# **Clearwater River Watershed District**

Phase II Project Report to the MPCA: Lake Louisa Nutrient TMDL and The Clearwater River, Clear Lake to Lake Betsy Bacteria and Dissolved Oxygen TMDL

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# Table of Contents

| 2.0 INTRODUCTION         3.0 DATA COLLECTED         3.1 Clearwater River, Clear Lake to Lake Betsy         3.2 Lake Louisa         3.4 RESULTS AND ANALYSIS         4.1 Clearwater River, Clear Lake to Lake Betsy         4.1.1 Field Survey         4.1.2 Hydrology         4.1.3 Water Quality         4.1.4.1 Dissolved Oxygen         4.1.4.1 Livestock         4.1.4.1 Livestock         4.1.4.2 Crop Farming         4.1.4.3 Urban Runoff         4.1.4.5 Wildlife         4.1.4.5 Wildlife         4.1.4.6 Wetlands         4.2 <lake louisa<="" td=""></lake>   | 1.0 | EXEC | CUTIVE  | SUMMAI   | RY   | 1-1   |
|--|-----|------|---|--|------|---|
| 3.1       Clearwater River, Clear Lake to Lake Betsy         3.2       Lake Louisa         3.2       Lake Louisa         4.0       RESULTS AND ANALYSIS         4.1       Clearwater River, Clear Lake to Lake Betsy         4.1.1       Field Survey.         4.1.2       Hydrology         4.1.3       Water Quality         4.1.3.1       Dissolved Oxygen         4.1.4.2       Bacteria         4.1.4.1       Livestock         4.1.4.2       Crop Farming         4.1.4.3       Urban Runoff         4.1.4.5       Wildlife         4.1.4.5       Wildlife         4.1.4.6       Wetlands         4.2       Lake Louisa         4.2.1       Lake Louisa 2006 | 2.0 | INTR | ODUCT   | ION  |      |   |
| 3.2       Lake Louisa  | 3.0 | DATA | COLL  | ECTED  |      |   |
| <ul> <li>4.1 Clearwater River, Clear Lake to Lake Betsy</li></ul>  |     |      |   |  |      |   |
| 4.1.1Field Survey.4.1.2Hydrology.4.1.3Water Quality  | 4.0 | RESU | LTS AN  | D ANALY  | YSIS |   |
| 4.2.2 Water Quality Standards and Numeric Targets44.2.32006 In-Lake Water Quality44.2.4 Source Assessments44.2.4.1 In-Lake Cycling44.2.4.2 Clearwater River44.2.4.3 Local Watershed44.2.4.4 Septic Systems44.2.4.5 Atmospheric Loads44.2.4.6 Ambient Groundwater Inflow4   |     |      | 4.1.1<br>4.1.2<br>4.1.3<br>4.1.4<br>Lake L<br>4.2.1 L<br>4.2.2 V<br>4.2.3 | Field Su<br>Hydrolo<br>Water Q<br>4.1.3.1<br>4.1.3.2<br>Source A<br>4.1.4.1<br>4.1.4.2<br>4.1.4.3<br>4.1.4.4<br>4.1.4.5<br>4.1.4.4<br>4.1.4.5<br>4.1.4.6<br>Louisa<br>Lake Louis<br>Vater Qual<br>2006 In-<br>Source Asso<br>4.2.4.1 I<br>4.2.4.2 Q<br>4.2.4.3 I<br>4.2.4.4<br>4.2.4.5 A | rvey | $\begin{array}{c} & 4-1 \\ & 4-3 \\ & 4-7 \\ & 4-9 \\ & 4-11 \\ & 4-12 \\ & 4-14 \\ & 4-14 \\ & 4-14 \\ & 4-14 \\ & 4-15 \\ & 4-15 \\ & 4-15 \\ & 4-15 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-16 \\ & 4-27 \\ & 4-20 \\ & 4-20 \\ & 4-20 \\ & 4-21 \\ & 4-20 \\ & 4-21 \\ & 4-20 \\ & 4-21 \\ & 4-21 \\ & 4-22 \\ & 4-23 \\ & 4-34 \\ & 4-35 \end{array}$ |

# Table of Contents (Cont.)

| 5.0 | STAKEHOLDER INVOLVEMENT |
|-----|-------------------------|
|     |                         |
|     |                         |

# **TABLES**

6.0

| 2.1 Sum | nary of 3 | 303(d) L | listings i | n the | Clearwater | River | Watershed | District |
|---------|-----------|----------|------------|-------|------------|-------|-----------|----------|
|---------|-----------|----------|------------|-------|------------|-------|-----------|----------|

- 3.1 Monitoring Station Descriptions
- 4.1.1 Stream Characteristics of the Clearwater River between Clear Lake and Lake Betsy
- 4.1.2 2006 Precipitation in the Upper Clearwater River Watershed District
- 4.1.3 2006 Average Flow and Runoff in the Clearwater River Watershed District
- 4.1.4 Sample Event Conditions
- 4.1.5 Water Quality in the Clearwater River and Minimally Impacted Streams of the North Central Hardwood Forest Ecoregion
- 4.2.1 Lake Louisa Water Balance
- 4.2.2 Water Quality Standards for the North Central Hardwood Forest Lakes
- 4.2.3 2006 Lake Louisa Mean Phosphorus Concentrations
- 4.2.4 Lake Louisa Local Subwatershed Land Use
- 4.3.5 Atmospheric P Deposition

# Table of Contents (Cont.)

### **FIGURES**

- 2.1 Clearwater River Watershed District
- 2.2 Impaired Waters in the Clearwater River Watershed District
- 3.1 Phase II Monitoring Locations
- 4.1.1 2006 Average Daily Stream Flow and Precipitation
- 4.1.2 Flow Profile of the Clearwater River During April 18, 2006 Synoptic Survey
- 4.1.3 Longitudinal DO Concentrations in the Clearwater River
- 4.1.4 Longitudinal CBOD-5 Concentrations in the Clearwater River
- 4.1.5 Longitudinal TKN Concentrations in the Clearwater River
- 4.1.6 Longitudinal Bacteria Concentrations in the Clearwater River
- 4.2.1 Lake Louisa
- 4.2.2 2006 Lake Louisa Surface Phosphorus Concentrations
- 4.2.3 Lake Louisa Historical Average Summer Surface Total Phosphorus Concentrations
- 4.2.4 2006 Lake Louisa Chlorophyll-a Concentrations
- 4.2.5 Lake Louisa Historical Average Summer Surface Chlorophyll-a Concentrations
- 4.2.6 Log Chlorophyll-a vs Log TP for CRWD Lakes, Lake Louisa and Ecoregion Reference Lakes
- 4.2.7 2006 Lake Louisa Secchi Depth
- 4.2.8 Lake Louisa Historical Annual Average Secchi Depth
- 4.2.9 Lake Louisa Curly Leaf Pondweed Extent
- 4.2.10 Lake Louisa Monitoring Locations and Adjacent Water Bodies
- 4.2.11 Lake Louisa Local Watershed Land Use
- 4.2.12 2006 Nutrient Sources to Lake Louisa

# Table of Contents (Cont.)

# **APPENDICES**

| Appendix A | 2005 Clearwater River In-stream Loading and Water Quality Profiles |
|------------|--|
| Appendix B | 2006 Clearwater River In-stream Loading and Water Quality Profiles |
| Appendix C | Mean Maximum and Minimum Water Quality Profiles                    |
| Appendix D | Field and Laboratory Data Sheets                                   |
| Appendix E | Continuous Dissolved Oxygen Records                                |
| Appendix F | Continuous Flow Records  |
| Appendix G | Time of Travel Study Results                                       |
| Appendix H | Field Survey Results   |
| Appendix I | Optical Brightener Sampling Results                                |
| Appendix J | Lake Louisa Data Evaluation  |
| Appendix K | Lake Louisa Field Data and Laboratory Results                      |

# Acronyms

| BOD                                  | Biochemical Oxygen Demand                 |
|--------------------------------------|---|
| CAFO                                 | Confined Animal Feeding Operation         |
| Carlson TSI                          | Carlson Trophic Status Index              |
| CBOD                                 | Carbonaceous BOD                          |
| CBOD-5                               | 5-Day Biochemical Oxygen Demand           |
| CBOD-20                              | 20-Day Biochemical Oxygen Demand          |
| CBOD-u                               | Ultimate Biochemical Oxygen Demand        |
| CFR                                  | Code of Federal Regulations               |
| cfs                                  | cubic feet per second                     |
| CFU/100 mL                           | colony forming units per 100 milliliters  |
| CWA                                  | Clear Water Act                           |
| CRWD                                 | Clearwater River Watershed District       |
| DO                                   | Dissolved oxygen                          |
| EPA                                  | Environmental Protection Agency           |
| FC                                   | Fecal Coliform                            |
| Lbs                                  | Pounds                                    |
| MDNR                                 | Minnesota Department of Natural Resources |
| µg/L                                 | micrograms per liter                      |
| mg/L                                 | milligrams per liter                      |
| mi <sup>2</sup>                      | square miles                              |
| MOS                                  | Margin of Safety                          |
| MPCA                                 | Minnesota Pollution Control Agency        |
| NCHF                                 | North Central Hardwood Forest             |
| NH <sub>3</sub>                      | Total Ammonia-Nitrogen                    |
| NO <sub>2</sub> / NO <sub>3</sub> -N | Nitrate/ Nitrite- Nitrogen                |
| NPS                                  | non-point source                          |
| QA                                   | Quality Assurance                         |

# Acronyms

| QC     | Quality Control                         |
|--------|---|
| SOD    | Sediment Oxygen Demand                  |
| STORET | EPA's "STOrage and RETrevial" System    |
| TKN    | Total Kjeldahl Nitrogen                 |
| TMDL   | Total Maximum Daily Load                |
| TN     | Total Nitrogen                          |
| TP     | Total phosphorus                        |
| TSS    | Total Suspended Solids                  |
| USGS   | United States Geological Survey         |
| WWTP   | Wastewater Treatment Plant              |
| USDA   | United States Department of Agriculture |

# **1.0 Executive Summary**

Section 303(d) of the Federal Clean Water Act (CWA) requires the Minnesota Pollution Control Agency (MPCA) to identify water bodies that do not meet water quality standards and to develop total maximum daily pollutant loads for those water bodies. A total maximum daily load (TMDL) is the amount of a pollutant that a water body can assimilate without exceeding the established water quality standard for that pollutant. Through a TMDL, pollutant loads can be distributed or allocated to point and non-point sources within the watershed that discharge to the water body.

This report prepared by Wenck Associates, Inc. (Wenck) for the Clearwater River Watershed District (CRWD), presents data collected in Phase II of the TMDL process for the listed segment of the Clearwater River between Clear Lake and Lake Betsy and for Lake Louisa in the CRWD located in central Minnesota.

- **Phase I** consisted of a review of existing information to better define existing conditions, identify data gaps, and develop plans for collecting and analyzing necessary additional information in subsequent phases.
- **Phase II** consisted of data collection and evaluation, the results of which are presented herein.
- **Phase III** will consist of setting the TMDL. Water quality models will help the CRWD quantify the TMDL and allocate loads to point sources and non point sources. An implementation plan to meet the load reductions will also be prepared. A work plan for Phase III was submitted to the MPCA in July 2007.
- Phase IV will consist of implementation of the load reductions established in Phase III.

Two 303d Impaired Waters are addressed in this report:

- Lake Louisa (MnDNR Lake ID 86-0282-00), and
- Clearwater River between Clear Lake and Lake Betsy in Meeker County (stream segment 07010203-502)

A segment of the Clearwater River between Grass Lake and the Mississippi River was added to the impaired waters list for dissolved oxygen in 2006. Phase I and II for this reach will be addressed in a separate report, Phase III for this reach will be combined with Phase III for the two segments addressed herein.

Lake Louisa is impaired due to excess nutrients, which can affect swimming and other recreational uses. Listed stream segment 07010203-502 is located on the Clearwater River between Clear Lake and Lake Betsy in Meeker County. The segment is listed because monitoring data have revealed that:

- Dissolved oxygen (DO) concentrations at times fall below the 5-milligram per liter (mg/L) water quality standard, which could impact fisheries and aquatic life,
- Discrete fecal coliform (FC) bacteria concentrations at times exceed 2,000 colony forming units per 100 milliliters (CFU/100 mL), and/or the geometric mean FC of at least 5 samples collected within a calendar month across several years of monitoring data at times exceeds 200 CFU/100 mL. This could pose a risk to swimmers and limit other recreational uses.

During Phase I of this TMDL, existing data collected by the MPCA, CRWD, and United States Geological Survey (USGS) between 1981 and 2003 was analyzed to define the extent, persistence, and severity of the DO depletion and FC exceedance in the Clearwater River, and sources of excess nutrients in Lake Louisa. Potential sources were reviewed. The results of that study are contained in the Phase I Report. Phase II of the TMDL study included field data collection to fill the data gaps necessary to establish the TMDL in Phase III. The following is a synthesis of findings from Phase I and Phase II for each of the TMDLs:

### **<u>Clearwater River-Clear Lake to Lake Betsy:</u>**

### **Dissolved Oxygen**

- The DO impairment is generally limited to the area of Kingston Wetland and downstream during low flow conditions (Q<6 cfs). This is supported by historic data as summarized in Phase I.
- Though long-term monitoring conducted between 1981 and 2003 show that 56% of DO violations occurred between 1989 and 1994, however recent data collection indicates the impairment is ongoing.
- Data shows that DO concentrations are fairly consistent from upstream to downstream, with the exception of a DO sag in the area of Kingston Wetland.

### Bacteria

- The variety of conditions under which bacteria concentrations in the Clearwater River and its tributaries exceed both the 200 CFU/ 100 mL and the 2,000 CFU/ 100 mL standards point to a combination of sources that influence in-stream bacteria concentrations differently under different conditions.
- Specific conditions contributing to the impairment are non-point source and include manure application, urban runoff, and livestock grazing in riparian areas.
- Bacteria concentrations routinely exceed the chronic standard in tributaries along the listed reach indicating that the sources are widespread geographically.

### Lake Louisa:

- Phosphorus loads to Lake Louisa are primarily the result of loads from Clearwater River, but are also affected by internal cycling of phosphorus.
- The wetland upstream of the lake is acting as a sedimentation basin removing nutrients from river inflows to the lake.
- Though water quality in Lake Louisa has improved dramatically since 1981, average summer TP concentrations were reduced by 80%; the lake is still impaired with respect to nutrients.

# 2.0 Introduction

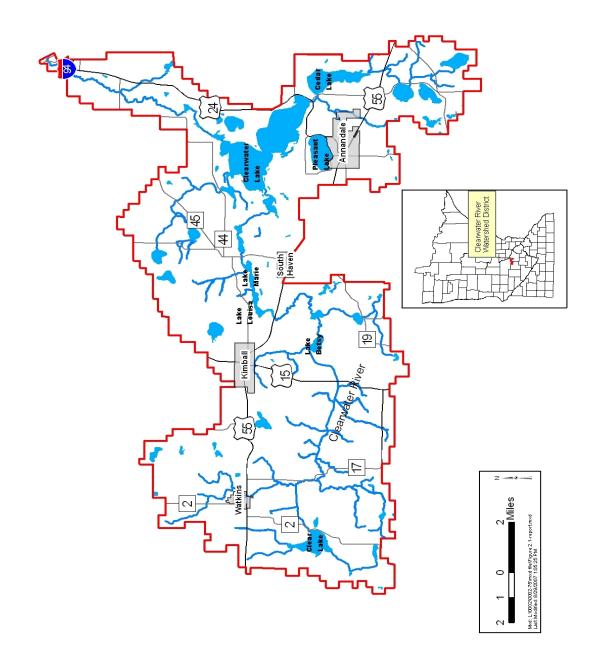
The Clearwater River Watershed District is a predominantly agricultural 168-square mile watershed in central Minnesota (Figure 2.1). The Clearwater River and the Clearwater River Chain of Lakes are the predominant water features in of the District. Lake Louisa is one lake in the Clearwater River Chain of Lakes. As specified in Minnesota Rules, Chapter 7050, the Clearwater River's and Lake Louisa's designated uses for Class 2B waters are aquatic life, recreation, industrial consumption, agriculture, wildlife, aesthetic enjoyment, and navigation.

The Clearwater River Watershed District has been proactive in the protection and improvement of water quality and has made considerable improvements in water quality throughout the District. However, monitoring data has shown that a 9.7-mile stretch of Clearwater River between Clear Lake and Lake Betsy does not meet water quality standards for fecal coliforms and dissolved oxygen (DO), and that Lake Louisa does not meet water quality standards for nutrients.

The Clean Water Act requires the State to develop TMDLs for impaired waters. A TMDL is the amount of a pollutant that a water body can assimilate without exceeding the pollutant's water quality standard.

The State of Minnesota's Clean Water Act Section 303(d) list of impaired waters within the Clearwater River Watershed District is summarized in Table 2.1 and Figure 2.2.

Figure 2.1 Clearwater River Watershed District

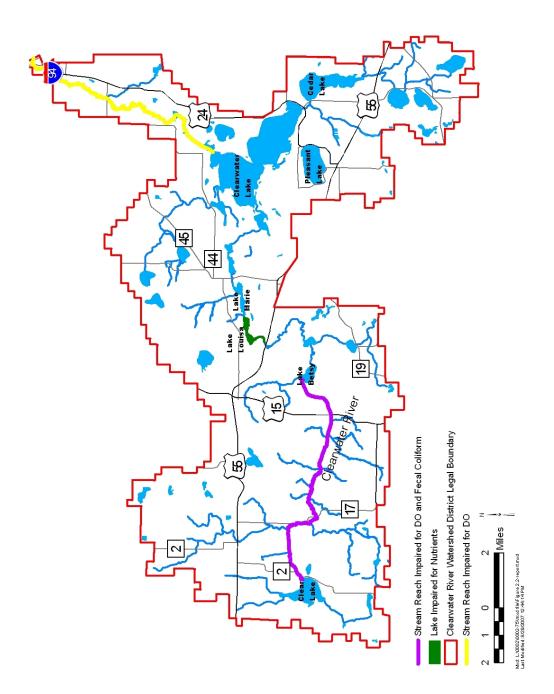


| Water Body                  | <u>Reach/ Lake ID</u> | Listing          | <b>Impaired</b> | Addressed in       |
|-----------------------------|-----------------------|------------------|-----------------|--------------------|
|                             |                       | <b>Parameter</b> | <u>Use</u>      | <u>this Report</u> |
| Lake Louisa                 | 86-0282-00            | Excess Nutrients | Swimming        | Yes                |
| Clearwater River,           | 07010203-502          | Fecal Coliform   | Swimming        | Yes                |
| Clear Lake to Lake<br>Betsy |                       | Low Oxygen       | Aquatic Life    | Yes                |
| Clearwater River,           | 07010203-511          | Low Oxygen       | Aquatic Life    | No*                |
| Grass Lake to the           |                       |                  |                 |                    |
| Mississippi River           |                       |                  |                 |                    |

#### Table 2.1 Summary of 303(d) Listings in the CRWD

\* A Work Plan for Phase III for all current listings was submitted to the MPCA in July 2007. Phase I & II for the newly listed reach of the Clearwater River between Grass Lake and the Mississippi is ongoing. The report documenting Phase II data collection in that segment, as well as a review of existing data will be presented under separate cover when all field work is complete in late 2007 or early 2008.

Figure 2.2 Impaired Waters in the CRWD



In October 2003, the CRWD applied for a grant under the TMDL program to conduct a Phase I TMDL Study. Phase I included compilation and analysis of existing water quality data for the watershed and preparation of a work plan to outline the remaining work necessary to complete the TMDLs for Lake Louisa and for the Clearwater River between Clear Lake and Lake Betsy. This report presents the data collected in Phase II, a detailed work plan for Phase III was submitted to the MPCA in July 2007.

The TMDL process will provide science-based pollutant load allocations and information that the District and other local officials can use when making decisions regarding land use, and land management that will affect water quality within the watershed. The main objectives for the Clearwater River Watershed District's TMDL Project are listed below:

- Define the spatial extent, persistence, severity, and causes of the DO depletion and high bacteria problem in the Clearwater River;
- Quantify point and non-point sources of oxygen demand and bacteria to the Clearwater River and nutrients to Lake Louisa. Assess their contributions to water quality impairments by land use category and main-stem river and tributary sub-watersheds for targeting priority areas for rehabilitation as well as protection;
- Allocate the Clearwater River and Lake Louisa assimilative capacity to both point and non-point sources of pollution and develop a margin of safety (MOS) protective of water quality standards; and
- Develop models for evaluating the impact of management practices and rehabilitation alternatives on water quality.

Field monitoring for the Clearwater River between Clear Lake and Lake Betsy and Lake Louisa was conducted between August 2005 and October 2006 to fill data gaps identified in Phase I. Specifically, the field data collection was conducted to determine the spatial and temporal extent of the DO and bacteria impairments on the Clearwater River and to quantify the sources. Data was further collected to measure in-lake nutrient concentrations and nutrient loadings to Lake Louisa.

Field monitoring for the Clearwater River between Grass Lake and the Mississippi River is ongoing in 2007. Field data collection is under way to determine the spatial and temporal extent of the DO impairment on the Clearwater River and to quantify the sources.

Monitoring was conducted in accordance with the work plan approved in Phase I and is described in sections 3.1 and 3.2 of this report. There were no significant deviations from the approved Monitoring Plan detailed in the Phase I Report.

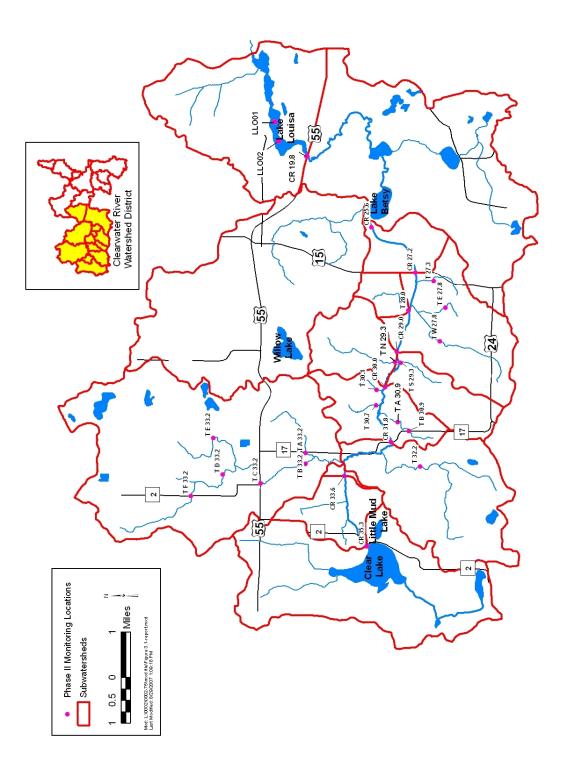
### 3.1 CLEARWATER RIVER, CLEAR LAKE TO LAKE BETSY

Figure 3.1 shows the monitoring locations for the DO and bacteria TMDL in the Clearwater River between Clear Lake and Lake Betsy. Table 3.1 lists monitoring station descriptions. Data collection at these locations included:

• Both low and high flow synoptic surveys of the Clearwater River between Clear Lake and Lake Betsy were conducted. Low flow synoptic surveys were conducted August 15, 2005 and September 26-27, 2005 (Appendix A). Dissolved oxygen and bacteria were measured during the August 15, 2005 survey because flows were zero throughout most of the reach.

- The Clearwater River main stem was also sampled approximately twice monthly in 2006 as flow conditions permitted between May and October. The high-flow synoptic survey was conducted April 18-19, 2006. Longitudinal water quality, flow, and loading profiles from 2006 sampling are included in Appendix B.
- Box plots in Appendix C show the mean, max, min and standard deviation of water quality parameters from upstream to downstream for data collected during Phase II (2005 and 2006). Field and lab data sheets are in Appendix D.
- Continuous DO measurements were collected during each synoptic survey, and for an extended period in 2005 and 2006. Data are plotted in Appendix E.
- Continuous stage was measured at Fairhaven Dam and upstream of Lake Betsy in 2005 and 2006. Rating curves were developed and flow records were produced. Results are in Appendix F.
- A time of travel dye study was conducted in the listed reach under two flow regimes September 27-29, 2005 and April 19-20, 2006. During the time of travel study, flows at the downstream end of the reach (CR 25.6) were 9.5 cfs during the 2005 survey and 32.6 cfs during the 2006 survey, therefore satisfying the project requirements of obtaining time of travel during high and low flow. Results are shown in Appendix G.
- A field survey was conducted. Appendix H contains a digital map; users can point and click locations on the map to view photos and the field survey results. The riparian corridor study included evaluation of riparian canopy and vegetation, in-stream macrophytes, stream substrate, and channel stability.
- Passive sampling for optical brighteners was conducted on the Clearwater River April 19 through May 2, 2006. Results are shown in Appendix I.

Figure 3.1 Phase II Monitoring Locations



**Table 3.1 Monitoring Station Descriptions** 

| TMDL Site ID   | Station Description   |  |  |
|--|---|--|--|
|  | Station Description<br>CLEARWATER R AT 732ND AVE, 2.4 MI S OF |  |  |
| CR 25.6  | KIMBALL   |  |  |
| 017 20.0   | CLEARWATER R AT CSAH-15, 3.5 MI S OF KIMBALL                  |  |  |
| CR 27.2  | PRAIRIE   |  |  |
|  | TRIBUTARY TO CLEARWATER R AT 353RD ST, 3.6                    |  |  |
| T 27.3   | MI S OF KIMBALL   |  |  |
|  | TRIBUTARY TO CLEARWATER R AT 350TH ST, 4.0                    |  |  |
| T E 27.8   | MI SW OF KIMBALL  |  |  |
|  | TRIBUTARY TO CLEARWATER R AT 707TH ST, 4.2                    |  |  |
| T W 27.8   | MI SW OF KIMBALL  |  |  |
|  | CLEARWATER R AT BR IN S20/SEQ 4 MI SE OF                      |  |  |
| CR 29.0  | WATKINS   |  |  |
|  | CLEARWATER R AT 697TH ST, 3.2 MI SW OF                        |  |  |
| CR 30.0  | KIMBALL   |  |  |
|  | TRIBUTARY TO CLEARWATER R AT 365TH ST, 3.2                    |  |  |
| T 30.1   | MI SE OF WATKINS  |  |  |
|  | TRIBUTARY TO CLEARWATER R AT 365TH ST, 3.0                    |  |  |
| T 30.7   |   |  |  |
| TRIBUTARY TO CLEARWATER R AT 3651                                      |   |  |  |
| T A 30.9   | MI SE OF WATKINS<br>TRIBUTARY TO CLEARWATER R AT CO HWY 17,   |  |  |
|  | ,   |  |  |
| T B 30.9 3.5 MI SE OF WATKINS<br>CLEARWATER R AT CSAH-17, 3.3 MI SSE C |   |  |  |
| CR 31 8  | WATKINS   |  |  |
| CR 31.8 WATKINS<br>TRIBUTARY TO CLEARWATER R AT 355TH S                |   |  |  |
| T 32.2 MI S OF WATKINS   |   |  |  |
| 1 02.2   | TRIBUTARY (CD-20) TO CLEARWATER R AT CSAH-                    |  |  |
| T A 33.2   | 17 AND 380TH ST, 1.5 MI SE OF WATKINS                         |  |  |
|  | TRIBUTARY (CD-20) TO CLEARWATER R .1 MI N                     |  |  |
| T B 33.2   | 380TH ST, 1.2 MI SÉ OF WATKINS                                |  |  |
|  | TRIBUTARY (CD-20) TO CLEARWATER R AT CSAH-                    |  |  |
| T C 33.2   | 55, 0.2 MI SE OF WATKINS                                      |  |  |
|  | TRIBUTARY (CD-20) TO CLEARWATER R AT 4TH                      |  |  |
| T D 33.2   | ST N, 0.2 MI NE OF WATKINS                                    |  |  |
|  | TRIBUTARY (CD-20) TO CLEARWATER R NEAR                        |  |  |
|  | MEEKER-STEARNS BOUNDARY, 1.2 MI NE OF                         |  |  |
| T E 33.2   | WATKINS   |  |  |
|  | TRIBUTARY (CD-20) TO CLEARWATER R AT CO                       |  |  |
| T F 33.2   | HWY 2, 0.8 MIN OF WATKINS                                     |  |  |
|  | CLEARWATER R AT 675TH ST, 1.6 MI S OF                         |  |  |
| CR 33.6  |   |  |  |
|  | CLEARWATER R (CD-44) AT 657TH AVE, 2.8 MI SW                  |  |  |
| CR 35.3  | OF WATKINS<br>_ Ph2\Report\[Table 3.1.xls]Sheet1              |  |  |

T:\0002\75\_TMDL Ph2\Report\[Table 3.1.xls]Sheet1

#### 3.2 LAKE LOUISA

- Lake Louisa was sampled five times in May to October 2006 at three depths in both the east and west basins of the lake.
- The Clearwater River directly upstream of Lake Louisa was sampled five times in May to October 2006. Appendix J contains plotted data for Lake Louisa, Appendix K contains field and lab data sheets for Lake Louisa.
- A pressure transducer was installed at the Fairhaven Dam to record flow out of Lake Louisa (Appendix E).

## 4.1 CLEARWATER RIVER, CLEAR LAKE TO LAKE BETSY

Results of the field survey, hydrologic monitoring and water quality sampling conducted in the Clearwater River and tributary watershed in 2005 and 2006 are presented in this section.

Water quality data is compared with that of minimally impacted streams in the North Central Forest Ecoregion.

Longitudinal water quality profiles allow an evaluation of the extent of impairment. In stream and tributary loadings are calculated and evaluated. Each of these elements allows an evaluation of the sources of bacteria and oxygen demand in the watershed.

### 4.1.1 Field Survey

The Clearwater River between Clear Lake and Lake Betsy extends between CR 35.3 in the upstream end at Clear Lake and CR 25.6 at Lake Betsy. The channel in this 9.7 mile reach of the Clearwater River impaired with respect to dissolved oxygen and bacteria can be broken into three distinct sections based on channel characteristics such as slope, morphometry and channel bed. Table 4.1.1 summarizes stream characterization in each reach.

In the 1.7-mile upstream segment between of the Clearwater River between Clear Lake and CR 33.6 the slope is 0. The channel is primarily ditched in this segment, sometimes draining large wetland complexes. The riparian land use is primarily pasture, wetland and agriculture.

The next reach between CR 33.6 and CR 29.0 is steeper, in fact the maximum slope of 33 ft/ mile occurs between 33.6 and 31.8. Downstream of this the slope ranges from 5 to 10 ft/ river mile. The portion of the river between mile 33.6 and 29.0 is more sinuous, the sediments are generally coarser. The channel in this segment is mostly flanked by a woody riparian buffer consisting of trees and grasses.

Between CR 29.0 and CR 25.0 the river is ditched through large wetlands. The first of these wetlands is the Kingston wetland located between river mile 29.0 and 27.2. In 1985 a CRWD project diverted low flow streamflow out of the main ditched channel and around to the edges of the Kingston wetland allowing stream flow to filter back into the channel through the wetland. The project was one of several in the Clearwater River Chain of Lakes Restoration; an effort that reduced total phosphorus and sediment loading in the Clearwater River and downstream lakes by an order of magnitude.

Downstream of river mile 25.6, the slope of the river is small, and in fact there is backflow from Lake Betsy into the Clearwater River from time to time.

Photos of the stream, along with assessment of the sediments, and riparian cover are presented in Appendix G. A summary of field survey results is presented in Table 4.1.1.

# Table 4.1.1 Stream Characteristics of the Clearwater River between Clear Lake and LakeBetsy

|                    | Drainage         |                |            |            |  |  |   |
|--------------------|------------------|----------------|------------|------------|--|--|---|
| River              | Area             | Elevation      | Slope (ft/ | Stream     |  | Sediment   |   |
| Mile               | (acres)          | (ft NGVD)      | mile)      | Width (ft) | Tree Canopy  | Description  | Description   |
| CR 35.3            | 6,801            | 1,129          |            | 12         | Mowed turf grass<br>riparian, 75%<br>upstream, 25%<br>downstream | gravel and cobbles,<br>medium to coarse sand   | Clear Lake Outlet   |
| CR 33.6            | 8,214            | 1,129          | 0          | 12         | 20% upstream,<br>100% downstream                                 | medium to coarse sandy<br>clay upstream; coarser<br>sand, some gravel and<br>cobble. | Straight narrow ditch with steep<br>banks upstream, flowing through<br>agricultural land. Downstream,<br>channel has more meanders and<br>is heavily forested. Channel<br>widens and sediment is coarser<br>graied. |
| CR 31.8            | 23,679           | 1,070          | 33         | 14         | 75% in the area  | Fine to medium sand,<br>layers of gravel, some<br>cobble and boulders                | Meandering channel, undercut<br>banks, braided, sediment deposits   |
| CR 30.0            | 25,602           | 1,060          | 6          | 14         | 100% upstream,<br>90% downstream                                 | clean medium to coarse<br>sand, organic material at<br>surface                       | Meandering channel, undercut<br>banks, braided, sediment deposits   |
| CR 29.0            | 28,633           | 1,050          | 10         | 18         | 60% upstream, 90%<br>downstream                                  | Medium to coarse sand,<br>some gravel  | Meandering channel, undercut<br>banks, braided, sediment deposits,<br>Kingston Wetland downstream   |
| CR 27.2            | 32,704           | 1,040          | 6          | 43         | 10% upstream, 60% downstream                                     | Wetland soils, organic<br>muck   | County Road 15, ditched and dredged channel   |
| CR 25.6<br>CR 25.0 | 33,877<br>33,976 | 1,032<br>1,032 |            | 35         | 90% upstream, 20%<br>downstream                                  | Sandy edges, organic<br>muck   | Ditched, straight channel with<br>undercut banks. Forested banks<br>upstream. Cow pasture on the<br>northbank downstream.<br>Lake Betsy Inlet   |

T:\ 0002\75\_TMDL Ph2\Report\[Rpt Outline.xls]Table4.1

#### 4.1.2 Hydrology

Precipitation and runoff volumes were below average in 2006. Precipitation was measured by the MPCA at the Fairhaven Dam, and in Watkins by a citizen precipitation recorder. Annual precipitation in Fairhaven was 26.13 inches, a 1 inch departure from the 1971-2000 Normal at St. Cloud. Precipitation in the upper watershed near Watkins was 22.59 inches, a 4.54 inch departure from St. Cloud normal precipitation (Table 4.1.2).

|           | 1971-2000<br>Normal<br>(St. | 2006 Preci<br>Fairhaven<br>Dam<br>(MPCA) | pitation<br>Watkins |
|-----------|-----------------------------|--|---------------------|
| January   | 0.76                        | 0.52                                     | 0.09                |
| February  | 0.59                        | 0.34                                     | 0.03                |
| March     | 1.50                        | 0.97                                     | 1.17                |
| April     | 2.13                        | 4.38                                     | 2.94                |
| Ma        | 2.97                        | 1.04                                     | 1.24                |
| June      | 4.51                        | 6.61                                     | 2.11                |
| Jul       | 3.34                        | 1.69                                     | 2.93                |
| August    | 3.93                        | 2.88                                     | 2.88                |
| September | 2.93                        | 6.89                                     | 5.31                |
| October   | 2.24                        | 0.71                                     | 1.35                |
| November  | 1.54                        | 0.1                                      | 0.23                |
| December  | 0.69                        | 0  | 1.63                |
| Total     | 27.13                       | 26.13                                    | 22.59               |

 Table 4.1.2 2006 Precipitation in the Upper Clearwater River Watershed District

T:\0002\75\_TMDL Ph2\Report\[Stream Hydrologyxls.xls]Precip

Continuous stage measurements were recorded in the Clearwater River at CR 31.8 in the middle of the impaired reach, at Fairhaven Dam downstream of Lake Marie, and at County Road 40 downstream of Grass Lake in the lower watershed. Figure 4.1.1 shows average daily flow at these locations and precipitation at Watkins. Average flows and runoff volumes are summarized in Table 4.1.3. All flow data is provisional and will be finalized in the Phase III report.

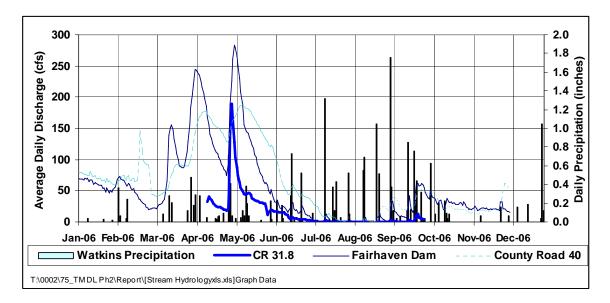


Figure 4.1.1 2006 Average Daily Stream flow and Precipitation

Note: Flow data is provisional and will be finalized in the Phase III report.

| Table 4.1.3 2006 Average Flow and Runoff in the Clearwater River Wa | Vatershed District |
|---|--------------------|
|---|--------------------|

|                          | 2006  |                  |                                      |                       |  |
|--------------------------|---|------------------|--------------------------------------|-----------------------|--|
| Station/ Location        | Tributary Sub-<br>watershed Area<br>(sq. mi.) |                  | Runoff Over<br>Watershed<br>(inches) | Average<br>Flow (cfs) |  |
| CR 31.8                  | 37  | 6,590            | 3.3                                  | 14                    |  |
| Fairhaven Dam<br>CSAH 40 | 91<br>164                                     | 36,573<br>42,673 | 7.5<br>4.9                           | 55<br>61              |  |

T:\0002\75\_TMDL Ph2\Report\[Stream HydrologyxIs.xls]Graph Data

Flow at CR 31.8 peaked at 190 cfs on May 1, 2006. The total runoff from the 37 square mile drainage area to CR 31.8 was 3.3 inches during 2006. Runoff at the Fairhaven Dam for the same period was 7.5 inches over the 91 square mile watershed, surprisingly high for a dry year. The average flow was 55 cfs over the flow period. Flow at Fairhaven Dam peaked on May 3, 2006 at 283 cfs. Runoff downstream of Grass Lake at CSAH 40 was 4.9 inches over the 164 square mile

watershed. The average flow was 61 cfs over the flow period. Flow peaked there on May 10, 2006 at 189 cfs.

The peak flows were the result of precipitation events in late April and early May of 2006 as opposed to spring melt conditions. Due to prevailing dry conditions during the summer, precipitation events later in the season did not increase flows significantly.

The increase in runoff from the upper watershed to the lower watershed is likely due to groundwater inflow. This is supported by synoptic survey data collected in 2005 and 2006. Longitudinal flow profiles in September 2005 and April 2006 show increasing flow in dry weather from upstream to downstream. Figure 4.1.2 shows groundwater contribution as percent of total flow. During dry weather, with no snow melt or point sources, incremental increases or decreases in main stem flow that are not from tributary inflows are attributed to groundwater gains or losses.

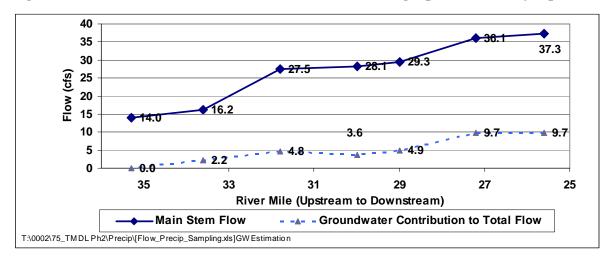


Figure 4.1.2 Flow Profile of the Clearwater River During April 18, 2006 Synoptic Survey

4-6

### 4.1.3 Water Quality

Synoptic surveys and bi-weekly river profile sampling of the Clearwater River between Clear Lake and Lake Betsy were conducted in both wet and dry weather and over a range of flow conditions (Table 4.1.4).

| TMDL Samples Collected | Wet/ Dry | CR 29.0<br>Flow (cfs) | Days Since<br>Last<br>Precipitation<br>Event >0.1<br>inch | Amount of<br>Last<br>Precipitation<br>(inches) | *   |
|------------------------|----------|-----------------------|---|--|-----|
| 8/15/2005              | dry      | 0.4                   | 6   | 0.08   |     |
| 7/12/2006              | dry      | 0.5                   | 18  | 0.52   |     |
| 6/15/2006              | dry      | 3.8                   | 6   | 0.16   |     |
| 5/30/2006              | dry      | 11.1                  | 17  | 0.2  |     |
| 4/19/2006              | dry      | 29.2                  | 13  | 0.28   |     |
| 4/18/2006              | dry      | 29.3                  | 12  | 0.28   |     |
| 8/23/2006              | wet      | 0.3                   | 1   | 1.05   |     |
| 7/26/2006              | wet      | 1.1                   | 4   | 0.43   |     |
| 6/28/2006              | wet      | 3.0                   | 4   | 0.52   |     |
| 10/5/2006              | wet      | 6.3                   | 1   | 0.63   |     |
| 9/25/2006              | wet      | 7.6                   | 2   | 1.43   | (1) |
| 9/27/2005              | wet      | 9.7                   | 3   | 0.22   |     |
| 9/26/2005              | wet      | 10.9                  | 2   | 0.22   | (2) |

#### **Table 4.1.4 Sample Event Conditions**

(1) 3 day event ending 2 days prior

(2) 0.78 inches 5 days prior

T:\0002\75\_TMDL Ph2\Precip\[Flow\_Precip\_Sampling.xls]Summary

Table 4.1.5 compares water quality in the Clearwater River in 2005 and 2006 to that of minimally impacted streams in the North Central Hardwood Forest Ecoregion.

 Table 4.1.5 Water Quality in the Clearwater River and Minimally Impacted Streams of the

 North Central Hardwood Forest Ecoregion

|                  | Water Quality of Minimally Impacted<br>Streams in NCHF, Annual 1970-1992* |       |        |      | 2005-2006 Clearwater River, Main<br>Stem |        |        |      |
|------------------|---|-------|--------|------|--|--------|--------|------|
| Parameter        | Mean  | SD    | MAX    | MIN  | Mean                                     | SD     | MAX    | MIN  |
| Conductivity     |   |       |        |      |  |        |        |      |
| (µmhos/cm)       | 298   | 83    | 840    | 40   | 826                                      | 262    | 1,716  | 442  |
| pH (SU)          | 8.1   | 0.3   | 8.9    | 7.2  | 7.7                                      | 0.8    | 9.0    | 5.6  |
| TSS (mg/L)       | 13.7  | 22.5  | 330    | 0.5  | 20                                       | 51     | 387    | 2    |
| Ammonia-N (mg/L) | 0.2   | 0.2   | 1.3    | 0.02 | 0.1                                      | 0.1    | 0.6    | 0.1  |
| NO2+NO3 (mg/L)   | 0.16  | 0.15  | 0.65   | 0.01 | 3.7                                      | 6.6    | 48     | 0.20 |
| TP (mg/L)        | 0.13  | 0.15  | 1.6    | 0.01 | 0.21                                     | 0.13   | 0.72   | 0.04 |
| Fecal Coliform   |   |       |        |      |  |        |        |      |
| (#/100mL)        | 920   | 3,277 | 27,000 | 4    | 621                                      | 12,609 | 60,000 | 10   |
| BOD5 (mg/L)      | 2.7   | 2.1   | 17     | 0.3  | 2.9                                      | 1.3    | 7.0    | 2.0  |

\*McCollar & Heiskary, 1993

T:\0002\75\_TMDL Ph2\Report\[RAK FINAL DATA.xls]Table 4.2

The most striking differences between 2005 and 2006 Clearwater River means and Ecoregion means are conductivity, NO2 +NO3, TSS, and total phosphorus. These values are consistent with a stream impacted by anthropogenic activities.

The high mean conductivity in the Clearwater River relative to the mean conductivity measured in minimally impacted streams in the Ecoregion further indicates that the stream has a groundwater contribution in this reach.

The chemical characteristics of the flow in the listed reach of the Clearwater River along with the dominant land use in the tributary watershed point to agricultural uses as the source of impairment. Concentrations of NO2+NO3 are an order of magnitude higher in the Clearwater River compared to those of minimally impacted streams; NO2+ NO3 is a key component of agricultural runoff because of its use as fertilizer. Nitrogen fertilizers are inexpensive and are sometimes over-applied leading to high concentrations in waters with agricultural watersheds. In further support of this conclusion, 75% of the land area tributary to the listed reach is cultivated or pasture.

#### 4.1.3.1 Dissolved Oxygen

Discrete measurements of DO along the profile of the Clearwater River in 2005 and 2006 show that DO sag and the DO impairment is generally limited to the area of and downstream of the Kingston Wetland in low flow, high-temperature conditions. Otherwise, DO concentrations are fairly consistent upstream to downstream (Figure 4.1.3).

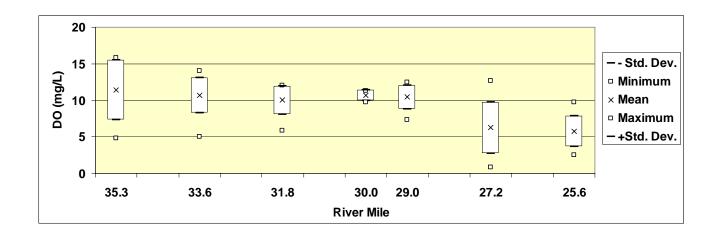


Figure 4.1.3 Longitudinal DO Concentrations in the Clearwater River

The consistent measurements of DO from upstream to downstream indicate the river is generally in equilibrium. This is supported by in-stream CBOD-5 and TKN concentrations (Figures 4.1.4 and 4.1.5).

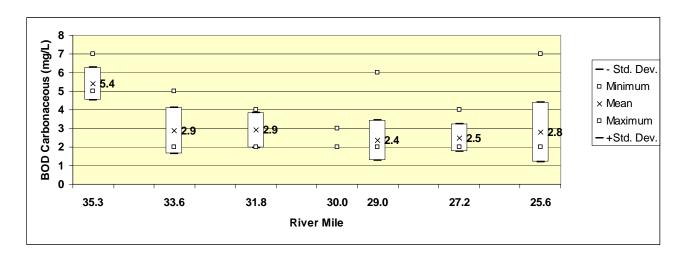
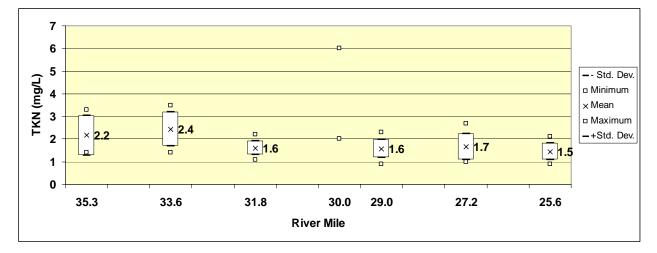


Figure 4.1.4 Longitudinal CBOD-5 Concentrations in the Clearwater River

Figure 4.1.5 Longitudinal TKN Concentrations in the Clearwater River



The comparatively higher CBOD-5 concentrations in the upstream reach are likely due to organic material in the outflow of Clear Lake, a highly eutrophic lake with nuisance algae blooms.

Dissolved oxygen, temperature, conductivity and pH were measured continuously at the upstream and downstream of Kingston Wetland during 2005, and at CR 31.8 during late summer 2005 and 2006. Measurements were also collected at CR 25.6 during late summer of 2006.

Continuous measurements of dissolved oxygen showed that DO concentrations were consistently below the state DO standard of 5 mg/L in the area and downstream of Kingston Wetland throughout 2005, and occasionally dipped below the state DO standard upstream of Kingston wetland at the low point of the diurnal DO cycle. Results of all continuous DO monitoring are presented in Appendix E.

Dissolved oxygen concentrations at CR 31.1 in the upstream end of the listed reach dipped below the state standard at the low point of the diurnal cycle on 6 of 17 days measured in 2005 and 3 of 28 days in 2006. Daily maximum DO concentrations were above the state standard for all measurements collected. Diurnal variations of DO at CR 31.8 were high, 5 mg/L in 2005 and 3.5 in 2006.

Daily maximum DO concentrations near the downstream end of the listed reach at CR 26.1 in 2005 were consistently below the state standard. Daily minimum DO concentration at CR 25.6 dipped below the state standard 6 of 28 days measured in 2006, and the daily DO maximum fell below the state standard on 2 days. Average diurnal DO variation was 2.7 in 2006.

#### 4.1.3.2 Bacteria

Log-mean fecal coliform concentrations were lowest, 140 cfu/ 100mL, at the upstream boundary of the listed reach of the Clearwater River. Concentrations increased steadily downstream and were highest between CR 31.8 and CR 29.0 with concentrations of 1,272 cfu/ 100mL and 1,300 cfu/ 100mL respectively (the peak value of 2,586 cfu/ 100mL represents only two sample events). Figure 4.1.6 shows the longitudinal geometric mean, minimum, maximum and log standard deviation of data collected in Phase II.

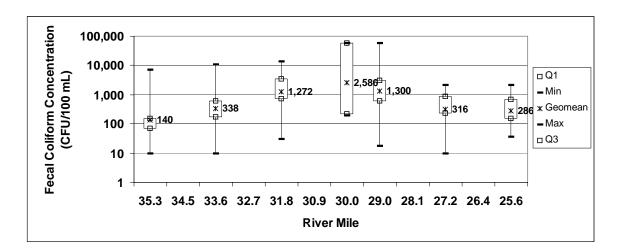


Figure 4.1.6 Longitudinal Bacteria Concentrations in the Clearwater River

The bacteria impairment impacts the entire reach, but appears to be highest in the central portion of the river.

#### 4.1.4 Source Assessment

An assessment of sources of oxygen demand and bacteria in the watershed is discussed in this section. The sources are non-point source in nature, no point sources were identified. Sources for both impairments include livestock and associated land practices including feedlots and pasturing, crop farming and associated land uses including drain tiles, urban runoff from the City of Watkins, septic systems, and natural sources such as wildlife and wetlands.

The number of fecal coliform samples collected in 2005 and 2006 exceeding the chronic and acute standards (200 and 2,000 CFU/ 100 mL respectively) is compared to channel flow and runoff conditions in the main stem (Table 4.1.6) and in main stem plus tributaries (Table 4.1.7).

Table 4.1.62005 and 2006 Fecal Coliform Samples Exceeding 200 and 2,000 andAssociated Channel Conditions (Main Stem)

|          | Main Stem Bacteria Samples Collected in 2005 and 2006 |                         |                         |                       |                          |                   |  |  |  |
|----------|---|-------------------------|-------------------------|-----------------------|--------------------------|-------------------|--|--|--|
|          | n   | n >2,000 CFU/<br>100 mL | n <2,000 CFU/<br>100 mL | n <200 CFU/<br>100 mL | Downstream<br>Flow (cfs) | Conditions<br>(1) |  |  |  |
| 08/15/05 | 4   | 1                       | 3                       | 1                     | 0.4                      | Dry               |  |  |  |
| 04/18/06 | 8   | 0                       | 2                       | 6                     | 29.3                     | Dry               |  |  |  |
| 05/30/06 | 7   | 1                       | 4                       | 3                     | 11.1                     | Dry               |  |  |  |
| 06/15/06 | 7   | 0                       | 3                       | 4                     | 3.8                      | Dry               |  |  |  |
| 07/12/06 | 5   | 4                       | 5                       | 0                     | 0.5                      | Dry               |  |  |  |
| 06/28/06 | 7   | 0                       | 5                       | 2                     | 3                        | Moderate          |  |  |  |
| 07/26/06 | 4   | 1                       | 3                       | 1                     | 1.1                      | Moderate          |  |  |  |
| 09/26/05 | 9   | 5                       | 9                       | 0                     | 10.9                     | Wet               |  |  |  |
| 08/23/06 | 2   | 2                       | 2                       | 0                     | 0.3                      | Wet               |  |  |  |
| 09/25/06 | 6   | 5                       | 6                       | 0                     | 7.6                      | Wet               |  |  |  |
| 10/05/06 | 6   | 0                       | 6                       | 0                     | 6.3                      | Wet               |  |  |  |

T:\0002\75\_TMDL Ph2\Report\[Bacti LInk.xls]Bact 2

(1) Dry= more than 5 days since last precipitation event;

Moderate= 4 or 5 days since last precipitation event

Wet= 1, 2, or 3 days since last precipiation event

| <b>Table 4.1.7</b> | 2005 and 2006 Fecal Coliform Samples Exceeding 200 and 2,000 and |
|--------------------|--|
|                    | Associated Channel Conditions (Main Stem & Tributaries)          |

| Main Stem & Tributary Bacteria Samples Collected in 2005 & 2006 |    |                            |                            |                          |                          |                   |
|---|----|----------------------------|----------------------------|--------------------------|--------------------------|-------------------|
| Date  | N  | n >2,000<br>CFU/ 100<br>mL | n <2,000<br>CFU/ 100<br>mL | n <200<br>CFU/ 100<br>mL | Downstream<br>Flow (cfs) | Conditions<br>(1) |
| 8/15/05   | 9  | 1                          | 4                          | 4                        | 0.4                      | Dry               |
| 4/18/06   | 23 | 0                          | 3                          | 20                       | 29.3                     | Dry               |
| 5/30/06   | 9  | 1                          | 5                          | 3                        | 11.1                     | Dry               |
| 6/15/06   | 9  | 1                          | 4                          | 4                        | 3.8                      | Dry               |
| 7/12/06   | 5  | 4                          | 1                          | 0                        | 0.5                      | Dry               |
| 6/28/06   | 9  | 0                          | 6                          | 3                        | 3                        | Moderate          |
| 7/26/06   | 4  | 1                          | 2                          | 1                        | 1.1                      | Moderate          |
| 9/26/05   | 22 | 13                         | 9                          | 0                        | 10.9                     | Wet               |
| 8/23/06   | 2  | 2                          | 0                          | 0                        | 0.3                      | Wet               |
| 9/25/06   | 7  | 5                          | 2                          | 0                        | 7.6                      | Wet               |
| 10/5/06   | 7  | 2                          | 5                          | 0                        | 6.3                      | Wet               |

T:\0002\75\_TMDL Ph2\Report\[Bacti LInk.xls]Bact 1

(1) Dry= more than 5 days since last precipitation event;

Moderate= 4 or 5 days since last precipitation event

Wet= 1, 2, or 3 days since last precipiation event

In the main stem of the Clearwater River, 63% acute bacteria exceedances occurred within three days of a precipitation event. This is consistent with historical data that showed 77% and 83% of FC samples exceeded 2,000 CFU/ 100 mL at CR 33.0 and CR 28.2 respectively occurred within 3 days of a precipitation event. Wet weather exceedances point to a multiplicity of sources.

Acute exceedances in dry weather are highly correlated to the presence of livestock in the streams, though also occurred in wet weather. Chronic exceedances occur in both wet and dry weather.

#### 4.1.4.1 Livestock

Fecal coliform concentrations in excess of 60,000 CFU/ 100 mL during dry weather conditions during 2005 and 2006 were primarily observed in areas with riparian livestock pastures where livestock were routinely allowed access to the stream.

### 4.1.4.2 Crop Farming

Corn and soy bean rotation are the primary row crops in the watershed tributary to the portion of the Clearwater River between Clear Lake and Lake Betsy. The high in-stream concentrations of NO2 + NO3 indicate that crop farming is a source of nutrients to the stream. Organic and ammonia nitrogen in animal waste also contributes to  $NO_2 + NO_3$  through the process of nitrification.

Liquid manure application can be a source of bacteria and oxygen demand to receiving waters. Manure is primarily applied to crops in the fall prior to a corn rotation and sometimes in the spring. Some of the exceedances of the bacteria standard observed between 1992 and 2003 coincide with periods of land application which may indicate land application does contribute to the bacteria impairment.

#### 4.1.4.3 Urban Runoff

One urban area, Watkins, lies within the watershed tributary to the Clearwater River between Clear Lake and Lake Betsy. Watkins storm water enters the Clearwater River via County Ditch 20, between monitoring stations at CR 33.8 and CR 31.8. Flows in the upper portion of the Clearwater River are largely comprised of flow from this tributary area.

Five-day BOD concentrations in the Watkins tributary were consistently 2 to 3 mg/L. Concentrations upstream were below detection limit in all but three sampling events where concentrations were 4 to 5 mg/L. Downstream concentrations at CR 31.8 ranged from below detection limit to 4 mg/L. Oxygen demand loads in the upper portion of the watershed are largely from this tributary which includes the Watkins area, though the sources are not necessarily all urban as CD 20 also drains a large agricultural watershed.

Bacteria populations in excess of the detection limit, 60,000 CFU/ 100 mL were observed in the Watkins tributary during the wet weather synoptic survey, concentrations were only 45 CFU/ 100 mL during the dry weather synoptic survey.

#### 4.1.4.4 Septic Systems and Human Waste

No homes, and therefore no septic systems, are located close enough to the Clearwater River to be a source of bacteria or oxygen demand to the Clearwater River in the impaired reach.

Wastewater from the City of Watkins and most of the homes ringing Clear Lake are routed to the WWTP at Watkins and land-applied north of the City outside of the area tributary to Clearwater River and is therefore not a source for bacteria or oxygen demand. A small number of homes on the southeast portion of Clear Lake are not connected to the sanitary sewer in this area.

#### 4.1.4.5 Wildlife

The DNR area wildlife manager, Mr. Fred Bengston, stationed in Sauk Rapids, was interviewed regarding wildlife populations in the CRWD. A 2005 DNR assessment of whitetail deer indicated populations were 9.5 deer/ square mile in the western portion of the watershed near the listed reach of the Clearwater River (Minnesota DNR, 2005). Breeding populations of waterfowl were estimated based on a 2005 Waterfowl Breeding Population Survey (Minnesota DNR, 2005). The study found 6.2 ducks and 2.6 Canada geese per square mile in areas with similar wetland densities as the Clearwater River watershed. Since the population assessment documents breeding populations, it is representative of spring and early summer populations of waterfowl. As juveniles reach maturity, the population densities increase towards late summer and fall until migration (Minnesota DNR 2005).

Mr. Bengston indicated that while wildlife populations were considered moderate to high throughout the watershed, wildlife populations were not concentrated in areas along the Clearwater River corridor that would allow them to contribute significantly to high bacteria concentrations in the Clearwater River. In short, the pathways to transport the bacteria from the producer (the animal) to the impaired water were not significant, and therefore the bacterial loading from wildlife is not expected to be significant.

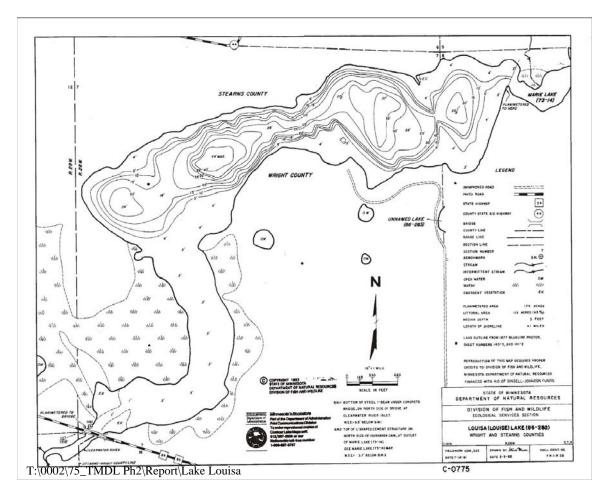
#### 4.1.4.6 Wetlands

Though DO concentrations decrease from upstream to downstream in the Clearwater River, the most significant decrease in DO is observed downstream of the Kingston Wetland. The oxygen sag observed downstream of the Kingston Wetland combined with the fairly consistent contribution of watershed oxygen demand from upstream to downstream point to a relatively large SOD in the wetland as opposed to a major point source of oxygen demand or other watershed source of oxygen demand not identified. In short, the wetland appears to consume dissolved oxygen through SOD and plant/algal respiration.

#### 4.2 LAKE LOUISA

Lake Louisa, on the Clearwater Chain of Lakes, is a 179-acre lake between Lake Betsy and Lake Marie (Figure 4.2.1). The littoral area for the lake is 113 acres, or 60% of the lake area. With two basins, the maximum depth is 44 feet and the mean depth is 12 feet. The dominant bottom substrate is sand, muck and silt with abundant macrophytes growing in depths up to 12 feet. Lake Louisa contains a viable fishery that is dominated by sunfish, northern pike, and largemouth bass. The lake is generally vertically stratified during the growing season.

#### Figure 4.2.1 Lake Louisa



Lake Louisa was included in the Clearwater River Chain of Lakes Restoration Project which began in 1980 and ended in 1993. During that project several nutrient load reduction measures

which reduced P concentrations in Lake Louisa and in the entire lake chain were undertaken, they included:

- Hypolimnetic aeration:
- Rough fish removal:
- Upgrading city wastewater treatment systems:
- Watershed BMPs,
- Wetland restoration and
- Wetland isolation.

Active mechanical harvesting of rough fish was conducted annually between 1984 and 1988; passive removal of rough fish is ongoing through a trap upstream of Lake Louisa at Highway 55 which was installed in 1998. Over 275,000 lbs of rough fish have been removed from Lake Louisa to date. Land application systems to treat wastewater from Watkins and Kimball went online in 1983 and 1985 respectively. Watershed BMPs including assistance with no-till farming and construction of manure storage lagoons were implemented throughout the watershed. Flow distribution structures were constructed around two wetlands near Kingston and on County Ditch 20 to filter river water through these previously ditched wetlands. In Watkins, a wetland was isolated and bypassed because it was exporting phosphorus due to historic discharges from a creamery.

These BMPs resulted in a dramatic decrease in TP concentrations in Lake Louisa. In-lake TP concentrations have declined from 440 µg/L in 1981 to 57 and 54 µg/L in the east and west basin respectively in 2006. Still, concentrations remain above the MPCA standard, and additional watershed load reductions are needed. To that end, data was collected towards completion of a TMDL study. The results of Lake Louisa water quality sampling from 2006 are discussed in this section and evaluated in the context of historical data available for Lake Louisa. Data collected in 2005 and 2006 are summarized in Appendix J; lab and field data is presented in Appendix K.

# 4.2.1 Lake Louisa 2006 Hydrology

Annual precipitation near Lake Louisa was 2.43 to 5.97 inches below average in 2006, 26.13 inches of precipitation was recorded by the MPCA at the Fairhaven Dam east of Lake Louisa and 22.59 inches of precipitation was recorded by a volunteer in Watkins, west of Lake Louisa. The 2006 precipitation on Lake Louisa's area of 179 acres amounted to 337 to 390 acre-feet (ac-ft), equivalent to an average inflow rate of approximately 0.5 cubic feet per second (cfs). However, lake evaporation at this location is typically 30.1 inches per year (USDA, c. 1966), and this is equivalent to a water loss rate of about 450 ac-ft for 2006, or an average outflow rate of approximately 0.6 cfs.

A continuous flow record at the Fairhaven Dam yielded a 2006 total flow volume of 36,573 ac-ft for the Clearwater River at that location. This was equivalent to 7.53 inches of runoff, surprisingly high for a relatively dry year. Apportioning flows at upstream locations by drainage area gives the following relationship (Table 4.2.1):

|                     | Drainage<br>Area | Runoff<br>Volume | Runoff<br>Depth | Average<br>Flow |
|---------------------|------------------|------------------|-----------------|-----------------|
| Location            | (ac)             | (ac-ft)          | (inches)        | (cfs)           |
| Lake Louisa Inflow  | 54,120           | 33,956           | 7.53            | 46.9            |
| Lake Louisa Outflow | 55,972           | 35,118           | 7.53            | 48.5            |
| Fairhaven Dam       | 58,291           | 36,573           | 7.53            | 50.5            |

Table 4.2.1 Lake Louisa Water Balance

# 4.2.2 Water Quality Standards and Numeric Targets

The Minnesota Pollution Control Agency (MPCA) developed numeric lake water quality standards for total phosphorus, chlorophyll-a, and Secchi depth. These three parameters are a measurement of indicators of eutrophication, which is the increase in biological productivity due to increased nutrient loading.

Because lake characteristics differ throughout the state, water quality standards vary by ecoregion and lake morphometry. The applicable water quality standards for the North Central Hardwood Forest Ecoregion are compared to 2006 mean water quality in Lake Louisa in Table 4.2.2. Though Lake Louisa is 60% littoral and may demonstrate some shallow lake characteristics, it is characterized as a deep lake since its maximum depth is greater than 15 feet, and is subject to the deep lake standard.

|                                     | Total<br>Phosphorus | Chlorophyll-a | Secchi Depth |
|-------------------------------------|---------------------|---------------|--------------|
| Lake Category                       | ųg/L                | ųg/L          | Meters       |
| Shallow Lakes Standard (MPCA)       | $\leq 60$           | $\leq 20$     | $\geq 1$     |
| Deep Lakes                          |                     |               |              |
| Applicable Standard for Lake Louisa |                     |               |              |
| (MPCA)                              | $\leq 40$           | $\leq 14$     | ≥1.4         |
| Lake Louisa (east basin)            | 54                  | 41            | 0.98         |
| Lake Louisa (west basin)            | 57                  | 35            | 0.97         |

 Table 4.2.2:
 Water Quality Standards for North Central Hardwood Forest Lakes

# 4.2.3 2006 In-Lake Water Quality

Mean surface TP concentrations in the east and west basins of Lake Louisa were 54 and 57  $\mu$ g/L respectively, exceeding the 40  $\mu$ g/L state standard for TP. Mean surface ortho-phosphorus concentrations were both 10  $\mu$ g/L (Table 4.2.3).

| Sample Type | Mean East<br>Basin TP<br>(µg/L) | Mean West<br>Basin TP<br>(µg/L) | Mean West<br>Basin OP<br>(µg/L) | Mean West<br>Basin OP<br>(µg/L) |
|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Surface     | 54                              | 57                              | 10                              | 10                              |
| Middle      | 46                              | 54                              | 10                              | 9                               |
| Bottom      | 176                             | 148                             | 143                             | 139                             |

 Table 4.2.3 2006 Lake Louisa Mean Phosphorus Concentrations

Surface TP concentrations in both the east and west basins of Lake Louisa were lowest in spring, with a minimum concentration of 25 and 28  $\mu$ g/L measured on May 30. Concentrations increased throughout the summer, reaching maximum concentrations in the east and west basin of 83 and

90  $\mu$ g/L respectively on August 3. Surface TP concentrations in Lake Louisa exceeded the MPCA standard of 40  $\mu$ g/L in six of seven samples that were collected in 2006 (Figure 4.2.2).

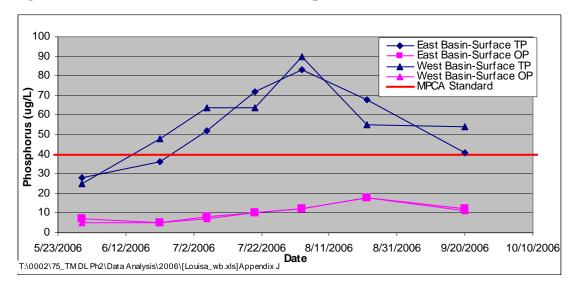
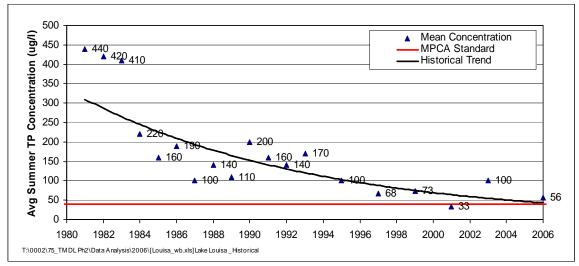


Figure 4.2.2 2006 Lake Louisa Surface Phosphorus Concentrations

Average summer surface TP concentrations have exhibited a decreasing trend since 1981. Overall, 2006 surface TP concentrations were well below the long-term average TP concentration of 173  $\mu$ g/L. The average TP concentration was almost 90% lower in 2006 than it was in 1981. While the summer average TP concentrations have been decreasing, they remain above the MPCA standard (Figure 4.2.3).



**Figure 4.2.3 Lake Louisa Historical Average Summer Surface Total Phosphorus Concentrations** 

The 2006 summer average surface orthophosphorus concentration was 10  $\mu$ g/L in both the east and west basins of Lake Louisa. Concentration of OP and TP followed similar seasonal patterns. Surface OP concentrations remained low in the early summer before reaching a peak of 18  $\mu$ g/L at both sites on August 22, and then decreased.

Orthophosphorus is the primary form of phosphorus used by algae and aquatic plants and provides a measurement of phosphorus that is immediately available for plant growth. Because of its availability for immediate uptake by plants, increased levels of ortho-phosphorus can cause increased algal growth. Ortho-phosphorus comprised 15-33% of the surface TP concentration in 2006.

The 2006 mean chlorophyll-a concentrations in the east and west basins of Lake Louisa were 41 and 35  $\mu$ g/L respectively, both exceeded the MPCA standard of 14  $\mu$ g/L. The minimum chlorophyll-a concentration for the east and west basins, 13 and 7  $\mu$ g/L respectively, were observed during the May 30 sampling event. The chlorophyll-a concentration in both basins increased as the summer progressed, peaking at 74  $\mu$ g/L on August 3 in the east basin and at 75  $\mu$ g/L in the west basin before decreasing in the last two sample events. Six of seven samples

collected in the east basin exceeded the MPCA standard for chlorophyll-a; four of six samples collected in the west basin exceeded the MPCA standard for chlorophyll-a (Figure 4.2.4).

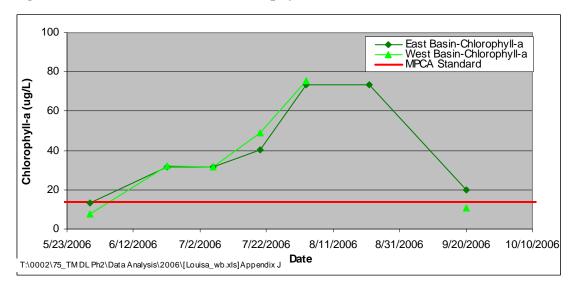
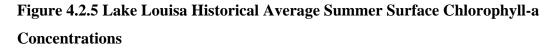
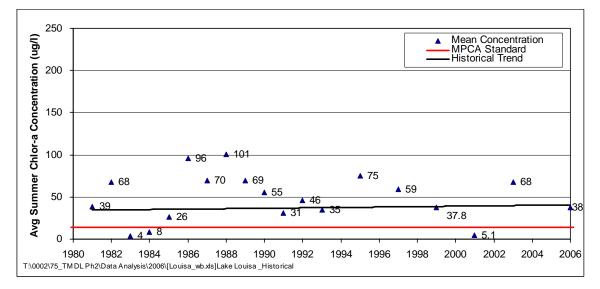


Figure 4.2.4 2006 Lake Louisa Chlorophyll-a Concentrations

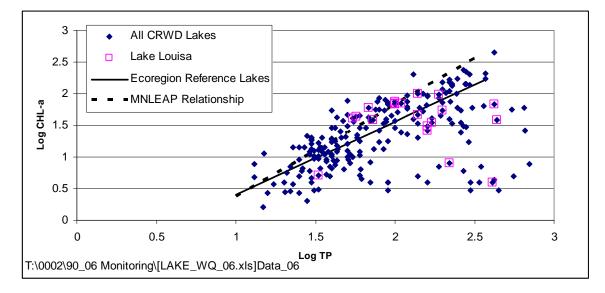
Chlorophyll-a concentrations in Lake Louisa exceeded the MPCA standard for nearly every year on record. The 2006 summer average concentration was below the long term average of 49  $\mu$ g/L (Figure 4.2.5).



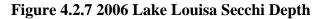


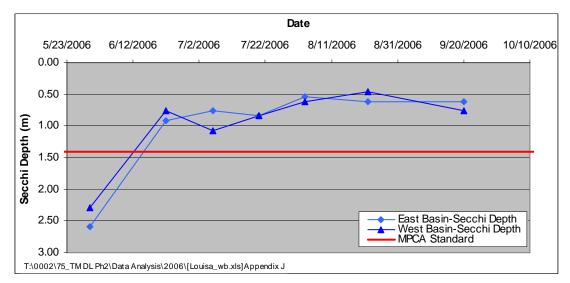
The lack of a clear trend in historical chlorophyll- a concentrations indicate that in some years, concentrations may have been limited by available light or other factors besides TP concentrations. This conclusion is supported by long-time residents who report that historically, Lake Louisa was turbid with very few macrophytes. Figure 4.2.6 compares the relationship between TP and chlorophyll-a for CRWD lakes, including Lake Louisa and Ecoregion reference lakes.

Figure 4.2.6 Log Chlorophyll-a vs Log TP for CRWD Lakes, Lake Louisa and Ecoregion Reference Lakes

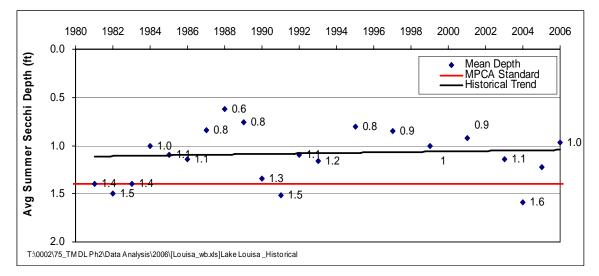


The 2006 summer average Secchi depths were similar in both basins of Lake Louisa, with an average of 0.98 meters in the east basin, and 0.97 meters in the west basin. The summer average Secchi depth in both basins was less than the MPCA standard of 1.4 meters. Seasonal variation was also similar in both basins, with maximum Secchi depths occurring on May 30, followed by an overall decrease throughout the summer. Measured Secchi depth was less than the MPCA standard during six of seven sample events in both basins in 2006 (Figure 4.2.7).





Secchi depths have violated the state standard in all but 5 of the past 21 years for which there is monitoring data (Figure 4.2.8). The long-term (1981- present) average Secchi depth in Lake Louisa is 1.1 meters. During this time period Secchi depth has shown a slight decreasing trend. This contrary trend was observed in Clearwater Lake over the same time period. In that case, it resulted from shifts in phytoplankton dominance.



#### Figure 4.2.8 Lake Louisa Historical Secchi Depth

#### 4.2.4 Source Assessments

The sources of nutrients to Lake Louisa include:

- In-lake nutrient cycling,
- Clearwater River,
- Local watershed,
- Septic systems,
- Atmospheric loads and
- Ambient groundwater inflows

These sources are assessed in the sections that follow.

# 4.2.4.1 In-Lake Nutrient Cycling

High phosphorus concentrations in sediment and bottom water samples indicate that the sediments of Lake Louisa recycle a significant amount of phosphorus back into the water column. Two approaches were used to quantify the internal phosphorus loading in Lake Louisa. A 2003 study conducted by Wenck Associates quantified the sediments' phosphorus content in Lake Louisa and estimated the internal load as 3,600 lbs of phosphorus/year.

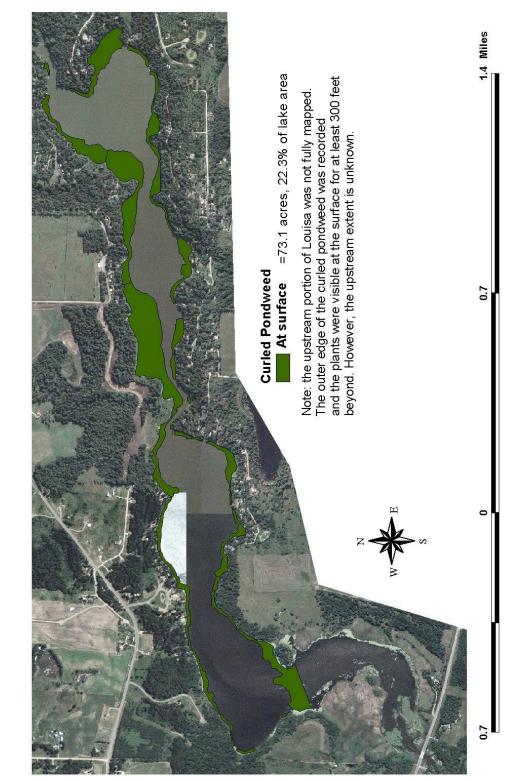
Another method utilized to assess phosphorus cycling in Lake Louisa involved developing the "anoxic factor" for the lake and applying an estimated sediment phosphorus release rate. The anoxic factor is expressed in days but is normalized over the area of the lake. For example, if the depth of oxygen depletion (<2 mg/L DO) over a period of time was 6 meters, then the number of days in the period was multiplied by the anoxic area at that depth and divided by the entire area of the lake. As the depth of oxygen depletion varied throughout the season, these results were summed up to derive the anoxic factor. An estimated release rate was then selected based upon the eutrophic state of the lake. The selected release rates represented a range based on previous lake studies. Applying different phosphorus release rates to the area of the lake that was anoxic resulted in internal phosphorus loads in Lake Louisa ranging from 1,100 to 2,500 lbs/year.

Temperature and dissolved oxygen measurements were taken at 1 meter intervals throughout the water column of Lake Louisa during the 2006 sampling trips. Temperature profiles indicate that the lake was stratified during the entire period from May 30 to September 20. The thermocline was typically present at a depth of 2 to 6 meters throughout the sampling period. Dissolved oxygen profiles indicate that the hypolimnion, that area of the lake below the thermocline, is anoxic for most of the summer. The depth below which Lake Louisa was considered anoxic in 2006 ranged from 2 to 4 meters.

Bottom water samples were collected in both basins of Lake Louisa in 2006. The bottom phosphorus concentrations exhibited similar seasonal patterns in both basins of the lake. Bottom TP concentrations steadily increased throughout the summer, with maximum concentrations

occurring at both sites on September 20, 2006. Similarly, the proportion of bottom-water TP comprised of orthophosphorus increased steadily throughout the season, with orthophosphorus making up nearly all of the TP concentration on September 20, 2006. Since the lake was stratified during the part of the season that the phosphorus concentrations were increasing, the high concentrations of phosphorus observed in the samples collected near the bottom are an indication of phosphorus release from the bottom sediments of Lake Louisa.

The submergent aquatic plant curly leaf pondweed, may exacerbate internal phosphorus cycling. Curly leaf pondweed is abundant in early summer in Lake Louisa as demonstrated by an aquatic vegetation inventory conducted by the MN DNR on June 2, 2005. Figure 4.2.9 indicates that 73.1 acres, or 22.3% of the lake, had curly leaf pondweed growing to the water surface at the time of the inventory.



#### Figure 4.2.9 Lake Louisa Curly Leaf Pondweed Extent (From Minnesota DNR)

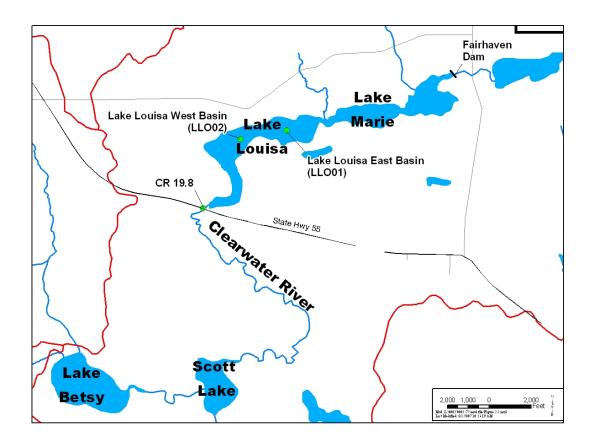
Louisa/Marie Curled Pondweed 6/2/05

When the lake was surveyed again in August 2005, curly leaf pondweed was only found at one transect location, indicating that the curly leaf pondweed had died off by late summer. Curly leaf pondweed begins its growth in late winter and typically reaches the end of its life cycle and dies back by July, releasing large amounts of phosphorus and depleting dissolved oxygen. This pulse of phosphorus can cause nuisance algal blooms in the lake. While the senescence of curly leaf pondweed contributes a pulse of available phosphorus to Lake Louisa, since it is only found in approximately 22% of the lake, it likely is not a major source of phosphorus in the lake.

#### 4.2.4.2 Clearwater River

The Clearwater River flows into Lake Louisa in the southwest corner of the lake. The river then flows through the lake, into Lake Marie, and over the dam at Fairhaven. The Clearwater River is responsible for a large portion of the nutrient load that is input to Lake Louisa during a typical year. The nutrient load from the Clearwater River for 2006 was calculated using concentrations from samples collected in the summer of 2006 at sampling point CR19.8, which is located at the Clearwater River inflow to Lake Louisa (Highway 55 bridge approximately 2 miles west of South Haven) at Clearwater River mile 19.8 (Figure 4.2.10).

# Figure 4.2.10 Lake Louisa Monitoring Locations and Adjacent Water Bodies



The flow-weighted mean TP concentration of the samples collected at CR 19.8 was 104  $\mu$ g/L. TP concentrations varied seasonally at CR 19.8. There were two peaks observed in TP concentrations on June 28 and September 25. The peak in TP concentration observed in September can be attributed to an increase in runoff from a heavy precipitation event prior to the sampling.

In 2006, the portion of the Clearwater River that is tributary to Lake Louisa had 7.5 inches of runoff over the watershed. This tributary area of 54,120 acres contributed a volume 34,000 acreft of water to Lake Louisa over the year. Using the volume of water over the watershed and the flow-weighted TP concentrations at CR19.8, the total load of phosphorus to Lake Louisa from the Clearwater River in 2006 was calculated to be 9,600 lbs.

An alternative estimate based on inverting the Canfield-Bachmann model yields a smaller phosphorus load to Lake Louisa in 2006. According to this approach, the 2006 load of phosphorus to the lake was 6,450 lbs, which is considerably less than the load based on phosphorus concentrations and flow in the Clearwater River.

The Clearwater River enters Lake Louisa at the head of a large shallow bay that is densely vegetated with emergent and submergent vegetation. A vegetation inventory conducted in August 2005 by the MN DNR demonstrates that the entire bay is vegetated with floating leaf and submergent aquatic vegetation (Appendix J). This shallow bay may function as a treatment basin, with particulate phosphorus settling out as the stream flow disperses, and orthophosphorus being taken up by the abundant aquatic plants growing in the shallow bay. There is evidence of sediment settling out of the stream flow, as sediment deltas are present in the shallow bay downstream of the mouth of the Highway 55 bridge.

#### 4.2.4.3 Local Watershed

Direct runoff from Lake Louisa's local watershed was a minimal source of nutrients during 2006 since precipitation was well below average.

The direct watershed to Lake Louisa encompasses approximately 1,852 acres. The land use within the directly contributing watershed is shown in Figure 4.2.11 and summarized in Table 4.2.3. The land use is predominantly agricultural, although agricultural activity, especially cultivated cropland, is less prominent in the direct contributing watershed to Lake Louisa than it is in the upstream portions of the CRWD. A small percentage of the subwatershed is developed, and a large portion of it is forested.

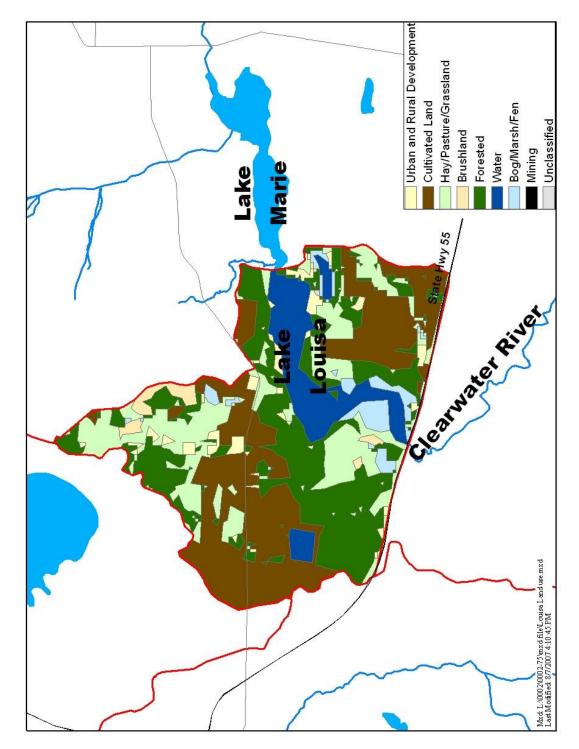


Figure 4.2.11-Lake Louisa Local Watershed Land Use

| Land Use                                     | Area (%) |  |
|--|----------|--|
| Urban and Rural Development                  | 3.2%     |  |
| Cultivated Land                              | 32.3%    |  |
| Hay/Pasture/Grassland                        | 19.3%    |  |
| Brushland                                    | 1.9%     |  |
| Forested                                     | 28.8%    |  |
| Open Water                                   | 10.8%    |  |
| Wetland                                      | 3.7%     |  |
| Unclassified                                 | 0.0%     |  |
| Source: MN Land Use and Cover (MN DNR, 1996) |          |  |

Table 4.2.3-Lake Louisa Subwatershed Land Use

The 2006 input of phosphorus to Lake Louisa from local watershed runoff was estimated by using the watershed loading rate over the portion of the Clearwater River watershed upstream from Lake Louisa. This portion of the watershed has a comparable land use to Lake Louisa's directly contributing watershed, and on average it exported 0.18 lbs of phosphorus/acre/year in 2006. Therefore, the load of phosphorus to Lake Louisa contributed by runoff from its local watershed is estimated as 320 lbs of phosphorus/year for 2006.

#### 4.2.4.4 Septic Systems

A review of county parcel information indicates that there are 56 homes on the shoreline of Lake Louisa. Residents comprise both part-time and year-round residents. Assuming that each home has an individual septic system, an estimate of phosphorus input to the lake was calculated. There are two components that make up the waste that is treated by a septic system: household wastewater, which may contain soaps and detergents that incorporate phosphorus, and human waste. The production of phosphorus in human waste is about 1.5 grams P per capita per day, and a reasonable allowance for other household sources approximately doubles the daily per-capita production to 3 grams (Stumm and Stumm-Zollinger, 1972), equivalent to 2.4 lb P/capita/year. Assuming that three persons, on average, live in each home on the lake for an average of three quarters of each year, the total annual production would be 300 lb P/yr, of which perhaps one third, or 100 lb P/yr, would actually enter the lake.

# 4.2.4.5 Atmospheric Loads

The atmosphere delivers phosphorus to water and land surfaces both in precipitation and in socalled "dryfall" (dust particles that are suspended by winds and later deposited). A recent statewide study of phosphorus sources commissioned by the MPCA (Barr, 2004) gives the following atmospheric load data for the upper Mississippi River watershed (Figure 4.2.4):

| Deposition Component               | [kg/ha/yr] | [lb/ac/yr] |
|------------------------------------|------------|------------|
| Low-precipitation P deposition     | 0.0809     | 0.0722     |
| Average-precipitation P deposition | 0.1006     | 0.0898     |
| High-precipitation P deposition    | 0.1228     | 0.1096     |
|                                    |            |            |
| Dry P deposition                   | 0.0703     | 0.0627     |
|                                    |            |            |
| Dry-year total P deposition        | 0.1512     | 0.1349     |
| Average-year total P deposition    | 0.1709     | 0.1525     |
| Wet-year total P deposition        | 0.1931     | 0.1723     |

Table 4.2.4 Atmospheric Deposition of P

Since 2006 was a dry year, the appropriate total P deposition rate is 0.1349 lb/ac/yr. Taken over Lake Louisa's area of 179 acres, the total atmospheric P load on the lake in 2006 is estimated as 8 lb for the year.

# 4.2.4.6 Ambient Groundwater Inflow

Lake Louisa lies within the Anoka Sand Plain and is therefore subject to significant groundwater interaction. The hydrologic atlas, "Water Resources of the Mississippi and Sauk Rivers Watershed, Central Minnesota" (Helgesen et al., 1975; U.S Geological Survey HA-534), includes the Clearwater River watershed and contains a water table map indicating that

groundwater from the Sand Plain aquifer discharges to Lake Louisa (and to Clearwater River generally – as expected for a significant stream).

The rate of groundwater inflow to Lake Louisa is estimated to be 5,600 ac-ft/yr on the following basis:

Rate of inflow = (hydraulic conductivity)  $\cdot$  (hydraulic gradient)  $\cdot$  (saturated thickness)  $\cdot$  (width)

The Anoka Sand Plain aquifer's hydraulic conductivity ranges from 30 to 150 meters per day, according to Landon and Delin (1995), giving a geometric mean value of 67 meters per day, or 220 ft/day. The water table map of Helgesen et al. (1975) shows hydraulic gradients toward Lake Louisa ranging from 0.002 to 0.018 ft/ft, with a geometric mean of 0.006 ft/ft. The median saturated sand thickness based on geologic logs from nine nearby wells is 42 ft. Finally, the width of groundwater flow into Lake Louisa is approximately 12,000 ft, being double the lake's upstream-downstream extent (because flow enters the lake from both north and south). The calculation of groundwater inflow is thus:

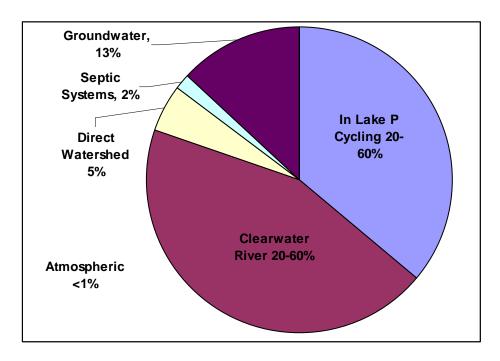
Rate of inflow =  $(220 \text{ ft/day}) \cdot (0.006 \text{ ft/ft}) \cdot (42 \text{ ft}) \cdot (12,000 \text{ ft}) = 665,280 \text{ ft}^3/\text{day},$ 

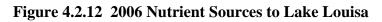
equivalent to 5,575 ac-ft/yr, or 5,600 ac-ft/yr, rounded appropriately. This result is also equivalent to an average groundwater inflow rate of 7.7 cfs.

The phosphorus load corresponding to the above groundwater inflow volume is estimated to be 850 lb/yr, based on a statewide median TP concentration for surficial glacial aquifers of 56 ug/L (MPCA, 1999).

# 4.2.4.7 Summary of Sources

Based on the measured loads in 2006, historic information regarding internal P cycling, and inverted Canfield-Bachmann, a general breakdown of P sources to Lake Louisa is shown in Figure 4.2.12.





In Phase III, the data collected during 2006 will be used in conjunction with historical data to model Lake Louisa to narrow the range of values and quantify the driving conditions during wet and dry years.

# 5.0 Stakeholder Involvement

Six stakeholder involvement meetings have been held to date; they are summarized below:

#### December 17, 2003 in Annandale

Watershed District Managers, the District Administrator, the MPCA Project Manager, and the Wenck Project Manager presented information about the TMDL process and the Clearwater River and Lake Louisa TMDL Project specifically. A question and answer session followed the presentation. County Soil and Water Conservation District Representatives from Wright, Meeker and Strearns Counties were invited, along with representatives from the Cities of Kimball and Watkins. Citizen advisory group members were also invited. Wright and Meeker County representatives attended.

#### December 17, 2003 in Annandale

The Wenck Project Manager presented information about the TMDL process and the Clearwater River and Lake Louisa TMDL Project specifically. An analysis of existing data was presented. A question and answer session followed the presentation. County Soil and Water Conservation District Representatives from Wright, Meeker and Strearns Counties were invited, along with representatives from the Cities of Kimball and Watkins. Citizen advisory group members, and lake associations were also invited. A Meeker County representative attended, along with members of the Citizen Advisory Group, and Clearwater Lake Association.

#### March 16, 2004 in Watkins

An additional meeting was held to solicit additional stakeholder involvement. The Wenck Project Manager presented information about the TMDL process and the Clearwater River and Lake Louisa TMDL Project specifically. An analysis of existing data was presented. A question and answer session followed the presentation. Meeting invitations and a letter describing the TMDL Project were sent to resident's homes. County Soil and Water Conservation District Representatives from Wright, Meeker and Stearns Counties, as well as representatives from the Cities of Kimball and Watkins were invited. Citizen advisory group members and lake associations were invited. The goal of the meeting was to establish a representative stakeholder group. These representative stakeholders met two more times.

#### July 15, 2007 Clearwater Chain of Lakes Association, Lake Louisa Working Group

District Administrator Merle Anderson met with members of the Clearwater Chain of Lakes Association (CCOLA) to spark interest in a Lake Louisa working group. This group of citizens heard a summary of the TMDL process and progress and agreed to discuss the Lake Louisa TMDL with residents to encourage interest and participation.

#### August 6, 2007, Clearwater Chain of Lakes Association, Lake Louisa Working Group

District Administrator Merle Anderson and Project Engineer Rebecca Kluckhohn met with 16 members of the Clearwater Chain of Lakes Association (CCOLA). This group is comprised of Lake Louisa and Lake Marie residents concerned with upstream water quality. Each resident expressed concern about the perceived deterioration of water quality in the entire Chain of Lakes. Most residents had moved to the area since the major improvements in water quality in the 1980s as the result of the Clearwater Chain of Lakes Improvement Project. Residents speculated that many septic systems around the lakes needed replacement, but that costs would be prohibitive for several residents. Residents also expressed concerns about livestock allowed to graze in and near the lakes and the Clearwater River.

#### August 10, 2007, Clear Lake Citizenship Dinner

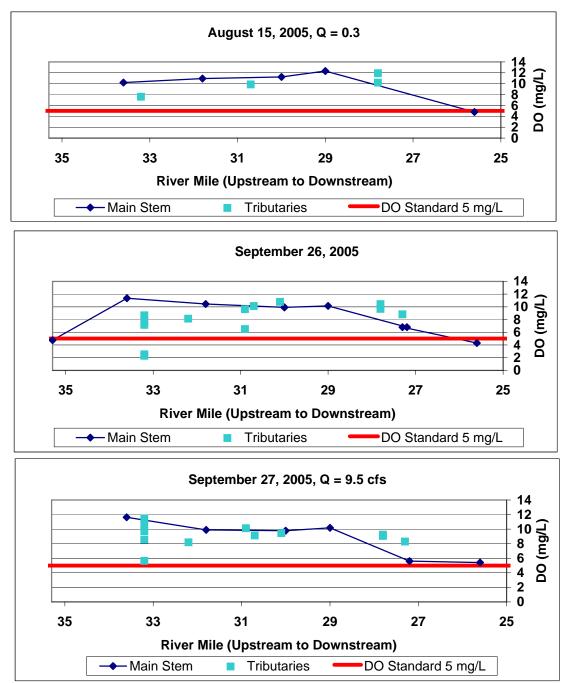
The CRWD's 6<sup>th</sup> Annual Citizenship Dinner was held at the Sportsman's Center at Clear Lake. Residents in the area of Clear Lake, the upstream boundary of the listed reach of the Clearwater River addressed in this report. Manager Anderson and District Engineer Norm Wenck listened to residents and answered questions about water quality in Clear Lake.

# 6.0 References

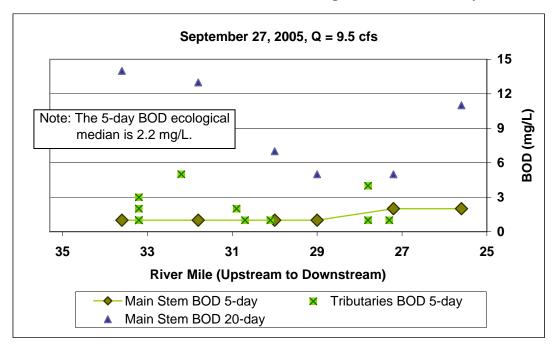
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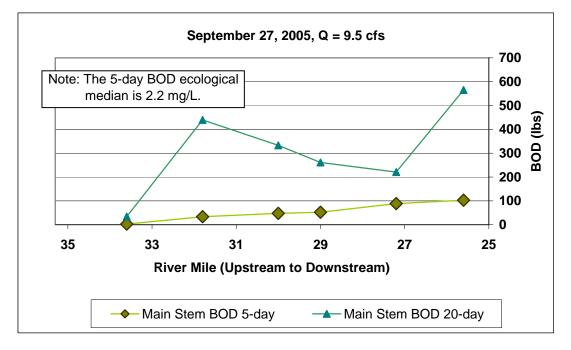
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# Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

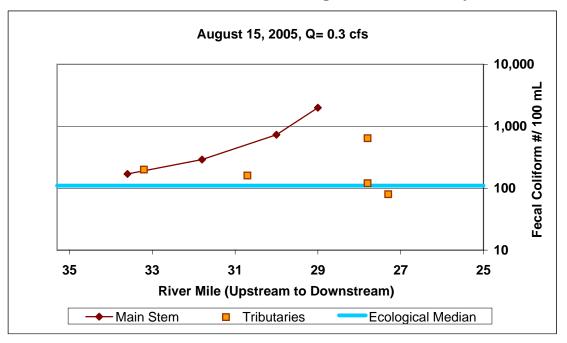


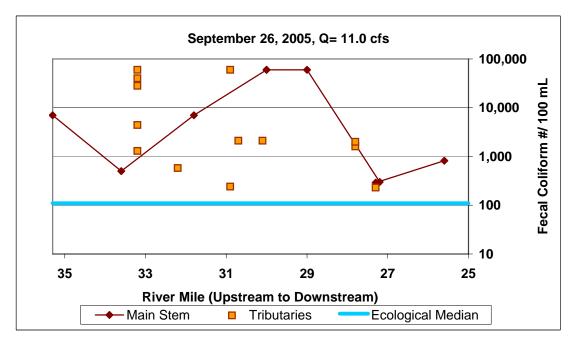
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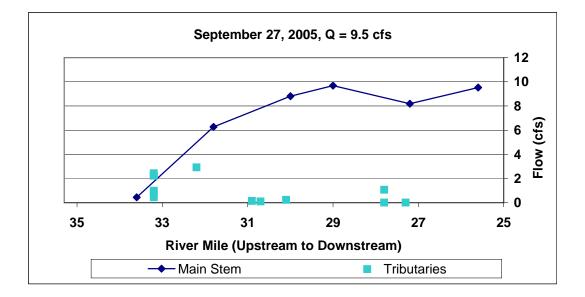


### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

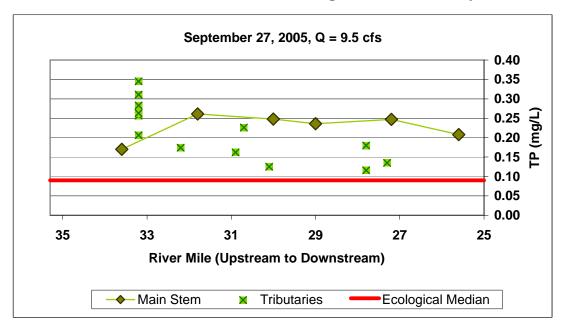


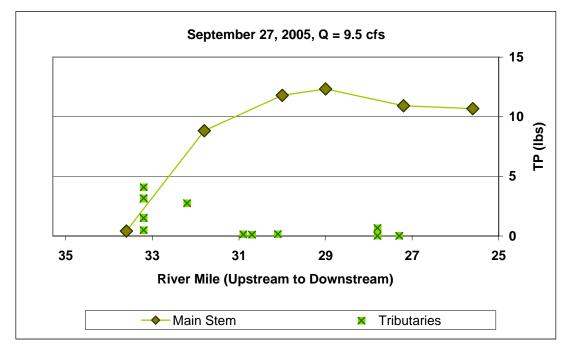


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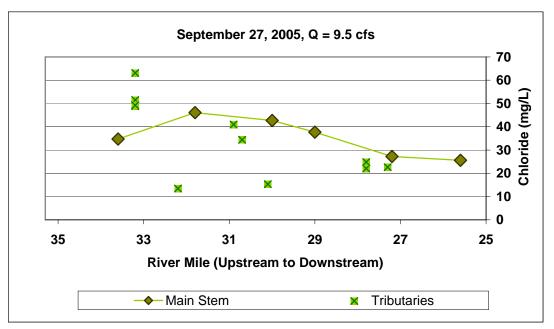


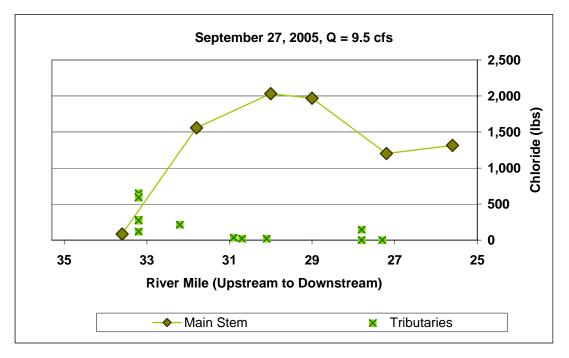
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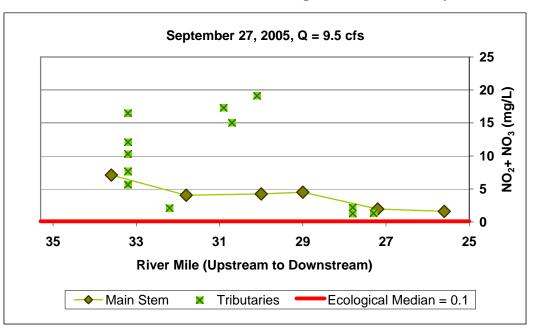


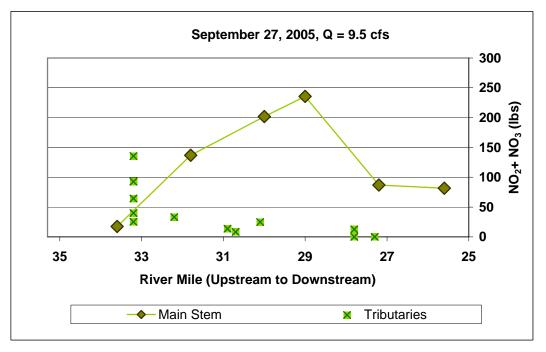
# Clearwater River Watershed District Clearwater River Bacteria and DO TMDL



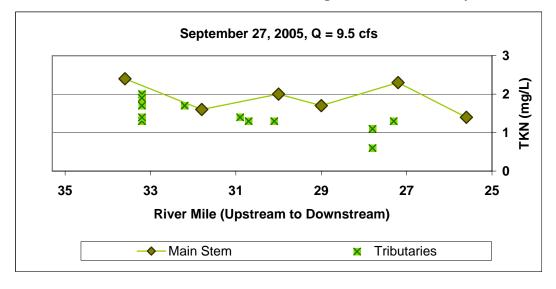


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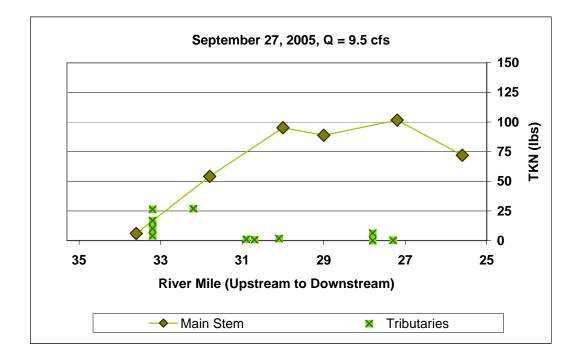




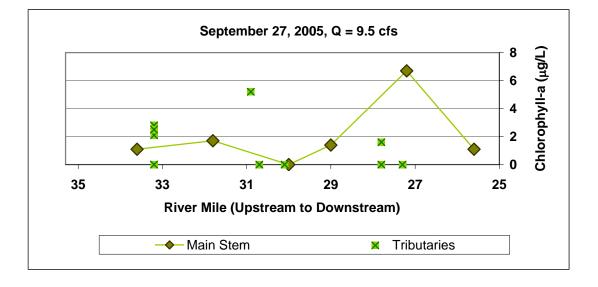
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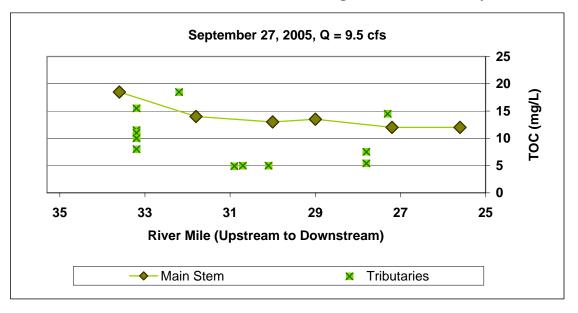


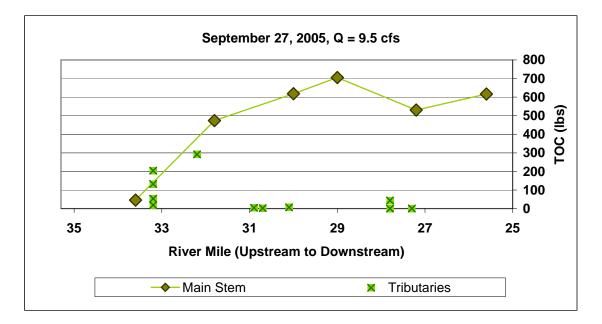


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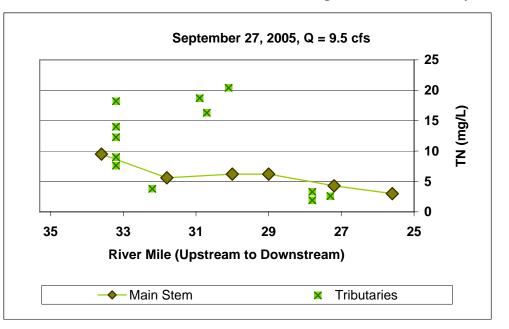


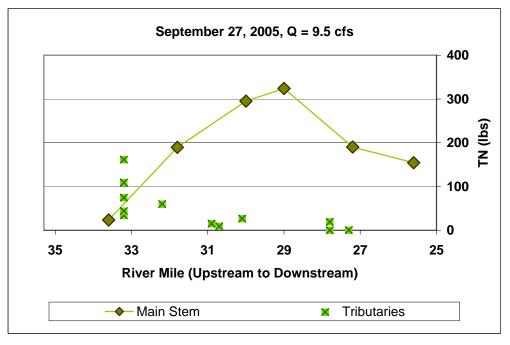
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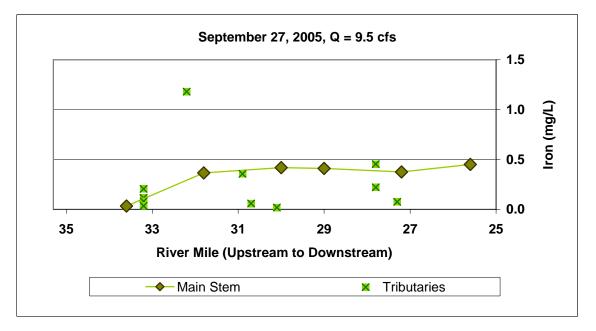


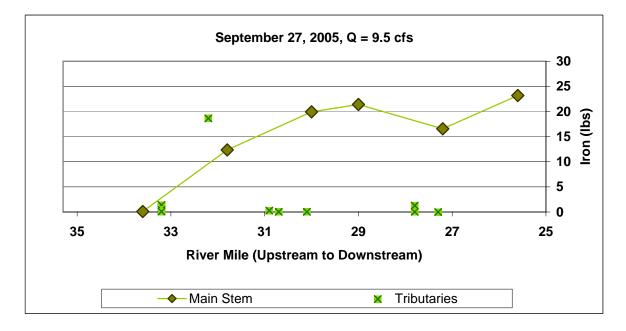
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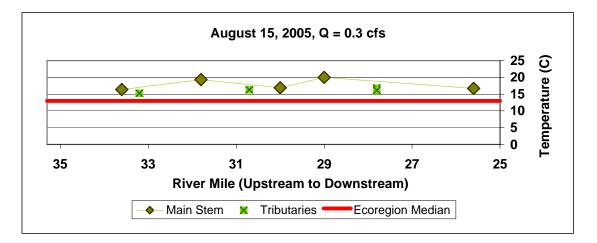


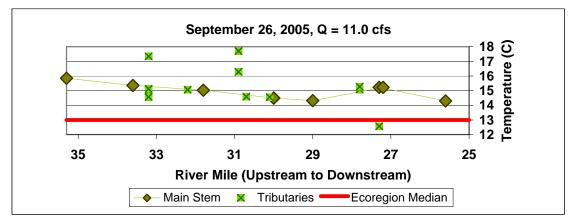
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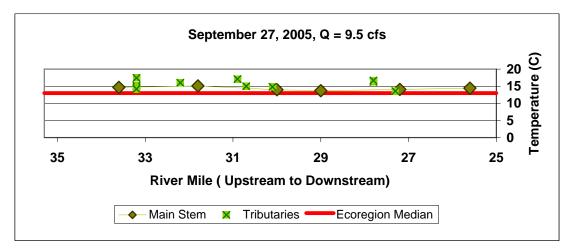




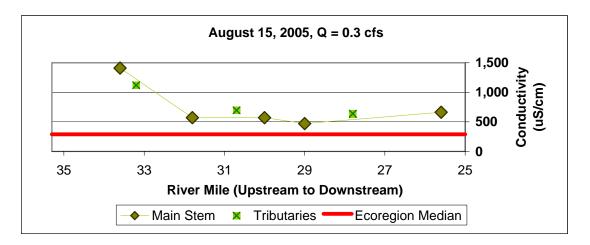
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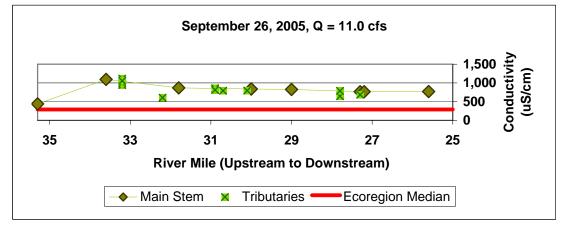


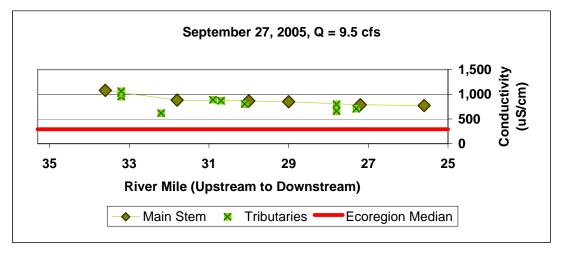




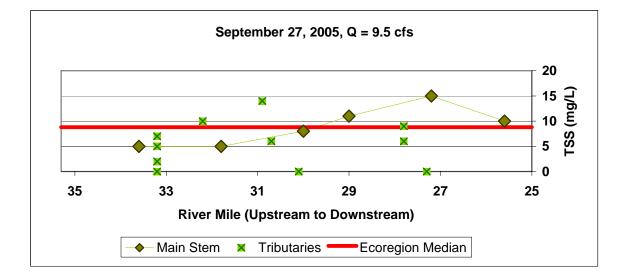
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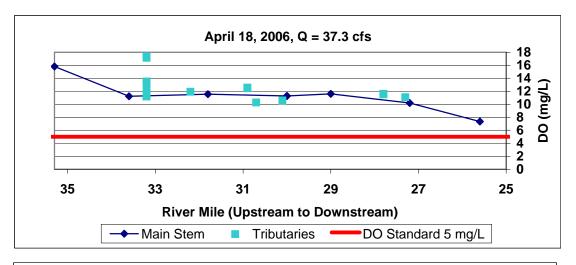


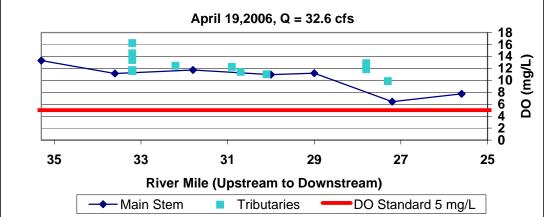


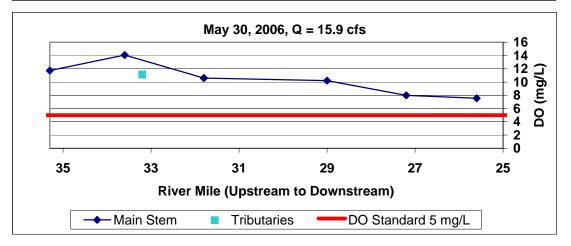
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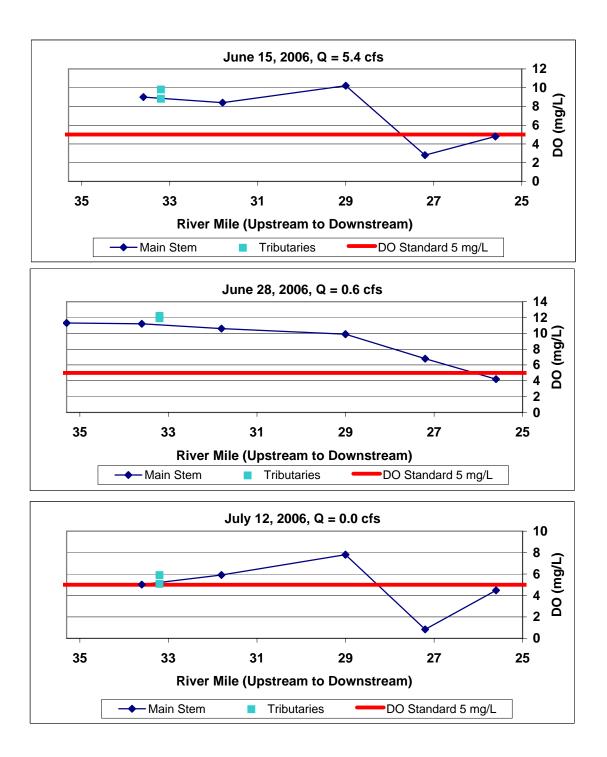
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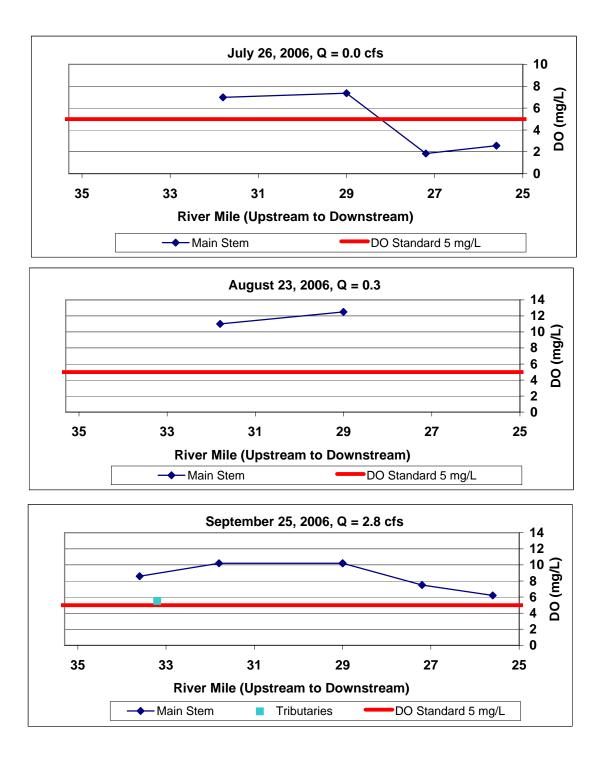




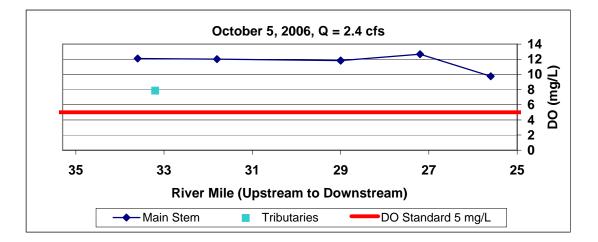
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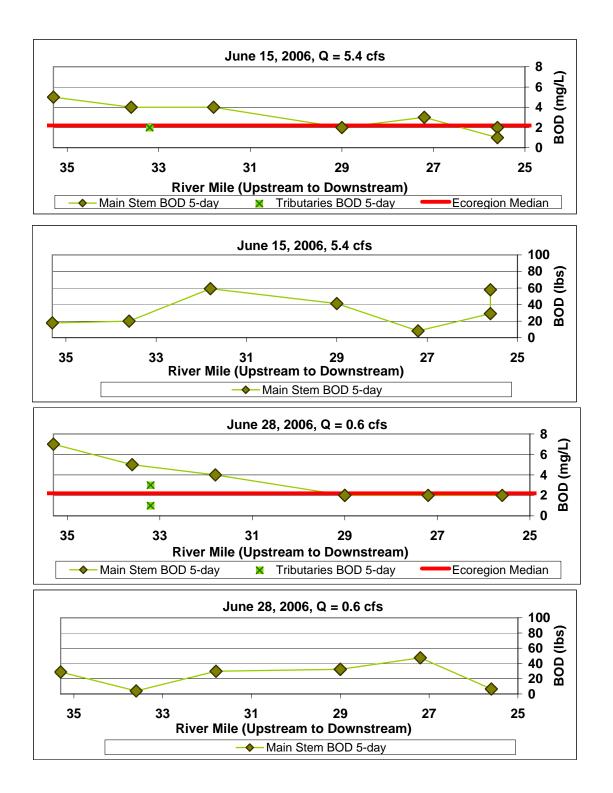
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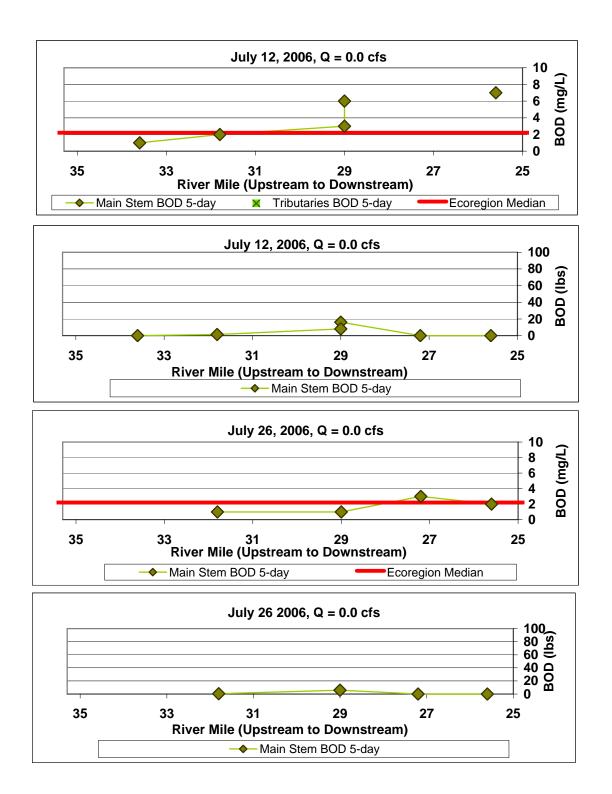
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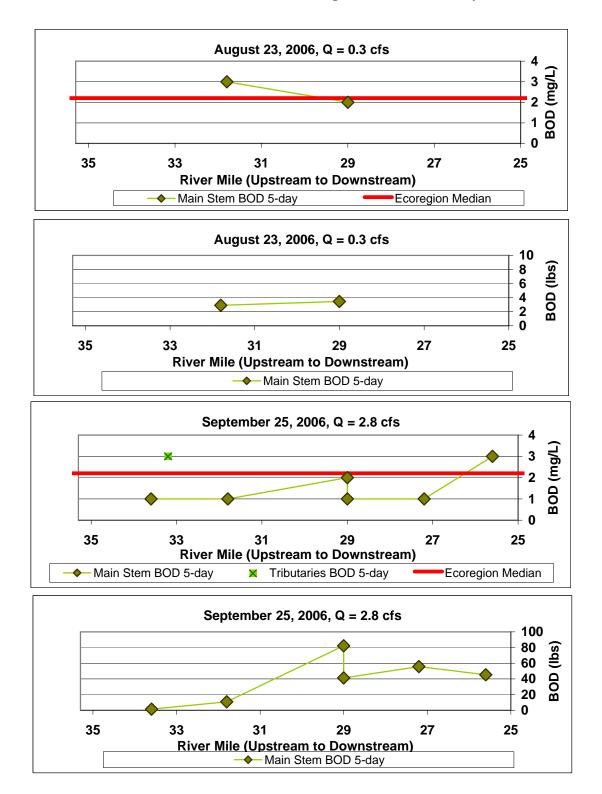
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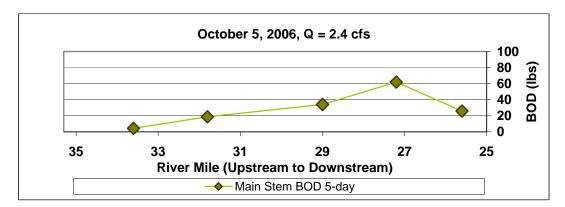


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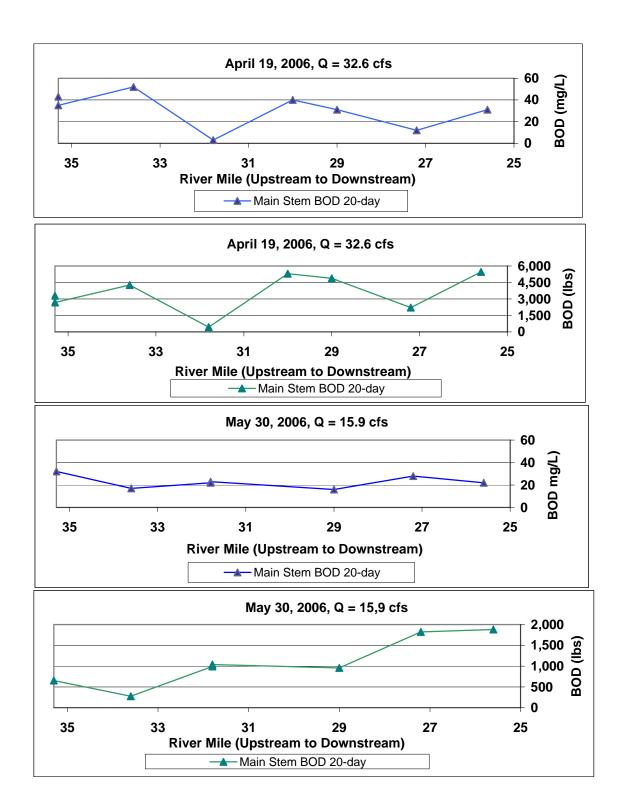


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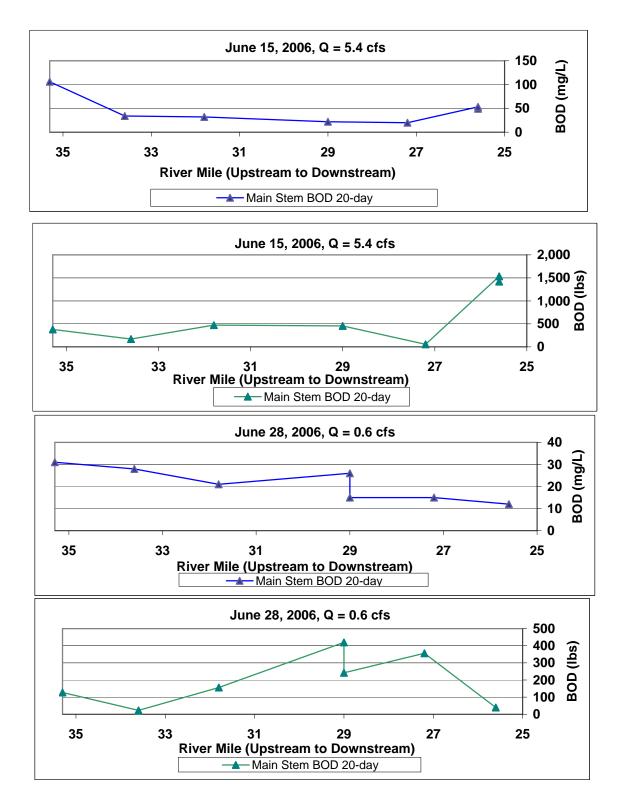
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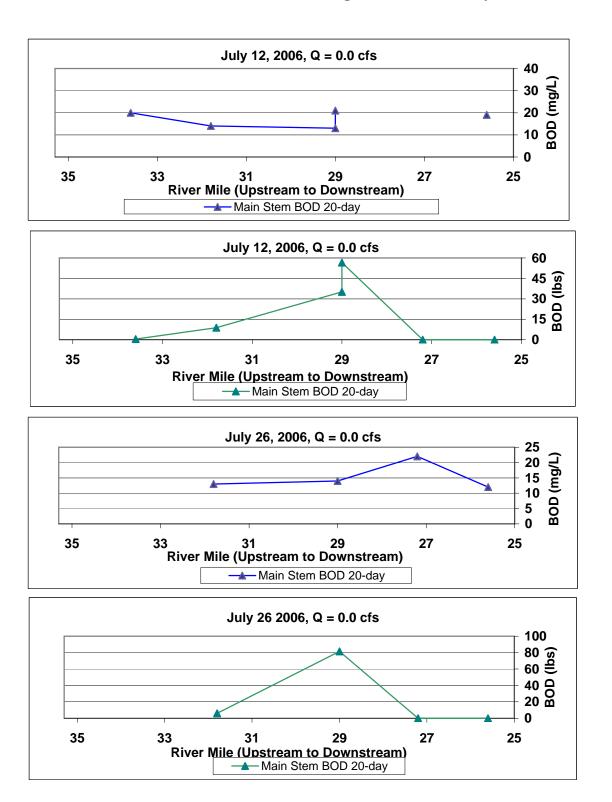
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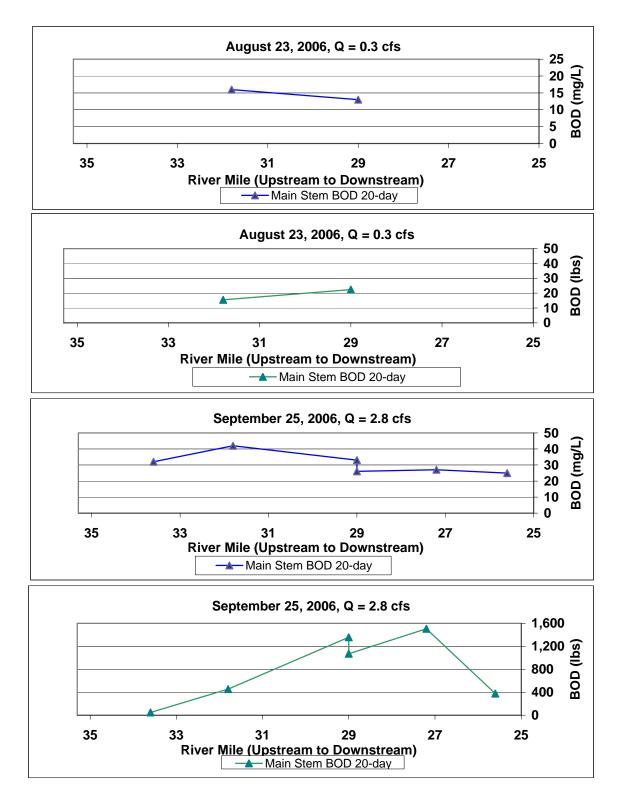
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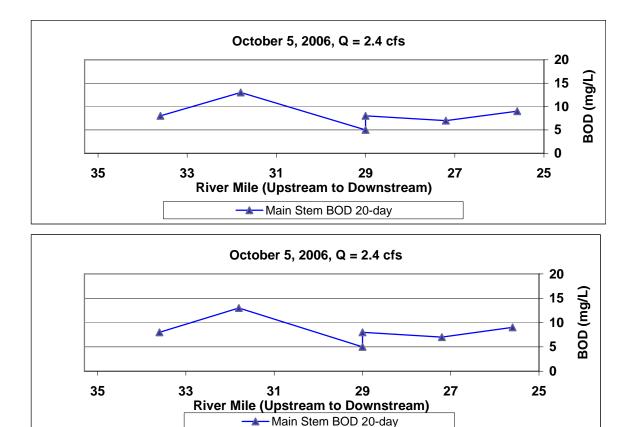
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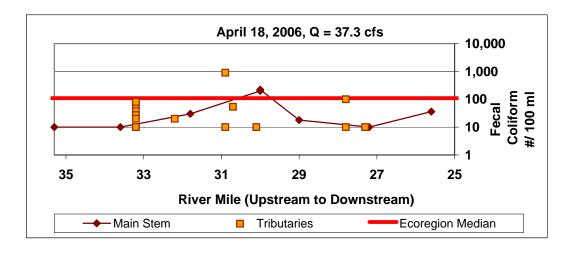
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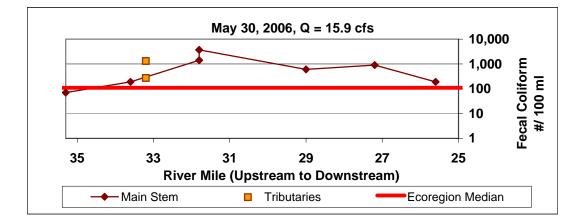


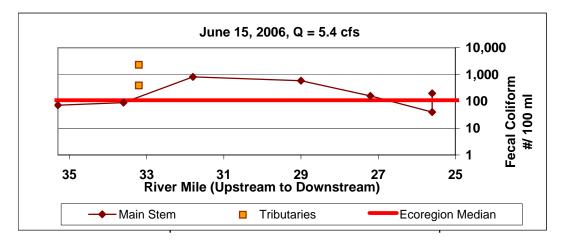
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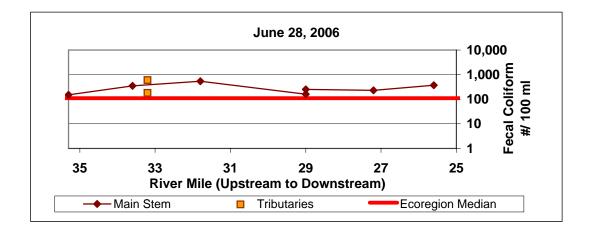
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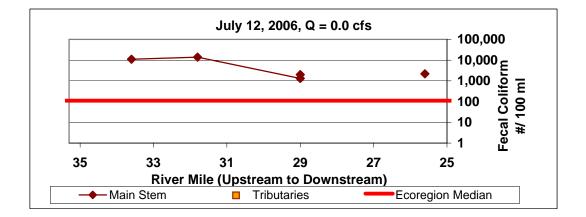


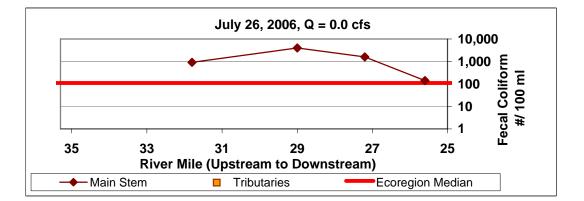




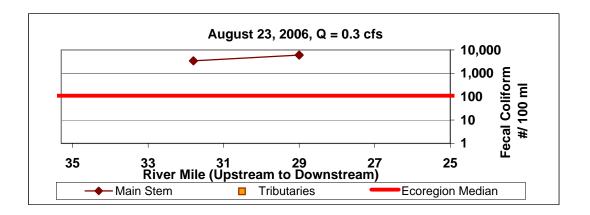
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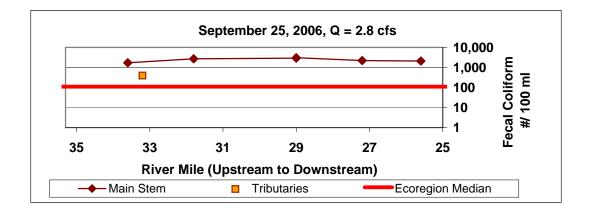


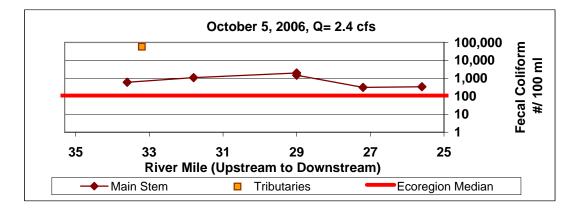




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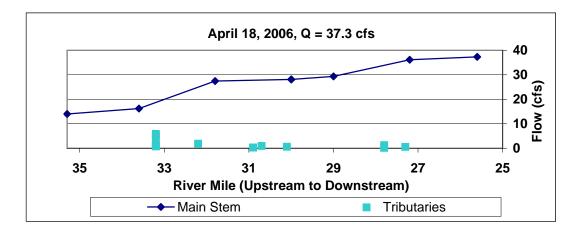


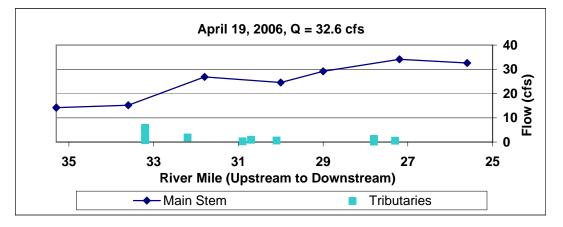


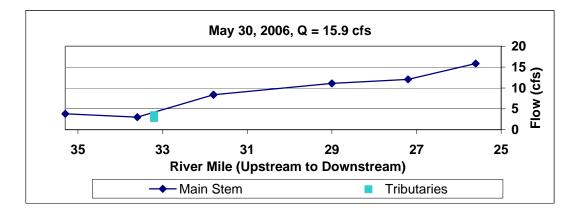


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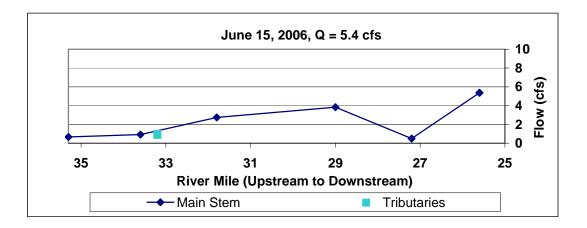


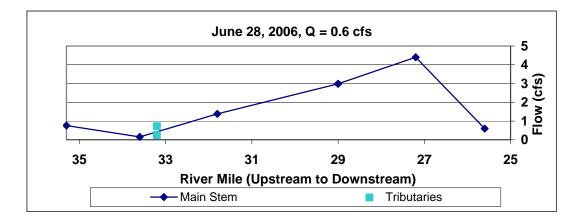


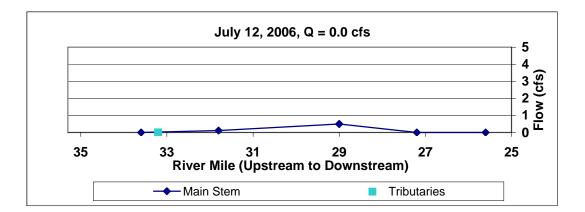




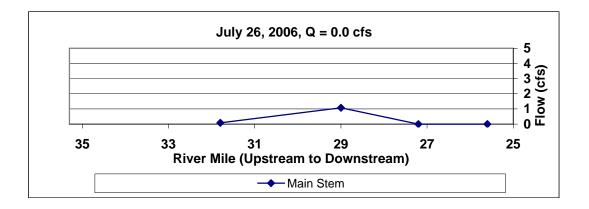
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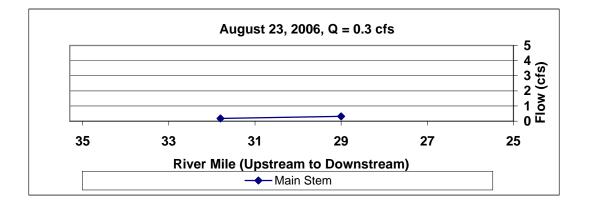


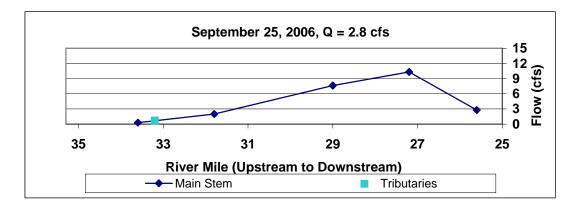




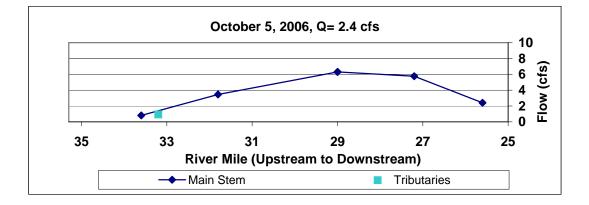
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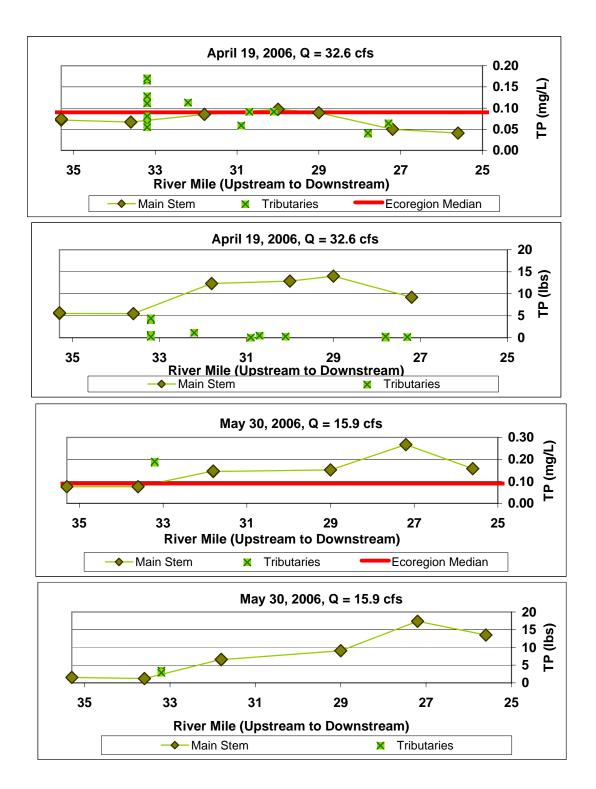




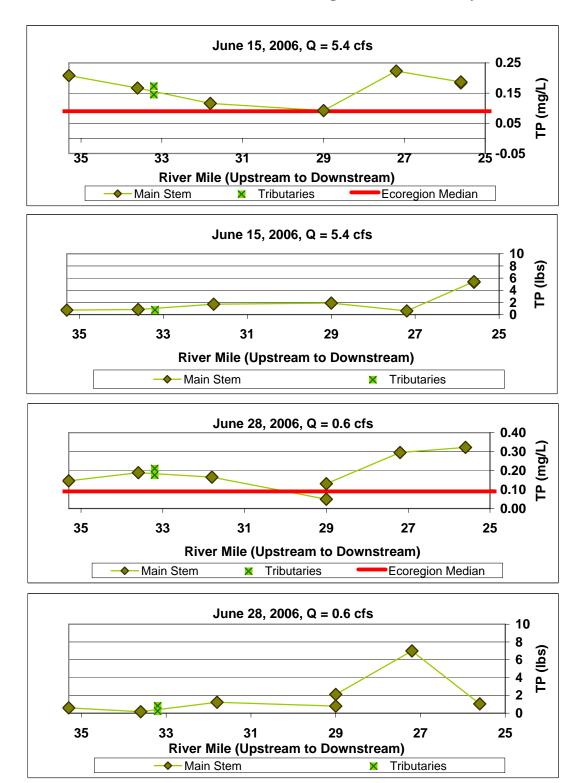
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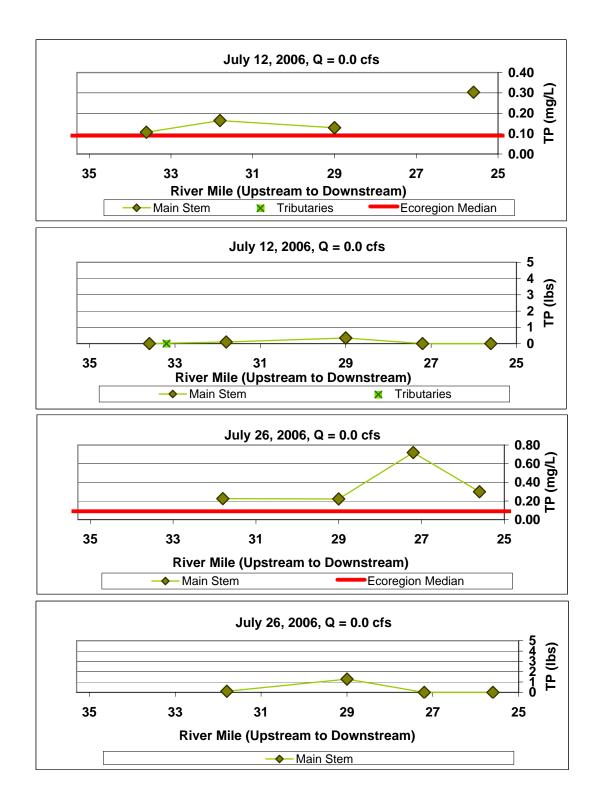
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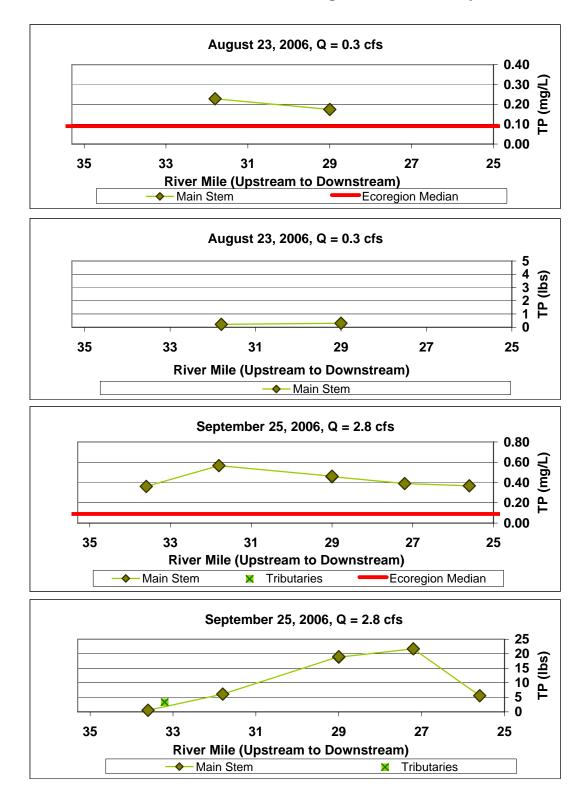
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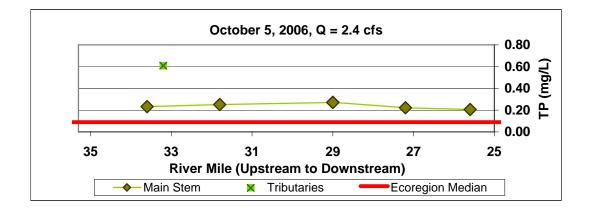
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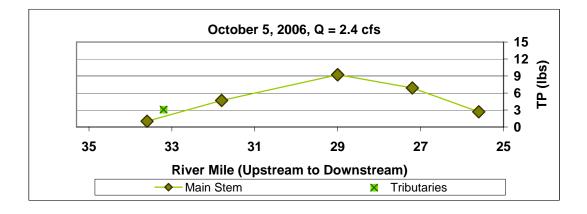


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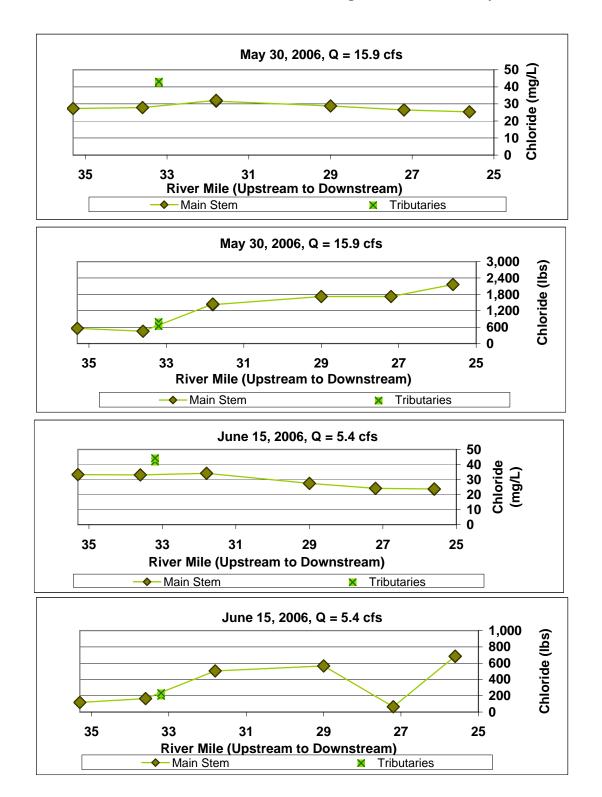


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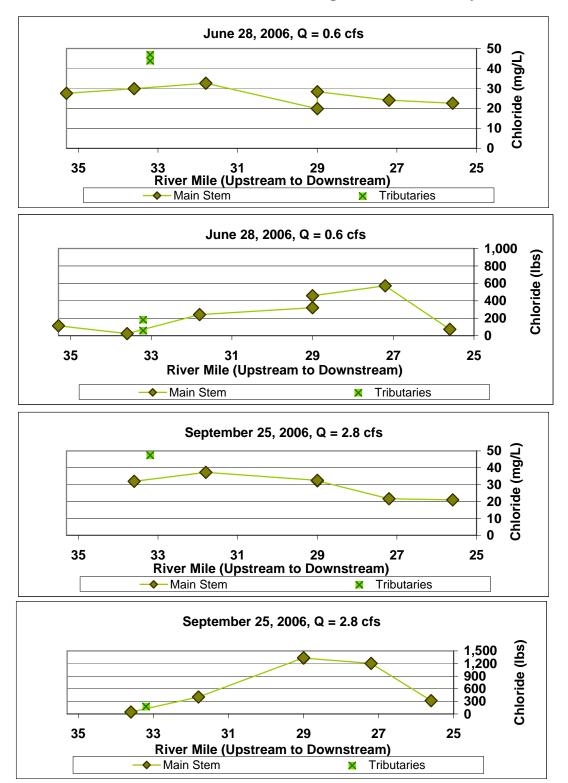




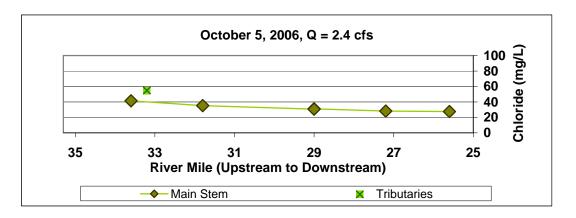
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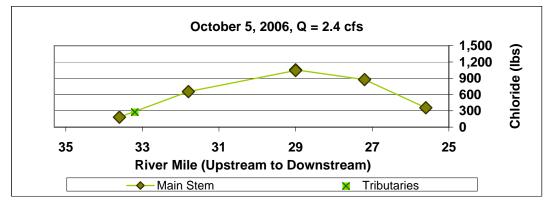


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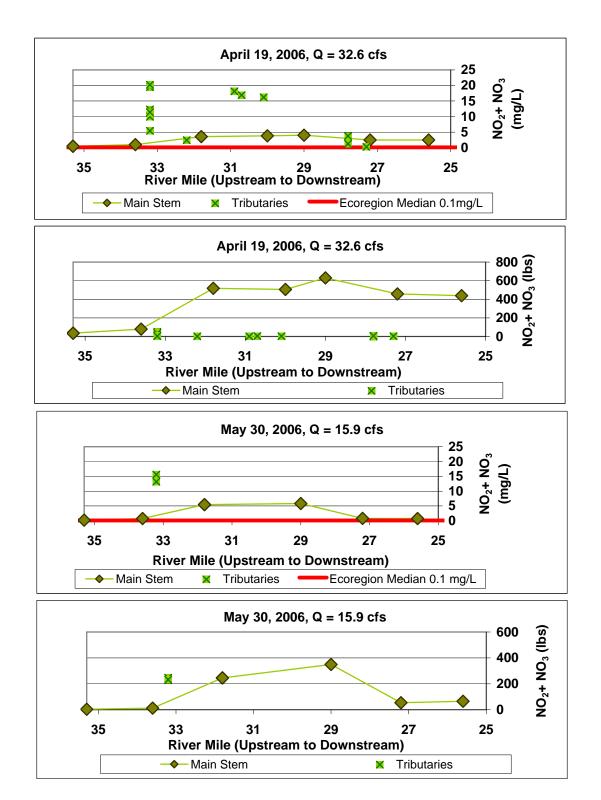


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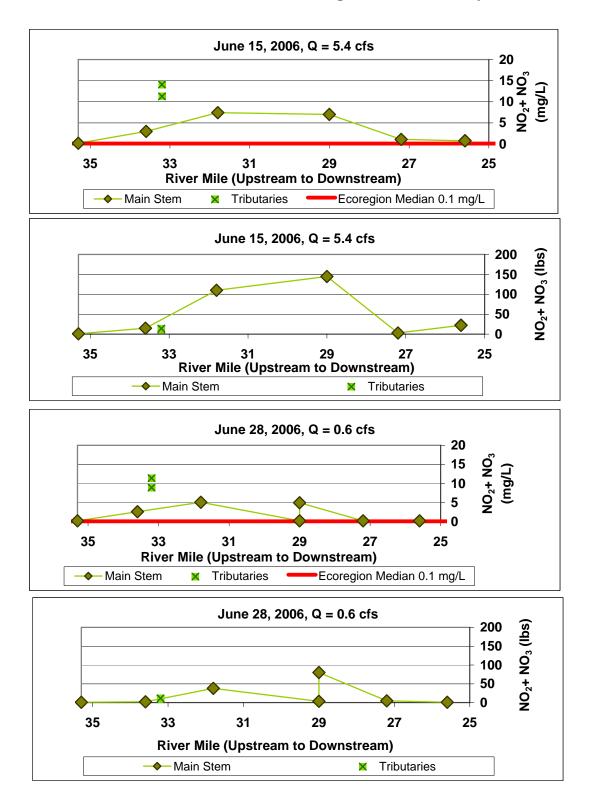




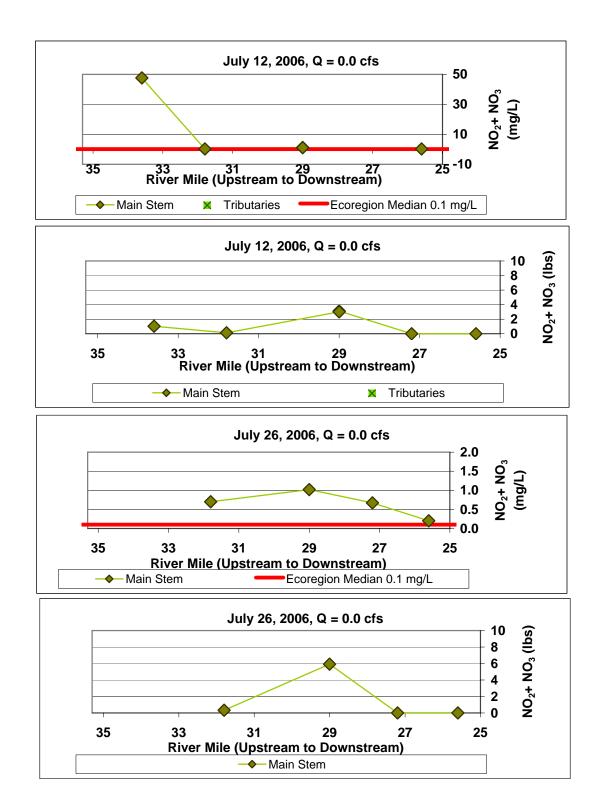
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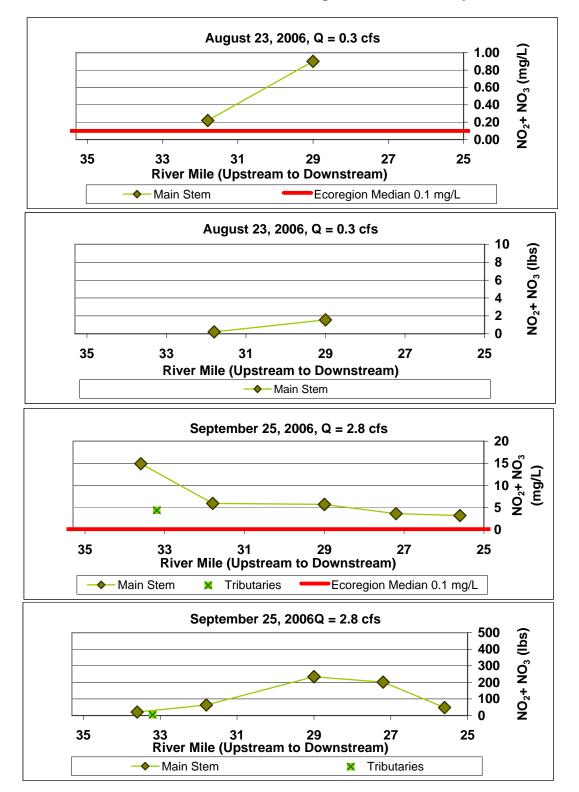


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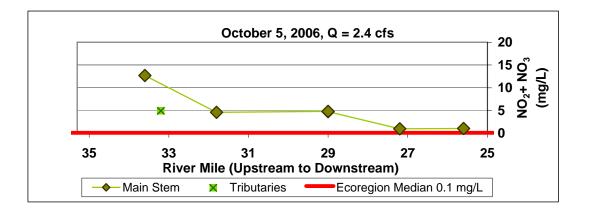


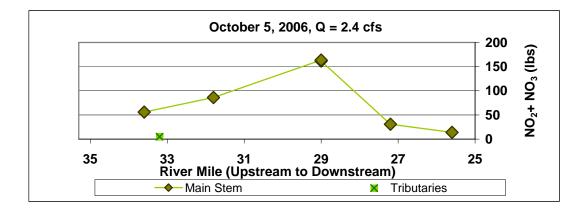
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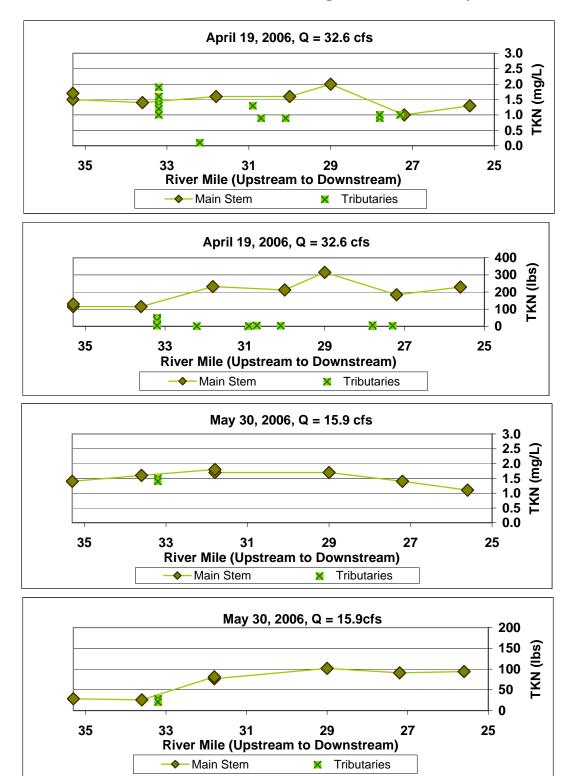


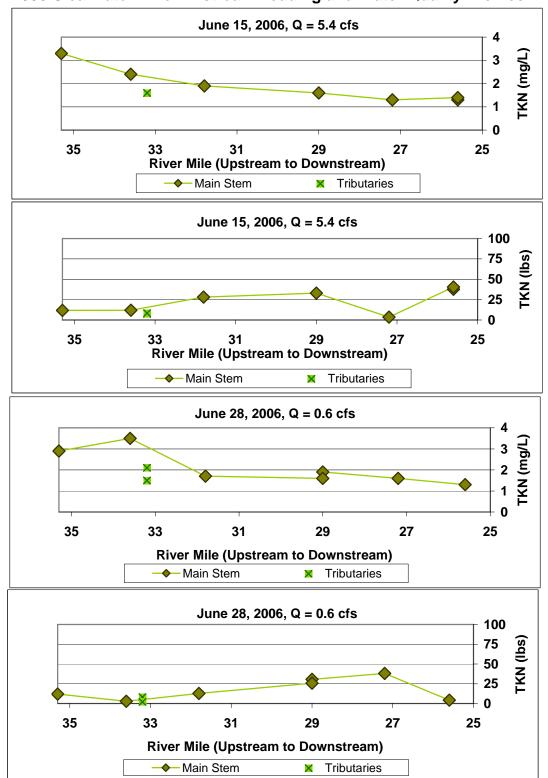


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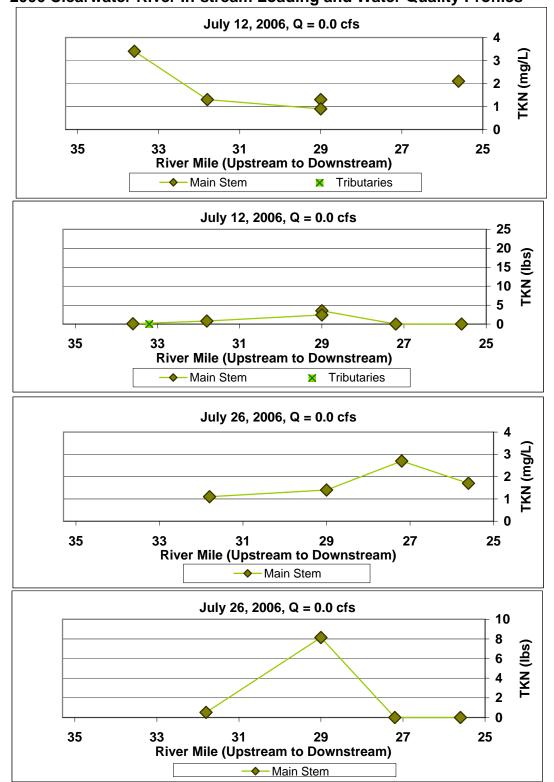


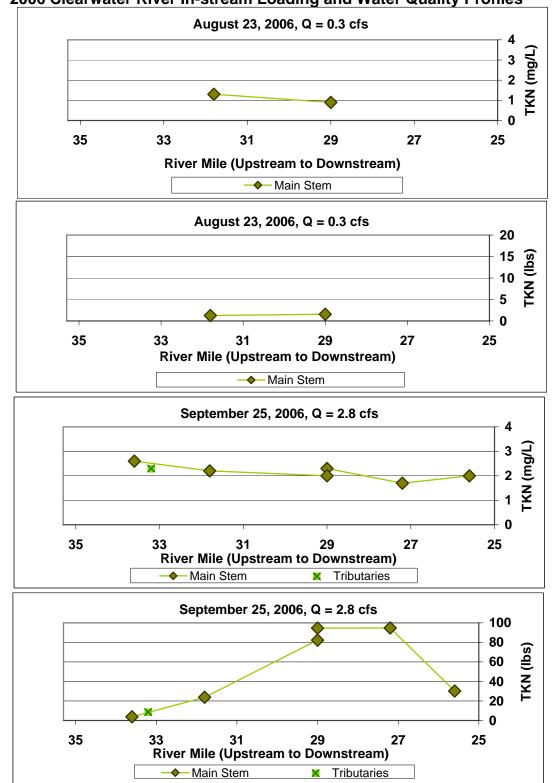




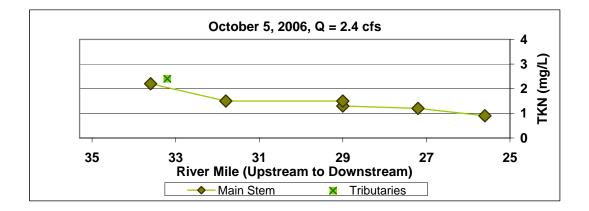


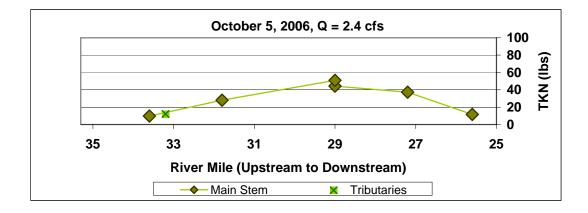


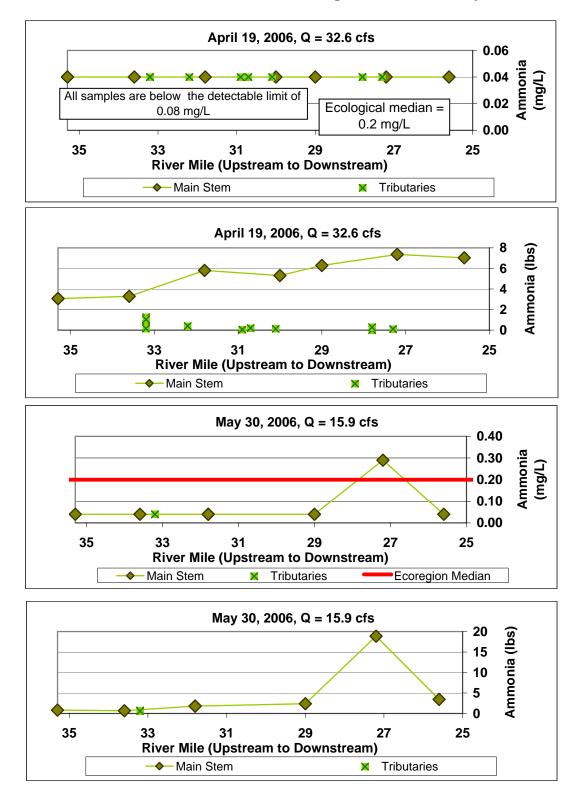


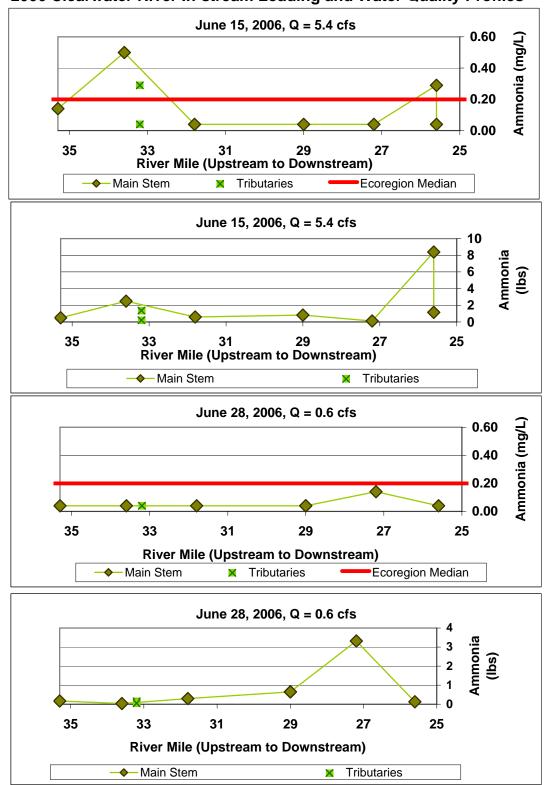


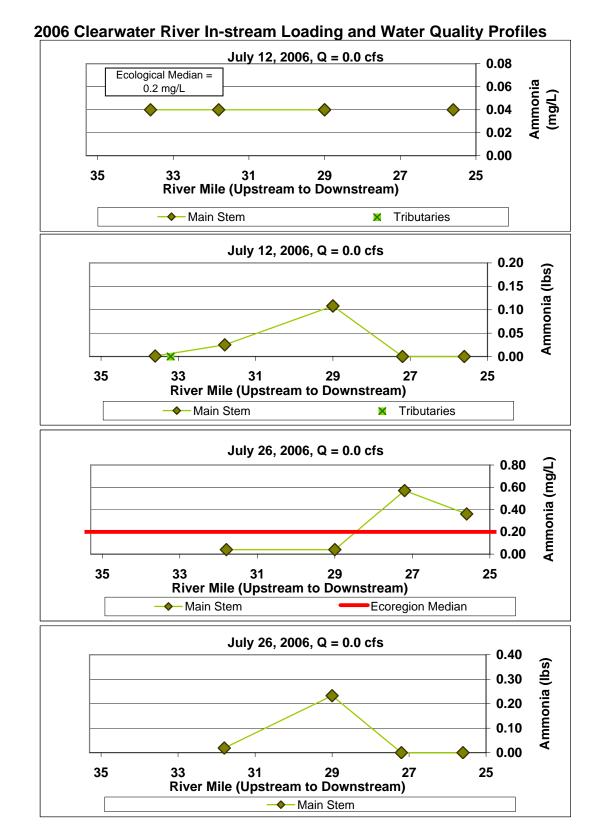
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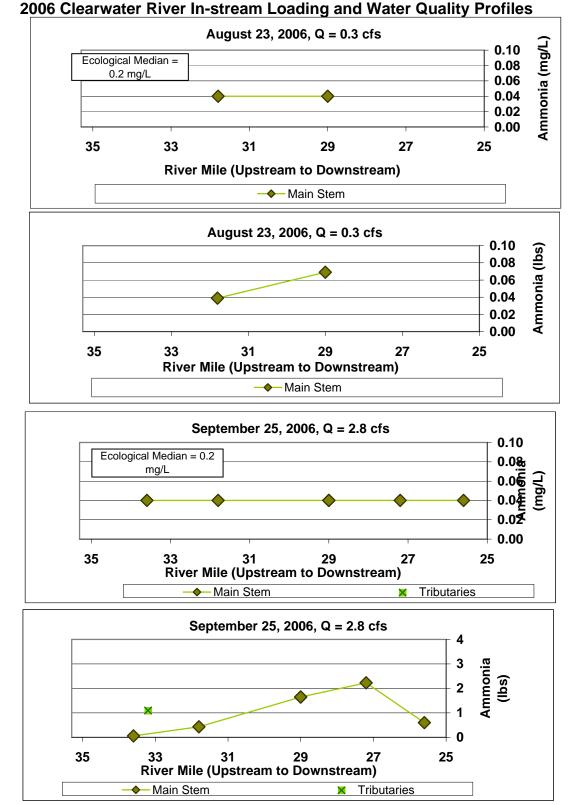






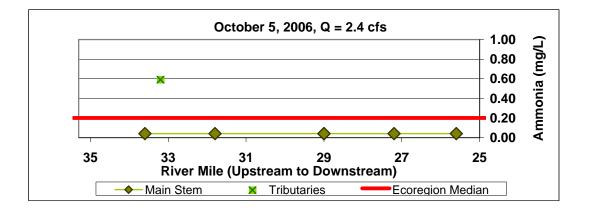


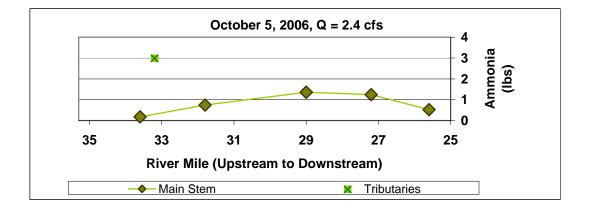




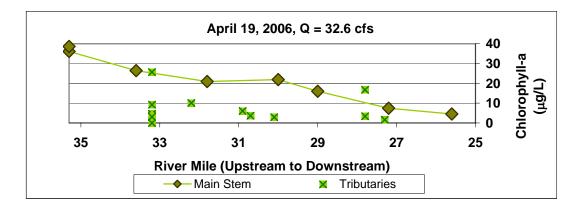
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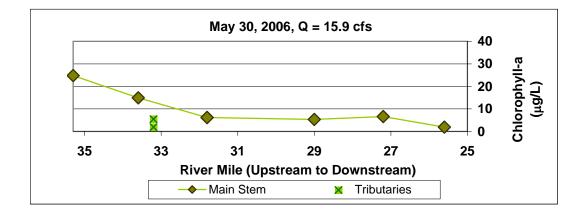
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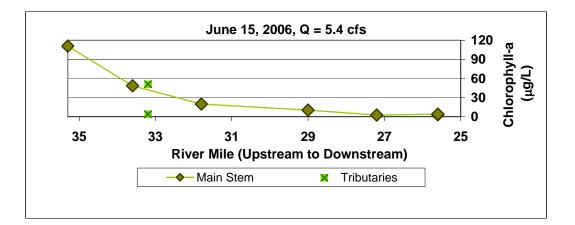




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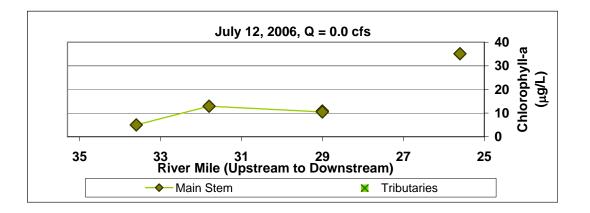


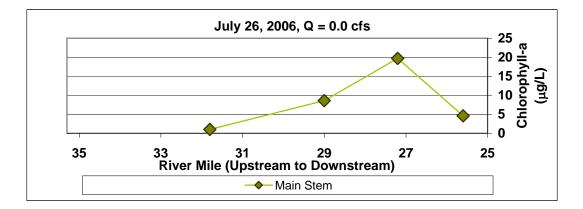


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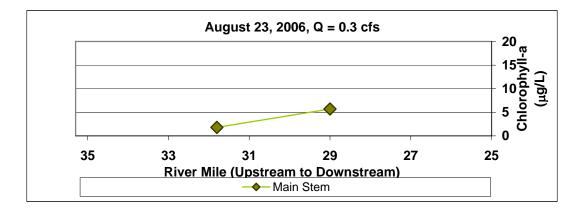
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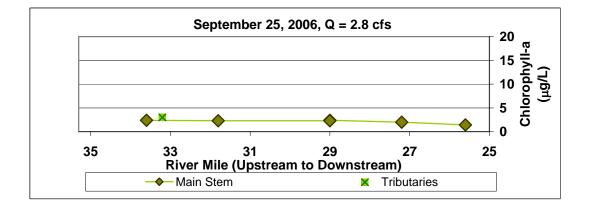


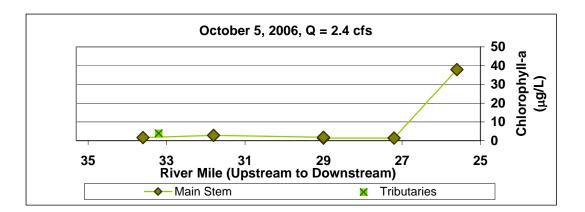




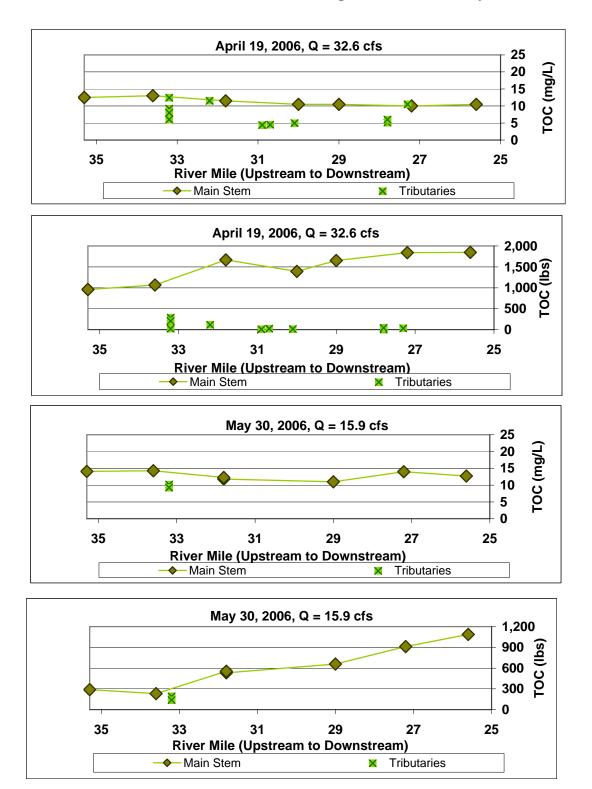
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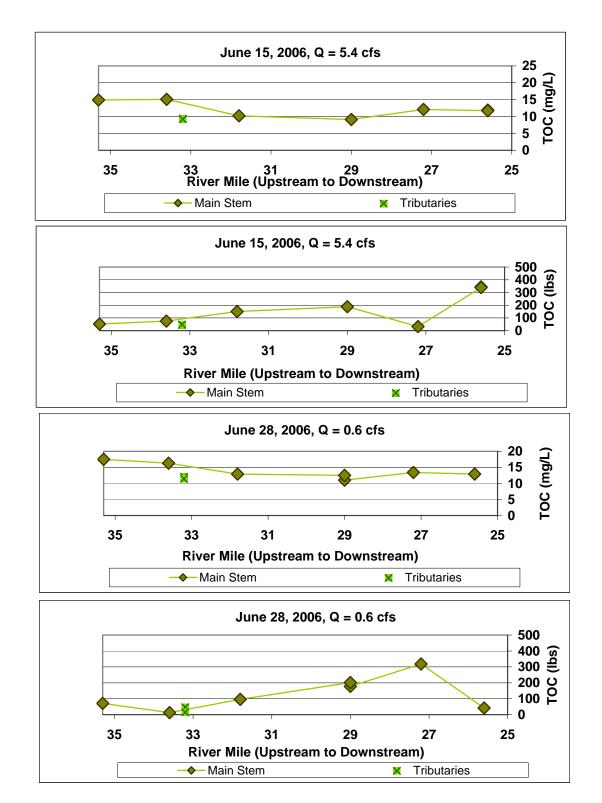


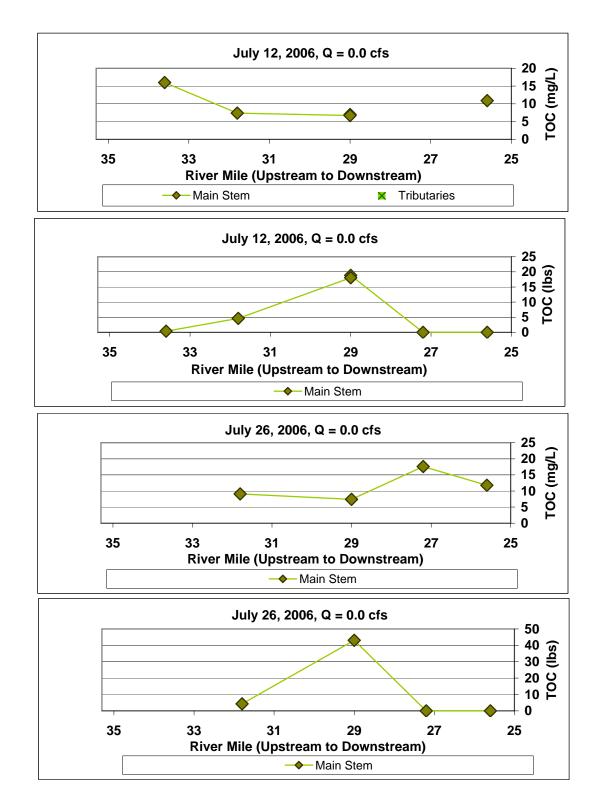


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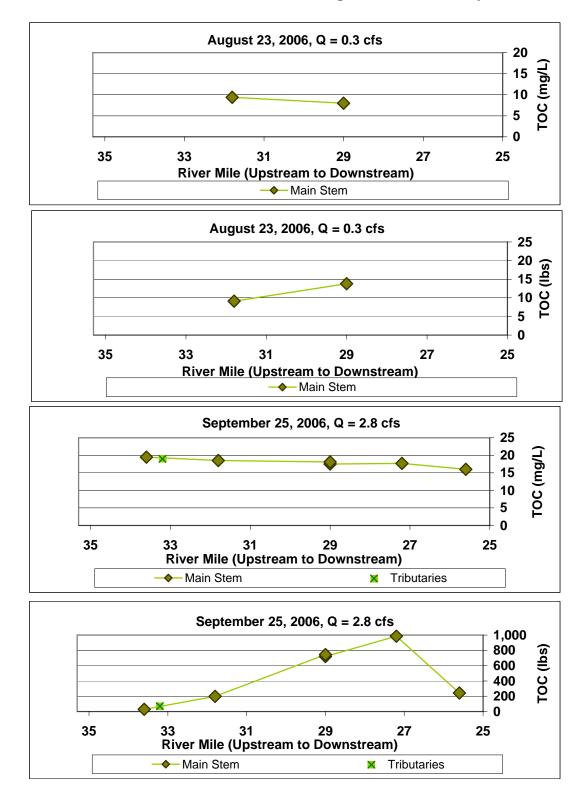


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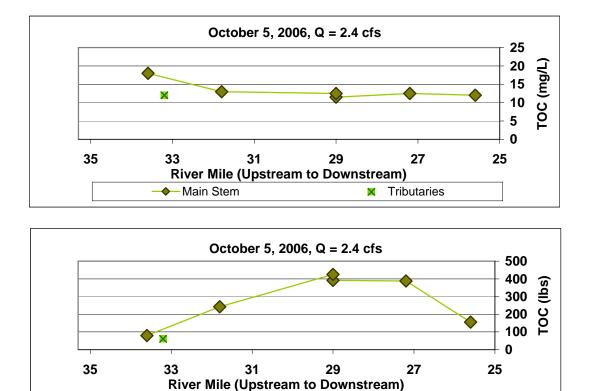


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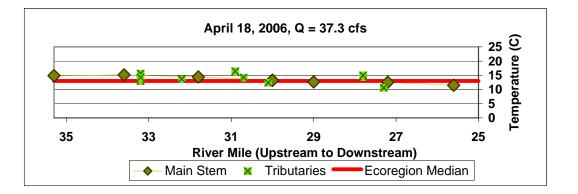
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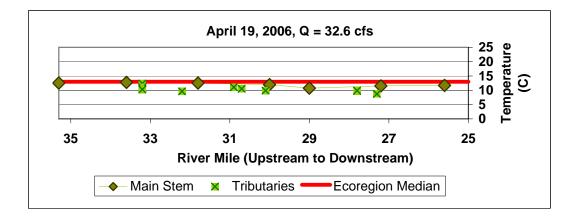
2006 Clearwater River In-stream Loading and Water Quality Profiles

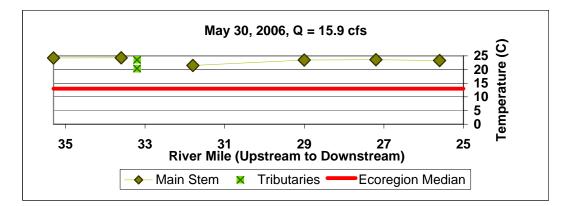


X Tributaries

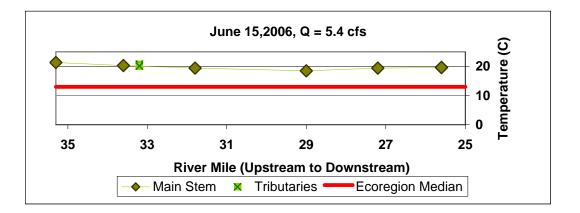
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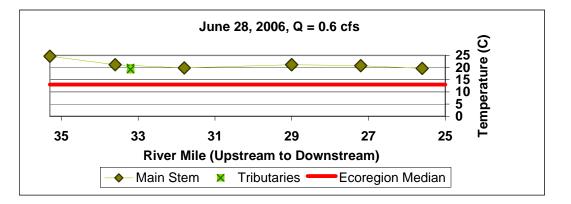


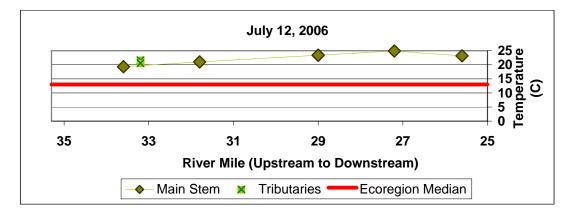




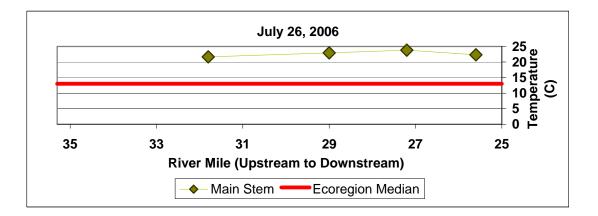
### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

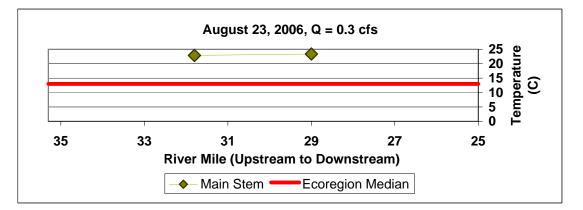


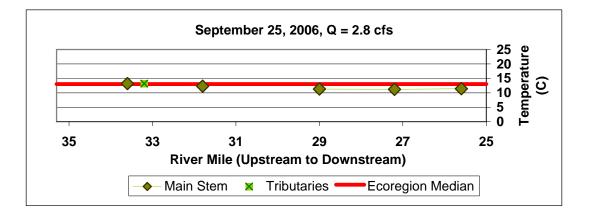




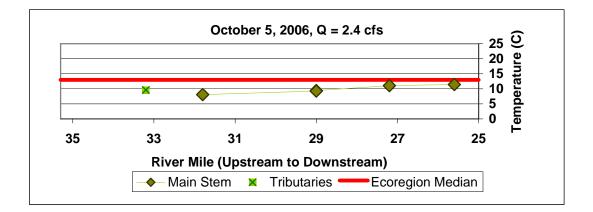
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL



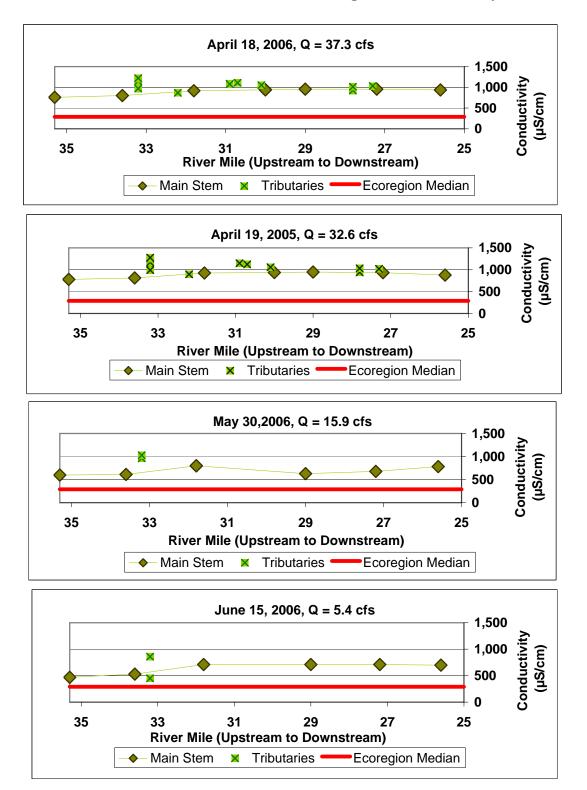




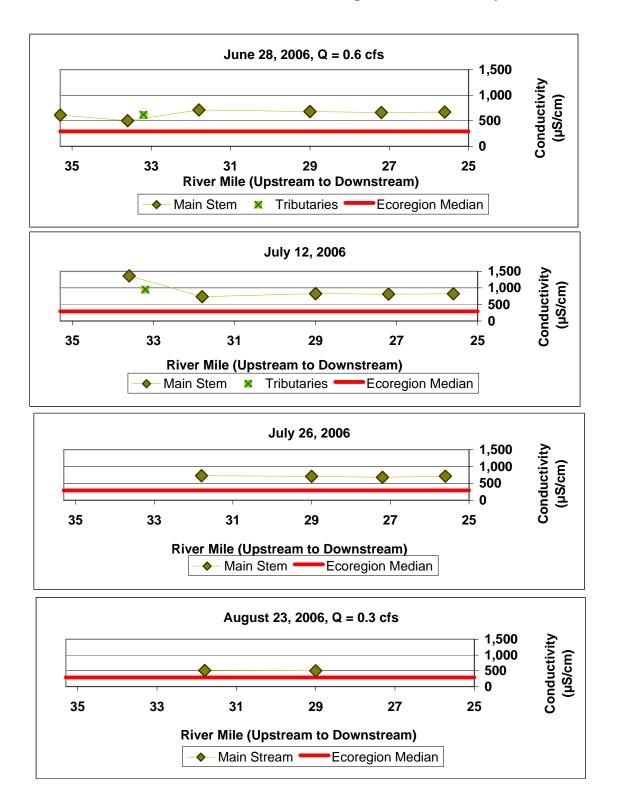
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL



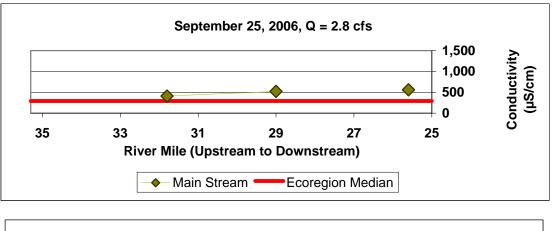
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

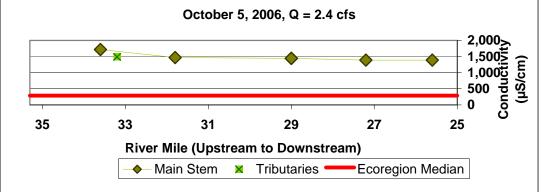


#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

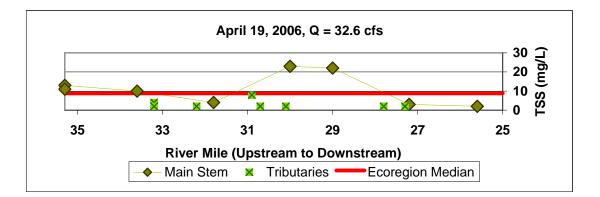


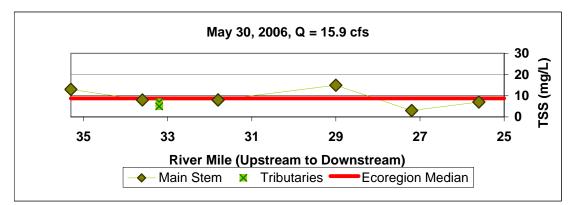
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

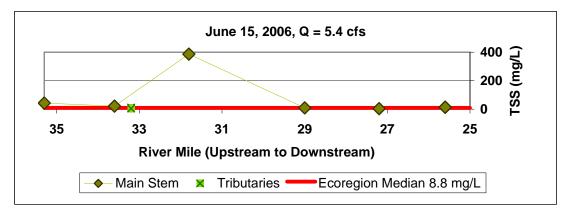




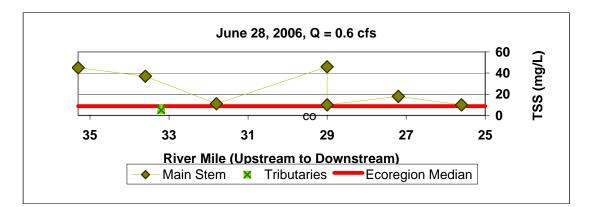
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

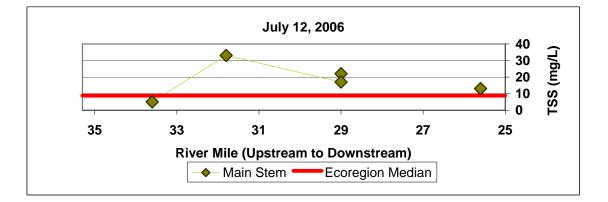


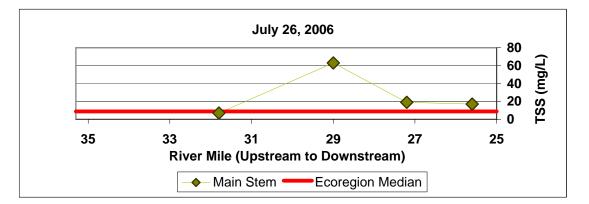


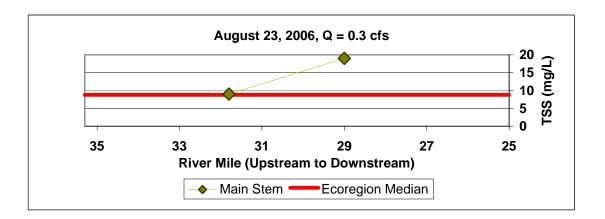


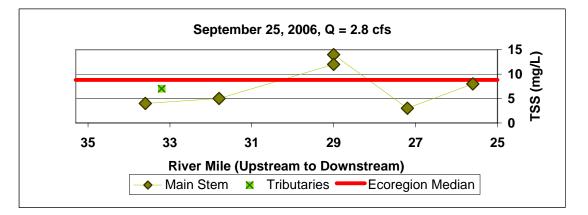
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

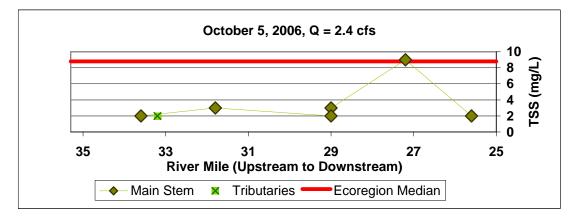




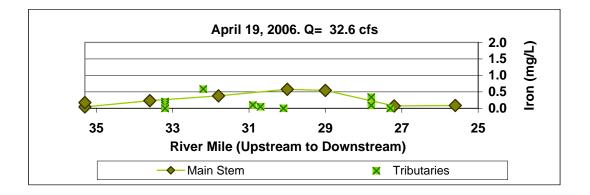


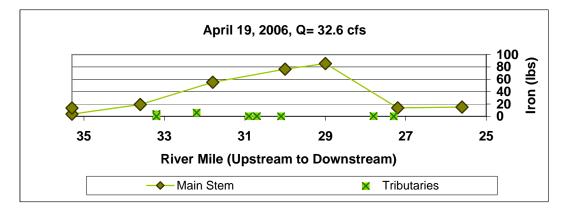






#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL



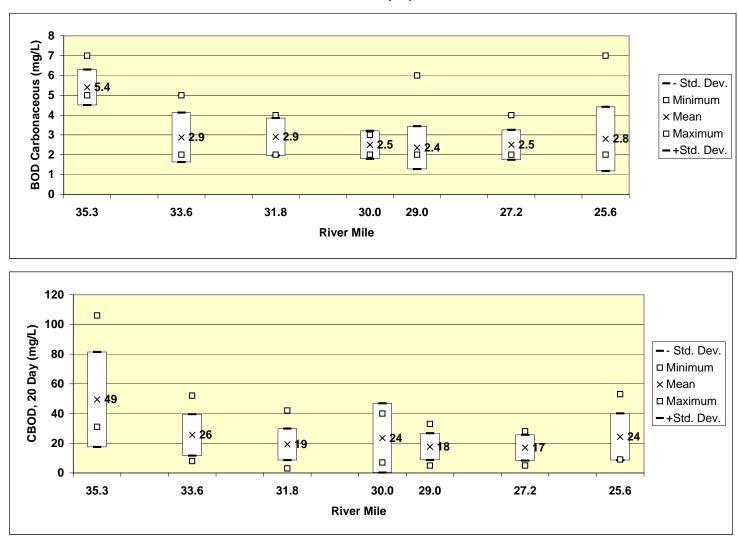


# Appendix C

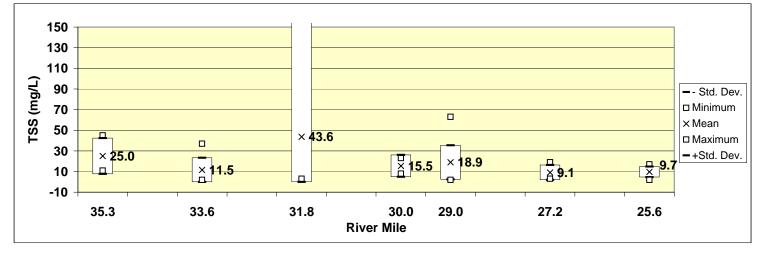
## Mean Maximum and Minimum Water Quality Profiles

#### Appendix C

#### **Clearwater River Watershed District**

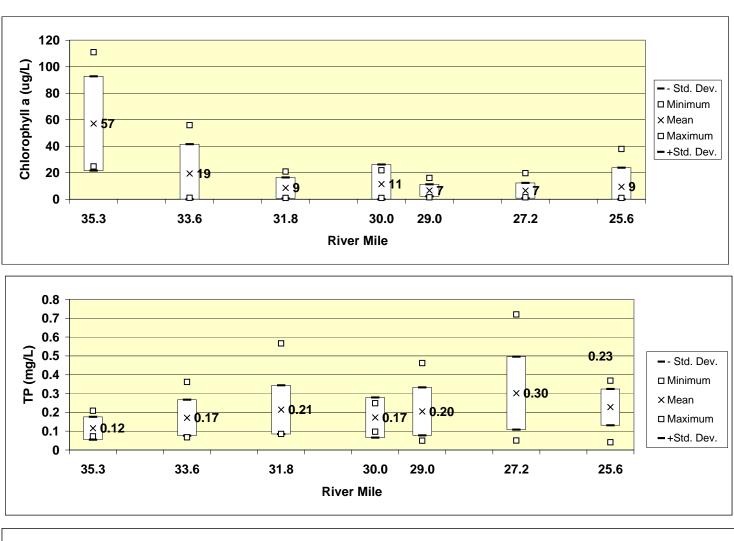


#### Phase II TMDL Study Mean, Max and Min Water Quality Upstream to Downstream

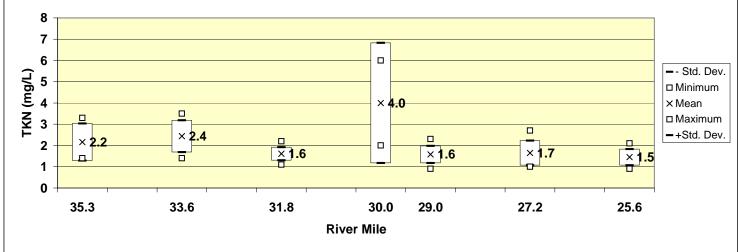


#### Appendix C

#### **Clearwater River Watershed District**

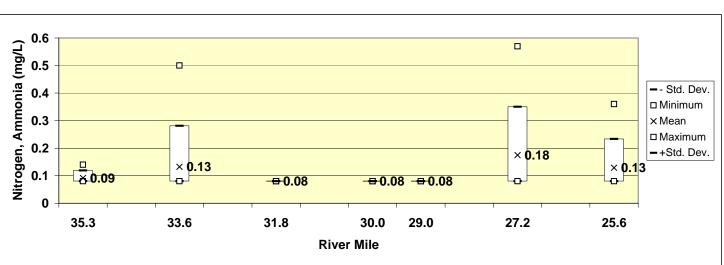


#### Phase II TMDL Study Mean, Max and Min Water Quality Upstream to Downstream

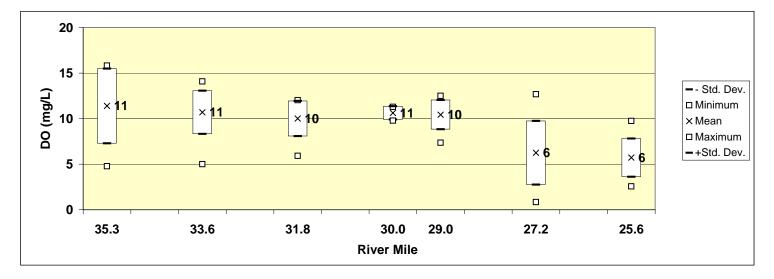


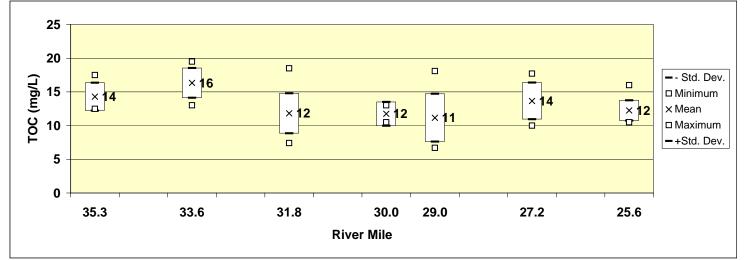
#### Appendix C

#### **Clearwater River Watershed District**



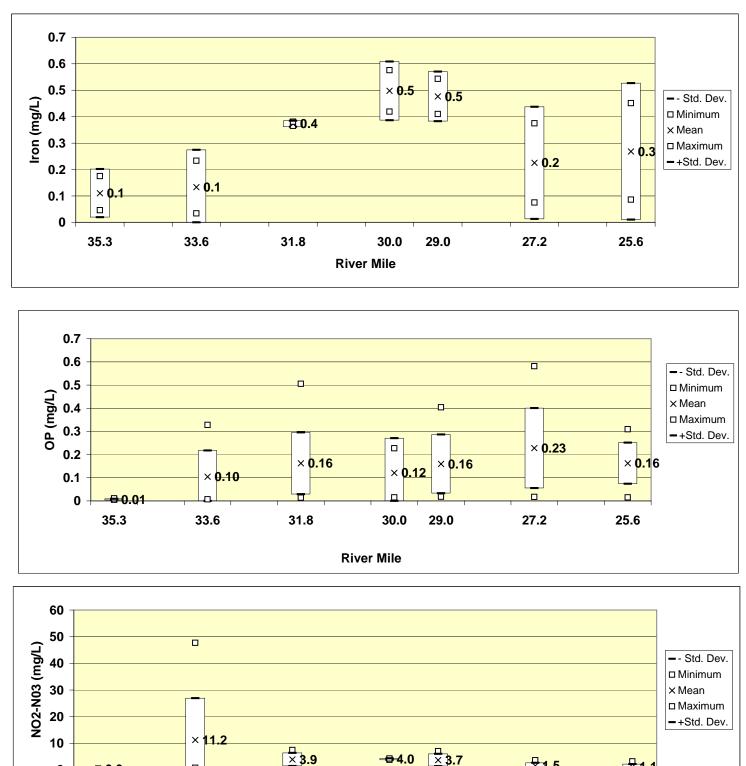






#### Appendix C

#### **Clearwater River Watershed District**



Phase II TMDL Study Mean, Max and Min Water Quality Upstream to Downstream

**₽0.3** 35.3

33.6

31.8

0

30.0

**River Mile** 

29.0

**₽**1.1

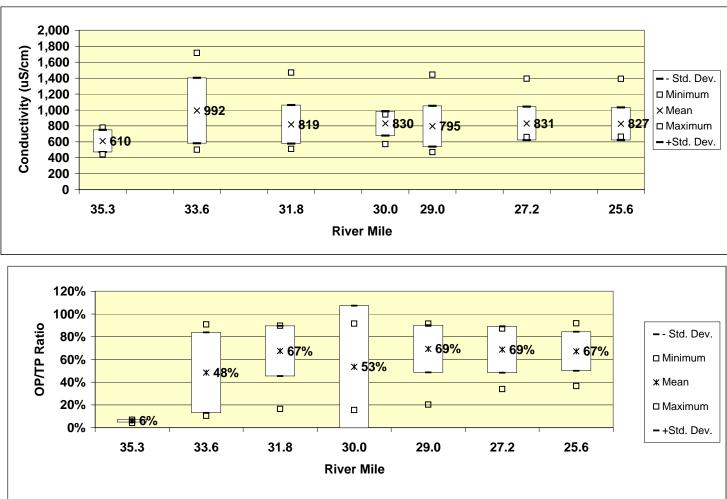
25.6

21.5

27.2

#### Appendix C

#### **Clearwater River Watershed District**



Phase II TMDL Study Mean, Max and Min Water Quality Upstream to Downstream

# Appendix D

**Field and Laboratory Data Sheets** 

| :  | Client:             | CRWG                           | 2                | _                  | ç            | Site Locatio | n: <u>TA 3</u>                        | 3.2                     |  |  |  |
|----|---------------------|--------------------------------|------------------|--------------------|--------------|--------------|---------------------------------------|-------------------------|--|--|--|
|    | Project No.:        |                                | -75              |                    | Site         | e Descriptio | n: Tributal                           | ry Q Coi                | may Huy 17 2 38                        |  |  |
|    | Date:               | B/15/c                         | 5                |                    |              |              |                                       |                         |  |  |  |
|    | Sampler(s):         | waa                            | <u>と</u>         | _                  | Sa           | mples Take   | n: <u> </u>                           | No No                   | ł                                      |  |  |
|    | Start Time:         |                                |                  | _                  | S            | Sample Tim   | e: <u>8.</u> '                        | 25                      |  |  |  |
|    | End Time:           |                                |                  | <u></u>            |              |              |                                       |                         |  |  |  |
|    | Channel Conditions: | Flow                           | 'ng              |                    | DTW N        | leasuremen   | t: <u> </u>                           | •                       | •••••••••••••••••••••••••••••••••••••• |  |  |
|    | COC Number:         | -                              | J                | _                  |              |              |                                       |                         |  |  |  |
| ſ  |                     |                                |                  |                    |              |              | Notes                                 | - Very                  | little                                 |  |  |
|    |                     | 1                              | Field Parameters |                    |              | -            |                                       | Wate,                   | nine                                   |  |  |
|    | Sample I.D.         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | ) pł         | I (S.U.)     |                                       | Cha                     | me                                     |  |  |
|    |                     | 15.27                          | 1120             | 7.59               | 7.8          | 30           |                                       |                         |  |  |  |
|    | Stage Ht            | :                              |                  | Rated Flow         |              |              | Gauged Flow                           | v: <b>_ OC</b>          | 15 CAS                                 |  |  |
| ſ  | Distance from       |                                |                  | Velocity           |              | ocity        | Average                               |                         | Discharge                              |  |  |
|    | Initial Point (ft)  | Width (ft)                     | Depth (ft)       | (60%<br>Depth)     | 20%<br>Depth | 80%<br>Depth | Velocity                              | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)              |  |  |
|    | 0, (left side)      | 1:4                            | .17              | ,03                |              |              | (ft/sec)                              |                         |  |  |  |
|    |                     |                                |                  |                    |              |              |                                       |                         |  |  |  |
|    |                     |                                |                  |                    |              |              |                                       |                         |  |  |  |
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|    |                     |                                |                  |                    |              |              |                                       |                         |  |  |  |
|    |                     |                                | -DTW             | 20int-             | +0D          | Cent         | 20 of                                 | Calio                   |  |  |  |
|    |                     |                                | -DTW<br>Jown     | Dint               | top<br>n s   | Cent         | er of                                 | culu                    |  |  |  |
|    |                     |                                | -DTW<br>down     | Dint               | top<br>n si  | Cent<br>de   | er of                                 | culu                    |  |  |  |
|    |                     |                                | -DTW<br>down     | 1                  | top<br>n s   | Cent         | r of                                  | culu                    |  |  |  |

and hold works

| Client:   | C                                     | 220              |                    |              | Site Locatio  | n: <u>dR 3</u> 3     | 3-6                     |  |
|---|---------------------------------------|------------------|--------------------|--------------|---------------|----------------------|-------------------------|--|
| Project No.:  | <u> </u>                              | 02-75            |                    |              |               | n: <u>Clearun</u>    |                         |  |
| Date:   |                                       | 105              |                    |              |               | er: 75°              |                         |  |
| Sampler(s):   |                                       | NC               |                    | Sa           |               | n: 🔍                 |                         | 0                                      |
| Start Time:   | · · · · · · · · · · · · · · · · · · · |                  |                    |              |               | e: 8.'               |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| End Time:   |                                       |                  |                    |              |               |                      |                         |  |
| Channel Conditions:   | Alow                                  | ing              | _                  | DTW I        | Measuremer    | it:                  |                         | ,                                      |
| COC Number:   |                                       | <u> </u>         |                    |              |               | :18                  | depth                   |  |
|   |                                       |                  |                    |              |               | Notes                | : - Les                 | ry little                              |
|   | <u> </u>                              | Field Parameters |                    |              |               |                      | h)41                    | er in                                  |
| Sample I.D.   | Temp. ( <sup>0</sup> C                | ) Cond. (mS/cm   | ) <b>D.O.</b> (mg/ | l) pl        | H (S.U.)      | -                    |                         | annel                                  |
|   | 1636                                  | 1412             | 10-20              |              | 77            |                      |                         | MMARI                                  |
| Announce of the second s |                                       |                  |                    |              |               | <u></u> ]            |                         |  |
| Stage Ht  | t:                                    |                  | Rated Flov         | V:           |               | Gauged Flow          | v. 20                   | 17 rfs                                 |
| -   |                                       |                  |                    | ···          | **            | ounged i for         |                         |  |
|   |                                       |                  | Stream Gau         | ging Dat     | ta            |                      |                         |  |
| Distance from   | Width (ft)                            | Denth (0)        | Velocity           | Ve<br>20%    | locity<br>80% | Average              |                         | Discharge                              |
| Initial Point (ft)  | widiii (11)                           | Depth (ft)       | (60%)<br>Depth)    | Depth        | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)  | 1.9                                   | 118              | .02                |              |               |                      |                         |  |
|   | ///                                   |                  | -1007              |              | -             |                      |                         |  |
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| Client: CRWD 0002-75<br>Project No.: |                         |                  | Site Location: CR 31.8                     |   |              |                                       |                         |   |  |  |
|--------------------------------------|-------------------------|------------------|--|---|--------------|---------------------------------------|-------------------------|---|--|--|
| Project No.:                         | <u>0002</u>             | 75               | Site Description: Clearwater River @ Hwy 1 |   |              |                                       |                         |   |  |  |
| Date:                                |                         | 5                |  | Weather: 75° SUNUS                                      |              |                                       |                         |   |  |  |
| Sampler(s):                          |                         | UL               |  |   |              |                                       |                         |   |  |  |
| Start Time:                          |                         |                  | Samula Times 0100                          |   |              |                                       |                         |   |  |  |
| End Time:                            |                         |                  |  |   |              | · · · · · · · · · · · · · · · · · · · |                         |   |  |  |
| Channel Conditions:                  |                         |                  |  | DTW N   | Measuremen   | ıt: 13,                               | 82                      |   |  |  |
| COC Number:                          | 0                       |                  | _  |   |              |                                       |                         | - mmetalikki - mme                            |  |  |
|                                      |                         |                  |  |   |              | Notes                                 | :                       |   |  |  |
|                                      |                         | Field Parameters |  |   |              |                                       |                         | , <u>, , , , , , , , , , , , , , , , , , </u> |  |  |
| Sample I.D.                          | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l)                         | pI  | H (S.U.)     |                                       |                         | , <del></del>                                 |  |  |
|                                      | 19.34                   | 572              | 10,95                                      | 7.0   | 20           |                                       | <b>4</b> 4444           |   |  |  |
|                                      | ······                  |                  |  |   |              | <u></u>                               | <u></u>                 |   |  |  |
| Stage H                              | t:                      |                  | Rated Flow                                 | :   |              | Gauged Flow                           | N: , DE                 | 5rfs  |  |  |
|                                      |                         |                  |  |   |              | C                                     |                         |   |  |  |
| -                                    |                         | S                | tream Gaug                                 | ging Dat  | a            |                                       |                         |   |  |  |
| Distance from                        |                         |                  | Velocity                                   |   | locity       | Average                               |                         | Discharge                                     |  |  |
| Initial Point (ft)                   | Width (ft)              | Depth (ft)       | (00/0                                      | 20%<br>Depth  | 80%<br>Depth | Velocity                              | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                               |  |  |
| 0, (left side)                       |                         |                  | 1  |   |              | (ft/sec)                              |                         |   |  |  |
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| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time: |            | Site              | Site Location<br>e Description<br>Weathe<br>mples Taker<br>Gample Time | n: <u>Tribut</u><br>r: <u>75</u><br>n: <u>Y</u> e |                       |                                 | <br><br>                |  |     |
|--|------------|-------------------|--|---|-----------------------|---------------------------------|-------------------------|--|-----|
| End Time:<br>Channel Conditions:                               |            |                   |  | DTW N   | Aeasuremen            | t: 9.5                          | 0                       |  |     |
| COC Number:  |            |                   |  |   |                       |                                 |                         |  |     |
| J  |            |                   |  |   |                       | Notes                           | : <u>-vei</u>           | cy shell                               | low |
|  | _          | Field Parameters  |  |   |                       |                                 | - and                   | very li                                | Hle |
| Sample I.D.  | 1.         | Cond. (mS/cm      |  |   | I (S.U.)              |                                 | flou                    | J                                      | -   |
|  | 16.32      | 697               | 9.84   | 7,0   | 15                    |                                 |                         |  |     |
| Stage H  | t:         |                   | Rated Flov   | v:  |                       | Gauged Flow                     | v: , COL                | lcfs                                   |     |
|  |            | 5                 | Stream Gau   | ging Dat  | a                     |                                 |                         |  |     |
| Distance from<br>Initial Point (ft)                            | Width (ft) | Depth (ft)        | Velocity<br>(60%<br>Depth)   | Vel<br>20%<br>Depth                               | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |     |
| 0, (left side)   | 1.8        | .12               | .02  | 1   |                       |                                 |                         |  |     |
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|  |            | -DTW F            | wint   | top o   | Fculu                 | ert dow                         | 96tfea                  | m                                      |     |
|  |            | 9                 |  |   |                       | ,                               |                         |  |     |
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| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: | CR<br>OC<br>B<br>WB    | WD<br>107-75<br>115105<br>NC |                            | Sit<br>Sa            | Site Locati<br>e Descriptio<br>Weath<br>amples Tako<br>Sample Tin<br>Measureme | on: $Clear$<br>er: $75^{\circ}$<br>en: $Y$<br>ne: $9^{\circ}$ | <u>alurer</u><br>Sunr<br>es N<br>25 | <u>27</u>                              |
|---|------------------------|------------------------------|----------------------------|----------------------|--|---|-------------------------------------|--|
| [   |                        |                              |                            |                      |  | Notes   | s:                                  |  |
|   | T                      | Field Parameter              | s                          |                      |  |   |                                     |  |
| Sample I.D.   | Temp. ( <sup>0</sup> C | Cond. (mS/cm                 | ) <b>D.O.</b> (mg          | /l) pl               | H (S.U.)   |   |                                     | · · · ·                                |
|   | 16.91                  | 570                          | 11.23                      | 7.9                  | 18   |   | ·,                                  |  |
| Stage H   | t:                     |                              | Rated Flo                  | ow:                  |  | Gauged Flo  | w: <u>,31</u>                       | 5                                      |
| ]   |                        |                              | Stream Ga                  | uging Dat            | a  |   |                                     |  |
| Distance from<br>Initial Point (ft)   | Width (ft)             | Depth (ft)                   | Velocity<br>(60%<br>Depth) | , Ve<br>20%<br>Depth | locity<br>80%<br>Depth   | A verage<br>Velocity<br>(ft/sec)                              | Area (ft <sup>2</sup> )             | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  |                        |                              |                            |                      |  |   |                                     |  |
|   |                        |                              |                            |                      |  |   |                                     |  |
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|   |                        |                              | ž.,                        | . <i>D</i> 1110      |  |   |                                     |  |
|   |                        |                              |                            |                      |  |   |                                     |  |
|   |                        |                              |                            |                      |  |   |                                     |  |

| Client:                    | CRW                     |                  |                |              | ањ. т. "н    | CR              | 29.                     | Õ               |
|----------------------------|-------------------------|------------------|----------------|--------------|--------------|-----------------|-------------------------|-----------------|
| Project No.:               |                         |                  | <del></del>    |              | Site Locatio | ·····           |                         |                 |
| Date:                      | <u> </u>                | 2 - 75<br>105    |                | Site         |              |                 | arukter k               | iver @ 704H     |
|                            |                         |                  | _              |              |              | - 70° suny      |                         |                 |
| Sampler(s):<br>Start Time: | QD                      | ·NC              |                |              | mples Taker  | 0               |                         | )               |
|                            | - <u>",</u>             |                  |                | 5            | Sample Time  | e: 1.9          | <u>)</u>                |                 |
| End Time:                  |                         |                  | _              |              |              | 10.11           |                         |                 |
| Channel Conditions:        | Flowing                 |                  | _              | DTW N        | Aeasuremen   | t: <u>15,44</u> |                         |                 |
| COC Number:                |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              | Notes           |                         |                 |
|                            | 1                       | Field Parameters |                |              | <            |                 |                         |                 |
| Sample I.D.                | Temp. ( <sup>0</sup> C) |                  |                | <u> </u>     | I (S.U.)     |                 |                         |                 |
|                            | 20.00                   | 470              | 12.32          | 7,0          | 95           |                 |                         |                 |
|                            |                         |                  |                |              |              |                 | $\neg \iota$            |                 |
| Stage H                    | t:                      |                  | Rated Flow     | v:           |              | Gauged Flov     | v: <u>13</u> 2          | $\mathbf{D}$    |
|                            |                         | S                | tream Gau      | ging Dat:    | a            |                 |                         |                 |
| Distance from              |                         |                  | Velocity       |              | ocity        | Average         |                         | Discharge       |
| Initial Point (ft)         | Width (ft)              | Depth (ft)       | (60%<br>Depth) | 20%<br>Depth | 80%<br>Depth | Velocity        | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
|                            |                         | ······           |                |              |              | (ft/sec)        |                         |                 |
| 0, (left side)             |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            | - 7-                    |                  |                | <u> </u>     |              |                 | 1 (                     |                 |
|                            |                         | ) VV po          | vint b         | Batr         | om t         | 2p of<br>upstre | bridge                  | Q+              |
|                            | <u> </u>                | th post          | tram           | rìgh         | t on         | upstre          | um Sicle                |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  | çà.            | a al Mont    |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |
|                            |                         |                  |                |              |              |                 |                         |                 |

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time: | 8/15/<br>400<br>10 | D<br>05<br>WBN<br>00            |                            | Site<br>Sai<br>S    | Site Location<br>Description<br>Weathe<br>nples Taker<br>ample Time | n: Tri<br>r: 80<br>n: (Y<br>e: (0 | 05                      |  | -<br>-<br>- |
|---|--------------------|---------------------------------|----------------------------|---------------------|---|-----------------------------------|-------------------------|--|-------------|
| Channel Conditions:<br>COC Number:<br>Sample I.D.                           |                    | Field Parameter<br>Cond. (mS/cm |                            |                     | 1easuremen<br>((S.U.)<br><b>87</b>                                  |                                   |                         | ow trick                               | und<br>klag |
| Stage Ht  | :                  |                                 | Rated Flov<br>Stream Gau   |                     |   | Gauged Flov                       |                         | <i>b</i> cfs                           |             |
| Distance from<br>Initial Point (ft)   | Width (ft)         | Depth (ft)                      | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth   | Average<br>Velocity<br>(ft/sec)   | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |             |
| 0, (left side)  |                    | 500                             | mhe :                      | 3.93                | 525   |                                   |                         |  |             |

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|         | Client:                             | _000                    | 2-75                   |                            | 5                   | Site Locatio      | n: [                 | N 2-                    | 7.8                                    |
|---------|-------------------------------------|-------------------------|------------------------|----------------------------|---------------------|-------------------|----------------------|-------------------------|--|
|         | Project No.:                        | $\underline{-CR}$       | WU                     |                            | Site                | e Descriptio      | n: Tribi             | utary G                 | r<br>V                                 |
|         | Date:                               |                         | 15/05                  |                            |                     | Weathe            | er: 75%              | Sung                    | )                                      |
|         | Sampler(s):                         | 1/2                     | B'NC                   | _                          | Sa                  | mples Take        | n: <u>Y</u> e        | s N                     | 0                                      |
|         | Start Time:                         |                         |                        |                            | S                   | Sample Tim        |                      | 00:00                   |  |
|         | End Time:                           |                         |                        |                            |                     |                   |                      |                         |  |
|         | Channel Conditions:                 | Flow                    | ing                    |                            | DTW N               | Aeasuremen        | ıt: <u> </u>         | 54                      | м                                      |
|         | COC Number:                         | <u> </u>                |                        |                            |                     |                   |                      |                         |  |
|         | <b>1</b>                            |                         |                        |                            |                     |                   | Notes                | : - 1RC                 | V LALLA                                |
|         |                                     |                         | Field Parameters       | 5                          |                     |                   |                      | flau                    | y lettle                               |
|         | Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm           | ) <b>D.O.</b> (mg/         | l) pH               | I (S.U.)          |                      | Culv                    |  |
| 3       |                                     | 16.15                   | 640                    | 11,90                      | 7,0                 | 94                |                      |                         |  |
|         |                                     |                         |                        |                            |                     |                   |                      |                         |  |
|         | Stage Ht                            | :                       |                        | Rated Flov                 | v:                  |                   | Gauged Flov          | v:_0)                   | 7cfs                                   |
|         |                                     |                         |                        |                            |                     |                   |                      |                         |  |
|         | 15                                  |                         |                        | Stream Gau                 | ging Data           | a                 |                      |                         |  |
| ;<br>fr |                                     |                         |                        |                            |                     |                   |                      |                         |  |
|         | Distance from                       | Width (ft)              | an and a second second | Velocity                   | Vel                 | ocity             | - Average            |                         | Discharge                              |
|         | Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)             | Velocity<br>(60%<br>Depth) |                     |                   | Velocity             | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|         | Initial Point (ft)                  | Width (ft)              | an and a second second | (60%                       | Vel                 | ocity<br>80%      |                      | Area (ft <sup>2</sup> ) | - 1                                    |
|         |                                     | Width (ft)              | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity             | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity             | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity             | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity             | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity             | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%                       | Vel                 | ocity<br>80%      | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel                 | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel                 | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel                 | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel                 | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel<br>20%<br>Depth | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |
|         | Initial Point (ft)                  |                         | an and a second second | (60%<br>Depth)             | Vel<br>20%<br>Depth | ocity 80% Depth . | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1                                    |

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| Client:                             | CRI                     | ND               | _                          | S                    | ite Location         |                      | 8 27. 7                 | 3  |       |
|-------------------------------------|-------------------------|------------------|----------------------------|----------------------|----------------------|----------------------|-------------------------|--|-------|
| Project No.:                        | _000                    | 2-75             | _                          | Site                 | Descriptior          | "Trì                 |                         | @ 353rd  | 52    |
| Date:                               | _8/15                   | 105              |                            |                      | Weather              | . 70                 | San                     | n v  | /     |
| Sampler(s):                         | WF                      | S. NC            | _                          | San                  | ples Taken           |                      | ,                       | -  | -     |
| Start Time:                         |                         | 15               | _                          | Sa                   | imple Time           | :E                   | ):15                    |  | -     |
| End Time:                           |                         |                  |                            |                      |                      |                      |                         |  | -     |
| Channel Conditions:                 | _floi                   | wing             |                            | DTW M                | easurement           | :5,0                 | 18                      |  | -     |
| COC Number:                         |                         | <u> </u>         | _                          |                      |                      |                      |                         | 990 <b>4 9</b> 997 <b>6</b> 40 997 <b>6</b> 40 997 | -     |
| [ <b>]</b>                          |                         |                  |                            |                      |                      | Notes                | -wat                    | er tric  | [ding |
|                                     | 1                       | Field Parameters | 11                         |                      |                      |                      | Ou+                     | er tric  | 9     |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | D.O. (mg/l                 | ) pH                 | (S.U.)               |                      | Cul                     | ver+   |       |
|                                     | •                       |                  |                            |                      |                      |                      | ·                       |  |       |
|                                     |                         |                  |                            |                      |                      | -                    |                         |  |       |
| Stage H                             | t:                      |                  | Rated Flow                 | /:                   |                      | Gauged Flov          | v:_ <b>,</b> 00         | )5cfs  |       |
|                                     |                         |                  |                            |                      |                      |                      |                         |  |       |
|                                     |                         | S                | tream Gau                  | ging Data            |                      |                      |                         |  |       |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | city<br>80%<br>Depth | A verage<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)             |       |

|                                     | 1          |                    | 1                          |                     |                       |                                 |                         |                                       |
|-------------------------------------|------------|--------------------|----------------------------|---------------------|-----------------------|---------------------------------|-------------------------|---------------------------------------|
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)         | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec |
| 0, (left side)                      |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            |                    | 5                          |                     |                       |                                 |                         |                                       |
|                                     |            | 500ml              | = 3                        | 7 50                | cs                    |                                 |                         |                                       |
|                                     |            | 500mL<br>135mL/sec |                            |                     |                       |                                 |                         | ·                                     |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            |                    |                            |                     |                       |                                 |                         | manifest manufest                     |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            | -DTW               | point                      | top                 | niddle                | of culu                         | rt, down                | nst-Clam                              |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            |                    | 25-                        |                     |                       |                                 |                         |                                       |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |
|                                     |            |                    |                            |                     |                       |                                 |                         |                                       |

March 27, 2002

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| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: | Site Location:<br>Site Location:<br>CR 25.6 (LLBet-<br>Site Description:<br>Weather:<br>75°, Sunny<br>Samples Taken:<br>Yes<br>No<br>Sample Time:<br>DTW Measurement:<br>23.30 |                                   |  |    |                       |                                 |                              |  |
|---|--|-----------------------------------|--|----|-----------------------|---------------------------------|------------------------------|--|
| Sample I.D.   | 1  | Field Parameters<br>Cond. (mS/cm) | ]]                                       |    | (S.U.)<br>65          | Notes                           | <u>- sun</u><br>with<br>No f | face covered<br>pondweed,<br>-low      |
| Stage H   | t:   |                                   | Rated Flow                               |    | ··                    | Gauged Flov                     | w: <u>6</u>                  | 15                                     |
| Distance from<br>Initial Point (ft)   | Width (ft)   | Depth (ft)                        | Stream Gau<br>Velocity<br>(60%<br>Depth) |    | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )      | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  |  |                                   |  |    |                       |                                 |                              |  |
|   |  |                                   |  |    |                       |                                 |                              |  |
|   |  |                                   |  |    |                       |                                 |                              |  |
|   |  |                                   |  |    |                       |                                 |                              |  |
| :   |  | Pre                               |  | 54 |                       |                                 |                              |  |
| T:\0185\04\292\Field Forms\Gauging Form   | 45I  | Cal pog                           | <sup>0</sup> 115.1<br>9.69               | 98 | .26                   | <u>i</u>                        |                              | March 27, 2002                         |

| <ul> <li>Client:</li> <li>Project No.:</li> <li>Date:</li> <li>Sampler(s):</li> <li>Start Time:</li> <li>End Time:</li> <li>Channel Conditions:</li> <li>COC Number:</li> </ul> | ¥                      | (26/05<br>, WB<br>5:40<br>0-1-9 |                     | Site<br>Sa   | Site Locatio<br>e Descriptio<br>Weathe<br>mples Take<br>Sample Tim<br>Aeasuremen | n:<br>n:Y<br>e:                       | 0/G_<br>(5) N<br>9:15  | nry                                    |
|---|------------------------|---------------------------------|---------------------|--------------|--|---------------------------------------|--|--|
|   |                        |                                 |                     |              |  | Notes                                 | s:   |  |
|   |                        | Field Parameter                 | S                   |              |  |                                       |  |  |
| Sample I.D.   | <b>Temp.</b> $(^{0}C)$ | Cond. (mS/cm                    | i) <b>D.O.</b> (mg/ | l) pH        | I (S.U.)   |                                       |  | e maakka maakka eennaykka              |
|   | 15.35                  | (095                            | 11.35               | 17.          | 13   |                                       | and the second sec |  |
|   |                        |                                 | 114 %               |              |  |                                       |  |  |
| Stage H   | [t:                    |                                 | Rated Flow          |              |  | Gauged Flo                            | » 7:   | 25/fr                                  |
|   |                        |                                 |                     |              |  | 0000000000000                         |  | 20013                                  |
|   |                        |                                 | Stream Gau          | ging Data    | a  |                                       |  |  |
| Distance from   |                        |                                 | Velocity            |              | ocity  | Average                               |  | Dicabanca                              |
| Initial Point (ft)  | Width (ft)             | Depth (ft)                      | (60%<br>Depth)      | 20%<br>Depth | 80%<br>Depth   | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> )  | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  |                        |                                 | i.                  |              |  |                                       |  |  |
|   |                        |                                 |                     |              |  | · · · · · · · · · · · · · · · · · · · |  |  |
|   |                        |                                 |                     |              |  |                                       |  |  |
|   |                        | -                               |                     |              |  |                                       |  |  |
|   |                        | ······                          |                     |              |  |                                       |  |  |
|   |                        |                                 |                     |              |  |                                       |  |  |
|   |                        |                                 |                     |              |  |                                       |  |  |
| 1   |                        |                                 |                     |              |  |                                       |  |  |

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|          | Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number; |            | 1/20/05<br>10,5M                 |                            | Si                 | Site Locatic<br>te Descriptio<br>Weathe<br>amples Take<br>Sample Tim<br>Measuremen | on: <u>Clear</u><br>er: <u>60</u><br>n: <u>60</u><br>e: <u>7:0</u> | es) N<br>95             | 35,3<br>Dutlet<br>nny                                 |
|----------|---|------------|----------------------------------|----------------------------|--------------------|--|--|-------------------------|---|
|          | Sample I.D.   | Temp. (°C) | Field Parameters<br>Cond. (mS/cm | 1                          |                    | H (S.U.)<br>)4   | Notes  |                         | <u>y little fa</u><br><u>Klinger</u><br>ourlet<br>ent |
| Ken (320 | 2052NOW)<br>)764-259Stage H   | lt:        |                                  | Rated Flow                 |                    |  | Gauged Flov  | N:                      |   |
|          | Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft)                       | Velocity<br>(60%<br>Depth) | Ve<br>20%<br>Depth | locity<br>80%<br>Depth   | Average<br>Velocity<br>(ft/sec)                                    | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)                |
|          | 0, (left side)  |            |                                  |                            |                    |  |  |                         |   |
|          |   |            |                                  |                            |                    |  |  |                         |   |
|          |   |            |                                  |                            |                    |  |  |                         |   |
|          |   |            |                                  |                            |                    |  |  |                         |   |
|          |   |            |                                  | 9-<br>                     | , a Pada           |  |  |                         |   |

| Client:                             |                                |                  |                  |               | Site Locatio  | n:                                    |                                  |                                       |
|-------------------------------------|--------------------------------|------------------|------------------|---------------|---------------|---------------------------------------|----------------------------------|---------------------------------------|
| Project No.:                        | _000                           | 2-75             |                  | Si            | te Descriptio | n: Ţ (                                | ) 33.                            | 2                                     |
| Date:                               | _ 9/                           | 26/05            |                  |               | Weathe        | er: 654                               | Suny                             | - <del>«</del> ~                      |
| Sampler(s):                         | _ W                            | BJM              |                  | S             | amples Take   |                                       | $\sim$ /                         | lo                                    |
| Start Time:                         | (6                             | 45               | _                |               | Sample Tim    | e: 🛛 🕅                                | NEDAD                            | B:30                                  |
| End Time:                           |                                |                  |                  |               |               | · · · · · · · · · · · · · · · · · · · |                                  |                                       |
| Channel Conditions:                 | E(                             | Ohing            | -                | DTW           | Measuremen    | t: 🔀                                  | 575                              | 4.31                                  |
| COC Number:                         |                                |                  | _                |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               | Notes                                 | s:                               |                                       |
|                                     | T                              | Field Parameters | 1                |               |               |                                       |                                  |                                       |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) |                  | <b>D.O.</b> (mg/ | 1) pi         | H (S.U.)      |                                       |                                  |                                       |
|                                     | 15.13                          | 997              | 2,51             |               | 76            |                                       |                                  |                                       |
|                                     |                                |                  | 75.19            | ,<br>0        |               |                                       | ~                                |                                       |
| Stage Ht                            | ·                              |                  | Rated Flov       | v:            |               | Gauged Flow                           | w:9E                             | Zefs                                  |
|                                     |                                | C.               |                  |               |               |                                       |                                  |                                       |
| 1                                   |                                |                  | tream Gau        |               |               |                                       |                                  |                                       |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)       | Velocity<br>(60% | 20%           | locity<br>80% | Average                               | $A = \left( \frac{2}{3} \right)$ | Discharge                             |
|                                     |                                |                  | Depth)           | Depth         | Depth         | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> )          | (Q, ft <sup>3</sup> /sec)             |
| 0, (left side)                      |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  | · ·                                   |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
|                                     |                                | ·····            |                  |               |               |                                       |                                  |                                       |
|                                     | ~                              |                  | ę                | , s Margada s |               |                                       |                                  |                                       |
|                                     |                                |                  |                  |               |               |                                       |                                  |                                       |
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| Client:             |                         |                                       |                    | i          | Site Locatio | on:                                   | E 33                    | 2.2                                    |
|---------------------|-------------------------|---------------------------------------|--------------------|------------|--------------|---------------------------------------|-------------------------|--|
| Project No.:        |                         |                                       |                    | Site       | e Descriptio | on:                                   |                         |  |
| Date:               | C                       | 1/26/05                               | -                  |            | Weathe       | er: 65°                               | , Gun                   | $\checkmark$                           |
| Sampler(s):         | <u> </u>                | BIM                                   | <u></u>            | Sa         | mples Take   | n: 6                                  | <u> </u>                |  |
| Start Time:         | (6                      | 30                                    |                    |            | Sample Tim   |                                       | 3:40                    |  |
| End Time:           | ·····                   |                                       |                    |            |              | U                                     |                         | <u></u>                                |
| Channel Conditions: | Elar                    | ing                                   |                    | DTW N      | Aeasuremen   | 1: 4.6                                | 5                       |  |
| COC Number:         | -                       |                                       |                    |            |              | <u>(† V</u>                           | <u> </u>                |  |
|                     |                         | · · · · · · · · · · · · · · · · · · · |                    |            |              | Notes                                 | :                       | *                                      |
|                     |                         | Field Parameter                       | S                  |            |              |                                       |                         |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm                          | ) <b>D.O.</b> (mg/ | l) pH      | I (S.U.)     |                                       |                         |  |
|                     | 114.57                  | (054                                  | 2.24               | T          | \$ 7.0%      |                                       | • <u>•••••</u> •••      |  |
|                     |                         |                                       | 9279               |            |              | <u>_</u>                              |                         | ······································ |
| Stage H             | lt:                     |                                       | Rated Flow         | v:         |              | Gauged Flov                           | N: 444                  | Befe                                   |
|                     |                         |                                       |                    |            |              |                                       | ····                    |  |
| J                   |                         |                                       | Stream Gau         | ging Data  | 1            |                                       |                         |  |
| Distance from       | Width (ft)              | Donth (A)                             | Velocity           | Vel<br>20% | ocity<br>80% | Average                               |                         | Discharge                              |
| Initial Point (ft)  | width (ft)              | Depth (ft)                            | (60%<br>Depth)     | Depth      | Depth        | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)      |                         |                                       |                    |            |              |                                       |                         |  |
| ·                   |                         |                                       |                    |            |              |                                       |                         |  |
|                     |                         |                                       |                    |            |              | · · · · · · · · · · · · · · · · · · · |                         |  |
|                     |                         |                                       |                    |            |              |                                       |                         |  |
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|                     |                         |                                       |                    |            |              |                                       |                         |  |
|                     |                         |                                       |                    |            |              |                                       | <u> </u>                |  |
|                     |                         |                                       |                    | Market     |              |                                       |                         |  |
|                     | -                       |                                       | ***                |            |              |                                       |                         |  |
|                     |                         |                                       |                    |            |              |                                       |                         |  |
|                     |                         |                                       |                    |            |              |                                       |                         |  |

| Client:  |            |  |                     |           | Site Locatio  | on: T      | C 33          | 3.2  |
|--|------------|--|---------------------|-----------|---------------|------------|---------------|--|
| Project No.:   |            |  |                     | Sit       | te Descriptio | n:         |               |  |
| Date:  | 9/         | 26/05  |                     |           | Weathe        | er: 65     | 8 Sin         | 0.1 C  |
| Sampler(s):  | <u> </u>   | BM   |                     | Sa        | amples Take   |            | res N         |  |
| Start Time:  | ((         | 0/5  |                     |           | Sample Tim    |            | 3:50          |  |
| End Time:  |            | j  |                     |           |               |            |               |  |
| Channel Conditions   | : <u> </u> | Ohing  |                     | DTW I     | Measuremen    | t: 4.C     | <u>)</u> ନ    |  |
| COC Number:  |            |  |                     |           |               | <u> </u>   |               |  |
| n and a second |            |  |                     |           |               | Note       | s:            |  |
|  |            | Field Parameter                              | S                   |           |               |            | <b></b>       | <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> |
| Sample I.D.  |            | Cond. (mS/cm                                 | 1) <b>D.O.</b> (mg/ | l) pl     | H (S.U.)      |            |               |  |
|  | 14.47      | 944  | 7.14                | 2         | , 30          |            |               |  |
|  |            |  | 71.0%               | 2         |               |            |               |  |
| Stage H  | -lt:       |  | Rated Flov          |           |               | Gauged Flo | w: <i>AQ</i>  | 2,242  |
|  |            |  |                     |           |               | U          |               |  |
| Martin and Martin and Martin   |            |  | Stream Gau          | ging Dat  | a             |            |               |  |
| Distance from  | Width (B)  |  | Velocity            | Ve<br>20% | locity        | Average    |               | Discharge                                    |
| Initial Point (ft)   | Width (ft) | Depth (ft)                                   | (60%<br>Depth)      | Depth     | 80%<br>Depth  | Velocity   | Area $(ft^2)$ | (Q, ft <sup>3</sup> /sec)                    |
| 0, (left side)   |            | na na sa |                     |           |               | (ft/sec)   |               |  |
|  |            | ······································       |                     |           |               | <u></u>    |               |  |
|  |            | · · · · · · · · · · · · · · · · · · ·        |                     |           |               |            |               |  |
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|  |            |  |                     |           |               |            |               |  |
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|  |            |  |                     |           |               |            |               |  |

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| Client:                               |            |                  |                            |              | Site Locatio          | on: <u> </u>                          | 1 33,2                  | <b>`</b>                               |
|---------------------------------------|------------|------------------|----------------------------|--------------|-----------------------|---------------------------------------|-------------------------|--|
| Project No.:                          |            |                  |                            | Site         | e Descriptio          | 1                                     |                         |  |
| Date:                                 |            | 26/05            |                            |              | Weath                 | · · · · · · · · · · · · · · · · · · · | , Sun                   | V                                      |
| Sampler(s):                           | Ŵ          | B.JM             |                            | Sa           | mples Take            | en: CY                                |                         |  |
| Start Time:                           | (5         | 50               |                            | S            | Sample Tim            | ie:                                   | 3:65                    |  |
| End Time:                             |            |                  |                            |              |                       |                                       |                         |  |
| Channel Conditions:                   | Plan       | ing              |                            | DTW N        | leasuremer            | nt: 5                                 | .57                     |  |
| COC Number:                           |            |                  |                            |              |                       |                                       |                         |  |
|                                       |            |                  |                            |              |                       | Notes                                 | 5:                      |  |
|                                       |            | Field Parameters | FI                         |              |                       |                                       |                         |  |
| Sample I.D.                           |            | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         |              | I (S.U.)              |                                       |                         |  |
|                                       | 17.34      | 1117             | 9.66                       |              | 21                    |                                       |                         |  |
|                                       |            |                  | 90.5                       | 70           |                       |                                       |                         |  |
| Stage Ht:                             |            |                  | Rated Flow                 | v:           | ·····                 | Gauged Flow                           | w: <u>`Z.Y3</u>         | ZGAS                                   |
|                                       |            |                  | Stream Gau                 | ring Data    |                       |                                       |                         |  |
|                                       |            |                  |                            |              |                       | T                                     |                         |  |
| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec)       | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                        |            |                  |                            |              |                       |                                       |                         |  |
|                                       |            |                  |                            |              |                       |                                       |                         |  |
|                                       |            |                  |                            |              |                       |                                       |                         |  |
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|                                       |            |                  |                            |              |                       |                                       |                         |  |
|                                       |            |                  | ş*-                        |              |                       |                                       |                         |  |
|                                       |            |                  |                            |              | 2                     |                                       |                         |  |
|                                       |            |                  |                            |              |                       |                                       |                         |  |

| Client:                             |  |                  |                    |                      | Site Locatio                          | on:                                    | B 33                                  | .2                                    |
|-------------------------------------|--|------------------|--------------------|----------------------|---------------------------------------|--|---------------------------------------|---------------------------------------|
| Project No.:                        |  | -,               |                    | Site                 | e Descriptio                          | on:                                    |                                       |                                       |
| Date:                               | q                                      | 126/05           |                    |                      | Weathe                                | er: QS                                 | 0.50                                  | nv                                    |
| Sampler(s):                         | l                                      | B.JM             |                    | Sa                   | mples Take                            |  |                                       |                                       |
| Start Time:                         | (                                      | 600              |                    |                      | Sample Tim                            | 14                                     | 00                                    | · 2500                                |
| End Time:                           |  | -<br>            |                    |                      |                                       |  |                                       | 1799 (5, 1992)<br>(5, 1992)           |
| Channel Conditions:                 | £[o                                    | hing             |                    | DTW N                | Aeasuremen                            | it: 6,4                                | 36                                    |                                       |
| COC Number:                         |  |                  |                    |                      |                                       | ······································ |                                       |                                       |
| //                                  |  |                  |                    |                      |                                       | Notes                                  | :                                     |                                       |
|                                     |  | Field Parameters | 0                  |                      |                                       |  |                                       |                                       |
|                                     | Temp. ( <sup>0</sup> C)                |                  | ) <b>D.O.</b> (mg/ | 1) pH                | I (S.U.)                              |  |                                       |                                       |
|                                     | 14.41                                  | 964              | 7.76               | 7.00                 | 7                                     |  | -                                     |                                       |
|                                     |  |                  | 76.99              | n<br>e               |                                       |  |                                       |                                       |
| Stage Ht:_                          | ······································ | ······           | Rated Flov         |                      |                                       | Gauged Flow                            | v: (), -62                            | 24 As                                 |
|                                     |  |                  |                    |                      |                                       |  | -                                     |                                       |
| [ <b></b>                           |  |                  | Stream Gau         |                      |                                       |  |                                       |                                       |
| Distance from<br>Initial Point (ft) | Width (ft)                             | Depth (ft)       | Velocity<br>(60%   | Vel<br>20%           | ocity<br>80%                          | Average                                | Area (ft <sup>2</sup> )               | Discharge                             |
|                                     |  |                  | Depth)             | Depth                | Depth                                 | Velocity<br>(ft/sec)                   | Alea (IL)                             | $(Q, ft^3/sec)$                       |
| 0, (left side)                      |  |                  |                    |                      |                                       |  |                                       | · · · · · · · · · · · · · · · · · · · |
|                                     |  |                  |                    |                      |                                       |  | · · · · · · · · · · · · · · · · · · · |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       | -                                      |                                       |                                       |
|                                     |  |                  | -                  |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      |                                       |  |                                       |                                       |
|                                     | ĺ                                      |                  |                    |                      |                                       |  |                                       |                                       |
|                                     |  |                  |                    |                      | . [                                   |  |                                       |                                       |
|                                     | ~                                      |                  | . V <sup>2</sup> - | ,1 <b>4</b> παρτής,1 | · · · · · · · · · · · · · · · · · · · |  |                                       |                                       |
|                                     | ~                                      |                  | . y.               | , Marka              |                                       |  |                                       |                                       |

| Client:             | • <u>•</u> •••••••••••••••••••••••••••••••••• |  | ·                  |                         | Site Locatio  | on:          | -32,2                   | ٤               |  |  |  |
|---------------------|---|--|--------------------|-------------------------|---------------|--------------|-------------------------|-----------------|--|--|--|
| Project No.:        | <u> </u>                                      | $\int_{\Delta}$                        |                    | Si                      | te Descriptio |              |                         |                 |  |  |  |
| Date:               | <u> </u>                                      | 126/05                                 |                    | Weather: 65° S-MM       |               |              |                         |                 |  |  |  |
| Sampler(s):         |   | <u>B</u> )W                            |                    | Samples Taken: (Yes) No |               |              |                         |                 |  |  |  |
| Start Time:         | 15  | 00                                     | <u> </u>           |                         | Sample Tim    | ie: <b>9</b> | 20                      |                 |  |  |  |
| End Time:           |   | •••••••••••••••••••••••••••••••••••••• |                    |                         |               | 9            |                         |                 |  |  |  |
| Channel Conditions: | - X[0,  | -my                                    |                    | DTW                     | Measuremer    | nt: 2,       | 78                      |                 |  |  |  |
| COC Number:         |   | /                                      |                    |                         |               |              |                         |                 |  |  |  |
|                     |   |  |                    |                         |               | Notes        | 3:                      |                 |  |  |  |
|                     |   | Field Parameter                        | S                  |                         |               |              |                         |                 |  |  |  |
| Sample I.D.         | <b>Temp.</b> ( <sup>0</sup> C)                | Cond. (mS/cm                           | ) <b>D.O.</b> (mg/ | l) pl                   | H (S.U.)      |              |                         |                 |  |  |  |
|                     | 15.06   | 600                                    | 6.13               |                         | 7.14          |              |                         |                 |  |  |  |
|                     |   |  | 60.99              | 700                     |               |              |                         |                 |  |  |  |
| Stage H             | t:  |  | Rated Flow         |                         |               | Gauged Flov  | x: 2.9:                 | of Ne           |  |  |  |
|                     |   | <b>,</b> .                             |                    |                         | ****          |              | ·· <u>_~</u>            | A (T)           |  |  |  |
|                     |   |  | Stream Gau         | ging Dat                | a             |              |                         |                 |  |  |  |
| Distance from       |   |  | Velocity           |                         | locity        | Average      |                         | Discharge       |  |  |  |
| Initial Point (ft)  | Width (ft)                                    | Depth (ft)                             | (60%)<br>Depth)    | 20%<br>Depth            | 80%<br>Depth  | Velocity     | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |  |  |  |
| 0, (left side)      | <u>, , , , , , , , , , , , , , , , , , , </u> |  | -                  | /                       |               | (ft/sec)     |                         |                 |  |  |  |
|                     | -   |  |                    |                         |               |              |                         |                 |  |  |  |
|                     |   |  |                    |                         |               |              | :<br>                   |                 |  |  |  |
|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |
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|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |
|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |
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|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |
|                     |   |  |                    | ir Propilipi            |               |              |                         |                 |  |  |  |
|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |
|                     |   |  |                    |                         |               |              |                         |                 |  |  |  |

| Client:            |                         |                  |                                       |                   | Site Locatio | on: fa               | 31.6                    |  |  |  |
|--------------------|-------------------------|------------------|---------------------------------------|-------------------|--------------|----------------------|-------------------------|--|--|--|
| Project No.:       |                         | , <u>(</u>       |                                       | Sit               | e Descriptio | <b>~</b>             |                         | 77 - 104 - 10 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 197 |  |  |
| Date:              | <u> </u>                | 124/05           |                                       | Weather: 650 Smar |              |                      |                         |  |  |  |
| Sampler(s):        | JN                      | 1, WB            |                                       | Sa                | unples Take  |                      | $\gamma \sim 1$         |  |  |  |
| Start Time:        | (4                      | 1:30             |                                       | Sample Time: 9:40 |              |                      |                         |  |  |  |
| End Time:          | P                       | lering           |                                       |                   |              |                      |                         |  |  |  |
| Channel Conditions |                         | J                |                                       | DTW N             | Measuremer   |                      | ad                      |  |  |  |
| COC Number:        |                         |                  |                                       |                   |              |                      | .2                      |  |  |  |
| I                  |                         | T- 001444        |                                       |                   |              | Notes                | :                       |  |  |  |
|                    |                         | Field Parameters | 5                                     |                   |              |                      |                         |  |  |  |
| Sample I.D.        | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/                    | i) pł             | I (S.U.)     |                      |                         |  |  |  |
|                    | 15.03                   | 6666             | 10.46                                 | 7.7               | 20           |                      |                         |  |  |  |
|                    |                         |                  | 104.1                                 |                   |              |                      |                         |  |  |  |
| Stage H            | lt:                     |                  | Rated Flow                            | v:                |              | Gauged Flov          | N: 9012                 | A  |  |  |
|                    |                         |                  |                                       |                   |              | C                    |                         | <u> </u>   |  |  |
|                    |                         |                  | Stream Gau                            | ging Dat          | а            |                      |                         |  |  |  |
| Distance from      | Velocity                | Vel<br>20%       | locity<br>80%                         | Average           |              | Discharge            |                         |  |  |  |
| Initial Point (ft) | Width (ft)              | Depth (ft)       | (60%)<br>Depth)                       | Depth             | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)  |  |  |
| 0, (left side)     |                         |                  |                                       |                   |              |                      |                         |  |  |  |
|                    |                         | <u></u>          | · · · · · · · · · · · · · · · · · · · |                   |              |                      |                         |  |  |  |
|                    |                         | ,                |                                       |                   |              |                      |                         |  |  |  |
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|                    |                         |                  |                                       |                   |              |                      |                         |  |  |  |
|                    |                         |                  |                                       |                   |              |                      |                         |  |  |  |
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|                    |                         | -                |                                       |                   |              |                      |                         |  |  |  |
|                    |                         |                  |                                       |                   |              |                      |                         |  |  |  |
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|                    |                         |                  |                                       | , Produ           |              |                      |                         |  |  |  |
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|                    |                         |                  |                                       |                   |              |                      |                         |  |  |  |
|                    | <u> </u>                | ·                |                                       |                   |              |                      |                         |  |  |  |

| Project No.:   | Client:   |                         |  |                     | :                      | Site Locatio | n:          | A 30.                                   | 9                                      |  |
|--|---|-------------------------|--|---------------------|------------------------|--------------|-------------|---|--|--|
| Sampler(s):       WB       WB       We and the sample sa | Project No.:  |                         | -fp  |                     | Site                   | e Descriptio | •           | •                                       |  |  |
| Sampler(s):       LA       M       Sampler Taken:       My         Start Time:       /1/50       Sample Time:       9:30       Nv         End Time:       /1/50       DTW Measurement:       3:65         COC Number:       DTW Measurement:       3:65         COC Number:       DTW Measurement:       3:65         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         Image: Condumn of the start of the star   | Date:   | 9                       | 126/05   |                     |                        | Weathe       | r: (05      | 0 5                                     | ~ ~ /                                  |  |
| Start Time:       1450       Sample Time:       9:50         End Time:   | Sampler(s):   | <u></u>                 | BAN  | ·                   | Sa                     | mples Take   | n: (y       | ~ | 7                                      |  |
| End Time:  | Start Time:   |                         | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ |                     |                        |              |             |   |  |  |
| Notes:         Notes:         Sample I.D.       Temp. (*C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         (*G, 2:G)       Gauged Flow:           Stage Ht:       Rated Flow:       Gauged Flow:           Distance from       Width (ft)       Depth (ft)       Velocity       Average       Area (ft²)       Discharge         O, (left side)                0, (left side)                             Distance from       Width (ft)       Depth (ft)       Velocity       Average       Area (ft²)       Discharge         0, (left side)                                   <   | End Time:   |                         |  |                     |                        | -            |             |   |  |  |
| Notes:         Notes:         Sample I.D.       Temp. (*C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         (*G, 2:G)       Gauged Flow:           Stage Ht:       Rated Flow:       Gauged Flow:           Distance from       Width (ft)       Depth (ft)       Velocity       Average       Area (ft²)       Discharge         O, (left side)                0, (left side)                             Distance from       Width (ft)       Depth (ft)       Velocity       Average       Area (ft²)       Discharge         0, (left side)                                   <   | Channel Conditions  | ::                      | Florm  |                     | DTW N                  | Aeasuremen   | t: 3.6      | 5                                       |  |  |
| Field Parameters         Sample I.D.       Temp. $\binom{0}{C}$ Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.) $(c_0, 2b$ $C_5 - G$ $q, b_1$ $7, 2 - 5$ Gauged Flow:         Gauged Flow:         Stage Ht:       Rated Flow:       Gauged Flow:         Distance from         Nidth (ft)       Depth (ft)       Velocity       Average       Nerameters         Olistance from       Nidth (ft)       Depth (ft)       Velocity       Average       Nerameters         Olistance from       Nidth (ft)       Depth (ft)       Velocity       Average       Nerameters         Olistance from       Nidth (ft)       Depth (ft)       Olistance         Olistance from       Nerameters       Average       Nerameters         Olistance from       Nerameters       Nerameters         Olistance from       Nerameters         Olistance from <th c<="" td=""><td>COC Number:</td><td></td><td>)</td><td></td><td></td><td></td><td></td><td></td><td></td></th>   | <td>COC Number:</td> <td></td> <td>)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | COC Number:             |  | )                   |                        |              |             |   |  |  |
| Field Parameters         Sample I.D.       Temp. $\binom{0}{C}$ Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.) $(c_0, 2b$ $C_{576}$ $q, \zeta_l$ $7, 25$ Gauged Flow:         Gauged Flow:         Stage Ht:       Gauged Flow:         Stage Ht:       Gauged Flow:         Distance from       Midth (ft)       Depth (ft)       Velocity       Average       QC, ft <sup>3</sup> /sec)         0, (left side)       Image: Imag  |   |                         |  |                     |                        |              | Notes       | 5                                       |  |  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$  |   |                         | Field Parameter  | S                   |                        |              |             | <u> </u>                                |  |  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$  | Sample I.D.   | Temp. ( <sup>0</sup> C) | Cond. (mS/cm   | i) <b>D.O.</b> (mg/ | l) pH                  | I (S.U.)     |             |   |  |  |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $   |   | 7                       |  |                     |                        |              |             | ·                                       |  |  |
| Stage Ht:       Rated Flow:       Gauged Flow:       He         Distance from       Width (ft)       Depth (ft)       Velocity<br>(60%       Velocity<br>20%       Average<br>80%       Average<br>Velocity       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       Image: Im   |   |                         |  |                     |                        |              | 긘           |   | • • • • • • • • • • • • • • • • • • •  |  |
| Stream Gauging DataDistance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>(60%<br>Depth) $\frac{Velocity}{Depth}$ Average<br>$20%$ $Area (ft^2)$ Discharge<br>(Q, ft²/sec)0, (left side)IIIIIIIIII1IIIIIIIIIIII0, (left side)IIIIIIIIIIII1III  | Stage I   | -It:                    |  |                     |                        |              | Gauged Flor | J46                                     | 2<br>2                                 |  |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>(60%<br>Depth)A verage<br>  |   |                         |  |                     | <u> </u>               | ·            | Guiged 110  |   |  |  |
| Initial Point (ft)Width (ft)Depth (ft) $(60\%)$<br>Depth) $20\%$<br>Depth) $80\%$<br>DepthAverage<br>Velocity<br>(ft/sec)Area (ft^2)Discharge<br>(Q, ft^3/sec)0, (left side) <td></td> <td></td> <td></td> <td>Stream Gau</td> <td>iging Data</td> <td>a</td> <td></td> <td></td> <td></td>  |   |                         |  | Stream Gau          | iging Data             | a            |             |   |  |  |
| Initial Point (ft)Width (ft)Depth (ft) $\begin{pmatrix} 60\% \\ Depth \end{pmatrix}$ $20\% \\ Depth \end{pmatrix}$ $avea (ft^2)$ $Area (ft^2)$ $(Q, ft^3/sec)$ 0, (left side) </td <td>Distance from</td> <td></td> <td></td> <td></td> <td></td> <td>····</td> <td>Average</td> <td></td> <td>Discharge</td>  | Distance from   |                         |  |                     |                        | ····         | Average     |   | Discharge                              |  |
| 0, (left side)   | Initial Point (ft)  | Width (ft)              | Depth (ft)   |                     | 1                      |              | Velocity    | Area (ft <sup>2</sup> )                 | -                                      |  |
|  | 0, (left side)  | 5                       |  |                     |                        | -            |             |   |  |  |
|  | ·····   |                         |  |                     |                        |              |             |   |  |  |
|  |   |                         |  |                     |                        |              |             |   |  |  |
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|  |   |                         |  |                     |                        |              |             |   |  |  |
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|  |   |                         |  |                     | , s <del>P</del> artes |              |             |   |  |  |
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| Client:                             |                        |                  |                    | 1           | Site Locatio | on:                                    |                         |                 |
|-------------------------------------|------------------------|------------------|--------------------|-------------|--------------|--|-------------------------|-----------------|
| Project No.:                        |                        |                  | <del></del>        | Site        | e Descriptio | n:                                     | B 30                    | .9              |
| Date:                               | 9                      | 126/05           |                    |             | Weathe       |  | Gunny                   |                 |
| Sampler(s):                         | _w                     | BJM              |                    | Sa          | mples Take   | 7                                      |                         | 0               |
| Start Time:                         | (                      | 4:45             |                    | S           | Sample Tim   |  | 9:35                    |                 |
| End Time:                           |                        |                  |                    |             |              | •••••••••••••••••••••••••••••••••••••• |                         |                 |
| Channel Conditions:                 | <b>Ç</b> t             | tagnent          |                    | DTW N       | leasuremen   | t: 1,7                                 | 1                       |                 |
| COC Number:                         |                        | J                |                    |             |              | <u></u>                                |                         |                 |
|                                     |                        |                  |                    |             |              | Notes                                  | ·· - (101               | V ( JoH)        |
|                                     | ·····                  | Field Parameters |                    |             |              |  | ·PI                     | ow in           |
| Sample I.D.                         | Temp. ( <sup>0</sup> C | ) Cond. (mS/cm   | ) <b>D.O.</b> (mg/ | l) pH       | I (S.U.)     |  | Cin                     | lunct           |
|                                     | 17.71                  | 610              | 6,50               | 7.2         | -4           |  |                         |                 |
|                                     |                        |                  | 66.4               |             |              | -                                      |                         |                 |
| Stage H                             | t:                     |                  | Rated Flow         | v:          |              | Gauged Flov                            | v:                      |                 |
|                                     |                        |                  |                    |             |              |  |                         |                 |
|                                     | <u> </u>               |                  | Stream Gau         |             |              |  |                         |                 |
| Distance from<br>Initial Point (ft) | Width (ft)             | Depth (ft)       | Velocity<br>(60%   | Vel<br>20%  | ocity<br>80% | Average                                |                         | Discharge       |
|                                     |                        |                  | Depth)             | Depth       | Depth        | Velocity<br>(ft/sec)                   | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0, (left side)                      |                        |                  |                    |             |              | ()                                     |                         |                 |
|                                     |                        |                  |                    |             |              |  |                         |                 |
|                                     |                        |                  |                    |             |              |  |                         |                 |
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|                                     | -                      |                  |                    |             |              |  |                         |                 |
|                                     |                        |                  |                    | ,s Maraja i |              |  |                         | ······          |
| · ·                                 |                        | ÷                |                    |             | ,            | · · · ·                                |                         |                 |
|                                     |                        |                  | ·······            |             |              |  | •                       | 11              |

| Client:                             |            |                  | _                          | 5             | Site Location         | 1: <u> </u>         | 30.7                    | 7   |
|-------------------------------------|------------|------------------|----------------------------|---------------|-----------------------|---------------------|-------------------------|---|
| Project No.:                        | ·          |                  |                            | Site          | Descriptior           |                     |                         |   |
| Date:                               | <u></u>    | 9/26/05          |                            |               | Weather               | - <u> </u>          | 0 5-m                   | w/  |
| Sampler(s):                         | <u> </u>   | VB JM            | _                          | Sa            | mples Taker           |                     | s) No                   |   |
| Start Time:                         |            | 1Ý15             | _                          | S             | Sample Time           |                     | 9:45                    | <u>, , , , , , , , , , , , , , , , , , , </u> |
| End Time:                           |            | _                |                            |               |                       |                     |                         |   |
| Channel Conditions:                 | 2          | Floring          | _                          | DTW M         | leasurement           | · 2.4               | 1                       |   |
| COC Number:                         |            |                  | _                          |               |                       |                     |                         | , <u>, , , , , , , , , , , , , , , , , , </u> |
|                                     |            |                  |                            |               |                       | Notes               | •                       |   |
|                                     | r          | Field Parameters | II                         |               |                       |                     |                         |   |
| Sample I.D.                         |            | Cond. (mS/cm)    | <b>D.O.</b> (mg/           | 1) <b>pH</b>  | l (S.U.)              |                     | •                       |   |
|                                     | 14.59      | 769              | 10.11                      | 17            | <u>19</u>             |                     |                         |   |
|                                     |            |                  | 99.70                      | 20            |                       |                     |                         |   |
| 🖋 Stage Ht                          | •          |                  | Rated Flow                 | w:            |                       | Gauged Flov         | v: <u>0,/0</u>          | Ycle  |
|                                     |            | 64               |                            |               |                       |                     |                         | -   |
| <u> </u>                            |            |                  | tream Gau                  |               |                       |                     |                         | ······································        |
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth  | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)        |
| 0, (left side)                      |            |                  |                            |               |                       | (ft/sec)            |                         |   |
|                                     |            |                  |                            |               |                       |                     |                         |   |
|                                     |            |                  |                            |               |                       |                     |                         |   |
|                                     |            |                  |                            |               |                       |                     |                         |   |
|                                     |            |                  |                            |               |                       |                     |                         |   |
|                                     |            |                  |                            |               |                       |                     |                         | ·····   |
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|                                     |            |                  |                            |               | ·······               |                     |                         |   |
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|                                     |            |                  |                            |               |                       |                     |                         |   |
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|                                     |            |                  |                            |               |                       |                     |                         | ·····   |
|                                     |            |                  |                            |               |                       |                     |                         |   |

| Client:                             |  |  |  |         | Site Locatio | n:                   |                           |                           |  |
|-------------------------------------|--|--|--|---------|--------------|----------------------|---------------------------|---------------------------|--|
| Project No.:                        |  | ·····                                  |  | Site    | e Descriptio | n:                   | 30.1                      |                           |  |
| Date:                               | 91                                     | 26/05                                  |  |         | Weathe       |                      |                           |                           |  |
| Sampler(s):                         | h/                                     | BITM                                   |  | Sa      |              | - /                  | ' \ /                     |                           |  |
| Start Time:                         |  | 105                                    | Weather: CSOG-MAY<br>Samples Taken: Yes No<br>Sample Time: 9:50<br>DTW Measurement: 5.(a/a<br>Notes: |         |              |                      |                           |                           |  |
| End Time:                           |  |  |  |         | -            |                      |                           |                           |  |
| Channel Conditions:                 | {                                      | lang                                   |  | DTW N   | Aeasuremen   | t: 5.                | lola                      |                           |  |
| COC Number:                         |  | •••••••••••••••••••••••••••••••••••••• |  |         |              |                      |                           |                           |  |
|                                     | ······································ |  |  |         |              | Notes                | 1.                        |                           |  |
|                                     |  | Field Parameters                       |  |         |              |                      |                           |                           |  |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C)         | Cond. (mS/cm)                          | <b>D.O.</b> (mg/   | l) pH   | I (S.U.)     |                      | E <u>rre</u> tau - mereka |                           |  |
|                                     | 14.56                                  | 796                                    | 10.77  | 7,1     | 14           |                      |                           |                           |  |
|                                     |  |  | 106.12   | °0      | <b>2</b>     |                      | - <u></u>                 |                           |  |
| Stage Ht:                           |  |  | Rated Flow   | w:      |              | Gauged Flow          | N: 0.24                   | L Ag                      |  |
|                                     |  |  |  |         |              |                      |                           | ·····                     |  |
|                                     |  | <u> </u>                               | Stream Gau   |         |              |                      | - maile - parts           |                           |  |
| Distance from<br>Initial Point (ft) | Width (ft)                             | Depth (ft)                             | Velocity<br>(60%   | Vel 20% | ocity<br>80% | Average              | A (0 <sup>2</sup> )       | Discharge                 |  |
|                                     |  |  | Depth)   | Depth   | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )   | (Q, ft <sup>3</sup> /sec) |  |
| 0, (left side)                      |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  |  |         |              |                      |                           |                           |  |
|                                     |  |  | -  | Paper.  |              |                      |                           |                           |  |
|                                     | -                                      |  |  | 1       | F            | 1                    |                           |                           |  |
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| Client:                             |                         |                  |                            |                     | Site Location         | on:                 |                         |  |
|-------------------------------------|-------------------------|------------------|----------------------------|---------------------|-----------------------|---------------------|-------------------------|--|
| Project No.:                        |                         | 1                |                            | Site                | e Descriptio          | on:                 | Q 30.                   | Ø                                      |
| Date:                               | 7                       | 26/05            |                            |                     | Weath                 |                     | $\sim$                  |  |
| Sampler(s):                         | _wf                     | , TM             | <u></u>                    | Sa                  | mples Take            |                     | 5                       | /                                      |
| Start Time:                         | _13                     | :45              |                            |                     | Sample Tin            | V                   |                         |  |
| End Time:                           |                         |                  |                            |                     |                       | 9:1                 | 55                      |  |
| Channel Conditions:                 | : <u> </u>              | ming             |                            | DTW N               | Aeasuremei            | nt: 8.15            | 5                       |  |
| COC Number:                         |                         | Ĵ                |                            |                     |                       | <u></u>             |                         |  |
| J                                   |                         |                  |                            |                     |                       | Notes               | FI                      | ) ]                                    |
|                                     |                         | Field Parameters | 5                          |                     |                       |                     | = Dup                   | licate                                 |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         | I) pH               | I (S.U.)              |                     | Sam                     | 1.1                                    |
|                                     | 14.49                   | 636              | 9,91                       | 7.0                 |                       |                     |                         |  |
|                                     |                         |                  | 97.4%                      | Ó                   |                       |                     |                         |  |
| Stage H                             | lt:                     | ·                | Rated Flow                 | N:                  | ·                     | Gauged Flov         | v: 9.6                  | 36 As                                  |
|                                     |                         |                  | _                          |                     |                       |                     | 1.4                     |  |
| 1                                   |                         |                  | Stream Gau                 |                     |                       |                     |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |                         |                  |                            |                     |                       | (ft/sec)            |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     | <u> </u>              |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
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|                                     |                         |                  |                            |                     |                       |                     |                         |  |
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|                                     |                         |                  | ¥•                         |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     |                       |                     |                         |  |
|                                     |                         |                  |                            |                     | <u> </u>              |                     |                         |  |

| Client:            |                                |                  |                   | 5          | Site Location | 1:                   |                         |   |
|--------------------|--------------------------------|------------------|-------------------|------------|---------------|----------------------|-------------------------|---|
| Project No.:       |                                |                  |                   | Site       | e Description |                      | Q 29.                   | O                                       |
| Date:              | q/                             | 26/05            |                   |            | Weathe        | r: 65                | Sin                     | v                                       |
| Sampler(s):        | WB,                            | Jon              |                   | Sa         | mples Taker   |                      | · ]                     |   |
| Start Time:        | 13                             | 130              | Sample Time: OOOD |            |               |                      |                         |   |
| End Time:          |                                |                  |                   |            |               |                      |                         |   |
| Channel Conditions | : P[d                          | wing             |                   | DTW N      | leasurement   | : IU                 | .59                     | <u> </u>                                |
| COC Number:        |                                | /                |                   |            |               |                      |                         |   |
|                    |                                |                  |                   | -          |               | Notes                |                         |   |
|                    |                                | Field Parameters |                   |            |               |                      |                         |   |
| Sample I.D.        | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/  | l) pH      | I (S.U.)      |                      | ····                    |   |
|                    | 14.32                          | 673              | 10.14             | 7.0        | 6             |                      |                         | 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
|                    |                                |                  | 992               | 790        |               | -                    |                         |   |
| Stage I            | -lt:                           |                  | Rated Flov        |            |               | Gauged Flow          | N: 10.9                 | RPR fr                                  |
|                    |                                |                  |                   |            |               | C                    |                         |   |
|                    |                                | S                | Stream Gau        | iging Data | a             |                      |                         |   |
| Distance from      |                                |                  | Velocity          | Vel<br>20% | ocity<br>80%  | Average              |                         | Discharge                               |
| Initial Point (ft) | Width (ft)                     | Depth (ft)       | (60%<br>Depth)    | Depth      | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)               |
| 0, (left side)     |                                |                  |                   |            |               | (10300)              |                         |   |
|                    |                                | <u></u>          |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
| ·                  |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                | Recalibra        | La F              | 12         | Va            | 7-                   |                         |   |
|                    |                                | meral: out       | rea f             |            | m 10          | <u></u>              |                         |   |
|                    | -                              |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |
|                    |                                |                  |                   |            |               |                      |                         |   |

| Client:  | <u> </u>                       | ······································ |                    |                        | Site Locatio | on:                  |                         |                           |
|--|--------------------------------|--|--------------------|------------------------|--------------|----------------------|-------------------------|---------------------------|
| Project No.:   |                                | <u></u>                                |                    | Site                   | e Descriptio | on:                  | W 27.                   | G                         |
| Date:  | 9/                             | 20/05                                  |                    |                        | Weathe       | A                    | O G-n                   | ns/                       |
| Sampler(s):  | _JM                            | , WB                                   |                    | Sa                     | mples Take   |                      | es N                    | /                         |
| Start Time:  | _13:                           | 15                                     |                    |                        | Sample Tim   |                      | 10:1                    |                           |
| End Time:  |                                |  |                    |                        | -            |                      |                         |                           |
| Channel Conditions   | :                              | wing                                   |                    | DTW N                  | Aeasuremen   | ıt: 8.7              | シリ                      |                           |
| COC Number:  | ·                              |  |                    |                        |              | <u></u>              | <u> </u>                |                           |
| [ <u></u>  |                                |  |                    |                        |              | Notes                | WILL                    | an is                     |
|  |                                | Field Parameters                       | 6                  |                        |              |                      | <u>-Wate</u><br>_Cle    | an                        |
| Sample I.D.  | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm                           | ) <b>D.O.</b> (mg/ | (1) <b>pH</b>          | I (S.U.)     |                      |                         |                           |
|  | 15.27                          | 7956                                   | 10.43              | 7,7                    | +3           |                      |                         |                           |
|  |                                |  | 104.20             | lø                     |              | <del></del>          |                         |                           |
| Stage H  | lt:                            |  | Rated Flow         | w:                     |              | Gauged Flov          | v: 1,0                  | 75                        |
|  |                                |  |                    |                        |              | -                    |                         |                           |
| n and a second |                                |  | Stream Gau         | iging Data             | 1            |                      |                         |                           |
| Distance from<br>Initial Point (ft)  | Width (ft)                     | Depth (ft)                             | Velocity<br>(60%   | Vel<br>20%             | ocity<br>80% | Average              | Area (ft <sup>2</sup> ) | Discharge                 |
|  |                                |  | Depth)             | Depth                  | Depth        | Velocity<br>(ft/sec) | Alea (It )              | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)   |                                |  |                    |                        | Ē            |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         | ·····                     |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                | *                                      |                    |                        |              |                      |                         |                           |
|  | ~                              |  |                    | , or a <b>A</b> nanita |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         |                           |
|  |                                |  |                    |                        |              |                      |                         | ······                    |
|  |                                |  |                    |                        |              |                      |                         |                           |

|       | Client:                             | <b>.</b>   |                  |  |           | Site Locatio    | on:                 |                         |   |
|-------|-------------------------------------|------------|------------------|--|-----------|-----------------|---------------------|-------------------------|---|
|       | Project No.:                        |            | <u> </u>         |  | Sit       | e Descriptio    | on: TE              | 27.96                   |   |
|       | Date:                               | 91         | 26/05            |  |           | Weath           | er: <u>0</u> 5 0    | Gunn                    | 1   |
|       | Sampler(s):                         | WB         | JM               |  | Sa        | umples Take     |                     |                         | /   |
|       | Start Time:                         |            | <u> </u>         |  |           | Sample Tim      | - C                 | 10:15                   |   |
|       | End Time:                           |            | J                |  |           | -               |                     |                         |   |
|       | Channel Conditions:                 | _ Alow     | 1+g              |  | DTW N     | Measuremer      | nt: 4.1             | 14                      |   |
|       | COC Number:                         |            |                  | _                                      |           |                 |                     |                         |   |
|       |                                     |            |                  | ······································ |           |                 | Notes               | :                       |   |
|       |                                     | F          | Field Parameters |  |           |                 |                     |                         |   |
|       | Sample I.D.                         |            | Cond. (mS/cm)    |  |           | <b>I</b> (S.U.) |                     |                         | <u>, , , , , , , , , , , , , , , , , , , </u> |
|       |                                     | 13.08      | 646              | 9.66                                   | 7.        | .07             |                     | /                       |   |
|       |                                     |            |                  | 96.2                                   | lo        |                 |                     |                         |   |
|       | Stage Ht                            |            |                  | Rated Flow                             | w:        |                 | Gauged Flow         | N: <u>01</u> .          | <u>3cfs</u>                                   |
|       |                                     |            | C                | twoom Car                              |           |                 |                     |                         |   |
|       |                                     |            |                  | tream Gau                              |           |                 |                     | 1                       |   |
|       | Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)       | Velocity<br>(60%                       | 20%       | ocity<br>80%    | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge                                     |
|       |                                     |            |                  | Depth)                                 | Depth     | Depth           | (ft/sec)            | incu (it )              | (Q, ft <sup>3</sup> /sec)                     |
| -     | 0, (left side)                      |            |                  |  |           |                 |                     |                         |   |
| -     |                                     | 3.1 sec    | - to fr'11       | (00)                                   | OmL       | bott            | e                   |                         |   |
|       |                                     |            |                  |  | <br>      |                 |                     |                         |   |
| (3.3  |                                     |            |                  |  |           |                 |                     |                         |   |
| 3,2-  |                                     |            |                  |  |           |                 |                     |                         |   |
| 2.8   |                                     |            |                  |  |           |                 |                     |                         |   |
| 9.3   |                                     |            |                  |  |           |                 |                     |                         |   |
| 3.1   |                                     |            |                  |  |           |                 |                     |                         |   |
| Any - |                                     |            |                  |  |           |                 |                     |                         |   |
| /  -  |                                     |            |                  |  |           |                 |                     |                         |   |
|       |                                     |            |                  |  |           |                 |                     |                         |   |
|       |                                     |            |                  | . ¥*-                                  | ·. Ru,r+· |                 | -                   |                         |   |
|       |                                     |            |                  |  |           |                 |                     |                         |   |
|       |                                     |            |                  |  |           |                 |                     |                         |   |

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: | _WB<br>_12 | 26/05<br>, JM<br>: V5<br>sing |                            | Site<br>Sai<br>S    | Site Location<br>Description<br>Weathe<br>nples Taker<br>Sample Time<br>Measurement | n: <u>hw</u><br>r: <u>65</u><br>n: <u>8</u><br>e: <u>1</u><br>t: <u>5,9</u> ( | 25) NI<br>10:20<br>6    |  |          |
|---|------------|-------------------------------|----------------------------|---------------------|---|---|-------------------------|--|----------|
|   |            |                               |                            |                     |   | Notes   | : Chan                  | <u>ne ( cho</u>                        | Ket      |
| Semple I D  | Temp. (°C) | Field Parameters              |                            | 1)                  |   | -   | With                    | h vegete<br>ter is                     | Hion.    |
| Sample I.D.   |            | Cond. (mS/cm)                 |                            |                     | I (S.U.)<br>7   |   | -tuq                    | teris                                  | <u> </u> |
|   | 1257       | 1009                          | 67.190                     |                     | <u></u>   |   |                         | ean                                    | _        |
| Stage H   | t:         |                               | Rated Flov                 | -                   |   | Gauged Flow   | v:                      |  | :        |
|   |            | S                             | Stream Gau                 | ging Data           | 1   |   |                         |  |          |
| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft)                    | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth   | Average<br>Velocity<br>(ft/sec)   | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |          |
| 0, (left side)  |            |                               |                            |                     |   |   | ļ                       |  |          |
|   |            | 2,5 sec                       | +0 f                       |                     | 200 m   | - bot   | He                      |  |          |
|   |            |                               |                            |                     |   |   |                         |  |          |
|   |            |                               |                            |                     |   |   |                         |  |          |

| <ul> <li>Client:</li> <li>Project No.:</li> <li>Date:</li> <li>Sampler(s):</li> <li>Start Time:</li> <li>End Time:</li> <li>Channel Conditions:</li> <li>COC Number:</li> </ul> | 9<br>WP<br>12:2<br>Flow   | 26/05<br>J.M<br>D                |   | Site Location: $47236CR 272$<br>Site Description: $4574CR 272$<br>Weather: $65754nn \mu$<br>Samples Taken: $Yes$ No<br>Sample Time: $1025$<br>DTW Measurement: $4758$<br>4758<br>4758 |                        |                                 |                         |  |  |  |  |
|---|---|----------------------------------|---|---|------------------------|---------------------------------|-------------------------|--|--|--|--|
| Sample I.D.   | Temp. (°С)<br>15.2д   | Field Parameters<br>Cond. (mS/cm | 1) D.O. (mg/<br>1) 0.7<br>0.7<br>0.7<br>0.7<br>0.7<br>0.7<br>0.7<br>0.7 | 6 G<br>8,   | ·<br>H (S.U.)<br>- ን ኢ |                                 | Cn/ven<br>by Ca         | 1, north<br>blacked<br>attail bags     |  |  |  |
|   | Stage Ht: Rated Flow: Gauged Flow: D.976cfs Stream Gauging Data |                                  |   |   |                        |                                 |                         |  |  |  |  |
| Distance from<br>Initial Point (ft)   | Width (ft)  | Depth (ft)                       | Velocity<br>(60%<br>Depth)  | 20%<br>Depth  | locity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |  |  |
| 0, (left side)  |   |                                  | v.  |   |                        |                                 |                         |  |  |  |  |

| <ul> <li>Client:</li> <li>Project No.:</li> <li>Date:</li> <li>Sampler(s):</li> <li>Start Time:</li> <li>End Time:</li> <li>Channel Conditions:</li> </ul> | 9/26<br>Wi<br>10:              | 7-75<br>1/05<br>3 JM<br>30 | Site Location: CR25.6<br>Site Description:<br>Weather: <u>GOOSunny</u><br>Samples Taken: <u>Yes</u> No<br>Sample Time: <u>0.30</u><br>DTW Measurement: <del>22.74</del> |                     |                       |                                 |                         |  |  |
|--|--------------------------------|----------------------------|---|---------------------|-----------------------|---------------------------------|-------------------------|--|--|
| COC Number:  | <u> </u>                       |                            |   |                     |                       | (/.                             |                         |  |  |
|  |                                | Field Parameters           |   |                     |                       | Notes                           | :<br>                   |  |  |
| Sample I.D.  | <b>Тетр.</b> ( <sup>0</sup> С) | Cond. (mS/cm)              | FI  | 1) pH               | I (S.U.)              |                                 | ·                       |  |  |
|  | 14.29                          | 769                        |   | 2 <u>% (- (</u>     | 63                    |                                 |                         |  |  |
| Stage H  | :                              |                            | 4.31,<br>Rated Flow   | •                   |                       | Gauged Flow                     | *: <b>())))</b> ]       | <u>M</u>                               |  |
| []   |                                | <u> </u>                   | Stream Gau  |                     |                       |                                 |                         |  |  |
| Distance from<br>Initial Point (ft)  | Width (ft)                     | Depth (ft)                 | Velocity<br>(60%<br>Depth)  | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |
| 0, (left side)   |                                |                            |   |                     |                       |                                 |                         |  |  |
|  |                                | -                          |   |                     |                       |                                 |                         |  |  |
|  |                                | ,                          |   |                     |                       |                                 |                         |  |  |
|  |                                | a                          |   |                     |                       |                                 |                         |  |  |
|  |                                |                            |   | 3                   |                       |                                 |                         |  |  |
|  |                                |                            |   |                     |                       |                                 |                         |  |  |
| Ø  |                                |                            |   |                     |                       |                                 |                         |  |  |
|  |                                |                            |   |                     |                       |                                 |                         |  |  |
|  |                                |                            |   |                     |                       |                                 |                         |  |  |
|  |                                |                            | . s*-   | jar a Magadar       |                       |                                 |                         |  |  |
|  |                                |                            |   |                     |                       |                                 |                         |  |  |
|  |                                |                            |   |                     |                       |                                 |                         |  |  |

| Client:            | CRI                                   | WP                  | <u></u>            |                                       | Site Locatio  | n:                                     | 233                     | .6                                    |
|--------------------|---------------------------------------|---------------------|--------------------|---------------------------------------|---------------|--|-------------------------|---------------------------------------|
| Project No.:       |                                       |                     |                    | Sit                                   | e Description |  |                         |                                       |
| Date:              | 9/2:                                  | 7/05                |                    |                                       | -             | r: <u>Clean</u>                        | 78                      | °, 15 mg                              |
| Sampler(s):        | GN                                    | WB                  |                    | Sa                                    | mples Taker   |  | 11                      | lo                                    |
| Start Time:        | _13                                   | 54                  |                    |                                       | Sample Time   |  | 355                     | -                                     |
| End Time:          | 4                                     | -06                 |                    |                                       |               |  |                         |                                       |
| Channel Conditions |                                       | -lozin              | 5                  | DTW                                   | Measuremen    | t: 🥻                                   | 2.20                    | 6                                     |
| COC Number:        |                                       |                     | $\sum$             |                                       |               |  |                         | , and a supplicit supplicit supplicit |
|                    | <u>}</u>                              |                     | Martin Martine     |                                       |               | Notes                                  | :                       |                                       |
|                    |                                       | Field Parameter     | S                  |                                       |               |  | -                       |                                       |
| Sample I.D.        | <b>Temp.</b> ( <sup>0</sup> C)        | Cond. (mS/cm        | ) <b>D.O.</b> (mg/ | l) pI                                 | H (S.U.)      |  |                         | , m <u>ettin pin merentu </u>         |
| CR33,6             | 14.67                                 | -1080               | 11,62              | 46                                    | ,94           |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         | · · · · · · · · · · · · · · · · · · · |
| Stage I-           | lt:                                   |                     | Rated Flow         | v:                                    |               | Gauged Flov                            | N:_BV                   | RAD                                   |
|                    |                                       |                     |                    |                                       |               |  | , <sup>L</sup>          | 754                                   |
|                    |                                       |                     | Stream Gau         | ging Dat                              | a             |  |                         | • •                                   |
| Distance from      | Width (ft)                            | Depth (ft)          | Velocity           | Vel                                   | locity<br>80% | Average                                |                         | Discharge                             |
| Initial Point (ft) |                                       | Deptii (It)         | (60%<br>Depth)     | Depth                                 | Depth         | Velocity<br>(ft/sec)                   | Area (ft <sup>2</sup> ) | $(Q, ft^{3}/sec)$                     |
| 0, (left side)     |                                       | ···                 |                    |                                       |               | (10000)                                |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       | nannaite nannaite , | -                  |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    | · · · · · · · · · · · · · · · · · · · |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    | · · · · · · · · · · · · · · · · · · · |               |  |                         |                                       |
|                    |                                       |                     |                    | i                                     |               | ······································ |                         |                                       |
|                    |                                       |                     |                    |                                       | <br>          |  | Ent                     |                                       |
|                    | ~                                     |                     |                    |                                       |               |  | WB                      |                                       |
|                    |                                       |                     |                    |                                       | a.            |  | 1111                    | 05                                    |
| :                  |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |
|                    |                                       |                     |                    |                                       |               |  |                         |                                       |

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| Client:             | <u>CP</u>                              | wD                                     |                     | :                     | Site Locatio | n:          | DJ                      | 3,2                                   |  |  |
|---------------------|--|--|---------------------|-----------------------|--------------|-------------|-------------------------|---------------------------------------|--|--|
| Project No.:        |  |  |                     | Site                  | e Descriptio |             |                         |                                       |  |  |
| Date:               | _9/2                                   | 7/05                                   |                     |                       | Weathe       | r:          | ean                     | 78°                                   |  |  |
| Sampler(s):         | 6-1                                    | 1/03                                   | 2                   | Samples Taken: Yes No |              |             |                         |                                       |  |  |
| Start Time:         | 14                                     | <u>14:40</u> Sample Time: <u>14-45</u> |                     |                       |              |             |                         |                                       |  |  |
| End Time:           | 4                                      | :55                                    |                     |                       |              | • · · · · · |                         |                                       |  |  |
| Channel Conditions: | -t'ou                                  | sing                                   |                     | DTW N                 | Aeasuremen   | t: <u> </u> | 32                      |                                       |  |  |
| COC Number:         |  |  |                     |                       |              |             |                         | , , , , , , , , , , , , , , , , , , , |  |  |
|                     |  |  |                     |                       |              | Notes       |                         |                                       |  |  |
|                     | <del>] .</del>                         | Field Parameter                        |                     |                       |              |             |                         |                                       |  |  |
| Sample I.D.         | 1.                                     | Cond. (mS/cm                           | 1) <b>D.O.</b> (mg/ |                       | I (S.U.)     |             |                         |                                       |  |  |
| TD33,2              | 14,55                                  | 1024                                   | <u> 4,71</u>        | 7                     | 37,2         |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
| Stage Ht            | :                                      |  | Rated Flow          | v:                    |              | Gauged Flov | N:                      |                                       |  |  |
|                     |  |  | Stream Gau          | ging Data             | a            |             | ,                       |                                       |  |  |
| Distance from       |  |  | Velocity            |                       | ocity        | Average     |                         | Discharge                             |  |  |
| Initial Point (ft)  | Width (ft)                             | Depth (ft)                             | (60%)<br>Depth)     | 20%<br>Depth          | 80%<br>Depth | Velocity    | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                       |  |  |
| 0, (left side)      |  |  |                     |                       |              | (ft/sec)    |                         |                                       |  |  |
|                     |  | ·····                                  |                     |                       |              |             |                         |                                       |  |  |
|                     | ······································ |  |                     |                       |              |             |                         |                                       |  |  |
|                     | ······································ | ······································ |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |
|                     |  |  |                     |                       |              |             | Ent                     |                                       |  |  |
|                     |  |  |                     | , or Martin           |              |             | Ent                     | 0                                     |  |  |
|                     |  |  |                     |                       |              |             | $0 _{IJ_{IJ}}$          | )                                     |  |  |
|                     |  |  |                     |                       |              |             |                         |                                       |  |  |

| Client:             | <u>L</u> F              | LWD  | _                  | Site Location:    | TF33.2                                |
|---------------------|-------------------------|--|--------------------|-------------------|---------------------------------------|
| Project No.:        |                         | ·  |                    | Site Description: |                                       |
| Date:               | 9/27                    | 105  |                    | Weather:          | Clean 78°                             |
| Sampler(s):         | 6Na                     | sh/w.B.  | <u>əl(</u>         | Samples Taken:    | (Yes) No                              |
| Start Time:         | 14                      | 152_   | <b>_</b>           | Sample Time:      | 1455                                  |
| End Time:           |                         | 5105   | -                  |                   |                                       |
| Channel Conditions: | Flor                    | wing   | _                  | DTW Measurement:  | 4.66                                  |
| COC Number:         |                         | (  | _                  | _                 |                                       |
| [ <sup></sup>       |                         |  |                    |                   | Notes: -Very little                   |
|                     | ]                       | Field Parameters   |                    |                   | Flow                                  |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)  | <b>D.O.</b> (mg/l) | рН (S.U.)         | · · · · · · · · · · · · · · · · · · · |
| TF33.2              | - 14.20                 | 1063   | 5.63               | 6.81              |                                       |
|                     |                         | - market and a second sec |                    |                   |                                       |

Stage Ht:\_\_\_\_

Rated Flow:\_\_\_\_\_

Gauged Flow:

Stream Gauging Data

| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|-------------------------------------|------------|------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| 0, (left side)                      | -          |            |                            |                      | -                     |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      | -                     |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 | Ent.                    |  |
|                                     |            |            |                            |                      |                       |                                 | WD                      | 0                                      |
|                                     |            |            |                            |                      |                       |                                 | MU                      |  |
|                                     | -          |            | şć                         | , is Month           |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |
|                                     |            |            |                            |                      |                       |                                 |                         |  |

| Client:             | CRUT             | Site Location:      | TC33.2             |
|---------------------|------------------|---------------------|--------------------|
| Project No.:        |                  | Site Description:   |                    |
| Date:               | 9/27/05          | -<br>Weather:       | Clean 78° 15mph    |
| Sampler(s):         | WB/6N            | -<br>Samples Taken: | (Yes) No           |
| Start Time:         | 15.08            |                     | 1508               |
| End Time:           | 15.22            |                     |                    |
| Channel Conditions: | Flowing          | DTW Measurement:    | 4.04               |
| COC Number:         |                  |                     |                    |
| Parameter           |                  |                     | Notes: Blind Dups: |
|                     | Field Parameters |                     | EDA +a             |

|             |                                | rielu raiallieleis |                    |           |
|-------------|--------------------------------|--------------------|--------------------|-----------|
| Sample I.D. | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)      | <b>D.O.</b> (mg/l) | pH (S.U.) |
| TC33,2      | 15,05                          | 957                | 10.64              | 7.10      |

29

Stage Ht:\_\_\_\_\_

Rated Flow:\_\_\_\_\_

Gauged Flow:\_\_\_\_\_

Stream Gauging Data

| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | A verage<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|---------------------------------------|------------|------------|----------------------------|---------------------|-----------------------|----------------------------------|-------------------------|--|
| 0, (left side)                        |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       | -                                |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  | Ent.                    |  |
|                                       |            |            |                            |                     |                       |                                  | WB                      |  |
|                                       |            |            | 2                          | . Pres              |                       |                                  | 4                       | 5                                      |
| · · · · · · · · · · · · · · · · · · · |            |            | \$2-                       |                     |                       |                                  | · / · / ·               | ~                                      |
|                                       |            |            |                            |                     |                       |                                  |                         |  |
|                                       |            |            |                            |                     |                       |                                  |                         |  |

| Client:             | ī                       | 2WD              |                  | (            | Site Locatio | n: <u>TA</u>         | 33,                     | 2               |
|---------------------|-------------------------|------------------|------------------|--------------|--------------|----------------------|-------------------------|-----------------|
| Project No.:        |                         |                  |                  |              | e Descriptio | -                    |                         |                 |
| Date:               | <u> </u>                | 127/05           |                  |              | Weathe       | r:                   | er 8                    | 0°              |
| Sampler(s):         | _G'K                    | WB               |                  | Sa           |              | n: 🛛 🕅               |                         |                 |
| Start Time:         | _15                     | 25               |                  | _ S          | Sample Time  | : <u>/s</u>          | 29                      |                 |
| End Time:           | _15                     | 3\$\$5           | _                |              |              |                      | £                       |                 |
| Channel Conditions: |                         | Flowing          | _                | DTW N        | /leasuremen  | t:5                  | 5,50                    | 7               |
| COC Number:         |                         | * *              |                  |              |              |                      |                         | <b>a</b>        |
|                     |                         |                  |                  |              |              | Notes                | :                       |                 |
|                     | 1                       | Field Parameters |                  |              |              |                      |                         |                 |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/ | l) pH        | I (S.U.)     |                      |                         |                 |
| TA33.2              | 15,12                   | 975              | 8,56             | 6.           | 29           |                      |                         |                 |
|                     |                         |                  |                  |              |              | <u>-</u>             |                         |                 |
| Stage H             | t:                      |                  | Rated Flow       | v:           |              | Gauged Flow          | w:                      |                 |
|                     |                         | s                | tream Gau        | ging Data    | 3            |                      |                         |                 |
| Distance from       |                         |                  | Velocity         |              | ocity        | Average              | 1                       | Discharge       |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%<br>Depth)   | 20%<br>Depth | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0, (left side)      |                         |                  |                  |              |              |                      |                         |                 |
|                     |                         |                  |                  |              |              |                      |                         |                 |
|                     |                         |                  |                  |              |              |                      |                         |                 |
|                     |                         |                  |                  |              |              |                      |                         |                 |
|                     |                         |                  |                  |              |              |                      |                         |                 |
|                     |                         |                  |                  |              |              |                      |                         |                 |
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| Client:                             | CŦ                      | 2UD              |                            | :                   | Site Locatio          | n: <u> </u>                      | 833,                                   | 2_                                     |
|-------------------------------------|-------------------------|------------------|----------------------------|---------------------|-----------------------|----------------------------------|--|--|
| Project No.:                        |                         |                  |                            |                     | e Descriptio          | -                                | ······································ | · · · · · · · · · · · · · · · · · · ·  |
| Date:                               | 9/2                     | 7/05             |                            | )                   |                       | r: Cle                           |  | 230                                    |
| Sampler(s):                         | 61                      | N/WB             |                            | Sa                  | mples Take            |                                  |  |  |
| Start Time:                         | 15                      | -35              |                            | · 5                 | Sample Tim            | : _/5                            | 1:0                                    |  |
| End Time:                           | 15                      | :47              |                            |                     |                       | - <u></u>                        |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| Channel Conditions:                 |                         | owing            |                            | DTW N               | 4easuremen            | t: 7.1                           | 03                                     |  |
| COC Number:                         |                         |                  |                            |                     |                       | <i></i>                          | <u> </u>                               |  |
| Terret Manager                      |                         |                  | _                          |                     |                       | Note                             | s:                                     |  |
|                                     |                         | Field Parameters |                            |                     |                       |                                  |  | ······                                 |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | D.O. (mg/                  | (l) pH              | I (S.U.)              |                                  |  |  |
| TB33.2                              | 17.42                   | 1029             | 11.43                      |                     | 26                    |                                  |  |  |
|                                     |                         |                  |                            | <u>`</u>            |                       |                                  |  |  |
| Stage H                             | t:                      |                  | Rated Flor                 | w:                  |                       | Gauged Flo                       | w:                                     |  |
|                                     |                         | S                | tream Gau                  | iging Data          | a                     |                                  |  |  |
|                                     |                         |                  |                            |                     |                       |                                  |  |  |
| Distance from                       |                         |                  | Velocity                   |                     | ocity                 | Average                          |  | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | A verage<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   |                                  | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity                         | Area (ft <sup>2</sup> )                | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity<br>(ft/sec)             |  | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity<br>(ft/sec)             | T NB                                   | - 4                                    |
| Initial Point (ft)                  | Width (ft)              |                  | (60%                       | 20%                 | 80%                   | Velocity<br>(ft/sec)             |  | - 4                                    |

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| Clie           | t.               | p-                                     | RWD              |                                       |            |              |                                       | $\sim$                  |                 |
|----------------|------------------|--|------------------|---------------------------------------|------------|--------------|---------------------------------------|-------------------------|-----------------|
|                |                  |  |                  | ·····                                 |            |              |                                       | SAIL                    | <u>`</u>        |
| -              | ect No.:         | al                                     | 7-1              | m                                     | Site       | e Descriptio |                                       |                         |                 |
| Date           |                  | -1/a                                   | 27/05            | <u></u>                               |            |              |                                       |                         | F YISU          |
|                | ipler(s):        |  |                  |                                       |            | mples Take   | -                                     | es N                    |                 |
|                | t Time:          |  | 52               |                                       | S          | Sample Tim   | e:/_                                  | 555                     |                 |
|                | Time:            | _[60                                   | 00               |                                       |            |              |                                       |                         |                 |
|                | nnel Conditions: | E(e                                    | DO<br>selling    | _                                     | DTW N      | leasuremen   | t:_ <b>`<i>3,0</i></b>                | 3                       |                 |
| COC            | Number:          |  |                  |                                       |            |              |                                       |                         |                 |
| <b></b>        | ·                |  |                  |                                       |            |              | Note                                  | s:                      | ·····           |
|                |                  |  | Field Parameters |                                       |            |              |                                       | <u> </u>                |                 |
|                | Sample I.D.      |  | Cond. (mS/cm     |                                       | l) pH      | I (S.U.)     |                                       |                         |                 |
| -7             | 32,2             | 16.05                                  | 619              | 8.1B                                  | 7,0        | )[           |                                       |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
|                | Stage H          | t:                                     |                  | Rated Flow                            | v:         |              | Gauged Flo                            | w:                      |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
| f <del>r</del> |                  | ······································ | 1                | Stream Gau                            | iging Data | 1            |                                       |                         |                 |
|                | istance from     |  |                  | Velocity                              | Vel<br>20% | ocity        | Average                               |                         | Discharge       |
| Ini            | tial Point (ft)  | Width (ft)                             | Depth (ft)       | (60%)<br>Depth)                       | Depth      | 80%<br>Depth | Velocity                              | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0              | , (left side)    |  |                  |                                       |            |              | (ft/sec)                              |                         |                 |
|                | , (tott side)    |  |                  |                                       |            |              |                                       |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
| <del>,</del> , |                  |  |                  |                                       |            |              |                                       |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         | ·····           |
|                |                  |  |                  |                                       |            |              | , , , , , , , , , , , , , , , , , , , |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |
|                |                  |  |                  | · · · · · · · · · · · · · · · · · · · |            |              | Ent                                   |                         |                 |
|                |                  |  |                  |                                       |            |              | WÞ                                    |                         |                 |
|                |                  |  | · ·              |                                       |            |              | 11/1                                  | כיון ו                  |                 |
|                |                  |  |                  | . ¥>                                  | · Philip   |              |                                       |                         |                 |
| ·····          |                  |  |                  |                                       |            |              |                                       | -                       |                 |
|                |                  |  |                  |                                       |            |              |                                       |                         | ······          |
|                |                  |  |                  |                                       |            |              |                                       |                         |                 |

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| Client:             | <u> </u>                | CUD              |                  | 5          | Site Location | $r: \subset \mathcal{F}$ | 31.                     | 8               |
|---------------------|-------------------------|------------------|------------------|------------|---------------|--------------------------|-------------------------|-----------------|
| Project No.:        |                         |                  |                  | Site       | e Description |                          |                         |                 |
| Date:               | _9/2                    | 7/05             |                  |            | Weather       | r: Clea                  | ~                       |                 |
| Sampler(s):         | w                       | B/6-N            |                  | Sa         | mples Taker   |                          | *                       | )               |
| Start Time:         |                         | 3:30             |                  |            | Sample Time   |                          | 535                     |                 |
| End Time:           | ]_                      | 350              |                  |            | •             |                          | (UBE                    |                 |
| Channel Conditions: | F                       | lowing           | _                | DTW N      | leasurement   | 12                       | ,99                     | <u>+-</u> )     |
| COC Number:         |                         |                  | -                |            |               |                          |                         |                 |
|                     |                         |                  | _                |            |               | Notes                    | :                       |                 |
|                     |                         | Field Parameters |                  | <u></u>    |               |                          |                         |                 |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | ) Cond. (mS/cm)  | <b>D.O.</b> (mg/ | l) pH      | I (S.U.)      |                          |                         |                 |
| CR31.8              | 15,08                   | 880              | 9,92             | 27         | -,19          |                          |                         |                 |
|                     | <b>-</b>                |                  |                  |            | <u> </u>      | 1                        | · · ·                   |                 |
| Stage Ht:           | <del></del>             |                  | Rated Flow       | v:         |               | Gauged Flow              | v: 6,7                  | 70              |
|                     |                         |                  |                  | ·····      |               | 0                        |                         |                 |
|                     |                         | S                | tream Gau        | ging Data  | 1             |                          |                         |                 |
| Distance from       | W7: J41- 7.84           |                  | Velocity         | Vel<br>20% | ocity         | Average                  |                         | Discharge       |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%<br>Depth)   | Depth      | 80%<br>Depth  | Velocity                 | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0, (left side)      |                         |                  |                  |            |               | (ft/sec)                 |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         | ······          |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     | ·····                   |                  |                  |            | 1 1           |                          |                         | fl              |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          |                         |                 |
|                     |                         |                  |                  |            |               |                          | EAt                     |                 |
|                     |                         |                  |                  |            |               |                          | Ent                     |                 |
|                     |                         |                  |                  |            |               |                          | Ent                     | 105             |

| Client:                             | CZ                      | 2017  |                            |                     | Site Location         | the second se | 30.9                    | <b>)</b>                               |
|-------------------------------------|-------------------------|---|----------------------------|---------------------|-----------------------|---|-------------------------|--|
| Project No.:                        |                         |   |                            |                     | e Description         |   | 50.7                    |  |
| Date:                               | 9                       | 122/05  |                            | on                  | -                     | r: Cle  | 8                       | <i>'0°</i>                             |
| Sampler(s):                         | G                       | B/6N  |                            | Sa                  | mples Taker           |   | es No                   |  |
| Start Time:                         | 160                     | <u>, , , , , , , , , , , , , , , , , , , </u> |                            |                     | Sample Time           | · · · ·   | 10                      | J                                      |
| End Time:                           | 16                      | 15  |                            |                     | sample rink           | <u></u>   | 10                      | and ( )                                |
| Channel Conditions:                 |                         | owing   |                            | DTW N               | Aeasurement           | t: <u>З,</u> 6  | 0                       |  |
| COC Number:                         |                         |   |                            |                     |                       | <u> </u>  | <u></u>                 | 107400                                 |
|                                     |                         |   |                            |                     | i.                    | Note  | s:                      |  |
|                                     |                         | Field Parameters                              | ;                          |                     |                       |   | • <u> </u>              |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm                                  | ) <b>D.O.</b> (mg/         | 1) pH               | I (S.U.)              | V 111 Water (V V V V V V V V V V V V V V V V V V V  |                         |  |
| 1610                                | 17.08                   | 888   | 10,12                      | 247,                | 10                    |   |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| T-30,9                              |                         |   |                            |                     |                       |   |                         |  |
| Stage H                             | t:                      |   | Rated Flow                 | w:                  |                       | Gauged Flo  | w:                      |  |
|                                     |                         |   |                            |                     |                       |   |                         |  |
|                                     |                         | 1   | Stream Gau                 | iging Dat           | a                     |   |                         |  |
|                                     |                         | 1   |                            |                     |                       |   |                         |  |
| Distance from                       | Width (ft)              | Depth (ft)                                    | Velocity                   |                     | ocity<br>80%          | Average   |                         | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)                                    | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Velocity  | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | -   | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity<br>(ft/sec)  |                         | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Ent.  |                         | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Velocity  |                         | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Ent.  |                         | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%                 | 80%                   | Ent.  |                         | - 1                                    |

| Client:                                  | CR                      | WD               |                    | ŝ            | Site Locatio          | on: Th               | # 30,                                  | 7-                                     |
|--|-------------------------|------------------|--------------------|--------------|-----------------------|----------------------|--|--|
| Project No.:                             |                         |                  |                    | Site         | e Descriptio          | n:                   |  |  |
| Date:                                    | 7/2                     | -7/05            |                    |              | Weathe                | er: Cla              | ar 7                                   | 5                                      |
| Sampler(s):                              | GN                      | WB_              |                    | Sa           | mples Take            |                      | es N                                   |  |
| Start Time:                              | 13                      | 15               |                    | S            | Sample Tim            | e: 13                | :17                                    |  |
| End Time:                                | 13                      | 27-              |                    |              |                       |                      |  |  |
| Channel Conditions                       | :                       | lowing           |                    | DTW N        | /leasuremen           | ıt: ?                | L.4Z                                   | 7                                      |
| COC Number:                              |                         |                  |                    |              |                       |                      |  |  |
|  |                         |                  | <u> </u>           |              |                       | Notes                | 5:                                     |  |
|  |                         | Field Parameters | 5                  |              |                       |                      |  |  |
| Sample I.D.                              | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/ | 1) <b>pH</b> | I (S.U.)              |                      | <u> </u>                               |  |
|  | 15.02                   | 869              | 9.13               | 7.2          | 24                    |                      |  |  |
|  |                         |                  |                    |              |                       | -1                   |  |  |
| Stage H                                  | -lt:                    |                  | Rated Flow         | N:           |                       | Gauged Flov          | w:                                     |  |
|  |                         |                  |                    |              |                       | -                    | ************************************** | ·····                                  |
|  |                         | 1                | Stream Gau         | iging Data   | 1                     |                      |  |  |
|  |                         |                  |                    | 37.1         |                       | 1                    | 1                                      | · · · · · · · · · · · · · · · · · · ·  |
| Distance from                            | Width (ft)              | Darth (A)        | Velocity           |              |                       | Average              |  | Discharge                              |
| Distance from<br>Initial Point (ft)      | Width (ft)              | Depth (ft)       | (60%)<br>Depth     | 20%<br>Depth | ocity<br>80%<br>Depth | Velocity             | Area (ft <sup>2</sup> )                | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | -                    | Area (ft <sup>2</sup> )                | - 1                                    |
| lf i i i i i i i i i i i i i i i i i i i | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity             | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity<br>(ft/sec) |  | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%                   | Velocity<br>(ft/sec) |  | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%<br>Depth)     | 20%          | 80%                   | Velocity<br>(ft/sec) |  | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                       | Width (ft)              | Depth (ft)       | (60%               | 20%<br>Depth | 80%                   | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | (Q, ft <sup>3</sup> /sec)              |

| Client:                             | CR                             | wp               |                            | S                    | ite Locatior          | <u> </u>                        | 0.1                                   | 4  |
|-------------------------------------|--------------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------|---------------------------------------|--|
| Project No.:                        |                                |                  |                            | Site                 | Description           | •                               |                                       |  |
| Date:                               | - 9/2                          | 27-65            |                            |                      | Weather               | :                               |                                       | annaidh ann ann ann ann ann ann ann ann ann an |
| Sampler(s):                         | W.                             | 3/6-1            |                            | San                  | iples Taken           | ::Ye                            | s) N                                  | D  |
| Start Time:                         | 13                             | 05               | _                          | Sa                   | ample Time            | :7                              | 308                                   | >  |
| End Time:                           | ./2                            | 510_             |                            |                      |                       |                                 |                                       |  |
| Channel Conditions:                 | _F?                            | owing            |                            | DTW M                | easurement            | : <b>Z</b>                      | 5,64                                  | ,<br>  |
| COC Number:                         |                                | <u> </u>         | _                          |                      |                       |                                 | – "                                   |  |
| <b>I</b>                            |                                |                  |                            |                      |                       | Notes                           |                                       |  |
|                                     | 2                              | Field Parameters |                            |                      |                       |                                 |                                       |  |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l          | ) pH                 | (S.U.)                |                                 | · · · · · · · · · · · · · · · · · · · | <u>, , , , , , , , , , , , , , , , , , , </u>  |
| \$T30,1                             | 14.83                          | 803              | 9,46                       | 7,                   | 21                    |                                 |                                       |  |
|                                     |                                |                  |                            |                      |                       | -                               |                                       | , , , , , , , , , , , , , , , , , , ,          |
| Stage Ht                            | •                              |                  | Rated Flow                 | V:                   |                       | Gauged Flov                     | v:                                    |  |
|                                     |                                | S                | tream Gau                  | ging Data            |                       |                                 |                                       |  |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velc<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | Discharge<br>(Q, ft <sup>3</sup> /sec)         |

| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | Discharge<br>(Q, ft <sup>3</sup> /sec)       |
|-------------------------------------|------------|------------|----------------------------|---------------------|-----------------------|---------------------------------|---------------------------------------|--|
| 0, (left side)                      |            |            |                            |                     |                       |                                 |                                       |  |
|                                     |            |            | 2                          |                     |                       |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 |                                       | <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> |
|                                     |            | ·          |                            |                     |                       |                                 | i i i i i i i i i i i i i i i i i i i |  |
|                                     |            | 9          |                            |                     |                       |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 | Ent                                   |  |
|                                     |            |            |                            |                     |                       |                                 | NB                                    |  |
|                                     |            |            |                            |                     |                       |                                 | 1111                                  | (h)  |
|                                     |            |            | ÷.                         | . "Para             |                       |                                 |                                       |  |
|                                     |            |            |                            | 1999.<br>1          | · · · ·               |                                 |                                       |  |
|                                     |            |            |                            |                     |                       |                                 |                                       |  |

| Client:                             | CRL                            | ND                                    |                    | 5             | Site Locatio          | on:_ <u>C</u> ⊉      | 30                      |  |
|-------------------------------------|--------------------------------|---------------------------------------|--------------------|---------------|-----------------------|----------------------|-------------------------|--|
| Project No.:                        |                                |                                       |                    |               | e Descriptio          | on:                  |                         |  |
| Date:                               | -9/2                           | 7/05                                  |                    |               | Weathe                | er: <u>Clea</u>      | ~ 75 °                  | 10mpn                                    |
| Sampler(s):                         | 6 Na                           | oh/wa                                 | 3-011              | Sa            | mples Take            | n:Y                  | es N                    |  |
| Start Time:                         | •                              | 155                                   |                    |               |                       | e:                   |                         |  |
| End Time:                           | <u> </u>                       | 5:03                                  |                    |               |                       |                      |                         |  |
| Channel Conditions:                 | Flo                            | wing                                  |                    | DTW N         | Aeasuremen            | it: 8,6              | $\mathcal{D}$           |  |
| COC Number:                         |                                | ~                                     |                    |               |                       |                      |                         |  |
|                                     |                                |                                       |                    |               |                       | Notes                |                         |  |
|                                     |                                | Field Parameter                       | s                  |               |                       |                      |                         |  |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm                          | ) <b>D.O.</b> (mg/ | (1) <b>pH</b> | I (S.U.)              |                      |                         | n  |
|                                     | 13.98                          | 865                                   | 9.78               | 6.            | 98                    |                      |                         |  |
| · · · · ·                           |                                | · · · · · · · · · · · · · · · · · · · |                    |               |                       |                      | · <u> </u>              |  |
| Stage H                             | t:                             |                                       | Rated Flow         | w:            |                       | Gauged Flov          | »: 8.8                  | Bcfs                                     |
|                                     |                                |                                       |                    | <u></u>       |                       |                      |                         | <b>, , , , , , , , , , , , , , , , ,</b> |
|                                     |                                |                                       | Stream Gau         | iging Data    | a                     |                      |                         |  |
|                                     |                                |                                       |                    |               |                       |                      |                         |  |
| Distance from                       |                                |                                       | Velocity           |               | ocity                 | Average              |                         | Discharge                                |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)                            | (60%               | 20%<br>Depth  | ocity<br>80%<br>Depth | A verage<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)   |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | -                  | 20%           | 80%                   | -                    | Area (ft <sup>2</sup> ) | - 1                                      |
| li i                                | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%<br>Depth  | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%               | 20%           | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)                            | (60%<br>Depth)     | 20%<br>Depth  | 80%                   | Velocity             | Area (ft <sup>2</sup> ) | - 1                                      |

| Client:                             | <u>CR</u>                      | wD               |                            | 5                    | Site Locatio          | n: <u> </u>                           | 229                                     |  |
|-------------------------------------|--------------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------------|---|--|
| Project No.:                        |                                | t                |                            |                      | e Descriptio          |                                       |   |  |
| Date:                               | _9/2                           | -7/05            |                            |                      | Weathe                | · · · · · · · · · · · · · · · · · · · |   |  |
| Sampler(s):                         | GNa                            | sh/w.            | Boll                       | Sa                   | mples Take            | n: <u>Y</u>                           |   |  |
| Start Time:                         | _12_                           | :10              |                            | S                    | Sample Time           | e: <u>12</u>                          | (10                                     |  |
| End Time:                           | _/2                            | 150              |                            |                      |                       |                                       |   |  |
| Channel Conditions:                 | _ <del>F</del> (               | soing            |                            | DTW M                | 4easuremen            | t: <u> </u>                           | .69                                     |  |
| COC Number:                         |                                |                  |                            |                      |                       |                                       |   | annali annais annaistean a             |
| F                                   |                                |                  |                            |                      |                       | Notes                                 | :                                       |  |
|                                     |                                | Field Parameters |                            |                      |                       |                                       | ••••••••••••••••••••••••••••••••••••••• |  |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         | (l) pH               | I (S.U.)              |                                       |   |  |
| CR29                                | 13,71                          | 850              | 10,18                      | 7 6.                 | 8Z                    |                                       |   |  |
| Stage H                             | lt:                            |                  | Rated Flow                 | w:                   |                       | Gauged Flov                           | »: <b>9.6</b> 8                         | 32                                     |
|                                     |                                | ŝ                | Stream Gau                 | iging Data           | n                     |                                       |   |  |
|                                     |                                |                  |                            |                      |                       |                                       |   |  |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec)       | Area (ft <sup>2</sup> )                 | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | i – II                                 |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              |   | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              |   | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                              |   | (Q, ft <sup>3</sup> /sec)              |
| Initial Point (ft)                  | Width (ft)                     | Depth (ft)       | (60%<br>Depth)             | 20%<br>Depth         | 80%                   | Velocity                              | Area (ft <sup>2</sup> )                 | (Q, ft <sup>3</sup> /sec)              |

| Client:                             | _ C P                   | $\omega_{\rm D}$                       |                            | S            | Site Locatio  | n: <u>7</u> 2        | 127.                                   | Ś  |
|-------------------------------------|-------------------------|--|----------------------------|--------------|---------------|----------------------|--|--|
| Project No.:                        |                         |  |                            |              | e Description |                      |  |  |
| Date:                               | - 9/:                   | 27                                     |                            |              | Weathe        |                      | •••••••••••••••••••••••••••••••••••••• |  |
| Sampler(s):                         | _61                     | Y/WB                                   |                            | Sa           | mples Taker   | n:Y                  |  |  |
| Start Time:                         |                         | 30 1                                   | 630                        |              |               | e: <u>16</u> 7       |  |  |
| End Time:                           |                         | 45                                     |                            |              |               |                      |  |  |
| Channel Conditions:                 | F                       | Towing                                 |                            | DTW M        | 4easuremen    | t:                   | R3                                     | 8,23   |
| COC Number:                         |                         |  |                            |              |               |                      |  |  |
| J                                   |                         | ······································ |                            |              |               | Notes                | 5:                                     |  |
|                                     |                         | Field Parameters                       | <b>.</b>                   |              |               |                      |  | , 177 alie - 188 - 197 alie - 197 |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)                          | <b>D.O.</b> (mg/           | D pH         | I (S.U.)      |                      |  |  |
| TW27.8                              | 16.69                   | 796                                    | 9.3                        | + 7,         | 2_0           |                      |  |  |
|                                     |                         |  | 9,2                        | 3            |               | -                    |  | <u> </u>   |
| Stage H                             | t:                      |  | Rated Flow                 | v:           |               | Gauged Flo           | w:                                     |  |
|                                     |                         |  |                            |              |               |                      |  |  |
| 1                                   | ·····                   | <u>-</u>                               | Stream Gau                 | ging Data    | 1             |                      |  |  |
|                                     |                         |  | 1                          | 37-1         |               |                      | 1                                      |  |
| Distance from                       | Width (ft)              | Denth (ft)                             | Velocity                   |              | ocity<br>80%  | Average              |  | Discharge  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)                             | Velocity<br>(60%<br>Depth) | 20%<br>Depth | 80%<br>Depth  | Velocity             | Area (ft <sup>2</sup> )                | Discharge<br>(Q, ft <sup>3</sup> /sec)   |
|                                     | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           |                      | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity             |  | -  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                             | (60%                       | 20%          | 80%           | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | -  |
| Initial Point (ft)                  |                         | Depth (ft)                             | (60%<br>Depth)             | 20%<br>Depth | 80%           | Velocity<br>(ft/sec) |  | -  |

T:\0185\04\292\Field Forms\Gauging Form

March 27, 2002

| Client:             | CRU                                   | <u> </u>         |                 | :            | Site Locatio |                      | re27.8                  | 8,4             |
|---------------------|---------------------------------------|------------------|-----------------|--------------|--------------|----------------------|-------------------------|-----------------|
| Project No.:        |                                       |                  |                 | Site         | e Descriptio | on:                  |                         |                 |
| Date:               | 2/2                                   | 7/05             |                 |              | Weath        | er: Cl               | lean -                  | 78              |
| Sampler(s):         | 6N                                    | IWB              |                 | Sa           | mples Take   | 1                    | es N                    |                 |
| Start Time:         | 16 2                                  | •                |                 |              | Sample Tim   |                      | 50                      |                 |
| End Time:           | /                                     | 700              |                 |              | ,            |                      |                         |                 |
| Channel Conditions: | Ŧ                                     | 700<br>Cowing    |                 | DTW N        | /leasuremer  | nt:                  | L.12                    |                 |
| COC Number:         |                                       |                  |                 |              |              |                      |                         |                 |
|                     |                                       |                  |                 |              |              | Note                 | c•                      |                 |
|                     |                                       | Field Parameters |                 |              |              |                      | J.                      |                 |
| Sample I.D.         |                                       | Cond. (mS/cm)    | 11              |              | I (S.U.)     |                      |                         |                 |
| TE27.8              | · · · · · · · · · · · · · · · · · · · | 1                | 9.03            |              | 15           |                      |                         |                 |
|                     |                                       |                  | 14.00           | - 61         | 13           |                      |                         |                 |
| Stage H             | lt:                                   |                  | Rated Flow      | 1/*          |              | Coursed Di           |                         |                 |
| U                   |                                       |                  | Italed 1104     | ·v           |              | Gauged Flo           | w:                      |                 |
| J                   |                                       | 5                | Stream Gau      | ging Data    | a            |                      |                         |                 |
| Distance from       | Width (ft)                            |                  | Velocity        |              | ocity        | Average              |                         | Discharge       |
| Initial Point (ft)  | $i$ within $i \pi i$                  |                  |                 |              |              |                      |                         |                 |
|                     | (induit (it)                          | Depth (ft)       | (60%)<br>Depth) | 20%<br>Depth | 80%<br>Depth | Velocity             | Area $(ft^2)$           | $(Q, ft^3/sec)$ |
|                     |                                       |                  | (60%<br>Depth)  |              |              | -                    | Area (ft <sup>2</sup> ) | - 1             |
| 0, (left side)      |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity             | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | 1 .             |              |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | Depth)          | Depth        |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |
|                     |                                       |                  | Depth)          | Depth        |              | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | - 1             |

| Client:                             | <u> </u>                       | wD                 |                    |              | Site Locatio | on: <u>72</u>        | -7,3                    |                  |
|-------------------------------------|--------------------------------|--------------------|--------------------|--------------|--------------|----------------------|-------------------------|------------------|
| Project No.:                        |                                |                    |                    |              | e Descriptio |                      |                         |                  |
| Date:                               | _9/.                           | 27                 |                    |              | Weath        | er: Cla              | ~ -                     | 700              |
| Sampler(s):                         | 6N                             | 1/WB               |                    | Sa           |              | en: Y                |                         |                  |
| Start Time:                         |                                | 203                |                    |              |              | ie:                  |                         |                  |
| End Time:                           |                                | -:/0               |                    |              |              |                      | 7.0                     | <u>.</u>         |
| Channel Conditions                  | : _ <u>F</u> [e                | owing              |                    | DTW N        | Measuremer   | nt:                  | .01                     |                  |
| COC Number:                         | -                              | /                  |                    |              |              |                      |                         |                  |
|                                     |                                |                    | × 44               |              |              | Notes                | 5:                      |                  |
|                                     |                                | Field Parameters   | S                  |              |              |                      |                         |                  |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm       | ) <b>D.O.</b> (mg/ | /l) pH       | I (S.U.)     |                      | <u></u>                 |                  |
| 127.3                               | / 3.58                         | 706                | 8,29               | 6.           | 93           |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         | and and and and  |
| Stage I                             | -It:                           |                    | Rated Flow         | w:           |              | Gauged Flov          | N:                      |                  |
|                                     |                                |                    |                    |              |              |                      |                         | • <u>••••</u> •• |
| J                                   |                                |                    | Stream Gau         | iging Data   | a            |                      |                         |                  |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)         | Velocity<br>(60%   | Vel 20%      | ocity<br>80% | Average              |                         | Discharge        |
|                                     |                                | 2 <b>-</b> pm (it) | Depth)             | Depth        | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$  |
| 0, (left side)                      |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
| · •                                 |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
| <u></u>                             |                                |                    |                    | <b>r</b> ate |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         |                  |
|                                     |                                |                    |                    |              |              |                      |                         | 1                |

| Client:             | CRC                     | UD               |                    | Site Location    | <u>CR27.2</u>                         |
|---------------------|-------------------------|------------------|--------------------|------------------|---------------------------------------|
| Project No.:        |                         |                  | _                  | Site Description | :                                     |
| Date:               | 9/2-7                   | 2/05             | _                  | Weather          | : Clean 75 F. 5mpt                    |
| Sampler(s):         | GNash                   | /W. Boll         | /<br>              | Samples Taken    |                                       |
| Start Time:         | _11:20                  | <u> </u>         | _                  | Sample Time      | :_1120                                |
| End Time:           |                         |                  |                    |                  |                                       |
| Channel Conditions: | <u>Flou</u>             | Ing              | _                  | DTW Measurement: | 4,52                                  |
| COC Number:         | •                       | /                | _                  |                  |                                       |
| (r <u> </u>         |                         |                  |                    |                  | Notes:                                |
|                     | ]                       | Field Parameters |                    |                  |                                       |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | pH (S.U.)        |                                       |
| CR27.2              | H.5+                    | 806-             | 5.61               | 7.01             |                                       |
|                     | 14.06                   | 788              |                    | 6.67             | · · · · · · · · · · · · · · · · · · · |
| Stage Ht            | t:                      |                  | Rated Flow:        |                  | Gauged Flow: 6.193                    |

Rated Flow:

#### Stream Gauging Data

| Width (ft) | Depth (ft)                             | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth   | ocity<br>80%<br>Depth  | A verage<br>Velocity<br>(ft/sec)   | Area (ft <sup>2</sup> )  | Discharge<br>(Q, ft <sup>3</sup> /sec)  |
|------------|--|----------------------------|---|--|--|--|---|
|            |  |                            |   |  |  |  |   |
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|            |  |                            |   |  |  | - 'MP  | ,   |
|            |  |                            |   |  |  |  | 411100-   |
|            | Width (ft)                             |                            | Width (ft)       Depth (ft)       (60% Depth)         Image: Constraint of the second se | Width (ft)       Depth (ft)       (60%<br>Depth)       20%<br>Depth         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)       Image: Depth (ft)         Image: Depth (ft)       Image: Depth (ft)       Image: Deph (ft)       Image: Depth (ft) <td>Width (ft)       Depth (ft)       (60%<br/>Depth)       20%<br/>Depth       80%<br/>Depth         Image: Second secon</td> <td>Width (ft)Depth (ft)(60%<br/>Depth)20%<br/>Depth80%<br/>DepthAverage<br/>Velocity<br/>(ft/sec)Image: Strain Stra</td> <td>Width (ft)Depth (ft)(60%<br/>Depth)20%<br/>Depth80%<br/>DepthAverage<br/>Velocity<br/>(ft/sec)Area (ft²)Image: Strain Strain</td> | Width (ft)       Depth (ft)       (60%<br>Depth)       20%<br>Depth       80%<br>Depth         Image: Second secon | Width (ft)Depth (ft)(60%<br>Depth)20%<br>Depth80%<br>DepthAverage<br>Velocity<br>(ft/sec)Image: Strain Stra | Width (ft)Depth (ft)(60%<br>Depth)20%<br>Depth80%<br>DepthAverage<br>Velocity<br>(ft/sec)Area (ft²)Image: Strain |

| Project No::       9/22/05       Site Description:       Lk Betsy Access         Date:       9/22/05       Weather:       Sampler(s):       WB, GM         Start Time:       10230       Sampler Taken:       Vest       Weather:         Start Time:       10230       Sampler Taken:       Vest       Weather:         Channel Conditions:       £ low (ng)       DTW Measurement:       222,75         COC Number:       DTW Measurement:       222,75         Sample LD.       Temp, (°C)       Cond. (mS(en))       pH (S.U.)         CRQ55.(6       14,45       7770       S7,41       G,571         VI Hiven fe BOD       Stream Gauging Data       Gauged Flow:       9524         Stream Gauging Data         Distance from       midal (n)       Depth (n)       Velocity       Average       Area (n²)       Discharge         0, (left side)       D       D       D       D       D       D       D         0, (left side)       D       D       D       D       D       D       D         0, (left side)       D       D       D       D       D       D       D       D         0, (left side)       D       D <t< th=""><th>Client:</th><th></th><th></th><th></th><th></th><th>Site Locatio</th><th>n:<u>CR</u></th><th>25.6</th><th>7</th></t<>  | Client:                                     |            |                  |                    |                | Site Locatio | n: <u>CR</u>  | 25.6                                   | 7                                      |
|--|---|------------|------------------|--------------------|----------------|--------------|---------------|--|--|
| Date:       Y12/1/05       Weather:         Sampler(s):       WB_GA/       Samples Taken:       Y2       No       Mo         Start Time:       10:30       Samples Taken:       Y2       No       Mo         End Time:       11:00       Samples Taken:       Y2       No       Mo         Channel Conditions:       Clow i rog       DTW Measurement:       2.2., 75       Sample Time:       14.45         COC Number:       Notes:       Notes:       Notes:       Notes:       Notes:         Sample I.D.       Temp. (C) Cond. (mS/cm)       D.0. (mg/t)       pH (S.U.)       Notes:       Notes:         CR25. (A       14.45//770       5.41/6.57/1       Gauged Flow:       9.57/4       Stream Gauging Data         Distance from Initial Point (ft)       Width (ft)       Depth (ft)       Velocity       Average       Area (ft <sup>2</sup> )       Discharge         0. (left side)       Image: Hild Parameters       Image: Philose PhilosePhilose Philose Philose Philose Philose Philose Philose  | Project No.:                                |            |                  |                    | Sit            | e Descriptio | n: <u>LLÍ</u> | Betsy A                                | Access                                 |
| Start Time:         ID: 30         Sample Time:         ID: 10/14 5           End Time:         II: 00         Sample Time:         ID: 14/15           Channel Conditions:         Elowing         DTW Measurement:         2.2, 75           COC Number:         Notes:         III: 00         III: 00           COC Number:         Field Parameters         Notes:           Sample 1.D.         Temp. (*C)         Cond. (mS/cm)         P.0. (mg/l)         PH (S.U.)           CR25.(c)         I4.45         7.7.0         S.41         G.5.7           VI fime ic BOD         Nage Ht:         Rated Flow:         Gauged Flow:         9.574           Stream Gauging Data         III: 100         III: 00         III: 00         III: 00           O, (left side)         III: 00         III: 00         III: 00         III: 00           Initial Point (ft)         Width (ft)         Depth (ft)         Velocity         Area (ft)         III: 00           0, (left side)         III: 00         III: 00         III: 00         III: 00         III: 00           III: 00         III: 00         III: 00         III: 00         III: 00         III: 00         III: 00           III: 00         III: 00         III: 00         <   | Date:                                       | _4/2       | 27/05            |                    |                | Weathe       |               | ,                                      |  |
| End Time:       11.00         Channel Conditions:       £1041 Ag         DTW Measurement:       22.75         COC Number:       Notes:         Sample I.D.       Temp. (*C)         Field Parameters       Notes:         Sample I.D.       Temp. (*C)         CR25.16       14.45 (*77.0         Stream Gauging Data         Distance from       Wridth (ft)         Depth       Depth         Depth       Depth         Octive       Xelocity         Velocity       Velocity         Velocity       Area (ft <sup>2</sup> )         O. (left side)       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup> )       Image: Area (ft <sup>2</sup> )         Image: Area (ft <sup>2</sup>  | Sampler(s):                                 | _ WE       | <u>3,GN</u>      |                    | Sa             | mples Take   | n:Y           | es N                                   | o (Ø)                                  |
| End Time:       11:00         Channel Conditions:       £10wing       DTW Measurement:       2.2.,75         COC Number:       Notes:         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       p.0. (mg/l)       pH (S.U.)         CR25.10       14.45       77.0       5.4.1       G. 57         Vitime fe BOD       Rated Flow:       Gauged Flow:       P.524         Stream Ganging Data         Distance from       Writh (ft)       Depth (ft)       Velocity       Velocity does       Average Velocity (ft/sec)       Discharge         0. (left side)       Image Ht       Rated Flow:       Gauged Flow:       Discharge       Discharge         0. (left side)       Image Ht       Rated Flow:       Gauged Flow:       Average Velocity (ft/sec)       Discharge         Imitial Point (ft)       Writh (ft)       Depth (ft)       Velocity 20%       Average       Area (ft <sup>2</sup> )       Discharge         Imitial Point (ft)       Width (ft)       Depth (ft)       Velocity (ft/sec)       Average       Area (ft <sup>2</sup> )       Discharge         Imitial Point (ft)   | Start Time:                                 |            |                  |                    | (              | Sample Tim   | e:            | 10:41                                  | 5                                      |
| COC Number:         Notes:         Sample I.D.       Temp. (°C)       Cond. (m5/cm) D.O. (mg/l) pH (S.U.)         CR25.10       14.45       7770       5.41       G. 57         OLITION:       Gauged Flow:         Clock (m5/cm) D.O. (mg/l) pH (S.U.)         CR25.10       14.45       7770       5.41       G. 57         OLITION:       Gauged Flow:       Gauged Flow:         Stream Gauging Data         Distance from       Velocity       Average       Average       Q. (n²)       Discharge       Q. n²/sec)       0, (left side)       Image Hi:       Rated Flow:       Gauged Flow:       Discharge       Q. n²/sec)       0, (left side)       Image Hi       Depth (ft)       Depth Depth       Depth Depth       Velocity       Average       Area (n²)       Discharge       Q. n²/sec)       Image Hi       Image Hi <td>End Time:</td> <td></td> <td>00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>   | End Time:                                   |            | 00               |                    |                |              |               |  |  |
| Notes:         Notes:         Sample LD.       Temp. (°C)       Cond. (mS/m)       D. (mg/l)       pH (s.u.)         CR25, (   | Channel Conditions                          | : <u> </u> | wing             |                    | DTW N          | Aeasuremen   | t: <u>22</u>  | .,75                                   | /                                      |
| Field Parameters           Sample I.D.         Temp. (°C)         Cond. (mS/cm)         p.O. (mg/l)         pH (S.U.)           CR35/10         14.45         7770         5.41         G. 571           VI time fa BOD         Itage H:         Rated Flow:         Gauged Flow:         9574           Distance from         midth (ft)         Depth (ft)         Velocity         Average         Area (ft²)         Discharge           0, (left side)         Itage H:         Itage H: </td <td>COC Number:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>   | COC Number:                                 |            |                  |                    |                |              |               |  |  |
| Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         CR35.6       14.45/770 $5.41$ $6.51$ White BOD       Steam Gauging Data         Stream Gauging Data         Distance from       Midth (ft)       Depth (ft)       Velocity       Average Velocity       Area (ft)       Discharge (Q. ft)/sec)         0, (left side)       Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2"Colspan  |   |            |                  |                    |                |              | Note          | 5:                                     |  |
| CR35.(c         14.45         770         5.41         G.51           Ultima in BOD         Rated Flow:         Gauged Flow:         9.524           Stream Gauging Data         Stream Gauging Data           Distance from         Width (ft)         Depth (ft)         Velocity         Average         Area (ft <sup>2</sup> )         Discharge           0, (left side)         0         0         0         0         0         0         0           1         0   |   |            | Field Parameters | 5                  |                |              |               |  |  |
| Ultime Report       Rated Flow:       Gauged Flow:       9.524         Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%)       Average<br>20%       Average<br>Velocity       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       0       0       0       0       0       0       0         4       0       0       0       0       0       0       0       0         0, (left side)       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   | Sample I.D.                                 | Temp. (°C  | C) Cond. (mS/cm  | ) <b>D.O.</b> (mg/ | (l) <b>p</b> F | I (S.U.)     |               |  |  |
| Trage Ht:       Rated Flow:       Gauged Flow:       Distance         Distance from Initial Point (ft)       Width (ft)       Depth (ft)       Velocity (60% 20% 80% Velocity (ft/sec)       A verage Velocity (ft/sec)       A rea (ft <sup>2</sup> )       Discharge (Q, ft <sup>3</sup> /sec)         0, (left side)       Image: Stream Gauged Flow:       Image: Stream Gaueed Flow:       Image: Stream Gaueed Fl   | CK25.6                                      | 14.45      | 770              | 5.41               | · G.           | 51           |               |  | ······································ |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%       Velocity<br>Depth       A verage<br>Velocity<br>(ft/sec)       A verage<br>(Q, ft²/sec)         0, (left side)       -       -       -       -       -       -         -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -  | Ultimate BOI                                | ) /        |                  |                    |                | <u>,</u>     |               |  | · · ·                                  |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%       A verage<br>Depth       A verage<br>Velocity       A rea (ft²)       Discharge<br>(Q, ft²/sec)         0, (left side)       Image: Colored state st | Stage H                                     | łt:        |                  | Rated Flow         | w:             |              | Gauged Flo    | w: 9.57                                | 4                                      |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$  |   |            |                  |                    |                |              | _             | ······································ |  |
| Initial Point (ft)Width (ft)Depth (ft) $(60\% Depth)$ $20\% Depth$ $80\% Depth$ $A \text{Verage} Velocity} (ft/sec)$ $A \text{rea } (ft^2)$ $Discharge (Q, ft^3/sec)$ 0, (left side) </td <td>, <u> </u></td> <td></td> <td></td> <td>Stream Gau</td> <td>iging Dat</td> <td>a</td> <td></td> <td></td> <td>_</td>   | , <u> </u>                                  |            |                  | Stream Gau         | iging Dat      | a            |               |  | _                                      |
| Initial Point (it)     Zrism (it)     Depth     Depth     Depth     Depth     Velocity<br>(ft/sec)     Area (ft <sup>+</sup> )     (Q, ft <sup>3</sup> /sec)       0, (left side)  |   | Width (ft) | Depth (ft)       | · ·                |                |              | Average       | 2                                      | Discharge                              |
| 0, (left side)   |   |            |                  |                    |                |              |               | Area (ft <sup>2</sup> )                | - 4                                    |
| Ent WD   | 0, (left side)                              | · ·        |                  |                    |                |              | (10300)       |  |  |
| Ent WD   |   |            |                  |                    |                |              |               |  |  |
| Ent WB   |   |            |                  |                    |                |              |               |  |  |
| Ent WD   | <u>ــــــــــــــــــــــــــــــــــــ</u> |            |                  |                    |                |              |               |  |  |
| Ent WD   |   |            |                  |                    |                |              |               |  |  |
| Ent WB   |   | ]          |                  |                    |                |              |               |  |  |
| Ent WB   |   | 7          |                  |                    |                |              |               |  |  |
| Ent WB   |   |            |                  |                    |                |              |               |  |  |
| Ent WB   |   |            |                  |                    |                |              |               |  |  |
| Ent WB   |   |            | 6270             |                    |                |              |               |  |  |
| WD   |   |            | V                |                    |                |              |               |  |  |
| WD   |   |            |                  |                    | · K* 14 % ·    |              |               | ENF                                    |  |
|  |   |            |                  | · •                |                |              |               | WB                                     |  |
|  |   |            |                  |                    |                |              |               | - tule                                 | 5                                      |

Marcii 27, 2002

| Client:             |                         | CRWD             | Site Locatio     |            | $\operatorname{Dn:} \underline{Ch36.3}$ |                      |                         |                           |
|---------------------|-------------------------|------------------|------------------|------------|---|----------------------|-------------------------|---------------------------|
| Project No.:        |                         | 0002-75          |                  | Site       | Description                             | 1:                   |                         |                           |
| Date:               | <u></u>                 | 1/15/06          |                  |            | Weather                                 | r: <u>9-nn</u>       | Y 650F                  | , Windy                   |
| Sampler(s):         |                         | <u>WB, JM</u>    |                  | Sa         | nples Taker                             | n: 🕅                 | S) No                   | , 7                       |
| Start Time:         |                         | 15:20            |                  |            |   | *                    | 6:54                    | 1                         |
| End Time:           | <u> </u>                |                  |                  |            |   |                      | ٦                       |                           |
| Channel Conditions: | 7(0                     | elling           |                  | DTW M      | leasurement                             | t;                   | 5.04                    |                           |
| COC Number:         | ····                    |                  | _                |            |   |                      |                         |                           |
| Par-one             |                         |                  |                  |            |   | Notes                | :                       |                           |
|                     |                         | Field Parameters |                  |            |   |                      |                         |                           |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/ | l) pH      | I (S.U.)                                |                      |                         |                           |
|                     | 14,66                   | 756              | 15.92            | 46         | .6/                                     |                      |                         |                           |
|                     |                         |                  |                  |            |   | _                    |                         |                           |
| Stage H             | lt:                     |                  | Rated Flow       | V:         |   | Gauged Flov          | v: <u>13,9</u>          | <u>96</u>                 |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  | Stream Gau       | iging Data | 1                                       |                      |                         |                           |
| Distance from       | 11/2 1.4 (2)            |                  | Velocity         | Vel 20%    | ocity<br>80%                            | Average              |                         | Discharge                 |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%)<br>Depth)  | Depth      | Depth                                   | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                         | **               |                  | 1          |   |                      |                         |                           |
| 0, (1011 5140)      |                         |                  | -                |            |   | -                    |                         |                           |
|                     | 1                       |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     | -                       |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            |   |                      |                         |                           |
|                     |                         |                  |                  |            | I                                       |                      |                         |                           |

| Client:                                      |                         | CRWD             |                            | S                   | Site Location                | 1: <u> </u>                     | 33,6                    |  |
|--|-------------------------|------------------|----------------------------|---------------------|------------------------------|---------------------------------|-------------------------|--|
| Project No.:                                 |                         | 0002-75          | <u></u>                    | Site                | Description                  | 1:                              |                         |  |
| Date:  | 00                      | Y/19/06          |                            |                     | Weather                      | r: <u> </u>                     | ny 69                   | F. Windy                               |
| Sampler(s):                                  |                         | WB, JM           |                            | Sai                 | nples Taker                  |                                 |                         |  |
| Start Time:                                  | (C                      | <u>5:40</u>      |                            | S                   | ample Time                   | »(                              | 2:03                    |  |
| End Time:                                    |                         |                  |                            |                     |                              |                                 | -<br>                   |  |
| Channel Conditions:                          | <u>P</u> [              | eoring           |                            | DTW M               | leasurement                  | •                               | 5.45                    | ·······                                |
| COC Number:                                  |                         |                  |                            |                     |                              |                                 | * * *                   |  |
| Francesson                                   | <u></u>                 |                  |                            |                     |                              | Notes                           | :                       |  |
|  |                         | Field Parameters |                            |                     |                              |                                 |                         |  |
| Sample I.D.                                  | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/l        | ) pH                | I (S.U.)                     |                                 |                         |  |
|  | 15.13                   | 60               | 11.24                      | 6                   | .33                          |                                 |                         |  |
| Stage H                                      | t:                      |                  | Rated Flow                 | v:                  | and a state of the survey of | Gauged Flow                     | v: [6,7                 | 13                                     |
| ALIERAND AND AND AND AND AND AND AND AND AND |                         |                  | Stream Gau                 | ging Data           |                              |                                 |                         |  |
| Distance from<br>Initial Point (ft)          | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth        | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                               |                         |                  |                            |                     |                              |                                 |                         |  |
|  |                         |                  | -                          |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
|  | -                       |                  |                            |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
|  | TT N N                  |                  |                            |                     |                              |                                 |                         | (                                      |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
|  |                         |                  | -                          |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
| ······                                       |                         |                  | ş.,                        |                     |                              |                                 |                         |  |
|  |                         |                  |                            |                     |                              |                                 |                         |  |
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| lient:              |                         | CRWD             |                   | S         | Site Locatio | n:                   | E33,2                   | <u>\</u>        |
|---------------------|-------------------------|------------------|-------------------|-----------|--------------|----------------------|-------------------------|-----------------|
| Project No.:        |                         | 0002-75          |                   | Site      | Descriptio   |                      |                         |                 |
| Date:               | OL                      | 1/195/06         | _                 |           | Weathe       |                      | w 690F                  | Winey           |
| Sampler(s):         |                         | WB, JM           | _                 | Sa        | mples Taker  | n:(Ye                | s) No                   | )               |
| Start Time:         | [6                      | :25              | _                 | S         | Sample Tim   | e:6                  | :20                     |                 |
| End Time:           |                         |                  |                   |           |              |                      |                         |                 |
| Channel Conditions: | <u> </u>                | Oning            |                   | DTW N     | 4easuremen   | t:                   | 2.14                    |                 |
| COC Number:         | <b></b>                 |                  |                   |           |              |                      | Ϋ́ς.                    |                 |
|                     |                         |                  |                   |           |              | Notes                | : there                 | DO calibrate    |
|                     |                         | Field Parameters |                   |           |              |                      | bre to                  | F ganoling      |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | l) pH     | I (S.U.)     |                      |                         |                 |
| · · · · ·           | 13,06                   | 970              | 17.14             | 9.25      |              |                      | ·                       |                 |
|                     |                         |                  |                   |           |              | _                    |                         | <u> </u>        |
| Stage Ht            | *                       |                  | Rated Flow        | v:        |              | Gauged Flow          | v: 1.05                 | 5 29            |
|                     |                         |                  |                   |           |              |                      |                         |                 |
|                     |                         | S                | Stream Gau        | ging Data | 1            |                      |                         |                 |
| Distance from       |                         |                  | Velocity          | Vel       | ocity<br>80% | - Average            |                         | Discharge       |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%)<br>Depth)   | Depth     | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0, (left side)      |                         | :<br>            |                   |           |              |                      |                         |                 |
| 0, (left side)      |                         |                  |                   |           |              | _                    |                         |                 |
|                     |                         |                  | -                 |           |              |                      |                         |                 |
|                     |                         |                  |                   |           |              |                      |                         |                 |
|                     |                         |                  |                   |           |              |                      |                         |                 |
|                     |                         |                  |                   |           |              |                      |                         |                 |
|                     |                         |                  |                   |           |              |                      |                         |                 |
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|                     |                         |                  |                   |           |              |                      |                         | ,               |
|                     | ,                       |                  |                   |           |              |                      |                         |                 |
|                     |                         |                  | ş*-               |           |              |                      |                         |                 |
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|                     |                         |                  |                   |           |              |                      |                         |                 |
|                     |                         |                  |                   |           |              |                      |                         |                 |

| Plient:                          |                         | CRWD             |                   | S       | Site Location | n:                                    | ) 33.2                  | <u> </u>                  |
|----------------------------------|-------------------------|------------------|-------------------|---------|---------------|---------------------------------------|-------------------------|---------------------------|
| Project No.:                     | (                       | 2002-75          |                   | Site    | e Description |                                       |                         |                           |
| Date:                            | OY/                     | 18/06            | <u> </u>          |         | Weathe        | r: <u>S.n.</u>                        | y 6507                  | Windy                     |
| Sampler(s):                      |                         | WB, JM           |                   | Sa      | mples Taker   |                                       |                         |                           |
| Start Time:                      | /6                      | :30              |                   | S       | Sample Time   | e:C                                   | 6:25                    |                           |
| End Time:                        |                         | - <u></u>        |                   |         |               |                                       |                         |                           |
| Channel Conditions:              |                         | (oring           |                   | DTW N   | 4easuremen    | t: ۷                                  | 1.25                    |                           |
| COC Number:                      |                         |                  |                   |         |               |                                       |                         |                           |
| particular and the second second |                         |                  |                   |         |               | Notes                                 | •                       |                           |
|                                  |                         | Field Parameters |                   |         |               |                                       |                         |                           |
| Sample I.D.                      | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) pł    | I (S.U.)      |                                       |                         |                           |
|                                  | 126, 15                 | 1214             | 13.43             | ; 46.   | 33            |                                       |                         |                           |
|                                  | <i>′</i> •              |                  |                   |         |               |                                       | 1 ~ 1                   |                           |
| Stage H                          | t:                      |                  | Rated Flow        | /:      |               | Gauged Flov                           | v: <u> ( / /</u>        |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
| ·····                            | 1                       | . (              | Stream Gau        |         |               | · · · · · · · · · · · · · · · · · · · |                         |                           |
| Distance from                    | Width (ft)              | Depth (ft)       | Velocity<br>(60%  | Vel 20% | ocity<br>80%  | - Average                             | . (62)                  | Discharge                 |
| Initial Point (ft)               | widdii (11)             | Deptii (it)      | Depth)            | Depth   | Depth         | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)                   |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         | <u> </u>         |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  | •                       |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         | 1             |                                       |                         | e unaite                  |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
|                                  |                         |                  | ¥*-               |         |               |                                       |                         |                           |
|                                  |                         |                  |                   |         |               |                                       |                         |                           |
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| Client:                                |                         | CRWD             |                  | Ç              | Site Locatio | n:                    | H33.2                   | <u>\</u>                               |
|--|-------------------------|------------------|------------------|----------------|--------------|-----------------------|-------------------------|--|
| Project No.:                           |                         | 0002-75          |                  | Site           | Descriptio   | n:                    |                         | ······································ |
| Date:                                  | <u></u> {5}             | 118/06           |                  |                | Weathe       | r: <u> </u>           | nny 65%                 | E, Windy                               |
| Sampler(s):                            |                         | WB, JM           |                  | Sa             | mples Taker  | $\sim$                |                         |  |
| Start Time:                            | ((                      | 0:25             |                  | S              | Sample Time  | e:2                   | 6:30                    |  |
| End Time:                              |                         |                  |                  |                |              | a                     |                         |  |
| Channel Conditions:                    | +la                     | Ling             |                  | DTW N          | leasuremen   | t:                    | 4.62                    | \                                      |
| COC Number:                            |                         |                  |                  |                |              |                       |                         |  |
| ······································ |                         |                  |                  |                |              | Notes                 | :                       |  |
| · · · · · · · · · · · · · · · · · · ·  |                         | Field Parameters |                  |                |              |                       | ·                       |  |
| Sample I.D.                            | Temp. ( <sup>0</sup> C) |                  |                  |                | I (S.U.)     |                       |                         |  |
|  | 14.27                   | 1229             |                  | malan          | 99           |                       |                         |  |
|  |                         |                  | 13.40            | 1              |              |                       |                         |  |
| Stage H                                | t:                      |                  | Rated Flow       | v:             |              | Gauged Flov           | v:_0.74                 | <u>.</u>                               |
|  |                         |                  |                  | • • •          |              | н.<br>-               |                         |  |
|  | I                       |                  | Stream Gau       |                |              |                       | ł                       |  |
| Distance from<br>Initial Point (ft)    | Width (ft)              | Depth (ft)       | Velocity<br>(60% | 20%            | ocity<br>80% | - Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge                              |
|  |                         |                  | Depth)           | Depth          | Depth        | (ft/sec)              |                         | (Q, ft <sup>3</sup> /sec)              |
| 0, (left side)                         |                         |                  |                  |                |              |                       | -                       |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         | <del>.</del>     |                  |                |              |                       |                         |  |
|  | •                       |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  | 1              |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  | . ¥^             | . <u>Pares</u> |              |                       |                         |  |
| ·                                      |                         |                  |                  |                |              |                       |                         |  |
| un                                     |                         |                  |                  |                |              |                       |                         |  |
|  |                         |                  |                  |                |              |                       |                         |  |

|                      |                                       | CRWD                   |                   | S          | lite Location | : <u>(</u>           | 33.2                    | 2                         |
|----------------------|---------------------------------------|------------------------|-------------------|------------|---------------|----------------------|-------------------------|---------------------------|
| Project No.:         | (                                     | 0002-75                |                   | Site       | Description   | •                    |                         |                           |
| Date:                | OY                                    | 198/06                 |                   |            | Weather       | : <u></u>            | ny 65                   | UF                        |
| Sampler(s):          | V                                     | VB, JM                 |                   | Sar        | nples Taken   | : (Ye                | s) No                   | /                         |
| Start Time:          |                                       | 16:15                  |                   | S          | ample Time    | :                    | 95140                   |                           |
| End Time:            |                                       |                        |                   |            |               | ŀ                    | <u>=01</u>              |                           |
| Channel Conditions:  | <u> </u>                              | )~ing                  | _                 | DTW M      | leasurement   |                      | 3.57                    |                           |
| COC Number:          |                                       |                        |                   |            |               |                      |                         |                           |
| pilanu lai kunis nun |                                       |                        |                   |            |               | Notes                |                         |                           |
|                      | • ••• ••• •••                         | Field Parameters       |                   | <b>.</b>   |               |                      |                         |                           |
| Sample I.D.          | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)          | <b>D.O.</b> (mg/l | ) pH       | I (S.U.)      |                      |                         |                           |
|                      | 14.05                                 | 1146                   | 1621              | S,         | 25            |                      |                         |                           |
|                      |                                       |                        |                   |            |               | _                    |                         |                           |
| Stage Ht             |                                       |                        | Rated Flow        | /:         |               | Gauged Flow          | v: <u>4.807</u>         | L cts                     |
|                      |                                       |                        |                   |            |               |                      |                         |                           |
|                      |                                       | <u></u>                | Stream Gau        | ging Data  | 1             |                      |                         |                           |
| Distance from        |                                       | <b>_</b> • <i>(A</i> ) | Velocity          | Vel<br>20% | ocity<br>80%  | Average              |                         | Discharge                 |
| Initial Point (ft)   | Width (ft)                            | Depth (ft)             | (60%              | 1-2070     |               |                      |                         |                           |
|                      |                                       | - ·F ()                | Depth)            | Depth      | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$           |
| () (left side)       |                                       |                        | 1 .               |            |               | Velocity<br>(ft/sec) | Area (ft <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       | · · · · · · · · · · · · · · · · · · · |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | 1 .               |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)       |                                       |                        | Depth)            |            |               |                      | Area (fi <sup>-</sup> ) | (Q, ft <sup>3</sup> /sec) |

| Client:                                |                                       | CRWD             |                    | 2       | Site Location | 1: TA                                  | 33. Z                   | ······································ |
|--|---------------------------------------|------------------|--------------------|---------|---------------|--|-------------------------|--|
| Project No.:                           |                                       | 0002-75          |                    | Site    | e Description |  |                         |  |
| Date:                                  | O`                                    | 1/ 45/0%         |                    |         | Weather       | r: <u> </u>                            | my 650                  | F, Windy                               |
| Sampler(s):                            |                                       | WB, JM           |                    | Sa      | mples Taker   |  | Nc                      | ,                                      |
| Start Time:                            | (                                     | 65.CO            | <u> </u>           | S       | Sample Time   | e: C                                   | 5:42                    |  |
| End Time:                              | ·                                     |                  |                    |         |               | •••••••••••••••••••••••••••••••••••••• |                         |  |
| Channel Conditions:                    | <u> </u>                              | lourn            | _                  | DTW N   | leasurement   | • •                                    | 5.52                    |  |
| COC Number:                            |                                       |                  |                    |         |               |  |                         |  |
| ······································ |                                       |                  |                    |         |               | Notes                                  | :                       |  |
|  |                                       | Field Parameters | -                  |         |               |  |                         |  |
| Sample I.D.                            | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm     | ) <b>D.O.</b> (mg/ | ) pH    | I (S.U.)      |  |                         |  |
|  | 13.01                                 | 1162             | 12.27              | 9       | :03           |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
| Stage H                                | t:                                    |                  | Rated Flow         | /:      |               | Gauged Flov                            | v: <u> </u>             | 79                                     |
|  |                                       |                  |                    |         |               |  |                         | I                                      |
|  | y                                     |                  | Stream Gau         |         |               |  |                         |  |
| Distance from                          | Width (ft)                            | Donth (ft)       | Velocity<br>(60%   | Vel 20% | ocity<br>80%  | Average                                |                         | Discharge                              |
| Initial Point (ft)                     | wiath (It)                            | Depth (ft)       | Depth)             | Depth   | Depth         | Velocity<br>(ft/sec)                   | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)                         |                                       |                  |                    |         |               |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
|  | 1                                     |                  |                    |         |               |  |                         |  |
|  |                                       |                  |                    |         | i             |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
|  |                                       |                  |                    |         |               |  |                         |  |
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|  |                                       |                  |                    |         |               |  |                         |  |
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|  |                                       |                  |                    |         |               |  |                         |  |

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| Client:                             |  | CRWD             |                            | S            | Site Location | 1: <u>7 B</u> 3                   | 3.Z                     |  |            |
|-------------------------------------|--|------------------|----------------------------|--------------|---------------|-----------------------------------|-------------------------|--|------------|
| Project No.:                        | <u></u>                                | 0002-75          |                            | Site         | Description   |                                   |                         |  |            |
| Date:                               | O'                                     | 4/10/06          |                            |              | Weather       | r: <u>9~na</u>                    | ,690F                   | , Windy                                | _          |
| Sampler(s):                         | ·                                      | WB, JM           |                            |              | nples Taker   | 1: <u>(</u> Ye                    | s) No                   | , /                                    | _          |
| Start Time:                         | 12                                     | 50               |                            | S            | ample Time    | :                                 | -145                    |  |            |
| End Time:                           |  |                  | _                          |              |               |                                   |                         |  |            |
| Channel Conditions:                 | <u> </u>                               | Viry             |                            | DTW M        | leasurement   | :: (j .                           | 69                      |  |            |
| COC Number:                         | •••••••••••••••••••••••••••••••••••••• | ••••••           | _                          |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              |               | Notes                             | : <u>chreds</u>         | 26 (9/120<br>1. 5ppmg<br>4.82mg        | woon       |
|                                     |  | Field Parameters |                            |              |               |                                   | at De                   | 1. Spame                               | \$ Q1G     |
| Sample I.D.                         |  | Cond. (mS/cm)    | <b>D.O.</b> (mg/l          |              | l (S.U.)      | (                                 | 95.0%                   | 5.62mg                                 | <u>(</u> ) |
|                                     | 15.69                                  | 1045             | 17.36                      | 6.5          | <u>Y</u>      |                                   |                         |  | -          |
| Stage H                             | t:                                     |                  | Rated Flow                 |              |               | Gauged Flov                       | v: <u>5,79</u>          | <u>'</u> 2_                            |            |
|                                     | <u>.</u>                               |                  | 1                          |              | ocity         | 1                                 | 1                       |  | า          |
| Distance from<br>Initial Point (ft) | Width (ft)                             | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth | 80%<br>Depth  | - Average<br>Velocity<br>(fl/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |            |
| 0, (left side)                      |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              | -             | -                                 |                         |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
| -                                   | •                                      | -                |                            |              |               |                                   |                         |  |            |
|                                     |  | <u> </u>         |                            |              | \$            |                                   |                         |  |            |
|                                     |  |                  |                            |              |               |                                   | -                       |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            | v            |               |                                   |                         |  |            |
|                                     | -                                      |                  |                            |              |               |                                   |                         |  | l          |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |
|                                     |  |                  |                            |              |               |                                   |                         |  |            |

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| Elient:             |                                       | CRWD                                  |                                       | S         | lite Location   | -13                                   | 2.Z                     |                           |
|---------------------|---------------------------------------|---------------------------------------|---------------------------------------|-----------|---|---------------------------------------|-------------------------|---------------------------|
| Project No.:        | (                                     | 0002-75                               |                                       | Site      | Description   | ۲<br>•                                |                         |                           |
| Date:               | <u> </u>                              | 4/10/06                               |                                       |           | Weather   | : SUM                                 | V GSOF                  | Windy                     |
| Sampler(s):         | Ţ                                     | WB, JM                                |                                       | Sar       | nples Taken   | $\sim$                                |                         | 1                         |
| Start Time:         |                                       |                                       |                                       | S         | ample Time  |                                       | 04:10                   |                           |
| End Time:           | ·                                     |                                       | _                                     |           |   | <u></u>                               |                         |                           |
| Channel Conditions: | 70                                    | Ving                                  |                                       | DTW M     | leasurement   |                                       | 5.02                    |                           |
| COC Number:         |                                       |                                       | _                                     |           |   |                                       |                         |                           |
|                     |                                       |                                       |                                       |           |   | Notes                                 | l                       |                           |
|                     |                                       | Field Parameters                      |                                       |           |   |                                       |                         |                           |
| Sample I.D.         | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)                         | <b>D.O.</b> (mg/l                     | ) pH      | I (S.U.)  |                                       |                         |                           |
|                     | 13.69                                 | 667                                   | 11.93                                 | 5.1       | 16  |                                       |                         |                           |
| <b>1</b>            |                                       | , . u                                 | · · · · · · · · · · · · · · · · · · · |           |   |                                       |                         |                           |
| Stage H             | t:                                    |                                       | Rated Flow                            | /:        | 1971 - 197 | Gauged Flow                           | 1.84                    | 5                         |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     |                                       | 5                                     | Stream Gau                            | ging Data | 1   |                                       |                         |                           |
| Distance from       |                                       |                                       | Velocity                              | Vel       | ocity<br>80%  | Average                               |                         | Discharge                 |
| lnitial Point (ft)  | Width (ft)                            | Depth (ft)                            | (60%)<br>Depth)                       | Depth     | Depth   | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                                       | ]                                     |           |   | (10300)                               | · · ·                   |                           |
|                     |                                       | * U 100/000 - 00 - 1, * - 0 0 - 1 - 1 | [                                     |           |   |                                       | •                       | ·····                     |
|                     |                                       |                                       | <u> </u>                              |           |   |                                       |                         | ·····                     |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
| 5<br>               |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     | ε ε ε ε ε ε ε ε ε ε ε ε ε ε ε ε ε ε ε |                                       |                                       |           |   |                                       |                         |                           |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     | ·                                     |                                       |                                       |           |   |                                       |                         |                           |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     |                                       |                                       |                                       |           | <u>-</u>  |                                       |                         |                           |
|                     | -                                     |                                       |                                       |           |   | , , , , , , , , , , , , , , , , , , , |                         |                           |
|                     |                                       |                                       |                                       |           |   |                                       |                         |                           |
|                     | 1                                     | I                                     | 1                                     |           |   |                                       | 1                       |                           |
| VIIII MILE III      |                                       |                                       |                                       |           |   |                                       |                         |                           |

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| Client:  |                                       | CRWD             |                            | S                                     | lite Location         | и:СА                | 31.65                   |  |
|--|---------------------------------------|------------------|----------------------------|---------------------------------------|-----------------------|---------------------|-------------------------|--|
| Project No.:   |                                       | 0002-75          |                            | Site                                  | Description           | 1:                  |                         | -                                      |
| Date:  | _OY/                                  | 196/05           | _                          |                                       | Weather               | : 9-n               | N 654                   | , hinder                               |
| Sampler(s):  | · /                                   | WB, JM           |                            | Sar                                   | nples Taken           |                     |                         | · /                                    |
| Start Time:  | 14                                    | 1:30             |                            | S                                     | ample Time            | :                   | 09:20                   | )                                      |
| End Time:  | <u> </u>                              |                  |                            |                                       |                       | · <u>·</u> ·····    |                         | , myyaitta ili a a                     |
| Channel Conditions:  | 410                                   | -iri)            |                            | DTW M                                 | feasurement           | •                   | 12.28                   |  |
| COC Number:  |                                       |                  | _                          |                                       |                       | • ··· · · · ·       |                         | ······································ |
|  |                                       |                  |                            |                                       |                       | Notes               | :                       |  |
|  |                                       | Field Parameters |                            |                                       |                       |                     | -                       |  |
| Sample I.D.  | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)    | <b>D.O</b> . (mg/l         | ) pH                                  | (S.U.)                |                     |                         |  |
|  | 14.34                                 | 919              | 11,56                      | G. 2                                  | 56                    |                     |                         |  |
|  | ii                                    |                  |                            | · · · · · · · · · · · · · · · · · · · |                       | 크                   |                         |  |
| Stage Ht   |                                       |                  | Rated Flow                 | /:                                    |                       | Gauged Flow         | 1: 27.4                 | 167                                    |
|  |                                       |                  |                            |                                       |                       | -                   |                         |  |
| Frank - Stationard |                                       |                  | Stream Gau                 | ging Data                             |                       |                     |                         | my Louis                               |
| Distance from<br>Initial Point (ft).   | Width (ft)                            | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth                  | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   |                                       |                  | <u>.</u>                   |                                       |                       | (ft/sec)            |                         | []                                     |
|  |                                       |                  | ¢.                         |                                       |                       | (ft/sec)            |                         |  |
| 0, (left side)   |                                       |                  |                            |                                       |                       | (II/sec)            |                         |  |
|  |                                       |                  |                            |                                       |                       | (ft/sec)            |                         |  |
|  |                                       |                  |                            |                                       |                       | (ft/sec)            |                         |  |
|  |                                       |                  |                            |                                       |                       | (ft/sec)            |                         |  |
|  |                                       |                  |                            |                                       |                       |                     |                         |  |
|  |                                       |                  |                            |                                       |                       |                     |                         |  |
|  | •                                     |                  |                            |                                       |                       |                     |                         |  |
|  | •                                     |                  |                            |                                       |                       |                     |                         |  |
|  | ·                                     |                  |                            |                                       |                       |                     |                         |  |
|  | · · · · · · · · · · · · · · · · · · · |                  |                            |                                       |                       |                     |                         |  |
|  | · · · · · · · · · · · · · · · · · · · |                  | ×                          |                                       |                       |                     |                         |  |
|  | · · · · · · · · · · · · · · · · · · · |                  | ×-                         |                                       |                       |                     |                         |  |

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| Client:             | ·····                   | CRWD                                    |                  | S          | Site Location | n: <u>TB</u>         | 30.9                    |                 |
|---------------------|-------------------------|---|------------------|------------|---------------|----------------------|-------------------------|-----------------|
| Project No.:        |                         | 0002-75                                 |                  | Site       | Description   |                      |                         |                 |
| Date:               | 0                       | 4/196/06                                | _                |            | Weathe        | r: <u>Sv</u>         | ny 65                   | F. Winly        |
| Sampler(s):         |                         | WB, JM                                  | _                | Sa         | mples Taker   | $\sim$               | nal l                   | · /             |
| Start Time:         | 15                      | -00                                     |                  | S          | Sample Time   | e:                   | 9:15                    |                 |
| End Time:           |                         |   |                  |            |               |                      |                         |                 |
| Channel Conditions: |                         |   | _                | DTW N      | leasuremen    | t:                   | 1.44                    |                 |
| COC Number:         |                         |   |                  |            |               |                      | Ę                       | 6               |
|                     |                         |   |                  |            |               | Notes                | " das ne                | togge F         |
|                     |                         | Field Parameters                        |                  |            |               |                      | 6000 4 C                |                 |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)                           | <b>D.O.</b> (mg/ | ) pH       | I (S.U.)      |                      |                         |                 |
|                     | 16.44                   | 1075                                    | 17.55            | 6.1        | <u>72</u>     |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
| Stage H             | t:                      |   | Rated Flow       | v:         |               | Gauged Flow          | N:                      |                 |
|                     |                         |   |                  | • • •      |               |                      |                         |                 |
|                     |                         |   | Stream Gau       |            |               |                      |                         |                 |
| Distance from       | Width (ft)              | Depth (ft)                              | Velocity<br>(60% | Vel<br>20% | ocity<br>80%  | Average              | Area (ft <sup>2</sup> ) | Discharge       |
| Initial Point (ft)  |                         | _ · · · · · · · · · · · · · · · · · · · | Depth)           | Depth      | Depth         | Velocity<br>(ft/sec) | Alca (It )              | $(Q, ft^3/sec)$ |
| 0, (left side)      |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   | \$r.             |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |
|                     |                         |   |                  |            |               |                      |                         |                 |

| lient:                                |  | CRWD             |                   |              | Site Location | n: TA                 | 20.9                    |  |
|---------------------------------------|--|------------------|-------------------|--------------|---------------|-----------------------|-------------------------|--|
| Project No.:                          |  | 0002-75          |                   | Site         | e Description | n:                    |                         |  |
| Date:                                 | OY/  | 119/06           |                   |              | Weathe        | r: <u>Sun</u>         | NY 657                  | Windy                                  |
| Sampler(s):                           |  | WB, JM           | _                 | Sa           | mples Takei   |                       | No No                   | · /                                    |
| Start Time:                           | 14   | 250              | _                 | 5            | Sample Time   | 2:                    | 0418                    | •••••••••••••••••••••••••••••••••••••• |
| End Time:                             |  |                  |                   |              |               |                       |                         |  |
| Channel Conditions:                   | <u> </u>   | Juling           | _                 | DTW N        | 4easuremen    | t;                    | 3.56                    |  |
| COC Number:                           | ·····  |                  |                   |              |               |                       | ,                       |  |
| []m                                   | n <del>1</del> - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |                  |                   |              |               | Notes                 | :                       |  |
|                                       |  | Field Parameters |                   |              |               |                       |                         |  |
| Sample I.D.                           | Temp. ( <sup>0</sup> C)                              | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) <b>p</b> F | I (S.U.)      |                       |                         |  |
|                                       | 16.06  | 1046             |                   | g 6.2        | <u>,</u> 6    |                       |                         |  |
|                                       |  |                  | 126,65            | 70           |               |                       |                         |  |
| Stage H                               | t:   |                  | Rated Flow        | /:           |               | Gauged Flow           | v:_0,20                 | 5a                                     |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  | <u>.</u>         | Stream Gau        |              |               |                       | 1                       |  |
| Distance from<br>Initial Point (ft)   | Width (ft)   | Depth (ft)       | Velocity<br>(60%  | Vel<br>20%   | ocity<br>80%  | - Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge                              |
|                                       |  |                  | Depth)            | Depth        | Depth         | (ft/sec)              |                         | $(Q, ft^3/sec)$                        |
| 0, (left side)                        |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  | -                 |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       | •  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   | . Per        |               |                       |                         |  |
| · · · · · · · · · · · · · · · · · · · | ·  |                  | ų.                |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |
|                                       |  |                  |                   |              |               |                       |                         |  |

| Client:             |  | CRWD             |                   | S                                     | ite Location |                                       | T-30                    | .7                        | - |
|---------------------|--|------------------|-------------------|---------------------------------------|--------------|---------------------------------------|-------------------------|---------------------------|---|
| Project No.:        | (  | 0002-75          |                   | Site                                  | Description  | :                                     |                         |                           | _ |
| Date:               | OY   | 1/10/06          |                   |                                       | Weather      | : <u>Sun</u>                          | x 6501                  | =, Windy                  | _ |
| Sampler(s):         | - t  | WB, JM           |                   | San                                   | nples Taken  | : <u>Ye</u>                           | s) No                   | / /                       | _ |
| Start Time:         |  | 17               |                   | S                                     | ample Time   | :                                     | 9:30                    |                           | _ |
| End Time:           |  |                  |                   |                                       |              | <u> </u>                              |                         |                           | _ |
| Channel Conditions: | - Pla  | 1 Liry           |                   | DTW M                                 | easurement   | :                                     | 2.40                    | <b>\</b>                  | - |
| COC Number:         | 1000 VI V V  |                  | _                 |                                       |              |                                       |                         |                           |   |
| P                   |  |                  |                   | •                                     |              | Notes                                 |                         |                           |   |
|                     |  | Field Parameters |                   |                                       |              |                                       |                         |                           |   |
| Sample I.D.         | Temp. ( <sup>0</sup> C)  | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) pH                                  | (S.U.)       |                                       |                         |                           |   |
|                     | 14,22  | 1112             | 10.27             | 9 9.4                                 | /(           |                                       |                         |                           |   |
|                     | and an and a second |                  | (00.4             | ମତ                                    |              |                                       | 0                       |                           |   |
| Stage H             | lt:  |                  | Rated Flow        | /:                                    |              | Gauged Flov                           | v: 0.39                 | 2                         |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  | Stream Gau        | ging Data                             |              |                                       |                         |                           | 1 |
| Distance from       | 117 1.1 JON  | D 4 (0)          | Velocity          | Velo<br>20%                           | ocity<br>80% | Average                               |                         | Discharge                 |   |
| Initial Point (ft)  | Width (ft)   | Depth (ft)       | (60%<br>Depth)    | Depth                                 | Depth        | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |   |
| 0, (left side)      |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              | · · · · · · · · · · · · · · · · · · · |                         |                           |   |
|                     |  |                  |                   |                                       | <u> </u>     |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              | 1                                     |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       | · · ·        |                                       |                         |                           |   |
| [                   |  |                  |                   |                                       |              | ···· · · · · ·                        |                         |                           |   |
|                     |  |                  |                   | · · · · · · · · · · · · · · · · · · · |              |                                       |                         |                           |   |
|                     |  |                  | ``                |                                       |              |                                       | -                       |                           |   |
|                     |  |                  | `                 |                                       |              |                                       |                         |                           |   |
|                     |  |                  |                   |                                       |              |                                       |                         |                           |   |

| Client:                             |  | CRWD             |                            | S       | Site Location | 1: <u>7</u> 3                   | 0.                      |  |
|-------------------------------------|--|------------------|----------------------------|---------|---------------|---------------------------------|-------------------------|--|
| Project No.:                        |  | 0002-75          |                            | Site    | e Description |                                 |                         |  |
| Date:                               |  | 106              |                            |         | Weather       | r: <u>9~9</u>                   | y 654                   | Vinter                                 |
| Sampler(s):                         |  | WB, JM           |                            | Sa      | mples Taker   | $\sim$                          | L /                     |  |
| Start Time:                         | _14                                    | 06               |                            | S       | Sample Time   | <u>    0q</u>                   | 1:32                    |  |
| End Time:                           |  |                  | _                          |         |               |                                 |                         |  |
| Channel Conditions:                 | {                                      | Consing          |                            | DTW N   | 4easurement   | : <u> </u>                      | 5.65                    |  |
| COC Number:                         |  | · · · · · ·      | _                          |         |               |                                 | -                       |  |
| [r                                  | ······································ |                  |                            |         |               | Notes                           | :                       |  |
|                                     |  | Field Parameters | -11                        |         |               |                                 |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C)                | Cond. (mS/cm)    | <b>D.O.</b> (mg/l          | ) pH    | I (S.U.)      |                                 |                         |  |
|                                     | 12.34                                  | 1052             | 10:59                      | 9       | 33            |                                 |                         |  |
|                                     |  |                  | 99.4920                    | ,       | /             |                                 | 0 696                   |  |
| Stage H                             | t:                                     |                  | Rated Flow                 | /:      |               | Gauged Flov                     | v: <u>0,565</u>         | i<br>                                  |
|                                     |  |                  |                            |         |               |                                 |                         |  |
| F                                   |  |                  | Stream Gau                 |         |               |                                 |                         |  |
| 11                                  |  |                  |                            |         |               |                                 |                         |  |
| Distance from                       | Width (ft)                             | Denth (ft)       | Velocity                   | Vel 20% | ocity<br>80%  | Average                         | Area $(ft^2)$           | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)                             | Depth (ft)       | Velocity<br>(60%<br>Depth) |         |               | Average<br>Velocity<br>(fl/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        |                         | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        |                         | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        |                         | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        |                         | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%                       | 20%     | 80%           | Velocity                        |                         | -                                      |
| Initial Point (ft)                  | Width (ft)                             | Depth (ft)       | (60%<br>Depth)             | 20%     | 80%           | Velocity                        |                         | -                                      |

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| Client:                             |                         | CRWD             |                            | 5                   | Site Location         | n:CA          | 30.0                    |  |
|-------------------------------------|-------------------------|------------------|----------------------------|---------------------|-----------------------|---------------|-------------------------|--|
| Project No.:                        |                         | 9002-75          |                            | Site                | Description           | n:            |                         |  |
| Date:                               | <u> </u>                | 16/06            |                            |                     | Weathe                | r: <u>Sun</u> | y 65°F,                 | Windy                                  |
| Sampler(s):                         |                         | WB, JM           |                            | Sar                 | nples Taker           | n: 🕅          | s No                    |  |
| Start Time:                         | (7                      | 55               |                            | S                   | ample Time            | : <u> </u>    | 149                     |  |
| End Time:                           |                         |                  | <u> </u>                   |                     |                       | [=            | DR                      |  |
| Channel Conditions:                 | _ <del>1</del> (0       | Lin              |                            | DTW M               | leasuremen            | t:            | 36                      |  |
| COC Number:                         |                         |                  | _                          |                     |                       |               |                         |  |
|                                     |                         |                  |                            |                     |                       | Notes         | :                       |  |
|                                     |                         | Field Parameters |                            |                     | •                     |               | _                       |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/           | l) pH               | l (S.U.)              |               |                         |  |
|                                     | 13.21                   | 942              | 11.29                      | 4                   | 27                    |               | •                       |  |
|                                     |                         | · · · · ·        | 107.97                     | )<br>@              | <u>6</u> - t          |               |                         |  |
| Stage H                             | t:                      |                  | Rated Flow                 | -                   |                       | Gauged Flov   | v:_7-6.1                | 17                                     |
|                                     |                         |                  |                            |                     |                       |               |                         |  |
|                                     |                         |                  | Stream Gau                 | ging Data           | 1                     |               |                         |  |
|                                     |                         |                  |                            |                     |                       |               |                         |  |
| Distance from                       |                         |                  | Velocity                   |                     | ocity                 | - Average     |                         | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Velocity      | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | -             | Area (ft <sup>2</sup> ) | - 11                                   |
|                                     | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%<br>Depth)             | 20%                 | 80%                   | Velocity      | Area (ft <sup>2</sup> ) | - 11                                   |

| Client:                               |                         | CRWD              |                          | 1                                      | Site Location | 1: <u>C</u> 6        | 229.0                   |                 |  |
|---------------------------------------|-------------------------|-------------------|--------------------------|--|---------------|----------------------|-------------------------|-----------------|--|
| Project No.:                          |                         | 0002-75           | Site Description:        |  |               |                      |                         |                 |  |
| Date:                                 | 04/19                   | 106               | Weather: Suny 65°F, Wind |  |               |                      |                         |                 |  |
| Sampler(s):                           |                         | WB, JM            | Samples Taken: Ves No    |  |               |                      |                         |                 |  |
| Start Time:                           | [3                      | >:20              |                          | 5                                      | Sample Time   | · 4:4                | 2                       |                 |  |
| End Time:                             |                         |                   |                          |  |               | ·                    |                         |                 |  |
| Channel Conditions:                   | -flou                   | ing               | <b>_</b>                 | DTW N                                  | 4easurement   | : 140                | 6                       |                 |  |
| COC Number:                           |                         |                   | _                        |  |               |                      |                         |                 |  |
|                                       |                         |                   |                          |  |               | Notes                | :                       |                 |  |
|                                       |                         | Field Parameters  | <b></b>                  |  |               |                      |                         |                 |  |
| Sample I.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)     | <b>D.O.</b> (mg/         | ) pł                                   | I (S.U.)      |                      |                         |                 |  |
|                                       | 12.67                   | 956               | (1.60                    | 4                                      | .27           |                      |                         |                 |  |
|                                       |                         |                   | 104.60                   | 76                                     |               | _                    |                         |                 |  |
| Stage Ht                              | :                       | 14 - 20 - 20 - 10 | Rated Flow               | /:                                     |               | Gauged Flov          | v: 29.320               | ×               |  |
|                                       |                         |                   |                          |  |               |                      |                         | -               |  |
| ·····                                 |                         | S                 | stream Gau               |  |               |                      |                         |                 |  |
| Distance from                         | Width (ft)              | Depth (ft)        | Velocity<br>(60%         | Vel<br>20%                             | ocity<br>80%  | Average              | . (62)                  | Discharge       |  |
| Initial Point (ft)                    | width (It)              | Depin (II)        | Depth)                   | Depth                                  | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |  |
| 0, (left side)                        |                         |                   |                          |  |               |                      |                         | ······          |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       | •                       | <u> </u>          |                          |  |               | -                    |                         | ·               |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
| - U - M                               |                         |                   |                          |  |               |                      |                         |                 |  |
| · · · · · · · · · · · · · · · · · · · |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   | 1                        |  |               |                      | I                       | 1               |  |
|                                       |                         |                   |                          |  |               |                      |                         |                 |  |
|                                       |                         |                   | . <b>S</b> *^            | , , ,, ,, ,, ,,, ,,,,,,,,,,,,,,,,,,,,, |               |                      |                         |                 |  |
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| Client:             |                        | CRWD            |            |                             | C:4- 1                                 |                      |                         |                           |  |  |  |
|---------------------|------------------------|-----------------|------------|-----------------------------|--|----------------------|-------------------------|---------------------------|--|--|--|
| Project No.:        |                        | 0002-75         |            | Site Location: <u>TW7.9</u> |  |                      |                         |                           |  |  |  |
| Date:               | ((                     | 1/19/06         |            | 8                           |  |                      |                         |                           |  |  |  |
| Sampler(s):         |                        | WB, JM          |            |                             | Weat                                   |                      | uny (65°                | Windy                     |  |  |  |
| Start Time:         |                        | 13510           |            | S                           | amples Tal                             |                      |                         | No                        |  |  |  |
| End Time:           |                        |                 |            |                             | Sample Ti                              | me: <u> </u>         | 14B                     |                           |  |  |  |
| Channel Conditions: | f                      | lowing          |            |                             |  |                      |                         |                           |  |  |  |
| COC Number:         |                        |                 | <b></b>    | DTW                         | Measureme                              | ent:                 | 6.29                    |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        | Field Parameter |            |                             | ······································ | Note                 | s:                      |                           |  |  |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C |                 |            | /1)                         |  |                      | <u> </u>                |                           |  |  |  |
|                     | 14.46                  |                 | 1/.6/      |                             | H (S.U.)                               |                      | ······                  |                           |  |  |  |
|                     |                        | 1               | 119.40     |                             | 0                                      |                      |                         |                           |  |  |  |
| Stage Ht:           |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
| <u> </u>            |                        |                 | Rated Flow | N:                          | ·                                      | Gauged Flov          | w: (, 269               | <u>/</u>                  |  |  |  |
|                     |                        |                 | Stream Gau | lging Dats                  | 1                                      |                      |                         |                           |  |  |  |
| Distance from       |                        |                 | Velocity   |                             | ocity                                  | 1                    |                         |                           |  |  |  |
|                     | Width (ft)             | Depth (ft)      | (60%)      | 20%                         | 80%                                    | Average              | Area (ft <sup>2</sup> ) | Discharge                 |  |  |  |
|                     |                        |                 | Depth)     | Depth                       | Depth                                  | Velocity<br>(ft/sec) | Alea (It.)              | (Q, ft <sup>3</sup> /sec) |  |  |  |
| 0, (left side)      |                        |                 | <br>       |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 | ę.,        |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      | · · · · · · · · ·       |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      |                         |                           |  |  |  |
|                     |                        |                 |            |                             |  |                      | <u> </u>                |                           |  |  |  |

| lient:                              | (                       | CRWD             | /D Site Location:          |  |                       | TEF7.6                          |                         |  |  |  |
|-------------------------------------|-------------------------|------------------|----------------------------|--|-----------------------|---------------------------------|-------------------------|--|--|--|
| Project No.:                        | 0                       | 0002-75          | _                          | Site   | Description           | •                               |                         |  |  |  |
| Date:                               | 0                       | (105/00          |                            | Weather: <u>G-nny</u> 65° Viney  |                       |                                 |                         |  |  |  |
| Sampler(s):                         | V                       | VB, JM           | _                          | Weather: $G_{-nn}$ $G_{5}^{2}$ $V_{cn}$ Samples Taken:       (es)       No |                       |                                 |                         |  |  |  |
| Start Time:                         |                         | 3:00             |                            | Si   | ample Time:           | 9:52                            |                         |  |  |  |
| End Time:                           | <u> </u>                |                  |                            |  |                       |                                 |                         |  |  |  |
| Channel Conditions:                 | -Hor                    | ing              | _                          | DTW M  | easurement:           | 4.1                             | 5                       |  |  |  |
| COC Number:                         |                         | )                |                            |  |                       |                                 | *                       | 6                                      |  |  |
| I                                   |                         |                  |                            |  |                       | Notes:                          | Vory ghe                | la, name                               |  |  |
|                                     | 1                       | Field Parameters |                            | 1  |                       |                                 | <u>Chenn</u>            | Į                                      |  |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l          |  | (S.U.)                |                                 |                         | ·                                      |  |  |
|                                     | 14,39                   | 924              | 11.53                      | 951  | 19                    |                                 |                         |  |  |  |
|                                     |                         |                  | 113.19                     | θω   |                       |                                 |                         |  |  |  |
| Stage H                             | t:                      |                  | Rated Flow                 | /:   |                       | Gauged Flov                     | : 0,107                 |  |  |  |
|                                     |                         |                  | Stream Gau                 | ging Data  | L                     |                                 |                         |  |  |  |
|                                     |                         | -                |                            |  |                       | 1                               |                         |  |  |  |
|                                     |                         |                  | Velocity                   | Velo   | ocity                 |                                 |                         |  |  |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth   | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
|                                     | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%<br>Depth)             | 20%  | 80%                   | Velocity                        | Area (ft <sup>2</sup> ) | ÷ []                                   |  |  |

| lient:                                | (  |   | S  | ite Location   | :   | T27.3  |  |   |  |  |
|---------------------------------------|--|---|--|--|---|--|--|---|--|--|
| Project No.:                          | 0  | 002-75  |  | Site   |   |  |  |   |  |  |
| Date:                                 | OY/196/06  |   | Weather  |  |   | <u> </u>   | ; Suny   | : Windy   |  |  |
| Sampler(s):                           |  |   |  | Samples Taken: Yes No  |   |  |  |   |  |  |
| Start Time:                           |  | 50  |  | Sample Time: 9:57  |   |  |  |   |  |  |
| End Time:                             |  |   | <u></u>  |  |   | <u> </u>   |  |   |  |  |
| Channel Conditions: Noving            |  |   | _  | DTW M  | leasurement   | :5   | .96  |   |  |  |
| COC Number:                           |  | 9   |  |  |   | -  |  |   |  |  |
|                                       |  |   |  |  |   | Notes:   | Later un   | × clos  |  |  |
|                                       | ]  | Field Parameters  |  |  |   |  |  |   |  |  |
| Sample I.D.                           | Temp. ( <sup>0</sup> C)  | Cond. (mS/cm)   | <b>D.O.</b> (mg/l  | ) pH   | (S.U.)  |  |  |   |  |  |
|                                       | 10.56  | 1072  |  |  | <u>प(</u>   |  |  |   |  |  |
|                                       |  |   | 99.79  | 0  |   |  |  | N   |  |  |
| Stage H                               | t;   |   | Rated Flow   | ·:   |   | Gauged Flow  | r: 0,531   | b de  |  |  |
|                                       |  |   |  |  |   |  |  | ,   |  |  |
|                                       |  |   | Stream Gau   | ging Data  | L   |  |  |   |  |  |
| Distance from                         |  | Darth (B)   | Velocity   |  |   | Average  | 4 (c <sup>2</sup> )  | Discharge   |  |  |
| Initial Point (ft)                    | wiam (ii)  | Depth (It)  | Depth)   | Depth  | Depth   |  | Area (n)   | (Q, ft <sup>3</sup> /sec)   |  |  |
| 0. (left side)                        |  |   |  |  |   |  |  | ······································  |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  | -  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   |  |  |   |  |  |   |  |  |
|                                       |  |   | ç.   | 1. 1. 1. 1. j.e.   |   |  |  |   |  |  |
| · · · · · · · · · · · · · · · · · · · |  |   | f  |  |   |  |  |   |  |  |
|                                       |  |   | 1  |  | 1   |  |  | 1   |  |  |
|                                       | Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number:<br>Sample I.D.<br>Stage H | Project No.:0Date: $0 \forall$ Sampler(s): $\forall$ Start Time: $i j \neq$ End Time: $i j \neq$ Channel Conditions: $\mathbf{Novid}$ COC Number: $\mathbf{Novid}$ Sample I.D.Temp. (°C) $i \partial, 5 \circ$ Stage Ht:Distance from<br>Initial Point (ft)Width (ft) | Project No.: $0002-75$ Date: $0 \vee 1/6/0 \%$ Sampler(s):WB, JMStart Time: $1250$ End Time: $1250$ Channel Conditions: $NoVireg$ COC Number:Field ParametersSample I.D.Temp. (°C)Cond. (mS/cm) $10.5\%$ $1033\chi$ Stage Ht:Stage Ht:Stage Ht:Distance from<br>Initial Point (ft)Width (ft)Depth (ft) | Project No.: $0002-75$ Date: $0 \sqrt{1/6/0} \sqrt{6}$ Sampler(s):WB, JMStart Time: $1250$ End Time: $1250$ End Time: $1250$ CoC Number:Field ParametersCOC Number: $100\sqrt{6}$ Sample I.D.Temp. ( $^{\circ}$ C)Cond. (mS/cm)D.0. (mg/l) $t O.550$ $t O.3 \lambda$ Jace Ht: $100\sqrt{6}$ Stage Ht:Rated FlowStage Ht:Rated FlowDistance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>(60%<br>Depth)0, (left side)Image: Content of the side of the sid | Project No.: $0002-75$ Site         Date: $0\sqrt{1/6/0^6}$ Sar         Sampler(s):       WB, JM       Sar         Start Time: $(2/50)$ S         End Time: $(2/50)$ S         Channel Conditions:       Noving       DTW M         COC Number:       Temp. $(^0C)$ Cond. (mS/cm)       D.O. (mg/l)       pH $(0.5\%)$ $(0.3 \lambda)$ $14e09$ 7.         Stage Ht:       Rated Flow:       99.7%         Stage Ht:       Rated Flow:       20%         Distance from       Width (ft)       Depth (ft) $20\%$ O, (left side)       Image: Sign of the side sign of the s | Project No.:       0002-75       Site Description         Date: $\bigcirc \checkmark / 160 \%$ Weather         Sampler(s):       WB, JM       Samples Taken         Start Time: $(250)$ Sample Time         End Time: $(250)$ Sample Time         Channel Conditions: $?? \circ ! \circ$ | Project No.: $0002$ -75       Site Description:         Date: $OV/IG/0b$ Weather: $G \leq O$ Sampler(s):       WB, JM       Samples Taken: $G \leq O$ Start Time: $(2 \leq O)$ Sample Taken: $G \leq O$ End Time: $(2 \leq O)$ Sample Time:       Image: Sample Time:       Image: Sample Time:         Channel Conditions: $Voltred       DTW Measurement:       Sample Time: Sample I.D.       Temp. (°C)       Cond. (mS/cm)       DI (M (SU.))       Notes:         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)       Notes:         Stage Ht:       Rated Flow:       Gauged Flow       Gauged Flow       Velocity       Velocity       Velocity       Velocity       Velocity (fl/sec)       Velocity (fl/sec)       Velocity (fl/sec)       Velocity (fl/sec)       Image: Sample Taken:       Image: S$ | Project No.:       0002-75       Site Description:         Date: $0\sqrt{16/0}$ Weather: $650$ ; $5$ $4nrw$ Sampler(s):       WB, JM       Samples Taken: $500$ ; $5$ $4nrw$ Start Time: $(250)$ Sample Taken: $9257$ End Time: $(250)$ Sample Time: $9257$ End Time: $(250)$ Sample Time: $9257$ COC Number: $DTW$ Measurement: $5276$ Sample 1.D.       Temp. (°C)       Cond. (mS/cm)       D.0. (mg/l)       pH (S.U.) $(2,55)$ $(033)$ $14.09$ $7.4$ $7.4$ Stage Ht:       Rated Flow:       Gauged Flow: $0.534$ Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft) $Velocity$ Average<br>Velocity       Area (ft <sup>2</sup> )         0, (left side)       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauged Flow: $0.534$ 0, (left side)       Image: Stream Gauging Data       Image: Stream Gauged Flow: $0.534$ Image: Stream Gauged Flow: $0.534$ Image: Stream Gauging Data       Image: Stream Gauged Flow: $0.534$ Image: Stream Gauged F |  |  |

| Client:   |   |                  | ç                | Site Location                         | п: <u>СД</u> | CR27,2               |                         |                 |  |
|---|---|------------------|------------------|---------------------------------------|--------------|----------------------|-------------------------|-----------------|--|
| Project No.:  |   | 0002-75          |                  | Site                                  | Description  | n:                   |                         |                 |  |
| Date:   | Y/                                      | 15/06            |                  |                                       | Weathe       | r: <u>654</u>        | D Sunny                 | Windy           |  |
| Sampler(s):   | ۰.<br>                                  | wв, јм           | <del></del>      | Sa                                    | mples Taker  | 1: <u>Y</u> e        |                         | -               |  |
| Start Time:   |   | -!(0             | <u> </u>         | S                                     | Sample Time  | e:(                  | :00                     |                 |  |
| End Time:   |   |                  |                  |                                       |              |                      |                         |                 |  |
| Channel Conditions:   | <u> </u>                                | wing             |                  | DTW N                                 | leasuremen   | t: <u>3,9</u>        | 5                       |                 |  |
| COC Number:   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              | Notes                |                         |                 |  |
|   | · _ · · · · · · · · · · · · · · · · · · | Field Parameters | -11 <sup></sup>  |                                       |              |                      |                         |                 |  |
| Sample I.D.   | Temp. ( <sup>0</sup> C)                 | Cond. (mS/cm)    | <b>D.O.</b> (mg/ | l) pH                                 | I (S.U.)     |                      |                         |                 |  |
|   | 12.58                                   | 956              | 10,20            |                                       | 90           |                      | . <u> </u>              |                 |  |
|   |   |                  | 96,197           | 0                                     |              |                      |                         |                 |  |
| Stage H   | t:                                      | ······           | Rated Flow       | v:                                    |              | Gauged Flov          | v: <u>    36, //(</u>   | 7               |  |
|   |   |                  |                  |                                       |              |                      |                         | ſ               |  |
| For the second se |   | <u></u>          | Stream Gau       |                                       |              |                      |                         |                 |  |
| Distance from   | Width (ft)                              | Depth (ft)       | Velocity<br>(60% | Vel 20%                               | ocity<br>80% | - Average            | A                       | Discharge       |  |
| Initial Point (ft)  |   | Depin (II)       | Depth)           | Depth                                 | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |  |
| 0, (left side)  |   |                  |                  |                                       | ·····        |                      |                         |                 |  |
|   |   | ·····            |                  |                                       |              |                      |                         |                 |  |
|   |   | ·                |                  | · · · · · · · · · · · · · · · · · · · |              |                      |                         | ······          |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   | •                                       |                  |                  | 1                                     |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         | 1017 A          |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   | -                                       |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  | ş2.              |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |
|   |   |                  |                  |                                       |              |                      |                         |                 |  |

| Client:                             | C                       | CRWD             | _                          | Si                   | te Location:          | $\underline{CR}$ | 25,6                    |  |
|-------------------------------------|-------------------------|------------------|----------------------------|----------------------|-----------------------|------------------|-------------------------|--|
| Project No.:                        | 0                       | 002-75           |                            | Site I               | Description:          | Lake F           | Setsv                   |  |
| Date:                               | 4                       | Xa               |                            |                      | Weather:              |                  | · · ·                   | Winty                                  |
| Sampler(s):                         |                         | /B, JM           | -                          | Sam                  | ples Taken:           | Yes              | < · ·                   | -                                      |
| Start Time:                         | 10:00                   |                  | _                          |                      |                       | 10               |                         |  |
| End Time:                           |                         |                  |                            |                      |                       |                  | ·                       |  |
| Channel Conditions:                 | Flowin                  | <u>^</u>         | _                          | DTW M                | easurement:           | ۍ <i>ح</i> ر ;   | <del>7</del> 6          |  |
| COC Number:                         |                         | J                | _                          |                      |                       |                  |                         |  |
|                                     |                         |                  |                            |                      |                       | Notes:           | - W4 +                  | er is                                  |
|                                     | ]                       | Field Parameters |                            |                      |                       |                  | flow                    | <u>er is</u><br>ing. clear             |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l)         | ) pH                 | (S.U.)                |                  |                         |  |
|                                     | 11.47                   | 938              | 7.34                       | 7.8                  | 3                     |                  | ·                       |  |
|                                     |                         | <u> </u>         |                            |                      |                       | 2                |                         |  |
| Stage H                             | t:                      |                  | Rated Flow                 | ·                    |                       | Gauged Flow      | . <u> </u>              | 339                                    |
|                                     |                         |                  |                            |                      |                       |                  |                         |  |
|                                     |                         | 1                | Stream Gau                 | ging Data            |                       |                  |                         |  |
|                                     |                         |                  |                            |                      |                       |                  |                         |  |
| Distance from                       | N/: 44. (A)             | Dansla (A)       | Velocity                   |                      | ocity                 | Average          | A (6 <sup>2</sup> )     | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Velocity         | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   |                  | Area (ft <sup>2</sup> ) | -                                      |
|                                     | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)       | (60%<br>Depth)             | 20%                  | 80%                   | Velocity         | Area (ft <sup>2</sup> ) | -                                      |

e,

| Client:             |            | CRWD             |                | S            | Site Location | n: <u>CR</u>                    | <u>35,3</u>             | ·                                      |
|---------------------|------------|------------------|----------------|--------------|---------------|---------------------------------|-------------------------|--|
| Project No.:        | (          | 0002-75          |                | Site         | Description   | 1:                              |                         |  |
| Date:               | _4/19      | 106              | _              |              | Weather       | r:                              |                         |  |
| Sampler(s):         |            | WB, JM           |                | Sa           | nples Taker   | 1: Ye                           | s) No                   |  |
| Start Time:         | 11:29      | 5                |                | S            | ample Time    | = <u>  ?</u>                    | 30                      |  |
| End Time:           |            | u                |                |              |               | Dupl                            | care N                  | FD1"                                   |
| Channel Conditions: | ·          |                  | <u> </u>       | DTW M        | leasurement   |                                 |                         |  |
| COC Number:         | ······     |                  |                |              |               |                                 |                         |  |
| 1                   |            |                  |                |              |               | Notes                           | : -> Din                | ped due<br>9<br>A due                  |
|                     |            | Field Parameters |                |              |               |                                 | @[150                   | 2                                      |
| Sample I.D.         |            | Cond. (mS/cm)    | <u></u>        |              | I (S.U.)      | _                               | -2002                   | Adve                                   |
|                     | 12.52      | 778              | 13.32          | <u>8.56</u>  | 2             |                                 |                         |  |
| Stage H             | t:         |                  | Rated Flow     | /:           |               | Gauged Flov                     | v: 14, 3                | NO                                     |
| ,                   |            |                  | Stream Gau     | ging Data    | 1             | <u>,</u>                        |                         |  |
| Distance from       |            |                  | Velocity       | Vel          | ocity         |                                 |                         |  |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%<br>Depth) | 20%<br>Depth | 80%<br>Depth  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                     | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%           | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%<br>Depth) | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) | - 1                                    |

| Client:             | (                       | CRWD   |                     | Si          | te Location | <u> </u>             | 33,(                    | 0               |
|---------------------|-------------------------|--|---------------------|-------------|-------------|----------------------|-------------------------|-----------------|
| Project No.:        | 0                       | 002-75   |                     | Site        | Description | ·                    |                         |                 |
| Date:               | ωY                      | /19/06   |                     |             | Weather:    | : Clarks             | , 554                   | - Winds         |
| Sampler(s):         |                         | VB, JM   |                     | Sam         | ples Taken: | Yes                  | s) No                   | /               |
| Start Time:         | 111                     | 0  |                     | Sa          | mple Time:  | 14:2                 | 10                      |                 |
| End Time:           |                         |  |                     |             |             |                      |                         |                 |
| Channel Conditions: | Flo                     | when   |                     | DTW M       | easurement: | 5.                   | 49                      |                 |
| COC Number:         |                         | /  | _                   |             |             |                      | t                       |                 |
|                     |                         |  |                     |             |             | Notes:               |                         |                 |
|                     |                         | Field Parameters                                       |                     |             |             |                      |                         |                 |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)  | <b>D.O.</b> (mg/l   | ) pH        | (S.U.)      |                      |                         |                 |
|                     | 12.77                   | ~611   | 11.13               | 9.7         | <i>64</i>   | ] ->                 | collacho                | 1 CBOD          |
| Language (1997)     |                         |  |                     |             |             |                      |                         | Supple          |
| Stage H             | t:                      | age of persons and | Rated Flow          | /;          |             | Gauged Flow          | :                       |                 |
|                     |                         |  |                     |             |             |                      | 15                      | (212)           |
|                     |                         |  | Stream Gau          |             |             |                      |                         |                 |
| Distance from       | Nº M. (B)               | D  | Velocity<br>(60%    | Velc<br>20% | city<br>80% | Average              | Area (ft <sup>2</sup> ) | Discharge       |
| Initial Point (ft)  | Width (ft)              | Depth (ft)   | Depth)              | Depth       | Depth       | Velocity<br>(ft/sec) | Alea (IL)               | $(Q, ft^3/sec)$ |
| 0, (left side)      |                         |  |                     |             |             |                      |                         |                 |
| <u></u>             |                         |  |                     |             |             | · ···                |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     | •                       |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |
|                     |                         | · · · · · · · · · · · · · · · · · · ·                  |                     |             |             |                      |                         |                 |
|                     | -2                      |  | - \$ <sup>3</sup> . | an Meandar  |             |                      |                         |                 |
|                     | -                       |  |                     |             |             |                      |                         |                 |
|                     |                         |  |                     |             |             |                      |                         |                 |

| Client:  |                         | CRWD             |                            | s                    | ite Locatior          | : <u> </u>                      | B 33                                  | 3,2                                    |
|--|-------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------|---------------------------------------|--|
| Project No.:   | (                       | 0002-75          |                            | Site                 | Description           |                                 |                                       | ······································ |
| Date:  | 4/19                    | 106              |                            |                      | Weather               |                                 |                                       |  |
| Sampler(s):  |                         | VB, JM           |                            | Sar                  | nples Taken           | : (Ye                           | s) No                                 |  |
| Start Time:  |                         |                  |                            | S                    | ample Time            | : 14:                           | 40                                    |  |
| End Time:  |                         |                  |                            |                      |                       |                                 |                                       |  |
| Channel Conditions:  |                         |                  | _                          | DTW M                | leasurement           | : 6.6                           | 9                                     |  |
| COC Number:  |                         |                  |                            |                      |                       |                                 | ſ                                     |  |
|  |                         |                  |                            |                      |                       | Notes                           | 1                                     |  |
|  |                         | Field Parameters |                            |                      |                       |                                 | ·                                     |  |
| Sample 1.D.  | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l          | ) pH                 | (S.U.)                |                                 |                                       | <u></u>                                |
|  | 12.37                   | (3)              | 16.24                      | 6.4                  | 16                    |                                 | · · · · · · · · · · · · · · · · · · · |  |
| 1 to a construction of the |                         |                  |                            | i                    |                       |                                 | · · · ·                               | · · · · · · · · · · · · · · · · · · ·  |
| Stage H  | t:                      |                  | Rated Flow                 | /:                   |                       | Gauged Flow                     | /:                                    |  |
|  |                         |                  |                            |                      |                       |                                 |                                       |  |
|  |                         | ŝ                | Stream Gau                 | ging Data            | ł                     |                                 |                                       |  |
|  |                         |                  |                            |                      |                       |                                 |                                       |  |
| Distance from<br>Initial Point (ft)  | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%                  | 80%                   | Velocity                        | Area (ft <sup>2</sup> )               | - 1                                    |
| 1  | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                       | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%<br>Depth)             | 20%<br>Depth         | 80%                   | Velocity                        | Area (fi <sup>2</sup> )               | - 1                                    |

| Client:   |                                       | CRWD                                   |                | S                    | ite Location | : <u> </u>           | <u>A 33</u>             | 3,2                                    |
|---|---------------------------------------|--|----------------|----------------------|--------------|----------------------|-------------------------|--|
| Project No.:  | (                                     | 0002-75                                |                | Site                 | Description  |                      |                         |  |
| Date:   | _0Y/                                  | 19/06                                  | _              |                      | Weather      | Clady                | 1 650F                  | Winder                                 |
| Sampler(s):   |                                       | WB, JM                                 |                | San                  | nples Taken: |                      |                         | / /                                    |
| Start Time:   | 180                                   | (5                                     |                | S                    | ample Time:  | 4                    | 50                      |  |
| End Time:   |                                       |  |                |                      |              | -                    |                         |  |
| Channel Conditions:   | -Ho-                                  | ing                                    |                | DTW M                | leasurement: |                      | 56                      |  |
| COC Number:   |                                       |  |                |                      |              | <b>,</b>             | -                       |  |
| 2 martine 10 |                                       | ······································ |                |                      |              | Notes                | :                       | ······································ |
|   |                                       | Field Parameters                       |                |                      |              |                      | ·                       |  |
| Sample I.D.   | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)                          |                |                      | (S.U.)       |                      | <u></u>                 |  |
|   | 10.23                                 | 1210                                   | 11.55          | 7.0                  | 96           |                      |                         |  |
|   | L                                     |  |                |                      |              |                      |                         |  |
| Stage H   | it:                                   |  | Rated Flow     | /:                   |              | Gauged Flov          | v:                      |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   | · · · · · · · · · · · · · · · · · · · |  | Stream Gau     | ging Data            | l<br>        |                      |                         |  |
| Distance from   | WERT (G)                              | Durth (P)                              | Velocity       | Vel<br>20%           | ocity<br>80% | Average              |                         | Discharge                              |
| Initial Point (ft)  | Width (ft)                            | Depth (ft)                             | (60%<br>Depth) | Depth                | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)  |                                       |  |                |                      |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         | ······································ |
|   |                                       |  | •              |                      |              | <u> </u>             |                         |  |
|   |                                       | <u></u>                                |                |                      |              |                      |                         | · · · · · · · · · · · · · · · · · · ·  |
|   |                                       |  | -              |                      |              |                      |                         |  |
|   |                                       |  | 1              |                      |              |                      |                         |  |
|   |                                       |  |                | 3                    |              |                      |                         |  |
|   |                                       |  |                |                      | ·····        |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   | -                                     |  | . ¥*           | a se <b>de</b> renas |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      |                         |  |
|   |                                       |  |                |                      |              |                      | <u> </u>                |  |

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| Client:                             | (                       | CRWD             |                                       | S                    | ite Location          | : AVA                           | DIC                     | <u> </u>                               |
|-------------------------------------|-------------------------|------------------|---------------------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| Project No.:                        |                         | 0002-75          |                                       | Site                 | Description           | ۰<br>                           |                         |  |
| Date:                               | 4/19                    | 106              |                                       |                      | Weather               | ·                               |                         |  |
| Sampler(s):                         | V                       | VB, JM           |                                       | San                  | nples Taken           | : <u>Ye</u>                     | s) No                   |  |
| Start Time:                         |                         |                  |                                       | S                    | ample Time            | : <u>/</u> 5                    | 35                      |  |
| End Time:                           |                         |                  | _                                     |                      |                       | FL                              | 22                      |  |
| Channel Conditions:                 | <u></u>                 |                  |                                       | DTW M                | easurement            | <u> </u>                        | 96                      |  |
| COC Number:                         |                         |                  | _                                     |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       | Notes                           |                         |  |
|                                     |                         | Field Parameters |                                       |                      |                       |                                 |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l]                    | ) pH                 | (S.U.)                |                                 |                         |  |
|                                     | 11.10                   | 1169             | 11.69                                 | 8.                   | 72                    |                                 | <del></del>             |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
| Stage H                             | t:                      |                  | Rated Flow                            | r<br>+               |                       | Gauged Flov                     | v:                      |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
| :                                   |                         |                  | Stream Gau                            | ging Data            | L                     |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth)            | Veld<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |                         |                  |                                       |                      |                       |                                 |                         | -                                      |
| 0, (1010 5100)                      | -                       |                  |                                       |                      | -                     | 1                               |                         |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
|                                     |                         |                  | · · · · · · · · · · · · · · · · · · · |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       | <u> </u>                        |                         |  |
| 9                                   |                         |                  |                                       |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       | · · · · · ·                     |                         |  |
|                                     |                         |                  |                                       | , <u>-</u>           |                       |                                 |                         |  |
|                                     |                         | <u> </u>         |                                       |                      |                       |                                 |                         | ····                                   |
|                                     |                         |                  | ţ.,                                   | · P.,                |                       |                                 |                         |  |
|                                     |                         |                  | 1                                     |                      |                       |                                 |                         |  |
|                                     |                         |                  |                                       |                      |                       |                                 |                         |  |
|                                     |                         |                  | 1                                     |                      | 1                     |                                 | I I                     |  |

| flient:                             | •                       | CRWD             |                            | S                   | ite Location                          | . Mg                            | 106 7                   | - F 33  | .2 |
|-------------------------------------|-------------------------|------------------|----------------------------|---------------------|---------------------------------------|---------------------------------|-------------------------|---|----|
| Project No.:                        |                         | 0002-75          |                            | Site                | Description                           | 1:,                             |                         |   |    |
| Date:                               | 4/191                   | 06               |                            |                     | Weather                               | 4.                              |                         |   |    |
| Sampler(s):                         |                         | WB, JM           |                            | Sar                 | nples Taken                           | u: (Ye                          |                         | 0   | •  |
| Start Time:                         |                         |                  |                            |                     |                                       |                                 | 16:05                   | 5   |    |
| End Time:                           |                         |                  |                            |                     |                                       |                                 | <del>.</del>            |   |    |
| Channel Conditions:                 |                         |                  | _                          | DTW M               | leasurement                           | : H.C                           | 52                      |   |    |
| COC Number:                         |                         |                  |                            |                     |                                       | ······                          |                         | en an ann an Anna an An |    |
|                                     |                         |                  |                            |                     |                                       | Notes                           | :                       |   |    |
|                                     |                         | Field Parameters |                            |                     |                                       |                                 | - η                     |   |    |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/           | l) pH               | I (S.U.)                              |                                 | *****                   |   |    |
|                                     | 10.30                   | 1278             | 1.66                       | 8.0                 | 03                                    |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       | 끸                               |                         | e one or other states and the second states and the second states and the second states and the second states a |    |
| Stage Ht:                           | *                       |                  | Rated Flow                 | v:                  |                                       | Gauged Flov                     | v:                      |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
| 3                                   |                         | ŝ                | Stream Gau                 | iging Data          | 1                                     |                                 |                         |   |    |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth                 | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)  |    |
| 0, (left side)                      |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         | u                |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            | -                   |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     | i                       | -                |                            |                     |                                       |                                 |                         |   |    |
|                                     | · · · · · ·             |                  |                            |                     |                                       |                                 |                         |   |    |
|                                     |                         |                  |                            |                     |                                       |                                 |                         |   |    |
| :                                   | -                       |                  | ş*.                        | . More 4.           |                                       |                                 |                         |   |    |
| :<br>                               |                         |                  | <b>₹</b> <sup>8</sup> ×    | р<br>. ро., е.      | · · · · · · · · · · · · · · · · · · · |                                 |                         |   |    |

| Client:                                |                         | CRWD             | <del></del>                | S               | ite Location | :                               | <u>E 33:</u>            | 2                                      |
|--|-------------------------|------------------|----------------------------|-----------------|--------------|---------------------------------|-------------------------|--|
| Project No.:                           | (                       | 0002-75          |                            | Site            | Description  | :                               |                         |  |
| Date:                                  | 4/19                    | 106              |                            |                 | Weather      | ;                               |                         |  |
| Sampler(s):                            |                         | WB, JM           | _                          | Sar             | nples Taken  |                                 |                         |  |
| Start Time:                            |                         |                  | _                          | S               | ample Time   | :                               | 5.20                    |  |
| End Time:                              | <u></u>                 |                  | _                          |                 |              |                                 |                         |  |
| Channel Conditions:                    |                         | · · · · · · ·    | _                          | DTW M           | leasurement  | :2.0                            | 72                      |  |
| COC Number:                            | <u> </u>                |                  | -                          |                 |              |                                 |                         |  |
| ······································ |                         |                  |                            |                 |              | Notes                           | •                       |  |
|  | 1                       | Field Parameters |                            |                 |              |                                 |                         |  |
| Sample I.D.                            | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    |                            |                 | (S.U.)       |                                 |                         |  |
|  | 10.71                   | 992              | 14.57                      | $1 \mathcal{B}$ | <u>73</u>    |                                 | 4                       | <b>YE R</b>                            |
|  |                         |                  |                            | 0               |              |                                 |                         |  |
| Stage H                                | t:                      |                  | Rated Flow                 | /: <u></u>      |              | Gauged Flov                     | v:                      |  |
|  |                         | S                | Stream Gau                 | ging Data       | I            |                                 |                         |  |
|  | I                       | I                | T                          | <del></del>     |              | 1                               |                         |  |
| Distance from                          |                         |                  | Velocity                   |                 | ocity        | Averoge                         |                         | Discharge                              |
| Distance from<br>Initial Point (ft)    | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth    | 80%<br>Depth | Average<br>Velocity<br>(fl/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          |                                 | Area (ft <sup>2</sup> ) | 14                                     |
| 11                                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity                        | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%                       | 20%             | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |
| Initial Point (ft)                     | Width (ft)              | Depth (ft)       | (60%<br>Depth)             | 20%<br>Depth    | 80%          | Velocity<br>(fl/sec)            | Area (ft <sup>2</sup> ) | 14                                     |

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| Client:             |  | CRWD                   | <del></del>      | S          | ite Locatior | 1: <u>7</u> 1        | D 33.                   | a                                      |
|---------------------|--|------------------------|------------------|------------|--------------|----------------------|-------------------------|--|
| Project No.:        |  | 0002-75                | ·······          | Site       | Description  | 1:                   | <u> </u>                | ······································ |
| Date:               | 4/19                                   | 106                    | _                |            |              |                      |                         |  |
| Sampler(s):         | 1                                      | WB, JM                 |                  | Sar        | nples Taker  | n:Ye                 | s No                    |  |
| Start Time:         |  |                        |                  | S          | ample Time   | <u> </u>             | 130                     |  |
| End Time:           |  |                        |                  |            |              |                      |                         | ···                                    |
| Channel Conditions: | ·                                      |                        | <u></u>          | DTW N      | leasurement  | - 4,0                | 28                      |  |
| COC Number:         | <b>e</b>                               |                        | <del></del>      |            |              |                      |                         |  |
| [                   | 11 - 1 - 11 - 12 - 12 - 12 - 12 - 12 - |                        |                  |            | ··· = ······ | Notes                | :                       |  |
|                     |  | Field Parameters       | - 11             |            |              |                      |                         |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C)                | Cond. (mS/cm)          | ·                |            | (S.U.)       |                      |                         |  |
|                     | 10.67                                  | 1259                   | <u>  3,4(</u>    | 8.2        | <u>}</u> &   |                      | ·                       | · · · · · · · · · · · · · · · · · · ·  |
|                     |  |                        |                  |            |              |                      |                         |  |
| Stage H             | t:                                     | None Martin Conference | Rated Flow       | v:         |              | Gauged Flov          | v:                      |  |
|                     |  |                        |                  |            |              |                      |                         |  |
| 1                   |  | 1                      | Stream Gau       |            |              |                      |                         |  |
| Distance from       | Width (ft)                             | Depth (ft)             | Velocity<br>(60% | Vel<br>20% | ocity<br>80% | - Average            | $A_{\rm max}(\Theta^2)$ | Discharge                              |
| lnitial Point (ft)  | width (11)                             | Depin (it)             | Depth)           | Depth      | Depth        | Velocity<br>(ft/sec) | Area $(ft^2)$           | $(Q, ft^3/sec)$                        |
| 0, (left side)      |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     | ·                                      |                        |                  |            |              |                      |                         | · · · · · · · · · · · · · · · · · · ·  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     | -                                      |                        |                  |            |              |                      |                         |  |
|                     |  |                        | . şîn            | , e angere |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |
|                     |  |                        |                  |            |              |                      |                         |  |

| Client:   |                         | CRWD   |                  | S           | Site Location | 1:                   | 32.0                                  | }   |         |
|---|-------------------------|--|------------------|-------------|---------------|----------------------|---------------------------------------|---|---------|
| Project No.:  |                         |  |                  | Site        | e Description | 1:                   |                                       |   |         |
| Date:   | 4/1                     | 9/06   |                  |             | Weathe        | r:                   |                                       |   | -       |
| Sampler(s):   |                         | WB, JM   |                  | Sa          | mples Taker   | n:Ye                 | es No                                 | с.  |         |
| Start Time:   | _11:16                  | )  |                  | S           | Sample Time   | = 1115               | )                                     |   | _       |
| End Time:   |                         |  |                  |             |               |                      |                                       | <u>, , , , , , , , , , , , , , , , , , , </u> |         |
| Channel Conditions:   | _flow                   | 100  |                  | DTW N       | leasurement   | <u> </u>             | $\Omega$                              |   | <u></u> |
| COC Number:   |                         | J  |                  |             |               |                      |                                       |   |         |
| <b>2</b> 1077107 Data (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. |                         |  |                  |             |               | Notes                | :                                     |   |         |
| ž   |                         | Field Parameters   |                  |             |               |                      |                                       |   | _       |
| Sample I.D.   | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)  | <b>D.O.</b> (mg/ | l) pH       | I (S.U.)      |                      |                                       |   | -       |
|   | 9.63                    | 897  | 12.42            | 8.          | 12            |                      |                                       |   | -       |
| 4   | <u></u>                 | , , <u>", 3, ", 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,</u> |                  |             |               | 긔                    |                                       |   | -       |
| Stage Ht  | :                       |  | Rated Flow       | v:          |               | Gauged Flov          | v:                                    |   |         |
|   |                         |  |                  |             |               | 2                    |                                       |   |         |
|   |                         | 5  | Stream Gau       | iging Data  | 1             |                      |                                       |   |         |
| Distance from   |                         |  | Velocity         | Vel-<br>20% | ocity<br>80%  | Average              |                                       | Discharge                                     |         |
| Initial Point (ft)  | Width (ft)              | Depth (ft)   | (60%)<br>Depth)  | Depth       | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | (Q, ft <sup>3</sup> /sec)                     |         |
| 0, (left side)  |                         |  |                  |             |               |                      |                                       | ······································        | ]       |
| 0, (left side)  |                         |  |                  |             |               | <u> </u>             | 1                                     |   |         |
|   |                         | ······································                     |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  |             |               |                      |                                       |   |         |
|   | •                       |  |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  |             |               |                      |                                       | ······  |         |
|   |                         |  |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  |             |               |                      |                                       | ~   |         |
|   |                         |  |                  |             | 1             |                      |                                       |   |         |
|   | -                       |  |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  | , i Miryawi |               |                      |                                       |   |         |
| -   |                         |  |                  |             |               |                      |                                       |   |         |
|   |                         |  |                  |             |               |                      | · · · · · · · · · · · · · · · · · · · |   |         |

|                         | CRWD                   |  | Ş   | Site Locatio  | n: <u>C</u> A   | 31.5   |   |
|-------------------------|------------------------|--|---|---|---|--|---|
| ······                  | 0002-75                |  | Site  | e Descriptio  | n:  | p Scensh   | p.C.  |
| 4/19                    | 1/06                   |  |   | Weathe  | er:   |  |   |
| •<br>                   | WB, JM                 |  | Sa  | mples Take  | n: <u> </u>   | es N   | 0   |
|                         |                        | _  | 5   | Sample Tim  | e:  |  |   |
| ·····                   |                        |  |   |   |   |  | · · · · · · · · · · · · · · · · · · ·   |
|                         |                        | _  | DTW N   | 4easuremen  | t:  |  |   |
|                         |                        | _  |   |   |   |  |   |
|                         |                        |  |   |   | Note  | s:   |   |
|                         | Field Parameters       |  |   |   |   |  |   |
| Temp. ( <sup>0</sup> C) | Cond. (mS/cm)          | <b>D.O.</b> (mg/l  | ) pH  | I (S.U.)  |   |  |   |
|                         |                        |  | <u> </u>  |   |   |  |   |
|                         |                        |  |   |   |   |  |   |
| ,<br>                   |                        | Rated Flow   |   | -10-0000 torong   | Gauged Flo  | w:   |   |
| Samp                    | vec s                  | tream Gau  | ging Data   | 1   |   |  |   |
| Tone                    | Concentration          | Velocity   | Velo  |   | Average   | phougant   | Discharge   |
| Water (FI)              |                        | (60%)<br>Depth)  | Depth   | Depth   | Velocity (ft/sec)   | Atten (fit)  | (Q, ft <sup>2</sup> /sec)   |
| 1400                    | ().672                 |  | [   |   |   | INI  |   |
|                         |                        |  |   |   |   | INI  |   |
| × /                     |                        |  |   |   |   | IN   |   |
|                         | ~                      |  |   |   |   | NN/  |   |
| 1545                    | 0 609                  |  |   |   |   | - In   |   |
| 1600                    | 0.774                  |  |   |   |   | THA  |   |
| <del> </del>            |                        |  |   |   |   |  |   |
| $0 \simeq 1$            | A.305 1                | 1  |   |   |   | MHI  |   |
| 0 = 0.15                | 0.303                  | Fant   | - Dio   | Vela  |   | THA  |   |
| 0 =<br>415<br>1070      |                        | Funi   |   | Visible   |   | MH4  |   |
|                         | (G.7<br>43.7           | Fam  | Visib   | re î  | lar in Pad  | MH<br>ing Cham   | Girand  |
| 625                     |                        | Fun<br>Dye<br>Dye<br>Dye   |   | in in Co  | lor in ent  |  | rel/Gorean  |
| 625                     | 16.7<br>43.7<br>606.0  | Fam<br>Dye<br>Dye<br>Dye<br>Dye  | Visib<br>Stor   | y in lo   | in entre  | chunnel  |   |
| 625                     | 16.7<br>43.7<br>606.0  | Fun<br>Dye<br>Dye<br>Dye<br>Dye<br>Dye<br>Dye  | Visib   | y in Co<br>y in Co<br>y ne                              | in entre  | chunnel  | rel/Goreans.<br>chemnel   |
|                         | 4/19<br>Temp. (°C)<br> | $\frac{4/19/06}{WB, JM}$<br>Field Parameters<br>Temp. (°C) Cond. (mS/cm)<br>$\frac{7(1/p)(e)}{Cond. (mS/cm)}$<br>$\frac{7(1/p)(e)}{Cond. (mS/$ | 4/19/06         WB, JM         Field Parameters         Field Parameters         Temp. (°C)         Cond. (mS/cm)         D.O. (mg/l         Stream Gauge         Cond. (mS/cm)         Velocity         Cond. (mS/cm)         D.O. (mg/l         Cond. (mS/cm)         D.O. (mg/l         Cond. (mS/cm)         Velocity         Cond. (mS/cm) <td< td=""><td><math display="block">     \begin{array}{c cccccccccccccccccccccccccccccccc</math></td><td>4/19/06       Weather Samples Take         WB, JM       Samples Take         Sample Tim       DTW Measuremen         DTW Measuremen       DTW Measuremen         Field Parameters       DTW Measuremen         Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         Rated Flow:</td><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td>H/19/06         Weather:           WB, JM         Samples Taken:         Yes         N           Sample Time:        </td></td<> | $     \begin{array}{c cccccccccccccccccccccccccccccccc$ | 4/19/06       Weather Samples Take         WB, JM       Samples Take         Sample Tim       DTW Measuremen         DTW Measuremen       DTW Measuremen         Field Parameters       DTW Measuremen         Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         Rated Flow: | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | H/19/06         Weather:           WB, JM         Samples Taken:         Yes         N           Sample Time: |

| Client:  |                         | CRWD             |                     | S            | Site Location | $\pi TA$    | 30,9                    |  |
|--|-------------------------|------------------|---------------------|--------------|---------------|-------------|-------------------------|--|
| Project No.:   |                         | 0002-75          | ·                   | Site         | Description   | 1:          |                         |  |
| Date:  | 4/19                    | 106              |                     |              | Weather       |             |                         |  |
| Sampler(s):  |                         | WB, JM           |                     | Sai          | nples Taker   | 1:Ye        | s) No                   | 1                                      |
| Start Time:  | 10:                     | 50               |                     | S            | ample Time    | =IO!        |                         |  |
| End Time:  |                         |                  |                     |              |               |             |                         |  |
| Channel Conditions:  | flou                    | ing              |                     | DTW M        | leasurement   |             | A 3.5                   | 9                                      |
| COC Number:  |                         | <u> </u>         |                     |              |               |             |                         | 1                                      |
| Part a second |                         |                  |                     |              |               | Notes       | :                       |  |
|  |                         | Field Parameters |                     |              |               |             |                         |  |
| Sample I.D.  | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | ) <b>D.O.</b> (mg/l | ) рН         | I (S.U.)      |             |                         |  |
|  | 11.06                   | 1147             | 12.23               | B            | 31            |             |                         |  |
|  |                         |                  |                     |              |               |             |                         |  |
| Stage H  | t:                      |                  | Rated Flow          | /:           |               | Gauged Flov | v:                      |  |
|  |                         |                  |                     |              |               |             |                         |  |
|  |                         |                  | Stream Gau          | ging Data    | 1             |             |                         |  |
| Jí   |                         |                  | Valasita            | l Vel        | ocity         |             |                         |  |
| Distance from  | With (G)                | Double (A)       | Velocity            |              |               | - Average   |                         | Discharge                              |
| Distance from<br>Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%)<br>Depth)     | 20%<br>Depth | 80%<br>Depth  | Velocity    | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | -           | Area (ft <sup>2</sup> ) |  |
|  | Width (fi)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (fi)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%                | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%<br>Depth)      | 20%          | 80%           | Velocity    | Area (ft <sup>2</sup> ) |  |

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| Client:                               |                         | CRWD             |                            |                     | Site Locatio          | n: CR                           | 31.8                    | ?                                      | · ~, ' |
|---------------------------------------|-------------------------|------------------|----------------------------|---------------------|-----------------------|---------------------------------|-------------------------|--|--------|
| Project No.:                          |                         | 0002-75          |                            | Sit                 | e Descriptio          | n:                              |                         | £                                      |        |
| Date:                                 | 4/                      | 19/06            |                            |                     | Weathe                | er: Over                        | cast 55                 | E, hindy                               | -      |
| Sampler(s):                           |                         | WB, JM           |                            | Sa                  | mples Take            | n:(rY                           | es No                   | /                                      |        |
| Start Time:                           | 2                       | ,50              |                            | 9                   | Sample Tim            | ~                               | 100 14                  | 1:00                                   |        |
| End Time:                             |                         | -<br>            |                            |                     |                       |                                 |                         |  |        |
| Channel Conditions:                   | <del>}}</del>           | Courry           |                            | DTW M               | Aeasuremen            | t: DA.H                         | 19                      |  | _      |
| COC Number:                           |                         | /                |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       | Notes                           | s:                      |  |        |
|                                       | 1                       | Field Parameters | 6                          |                     |                       |                                 |                         |  | -      |
| Sample I.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         | 1) pł               | ł (S.U.)              |                                 |                         |  | _      |
|                                       | 12.53                   | 925              | 11.74                      | q.                  | 34                    |                                 |                         |  | -      |
| Stage Ht                              | :                       |                  | Rated Flow<br>Stream Gau   |                     |                       | Gauged Flow                     | w:G.G                   | 57                                     |        |
| Distance from<br>Initial Point (ft)   | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |        |
| 0, (left side)                        |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         | ······································ |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 | н.<br>М                 |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         | -                                      |        |
| · · · · · · · · · · · · · · · · · · · |                         |                  |                            |                     |                       | 7<br>                           |                         |  |        |
|                                       | ·                       |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  | ş2.                        |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |
|                                       |                         |                  |                            |                     |                       |                                 |                         |  |        |

| Project No.: $0002-75$ Site Description:         Date: $4/19/06$ Weather:         Sampler(s):       WB, JM       Samples Taken:       No         Start Time:       Sample Time:       I 3:50         End Time:       DTW Measurement: $3.4$ LC         COC Number:       DTW Measurement: $3.4$ LC         Field Parameters       Notes:   |
|--|
| Date:       9/19/06       Weather:         Sampler(s):       WB, JM       Samples Taken:       No         Start Time:       Sample Time:       I3:50         End Time:       DTW Measurement: $3.46$ Channel Conditions:       DTW Measurement: $3.46$ COC Number:       Notes:       Notes:         Field Parameters       Notes:       Image: Cond. (mS/cm)         Sample I.D.       Temp. ( $^{0}$ C)       Cond. (mS/cm)       D.0. (mg/l)  |
| Start Time: Sample Time:   End Time: Image: Im  |
| End Time:       DTW Measurement:       Difference         COC Number:       DTW Measurement:       Difference         Field Parameters       Notes:  |
| Channel Conditions: DTW Measurement: DtW |
| COC Number:          Field Parameters       Notes:         Sample I.D.       Temp. ( <sup>0</sup> C)         Cond. (mS/cm)       D.O. (mg/l)         pH (S.U.)       Image: Condent of the second secon  |
| COC Number:          Field Parameters       Notes:         Sample I.D.       Temp. (°C)         Cond. (mS/cm)       D.O. (mg/l)         pH (S.U.)       Image: Condent of the provided state of th   |
| Field Parameters       Sample I.D.     Temp. (°C)     Cond. (mS/cm)     p.H. (S.U.)  |
| Field Parameters       Sample I.D.     Temp. ( <sup>0</sup> C)     Cond. (mS/cm)     D.O. (mg/l)     pH (S.U.)   |
|  |
| 10.49 1125 11.41 8.45  |
|  |
|  |
| Stage Ht: Rated Flow: Gauged Flow:   |
|  |
| Stream Gauging Data  |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft)VelocityVelocityAverage<br>$80\%$ Discharge<br>VelocityInitial Point (ft)Width (ft)Depth (ft) $(60\%)$ $20\%$ $80\%$ VelocityArea (ft²) $Discharge$   |
| Initial Point (ft)Width (ft)Depth (ft) $(60\%)$ $20\%$ $80\%$ VelocityArea (ft²) $(Q, ft³/sec)$ Initial Point (ft)DepthDepthDepthDepthVelocity $(Q, ft³/sec)$  |
| 0, (left side)   |
|  |
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| Client:             |                                       | CRWD             |                 |              | Site Location | n: <u> </u> | - 30,                   | [                                     |
|---------------------|---------------------------------------|------------------|-----------------|--------------|---------------|-------------|-------------------------|---------------------------------------|
| Project No.:        |                                       | 0002-75          |                 | Site         | e Description | 1:          |                         |                                       |
| Date:               | _4/10                                 | 1/06             |                 |              | Weather       | r:          |                         |                                       |
| Sampler(s):         | . / .                                 | WB, JM           |                 | Sa           | mples Taker   |             | s) No                   |                                       |
| Start Time:         |                                       |                  |                 |              | Sample Time   |             | 5.40                    | · · · · · · · · · · · · · · · · · · · |
| End Time:           |                                       |                  |                 |              |               | ··          |                         |                                       |
| Channel Conditions: | Flow                                  | îng              |                 |              | Aeasurement   | 5.6         |                         |                                       |
| COC Number:         |                                       | <u> </u>         |                 | DIWA         | reastrement   |             |                         |                                       |
|                     | ·                                     |                  |                 |              |               | NT 4        |                         |                                       |
|                     |                                       | Field Parameters |                 |              |               | Notes       |                         |                                       |
| Sample I.D.         | Temp ( <sup>0</sup> C)                | Cond. (mS/cm)    | 1               | ) nL         | I (S.U.)      | -           | <u>.</u>                |                                       |
| Sample 1.D.         | 9.99                                  | 1059             | 11,01           | <u> </u>     |               |             | •                       |                                       |
| <u> </u>            | <u></u>                               | 1():01           | 11101           | 0.0          | 20            |             |                         |                                       |
|                     |                                       |                  |                 |              |               |             |                         |                                       |
| Slage H             | lt:                                   |                  | Rated Flow      | /:           |               | Gauged Flow | /:                      |                                       |
|                     |                                       |                  | Stream Gau      | ging Dat:    | ł             |             |                         |                                       |
| Distance from       |                                       |                  | Velocity        |              | ocity         | Average     |                         | Discharge                             |
| Initial Point (ft)  | Width (ft)                            | Depth (ft)       | (60%)<br>Depth) | 20%<br>Depth | 80%           | Velocity    | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                       |
|                     | 1                                     |                  |                 | 12 Optil     | Depth         |             |                         | (Q, II /sec)                          |
|                     |                                       |                  |                 |              | Depth         | (ft/sec)    |                         | (Q, II /sec)                          |
| 0, (left side)      |                                       |                  |                 |              | Depth         |             |                         | (Q, II /sec)                          |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      | ·                                     |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      | · ·                                   |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      | · · ·                                 |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |
| 0, (left side)      |                                       |                  |                 |              |               |             |                         |                                       |

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| Client:                             |                         | CRWD             |  | S                   | Site Location         | $\sim CR$                             | 36                      | ), O                                   |
|-------------------------------------|-------------------------|------------------|--|---------------------|-----------------------|---------------------------------------|-------------------------|--|
| Project No.:                        |                         | 0002-75          | **********   | Site                | Description           | 1:                                    |                         |  |
| Date:                               | HIC                     | 2/06             |  |                     | Weather               | **                                    |                         |  |
| Sampler(s):                         |                         | 7<br>WB, JM      |  | Sar                 | nples Taken           | :: <u>Ye</u>                          | s No                    |  |
| Start Time:                         |                         |                  |  |                     | ample Time            |                                       | 25                      | ·                                      |
| End Time:                           | <u></u> ,               |                  |  |                     | ·                     |                                       |                         | ······                                 |
| Channel Conditions:                 |                         |                  | _  | DTW M               | leasurement           | : 7.                                  | 43                      |  |
| COC Number:                         |                         |                  |  |                     |                       | · · · · · · · · · · · · · · · · · · · |                         |  |
|                                     |                         |                  | _  |                     |                       | Notes:                                |                         |  |
|                                     |                         | Field Parameters |  |                     |                       |                                       |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | D.O. (mg/l   | ) pH                | I (S.U.)              |                                       |                         | 1000 model 4                           |
|                                     | 11,97                   | 937              | 10.95  | R.3                 | 7                     |                                       | ·······                 | ······                                 |
| C                                   |                         |                  | and a second |                     |                       | -                                     |                         |  |
| Stage H                             | t:                      |                  | Rated Flow   | /:                  |                       | Gauged Flow                           | : 24,5                  | 28                                     |
|                                     |                         |                  | ~ ~  |                     |                       |                                       | . <i>ф.</i>             | -                                      |
|                                     |                         | 2                | Stream Gau   | ging Data           | 1                     |                                       |                         |  |
| {r                                  | <u></u>                 | 1                | 1  |                     |                       |                                       | I 1                     | ·······                                |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth)   | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec)       | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
|                                     | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%   | 20%                 | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)       | (60%<br>Depth)   | 20%<br>Depth        | 80%                   | Velocity                              | Area (ft <sup>2</sup> ) | - 6                                    |

| Client:             |                                | CRWD             |                   | S           | ite Locatior | 1:                   | 479.C                   | )                                      |
|---------------------|--------------------------------|------------------|-------------------|-------------|--------------|----------------------|-------------------------|--|
| Project No.:        |                                | 0002-75          |                   | Site        | Description  | 1:                   |                         |  |
| Date:               | (                              | <u>DY/19/06</u>  | _                 |             | Weather      |                      |                         |  |
| Sampler(s):         |                                | WB, JM           |                   | Sar         | nples Taken  | : <u> </u>           |                         |  |
| Start Time:         |                                | 715              | _                 | S           | ample Time   |                      |                         |  |
| End Time:           |                                |                  |                   |             |              |                      |                         |  |
| Channel Conditions: | <u>+lo</u>                     | ming             |                   | DTW M       | leasurement  | :                    |                         | ······································ |
| COC Number:         | •                              | J                |                   |             |              |                      |                         |  |
|                     |                                |                  |                   |             |              | Notes                | :                       |  |
|                     |                                | Field Parameters |                   |             |              |                      |                         |  |
| Sample I.D.         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) pH        | (S.U.)       |                      | *****                   | , , , , , , , , , , , , , , , , , , ,  |
|                     |                                |                  |                   |             |              |                      |                         |  |
|                     |                                |                  |                   |             |              | -                    |                         | ,                                      |
| Stage H             | t:                             |                  | Rated Flow        | /:          |              | Gauged Flov          | V:                      |  |
| $\cap$ (            | $\sim 1$                       |                  |                   |             |              | -                    |                         |  |
| Dye                 | 79mphe                         | 5                | Stream Gau        | ging Data   |              |                      |                         |  |
| Distance from       |                                |                  | Velocity          | Velo<br>20% | ocity<br>80% | Average              |                         | Discharge                              |
| Initial Point (ft)  | WARE (III)                     | Confront during  | (60%<br>Depth)    | Depth       | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)      |                                |                  |                   |             |              |                      |                         |  |
| Blonk               | 1720                           | 115              | -¥                | a.a. du     |              | in atray             |                         |  |
| #                   | 1600                           | 1.37             | <u></u>           | <u>10</u>   | 1 UM:MC      | In write             |                         |  |
|                     | 1700                           | 1.44             |                   |             |              |                      |                         |  |
|                     | 1720                           | 1.44             |                   | ,           |              |                      |                         |  |
| <u> </u>            | ,                              | ·                | PIL C             |             | 0 (5-1)      | an e cole            | 1 t. I                  | 22.0                                   |
| Ł                   |                                | Add with the     |                   | Jon 6       | en oc        | Min Gu               | Trail 1                 | 170                                    |
|                     | 190:                           | Not chybe        |                   | KG01C       |              |                      |                         |  |
|                     |                                |                  |                   |             |              |                      |                         |  |
|                     |                                |                  |                   |             |              |                      |                         |  |
|                     | ·                              |                  |                   |             |              |                      | · · · · ·               |  |
|                     |                                |                  | ę.,               | - Hourse    |              |                      |                         |  |
|                     |                                |                  |                   |             |              |                      |                         |  |
|                     |                                |                  |                   |             |              |                      |                         | · · · · · · · · · · · · · · · · · · ·  |
|                     |                                |                  |                   |             |              |                      |                         |  |

| Client:   |                                   | CRWD                                    |                            |                     | Site Locatio           | n: <u>C</u> R                   | 29.0                                   |  |
|---|-----------------------------------|---|----------------------------|---------------------|------------------------|---------------------------------|--|--|
| Project No.:                                    |                                   | 0002-75                                 |                            | Sit                 | e Descriptio           | n:                              |  |  |
| Date:   | 4/1                               | 9/06                                    |                            |                     | Weathe                 | er: Sno                         | CSOF,                                  | Breeze                                 |
| Sampler(s):                                     |                                   | WB, JM                                  |                            | Sa                  | amples Take            |                                 | <b>`</b>                               | )                                      |
| Start Time:                                     |                                   | :25                                     |                            |                     | Sample Tim             | e: ((                           | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |  |
| End Time:                                       |                                   |   |                            |                     | ·                      |                                 | <u> </u>                               |  |
| Channel Conditions:                             | P                                 | Quity                                   | _                          | DTW N               | Measuremen             | ı. <u>14.</u>                   | 18                                     |  |
| COC Number:                                     |                                   | , |                            |                     |                        | ·                               | !(_/                                   |  |
|   | , , , , , , , , , , , , , , , , , |   | _                          |                     |                        | Notes                           | : /mzs                                 | - den .                                |
|   |                                   | Field Parameters                        |                            |                     |                        |                                 | duo                                    | - dempo<br>; dosed                     |
| Sample I.D.                                     | Temp. ( <sup>0</sup> C            | ) Cond. (mS/cm)                         | <b>D.O.</b> (mg/           | l) pl               | H (S.U.)               |                                 | 240                                    | <u> </u>                               |
|   | 10.74                             | 946                                     | 11.19                      |                     | 6.74                   |                                 | Mard C                                 | Rail                                   |
|   |                                   |   |                            |                     | <u> </u>               |                                 |  | 1500                                   |
| Stage Ht  |                                   |   | Rated Flow                 | V:                  |                        | Gauged Flov                     | v: 29.1                                | 1.47                                   |
|   |                                   | S                                       | Stream Gau                 | ging Dat            | a                      |                                 |  |  |
|   |                                   | ·····                                   |                            |                     |                        |                                 |  |  |
| Distance from<br>Initial Point (ft)             | Width (ft)                        | Depth (ft)                              | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | locity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|   | Width (ft)                        | Depth (ft)                              | (60%                       | 20%                 | 80%                    | Velocity                        | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                              | Width (ft)                        | Depth (ft)                              | (60%                       | 20%                 | 80%                    | Velocity                        | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)                              | Width (ft)                        | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)            | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%                    | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |
| Initial Point (ft)<br>0, (left side)<br>-Set-IE | 500 -                             | to sam                                  | (60%<br>Depth)             | 20%<br>Depth        | 80%<br>Depth           | Velocity<br>(ft/sec)            | Area (ft <sup>2</sup> )                | - 1                                    |

| lient:              |                                       | CRWD             |                     | 5          | Site Location | 1:[ <i>E</i>         | 27.6                    |                           |
|---------------------|---------------------------------------|------------------|---------------------|------------|---------------|----------------------|-------------------------|---------------------------|
| Project No.:        |                                       | 0002-75          |                     | Site       | e Descriptior | ו:                   |                         |                           |
| Date:               | 0                                     | P(400            |                     |            | Weather       | r: <u> </u>          | ~ 550                   | F, Breezy                 |
| Sampler(s):         |                                       | WB, JM           |                     | Sa         | mples Taker   | n: 🥂 🏹               | S No                    | , 7                       |
| Start Time:         | <i>O</i>                              | 955              |                     | S          | Sample Time   | * <u> </u>           | 00                      |                           |
| End Time:           |                                       |                  |                     |            |               |                      |                         |                           |
| Channel Conditions: | F                                     | lown             |                     | DTW N      | leasurement   | : 4,13               |                         |                           |
| COC Number:         |                                       | /                |                     | ·          |               |                      |                         |                           |
|                     |                                       |                  |                     |            |               | Notes                | :                       |                           |
|                     |                                       | Field Parameters |                     |            |               |                      | ·····                   |                           |
| Sample I.D.         | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)    | ) <b>D.O.</b> (mg/l | ) pH       | I (S.U.)      |                      |                         |                           |
|                     | 9.75                                  | 941              | 12,87               | 8.0        | 79            |                      |                         |                           |
|                     | -                                     | ······           |                     |            |               | =                    |                         |                           |
| Stage Ht            | ⊧a<br>•                               |                  | Rated Flow          | /:         |               | Gauged Flov          | v:                      |                           |
|                     |                                       |                  |                     |            |               |                      |                         |                           |
|                     |                                       |                  | Stream Gau          | ging Data  | 1             |                      |                         |                           |
| Distance from       |                                       |                  | Velocity            | Vel<br>20% | ocity<br>80%  | Average              |                         | Discharge                 |
| Initial Point (ft)  | Width (ft)                            | Depth (ft)       | (60%                | -          | 0070          |                      | Area (ft <sup>2</sup> ) | - 1                       |
|                     |                                       |                  | Depth)              | Depth      | Depth         | Velocity             | Alca (IL)               | $(Q, ft^3/sec)$           |
| 0 (left side)       |                                       |                  | Depth)              | Depth      | Depth         | Velocity<br>(ft/sec) | Aica (it )              | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      | · · · · · · · · · · · · · · · · · · · |                  | Depth)              | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |                                       |                  |                     | Depth      | Depth         |                      |                         | (Q, ft <sup>3</sup> /sec) |

| Client:             |                         | CRWD   |                    |           | Site Locatio  | on: Th               | 27.66                   |  |
|---------------------|-------------------------|--|--------------------|-----------|---------------|----------------------|-------------------------|--|
| Project No.:        | <u> </u>                | 0002-75  |                    |           | te Descriptio | on:                  |                         |  |
| Date:               | _04/                    | 46   | <u></u>            |           | Weath         | er: 5_1              | m 550                   | F. Brenzy                              |
| Sampler(s):         | 1                       | VB, JM   |                    | Sa        | amples Take   | en: 🥂                | es) No                  | · ·                                    |
| Start Time:         | 6                       |  | $\overline{1}$     |           |               | le:(                 | $\sim$                  |  |
| End Time:           |                         |  |                    |           |               |                      |                         | a name , produkti , promonik i         |
| Channel Conditions: |                         |  |                    | DTW I     | Measuremer    | it:                  | G. 24                   | /<br>>                                 |
| COC Number:         |                         |  |                    |           |               |                      |                         |  |
| [                   |                         |  |                    |           |               | Notes                | *<br>•                  |  |
| e                   |                         | Field Parameter  | 5                  |           |               |                      |                         | ······································ |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm   | ) <b>D.O.</b> (mg/ | l) pl     | H (S.U.)      |                      | <u> </u>                |  |
|                     | 9,90                    | 1031   | 11,83              | 8.        | 28            |                      | ·                       |  |
|                     |                         |  |                    |           |               |                      |                         |  |
| Stage H             | t:                      |  | Rated Flov         | v:        |               | Gauged Flov          | v:                      |  |
|                     |                         |  |                    |           |               | -                    |                         |  |
|                     |                         |  | Stream Gau         | ging Dat  | a             |                      |                         |  |
| Distance from       |                         |  | Velocity           | Ve<br>20% | locity<br>80% | Average              |                         | Discharge                              |
| Initial Point (ft)  | Width (ft)              | Depth (ft)   | (60%<br>Depth)     | Depth     | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)      |                         | ang menjadi di di seconda di seconda di data di seconda di seconda di seconda di seconda di seconda di seconda d |                    |           |               |                      |                         |  |
|                     |                         |  |                    |           |               |                      |                         |  |
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|                     |                         |  |                    |           |               |                      |                         |  |
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|                     | ••••••                  |  |                    |           |               |                      |                         |  |
|                     |                         |  |                    |           |               |                      |                         |  |
|                     |                         |  |                    |           |               |                      |                         |  |
|                     |                         | · · · · · · · · · · · · · · · · · · ·  |                    |           |               |                      |                         |  |
|                     |                         |  | . ¥.               | . mj.;,e, |               |                      |                         |  |
|                     |                         |  |                    | <u> </u>  |               |                      |                         |  |
| ····                |                         |  |                    |           |               |                      |                         |  |
| ·····               |                         |  |                    |           |               |                      |                         |  |

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| Client:                               |               | CRWD             |                            |                     | Site Locatior         | 1: <u>7</u> 7       | 7.3                     |  |
|---------------------------------------|---------------|------------------|----------------------------|---------------------|-----------------------|---------------------|-------------------------|--|
| Project No.:                          |               | 0002-75          |                            | Site                | e Description         | ):                  | <b>,</b>                |  |
| Date:                                 | 041           | 1906             |                            |                     | Weather               | - G-ma              | GEVF 1                  | A-rezv                                 |
| Sampler(s):                           |               | WB, JM           |                            | Sa                  | mples Taken           | -                   | es No                   |  |
| Start Time:                           | 091           | 40               |                            | S                   | Sample Time           | 094                 | 15                      |  |
| End Time:                             |               |                  |                            |                     |                       | ·                   | 1                       |  |
| Channel Conditions:                   | Hou           | <u>24</u>        |                            | DTW N               | Aeasurement           | :6.                 | 02                      |  |
| COC Number:                           |               |                  |                            |                     |                       |                     |                         |  |
| · · · · · · · · · · · · · · · · · · · |               |                  | ····                       |                     |                       | Notes               |                         |  |
|                                       |               | Field Parameters |                            |                     |                       |                     |                         |  |
| Sample I.D.                           |               | Cond. (mS/cm     | ) <b>D.O.</b> (mg/l        | ) pł                | I (S.U.)              |                     | ·····                   |  |
|                                       | <i>c6</i> .71 | 1019             | 9.87                       | 7.                  | 67                    |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
| Stage H                               | t:            | P-day/           | Rated Flow                 | /;                  |                       | Gauged Flov         | v:                      |  |
|                                       |               |                  | <b>a</b> . <b>a</b>        |                     |                       |                     |                         |  |
|                                       | T T           |                  | Stream Gau                 |                     |                       |                     |                         |  |
| Distance from<br>Initial Point (ft)   | Width (ft)    | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                        |               |                  |                            |                     |                       | (ft/sec)            |                         |  |
| o, (left side)                        |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     | 2                       |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       |               |                  |                            |                     |                       |                     |                         |  |
|                                       | ·             |                  |                            |                     |                       |                     |                         |  |

| Elient:   |                         | CRWD             |                   | 5            | Site Locatio | n: <u>CA</u> | 27.2                    |  |
|---|-------------------------|------------------|-------------------|--------------|--------------|--------------|-------------------------|--|
| Project No.:  |                         | 0002-75          |                   | Site         | Description  |              |                         |  |
| Date:   | 0Y                      | 1906             |                   |              | Weathe       | r: <u> </u>  | INV 50                  | F Breeze                               |
| Sampler(s):   |                         | WB, JM           |                   | Sa           | mples Taker  |              |                         | • /                                    |
| Start Time:   | C                       | 0900             |                   | S            | ample Time   | e:           | 0910                    |  |
| End Time:   | <u> </u>                |                  | _                 |              |              |              |                         |  |
| Channel Conditions:   | £                       | Quing            |                   | DTW N        | leasuremen   | t: <u>3</u>  | .97                     |  |
| COC Number:   |                         |                  | _                 |              |              |              | •                       |  |
| [ <del></del>   |                         | medica da        |                   |              |              | Notes        | : Dempe                 | & Dyy                                  |
|   |                         | Field Parameters | 11                |              |              |              | Q 9                     | 10                                     |
| Sample I.D.   | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) pH         | I (S.U.)     |              | 1/2 0                   | ups of dire                            |
|   | 1.50                    | 934              | 6.43              | 7,0          | £0           |              | 120                     | 2                                      |
|   |                         |                  | ·                 |              |              |              |                         |  |
| Stage Ht  | •                       |                  | Rated Flow        | /:           |              | Gauged Flow  | 1: <u>- 79. 10</u>      | 23                                     |
|   |                         | S                | Stream Gau        | ging Data    | I            |              |                         |  |
| Distance from   |                         |                  | Velocity          |              | ocity        | Average      |                         | Discharge                              |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%)<br>Depth)   | 20%<br>Depth | 80%<br>Depth | Velocity     | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                        |
| 0, (left side)  |                         | 7                |                   | 1            |              | (ft/sec)     |                         |  |
| ×   | Rese-                   | + TSC            | na                | 13:0         | 00 -         | to Sam       | ple a                   | · +-                                   |
|   |                         |                  | tervals           |              |              | 10 sim       |                         |  |
|   |                         | 111101 - 111     | 2 1913            |              |              |              |                         |  |
|   | Tome                    | (contradirent    |                   | Fin          | Concepted    | 210          |                         |  |
|   | 1305                    | 1.19             |                   | 1735         | 10-10-30-20F |              |                         |  |
|   |                         | 0.5406           |                   | 19505        | 0.519        |              |                         |  |
|   | 1405                    | 0.551            |                   | (00)         | <u> </u>     |              |                         | ······································ |
|   | 1435                    | 0.546            |                   |              |              |              |                         |  |
|   |                         | 0.524            |                   |              |              |              |                         |  |
|   | 1535                    |                  |                   |              |              |              | · · · · ·               |  |
|   |                         | 0.525            |                   |              |              |              |                         |  |
|   | (035                    |                  |                   |              |              |              |                         |  |
|   |                         | 0.514            |                   |              |              |              |                         |  |
| T:0185045292/Field Forms/Gauging Form   |                         |                  | Q. 163            | б.           |              |              | 10 0.0                  | x.L.b.                                 |
| The second se | / * `                   |                  | ~ ~ ~             | 40           | Caller       | of I your    |                         | Fiarch 17, 20021 Y                     |

| Client:                                |                        | CRWD                                  |                            | 5                    | Site Location                          | n:                              | CA 25                   | 10                                     |             |
|--|------------------------|---------------------------------------|----------------------------|----------------------|--|---------------------------------|-------------------------|--|-------------|
| Project No.:                           | <del></del>            | 0002-75                               |                            | Site                 | Description                            | 1:                              |                         | Ange                                   |             |
| Date:                                  | ()                     | 41406                                 | · ·                        |                      | Weathe                                 | r: <b>5-nr</b>                  | N, 50                   | IF hight                               | Broom       |
| Sampler(s):                            |                        | WB, JM                                |                            | Sa                   | nples Taker                            | 4                               | -1                      | No                                     |             |
| Start Time:                            | C                      | 9600                                  |                            | S                    | ample Time                             | , Õ                             | 605                     |  | <u>1887</u> |
| End Time:                              | •                      |                                       |                            |                      |  |                                 |                         |  |             |
| Channel Conditions:                    |                        | 0 wing                                | _                          | DTW M                | leasurement                            | : 22,                           | 51                      |  | _           |
| COC Number:                            |                        | · · · · · · · · · · · · · · · · · · · |                            |                      |  |                                 |                         |  |             |
|  |                        |                                       |                            |                      |  | Notes                           | :                       |  |             |
|  |                        | Field Parameters                      |                            |                      |  |                                 |                         | , <b></b> , <u>.</u>                   |             |
| Sample I.D.                            | Temp. ( <sup>0</sup> C | ) Cond. (mS/cm)                       | <b>D.O.</b> (mg/           | 1) <b>p</b> H        | (S.U.)                                 |                                 |                         |  | <br>Maria   |
|  | 11.70                  | 679                                   | 7.75                       | 7.                   | 54                                     |                                 |                         |  |             |
| Stage H                                | t:                     |                                       | Rated Flow                 | v:                   | ······································ | Gauged Flov                     | v: <u>3</u> 6           | 2.624                                  | 7           |
|  |                        | S                                     | Stream Gau                 | iging Data           | l                                      |                                 |                         |  |             |
| Distance from<br>Initial Point (ft)    | Width (ft)             | Depth (ft)                            | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth                  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |             |
| 0, (left side)                         |                        |                                       |                            |                      |  | XXX: G                          | 96 meter                | on inde                                | un 11       |
|  |                        |                                       |                            |                      |  | Sett                            | .1                      | Josh " An                              |             |
| -Set I                                 | SCO to                 | Sample                                | evon                       | 20 m                 | innte                                  | 1                               | gunter                  | 7                                      |             |
|  | Starti                 | 10                                    | 50                         | <br>                 |  | •                               |                         |  |             |
|  | Builder                |                                       | 1,52                       |                      | Bayla                                  | oral 124                        | 5 0.4                   | 93 V#X                                 |             |
|  | Builing                | and 11:10                             | 1.35                       |                      |  |                                 |                         |  |             |
| Leset                                  | - 7-                   | CO to                                 | Gim                        | ple                  | over                                   | 130                             | uninu+                  | 25                                     |             |
|  | Start                  | ing a                                 | 13:00                      | 3                    |  |                                 |                         |  |             |
| Time                                   |                        | Conembation                           |                            | Ime                  |  | Ence                            | Hitor                   | Tome Compa                             | brailon     |
| 2/10                                   | · ·                    | 5.64                                  | -                          | 1300                 |  | 1.44                            |                         | 1860 1.98                              | 1           |
| 1430                                   |                        | 78.3                                  |                            | ivao                 |  | 77.5                            |                         |  |             |
| 530                                    |                        | 12.3                                  | <b>V</b> -                 | (500                 | THE I                                  | 20.5                            |                         |  |             |
| 1640                                   |                        | (. 70                                 |                            | 1600                 |  | 6.65                            |                         |  |             |
| 1770                                   |                        | 2.34                                  |                            | 1700                 |  | 3,04                            |                         | ······································ |             |
| T20185/04/292/Field Forms/Gauging Form | $\rightarrow$ (        | PSQ1 19(0                             | 40 GH                      | int Sig              | nlig 6                                 | ) (440)                         | , cullecto              | S Germhely                             | ۔<br>۱      |

| Client:                               |                         | RWD              |                    | Si         | ite Location | Sout                 | hcle                    | ar LaKe                                  |
|---------------------------------------|-------------------------|------------------|--------------------|------------|--------------|----------------------|-------------------------|--|
| Project No.:                          |                         |                  | _                  |            |              |                      |                         |  |
| Date:                                 | _5/1                    | 7                | _                  |            |              | :                    |                         |  |
| Sampler(s):                           | - /-                    | •                |                    | San        |              | : Yes                |                         |  |
| Start Time:                           |                         |                  |                    |            |              |                      |                         |  |
| End Time:                             |                         |                  |                    |            |              |                      |                         |  |
| Channel Conditions:                   |                         |                  | _                  | DTW M      | easurement   |                      |                         |  |
| COC Number:                           |                         |                  | _                  |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              | Notes                | :                       |  |
|                                       | ]                       | Field Parameters |                    |            |              |                      |                         |  |
| Sample 1.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | ) pH       | (S.U.)       |                      | BM                      | 3*9                                      |
|                                       | 14.5                    | 460              | 12.8               | 5          | 10           |                      |                         |  |
| t,                                    |                         |                  |                    |            | <u> </u>     | -                    |                         |  |
| Stage H                               | t;                      |                  | Rated Flow         |            |              | Gauged Flow          | v: 1,44                 |  |
|                                       |                         |                  |                    |            |              |                      | ł                       |  |
|                                       |                         | <u> </u>         | Stream Gau         | ging Data  | 1            |                      |                         |  |
| Distance from                         |                         |                  | Velocity           | Vel<br>20% | ocity<br>80% | Average              | 2                       | Discharge                                |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)       | (60%)<br>Depth)    | Depth      | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)                |
| 0 (laft side)                         | 3'                      | 1'1"             | 12                 |            |              | 30"                  |                         |  |
| 0, (left side) )<br>2                 |                         | <u> </u>         | 19                 |            |              |                      |                         |  |
| 3                                     |                         | _                | 14                 |            |              |                      |                         |  |
|                                       |                         | 1.1              |                    |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              |                      |                         |  |
| · · · · · · · · · · · · · · · · · · · |                         |                  |                    |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              |                      |                         |  |
|                                       |                         | <u> </u>         |                    |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              |                      |                         |  |
|                                       |                         |                  |                    |            |              |                      |                         |  |
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| 1                                     |                         |                  |                    |            |              |                      |                         | , <u>, , , , , , , , , , , , , , , ,</u> |
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| Client:                             |                         | CRWD             | して                         | -'S <sub>Sit</sub>   | e Location:           | Nort                            | ACLO                    | ur Liake                               |
|-------------------------------------|-------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| Project No.:                        | <b>4</b>                |                  | - H.                       | Site D               | Description:          | V                               | Notch                   |  |
| Date:                               |                         |                  | _                          |                      |                       |                                 |                         |  |
| Sampler(s):                         |                         |                  |                            | Sam                  | ples Taken:           | Yes                             | ✓ No                    | · · · · · · · · · · · · · · · · · · ·  |
| Start Time:                         |                         |                  | -                          | Sa                   | mple Time:            |                                 |                         |  |
| End Time:                           |                         |                  | -                          |                      |                       |                                 |                         |  |
| Channel Conditions:                 |                         |                  | _                          | DTW Me               | easurement:           | • • • • · · ·                   |                         |  |
| COC Number:                         |                         |                  | _                          |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       | Notes:                          |                         |  |
|                                     | T                       | Field Parameters |                            | <u></u>              |                       |                                 | .:                      | _ ,, _ , »• = »»»                      |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | D.O. (mg/l)                | pH                   | (S.U.)                |                                 | •                       |  |
|                                     | 14.2                    | 440              | 4.1                        | 46                   | 0                     |                                 |                         | <del></del>                            |
| Stage H                             | t:                      |                  | Rated Flow                 | :                    |                       | Gauged Flow                     | 2.87                    | 'ds                                    |
|                                     |                         | S                | Stream Gau                 | ging Data            |                       |                                 |                         |  |
| Distance f om<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 3                       | 1.60             |                            | 21                   |                       | 30°6                            | - TA                    |  |
| 2                                   |                         |                  |                            | 27                   |                       |                                 |                         |  |
| 3                                   | *                       |                  |                            | 22                   |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 | :<br>                   |  |
|                                     |                         |                  |                            | v                    |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |

Gauging Form

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March 27, 2002

| Client:                             | 0                       | CRWD             | _                          | Site                 | e Location:          | CRI                             | 0.5                     |  |  |
|-------------------------------------|-------------------------|------------------|----------------------------|----------------------|----------------------|---------------------------------|-------------------------|--|--|
| Project No.:                        |                         |                  |                            |                      |                      |                                 |                         |  |  |
| Date:                               | 5/17/                   | <u>ن</u> د       | _                          |                      |                      |                                 |                         |  |  |
| Sampler(s):                         | <b>1</b>                |                  |                            | Samp                 |                      | Yes 🖍 No                        |                         |  |  |
| Start Time:                         |                         |                  | -                          |                      |                      | 900                             |                         |  |  |
| End Time:                           | <u> </u>                | ·                | -                          |                      |                      |                                 |                         |  |  |
| Channel Conditions:                 |                         |                  |                            | DTW Me               | asurement:           |                                 |                         |  |  |
| COC Number:                         |                         |                  |                            |                      |                      |                                 |                         |  |  |
|                                     |                         |                  | _                          |                      |                      | Notes:                          | S.G. 1                  | 2.10                                   |  |
|                                     |                         | Field Parameters |                            |                      |                      |                                 |                         |  |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l)         | pH (                 | (S.U.)               |                                 |                         |  |  |
|                                     | 15.5                    | 420              | 14.7                       | 54                   | -0                   |                                 |                         |  |  |
| Stage H                             | t:                      |                  | Rated Flow                 | :                    |                      | Gauged Flow                     | . 15.6                  | $\frac{1}{2}O$                         |  |
|                                     |                         | S                | Stream Gau                 | ging Data            |                      |                                 |                         |  |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | city<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |
| 0, (left side) 🖉                    |                         | 1                | 3                          | 3058                 | •                    |                                 |                         |  |  |
|                                     | -                       | 2                | <i>g</i>                   |                      |                      |                                 |                         |  |  |
| 2                                   |                         | 3.Z              | 6                          |                      |                      |                                 |                         |  |  |
| 3                                   |                         | 35               | 6                          |                      |                      |                                 |                         |  |  |
| Ц                                   | :                       | 35<br>4.2        | 12                         |                      |                      |                                 |                         |  |  |
| 5                                   |                         | 5.1<br>5.2       | 13.<br>18.<br>20           |                      |                      |                                 |                         |  |  |
| 6                                   |                         | 5.2              | 20                         |                      |                      |                                 |                         |  |  |
| 7                                   |                         | 5.0              | 21                         |                      |                      |                                 |                         |  |  |
| C                                   |                         | 30               | 14                         |                      |                      |                                 |                         |  |  |
| 9                                   |                         | 215              | 3                          |                      |                      |                                 |                         |  |  |
| 10                                  |                         | 1.0              | 1                          |                      |                      |                                 |                         | · · ·                                  |  |
| J                                   |                         |                  | ş2                         |                      |                      |                                 |                         |  |  |
|                                     |                         |                  |                            |                      |                      |                                 |                         |  |  |
|                                     |                         |                  | 1                          |                      |                      |                                 |                         |  |  |

| Client:             | CRWD Site Location                    |                  |                    | te Location: | WR           | 02                                     |                         |  |
|---------------------|---------------------------------------|------------------|--------------------|--------------|--------------|--|-------------------------|--|
| Project No.:        | •                                     | :                | _                  |              |              |  |                         | 2- · · · · · · · · · · · · · · · · · · · |
| Date:               |                                       | 9.6              |                    |              |              |  |                         | ····                                     |
| Sampler(s):         |                                       |                  | _                  | Sam          |              | Var No                                 |                         |  |
| Start Time:         |                                       |                  | Sample Time:       |              |              |  |                         | · · · · · · · · · · · · · · · · · · ·    |
| End Time:           |                                       |                  | _                  |              |              |  |                         |  |
| Channel Conditions: |                                       |                  | _                  | DTW M        | easurement:  | 1                                      | 2.6                     |  |
| COC Number:         |                                       |                  | _                  |              |              |  | Υ.                      |  |
|                     |                                       |                  |                    |              |              | Notes:                                 |                         |  |
|                     |                                       | Field Parameters |                    |              |              |  |                         |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | pН           | (S.U.)       |  | <u>.</u>                |  |
| 2                   | 13.2                                  | 850              | 12.9               | 6            | 10           |  |                         |  |
|                     |                                       |                  |                    |              |              |  |                         |  |
| Stage H             | t:                                    |                  | Rated Flow         | :            |              | Gauged Flow                            |                         |  |
|                     |                                       |                  |                    |              |              |  | 8.13                    | ofs                                      |
|                     |                                       |                  | Stream Gau         |              |              | 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | <u> </u>                |  |
| Distance from       | MC LE (B)                             | Durath (A)       | Velocity<br>(60%   | Velo<br>20%  | ocity<br>80% | Average                                | Area (ft <sup>2</sup> ) | Discharge                                |
| Initial Point (ft)  | Width (ft)                            | Depth (ft)       | Depth)             | Depth        | Depth        | Velocity<br>(ft/sec)                   | Alea (It.)              | (Q, ft <sup>3</sup> /sec)                |
| 0, (left side) 🌔    | 10                                    | 1.380'1'4        |                    | 5            | 107-         | 30"                                    |                         |  |
| 2                   |                                       | 1.33             | 23                 | 20           | [            |  |                         |  |
| 4                   |                                       | 1.33             | ~                  | 24           |              |  |                         |  |
| 6                   | · · · · · · · · · · · · · · · · · · · | 1.33             |                    | 18           |              |  |                         |  |
| R                   |                                       | 1.33             |                    | 19           |              |  |                         |  |
| 10                  |                                       | 1.33             |                    | 18           |              |  |                         |  |
|                     |                                       |                  |                    | 7            |              |  |                         |  |
|                     |                                       |                  |                    |              |              |  |                         |  |
|                     |                                       |                  |                    |              |              |  |                         |  |
|                     | _                                     |                  |                    |              |              |  |                         |  |
|                     |                                       |                  |                    |              |              |  | 1                       |  |
| .l                  | -                                     |                  | - <u>-</u>         |              |              |  |                         |  |
|                     | ,,                                    |                  | -                  |              |              |  |                         |  |
| , .                 |                                       |                  |                    | -            |              |  |                         |  |

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| Client:                              | CRWD Site Location                    |                               |                    | te Location: | CRE          | 35.3                 | 0                       |                           |
|--------------------------------------|---------------------------------------|-------------------------------|--------------------|--------------|--------------|----------------------|-------------------------|---------------------------|
| Project No.:                         | 00                                    | 02-75                         | _                  | Site         | Description: | Clear                | ~ L <                   | Outlet                    |
| Date:                                | <u> </u>                              | 1/06                          | _                  |              | Weather:     |                      |                         |                           |
| Sampler(s):                          | /                                     | ۷<br>WB                       | _                  | Sam          | ples Taken:  | Yes                  | ) <u>No</u>             |                           |
| Start Time:                          | A 14'                                 | 20                            | _                  | Sa           | umple Time:  |                      | 25                      |                           |
| End Time:                            |                                       |                               | _                  |              |              |                      |                         |                           |
| Channel Conditions:                  | Flow                                  | ing                           | -                  | DTW M        | easurement:  | 5.3                  | 5                       |                           |
| COC Number:                          |                                       | $\bigcirc$                    |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              | Notes:               |                         |                           |
|                                      | F                                     | Field Parameters              |                    |              |              |                      |                         |                           |
| Sample I.D.                          | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)                 | <b>D.O.</b> (mg/l) | - pH         | (S.U.)       |                      |                         |                           |
|                                      | 34.22                                 | 599                           | 11,73              | 8.8          | 2            |                      |                         |                           |
|                                      |                                       |                               |                    |              |              | -                    | 0 -                     | MA                        |
| Stage H                              | t:                                    |                               | Rated Flow         |              |              | Gauged Flow          | <u>. 5, 7</u>           | <u>18</u>                 |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       | £                             | Stream Gau         | ging Data    | 1            |                      |                         |                           |
| Distance from                        |                                       |                               | Velocity           | Vel<br>20%   | ocity<br>80% | Average              |                         | Discharge                 |
| Initial Point (ft)                   | Width (ft)                            | Depth (ft)                    | (60%<br>Depth)     | Depth        | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)                       |                                       |                               |                    |              |              |                      |                         |                           |
| 0, (left side)                       |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       | ·······                       |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       | ана сталица и сталица и       |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              |                      |                         |                           |
|                                      |                                       |                               |                    |              |              | ·<br>                |                         |                           |
|                                      | · · · · · · · · · · · · · · · · · · · |                               |                    |              |              |                      |                         |                           |
|                                      |                                       | <u></u>                       | \$r>               | <u></u>      |              | -                    |                         |                           |
|                                      |                                       | m <sub>e y</sub> - territoria |                    |              |              |                      | -                       |                           |
|                                      |                                       |                               | 1                  |              |              |                      |                         |                           |
|                                      |                                       | , scholer                     |                    |              |              | <u> </u>             |                         |                           |
| T/0185904/292-Field Forms/Gauging Fi | arm tr                                | + 10/10/06                    |                    |              |              |                      |                         | March 27, 2002            |

| Client:                             | (                       | CRWD               | -                          | Sit                  | e Location:  | CR2                                   | 3.6                     |  | -       |
|-------------------------------------|-------------------------|--------------------|----------------------------|----------------------|--------------|---------------------------------------|-------------------------|--|---------|
| Project No.:                        | 0                       | 002-75             |                            | Site I               | Description: |                                       |                         |  | _       |
| Date:                               | 513                     | 0/06               | -                          |                      | Weather:     | 80°                                   |                         |  | -       |
| Sampler(s):                         | . 91                    | WB                 | _                          | Sam                  | ples Taken:  | (r Yes                                | ) No                    | ······                                 | _       |
| Start Time:                         | 14                      | 90                 | _                          | Sa                   | mple Time:   | 140                                   | 5                       |  | _       |
| End Time:                           | AHNE                    | AB 1420            | -                          |                      |              |                                       |                         |  | <u></u> |
| Channel Conditions:                 | flou                    | Ding               |                            | DTW Mo               | easurement:  | _5.9                                  | 4                       |  | _       |
| COC Number:                         |                         | 0                  | -                          |                      |              |                                       |                         |  |         |
|                                     |                         |                    |                            |                      |              | Notes:                                |                         |  | -       |
|                                     | r                       | Field Parameters   | 1                          | 1                    |              |                                       |                         |  | -       |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) |                    |                            |                      | (S.U.)       |                                       |                         |  | -       |
|                                     | 24.30                   | 614                | 14.08                      | 8.6                  | 39           |                                       |                         |  | -       |
| Stage H                             | t:                      |                    | Rated Flow                 | :                    |              | Gauged Flow                           | r: <u>S00</u>           | 0                                      |         |
|                                     |                         | S                  | Stream Gau                 | ging Data            |              |                                       |                         |  | -       |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)         | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | 80% Depth    | Average<br>Velocity<br>(ft/sec)       | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |         |
| 0, (left side)                      | 0.5                     | 0.60               | 1.41                       |                      |              | · · · · · · · · · · · · · · · · · · · | 1300                    | .423                                   | Ì       |
| <u> </u>                            |                         | $\partial_i(\rho)$ | 1.50                       |                      |              | <u> </u>                              | 160                     | NBLAG:                                 | WO      |
| 2                                   | 1                       | 0,60               | 1.17                       |                      |              |                                       | .60                     | AYCO,                                  | 700     |
| 3                                   | 2<br>2                  | 1.50               | 0.77                       |                      |              | -, ,                                  | ,50                     | ASON ,                                 | 385     |
| 4                                   | 1                       | (2), 4(0)          | 0.82                       |                      |              |                                       | .46                     | ANA,                                   | 372     |
| 5                                   | •                       | 0.26               | 0.82                       |                      |              |                                       | .70                     | .213                                   |         |
| 6                                   | 1                       | 0,12               | DOH                        |                      |              |                                       | .12                     | .004                                   |         |
| av                                  |                         | V                  | T.                         |                      |              |                                       |                         |  |         |
| \$10                                | \$3,5                   | Õ                  | 0                          |                      |              | 0                                     | 0                       | 0                                      |         |
|                                     |                         |                    |                            |                      |              |                                       |                         |  |         |
|                                     | *                       |                    |                            |                      |              |                                       | -                       |  | -       |
| <br>                                | -                       |                    | · · · · ·                  |                      |              |                                       |                         |  |         |
|                                     |                         |                    |                            |                      |              |                                       |                         |  |         |
|                                     |                         |                    |                            |                      |              |                                       |                         |  |         |
| Tr018504\2924Field Forms/Gauging Fi | erm Er                  | 10/10/06           |                            |                      |              |                                       |                         | March 27, 2002                         |         |

|                                      |                  |                                       |              |                |               |             | $C \supseteq$                         | $\mathcal{X}$   |  |
|--------------------------------------|------------------|---------------------------------------|--------------|----------------|---------------|-------------|---------------------------------------|-----------------|--|
| Client:                              | C                | RWD                                   | _            | S              | ite Location: | T           | $\bigcup$                             | 50, X           |  |
| Project No.:                         | ·····            | 002-75                                | -            | Site           | Description:  |             |                                       |                 |  |
| Date:                                | <u> </u>         | 0/06                                  | _            |                | Weather:      |             |                                       |                 |  |
| Sampler(s):                          |                  | WB                                    | _            | Samples Taken: |               |             | Yes No                                |                 |  |
| Start Time:                          | 14:4             | 5                                     | _            | S              | ample Time:   | Ţ.          | 4:50                                  |                 |  |
| End Time:                            |                  |                                       |              |                |               |             |                                       |                 |  |
| Channel Conditions:                  | Flow             | ing                                   | _            | DTW M          | leasurement:  | 4.04        | †                                     |                 |  |
| COC Number:                          |                  | 0                                     | _            |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               | Notes:      |                                       |                 |  |
|                                      |                  | Field Parameters                      |              |                |               |             |                                       |                 |  |
| Sample I.D.                          | 1                | Cond. (mS/cm)                         |              | ) pH           | l (S.U.)      |             | +                                     |                 |  |
|                                      | 20:37            | 1028                                  | 11.12        | 8.             |               |             | ₩••                                   |                 |  |
|                                      | <u>1-0-0/1</u>   |                                       |              |                | <u></u> _     | <u>u</u>    |                                       |                 |  |
| Stage H                              | t:               |                                       | Rated Flow   | <i>,</i> •     |               | Gauged Flow | 2.75                                  | 57              |  |
| Stuge II                             | •• <u>•</u> •••• |                                       | reactar room | *              |               | Guabou 1007 |                                       |                 |  |
|                                      |                  | ;                                     | Stream Gau   | ging Data      | a             |             |                                       |                 |  |
| Distance from                        |                  |                                       | Velocity     |                | ocity         | Average     |                                       | Discharge       |  |
| Initial Point (ft)                   | Width (ft)       | Depth (ft)                            | (60%         | 20%<br>Depth   | 80%<br>Depth  | Velocity    | Area (ft <sup>2</sup> )               | $(Q, ft^3/sec)$ |  |
|                                      |                  | ·····                                 | Depth)       |                |               | (ft/sec)    | · · · · · · · · · · · · · · · · · · · |                 |  |
| 0, (left side)                       |                  |                                       |              |                |               | ·····       |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      | · .              |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      | 2<br>.#          |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  |                                       | -            |                |               |             |                                       |                 |  |
| I                                    |                  |                                       | ¥-           | 1              |               |             | -                                     |                 |  |
|                                      |                  |                                       |              |                |               |             |                                       |                 |  |
|                                      |                  | • • • • • • • • • • • • • • • • • • • |              |                |               |             |                                       |                 |  |
| L                                    | Ent              | WP                                    | 1            | 1              | <u> </u>      | <u>I</u>    | <u></u>                               | s               |  |
| T:\0185\04\292\Field Forms\Gauging F | m Ent            | ioli ciror                            | 0 104        |                |               |             |                                       | March 27, 2002  |  |

| Field | Form: | 2006 | Stream | Sampling |
|-------|-------|------|--------|----------|
|-------|-------|------|--------|----------|

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: |            |            |                            |                      |                       |                                 |                         |  |   |
|---|------------|------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|---|
| Sample I.D.   | Temp. (°C) | 964        | 20,16                      | Ø,                   | (s.u.)<br>63          | Notes:                          |                         | 72                                     |   |
| Stage H   | L:         |            | Rated Flow                 |                      |                       | Gauged Flow                     | /: <u>0+11</u>          | <u>o</u>                               |   |
| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |   |
| 0, (left side)  |            |            |                            |                      |                       |                                 |                         |  |   |
|   |            |            |                            |                      |                       |                                 |                         |  |   |
|   |            |            |                            |                      |                       |                                 |                         |  |   |
| T:018504/292/Field Forms Gauging Fo   | ,<br>Ev    | 10/10/0    | lo                         |                      |                       | <u>1</u>                        | <u>I</u>                | March 27, 2002                         | 1 |

| Project No.: $0002-75$ Site Description:Date: $5/30/06$ Weather: $BO^2_1 Sunny$ Sampler(s):WBSamples Taken:YesStart Time: $13.20$ Sample Time: $13.25$ End Time: $13.45$ DTW Measurement: $13.98$   |                     |                         | Field For        | m: 2006             | Stream    | Sampli       | ng<br>FD     | )                       |                                       |   |  |
|---|---------------------|-------------------------|------------------|---------------------|-----------|--------------|--------------|-------------------------|---------------------------------------|---|--|
| Date: $5/20/06$ Weather: $90^{\circ}$ Surplet Start Hy<br>Sampler(5): WB Samples Taker: $90^{\circ}$ Sample Time: $13^{\circ}25$<br>Sample Time: $13^{\circ}20$ Sample Time: $13^{\circ}25$<br>End Time: $13^{\circ}45$ DTW Measurement: $13^{\circ}98$<br>Notes: $-Duplicat w$<br>Taker<br>Sample I.D. Temp. (°C) Cond. (mS/m) D.O. (mg/t) pH (S.U.)<br>$a_1.449$ SO. $10.60$ B. 44<br>Stage Ht: Rated Flow: Gauged Flow: $8.356$<br>Stream Gauging Data<br>Distance from<br>Initial Point (ft) Depth (ft) Velocity 20% Average<br>Velocity Area (ft <sup>2</sup> ) Discharge<br>(Q, ft <sup>2</sup> /sec) (Q, ft <sup>2</sup> /sec)<br>0, (left side) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | Client:             | C                       | RWD              |                     | S         | ite Location | : CR         | 31,8                    | )                                     |   |  |
| Date: $5/20/06$ Weather: $90^{\circ}$ Surplet Start Hy<br>Sampler(5): WB Samples Taker: $90^{\circ}$ Sample Time: $13^{\circ}25$<br>Sample Time: $13^{\circ}20$ Sample Time: $13^{\circ}25$<br>End Time: $13^{\circ}45$ DTW Measurement: $13^{\circ}98$<br>Notes: $-Duplicat w$<br>Taker<br>Sample I.D. Temp. (°C) Cond. (mS/m) D.O. (mg/t) pH (S.U.)<br>$a_1.449$ SO. $10.60$ B. 44<br>Stage Ht: Rated Flow: Gauged Flow: $8.356$<br>Stream Gauging Data<br>Distance from<br>Initial Point (ft) Depth (ft) Velocity 20% Average<br>Velocity Area (ft <sup>2</sup> ) Discharge<br>(Q, ft <sup>2</sup> /sec) (Q, ft <sup>2</sup> /sec)<br>0, (left side) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | Project No.:        | 00                      | )02-75           |                     | Site      | Description  | •            |                         |                                       |   |  |
| Sampler(s):         WB         Samples Taken:         (test) No           Start Time:         13:20         Sample Time:         13:25           Channel Conditions:         Plowing.         DTW Measurement:         13:95           COC Number:         DTW Measurement:         13:95           Sample 1.D.         Temp. (*C)         Cond. (mScm)         D.O. (mg/0         pH (s.U.)           Al 49         SOI         100(0)         8.440         Temp. (*C)         Temp. (*C)           Stage Ht:         Rated Flow:         Gauged Flow:         8.3566           Stage Ht:         Rated Flow:         Gauged Flow:         8.7356           Other in the intervence from Initial Point (ft)         Depth (ft)         Depth         20%         8%           O. (left side)         Image:         Image:         Image:         Image:         Image:           Image:         Image:         Image:         Image:         Image:         Image:         Image:           O. (left side)         Image:   | Date:               | 5/BC                    | 0/06             | Weather: BOO, SUNNV |           |              |              |                         |                                       |   |  |
| Start Time: $13.20$ Sample Time: $13.25$ End Time: $13.45$ DTW Measurement: $13.98$ Channel Conditions:       Field Parameters       DTW Measurement: $13.98$ Source Number: $13.49$ DO. (mg/l)       pH (S.U.)         Sample 1.D.       Temp. $f^{c}_{CO}$ Cond. (mS/cm)       pH (S.U.) $31.49$ $30.01$ $100.60$ $8.440$ Stage Ht:       Rated Flow:       Gauged Flow: $9.356$ Stream Gauged Bota         Distance from         Initial Point (R)       Width (R)       Depth (R) $Velocity$ Average<br>Velocity       Area (R <sup>2</sup> )       Discharge<br>(Q, R <sup>3</sup> /sec)         0, (left side)       Image: Image   | Sampler(s):         | / .                     | ,<br>WB          |                     | San       | ples Taken   | : Yes        |                         |                                       |   |  |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $   | Start Time:         | 13:21                   | )                |                     | S         | ample Time   | : 13         | :25                     |                                       |   |  |
| COC Number:         Field Parameters         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U)         A) 1.49       8/O.1       1/O.60       8.40       1/0         Stage H:       Rated Flow:       Gauged Flow:       8.356         Stage H:       Gauged Flow:       9.356         Distance from       Width (ft)       Depth (ft)       Velocity       Average       Area (ft <sup>2</sup> )       Discharge         0, (left side)       Image:       Image: <td>End Time:</td> <td>13:4!</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  | End Time:           | 13:4!                   | 5                |                     |           |              |              |                         |                                       |   |  |
| Notes: -Duplication         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       p.0. (mg/l)       pH (S.U.)         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       p.0. (mg/l)       pH (S.U.)         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       p.0. (mg/l)       pH (S.U.)         Stage H:       Gauged Flow:       S.356         Stream Gauging Data         Distance from       Width (ft)       Depth       Opeph       Area (ft <sup>2</sup> )       Discharge         O. (left side)       Image: Stream Gauging Data         O. (left side)       Image: Stream Gauging Data         O. (left side)       Image: Stream Gauging Data         Image:   | Channel Conditions: | Flowi                   | N/               |                     | DTW M     | easurement   | :12,0        | 78                      |                                       |   |  |
| Sample I.D.         Temp. (°C)         Cond. (mS/cm)         D.O. (mg/l)         pH (S.U.)           A) 49         SO         IOLGO         8.440             Stage H:         Rated Flow:         Gauged Flow:         8.356   Distance from Initial Point (ft)     Width (ft)         Depth (ft)         Velocity<br>(60%         Velocity<br>Depth         Average<br>Velocity<br>(ft/sec)         Average<br>(Q, ft^3/sec)         Discharge<br>(Q, ft^3/sec)           0, (left side)         I <td>COC Number:</td> <td></td> <td>)</td> <td></td> <td></td> <td></td> <td>, <u> </u>,</td> <td></td> <td></td> <td></td>   | COC Number:         |                         | )                |                     |           |              | , <u> </u> , |                         |                                       |   |  |
| Sample I.D.         Temp. (°C)         Cond. (mS/cm)         D.O. (mg/l)         pH (S.U.)           A) 49         SO         IOLGO         8.440             Stage H:         Rated Flow:         Gauged Flow:         8.356   Distance from Initial Point (ft)     Width (ft)         Depth (ft)         Velocity<br>(60%         Velocity<br>Depth         Average<br>Velocity<br>(ft/sec)         Average<br>(Q, ft^3/sec)         Discharge<br>(Q, ft^3/sec)           0, (left side)         I <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Notes:</td> <td>-Dup</td> <td>PlicafN</td> <td></td>   |                     |                         |                  |                     |           |              | Notes:       | -Dup                    | PlicafN                               |   |  |
| Al.49       BO       IDLGO       B.445         Stage Ht:       Rated Flow:       Gauged Flow: Q.3.56         Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%)       Average<br>20%       Average<br>80%       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>2</sup> /sec)         0, (left side)  |                     | 1                       | Field Parameters |                     |           |              |              | tak.                    | ln                                    |   |  |
| Stage H:        Rated Flow:        Gauged Flow:       S. 3. 5.6         Distance from       Width (ft)       Depth (ft)       Velocity       Velocity       Average       Area (ft <sup>2</sup> )       Discharge         0, (left side)       Image: Sigest state  | Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l   | ) pH      | (S.U.)       |              |                         | •                                     |   |  |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>Depth       Average<br>Velocity<br>Depth       Average<br>Velocity<br>(ft/sec)       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         0, (left side)       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         1       Image: Stream Gauging Data         0, (left side)       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: St  |                     | 21.49                   | 801              | 1060                | 8,        | 40           |              |                         |                                       |   |  |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>Depth       Average<br>Velocity<br>Depth       Average<br>Velocity<br>(ft/sec)       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         0, (left side)       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         1       Image: Stream Gauging Data         0, (left side)       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: St  |                     | t                       |                  |                     |           |              | _            | _                       |                                       |   |  |
| Bistance from<br>Initial Point (ft)         Velocity<br>(formulation (ft)         Depth (ft)         Velocity<br>(formulation (ft)         Discharge<br>(Q, ft <sup>3</sup> /sec)           0, (left side)         1  | Stage H             | lt:                     |                  | Rated Flow          | /:        |              | Gauged Flow  | <u>8.3</u>              | 56                                    |   |  |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>$0epth$ (ft)Velocity<br>$0epth$ Average<br>$0epth$ Area (ft²)Discharge<br>$(Q, ft³/sec)$ 0, (left side)11212334556677777 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>÷</td> <td></td> <td></td>  |                     |                         |                  |                     |           |              |              | ÷                       |                                       |   |  |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft) $\begin{pmatrix} 66\%\\ Depth \end{pmatrix}$ $20\%\\ Depth \end{pmatrix}$ $80\%\\ Depth \end{pmatrix}$ $Avea (ft^2)$ $Discharge (Q, ft^3/sec)$ 0, (left side) </td <td></td> <td></td> <td>·····</td> <td>Stream Gau</td> <td>ging Data</td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td>  |                     |                         | ·····            | Stream Gau          | ging Data | 1            |              |                         |                                       | 1 |  |
| 0, (left side)  |                     | Width (ft)              | Depth (ft)       | (60%                | 20%       | 80%          | Velocity     | Area (ft <sup>2</sup> ) | - 1                                   |   |  |
| Image: Second               | 0, (left side)      |                         |                  |                     |           |              |              |                         | · · · · · · · · · · · · · · · · · · · |   |  |
| Image: A state of the stat               |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: State of the state                |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: Second               |                     |                         |                  | <u></u>             |           |              |              |                         |                                       |   |  |
| Image: Second               |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: Second               |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: second |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: second |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: second |                     |                         |                  |                     |           |              |              |                         |                                       |   |  |
| Image: second | ······              |                         |                  | -                   |           |              |              |                         |                                       |   |  |
|   | <b></b>             | ~                       |                  |                     |           |              |              |                         |                                       |   |  |
| E = 10/10/06  |                     | ÷.                      |                  |                     |           |              |              |                         |                                       |   |  |
| E v IDlinkh   | <u>.</u>            |                         |                  |                     |           |              |              |                         |                                       |   |  |
|   | S                   |                         | E Inlini         | <br>/NL             |           |              |              | 1                       |                                       |   |  |

| Client:                               | (  | CRWD                  |                   | Si                | ite Location: | CR                   | 29.0                    | )                                      |  |
|---------------------------------------|--|-----------------------|-------------------|-------------------|---------------|----------------------|-------------------------|--|--|
| Project No.:                          | 0  | 002-75                |                   | Site Description: |               |                      |                         |  |  |
| Date:                                 | 5/2  | 0/06                  | -                 |                   | Weather:      |                      |                         |  |  |
| Sampler(s):                           |  | _WB                   | -                 | San               |               | Yes                  | No                      |  |  |
| Start Time:                           | 17:50  | $\tilde{\mathcal{O}}$ | -                 |                   | ample Time:   |                      | 12:55                   | •                                      |  |
| End Time:                             | 13:10  | )                     | -                 |                   | ampie rinie.  |                      |                         | ······································ |  |
| Channel Conditions:                   | Flowin   | 7/2                   |                   | DTW M             | leasurement:  | 14.5                 | 54                      |  |  |
| COC Number:                           | 10-  | 9                     |                   |                   | leasurement.  |                      | /                       |  |  |
| eoe Number.                           |  |                       | -                 |                   |               | Notes:               |                         |  |  |
|                                       |  | Field Parameters      |                   |                   |               |                      | ······                  |  |  |
| Sample I.D.                           |  | Cond. (mS/cm)         |                   | nH                | I (S.U.)      | :                    | <del></del>             |  |  |
|                                       | 17 mp. ( C)                                    | 630                   | 10.2              |                   |               |                      | ·                       |  |  |
| L                                     | <u>() · )</u>                                  | 0 30                  | 10.2              | 0.1               | ~             |                      |                         |  |  |
|                                       |  |                       |                   |                   |               | Gauged Flow          | 11 09                   | $\gamma$                               |  |
| Stage H                               | t:   |                       | Rated Flow        |                   |               | Gauged Flow          | <u>: 11/01</u>          | <u>a</u>                               |  |
|                                       |  | S                     | Stream Gau        | ging Data         | 1             |                      |                         |  |  |
| Distance from                         |  |                       | Velocity Velocity |                   |               | Average              |                         | Discharge                              |  |
| Initial Point (ft)                    | Width (ft)                                     | Depth (ft)            | (60%<br>Depth)    | Depth             | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)              |  |
| 0, (left side)                        |  |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       |                   |                   |               |                      |                         |  |  |
|                                       | ~  |                       |                   |                   |               |                      |                         |  |  |
|                                       | <i>u</i> , , , , , , , , , , , , , , , , , , , |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       |                   |                   |               |                      |                         |  |  |
| · ·                                   |  |                       | <u> </u>          |                   |               |                      |                         |  |  |
|                                       | *  |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       | <del> </del>      |                   |               |                      |                         |  |  |
|                                       |  |                       |                   |                   |               |                      |                         |  |  |
|                                       |  |                       | ţ.                |                   |               |                      |                         |  |  |
| · · · · · · · · · · · · · · · · · · · |  |                       |                   |                   | 1             |                      |                         |  |  |
|                                       |  |                       |                   | <u> </u>          |               | <u></u>              |                         |  |  |
|                                       |  | 6. L 10/10            | 0706              |                   |               |                      |                         | :                                      |  |
| T:018590492924Field Forms/Gauging Fu  | 1311   | En+ 10/11             | \$                |                   |               |                      |                         | March 27, 2002                         |  |

Section ....

| Client:                               |   | CRWD             |                    | Si           | te Location: | CRE                  | <del>7</del> ,2         |                           |              |
|---------------------------------------|---|------------------|--------------------|--------------|--------------|----------------------|-------------------------|---------------------------|--------------|
| Project No.:                          | 0   | 002-75           | _                  | Site         | Description: |                      |                         |                           | _            |
| Date:                                 | 5/30  | 0/06             | _                  |              | Weather:     | ····                 |                         |                           |              |
| Sampler(s):                           |   | WB               |                    | Sam          | ples Taken:  | Yes                  | ) No                    |                           |              |
| Start Time:                           | 12:20   | 0                |                    | Sa           | mple Time:   | 12,                  | 25                      |                           |              |
| End Time:                             | 1   |                  | _                  |              |              | 5.04                 |                         |                           |              |
| Channel Conditions:                   | Very 1.                                       | Stlefla          | _<br>∽/            | DTW M        | easurement:  | 3.61                 | -4p                     | Stflan                    | <del>,</del> |
| COC Number:                           |   |                  | _                  |              |              | 4                    | - 1                     |                           |              |
|                                       |   |                  |                    |              |              | Notes:               | Cur                     | ly leaf                   |              |
|                                       |   | Field Parameters |                    |              |              | ]                    | Pantu                   | · ·                       |              |
| Sample I.D.                           | Temp. ( <sup>0</sup> C)                       | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | pH           | (S.U.)       |                      | thic                    | kin.                      |              |
|                                       | 03.6  | 680              | 8.00               | 8:0          | 14           |                      | Cha                     | nnel                      | _            |
|                                       | <u>, , , , , , , , , , , , , , , , , , , </u> |                  |                    |              |              | -                    |                         |                           |              |
| Stage H                               | [t:   |                  | Rated Flow         | ·            |              | Gauged Flow          | <u>, 12,0</u>           | 158                       |              |
| C C                                   |   |                  |                    |              |              |                      |                         | -                         |              |
|                                       |   |                  | Stream Gau         | ging Data    | l            |                      |                         |                           |              |
| Distance from                         |   |                  | Velocity           |              | ocity        | Average              |                         | Discharge                 |              |
| Initial Point (ft)                    | Width (ft)                                    | Depth (ft)       | (60%)<br>Depth)    | 20%<br>Depth | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |              |
|                                       |   |                  | 4 /                | <u> </u>     |              |                      |                         |                           |              |
| 0, (left side)                        |   | ·                |                    |              |              |                      |                         | 2                         | -            |
|                                       |   |                  |                    | :            |              |                      |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           |              |
| ·                                     |   |                  |                    |              | <u> </u>     |                      |                         |                           | <b>-</b>     |
|                                       |   |                  |                    |              | 1            |                      |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           | -            |
| · · · · · · · · · · · · · · · · · · · |   |                  |                    |              |              | - ···-               |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           |              |
|                                       |   |                  |                    |              |              |                      |                         |                           | _            |
|                                       |   |                  | ×                  |              |              | -                    |                         |                           | -            |
|                                       |   |                  |                    |              |              |                      |                         |                           |              |
|                                       |   |                  |                    |              |              |                      |                         | s.                        |              |
| 1. 0185-04-292:Field Fano- Gauging I  | -<br>97611                                    | Ent NB           | Jala               |              |              |                      |                         | March 27, 2002            |              |
| · · · · · · · · · · · · · · · · · · · |   | 101              | 0 100              |              |              |                      |                         |                           |              |

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time: | 5/2<br>    | 5                       | -<br>-<br>-<br>-           | Site I<br>Sam<br>Sa                   | Weather:<br>ples Taken:<br>imple Time: | Lake /                          | )<br>11: 5:                             |  |
|---|------------|-------------------------|----------------------------|---------------------------------------|--|---------------------------------|---|--|
| Channel Conditions:   | Very L     | He flow                 | -                          | DTW M                                 | easurement:                            | 21.5                            | 3                                       |  |
| COC Number:   |            | <u>, , ,</u>            | -                          |                                       |  | <b></b>                         |   |  |
|   |            | 700<br>Field Parameters | 7 20                       | 8,4                                   | つ                                      | Notes:                          | •                                       |  |
| Sample I.D.   | 1          | Cond. (mS/cm)           | 1                          |                                       | (S.U.)                                 |                                 | <b>.</b>                                |  |
| Sample 1.D.   | 23.32      | 782                     | 7,56                       | 8.0                                   |  |                                 | • |  |
| Stage H   | t:         |                         | Rated Flow                 | /:                                    |  | Gauged Flow                     | .15,8                                   | 362                                    |
| IE  | 11         | S                       | Stream Gau                 |                                       |  | F                               |   |  |
| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft)              | Velocity<br>(60%<br>Depth) | 20%<br>Depth                          | ocity<br>80%<br>Depth                  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                 | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  |            |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            | • •••                   |                            |                                       |  |                                 |   |  |
|   |            |                         |                            | · · · · · · · · · · · · · · · · · · · |  | -                               |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            | <br>                                  |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   | -          | 4µ                      | ę.                         |                                       |  | :<br>:                          |   |  |
|   | ```        |                         |                            |                                       |  |                                 |   |  |
|   |            |                         |                            |                                       |  |                                 |   |  |
|   |            | W/6                     |                            |                                       |  |                                 |   | ŧ.                                     |

| Client:  | C                                     | RWD              | Site Location: CR 19.8                              |              |              |                                     |                         |  |
|--|---------------------------------------|------------------|---|--------------|--------------|-------------------------------------|-------------------------|--|
| Project No.:   | 0002-75                               |                  | Site Description: <u>Clearwater River @ Hwy 5</u> 5 |              |              |                                     |                         |  |
| Date:  | 5/30/06                               |                  | Weather: 75° Sunny                                  |              |              |                                     |                         |  |
| Sampler(s):  | WB                                    |                  | Samples Taken: Yes No                               |              |              |                                     |                         |  |
| Start Time:  | 11:00                                 |                  | Sample Time:  |              |              |                                     |                         |  |
| End Time:  |                                       |                  | -   |              |              |                                     |                         |  |
| Channel Conditions:                                    | Very lit                              | He Flaw          | DTW Measurement: <u>11,70</u>                       |              |              |                                     |                         |  |
| COC Number:  |                                       |                  | -   |              | downsf.      | p middle<br>upotrean<br>ream Notes: | of br,                  | dge                                    |
|  | I                                     | Field Parameters |   |              |              |                                     |                         |  |
| Sample I.D.  | Temp. ( <sup>0</sup> C) Cond. (mS/cm) |                  | <b>D.O.</b> (mg/l) <b>pH</b> (S.U.)                 |              |              |                                     |                         |  |
|  | 22:30                                 | 7.24             | 9.87  | 8.3          | 36           |                                     |                         |  |
| Stage Ht: Rated Flow: Gauged Flow: Stream Gauging Data |                                       |                  |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     | 1                       |  |
| Distance from<br>Initial Point (ft)                    | Width (ft)                            | Depth (ft)       | Velocity<br>(60%<br>Depth)                          | 20%<br>Depth | 80%<br>Depth | Average<br>Velocity<br>(ft/sec)     | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   |                                       |                  |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         |  |
| - · · · · · · · · · · · · · · · · · · ·                |                                       |                  |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         |  |
|  | · ·                                   | ·····            |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         | ·····                                  |
|  |                                       |                  |   |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         | ·                                      |
|  |                                       |                  |   |              |              |                                     | <br>                    |  |
|  | -                                     |                  | ¥ <sup>2.</sup> .                                   |              |              |                                     |                         |  |
| ······································                 | •                                     |                  | · · · · · · · · · · · · · · · · · · ·               |              |              |                                     |                         |  |
|  |                                       |                  |   |              |              |                                     |                         |  |
| T(a)185044292/Field Forms/Gauging F                    | unin En                               | tered S          | WL !  | 3/25         | lou          | QA                                  | WB<br>10/10/0           | March 27, 2002                         |

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| Client:                                 |                         | CRWD                 |                                       |                     | Site Location         | n:                               | <u>Z</u> <u>S</u> E     | 5.3,                                   |  |
|---|-------------------------|----------------------|---------------------------------------|---------------------|-----------------------|----------------------------------|-------------------------|--|--|
| Project No.:                            |                         |                      |                                       |                     |                       | 1:                               |                         |  |  |
| Date:                                   | 6-15                    | -00                  |                                       | Weather:            |                       |                                  |                         |  |  |
| Sampler(s):                             | INPR                    | FIN                  |                                       | -<br>Samples Taken: |                       |                                  |                         |  |  |
| Start Time:                             | 11:41                   | J - V - V            |                                       | Sample Time:        |                       |                                  | 150                     |  |  |
| End Time:                               |                         | /                    |                                       |                     | Sumple Third          | ·· <u> </u>                      |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |
| Channel Conditions:                     |                         |                      |                                       | יעדת                | Measurement           | 5.10                             | 2                       |  |  |
| COC Number:                             |                         | u <b>m</b> aataata t |                                       | DIWI                | vicasurement          |                                  | 0                       |  |  |
| COC Number:                             | · · ·                   |                      |                                       |                     |                       | <b>NT</b> .                      | <b>• (</b> )            | ι,                                     |  |
|   |                         |                      |                                       |                     |                       | Notes                            | " <u>-Waf</u>           | er is                                  |  |
|   |                         | Field Parameters     |                                       |                     |                       |                                  | gree                    | 20                                     |  |
| Sample I.D.                             | Temp. ( <sup>0</sup> C) |                      | ) <b>D.O.</b> (mg/l)                  |                     | H (S.U.)              |                                  |                         |  |  |
| s                                       | 21.3                    | 4.70                 |                                       | 89                  | 9                     |                                  |                         |  |  |
| Stage H                                 | łt:                     |                      | Rated Flow                            | ;                   |                       | Gauged Flov                      | v: <i>0.</i> (          | 261                                    |  |
| :<br>                                   |                         |                      | Stream Gaug                           | ging Dat            | a                     |                                  |                         |  |  |
| Distance from<br>Initial Point (fl)     | Width (ft)              | Depth (ft)           | 1 (00/0 ]                             | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | A verage<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |
| 0, (left side)                          |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
| ······                                  |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
| ······································  |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
| ·                                       |                         |                      |                                       |                     | [                     |                                  |                         |  |  |
|   |                         |                      | · · · · · · · · · · · · · · · · · · · |                     |                       |                                  |                         |  |  |
|   |                         |                      | ¥*^                                   | , March             |                       |                                  | ·                       |  |  |
|   |                         |                      |                                       |                     | -                     |                                  |                         |  |  |
|   |                         |                      |                                       |                     |                       |                                  |                         |  |  |
|   |                         | - 4                  |                                       |                     |                       |                                  |                         | s. *                                   |  |
| T:\U185\U4\292\Field Funns\Gaueine Form | E                       | nt 10/10/0           | )lo                                   |                     |                       |                                  |                         |  |  |

| Client:                               |                         | CRWD             |                            |                     | Site Locatio                          | n: <u>CR</u>                    | 33.(                    | 6                                      | _ |
|---------------------------------------|-------------------------|------------------|----------------------------|---------------------|---------------------------------------|---------------------------------|-------------------------|--|---|
| Project No.:<br>Date:                 | (01                     | 15106            |                            | Sit                 | e Descriptio<br>Weathe                |                                 |                         | <u> </u>                               |   |
| Sampler(s):                           | _M                      | S,KM             |                            | Sa                  | mples Taker                           | n: 🛛 📿                          | es No                   | D                                      |   |
| Start Time:                           | /                       | ģo               |                            | :                   | Sample Time                           | e:                              | <u>75</u>               |  |   |
| End Time:                             |                         | · " " "          | _                          |                     |                                       | <u> </u>                        |                         |  |   |
| Channel Conditions:<br>COC Number:    |                         |                  | _                          | DTW N               | Aeasuremen                            | t:(Q+                           | Ye                      |  |   |
| COC Number:                           | <u></u>                 |                  |                            |                     |                                       | Notes                           |                         |  |   |
|                                       |                         | Field Parameters |                            | <b></b>             | · · · · · · · · · · · · · · · · · · · |                                 |                         |  | _ |
| Sample I.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         | (l) pF              | I (S.U.)                              |                                 |                         |  | _ |
|                                       | 20.3                    | 530              | 9.0                        | 87                  | 12                                    |                                 |                         |  | _ |
| Stage H                               | t:                      |                  | Rated Flow                 | w:                  |                                       | Gauged Flov                     | 0.925                   | $\hat{\boldsymbol{\Sigma}}$            |   |
| ŀ                                     |                         |                  | Stream Gau                 | iging Data          | 1                                     |                                 |                         |  |   |
| Distance from<br>Initial Point (ft)   | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth                 | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |   |
| 0, (left side)                        |                         |                  |                            |                     |                                       |                                 |                         |  |   |
|                                       | *                       |                  |                            |                     |                                       |                                 |                         |  |   |
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|                                       |                         |                  |                            |                     |                                       |                                 |                         |  |   |
|                                       |                         |                  | 5.                         | , ¥≂,-≱-            |                                       |                                 |                         |  |   |
|                                       | ···                     |                  |                            |                     |                                       |                                 |                         |  |   |
|                                       |                         | · · · ·          |                            |                     |                                       |                                 |                         | 2.<br>1. <sup>7</sup>                  |   |
| T-01850442924Field FormskGaueing Form | Ent                     | WB 10/10/06      |                            |                     |                                       |                                 |                         |  |   |

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| Field Form: | 2006 | Stream | Sampling |
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|---------------------------------------|-------------------------|---|----------------------------|---------------------|----------------|---------------------------------|-------------------------|--|
| Client:                               |                         | CRWD  |                            |                     | Site Location  | n:                              | $(\dot{t})$             | 55.a                                   |
| Project No.:                          | <u> </u>                |   |                            | Site                | e Description  |                                 |                         |  |
| Date:                                 | 6/15                    | 5/06  |                            |                     | Weathe         | r: <u>75</u>                    | Part                    | l v Clou                               |
| Sampler(s):                           | _WP                     | SICN  |                            | Sa                  | mples Taker    | n:                              | es No                   |  |
| Start Time:                           |                         | <i>[</i> <sup>*</sup> ·                         |                            | 5                   | Sample Time    | . 12                            | 10                      |  |
| End Time:                             |                         | ••••••  |                            |                     |                |                                 |                         |  |
| Channel Conditions:                   |                         |   |                            | DTW N               | leasurement    | : H.O                           | KB                      |  |
| COC Number:                           |                         |   |                            |                     |                |                                 |                         |  |
| · · · · · · · · · · · · · · · · · · · |                         | THTTOM MALANIA 2 MARY TALES OF, ATT I TARAGUTER |                            |                     |                | Notes                           |                         |  |
|                                       |                         | Field Parameters                                | - 11                       |                     |                |                                 |                         |  |
| Sample I.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)                                   |                            |                     | (S.U.)         |                                 |                         |  |
| ·····                                 | 201                     | 450   | 9.8                        | 89                  | <del>}</del> / |                                 |                         |  |
| Stage H                               | t:                      |   | Rated Flow                 |                     |                | Gauged Flov                     | v:_0.78                 | <u>,</u>                               |
|                                       |                         |   | Stream Gau                 | ging Data           | l              |                                 |                         |  |
|                                       |                         |   |                            |                     |                | 1                               | 1                       |  |
| Distance from<br>Initial Point (ft)   | Width (ft)              | Depth (ft)                                      | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | 80%<br>Depth   | Average<br>Velocity<br>(ff/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                       | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    | Width (ft)              | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    |                         | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    |                         | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    |                         | Depth (ft)                                      | (60%                       | 20%<br>Depth        | 80%            | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                    |                         | Depth (ft)                                      | (60%                       | 20%                 | 80%            | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft) 0, (left side)     |                         | Depth (ft)                                      | (60%<br>Depth)             | 20%<br>Depth        | 80%            | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft) 0, (left side)     |                         | Depth (ft)                                      | (60%<br>Depth)             | 20%<br>Depth        | 80%            | Velocity                        | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |

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| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: | <br>UB<br>              |                  | B 3,                       | 3.2                  |                       |                                 |                         |  |
|---|-------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
|   |                         | Field Parameters |                            |                      |                       |                                 | <u>.</u>                |  |
| Sample I.D.   | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/         | 1) pH                | I (S.U.)              |                                 |                         |  |
|   | 20.8                    | 860              | 8.8                        | 8.                   | 67                    |                                 |                         |  |
| Stage H   | t:                      |                  | Rated Flov                 | iging Data           |                       | Gauged Flov                     | v: 0, 87                | 74                                     |
| Distance from<br>Initial Point (ft)   | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  | -                       |                  |                            |                      |                       |                                 |                         |  |
|   | •                       |                  |                            |                      |                       |                                 |                         |  |
|   |                         |                  |                            |                      |                       |                                 |                         |  |
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|  |                         | Field Fo                              | orm: 2000                  | 5 Strea             | m Sampl               | ling                |                         |  |
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| Client:  |                         | CRWD                                  |                            |                     | Site Locatio          | $m \cap R'$         | 31.8                    |  |
| Project No.:   |                         |                                       |                            |                     | e Descriptio          |                     |                         |  |
| Date:  | 611                     | 5/17                                  | ·                          | 51                  | Weath                 |                     | DD J                    | y Cloudy                               |
| Sampler(s):  | - Con                   | ICIA!                                 |                            | Sa                  |                       |                     | • `                     | 5                                      |
| Start Time:  | 1/25                    | $2\partial$                           | ······                     |                     | mples Take            | 10                  | es) No<br>40            | 0                                      |
| ind Time:  | _10-                    |                                       |                            | L.                  | Sample Tim            | le:(_).             | -10                     | ·                                      |
| Channel Conditions   | •                       |                                       |                            |                     | 4                     | 17                  | 24                      |  |
| OC Number:   | •                       |                                       |                            | DIWN                | /leasuremen           | n:/_>               | 1.51                    |  |
| OC Number:   |                         |                                       |                            |                     |                       | <b>.</b>            |                         |  |
| And a constant of the second |                         | ביויים                                |                            |                     |                       | Notes               |                         |  |
| Comela E D   | Temp. ( <sup>0</sup> C) | Field Parameter.                      |                            |                     |                       |                     | ·                       |  |
| Sample I.D.  | 19.4                    | 7/0                                   | 8-4-                       |                     | (S.U.)<br>イワ          |                     |                         |  |
|  |                         | //-                                   | <u> 0.5 P</u>              |                     | 1                     |                     |                         |  |
|  |                         |                                       | Stream Gau                 | ging Data           |                       |                     |                         |  |
| Distance from<br>Initial Point (ft)  | Width (ft)              | Depth (ft)                            | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   |                         |                                       |                            |                     |                       | (ft/sec)            |                         |  |
|  |                         |                                       |                            |                     |                       |                     |                         |  |
|  |                         |                                       |                            |                     |                       |                     |                         |  |
| • <u></u>  |                         |                                       |                            |                     |                       |                     |                         |  |
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# Field Form: 2006 Stream Sampling

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| Client:                                | <u></u>                                   | CRWD             |                                       |              | Site Locatio    |                      | 29. O                                  |   |  |  |
|--|---|------------------|---------------------------------------|--------------|-----------------|----------------------|--|---|--|--|
| Project No.:                           |   |                  |                                       | Sit          | e Descriptio    | n:                   | ······································ |   |  |  |
| Date:                                  | (a/15                                     | 106              |                                       |              | Weathe          |                      |  | <b>VI</b>                                     |  |  |
| Sampler(s):                            | WB  | IKIN             |                                       | Sa           | umples Take     |                      | es N                                   | 0   |  |  |
| Start Time:                            | 10:0                                      | 5                |                                       |              | Sample Tim      |                      |  |   |  |  |
| End Time:                              |   |                  |                                       |              |                 | <u> </u>             |  |   |  |  |
| Channel Conditions.                    | :   |                  |                                       | DTW N        | Measuremen      | t: <u>14.8</u>       | 9                                      | , <u>, , , , , , , , , , , , , , , , , , </u> |  |  |
| COC Number:                            | <u></u>                                   |                  |                                       | DIWI         | fieddur efficir | " <u> </u>           | <b> </b>                               |   |  |  |
|  | -   |                  |                                       |              |                 | Notes                | •                                      |   |  |  |
|  | An | Field Parameters |                                       |              |                 |                      | le<br>                                 |   |  |  |
| Sample I.D.                            |   | Cond. (mS/cm)    |                                       | (1) pF       | H (S.U.)        |                      | ······                                 |   |  |  |
|  | 18.5                                      |                  | 10.2                                  |              | - <u>)</u> U    |                      | <u> </u>                               |   |  |  |
| L                                      |   |                  |                                       |              |                 |                      |  |   |  |  |
| Stage F                                |   |                  | Rated Flow                            | 1/*          |                 | Gauged Flov          | 36                                     | 326   |  |  |
|  |   |                  | Rated 1 10                            | ·v           |                 | Gauged Flow          | v. <u> </u>                            |   |  |  |
| 2                                      |   | ł                | Stream Gau                            | iging Data   | a               |                      |  |   |  |  |
| Distance from                          |   |                  | Velocity                              |              | ocity           | Average              |  | Discharge                                     |  |  |
| Initial Point (ft)                     | Width (ft)                                | Depth (ft)       | (60%<br>Depth)                        | 20%<br>Depth | 80%<br>Depth    | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | (Q, ft <sup>3</sup> /sec)                     |  |  |
| 0, (left side)                         |   |                  |                                       |              |                 |                      |  |   |  |  |
|  |   |                  |                                       |              |                 |                      |  |   |  |  |
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|  | f   |                  |                                       |              |                 |                      |  |   |  |  |
| Ev                                     | "FINB                                     |                  |                                       |              |                 |                      |  |   |  |  |
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| Client:  |                         | CRWD             |                  |              | Site Locatio                           | n: <u>CR</u>         | 27.0                    | 2                                     |
|--|-------------------------|------------------|------------------|--------------|--|----------------------|-------------------------|---------------------------------------|
| Project No.:   |                         |                  |                  | Si           | te Descriptio                          | n:                   |                         |                                       |
| Date:  | 6/19                    | 5106             |                  |              | Weathe                                 | er:                  |                         |                                       |
| Sampler(s):  | WP                      | S.KUT            |                  | S            | amples Take                            |                      | es No                   | )                                     |
| Start Time:  | 9:40                    | m<br>m           |                  |              | Sample Tim                             |                      |                         | ······                                |
| End Time:  | ·····                   |                  |                  |              |  |                      | <u> </u>                |                                       |
| Channel Conditions   | : tloni                 | ittle Flow       |                  | DTW          | Measuremen                             | 590                  | 2                       | <u></u>                               |
| COC Number:  | _ <del></del>           |                  |                  |              |  |                      | 9                       |                                       |
|  |                         |                  |                  |              |  | Notes                |                         |                                       |
|  |                         | Field Parameters |                  |              | ······································ |                      |                         |                                       |
| Sample I.D.  | Temp. ( <sup>0</sup> C) |                  | · [[ · · · · · · |              |  | -                    |                         |                                       |
| Sample I.D.  | 19.4                    | 7.10             |                  |              | H (S.U.)                               |                      |                         |                                       |
|  | 111.7                   | 7.70             | 2.8              | 0            | 28                                     |                      |                         |                                       |
|  |                         |                  |                  |              |  |                      | 1 in 71 Aver            | an 🔿                                  |
| Stage I  | -lt:                    |                  | Rated Flow       | W;           |  | Gauged Flov          | v: [[16]. O             | $\mathcal{M} \mathcal{O}$             |
| :  |                         | :                | Stream Gau       | iging Dat    | a                                      |                      |                         |                                       |
| Distance from  |                         |                  | Velocity         |              | ocity                                  | Áverage              |                         | Discharge                             |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%<br>Depth)   | 20%<br>Depth | 80%<br>Depth                           | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)             |
| 0, (left side)   |                         |                  |                  |              |  |                      |                         |                                       |
|  |                         |                  |                  |              |  |                      |                         |                                       |
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|  |                         |                  |                  |              |  |                      |                         |                                       |
|  |                         | . 1              |                  |              |  |                      |                         |                                       |
| T-0185-04-292/Field Forms(Causing Form   | WE                      | , (0/10/01       | Q                |              |  | <u> </u>             |                         |                                       |

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number: | 6/<br>4:0:<br>9:0:<br>9:30<br>Flow | CRWD<br>15/06<br>JB, KW<br>5<br>)<br>ng in cu | nter of<br>evane           | Sit<br>Sa           | Site Locatio<br>e Descriptio<br>Weatho<br>umples Take<br>Sample Tim<br>Measuremen | on: <u>Lk</u><br>er: <u>70</u><br>en: <u>(</u> y<br>ne: <u>9</u> ?] <u>9</u><br>nt: <u>2</u> 3 | р <u>о, Сл</u><br>сър. N<br>5<br> | r access                               |
|---|------------------------------------|---|----------------------------|---------------------|---|--|-----------------------------------|--|
|   |                                    | Field Parameters                              |                            |                     |   |  | (FDI                              | ) taken                                |
| Sample I.D.   | Temp. (°C)                         | ) Cond. (mS/cm                                | ) D.O. (mg/<br>4. 8        |                     | I(S.U.)<br>イス   |  |                                   |  |
| Stage H   |                                    |   | Rated Flov<br>Stream Gau   | W:                  |   | Gauged Flov  |                                   | Macfs<br>07                            |
| Distance from<br>Initial Point (ft)   | Width (ft)                         | Depth (ft)                                    | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth   | Average<br>Velocity<br>(ft/sec)  | Area (ft <sup>2</sup> )           | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  |                                    |   |                            |                     |   |  |                                   |  |

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|                                       |                 |   |                       | ·   | $\sim$  |   | Q  |  |
|---------------------------------------|-----------------|---|-----------------------|---|---|---|--|--|
|                                       | CRWD            |   |                       |   |   | KIYa  | U  |  |
|                                       | 177             |   | Sit                   | e Descriptio  | n: Hwy S  | 5   |  |  |
| 6/1                                   | 5/06            |   |                       | Weathe  | er:   |   |  |  |
| /                                     |                 |   | Samples Taken: Yes No |   |   |   |  |  |
|                                       |                 |   | :                     | Sample Time   | e: 17   | 540   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   | DTW N                 | Measuremen  | t:1/  | 207   | <b>`</b>   |  |
| <b></b>                               |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   | Notes   | 5:  |  |  |
|                                       | Field Parameter | S   |                       | ,   |   | <u> </u>  |  |  |
| Temp. ( <sup>0</sup> C)               | Cond. (mS/cm    | 1) <b>D.O.</b> (mg/   | l) pI                 | I (S.U.)  |   |   |  |  |
| 33.8                                  |                 | 6.7   | Q.S                   | 56  |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
| .t:                                   |                 | Rated Flow  | /:                    |   | Gauged Flow   | W:  |  |  |
|                                       |                 | Stream Gau  | ging Data             | 1   |   |   |  |  |
| Width (ft)                            | Depth (ft)      | Velocity<br>(60%<br>Depth)  | Vel<br>20%<br>Depth   | ocity<br>80%<br>Depth   | Average<br>Velocity<br>(ft/sec)   | Area (ft <sup>2</sup> )   | Discharge<br>(Q, ft <sup>3</sup> /sec)   |  |
| · · · ·                               |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
| <u> </u>                              |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   | ····   |  |
| ,                                     |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 |   |                       |   |   |   |  |  |
|                                       |                 | ¥-  | , Mirziki -           |   |   |   |  |  |
|                                       |                 | ÷-  | , M-(6)               |   |   |   |  |  |
| · · · · · · · · · · · · · · · · · · · |                 | ÷-  | - Mrgh+               |   |   |   |  |  |
|                                       | Temp. (°C)      | G/15/06         Field Parameter         Temp. (°C)         Cond. (mS/cn         3:8         Width (ft)         Depth (ft) |                       | Sit         G/15/06         Sa         DTW N         Field Parameters         Temp. (°C)       Cond. (mS/cm)         DO. (mg/l)       pH         3:8       G7         G7       S.2         It:       Rated Flow:         Stream Gauging Data         Width (ft)       Depth (ft)         Velocity       Vel         Depth       Depth | Site Description         Samples Take         Samples Take         Sample Tim         DTW Measuremen         Field Parameters         Temp. (°C)       Cond. (mS/cm)         DO. (mg/l)       pH (S.U.)         33 · 8       G.7         Extrem Gauging Data         Width (ft)       Depth (ft)         Velocity       Velocity         Velocity       20%         B0%       Depth         Depth       Depth | Site Description:       Hwy S         G//5/06       Weather:         Samples Taken:       Y         Samples Taken:       Y         Sample Time:       Y         DTW Measurement:       Y         DTW Measurement:       Y         Notes       Y         Field Parameters       DTW Measurement:         Temp. (°C)       Cond. (mS/cm)         DO. (mg/l)       pH (S.U.)         J3 + S       G.7         B       G.7         Stream Gauging Data         Width (ft)       Depth (ft)         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity         Kated Flow:       Depth         Depth       Depth         Velocity       Average         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity         Velocity       Velocity | Site Description: $Hwy SS$ Site Description: $Hwy SS$ Weather:       Samples Taken:         Samples Taken:       Yes         Sample Time: $DTW$ DTW Measurement: $V2000$ Notes:       Image: Stream Gauging Data         Width (ft)       Depth (ft)       Velocity         Velocity       Velocity         Velocity       Average         Velocity       Velocity         Velocity       Average         Velocity       Stream Gauging Data |  |

| Client:  |            | CRWD                                  |                            |                     | Site Locatio          | on:                               |                         |  |
|--|------------|---------------------------------------|----------------------------|---------------------|-----------------------|-----------------------------------|-------------------------|--|
| Project No.:   |            |                                       |                            | Sit                 | e Descriptio          | on: $CR$                          | 35.3                    |  |
| Date:  | 628        | 106                                   |                            |                     |                       | er;                               |                         | -                                      |
| Sampler(s):  | Ku         | / 06                                  |                            | Sa                  |                       | n: Y                              |                         |  |
| Start Time:  | 122        | 20                                    |                            | ł                   | Sample Tim            | e:                                |                         |  |
| End Time:  |            |                                       |                            |                     |                       |                                   |                         |  |
| Channel Conditions:  |            |                                       |                            | DTW N               | Measuremen            | ıt:                               |                         |  |
| COC Number:  | <u></u>    |                                       | <u></u>                    |                     |                       |                                   |                         |  |
| Transaction of the second seco |            |                                       |                            |                     |                       | Notes                             | •                       | · · · · · · · · · · · · · · · · · · ·  |
|  |            | Field Parameters                      | <u>3</u>                   |                     |                       |                                   | Bn                      | 15.7                                   |
| Sample I.D.  |            | Cond. (mS/cm                          |                            | l) pł               | I (S.U.)              |                                   |                         |  |
| CR 35.3  | 247        | 610                                   | 11.3                       | 69                  | 13                    |                                   |                         |  |
| Stage H  | t:         |                                       | Rated Flov                 | v:                  |                       | Gauged Flov                       | v: 01/6                 | lcfs                                   |
|  |            |                                       | Stream Gau                 | ging Data           | 1                     |                                   | 0                       | E                                      |
| Distance from<br>Initial Point (ft)  | Width (ft) | Depth (ft)                            | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | - Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   | 7'         | .40                                   | 4                          | 30                  |                       |                                   |                         |  |
|  |            | .50                                   | 3                          |                     |                       | :                                 |                         |  |
|  |            | .50                                   | 12                         |                     |                       |                                   |                         |  |
|  |            | .5.5                                  | 3                          |                     |                       |                                   | 3                       |  |
|  |            | . <u>5.5</u><br>.4.5                  | 1                          |                     |                       |                                   |                         |  |
|  |            | ţ                                     |                            |                     |                       |                                   |                         |  |
|  | ,          |                                       |                            |                     |                       | •                                 |                         |  |
|  |            |                                       |                            |                     |                       |                                   |                         |  |
|  |            |                                       |                            |                     |                       |                                   |                         |  |
|  |            |                                       |                            |                     |                       |                                   |                         |  |
| ·  |            |                                       | \$¢.                       | 11 <sub>11</sub> == |                       |                                   |                         |  |
|  |            |                                       |                            |                     |                       |                                   |                         |  |
|  |            |                                       |                            |                     |                       |                                   |                         |  |
|  |            | · · · · · · · · · · · · · · · · · · · | ļ                          |                     |                       |                                   |                         | • · ·                                  |

| Client:                                 | CRWD                    |                                       |        |                  |             | Site Location | CR3                  | 3.6                     |                                       |  |
|---|-------------------------|---------------------------------------|--------|------------------|-------------|---------------|----------------------|-------------------------|---------------------------------------|--|
| Project No.:                            |                         |                                       |        |                  | Sit         | e Description | 1:                   |                         |                                       |  |
| Date:                                   | 628                     | 66                                    |        |                  |             |               | r:                   |                         |                                       |  |
| Sampler(s):                             |                         |                                       |        | <u> </u>         | Sa          |               |                      | Yes 🦢 No                |                                       |  |
| Start Time:                             | 110                     | 9                                     |        |                  |             |               |                      | · ·                     |                                       |  |
| End Time:                               | <b>u</b> .              |                                       |        |                  |             |               |                      |                         |                                       |  |
| Channel Conditions:                     |                         |                                       |        |                  | DTW N       | Aeasurement   | :                    | :                       |                                       |  |
| COC Number:                             | <u> </u>                |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             |               | Notes                |                         |                                       |  |
|   |                         | Field Parar                           | neters |                  |             |               |                      | BM                      | 6.4                                   |  |
| Sample I.D.                             | Temp. ( <sup>0</sup> C) | ) Cond. (m                            | nS/cm) | <b>D.O.</b> (mg/ | l) pH       | I (S.U.)      |                      |                         |                                       |  |
| CR33.6                                  | 21.2                    | 500                                   |        | 63               | 68          | 75            |                      | <u>AUE 0 </u>           |                                       |  |
| •                                       |                         |                                       |        | 11.2             | ere untaile |               | 2                    | 0                       | ~                                     |  |
| Stage H                                 | t:                      |                                       |        | Rated Flov       | v:          |               | Gauged Flov          | v: 0,15                 | cfs                                   |  |
| :                                       |                         |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         | · · · · · · · · · · · · · · · · · · · | 5      | Stream Gau       | ging Data   |               |                      |                         |                                       |  |
| Distance from                           | WEAL (BY                |                                       | 0.     | Velocity         | Vel         | ocity<br>80%  | Average              |                         | Discharge                             |  |
| Initial Point (ft)                      | Width (ft)              | Depth (                               | (11)   | (60%<br>Depth)   | Depth       | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                       |  |
| 0, (left side)                          | 8:0                     | 20                                    | 16     | 0                | 30          |               | (10500)              |                         |                                       |  |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | <u></u>                 | 7 19                                  |        | ſ                |             |               |                      |                         |                                       |  |
|   |                         | 40.                                   | 33     | 3                |             |               |                      |                         |                                       |  |
|   |                         | 40.<br>60;                            | 50     | 3<br>2           |             |               |                      |                         |                                       |  |
|   |                         | 0                                     | 50     | ~                |             |               |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             |               |                      |                         | ·····                                 |  |
|   |                         |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             | ·             |                      |                         |                                       |  |
|   | •                       |                                       |        | <u>.</u>         | . Pr        | <u> </u>      |                      |                         |                                       |  |
|   |                         |                                       |        |                  |             |               |                      |                         |                                       |  |
|   |                         |                                       | 1      |                  | (           | 4             | !                    | l l                     | ł                                     |  |
|   |                         | · · · · · · · · · · · · · · · · · · · |        |                  |             |               |                      |                         | · · · · · · · · · · · · · · · · · · · |  |

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| Client:                             | - <u></u>                             | CRWD             |                            |                      | Site Locatio |                                  | Ma                      |  |
|-------------------------------------|---------------------------------------|------------------|----------------------------|----------------------|--------------|----------------------------------|-------------------------|--|
| Project No.:                        |                                       |                  |                            | Site                 | e Descriptio | on: <u>TB</u>                    | 2 3                     | 3.2                                    |
| Date:                               | 280                                   | 6                |                            |                      | Weath        | er:                              | <u> </u>                |  |
| Sampler(s):                         |                                       | ·······          |                            | Sa                   | mples Take   | en: Y                            | es N                    | 0                                      |
| Start Time:                         | 120                                   |                  |                            |                      |              | 1e:                              |                         |  |
| End Time:                           |                                       |                  |                            |                      |              | •                                |                         |  |
| Channel Conditions:                 | · · · · · · · · · · · · · · · · · · · |                  |                            | DTW N                | leasuremer   | 1t:                              |                         | ·····                                  |
| COC Number:                         |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              | Notes                            |                         |  |
|                                     |                                       | Field Parameters | ;<br>                      |                      |              |                                  |                         |  |
| Sample I.D.                         | 1                                     | ) Cond. (mS/cm   | ) D.O. (mg                 | /I) pH               | l (S.U.)     |                                  |                         |  |
| TB 3 3.2                            | 19.2                                  | 620              | 12.2                       | 6.                   | 73           |                                  |                         |  |
| Stage F                             | It:                                   |                  | Rated Flor                 | w:                   |              | Gauged Flov                      | v:_0,0                  | Bcfs                                   |
|                                     |                                       |                  | Stream Gai                 | uging Data           |              | American Contractor Contractor   |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)                            | Depth (ft)       | Velocity<br>(60%<br>Depth) | Veld<br>20%<br>Depth | Depth        | A verage<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 6'                                    | .30              | 2                          | 30°                  |              |                                  |                         |  |
|                                     |                                       | -5.2             | 4                          |                      |              |                                  |                         |  |
|                                     |                                       | .41              | 1                          |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
| ·····                               |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              | -                                |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  | ş*.                        | . 91+                |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         |  |
|                                     |                                       |                  |                            |                      |              |                                  |                         | 3<br>6, <sup></sup>                    |

| Client:   |                        | CRWD            |                            | :                    | Site Locatio          | n:_ <i>TB</i> _                   | 33                                    | Q                                      |
|---|------------------------|-----------------|----------------------------|----------------------|-----------------------|-----------------------------------|---------------------------------------|--|
| Project No.:  |                        |                 | <u></u>                    | Site                 | e Descriptio          | on:                               |                                       |  |
| Date:   | _0;                    | 2806            |                            |                      |                       | er:                               |                                       |  |
| Sampler(s):   | _Xi                    | 5               |                            | Sa                   |                       | n: Y                              | · · · ·                               |  |
| Start Time:   | 1150                   | >               |                            |                      |                       |                                   |                                       |  |
| End Time:   |                        |                 |                            |                      |                       |                                   |                                       |  |
| Channel Conditions:   |                        |                 |                            | DTW N                | leasuremen            | it:                               |                                       |  |
| COC Number:   |                        |                 |                            |                      |                       |                                   |                                       |  |
| Proprietante  |                        |                 |                            | <b></b>              |                       | Notes                             | :                                     |  |
|   |                        | Field Parameter | S                          |                      |                       |                                   |                                       |  |
| Sample I.D.   | Temp. ( <sup>0</sup> C | ) Cond. (mS/cm  | 1) <b>D.O.</b> (mg/        | l) pH                | I (S.U.)              |                                   | · · · · · · · · · · · · · · · · · · · |  |
| TB 33.2   | 4.2                    | 610             | 11.9                       | 69                   | l                     |                                   |                                       |  |
| Stage H   | t:                     |                 | Rated Flow                 | V:                   |                       | Gauged Flov                       | 0.7                                   | 2cfs                                   |
| Frankling and the second se |                        |                 | Stream Gau                 | ging Data            | l                     |                                   |                                       |  |
| Distance from<br>Initial Point (ft)   | Width (ft)             | Depth (ft)      | Velocity<br>(60%<br>Depth) | Veld<br>20%<br>Depth | ocity<br>80%<br>Depth | - Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)  | 12                     | 0.40            | 1                          | 30                   | 4                     |                                   |                                       |  |
|   | -                      | .5.5            | 2                          |                      |                       |                                   |                                       |  |
|   |                        | .50             | 8 \$                       |                      |                       |                                   |                                       |  |
|   |                        | 30              | 9 T                        |                      |                       |                                   |                                       |  |
|   |                        | 25              | 4                          |                      |                       |                                   |                                       |  |
|   |                        | .20             | 1                          |                      |                       |                                   |                                       |  |
|   | ,                      |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 |                            |                      |                       |                                   |                                       |  |
|   |                        |                 | *                          |                      |                       |                                   | · · · · · · · · · · · · · · · · · · · |  |
|   |                        |                 |                            |                      |                       |                                   | · · · · · · · · · · · · · · · · · · · |  |

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| Field Form: | 2006 Stream Sampling |
|-------------|----------------------|
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| Client:                             |                        | CRWD             |                                       |                 | Site Locatio |                                 |                         | _                                      |
|-------------------------------------|------------------------|------------------|---------------------------------------|-----------------|--------------|---------------------------------|-------------------------|--|
| Project No .:                       |                        |                  |                                       | Site            | e Descriptio | n: <u>CR</u> ;                  | 31 8                    | r                                      |
| Date:                               | 62                     | 806              |                                       |                 | Weathe       | er:                             | ,                       |  |
| Sampler(s):                         | Ku                     |                  |                                       | Sa              | mples Take   | n: Y                            | es No                   | )                                      |
| Start Time:                         | 104                    | F0               |                                       | 5               | Sample Tim   | e:                              | 40                      |  |
| End Time:                           |                        |                  |                                       |                 |              |                                 |                         |  |
| Channel Conditions:                 |                        |                  |                                       | DTW N           | /leasuremen  | t:                              |                         |  |
| COC Number:                         |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  | · · · · · · · · · · · · · · · · · · · |                 |              | Notes                           | •                       |  |
|                                     | ·····                  | Field Parameters | S                                     |                 |              |                                 | BM                      | 13.8                                   |
| Sample I.D.                         | Temp. ( <sup>0</sup> C | ) Cond. (mS/cm   | ) <b>D.O.</b> (mg/                    | -               | I (S.U.)     |                                 |                         |  |
| CR 31.54                            | 19.9                   | 7.10             | 10.6                                  | 63              | 87           |                                 |                         |  |
| Stage H                             | t:                     |                  | Rated Flow                            |                 |              | Gauged Flov                     | <u>, 1.36</u>           | 3.5                                    |
|                                     |                        | 1<br>1           |                                       |                 | ocity        |                                 |                         | <u> </u>                               |
| Distance from<br>Initial Point (ft) | Width (ft)             | Depth (ft)       | Velocity<br>(60%<br>Depth)            | 20%<br>Depth    | 80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 10 4                   | .50              | 15                                    | 300             |              |                                 |                         |  |
| · ·                                 |                        | .50              | 10                                    |                 |              |                                 |                         |  |
|                                     |                        | 5.5              | 8.5                                   |                 |              |                                 |                         |  |
|                                     |                        | .60              | 5                                     |                 |              |                                 |                         |  |
|                                     |                        | 4.5              | 3                                     |                 |              |                                 |                         |  |
|                                     |                        | 3.0              | 0                                     |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 | -            |                                 |                         |  |
| \                                   |                        |                  | \$\$.                                 | · • • • • • • • |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         |  |
|                                     |                        |                  |                                       |                 |              |                                 |                         | 5<br>1.                                |

| Client:                             |            | CRWD           |        |                            |                     | Site Locatio          |                                 |                                       |  |
|-------------------------------------|------------|----------------|--------|----------------------------|---------------------|-----------------------|---------------------------------|---------------------------------------|--|
| Project No.:                        |            |                |        |                            | Sit                 | e Descriptio          | on: <u>CR</u>                   | 29.0                                  | )                                      |
| Date:                               | 67         | 2800<br>- 400- | 6      |                            |                     | Weath                 | on: <u>CR</u><br>er: <u>S</u> o | nneu                                  | 75'                                    |
| Sampler(s):                         | Xa         | · with         |        | د<br>                      | Sa                  | mples Take            | en: Y                           | es 🗸 N                                | 0                                      |
| Start Time:                         | 10         | 20             |        | _                          |                     |                       | ie:                             |                                       |  |
| End Time:                           |            |                |        |                            |                     |                       |                                 |                                       |  |
| Channel Conditions:                 |            |                |        | <del></del>                | DTW N               | Aeasuremer            | nt:                             |                                       |  |
| COC Number:                         |            | <u> </u>       |        | _                          |                     |                       |                                 |                                       |  |
| II                                  |            |                |        |                            |                     |                       | Notes                           | •                                     |  |
|                                     | 1          | Field Parar    | neters | 11                         |                     |                       |                                 | BMI                                   | 5.4                                    |
| Sample I.D.                         |            | ) Cond. (n     |        |                            |                     | I (S.U.)              |                                 |                                       |  |
| CR29.0                              | 29.2       | 680            | 2      | 9.9                        | 7                   | .56                   |                                 | · · · · · · · · · · · · · · · · · · · |  |
| Stage H                             | t:         |                |        |                            | w:                  |                       | Gauged Flov                     | v: 2,9                                | <u>1</u> cfs                           |
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (        | ft)    | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )               | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 10'        | 0.5            |        | 5                          | 30'                 | 2                     |                                 |                                       |  |
| 2                                   | •          | 0.81           |        | 1 le                       |                     |                       |                                 |                                       |  |
|                                     |            | 6.5            |        | 18                         |                     |                       |                                 | 1                                     |  |
|                                     |            | 0.8            |        | 15                         |                     |                       |                                 |                                       |  |
|                                     |            | 0.4            |        | 11                         |                     |                       |                                 |                                       |  |
|                                     |            | . 1            |        |                            |                     |                       |                                 |                                       |  |
|                                     |            |                |        |                            |                     |                       |                                 |                                       |  |
|                                     | -          |                |        |                            |                     |                       | į                               |                                       |  |
|                                     | 2          |                |        |                            |                     |                       |                                 |                                       |  |
|                                     |            |                |        |                            |                     |                       |                                 |                                       |  |
|                                     | •          |                |        | <u>چ</u> .                 |                     |                       |                                 |                                       |  |
|                                     |            |                |        |                            |                     |                       |                                 |                                       |  |
|                                     |            |                |        |                            |                     |                       |                                 |                                       |  |
|                                     |            |                | ```    |                            |                     |                       |                                 |                                       | 3<br>6 · ·                             |

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# Field Form: 2006 Stream Sampling

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| Client:             |            | CRWD                                  |                    |              | Site Locatior | : CR                 | 27.                     | 2                                     |
|---------------------|------------|---------------------------------------|--------------------|--------------|---------------|----------------------|-------------------------|---------------------------------------|
| Project No.:        |            |                                       |                    |              | e Descriptior |                      |                         |                                       |
| Date:               | 62         | 806                                   | -                  |              |               | : Sun                | iney                    |                                       |
| Sampler(s):         |            |                                       |                    | Sa           |               |                      |                         | 0                                     |
| Start Time:         | 940        | >                                     |                    |              |               |                      |                         |                                       |
| End Time:           |            |                                       |                    |              |               |                      |                         |                                       |
| Channel Conditions: |            |                                       |                    | DTW N        | Measurement   | •                    |                         |                                       |
| COC Number:         |            |                                       | <del></del>        |              |               |                      |                         |                                       |
| F                   |            |                                       |                    |              |               | Notes                |                         | 1                                     |
|                     | -1         | Field Parameters                      |                    |              |               |                      | BM                      | 6.80                                  |
| Sample I.D.         |            | C) Cond. (mS/cm)                      | ) <b>D.O.</b> (mg/ | l) pł        | I (S.U.)      |                      |                         |                                       |
| CR27.2              | 20.8       | 660                                   | 6.8                | 8            | 29            |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
| Stage H             | t:         |                                       | Rated Flow         | <i>w</i> :   |               | Gauged Flov          | v:                      |                                       |
|                     |            | :                                     | Stream Gau         | iging Dat:   | D             |                      |                         |                                       |
| Distance from       |            |                                       | Velocity           |              | ocity         | Average              |                         | Discharge                             |
| Initial Point (ft)  | Width (ft) | Depth (ft)                            | (60%<br>Depth)     | 20%<br>Depth | 80%<br>Depth  | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^{3}/sec)$                     |
| 0, (left side)      |            |                                       |                    |              |               |                      |                         |                                       |
|                     | · To       | weedy                                 | -                  |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    | ŀ            |               |                      | 1                       | · · · · · · · · · · · · · · · · · · · |
|                     |            |                                       |                    |              |               |                      | 44                      |                                       |
|                     |            | · · · · · · · · · · · · · · · · · · · |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            |                                       | ş».                | 194.414      |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         |                                       |
|                     |            | <u></u>                               |                    |              |               |                      |                         |                                       |
|                     |            |                                       |                    |              |               |                      |                         | 3                                     |

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| Client:             |   | CRWD                                  |                   |              | Site Locatio  | n: <u>CR2</u>                   | 5.6                     |  |
|---------------------|---|---------------------------------------|-------------------|--------------|---------------|---------------------------------|-------------------------|--|
| Project No.:        | ·                                       |                                       |                   | Site         | e Description | n:                              |                         |  |
| Date:               | 62.                                     | 806                                   |                   |              | Weathe        | r: Sun                          | neu                     | 75°                                    |
| Sampler(s):         | Xw                                      | 800                                   |                   | Sa           | mples Taker   | 1: Ye                           | es 🔶 N                  |  |
| Start Time:         | ₩ <u>₩</u> ₩                            |                                       |                   | ç            | Sample Time   | . 90                            | 00                      |  |
| End Time:           | • |                                       | _                 | -            |               | ··/                             |                         |  |
| Channel Conditions: |   |                                       |                   | DTW N        | Aeasurement   | •                               |                         |  |
| COC Number:         |   |                                       | _                 |              |               |                                 |                         |  |
|                     |   |                                       | _                 |              |               | Notes                           | •                       |  |
|                     |   | Field Parameters                      |                   |              |               | ]                               |                         | 23.2                                   |
| Sample I.D.         | Temp. ( <sup>0</sup> C                  | ) Cond. (mS/cm)                       | <b>D.O</b> . (mg/ |              | I (S.U.)      |                                 | pre                     | <u> </u>                               |
| CR25.6              |   | 670                                   | 4.2               |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 | A (                     |  |
| Stage H             | [t:                                     |                                       | Rated Flow        | v:           |               | Gauged Flow                     | v: Not                  | Ganged                                 |
|                     |   | s                                     | tream Gau         | ging Data    | 1             |                                 |                         |  |
| Distance from       |   |                                       | Velocity          |              | ocity         | A. 11070.000                    |                         | EN's al s                              |
| Initial Point (ft)  | Width (ft)                              | Depth (ft)                            | (60%<br>Depth)    | 20%<br>Depth | 80%<br>Depth  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)      |   |                                       |                   | 1            |               | (14500)                         |                         |  |
|                     |   | NUB                                   | >0Ts              |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         | · · · · · · · · · · · · · · · · · · ·  |
|                     |   |                                       |                   | ·            |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     | •                                       |                                       |                   |              | -             |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
|                     |   |                                       | *-                |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |
| 1                   |   | · · · · · · · · · · · · · · · · · · · | ·····             |              |               |                                 |                         |  |
|                     |   |                                       |                   |              |               |                                 |                         |  |

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| Field F | Form: | 2006 | Stream | Sampling |
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Manua 77 7007

| Client:                                |                                   | CRWD             |                   |                         | Site Location  |                                       | id i                    |  |
|--|-----------------------------------|------------------|-------------------|-------------------------|----------------|---------------------------------------|-------------------------|--|
| Project No.:<br>Date:                  | 100                               | 06               | <u></u>           | Si                      | te Descriptior | •                                     |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| Sampler(s):<br>Start Time:             | 1.1.1                             | >                |                   |                         | amples Taken   |                                       |                         | 0                                      |
| End Time:                              |                                   |                  |                   |                         | Sample Time    | · · · · · · · · · · · · · · · · · · · | ,                       |  |
| Channel Conditions:                    | -                                 |                  |                   |                         |                | <u> </u>                              |                         |  |
| COC Number:                            |                                   |                  | -                 | DIWI                    | vieasurement   |                                       |                         |  |
| COC Munifier.                          |                                   |                  | -                 |                         |                | Note                                  |                         |  |
|  |                                   | Field Parameters |                   |                         |                | Notes                                 |                         | 712.2                                  |
| Sample I.D.                            | , , , , , , , , , , , , , , , , , | Cond. (mS/cm)    | <b>D.O</b> . (mg/ | l) pl                   | H (S.U.)       |                                       | /                       | 112.6                                  |
| Hours 5                                |                                   |                  | 11.4              |                         | . Y            | e<br>e                                |                         |  |
| 1                                      |                                   |                  |                   |                         | - 3            | ļ                                     | ······                  | <u></u>                                |
| Stage H                                | t:                                |                  | Rated Flov        | v:                      |                | Gauged Flov                           | <i>.</i>                |  |
|  |                                   |                  |                   | <u> </u>                |                |                                       | ···                     |  |
|  |                                   | S                | tream Gau         | iging Dat               | a              |                                       |                         |  |
| Distance from                          |                                   | 5 1 (0)          | Velocity          | Vel                     | ocity<br>80%   | Average                               |                         | Discharge                              |
| Initial Point (ft)                     | Width (ft)                        | Depth (ft)       | (60%<br>Depth)    | Depth                   | Depth          | Velocity<br>(ft/sec)                  | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)              |
| 0, (left side)                         |                                   |                  |                   |                         |                |                                       |                         | ······                                 |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         | 2                                      |
|  |                                   | 3                |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
| ·····                                  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  | ¥*.               | . ры <sub>р</sub> .е.ф. |                |                                       |                         |  |
| :                                      |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       |                         |  |
|  |                                   |                  |                   |                         |                |                                       | Ento                    | 5<br>6.                                |
| T:0185004/292/Field Forms/Gaucing Form |                                   |                  |                   |                         |                |                                       | M                       | 7                                      |

| Client:                                 | (                       | CRWD             | _                                     | Si         | te Location: | CR                   | 35,                     | 3                         |
|---|-------------------------|------------------|---------------------------------------|------------|--------------|----------------------|-------------------------|---------------------------|
| Project No.:                            | 0                       | 002-75           | _                                     | Site       | Description: | Clea                 | rLake                   | 2 Outlet                  |
| Date:                                   | 12                      | 2-Jul-06         | _                                     |            | Weather:     |                      |                         |                           |
| Sampler(s):                             |                         | WB               | _                                     | San        |              | Yes                  | 1                       |                           |
| Start Time:                             | 10:0                    | 00               |                                       | Sa         | mple Time:   |                      | <u> </u>                |                           |
| End Time:                               | 10:0                    | 5                |                                       |            |              |                      |                         |                           |
| Channel Conditions:                     | No II                   | later in Cl      | annel                                 | DTW M      | easurement:  |                      | <u> </u>                |                           |
| COC Number:                             |                         |                  | _                                     |            |              |                      |                         |                           |
| ( <b></b>                               |                         |                  |                                       |            | <u></u>      | Notes:               |                         | <u> </u>                  |
|   |                         | Field Parameters | <del></del>                           |            |              |                      |                         |                           |
| Sample I.D.                             | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l                     | ) pH       | (S.U.)       |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      | <del></del>             |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
| Stage H                                 | t:                      |                  | Rated Flow                            | v:         |              | Gauged Flow          | /:                      |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   | 1                       | <u></u>          | Stream Gau                            |            |              |                      | 1                       | ]                         |
| Distance from                           | Width (ft)              | Depth (ft)       | Velocity<br>(60%                      | 20%        | ocity<br>80% | Average              | Area (ft <sup>2</sup> ) | Discharge                 |
| Initial Point (ft)                      |                         |                  | Depth)                                | Depth      | Depth        | Velocity<br>(ft/sec) |                         | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)                          |                         |                  |                                       |            |              |                      |                         |                           |
|   | -                       |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         | ,,               |                                       |            |              |                      |                         |                           |
|   |                         |                  |                                       | , . Weaths |              |                      |                         |                           |
|   |                         |                  | 4                                     |            |              |                      |                         |                           |
|   |                         |                  | · · · · · · · · · · · · · · · · · · · |            | :<br>        |                      |                         |                           |
|   |                         |                  |                                       |            |              |                      |                         |                           |
|   |                         | ENTW             | \$2<br>                               |            |              |                      | ,                       |                           |
| T-\0185\04\292\Field Forms\Gauging Form |                         | 10/              | 010,0                                 |            |              |                      |                         | March 27, 2002            |

March 27, 2002

|       |                                       |                         |  |                   |              |                                       | $\sim 0$    | 00                      | r                                  |     |
|-------|---------------------------------------|-------------------------|--|-------------------|--------------|---------------------------------------|-------------|-------------------------|------------------------------------|-----|
|       | Client:                               | (                       | CRWD                                   |                   | Si           | te Location                           | CR'         | $D_{r}$                 | 6                                  | -   |
|       | Project No.:                          | 0                       | 002-75                                 |                   | Site I       | Description                           |             | 4                       | ······                             | -   |
|       | Date:                                 | 12                      | 2-Jul-06                               |                   |              | Weather                               | _ 80        | Sun Sun                 | ny                                 | -   |
|       | Sampler(s):                           |                         | WB                                     | <b></b>           | Sam          | ples Taken:                           | Yes         | ) <u>No</u>             | /                                  |     |
|       | Start Time:                           | 10:0                    | 15                                     | _                 | Sa           | mple Time:                            | -           | 10:1                    | 5                                  | -   |
|       | End Time:                             | <u>)0:</u> ;            | 20                                     |                   |              |                                       |             |                         |                                    |     |
|       | Channel Conditions:                   | Flow                    | ing                                    | _                 | DTW Me       | easurement                            | Q.          | )(                      |                                    | _   |
|       | COC Number:                           |                         | <u> </u>                               | _                 |              |                                       |             |                         |                                    |     |
|       |                                       |                         | ······································ |                   |              |                                       | Notes:      | -Ver                    | y Smal                             | 7   |
|       |                                       |                         | Field Parameters                       |                   |              |                                       |             | amon                    | <u>y Smal</u><br>nt of f.<br>hanne | Yow |
|       | Sample I.D.                           | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)                          | <b>D.O.</b> (mg/l | ) pH         | (S.U.)                                |             | inc                     | hanne                              | 2/  |
|       |                                       | 19.31                   | 1363                                   | 5.01              | 7.           | 79                                    |             |                         |                                    | -(  |
|       |                                       |                         |  |                   |              |                                       | -           |                         |                                    | -   |
|       | Stage Ht                              |                         |  | Rated Flow        | v:           |                                       | Gauged Flow | $r_{r} \gtrsim r_{r}$   | D4cf                               | 5   |
| )     |                                       |                         |  |                   |              |                                       | -           |                         |                                    | _   |
| H     |                                       |                         | S                                      | Stream Gau        | ging Data    | L                                     |             |                         |                                    |     |
| 4     | Distance from                         |                         |  | Velocity          |              | ocity                                 | Average     |                         | Discharge                          |     |
|       | Initial Point (ft)                    | Width (ft)              | Depth (ft)                             | (60%<br>Depth)    | 20%<br>Depth | 80%<br>Depth                          | Velocity    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)          |     |
|       |                                       |                         |  |                   |              |                                       | (ft/sec)    |                         |                                    |     |
|       | 0, (left side)                        |                         |  |                   |              | · · · · · · · · · · · · · · · · · · · |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    |     |
|       | · · · · · · · · · · · · · · · · · · · |                         |  |                   | ,            | -                                     |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    | ,   |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    | /   |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         | ·····                                  |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         | <u></u>                                |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         |  |                   | 5.<br>       | ŧ.                                    |             |                         |                                    |     |
| 1.1 M |                                       |                         |  |                   |              | 24.<br>1940                           |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         |                                    |     |
|       |                                       |                         |  |                   |              |                                       |             |                         | 6 <sup>2</sup>                     |     |

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March 27, 2002

| Client:             | (                                      | CRWD             |                   | Si       | ite Location: | TC                                    | 33.                     | 2  |
|---------------------|--|------------------|-------------------|----------|---------------|---------------------------------------|-------------------------|--|
| Project No.:        | 0                                      | 002-75           | _ <b>.</b>        | Site     | Description:  |                                       |                         |  |
| Date:               | 12                                     | 2-Jul-06         | -                 |          | Weather:      | 75%                                   | hand                    | Sunny  |
| Sampler(s):         |  | WB               |                   | San      | ples Taken:   | Yes                                   | s No                    | <u>)                                    </u> |
| Start Time:         | 9:2                                    | <u>.0</u>        | _                 | Sa       | ample Time:   |                                       |                         | •  |
| End Time:           | <u> </u>                               | ,5               | _                 |          |               |                                       |                         |  |
| Channel Conditions: | Not                                    | flowing          | _                 | DTW M    | easurement:   | 4.5                                   | 2                       |  |
| COC Number:         | •••••••••••••••••••••••••••••••••••••• | <u> </u>         | _                 |          |               |                                       |                         |  |
| I <b></b>           |  |                  |                   |          |               | Notes:                                | Water                   | is<br>Iant                                   |
|                     | 1                                      | Field Parameters | <b></b>           |          |               |                                       | Stagn                   | lant   |
| Sample I.D.         | Temp. ( <sup>0</sup> C)                | Cond. (mS/cm)    | <b>D.O.</b> (mg/l | ) pH     | I (S.U.)      |                                       |                         |  |
|                     | 20,55                                  | 954              | 5.90              | 7,5      | 2             |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
| Stage H             | t:                                     |                  | Rated Flov        | v:       |               | Gauged Flow                           | v:                      |  |
| м.                  |  |                  |                   |          |               |                                       |                         |  |
| [ <del>]</del>      |  | 2                | Stream Gau        |          |               | · · · · · · · · · · · · · · · · · · · |                         |  |
| Distance from       | Width (ft)                             | Depth (ft)       | Velocity<br>(60%  | Vel 20%  | ocity<br>80%  | Average                               | Area (ft <sup>2</sup> ) | Discharge                                    |
| Initial Point (ft)  |  | - ·r ·· (··)     | Depth)            | Depth    | Depth         | Velocity<br>(ft/sec)                  | nica (it )              | (Q, ft <sup>3</sup> /sec)                    |
| 0, (left side)      |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   | . 94.02. |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         |  |
|                     |  |                  |                   |          |               |                                       |                         | · · · · · · · · · · · · · · · · · · ·        |
|                     |  | Ent W!           | 5                 |          | · •           |                                       |                         |  |

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|                                     |  |                  |                    |            |              | TB                                       | 22                      | $\overline{}$                          |
|-------------------------------------|--|------------------|--------------------|------------|--------------|--|-------------------------|--|
| Client:                             | C  | CRWD             | <b>-</b>           |            |              |  |                         |  |
| Project No.:                        | 00   | 002-75           |                    | Site I     | Description: | •  |                         |  |
| Date:                               | 12   | 2-Jul-06         | <b></b>            |            | Weather:     |  |                         |  |
| Sampler(s):                         |  | WB               |                    | Sam        | ples Taken:  | Yes                                      | No                      | )                                      |
| Start Time:                         | <u> </u>                                   | 5                | _                  | Sa         | mple Time:   | •  |                         |  |
| End Time:                           | 9:50                                       | 5                |                    |            |              |  |                         |  |
| Channel Conditions:                 | Nor  | Flow             | _                  | DTW Me     | easurement:  | _7.56                                    | 2                       |  |
| COC Number:                         |  |                  | _                  |            |              | -  |                         |  |
|                                     |  |                  |                    |            |              | Notes:                                   | -Ver                    | y little                               |
|                                     | I  | Field Parameters |                    |            |              |  | wafe                    | ylittle<br>in<br>nnel                  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C)                    | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | рН         | (S.U.)       |  | Char                    | nnel                                   |
|                                     | 21.67                                      | 942              | 5.07               | 7.8        | Ya           |  | <b>.</b>                |  |
| <u></u>                             | <u>kalati mani faka kupani ana ana ana</u> |                  |                    | <u></u>    |              | L. L |                         |  |
| Stage H                             | t:   |                  | Rated Flow         | <i>]</i> • |              | Gauged Flow                              | <i>,</i> •              |  |
| 8                                   | ·•   |                  | ******* * **       | •          |              | Gungen i i i                             | ·                       |  |
|                                     |  | 5                | Stream Gau         | ging Data  | L            |  |                         |  |
|                                     |  |                  |                    |            |              |  |                         |  |
| Distance from                       |  |                  | Velocity           |            | ocity        | Average                                  |                         | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Average<br>Velocity                      | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)                                 | Depth (ft)       |                    |            | ocity        |  | Area (ft <sup>2</sup> ) | -                                      |
|                                     | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)                                 | Depth (ft)       | (60%               | 20%        | ocity<br>80% | Velocity                                 | Area (ft <sup>2</sup> ) | -                                      |

Ent WB 10/10/04

| Client:             |                                       | CRWD             |                | g                                      | :4- T        | : CR        | 318                     | )               |      |
|---------------------|---------------------------------------|------------------|----------------|--|--------------|-------------|-------------------------|-----------------|------|
| Project No.:        | · ·                                   | 0002-75          |                |  |              | •           | 200                     |                 |      |
| Date:               |                                       | 2-Jul-06         | <u></u>        | Sile                                   | Description  | amp         | Sunny                   |                 |      |
| Sampler(s):         | I.                                    | WB               |                | 0                                      | Weather      |             |                         |                 |      |
| Start Time:         | 10:3                                  |                  |                |  | nples Taken  |             | <u>s No</u><br>145      |                 |      |
| End Time:           | 10:E                                  | _                |                | 5                                      | ample Time   |             | 75                      |                 |      |
| Channel Conditions: | flow                                  |                  |                | TYTUL 34                               | leasurement  | 12.         | מר                      |                 |      |
| COC Number:         | FICU                                  | ing              |                | DIWW                                   | leasurement  | -Bin bhle   | 10<br>15 h              | elow wate       | -lin |
| eoe Number.         |                                       |                  | _              |  |              |             |                         |                 |      |
|                     |                                       | Field Parameters |                | ······································ |              | Notes       | Very                    | little          |      |
| Sample I.D.         | 1                                     | Cond. (mS/cm)    | П              |  |              |             | <u>char</u>             | <u>r</u> in     |      |
| Sumple M.S.         | 21.03                                 | 1                | 5,91           | 7.9                                    | A            |             | <u>Char</u>             | mel             |      |
|                     |                                       |                  |                |  | <u> </u>     | <u>]</u>    | •                       |                 |      |
| Stage U             | t:                                    |                  | Dete J Dies    |  |              | Gauged Flow | N 11/2                  | cfs             |      |
| Stage ri            | Li                                    |                  | Rated Flov     | v:                                     |              | Gauged Flow | ν: <u>[] • Π (</u> Φ    |                 |      |
|                     |                                       | :                | Stream Gau     | ging Data                              | a            |             |                         |                 |      |
| Distance from       |                                       |                  | Velocity       |  | ocity        | Average     |                         | Discharge       |      |
| Initial Point (ft)  | Width (ft)                            | Depth (ft)       | (60%<br>Depth) | 20%<br>Depth                           | 80%<br>Depth | Velocity    | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |      |
|                     |                                       |                  |                | γ <u></u>                              | <b></b>      | (ft/sec)    |                         |                 |      |
| 0, (left side)      |                                       |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     | · · · · · · · · · · · · · · · · · · · |                  |                |  |              | ·           |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  | ļ              |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |
|                     | -                                     |                  |                |  |              |             |                         |                 |      |
|                     |                                       |                  |                | - State of a                           |              |             |                         |                 |      |
|                     | -                                     |                  | ¥*/            |  |              |             |                         |                 |      |
|                     |                                       |                  |                |  |              |             |                         |                 |      |

Ent WB 10/10/06

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|                     |            |                  |                |              |              | $\wedge \Omega$ | 00                      | -                                      |
|---------------------|------------|------------------|----------------|--------------|--------------|-----------------|-------------------------|--|
| Client:             |            | CRWD             |                |              | te Location: |                 | <u>04.</u> C            | )                                      |
| Project No.:        | 0          | 002-75           | _              | Site         | Description: | <u></u>         | 0 0                     | •••••••••••••••••••••••••••••••••••••• |
| Date:               | 12         | 2-Jul-06         | _              |              | Weather:     | _80             | , Sun                   | ny                                     |
| Sampler(s):         | ·          | WB               |                | Sam          | ples Taken:  | Yes             | 5 <u>)</u> No           |  |
| Start Time:         | //:0       | 0                |                | Sa           | mple Time:   | /               | 10                      | FUI                                    |
| End Time:           |            | <u>25</u>        |                |              |              |                 |                         |  |
| Channel Conditions: | flou       | ing              |                | DTW M        | easurement:  | _ /5.3          | 8                       |  |
| COC Number:         | • 1-       | 5                |                |              |              |                 |                         |  |
|                     |            |                  | _              |              |              | Notes:          | -very                   | little                                 |
|                     | ]          | Field Parameters |                |              |              |                 | flag                    | J in                                   |
| Sample I.D.         | T          | Cond. (mS/cm)    | 1              | Ha           | (S.U.)       |                 | Ch                      | annel                                  |
| 1                   | 23.42      | Qal              | 7.81           | R1           | 1            |                 |                         | ANNE                                   |
|                     |            |                  |                | 1 0.1        |              | J               | ę                       |  |
| Steres II.          | <b>6</b> - |                  | D-4-151        |              |              | 0 17            | 20                      | 1.50 cfs                               |
| Stage II            | t:         |                  | Rated Flow     | v:           |              | Gauged Flow     | <u> </u>                | <u></u> CIS                            |
|                     |            | 1                | Stream Gau     | ging Data    | l            |                 |                         |  |
| Distance from       |            |                  | Velocity       |              | ocity        | Average         |                         | Discharge                              |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%<br>Depth) | 20%<br>Depth | 80%<br>Depth | Velocity        | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec)              |
| 0, (left side)      |            |                  |                |              |              | (ft/sec)        |                         | (Q, 11/300)                            |
| v, (left side)      |            |                  |                |              | T            | (ft/sec)        |                         | (Q, 11/300)                            |
|                     |            |                  |                |              | 1            | (ft/sec)        |                         | (2, 11/300)                            |
|                     |            |                  |                |              |              | (ft/sec)        |                         | (Q, 11/300)                            |
|                     |            |                  |                |              |              | (ft/sec)        |                         | (Q, 11/300)                            |
|                     |            |                  |                |              |              | (ft/sec)        |                         | (Q, 11/300)                            |
|                     |            |                  |                |              |              | (ft/sec)        |                         | (Q, II /300)                           |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |
|                     |            |                  | ζ··            |              |              | (ft/sec)        |                         |  |
|                     |            |                  |                |              |              | (ft/sec)        |                         |  |

E-17 WB 10/06

|                                     |                         |                  |                   |           |              |                     | _                       | _                                      |
|-------------------------------------|-------------------------|------------------|-------------------|-----------|--------------|---------------------|-------------------------|--|
| Client:                             | (                       | CRWD             |                   | Si        | te Location: |                     |                         | <u>R27.2</u>                           |
| Project No.:                        | 0                       | 002-75           | <b></b>           | Site      | Description: |                     | _                       |  |
| Date:                               | 12                      | 2-Jul-06         |                   |           | Weather:     | BO                  | Sun                     | ny                                     |
| Sampler(s):                         |                         | WB               |                   | San       | ples Taken:  | Ye                  | · _                     |  |
| Start Time:                         | 11:2                    | 10               | _                 | Sa        | mple Time:   |                     |                         |  |
| End Time:                           |                         | 0                |                   |           |              |                     |                         |  |
| Channel Conditions:                 | _No                     | Flow             | _                 | DTW M     | easurement:  | 6.8                 | 35 U                    | 15                                     |
| COC Number:                         |                         |                  | _                 |           |              | 5.3                 |                         | <b>,</b>                               |
|                                     |                         |                  |                   |           |              | Notes               | -Cha                    | innel is                               |
|                                     | ]                       | Field Parameters |                   |           |              |                     | NOT                     | Flowing                                |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/1 | ) pH      | (S.U.)       |                     | -duck                   | weed a                                 |
|                                     | 24.89                   | BII              | 0.84              | 7.7       | 7            |                     | surfa                   | ace and                                |
|                                     |                         |                  | <b></b>           |           |              | -                   | Choke                   | d with ve                              |
| Stage H                             | t:                      |                  | Rated Flov        | v:        |              | Gauged Flov         |                         | -                                      |
|                                     |                         |                  |                   |           |              |                     |                         |  |
|                                     |                         |                  |                   |           |              |                     |                         |  |
|                                     |                         | 5                | itream Gau        | ging Data | 1            |                     |                         |  |
| Distance from                       |                         | 5                | tream Gau         | Vel       | ocity        | Average             |                         | Disaharaa                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%  |           | ocity<br>80% | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge $(\Omega, ft^3/sec)$         |
|                                     | Width (ft)              | -77 - 17         | Velocity          | Vel       | ocity        | -                   | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |
| Initial Point (ft)                  | Width (ft)              | -77 - 17         | Velocity<br>(60%  |           | ocity<br>80% | Velocity            | Area (ft <sup>2</sup> ) | - 1                                    |

\$°.

ENF WB 10/10/06

Station 1

2

| Client:                             | C          | CRWD             |                            | Si              | te Location:                            | CR          | 25.0                    |  |
|-------------------------------------|------------|------------------|----------------------------|-----------------|---|-------------|-------------------------|--|
| Project No.:                        | ·          | 002-75           |                            |                 | Description:                            |             | 00.0                    | 2                                      |
| Date:                               |            | 2-Jul-06         | _                          | 5.001           | Weather                                 | Q1º         | 5.00                    | у                                      |
| Sampler(s):                         | • **       | WB               |                            | Sam             | ples Taken:                             |             | <b>`</b>                | •                                      |
| Start Time:                         | 12         | 00               | _                          |                 | mple Time:                              |             | 12:10                   | ************************************** |
| End Time:                           | 17'        | 20               | -                          |                 | mpie rime.                              |             | 10.10                   |  |
| Channel Conditions:                 |            | Wing             | -                          | DTWM            | easurement:                             | 27          | 3.65                    |  |
| COC Number:                         |            | wing             |                            |                 | casurement.                             |             |                         | <u></u>                                |
| COC Number.                         |            | ······           |                            |                 |   | Notee       | -Ver                    | no l'ulla                              |
|                                     |            | Field Parameters |                            |                 |   |             |                         | y little                               |
| Sample I.D.                         |            | Cond. (mS/cm)    | D.O (mg/l                  | nH              | (S.U.)                                  |             | - The                   | SW<br>- Flow From                      |
|                                     | 23.21      | 872              | 4.48                       | $\frac{1}{770}$ | $\hat{\boldsymbol{\boldsymbol{\beta}}}$ |             | Jak                     |  |
|                                     | 0 3. 6.1   | 000              | 1010                       | <u>_ // / -</u> |   |             | 1-01-                   |  |
| Stage Hi                            | t:         |                  | Rated Flow                 | 7•              |   | Gauged Flow | ··· - /).               |  |
| Buge III                            | L.         |                  | Rated 110                  | ·               |   | Gaugeu 110v | v. <u> </u>             | ·                                      |
|                                     |            | S                | Stream Gau                 | ging Data       | l                                       |             |                         |  |
|                                     |            |                  |                            | Val             |   |             | 1                       |  |
| Distance from                       |            |                  | Velocity                   |                 | ocity                                   | Average     |                         | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth    | 80%<br>Depth                            | Velocity    | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | _           | Area (ft <sup>2</sup> ) |  |
|                                     | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)                  | Width (ft) | Depth (ft)       | (60%                       | 20%             | 80%                                     | Velocity    | Area (ft <sup>2</sup> ) |  |

ENT WB 10/10/06

| Client:             | CRWD      | Site Location:    | CR 19.8               |
|---------------------|-----------|-------------------|-----------------------|
| Project No.:        | 0002-75   | Site Description: | Har 55                |
| Date:               | 12-Jul-06 | Weather:          |                       |
| Sampler(s):         | WB        | Samples Taken:    | Yes No                |
| Start Time:         | []:45     | Sample Time:      | 12:50                 |
| End Time:           | 13:05     |                   |                       |
| Channel Conditions: | flowing   | DTW Measurement:  | 12.10                 |
| COC Number:         |           |                   |                       |
|                     |           |                   | and the second second |

| Field Parameters |                         |               |                    |           |  |  |  |
|------------------|-------------------------|---------------|--------------------|-----------|--|--|--|
| Sample I.D.      | Temp. ( <sup>0</sup> C) | Cond. (mS/em) | <b>D.O.</b> (mg/l) | pH (S.U.) |  |  |  |
|                  | 24.46                   | 637           | 4.78               | 8.06      |  |  |  |

Notes: - Very litele - flow - thick ugetation in channe

Stage Ht:\_\_\_\_\_

Rated Flow:\_\_\_\_\_

Gauged Flow:\_\_\_\_\_

**Stream Gauging Data** 

| Distance from<br>Initial Point (ft)      | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|--|------------|------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| 0, (left side)                           |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            | -                          |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
| -  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  |            |            |                            |                      |                       |                                 |                         |  |
|  | ^          |            |                            | in Magana            |                       |                                 |                         |  |
|  |            | <u> </u>   |                            |                      |                       |                                 |                         |  |
| · · · · · · · · · · · · · · · · · · ·    |            | -          |                            |                      |                       |                                 |                         |  |
| T:\0185\04\292\Field Forms\Clauging Form | - Ent      | used Sw    | rL 8/1                     | 6106                 | QA !                  | WB                              | 10/10/01                | /<br>/ March 27, 2002                  |

| Client:<br>Project No.:<br>Date:<br>Sampler(s):<br>Start Time:<br>End Time:<br>Channel Conditions:<br>COC Number:  |                         | CRWD<br>306<br>0 |                            | Sa                   | Weathe<br>mples Taker<br>Sample Time | n:<br>n:<br>n:<br>n:<br>n:<br>Y | es / N                  | 0                                      |
|--|-------------------------|------------------|----------------------------|----------------------|--------------------------------------|---------------------------------|-------------------------|--|
| COC Number,  |                         |                  |                            |                      |                                      | Notes                           |                         |  |
|  |                         | Field Parameters |                            |                      |                                      |                                 |                         |  |
| Sample I.D.  | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/           | l) pH                | I (S.U.)                             |                                 |                         | an                                     |
|  | 280                     | 410              | 15.2                       | 63                   | 10                                   |                                 |                         |  |
| Stage Ht   | ,<br>,,,,               |                  | Rated Flow                 | V:                   |                                      | Gauged Flov                     | v: 0,0                  | 12 cfs                                 |
| Party and a subject of the subject o |                         | 5                | Stream Gau                 | ging Data            | 1                                    |                                 |                         |  |
| Distance from<br>Initial Point (ft)  | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Velo<br>20%<br>Depth | ocity<br>80%<br>Depth                | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   | Ø PO                    | Q.               | 5                          |                      | 3050                                 |                                 |                         |  |
|  | 10                      | 2"               |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
| ,<br>  | ·                       |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  |                            |                      |                                      |                                 |                         |  |
|  |                         |                  | · · ·                      |                      |                                      |                                 |                         |  |
|  | ·                       |                  |                            |                      |                                      |                                 |                         |  |
|  |                         | · · · 1          |                            |                      |                                      |                                 |                         | 3<br>t. *                              |

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| Client:            |                         | CRWD             |                                       |              | Site Locatio  | m. Nort              | h CLea                  | rLaKe                                   |
|--------------------|-------------------------|------------------|---------------------------------------|--------------|---------------|----------------------|-------------------------|---|
| Project No.:       |                         |                  |                                       | Si           | te Descriptio | on: <u>Nort</u>      | atiln                   | Votch                                   |
| Date:              | B1.                     | 3 06             |                                       |              |               |                      |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| Sampler(s):        | ·                       |                  |                                       | S            |               | en: Y                |                         |   |
| Start Time:        |                         |                  |                                       |              |               |                      |                         |   |
| End Time:          |                         |                  | <u></u>                               |              |               |                      |                         |   |
| Channel Conditions | •                       |                  |                                       | DTW          | Measuremen    |                      |                         |   |
| COC Number:        |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               | Note                 | 5:                      |   |
|                    |                         | Field Parameters | · · · · · · · · · · · · · · · · · · · |              |               |                      |                         |   |
| Sample I.D.        | Temp. ( <sup>0</sup> C) | ) Cond. (mS/cm   | 1                                     | /l) pl       | H (S.U.)      |                      |                         | ······································  |
| 1                  |                         |                  |                                       |              |               |                      |                         | , <b></b>                               |
|                    |                         |                  |                                       | <u></u>      |               |                      |                         | ••••••••••••••••••••••••••••••••••••••  |
| Stage I            | -lt:                    |                  | Rated Flor                            | <i>.</i>     |               | Gauged Flov          | 1/*                     |   |
| Ũ                  | <u> </u>                |                  |                                       |              |               | Cauged 1 104         | ··· ,                   |   |
|                    |                         |                  | Stream Gau                            | iging Dat    | a             |                      |                         |   |
| Distance from      |                         |                  | Velocity                              |              | locity        | Average              |                         | Discharge                               |
| Initial Point (ft) | Width (ft)              | Depth (ft)       | (60%)<br>Depth)                       | 20%<br>Depth | 80%<br>Depth  | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^{3}/sec)$                       |
| 0, (left side)     |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         | $\sim$           |                                       |              |               |                      |                         |   |
|                    |                         | f                |                                       |              |               |                      |                         |   |
|                    |                         |                  | $\bigcirc$                            |              |               |                      |                         |   |
|                    |                         |                  | +                                     | · · · · ·    |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         | f                |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       | . Waren a    |               |                      |                         |   |
|                    |                         | ·····            | Ų.,                                   |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              |               |                      |                         |   |
|                    |                         |                  |                                       |              | *             |                      | 1                       | s) <sup>5</sup>                         |

| Field For | n: 2006 | Stream | Sampling |
|-----------|---------|--------|----------|
|-----------|---------|--------|----------|

| Client:             | <b></b>                 | CRWD             |                    |               | Site Locatio | on: <u>CR</u>        | 05                      |                                       |
|---------------------|-------------------------|------------------|--------------------|---------------|--------------|----------------------|-------------------------|---------------------------------------|
| Project No.:        |                         |                  |                    |               |              |                      |                         |                                       |
| Date:               | $_{71}$                 | 306              |                    |               |              |                      |                         | · · · · · · · · · · · · · · · · · · · |
| Sampler(s):         |                         | ·                |                    | Sa            |              | n: <u>Y</u>          |                         |                                       |
| Start Time:         | 43                      | 0                |                    |               |              |                      |                         |                                       |
| End Time:           | •••••                   |                  |                    |               |              |                      |                         |                                       |
| Channel Conditions: |                         |                  |                    | DTW N         | Aeasuremen   | it:                  |                         |                                       |
| COC Number:         |                         |                  |                    |               |              |                      |                         |                                       |
|                     |                         |                  |                    |               |              | Notes                |                         |                                       |
|                     |                         | Field Parameters | )<br>              |               |              |                      |                         |                                       |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     | ) <b>D.O.</b> (mg/ | l) pł         | I (S.U.)     |                      | BS                      | G. 10:85                              |
| 6                   | 30.9                    | 410              | 169                | 49            | 14           |                      |                         |                                       |
|                     |                         |                  |                    |               |              |                      |                         |                                       |
| Stage Ht            | -                       |                  | Rated Flov         | v:            |              | Gauged Flov          | v:                      |                                       |
|                     |                         |                  |                    |               |              |                      |                         |                                       |
| [                   | <u></u>                 |                  | Stream Gau         |               |              |                      |                         |                                       |
| Distance from       | Width (ft)              | Depth (ft)       | Velocity<br>(60%   | Vel<br>20%    | ocity<br>80% | Average              | Area (ft <sup>2</sup> ) | Discharge                             |
| Initial Point (ft)  |                         | 2 op (11)        | Depth)             | Depth         | Depth        | Velocity<br>(ft/sec) | Area (II)               | $(Q, ft^3/sec)$                       |
| 0, (left side)      | -                       | ·                |                    |               |              |                      |                         |                                       |
|                     | -                       |                  |                    |               |              | ;<br>;               |                         |                                       |
|                     | Ta                      | weed             | To                 | Flou          | P Re         | ed                   |                         |                                       |
|                     | / -                     |                  |                    |               |              |                      |                         |                                       |
|                     |                         |                  |                    |               |              |                      |                         |                                       |
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|                     |                         |                  |                    |               |              |                      |                         |                                       |
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|                     |                         |                  | Ş*a                | , 4Pe +, m, , |              |                      |                         |                                       |
|                     |                         |                  |                    |               |              |                      |                         |                                       |
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|                     |                         | ·                |                    |               |              |                      |                         | 4) <sup>5</sup> .                     |

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| Client:             |                         | CRWD             |                                     | Site Location: $URU2$ |               |                      |  |                   |  |
|---------------------|-------------------------|------------------|-------------------------------------|-----------------------|---------------|----------------------|--|-------------------|--|
| Project No.:        |                         |                  | _                                   | Site Description:     |               |                      |  |                   |  |
| Date:               | 71                      | 306              | _                                   |                       |               |                      |  |                   |  |
| Sampler(s):         |                         |                  |                                     |                       |               | 1: Ye                | Yes No   |                   |  |
| Start Time:         | 400                     | 400              |                                     |                       |               |                      |  |                   |  |
| End Time:           |                         |                  | _                                   |                       | ·             | <u></u>              | , <u>, , , , , , , , , , , , , , , , , , ,</u> |                   |  |
| Channel Conditions: |                         |                  |                                     | DTW                   | Measurement   | <u></u>              |  |                   |  |
| COC Number:         |                         |                  | _                                   |                       |               |                      |  |                   |  |
|                     |                         |                  | -                                   |                       |               | Notes                | :  |                   |  |
|                     |                         | Field Parameters |                                     |                       |               |                      | B.M.   | 13.6              |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) <b>pH</b> (S.U.) |                       |               |                      |  |                   |  |
| 5                   | 28.5                    | 420              | 14.2                                | 5                     | 10            |                      |  |                   |  |
|                     |                         |                  |                                     |                       |               |                      |  |                   |  |
| Stage H             | t:                      |                  | Rated Flow                          | /:                    |               | Gauged Flow          | <sub>v:</sub> D, 3 <sup>L</sup>                | lifis             |  |
|                     |                         |                  |                                     |                       |               | C                    |  |                   |  |
| F                   |                         | S                | Stream Gau                          | ging Dat              | a             |                      |  |                   |  |
| Distance from       |                         |                  | Velocity                            | Ve<br>20%             | locity<br>80% | Average              |  | Discharge         |  |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%<br>Depth)                      | Depth                 | Depth         | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                        | $(Q, ft^{3}/sec)$ |  |
| 0, (left side) 🖉    | 10'                     | 4".33            | •                                   | え                     |               | 30                   |  |                   |  |
| 2                   | •                       | ,33              |                                     | 3                     |               |                      |  |                   |  |
| 4                   |                         | - <u>33</u>      |                                     | 2                     |               |                      |  |                   |  |
| 6                   |                         | •33              |                                     |                       |               |                      |  |                   |  |
| R                   |                         | ·33              |                                     | 2                     |               |                      |  |                   |  |
| $\int $             |                         | ,33              |                                     |                       |               |                      |  |                   |  |
| /_/                 |                         |                  |                                     |                       | _             |                      |  |                   |  |
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|                     |                         |                  |                                     |                       |               |                      |  |                   |  |
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|                     |                         |                  |                                     |                       |               |                      |  |                   |  |
|                     |                         |                  | [·                                  |                       |               |                      |  |                   |  |
|                     |                         |                  |                                     |                       |               |                      |  | 3.<br>A.          |  |

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| Field | Form: | 2006 | Stream | Sampling |
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| Client:             | (          | CRWD             |                     | S            | C<br>ite Location | r.35.3                                |                         |                                       |
|---------------------|------------|------------------|---------------------|--------------|-------------------|---------------------------------------|-------------------------|---------------------------------------|
| Project No.:        | •          |                  | - Site Description: |              |                   |                                       |                         |                                       |
|                     | 774        | 002-75<br>e)Ce   |                     |              | : 88              |                                       |                         |                                       |
| Sampler(s):         | NIC        | ole<br>5         | Samples Taken:      |              | $\rightarrow$     |                                       |                         |                                       |
| Start Time:         | 17.04      | <br>             | -                   |              |                   |                                       |                         |                                       |
| End Time:           |            |                  | -                   |              | ample time        | •                                     |                         |                                       |
| Channel Conditions: |            |                  |                     | DTW M        | anguramant        | : NO Wa                               | \                       |                                       |
| COC Number:         |            |                  |                     |              | reasurement       | . <u>Nº W4</u>                        |                         |                                       |
| ebe Number.         |            |                  | -                   |              |                   | Notes                                 |                         | 1                                     |
|                     |            | Field Parameters |                     |              |                   | ]                                     | ho u                    | uter<br>U-Drj                         |
| Sample I.D.         | 1          | Cond. (mS/cm)    | <b>D.O.</b> (mg/l   | nH           | l (S.U.)          |                                       | <u> A a</u>             | et ~ long                             |
| Sample LD.          |            |                  |                     |              | (0.0.)            |                                       | <u></u>                 |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
| Stage H             | t:         |                  | Rated Flow          | ·            |                   | Gauged Flow                           |                         |                                       |
| Stage II            |            |                  | Nateu Flow          | · •          |                   | Gaugeu Flow                           | · •                     |                                       |
|                     |            | S                | Stream Gau          | ging Data    | 1                 |                                       |                         |                                       |
| Distance from       |            |                  | Velocity            |              | ocity             | Average                               |                         | Discharge                             |
| Initial Point (ft)  | Width (ft) | Depth (ft)       | (60%<br>Depth)      | 20%<br>Depth | 80%<br>Depth      | Velocity                              | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                       |
|                     |            |                  |                     |              |                   | (ft/sec)                              |                         |                                       |
| 0, (left side)      |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   | · · · · · · · · · · · · · · · · · · · |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
| ·····               |            |                  |                     |              |                   |                                       |                         | · · · · · · · · · · · · · · · · · · · |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     | ~          |                  | ¥.                  |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
|                     |            |                  |                     |              |                   |                                       |                         |                                       |
| 11                  |            | -                | 1                   |              |                   |                                       |                         |                                       |

| Client:                             |                         | CRWD  | -                          | Sit         | C<br>te Location: | 33.6                            |                         |  |
|-------------------------------------|-------------------------|---|----------------------------|-------------|-------------------|---------------------------------|-------------------------|--|
| Project No.:                        | 0                       | 002-75  | _                          | Site I      | Description:      |                                 |                         |  |
| Date:                               | J. U.                   | σų  | Weather: Sen 39            |             |                   |                                 |                         |  |
| Sampler(s):                         | MC                      | σίρ   | Samples Taken              |             |                   | Yes 🕥                           |                         |  |
| Start Time:                         | 1150                    |   |                            |             |                   |                                 |                         |  |
| End Time:                           | <u> </u>                |   | _                          |             |                   |                                 |                         |  |
| Channel Conditions:                 |                         |   |                            | DTW Me      | easurement:       | NO we                           | <b>↓</b>                |  |
| COC Number:                         |                         |   |                            |             |                   |                                 |                         |  |
|                                     |                         |   | -<br>                      |             |                   | Notes:                          | Just a                  | Carpl                                  |
|                                     | ]                       | Field Parameters                              | · ·                        |             |                   |                                 | Spirt                   | complet                                |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)                                 | <b>D.O.</b> (mg/l)         | pН          | (S.U.)            |                                 | weter                   |  |
|                                     |                         |   |                            |             | -                 |                                 | ·····                   |  |
|                                     |                         | <u>, , , , , , , , , , , , , , , , , , , </u> |                            |             |                   | 1                               |                         |  |
| Stage Ht                            | :                       |   | Rated Flow                 | •           |                   | Gauged Flow                     | /:                      |  |
|                                     |                         |   |                            |             |                   |                                 |                         |  |
|                                     |                         | S   | tream Gau                  | ging Data   |                   |                                 |                         |  |
|                                     |                         |   |                            |             |                   |                                 |                         |  |
| Distance from                       | Width (ft)              | Depth (ft)                                    | Velocity<br>(60%           | Velc<br>20% | ocity<br>80%      | Average                         | $Area (fi^2)$           | Discharge                              |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)                                    | Velocity<br>(60%<br>Depth) |             |                   | Average<br>Velocity<br>(ft/sec) | Area (fi <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  | Width (ft)              | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%                       | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |
| Initial Point (ft)                  |                         | Depth (ft)                                    | (60%<br>Depth)             | 20%         | 80%               | Velocity                        | Area (ft <sup>2</sup> ) | -                                      |

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| Field 1 | Form: | 2006 | Stream | Sampling |
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| Client:             | (                       | CRWD             |   | Si           | te Location: | TB 3        | 3.2                     |  |  |
|---------------------|-------------------------|------------------|---|--------------|--------------|-------------|-------------------------|--|--|
| Project No.:        | 0002-75                 |                  | -   |              |              |             |                         |  |  |
| Date:               | 7.26-0                  | 4                | Site Description: Dry 19 yn Ac<br>Weather: 33 |              |              |             |                         |  |  |
| Sampler(s):         | WLO                     |                  |   | San          | ples Taken:  | en: Yes 😡   |                         |  |  |
| Start Time:         | 12:00                   |                  | -   | Sa           | ample Time:  | <u> </u>    |                         |  |  |
| End Time:           |                         |                  | _   |              |              |             |                         |  |  |
| Channel Conditions: | -Ory                    |                  | -   | DTW M        | easurement:  | Clow.       | t cure                  | nd                                     |  |
| COC Number:         | ų                       |                  | _   |              |              | Clow.       |                         |  |  |
| <b>1</b>            |                         |                  |   |              |              | Notes       | Jost a                  | aul                                    |  |
|                     |                         | Field Parameters |   |              |              |             | othor                   | - Hours                                |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l]                            | ) pH         | (S.U.)       |             | wrth, b                 | oth wight                              |  |
|                     |                         |                  |   | <u> </u>     |              |             | p/down 5                | menn Rec                               |  |
|                     |                         |                  |   |              |              |             | is no i                 | unter at al                            |  |
| Stage H             | t:                      |                  | Rated Flow                                    | ·            |              | Gauged Flov | /:                      |  |  |
|                     |                         | _                |   |              |              |             |                         |  |  |
|                     | 1                       | 2                | Stream Gau                                    | <br>T        |              |             |                         |  |  |
| Distance from       | Width (ft)              | Depth (ft)       | Velocity                                      | Vel          | neitv        |             |                         |  |  |
| Initial Point (ft)  |                         |                  | 1 (61)07                                      | 120%         |              | Average     | A                       | Discharge                              |  |
|                     |                         |                  | (60%<br>Depth)                                | 20%<br>Depth | 80%<br>Depth | Velocity    | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | -           | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |
| 0, (left side)      |                         |                  | 1 °   |              | 80%          | Velocity    | Area (ft <sup>2</sup> ) | - 1                                    |  |

\$<sup>2</sup> :

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#### Field Form: 2006 Stream Sampling

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| Client:                             | (                       | CRWD   | -                  | Si           | te Location: | CR                              | 31.0                    |  |
|-------------------------------------|-------------------------|--|--------------------|--------------|--------------|---------------------------------|-------------------------|--|
| Project No.:                        | 0002-75                 |  | Site Description:  |              |              |                                 |                         |  |
| Date:                               | 7.24.06<br>NIC          |  | Weather: Sun 90°   |              |              |                                 |                         |  |
| Sampler(s):                         | NIC                     |  |                    | Sam          |              | Tes                             |                         |  |
| Start Time:                         | ·                       |  | -                  | Sa           | mple Time:   | 1130                            |                         |  |
| End Time:                           | . <u></u>               |  | •                  |              |              |                                 | ·····                   |  |
| Channel Conditions:                 | Row (-                  | an amount  | С.                 | DTW M        | easurement:  | 13.7                            | <u></u>                 |  |
| COC Number:                         | ·                       |  |                    |              |              |                                 |                         |  |
|                                     |                         | NIX ( 4 100 0000 - 2000 |                    |              |              | Notes:                          | bur                     | fler                                   |
|                                     | -<br>-                  | Field Parameters   |                    |              |              |                                 | - but                   | flow                                   |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)  | <b>D.O.</b> (mg/l) | pH           | (S.U.)       |                                 |                         | 0                                      |
| 31.3                                | 21.65                   | 727  | 6.98               | 2,14         | -(           |                                 |                         |  |
| Stage H                             | t:7.74                  |  | Rated Flow         |              |              | Gauged Flow                     | : <u>0.08</u>           | 7                                      |
|                                     |                         |  | Velocity           | Velo         | ocity        |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)   | (60%<br>Depth)     | 20%<br>Depth | 80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |                         |  |                    |              |              |                                 |                         |  |
|                                     |                         |  |                    |              |              |                                 |                         |  |
|                                     |                         |  |                    |              |              |                                 |                         |  |
|                                     |                         |  |                    |              |              |                                 |                         |  |
|                                     |                         |  |                    |              |              |                                 |                         |  |
|                                     |                         |  |                    |              |              |                                 |                         |  |
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#### Field Form: 2006 Stream Sampling

---- WVP

| Field | Form: | 2006 | Stream | Sampling |
|-------|-------|------|--------|----------|
|-------|-------|------|--------|----------|

| Client:             | C                       | CRWD             | _                  | Si           | ite Location: | CR.                             | 29.0                    |  |
|---------------------|-------------------------|------------------|--------------------|--------------|---------------|---------------------------------|-------------------------|--|
| Project No.:        | 0                       | 002-75           | Site Description:  |              |               |                                 |                         |  |
| Date:               | 7.26.                   | 04               | _                  |              | Weather:      | Surg &                          | 850                     |  |
| Sampler(s):         |                         |                  | _                  | San          |               | Yes                             |                         |  |
| Start Time:         |                         |                  | -                  |              | ample Time:   |                                 |                         |  |
| End Time:           |                         |                  | _                  |              |               | ·····                           |                         |  |
| Channel Conditions: | down                    | - 11m            | _                  | DTW M        | easurement:   | 15.4                            | 6                       |  |
| COC Number:         | ð                       | /~               |                    |              |               |                                 |                         |  |
|                     |                         |                  | _                  |              |               | Notes:                          |                         |  |
|                     | ]                       | Field Parameters |                    |              |               |                                 |                         |  |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | ) pH         | (S.U.)        |                                 |                         |  |
| CR 29.0             | 22.96                   | 708              | 7.36               | 8.11         | <i>t</i>      |                                 |                         |  |
| Stage H             | <u>: 15.46</u>          |                  | Rated Flow         | :            |               | Gauged Flow                     | v: <u>1.07</u>          | 28                                     |
|                     |                         | S                | Stream Gau         | ging Data    | 1             |                                 |                         |  |
| Distance from       |                         |                  | Velocity           | Vel          | ocity         |                                 |                         |  |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%)<br>Depth)    | 20%<br>Depth | 80%<br>Depth  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
|                     | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  | Width (ft)              | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%               | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |
| Initial Point (ft)  |                         | Depth (ft)       | (60%<br>Depth)     | 20%          | 80%           | Velocity                        | Area (ft <sup>2</sup> ) |  |

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| Field Form: | 2006 | Stream | Sampling |
|-------------|------|--------|----------|
|-------------|------|--------|----------|

| Client:             | CRWD    |
|---------------------|---------|
| Project No.:        | 0002-75 |
| Date:               | 7-26-06 |
| Sampler(s):         | NIL     |
| Start Time:         | 1000    |
| End Time:           | 10-25   |
| Channel Conditions: | Wei     |
| COC Number:         |         |

|                   | /                  |
|-------------------|--------------------|
| Site Location:    | CR 27.2            |
| Site Description: | murky sky. water a |
| Weather:          | 82° 5mm            |
| Samples Taken:    | (Yes) No           |
| Sample Time:      | 1015               |

DTW Measurement: 5.48 6.98 us

**pH** (S.U.)

7.34

| Notes: Staguert water |
|-----------------------|
| lots of water         |
| but us flow           |
| up stayment           |
| 0 2                   |

Stage Ht: <u>S. 78</u>

Sample I.D.

**Temp.** (<sup>0</sup>C)

23.81

Rated Flow:

1.85

**Field Parameters** 

678

Cond. (mS/cm) D.O. (mg/l)

Gauged Flow: No flow

Stream Gauging Data

| Distance from<br>Initial Point (ft)   | Width (ft) | Depth (ft) | Velocity<br>(60%<br>Depth) | Velc<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|---------------------------------------|------------|------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| 0, (left side)                        |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
| · · · · · · · · · · · · · · · · · · · | ····       |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       |            |            |                            |                      |                       |                                 |                         |  |
|                                       | ~          |            | ₹°•                        |                      |                       |                                 |                         |  |
|                                       |            |            |                            | ļ                    |                       |                                 |                         |  |
|                                       |            | -          |                            |                      |                       |                                 |                         |  |

| Client:                             | (                              | CRWD                                    | Site Location:             |                      |                       | <u> (q 7</u>                    | 5.6                     |  |
|-------------------------------------|--------------------------------|---|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| Project No.:                        | 0                              | 002-75                                  | Site Description:          |                      |                       |                                 |                         |  |
| Date:                               | 7.20                           | -oU                                     | _                          |                      | Weather:              | Sinny E                         | 30°                     |  |
| Sampler(s):                         | NIC                            | × · · · · · · · · · · · · · · · · · · · | _                          | Sam                  |                       | Tes                             |                         |  |
| Start Time:                         | 515                            |   | -                          | Sa                   | mple Time:            | 930                             |                         |  |
| End Time:                           | 9:46                           |   | <b>_</b>                   |                      |                       | <u> </u>                        |                         |  |
| Channel Conditions:                 | Glowm                          |   | _                          | DTW Mo               | easurement:           | 22.95                           | <i>-</i>                |  |
| COC Number:                         |                                | ,                                       | _                          |                      |                       |                                 |                         |  |
| (                                   |                                |   |                            |                      |                       | Notes:                          | water,                  | nust                                   |
|                                     |                                | Field Parameters                        | <b>R</b>                   | <b>,</b>             |                       |                                 | flown                   | not                                    |
| Sample I.D.                         | <b>Temp.</b> ( <sup>0</sup> C) | Cond. (mS/cm)                           | <b>D.O.</b> (mg/l)         | pH                   | (S.U.)                |                                 | •                       |  |
| CR 25.6                             | 22.30                          | 710                                     | 2.56                       | 7.0                  | ï٩                    |                                 |                         |  |
| Stage H                             | t:                             |   | Rated Flow                 | *<br>*               | Advances of the Same  | Gauged Flow                     | : <u>No flo</u>         | <u>u (</u> shyrrt                      |
|                                     |                                | S                                       | stream Gau                 | ging Data            |                       |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)                     | Depth (ft)                              | Velocity<br>(60%<br>Depth) | Velc<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                |   |                            |                      |                       |                                 |                         |  |
|                                     |                                | · · · · · · · · · · · · · · · · · · ·   |                            |                      |                       |                                 |                         |  |

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| Client:                             |                         | CRWD             |                            | :                    | Site Locatio          | n: <u> </u>                     | 231                     | .8                                     |
|-------------------------------------|-------------------------|------------------|----------------------------|----------------------|-----------------------|---------------------------------|-------------------------|--|
| Project No .:                       | <u>.</u>                |                  |                            | Site                 | e Descriptio          | n:                              |                         |  |
| Date:                               | 82                      | 306              |                            |                      |                       | er:                             |                         |  |
| Sampler(s):                         |                         |                  |                            | Sa                   |                       | n: Ye                           |                         |  |
| Start Time:                         | 12                      | 35               |                            |                      |                       | e:                              |                         |  |
| End Time:                           |                         |                  |                            |                      |                       |                                 |                         |  |
| Channel Conditions:                 |                         |                  |                            | DTW N                | leasuremen            | t:                              |                         |  |
| COC Number:                         | <u></u>                 |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       | Notes                           | :                       |  |
|                                     |                         | Field Parameters |                            |                      | ·                     |                                 |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O</b> . (mg/          | l) pH                | I (S.U.)              |                                 |                         |  |
| 2                                   | 22.09                   | 510              | 11                         | 6                    | 64                    |                                 |                         |  |
|                                     | t: <u>BM</u>            | <u>13</u> .4     | Rated Flov                 | w:                   |                       | Gauged Flow                     | <u>. 0,18</u>           | Befs                                   |
| :<br>                               |                         | 5                | Stream Gau                 | iging Data           | I                     |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%<br>Depth) | Veld<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 8                       | 2'016            | • 1                        |                      |                       | 30'                             |                         |  |
| 2                                   | •                       | 3" 0,25          | 3                          |                      |                       |                                 |                         |  |
| 24                                  |                         | 20,10            | 5                          |                      |                       |                                 |                         |  |
| 6                                   |                         | 2 0.16           | 3                          |                      |                       |                                 |                         |  |
| 8                                   |                         | 2 0.16<br>1 0.08 | 4                          |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     | ,                       |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      | -                     |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  | 3.4 .<br>7                 | 19/10/1911           |                       |                                 |                         |  |
| 2                                   | Ţ                       |                  |                            |                      |                       |                                 |                         |  |
|                                     |                         |                  |                            |                      |                       |                                 |                         | 1                                      |
|                                     |                         |                  |                            |                      |                       |                                 |                         |  |

| Client:                |                   | CRWD.            |  |              | Site Locatio | n: <u> </u>          | 29.0                    | 2                         |
|------------------------|-------------------|------------------|--|--------------|--------------|----------------------|-------------------------|---------------------------|
| Project No.:           | Site Description: |                  |  |              |              | n:                   |                         |                           |
| Date:                  | _ 82              | 306              | _  |              | Weathe       | er:                  |                         |                           |
| Sampler(s):            |                   |                  |  |              |              | n: <u>Y</u> e        |                         |                           |
| Start Time:            |                   |                  |  |              |              | e:                   |                         |                           |
| End Time:              |                   |                  |  |              |              |                      |                         |                           |
| Channel Conditions:    |                   |                  | _  | DTW N        | Measuremen   | t:                   |                         |                           |
| COC Number:            | <u></u>           |                  | -  |              |              |                      |                         |                           |
| 1                      |                   |                  | 1100-21-21-24-24-24-24-24-24-24-24-24-24-24-24-24- |              |              | Notes                | :                       | ·····                     |
| a som yr anna a laidau |                   | Field Parameters |  |              |              |                      |                         |                           |
| Sample I.D.            |                   | Cond. (mS/cm)    | <b>D.O.</b> (mg/l                                  |              | H (S.U.)     |                      |                         |                           |
|                        | 23.4              | 500              | 12.5   | 6.           | 30           |                      |                         |                           |
| Stage H                | t: <u>BM  </u>    | r                | Rated Flow   |              |              | Gauged Flow          | . <u>0</u> ,3           | 2cfs                      |
| Distance from          |                   | ,                | Velocity   |              | ocity        | Average              |                         | Discharge                 |
| Initial Point (ft)     | Width (ft)        | Depth (ft)       | (60%<br>Depth)                                     | 20%<br>Depth | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)         | -                 |                  | -  |              |              |                      |                         |                           |
| 0                      | 6'                | 0210,16          |  | 1.           | 30*          |                      |                         |                           |
| 2                      |                   | 3 10.25          |  | 2            |              |                      |                         | 1                         |
| 4                      |                   | 6 0.50           |  | 2            |              |                      |                         |                           |
| <u> </u>               |                   | 5 10.42          |  | 1            |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  | Q4.1   | 91.7141      |              |                      |                         |                           |
| }                      |                   |                  |  | -            |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         |                           |
|                        |                   |                  |  |              |              |                      |                         | 61 <sup>3</sup>           |

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| Client:             |  | CRWD             |                  |              | Site Locatio | on: <u>Sov</u>       | The C                   | courbake                              |
|---------------------|--|------------------|------------------|--------------|--------------|----------------------|-------------------------|---------------------------------------|
| Project No.:        | •••••••••••••••••••••••••••••••••••••• |                  |                  | Sit          | e Descriptio | on: <u>INLe</u>      | tate                    | esster                                |
| Date:               | _ 8 2                                  | 2806             |                  |              | Weathe       | er:                  |                         |                                       |
| Sampler(s):         | •                                      | 1.0              |                  | Sa           |              | n:Y                  |                         |                                       |
| Start Time:         |  |                  |                  | 5            | Sample Tim   | e:                   | ····                    | · · · · · · · · · · · · · · · · · · · |
| End Time:           |  |                  |                  |              |              |                      |                         |                                       |
| Channel Conditions: |  |                  |                  | DTW N        | Aeasuremen   | ıt:                  |                         |                                       |
| COC Number:         |  |                  |                  |              |              |                      |                         |                                       |
| 1                   |  |                  |                  |              |              | Notes                | •                       |                                       |
|                     |  | Field Parameters |                  |              |              |                      |                         |                                       |
| Sample I.D.         | Temp. ( <sup>0</sup> C)                | Cond. (mS/cm)    | D.O. (mg/        | l) pł        | I (S.U.)     |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              | _                    |                         |                                       |
| Stage Ht            | •                                      |                  | Rated Flow       | v:           |              | Gauged Flow          | v:                      |                                       |
| ,                   |  | S                | Stream Gau       | ging Data    | 1            |                      |                         |                                       |
| Distance from       |  |                  | Velocity         |              | ocity        | Average              |                         | Discharge                             |
| Initial Point (ft)  | Width (ft)                             | Depth (ft)       | (60%<br>Depth)   | 20%<br>Depth | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                       |
| 0, (left side)      |  |                  |                  |              |              |                      |                         |                                       |
|                     | -                                      |                  |                  |              |              |                      |                         |                                       |
|                     |  | h                | $\alpha$ $1$ $2$ |              | 1            |                      |                         |                                       |
|                     |  |                  | 4                |              |              |                      |                         |                                       |
|                     |  | V                | -(               |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     | ,                                      |                  |                  |              |              |                      |                         |                                       |
| ······              |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  | ž.,              | . #•v.e.     |              |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              |                      |                         |                                       |
|                     |  |                  |                  |              |              | 1                    |                         |                                       |

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| Client:                               |                                       | CRWD             |                    |              | Site Location | n: <u>V</u>   | orth                    | Cheurbok.<br>V Notch |
|---------------------------------------|---------------------------------------|------------------|--------------------|--------------|---------------|---|-------------------------|----------------------|
| Project No.:                          |                                       |                  |                    | Sit          | e Description | n: <u>INL</u>   | etat                    | Notch                |
| Date:                                 | &                                     | 2806             |                    |              |               |   |                         |                      |
| Sampler(s):                           | <u></u>                               |                  |                    | Sa           |               |   |                         | 0                    |
| Start Time:                           | <u> </u>                              |                  |                    |              | Sample Time   | 2:  |                         |                      |
| End Time:                             |                                       |                  | _                  |              |               |   |                         |                      |
| Channel Conditions:                   | ·                                     |                  |                    | DTW N        | Measurement   | - 4   |                         |                      |
| COC Number:                           |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               | Notes   | s:                      |                      |
|                                       |                                       | Field Parameters |                    |              |               |   |                         |                      |
| Sample I.D.                           | Temp. ( <sup>0</sup> C)               | Cond. (mS/cm)    | ) <b>D.O.</b> (mg/ | l) pł        | ł (S.U.)      |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               | _   |                         |                      |
| Stage H                               | t:                                    |                  | Rated Flov         | v:           |               | Gauged Flow   | v:                      |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
| · · · · · · · · · · · · · · · · · · · |                                       |                  | Stream Gau         | ging Data    | 1             | a a constante da con |                         |                      |
| Distance from                         | Width (ft)                            | Dind. (A)        | Velocity           | Vel          | ocity<br>80%  | Average   |                         | Discharge            |
| lnitial Point (ft)                    | •• IUIII (II)                         | Depth (ft)       | (60%<br>Depth)     | Depth        | Depth         | Velocity<br>(ft/sec)  | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$      |
| 0, (left side)                        |                                       |                  |                    |              |               | (11000)   |                         |                      |
|                                       | -                                     |                  |                    |              |               |   |                         |                      |
|                                       |                                       | 1                | )                  |              |               |   |                         |                      |
|                                       |                                       |                  | r                  | . )          |               |   |                         |                      |
|                                       | · · · · · · · · · · · · · · · · · · · |                  | 1 4                |              |               |   |                         |                      |
|                                       |                                       |                  | /                  |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       |                  |                    | . Protection | <u> </u>      |   |                         | ·····                |
|                                       |                                       |                  | · · · · ·          |              |               |   |                         |                      |
|                                       |                                       |                  |                    |              |               |   |                         |                      |
|                                       |                                       | · · · · ·        |                    |              |               |   |                         |                      |
|                                       |                                       | 1                |                    |              |               |   |                         | 41<br>               |

| Client:             |                         | CRWD             | <u> </u>         |                | Site Locatio | on: <u>CR</u>        | 10.5                    |   |
|---------------------|-------------------------|------------------|------------------|----------------|--------------|----------------------|-------------------------|---|
| Project No.:        |                         |                  |                  |                |              | on:                  |                         |   |
| Date:               | 87                      | 2806             |                  |                |              | er:                  |                         |   |
| Sampler(s):         |                         |                  |                  | Sa             |              | en: Y                |                         | ,   |
| Start Time:         | _/_                     | 45               |                  |                |              | ne:                  |                         |   |
| End Time:           | •                       |                  |                  |                |              |                      |                         | <u> </u>                                      |
| Channel Conditions: |                         |                  |                  | DTW N          | Measuremer   | nt:                  |                         |   |
| COC Number:         |                         |                  |                  |                |              |                      |                         |   |
| Paula               |                         |                  |                  |                |              | Notes                | SG                      | 10.95   |
|                     |                         | Field Parameters |                  |                |              |                      |                         | <u>, , , , , , , , , , , , , , , , , , , </u> |
| Sample I.D.         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | D.O. (mg/        | (l) p <b>ł</b> | I (S.U.)     |                      |                         |   |
| 2                   | 22.5                    | 403              | 9.2              | 6              | 10           |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         | , ·····                                       |
| Stage H             | t:                      |                  | Rated Flov       | N:             | i            | Gauged Flov          | v:                      | ·····   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         | <u> </u>         | Stream Gau       |                |              |                      |                         |   |
| Distance from       | Width (ft)              | Depth (ft)       | Velocity<br>(60% | Vel 20%        | ocity<br>80% | Average              |                         | Discharge                                     |
| Initial Point (ft)  |                         | Deput (It)       | Depth)           | Depth          | Depth        | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$                               |
| 0, (left side)      |                         |                  |                  |                |              | · · ·                |                         |   |
|                     | •                       |                  |                  |                |              |                      |                         |   |
|                     |                         |                  | ······           |                |              | :<br>:               |                         |   |
|                     | To                      | Weedy            | Toc              | DoFloc         | U U          |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  | ¥.,              | . Anus 4.      | -            |                      |                         |   |
| · · · ·             |                         |                  |                  |                |              |                      |                         |   |
|                     |                         |                  |                  |                |              |                      |                         |   |
|                     | 1                       |                  |                  |                |              |                      |                         | 4. <sup>5</sup>                               |

| Client:             |                        | CRWD Site Location: |  |                  |              |                      | R0.2                    |                                       |
|---------------------|------------------------|---------------------|--|------------------|--------------|----------------------|-------------------------|---------------------------------------|
| Project No.:        |                        |                     |  | Sit              | e Descriptio | on:                  | ,                       | · · · · · · · · · · · · · · · · · · · |
| Date:               | 34-                    | 8/66<br>m 15.15     |  |                  |              |                      |                         | · ·                                   |
| Sampler(s):         | <u>K</u>               | in with             | ************************************** | Sa               |              | en: Y                |                         |                                       |
| Start Time:         |                        | 00                  |  |                  |              |                      |                         | · · · · · · · · · · · · · · · · · · · |
| End Time:           |                        |                     |  |                  |              |                      |                         |                                       |
| Channel Conditions: |                        |                     |  | DTW              | Measuremer   | nt:                  |                         |                                       |
| COC Number:         |                        |                     |  |                  |              |                      |                         |                                       |
|                     |                        |                     |  |                  |              | Notes                |                         |                                       |
|                     |                        | Field Parameters    | <u>s</u>                               |                  |              |                      | BM                      | 113.7                                 |
| Sample I.D.         | Temp. ( <sup>0</sup> C | Cond. (mS/cm        |  |                  | H (S.U.)     |                      |                         |                                       |
|                     | 18.2                   | 970                 | 8.2                                    | 6.1              | !/           |                      |                         |                                       |
| Stage H             | t:                     |                     | Rated Flov<br>Stream Gau               |                  |              | Gauged Flov          | v: <u>0,</u> 7,         | <u>3</u> cfs                          |
| Distance from       |                        |                     | Velocity                               |                  | ocity        | Average              |                         | Discharge                             |
| Initial Point (ft)  | Width (ft)             | Depth (ft)          | (60%<br>Depth)                         | 20%<br>Depth     | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^{3}/sec)$                     |
| 0, (left side) 🤉    | 10'                    | 0.3 "               | 2                                      |                  |              | 30°                  | <u>.</u>                |                                       |
| 3                   | -                      | 2                   | 2                                      |                  |              |                      |                         |                                       |
| ÿ                   |                        |                     | 1                                      |                  |              |                      |                         |                                       |
| 5                   |                        |                     | 3                                      |                  |              |                      |                         |                                       |
| 6                   |                        |                     | 2                                      |                  |              |                      |                         |                                       |
| 7                   |                        |                     | 2                                      |                  |              |                      |                         |                                       |
| 6                   |                        |                     | 2                                      |                  |              |                      |                         |                                       |
| 9                   |                        |                     | ľ                                      |                  |              |                      |                         |                                       |
| 10                  |                        |                     | 0                                      |                  |              |                      |                         |                                       |
|                     |                        |                     |  |                  |              |                      |                         |                                       |
|                     |                        |                     | ¥-                                     | 194 <sub>1</sub> | - 199 s      |                      |                         |                                       |
|                     |                        |                     |  |                  |              |                      |                         |                                       |
|                     |                        |                     |  |                  |              |                      |                         |                                       |
|                     |                        |                     |  | <u> </u>         |              |                      |                         | 6. <sup>1</sup>                       |

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| Client:   |                                       | CRWD                                   |                            |                   | Site Locatio                           | in: <u>C'R</u>                  | 25.                     | 6  |
|---|---------------------------------------|--|----------------------------|-------------------|--|---------------------------------|-------------------------|--|
| Project No.:  |                                       |  |                            |                   | e Descriptio                           | n:                              | v                       | _  |
| Date:   | 925                                   | - 66                                   |                            |                   | Weathe                                 | er: Sunney                      | , 52                    | Ċ  |
| Sampler(s):   | Kn                                    | - 66                                   |                            | Sa                | imples Take                            | n: Y                            | es N                    | <u></u>                                  |
| Start Time:   | 9:0                                   |  |                            |                   |  | e:                              |                         | 4  |
| End Time:   | <b></b>                               |  |                            |                   |  |                                 |                         |  |
| Channel Conditions:   | <u> </u>                              |  |                            | <b>Δ</b> ΤΨ Ν     | Aeasuremen                             | t:                              |                         |  |
| COC Number:   | A                                     | · · · · · · · · · · · · · · · · · · ·  |                            | DIWI              | ricusui cincii                         | L                               |                         |  |
|   |                                       | · · · · · · · · · · · · · · · · · · ·  |                            |                   |  | Notes                           |                         |  |
|   |                                       | Field Parameters                       |                            |                   |  |                                 | BM                      | 12'9                                     |
| Sample I.D.   | Temp. ( <sup>0</sup> C)               | ) Cond. (mS/cm                         | ) <b>D.O.</b> (mg/         | (l) pH            | I (S.U.)                               |                                 |                         | <u></u>                                  |
|   | 11.4                                  |  |                            |                   | ······································ |                                 |                         |  |
| Prevenuella and a second se |                                       |  |                            |                   |  | <u>_</u> ]                      |                         |  |
| Stage H   | lt:                                   |  | Rated Flow                 | w:                |  | Gauged Flow                     | v:                      |  |
|   |                                       |  | Stream Gau                 | iging Data        | 1                                      |                                 |                         |  |
|   |                                       |  |                            |                   | ocity                                  | 1                               | 1                       | ]  |
| Distance from<br>Initial Point (ft)   | Width (ft)                            | Depth (ft)                             | Velocity<br>(60%<br>Depth) | 20%<br>Depth      | 80%<br>Depth                           | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)   |
| 0, (left side)  |                                       |  | <br>                       |                   |  | (10300)                         |                         |  |
|   |                                       |  | i                          |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       | NOL                                    | BOOTS                      |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   | · · · · · · · · · · · · · · · · · · · | ··· ·· ··· ··· ··· ··· ··· ··· ··· ··· | · · · ·                    | in <sub>ten</sub> |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   |                                       |  |                            |                   |  |                                 |                         |  |
|   | ł                                     |  |                            |                   |  |                                 |                         | 4. · · · · · · · · · · · · · · · · · · · |

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| Client:  |                         | CRWD             | •••••••         |                       | Site Locatio  | on:                  |                         |                 |
|--|-------------------------|------------------|-----------------|-----------------------|---------------|----------------------|-------------------------|-----------------|
| Project No.:   | O                       |                  |                 | Si                    | te Descriptic | on: <u>CR</u>        | 27.                     | 2               |
| Date:  | 92                      | 506              |                 |                       |               | er:                  |                         |                 |
| Sampler(s):  | Lu                      | 506              |                 | S                     |               | m:Y                  |                         |                 |
| Start Time:  |                         |                  |                 |                       | Sample Tim    | e: 10.               | 00                      |                 |
| End Time:  |                         |                  |                 |                       |               |                      |                         |                 |
| Channel Conditions:  |                         |                  |                 | DTW                   | Measuremen    | ıt:                  |                         |                 |
| COC Number:  |                         |                  |                 |                       |               |                      |                         |                 |
| Fundamental and the second |                         |                  | *****           |                       |               | Notes                | 5:                      |                 |
|  |                         | Field Parameters | 5               |                       |               |                      | BM                      | 6'0             |
| Sample I.D.  | Temp. ( <sup>0</sup> C) | Cond. (mS/cm     |                 |                       | H (S.U.)      |                      |                         |                 |
| 2  | 11.2                    |                  | 7.5             | 5.0                   | 61            |                      |                         |                 |
| Stage H  | <b>t</b> .              |                  | Rated Flo       | 11/                   |               | Gauged Flov          | 10,33                   | )<br>>          |
| Stage H  | t:                      | <u></u> _        | Rated Flo       | w:                    |               | Gauged Flov          | N: 10:55                | <b>&gt;</b>     |
|  |                         |                  | Stream Ga       | uging Dat             | a             |                      |                         |                 |
| Distance from  |                         |                  | Velocity        |                       | locity        | Average              |                         | Discharge       |
| Initial Point (ft)   | Width (ft)              | Depth (ft)       | (60%)<br>Depth) | 20%<br>Depth          | 80%<br>Depth  | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^3/sec)$ |
| 0, (left side)   | 20                      | 4'0              |                 |                       |               | 30                   |                         |                 |
| .۲   | 1                       |                  | 2               |                       |               |                      |                         |                 |
| 2  | 4                       |                  | 3               |                       |               |                      |                         |                 |
| 3  | G                       |                  | 4               |                       |               |                      |                         |                 |
| Ý  | A                       | ·                | 4               |                       |               |                      |                         |                 |
| 5  | Ø                       |                  | 4               |                       |               |                      |                         |                 |
| 1  |                         | 7                |                 |                       |               |                      |                         |                 |
| 36   | 12                      |                  | 2               | $\left \right\rangle$ |               |                      |                         |                 |
| 87 - F   | Non-                    |                  | 2               |                       | Migd          | Slowi                | ng Flu                  | w               |
| 98   | 16                      |                  | 1               | /                     |               |                      |                         |                 |
| poq  | 18                      |                  | 5 🐖             | N                     |               |                      |                         |                 |
| 10   | 20                      |                  | 7               |                       |               |                      |                         |                 |
| -  |                         |                  |                 |                       |               |                      |                         |                 |
|  |                         |                  |                 |                       |               |                      |                         | 41 <sup>2</sup> |

| Client:  |  | CRWD             | <del>_</del>               |                     | Site Locatio          | n:                               |  |  |
|--|--|------------------|----------------------------|---------------------|-----------------------|----------------------------------|--|--|
| Project No.:   | <b>.</b>                               |                  |                            | Sit                 | e Descriptio          | n: <u>CR</u>                     | 29.0                                   | )                                      |
| Date:  | 92                                     | 506              |                            |                     | Weathe                | er:                              |  |  |
| Sampler(s):  | k.c                                    | ر                |                            | Sa                  | mples Take            | n: <u>Y</u>                      | es 🗸 N                                 | 0                                      |
| Start Time:  | •••••••••••••••••••••••••••••••••••••• |                  |                            | 9                   | Sample Tim            | e:                               |  |  |
| End Time:  |  |                  |                            |                     |                       | /·                               | ET.                                    |  |
| Channel Conditions:  | •                                      |                  |                            | DTW N               | Aeasuremen            | t:                               |  |  |
| COC Number:  |  |                  |                            |                     |                       |                                  |  |  |
| []   |  |                  |                            |                     |                       | Note                             | 5:                                     |  |
|  |  | Field Parameters | S<br>II                    |                     |                       |                                  | BM                                     | 14.7                                   |
| Sample I.D.  | Temp. ( <sup>0</sup> C                 | ) Cond. (mS/cm   | ) <b>D.O.</b> (mg/         | 1) pł               | I (S.U.)              |                                  | •••••••••••••••••••••••••••••••••••••• | -                                      |
| 3  | 11.3                                   | 520              | 10.2                       | $\underline{\int}$  | <u>57</u>             |                                  |  |  |
| Stage H  | t:                                     |                  | Rated Flov                 | N:                  |                       | Gauged Flov                      | N: 7.63                                | 3                                      |
| Partition of the partition of the second |  | 11 at 1.         | Stream Gau                 | iging Data          | 1                     |                                  |  |  |
| Distance from<br>Initial Point (ft)  | Width (ft)                             | Depth (ft)       | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | A verage<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> )                | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 2 0, (left side)   | 14                                     | 0.6              | 2                          |                     |                       | 30                               |  |  |
| 4  |  | 1.3              | 8                          |                     |                       |                                  |  |  |
| 6  |  | 16               | 16                         |                     |                       |                                  | 1                                      |  |
| Q  |  | 1.9              | 17                         |                     |                       |                                  |  |  |
| 8 10 3   |  | 1.8              | 15                         |                     |                       |                                  |  |  |
| 12   |  | 1.1              | 10                         |                     |                       |                                  |  |  |
| 14   |  | 0.5              | 9                          |                     |                       |                                  |  |  |
|  |  |                  |                            |                     |                       |                                  |  |  |
|  |  |                  |                            |                     |                       |                                  |  | -                                      |
|  |  |                  |                            |                     |                       |                                  |  |  |
|  |  |                  | şr.                        | , to the Mercury    |                       |                                  |  |  |
|  |  |                  |                            |                     |                       |                                  |  |  |
|  |  |                  |                            |                     |                       |                                  |  |  |
|  |  |                  |                            |                     |                       |                                  |  | \$<br>\$.                              |

| Client:                             | - ·        | CRWD             |                  |              | Site Locatio | n:                              |                         | ······                                 |
|-------------------------------------|------------|------------------|------------------|--------------|--------------|---------------------------------|-------------------------|--|
| Project No.:                        | <b></b>    |                  |                  | Sit          | e Descriptio | n: /                            | 231.                    | 8                                      |
| Date:                               | 9/2        | 25/06            |                  |              |              |                                 |                         | •                                      |
| Sampler(s):                         | K          | 25/06            |                  | Sa           | mples Take   | n: <u>Y</u>                     | es 🗸 No                 | D                                      |
| Start Time:                         |            | 1140             | <u> </u>         |              |              |                                 |                         |  |
| End Time:                           |            |                  | <del></del>      |              |              |                                 |                         |  |
| Channel Conditions:                 |            |                  | _                | DTW N        | Aeasuremen   | t:                              |                         |  |
| COC Number:                         |            |                  | _                |              |              |                                 |                         |  |
| [f                                  | ., ,       | •                |                  |              |              | Notes                           | *                       |  |
|                                     |            | Field Parameters |                  | ····         |              |                                 | BM                      | 13.2                                   |
| Sample I.D.                         |            | Cond. (mS/cm)    | <b>D.O.</b> (mg/ | (I) pH       | I (S.U.)     |                                 | 4 <u></u>               |  |
| 4                                   | 12.3       | 410              | 10.2             | 5            | 66           |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 | 06                      | ~                                      |
| Stage H                             | t:         |                  | Rated Flow       | <i>w</i> :   | ··           | Gauged Flov                     | v: <u>2.</u> ()         | 9                                      |
|                                     |            | S                | Stream Gau       | iging Data   | 1            |                                 |                         |  |
|                                     |            | ]                | Velocity         | Vel          | ocity        |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)       | (60%)<br>Depth)  | 20%<br>Depth | 80%<br>Depth | Average<br>Velocity<br>(fl/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side) 🕽                    | 12'        | .3 .25           | 2                |              |              | 30                              |                         |  |
| Ч                                   | -          | 5.42             | ]                |              |              |                                 |                         |  |
| 6                                   |            | 9,75             | 15               |              |              |                                 |                         |  |
| 8                                   |            | 9.75             | 12               |              |              |                                 |                         |  |
| ( 6                                 |            | 4.33             | 9                | Ĩ            |              |                                 |                         |  |
| (}                                  |            | 2.17             | 2                |              |              |                                 |                         |  |
|                                     | •          |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  | ¥-               | . Anta       |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         |  |
|                                     |            |                  |                  |              |              |                                 |                         | 1. ·                                   |

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| Client:                             |                         | CRWD             |                   |              | Site Locatio |                                 |                         |  |
|-------------------------------------|-------------------------|------------------|-------------------|--------------|--------------|---------------------------------|-------------------------|--|
| Project No.:                        |                         |                  |                   | Site         | e Descriptio | n: <u>TB</u>                    | 33.                     | 2                                      |
| Date:                               | 97                      | 2506             |                   |              | Weathe       | :r:                             |                         | _                                      |
| Sampler(s):                         | K                       | W                |                   | Sa           |              | n: Y                            |                         |  |
| Start Time:                         | 12                      | 30               |                   |              |              |                                 |                         |  |
| End Time:                           |                         |                  |                   |              |              |                                 |                         |  |
| Channel Conditions:                 |                         |                  |                   | DTW N        | leasuremen   | t:                              |                         |  |
| COC Number:                         |                         |                  |                   |              |              |                                 |                         |  |
| 1                                   |                         |                  |                   |              |              | Notes                           |                         |  |
|                                     | 1                       | Field Parameters | - 11              |              |              |                                 | BM                      | 7'                                     |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | ) Cond. (mS/cm)  | <b>D.O.</b> (mg/l | ) pH         | I (S.U.)     |                                 |                         |  |
|                                     | 13.2                    |                  | 5.5               | 5            | 69           |                                 |                         |  |
| Stage Ht                            | ::                      |                  | Rated Flow        |              |              | Gauged Flov                     | v:7(                    | )                                      |
| Distance                            |                         |                  | Velocity          | Vela         | ocity        | .                               | 1                       |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | (60%              | 20%<br>Depth | 80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      | 9'                      | 0.2              | QQ"1              |              |              | 30                              |                         |  |
| 3                                   | •                       | 0.5              | 3                 |              |              |                                 |                         |  |
| 5                                   |                         | 018              | 55                | ~            |              |                                 |                         |  |
| 2                                   |                         | 6,8              | Ø 3               |              |              |                                 |                         |  |
| 9                                   |                         | 0.5              | á 2               | <u></u>      |              |                                 |                         |  |
| ¥                                   |                         |                  |                   |              |              |                                 |                         |  |
|                                     |                         |                  |                   |              |              |                                 |                         |  |
| -                                   | Ē                       |                  |                   |              |              |                                 |                         |  |
|                                     | -                       |                  |                   |              |              |                                 |                         |  |
|                                     |                         |                  |                   |              | 1            |                                 |                         |  |
|                                     |                         |                  | . <u>Ş</u>        | · 4941.00.   |              |                                 |                         |  |
|                                     |                         |                  |                   |              |              |                                 |                         |  |
|                                     |                         |                  |                   |              |              |                                 |                         |  |
|                                     |                         |                  |                   |              |              |                                 |                         | to *                                   |

| Client:             |            | CRWD                                  |                 |            | Site Locatio | on:                  |                         |                   |
|---------------------|------------|---------------------------------------|-----------------|------------|--------------|----------------------|-------------------------|-------------------|
| Project No.:        |            |                                       |                 | Site       | e Descriptic | on: <u>CR</u>        | 33.                     | 6                 |
| Date:               | 92         | 50¢                                   | <del></del>     |            |              | er:                  |                         |                   |
| Sampler(s):         | <u> </u>   | <u></u>                               |                 | Sa         |              | n:Y                  |                         |                   |
| Start Time:         | 100        |                                       |                 | S          | Sample Tim   | e:                   |                         |                   |
| End Time:           |            |                                       |                 |            |              |                      |                         |                   |
| Channel Conditions: |            |                                       |                 | DTW N      | leasuremer   | ıt:                  |                         |                   |
| COC Number:         |            |                                       | _               |            |              |                      |                         |                   |
| 1                   |            | THING THE STATE OF THE STATE OF       |                 |            |              | Notes                |                         |                   |
|                     |            | Field Parameters                      |                 |            |              |                      | BM                      | 63                |
| Sample I.D.         |            | ) Cond. (mS/cm)                       | ••••{ ••        | 1) pH      | I (S.U.)     |                      |                         |                   |
| 6.                  | 13.1       |                                       | 8.6             |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      | ANT                     | 7                 |
| Stage H             | t:         |                                       | Rated Flow      | v:         | ······       | Gauged Flow          | v: 0.0                  | <u>/</u>          |
|                     |            | 5                                     | Stream Gau      | iging Data | ı            |                      |                         |                   |
| Distance from       |            |                                       | Velocity        | Vel        | ocity        | Average              |                         | Discharge         |
| Initial Point (ft)  | Width (ft) | Depth (ft)                            | (60%)<br>Depth) | Depth      | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | $(Q, ft^{3}/sec)$ |
| 0, (left side)      | 6'         | 0.2                                   | 1               |            |              | 30                   |                         |                   |
|                     |            | 0, BL                                 | 4               | -          |              |                      |                         |                   |
|                     |            | 0.3                                   | 6               |            |              |                      |                         |                   |
|                     |            | 6.2                                   | 5               | 1          |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            | · · · · · · · · · · · · · · · · · · · |                 |            |              |                      |                         |                   |
| f                   |            |                                       |                 |            |              |                      |                         |                   |
|                     | -          |                                       | ę.              | n Romen    |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         |                   |
|                     |            |                                       |                 |            |              |                      |                         | 5.<br>8.7 *       |

9-25

| Client:                             |  | CRWD             |                            |              | Site Locatio | n:                              |                         |  |
|-------------------------------------|--|------------------|----------------------------|--------------|--------------|---------------------------------|-------------------------|--|
| Project No.:                        |  |                  |                            | Sit          | e Descriptio | n: <u> </u>                     | R 3                     | 5.3                                    |
| Date:                               |  |                  |                            |              | Weathe       | er:                             |                         |  |
| Sampler(s):                         |  |                  |                            | Sa           |              | n: Y                            |                         |  |
| Start Time:                         |  |                  |                            |              | Sample Tim   | e:                              |                         |  |
| End Time:                           | <u></u>                                      |                  |                            |              |              |                                 |                         |  |
| Channel Conditions:                 | <u>.                                    </u> |                  | -                          | DTW I        | Measuremen   | t:                              |                         |  |
| COC Number:                         | •  |                  | -                          |              |              |                                 |                         |  |
| J                                   |  |                  |                            |              |              | Notes                           | *                       |  |
|                                     |  | Field Parameters | <del></del>                | -1           |              |                                 |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C)                      | ) Cond. (mS/cm)  | <b>D.O.</b> (mg/l          | D pF         | ł (S.U.)     |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         | ·····                                  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
| Stage H                             | lt:  |                  | Rated Flow                 | /:           |              | Gauged Flov                     | /:                      | <u>.</u>                               |
|                                     |  | s                | itream Gau                 | aina Dot     | <b>D</b>     |                                 |                         |  |
|                                     |  |                  |                            |              | ocity        | 1                               |                         | i                                      |
| Distance from<br>Initial Point (ft) | Width (ft)                                   | Depth (ft)       | Velocity<br>(60%<br>Depth) | 20%<br>Depth | 80%<br>Depth | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |  |                  |                            |              |              |                                 |                         | <u></u>                                |
|                                     |  | 1                | i                          | F            | 1            |                                 |                         |  |
|                                     |  |                  | $\hat{\mathcal{O}}$        | P            | Fot          |                                 |                         |  |
|                                     |  | 70               |                            |              |              |                                 |                         |  |
|                                     |  | /                |                            |              |              |                                 |                         |  |
|                                     |  |                  |                            |              |              | 3                               |                         |  |
|                                     | ,  |                  |                            |              | 1            |                                 | , r                     |  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
|                                     |  |                  | . ¥•                       | 1 (Priva)    |              |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         |  |
|                                     |  |                  |                            |              |              |                                 |                         | 6. <sup>2</sup>                        |



| Client:                                |   | CRWD                                   | <u> </u>          | 5           | Site Locatio                           | n:                   |                         |                   |
|--|---|--|-------------------|-------------|--|----------------------|-------------------------|-------------------|
| Project No.:                           | • · · · · · · · · · · · · · · · · · · · |  | <u></u>           | Site        | Descriptio                             | n: <u> </u>          | $C_{3}$                 | 3.2               |
| Date:                                  |   |  | _                 |             | Weathe                                 | er:                  |                         |                   |
| Sampler(s):                            |   |  | _                 | Sai         |  | n: Y                 |                         |                   |
| Start Time:                            |   | ······································ |                   | S           | ample Tim                              | e:                   |                         |                   |
| End Time:                              |   |  | <u> </u>          |             |  |                      |                         |                   |
| Channel Conditions:                    |   |  | _                 | DTW M       | leasuremen                             | t:                   |                         |                   |
| COC Number:                            |   |  | _                 |             |  |                      |                         |                   |
| F                                      |   |  |                   |             |  | Note                 | s:                      |                   |
|  | 1                                       | Field Parameters                       | H                 |             |  |                      | <u> </u>                |                   |
| Sample I.D.                            | Temp. ( <sup>0</sup> C)                 | Cond. (mS/cm)                          | <b>D.O.</b> (mg/l | ) pH        | (S.U.)                                 |                      |                         |                   |
|  |   |  |                   |             |  |                      | <u></u>                 |                   |
|  |   |  |                   |             |  |                      |                         |                   |
| Stage H                                | t:                                      |  | Rated Flow        | /:          |  | Gauged Flor          | w:                      |                   |
|  |   |  |                   |             |  |                      |                         |                   |
|  | · · · · · · · · · · · · · · · · · · ·   | S                                      | tream Gau         |             |  |                      |                         |                   |
| Distance from<br>Initial Point (ft)    | Width (ft)                              | Depth (ft)                             | Velocity<br>(60%  | Velo<br>20% | eity<br>80%                            | - Average            | Area (ft <sup>2</sup> ) | Discharge         |
|  |   |  | Depth)            | Depth       | Depth                                  | Velocity<br>(ft/sec) |                         | $(Q, ft^{3}/sec)$ |
| 0, (left side)                         |   | -                                      | /.                |             |  |                      |                         |                   |
|  |   | ///                                    | 5 F               | · /,        | . / 1                                  |                      |                         |                   |
|  |   | /U                                     |                   |             |  |                      |                         |                   |
|  |   | /                                      |                   |             |  |                      |                         | _                 |
|  |   |  |                   |             |  |                      |                         |                   |
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|  | •                                       |  | -                 |             | ************************************** |                      |                         |                   |
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|  |   |  |                   |             |  |                      |                         |                   |
|  |   |  |                   |             |  |                      |                         |                   |
|  | ·                                       |  | <b>4</b>          | Prove       |  |                      |                         |                   |
|  |   |  |                   |             |  |                      |                         |                   |
|  |   |  |                   |             |  |                      |                         |                   |
|  |   |  |                   |             | -                                      |                      |                         | ÷                 |

| Client:                              |            | CRWD              |                  |               | Site Locatio | n:                   |                         |                           |
|--------------------------------------|------------|-------------------|------------------|---------------|--------------|----------------------|-------------------------|---------------------------|
| Project No.:                         | ſ          |                   |                  | Site          | e Descriptio | n: R                 | 19.8                    | 2                         |
| Date:                                | 9/2        | 5/06              |                  |               | Weathe       |                      | <b></b>                 |                           |
| Sampler(s):                          |            | · · · · ·         |                  | Sa            | mples Take   | n: Y                 |                         |                           |
| Start Time:                          | 20         | с,                |                  |               |              | e:                   |                         |                           |
| End Time:                            |            |                   | _                |               | 1            |                      |                         |                           |
| Channel Conditions:                  |            |                   |                  | DTW N         | Aeasuremen   |                      |                         |                           |
| COC Number:                          |            |                   |                  |               |              |                      |                         |                           |
|                                      |            |                   | -                |               |              | Notes                |                         |                           |
|                                      |            | Field Parameters  |                  |               |              |                      | ·                       |                           |
| Sample I.D.                          |            | Cond. (mS/cm)     | <b>D.O.</b> (mg/ | l) p <b>F</b> | I (S.U.)     | 1                    |                         |                           |
| 7                                    | 14.2       |                   | 10.2             |               |              |                      |                         |                           |
|                                      |            |                   |                  |               |              |                      |                         |                           |
| Stage F                              | lt:        |                   | Rated Flow       | <i></i>       |              | Gauged Flov          | <i>w</i> .              |                           |
|                                      |            |                   | 1000 1 101       | ••            |              | ·                    | · · ·                   |                           |
|                                      |            | S                 | stream Gau       | iging Data    | ŧ            |                      |                         |                           |
| Distance from                        |            |                   | Velocity         |               | ocity        | - Average            |                         | Discharge                 |
|                                      | I mene and | $D_{aut}(\Theta)$ | 10001            | 20%           | 0/10/        |                      | 1 1                     | Dipoliti 20               |
| Initial Point (ft)                   | Width (ft) | Depth (ft)        | (60%<br>Depth)   | Depth         | 80%<br>Depth | Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| Initial Point (ft)<br>0, (left side) |            | Depth (ft)        |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   |                  |               |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
|                                      |            |                   | Depth)           | Depth         |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |
| 0, (left side)                       |            |                   | Depth)           | Depth         |              | -                    | Area (ft <sup>2</sup> ) | (Q, ft <sup>3</sup> /sec) |

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| Client:                             | C          | RWD              |                    | Si                  | te Location:          | CRE                 | 33,6                    |  |
|-------------------------------------|------------|------------------|--------------------|---------------------|-----------------------|---------------------|-------------------------|--|
| Project No.:                        | 0          | 002-75           | _                  | Site                | Description:          |                     | -                       |  |
| Date:                               | 10105      | 106              |                    |                     | Weather:              | 450                 | Sunn                    | /                                      |
| Sampler(s):                         | WB,        | R L              |                    | Sam                 | ples Taken:           | (Yes                | ) <sub>No</sub>         |  |
| Start Time:                         | 9.9        | 55               | _                  | Sa                  | ample Time:           | <i>1Ĉ</i>           | ):00                    |  |
| End Time:                           |            |                  |                    |                     |                       |                     |                         |  |
| Channel Conditions:                 | Flowin     | <u>ų</u>         | <del>.</del>       | DTW M               | easurement:           | <u>(q.1'a</u>       | 2                       |  |
| COC Number:                         |            | J                | -                  |                     |                       |                     |                         | 01                                     |
|                                     |            |                  |                    |                     |                       | Notes:              | <u>50 m</u>             | hannel                                 |
|                                     |            | Field Parameters | 1                  |                     |                       |                     | inc                     | hannel                                 |
| Sample I.D.                         | -          | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) |                     | (S.U.)                |                     | Wate                    | in is                                  |
|                                     | 8.67       | 1716             | 12.01              | 7,                  | 42                    |                     | <u> </u>                | lar                                    |
|                                     |            |                  | Rated Flow         |                     |                       | Gauged Flow         | 0.81                    | 3                                      |
| Stage H                             | ::         | Gauged Flow      | - 01010            |                     |                       |                     |                         |  |
| Stream Gauging Data                 |            |                  |                    |                     |                       |                     |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft) | Depth (ft)       | Velocity<br>(60%   | Vel<br>20%<br>Depth | ocity<br>80%<br>Depth | Average<br>Velocity | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
|                                     |            |                  | Depth)             | <u> </u>            |                       | (ft/sec)            |                         |  |
| 0, (left side)                      |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       | <u>,</u>            |                         |  |
| ``                                  |            |                  |                    |                     |                       |                     |                         | · · ·                                  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
| • 24 - 2                            |            |                  |                    |                     |                       |                     |                         |  |
| [ <del>]</del>                      |            |                  | şe,                |                     |                       |                     |                         |  |
|                                     |            |                  |                    |                     |                       |                     |                         |  |
| ······                              |            |                  |                    |                     |                       |                     |                         |  |
| T#018504/292/Field Forms/Gauging Fo | ırm        | NB 10            | )/12/0             | le .                | - Ag<br>- Ag          |                     |                         | March 27, 2802                         |

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|                                     |                         |                  |                    |           | 1             | °<br>—                                | 22                      | 2   |
|-------------------------------------|-------------------------|------------------|--------------------|-----------|---------------|---------------------------------------|-------------------------|---|
| Client:                             |                         | CRWD             | -                  | Si        | ite Location: | <u> </u>                              | $\bigcirc$              | $\mathcal{O} \circ \mathcal{O}$   |
| Project No.:                        |                         | 002-75           | -                  | Site      | Description:  |                                       |                         |   |
| Date:                               | 0/0                     | 15/06            | -                  |           | Weather:      |                                       |                         |   |
| Sampler(s):                         | WB,                     | KL               | -                  |           | ples Taken:   |                                       |                         |   |
| Start Time:                         | - 9:30                  | )                | <u> </u>           | Sa        | ample Time:   | 9:41                                  | 0                       |   |
| End Time:                           |                         |                  | _                  |           |               |                                       |                         |   |
| Channel Conditions:                 |                         |                  | -                  | DTW M     | easurement:   |                                       | 10                      |   |
| COC Number:                         |                         |                  | _                  |           |               | ·                                     |                         |   |
|                                     |                         |                  |                    |           |               | Notes:                                |                         |   |
|                                     | ]                       | Field Parameters | <b>1</b>           | <b>,</b>  |               |                                       |                         |   |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)    | <b>D.O.</b> (mg/l) | pH        | (S.U.)        |                                       |                         |   |
| FB 33.2                             | 9.63                    | 1487             | 7.86               | -9,4      | 16-           |                                       | <u></u>                 |   |
|                                     |                         |                  |                    | 7.3       | 32            | -                                     | 8 00                    | <u> </u>  |
| Stage H                             | t:                      |                  | Rated Flow         |           |               | Gauged Flow                           | 0.93                    | 16  |
| _                                   |                         |                  |                    |           |               | -                                     |                         |   |
|                                     |                         | . 8              | Stream Gau         | ging Data | 1             |                                       |                         |   |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)       | Velocity<br>(60%   | 20%       | ocity<br>80%  | Average<br>Velocity                   | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec)  |
|                                     |                         |                  | Depth)             | Depth     | Depth         | (ft/sec)                              |                         | (Q, II /sec)  |
| 0, (left side)                      |                         |                  |                    |           |               |                                       |                         |   |
| ۰. ۲                                |                         |                  |                    |           |               |                                       |                         |   |
| 1                                   |                         |                  | 1                  |           |               |                                       |                         |   |
| · -                                 |                         |                  |                    |           |               |                                       |                         |   |
|                                     |                         | ·····            |                    |           |               |                                       |                         |   |
| <br>                                |                         |                  |                    |           |               |                                       |                         |   |
|                                     |                         |                  |                    |           |               |                                       |                         |   |
|                                     |                         |                  |                    |           |               |                                       |                         |   |
|                                     |                         |                  |                    |           |               | · · · · · · · · · · · · · · · · · · · |                         |   |
|                                     |                         |                  |                    |           |               |                                       |                         |   |
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| :                                   |                         |                  |                    |           | -             |                                       |                         |   |
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|                                     | ansaannanna Stalle      |                  | <u> </u>           | L         |               |                                       |                         |   |
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|                         | CRWD   | _                                     | S  | ite Location:  | $\underline{CR}$  | 31.8  | 3  |
|-------------------------|--|---------------------------------------|--|--|---|---|--|
| 0                       | 002-75   |                                       | Site   | Description:   |   |   |  |
| \$10/                   | 15/06  |                                       |  | Weather:   | 500   | Sun   | 71/  |
|                         |  |                                       | San  |  | / -   |   | /  |
|                         |  | -                                     |  |  |   |   | •  |
|                         |  | -                                     |  | -  |   |   |  |
|                         |  | -                                     | DTW M  | easurement:  | ]-  | 3,12  |  |
|                         |  | -                                     |  |  |   |   |  |
|                         |  | -                                     |  |  | Notes:  |   |  |
| ]                       | Field Parameters   |                                       |  | ······································   |   |   |  |
| Temp. ( <sup>0</sup> C) | Cond. (mS/cm)  | <b>D.O.</b> (mg/l                     | ) pH   | (S.U.)   |   |   | anana an a   |
| 9.23                    | 1469   | 12.02                                 | 7.7  | <u>'0</u>  |   |   | ······································   |
| t:                      |  | Rated Flow                            | v:   |  | Gauged Flow   | . 3,45  | 590  |
| ····                    |  | Stream Gau                            | ging Data  | 1  |   |   |  |
| Width (ft)              | Depth (ft)   | Velocity<br>(60%<br>Depth)            | Vel<br>20%<br>Depth  | ocity<br>80%<br>Depth  | Average<br>Velocity<br>(ft/sec)   | Area (ft <sup>2</sup> )                                 | Discharge<br>(Q, ft <sup>3</sup> /sec)   |
|                         |  |                                       |  |  |   |   |  |
|                         |  |                                       |  |  |   |   |  |
|                         |  |                                       |  |  |   |   |  |
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|                         | - 14 (a, - 14) a - 14 | · · · · · · · · · · · · · · · · · · · |  |  |   |   |  |
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|                         |  | <b>\$</b> \$*.                        |  |  |   |   |  |
|                         |  |                                       |  |  |   |   |  |
|                         |  | 1                                     | 1  | 1  |   | 1   |  |
|                         | Ent WB   | 1<br>10/17/1                          |  |  |   |   |  |
|                         | 0<br><b>f</b> 10/(<br><b>Temp. (°C)</b><br>(°C)<br>(1, 2, 3)<br>t:<br>Width (ft)                                 | Ч.ЭЗ     14.6       t:                | 0002-75         Field Parameters         Field Parameters         Temp. (°C) Cond. (mS/cm) D.O. (mg/l         (1)       (1)       (1)         (1) </td <td>0002-75       Site         ID/05/06       San         Site       Site         Field Parameters       DTW M         I A (O)       O, (mg/l)       PH         I A (O)       I A (O)       O, (mg/l)         Stream Gauging Data       Stream Gauging Data         Width (ft)       Depth (ft)       Velocity<br/>(60%<br/>Depth)       Velocity<br/>20%<br/>Depth         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A</td> <td>0002-75       Site Description:         Weather:       Samples Taken:         Sample Time:       DTW Measurement:         DTW Measurement:       DTW Measurement:         Field Parameters       DTW Measurement:         Field Parameters       DTW Measurement:         Year       No. (mg/l)       pH (S.U.)         9.0       10/05       7.70         Stream Gauging Data         Width (ft)         Depth (ft)       Velocity         Velocity       20%         80%       Depth         Depth       Depth         Depth       Depth         Image: Stream Gauging Data       Image: Stream Gauging Data         Image: S</td> <td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td> <td>0002-75       Site Description:         ID/0/05/06       Weather:       50°, Su or         Samples Taken:       Ves&gt; No         Sample Time:       10'30         DTW Measurement:       13, 18         Image: Stream Gauging Data       Notes:         Stream Gauging Data       Stream Gauging Data         Width (ft)       Depth (ft)       Velocity         Velocity       20%       80%         Depth       10       10         Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Width (ft)       Depth (ft)       Velocity       Average         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image</td> | 0002-75       Site         ID/05/06       San         Site       Site         Field Parameters       DTW M         I A (O)       O, (mg/l)       PH         I A (O)       I A (O)       O, (mg/l)         Stream Gauging Data       Stream Gauging Data         Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>20%<br>Depth         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A (D)         I A (D)       I A (D)       I A (D)       I A | 0002-75       Site Description:         Weather:       Samples Taken:         Sample Time:       DTW Measurement:         DTW Measurement:       DTW Measurement:         Field Parameters       DTW Measurement:         Field Parameters       DTW Measurement:         Year       No. (mg/l)       pH (S.U.)         9.0       10/05       7.70         Stream Gauging Data         Width (ft)         Depth (ft)       Velocity         Velocity       20%         80%       Depth         Depth       Depth         Depth       Depth         Image: Stream Gauging Data       Image: Stream Gauging Data         Image: S | $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | 0002-75       Site Description:         ID/0/05/06       Weather:       50°, Su or         Samples Taken:       Ves> No         Sample Time:       10'30         DTW Measurement:       13, 18         Image: Stream Gauging Data       Notes:         Stream Gauging Data       Stream Gauging Data         Width (ft)       Depth (ft)       Velocity         Velocity       20%       80%         Depth       10       10         Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Width (ft)       Depth (ft)       Velocity       Average         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image: Stream Gauging Data         Image: Stream Gauging Data       Image: Stream Gauging Data       Image |

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| Field Form: | 2006 Stream Sampling |
|-------------|----------------------|
|             |                      |

| Client:             | C                                     | CRWD             | -                | Si                | ite Location | CR                   | <u>29.0</u>             |                                       |
|---------------------|---------------------------------------|------------------|------------------|-------------------|--------------|----------------------|-------------------------|---------------------------------------|
| Project No.:        | 0                                     | 002-75           |                  | Site Description: |              |                      |                         |                                       |
| Date:               | 10105                                 | 5106             | _                | Weather:          |              |                      |                         |                                       |
| Sampler(s):         |                                       |                  | -                | San               | nples Taken  | Yes                  | ) No                    |                                       |
| Start Time:         | 10:45                                 | )                | -                | Sa                | ample Time   | . 10: 5              | 50                      | · · · · · · · · · · · · · · · · · · · |
| End Time:           |                                       |                  | _                |                   |              |                      |                         |                                       |
| Channel Conditions: | How                                   | ing              | _                | DTW M             | easurement   | 14.7                 | 2                       |                                       |
| COC Number:         | · · · · · · · · · · · · · · · · · · · |                  | _                |                   |              |                      |                         |                                       |
|                     |                                       |                  |                  |                   |              | Notes:               | Wate,                   | $\sim is$                             |
|                     | ]                                     | Field Parameters | 16               | <b>.</b>          |              | -                    | Clea                    | <u> </u>                              |
| Sample I.D.         | L                                     | Cond. (mS/cm)    |                  |                   |              |                      |                         |                                       |
|                     |                                       | 1444             |                  |                   |              |                      |                         |                                       |
| Took                | Duplic                                | ite sam          | ple F            | = 0 -             | 1            |                      | ( )                     | 400                                   |
|                     | :<br>                                 |                  | Rated Flow       |                   |              | Gauged Flow          | <u>. 6, 3</u>           | 038                                   |
|                     |                                       |                  |                  |                   |              |                      |                         |                                       |
|                     |                                       | <u> </u>         | Stream Gau       | ·                 |              |                      | 1                       |                                       |
| Distance from       | Width (ft)                            | Depth (ft)       | Velocity<br>(60% | 20%               | ocity<br>80% | Average              | Area (ft <sup>2</sup> ) | Discharge                             |
| Initial Point (ft)  | maan (n)                              | Depth (It)       | Depth)           | Depth             | Depth        | Velocity<br>(ft/sec) | Alea (It)               | (Q, ft <sup>3</sup> /sec)             |
| 0, (left side)      |                                       |                  |                  |                   |              |                      |                         |                                       |
|                     |                                       |                  |                  |                   |              |                      |                         |                                       |
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| ۲ ,<br>             |                                       |                  |                  |                   |              |                      |                         |                                       |
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|                     |                                       |                  | v-               |                   |              |                      |                         |                                       |
|                     |                                       |                  | V.               |                   |              |                      |                         |                                       |

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Ent WB 10/12/06

and the second

| · · · · · ·                         |                         | Field Forn  | n: 2006                    | Stream                                | Samplin                                | ng                              |                         |  |
|-------------------------------------|-------------------------|---|----------------------------|---------------------------------------|--|---------------------------------|-------------------------|--|
| Client:                             |                         | CRWD  |                            | S                                     | te Location:                           | :                               |                         |  |
| roject No.:                         | 0                       | 002-75  | -                          | Site                                  | Description                            | CR                              | 27.2                    | -                                      |
| Date:                               |                         | 5106  | -                          |                                       |  | ······                          |                         |  |
| ampler(s):                          |                         | WB  |                            | San                                   |  | Yes                             |                         |  |
| tart Time:                          | 11:10                   |   | •                          |                                       |  | . 11'ı                          |                         |  |
| ind Time:                           |                         |   | -                          |                                       | -                                      | +                               | <u> </u>                |  |
| hannel Conditions:                  |                         |   | -                          | DTW M                                 | easurement:                            | 6.                              | 36/4                    | 5                                      |
| OC Number:                          |                         |   | -                          |                                       |  |                                 | 0.5e (                  |  |
|                                     | ·                       |   | -                          |                                       |  | Notes:                          | 1                       |  |
|                                     | ]                       | Field Parameters  |                            |                                       |  |                                 |                         |  |
| Sample I.D.                         | Temp. ( <sup>0</sup> C) | Cond. (mS/cm)   | <b>D.O.</b> (mg/l          | ) pH                                  | (S.U.)                                 |                                 |                         |  |
|                                     | 11.07                   | 1392  | 12.6                       | \$ 7.8                                | 38                                     |                                 |                         |  |
| Stage H                             | It:                     |   | Rated Flow                 | /:                                    |  | Gauged Flow                     | .5.75                   | 513                                    |
|                                     |                         | S   | tream Gau                  | ging Data                             | l                                      |                                 |                         |  |
| Distance from<br>Initial Point (ft) | Width (ft)              | Depth (ft)  | Velocity<br>(60%<br>Depth) | Vel<br>20%<br>Depth                   | ocity<br>80%<br>Depth                  | Average<br>Velocity<br>(ft/sec) | Area (ft <sup>2</sup> ) | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)                      |                         |   |                            |                                       |  |                                 |                         |  |
|                                     |                         |   |                            |                                       |  |                                 |                         |  |
|                                     |                         |   |                            |                                       |  |                                 |                         |  |
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|                                     |                         | **** <del>*** ****</del> *** <b>****</b> ******************** |                            |                                       | ······································ |                                 |                         |  |
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|                                     | ,                       | MIR 10  | 12/06                      | 1                                     | 1                                      | £                               |                         | £.                                     |

1.1.144

Annual -

| Project No.: $0002-75$ Site Description: $CR$ $2.5, 6$ Date: $10105106$ Weather:Sampler(s): $RL, WB$ Samples Taken:YesNoStart Time: $11'35$ Sample Time: $11'40$ |  |
|--|--|
| Sampler(s):RL, WBSamples Taken:YesNoStart Time:11'35Sample Time:11'40  |  |
| Start Time:         11.3.5         Sample Time:         11.40  |  |
| Start Time:         11.3.5         Sample Time:         11.40  |  |
|  |  |
| End Time:  |  |
| Channel Conditions: DTW Measurement: 22,78   |  |
| COC Number:  |  |
| Notes:   |  |
| Field Parameters   |  |
| Sample I.D.         Temp. ( <sup>0</sup> C)         Cond. (mS/cm)         D.O. (mg/l)         pH (S.U.)  |  |
| 11.45 1390 9.75 7.83   |  |
| Stage Ht: Rated Flow: Gauged Flow:_2,4084 Stream Gauging Data  | Ĺ                                      |
| $\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $   | Discharge<br>(Q, ft <sup>3</sup> /sec) |
| 0, (left side)   |  |
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Ent WB 10/17/06

11.000

| Project No.:       0002-75       Site Description:         Date: $10/05/06$ Weather:         Sampler(s): $UB_{1}B_{1}$ Samples Taken:       Yes         Start Time: $12/00$ Sample Time:       Yes         End Time: $12/00$ DTW Measurement: $10/07$ COC Number:       Temp. (°C)       Cond. (mS/cm)       pH (S.U.)         Field Parameters       Notes: $VL^{r}y_{1}/1+H g_{0}$ Sample I.D.       Temp. (°C)       Cond. (mS/cm)       pH (S.U.)         Stage H:       Rated Flow:       Gauged Flow:   | Client:                                | (                 | CRWD                                   | _            | S        | Site Location: |             | 955                     |              |
|---|--|-------------------|--|--------------|----------|----------------|-------------|-------------------------|--------------|
| Date: $10/05/16$ Weather:         Sampler(s): $WB_RL$ Samples Taken:       Yes       No         Start Time: $12/00$ Sample Time:       Image: Construction of the second of the sec   | Project No.:                           | 0                 | 002-75                                 |              | Site     | Description:   |             |                         |              |
| Start Time: $1 \rightarrow 0 \rightarrow$ Sample Time:         End Time: $1 \rightarrow 0 \rightarrow$ Channel Conditions: $1 \rightarrow 0 \rightarrow$ COC Number: $1 \rightarrow 0 \rightarrow$ Sample I.D.       Temp. (°C)         Cod. (mS/m)       D.O. (mg/l)         pH (S.U.) $1 \rightarrow 0 \rightarrow$ Sample I.D.       Temp. (°C)         Cod. (mS/m)       D.O. (mg/l)         pH (S.U.) $1 \rightarrow 0 \rightarrow$ Stage Ht:       Rated Flow:         Gauged Flow:       Gauged Flow:         Stream Gauging Data         Distance from       Width (ft)         Depth (ft)       Velocity         (60%) $20\%$ B0%       Average         Velocity       Area (ft <sup>2</sup> )         O(left side) $20\%$ Stage H: $1 \rightarrow 0$ Distance from $1 \rightarrow 0$ Initial Point (ft)       Depth (ft)       Velocity $0, (left side)$ $20\%$ $20\%$ $20\%$ $0, (left side)$ $20\%$ $20\%$ $20\%$ $20\%$ $0, (left side)$ $20\%$ $20\%$ $20\%$ $20\%$ $20\%$ $20\%$ </th <th>Date:</th> <th>10/0.</th> <th>5/06</th> <th>-</th> <th></th> <th></th> <th></th> <th>•</th> <th></th>  | Date:                                  | 10/0.             | 5/06                                   | -            |          |                |             | •                       |              |
| Start Time: $(A, D)$ Sample Time:         End Time: $(A, D)$ $(A, D)$ Channel Conditions: $(A, D)$ $(A, D)$ COC Number: $DTW$ Measurement: $(D, D7)$ COC Number: $DTW$ Measurement: $(D, D7)$ Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         III. ( $AB$ $Qq7$ III. ( $AI$ $SI$ $SI$ Stage Ht:       Rated Flow:       Gauged Flow:   | Sampler(s):                            | WF                | 2.RL                                   | _            | Sar      | nples Taken:   | Yes         | No                      |              |
| $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$  | Start Time:                            |                   | 100                                    | _            | S        | ample Time:    | <u> </u>    | )                       |              |
| Notes: V// / i+i/e         Field Parameters         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         III       III       Gauged Flow:   | End Time:                              |                   |  | _            |          |                |             |                         |              |
| Notes: V// / i+i/e         Field Parameters         Sample I.D.       Temp. (°C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         III       III       Gauged Flow:   | Channel Conditions:                    | <u>flou</u>       | ving                                   | _            | DTW M    | leasurement:   | 12.         | 07                      |              |
| Sample I.D.       Temp. ( $^{\circ}$ C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         II. ( $^{\circ}$ Q       II. (II. (II. (II. (II. (II. (II. (II.   | COC Number:                            | -                 | <u> </u>                               | -            |          |                |             |                         |              |
| Sample I.D.       Temp. ( $^{\circ}$ C)       Cond. (mS/cm)       D.O. (mg/l)       pH (S.U.)         II. ( $^{\circ}$ Q       II. (II. (II. (II. (II. (II. (II. (II.   |  |                   | · · · · · · · · · · · · · · · · · · ·  |              |          |                | Notes:      | Very                    | 1:++1e       |
| Stage Ht:       Rated Flow:       Gauged Flow:         Stage Ht:       Rated Flow:       Gauged Flow:         Distance from       Width (ft)       Depth (ft)       Velocity<br>(60%       Average<br>20%       Average<br>Velocity<br>(ft/sec)       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       Image (Image (Im   |  | ·                 | Field Parameters                       | H            | ·        |                |             | <u> </u>                | 242          |
| Stage Ht: Rated Flow:         Gauged Flow:         Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>Depth       Average<br>Velocity<br>(ft/sec)       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)   | Sample I.D.                            |                   |  |              |          |                |             |                         |              |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>Depth       Average<br>Velocity<br>(ft/sec)       Area (ft <sup>2</sup> )       Discharge<br>(Q, ft <sup>3</sup> /sec)         0, (left side)       Image (Image (I  |  | 11.66             | 99-1                                   | 11.61        |          | 5              |             |                         |              |
| Stream Gauging Data         Distance from<br>Initial Point (ft)       Width (ft)       Depth (ft)       Velocity<br>(60%<br>Depth)       Velocity<br>20%<br>Depth       Average<br>80%<br>Depth       Average<br>Velocity<br>(ft/sec)       Discharge<br>(Q, ft <sup>3</sup> sec)         0, (left side)       Image: Stream Gauging Data       Image: Stream Gaua       Image: Stream Gauging Data <th></th> <th>_</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  |  | _                 |  |              |          |                |             |                         |              |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>(60%<br>Depth)Velocity<br>$20%$<br>DepthAverage<br>$20%$<br>DepthAverage<br>Velocity<br>(ft/sec)Area (ft²)Discharge<br>(Q, ft³/sec)0, (left side) $  -$ <  | Stage Ht                               | •                 |  | Rated Flow   |          |                | Gauged Flow | ·:                      |              |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft)Velocity<br>(60%<br>Depth)Velocity<br>$20%$<br>DepthAverage<br>$20%$<br>DepthAverage<br>Velocity<br>(ft/sec)Area (ft²)Discharge<br>(Q, ft³/sec)0, (left side) $  -$ <  |  |                   | c                                      | troom Cou    | aina Dat | 9              |             |                         |              |
| Distance from<br>Initial Point (ft)Width (ft)Depth (ft) $\begin{array}{c} 0.00\%\\ (60\%\\ Depth \end{array} \end{array}$ $\begin{array}{c} 20\%\\ Depth \end{array}$ $\begin{array}{c} 80\%\\ Depth \end{array}$ $\begin{array}{c} AVerage}{Velocity}\\ Velocity\\ (ft/sec) \end{array}$ $\begin{array}{c} Area (ft^2)\\ (Q, ft^3/sec) \end{array}$ 0, (left side) $\begin{array}{c} 0.00\%\\ 0.00\%\\ 0.00\% \end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%\\ 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%\\ 0.00\%$ $\begin{array}{c} 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%$ $\begin{array}{c} 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%$ $\begin{array}{c} 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c} 0.00\%\\ 0.00\%\end{array}$ $\begin{array}{c$ |  |                   |  |              |          |                |             | <u> </u>                |              |
| Depth       Depth       Depth       Depth       Depth       (ft/sec)       (cc, n/scc)         0, (left side)   |  | Width (ft)        | Depth (ft)                             |              | 20%      | 80%            | -           | Area (ft <sup>2</sup> ) | _            |
|   |  |                   |  | Depth)       | Depth    | Depth          |             |                         | (Q, I( /Sec) |
| Index   | 0, (left side)                         |                   |  |              |          |                |             |                         |              |
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|   |  |                   | -                                      | -            |          |                |             |                         |              |
| T:\0185\04\292\Field Forms\Gauging Form Harch 27, 2002  | T:\0185\04\292\Field Forms\Gauging For | m                 | 1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - |              |          | Ev             | V+W         | B                       | -            |



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 - Fax 507-359-2890 1411 S. 12th St. ~ Bismarck, ND 58502 ~ 800-279-6885 ~ Fax 701-258-9724 35 W. Lincoln Way ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 www.mvtl.com



WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: CR 33.6 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28603 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 8:45 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Receiv<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 170                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | . 10.00  |
|--|--|
| Reporting Limit  | \$**   |
| vated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MIC                        | RO # 1013-M ND WW/DW # R-040 IA LAB #: 132                   |
|  |  |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: TA 33.2 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28602 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 8:25 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Receiv<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 200                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

Ð Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

WI LAB # 999447680 ND MICRO # 1013-M

.013-M ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: CR 31.8 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28604 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 9:00 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Receive<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 290                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

Þ. -Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<):  $\emptyset \approx$  Due to sample matrix ! = Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MIC

# = Due to sample concentration
y + = Due to extract volume
ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: T 30.7 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28605 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 9:15 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Receiv<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 160                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

Ð. 1 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO

# = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: CR 30.0 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28606 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 9:25 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 730                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

Þ. Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Levated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: CR 29.0 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28607 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 9:45 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 2000                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

8. L. Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: TW 27.8 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28608 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 10:00 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

| As Received<br>Result      |     | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst         |     |
|----------------------------|-----|--------------|---------------------|------------------|-----------------|-----|
| Fecal Coliform, MF         | 120 | CFU/100 mL   | 10.                 | SM 9222D 18th Ed | 15 Aug 05 14:15 | VRK |
| CFU = Colony Forming Units |     |              |                     |                  |                 |     |

B. L Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Lievated "Less Than Result" (<); @ = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125

WI LAB # 999447680 ND MICRO # 1013-M

ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: TE 27.8 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28609 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 10:05 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                            | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF         | 640                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |
| CFU = Colony Forming Units |                       |            |              |                     |                  |         |

P E. Approved by:

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

thevated "Less Than Result" (<):  $0 \approx Due$  to sample matrix  $! \approx Due$  to sample quantity

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND M

+ = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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# = Due to sample concentration

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Number: 0002-75 Sample Description: T 27.3 Page: 1 of 1

Report Date: 18 Aug 05 Lab Number: 05-A28610 Work Order #:12-8543 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Aug 05 10:15 Date Received: 15 Aug 05 13:40

Chain of Custody Number: 100207 Temp at Receipt: 2.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 80                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Aug 05 14:15  | VRK     |

CFU = Colony Forming Units

Þ. 4 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" {<}: @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

PRELIMINARY REPORT

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 35.3

Date Sampled: 26 Sep 05 9:05 Date Received: 26 Sep 05 13:18

Sample Matrix: SURFACE WATER

Temp at Receipt: 4.0C

Report Date: 27 Sep 05

Lab Number: 05-A33906

Work Order #:12-10060 Account #: 013173

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 7000                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK     |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 9 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33907 Work Order #:12-10060 WENCK ASSOCIATES INC Account #: 013173 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:15 Date Received: 26 Sep 05 13:18 Sample Description: CR 33.6 Temp at Receipt: 4.0C As Received Method Method Date Result RL Reference Analyst Analyzed Fecal Coliform, MF 500 CFU/100 mL 10, SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" {<}: @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DN # R-040 IA LAB #: 132

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| 0 CFU/100 mL  | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK                    |
|---------------|--------------|---------------------|------------------|------------------------|
| eceived<br>lt | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst                |
|               |              | Temp at Recei       | pt: 4.0C         |                        |
|               |              | Date Received       | : 26 Sep 05 13:  | 18                     |
|               |              | -                   | 26 Sep 05 8:3    |                        |
| 9-9000        |              | Sample Matrix       | : SURFACE WATER  | ٤                      |
|               |              | Account #: 01       | 3173             |                        |
|               |              | Work Order #:       | 12-10060         |                        |
|               |              | Lab Number: 0       | 5-A33901         |                        |
|               |              | Report Date:        | 27 Sep 05        |                        |
|               |              |                     |                  |                        |
|               |              |                     | Report Date:     | Report Date: 27 Sep 05 |

CFU = Colony Forming Units

\* Holding time Exceeded

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Page:

1 of 1

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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|                        | As Receiv<br>Result | ved | Method<br>RL | Method<br>Reference | Date<br>Analyzed               | Analyst |
|------------------------|---------------------|-----|--------------|---------------------|--------------------------------|---------|
| Sample Description: TF | 33.2                |     |              | Temp at Recei       | pt: 4.0C                       |         |
|                        |                     |     |              | •                   | 26 Sep 05 8:<br>: 26 Sep 05 13 |         |
| MAPLE PLAIN MN         | 55359-9(            | 00  |              | •                   | : SURFACE WATE                 |         |
| 1800 PIONEER CR        |                     |     |              | Account #: 01       |                                |         |
| WENCK ASSOCIATE        | S INC               |     |              | Work Order #:       | 12-10060                       |         |
| WES BOLL               |                     |     |              | Lab Number: 0       | -                              |         |
|                        |                     |     |              | Report Date:        | 27 Sep 05                      |         |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33903 WENCK ASSOCIATES INC Work Order #:12-10060 1800 PIONEER CRK CTR Account #: 013173 MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 8:50 Date Received: 26 Sep 05 13:18 Sample Description: TC 33.2 Temp at Receipt: 4.0C As Received Method Method Date Analyzed Result RL Reference Analyst

Fecal Coliform, MF 1300 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

Page:

1 of 1

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume

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CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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|          |                | As Recei<br>Result | ived | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------|----------------|--------------------|------|--------------|---------------------|------------------|---------|
|          |                |                    |      |              | Temp at Rece        | eipt: 4.0C       |         |
| Sample D | Description: T | TA 33.2            |      |              | Date Receive        | d: 26 Sep 05 1   | .3:18   |
|          |                |                    |      |              | •                   | l: 26 Sep 05 8   |         |
| M        | APLE PLAIN M   | 4N 55359-9         | 000  |              | Sample Matri        | x: SURFACE WAT   | ER      |
| 1        | 1800 PIONEER C | CRK CTR            |      |              | Account #: 0        | 13173            |         |
| M        | VENCK ASSOCIAT | TES INC            |      |              | Work Order #        | :12-10060        |         |
| И        | VES BOLL       |                    |      |              | Lab Number:         | 05-A33904        |         |
|          |                |                    |      |              | Report Date:        | 27 Sep 05        |         |

CFU = Colony Forming Units

\* Holding time Exceeded

Page:

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RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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#### AN EQUAL OPPORTUNITY EMPLOYER

|           |                   |                       |              | Page: 1 of 1        |                  |         |
|-----------|-------------------|-----------------------|--------------|---------------------|------------------|---------|
| PRELIM    | INARY REPORT      |                       |              |                     |                  |         |
|           |                   |                       |              | Report Date: 2      | 7 Sep 05         |         |
|           | WES BOLL          |                       |              | Lab Number: 05      | -A33905          |         |
|           | WENCK ASSOCIATES  | INC                   |              | Work Order #:1      | 2-10060          |         |
|           | 1800 PIONEER CRK  | CTR                   |              | Account #: 013      | 173              |         |
|           | MAPLE PLAIN MN    | 55359-9000            |              | Sample Matrix:      | SURFACE WATER    | 2       |
|           |                   |                       |              | Date Sampled:       |                  |         |
|           |                   |                       |              | Date Received:      | -                |         |
| Sample    | Description: TB 3 | 33.2                  |              |                     |                  | 20      |
|           |                   |                       |              | Temp at Receip      | t: 4.0C          |         |
|           |                   | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
| Fecal Col | iform, MF         | > 60000 CFU/100 mL    | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK     |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132





Page:

1 of 1

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PRELIMINARY REPORT Report Date: 27 Sep 05 Lab Number: 05-A33908 WES BOLL WENCK ASSOCIATES INC Work Order #:12-10060 1800 PIONEER CRK CTR Account #: 013173 MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:20 Date Received: 26 Sep 05 13:18 Sample Description: T 32.2 Temp at Receipt: 4.0C As Received Method Method Date

| Fecal Coliform, MF         | Result | vica       | RL        | Reference        | Analyzed        | Analyst |
|----------------------------|--------|------------|-----------|------------------|-----------------|---------|
| Fecal Coliform, MF         | 580    | CFU/100 mL | 10.       | SM 9222D 18th Ed | 26 Sep 05 14:30 | VRK     |
| CFU = Colony Forming Units |        | ÷          | Holding t | ime Exceeded     |                 |         |

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RL = Reporting Limit Elevated "Less Than Result" (<): 9  $\approx$  Due to sample matrix !  $\approx$  Due to sample quantity # = Due to sample concentration
+ = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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PRELIMINARY REPORT

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 31.8

Report Date: 27 Sep 05 Lab Number: 05-A33891 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:40 Date Received: 26 Sep 05 13:18

Temp at Receipt: 4.0C

|                    | As Receive<br>Result | d          | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 7000                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK     |

CFU = Colony Forming Units

\* Holding time Exceeded

| RL = Reporting Limit  | e e e e e e e e e e e e e e e e e e e                        |
|---|--|
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix : = Due to sample quantity | # → Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                      | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132             |



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| PRELIM    | INARY REPORT      |                    |        |                  |                 |         |
|-----------|-------------------|--------------------|--------|------------------|-----------------|---------|
|           |                   |                    |        | Report Date: 2   | 7 Sep 05        |         |
|           | WES BOLL          |                    |        | Lab Number: 05   | <b>-</b>        |         |
|           | WENCK ASSOCIATES  | INC                |        | Work Order #:1   | 2-10060         |         |
|           | 1800 PIONEER CRK  | CTR                |        | Account #: 013   | 173             |         |
|           | MAPLE PLAIN MN    | 55359-9000         |        | Sample Matrix:   | SURFACE WATER   |         |
|           |                   |                    |        | Date Sampled:    |                 |         |
|           |                   |                    |        | Date Received:   | •               |         |
| Sample    | Description: TA 3 | 30.9               |        |                  | ·····           |         |
| <u>-</u>  | <b>i</b>          |                    |        | Temp at Receip   | t: 4.0C         |         |
|           |                   | As Received        | Method | Method           | Date            |         |
|           |                   | Result             | RL     | Reference        | Analyzed        | Analyst |
| Fecal Col | iform, MF         | > 60000 CFU/100 mL | 10.    | SM 9222D 18th Ed | 26 Sep 05 14:30 | VRK     |
|           |                   |                    |        |                  |                 |         |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Report Date: 27 Sep 05 Lab Number: 05-A33910 INC Work Order #:12-10060 CTR Account #: 013173

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TB 30.9

#### Temp at Receipt: 4.0C

Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:35 Date Received: 26 Sep 05 13:18

1 of 1

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|                    | As Rece<br>Result | ived       | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 240               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:    | 30 VRK  |

CFU = Colony Forming Units

PRELIMINARY REPORT

WES BOLL

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume

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CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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PRELIMINARY REPORT

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: T 30.7

Report Date: 27 Sep 05 Lab Number: 05-A33892 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:45 Date Received: 26 Sep 05 13:18

Temp at Receipt: 4.0C

|                    | As Receive<br>Result | d          | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 2100                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK     |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33893 WENCK ASSOCIATES INC Work Order #:12-10060 Account #: 013173 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:50 Date Received: 26 Sep 05 13:18 Sample Description: T 30.1 Temp at Receipt: 4.0C As Received Method Method Date Result RL Reference Analyzed Analyst

Fecal Coliform, MF 2100 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 NI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33894 WENCK ASSOCIATES INC Work Order #:12-10060 1800 PIONEER CRK CTR Account #: 013173 MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 9:55 Date Received: 26 Sep 05 13:18 Sample Description: CR 30 Temp at Receipt: 4.0C Method As Received Method Date Result RL Reference Analyzed Analyst Fecal Coliform, MF > 60000 CFU/100 mL 10 SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 TA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 Lab Number: 05-A33895 WES BOLL Work Order #:12-10060 WENCK ASSOCIATES INC Account #: 013173 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 10:00 Date Received: 26 Sep 05 13:18 Sample Description: CR 29 Temp at Receipt: 4.0C Method Method As Received Date Reference Result RL Analyzed Analyst

Fecal Coliform, MF > 60000 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

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CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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PRELIMINARY REPORT WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Description: TW 27.8 Report Date: 27 Sep 05 Lab Number: 05-A33896 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 10:10 Date Received: 26 Sep 05 13:18 Temp at Receipt: 4.0C

|                    | As Receiv<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |  |
|--------------------|---------------------|------------|--------------|---------------------|------------------|---------|--|
| Fecal Coliform, MF | 2000                | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 05 14:30  | VRK     |  |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WH/DW # R-040 IA LAB #: 132

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|        |                  | Result   |     | RL     | Reference    | Analyzed         | Analyst |
|--------|------------------|----------|-----|--------|--------------|------------------|---------|
|        |                  | As Recei | ved | Method | Method       | Date             |         |
|        |                  |          |     |        | Temp at Rece | ipt: 4.0C        |         |
| Sample | Description: TE  | 27.8     |     |        | Date Receive | d: 26 Sep 05 13  | :18     |
|        |                  |          |     |        | •            | : 26 Sep 05 10:1 |         |
|        | MAPLE PLAIN MN   | 55359-9  | 000 |        |              | x: SURFACE WATE  |         |
|        | 1800 PIONEER CRK | CTR      |     |        | Account #: 0 | 13173            |         |
|        | WENCK ASSOCIATES | INC      |     |        | Work Order # | :12-10060        |         |
|        | WES BOLL         |          |     |        | Lab Number:  | 05-A33897        |         |
|        |                  |          |     |        | Report Date: | 27 Sep 05        |         |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33898 WENCK ASSOCIATES INC Work Order #:12-10060 Account #: 013173 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 10:20 Date Received: 26 Sep 05 13:18 Sample Description: T 27.3 Temp at Receipt: 4.0C Method As Received Method Date Result RL Reference Analyzed Analyst

Fecal Coliform, MF 230 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ > Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 NI LAB # 999447680 ND MICRO # 1013-M ND WW/DN # R-040 IA LAB #: 132

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PRELIMINARY REPORT Report Date: 27 Sep 05 WES BOLL Lab Number: 05-A33899 Work Order #:12-10060 WENCK ASSOCIATES INC Account #: 013173 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Sample Matrix: SURFACE WATER Date Sampled: 26 Sep 05 10:25 Date Received: 26 Sep 05 13:18 Sample Description: CR 27.2 Temp at Receipt: 4.0C Method As Received Method Date Analyzed Result RL Reference

| Fecal Coliform, MF | 290 | CFU/100 mL | 10. | SM 9222D 18th Ed | 26 Sep 05 14:30 VRK |
|--------------------|-----|------------|-----|------------------|---------------------|
|                    |     |            |     |                  |                     |

CFU = Colony Forming Units

\* Holding time Exceeded

 RL = Reporting Limit
 \*\*

 Elevated "Less Than Result" (<): @ = Due to sample matrix</td>
 # = Due to sample concentration

 ! = Due to sample quantity
 + = Due to extract volume

 CERTIFICATION: MN LAB # 027-015-125
 WI LAB # 999447680
 ND MICRO # 1013-M
 ND WW/DW # R-040
 IA LAB #: 132

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| acal Col | liform, MF       | 820      | CFU/100 mL | 10.    | SM 9222D 18th Ed | 26 Sep 05 14:3                     | 0 VRK  |
|----------|------------------|----------|------------|--------|------------------|------------------------------------|--------|
|          |                  | Result   |            | RL     | Reference        | Analyzed                           | Analys |
|          |                  | As Recei | ved        | Method | Method           | Date                               |        |
|          | -                |          |            |        | Temp at Rece     | lpt: 4.0C                          |        |
| Sample   | Description: CR  | 25.6     |            |        | Dule Received    | r. 20 dep 00 r.                    |        |
|          |                  |          |            |        | *                | : 26 Sep 05 10:<br>1: 26 Sep 05 13 |        |
|          | MAPLE PLAIN MN   | 22323-3  | 000        |        | •                | K: SURFACE WATE                    |        |
|          | 1800 PIONEER CRK |          | 000        |        | Account #: 01    |                                    |        |
|          | WENCK ASSOCIATES |          |            |        | Work Order #     |                                    |        |
|          | WES BOLL         |          |            |        | Lab Number:      |                                    |        |
|          |                  |          |            |        | Report Date:     | -                                  |        |

CFU = Colony Forming Units

\* Holding time Exceeded

RL = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 9999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132





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#### AN EQUAL OPPORTUNITY EMPLOYER

| PRELIMINARY REPORT        |        |             |                 |         |
|---------------------------|--------|-------------|-----------------|---------|
|                           |        | Report Date | : 27 Sep 05     |         |
| WES BOLL                  |        | Lab Number: | 05-A33900       |         |
| WENCK ASSOCIATES INC      |        | Work Order  | #:12-10060      |         |
| 1800 PIONEER CRK CTR      |        | Account #:  | 013173          |         |
| MAPLE PLAIN MN 55359-9000 |        | Sample Matr | ix: SURFACE WAY | FER     |
|                           |        | Date Sample | d: 26 Sep 05    |         |
|                           |        | Date Receiv | ed: 26 Sep 05 1 | 13:18   |
| Sample Description: FD 1  |        |             | -               |         |
|                           |        | Temp at Rec | eipt: 4.0C      |         |
| As Received               | Method | Method      | Date            |         |
| Result                    | RL     | Reference   | Analyzed        | Analyst |

Fecal Coliform, MF \* > 60000 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

 $^{\star\star}$  No collection time supplied by the client.

RL = Reporting Limit Elevated "Less Than Result" (<): @ « Due to sample matrix # = Due to sample concentration ! « Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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| PRELIMINARY  | REPORT      |                       |              |                     |                  |         |
|--------------|-------------|-----------------------|--------------|---------------------|------------------|---------|
|              |             |                       |              | Report Date         | e: 27 Sep 05     |         |
| WES B        | )LL         |                       |              | Lab Number          | : 05-A33912      |         |
| WENCK        | ASSOCIATES  | INC                   |              | Work Order          | #:12-10060       |         |
| 1800         | PIONEER CRK | CTR                   |              | Account #:          | 013173           |         |
| MAPLE        | PLAIN MN    | 55359-9000            |              | Sample Mati         | ix: SURFACE WAT  | FER     |
|              |             |                       |              | Date Sample         | ed: 26 Sep 05    |         |
|              |             |                       |              | Date Receiv         | red: 26 Sep 05 1 | 13:18   |
| Sample Descr | ption: FD : | 2                     |              |                     |                  |         |
|              |             |                       |              | Temp at Rec         | ceipt: 4.0C      |         |
|              |             | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |

Fecal Coliform, MF \* 300 CFU/100 mL 10. SM 9222D 18th Ed 26 Sep 05 14:30 VRK

CFU = Colony Forming Units

\* Holding time Exceeded

\*\* No collection time supplied by the client.

RL = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34338 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 13:55 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 33.6

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    | 1949-bar   |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                    |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 28 Sep 05 15:57  | CJL        |
| CBOD, 20 Day             | 14                 | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 5                  | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00  | RMV        |
| Carbon, Total Organic    | 18.5               | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | 1.1                | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 9.5                | mg/L       | NA           | Calc                | 6 Oct 05 6:15    | Calculated |
| Chloride                 | 34.7               | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:20  | DAP        |
| Nitrate+Nitrite          | 7.10               | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13   | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55   | TAM        |
| Phosphorus, Total        | 0.170              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:38   | DAP        |
| Phosphorus, Ortho        | 0.151              | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  | DAP        |
| Nitrogen, Total Kjeldahl | 2.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 6:15    | RSL        |
| Iron                     | 0.034              | mg/L       | 0.010        | 6010                | 5 Oct 05 13:06   | TB         |

Ent WB 11/11/05

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

 $\iota_-$  , ated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: l of l

Report Date: 8 Nov 05 Lab Number: 05-A34345 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 15:08 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TC 33.2

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                    |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10  | CJL        |
| CBOD, 20 Day             | 11                 | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 2                  | mg/L       | 2            | SM 2540D            | 28 Sep 05 17:00  | RMV        |
| Carbon, Total Organic    | 11.0               | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | 2.8                | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 9.0                | mg/L       | NA           | Calc                | 6 Oct 05 14:00   | Calculated |
| Chloride                 | 49.6               | mq/L       | 3.0          | 325.2               | 29 Sep 05 11:31  | DAP        |
| Nitrate+Nitrite          | 7.69               | mg/L as N  | 0,20         | 353.2               | 3 Oct 05 13;13   | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 6 Oct 05 13:00   | TAM        |
| Phosphorus, Total        | 0.257              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39   | DAP        |
| Phosphorus, Ortho        | 0.249              | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  | DAP        |
| Nitrogen, Total Kjeldahl | 1.3                | mq/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00   | TAM        |
| Iron                     | 0.113              | mg/L       | 0.010        | 6010                | 5 Oct 05 13:43   | ŢΒ         |

Ent. WB 11/11/05

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix (  $\ll$  Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125

WI LAB # 999447680 ND MICRO # 1013-M

# = Due to sample concentration + = Due to extract volume 1013-M ND WW/DW # R-040 IA LAB #: 132

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Sample Description: TB 33.2

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000 Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34344 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 15:40 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

|   | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed            | Analyst    |
|---|---------------------------------|------------|--------------|---------------------|-----------------------------|------------|
| Phosphorus Water Digest<br>Water Digestions |                                 |            |              |                     | 4 Oct 05                    | AKF        |
| BOD, Carbonaceous                           | 3                               | mg/L       | 2            | SM 5210B            | 3 Oct 05<br>28 Sep 05 16:10 | JMS<br>CJL |
| CBOD, 20 Day                                | 15                              | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10             | CJL        |
| Solids, Total Suspended                     | 7                               | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00             |            |
| Carbon, Total Organic                       | 11.5                            | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00               |            |
| Chlorophyll a                               | 31.6                            | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28              | JD         |
| Nitrogen Total, Calculat                    | 7.6                             | mg/L       | NA           | Calc                | 6 Oct 05 14:00              | Calculated |
| Chloride                                    | 63.1                            | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:31             | DAP        |
| Nitrate+Nitrite                             | 5.66                            | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13              | DAP        |
| Nitrogen, Ammonia                           | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 6 Oct 05 13:00              | TAM        |
| Phosphorus, Total                           | 0.345                           | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39              | DAP        |
| Phosphorus, Ortho                           | 0.322                           | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32             | DAP        |
| Nitrogen, Total Kjeldahl                    | 1.9                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00              | TAM        |
| Iron  | 0.206                           | mg/L       | 0.010        | 6010                | 5 Oct 05 13:43              | TB         |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit L-Jated "Less Than Result" (<): @ = Due to sample matrix 1 = Due to sample duantity CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34343 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 15:29 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TA 33.2

|   | As Recei<br>Result   | ved   | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed  | Analyst  |
|---|--|---|--|--|---|--|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia | < 2<br>4<br>< 2<br>15.5<br>2.1<br>12.3<br>49.5<br>10.3<br>< 0.08 | mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L as N<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 E, E | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 16:10<br>28 Sep 05 16:19<br>28 Sep 05 16:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 14:00<br>29 Sep 05 11:31<br>3 Oct 05 13:13 | AKF<br>JMS<br>CJL<br>CJL<br>RMV<br>Bis<br>JD<br>Calculated<br>DAP<br>DAP |
| Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Iron  | 0.311<br>0.300<br>2.0<br>0.057                                   | mg/L<br>mg/L<br>mg/L<br>mg/L  | 0.005<br>0.005<br>0.1<br>0.010                         | EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>6010   | 4 Oct 05 15:55<br>4 Oct 05 10:39<br>28 Sep 05 17:32<br>6 Oct 05 14:00<br>5 Oct 05 13:43   | TAM<br>DAP<br>DAP<br>TAM<br>TB   |

|   | Ent  |
|---|--|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                 | WB   |
| Reporting Limit   | . тур<br>Х <sup>а</sup> г                                    |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix ! = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                      | ND MICRO # 1013~M ND WW/DW # R-040 IA LAB #: 132             |

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Report Date: 8 Nov 05 Lab Number: 05-A34339 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 14:55 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

EVIB WB

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TF 33.2

|   | As Recei<br>Result   | ved  | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed   | Analyst  |
|---|--|--|--|--|--|--|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Iron | < 2<br>5<br>8.0<br>< 1<br>18.2<br>49.2<br>16.5<br>< 0.08<br>0.206<br>0.203<br>1.7<br>0.035 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>0.010 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 15:57<br>28 Sep 05 16:19<br>28 Sep 05 16:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 6:15<br>29 Sep 05 11:20<br>3 Oct 05 13:13<br>4 Oct 05 15:55<br>4 Oct 05 10:39<br>28 Sep 05 17:32<br>6 Oct 05 6:15<br>5 Oct 05 13:06 | AKF<br>JMS<br>CJL<br>CJL<br>RMV<br>Bis<br>JD<br>Calculated<br>DAP<br>DAP<br>TAM<br>DAP<br>DAP<br>RSL<br>TB |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

E..., ated "Less Than Result" (<):  $\ell$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680 ND MICRO # 1013-M

+ = Due to extract volume

# = Due to sample concentration

ND WW/DW # R-D40 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34340 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 14:45 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TD 33.2

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  | ev                 |            |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                    |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10  | CJL        |
| CBOD, 20 Day             | 14                 | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 7                  | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00  | RMV        |
| Carbon, Total Organic    | 10.0               | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | < 1                | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 14.0               | mg/L       | NA           | Calc                | 6 Oct 05 14:00   | Calculated |
| Chloride                 | 51.5               | mq/L       | 3.0          | 325.2               | 29 Sep 05 11:20  | DAP        |
| Nitrate+Nitrite          | 12.1               | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13   | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55   | TAM        |
| Phosphorus, Total        | 0.283              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39   | DAP        |
| Phosphorus, Ortho        | 0.277              | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  | DAP        |
| Nitrogen, Total Kjeldahl | 1.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00   | TAM        |
| Iron                     | 0.080              | mg/L       | 0.010        | 6010                | 5 Oct 05 13:06   |            |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

E...vated "Less Than Result" (<):  $\mathfrak{E}$  = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

Ent. WB 11/11/05

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34342 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 15:55 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: T 32.2

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                    |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | 5                  | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10  | CJL        |
| CBOD, 20 Day             | 36                 | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 10                 | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00  | RMV        |
| Carbon, Total Organic    | 18.5               | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | 14.6               | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 3.8                | mg/L       | NA           | Calc                | 6 Oct 05 14:00   | Calculated |
| Chloride                 | 13.5               | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:31  | DAP        |
| Nitrate+Nitrite          | 2.11               | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13   | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55   | TAM        |
| Phosphorus, Total        | 0.174              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39   | DAP        |
| Phosphorus, Ortho        | 0.117              | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  | DAP        |
| Nitrogen, Total Kjeldahl | 1.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00   | TAM        |
| Iron                     | 1,180              | mg/L       | 0.010        | 6010                | 5 Oct 05 13:43   | TB         |

Ent. WB 11/11/05 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit  $E_{-}$  ,/ated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 31.8

Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34337 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 13:35 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

11/11/05

|   | As Received<br>Result |  | Method<br>RL | Method<br>Reference | Date<br>Analyzed            | Analyst    |
|---|-----------------------|--|--------------|---------------------|-----------------------------|------------|
| Phosphorus Water Digest<br>Water Digestions |                       | ······································ |              |                     | 4 Oct 05                    | AKF        |
| BOD, Carbonaceous                           | < 2                   | mg/L                                   | 2            | SM 5210B            | 3 Oct 05<br>28 Sep 05 15:57 | JMS<br>CJL |
| CBOD, 40 Day                                | 7                     | mg/L                                   | 2            | SM 5210B            | 29 Sep 05 9:39              | RMV        |
| CBOD, 20 Day                                | 1.3                   | mg/L                                   | 2            | SM 5210B            | 28 Sep 05 16:19             | CJL        |
| Solids, Total Suspended                     | 5                     | mg/L                                   | 2            | SM 2540D            | 2 Oct 05 11:40              | CJL        |
| Carbon, Total Organic                       | 14.0                  | mg/L                                   | 0.5          | 415.1               | 6 Oct 05 8:00               | Bis        |
| Chlorophyll a                               | 1.7                   | mg/cubic m                             | 1.0          | 10200H              | 30 Sep 05 7:28              | JD         |
| Nitrogen Total, Calculat                    | 5.6                   | mg/L                                   | NA           | Calc                | 6 Oct 05 6:15               | Calculated |
| Chloride                                    | 46.1                  | mg/L                                   | 3.0          | 325.2               | 29 Sep 05 11:20             | DAP        |
| Nitrate+Nitrite                             | 4.05                  | mg/L as N                              | 0.20         | 353.2               | 3 Oct 05 13:12              | DAP        |
| Nitrogen, Ammonia                           | < 0.08                | mg/L                                   | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55              | TAM        |
| Phosphorus, Total                           | 0.261                 | mg/L                                   | 0.005        | EPA 365.1           | 4 Oct 05 10:38              | DAP        |
| Phosphorus, Ortho                           | 0.234                 | mg/L                                   | 0,005        | EPA 365.1           | 28 Sep 05 17:30             | DAP        |
| Nitrogen, Total Kjeldahl                    | 1.6                   | mg/L                                   | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 6:15               | RSL        |
| lids, Suspended Volatile                    | 5                     | mg/L                                   | 2            | SM 2540E            | 2 Oct 05 11:40              | CJL        |
| òn  | 0.365                 | mg/L                                   | 0.010        | 6010                | 5 Oct 05 13:06              | TB         |

<u>(</u> Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Eisvated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680 ND MICRO # 1013-M

# = Due to sample concerc + = Due to extract volume

Due to sample concentration

P .....

ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Ent. WB 11/11/05

IA LAB #: 132

Report Date: 8 Nov 05 Lab Number: 05-A34341 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 16:10 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

Sample Description: T 30.9

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

|   | As Received<br>Result   |   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed  | Analyst   |
|---|---|---|---|--|---|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Solids, Suspended Volatile | $\begin{array}{c} 2 \\ 13 \\ 14 \\ 4.9 \\ 5.2 \\ 18.7 \\ 41.0 \\ 17.3 \\ < 0.08 \\ 0.162 \\ 0.141 \\ 1.4 \\ 7 \\ 0.356 \end{array}$ | mg/L<br>mg/L<br>mg/L<br>mg/Lubic m<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>2<br>0.010 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>SM 2540E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 16:10<br>28 Sep 05 16:19<br>2 Oct 05 11:40<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 14:00<br>29 Sep 05 11:31<br>3 Oct 05 13:13<br>4 Oct 05 10:39<br>28 Sep 05 17:32<br>6 Oct 05 14:00<br>2 Oct 05 14:00<br>2 Oct 05 11:40<br>5 Oct 05 13:43 | CJL<br>CJL<br>Bis<br>JD<br>Calculated<br>DAP<br>TAM<br>DAP<br>DAP<br>TAM<br>CJL |

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      |  |
|---|--|
| Reporting Limit   | Россия<br>Ф.   |
| EicJated "Less Than Result" (<): $\theta$ = Due to sample matrix $!$ = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 I                         |

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34336 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 13:17 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

Ent NB 1/11/05

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: T 30.7

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                       | ··=        |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                       |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 28 Sep 05 15:57  | CJL        |
| CBOD, 20 Day             | 14                    | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 6                     | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00  | RMV        |
| Carbon, Total Organic    | 5.0                   | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | < 1                   | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 16.3                  | mg/L       | NA           | Calc                | 6 Oct 05 6:15    | Calculated |
| Chloride                 | 34.4                  | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:20  | DAP        |
| Nitrate+Nitrite          | 15.0                  | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:12   | DAP        |
| Nitrogen, Ammonía        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55   | TAM        |
| Phosphorus, Total        | 0.226                 | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:38   | DAP        |
| Phosphorus, Ortho        | 0.214                 | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:30  | DAP        |
| Nitrogen, Total Kjeldahl | 1.3                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 6:15    | RSL        |
| Iron                     | 0.060                 | mg/L       | 0.010        | 6010                | 5 Oct 05 13:06   | TB         |

65 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

 $\texttt{L}_{--} \texttt{vated}$  "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680

# = Due to sample concentration + = Due to extract volume

ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34335 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 13:08 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: T 30.1

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                       |            | ···.         |                     | 4 Oct 05         | AKF     |
| Water Digestions         |                       |            |              |                     | 3 Oct 05         | JMS     |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 28 Sep 05 15:57  | CJL     |
| CBOD, 20 Day             | 9                     | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL     |
| Solids, Total Suspended  | < 2                   | mg/L       | 2            | SM 2540D            | 28 Sep 05 16:00  | RMV     |
| Carbon, Total Organic    | 5.0                   | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    |         |
| Chlorophyll a            | < 1                   | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD      |
| Nitrogen Total, Calculat | 20.4                  | mg/L       | NA           | Calc                | 6 Oct 05 6:15    |         |
| Chloride                 | 15.3                  | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:20  | DAP     |
| Nitrate+Nitrite          | 19.1                  | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:12   |         |
| Nitrogen, Ammonia        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 4 Oct 05 15:55   |         |
| Phosphorus, Total        | 0.125                 | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:38   |         |
| Phosphorus, Ortho        | 0.111                 | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:30  |         |
| Nitrogen, Total Kjeldahl | 1.3                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 6:15    |         |
| Iron                     | 0.020                 | mg/L       | 0.010        | 6010                | 5 Oct 05 13:06   |         |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

L\_.vated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680 ND MICRO # 1013-M

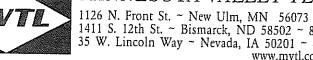
# = Bue to sample concentration + = Due to extract volume ND WW/DW # R-040

IA LAB #: 132

Ent WB 1/11/05

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34334 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 13:00 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 30.0

|   | As Received<br>Result  |   | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed  | Analyst   |
|---|--|---|--|--|---|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl | < 2<br>7<br>8<br>13.0<br>< 1<br>6.2<br>42.7<br>4.24<br>< 0.08<br>0.248<br>0.227<br>2.0 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 15:57<br>28 Sep 05 16:19<br>28 Sep 05 16:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 6:15<br>29 Sep 05 11:20<br>3 Oct 05 13:12<br>4 Oct 05 15:55<br>4 Oct 05 10:38<br>28 Sep 05 17:30 | AKF<br>JMS<br>CJL<br>CJL<br>RMV<br>Bis<br>JD<br>Calculated<br>DAP<br>DAP<br>TAM<br>DAP<br>DAP |
| Iron  | 0.419  | mg/L  | 0.010  | SM 4500NorgB/NH3 E<br>6010   | 6 Oct 05 6:15<br>5 Oct 05 13:06   | RSL<br>TB   |

Approved by: YS. Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

ated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M

82. # \* Due to sample concentration
+ \* Due to extract volume

Ent WB 11/11/05

ND WW/DW # R-040 IA LAB #; 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34333 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 12:10 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 29.0

|   | As Received<br>Result  |   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst   |
|---|--|---|---|--|--|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Iron | < 2<br>5<br>11<br>13.5<br>1.4<br>6.2<br>37.7<br>4.51<br>< 0.08<br>0.236<br>0.216<br>1.7<br>0.410 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>0.010 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 15:57<br>28 Sep 05 16:19<br>28 Sep 05 16:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 6:15<br>29 Sep 05 11:20<br>3 Oct 05 13:12<br>4 Oct 05 15:55<br>4 Oct 05 10:38<br>28 Sep 05 17:30<br>6 Oct 05 6:15<br>5 Oct 05 13:06 | AKF<br>JMS<br>CJL<br>CJL<br>RMV<br>Bis<br>JD<br>Calculated<br>DAP<br>DAP<br>TAM<br>DAP<br>RSL<br>TB |

Entered WB ill/105 Approved by: 6 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit ated "Less Than Result" (<):  $\theta = Due$  to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34348 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 16:50 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TE 27.8

|   | As Received<br>Result   |   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst   |
|---|---|---|---|--|--|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Iron | 4<br>14<br>6<br>5.4<br>< 1<br>1.9<br>22.1<br>1.29<br>< 0.08<br>0.180<br>0.180<br>0.6<br>0.454 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>0.010 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 16:10<br>28 Sep 05 16:19<br>28 Sep 05 17:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 14:00<br>29 Sep 05 11:31<br>3 Oct 05 13:14<br>6 Oct 05 10:39<br>28 Sep 05 17:34<br>6 Oct 05 14:00<br>5 Oct 05 13:43 | CJL<br>RMV<br>Bis<br>JD<br>Calculated<br>DAP<br>DAP<br>TAM<br>DAP |

Ent. WB 11/11/05

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

 ${\tt E_{n-1}}$  ,ated "Less Than Result" (<); 0 = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34349 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 16:35 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

> Ent WB 1/11/05

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: TW 27.8

|   | As Received<br>Result  |   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst                 |
|---|--|---|---|--|--|-------------------------|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Iron | < 2<br>5<br>9<br>7.5<br>1.6<br>3.3<br>24.8<br>2.19<br>< 0.08<br>0.116<br>0.101<br>1.1<br>0.221 | mg/L<br>mg/L<br>mg/L<br>mg/Lubic m<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>0.010 | SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 16:50<br>28 Sep 05 16:19<br>28 Sep 05 17:00<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 14:00<br>29 Sep 05 11:31<br>3 Oct 05 13:14<br>6 Oct 05 10:40<br>28 Sep 05 17:34<br>6 Oct 05 14:00<br>5 Oct 05 13:43 | CJL<br>RMV<br>Bis<br>JD |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

ted "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MIC

ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34347 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 17:05 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

> Ent. WB 11/11/05

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: T 27.3

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                       |            |              |                     | 4 Oct 05         | AKF     |
| Water Digestions         |                       |            |              |                     | 3 Oct 05         | JMS     |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10  | CJL     |
| CBOD, 20 Day             | 5                     | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL     |
| Solids, Total Suspended  | < 2                   | mg/L       | 2            | SM 2540D            | 28 Sep 05 17:00  | RMV     |
| Carbon, Total Organic    | 14.5                  | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    |         |
| Chlorophyll a            | < 1                   | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD      |
| Nitrogen Total, Calculat | 2.6                   | mg/L       | NA           | Calc                | 6 Oct 05 14:00   |         |
| Chloride                 | 22.6                  | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:31  | DAP     |
| Nitrate+Nitrite          | 1.30                  | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13   | DAP     |
| Nitrogen, Ammonia        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 6 Oct 05 13:00   | TAM     |
| Phosphorus, Total        | 0.135                 | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39   | DAP     |
| Phosphorus, Ortho        | 0.117                 | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  |         |
| Nitrogen, Total Kjeldahl | 1.3                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00   | TAM     |
| Iron                     | 0.075                 | mg/L       | 0.010        | 6010                | 5 Oct 05 13:43   | TB      |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

 $\mathtt{k}_{+-},\mathtt{ated}$  "Less Than Result" (<): ( = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Bue to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34332 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 11:20 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 27.2

| Phosphorus Water Digest 4 Oct 05 AKF<br>Water Digestions 3 Oct 05 JMS  | alyst  |
|--|--|
| BOD, Carbonaceous         2         mg/L         2         SM 5210B         28 Sep 05 15:57         CJL           CBOD, 20 Day         5         mg/L         2         SM 5210B         28 Sep 05 16:19         CJL           Solids, Total Suspended         15         mg/L         2         SM 2540D         2 Oct 05 11:40         CJL           Carbon, Total Organic         12.0         mg/L         0.5         415.1         6 Oct 05 8:00         Bis           Chlorophyll a         6.7         mg/cubic m         1.0         10200H         30 Sep 05 7:28         JD | S<br>L<br>L<br>S<br>lculated<br>P<br>P<br>P<br>P<br>P<br>L<br>L<br>L |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

ted "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

Ent WB 11/11/05

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

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Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34331 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 10:45 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Sample Description: CR 25.6

|   | As Recei<br>Result  | ved  | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed  | Analyst   |
|---|---|--|--|--|---|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 40 Day<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>`lids,Suspended Volatile<br>Dn | 2<br>5<br>11<br>10<br>12.0<br>1.1<br>3.0<br>25.6<br>1.59<br>< 0.08<br>0.208<br>0.191<br>1.4<br>7<br>0.451 | mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L as N<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>NA<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.10<br>2<br>0.010 | SM 5210B<br>SM 5210B<br>SM 5210B<br>SM 2540D<br>415.1<br>10200H<br>Calc<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>SM 2540E<br>6010 | 4 Oct 05<br>3 Oct 05<br>28 Sep 05 15:57<br>29 Sep 05 9:39<br>28 Sep 05 16:19<br>2 Oct 05 11:40<br>6 Oct 05 8:00<br>30 Sep 05 7:28<br>6 Oct 05 6:15<br>29 Sep 05 11:20<br>3 Oct 05 13:12<br>4 Oct 05 15:55<br>4 Oct 05 10:38<br>26 Sep 05 17:30<br>6 Oct 05 6:15<br>2 Oct 05 11:40<br>5 Oct 05 13:06 | AKF<br>JMS<br>CJL<br>RMV<br>CJL<br>CJL<br>CJL<br>CJL<br>Calculated<br>DAP<br>DAP<br>TAM<br>DAP<br>DAP<br>RSL<br>CJL<br>TB |

Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

.ted "Less Than Result" (<); 9 = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

Entered WB 11/11/05

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WN/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

TC33.2 Sample Description: FD 1

Page: 1 of 1

Report Date: 8 Nov 05 Lab Number: 05-A34346 Work Order #:12-10060 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 27 Sep 05 15:09 Date Received: 28 Sep 05 10:30 PO #: 0002-75 Chain of Custody Number: 100208 Temp at Receipt: 2.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                                 |            |              |                     | 4 Oct 05         | AKF        |
| Water Digestions         |                                 |            |              |                     | 3 Oct 05         | JMS        |
| BOD, Carbonaceous        | < 2                             | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:10  | CJL        |
| CBOD, 20 Day             | 10                              | mg/L       | 2            | SM 5210B            | 28 Sep 05 16:19  | CJL        |
| Solids, Total Suspended  | 2                               | mg/L       | 2            | SM 2540D            | 28 Sep 05 17:00  | RMV        |
| Carbon, Total Organic    | 11.0                            | mg/L       | 0.5          | 415.1               | 6 Oct 05 8:00    | Bis        |
| Chlorophyll a            | 2.5                             | mg/cubic m | 1.0          | 10200H              | 30 Sep 05 7:28   | JD         |
| Nitrogen Total, Calculat | 9.0                             | mg/L       | NA           | Calc                | 6 Oct 05 14:00   | Calculated |
| Chloride                 | 48,9                            | mg/L       | 3.0          | 325.2               | 29 Sep 05 11:31  | DAP        |
| Nitrate+Nitrite          | 7.65                            | mg/L as N  | 0.20         | 353.2               | 3 Oct 05 13:13   | DAP        |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 6 Oct 05 13:00   | TAM        |
| Phosphorus, Total        | 0.263                           | mg/L       | 0.005        | EPA 365.1           | 4 Oct 05 10:39   | DAP        |
| Phosphorus, Ortho        | 0.253                           | mg/L       | 0.005        | EPA 365.1           | 28 Sep 05 17:32  | DAP        |
| Nitrogen, Total Kjeldahl | 1.4                             | mq/L       | 0.1          | SM 4500NorgB/NH3 E  | 6 Oct 05 14:00   | TAM        |
| Iron                     | 0.115                           | mg/L       | 0.010        | 6010                | 5 Oct 05 13:43   | тв         |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

 $E_{\pm e}vated$  "Less Than Result" (<); e = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680 NB MICRO # 1013-M

= Due to sample concentration + = Due to extract volume

Ent. WB 11/11/05

ND WW/DW # R-040 IA LAB #: 132

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 25.6

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13197 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 10:10 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

IA LAB #: 022

Temp at Receipt: -1.0C

|                    | As Receive<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 36                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | . m.e.   |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix $!$ = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132                     |



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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER TMDL

Sample Description: T 27.3

Report Date: 22 Apr 06 Lab Number: 06-A13199 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:57 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Receive<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | < 10                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

Approved by: Jason G. Smith, Inorganic

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



Sample Description: CR 27.2

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13198 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 10:00 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 10                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | . Mara   |               |
|---|--|---------------|
| Reporting Limit   |  |               |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix $!$ = Due to sample quantity | # = Due to sample concentration<br>+ ≃ Due to extract volume |               |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132             | IA LAB #: 022 |



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1 of 1 Page:

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER TMDL

Sample Description: TE 27.8

Report Date: 22 Apr 06 Lab Number: 06-A13200 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:52 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 10                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

Approved by:

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

M-11

Reporting Limit

Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CLEARWATER RIVER TMDL

Sample Description: TW 27.8

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13201 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:48 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

IA LAB #: 022

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 100                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | ,. Moor.<br><b>≹-</b>  |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132



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Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 29.0

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13202 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:42 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Receiv<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 18                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN               | х. жил   |           |
|--|--|-----------|
| Reporting Limit  |  |           |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix $?$ = Due to sample quantity | # ≈ Due to sample concentration<br>+ ≈ Due to extract volume |           |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600                                 | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA L        | AB #: 022 |



WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 30.0

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13203 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:35 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 220                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

5... Approved by: XS Jason G. Smith, Inorganic

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



Sample Description: T 30.1

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1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13204 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:32 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | < 10                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

9. L Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

- Reporting Limit

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Project Name: CLEARWATER RIVER TMDL

Sample Description: T 30.7

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13207 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:30 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 54                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14;15  | VRK     |

CFU = Colony Forming Units

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | , s Marin<br>Ven   |
|---|--|
| = Reporting Limit   |  |
| Elevated "Less Than Result" {<}: @ « Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



Sample Description: TA 30.9

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Project Name: CLEARWATER RIVER TMDL

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13205 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:18 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 900                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: |   |
|--------------|---|
|              | Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN |
|              |   |

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Project Name: CLEARWATER RIVER TMDL

Sample Description: TB 30.9

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13206 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:15 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | < 10                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      |  |
|---|--|
| Preporting Limit  |  |
| Elevated "Less Than Result" (<): $\theta = Due$ to sample matrix $! = Due$ to sample quantity | # ≈ Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO                               | D # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022      |

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Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 31.8

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13208 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:20 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received |            | Method | Method           | Date             |     |
|--------------------|-------------|------------|--------|------------------|------------------|-----|
|                    | Result      |            | RL     | Reference        | Analyzed Analyst |     |
| Fecal Coliform, MF | 30          | CFU/100 mL | 10.    | SM 9222D 18th Ed | 10 Apr 06 14:15  | VRK |

CFU = Colony Forming Units

| Approved by: | for 8. hant IS  |
|--------------|---|
|              | Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN |

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Project Name: CLEARWATER RIVER TMDL

Sample Description: T 32.2

1 of 1 Page:

Report Date: 22 Apr 06 Lab Number: 06-A13209 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:10 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 20                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: | Jan B. Lan IS   |  |  |  |  |  |
|--------------|---|--|--|--|--|--|
|              | Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN |  |  |  |  |  |

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume

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WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

Sample Description: TF 33.2

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13216 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:30 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

IA LAB #: 022

Temp at Receipt: -1.0C

| As Received        |      | Method     | Method    | Date             | Analyst         |     |
|--------------------|------|------------|-----------|------------------|-----------------|-----|
| Result             |      | RL         | Reference | Analyzed         |                 |     |
| Fecal Coliform, MF | < 10 | CFU/100 mL | 10.       | SM 9222D 18th Ed | 18 Apr 06 14:15 | VRK |

CFU = Colony Forming Units

| Approved by:   | Jan 8. Sont To  |  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|--|
|                | Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN |  |  |  |  |  |  |
| · Reporting Li | mít   |  |  |  |  |  |  |

Elevated "Less Than Result" (<): @ ~ Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WN/DW # R-040 IA LAB #: 132

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1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

Sample Description: TE 33.2

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1 of 1 Page:

Report Date: 22 Apr 06 Lab Number: 06-A13215 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:20 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Receive<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 20                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

Ì 65 Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

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- Reporting Limit

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CLEARWATER RIVER TMDL

Sample Description: TD 33.2

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13214 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:25 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 80                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved |  | Jon 8. Sant 75            |  |  |  |  |  |  |
|----------|--|---------------------------|--|--|--|--|--|--|
|          |  | Jason G. Smith, Inorganic |  |  |  |  |  |  |

Laboratory Manager New Ulm, MN

Reporting Limit

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+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Project Name: CLEARWATER RIVER TMDL

Sample Description: TC 33.2

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13213 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:40 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 64                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

8. - Co-Approved by: Ś Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

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Project Name: CLEARWATER RIVER TMDL

Sample Description: TB 33.2

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13212 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:45 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 45                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                | . Mark<br><b>V</b> a   |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |



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Project Name: CLEARWATER RIVER TMDL

Sample Description: TA 33.2

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13211 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:42 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Receive<br>Result | ed         | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 10                   | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

| Approved | by: | Jan   |    | 8. L   | 25        | Tes |
|----------|-----|-------|----|--------|-----------|-----|
|          |     | Jason | G. | Smith, | Inorganic |     |

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" {<}: @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

MVTL guarantees the accuracy of the analysis done on the sample submitted for lesting. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

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Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 33.6

Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13210 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 9:03 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | 10                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

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| Approved by: Arm S. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | Mak  |
|---|--|
| · Reporting Limit   |  |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix ! = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume   |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                      | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 |
|   |  |

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

Sample Description: CR 35.3

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13217 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 8:54 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                    | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF | < 10                  | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |

CFU = Colony Forming Units

Þ. Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume WI LAB # 999447680 CERTIFICATION: MN LAB # 027-015-125

ND MICRO # 1013-M ND WW/DW # R-040

-

IA LAB #: 132 IA LAB #: 022



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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER TMDL

Sample Description: FD 1

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13218 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                            | As Received<br>Result   |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|-------------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF         | * 27                    | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |
| CFU = Colony Forming Units | * Holding time Exceeded |            |              |                     |                  |         |

\*\* No collection time supplied by the client.

| Approved by: Jason G. Smith, Inorganic  |  |
|---|--|
| Laboratory Manager New Ulm, MN  | , i Miran<br>Xa  |
| = Reporting Limit   |  |
| Elevated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |

WES BOLL

Sample Description: FD 2

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER TMDL

MAPLE PLAIN MN 55359-9000

MINNESOTA VALLEY TESTING LABORATORIES, INC.

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Page: 1 of 1

Report Date: 22 Apr 06 Lab Number: 06-A13219 Work Order #:12-4490 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 18 Apr 06 Date Received: 18 Apr 06 13:00 PO #: CLEARWATER RIVER TMDL

Temp at Receipt: -1.0C

|                            | As Receiv<br>Result | red        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Fecal Coliform, MF         | * 200               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 18 Apr 06 14:15  | VRK     |
| CFU = Colony Forming Units | *                   |            | Holding t    | ime Exceeded        |                  |         |

\*\* No collection time supplied by the client.

| Approved by:<br>Jason G. Smith, Inorganic  |  |
|--|--|
| Laboratory Manager New Ulm, MN   | _ · · Mojive:<br><b>Q<sup>2</sup> /</b>                              |
| Reporting Limit  |  |
| Elevated "Less Than Result" (<): ${\mathfrak Q}$ = Due to sample matrix $!$ = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680   | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |

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Project Name: CLEARWATER RIVER

Sample Description: CR 35.3

Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13643 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 11:30 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0C

|                            | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|----------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest    |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions           |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous          | 5                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day               | 35                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended    | 13                 | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 16:40  | CJL        |
| Carbon, Total Organic      | 12.5               | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a              | 36,1               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat   | 2.0                | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite            | 0.47               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia          | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 20 Apr 06 14:10  | TAM        |
| Phosphorus, Total          | 0.072              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP        |
| Phosphorus, Ortho          | 0.005              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl   | 1.5                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Solids, Suspended Volatile | 7                  | mg/L       | 2            | EPA 160.4           | 20 Apr 06 16:40  | CJL        |
| Tron                       | 0.046              | mg/L       | 0.010        | 6010                | 27 Apr 06 10:58  | CJR        |

Ð. Approved by: Jáson G. Smith, Inorganic

Laboratory Manager New Ulm, MN

= Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity

= Due to sample concentration + = Due to extract volume IA LAB #: 132

IA LAB #: 022

WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040

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WENCK ASSOCIATES INC 1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: CR 33.6

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13638 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 14:20 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

### Temp at Receipt: 3.0C

|                          | As Recei<br>Result                    | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|---------------------------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  | · · · · · · · · · · · · · · · · · · · |            | · · ·        |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                                       |            |              |                     | 24 Apr 06        | тв         |
| BOD, Carbonaceous        | 4                                     | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 40 Day             | 89                                    | mg/L       | 2            | SM 5210B            | 20 Apr 06 11:24  | CJL        |
| CBOD, 20 Day             | 52                                    | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 10                                    | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 16:40  | CJL        |
| Carbon, Total Organic    | 13.0                                  | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 26.4                                  | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 2.4                                   | mg/L       | NA           | Calc                | 21 Apr 06 17:18  | Calculated |
| Nitrate+Nitrite          | 0,96                                  | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:18  | DAP        |
| Nitrogen, Ammonia        | < 0.08                                | mg/L       | 0.08         | 4500 NH3 B, E       | 21 Apr 06 7:55   | RSL        |
| Phosphorus, Total        | 0.067                                 | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho        | 0.007                                 | ma/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 1.4                                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| lids, Suspended Volatile | 4                                     | mg/L       | 2            | EPA 160.4           | 20 Apr 06 16:40  | CJL        |
| on                       | 0,233                                 | mg/L       | 0.010        | 6010                | 27 Apr 06 10:58  | CJR        |

A Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

WI LAB # 999447680

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity

+ = Due to extract volume ND MICRO # 1013-M

Due to sample concentration ND WW/DW # R-040

IA LAB #: 132 IA LAB #: 022

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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: TE 33.2

Report Date: 30 May 06 Lab Number: 06-A13656 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 16:20 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

6/3

Temp at Receipt: 3.0C

|   | As Receiv<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed       | Analyst    |
|---|---------------------|------------|--------------|---------------------|------------------------|------------|
| Phosphorus Water Digest<br>Water Digestions |                     |            |              |                     | 24 Apr 06<br>24 Apr 06 | DAP<br>TB  |
| BOD, Carbonaceous                           | < 2                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57        | RMV        |
| CBOD, 20 Day                                | 12                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04        | RMV        |
| Solids, Total Suspended                     | < 2                 | mg/L       | 2            | USGS 1-3765-85      | 20 Apr 06 9:25         | RMV        |
| Carbon, Total Organic                       | 8.0                 | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15         | Bis        |
| Chlorophyll a                               | 3.1                 | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27         | JD         |
| Nitrogen Total, Calculat                    | 7.0                 | mg/L       | NA           | Calc                | 21 Apr 06 17:20        | Calculated |
| Nitrate+Nitrite                             | 5.39                | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20        | DAP        |
| Nitrogen, Ammonia                           | < 0.08              | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 14:05        | TAM        |
| Phosphorus, Total                           | 0.081               | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02        | DAP        |
| Phosphorus, Ortho                           | 0.046               | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55         | DAP        |
| Nitrogen, Total Kjeldahl                    | 1.6                 | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05        | RSL        |
| Iron  | 0.087               | mg/L       | 0.010        | 6010                | 27 Apr 06 12:10        | CJR        |

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN  | A LY          |
|--|---------------|
| Reporting Limit  |               |
| vated "Less Than Result" (<): 0 ≈ Due to sample matrix # ∞ Due to sample concentration<br>! ≈ Due to sample quantity + ≈ Due to extract volume |               |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132  | IA LAB #: 022 |



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Page: 1 of 1

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Project Name: CLEARWATER RIVER

Sample Description: TF 33.2

Report Date: 30 May 06 Lab Number: 06-A13657 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 16:05 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

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Temp at Receipt: 3.0C

|                          | As Receiv<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|---------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                     |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                     |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 14                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | < 2                 | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 6.0                 | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 9,2                 | mq/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 21.2                | mq/L       | NA           | Calc                | 21 Apr 06 17:20  | Calculated |
| Nitrate+Nitrite          | 20.2                | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP        |
| Nitrogen, Ammonia        | < 0.08              | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 14:05  | TAM        |
| Phosphorus, Total        | 0.055               | mq/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02  | DAP        |
| Phosphorus, Ortho        | 0.047               | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:56   | DAP        |
| Nitrogen, Total Kjeldahl | 1.0                 | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | < 0.01              | mg/L       | 0.01         | 6010                | 27 Apr 06 12:10  | CJR        |

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN | e test   |
|--|--|
| Reporting Limit  |  |
|  | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO #        | # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022                |



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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

### Project Name: CLEARWATER RIVER

Sample Description: TC 33.2

Report Date: 30 May 06 Lab Number: 06-A13652 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 15:35 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

IA LAB #: 022

### Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            | ··· ·        |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | ТВ         |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 15                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 2                  | mg/L       | 2            | USGS 1-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 8.0                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 3.0                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 12.7               | mg/L       | NA           | Calc                | 21 Apr 06 17:20  | Calculated |
| Nitrate+Nitrite          | 11.4               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM        |
| Phosphorus, Total        | 0.170              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02  | DAP        |
| Phosphorus, Ortho        | 0.120              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP        |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.142              | mg/L       | 0,010        | 6010                | 27 Apr 06 11:30  | CJR        |

| Approved | by: | for 8. But IS             |  |  |  |  |  |  |
|----------|-----|---------------------------|--|--|--|--|--|--|
|          |     | Jason G. Smith, Inorganic |  |  |  |  |  |  |

Laboratory Manager New Ulm, MN

PI = Reporting Limit

/ated "Less Than Result" (<): @ = Due to sample matrix</pre> # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 IA LAB #: 132

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any lither sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: TD 33.2

Report Date: 30 May 06 Lab Number: 06-A13653 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 16:30 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 13                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | < 2                | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 6.0                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | < 1                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 20.7               | mg/L       | · NA         | Calc                | 21 Apr 06 17:20  | Calculated |
| Nitrate+Nitrite          | 19.5               | mq/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM        |
| Phosphorus, Total        | 0.062              | mq/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02  | DAP        |
| Phosphorus, Ortho        | 0.050              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP        |
| Nitrogen, Total Kjeldahl | 1.2                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.076              | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR        |

P.  $\leq$ Approved by:  $(\Delta)$ Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

= Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

 $\exists vated$  "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680

# = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 I. O. K.

IA LAB #: 022

IA LAB #: 132

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: TB 33.2

MAPLE PLAIN MN 55359-9000

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1 of 1 Page:

Report Date: 30 May 06 Lab Number: 06-A13588 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 14:40 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | ТВ         |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 26                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 4                  | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 9.2                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 25.7               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 11.5               | mg/L       | NA           | Calc                | 21 Apr 06 17:18  | Calculated |
| Nitrate+Nitrite          | 9.94               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:18  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 21 Apr 06 7:55   | RSL        |
| Phosphorus, Total        | 0,128              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho        | 0.087              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:35   | DAP        |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| Iron                     | 0.075              | mg/L       | 0.010        | 6010                | 27 Apr 06 10:58  | CJR        |

Ð. 4 رعا Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

 $\dot{E^{1}}$  ated "Less Than Result" (<):  $\ell$  = Due to sample matrix  $\ell$  = Due to sample quantity

WI LAB # 999447680

# = Due to sample concentration
+ = Due to extract volume

ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13630 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 14:50 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0C

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                       |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                       |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day             | 29                    | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 3                     | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 12.4                  | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 4.6                   | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 14.2                  | mg/L       | NA           | Calc                | 21 Apr 06 17:18  | Calculated |
| Nitrate+Nitrite          | 12.3                  | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:18  | DAP        |
| Nitrogen, Ammonia        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 21 Apr 06 7:55   | RSL        |
| Phosphorus, Total        | 0.111                 | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho        | 0.075                 | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 1.9                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| Iron                     | 0.202                 | mg/L       | 0.010        | 6010 <sup>~</sup>   | 27 Apr 06 10:58  | CJR        |

18. Approved by: Jason G. Smith, Inorganic

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WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: TA 33.2

MAPLE PLAIN MN 55359-9000

Laboratory Manager New Ulm, MN

WI LAB # 999447680

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<): 4 = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 IJ

WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: T 32.2

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13644 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 11:15 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

### Temp at Receipt: 3.0C

| •                        | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                       |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                       |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day             | 53                    | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | < 2                   | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 11.5                  | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 10.1                  | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 2.5                   | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite          | 2.43                  | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 20 Apr 06 14:10  | TAM        |
| Phosphorus, Total        | 0.113                 | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP        |
| Phosphorus, Ortho        | 0.065                 | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 0.1                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.586                 | mg/L       | 0.010        | 6010                | 27 Apr 06 10:58  | CJR        |

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                | , Pura<br>≸-   | 4 00 V    |
|---|--|-----------|
| Reporting Limit   |  |           |
| Elevated "Less Than Result" {<}: @ ≅ Due to sample matrix<br>! ⇔ Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume |           |
| CERTIFICATION: NN LAR # 027-015-125 NT LAR # 999447680 ND MICRO #                       | 1013-M ND WW/DW # R-040 TA LAB #: 132 TA L                   | AB #: 022 |

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WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: CR 31.8

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13639 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 14:00 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0C

|                            | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|----------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest    |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions           |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous          | 3                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day               | 8                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended    | 14                 | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 16:40  | CJL        |
| Carbon, Total Organic      | 11.5               | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a              | 20,9               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat   | 5.2                | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite            | 3.57               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia          | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 21 Apr 06 7:55   | RSL        |
| Phosphorus, Total          | 0.085              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho          | 0.014              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl   | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| Solids, Suspended Volatile | 4                  | mg/L       | 2            | EPA 160.4           | 20 Apr 06 16:40  | CJL        |
| ron                        | 0.381              | mg/L       | 0.010        | 6010                | 27 Apr 06 10:58  | CJR        |

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN   | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
|--|---------------------------------------|
| * Reporting Limit  |                                       |
| Elévated "Less Than Result" (<): @ = Due to sample matrix  # = Due to sample concentration<br>! = Due to sample quantity + = Due to extract volume |                                       |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132  | IA LAB #: 022                         |

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#### Project Name: CLEARWATER RIVER

Sample Description: TA 30.9

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Report Date: 30 May 06 Lab Number: 06-A13645 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 10:55 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

| -<br>-                   | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day             | 12                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | В                  | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 4.4                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 6.1                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 19.4               | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite          | 18.1               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM        |
| Phosphorus, Total        | 0.059              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP        |
| Phosphorus, Ortho        | 0.041              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.103              | mg/L       | 0,010        | 6010                | 1 May 06 14:03   | CJR        |

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN  | 4 8.<br>2     |
|--|---------------|
| Reporting Limit  |               |
| Elevated "Less Than Result" {<}: @ = Due to sample matrix  # = Due to sample concentration<br>! = Due to sample quantity + = Due to extract volume |               |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132  | IA LAB #: 022 |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: T 30.7

Report Date: 30 May 06 Lab Number: 06-A13640 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 13:50 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

| :                        | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day             | 14                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | < 2                | mq/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 4.5                | mq/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bís        |
| Chlorophyll a            | 3.6                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 17.8               | mq/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite          | 16.9               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 21 Apr 06 7:55   | RSL        |
| Phosphorus, Total        | 0.091              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho        | 0.078              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 0.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| Iron                     | 0.049              | mg/L       | 0.010        | 601.0               | 27 Apr 06 10:58  | CJR        |

Ì Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

= Reporting Limit

Elevated "Less Than Result" {<}: @ = Due to sample matrix !  $\approx$  Due to sample quantity = Due to sample concentration + = Due to extract volume WI LAB # 999447680 ND WW/DW # R-040 IA LAB #: 022 CERTIFICATION: MN LAB # 027-015-125 ND MICRO # 1013-M IA LAB #: 132

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WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: T 30.1

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13641 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 13:40 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              | 55.000              | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV        |
| CBOD, 20 Day             | 9                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 2                  | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 5.0                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 2.9                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 17.1               | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite          | 16.2               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mq/L       | 0.08         | 4500 NH3 B, E       | 20 Apr 06 14:10  | TAM        |
| Phosphorus, Total        | 0.091              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:00  | DAP        |
| Phosphorus, Ortho        | 0.079              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP        |
| Nitrogen, Total Kjeldahl | 0.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 20 Apr 06 7:30   | RSL        |
| Iron                     | < 0.01             | mg/L       | 0.01         | 6010                | 27 Apr 06 10:58  | CJR        |

Đ. .  $\leq$ Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

Elsvated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: CR 30.0

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13642 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 13:25 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|   | As Recei<br>Result  | ved   | Method<br>RL                                      | Method<br>Reference  | Date<br>Analyzed  | Analyst   |
|---|---|---|---|--|---|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho | 3<br>40<br>23<br>10.5<br>21.9<br>5.4<br>3.81<br>< 0.08<br>0.097 | mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L | 2<br>2<br>2<br>1.0<br>NA<br>0.20<br>0.08<br>0.005 | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>Calc<br>353.2<br>4500 NH3 B, E<br>EPA 365.1 | 24 Apr 06<br>24 Apr 06<br>20 Apr 06 10:30<br>20 Apr 06 12:04<br>20 Apr 06 16:40<br>27 Apr 06 8:15<br>24 Apr 06 8:27<br>21 Apr 06 17:19<br>21 Apr 06 17:19<br>20 Apr 06 14:10<br>25 Apr 06 11:01 | DAP<br>TB<br>RMV<br>CJL<br>Bis<br>JD<br>Calculated<br>DAP<br>TAM<br>DAP |
| Nitrogen, Total Kjeldahl<br>Solids,Suspended Volatile   | 0.015<br>1.6<br>6<br>0.576                                      | mg/L<br>mg/L<br>mg/L<br>mg/L  | 0.005<br>0.1<br>2<br>0.010                        | EPA 365.1<br>SM 4500NorgB/NH3 E<br>EPA 160.4<br>6010   | 20 Apr 06 8:54<br>21 Apr 06 14:05<br>20 Apr 06 16:40<br>27 Apr 06 10:58   | DAP<br>RSL<br>CJL<br>CJR  |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<): & = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447660

# ~ Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 I

IA LAB #: 132 IA LAB #: 022

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: CR 29.0

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13646 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 10:30 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

| •<br>•                    | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst   |
|---------------------------|--------------------|------------|--------------|---------------------|------------------|-----------|
| Phosphorus Water Digest   |                    |            |              |                     | 24 Apr 06        | DAP       |
| Water Digestions          |                    |            |              |                     | 24 Apr 06        | TB        |
| BOD, Carbonaceous         | 2                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:30  | RMV       |
| CBOD, 40 Day              | 123                | mg/L       | 2            | SM 5210B            | 20 Apr 06 11:24  | CJL       |
| CBOD, 20 Day              | 31                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV       |
| Solids, Total Suspended   | 22                 | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 16:40  | CJL       |
| Carbon, Total Organic     | 10,5               | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis       |
| Chlorophyll a             | 16.0               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD        |
| Nitrogen Total, Calculat  | 6.0                | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculate |
| Nitrate+Nitrite           | 4.00               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP       |
| Nitrogen, Ammonia         | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM       |
| Phosphorus, Total         | 0.089              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP       |
| Phosphorus, Ortho         | 0.018              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:54   | DAP       |
| Nitrogen, Total Kjeldahl  | 2.0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL       |
| blids, Suspended Volatile | 3                  | mg/L       | 2            | EPA 160.4           | 20 Apr 06 16:40  | CJL       |
| on                        | 0.543              | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR       |

Ð 65 Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680

ND MICRO # 1013-M ND WW/DW # R-040

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IA LAB #: 132

IA LAB #: 022

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#### Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: TW 27.8

Report Date: 30 May 06 Lab Number: 06-A13647 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 10:15 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

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#### Temp at Receipt: 3.0C

| :                        | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst   |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|-----------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP       |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB        |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV       |
| CBOD, 20 Day             | 21                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV       |
| Solids, Total Suspended  | < 2                | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV       |
| Carbon, Total Organic    | 6.0                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis       |
| Chlorophyll a            | 3.4                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD        |
| Nitrogen Total, Calculat | 4.8                | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculate |
| Nitrate+Nitrite          | 3.78               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP       |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B. E       | 25 Apr 06 11:35  | TAM       |
| Phosphorus, Total        | 0.041              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP       |
| Phosphorus, Ortho        | 0.030              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP       |
| Nitrogen, Total Kjeldahl | 1.0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL       |
| Iron                     | 0.092              | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR       |

6 Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" {<}: @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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1 of 1 Page:

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: TE 27.8

Report Date: 30 May 06 Lab Number: 06-A13648 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 10:00 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

| :                        | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 9                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solíds, Total Suspended  | < 2                | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 5.1                | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 16.7               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 2.1                | mg/L       | NA           | Calc                | 21 Apr 06 17:19  | Calculated |
| Nitrate+Nitrite          | 1.23               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:19  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM        |
| Phosphorus, Total        | 0.040              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP        |
| Phosphorus, Ortho        | 0.016              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP        |
| Nitrogen, Total Kjeldahl | 0.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.338              | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR        |

Ð. L Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity

+ = Due to extract volume WI LAB # 999447680 ND MICRO # 1013-M

# = Due to sample concentration

ND WW/DW # R-040 IA LAB #: 132

IA LAB #: 022

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: T 27.3

1 of 1 Page:

Report Date: 30 May 06 Lab Number: 06-A13649 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 9:45 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed   | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|--------------------|------------|
| Phosphorus Water Digest  | ****               | ·          |              |                     | 24 Apr 06          | DAP        |
| Water Digestions         |                    |            |              |                     | 24 A <u>p</u> r 06 | ТВ         |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57    | RMV        |
| CBOD, 20 Day             | 12                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04    | RMV        |
| Solids, Total Suspended  | < 2                | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25     | RMV        |
| Carbon, Total Organic    | 10.5               | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15     | Bis        |
| Chlorophyll a            | 1.6                | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27     | JD         |
| Nitrogen Total, Calculat | 1.2                | mg/L       | NA           | Calc                | 21 Apr 06 17:20    | Calculated |
| Nitrate+Nitrite          | 0.24               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20    | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35    | TAM        |
| Phosphorus, Total        | 0.064              | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01    | DAP        |
| Phosphorus, Ortho        | 0.054              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55     | DAP        |
| Nitrogen, Total Kjeldahl | 1,0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05    | RSL        |
| Iron                     | < 0.01             | mg/L       | 0.01         | 6010                | 27 Apr 06 11:30    | CJR        |

8 La Approved by: 9) Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

WI LAB # 999447680

\ = Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity

+ = Due to extract volume

# = Due to sample concentration ND WW/DW # R-040 ND MICRO # 1013-M

IA LAB #: 132 IA LAB #: 022

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#### Project Name: CLEARWATER RIVER

Sample Description: CR 27.2

Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13650 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 9:10 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

### Temp at Receipt: 3.0C

|  | As Recei<br>Result  | ved  | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst   |
|--|---|--|---|--|--|---|
| Phosphorus Water Digest<br>Water Digestions<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl<br>Solids,Suspended Volatile<br>Iron | < 2<br>12<br>3<br>10.0<br>7.4<br>3.5<br>2.49<br>< 0.08<br>0.050<br>0.017<br>1.0<br>< 2<br>0.075 | mg/L<br>mg/L<br>mg/L<br>mg/Ll<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>0.5<br>1.0<br>NA<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1<br>2<br>0.010 | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>Calc<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E<br>EPA 160.4<br>6010 | 24 Apr 06<br>24 Apr 06<br>20 Apr 06 10:57<br>20 Apr 06 12:04<br>20 Apr 06 16:40<br>27 Apr 06 8:15<br>24 Apr 06 8:15<br>24 Apr 06 17:20<br>21 Apr 06 17:20<br>25 Apr 06 11:35<br>25 Apr 06 11:01<br>20 Apr 06 8:55<br>21 Apr 06 14:05<br>20 Apr 06 16:40<br>27 Apr 06 11:30 | DAP<br>TB<br>RMV<br>CJL<br>Bis<br>JD<br>Calculated<br>DAP<br>TAM<br>DAP<br>DAP<br>RSL<br>CJL<br>CJR |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit

:vated "Less Than Result" (<):  $\theta \approx$  Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680

CERTIFICATION: MN LAB # 027-015-125

# = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M

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ND WW/DW # R-040 IA LAB #; 132 IA LAB #: 022

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WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: CR 25.6

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13651 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 8:05 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                                 |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         | . 0                             | 1-         | •            |                     | 24 Apr 06        | TB         |
| BOD, Carbonaceous        | < 2                             | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 31                              | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | < 2                             | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV        |
| Carbon, Total Organic    | 10.5                            | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 4.5                             | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 3.8                             | mg/L       | NA           | Calc                | 21 Apr 06 17:20  | Calculated |
| Nitrate+Nitrite          | 2.49                            | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP        |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM        |
| Phosphorus, Total        | 0.041                           | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:01  | DAP        |
| Phosphorus, Ortho        | 0.015                           | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP        |
| Nitrogen, Total Kjeldahl | 1.3                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.086                           | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR        |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

\* = Reporting Limit

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Sample Description: FD 1

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1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 30 May 06 Lab Number: 06-A13654 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Apr 06        | DAP        |
| Water Digestions         |                    |            |              |                     | 24 Apr 06        | тв         |
| BOD, Carbonaceous        | 5                  | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV        |
| CBOD, 20 Day             | 43                 | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV        |
| Solids, Total Suspended  | 11                 | mg/L       | 2            | USGS I-3765-85      | 20 Apr 0.6 9:25  | RMV        |
| Carbon, Total Organic    | 12.5               | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis        |
| Chlorophyll a            | 38.6               | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD         |
| Nitrogen Total, Calculat | 2.2                | mg/L       | NA           | Calc                | 21 Apr 06 17:20  | Calculated |
| Nitrate+Nitrite          | 0.46               | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP        |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 11:35  | TAM .      |
| Phosphorus, Total        | 0.074              | mq/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02  | DAP        |
| Phosphorus, Ortho        | 0.005              | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP        |
| Nitrogen, Total Kjeldahl | 1.7                | mq/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL        |
| Iron                     | 0.175              | mg/L       | 0.010        | 6010                | 27 Apr 06 11:30  | CJR        |

\*\* No collection time supplied by the client.

Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

= Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

evated "Less Than Result" {<}: @ = Due to sample matrix # = Du ! = Due to sample quantity + = Du

WI LAB # 999447680

# = Due to sample concentration
+ = Due to extract volume

ere ere

IA LAB #: 022

IA LAB #: 132

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ND MICRO # 1013-M ND WW/DW # R-040

M----

# MVTI

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

MAPLE PLAIN MN 55359-9000

WES BOLL

Sample Description: FD 2

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#### 1 of 1 Page:

Report Date: 30 May 06 Lab Number: 06-A13655 Work Order #:12-4607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 19 Apr 06 Date Received: 19 Apr 06 18:53 PO #: CLEARWATER RIVER

#### Temp at Receipt: 3.0C

|                          | As Received<br>Result                  |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst   |
|--------------------------|--|------------|--------------|---------------------|------------------|-----------|
| Phosphorus Water Digest  | ······································ |            |              |                     | 24 Apr 06        | DAP       |
| Water Digestions         |  |            |              |                     | 24 Apr 06        | TB        |
| BOD, Carbonaceous        | < 2                                    | mg/L       | 2            | SM 5210B            | 20 Apr 06 10:57  | RMV       |
| CBOD, 20 Day             | 13                                     | mg/L       | 2            | SM 5210B            | 20 Apr 06 12:04  | RMV       |
| Solids, Total Suspended  | 2                                      | mg/L       | 2            | USGS I-3765-85      | 20 Apr 06 9:25   | RMV       |
| Carbon, Total Organic    | 8.0                                    | mg/L       | 0.5          | 415.1               | 27 Apr 06 8:15   | Bis       |
| Chlorophyll a            | 3.7                                    | mg/cubic m | 1.0          | 10200H              | 24 Apr 06 8:27   | JD        |
| Nitrogen Total, Calculat | 12.8                                   | mg/L       | NA           | Calc                | 21 Apr 06 17:20  | Calculate |
| Nitrate+Nitrite          | 11.3                                   | mg/L as N  | 0.20         | 353.2               | 21 Apr 06 17:20  | DAP       |
| Nitrogen, Ammonia        | < 0.08                                 | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Apr 06 14:05  | TAM       |
| Phosphorus, Total        | 0.165                                  | mg/L       | 0.005        | EPA 365.1           | 25 Apr 06 11:02  | DAP       |
| Phosphorus, Ortho        | 0.122                                  | mg/L       | 0.005        | EPA 365.1           | 20 Apr 06 8:55   | DAP       |
| Nitrogen, Total Kjeldahl | 1.5                                    | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 21 Apr 06 14:05  | RSL       |
| Iron                     | 0.146                                  | mg/L       | 0.010        | 6010                | 27 Apr 06 12:10  | CJR       |

\*\* No collection time supplied by the client.

Ð Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

WI LAB # 999447680

pr. = Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

# = Due to sample concentration + = Due to extract volume

ND MICRO # 1013-M ND WW/DW # R-040

IA LAB #: 132 IA LAB #: 022

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1 of 1 Page:

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 35.3

Report Date: 21 Jun 06 Lab Number: 06-A21426 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 14:25 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|   | As Receiv<br>Result  | ed  | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed   | Analyst  |
|---|--|---|--|--|--|--|
| Phosphorus Water Digest<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Fecal Coliform, MF<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho | 5<br>32<br>13<br>14.1<br>24.8<br>70<br>27.3<br>< 0.2<br>< 0.08<br>0.076<br>< 0.005 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>CFU/100 mL<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>10.<br>3.0<br>0.2<br>0.08<br>0.005<br>0.005 | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>SM 9222D 18th Ed<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1 | 6 Jun 06<br>31 May 06 10:28<br>31 May 06 10:43<br>31 May 06 10:10<br>6 Jun 06 8:00<br>2 Jun 06 7:20<br>30 May 06 19:20<br>5 Jun 06 19:20<br>5 Jun 06 15:46<br>1 Jun 06 9:10<br>6 Jun 06 13:02<br>31 May 06 16:35 | RMV<br>RMV<br>Bis<br>JD<br>ECH<br>RMV<br>DAP<br>RSL<br>RMV |
| Nitrogen, Total Kjeldahl  | 1.4  | mg/L  | 0.1  | SM 4500NorgB/NH3 E   | 1 Jun 06 6:45  | RSL  |

U = Colony Forming Units

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Z = Reporting Limit # = Due to sample concentration
+ = Due to extract volume Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity IA LAB #: 022 WI LAB # 999447680 ND WW/DW # R-040 IA LAB #: 132 ND MICRO # 1013-M CERTIFICATION: MN LAB # 027-015-125

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 33.6

Report Date: 21 Jun 06 Lab Number: 06-A21425 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 14:05 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 31 May 06 10:20  | CJL     |
| CBOD, 20 Day             | 17                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 8                  | mg/L       | 2            | USGS 1-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 14.3               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 14.9               | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | 190                | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 27.9               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:26   | RMV     |
| Nitrate+Nitrite          | 0.77               | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:46   | DAP     |
| Nítrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.076              | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.011              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

J = Colony Forming Units

WB ,0/11/06

Đ., <u>65</u> Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

= Reporting Limit

| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix ! = Due to sample quantity | # ≈ Due to sample concentration<br>+ ≈ Due to extract volume   |
|---|--|
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                      | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 |

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Sample Description: TC 33.2

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1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

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Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21427 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 14:50 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 13                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 5                  | mg/L       | 2            | USGS I-3765-85      | 31 May 06 10:10  | RMV     |
| Carbon, Total Organic    | 9.3                | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 1.9                | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | 1300               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 43.1               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:26   | RMV     |
| Nitrate+Nitrite          | 15.6               | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:47   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mq/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.190              | mq/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.154              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

U = Colony Forming Units

6 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN z.»., = Reporting Limit hated "Less Than Result" (<): @ = Due to sample matrix
! = Due to sample quantity</pre> Due to sample concentration + = Due to extract volume WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 CATION: MN LAB # 027-015-125

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

Sample Description: TB 33.2

Report Date: 21 Jun 06 Lab Number: 06-A21428 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 15:10 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | As Received<br>Result |       | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|-----------------------|-------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |                       |       |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 3                  | mg/L                  | 2     | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 16                 | mg/L                  | 2     | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 7                  | mg/L                  | 2     | USGS I-3765-85      | 31 May 06 10:10  | RMV     |
| Carbon, Total Organic    | 10.2               | mg/L                  | 0.5   | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 5.5                | mg/cubic m            | 1.0   | 10200н              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | 270                | CFU/100 mL            | 10.   | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 42.3               | mg/L                  | 3.0   | 325.2               | 5 Jun 06 11:26   | RMV     |
| Nitrate+Nitrite          | 13.2               | mg/L as N             | 0.20  | 353.2               | 1 Jun 06 15:47   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L                  | 0.08  | 4500 NH3 B. E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.185              | mg/L                  | 0.005 | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.139              | mg/L                  | 0.005 | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.5                | mg/L                  | 0.1   | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

J = Colony Forming Units

A Approved by: へう Jason G. Smith, Inorganic m. + Laboratory Manager New Ulm, MN = Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume WI LAB # 999447680 ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 CERTIFICATION: MN LAB # 027-015-125 ND MICRO # 1013-M

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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 31.8

Report Date: 21 Jun 06 Lab Number: 06-A21423 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 13:25 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 23                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 8                  | mg/L       | 2            | USGS I-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 11.8               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 6.2                | mq/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | 3700               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 31.6               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:25   | RMV     |
| Nitrate+Nitrite          | 5.46               | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:46   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mq/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.145              | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.081              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

I = Colony Forming Units

WB JOIN (Ch

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                   | , Brake<br>Ver   |
|---|--|
| = Reporting Limit   |  |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix $!$ = Due to sample quantity | # ≈ Due to sample concentration<br>+ = Due to extract volume   |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 |

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#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 29.0

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Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21422 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 12:55 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            | ****         |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 16                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 15                 | mg/L       | 2            | USGS I-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 11.0               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 5.3                | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | * 600              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 28.8               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:25   | RMV     |
| Nitrate+Nitrite          | 5.84               | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:46   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.152              | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.082              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.7                | mq/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

U = Colony Forming Units

\* Holding time Exceeded

WB 10/11/00

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                |  |
|---|--|
| . = Reporting Limit   |  |
| Elevated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | # ≈ Due to sample concentration<br>+ ≈ Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO #                       | 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022          |

MVTL guarantees the accuracy of the analysis done on the sample submitted for festing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any bther sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is teserved pending our written approval.



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1 of 1 Page:

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 27.2

Report Date: 21 Jun 06 Lab Number: 06-A21421 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 12:25 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 28                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 3                  | mg/L       | 2            | USGS I-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 14.0               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 6.6                | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | * 900              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 26.5               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:25   | RMV     |
| Nitrate+Nitrite          | 0.83               | mg/L as N  | 0,20         | 353.2               | 1 Jun 06 15:46   | DAP     |
| Nitrogen, Ammonia        | 0.29               | mg/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.267              | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.197              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:34  | DAP     |
| Nitrogen, Total Kjeldahl | 1.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL     |

J = Colony Forming Units

\* Holding time Exceeded

B. . ්න Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

.011/14

= Reporting Limit

Elevated "Less Than Result" (<):  $\emptyset$  = Due to sample matrix ! = Due to sample quantity = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

P .....



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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 25.6

Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21420 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 11:55 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    | t          |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 22                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 7                  | mg/L       | 2            | USGS I-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 12.7               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 1.9                | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | * 190              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 25.3               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:25   | RMV     |
| Nitrate+Nitrite          | 0.77               | mg/L as N  | 0.20         | 353.2               | l Jun 06 15:46   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.158              | mg/L       | 0,005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.111              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:34  | DAP     |
| Nitrogen, Total Kjeldahl | 1.1                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    |         |

J = Colony Forming Units

\* Holding time Exceeded

NB VOLITION

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume IA LAB #: 022 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: CR 19.8

Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21429 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 11:15 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 6 Jun 06         | DAP        |
| BOD, Carbonaceous        | 5                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL        |
| CBOD, 20 Day             | 30                 | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV        |
| Solids, Total Suspended  | 3                  | mg/L       | 2            | USGS 1-3765-85      | 31 May 06 10:10  | RMV        |
| Carbon, Total Organic    | 13.1               | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis        |
| Chlorophyll a            | 11.2               | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD         |
| Nitrogen Total, Calculat | 3.2                | mg/L       | NA           | Calc                | 1 Jun 06 15:47   | Calculated |
| Chloride                 | 20.7               | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:26   | RMV        |
| Nitrate+Nitrite          | 1.82               | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:47   | DAP        |
| Phosphorus, Total        | 0.055              | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV        |
| Phosphorus, Ortho        | 0.009              | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP        |
| Nitrogen, Total Kjeldahl | 1.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL        |

A.  $\leq$ Approved by: 9 Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

WI LAB # 999447680

. = Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\mathbb{Q}$  = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

2°

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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: FD 1

Report Date: 21 Jun 06 Lab Number: 06-A21424 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 13:25 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Receiv<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                     |            |              |                     | 6 Jun 06         | DAP     |
| BOD, Carbonaceous        | 4                   | mg/L       | 2            | SM 5210B            | 31 May 06 10:28  | CJL     |
| CBOD, 20 Day             | 22                  | mg/L       | 2            | SM 5210B            | 31 May 06 10:43  | RMV     |
| Solids, Total Suspended  | 8                   | mg/L       | 2            | USGS I-3765-85      | 31 May 06 8:55   | RMV     |
| Carbon, Total Organic    | 12.3                | mg/L       | 0.5          | 415.1               | 6 Jun 06 8:00    | Bis     |
| Chlorophyll a            | 6.2                 | mg/cubic m | 1.0          | 10200H              | 2 Jun 06 7:20    | JD      |
| Fecal Coliform, MF       | 1400                | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 30 May 06 19:20  | ECH     |
| Chloride                 | 32.1                | mg/L       | 3.0          | 325.2               | 5 Jun 06 11:25   | RMV     |
| Nitrate+Nitrite          | 5.46                | mg/L as N  | 0.20         | 353.2               | 1 Jun 06 15:46   | DAP     |
| Nitrogen, Ammonia        | < 0.08              | mg/L       | 0.08         | 4500 NH3 B, E       | 1 Jun 06 9:10    | RSL     |
| Phosphorus, Total        | 0.147               | mg/L       | 0.005        | EPA 365.1           | 6 Jun 06 13:02   | RMV     |
| Phosphorus, Ortho        | 0.081               | mg/L       | 0.005        | EPA 365.1           | 31 May 06 16:35  | DAP     |
| Nitrogen, Total Kjeldahl | 1.8                 | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    |         |

J = Colony Forming Units

10/11/06

Ð Approved by: Jason G. Smith, Inorganic P .- 6 Laboratory Manager New Ulm, MN . = Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix Due to sample concentration = Due to sample quantity + = Due to extract volume IA LAB #: 022 ND WW/DW # R-040 IA LAB #: 132 CERTIFICATION: MN LAB # 027-015-125 ND MICRO # 1013-M WI LAB # 999447680

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: CR 35.3

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24827 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 11:30 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 5                  | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:16  | AKF     |
| CBOD, 20 Day             | 106                | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:29  | PJB     |
| Solids, Total Suspended  | 43                 | mg/L       | 2            | USGS I-3765-85      | 16 Jun 06 8:30   | CJL     |
| Carbon, Total Organic    | 14.9               | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | Bis     |
| Chlorophyll a            | 111                | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:41   | JD      |
| Fecal Coliform, MF       | * 72               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | NS      |
| Chloride                 | 33.3               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:30  | RMV     |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 23 Jun 06 16:38  | RMV     |
| Nitrogen, Ammonia        | 0.14               | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9:40   | TAM     |
| Phosphorus, Total        | 0.208              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11:14  | RMV     |
| Phosphorus, Ortho        | 0.011              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9:49   | DAP     |
| Nitrogen, Total Kjeldahl | 3.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

stch matrix spike duplicate RPD for Ortho-P was outside MVTL 5% limit at 6%. sta reported based on all remaining QC acceptable.

CFU = Colony Forming Units

\* Holding time Exceeded

Enti WB 10/11/04

Approved by: Jason G. Smith, Inorganic P ...... Laboratory Manager New Ulm, MN = Reporting Limit # = Due to sample concentration
+ = Due to extract volume Elevated "Less Than Result" (<);  $\mathfrak{k}$  = Due to sample matrix ! = Due to sample quantity ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 WI LAB # 999447680 ND MICRO # 1013-M CERTIFICATION: MN LAB # 027-015-125

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: CR 33.6

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24825 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 11:15 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 4                  | mq/L       | 2            | SM 5210B            | 16 Jun 06 10:16  | AKF     |
| CBOD, 20 Day             | 34                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:29  | PJB     |
| Solids, Total Suspended  | 21                 | mg/L       | 2            | USGS 1-3765-85      | 16 Jun 06 8:30   | CJL     |
| Carbon, Total Organic    | 15.1               | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | Bis     |
| Chlorophyll a            | 48.6               | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:41   | JD      |
| Fecal Coliform, MF       | * 90               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | NS      |
| Chloride                 | 33.1               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:30  | RMV     |
| Nitrate+Nitrite          | 2.98               | mg/L as N  | 0.20         | 353.2               | 23 Jun 06 16:38  | RMV     |
| Nitrogen, Ammonia        | 0.50               | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9:40   | TAM     |
| Phosphorus, Total        | 0.167              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11:13  | RMV     |
| Phosphorus, Ortho        | 0.049              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9:48   | DAP     |
| Nitrogen, Total Kjeldahl | 2.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

⊽U = Colony Forming Units

\* Holding time Exceeded

NG JUNIDE

Approved by:

A L

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN \* Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

75

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: TC 33.2

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24828 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 12:10 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

022

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:16  | AKF     |
| CBOD, 20 Day             | 20                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:29  | PJB     |
| Solids, Total Suspended  | 4                  | mg/L       | 2            | USGS I-3765-85      | 16 Jun 06 8:30   | CJL     |
| Carbon, Total Organic    | 9.2                | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | Bis     |
| Chlorophyll a            | 4.0                | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:41   | JD      |
| Fecal Coliform, MF       | 2300               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | NS      |
| Chloride                 | 44.3               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:30  | RMV     |
| Nitrate+Nitrite          | 14.1               | mg/L as N  | 0.20         | 353.2               | 23 Jun 06 16:39  | RMV     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9:40   | TAM     |
| Phosphorus, Total        | 0.145              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11:14  | RMV     |
| Phosphorus, Ortho        | 0.114              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9:49   | DAP     |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

.tch matrix spike duplicate RPD for Ortho-P was outside MVTL 5% limit at 6%. Lata reported based on all remaining QC acceptable.

CFU = Colony Forming Units

| 10/11/00   |                |                                    |                                |        |        |          |
|--|----------------|------------------------------------|--------------------------------|--------|--------|----------|
| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New U   |                | . Pro                              |                                |        |        |          |
| Reporting Limit  |                |                                    |                                |        |        |          |
| Elevated "Less Than Result" (<): $\theta$ = Due to sample maps $!$ = Due to sample quarks $!$ = Due to sample quarks $!$ |                | # = Due to samp<br>+ = Due to extr | le concentration<br>act volume |        |        |          |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 99944   | 47680 ND MICRO | 1013-M ND WW                       | //DW # R-040 IA                | LAB #: | 132 I. | A LAB #: |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: TB 33.2

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24826 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 11:30 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:16  | AKF     |
| CBOD, 20 Dav             | 24                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:29  | PJB     |
| Solids, Total Suspended  | 11                 | mg/L       | 2            | USGS I-3765-85      | 16 Jun 06 8:30   | CJL     |
| Carbon, Total Organic    | 9.4                | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | Bis     |
| Chlorophyll a            | 51.0               | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:41   | JD      |
| Fecal Coliform, MF       | * 390              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | NS      |
| Chloride                 | 42.0               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:30  | RMV     |
| Nitrate+Nitrite          | 11.3               | mg/L as N  | 0.20         | 353.2               | 23 Jun 06 16:38  | RMV     |
| Nitrogen, Ammonia        | 0.29               | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9:40   | TAM     |
| Phosphorus, Total        | 0.173              | mg/L       | 0,005        | EPA 365.1           | 20 Jun 06 11:14  | RMV     |
| Phosphorus, Ortho        | 0.121              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9:49   | DAP     |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

<code>stch matrix spike duplicate RPD for Ortho-P was outside MVTL 5% limit at 6%. ta reported based on all remaining QC acceptable.</code>

CFU = Colony Forming Units

\* Holding time Exceeded

D. L

Approved by:

Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

| Elevated "Less Than Result" (<): @<br>! | Due to sample matrix<br>= Due to sample quantity | # = Due to sample<br>+ = Due to extrac |                         |               |
|---|--|--|-------------------------|---------------|
| CERTIFICATION: MN LAB # 027-015-125     | WT TAB # 999447680                               | ND MICRO # 1013-M ND WW/I              | W # R-040 IA LAB #: 132 | IA LAB #: 022 |

6

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: CR 31.8

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24824 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 10:40 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 16 Jun 06 10     | :16 AKF |
| CBOD, 20 Day             | 32                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10     | :29 PJB |
| Solids, Total Suspended  | 387                | mg/L       | 2            | USGS I-3765-85      | 16 Jun 06 8      | :30 CJL |
| Carbon, Total Organic    | 10.2               | mg/L       | 0.5          | 415.1               | 27 Jun 06 8      | :00 Bis |
| Chlorophyll a            | 19,9               | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 E      | :41 JD  |
| Fecal Coliform, MF       | * 820              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17     | :40 NS  |
| Chloride                 | 34.1               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13     | :30 RMV |
| Nitrate+Nitrite          | 7.44               | mg/L as N  | 0.20         | 353.2               | 23 Jun 06 16     | :38 RMV |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9      | :40 TAM |
| Phosphorus, Total        | 0.116              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11     | :13 RMV |
| Phosphorus, Ortho        | 0.060              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9      | :48 DAP |
| Nitrogen, Total Kjeldahl | 1.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9      | :15 RSL |

⊽U = Colony Forming Units

\* Holding time Exceeded

£. 4 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

\* Reporting Limit

| · Reportanty Dimit  |  |
|---|--|
| Elevated "Less Than Result" (<): $\theta$ — Due to sample matrix ! = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume   |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                      | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER

Sample Description: CR 29.0

MVT

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24823 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 10:15 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Receiv<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed |         | Analyst |
|--------------------------|---------------------|------------|--------------|---------------------|------------------|---------|---------|
| Phosphorus Water Digest  |                     |            |              |                     | 19 Jun 0         | 5       | DAP     |
| BOD, Carbonaceous        | 2                   | mg/L       | 2            | SM 5210B            | 16 Jun 0         | 5 9:47  | AKF     |
| CBOD, 20 Day             | 22                  | mg/L       | 2            | SM 5210B            | 16 Jun 0         | 5 10:29 | PJB     |
| Solids, Total Suspended  | 9                   | mg/L       | 2            | USGS I-3765-85      | 16 Jun 0         | 5 8:30  | CJL     |
| Carbon, Total Organic    | 9.1                 | mg/L       | 0.5          | 415.1               | 27 Jun 0         | 5 B:00  | Bis     |
| Chlorophyll a            | 10.2                | mg/cubic m | 1.0          | 10200H              | 19 Jun O         | 5 8:41  | JD      |
| Fecal Coliform, MF       | * 590               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 0         | 5 17:40 | NS      |
| Chloride                 | 27.4                | mg/L       | 3.0          | 325.2               | 19 Jun O         | 5 13:29 | RMV     |
| Nitrate+Nitrite          | 7.00                | mg/L as N  | 0.20         | 353.2               | 23 Jun 0         | 5 16:38 | RMV     |
| Nitrogen, Ammonia        | < 0.08              | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun O         | 5 9:40  | TAM     |
| Phosphorus, Total        | 0.092               | mg/L       | 0.005        | EPA 365.1           | 20 Jun 0         | 5 11:13 | RMV     |
| Phosphorus, Ortho        | 0.049               | mg/L       | 0.005        | EPA 365.1           | 16 Jun O         | 5 9:48  | DAP     |
| Nitrogen, Total Kjeldahl | 1.6                 | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun O         | 5 9:15  | RSL     |

"U = Colony Forming Units

\* Holding time Exceeded

Ent: NB NIIIDE

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | . 6.,+<br><b>V</b> -   |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO                         | # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022                |

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WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

Sample Description: CR 27.2

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24822 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 9:50 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                           | As Receiv<br>Result | <i>r</i> ed | Method<br>RL | Method<br>Reference | Date<br>Analyzed |       | Analyst |
|---------------------------|---------------------|-------------|--------------|---------------------|------------------|-------|---------|
| Phosphorus Water Digest   |                     |             |              |                     | 19 Jun 06        |       | DAP     |
| BOD, Carbonaceous         | 3                   | mg/L        | 2            | SM 5210B            | 16 Jun 06        | 9:47  | AKF     |
| CBOD, 20 Day              | 20                  | mg/L        | 2            | SM 5210B            | 16 Jun 06 1      | LO:29 | PJB     |
| Solids, Total Suspended   | 3                   | mq/L        | 2            | USGS I-3765-85      | 16 Jun 06        | 8:30  | CJL     |
| Carbon, Total Organic     | 12.1                | mg/L        | 0.5          | 415.1               | 27 Jun 06        | 8:00  | Bis     |
| Chlorophyll a             | 2.5                 | mg/cubic m  | 1.0          | 10200H              | 19 Jun 06        | 8:41  | JD      |
| Fecal Coliform, MF        | * 160               | CFU/100 mL  | 10.          | SM 9222D 18th Ed    | 15 Jun 06 1      | L7:40 | NS      |
| Chloride                  | 24.2                | mg/L        | 3.0          | 325.2               | 19 Jun 06 1      | 13:29 | RMV     |
| Nitrate+Nitrite           | 1.11                | mg/L as N   | 0.20         | 353.2               | 23 Jun 06 1      | L6:38 | RMV     |
| Nitrogen, Ammonia         | < 0.08              | mg/L        | 0.08         | 4500 NH3 B, E       | 19 Jun 06        | 8:40  | TAM     |
| Phosphorus, Total         | 0.223               | mg/L        | 0.005        | EPA 365.1           | 20 Jun 06 1      | 11:13 | RMV     |
| Phosphorus, Ortho         | 0.161               | mg/L        | 0.005        | EPA 365.1           | 16 Jun 06        | 9:48  | DAP     |
| Nitrogen, Total Kjeldahl  | 1.3                 | mg/L        | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06        | 9:15  | RSL     |
| ⊤U = Colony Forming Units |                     |             | * Holding t  | ime Exceeded        |                  |       |         |

NB 10/11/06

Ð Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit

Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: CR 25.6

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24821 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 9:15 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 16 Jun 06 9:4'   |         |
| CBOD, 20 Day             | 49                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:2   |         |
| Solids, Total Suspended  | 14                 | mg/L       | 2            | USGS 1-3765-85      | 16 Jun 06 7:00   | ) CJL   |
| Carbon, Total Organic    | 11.9               | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | ) Bis   |
| Chlorophyll a            | 2.9                | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:4    | JD      |
| Fecal Coliform, MF       | * 200              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | ) NS    |
| Chloride                 | 23.6               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:29  | RMV     |
| Nitrate+Nitrite          | 0.78               | mg/L as N  | 0.20         | 353.2               | 23 Jun 06 16:30  | RMV     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 8:40   | ) TAM   |
| Phosphorus, Total        | 0.184              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11:13  | RMV     |
| Phosphorus, Ortho        | 0.115              | mg/L       | 0.005        | EPA 365.1           | 16 Jun 06 9:48   | DAP     |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

U = Colony Forming Units

\* Holding time Exceeded

10/11/06

Ì Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN = Reporting Limit

Elevated "Less Than Result" (<): @ \* Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER

Sample Description: FD 1

Page: 1 of 1

Report Date: 6 Jul 06 Lab Number: 06-A24829 Work Order #:12-7155 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 15 Jun 06 Date Received: 15 Jun 06 16:21 PO #: CLEARWATER RIVER

Temp at Receipt: 6.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 19 Jun 06        | DAP     |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:16  | AKF     |
| CBOD, 20 Day             | 53                 | mg/L       | 2            | SM 5210B            | 16 Jun 06 10:29  | PJB     |
| Solids, Total Suspended  | 14                 | mg/L       | 2            | USGS I-3765-85      | 16 Jun 06 8:30   | CJL     |
| Carbon, Total Organic    | 11.7               | mg/L       | 0.5          | 415.1               | 27 Jun 06 8:00   | Bis     |
| Chlorophyll a            | 3.9                | mg/cubic m | 1.0          | 10200H              | 19 Jun 06 8:41   | JD      |
| Fecal Coliform, MF       | * 40               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 15 Jun 06 17:40  | NS      |
| Chloride                 | 23.7               | mg/L       | 3.0          | 325.2               | 19 Jun 06 13:30  | RMV     |
| Nitrate+Nitrite          | 0.76               | mg/L as N  | 0,20         | 353.2               | 23 Jun 06 16:39  | RMV     |
| Nitrogen, Ammonia        | 0.29               | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jun 06 9:40   | TAM     |
| Phosphorus, Total        | 0.187              | mg/L       | 0.005        | EPA 365.1           | 20 Jun 06 11:14  | RMV     |
| Phosphorus, Ortho        | 0.114              | mg/L       | 0,005        | EPA 365.1           | 16 Jun 06 9:49   | DAP     |
| Nitrogen, Total Kjeldahl | 1.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 16 Jun 06 9:15   | RSL     |

stch matrix spike duplicate RPD for Ortho-P was outside MVTL 5% limit at 6%. .ta reported based on all remaining QC acceptable.

CFU = Colony Forming Units

\* Holding time Exceeded

\*\* No collection time supplied by the client.

| Ent.<br>WP   | 011/106      |         |                     |                        |          |        |              |    |
|--|--------------|---------|---------------------|------------------------|----------|--------|--------------|----|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN          | -<br>1       | ş       | , Messa             |                        |          |        |              |    |
| <ul> <li>Reporting Limit</li> </ul>  |              |         |                     |                        |          |        |              |    |
| Elevated "Less Than Result" {<}: 0 = Due to sample matrix ! = Due to sample quantity |              |         | sample c<br>extract | concentratic<br>volume | n        |        |              |    |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                               | ND MICRO # 1 | 013-M 1 | ND WW/DW            | # R-040                | IA LAB # | 1: 132 | IA LAB #; 0; | 22 |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CRWD

MVTE

Sample Description: HWY 55

Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26953 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 13:10 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analy | zed  |       | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|---------------|------|-------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 J1          | 1 06 |       | RLB     |
| BOD, Carbonaceous        | 5                  | mg/L       | 2            | SM 5210B            | 29 Ji         | n 06 | 10:47 | RMV     |
| CBOD, 20 Day             | 22                 | mg/L       | 2            | SM 5210B            | 29 Ji         | n 06 | 11:26 | PJB     |
| Solids, Total Suspended  | 9                  | mg/L       | 2            | USGS 1-3765-85      | 29 Ji         | n 06 | 12:30 | PJB     |
| Carbon, Total Organic    | 10.7               | mg/L       | 0.5          | 415.1               | JJι           | 1 06 | 8:00  | Bis     |
| Chlorophyll a            | 11.5               | mg/cubic m | 1.0          | 10200H              | 30 Ji         | n 06 | 4:16  | JD      |
| Fecal Coliform, MF       | * 270              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Ji         | n 06 | 19:50 | VRK     |
| Chloride                 | 29.4               | mg/L       | 3.0          | 325.2               | 7 Ju          | 1 06 | 13:43 | RMV     |
| Nitrate+Nitrite          | 4.92               | mg/L as N  | 0.20         | 353.2               | 30 Ji         | n 06 | 16:14 | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 5 Ji          | 1 06 | 7:55  | TAM     |
| Phosphorus, Total        | 0.155              | mg/L       | 0.005        | EPA 365.1           | 3 J.          | 1 06 | 13:07 | RMV     |
| Phosphorus, Ortho        | 0.096              | mg/L       | 0.005        | EPA 365.1           | 30 Ji         | n 06 | 7:44  | RMV     |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Ji          | 1 06 | 10:15 | RSL     |

'U = Colony Forming Units

\* Holding time Exceeded

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | 6<br>\$ <sup>4</sup> -   | 2 glaton                 |
|---|--|--------------------------|
| Reporting Limit   |  |                          |
| Elevated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |                          |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 N                                | ND MICRO # 1013-M ND WW/DW # R-040 IA                                | LAB #: 132 IA LAB #: 022 |

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WES BOLL

Sample Description: CR 33.6

Project Name: CRWD

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1 of 1 Page:

Report Date: 19 Jul 06 Lab Number: 06-A26949 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 11:09 Date Received: 28 Jun 06 17:15 PO #: CRWD

IA LAB #: 022

Temp at Receipt: 5.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                                 | ·····      |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | 5                               | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:38  | RMV     |
| CBOD, 20 Day             | 28                              | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | PJB     |
| Solids, Total Suspended  | 37                              | mg/L       | 2            | USGS I-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 16.3                            | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | 55.9                            | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 350                           | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 29.9                            | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:43   | RMV     |
| Nitrate+Nitrite          | 2.58                            | mg/L as N  | 0.20         | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 30 Jun 06 8:45   | TAM     |
| Phosphorus, Total        | 0.189                           | mg/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:06   | RMV     |
| Phosphorus, Ortho        | 0.033                           | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 3.5                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Jul 06 10:15   | RSL     |

'U = Colony Forming Units

\* Holding time Exceeded

Ent 7/21/06 Ð. -ఱ Approved by: Jason G. Smith, Inorganic ..... Laboratory Manager New Ulm, MN ¥2. Reporting Limit = Due to sample concentration

WI LAB # 999447680

Elevated "Less Than Result" (<): 0 = Due to sample matrix ! - Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125

+ = Due to extract volume

ND MICRO # 1013-M ND WW/DW # R-040 TA LAB #: 132

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Page:

PO #: CRWD





WES BOLL WENCK ASSOCIATES INC MAPLE PLAIN MN 55359-9000

Report Date: 19 Jul 06 Lab Number: 06-A26952 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 12:40 Date Received: 28 Jun 06 17:15

Temp at Receipt: 5.0C

1 of 1

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|---------|
|                          | Reduto                |            | 110          | Nerelence           | Allaryzed        | Anaryse |
| Phosphorus Water Digest  |                       |            |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | < 2                   | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:47  | RMV     |
| CBOD, 20 Day             | 14                    | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | PJB     |
| Solids, Total Suspended  | 5                     | mg/L       | 2            | USGS I-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 11.4                  | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | 8.5                   | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 600                 | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 43.8                  | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:43   | RMV     |
| Nitrate+Nitrite          | 11.4                  | mg/L as N  | 0.20         | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08                | mg/L       | 0.08         | 4500 NH3 B, E       | 5 Jul 06 7:55    | TAM     |
| Phosphorus, Total        | 0.176                 | mg/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:07   | RMV     |
| Phosphorus, Ortho        | 0.113                 | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 1.5                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Jul 06 10:15   | RSL     |

U = Colony Forming Units

\* Holding time Exceeded

0, 0, 0, 0 V

Ð. -لک Approved by: Jason G. Smith, Inorganic · · · · · Laboratory Manager New Ulm, MN \* Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 TA LAB #: 022 TA LAR #: 132

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1800 PIONEER CRK CTR

Project Name: CRWD

#### C Sample Description: TE 33.2



WES BOLL

Sample Description: TB 33.2

Project Name: CRWD

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1800 PIONEER CRK CTR

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26950 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 11:50 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyz | ed       | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|----------------|----------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 Jul          | 06       | RLB     |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 29 Jun         | 06 10:38 | RMV     |
| CBOD, 20 Day             | 14                 | mg/L       | 2            | SM 5210B            | 29 Jun         | 06 11:26 | PJB     |
| Solids, Total Suspended  | 7                  | mg/L       | 2            | USGS I-3765-85      | 29 Jun         | 06 12:30 | PJB     |
| Carbon, Total Organic    | 12.1               | mg/L       | 0.5          | 415.1               | 3 Jul          | 06 8:00  | Bis     |
| Chlorophyll a            | 12.4               | mg/cubic m | 1.0          | 10200H              | 30 Jun         | 06 4:16  | JD      |
| Fecal Coliform, MF       | * 180              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun         | 06 19:50 | VRK     |
| Chloride                 | 46.9               | mg/L       | 3.0          | 325.2               | 7 Jul          | 06 13:43 | RMV     |
| Nitrate+Nitrite          | 8.93               | mg/L as N  | 0.20         | 353.2               | 30 Jun         | 06 16:12 | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 5 Jul          | 06 7:55  | TAM     |
| Phosphorus, Total        | 0.211              | mq/L       | 0.005        | EPA 365.1           | 3 Jul          | 06 13:06 | RMV     |
| Phosphorus, Ortho        | 0.137              | mg/L       | 0.005        | EPA 365.1           | 30 Jun         | 06 7:44  | RMV     |
| Nitrogen, Total Kjeldahl | 2.1                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Jul          | 06 10:15 | RSL     |

Ent 7/21/06 WB 9. La Approved by: Jason G. Smith, Inorganic P-...+ Laboratory Manager New Ulm, MN «». Reporting Limit Elevated "Less Than Result" (<): 8 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume ND WW/DW # R-040 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M IA LAB #: 132 TA LAB #: 022

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WES BOLL

Sample Description: CR 35.3

Project Name: CRWD

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26951 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 12:20 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | 7                  | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:38  | RMV     |
| CBOD, 20 Day             | 31                 | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | PJB     |
| Solids, Total Suspended  | 45                 | mg/L       | 2            | USGS I-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 17.5               | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | 75.3               | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 150              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 27.6               | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:43   | RMV     |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 5 Jul 06 7:55    | TAM     |
| Phosphorus, Total        | 0.146              | mg/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:07   | RMV     |
| Phosphorus, Ortho        | 0.006              | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 2.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Jul 06 10:15   | RSL     |

'U = Colony Forming Units

\* Holding time Exceeded

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | ₩<br>¥•  |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" <<}: 0 = Due to sample matrix<br>! = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO                         | # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022        |

En+7/21/06 11/B

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Sample Description: CR 31.8

Project Name: CRWD

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26948 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 10:40 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:38  | RMV     |
| CBOD, 20 Day             | 21                 | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | PJB     |
| Solids, Total Suspended  | 11                 | mg/L       | 2            | USGS I-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 12.9               | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | 18.0               | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 540              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 32.6               | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:41   | RMV     |
| Nitrate+Nitrite          | 5.08               | mg/L as N  | 0.20         | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 30 Jun 06 8:45   | TAM     |
| Phosphorus, Total        | 0.165              | mq/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:06   | RMV     |
| Phosphorus, Ortho        | 0.115              | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 1.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 3 Jul 06 10:15   | RSL     |
|                          |                    |            |              | ing There is the t  |                  |         |

'U = Colony Forming Units

\* Holding time Exceeded

Ent 7/21/06 WB R £. . لم Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN \*\*...\* 5 Reporting Limit Elevated "Less Than Result" (<):  $\ell$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW∕DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Project Name: CRWD

WENCK ASSOCIATES INC

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Sample Description: CR 29.0 FT

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26954 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 10:20 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

| As Recei <sup>.</sup><br>Result | vea  | Method<br>RL  | Method<br>Reference   | Date<br>Analyzed   | Analyst  |
|---------------------------------|--|---|---|--|--|
|                                 |  | ·····   |   | 3 Jul 06   | RLB  |
| 2                               | mg/L   | 2   | SM 5210B  | 29 Jun 06 10:47  | RMV  |
| 26                              | mg/L   | 2   | SM 5210B  | 29 Jun 06 11:26  | PJB  |
| 46                              | mg/L   | 2   | USGS 1-3765-85  | 29 Jun 06 12:30  | PJB  |
| 12.5                            | mg/L   | 0.5   | 415.1   | 3 Jul 06 8:00  | Bis  |
| 6.8                             | mg/cubic m   | 1.0   | 10200H  | 30 Jun 06 4:16   | JD   |
| * 160                           | CFU/100 mL   | 10.   | SM 9222D 18th Ed  | 28 Jun 06 19:50  | VRK  |
| 19.9                            | mg/L   | 3.0   | 325.2   | 7 Jul 06 13:43   | RMV  |
| 0.21                            | mg/L as N  | 0.20  | 353.2   | 30 Jun 06 16:14  | DAP  |
| < 0.08                          | mg/L   | 0.08  | 4500 NH3 B, E   | 5 Jul 06 7:55  | TAM  |
| 0.049                           | mg/L   | 0.005   | EPA 365.1   | 3 Jul 06 13:07   | RMV  |
| 0.022                           |  | 0.005   | EPA 365.1   | 30 Jun 06 7:44   | RMV  |
| 1.6                             | mg/L   | 0.1   | SM 4500NorgB/NH3 E  | 3 Jul 06 10:15   | RSL  |
|                                 | Result<br>26<br>46<br>12.5<br>6.8<br>* 160<br>19.9<br>0.21<br>< 0.08<br>0.049<br>0.022 | Result         2       mg/L         26       mg/L         46       mg/L         12.5       mg/L         6.8       mg/cubic m         * 160       CFU/100 mL         19.9       mg/L         0.21       mg/L as N         < 0.08 | Result         RL           2         mg/L         2           26         mg/L         2           46         mg/L         2           12.5         mg/L         0.5           6.8         mg/cubic m         1.0           * 160         CFU/100 mL         10.           19.9         mg/L         3.0           0.21         mg/L as N         0.20           < 0.08 | Result     RL     Reference       2     mg/L     2     SM 5210B       26     mg/L     2     SM 5210B       46     mg/L     2     USGS I-3765-85       12.5     mg/L     0.5     415.1       6.8     mg/cubic m     1.0     10200H       * 160     CFU/100 mL     10.     SM 9222D 18th Ed       19.9     mg/L     3.0     325.2       0.21     mg/L as N     0.20     353.2       < 0.08 | Result         RL         Reference         Analyzed           2         mg/L         2         SM 5210B         29 Jun 06 10:47           26         mg/L         2         SM 5210B         29 Jun 06 10:47           26         mg/L         2         SM 5210B         29 Jun 06 10:47           26         mg/L         2         SM 5210B         29 Jun 06 12:30           12.5         mg/L         0.5         415.1         3 Jul 06 8:00           6.8         mg/cubic m         1.0         10200H         30 Jun 06 4:16           * 160         CFU/100 mL         10.         SM 9222D 18th Ed         28 Jun 06 19:50           19.9         mg/L         3.0         325.2         7 Jul 06 13:43           0.21         mg/L as N         0.20         353.2         30 Jun 06 16:14           < 0.08 |

U = Colony Forming Units

\* Holding time Exceeded

B. £ Approved by: হৈ Jason G. Smith, Inorganic 10 × 14 Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 TA LAB #: 022

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26947 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 10:20 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                                 |            |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | 2                               | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:38  | RMV     |
| CBOD, 20 Day             | 15                              | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | PJB     |
| Solids, Total Suspended  | 10                              | mg/L       | 2            | USGS 1-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 11.0                            | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | 10.5                            | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 250                           | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 28.4                            | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:41   | RMV     |
| Nitrate+Nitrite          | 4.96                            | mg/L as N  | 0.20         | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 30 Jun 06 8:45   | TAM     |
| Phosphorus, Total        | 0.131                           | mg/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:06   | RMV     |
| Phosphorus, Ortho        | 0.087                           | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 1.9                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 29 Jun 06 15:45  | RSL     |

"U = Colony Forming Units

WES BOLL

Sample Description: CR 29.0

Project Name: CRWD

\* Holding time Exceeded

Ent 7/21/06 Đ.,  $\leq$ Approved by: 3 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<): @ ≠ Due to sample matrix ! ≠ Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: CR 27.2

Project Name: CRWD

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26946 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 9:40 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

| 2<br>15<br>18 | mg/L<br>mg/L<br>mg/L                                  | 2   | SM 5210B<br>SM 5210B  | 3 Jul 06<br>29 Jun 06 10:38<br>29 Jun 06 11:26  | RLB<br>RMV  |
|---------------|---|---|---|---|---|
|               | mg/L  | 2<br>2  |   |   |   |
|               | -   | 2   | SM 5210B  | 29 Jun 06 11.26   |   |
| 18            | mg (T   |   |   | The contraction the second  | PJB   |
|               | mg/u  | 2   | USGS I-3765-85  | 29 Jun 06 12:30   | PJB   |
| 13.4          | mg/L  | 0.5   | 415.1   | 3 Jul 06 8:00   | Bis   |
| 5.8           | mg/cubic m  | 1.0   | 10200H  | 30 Jun 06 4:16  | JD  |
| 230           | CFU/100 mL  | 10.   | SM 9222D 18th Ed  | 28 Jun 06 19:50   | VRK   |
| 24.1          | mg/L  | 3.0   | 325.2   | 7 Jul 06 13:41  | RMV   |
| < 0.2         | mg/L as N   | 0.2   | 353.2   | 30 Jun 06 16:12   | DAP   |
| 0.14          | mg/L  | 0.08  | 4500 NH3 B, E   | 30 Jun 06 8:45  | TAM   |
| 0.295         | mg/L  | 0.005   | EPA 365.1   | 3 Jul 06 13:06  | RMV   |
| 0.250         | mg/L  | 0.005   | EPA 365.1   | 30 Jun 06 7:44  | RMV   |
| 1.6           | mg/L  | 0.1   | SM 4500NorgB/NH3 E  | 29 Jun 06 15:45   | RSL   |
|               | 5.8<br>230<br>24.1<br>< 0.2<br>0.14<br>0.295<br>0.250 | 5.8 mg/cubic m<br>230 CFU/100 mL<br>24.1 mg/L<br>< 0.2 mg/L as N<br>0.14 mg/L<br>0.295 mg/L<br>0.250 mg/L<br>1.6 mg/L | 5.8       mg/cubic m       1.0         230       CFU/100 mL       10.         24.1       mg/L       3.0         < 0.2 | 5.8         mg/cubic m         1.0         10200H           230         CFU/100 mL         10.         SM 9222D 18th Ed           24.1         mg/L         3.0         325.2           < 0.2 | 5.8       mg/cubic m       1.0       10200H       30       Jun 06       4:16         230       CFU/100 mL       10.       SM 9222D 18th Ed       28       Jun 06       19:50         24.1       mg/L       3.0       325.2       7       Jul 06       13:41         < 0.2 |

U = Colony Forming Units

\* Holding time Exceeded

Ent 7/21/06 WB g. S.  $\overline{\mathcal{X}}$ Approved by: Jason G. Smith, Inorganic P ... + Laboratory Manager New Ulm, MN **4**1. Reporting Limit Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: NN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: CR 25.6

Project Name: CRWD

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Page: 1 of 1

Report Date: 19 Jul 06 Lab Number: 06-A26945 Work Order #:12-7634 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 28 Jun 06 9:00 Date Received: 28 Jun 06 17:15 PO #: CRWD

Temp at Receipt: 5.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                                 |            |              |                     | 3 Jul 06         | RLB     |
| BOD, Carbonaceous        | 2                               | mg/L       | 2            | SM 5210B            | 29 Jun 06 10:38  | RMV     |
| CBOD, 20 Day             | 12                              | mg/L       | 2            | SM 5210B            | 29 Jun 06 11:26  | РЈВ     |
| Solids, Total Suspended  | 10                              | mq/L       | 2            | USGS I-3765-85      | 29 Jun 06 12:30  | PJB     |
| Carbon, Total Organic    | 12.9                            | mg/L       | 0.5          | 415.1               | 3 Jul 06 8:00    | Bis     |
| Chlorophyll a            | < 1                             | mg/cubic m | 1.0          | 10200H              | 30 Jun 06 4:16   | JD      |
| Fecal Coliform, MF       | * 370                           | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 28 Jun 06 19:50  | VRK     |
| Chloride                 | 22.6                            | mg/L       | 3.0          | 325.2               | 7 Jul 06 13:41   | RMV     |
| Nitrate+Nitrite          | < 0.2                           | mg/L as N  | 0.2          | 353.2               | 30 Jun 06 16:12  | DAP     |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 30 Jun 06 8:45   | TAM     |
| Phosphorus, Total        | 0.322                           | mg/L       | 0.005        | EPA 365.1           | 3 Jul 06 13:06   | RMV     |
| Phosphorus, Ortho        | 0.285                           | mg/L       | 0.005        | EPA 365.1           | 30 Jun 06 7:44   | RMV     |
| Nitrogen, Total Kjeldahl | 1.3                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 29 Jun 06 15:45  | RSL     |

U = Colony Forming Units

\* Holding time Exceeded

Ent 7/21/06 WB 8. . 5 Approved by: Jason G. Smith, Inorganic **ev** - - pr Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity # = Bue to sample concentration

! = Due to sample quantity + = Due to extract volume CERTIFICATION: NN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

# MVTL

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER Project Number: 0002-75 Sample Description: CR 33.6 Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29371 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 10:15 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                            | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest    |                    |            |              |                     | 17 Jul 06        | RLB     |
| BOD, Carbonaceous          | < 2                | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:59   | CJL     |
| CBOD, 20 Day               | 20                 | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:39   | PJB     |
| Solids, Total Suspended    | 5                  | mg/L       | 2            | USGS I-3765-85      | 13 Jul 06 10:30  | AKF     |
| Carbon, Total Organic      | 16.0               | mg/L       | 0.5          | 415.1               | 20 Jul 06 8:00   | Bis     |
| Chlorophyll a              | 5.0                | mg/cubic m | 1.0          | 10200H              | 17 Jul 06 8:19   | JD      |
| Fecal Coliform, MF         | * 11000            | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 12 Jul 06 17:05  | VRK     |
| Nitrate+Nitrite            | 47.7               | mg/L as N  | 0.20         | 353.2               | 19 Jul 06 17:01  | RMV     |
| Nitrogen, Ammonia          | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jul 06 12:15  | TAM     |
| Phosphorus, Total          | 0.107              | mg/L       | 0.005        | EPA 365.1           | 18 Jul 06 11:10  | RMV     |
| Phosphorus, Ortho          | 0.053              | mg/L       | 0.005        | EPA 365.1           | 13 Jul 06 8:43   | RMV     |
| Nitrogen, Total Kjeldahl   | 3.4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 14 Jul 06 15:20  | RSL     |
| CFU = Colony Forming Units |                    |            | * Holding t  | ime Exceeded        |                  |         |

10/10/06

O. La কি Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN · · · · · Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! » Due to sample quantity # « Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER Project Number: 0002-75 Sample Description: CR 31.8 Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29372 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 10:45 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                          | As Recei <sup>.</sup><br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                                 |            |              |                     | 17 Jul 06        | RLB     |
| BOD, Carbonaceous        | 2                               | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:59   | CJL     |
| CBOD, 20 Day             | 14                              | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:39   | PJB     |
| Solids, Total Suspended  | 33                              | mq/L       | 2            | USGS I-3765-85      | 13 Jul 06 10:30  | AKF     |
| Carbon, Total Organic    | 7.4                             | mg/L       | 0.5          | 415.1               | 20 Jul 06 8:00   | Bis     |
| Chlorophyll a            | 12.9                            | mg/cubic m | 1.0          | 10200H              | 17 Jul 06 8:19   | JD      |
| Fecal Coliform, MF       | * 14000                         | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 12 Jul 06 17:05  | VRK     |
| Nitrate+Nitrite          | < 0.2                           | mg/L as N  | 0.2          | 353.2               | 19 Jul 06 17:01  | RMV     |
| Nitrogen, Ammonia        | < 0.08                          | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jul 06 12:15  | TAM     |
| Phosphorus, Total        | 0.164                           | mg/L       | 0.005        | EPA 365.1           | 18 Jul 06 11:10  | RMV     |
| Phosphorus, Ortho        | 0.106                           | mg/L       | 0.005        | EPA 365.1           | 13 Jul 06 8:43   | RMV     |
| Nitrogen, Total Kjeldahl | 1.3                             | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 14 Jul 06 15:20  | RSL     |

CFU = Colony Forming Units

\* Holding time Exceeded

G £. -ব্য Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<):  $0 \approx$  Due to sample matrix !  $\approx$  Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CLEARWATER RIVER Project Number: 0002-75 Sample Description: CR 29.0 Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29373 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 11:10 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyze | ì        | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|-----------------|----------|---------|
| Phosphorus Water Digest  |                    |            | 4 9 C        |                     | 17 Jul          | 06       | RLB     |
| BOD, Carbonaceous        | 6                  | mg/L       | 2            | SM 5210B            | 13 Jul          | 06 8:59  | CJL     |
| CBOD, 20 Day             | 21                 | mg/L       | 2            | SM 5210B            | 13 Jul          | 06 8:39  | PJB     |
| Solids, Total Suspended  | 22                 | mg/L       | 2            | USGS 1-3765-85      | 13 Jul          | 06 10:30 | AKF     |
| Carbon, Total Organic    | 7.0                | mg/L       | 0.5          | 415.1               | 20 Jul          | 06 8:00  | Bis     |
| Chlorophyll a            | 10.9               | mg/cubic m | 1.0          | 10200H              | 17 Jul          | 06 8:19  | JD      |
| Fecal Coliform, MF       | 2000               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 12 Jul          | 06 17:05 | VRK     |
| Nitrate+Nitrite          | 1.16               | mq/L as N  | 0.20         | 353.2               | 19 Jul          | 06 17:01 | RMV     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jul          | 06 12:15 | TAM     |
| Phosphorus, Total        | 0.129              | mg/L       | 0.005        | EPA 365.1           | 18 Jul          | 06 11:10 | RMV     |
| Phosphorus, Ortho        | 0.087              | mg/L       | 0.005        | EPA 365.1           | 13 Jul          | 06 8:43  | RMV     |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 14 Jul          | 06 15:20 | RSL     |

CFU = Colony Forming Units

NB 1011

Đ. <u>Vs</u> Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Bue to sample concentration
+ = Due to extract volume ND WW/DW # 8-040 IA LAB #: 132 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M IA LAB #: 022



WES BOLL

Project Number: 0002-75 Sample Description: CR 25.6

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Project Name: CLEARWATER RIVER

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Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29374 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 12:10 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                          | As Receiv<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                     |            | ·····        |                     | 17 Jul 06        | RLB     |
| BOD, Carbonaceous        | 7                   | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:5    | 9 CJL   |
| CBOD, 20 Day             | 19                  | mq/L       | 2            | SM 5210B            | 13 Jul 06 8:3    | 9 PJB   |
| Solids, Total Suspended  | 13                  | mg/L       | 2            | USGS I-3765-85      | 13 Jul 06 10:3   | 0 AKF   |
| Carbon, Total Organic    | 10.9                | mg/L       | 0.5          | 415.1               | 20 Jul 06 8:0    | 0 Bis   |
| Chlorophyll a            | 35.1                | mg/cubic m | 1.0          | 10200H              | 17 Jul 06 8:1    | 9 JD    |
| Fecal Coliform, MF       | 2200                | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 12 Jul 06 17:0   | 5 VRK   |
| Nitrate+Nitrite          | < 0.2               | mg/L as N  | 0.2          | 353.2               | 23 Jul 06 10:5   | 0 RMV   |
| Nitrogen, Ammonía        | < 0.08              | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jul 06 12:1   | 5 TAM   |
| Phosphorus, Total        | 0.303               | mg/L       | 0.005        | EPA 365.1           | 18 Jul 06 11:1   | 0 RMV   |
| Phosphorus, Ortho        | 0.181               | mg/L       | 0.005        | EPA 365.1           | 13 Jul 06 8:4    | 4 RMV   |
| Nitrogen, Total Kjeldahl | 2.1                 | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 14 Jul 06 15:2   | 0 RSL   |

CFU = Colony Forming Units

Ì Approved by: 6 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<); 0 = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 NB MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CLEARWATER RIVER Project Number: 0002-75 Sample Description: CR 19.8 Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29375 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 12:50 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                          | As Recei<br>Result | veđ        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 17 Jul 06        | RLB        |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:59   | CJL        |
| CBOD, 20 Day             | 12                 | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:39   | PJB        |
| Solids, Total Suspended  | 8                  | mg/L       | 2            | USGS I-3765-85      | 13 Jul 06 10:30  | AKF        |
| Carbon, Total Organic    | 8.6                | mg/L       | 0.5          | 415.1               | 20 Jul 06 8:00   | Bis        |
| Chlorophyll a            | 2.2                | mg/cubic m | 1.0          | 10200н              | 17 Jul 06 8:19   | JD         |
| Nitrogen Total, Calculat | 0.7                | mg/L       | NA           | Calc                | 23 Jul 06 10:50  | Calculated |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 23 Jul 06 10:50  | RMV        |
| Phosphorus, Total        | 0.078              | mg/L       | 0.005        | EPA 365.1           | 18 Jul 06 11:10  | RMV        |
| Phosphorus, Ortho        | 0.047              | mg/L       | 0.005        | EPA 365.1           | 13 Jul 06 8:44   | RMV        |
| Nitrogen, Total Kjeldahl | 0.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 17 Jul 06 15:15  | RSL        |

A TS Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 ND WW/DW # R-040 IA LAB #: 022 WI LAB # 999447680 ND MICRO # 1013-M IA LAB #: 132



WES BOLL

Project Number: 0002-75

Sample Description: FD 1

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1800 PIONEER CRK CTR

Project Name: CLEARWATER RIVER

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Page: 1 of 1

Report Date: 3 Aug 06 Lab Number: 06-A29376 Work Order #:12-8098 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 12 Jul 06 Date Received: 12 Jul 06 15:30 PO #: CLEARWATER RIVER

Temp at Receipt: 1.0C

|                            | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest    | •                  |            |              |                     | 17 Jul 06        | RLB     |
| BOD, Carbonaceous          | 3                  | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:59   | CJL     |
| CBOD, 20 Day               | 13                 | mg/L       | 2            | SM 5210B            | 13 Jul 06 8:39   | PJB     |
| Solids, Total Suspended    | 17                 | mg/L       | 2            | USGS I-3765-85      | 13 Jul 06 10:30  | AKF     |
| Carbon, Total Organic      | 6.7                | mg/L       | 0.5          | 415.1               | 20 Jul 06 8:00   | Bis     |
| Chlorophyll a              | 10.5               | mg/cubic m | 1.0          | 10200н              | 17 Jul 06 8:19   | JD      |
| Fecal Coliform, MF         | * 1300             | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 12 Jul 06 17:05  | VRK     |
| Nitrate+Nítrite            | 1.12               | mg/L as N  | 0,20         | 353,2               | 23 Jul 06 10:50  | RMV     |
| Nitrogen, Ammonia          | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 19 Jul 06 12:15  | TAM     |
| Phosphorus, Total          | 0.129              | mg/L       | 0.005        | EPA 365.1           | 18 Jul 06 11:11  | RMV     |
| Phosphorus, Ortho          | 0.084              | mg/L       | 0,005        | EPA 365.1           | 13 Jul 06 8:44   | RMV     |
| Nitrogen, Total Kjeldahl   | 0.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 17 Jul 06 15:15  | RSL     |
| CFU = Colony Forming Units |                    |            | * Holding t  | ime Exceeded        |                  |         |

\*\* No collection time supplied by the client.

C.L Approved by: رکر Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix !  $\circ$  Due to sample quantity = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: CR 31.8

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 16 Aug 06 Lab Number: 06-A32002 Work Order #:12-8600 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Jul 06 11:30 Date Received: 26 Jul 06 15:30

Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed |       | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|-------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 31 Jul 06        |       | RMV     |
| BOD, Carbonaceous        | < 2                | mg/L       | 2            | SM 5210B            | 27 Jul 06        | 10:09 | CJL     |
| CBOD, 20 Day             | 13                 | mg/L       | 2            | SM 5210B            | 27 Jul 06        | 16:31 | PJB     |
| Solids, Total Suspended  | 7                  | mg/L       | 2            | USGS I~3765-85      | 27 Jul 06        | 9:25  | PJB     |
| Carbon, Total Organic    | 9.1                | mg/L       | 0.5          | 415.1               | 3 Aug 06         | 8:00  | Bis     |
| Chlorophyll a            | 1.0                | mg/cubic m | 1.0          | 10200H              | 31 Jul 06        | 9:59  | JD      |
| Fecal Coliform, MF       | 910                | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Jul 06        | 17:20 | VRK     |
| Nitrate+Nitrite          | 0.70               | mg/L as N  | 0.20         | 353.2               | 30 Jul 06        | 15:03 | JGS     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 2 Aug 06         | 8:05  | TAM     |
| Phosphorus, Total        | 0.225              | mg/L       | 0.005        | EPA 365.1           | 1 Aug 06         | 9:23  | RMV     |
| Phosphorus, Ortho        | 0.177              | mg/L       | 0.005        | EPA 365.1           | 27 Jul 06        |       | RMV     |
| Nitrogen, Total Kjeldahl | 1.1                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 28 Jul 06        | 14:20 | TAM     |

CFU = Colony Forming Units

Ì Approved by: <u> শ্র</u>েন্স Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix

WI LAB # 999447680

! = Due to sample quantity

CERTIFICATION: MN LAB # 027-015-125

· Bue to sample concentration + = Due to extract volume

ND WW/DW # 8-040 IA LAB #: 132 TA LAB #+ 022

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ND MICRO # 1013-M



WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

55359-9000

MAPLE PLAIN MN

Sample Description: CR 29.0

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Page: 1 of 1

Report Date: 16 Aug 06 Lab Number: 06-A32001 Work Order #:12-8600 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Jul 06 10:40 Date Received: 26 Jul 06 15:30

022

Temp at Receipt: 3.0C

Method As Received Method Date Result RL Reference Analyzed Analyst Phosphorus Water Digest 31 Jul 06 RMV BOD, Carbonaceous mg/L 9:41 < 2 2 SM 5210B 27 Jul 06 CJL CBOD, 20 Day 14 2 mg/L SM 5210B 27 Jul 06 16:31 PJB Solids, Total Suspended 63 mg/L 2 USGS I-3765-85 27 Jul 06 7:45PJB Carbon, Total Organic 7.4 mg/L 0.5 415.1 3 Aug 06 8:00 Bis Chlorophyll a 8.6 mg/cubic m 1.0 10200H 31 Jul 06 9:59 JD 26 Jul 06 17:20 CFU/100 mL SM 9222D 18th Ed Fecal Coliform, MF 4000 10. VRK 353.2 30 Jul 06 15:03 Nitrate+Nitrite 1.02 mg/L as N 0,20 JGS Nitrogen, Ammonia < 0.08 mg/L 0,08 4500 NH3 B, E 2 Aug 06 8:05 TAM 0.222 0.005 EPA 365.1 1 Aug 06 9:22 RMV Phosphorus, Total mg/L Phosphorus, Ortho 0.165 mg/L 0.005 EPA 365.1 27 Jul 06 8:19 RMV SM 4500NorgB/NH3 E 28 Jul 06 14:20 Nitrogen, Total Kjeldahl 1.4 mq/L 0.1 TAM

CFU = Colony Forming Units

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\* Holding time Exceeded

|  | Entl   |
|--|--|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN            | WB   |
| Reporting Limit  | $\sim 10/0/00$   |
| levated "Less Than Result" (<): @ ≈ Due to sample matrix<br>! ≈ Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| ERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MI                            | CRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #:                |



WES BOLL

Sample Description: CR 27.2

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 16 Aug 06 Lab Number: 06-A32000 Work Order #:12-8600 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Jul 06 10:15 Date Received: 26 Jul 06 15:30

Temp at Receipt: 3.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 31 Jul 06        | RMV     |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 27 Jul 06 9:41   | CJL     |
| CBOD, 20 Day             | 22                 | mg/L       | 2            | SM 5210B            | 27 Jul 06 16:31  | PJB     |
| Solids, Total Suspended  | 19                 | mg/L       | 2            | USGS I-3765-85      | 27 Jul 06 7:45   | PJB     |
| Carbon, Total Organic    | 17.6               | mg/L       | 0.5          | 415.1               | 3 Aug 06 8:00    | Bis     |
| Chlorophyll a            | 19.7               | mg/cubic m | 1.0          | 10200H              | 31 Jul 06 9:59   | JD      |
| Fecal Coliform, MF       | * 1600             | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Jul 06 17:20  | VRK     |
| Nitrate+Nitrite          | 0.67               | mg/L as N  | 0.20         | 353.2               | 30 Jul 06 15:02  | JGS     |
| Nitrogen, Ammonia        | 0.57               | mg/L       | 0,08         | 4500 NH3 B, E       | 2 Aug 06 8:05    | TAM     |
| Phosphorus, Total        | 0.720              | mg/L       | 0.005        | EPA 365.1           | 1 Aug 06 9:22    | RMV     |
| Phosphorus, Ortho        | 0.581              | mg/L       | 0.005        | EPA 365.1           | 27 Jul 06 8:18   | RMV     |
| Nitrogen, Total Kjeldahl | 2.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 28 Jul 06 14:20  | TAM     |
|                          |                    |            | · · · · · ·  |                     |                  |         |

CFU = Colony Forming Units

\* Holding time Exceeded

WB 10/10/06 Zs Approved by Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix # Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 ND MICRO # 1013-M WI LAB # 999447680 ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

MVTL

WES BOLL

Sample Description: CR 25.6

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Page: 1 of 1

Report Date: 16 Aug 06 Lab Number: 06-A31999 Work Order #:12-8600 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 26 Jul 06 9:30 Date Received: 26 Jul 06 15:30

Temp at Receipt: 3.0C

|                            | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|----------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest    |                    |            |              |                     | 31 Jul 06        | RMV     |
| BOD, Carbonaceous          | 2                  | mg/L       | 2            | SM 5210B            | 27 Jul 06 9:41   | CJL     |
| CBOD, 20 Day               | 12                 | mg/L       | 2            | SM 5210B            | 27 Jul 06 16:31  | PJB     |
| Solids, Total Suspended    | 17                 | mg/L       | 2            | USGS I-3765-85      | 27 Jul 06 7:45   | PJB     |
| Carbon, Total Organic      | 11.8               | mg/L       | 0.5          | 415.1               | 3 Aug 06 8:00    | Bis     |
| Chlorophyll a              | 4.6                | mg/cubic m | 1.0          | 10200H              | 31 Jul 06 9:59   | JD      |
| Fecal Coliform, MF         | * 140              | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Jul 06 17:20  | VRK     |
| Nitrate+Nitrite            | < 0.2              | mg/L as N  | 0.2          | 353.2               | 30 Jul 06 15:02  | JGS     |
| Nitrogen, Ammonia          | 0.36               | mg/L       | 0.08         | 4500 NH3 B, E       | 2 Aug 06 8:05    | TAM     |
| Phosphorus, Total          | 0.299              | mg/L       | 0.005        | EPA 365.1           | 1 Aug 06 9:22    | RMV     |
| Phosphorus, Ortho          | 0.198              | mg/L       | 0.005        | EPA 365.1           | 27 Jul 06 8:18   | RMV     |
| Nitrogen, Total Kjeldahl   | 1.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 28 Jul 06 14:20  | TAM     |
| CEU - Colony Forming Units |                    |            | 4            | ine There ded       |                  |         |

CFU = Colony Forming Units

\* Holding time Exceeded

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | WB - 10/10/06  |
|---|--|
| Reporting Limit   |  |
| Elevated "Less Than Result" (<): $\theta = Due$ to sample matrix $! = Due$ to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |



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Project Name: CRWD

Sample Description: CR 31.8

1 of 1 Page:

Report Date: 15 Sep 06 Lab Number: 06-A36964 Work Order #:12-9607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 23 Aug 06 12:30 Date Received: 23 Aug 06 15:30 PO #: CRWD

Temp at Receipt: 9.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 26 Aug 06        | RLB     |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 24 Aug 06 14:34  | CJL     |
| CBOD, 20 Day             | 16                 | mg/L       | 2            | SM 5210B            | 24 Aug 06 15:59  | AKF     |
| Solids, Total Suspended  | 9                  | mg/L       | 2            | USGS 1-3765-85      | 24 Aug 06 10:50  | CJL     |
| Carbon, Total Organic    | 9.4                | mg/L       | 0.5          | 415.1               | 31 Aug 06 8:15   | Bis     |
| Chlorophyll a            | 1.8                | mg/cubic m | 1.0          | 10200H              | 25 Aug 06 7:35   | JD      |
| Fecal Coliform, MF       | 3400               | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 23 Aug 06 18:30  | CAK     |
| Chloride                 | 10.5               | mg/L       | 3.0          | 325.2               | 25 Aug 06 15:43  | RMV     |
| Nitrate+Nitrite          | 0.22               | mg/L as N  | 0.20         | 353.2               | 30 Aug 06 12:36  | RMV     |
| Nitrogen, Ammonia        | < 0.08             | mq/L       | 0.08         | 4500 NH3 B, E       | 28 Aug 06 10:15  | RSL     |
| Phosphorus, Total        | 0.228              | mg/L       | 0.005        | EPA 365.1           | 28 Aug 06 11:32  | RMV     |
| Phosphorus, Ortho        | 0,191              | mg/L       | 0.005        | EPA 365.1           | 24 Aug 06 7:23   | RMV     |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 29 Aug 06 16:40  | RSL     |

FU = Colony Forming Units

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| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | W B<br>10/10/06  |
|--|--|
| = Reporting Limit  |  |
| Elevated "Less Than Result" (<): $\emptyset$ = Due to sample matrix $!$ = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume   |
| CERTIFICATION: MN 1.4R # 073-015-125 - MI 1.4R # 999447680                                       | ND MICRO # 1613-M ND WW/DW # R-646 TA TAR #+ 132 TA TAR #+ 622 |



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#### Project Name: CRWD

Sample Description: CR 29.0

Page: 1 of 1

Report Date: 15 Sep 06 Lab Number: 06-A36963 Work Order #:12-9607 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 23 Aug 06 11:30 Date Received: 23 Aug 06 15:30 PO #: CRWD

Temp at Receipt: 9.0C

| 26 Aug 0<br>24 Aug 0<br>24 Aug 0<br>24 Aug 0 | 6 14:34  | RLB<br>CJL  |
|--|--|---|
| 24 Aug 0                                     |  | CJL   |
| 2  |  |   |
| : 05   | 6 15:59  | AKF   |
| 5-85 24 Aug 0                                | 6 10:50  | CJL   |
| 31 Aug 0                                     | 6 8:15   | Bis   |
| 25 Aug 0                                     | 6 7:35   | JD  |
| Bth Ed 23 Aug 0                              | 6 18:30  | CAK   |
| 25 Aug 0                                     | 6 15:43  | RMV   |
| 30 Aug 0                                     | 6 12:36  | RMV   |
| E 28 Aug 0                                   | 6 10:15  | RSL   |
| 28 Aug 0                                     | 6 11:32  | RMV   |
| 24 Aug 0                                     | 6 7:23   | RMV   |
| gB/NH3 E 29 Aug 0                            | 6 16:40  | RSL   |
| ,  | th Ed 23 Aug 0<br>25 Aug 0<br>30 Aug 0<br>E 28 Aug 0<br>28 Aug 0<br>24 Aug 0 | th Ed 23 Aug 06 18:30<br>25 Aug 06 15:43<br>30 Aug 06 12:36<br>E 28 Aug 06 10:15<br>28 Aug 06 11:32<br>24 Aug 06 7:23 |

"U = Colony Forming Units"

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\* Holding time Exceeded

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| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                         | WB<br>10/10/06   |  |
|---|--|--|
| > Reporting Limit   |  |  |
| Elevated "Less Than Result" (<): $\theta$ $\approx$ Due to sample matrix ! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |  |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |  |

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Sample Description: CR 33.6

Project Name: CRWD

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Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42119 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 13:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

| g/L<br>g/L<br>g/L | 2            | SM 5210B<br>SM 5210B     | 3 Oct 06<br>26 Sep 06 15:10                | DAP<br>AKF   |
|-------------------|--------------|--------------------------|--|--|
| g/L<br>g/L        | 2<br>2       |                          |  | AKF  |
| g/L<br>g/L        | 2            | SM 5210B                 |  |  |
| g/L               | -            |                          | 26 Sep 06 15:45                            | CJL  |
|                   | 2            | USGS I-3765-85           | 26 Sep 06 13:30                            | CJL  |
| q/L               | 0.5          | 415.1                    | 28 Sep 06 8:00                             | Bis  |
| g/cubic m         | 1.0          | 10200H                   | 6 Oct 06 6:31                              | JD   |
| FU/100 mL         | 10.          | SM 9222D 18th Ed         | 26 Sep 06 12:40                            | INP  |
| g/L               | 3.0          | 325.2                    | 29 Sep 06 14:37                            | DAP  |
| g/L as N          | 0.20         | 353.2                    | 2 Oct 06 13:20                             | DAP  |
| q/L               | 0.08         | 4500 NH3 B, E            | 28 Sep 06 9:40                             | TAM  |
|                   | 0.005        | EPA 365.1                | 4 Oct 06 9:23                              | DAP  |
| - · · ·           | 0.005        | EPA 365.1                | 26 Sep 06 15:15                            | DAP  |
|                   | 0.1          | SM 4500NorgB/NH3 E       | 28 Sep 06 13:35                            | RMV  |
| ŀ                 | ig/L<br>ig/L | lg/L 0.005<br>lg/L 0.005 | g/L 0.005 EPA 365.1<br>g/L 0.005 EPA 365.1 | Image: General condition         Image: General condition <thimage: condition<="" general="" th=""> <thimage: ge<="" td=""></thimage:></thimage:> |

FU = Colony Forming Units

\* Holding time Exceeded

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Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Leas Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity - Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Project Name: CRWD

Sample Description: CR 31.8

Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42117 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 11:40 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|                          | As Receiv<br>Result | As Received<br>Result |       | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------|-----------------------|-------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                     |                       |       |                     | 3 Oct 06         | DAP     |
| BOD, Carbonaceous        | < 2                 | mg/L                  | 2     | SM 5210B            | 26 Sep 06 15:10  | AKF     |
| CBOD, 20 Day             | 42                  | mg/L                  | 2     | SM 5210B            | 26 Sep 06 15:45  | CJL     |
| Solids, Total Suspended  | 5                   | mg/L                  | 2     | USGS I-3765-85      | 26 Sep 06 13:30  | CJL     |
| Carbon, Total Organic    | 18.5                | mg/L                  | 0.5   | 415.1               | 28 Sep 06 8:00   | Bis     |
| Chlorophyll a            | 2.3                 | mg/cubic m            | 1.0   | 10200H              | 6 Oct 06 6:31    | JD      |
| Fecal Coliform, MF       | * 2700              | CFU/100 mL            | 10.   | SM 9222D 18th Ed    | 26 Sep 06 12:40  | INP     |
| Chloride                 | 37.3                | mg/L                  | 3.0   | 325.2               | 29 Sep 06 14:37  | DAP     |
| Nitrate+Nitrite          | 5.94                | mg/L as N             | 0.20  | 353.2               | 2 Oct 06 13:20   | DAP     |
| Nitrogen, Ammonia        | < 0.08              | mg/L                  | 0.08  | 4500 NH3 B, E       | 28 Sep 06 9:40   | TAM     |
| Phosphorus, Total        | 0.566               | mg/L                  | 0.005 | EPA 365.1           | 4 Oct 06 9:22    | DAP     |
| Phosphorus, Ortho        | 0.505               | mg/L                  | 0.005 | EPA 365.1           | 26 Sep 06 15:14  | DAP     |
| 'itrogen, Total Kjeldahl | 2.2                 | mg/L                  | 0.1   | SM 4500NorgB/NH3 E  | 28 Sep 06 13:35  | RMV     |

CFU = Colony Forming Units

\* Holding time Exceeded

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| Approved b     | y: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN           | <b>\$</b> -        | W-++                                   |              |               |
|----------------|--|--------------------|--|--------------|---------------|
| . = Reporting  | Limit  |                    |  |              |               |
| Elevated "Less | Than Result" {<}: @ = Due to sample matrix<br>! = Due to sample quantity |                    | sample concentration<br>extract volume | ł            |               |
| CERTIFICATION: | MN LAB # 027-015-125 WI LAB # 999447680 ND                               | D MICRO # 1613-M N | ID WW/DW # R-040 1                     | A LAB #: 132 | IA LAB #: 022 |



WES BOLL

Sample Description: TB 33.2

Project Name: CRWD

WENCK ASSOCIATES INC

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MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42118 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 12:30 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|   | As Recei<br>Result | ved                | Method<br>RL   | Method<br>Reference    | Date<br>Analyzed                   | Analyst    |
|---|--------------------|--------------------|----------------|------------------------|------------------------------------|------------|
| Phosphorus Water Digest                       |                    |                    | -              |                        | 3 Oct 06                           | DAP<br>AKF |
| BOD, Carbonaceous<br>CBOD, 20 Day             | 3<br>42            | mg/L<br>mg/L       | 2<br>2         | SM 5210B<br>SM 5210B   | 26 Sep 06 15:10<br>26 Sep 06 15:45 |            |
| Solids, Total Suspended                       | 7                  | mg/L               | 2              | USGS I-3765-85         | 26 Sep 06 13:30<br>28 Sep 06 8:00  |            |
| Carbon, Total Organic<br>Chlorophyll a        | 19.0<br>3.0        | mg/L<br>mg/cubic m | 0.5<br>1.0     | 415.1<br>10200H        | 6 Oct 06 6:31                      | JD         |
| Fecal Coliform, MF                            | * 390              | CFU/100 mL         | 10.            | SM 9222D 18th Ed       | 26 Sep 06 12:40<br>29 Sep 06 14:37 | INP<br>DAP |
| Chloride<br>Nitrate+Nitrite                   | 47.4<br>4.38       | mg∕L<br>mg∕L as N  | 3.0<br>0.20    | 325.2<br>353.2         | 2 Oct 06 13:20                     |            |
| Nitrogen, Ammonia                             | 0.29               | mg/L               | 0.08           | 4500 NH3 B, E          | 28 Sep 06 9:40<br>4 Oct 06 9:23    | TAM<br>DAP |
| Phosphorus, Total                             | 0.884<br>0.802     | mg/L<br>mg/L       | 0.005<br>0.005 | EPA 365.1<br>EPA 365.1 | 26 Sep 06 15:15                    |            |
| Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl | 2.3                | mg/L               | 0.1            | SM 4500NorgB/NH3 E     | 28 Sep 06 13:35                    | RMV        |

L'U = Colony Forming Units

\* Holding time Exceeded

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                | ۴  |
|---|--|
| - Reporting Limit   |  |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | # ≈ Due to sample concentration<br>+ = Due to extract volume |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO                         | # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022        |

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Project Name: CRWD

Sample Description: CR 29.0 F.T

Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42116 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 11:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 Oct 06         | DAP     |
| BOD, Carbonaceous        | 2                  | mg/L       | 2            | SM 5210B            | 26 Sep 06 15:10  | AKF     |
| CBOD, 20 Day             | 33                 | mg/L       | 2            | SM 5210B            | 26 Sep 06 15:45  | CJL     |
| Solids, Total Suspended  | 12                 | mg/L       | 2            | USGS I-3765-85      | 26 Sep 06 13:30  | CJL     |
| Carbon, Total Organic    | 18.1               | mg/L       | 0.5          | 415.1               | 28 Sep 06 8:00   | Bis     |
| Chlorophyll a            | 2.3                | mg/cubic m | 1.0          | 10200H              | 6 Oct 06 6:31    | JD      |
| Fecal Coliform, MF       | * 2900             | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 06 12:40  | INP     |
| Chloride                 | 32.5               | mg/L       | 3.0          | 325.2               | 29 Sep 06 14:37  | DAP     |
| Nitrate+Nitrite          | 5.70               | mg/L as N  | 0.20         | 353.2               | 2 Oct 06 13:20   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mg/L       | 0.08         | 4500 NH3 B, E       | 28 Sep 06 9:40   | TAM     |
| Phosphorus, Total        | 0.462              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 06 9:22    | DAP     |
| Phosphorus, Ortho        | 0.404              | mg/L       | 0.005        | EPA 365.1           | 26 Sep 06 15:14  | DAP     |
| Nitrogen, Total Kjeldahl | 2.0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 28 Sep 06 13:35  | RMV     |
| Nitrogen, Total Kjeldani | 2.0                | шдуг       |              | SM 4300NOLGB/NH3 E  | 20 Jeb 00 to.jo  | 1111    |

.FU = Colony Forming Units

\* Holding time Exceeded

P Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

. = Reporting Limit

| Elevated "Less Than Result" (<): $\theta$ = Due to sample matrix $!$ = Due to sample quantity | # = Due to sample concentration<br>+ = Due to extract volume   |
|---|--|
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 |

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N ....



WES BOLL

Sample Description: CR 29.0

Project Name: CRWD

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Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42115 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 11:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|                     | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|---------------------|-----------------------|--------------|---------------------|------------------|---------|
| orus Water Digest   |                       |              |                     | 3 Oct 06         | DAP     |
| Carbonaceous        | < 2 mg/L              | 2            | SM 5210B            | 26 Sep 06 15:10  | AKF     |
| 20 Day              | 26 mg/L               | 2            | SM 5210B            | 26 Sep 06 15:45  | CJL     |
| , Total Suspended   | 14 mg/L               | 2            | USGS I-3765-85      | 26 Sep 06 13:30  | CJL     |
| , Total Organic     | 17.5 mg/L             | 0.5          | 415.1               | 28 Sep 06 8:00   | Bis     |
| phyll a             | 2.4 mg/cubi           | cm 1.0       | 10200H              | 6 Oct 06 6:31    | JD      |
|                     | 3100 CFU/100          |              | SM 9222D 18th Ed    | 26 Sep 06 12:40  | INP     |
| .de                 | 32.3 mg/L             | 3.0          | 325.2               | 29 Sep 06 14:36  | DAP     |
| ce+Nitrite          | 5.67 mg/L as          | N 0.20       | 353.2               | 2 Oct 06 13:20   | DAP     |
| en, Ammonia         | < 0.08 mg/L           | 0.08         | 4500 NH3 B, E       | 28 Sep 06 9:40   | TAM     |
| orus, Total         | 0.457 mg/L            | 0.005        | EPA 365.1           | 4 Oct 06 9:22    | DAP     |
| orus, Ortho         | 0.403 mg/L            | 0.005        | EPA 365.1           | 26 Sep 06 15:14  | DAP     |
| gen, Total Kjeldahl | 2.3 mg/L              | 0.1          | SM 4500NorgB/NH3 E  | 28 Sep 06 13:35  | RMV     |
| en, Total Kjeldahl  | 2.3 mg/L              |              | SM 4500NorgB/NH3 E  | 28 Sep 06 13:35  |         |

.FU = Colony Forming Units

\* Holding time Exceeded

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN . = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: CR 27.2

Project Name: CRWD

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Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42114 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 10:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

| Result | ved   | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed  | Analyst |
|--------|---|--|--|---|---------|
|        |   |  |  | 3 Oct 06  | DAP     |
| < 2    | ma/L  | 2  | SM 5210B   | 26 Sep 06 15:10   | ) AKF   |
|        |   | 2  | SM 5210B   | 26 Sep 06 15:45   | i CJL   |
| 3      | -   | 2  | USGS I-3765-85   | 26 Sep 06 13:30   | ) CJL   |
| 17.7   | -   | 0.5  | 415.1  | 28 Sep 06 8:00  | ) Bis   |
|        |   | 1.0  | 10200H   | 6 Oct 06 6:33   | . JD    |
|        |   | 10.  | SM 9222D 18th Ed   | 26 Sep 06 12:40   | ) INP   |
|        |   | 3.0  | 325.2  | 29 Sep 06 14:3  | DAP     |
|        |   | 0.20   | 353.2  | 2 Oct 06 13:20  | ) DAP   |
|        |   |  | 4500 NH3 B, E  | 28 Sep 06 9:40  | ) TAM   |
|        | <b>.</b>  |  | EPA 365.1  | 4 Oct 06 9:23   | 2 DAP   |
|        | +   | 0.005  | EPA 365.1  | 26 Sep 06 15:14   | DAP     |
| 1.7    | mg/L  | 0.1  | SM 4500NorgB/NH3 E   | 28 Sep 06 13:3  | 5 RMV   |
|        | < 2<br>27<br>3<br>17.7<br>2.0<br>* 2200<br>21.6<br>3.62<br>< 0.08<br>0.389<br>0.339 | <pre>&lt; 2 mg/L 27 mg/L 3 mg/L 17.7 mg/L 2.0 mg/cubic m * 2200 CFU/100 mL 21.6 mg/L 3.62 mg/L as N &lt; 0.08 mg/L 0.389 mg/L 0.339 mg/L</pre> | <pre>&lt; 2 mg/L 2 27 mg/L 2 3 mg/L 2 17.7 mg/L 0.5 2.0 mg/cubic m 1.0 * 2200 CFU/100 mL 10. 21.6 mg/L 3.0 3.62 mg/L as N 0.20 &lt; 0.08 mg/L 0.08 0.389 mg/L 0.005 0.339 mg/L 0.005</pre> | <pre>&lt; 2 mg/L 2 SM 5210B 27 mg/L 2 SM 5210B 3 mg/L 2 USGS I-3765-85 17.7 mg/L 0.5 415.1 2.0 mg/cubic m 1.0 10200H * 2200 CFU/100 mL 10. SM 9222D 18th Ed 21.6 mg/L 3.0 325.2 3.62 mg/L AS N 0.20 353.2 &lt; 0.08 mg/L 0.08 4500 NH3 B, E 0.389 mg/L 0.005 EPA 365.1 0.339 mg/L 0.005 EPA 365.1</pre> | < 2     |

.FU = Colony Forming Units

\* Holding time Exceeded

£. -Approved by: ్రస Jason G. Smith, Inorganic ..... Laboratory Manager New Ulm, MN

, = Reporting Limit

Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CRWD

Sample Description: CR 25.6

Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42113 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 9:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 3 Oct 06         | DAP     |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 26 Sep 06 15:10  | AKF     |
| CBOD, 20 Day             | 25                 | mq/L       | 2            | SM 5210B            | 26 Sep 06 15:45  | CJL     |
| Solids, Total Suspended  | 8                  | mg/L       | 2            | USGS I-3765-85      | 26 Sep 06 13:30  | CJL     |
| Carbon, Total Organic    | 16.0               | mg/L       | 0.5          | 415.1               | 28 Sep 06 8:00   | Bis     |
| Chlorophvll a            | 1.4                | mg/cubic m | 1.0          | 10200н              | 4 Oct 06 8:20    | JD      |
| Fecal Coliform, MF       | * 2100             | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 26 Sep 06 12:40  | INP     |
| Chloride                 | 21.0               | mg/L       | 3.0          | 325.2               | 29 Sep 06 14:36  | DAP     |
| Nitrate+Nitrite          | 3.19               | mg/L as N  | 0.20         | 353.2               | 2 Oct 06 13:19   | DAP     |
| Nitrogen, Ammonia        | < 0.08             | mq/L       | 0.08         | 4500 NH3 B, E       | 28 Sep 06 9:40   | TAM     |
| Phosphorus, Total        | 0.368              | mg/L       | 0.005        | EPA 365.1           | 4 Oct 06 9:22    | DAP     |
| Phosphorus, Ortho        | 0.309              | mg/L       | 0.005        | EPA 365.1           | 26 Sep 06 15:14  | DAP     |
| 'itrogen, Total Kjeldahl | 2.0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 28 Sep 06 13:35  | RMV     |

CFU = Colony Forming Units

\* Holding time Exceeded

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN P .---= Reporting Limit # = Due to sample concentration
+ = Due to extract volume

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: CR 19.8

Project Name: CRWD

CERTIFICATION: MN LAB # 027-015-125

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Page: 1 of 1

Report Date: 16 Oct 06 Lab Number: 06-A42055 Work Order #:12-10896 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 25 Sep 06 14:00 Date Received: 26 Sep 06 10:45 PO #: CRWD

Temp at Receipt: 1.0C

|   | As Recei<br>Result                     | ved  | Method<br>RL                        | Method<br>Reference   | Date<br>Analyzed  | Analyst                               |
|---|--|--|-------------------------------------|---|---|---------------------------------------|
| Phosphorus Water Digest<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Nitrogen Total, Calculat | 5<br>41<br>17<br>14.4<br>44.7<br>2.6   | mg/L<br>mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>mg/L | 2<br>2<br>0.5<br>1.0<br>NA          | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>Calc | 3 Oct 06<br>26 Sep 06 14:56<br>26 Sep 06 15:45<br>26 Sep 06 10:45<br>28 Sep 06 8:00<br>4 Oct 06 8:20<br>2 Oct 06 13:19<br>29 Sep 06 14:36 | CJL<br>CJL<br>Bis<br>JD<br>Calculated |
| Chloride<br>Nitrate+Nitrite<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl   | 18.2<br>< 0.2<br>0.164<br>0.039<br>2.6 | mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L          | 3.0<br>0.2<br>0.005<br>0.005<br>0.1 | 325.2<br>353.2<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E    | 29 Sep 06 14:36<br>2 Oct 06 13:19<br>4 Oct 06 9:22<br>26 Sep 06 15:14<br>28 Sep 06 13:35  | DAP<br>DAP<br>DAP                     |

£. 4 Approved by: Xá Jason G. Smith, Inorganic \*\*\*\* Laboratory Manager New Ulm, MN 82. \_ = Reporting Limit Elevated "Less Than Result" (<):  $\emptyset$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume

WI LAB # 999447680

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ND MICRO # 1013-M ND WW/DW # R-040

IA LAB #: 132

IA LAB #: 022



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#### Project Name: CRWD STREAMS

Sample Description: CR 55

Page: 1 of 1

Report Date: 26 Oct 06 Lab Number: 06-A44218 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 12:00 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst      |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|--------------|
| Phosphorus Water Digest  |                    |            |              |                     | 10 Oct 06        | DAP          |
| BOD, Carbonaceous        | 4                  | mg/L       | 2            | SM 5210B            | 6 Oct 06 10:1    | 7 AKF        |
| CBOD, 20 Day             | 6                  | mg/L       | 2            | SM 5210B            | 6 Oct 06 11:0    | 4 JED        |
| Solids, Total Suspended  | 7                  | mg/L       | 2            | USGS I-3765-85      | 6 Oct 06 8:1     | 5 CJL        |
| Carbon, Total Organic    | 11.0               | mg/L       | 0.5          | 415.1               | 12 Oct 06 8:0    | 0 Bis        |
| Chlorophyll a            | 33.7               | mg/cubic m | 1.0          | 10200H              | 11 Oct 06 6:0    | 5 JD         |
| Nitrogen Total, Calculat | 1.2                | mq/L       | NA           | Calc                | 11 Oct 06 8:0    | 5 Calculated |
| Chloride                 | 20.2               | mg/L       | 3.0          | 325.2               | 10 Oct 06 13:3   | 5 DAP        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 9 Oct 06 15:3    | 6 DAP        |
| Nitrogen, Ammonia        | 0.44               | mg/L       | 0.08         | 4500 NH3 B, E       | 11 Oct 06 7:2    | 0 RMV        |
| Phosphorus, Total        | 0.090              | mg/L       | 0.005        | EPA 365.1           | 12 Oct 06 13:1   | 1 DAP        |
| Phosphorus, Ortho        | 0.013              | mg/L       | 0.005        | EPA 365.1           | 6 Oct 06 10:1    | 1 DAP        |
| Nitrogen, Total Kjeldahl | 1.2                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 11 Oct 06 8:0    | 5 RMV        |

B. L Approved by: 63-Jason G. Smith, Inorganic ..... Laboratory Manager New Ulm, MN \* Reporting Limit Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume

WI LAB # 999447680

CERTIFICATION: MN LAB # 027-015-125

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ND MICRO # 1013-M

ND WW/DW # R-040

IA LAB #: 132

IA LAB #: 022

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WES BOLL

Project Name: CRWD STREAMS

Sample Description: CR 33.6

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Page: 1 of 1

Report Date: 26 Oct 06 Lab Number: 06-A44212 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 10:00 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|  | As Receiv<br>Result  | ved   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst   |
|--|--|---|---|--|--|---|
| Phosphorus Water Digest<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Fecal Coliform, MF<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total | < 2<br>8<br>2<br>18.0<br>1.6<br>* 600<br>41.5<br>12.7<br>< 0.08<br>0.232 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>CFU/100 mL<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>10.<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005 | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>SM 9222D 18th Ed<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1 | 10 Oct 06<br>6 Oct 06 10:17<br>6 Oct 06 11:04<br>6 Oct 06 8:15<br>12 Oct 06 8:00<br>11 Oct 06 6:05<br>5 Oct 06 17:35<br>10 Oct 06 13:35<br>9 Oct 06 15:33<br>11 Oct 06 7:20<br>12 Oct 06 13:11<br>6 Oct 06 10:11 | DAP<br>AKF<br>JED<br>CJL<br>Bis<br>JD<br>INP<br>DAP<br>DAP<br>RMV<br>DAP<br>DAP |
| Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl  | 0.200<br>2.2   | mg/L  | 0.1   | SM 4500NorgB/NH3 E   | 11 Oct 06 8:05   | RMV   |

FU = Colony Forming Units

\* Holding time Exceeded

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | nat<br>V   |
|---|--|
| = Reporting Limit   |  |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |

NB



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#### Project Name: CRWD STREAMS

Sample Description: TB 33.2

Report Date: 26 Oct 06 Lab Number: 06-A44211 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 9:40 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

#### Temp at Receipt: 5.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                    |            |              |                     | 10 Oct 06        | DAP     |
| BOD, Carbonaceous        | 3                  | mg/L       | 2            | SM 5210B            | 6 Oct 06 10:17   | AKF     |
| CBOD, 20 Day             | 11                 | mg/L       | 2            | SM 5210B            | 6 Oct 06 11:04   | JED     |
| Solids, Total Suspended  | 2                  | mg/L       | 2            | USGS I-3765-85      | 6 Oct 06 8:15    | CJL     |
| Carbon, Total Organic    | 12.0               | mg/L       | 0.5          | 415.1               | 12 Oct 06 8:00   | Bis     |
| Chlorophyll a            | 3.9                | mq/cubic m | 1.0          | 10200H              | 11 Oct 06 6:05   | JD      |
| Fecal Coliform, MF       | * 58000            | CFU/100 mL | 10.          | SM 9222D 18th Ed    | 5 Oct 06 17:35   | INP     |
| Chloride                 | 54.9               | mg/L       | 3.0          | 325.2               | 10 Oct 06 13:35  | DAP     |
| Nitrate+Nitrite          | 4,91               | mg/L as N  | 0.20         | 353.2               | 9 Oct 06 15:33   | DAP     |
| Nitrogen, Ammonia        | 0.59               | mg/L       | 0.08         | 4500 NH3 B, E       | 11 Oct 06 7:20   | RMV     |
| Phosphorus, Total        | 0.609              | mg/L       | 0.005        | EPA 365.1           | 12 Oct 06 13:11  | DAP     |
| Phosphorus, Ortho        | 0.555              | mg/L       | 0.005        | EPA 365.1           | 6 Oct 06 10:11   | DAP     |
| Nitrogen, Total Kjeldahl | 2,4                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 11 Oct 06 8:05   | RMV     |

.FU = Colony Forming Units

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\* Holding time Exceeded

| 1/LSUNO   |  |       |       |       |       |     |
|---|--|-------|-------|-------|-------|-----|
| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                            | ₩  |       |       |       |       |     |
| ≈ Reporting Limit   |  |       |       |       |       |     |
| Elevated "Less Than Result" (<): $\mathfrak{G}$ = Due to sample matrix $!$ = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |       |       |       |       |     |
| CERTIFICATION: MN LAB # 027-015-125 W1 LAB # 999447680  | ND MICRO # 1013-M ND WW/DW # R-040 IA 1                              | LAB # | : 132 | 1A L/ | AB #; | 022 |



WES BOLL

Project Name: CRWD STREAMS

Sample Description: CR 31.8

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 26 Oct 06 Lab Number: 06-A44213 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 10:30 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|                          |        | Method<br>Reference | Date<br>Analyzed | Analyst            |                 |     |
|--------------------------|--------|---------------------|------------------|--------------------|-----------------|-----|
| Phosphorus Water Digest  |        |                     |                  |                    | 10 Oct 06       | DAP |
| BOD. Carbonaceous        | < 2    | mg/L                | 2                | SM 5210B           | 6 Oct 06 10:17  | AKF |
| CBOD, 20 Day             | 13     | mg/L                | 2                | SM 5210B           | 6 Oct 06 11:04  | JED |
| Solids, Total Suspended  | 3      | mg/L                | 2                | USGS I-3765-85     | 6 Oct 06 8:15   | CJL |
| Carbon, Total Organic    | 13.0   | mg/L                | 0.5              | 415.1              | 12 Oct 06 8:00  | Bis |
| Chlorophyll a            | 2.8    | mg/cubic m          | 1.0              | 10200H             | 11 Oct 06 6:05  | JD  |
| Fecal Coliform, MF       | * 1100 | CFU/100 mL          | 10.              | SM 9222D 18th Ed   | 5 Oct 06 17:35  | INP |
| Chloride                 | 35.1   | mg/L                | 3.0              | 325.2              | 10 Oct 06 13:35 | DAP |
| Nitrate+Nitrite          | 4.61   | mg/L as N           | 0.20             | 353.2              | 9 Oct 06 15:33  | DAP |
| Nitrogen, Ammonia        | < 0.08 | ma/L                | 0.08             | 4500 NH3 B, E      | 11 Oct 06 7:20  | RMV |
| Phosphorus, Total        | 0.252  | mg/L                | 0.005            | EPA 365.1          | 12 Oct 06 13:11 | DAP |
| Phosphorus, Ortho        | 0,219  | mg/L                | 0.005            | EPA 365.1          | 6 Oct 06 10:11  | DAP |
| Nitrogen, Total Kjeldahl | 1.5    | mg/L                | 0.1              | SM 4500NorgB/NH3 E | 11 Oct 06 8:05  | RMV |
|                          |        |                     | بد سماله 1 ما ۲  | ime Exceeded       |                 |     |

FU = Colony Forming Units

N

\* Holding time Exceeded

| MA  |  |
|---|--|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | ₩<br>¥•  |
| = Reporting Limit   |  |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Project Name: CRWD STREAMS

Sample Description: CR 29.0

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 26 Oct 06 Lab Number: 06-A44214 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 10:50 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|                          | As Receiv<br>Result | ved        | Method Method<br>RL Reference |                    | Date<br>Analyzed | Analyst |  |
|--------------------------|---------------------|------------|-------------------------------|--------------------|------------------|---------|--|
|                          | ·                   |            |                               |                    | 10.0+4.00        | DAP     |  |
| Phosphorus Water Digest  |                     | 1.         | •                             | <b>SN 5310</b> B   | 10 Oct 06        |         |  |
| BOD, Carbonaceous        | < 2                 | mg/L       | 2                             | SM 5210B           | 6 Oct 06 10:17   | AKF     |  |
| CBOD, 20 Day             | 8                   | mg/L       | 2                             | SM 5210B           | 6 Oct 06 11:04   | JED     |  |
| Solids, Total Suspended  | 3                   | mg/L       | 2                             | USGS I-3765-85     | 6 Oct 06 8:15    | CJL     |  |
| Carbon, Total Organic    | 11.5                | mg/L       | 0.5                           | 415.1              | 12 Oct 06 8:00   | Bis     |  |
| Chlorophyll a            | 1.4                 | mg/cubic m | 1.0                           | 10200H             | 11 Oct 06 6:05   | JD      |  |
| Fecal Coliform, MF       | * 1500              | CFU/100 mL | 10.                           | SM 9222D 18th Ed   | 5 Oct 06 17:35   | INP     |  |
| Chloride                 | 31.0                | mg/L       | 3.0                           | 325.2              | 10 Oct 06 13:35  | DAP     |  |
| Nitrate+Nitrite          | 4.75                | mg/L as N  | 0.20                          | 353.2              | 9 Oct 06 15:36   | DAP     |  |
| Nitrogen, Ammonia        | < 0.08              | mq/L       | 0.08                          | 4500 NH3 B, E      | 11 Oct 06 7:20   | RMV     |  |
| Phosphorus, Total        | 0.272               | mg/L       | 0.005                         | EPA 365.1          | 12 Oct 06 13:11  | DAP     |  |
| Phosphorus, Ortho        | 0.238               | mg/L       | 0.005                         | EPA 365.1          | 6 Oct 06 10:11   | DAP     |  |
| Nitrogen, Total Kjeldahl | 1.3                 | mg/L       | 0.1                           | SM 4500NorgB/NH3 E | 11 Oct 06 8:05   | RMV     |  |

.FU = Colony Forming Units

\* Holding time Exceeded

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                             |  |     |
|---|--|-----|
| * Reporting Limit   |  |     |
| Elevated "Less Than Result" (<); $\emptyset$ $\simeq$ Due to sample matrix $!$ = Due to sample quantity | # ∞ Due to sample concentration<br>+ = Due to extract volume |     |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660  | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #:   | 022 |



WES BOLL

Project Name: CRWD STREAMS

Sample Description: CR 27.2

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

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Page: 1 of 1

Report Date: 26 Oct 06 Lab Number: 06-A44215 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 11:15 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|                           | As Received Method Method<br>Result RL Reference |            | Date<br>Analyzed | Analyst            |                 |     |
|---------------------------|--|------------|------------------|--------------------|-----------------|-----|
| Phosphorus Water Digest   |  |            |                  |                    | 10 Oct 06       | DAP |
| BOD, Carbonaceous         | 2  | mg/L       | 2                | SM 5210B           | 6 Oct 06 10:17  | AKF |
| CBOD, 20 Day              | 7  | mg/L       | 2                | SM 5210B           | 6 Oct 06 11:04  | JED |
| Solids, Total Suspended   | 9  | mg/L       | 2                | USGS 1-3765-85     | 6 Oct 06 8:15   | CJL |
| Carbon, Total Organic     | 12.5   | mg/L       | 0.5              | 415.1              | 12 Oct 06 8:00  | Bis |
| Chlorophyll a             | 1.4  | mg/cubic m | 1.0              | 10200H             | 11 Oct 06 6:05  | JD  |
| Fecal Coliform, MF        | * 310  | CFU/100 mL | 10.              | SM 9222D 18th Ed   | 5 Oct 06 17:35  | INP |
| Chloride                  | 28.2   | mg/L       | 3.0              | 325.2              | 10 Oct 06 13:35 | DAP |
| Nitrate+Nitrite           | 0.99   | mg/L as N  | 0.20             | 353.2              | 9 Oct 06 15:36  | DAP |
| Nitrogen, Ammonia         | < 0.08   | mq/L       | 0.08             | 4500 NH3 B, E      | 11 Oct 06 7:20  | RMV |
| Phosphorus, Total         | 0.222  | mq/L       | 0.005            | EPA 365.1          | 12 Oct 06 13:11 | DAP |
| Phosphorus, Ortho         | 0.088  | mg/L       | 0.005            | EPA 365.1          | 6 Oct 06 10:11  | DAP |
| Nítrogen, Total Kjeldahl  | 1.2  | mg/L       | 0.1              | SM 4500NorgB/NH3 E | 11 Oct 06 8:05  | RMV |
| FU = Colony Forming Units |  |            | * Holding t      | ime Exceeded       |                 |     |

Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN = Reporting Limit Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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#### Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CRWD STREAMS

Sample Description: CR 25.6

Report Date: 26 Oct 06 Lab Number: 06-A44216 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 11:40 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

|   | As Receiv<br>Result   | <i>r</i> ed   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed   | Analyst  |  |
|---|---|---|---|--|--|--|--|
| Phosphorus Water Digest<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Fecal Coliform, MF<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl | 2<br>9<br>2<br>12.0<br>37.9<br>340<br>27.5<br>1.07<br>< 0.08<br>0.206<br>0.106<br>0.9 | mg/L<br>mg/L<br>mg/L<br>mg/cubic m<br>CFU/100 mL<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L<br>mg/L | 2<br>2<br>2<br>1.0<br>10.<br>3.0<br>0.20<br>0.08<br>0.005<br>0.005<br>0.1 | SM 5210B<br>SM 5210B<br>USGS I-3765-85<br>415.1<br>10200H<br>SM 9222D 18th Ed<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E | 10 Oct 06<br>6 Oct 06 10:17<br>6 Oct 06 11:04<br>6 Oct 06 8:15<br>12 Oct 06 8:00<br>11 Oct 06 6:05<br>5 Oct 06 17:35<br>10 Oct 06 13:35<br>9 Oct 06 15:36<br>11 Oct 06 7:20<br>12 Oct 06 13:11<br>6 Oct 06 10:11<br>11 Oct 06 8:05 | DAP<br>AKF<br>JED<br>CJL<br>Bis<br>JD<br>INP<br>DAP<br>DAP<br>RMV<br>DAP<br>DAP<br>RMV<br>DAP<br>RMV |  |

FU = Colony Forming Units

B. L <u> 75</u> Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

= Reporting Limit

Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any ether sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

w. ....



WES BOLL

Project Name: CRWD STREAMS

Sample Description: FD1

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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1 of 1 Page:

Report Date: 26 Oct 06 Lab Number: 06-A44217 Work Order #:12-11353 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 5 Oct 06 Date Received: 5 Oct 06 15:00 PO #: CRWD STREAMS

Temp at Receipt: 5.0C

| As Recei<br>Result   |   | ved   | Method<br>RL   | Method<br>Reference  | Date<br>Analyzed  | Analyst  |
|--|---|---|--|--|---|--|
| Phosphorus Water Digest<br>BOD, Carbonaceous<br>CBOD, 20 Day<br>Solids, Total Suspended<br>Carbon, Total Organic<br>Chlorophyll a<br>Fecal Coliform, MF<br>Chloride<br>Nitrate+Nitrite<br>Nitrogen, Ammonia<br>Phosphorus, Total | < 2<br>5<br>2<br>12.5<br>1.8<br>* 2000<br>30.7<br>4.81<br>< 0.08<br>0.271 | mg/L<br>mg/L<br>mg/L<br>mg/Cubic m<br>CFU/100 mL<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L | 2<br>2<br>2<br>0.5<br>1.0<br>10.<br>3.0<br>0.20<br>0.08<br>0.005 | SM 5210B<br>SM 5210B<br>USGS 1-3765-85<br>415.1<br>10200H<br>SM 9222D 18th Ed<br>325.2<br>353.2<br>4500 NH3 B, E<br>EPA 365.1<br>EPA 365.1 | 10 Oct 06<br>6 Oct 06 10:1<br>6 Oct 06 11:0<br>6 Oct 06 8:1<br>12 Oct 06 8:0<br>11 Oct 06 6:0<br>5 Oct 06 17:3<br>10 Oct 06 13:3<br>9 Oct 06 15:3<br>11 Oct 06 7:2<br>12 Oct 06 13:3<br>6 Oct 06 10:1 | 4 JED<br>5 CJL<br>0 Bis<br>5 JD<br>5 INP<br>5 DAP<br>6 DAP<br>0 RMV<br>1 DAP |
| Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl  | 0.238<br>1.5  | mg/L<br>mg/L  | 0.005<br>0.1   | SM 4500NorgB/NH3 E   | 11 Oct 06 8:0   |  |
| <pre>FU = Colony Forming Units</pre>   |   | -   | * Holding t  | ime Exceeded   |   |  |

\*\* No collection time supplied by the client.

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | . 1944.<br><b>V</b>  |
|---|--|
| * Reporting Limit   |  |
| Elevated "Less Than Result" (<): @ = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

| MVTL | LABORATORIES,<br>1126 North Front Street | Inc. |
|------|--|------|
|      | New Ulm, MN 56073                        |      |

## CHAIN O' CUSTODY RECORD

Page \_\_\_\_\_ of \_\_\_\_

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| Wenck Associates, Inc.<br>1800 Pioneer Creek Ctr<br>Maple Plain, MN 55359-0249 |  |  |                        | Name                 | of Sa    | ample   | er;   | For faxed re                  | port check box   |          |  |
| Billing Address (indicate name and address if different from above):           |  |  | ····                   |                      |          | Bo      | <u> </u>  | Date Submit                   |  |          |  |
| _  |  | · · · · · · · · · · · · · · · · · · ·  |                        | Quote                | #        |         |   | 8/15/0                        |  |          |  |
|  |  |  | -                      | Proied               | t Nar    | me/Ni   | umber:  | Purchase Or                   |  | _        |  |
|  |  |  |                        |                      |          | 2-7     |   | i dicitase Or                 | uo: #.   |          |  |
|  |  |  |                        |                      |          |         | ······································                |                               |  |          |  |
| Lab<br>Use   | Your Sample<br>I.D. or Number                      | Sample<br>Description                  | Date<br>Time           | Soil                 | Vater    |         | le (Matrix or Substance)<br>Other (Please Be Specific | <u> </u>                      | Analyze For:   |          |  |
| Only   | Example  | Tank Bottom<br>Tank #3                 | 01/01/99<br>11:45 a.m. | Sampled Liquid Layer |          |         |   | ·                             | Vitamin A, TKN, Iron, Calcium<br>BOD, COD, Acetone, Shelf Life |          |  |
| A 28602  | TA 33.2  |  | B/15/05<br>B; 25       |                      | X        |         | Not bottom sludge                                     | Fecal                         |  | agada.   |  |
| 03   | CR 23.6  | •••••••••••••••••••••••••••••••••••••• | 8/15/05                | _                    |          |         |   | - recal                       | <u>Coliform</u>  |          |  |
| 04   | CR 31, 8   |  | 8/15/05                | _                    |          |         |   |                               |  |          |  |
| 05   | T 30, 7  | •••••••••••••••••••••••••••••••••••••• | 8/15/05                |                      |          |         |   |                               |  | _        |  |
|  | CR 30,0  |  | <u>'9:15</u>           |                      |          |         |   |                               | ·  |          |  |
| 06   |  |  | 9125                   |                      | -        |         |   |                               |  |          |  |
| <u>F0</u>  | CK 29.0  |  | <u>q:45</u>            |                      |          |         |   |                               |  |          |  |
| 08   | TW 71.8  |  | 10:00                  | _                    | _        |         |   |                               | AA   |          |  |
| - 09   | IE 77.8  |  | 10:05                  | -                    |          |         |   |                               |  |          |  |
| N.   | 1 27.3   |  | 10:15                  |                      | 7        |         |   |                               |  |          |  |
|  |  |  |                        |                      |          |         |   |                               |  |          |  |
| · .  | Transferred by:                                    | Comments:<br>(Sample Condition)        | Date<br>Time           | 2                    | R        | eceived | i by: (S  | Comments:<br>ample Condition) | Date °C  |          |  |
| <b>1</b>   | Wester Bold  | ala                                    | 8/15/08                | IXE                  | (P)      | 30C     |   | Tu                            | 18/40 20   |          |  |
| 2  |  |  | - toice                |                      | <u> </u> |         | O7 .  | fr.C.                         | 1590 0   |          |  |
| 3  | 1991 Martin Martin - 1                             |  |                        |                      |          |         |   |                               |  |          |  |
| Disposed of  | Ву:  |  |                        | Disp                 | osal     | Comr    | ments:  |                               |  |          |  |

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|---|---|---|-----------------|-------------------------------------|------------------------------|----------------|-----------------|----------------|--------------|--------------|-------------------|-----------------|-------------------|-------------|------------------|-----------------------------|--|--|--|--|
| Toll Fre  |   | Fax: (507) 359-28                           | 90              |                                     |                              |                |                 |                |              | wc           | ) rk              | Orc             | ler               | *#          | S.               | and Car                     | )2-75  |  |  |  |
|   | Name and Address:   |   |                 |                                     | Aco                          | coui           | <b>nt #</b> :   |                |              |              |                   |                 |                   |             |                  | Pho                         | ne #: (763) 479-4 <i>38</i> 3  |  |  |  |
| Wenck Associates<br>1800 Promer Crick Ctr<br>Maple Plan, MN 55355 |   |   |                 | Ves Boll For faxed report check box |                              |                |                 |                |              |              | #: 1763H A Hold - |                 |                   |             |                  |                             |  |  |  |  |
| Billing Address (Indicate if different from above):               |   |   |                 |                                     |                              |                | X               | 10             | sĺ           | ŚŊ           | 11                |                 |                   |             |                  | For e-mail report check box |  |  |  |  |
|   |   |   |                 | Qu                                  | ote                          | Nun            | nbei            | r              |              |              |                   |                 |                   |             | Date             | e Submitted:                |  |  |  |  |
|   |   |   |                 |                                     | Project Name/Number: Purchas |                |                 | chase Order #: |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | Sample  | Information                                 |                 |                                     |                              |                |                 |                | Bo           | ottle        | Ty                | pe              |                   |             |                  |                             | Analysis   |  |  |  |
| Lab<br>Number   | Sample ID   | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled                     | VOC Vials                    | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3    | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4     | Sterile plastic | Amber H2SO4       | 500 ml NaOH | Filtered? Y or N | Other:                      | Analysis Required  |  |  |  |
|   | CQ 3/4  | Water                                       | Thoules         | 0940                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             | Feral Conform  |  |  |  |
|   | T 30.7  |   | <u> </u>        | ()445                               |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | T 20.1  |   |                 | 0190                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | CA 20   |   |                 | 0445                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | CPA 29  |   |                 | 1000                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | TW 27.9   |   |                 | 1010                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | TE STE  |   |                 | 1015                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | - 27.3  |   |                 | 1020                                |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             |  |  |  |  |
|   | <u>CA 27.2</u>  |   | ⇒¥∕             | 1.725                               |                              |                |                 |                |              |              |                   |                 | 014605<br>11538/0 |             |                  |                             |  |  |  |  |
|   | FD  | Wyper                                       | 9/20/05         | t                                   |                              |                |                 |                |              |              |                   |                 |                   |             |                  |                             | KEMSKE PAPER CO. / DSWALD PUBLISHING CO., NEW ULM, MN 1800 787-38371 N7 45 |  |  |  |

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| <b>LABORATORIES, Inc.</b><br>1126 North Front Street<br>New Ulm, MN 56073 |                  |   |                 |                 |             | Chain of Custody Record Pageof               |                 |             |              |              |               |                 |             |             |                      |  |   |  |  |
|---|------------------|---|-----------------|-----------------|-------------|--|-----------------|-------------|--------------|--------------|---------------|-----------------|-------------|-------------|----------------------|--|---|--|--|
| Phone: (507) 354-8517<br>Toll Free: (800) 782-3557 Fax: (507) 359-2890    |                  |   |                 |                 |             |  | Work Order #    |             |              |              |               |                 |             |             |                      |  | 0000-75 -   |  |  |
| Company Name and Address:   |                  |   |                 |                 |             | Account #:                                   |                 |             |              |              |               |                 |             |             |                      | Phone #:                               |   |  |  |
| Wenck Associates  |                  |   |                 |                 |             |  | LINC 2 II       |             |              |              |               |                 |             |             |                      |  | Fax #:<br>For faxed report check box                                  |  |  |
|   |                  |   |                 |                 |             | Name of Sampler:<br>New Boll<br>Quote Number |                 |             |              |              |               |                 |             |             |                      | E-mail:<br>For e-mail report check box |   |  |  |
|   |                  |   |                 |                 |             | Project Name/Number:                         |                 |             |              |              |               |                 |             |             |                      | Purchase Order #:                      |   |  |  |
| Sample Information  |                  |   |                 |                 | Bottle Type |  |                 |             |              |              |               |                 |             |             |                      |  | Analysis  |  |  |
| Lab<br>Number   | Sample ID        | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VoC Vials   | 600 ml unpres.                               | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4 | 500 ml NaOH | Filtered? Y or N     | Other:                                 | i<br>Analysis Required  |  |  |
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|   | TC 33.2          |   |                 | 0490            |             |  |                 |             |              |              |               |                 |             |             |                      |  |   |  |  |
|   | TA 33.2          |   |                 | 0355            |             |  |                 |             |              |              |               |                 |             |             |                      |  |   |  |  |
|   | T 13 32.2        |   |                 | 0900            |             |  |                 |             |              |              |               |                 |             |             |                      |  |   |  |  |
|   | CR 35.3          |   |                 | 0105            |             |  |                 |             |              |              |               |                 |             |             |                      |  |   |  |  |
| {   | CA 33.6          |   |                 | 0415            |             |  |                 |             |              |              |               |                 |             |             | 9, 1800<br>81, (280) |  |   |  |  |
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| Toll Free     |  | //c   | ;ha             | ain                                      | 0                   |                  | <b></b>         |             |              |              |               |                  |             | Page <u>3</u> of <u>3</u> . |  |          |                                  |  |  |
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| Billing Addr  | illing Address (indicate if different from above): |   |                 |  |                     | Name of Sampler: |                 |             |              |              |               |                  |             |                             | E-mail:<br>For e-mail report check box |          |                                  |  |  |
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| Lab<br>Number | Sample ID  | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled                          | VoC Vials           | 500 ml unpres.   | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic  | Amber H2SO4 | 500 ml NaOH                 | Filtered? Y or N                       | Other:   | Analysis Reguired                |  |  |
|               | Ch 29.6  | Water-                                      | 0/24/1          | -1030                                    |                     |                  |                 |             |              |              |               |                  |             |                             | ata .                                  |          | Secol Californ                   |  |  |
|               | FD &   | Water                                       | -126/05         |  |                     |                  |                 |             |              |              |               |                  |             |                             |  |          |                                  |  |  |
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| MVTL                       | 1126 North Front Street<br>New Ulm, MN 56073                            | 5_ <i>1177/</i>                      |   |   |                           |                     | DY RECORE   | ) Page<br>coler # l                                       | 1 <sub>of</sub> <u>6</u><br>100208                                   |  |  |
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| Toll Free:                 | Phone: (507) 354-8517<br>(800) 782-3557 Fax: (507) 359-                 | 2890                                 |   |   |                           |                     | WORK ORDER #  |   |  |  |  |
| company Na<br>Wer          | me and Address:<br>IC & ASSociates, J<br>ess (indicate name and address |                                      |   |   | act:<br>Ne<br>pf S<br>VCS | s (<br>ample<br>Bol | <u>3511</u>   | Phone #:<br>Fax #:<br>For faxed report<br>Date Submitted: | check box  |  |  |
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| Lab<br>Use                 | Your Sample<br>I.D. or Number   | Sample<br>Description<br>Tank Bottom | Date<br>Time<br>01/01/99  | Soil  | Type (<br>Water           | Food                | le (Matrix or Substance)<br>Other (Please Be Specific)<br>Sampled Liquid Layer  |   | lyze For:  |  |  |
| Only                       | Example   | C.R.25.6                             | 11:45 a.m.<br>9/27/05   |   | V                         | X                   | Not bottom sludge   |   | Acetone, Shelf Life  |  |  |
|                            |   | CR27.2                               | 10145<br>9/27/05<br>120<br>4/27/05  |   |                           |                     | (1) 1000mh Unpillo<br>(1) 1000mh Unpillo<br>(1) 1000mh Amber<br>(1) 500mh H350<br>(1) 500mh H350<br>(1) 500mh H350<br>(1) 1000mh H050<br>(1) 1000mh Unpillo | NO. + NO.<br>TKN-Ni+<br>I Iron M                          | He-A, TP, TN,<br>Ammon a - Nim<br>Cogen, TOC, T<br>+ VSS<br>BOD, VSS |  |  |
| 1<br>2<br>3<br>Disposed of |   | Comments:<br>(Sample Condition)      | Date<br>Time<br>7 7 3 A /a<br>7 3 A /a<br>7 3 A /a<br>7 3 4 /a<br>7 3 4 /a<br>7 3 4 /a<br>7 /a<br>7 /a<br>7 /a<br>7 /a<br>7 /a<br>7 /a<br>7 /a<br>7 |   | <u>]4</u>                 | Com                 |   | Comments:<br>mple Condition)                              | Date °C  |  |  |

| MVTL        | LABORATORIES<br>1126 North Front Street<br>New Ulm, MN 56073<br>Phone: (507) 354-8517 | s inc                           |                      |                        |                 |                        | DY RE(   | AS                | Page  |              | <u>6</u><br>.0  |  |
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| Toll Free:  | (800) 782-3557 Fax: (507) 359-  | 2890                            |                      |                        |                 |                        | WORK   | ORDER #           |   |              |                 |  |
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|             | K Associates, ]   |                                 |                      | Conta<br>Name<br>Quote | of S            |                        | Boll   |                   | Fax #:<br>For faxed repo<br>Date Submitte   |              |                 |  |
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| Use<br>Only | Example   | Tank Bottom<br>Tank #3          | 01/01/99             | Soil                   | water           | Food                   | Sampled Liq  | luid Layer        | Vitamin A, TKN, Iron, Calcium<br>BOD, COD, Acetone, Shelf Life  |              |                 |  |
| •           | • • • • • • • • • • • • • • • • • • •   |                                 | 11:45 a.m.<br>9/27/0 | 5                      | X               |                        | Not botton   | - None            | 5 Day (R)   | A            | <u>።</u><br>ହչስ |  |
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|                  | K Associates, In  |                                 |                        | Name   | Ve≤<br>of Sa<br>Ne≤ | mple                  | 1999 - N. S.  |   | <sup>=</sup> ax #:<br><sup>=</sup> or faxed report<br>Date Submitted: | check box                                 |             |
|                  |   |                                 |                        | Projec   |                     |                       | umber:<br>)-75  | F   | <sup>9</sup> urchase Order i  | ł:  |             |
| Lab<br>Use       | Your Sample<br>I.D. or Number   | Sample<br>Description           | Date                   | Soil   |                     | organistices (1419-04 | ole (Matrix or Subs   |   | Ana   | lyze For:                                 |             |
| Only             | Example   | Tank Bottom<br>Tank #3          | 01/01/99<br>11:45 a.m. | Soil Water Food Other (Please Be Specific)           Soil         Water         Sampled Liquid Layer           Not bottom sludge         Not bottom sludge |                     |                       |   |   | Vitamin A,  | TKN, Iron, Calcium<br>Acetone, Shelf Life |             |
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| 1                | Medly Boll  |                                 | <u> 409/05</u>         |  | John                | X.                    | Man   | 0.  | x ] ( (   | 345 2800                                  |             |
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# **CHAIN OF CUSTODY RECORD**

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| Toll Free: (800) 782-3557 Fax: (507) 359-2    | 890                             |              |                    |               |            | WORK                                       | ORDER #                                 |                              |                           |                    |  |
| Company Name and Address:                     |                                 |              | Acco               | unt #:        |            |  |   | Phone #:                     |                           |                    |  |
| Wenck Associates, Inc                         |                                 | -            | Conta              | act:          |            | atha                                       |   |                              |                           |                    |  |
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|   |                                 |              | Nam                | e of S        | ampl       | er:<br>Boll                                |   | For faxed repor              | check box                 |                    |  |
| Billing Address (indicate name and address if | f different from above):        |              | Quot               |               | <u>122</u> | <u>&gt; 0011</u>                           |   | Date Submitted               | :                         |                    |  |
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| Lab Your Sample                               | Sample<br>Description           | Date         |                    | Type of Water | of Sam     | ple (Matrix or Sub                         |   | - An                         | alyze For:                |                    |  |
| USe   |                                 |              |                    |               |            | Other (Please<br>Sampled Liq<br>Not bottom | uid Layer                               | Vitamin A                    | nin A, TKN, Iron, Calcium |                    |  |
|   | CR 31.9                         | 11:45 a.m.   |                    | X             | X          | (1) 100mb                                  |   |                              | ), Acetone, Shelf         |                    |  |
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|   |                                 |              |                    |               |            | and the first and the second second second | 1- Amber                                | 0,107-                       | A                         | <u>, s. t.a.c.</u> |  |
|   |                                 |              |                    |               |            | (1)500mb                                   | NONE                                    | ORP.C                        | hloride.                  | 755                |  |
|   |                                 |              |                    |               |            | (2)500m2                                   | HaSOM                                   | TKN-N                        | tracen!                   | TOC.               |  |
|   |                                 |              |                    |               |            | (1) 500 mb                                 | HNO2                                    |                              |                           |                    |  |
|   | ~~ ~~ (                         |              | 1                  |               |            | (1) \$000m                                 | 14 4250                                 | TP, TN, M                    | b+ MG, A                  | marging the rece   |  |
|   | <u> 22 33,6</u>                 |              |                    |               |            |  |   | 1                            | -                         |                    |  |
|   |                                 |              |                    |               |            |  |   |                              |                           |                    |  |
|   |                                 |              |                    |               |            |  |   |                              |                           |                    |  |
| Transferred by:                               | Comments:<br>(Sample Condition) | Date<br>Time | _                  | R             | éceive     | d by:                                      |   | Comments:<br>nple Condition) | Date<br>Time              | C                  |  |
| 1 MUSLIG BALL                                 |                                 | 9/20/05      | - 1                | W             |            | A.C.                                       | 0.41                                    | •                            | 23.990                    |                    |  |
| 2   |                                 | 1.00         |                    | 1. 3. 18/     |            |  | rae<br>See See See See See              |                              |                           |                    |  |
| 3   |                                 |              |                    |               |            |  |   |                              |                           |                    |  |
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# **CHAIN OF CUSTODY RECORD**

Page <u>5 of 6</u>

#### PLEASE DO NOT WRITE IN THE SHADED AREAS

| New Ulm, MN 56073  |                                |                    |         |        |  |  |                              | 10020   | )9      |  |
|--|--------------------------------|--------------------|---------|--------|--|--|------------------------------|---|---------|--|
| Phone: (507) 354-8517<br>Toll Free: (800) 782-3557 Fax: (507) 359-2890 |                                |                    |         |        | WORK   | ORDER #  |                              |   | <br>    |  |
| Company Name and Address:  |                                | Accou              | nt #:   |        |  |  | Phone #:                     |   |         |  |
| Work A Dore May 2  | -                              | Conta              | ct;     | . 2    | Sell   |  |                              |   |         |  |
|  | -                              | Name               |         |        |  |  | For faxed report check box   |   |         |  |
| Billing Address (indicate name and address if different from above):   |                                | Quote              |         | Pres   |  |  | Date Submitted:              | · · · · · · · · · · · · · · · · · · ·           |         |  |
|  | -                              | Projec             | t Nan   | ne/Nu  | imber:                                       |  | Purchase Order a             | <b>#:</b>                                       |         |  |
| Lab Your Sample Sample<br>Lb. or Number Description                    | Date                           |                    |         |        | e (Matrix or Sub:                            |  |                              | here Fort                                       |         |  |
| Use I.D. or Number Description Only Example Tank Bottom Tank #3        | Time<br>01/01/99<br>11:45 a.m. | Soil               | Water   | Food   | Other (Please I<br>Sampled Liq<br>Not bottom | uid Laver  |                              | Iyze For:<br>TKN, Iron, Calci<br>Acetone, Shelf | um      |  |
| TF 33,2  | 9/07/05                        | -                  |         |        | Cooler                                       | 0.0.0.22.0.71.5000000000000000000000000000000000 | 5.00 AG                      |   |         |  |
| <u> </u>   | 11251/65<br>142-45<br>0107/02  |                    |         |        | Cooler                                       | 5  |                              | ÷   |         |  |
| T 30.2   | 910 900                        |                    |         |        | Cooler                                       | 6  | + 1/55                       | <u> </u>  | <u></u> |  |
| TA 33.2  | 9/27/00                        |                    |         |        | <u>Ceoler</u><br>Ceoler                      | 7  |                              |   |         |  |
| TB 33.2  | 105<br>540<br>4127105          | 7                  |         |        | Cooler                                       | AM 2010 CONTRACTOR CONTRACTOR                    |                              |   |         |  |
| TC33.2<br>FD1  | 1000                           | -                  |         |        | Cooler (                                     | 1.160 P.5 Charles and Contract State (1999)      |                              |   |         |  |
|  |                                | -                  |         |        | Cooleri                                      | 2  |                              | <u></u>   |         |  |
|  |                                |                    |         |        |  |  |                              |   |         |  |
| Transferred by: Comments:<br>(Sample Condition)                        | Date<br>Time                   | _                  | Re      | ceived | by:  |  | Comments:<br>nple Condition) | Date<br>Time                                    | °C      |  |
| 1 Willing the  | 1128/05                        | - (                | ).l.    |        | -).l   | ð.   | - Ive                        | <u>1558</u> 8                                   |         |  |
| 2 / 2  |                                | -                  | <u></u> |        |  |  |                              |   | -       |  |
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| STARS (SAM) (SAM) (SAM) | me and Address:   |                                 |                  | Account #:                           |                                    | Phone #:   |   |  |  |  |
|                         | lenck Associat  |                                 |                  | Contact:<br>Name of Sampler          |                                    | Fax #:<br>For faxed  | Fax #:<br>For faxed report check box    |  |  |  |
| Billing Addre           | ess (indicate name and address                          | if different from above):       |                  | Quote #:                             | <u></u>                            | Date Sub   | mitted:                                 |  |  |  |
|                         |   |                                 |                  | Project Name/Nu                      | mber:                              | Purchase   | Order #:                                |  |  |  |
| Lab                     | Your Sample   | Sample                          | Date             |                                      | ə (Matrix or Substa                |  | Anglung Ford                            |  |  |  |
| Use<br>Only             | I.D. or Number<br>Example                               | Description<br>Tank Bottom      | Time<br>01/01/99 | Soil Water Food                      | Other (Please Be<br>Sampled Liquid | Layer  | Vitamin A, TKN, Iron, Calcium           |  |  |  |
|                         | T 973   | Tank #3                         | 11:45 a.m.       |                                      | Not bottom sl                      |  | 30D, COD, Acetone, Shelf Life           |  |  |  |
|                         | TEOZA   |                                 | 17.05            | ana mananana mananana manjarisia par | Cooler                             | <u>7</u><br>G  | ne as l'evious                          |  |  |  |
|                         | TW278   |                                 | 9127105          | - X .                                | Cooler                             | 0  |   |  |  |  |
|                         |   |                                 | -                | _                                    |                                    |  |   |  |  |  |
|                         |   |                                 |                  |                                      |                                    |  |   |  |  |  |
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|                         |   | -                               | Date             |                                      |                                    |  |   |  |  |  |
|                         | Transferred by:   | Comments:<br>(Sample Condition) | Time             | Received.                            | by:                                | Comments:<br>(Sample Conditi   | on) Date °C                             |  |  |  |
| <b>1</b>                | UNIOUN YALL   |                                 | <u>- 9,29/6</u>  | - No prime No.                       | 1.1.                               | and a second | <u>- 136 Sept</u><br>- <u>1</u> 56 Sept |  |  |  |
| 2                       | V. S. S.  |                                 |                  | -                                    |                                    |  |   |  |  |  |
| 3                       |   |                                 |                  | -                                    |                                    |  |   |  |  |  |
| Disposed or             | r BA:   |                                 |                  | Disposal Comm                        | nents:                             |  |   |  |  |  |

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|-------------|--|--|--------------|-----------------|-----------------------------|-------------------------------|--------------|-------------------------------|-----------------|-------------|-------------|----------|--------------------------|---------------------------|---------------------------|
| Toll Fre    | Phone: (507) 354-85<br>e: (800) 782-3557 | 517<br>Fax: (507) 359-28   | 00           |                 |                             |                               | k            | Nork                          | Ord             | ler         | #           | 12       | - 4607                   |                           | • مر.<br>ش                |
|             | Name and Address: /                      | <u>rax. (507) 555-20</u>   | 20           |                 | Accour                      | nt #:                         |              | v                             |                 |             |             |          |                          |                           |                           |
|             | Weg Boll                                 | 763  | -479-        | Y 700           |                             |                               |              |                               |                 |             | ·           | <u> </u> |                          |                           |                           |
|             |  |  |              |                 | Contac                      | t:                            |              |                               |                 |             |             | Fax      | For faxed repo           | t check hoy               |                           |
|             | WANNEY Aggor                             | coates   | *****        |                 | Name o                      | of Sam                        | pler:        |                               |                 |             |             | E-n      | nail:                    | CHECK DOX                 |                           |
| Billing Add | iress (indicate if different             | from above):   |              |                 | Quote                       | Numbo                         |              |                               |                 |             |             |          | For e-mail repo          |                           |                           |
|             |  |  |              |                 | Guore                       | VUITIDE                       | 1            |                               |                 |             |             |          | e ouninitieu             | •                         |                           |
|             |  |  |              |                 | Project                     | Name                          | /Num         | bern                          | . Y _Aa         | ~           |             | Pur      | chase Order              | *#:                       |                           |
|             | Sample                                   | Information  |              |                 |                             | per w                         |              | ttle T                        |                 |             |             | 1        |                          | Analysis                  |                           |
|             |  |  |              |                 |                             |                               | Ī            |                               |                 |             |             |          |                          |                           |                           |
|             |  |  |              |                 | pres,                       | 1000 ml unpres<br>500 ml HNO3 | Ñ            | 504<br>2504                   | stic            | ŝ           | HOH         |          |                          | *                         |                           |
| Lab         |  | Sample Type  | Date         |                 | VOC Vials<br>500 ml unpres. | E E                           | 1000 ml HNO3 | H H                           | e pla           | r H2        | I Na(       |          |                          |                           |                           |
| Number      | Sample ID                                | (Food, Soil,<br>Water, Etc.)                                     | Sampled      | Time<br>Sampled | Voc<br>500 n                | 1000 ml unpre<br>500 ml HNO3  | 1000         | 500 ml H2SO4<br>1000 ml H2SO4 | Sterile plastic | Amber H2S04 | 500 ml NaOH | Other:   | Ana                      | lysis Requi               | ired                      |
| A13630      | TA-33.2                                  | Water  | 04/19/06     |                 |                             |                               |              |                               |                 |             |             |          | 1                        | NOSTRO3                   |                           |
| A13588      | TB33.2                                   |  |              | 14:40           |                             |                               |              |                               |                 |             |             |          |                          |                           | 1 1                       |
| A13638      | CA33.6                                   |  |              | 14120           |                             |                               |              |                               |                 |             |             |          |                          |                           |                           |
| A13671      | CB31.66                                  |  |              | 14:00           |                             |                               |              |                               |                 |             |             |          |                          |                           | <u> </u>                  |
| A13640      | T 30.7                                   |  |              | 13150           |                             |                               |              |                               |                 |             |             |          |                          |                           |                           |
| A13641      | T-300.                                   |  |              | 13:40           |                             |                               |              |                               |                 |             |             |          |                          |                           |                           |
| A13642      | CA30.0                                   |  |              | 13125           |                             |                               |              |                               |                 |             |             |          |                          |                           |                           |
| A13643      | CA 35,3                                  |  |              | 11 : 30         |                             |                               |              |                               |                 |             |             |          |                          | [                         |                           |
| A13644      | T32.2                                    |  |              | 11:15           |                             |                               |              |                               |                 |             |             |          |                          |                           |                           |
| A13645      | TA-30.0                                  | Water  | 04/14/04     | (0:55           |                             |                               |              |                               |                 |             |             |          | TPOPT                    | V, Northo                 | 13 Ama TRA/               |
| Comments    |  | <b>A</b> N   | ╶╳╌┼┟╧┼┟╧╧╧┙ |                 |                             | . <u>f</u>                    | <u> </u>     |                               | f_              |             | 1           | <b>.</b> | KEMSKE PAPER CO. / OSWAL | 2 PUBLISHING CO., NEW ULI | M. M4 (800 782-3512) N749 |

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| 1. Medantal     | 041906 | (650  | orter,            | KUGO         | GAROS | 1853  | 30    |
| 2.              |        |       |                   |              | 1     |       |       |

|               | 1126 North Fi<br>New Ulm, MN            | 56073                                       | 8               | , 1999 (h.,     | C         | ha             |                 | of          | Cı           | 15           | toc           | ly         | Re          | co               | rd                                    | F                | 'age              | 2       | 0       | f_(                      |                    |      |
|---------------|---|---|-----------------|-----------------|-----------|----------------|-----------------|-------------|--------------|--------------|---------------|------------|-------------|------------------|---------------------------------------|------------------|-------------------|---------|---------|--------------------------|--------------------|------|
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|               | Name and Address:                       | 763-4                                       |                 | \$0             | Aco       | coui           | nt #:           |             |              |              |               |            |             |                  | Pho                                   | one #:           |                   |         |         | ************************ |                    | •    |
|               |   |   |                 |                 | Coi       | ntac           | :t:             |             |              |              |               |            |             |                  | Fax                                   |                  |                   |         |         |                          | 7                  |      |
|               | Wendy Aggoci                            |   |                 |                 | Nar       | me (           | of Sa           | mpl         | ler:         |              |               |            |             |                  | E-n                                   | hor ta<br>nail:  | ted rep           | ort che | eck box | <u> </u>                 | <u> </u>           |      |
| Billing Add   | ress (indicate if different             | from above):                                |                 |                 |           | ota            | Num             | hor         |              |              |               | •          |             |                  | · · · · · · · · · · · · · · · · · · · | For e-n<br>e Sub |                   |         | eck bo) | <u> </u>                 | _                  |      |
|               |   |   |                 |                 |           |                |                 |             |              |              |               |            |             |                  | Uai                                   | e ouu            | annre             | u:      |         |                          |                    |      |
|               |   |   |                 |                 | Pro       |                |                 |             | luml         |              |               | ~          |             |                  | Pur                                   | chase            | e Ord             | er #:   |         |                          |                    |      |
|               | Sample                                  | Information                                 |                 |                 |           | 71             | <u> </u>        |             | Boti         |              |               |            |             |                  | <u> </u>                              | ]                |                   | An      | alysis  | 3                        |                    |      |
| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | Voc Vials | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Amhor HISO | 500 ml NaOH | Filtered? Y or N |                                       |                  | ٨٣                | alvei   | s Req   | uirod                    |                    |      |
| A13630        | TA33,2                                  | Water                                       | 04/14/00        | 14.90           |           | - 01           |                 |             |              | <u>0</u>     | 5             |            |             | <u></u>          |                                       | 1                |                   |         |         | uneu<br>1)-70,           | 755                |      |
| A13588        | TB33,2                                  | j   |                 | 14:40           | -         |                |                 |             |              |              |               |            |             | 1                |                                       |                  | <u></u>           |         | 101     | 1                        |                    |      |
| A13638        | CB 33.6                                 |   |                 | (4:20           |           |                |                 |             |              |              |               |            |             |                  |                                       |                  |                   |         |         | 1                        |                    | 1499 |
| A13639        | (1231,9                                 |   |                 | 14:00           |           |                |                 |             |              |              |               |            |             |                  | <u> </u>                              |                  |                   |         |         | 1                        |                    | 1499 |
| A13640        | T-30.7                                  |   |                 | 13:50           |           |                |                 |             |              |              |               |            |             |                  |                                       |                  |                   |         |         | 1                        |                    |      |
| A13641        | てう0.1                                   |   |                 | 13:40           |           |                | ŀ               |             |              |              |               |            |             |                  |                                       |                  |                   |         |         | 1                        |                    |      |
| A13642        | CA30.0                                  |   |                 | 13:25           |           |                |                 |             |              |              |               |            |             |                  |                                       |                  |                   |         |         |                          | 1                  | V59  |
| A 13643       | Ch35.3                                  |   |                 | 11:30           |           |                |                 |             |              |              |               |            |             |                  |                                       |                  |                   |         |         |                          |                    | V99  |
| A13644        | T32.2                                   |   |                 | 11:15           |           |                |                 |             |              |              |               |            |             |                  |                                       | l                |                   | ĺ       |         |                          |                    |      |
| A 13645       | TA 30.9                                 | Water                                       | 00/p/14         | 10:55           |           |                |                 |             |              |              |               |            |             |                  |                                       | KEMSKE PA        | Fe<br>ER CO. /dsv | ( HU)-  | 5 CB    | UD-70,                   | 199<br>2 35321 N72 | 9    |

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| Transferred by | Date:  | Time: | Sample Condition: | Received by: | Date:   | Time: | Temp: |
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| 1. Unday Ball  | 04/906 | 1650  | 6 kg              | ADGE -       | 19/2000 | 1853  | 30    |
| 2. 0           |        |       |                   |              |         |       |       |

|             | LABORAT<br>1126 North Fi<br>New Ulm, MN |                             | 9<br>9   | anger - | C         | hai            | in (           | of          | Cu                           | stc           | )dy             | y F         | lec         | 201       | rd                                      | Page_                        | of                        | 6.  |
|-------------|---|-----------------------------|----------|---------|-----------|----------------|----------------|-------------|------------------------------|---------------|-----------------|-------------|-------------|-----------|---|------------------------------|---------------------------|---|
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| Company N   | ame and Address:                        |                             |          |         | Acc       | oun            | t #:           |             |                              |               |                 |             |             |           | Pho                                     | ne #:                        |                           |   |
| l Ve        | 9 Bull 7                                | 63-979-9                    | 200      |         |           |                |                |             |                              |               |                 |             |             |           |   |                              |                           |   |
|             | enels Associat                          |                             |          |         | Con       | itact          |                |             |                              |               |                 |             |             |           | Fax                                     |                              | ort check box             |   |
|             |   |                             |          |         | Nan       | ne of          | f Sai          | mplo        | er:                          |               |                 |             |             |           | E-m                                     |                              |                           |   |
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|             |   |                             |          |         | - ac      |                | 44111          | 001         |                              |               |                 |             |             |           | Dat                                     | e Submitte                   | u.                        |   |
|             |   |                             |          |         |           |                |                |             | lumb<br>r                    |               | . /             |             |             |           | Pur                                     | chase Orde                   | ər #:                     |   |
| ·····       | Sample                                  | Information                 |          |         | $\vdash$  |                | <u>er v</u>    |             | <u>br</u><br>Bottl           |               |                 |             |             |           |   |                              | Analysis                  |   |
|             |   |                             |          |         |           |                |                |             |                              |               |                 |             |             |           | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                              |                           |   |
|             |   |                             |          |         |           | pres.          | 1000 ml unpres | 8           |                              | 2S04          | stic            | SO4         | НО          | Y or N    |   |                              | ž.                        |   |
| Lab         |   | Sample Type<br>(Food, Soil, | Date     | Time    | VOC Vials | 500 ml unpres. |                | 500 ml HNO3 | 1000 ml HNO3<br>500 ml H2SO4 | H H           | Sterile plastic | er H2       | n Na(       | ed? )     |   |                              |                           |   |
| Number      | Sample ID                               | Water, Etc.)                | Sampled  | Sampled | S         | 200 u          | 1000           | 200 u       | 1000<br>500 n                | 1000 ml H2SO4 | Steril          | Amber H2SO4 | 500 ml NaOH | Filtered? | Other:                                  | An                           | alysis Requ               | ired  |
| A 13630     | TA33,2                                  | Water                       | 04/19/08 | 1450    |           |                |                | -           |                              |               |                 |             |             |           |   | ,,                           | UC                        |   |
| A135588     | +B33,2                                  |                             |          | IVYO    |           |                | l              |             |                              |               |                 |             |             |           |   |                              | l                         |   |
| A13638      | CA 33.6                                 |                             |          | 1420    |           |                |                |             |                              |               |                 |             |             |           |   |                              |                           | UBOD-   |
| A13639      | CA31.9                                  |                             |          | 1400    |           |                | 1              | Ι           |                              |               |                 |             |             |           |   |                              |                           |   |
| A13640      | T30,7                                   |                             |          | 1350    |           |                |                |             |                              |               |                 |             |             |           |   |                              |                           | · · · · · · · · · · · · · · · · · · ·           |
| A13641      | T-30.                                   |                             |          | 1340    |           |                |                |             |                              | Ī             |                 |             |             |           |   |                              |                           |   |
| A13642      | Ch30.0                                  |                             |          | 1325    |           |                |                |             |                              | 1             |                 |             |             |           |   |                              |                           |   |
| A13643      | CA35.3                                  |                             |          | 1130    |           |                |                |             |                              |               |                 |             |             |           | ·                                       |                              |                           |   |
| A13644      | てふみみ                                    |                             |          | 1119    |           |                |                |             |                              |               |                 |             |             |           |   |                              | t                         | www.minee.et.et.et.et.et.et.et.et.et.et.et.et.e |
| A13644      | TA30.9                                  | Water                       | 04/19/06 | 1055    |           |                |                |             |                              | 1             |                 |             |             |           |   | Chlad to                     | <u> </u>                  |   |
| Comments:   |   | *************               |          | ·····   | _11,      |                |                |             |                              | <u> </u>      | <b></b>         |             | Lumm        | ι         |   | KEMSKE PAPER CO. OSW         | ALD PUBLISHING CO., NEW U | LM. MIN (800 782-3532) N745                     |

|    | Transferred by: | Date:  | Time: | Sample Condition: | Received by: | Date:  | Time: | Temp: |
|----|-----------------|--------|-------|-------------------|--------------|--------|-------|-------|
| 1. | WWWW BOOK       | 041906 | 1650  | orter             | HUGGE        | 194,00 | 1853  | 30    |
| 2. |                 |        |       |                   |              |        |       |       |

|               | 1126 North Fi<br>New Ulm, MN            | 1 56073                                     | 8               | , narana,       | С         | ha;            | Ī               | 01           | f C          | us           | to            | ody             | / F         | lec         | :01              | rd           |                      | Page           | »{f          | k  | _of_(   | 6         |                    |
|---------------|---|---|-----------------|-----------------|-----------|----------------|-----------------|--------------|--------------|--------------|---------------|-----------------|-------------|-------------|------------------|--------------|----------------------|----------------|--------------|--|---|-----------|--------------------|
| Toll Fre      | Phone: (507) 354-8<br>e: (800) 782-3557 | 517<br>Fax: (507) 359-28                    | 90              |                 |           |                |                 |              |              | Wo           | rk            | Or              | der         | #           |                  |              |                      |                |              |  |   |           | ۰۰<br>ت            |
| Company N     | Vame and Address:                       |   |                 |                 | Aci       | cou            | nt #:           | ;            |              |              |               |                 |             |             |                  | Pho          | ne #                 | :              |              | <u></u>                                      |   |           |                    |
| i i           | veg Boll                                | 763-4                                       | 79-47           | UO              | _         |                | *               | ••••         |              |              |               |                 |             |             |                  |              | **                   |                |              |  | <u></u>                                       |           |                    |
| 1             |   | 1   |                 | - 0             | Co        | ntac           | )[]             |              |              |              |               |                 |             |             |                  | Fax          |                      | word ro        | nort c       | heck l                                       | hav   |           | ٦                  |
|               | Vendar Aggoco                           | abeg  |                 |                 | Nai       | me             | of Sa           | amp          | oler:        |              | <b>-</b>      |                 |             |             |                  | E-m          |                      | Acu ie         | porce        | IICCK I                                      | <u>, , , , , , , , , , , , , , , , , , , </u> |           | <u></u>            |
| Billing Add   | lress (indicate if different            | from above):                                |                 |                 | ]         |                |                 |              |              |              |               |                 |             |             |                  |              |                      |                |              | :heck  | box   |           |                    |
|               |   |   |                 |                 | Qu        | ote            | Nun             | nbe          | r            |              |               |                 |             |             |                  | Date         | e Sul                | bmitt          | ed:          |  |   |           |                    |
|               |   |   |                 |                 | Pro       | ojec           | t Na            | me/          | Nur          | nbei         | ŕ:            |                 |             |             |                  | Pure         | chas                 | e Or           | der #        | •  |   |           | ·····              |
|               |   |   |                 |                 | C         | llea           | r W             | <u>i ler</u> |              | <u>the</u>   | ev            | ******          |             |             |                  |              |                      |                |              |  |   |           |                    |
|               | Sample                                  | Information                                 | 1               | 1               | <u> </u>  | <b>.</b>       | T               |              | Bo           | ottle        | Ty            | pe              |             |             |                  |              |                      |                | A            | naly   | sis   |           |                    |
| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | Voc Vials | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3  | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4 | 500 ml NaOH | Filtered? Y or N | Other:       |                      |                |              | sis R  |   | *******   |                    |
| A13646        |   | Ligher_                                     | PY1906          | 1070            | <b> </b>  | ļ              |                 |              |              |              |               |                 |             |             |                  |              | ŢĻ                   | IP,T.          | N,           | NOF/N  | <u>(13, An</u>                                | m THA     | MBD                |
| A13647        | TW27.96                                 |   |                 | 1019            |           |                |                 |              |              |              |               |                 |             |             |                  |              |                      | ĺ              | <u> </u>     | i  |   |           |                    |
| A 13648       | TE27.96                                 |   |                 | 1000            |           |                |                 |              |              |              |               |                 |             |             |                  |              |                      |                |              |  |   |           |                    |
| A13649        | T77.3                                   |   |                 | 0445            |           |                |                 |              |              |              | Ĩ             |                 |             |             | :                |              |                      |                | 1            |  |   |           | 1                  |
| A13650        | CA27,2                                  |   |                 | 0410            |           |                |                 |              |              |              |               |                 |             |             |                  |              |                      | 1              |              |  |   |           | 1                  |
| A13651        | CA75.6                                  |   |                 | 0605            | 1         |                |                 |              |              |              |               |                 |             |             |                  |              |                      | 1              | 1            |  |   |           |                    |
| A13652        |   |   | 15735           |                 |           |                |                 |              |              |              |               |                 |             |             |                  |              |                      | <u> </u>       |              |  | · · ·   |           | -                  |
|               |   |   |                 |                 | <b>_</b>  |                |                 |              |              |              |               |                 |             | ·           |                  |              |                      |                |              |  |   |           |                    |
|               | TD 33,2                                 |   |                 | <u>16:30</u>    | 4         | <u> </u>       |                 |              |              |              |               |                 |             | ——          |                  |              |                      |                |              |  | {   |           |                    |
| A13654        | FOL                                     |   |                 |                 |           |                |                 |              |              |              |               |                 |             |             |                  |              | 1                    |                | <u> </u>     | <u>    l,   </u>                             |   |           | ۱<br>۲ <u>۲ آړ</u> |
| A13655        | FDZ                                     | Water                                       | 04/900          |                 |           | <u> </u>       |                 |              |              | ·            |               |                 |             |             |                  |              | T1/ (                | <u>J/ T</u>    | $N, \Lambda$ | KD-141                                       | 5 日   | mm l      | 16/1/              |
|               | TE 33,2                                 | Water                                       | 041906          | 16:20           |           |                |                 |              |              |              |               |                 |             |             |                  |              | (                    |                |              | l  | ĩ   | l         | 1                  |
|               | TF33,ス<br>Transferred by:               | Date:                                       | Time:           | Sample C        | long      | litio          | <u>n.</u> 1     |              |              | Rec          | aiv           | ad              | hiv         |             |                  |              | <u>tí/,ť</u><br>Date | <u>  </u> 4_[/ | V / M        | <u>ነን////</u><br>ime:                        | <u>7 fil</u> n                                | <u>nm</u> | <u> 16//</u>       |
| 1 /Alas       | V. And                                  |   | 16:50           | or Ze           |           | 4100           |                 |              | )<br>A       | <u>Nec</u>   |               |                 |             |             |                  |              |                      | 50Ъ            | _            | 53   | $\dashv$                                      | Ten<br>S  | <u>пр.</u><br>Ә    |
| 2.            | wy rave                                 | 4/19/06                                     | 16-21           | or te           | <u>~</u>  | -              |                 | <u>a</u>     | 4-0          | $\leq$       |               |                 |             |             |                  | <u>a (</u> / | <u>L</u>             | 00             | 10           | <u>,                                    </u> |   | <u> </u>  |                    |

|               | 1126 North Fi<br>New Ulm, MN            | 56073                                       | 9                          | , 1999, 1         | C                | 'na                                     | ain             | 01          | fC           | UE           | stc                 | »q)             | / R         | leco        | ord      | þ                     | 'age          |            | 2                 | of_C   | >                | <br>-         |
|---------------|---|---|----------------------------|-------------------|------------------|---|-----------------|-------------|--------------|--------------|---------------------|-----------------|-------------|-------------|----------|-----------------------|---------------|------------|-------------------|--|------------------|---------------|
| Toll Free     | Phone: (507) 354-85<br>: (800) 782-3557 | 517<br>Fax: (507) 359-28                    | 90                         |                   |                  |   |                 |             | ļ            | Wc           | ork                 | Or              | der         | *           |          |                       |               |            |                   |  | - ،<br>د         |               |
|               | ame and Address:                        |   | "3-1/79-                   | -1/2019           | Aco              | coui                                    | nt #:           | •           | ł            |              |                     |                 | <u></u>     |             | Pł       | none #:               |               |            | A                 |  |                  |               |
|               | Veg Boll                                |   | $\mathcal{I}(\mathcal{I})$ | (100              | Co               | ntac                                    | ct:             |             |              |              |                     |                 |             |             | Fa       | ix #:                 |               |            | <del></del>       |  |                  | -             |
|               | Wencly 1799                             | arutes                                      |                            |                   | Na               | me                                      | of S            | amn         | Jor          |              |                     |                 |             |             | E        | For fax<br>mail:      | ed re         | eport o    | heck bo           | <u>&lt;                                     </u> |                  |               |
| Billing Add   | ress (indicate if different             | from above):                                |                            |                   | -                |   |                 |             |              |              |                     |                 |             |             | <u> </u> |                       | nail re       | eport d    | check bo          | ×Г   |                  |               |
|               |   |   |                            |                   | Qu               | ote                                     | Nun             | nbei        | ŕ            |              |                     |                 |             |             | Da       | ate Sub               | mitt          | ed:        |                   |  |                  |               |
|               |   |   |                            |                   | Pro              | jeci                                    | t Na            | me/         | Nun          | nþe          | r:                  |                 |             |             | Ρι       | irchase               | Or            | der #      | w.                |  | <del>,</del>     |               |
|               | Sample                                  | Information                                 |                            |                   | $\left  \right $ | $\left  \underline{\mathbf{e}} \right $ | rh              | /11/=       |              |              | <u> 1_6</u><br>: Ty |                 |             |             |          |                       | -             | A          | mahat             |  | ······           | -             |
|               |   | ***************************************     |                            |                   |                  |   |                 |             |              |              | - 1 y               | he              |             |             |          | -                     |               | A          | nalysi            | 3  |                  |               |
| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled            | Time<br>Sampled   | voc Vials        | 500 ml unpres.                          | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4       | Sterile plastic | Amber H2SO4 | 500 ml NaOH |          | Culer:                | А             | nahu       | sis Reg           | uirad  |                  |               |
| A13646        | (h79.0)                                 | Water                                       | 04/900                     | 1 2               |                  | <u>67</u>                               |                 |             |              | <u></u>      |                     | <u></u>         | 4           | <u></u>     | <u> </u> |                       |               |            |                   | wp-2   | HC.C.            | 1499          |
| A13647        | TW77.99                                 |   | 1                          | 1015              |                  |   |                 |             |              |              |                     |                 |             |             | _        | - Coline              | $\frac{1}{1}$ |            | 1 , C             | 1  | 127              | 1777          |
| 48            | 7 57.96                                 |   |                            | (000)             |                  |   |                 |             |              |              |                     |                 |             |             |          |                       | $\neg$        |            |                   |  |                  | -             |
| 49            | +27.3                                   |   |                            | 0945              |                  |   |                 |             |              |              |                     |                 |             | ···         |          |                       |               |            |                   |  | Ť                | -             |
| 50            | CQ77,7                                  |   |                            | 0410              |                  |   |                 |             |              |              |                     |                 |             |             |          |                       |               |            |                   |  | -                | 1499          |
| 9             | CA25-6                                  |   |                            | (19605            |                  |   |                 |             |              |              |                     |                 |             |             |          |                       |               |            |                   |  |                  |               |
| 52            | TC 33.2                                 |   | 1513                       | Flo:OF            | PB<br>D          |   |                 |             |              |              |                     |                 |             |             |          |                       |               |            | I                 |  |                  |               |
| 53            | TD 33.2                                 |   |                            | 16:30             |                  |   |                 |             |              |              |                     |                 |             |             |          |                       |               |            |                   |  |                  |               |
| 54            | FDI                                     |   |                            |                   |                  |   |                 |             |              |              |                     |                 |             |             |          |                       |               |            |                   |  | T                |               |
| 55            | FD2                                     |   | L                          |                   |                  |   |                 |             |              |              |                     |                 |             |             |          | Chird                 | FP            | (A         | UDS, (            | 100-2  | 799              | m.            |
| Comments:     | TE 33,2<br>TE 33,2                      | hater                                       | 04(900                     | 16:20             |                  |   |                 |             |              |              |                     |                 |             |             |          | (                     |               |            |                   | 1  |                  |               |
| <u>57</u>     | TF 33.2<br>ransferred by:               | Date:                                       | <u>0\(406</u><br>Time:     | 16:05<br>Sample C | Cond             | litio                                   |                 |             |              | Rer          | eiv                 | ed l            | <u>.</u>    | <u></u>     | <b>—</b> | <u>Chlrk</u><br>Date: | F             |            | /w-5,(<br>ime:    | <u> kal)-20</u>                                  |                  | <i>ሳ</i><br>ገ |
| 1. MAD        | MARICE                                  | 4/19/06                                     | 16:50                      | Or J.             |                  |   |                 | R           | 60           | 20           | ET.                 |                 |             |             | $ _{c}$  | Hale:                 | 7             |            | <u>ime:</u><br><3 | Ten<br>32  | <u>.ip:</u><br>> | -             |
| 2.            | any to da                               | -41-11                                      |                            | -1 00             | <u> </u>         |   |                 | <u>a</u> X  | PX2          |              |                     |                 |             |             |          | March                 | 0             | <u>. v</u> |                   |  |                  |               |



LABORATORIES, Inc.

1126 North Front Street New Ulm, MN 56073 Chain of Custody Record

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|              | Phone: (507) 354-8                   |                             |                          |          |           |                |                 |             | ſ                    | \A/~         |               | Orc             | lar            | 44          |             |          |            |             |                 |               |  |          |
|--------------|--------------------------------------|-----------------------------|--------------------------|----------|-----------|----------------|-----------------|-------------|----------------------|--------------|---------------|-----------------|----------------|-------------|-------------|----------|------------|-------------|-----------------|---------------|--|----------|
|              | : (800) 782-3557<br>ame and Address: | Fax: (507) 359-28           | 90                       |          | Aa        | cour           | -s .II.         |             |                      | AAC          | /I K          |                 | 5 <b>(</b> ) 5 |             |             | <u> </u> | ne #:      |             |                 |               |  | د        |
| Company ne   | ame and Audi 655.                    |                             |                          |          | MCI       | Jour           | 11. #1          | •           |                      |              |               |                 |                |             |             | РПО      | ne #:      |             |                 |               |  |          |
|              |                                      |                             |                          |          | Co        | ntac           | t:              |             |                      |              |               |                 |                |             | Ī           | Fax      |            |             |                 |               |  |          |
|              |                                      |                             |                          |          | Na        | ne c           | of Si           | amr         | her                  | *            |               |                 |                | <u></u>     | _           | ۲<br>E-m |            | ed rep      | ort chec        | k box         |  |          |
| Billing Addr | ess (indicate if different           | from above):                | ·····                    |          | 1         |                |                 |             |                      | •            |               |                 | 4              |             | '           |          |            | iail re     | port chec       | :k box        |  |          |
|              |                                      |                             |                          |          | Qu        | ote            | Nun             | nbei        | r                    |              |               |                 |                |             |             | Date     | Subi       | mitte       | d:              |               |  |          |
|              |                                      |                             |                          |          | Pro       | oject          | Na              | me/         | 'Nur                 | nbe          | r:            |                 |                |             |             | Purc     | hase       | Ord         | er #:           |               | ······································ |          |
|              | Sample                               | Information                 |                          |          |           |                |                 |             | Bc                   | ottle        | • Ty          | ре              |                |             |             |          |            |             | Ana             | lysis         | <u>,</u>                               |          |
|              |                                      |                             |                          |          |           |                | ,<br>i          |             |                      |              |               |                 |                |             | Z           | ·        |            |             |                 |               |  |          |
|              |                                      |                             |                          |          | 5         | 500 ml unpres. | 1000 ml unpres. | 103         | 1000 ml HNO3         | 500 ml H2SO4 | 1000 ml H2SO4 | astic           | Amber H2SO4    | ъ           | Y or N      |          |            |             |                 | 4 · · · 4     |  |          |
| Lab          |                                      | Sample Type<br>(Food, Soil, | Date                     | Time     | voc Vials | 티              | n<br>E          | 500 ml HNO3 | Ē                    | nl H         | Ē             | Sterile plastic | er H           | 500 ml NaOH | Filtered? Y | Ľ,       |            |             |                 |               |  |          |
| Number       | Sample ID                            | Water, Etc.)                | Sampled                  | Sampled  | No<br>No  | 500            | 100             | 500         | 1000                 | 500          | 1000          | Ster            | Amb            | 200         | Filte       | Other:   |            | Ar          | alysis          | Regu          | ired                                   |          |
| A13646       | <u> </u>                             | Water                       | 04/19/06                 | (030)    |           |                |                 |             |                      |              |               |                 |                |             |             |          | Chl-       | -d,         | TUC             | ~             |  |          |
| A13647       | TW 27.65                             |                             |                          | 1015     |           |                |                 |             |                      |              |               |                 |                |             |             |          | į          | -7          | 1               | <u>.</u>      |  |          |
| મજ           | TE27.9                               |                             |                          | (000)    |           |                |                 |             |                      |              |               |                 |                |             |             |          |            |             |                 |               |  | <br>     |
| 시위           | T77.3                                |                             |                          | 0945     |           |                |                 |             |                      |              |               |                 |                |             |             | Ì        |            |             |                 |               |  |          |
| 15U          | (かみ7,み                               |                             |                          | 0910     |           |                |                 |             |                      |              | -             |                 |                | İ           |             |          |            |             |                 |               |  |          |
| 51           | CR2516                               |                             |                          | 09505    |           |                |                 |             |                      |              |               |                 |                |             |             | Ì        |            |             |                 |               |  |          |
| 52           | TC 33.2                              |                             |                          | 1535     |           |                | ĺ               |             |                      |              |               |                 |                |             |             |          |            |             |                 |               |  |          |
| 53           | TD33,2                               |                             |                          | (630     |           |                |                 |             |                      |              |               |                 |                |             |             | Ì        |            |             |                 |               |  |          |
| 54           | FD(                                  | Ļ                           | 1.                       |          |           |                |                 |             |                      |              |               |                 |                |             |             | ĺ        | l          |             |                 |               | ,                                      |          |
| 55           | FD2                                  | Water                       | 04/19/00                 |          |           |                |                 |             |                      |              |               |                 |                |             |             |          | Chl-       | -0          | TVC             |               |  |          |
| Comments:    | TESPiz                               |                             |                          | (670     | •         |                |                 |             |                      |              | <b>`</b>      |                 | ,              |             |             |          | . [        | ER CO / OSV | NALD RUBLISHINI | 3 CO., NEW US | LM, MN 1808 787-35                     | 32) N74  |
| 57           | TF 33,2                              | nater                       | <u>04/19/00</u><br>Time: | 1605     |           | 3141-          |                 |             |                      | <b>D</b>     |               | 7 R.            |                |             |             |          | <u>h -</u> | <u>-</u> 12 | TUC             | r             |  |          |
| 1 th h N     | nansferred by:                       | Date:<br>04/406             | 100<br>1650              | Sample C |           | 1110           |                 | F           | $\overline{\lambda}$ | ~            | ceiv          | ed t            | y:             |             | -           |          | Date:      |             | <br>1 & 5       |               | Temp                                   |          |
| · VALAC      | My sou                               |                             |                          | -r +(    | ~         |                |                 | 4           | đ (                  | S            | 22            | <u>L</u>        |                | -           |             | 114      | 750G       | 2           | 187             | $\geq$        | 30                                     | <u> </u> |
| 2.           | V                                    | 1                           | 1                        | ł        |           |                |                 |             |                      |              |               |                 |                |             |             |          |            | [           |                 |               |  |          |

|               | LABORAT<br>1126 North Fr<br>New Ulm, MN              |   |                 |                 | C         | ;ha            | ain             | of          | Cu                           | stc           | ody             | r R                      | ec          | Oľ               | ď      | Page                                   | _of,                                    |      |
|---------------|--|---|-----------------|-----------------|-----------|----------------|-----------------|-------------|------------------------------|---------------|-----------------|--------------------------|-------------|------------------|--------|--|---|------|
| Toll Fre      | Phone: (507) 354-85<br>e: (800) 782-3557             | 517<br>Fax: (507) 359-28                    | 90              |                 |           |                |                 |             | W                            | ork           | Ore             | der                      | #           |                  |        | 12-7480                                |   |      |
|               |  |   |                 |                 | Acc       | cou            | nt #:           |             |                              |               |                 |                          |             |                  | Pho    | ne #:                                  |   |      |
| 1800          | vame and Address:<br>ICK Gnd Associa<br>PioneerCReek | Circle                                      |                 |                 | Сог       | ntad           | ct:             |             | ····                         |               |                 |                          |             |                  | Fax    | #:                                     | productions                             |      |
| mon           | e Plaine Min   | 7 55750                                     | 3_000           | 0               |           |                | - 6 0           |             |                              |               |                 |                          |             |                  |        | For faxed report check                 | box                                     | 4    |
|               | lress (indicate if different                         |   | /               |                 |           | me             | or 5            | ampl        | er:                          |               |                 |                          |             |                  | E-m    | all:<br>For e-mail report check        | t box                                   |      |
|               | ,  |   |                 |                 | Que       | ote            | Nun             | nber        |                              |               |                 |                          |             |                  |        | e Submitted:                           |   |      |
|               |  |   |                 |                 | Pro       | ojec           | t Na            | me/N        | lumb                         | er:           |                 |                          |             |                  | Pure   | chase Order #:                         |   | -    |
|               | Sample   | Information                                 |                 |                 |           |                |                 | ĺ           | Bottl                        | e Ty          | /pe             |                          |             |                  |        | Analy                                  | /sis                                    | ]    |
| Lab<br>Number | Sample ID  | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | voc Vials | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3<br>500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4              | 500 ml NaOH | Filtered? Y or N | Other: | Analysis F                             | Required                                |      |
| A26199        | LL001  | Water                                       | 5/22/06         | 2,00            |           | ~              |                 | レ           | C                            | 12            |                 | -                        |             |                  |        | -TD                                    | 212:00                                  |      |
| A26200        | LL002  | water                                       | /               | 3,00            |           | /              |                 | 1           | v                            | 14            |                 | $\overline{\mathcal{A}}$ |             |                  |        | -Orthophus                             | hote Phose                              | hors |
|               |  |   |                 |                 |           |                |                 |             |                              |               |                 |                          |             |                  |        | ~ ナル                                   |   | 1    |
|               |  |   |                 |                 |           |                |                 |             |                              |               |                 |                          |             |                  | ¥      | NO2+ NO                                | 3                                       |      |
|               |  |   |                 | -               |           |                |                 |             |                              |               |                 |                          |             |                  | ļ      | TKN Nitro                              | gel                                     |      |
|               |  | L   |                 |                 |           |                |                 |             |                              |               |                 |                          |             |                  | 1      | Chloride                               |   |      |
|               |  |   |                 |                 |           |                |                 |             |                              |               |                 |                          |             |                  |        | Junn                                   | 32140                                   |      |
|               |  |   | $\sim$          |                 |           |                |                 |             |                              |               |                 |                          |             |                  | ****   | 755                                    |   |      |
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| Comments      | :  |   |                 |                 |           |                |                 |             |                              |               |                 |                          |             |                  |        | KEMSKE PAPER CO. / OSWALD PUBLISHING ( | -<br>20., NEW ULM, MN (800 782-3532) N7 | 49   |

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| 1. Kevin Wittrock | 52206 |       |                   | n/Lelmid     | 10/23/06 | 010:55 | 4     |
| 2.                |       |       |                   |              | 47       |        | /     |

| MC            | ILABORAT<br>1126 North Fr<br>New Ulm, MN               |   | 8               | ,000 H.,        | Cŀ        | nain                              | 0            | fC           | US           | sto           | dy              | R              | ec          | :01              | d        | Pageof  |    |
|---------------|--|---|-----------------|-----------------|-----------|-----------------------------------|--------------|--------------|--------------|---------------|-----------------|----------------|-------------|------------------|----------|---|----|
| Tail Era      | Phone: (507) 354-85                                    |   | 00              |                 |           |                                   |              | [            | Wc           | rk            | Ord             | ler            | #           |                  | 2-       | 6363 :  |    |
| Company I     | Name and Address:                                      |   | 30              |                 | Acco      | ount #                            | ŧ:           |              |              |               | - 1.d 1         |                |             |                  | Pho      | ne #: (763)+74-4783   |    |
| Nenc          | KASSOCIAtes, Inc                                       | ,   |                 |                 | Cont      |                                   |              |              |              |               |                 |                |             |                  |          |   |    |
| 1800          | CASSOCIATES, Ind<br>Pioneer Creek C<br>le Plain, MN 55 | tra   |                 |                 |           | $\omega$                          | es           | B            | o/           | 7             |                 |                |             |                  | Fax      | #:<br>For faxed report check box  |    |
| Pilling Add   | IR Flain, MM (D)                                       | <u>5357</u>                                 |                 |                 | Nam       | e of s<br>Ves                     | Samp<br>D    | oler:        |              |               |                 |                | •           |                  | E-m      | ail: Woll Quenck, com   |    |
|               | ness (maicate il different                             | nom abovej.                                 |                 |                 |           | te Nu                             |              |              |              |               |                 |                |             |                  | Dat      | For e-mail report check box<br>e Submitted:<br>5/30/06                      |    |
|               |  |   |                 |                 | Droid     | ect Na                            |              |              |              |               |                 |                |             |                  |          | <i>5/30/06</i><br>chase Order #:  |    |
|               |  |   |                 |                 | Cle       | ect Na<br><u>'4 ( Wa</u>          | ame/<br>1+e/ | Ri           | nde<br>Ve    | r:            | 5               | +7             | C41         |                  | Pur      | cnase Order #:  |    |
|               | Sample   | Information                                 | T               |                 | <u> </u>  |                                   |              |              |              | τy            | pe              |                |             |                  |          | Analysis  |    |
| Lab<br>Number | Sample ID  | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VOC Vials | 500 ml unpres.<br>1000 ml unpres. | 500 ml HNO3  | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber 7 204    | 500 ml NaOH | Filtered? Y or N | 100mL    | Analysis Required   |    |
| A21420        | CR25.6   | Water                                       | 5/30/06         | 11:55           |           | 3                                 |              | _ <u>`</u>   | 1            | 1             |                 | $\overline{1}$ |             |                  | <u> </u> | TP, OP, NO2+NO3, Ammonia-N, TR  | LA |
| 21            | CR 27.2  |   |                 | 12:25           |           |                                   |              |              |              | T             |                 |                |             |                  | 1        | Feol Coliform, Chlarite.  | 70 |
| 22            | CR 29,0.   |   |                 | 12:55           |           |                                   |              |              |              |               | ·····           |                |             |                  |          | 5 day CBOD, 20 day ( BOD)   |    |
| 23            | CR 31.8 .  |   |                 | 13:25           |           |                                   |              |              |              |               |                 |                |             |                  |          | TSSICHIPC-G. TO   |    |
| 34            | FDI ·  |   |                 | <b>~</b>        |           | Π                                 |              |              |              |               |                 |                |             |                  | 1        |   |    |
| 25            | CR 33.6  |   |                 | 14:05           |           |                                   |              |              |              |               |                 |                |             |                  |          |   |    |
| 26            | CR35.3'  |   |                 | 14.25           |           |                                   |              |              |              |               |                 |                |             |                  |          |   |    |
| 27            | TCB3.2   |   |                 | 14:50           |           |                                   |              |              |              |               |                 | Д              |             |                  |          |   |    |
| 28            | TB 33,2  |   |                 | 15:10           |           | <u>}`</u>                         |              |              | +            | ~             |                 | ┵╢             |             |                  |          |   |    |
|               |  |   |                 |                 |           |                                   |              |              |              |               |                 |                |             |                  |          | KEMSKE PAPER CO. / OSWALD PUBLISHING CO., NEW ULM, IMN (860 762 3532) 17749 |    |
| Comments      | ).   |   |                 |                 |           |                                   |              |              |              |               |                 |                |             |                  |          |   |    |

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| 1. Workey Ball  | 5/30106 | 16:45 |                   | ~            |          |       | ······ |
| 2. plan Balbach | 3/30/06 | 16:45 | Don               | Balbach      | \$130106 | 6:22  | 4      |

|               | 1126 North Fi<br>New Ulm, MN            | 56073                                       |                                       | 2.00            | С         | ha             |                 | of          | i C          | ΰs           | sto           | dy              | ' R         | lec         | :01              | rđ       | Page_2_of_3.  |
|---------------|---|---|---------------------------------------|-----------------|-----------|----------------|-----------------|-------------|--------------|--------------|---------------|-----------------|-------------|-------------|------------------|----------|---|
| Toll Fre      | Phone: (507) 354-8<br>e: (800) 782-3557 | 517<br>Fax: (507) 359-289                   | 90                                    |                 |           |                |                 |             |              | ₩c           | ork           | Orc             | ler         | #           |                  |          |   |
|               | Name and Address:                       |   |                                       |                 | Acc       | our            | nt #:           |             |              |              |               |                 |             |             |                  | Pho      | me #:   |
| Wen           | cle Associates                          |   |                                       |                 | Cor       |                | l               | N           |              | <u>ب</u>     | )<br>D        | //              |             |             |                  |          | For faxed report check box  |
| Billing Add   | ress (indicate if different             | from above):                                |                                       |                 | Nar       | ne c           | of S            | amp         | bler         | •            |               |                 |             |             |                  | E-m      | ail:<br>For e-mail report check box                                       |
|               |   |   |                                       |                 | Que       | ote            | Nun             | nbei        | r            |              |               |                 |             |             |                  |          | e Submitted:  |
|               |   |   |                                       |                 | Pro       | ject           | : Na            | me/         | Nur          | nbe          | r:            |                 |             |             |                  | Pur      | chase Order #:  |
|               | Sample                                  | Information                                 |                                       |                 |           |                |                 |             | Bo           | ottle        | » Ту          | pe              |             |             |                  |          | Analysis  |
| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Waţer, Etc.) | Date<br>Sampled                       | Time<br>Sampled | VOC Vials | 600 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber 72504 | 500 ml NaOH | Filtered? Y or N | Other:   | Analysis Required   |
| A21429        | CR 19.8                                 | Water                                       | 5 30/06                               |                 |           |                | 3               |             |              | 1            | ŀ             |                 | 1           |             |                  |          | TP.OP, TN. NO3+NO3TKN   |
|               |   |   |                                       | ··· · V         |           |                |                 |             |              |              |               |                 |             |             |                  |          | Chlaride, CBOD-5day.  |
|               |   |   |                                       |                 |           |                |                 |             |              |              |               |                 |             |             |                  |          | CBOD -20 dax TSS,   |
|               |   |   |                                       |                 | ļ         |                |                 |             |              |              |               |                 |             |             |                  |          | chlora, Toc   |
|               |   |   |                                       |                 |           |                |                 |             |              |              |               |                 |             |             |                  |          |   |
|               |   | -   |                                       |                 |           |                |                 |             | •            |              |               |                 |             |             |                  |          |   |
|               |   | ,   | · · · · · · · · · · · · · · · · · · · |                 |           |                |                 |             |              |              |               |                 |             |             |                  |          |   |
|               | · · · · · · · · · · · · · · · · · · ·   |   |                                       |                 |           |                |                 |             |              |              |               |                 |             |             |                  |          |   |
|               |   |   |                                       |                 |           |                |                 |             |              |              |               |                 |             |             |                  |          |   |
| Comments      | :                                       | <u> </u>                                    |                                       | L               |           |                |                 |             |              |              |               |                 |             |             |                  | <u> </u> | KEMSKE FAPER CO. / OSWALD PUBLISHING CO., NEW ULM, MM (800 782 3532) N749 |

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| 1. | 110 Martale     | 5/30/06 | 16:45 |                   | ,            |         |       |       |
| 2. | Non Baldach     | 5/30/06 | 16:45 | - flon Ball       | bren .       | 5-30-06 | 6'23  | 4     |

|               | LABORAT<br>1126 North Fr<br>New Ulm, MN   |   |                 |                 | C         | ha             | lin             | oſ          | fC           | UE           | sto           | dy              | ' R         | ec          | :0r              | d      | Page B3 of B3  |
|---------------|---|---|-----------------|-----------------|-----------|----------------|-----------------|-------------|--------------|--------------|---------------|-----------------|-------------|-------------|------------------|--------|--|
| Toll Fre      | Phone: (507) 354-85<br>e: (800) 782-3557  | 17<br>Fax: (507) 359-28                     | an              |                 |           |                |                 |             |              | Wc           | ork           | Or              | der         | #           |                  |        |  |
| Company I     | Vame and Address:   |   |                 |                 | Aco       | cou            | nt #:           | ;           | I            |              |               |                 |             |             |                  | Pho    | ne #:  |
| Wer<br>1800   | nCK Associates<br>Pioneer Creek<br>ple Plain, MN 55<br>Iress (indicate if different | Ctr   |                 |                 | Coi       | ntac           | :t:             |             |              |              |               |                 |             |             |                  | Fax    | #:<br>For faxed report check box   |
| Ma            | Ple Plain, MN 55  | 359-0249                                    |                 |                 | Nar       | me (           | of S            | amŗ         | oler         | ;            |               |                 |             |             |                  | E-m    |  |
| Billing Add   | Iress (indicate if different  | from above):                                |                 |                 |           | -4-            | Nun             |             |              | <u>,</u>     |               |                 |             |             |                  |        | For e-mail report check box  |
|               |   |   |                 |                 | QU        | ote            | NUN             | nde         |              |              |               |                 |             |             |                  | Date   |  |
|               |   |   |                 |                 | Pro       | jec            | t Na            | me/         | /Nur         | nbe          | 1             |                 |             |             |                  | Pure   | chase Order #:   |
| ·····         | Sample  | Information                                 |                 |                 |           |                |                 |             | Bo           | ottle        | э Ту          | pe              |             |             | s                |        | Analysis   |
| Lab<br>Number | Sample ID   | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VOC Vials | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2304 | 500 ml NaOH | Filtered? Y or N | Other: | Analysis Required  |
| A21430        | LLOØIT  | Mater                                       | 5/30/X          | 9:00            |           | 1              |                 |             |              | 1            | 61            |                 | ľ           |             |                  |        | TP, OP, TN, ND, +103, TKN, Chloride TSS                                    |
| 31            | LLOØIM  |   | 11              | 11              |           | 1              |                 |             |              | 1            |               |                 | -           |             |                  |        | TP.OP  |
| 32            | LLOØIB  | t l   | 17              | 1 \             |           | 1              |                 | 1           |              | 1            |               |                 |             |             |                  |        | TP, OP, Toral Iron   |
| 33            | LLOØZT  | Water                                       | 5/30/06         | 9:45            |           | 1              |                 |             |              | 1            | 1             |                 | 1           |             |                  |        | TP, OP, TN, NG, TKN, Chloride, TSS, Chle                                   |
| 34            | LLODAM  | · /1  | ()(             | 11              |           | 1              |                 |             |              | 1            |               |                 |             |             |                  |        |  |
| 355           | LLOB2 B   | <u></u>                                     | /\              | }1              |           | )              |                 | 1           |              | 1            |               |                 |             | <u> </u>    |                  |        |  |
|               |   |   |                 |                 |           |                |                 |             |              |              |               |                 |             |             |                  |        |  |
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| 1. Working Boll | 5/30/12 | 16:45 | <u>^</u>          |              |         |       |       |
| 2 lon Baltach   | 430/16  | 16:45 | - flon Ba         | boen         | 5-30-06 | 6.23  | 4     |

| MIV           | LABORAT<br>1126 North Fr<br>New Ulm, MN   |   | 2               |                 | Cł        | nain                              | ) of                   | C               | us           | toc           | Яλ              | Re   | )C(                                    | C                | d      | Pageof  |
|---------------|---|---|-----------------|-----------------|-----------|-----------------------------------|------------------------|-----------------|--------------|---------------|-----------------|------|--|------------------|--------|---|
| Toll Fre      | Phone: (507) 354-85<br>e: (800) 782-3557  | 17<br>Fax: (507) 359-28                     | 90              |                 |           |                                   |                        | 1               | No           | rk C          | )rd             | er # | ē                                      | 1 2              | 7-     | 7165 :  |
| A             | 1   |   |                 |                 | Acco      | ount #                            | ŧ:                     |                 |              |               |                 |      |  |                  |        |   |
| Wer           | Name and Address:<br>NCK ASSOCIUTE<br>O Pidneer Creek<br>laple Plain, MN<br>Iress (indicate if different) | SILAC.                                      |                 |                 | Cont      | tact:                             |                        | 131             | 10           | 2             |                 |      |  |                  | Fax    | ne #:<br>(763)479-4283  |
| IBC           | O FIONEER DEER  | EC 2EA                                      | a Jur           |                 |           | -V                                | Ve                     | 5               | E            | 01            | 1               |      |  |                  | ;      | For faved report check box  |
| Billing Add   | Iress (indicate if different)   | <u> </u>                                    | 1017            |                 | Nam       | e of S<br>( ۸                     | Samp                   | <sup>ler:</sup> | 501          | 1             |                 |      |  |                  | E-m    | ail: Wbo/@winclc, com   |
|               |   |   |                 |                 | Quo       | te Nu                             | - in the second second |                 | <u> </u>     | .[            |                 |      | •••••••••••••••••••••••••••••••••••••• |                  |        | Submitted:  |
|               |   |   |                 |                 | Proi      | oct N:                            | amel                   | Nur             | hei          |               |                 |      |  | _                | Pur    | chase Order #·  |
|               | Project Name/Number: Purchase Order #:<br>Clear Water River<br>Sample Information Bottle Type Analysis    |   |                 |                 |           |                                   |                        |                 |              |               |                 |      |  |                  |        |   |
|               | Clear Water     River       Sample Information     Bottle Type  |   |                 |                 |           |                                   |                        |                 |              |               |                 |      |  |                  |        |   |
| Lab<br>Number | Sample ID   | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VOC Vials | 500 ml unpres.<br>1000 ml unpres. | 500 ml HNO3            | 1000 ml HNO3    | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic |      | 500 mi NaOH                            | Filtered? Y or N | Other: | Analysis Required   |
| A24821        | C.R25.6   | Water                                       | 6/15/06         |                 |           | 3                                 |                        |                 | 1            | 1             |                 | 1    |  |                  | 1      | TP, OP; TKN-Nitroyen, Ammonia-N,  |
| 22            | CR 27.2   |   | 77              | 9:50            |           |                                   |                        |                 |              |               |                 |      |  |                  |        | NO2+NO2, Feral Coliforny  |
| 23            | CR 29.0   |   |                 | 10:15           |           |                                   |                        |                 |              |               |                 |      |  |                  |        | Chlorite, CBAD-Sdav.  |
| ay            | CR 31.8   |   |                 | 10:40           |           |                                   |                        |                 |              |               |                 |      |  |                  |        | CBOD-20day T35;   |
| 25            | CR 33.6   |   |                 | 11:15           |           |                                   |                        |                 |              |               |                 |      |  |                  |        | Chlos-a, TDC  |
| 26            | TB 33,2   |   |                 | 11:30           |           |                                   |                        |                 |              |               |                 |      |  |                  |        |   |
| 27            | CR 35,3   |   |                 | 11:50           |           | (                                 |                        |                 |              |               |                 |      |  |                  |        |   |
| 28            | TC 33,2   |   |                 | 12:10           |           |                                   |                        |                 |              |               |                 |      |  |                  |        |   |
| 29            | FDĬ   |   |                 |                 |           | 1                                 |                        |                 | 4            | $\forall$     | 1               | /    |  | -                | $\bot$ |   |
|               |   |   |                 |                 |           |                                   |                        |                 |              |               |                 |      |  |                  |        |   |
| Comments      | 5.  |   |                 |                 |           |                                   |                        |                 |              |               |                 |      |  |                  |        | KEMSKE PAPER CO. / OSWALD PUBLIBHING CO., NEW ULM, MM (880 782-3522) <b>11749</b> |

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| 1. | HASLEYS FOLL    | 6115126 | 14:30 |                   | 0                 |        |       | 7     |
| 2. | joon Balkoch    | 0115100 | 14:30 |                   | plan Baldach 6-15 | -06 4. | 21    | 6     |

|               | 1126 North Fr<br>New Ulm, MN            | 56073                                       | ,               | ,,              | C         | ha             |            | of           | Cu           | ist          | od              | у         | Re          | CO               | rd     | Page_Zof_Z.   |
|---------------|---|---|-----------------|-----------------|-----------|----------------|------------|--------------|--------------|--------------|-----------------|-----------|-------------|------------------|--------|---|
| Toll Fre      | Phone: (507) 354-8<br>e: (800) 782-3557 | 517<br>Fax: (507) 359-28                    | 90              |                 |           |                |            |              | W            | Vor          | k O             | rde       | r #         |                  |        | *   |
| Company I     | Name and Address:<br>2 ASSOCIATES, In C |   |                 |                 | Acc       | oun            | ıt #:      |              |              |              |                 |           |             |                  |        | ne #:<br>763)479-4 <i>39</i> 3  |
|               |   |   |                 |                 | Con       | <u> </u>       | <u>Nr</u>  |              | Bo           | 1[           |                 |           |             |                  | Fàx    | For faxed report check box  |
| Billing Add   | Iress (indicate if different            | from above):                                | · · · ·         |                 | Nan       |                |            | •            | er:          |              |                 |           |             |                  |        | nail: wboll@wenck.com   |
|               |   |   |                 |                 | Quo       | ote l          | lum        | ber          |              |              |                 |           |             |                  | Date   | e Submitted:  |
|               |   |   |                 |                 | Proj<br>C | ject<br>lea    | Nar<br>CW4 | ne/N<br>ite/ | lumt<br>- R  | oer:         | $\gamma \gamma$ |           |             |                  | Pur    | chase Order #:  |
|               | Sample                                  | Information                                 | 3               |                 |           | <u> </u>       |            |              | Boti         |              |                 | 9         |             | · · · · ·        |        | Analysis  |
| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VOC Vials | 500 ml unpres. |            | 500 ml HNO3  | 1000 ml HNO3 | 500 mi H2504 | TUVU MI H2304   | Amber 4 2 | 500 ml NaOH | Filtered? Y or N | Other: | Analysis Required   |
| <u>A24830</u> | CR 19.8                                 | Water                                       | 6/15/06         | 12:40           |           |                | 3          |              | (            | 1            |                 | 1         |             |                  |        | TP, OP, TN, NO3+1102, TKN,  |
|               |   |   |                 |                 |           |                |            |              |              |              |                 |           |             |                  |        | CBOD-20 day, TSS, chlor 95  |
|               |   |   |                 |                 |           |                |            |              |              |              |                 |           |             |                  |        | 1 OC  |
|               |   |   |                 |                 |           |                |            |              |              |              |                 |           |             |                  |        |   |
|               | ······································  |   |                 |                 |           |                |            |              |              |              |                 |           |             |                  |        |   |
|               |   |   |                 |                 |           |                |            |              |              | _            |                 |           |             |                  |        |   |
| Comments      | 3:                                      | <u>l</u>                                    | <u>}</u>        |                 |           |                |            |              | <u>I</u>     | <u> </u>     |                 |           |             |                  | 1      | KEMSKE PAPER CO. / OSWALD PUBLISHING CO., NEW ULM, M4 (800 782 1532) N749 |

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| 1. Malles Poll  | 6/15/06 | 14:30 |                   |                                       | 4.21  |       | -3    |
| 2. Den Baldain  | 6115106 | 14:30 |                   | flon Balback 6.                       | 15-06 |       | 1     |
|                 |         |       |                   | · · · · · · · · · · · · · · · · · · · |       |       | 1     |

|          | 1126 North Fi<br>New Ulm, MN            | 1 56073                               | a              |          |           | ha         |                 | of                      | ° C          | US           | sto           | dy              | / F         | lec         | :0               | rd       | Pageo                                       | ······································           |
|----------|---|---------------------------------------|----------------|----------|-----------|------------|-----------------|-------------------------|--------------|--------------|---------------|-----------------|-------------|-------------|------------------|----------|---|--|
| Toll Fre | Phone: (507) 354-8<br>e: (800) 782-3557 | 517<br>Fax: (507) 359-28              | ian            |          |           |            |                 |                         |              | Wc           | ork           | Or              | der         | •#          | 1                | 2        | 7634  |  |
|          | Vame and Address:                       | 1 47. (007) 000-20                    |                |          | Aco       | cour       | nt #:           |                         |              |              |               |                 |             |             | <u> </u>         | Pho      | ne #:                                       | _  |
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|          | Sample                                  | Information                           |                |          | ×         |            | . <u></u> .     |                         |              | ttle         | Ту            | pe              |             |             |                  | ·        | Analysis                                    | 3  |
|          |   |                                       |                |          |           | es.        | res.            | 0                       | 03           | 04           | \$04          | ic              | 04          | -           | or N             | 52 0     |   | 99999999 - 44 - 44 - 44 - 45 - 46 - 46 - 46 - 46 |
|          |   | Sample Type                           |                |          | als       | mi unpres  | dun             | ₽<br>₽                  | ŇHI          | H2S(         | H2S           | plast           | H2S(        | NaO         | 2 Y 6            | ત<br>૨   |   |  |
| Lab      |   | (Food, Soil,                          | Date           | Time     | voc Vials |            | 1000 ml unpres. | 500 ml HNO3             | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4 | 500 ml NaOH | Filtered? Y or N | Other, 6 |   |  |
| Number   | Sample ID                               | Water, Etc.)                          | Sampled        |          | 8         | 500        | Ē               | <u></u>                 | ě            |              | <u>ē</u>      | Ste             | An          | 500         | Ē                | 5        | Analysis Req                                | uired  |
| A26945   | CR 23.6                                 |                                       | 62806          | 900      | :<br>     |            |                 |                         |              | -            | $\leq$        |                 | _           |             |                  |          | TP  |  |
| 46       | CR 27:02                                |                                       |                | 940      |           |            | $\square$       |                         |              |              | $\square$     |                 | _           |             |                  |          | Pasphospho                                  | te   |
| 47       | CR 29.0                                 |                                       |                | 1020     |           |            | 1               |                         |              |              |               |                 | /           |             |                  | 1        | NO2# NO3                                    |  |
| 48       | CR 31.8                                 |                                       |                | 1040     |           |            | <               |                         |              | 1            | 7             |                 | ~           |             |                  | /        | Ammonia Nit.                                | Gara   |
| 49       | CR 33.6                                 |                                       | - <u> </u>     | 1109     |           |            | ~               |                         | -            | 1            | オ             |                 | 7           |             |                  | 7        | THIN Nitrog                                 |  |
| 50       | TR 23.2                                 | ·                                     |                | 1150     |           |            | 7               |                         |              | ~            | オ             |                 | /           |             |                  | 7        | Facal Cloife                                |  |
| 51       | CR 35.3                                 | · · · · · · · · · · · · · · · · · · · |                | 1220     |           |            | オ               |                         | -+           |              | オ             |                 | 7           |             |                  | 7        |   | ~*6  |
| 52       | 10 22 2                                 |                                       |                | 1240     | ļ,        |            |                 |                         |              |              | 1             |                 |             |             |                  | -        | Chloride                                    |  |
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| 53       | HWY 53                                  |                                       |                | 110      |           |            | 4               |                         | -            |              |               |                 | _           |             |                  |          | CB00 20 P                                   | ay   |
| 54       | CR 29.0 FT                              |                                       |                | 10:20    |           |            |                 |                         |              |              |               |                 |             |             |                  |          | 755   | <u> </u>   |
| Comments | ÷                                       |                                       |                |          | ,         |            |                 |                         |              |              |               |                 |             |             |                  |          | KEYCEERATER CO COSYNELO PHILE PARS (P. N/W) | non a contra                                     |
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|                         | 1126 North Fro<br>New Ulm, MN<br>Phone: (507) 354-85                    | 56073<br>17                                 |                            | , or            | ° C       | hai       |                   | of                 | Г            |               |               | dy<br>Ord       |             |             | or<br>M          | d<br>Øø | Pageof   |
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| Lab<br>Number<br>A29315 | Sample ID<br>CR 19, B   | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled<br>7/12/00 | Time<br>Sampled | VOC Vials |           | W 1000 ml unpres. | 500 ml HNO3        | 1000 mI HNO3 | 500 mi H2SO4  | 1000 ml H2SO4 | Sterile plastic | Amber Hitte | 500 ml NaOH | Filtered? Y or N | Other:  | Analysis Required<br>TPOrtho-P, TN, NortNOz,<br>TKN-N, Chloride,<br>5 day CROD, 20 day CROD<br>T3S, Chlor-a, TOC   |
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| Lab<br>Number Sample ID<br>A29371 CR 33.6<br>73 CR 31 B | Sample Type<br>(Food, Soil,<br>Water, Etc.)<br>Water | Date<br>Sampled | Time<br>Sampled<br>10:15              | VOC Vials |         | 500 ml HNO3                           | 500 ml H2SO4 |            | Sterile plastic | 500 ml NaOH  | Filtered? Y or N |      | Analysis Required<br>TP, Ortho-P, NO2+NO2, Ammonia-N,<br>TKNi Fecal, Chloride |
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|               | ek Assocrate.                           | 7/03-979-420           Contact:         Fax #: |                 |  |  |                |                 |             |              |              |               |                 |             |               | 1200             | >              |   |                  |             |                    |
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| Lab<br>Number | Sample ID                               | Sample Type<br>(Food, Soil,<br>Water, Etc.)    | Date<br>Sampled | Time<br>Sampled                        | VOC Vials                                    | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 ml H2SO4 | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4 | 500 ml NaOH   | Filtered? Y or N | Other: 150 m l | Analys  | sis Req          | uirec       | 1                  |
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|                | CHAIN OF CUSTODY<br>RECORD |      |  |          |                                       |  |            | WENCK ASSOCIATES, INC.<br>1800 Pioneer Creek Ctr. – P.O. Box 249<br>Maple Plain, MN 55359-0249<br>Phone: (763) 479-4200<br>FAX: (763) 479-4242 |         |   |                 |          |                     |          |                                       |          |                                 |                                  | FIELD COORDINATOR<br>NORM WENCK<br>AIRBILL NO |  |  |  |  |
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| Sample<br>I.D. | Date                       | Time | Comp.  | Grab     | 1                                     | Description                            | Soil       | Water  | Other   |   |                 |          |                     |          |                                       |          |                                 |                                  |   |  |  |  |  |
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| -<br>-<br>-    |                            |      |  |          |                                       |  |            |  |         |   |                 |          |                     |          | · · · · · · · · · · · · · · · · · · · |          |                                 | · · · · ·                        |   |  |  |  |  |
|                |                            |      |  |          |                                       |  |            |  |         |   |                 |          |                     |          |                                       |          |                                 |                                  |   |  |  |  |  |
|                |                            |      |  | -        |                                       |  |            |  |         |   |                 |          |                     |          |                                       |          |                                 | - DJ                             | · · · · · · · · · · · · · · · · · · ·         |  |  |  |  |
| Relinquish     | ط by: (Sig                 |      | Date   | Time     | Relinquishe                           | ed by: (Signat                         | ure)       | <u>I</u>   | Relinqu | ished by:                                 | (Signatu        | l<br>re) | <u>.</u>            | Date     | Time                                  | Relind   | inquished by: (Signature)       |                                  |   |  |  |  |  |
| Relinquish     |                            |      | Date   | Time     | -91                                   | or Laboratory I                        | by: (Signa | iture)   | Date    | ,<br>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Time            | Sam      | pling/Rec           | eipt Com | ments                                 | 3: 30 PM |                                 |                                  |   |  |  |  |  |

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

|                      |            |                         |                |             |                                       |                              |         |              |                                       |                          |                           |   | /                    | 12-1        | 1080   | 96  | )              | N                     | 0                    | 71                  | 00                 |               |
|----------------------|------------|-------------------------|----------------|-------------|---------------------------------------|------------------------------|---------|--------------|---------------------------------------|--------------------------|---------------------------|---|----------------------|-------------|--|---|----------------|-----------------------|----------------------|---------------------|--------------------|---------------|
| 2                    |            | IN OF C                 | CUSTO          | DDY         |                                       |                              | 1800    | Maple<br>Pho | r Creel<br>Plain,-<br>ne: (7 <u>(</u> | ς Ctr                    | - P.O.<br>359-02<br>-4200 | Box 24  | 9                    |             |  | FIELD COORDINATOR<br>NOMWEAC<br>AIRBILL NO. |                |                       |                      |                     | <u>K.</u>          |               |
| PROJ. NO.            |            |                         |                | PROJ. N     | AMECRWD                               |                              |         |              |                                       |                          |                           |   | iy 2 h               | 101         | 1211   | 5-0   | ر<br>Apaly     | <u>REN</u><br>yses, D | MARK<br>Electio      | <u>s</u><br>In Limi | ts,                |               |
| SAMPLERS             | S (Signatu | re)<br>Ze               | ~~~~           |             | tte=                                  |                              | APLE MA | TRIX         | 1<br>G                                | Or M<br>Phesy            | tri                       | N02#  | Animenia<br>Nitrogen | 1/2<br>N.T. | t etc.   | CALC  | GT<br>GRA<br>O | umaro<br>VQC,  <br>\  | nangi Ili<br>Rang/Ho | me, Pr<br>old, Pr   |                    | ion,<br>Data) |
| Sample               | Date       | Time                    | Comp.          | Grab        | Sample Description                    | Soil                         | Water   | Other        |                                       |                          |                           |   |                      |             |  |   |                |                       |                      |                     |                    |               |
| 1                    | 7250       | ;902                    |                |             | CR25.6                                |                              |         |              | 6                                     | annanti                  |                           | and the second se | • • • • • •          | -           | · · · · · ·  | -   | 7              |                       | 7                    |                     | ~                  | AUZII         |
| 2                    |            | 1000                    |                | 1           | CR212                                 | ~                            |         |              | and the second                        | . Sector of the          | -                         | /   | /                    |             | ~~~  | 1   | 7              |                       | ~                    | オ                   | 7                  | γu            |
| 3                    |            | 1100                    |                | 1           | CR 29.0                               |                              |         |              |                                       | /                        |                           | and the second se |                      |             | and the second s | ~   |                |                       | -                    | -                   | 1                  | 15            |
| 4                    |            | 1140                    |                |             | CR 318                                |                              | 1       |              |                                       | ***                      |                           | 1   |                      |             | /  |   | /              |                       | /                    | 1                   | ~                  | 16            |
| 5                    |            | 1230                    |                | /           | TB 332                                |                              |         |              |                                       | <b>667</b> <sup>22</sup> |                           |   | /                    | 1           | /  | 1   | 1              | <u> </u>              | -                    | 1                   | <u></u>            | 17            |
| i.                   |            | 100                     |                | 9           | CR 33.6                               | >                            | /       |              |                                       | /                        |                           | /   | /                    |             | Careton and  |   | <u> </u>       | /                     |                      | 1                   | _                  | 18            |
| 7                    |            | 200                     |                | 1           | CR 19.5                               | ···· ··· ···· ···· ···· ···· |         |              | <u> </u>                              |                          | 1                         | /   |                      |             |  | /   | 4              |                       | Statement.           |                     | Sector Contraction | A42095        |
|                      |            |                         |                |             | · · · · · · · · · · · · · · · · · · · |                              |         |              |                                       |                          |                           |   |                      |             |  |   |                |                       |                      |                     |                    |               |
| <u>}</u>             |            |                         |                |             | CR 29.0 F                             | <u>. •</u> [                 |         | :            |                                       |                          |                           |   |                      |             |  |   |                |                       |                      |                     |                    |               |
|                      |            |                         |                |             |                                       |                              |         |              |                                       |                          |                           | <u>.</u>  |                      |             |  |   |                |                       |                      |                     |                    |               |
|                      |            |                         |                |             |                                       |                              |         |              |                                       |                          |                           |   |                      |             |  |   |                | ļ                     |                      |                     |                    |               |
| <u></u>              |            |                         |                |             |                                       |                              |         |              |                                       |                          |                           |   |                      |             |  |   |                |                       |                      |                     |                    |               |
| Relinquishe<br>Kurri |            |                         | Date<br>9,25CL | Time<br>235 | Relinquished by: (Sigr                | ature)                       |         | Relinqu      | ished by:                             | (Signatu                 | re)<br>Mr                 | di  | Date<br>Biga         | Time        | Relinq   | inquished by: (Signature)                   |                |                       |                      |                     |                    |               |
| Relinquishe          | d by: (Sig | A CONTRACT OF THE OWNER | Date           | Time        | Received for Laborator                | y by: (Sign                  | ature)  | Date         |                                       | Time                     | San                       | npling/Rec  | 1 1                  |             | •  |   |                |                       |                      |                     | -                  |               |

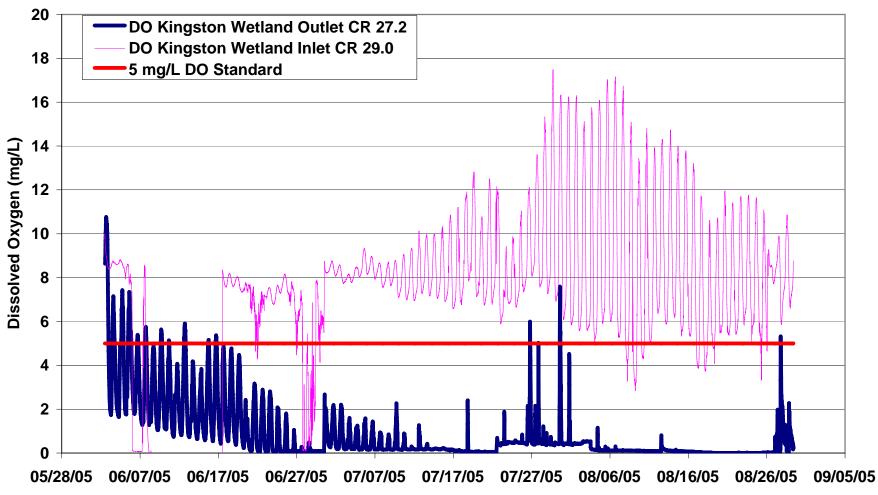
DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

# Appendix E

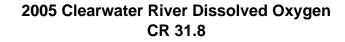
**Continuous Dissolved Oxygen Records** 

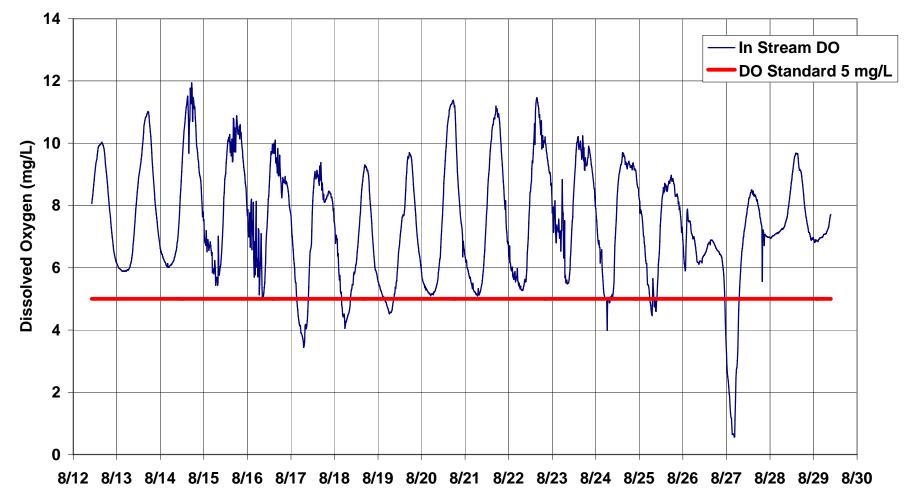
## Phase II TMDL Study Lake Louisa and The Clearwater River (Clear Lake to Lake Betsy)

## Clearwater River Dissolved Oxygen Upstream and Downstream of the Kingston Wetland









#### Phase II TMDL Study Lake Loiusa and The Clearwater River (Clear Lake to Lake Betsy)

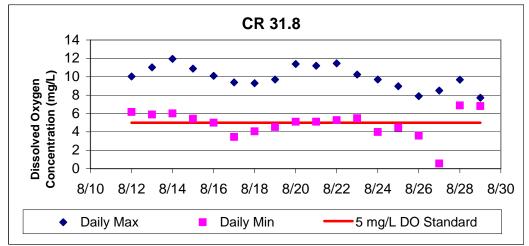
#### Clearwater River Dissolved Oxygen CR 31.8

|                            | Precipitation | Flow  | Dissolve  | ed Oxygen | (mg/L)   |
|----------------------------|---------------|-------|-----------|-----------|----------|
| Date                       | (inches)      | (cfs) | Daily Max | Daily Min | Delta DO |
| Friday, August 12, 2005    |               |       | 10.03     | 6.17      | 3.86     |
| Saturday, August 13, 2005  |               |       | 11.02     | 5.88      | 5.14     |
| Sunday, August 14, 2005    |               |       | 11.94     | 6.01      | 5.93     |
| Monday, August 15, 2005    |               | 0.06  | 10.88     | 5.43      | 5.45     |
| Tuesday, August 16, 2005   |               |       | 10.1      | 5         | 5.1      |
| Wednesday, August 17, 2005 |               |       | 9.38      | 3.44      | 5.94     |
| Thursday, August 18, 2005  | 0.28          |       | 9.3       | 4.05      | 5.25     |
| Friday, August 19, 2005    | 0.12          |       | 9.7       | 4.52      | 5.18     |
| Saturday, August 20, 2005  |               |       | 11.38     | 5.1       | 6.28     |
| Sunday, August 21, 2005    |               |       | 11.19     | 5.1       | 6.09     |
| Monday, August 22, 2005    |               |       | 11.46     | 5.27      | 6.19     |
| Tuesday, August 23, 2005   |               |       | 10.24     | 5.48      | 4.76     |
| Wednesday, August 24, 2005 |               |       | 9.7       | 3.99      | 5.71     |
| Thursday, August 25, 2005  |               |       | 8.97      | 4.46      | 4.51     |
| Friday, August 26, 2005    | 2.12          |       | 7.88      | 3.59      | 4.29     |
| Saturday, August 27, 2005  |               |       | 8.5       | 0.56      | 7.94     |
| Sunday, August 28, 2005    |               |       | 9.68      | 6.88      | 2.8      |
| Monday, August 29, 2005    |               |       | 7.71      | 6.81      | 0.9      |
| Average:                   |               |       | 9.9       | 4.9       | 5.1      |
| Standard Dev:              |               |       | 1.2       | 1.5       | 1.5      |
| Max:                       |               |       | 11.9      | 6.9       | 7.9      |
| Min:                       |               |       | 7.7       | 0.6       | 0.9      |

T:\0002\75\_TMDL Ph2\Report\Appendix E\_Cont DO\[Kingston.xls]Fig d.3

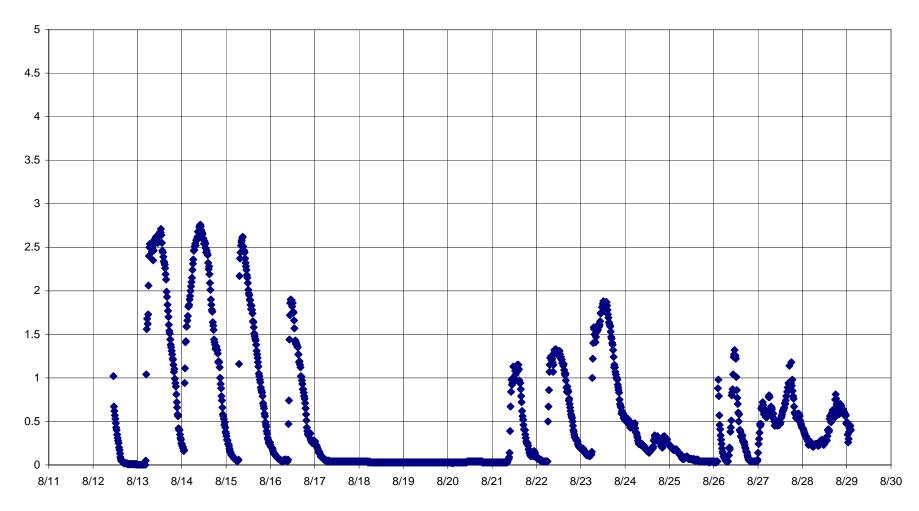
Precipitation: Kingston





## Phase II TMDL Study Lake Louisa and The Clearwater River (Clear Lake to Lake Betsy)

## 2005 Clearwater River Dissolved Oxygen CR 26.1

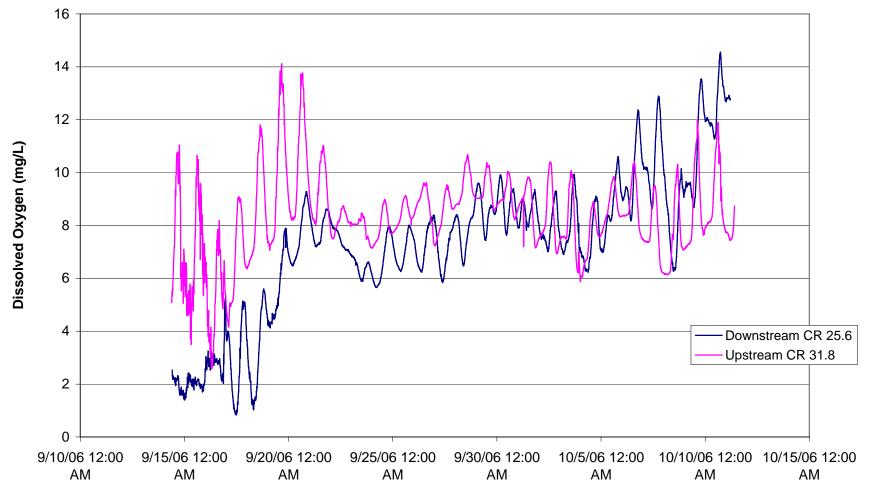


T:\0002\75\_TMDL Ph2\Report\Appendix E\_Cont DO\Kingston\Figure E4 CR 26.1 DO

Wenck Associates, Inc.



2006 Clearwater River Dissolved Oxygen Upstream and Downstream End of Listed Reach

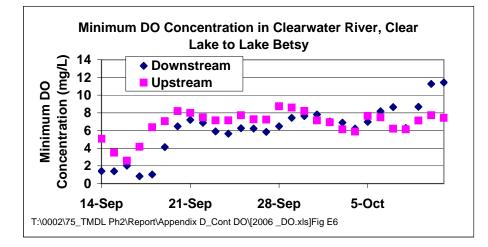


#### Phase II TMDL Study

#### Lake Louisa and The Clearwater River (Clear Lake to Lake Betsy)

| r                | De          | weatraam        | r                   |       | Inctroom |      |
|------------------|-------------|-----------------|---------------------|-------|----------|------|
| Data             |             | wnstream<br>Min |                     |       | Jpstream |      |
| Date<br>09/14/06 | Max<br>2.53 | 1.41            | ∆ <b>DO</b><br>1.12 | Max   | Min      | Δ DO |
|                  |             |                 |                     | 11.03 | 5.06     | 5.97 |
| 09/15/06         | 2.41        | 1.4             | 1.01                | 10.65 | 3.5      | 7.15 |
| 09/16/06         | 5.22        | 2.03            | 3.19                | 8.19  | 2.58     | 5.61 |
| 09/17/06         | 5.14        | 0.83            | 4.31                | 9.08  | 4.16     | 4.92 |
| 09/18/06         | 5.6         | 1.03            | 4.57                | 11.8  | 6.36     | 5.44 |
| 09/19/06         | 7.89        | 4.13            | 3.76                | 14.11 | 7.06     | 7.05 |
| 09/20/06         | 9.28        | 6.47            | 2.81                | 13.76 | 8.2      | 5.56 |
| 09/21/06         | 8.62        | 7.19            | 1.43                | 11.02 | 8        | 3.02 |
| 09/22/06         | 8.26        | 6.88            | 1.38                | 8.75  | 7.49     | 1.26 |
| 09/23/06         | 6.9         | 5.89            | 1.01                | 8.47  | 7.14     | 1.33 |
| 09/24/06         | 7.96        | 5.65            | 2.31                | 8.98  | 7.15     | 1.83 |
| 09/25/06         | 8.01        | 6.26            | 1.75                | 9.13  | 7.73     | 1.4  |
| 09/26/06         | 8.39        | 6.23            | 2.16                | 9.62  | 7.28     | 2.34 |
| 09/27/06         | 8.33        | 5.84            | 2.49                | 9.54  | 7.23     | 2.31 |
| 09/28/06         | 9.15        | 6.47            | 2.68                | 10.68 | 8.74     | 1.94 |
| 09/29/06         | 9.6         | 7.44            | 2.16                | 10.37 | 8.59     | 1.78 |
| 09/30/06         | 9.91        | 7.63            | 2.28                | 10.04 | 8.22     | 1.82 |
| 10/01/06         | 9.36        | 7.82            | 1.54                | 9.83  | 7.15     | 2.68 |
| 10/02/06         | 9.3         | 7.01            | 2.29                | 10.4  | 6.93     | 3.47 |
| 10/03/06         | 9.93        | 6.9             | 3.03                | 10.07 | 6.13     | 3.94 |
| 10/04/06         | 9.11        | 6.23            | 2.88                | 8.89  | 5.87     | 3.02 |
| 10/05/06         | 10.6        | 6.98            | 3.62                | 9.84  | 7.66     | 2.18 |
| 10/06/06         | 12.37       | 8.17            | 4.2                 | 10.4  | 7.48     | 2.92 |
| 10/07/06         | 12.89       | 8.64            | 4.25                | 9.49  | 6.2      | 3.29 |
| 10/08/06         | 10.15       | 6.27            | 3.88                | 10.31 | 6.14     | 4.17 |
| 10/09/06         | 13.54       | 8.68            | 4.86                | 11.99 | 7.12     | 4.87 |
| 10/10/06         | 14.55       | 11.27           | 3.28                | 11.91 | 7.73     | 4.18 |
| 10/11/06         | 12.92       | 11.44           | 1.48                | 8.99  | 7.43     | 1.56 |
|                  | Avera       | ge ∆ DO:        | 2.7                 |       |          | 3.5  |

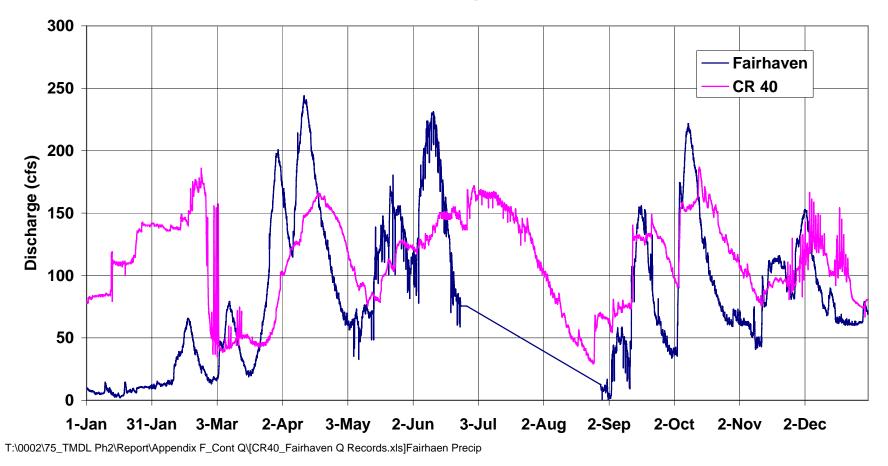
#### 2006 Clearwater River Dissolved Oxygen Upstream and Downstream End of Listed Reach



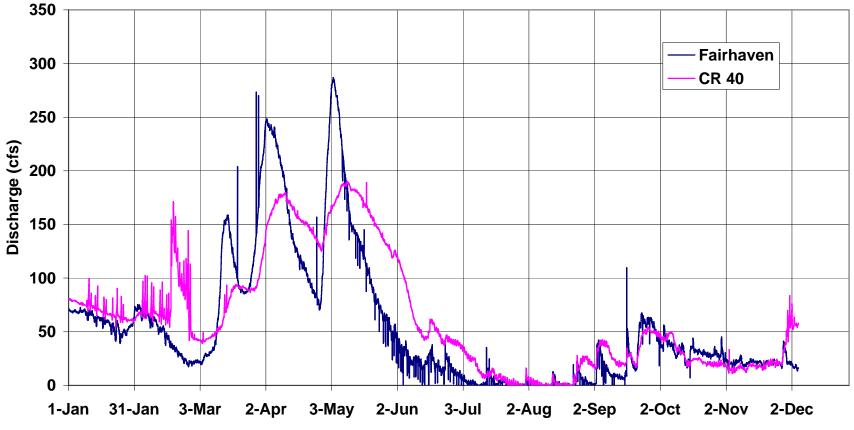
# Appendix F

**Continuous Flow Records** 

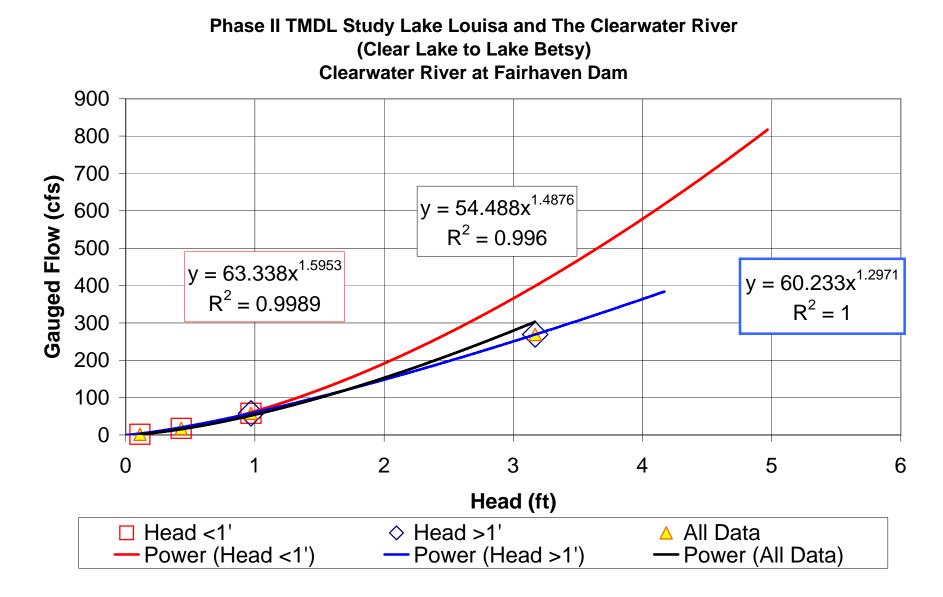
# Phase II TMDL Study Lake Louisa and The Clearwater River (Clear Lake to Lake Betsy) 2005 Clearwater River Mile Discharge at Fairhaven Dam and CR 40



Appendix F Figure 2 Phase II TMDL Study Lake Louisa and The Clearwater River (Clear Lake to Lake Betsy) 2006 Clearwater River Mile Discharge at Fairhaven Dam and CR 40



T:\0002\75\_TMDL Ph2\Report\Appendix F\_Cont Q\[CR40\_Fairhaven Q Records.xls]Fairhaen Precip



# Appendix G

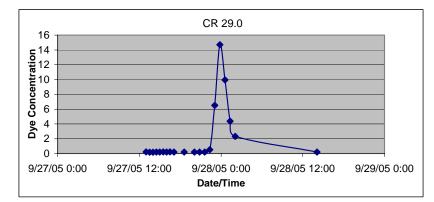
**Time of Travel Study Results** 

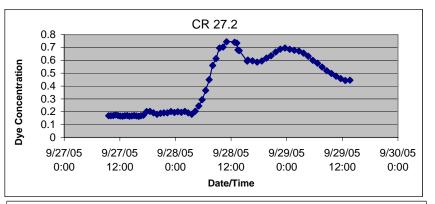
### Appendix G

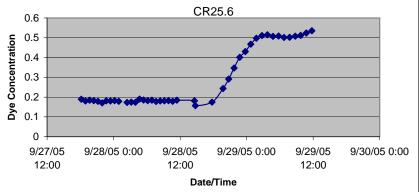
### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

### September 2005 Time of Travel Study Results

|                | Site   | Dye Dump Time   | Dye Concentration<br>(oz) | Distance from<br>Dump Site<br>(miles) | Dye Peak Time   | Time of<br>Travel<br>(hours) | Avg<br>Reach<br>Velocity<br>(miles/hr) | Avg<br>Reach<br>Velocity<br>(ft/sec) | Avg Site<br>Measured<br>Velocity | Gauged<br>Flow (cfs) |
|----------------|--------|-----------------|---------------------------|---------------------------------------|-----------------|------------------------------|--|--------------------------------------|----------------------------------|----------------------|
| Dye Dump       | CR31.8 | 9/27/2005 12:00 | 12                        |                                       |                 |                              |  |                                      | 0.66                             | 6.27                 |
| #1             | CR29.0 |                 |                           | 2.8                                   | 9/27/2005 23:50 | 11.83                        | 0.24                                   | 0.35                                 | 0.92                             | 9.68                 |
|                | CR27.2 |                 |                           | 4.6                                   | 9/28/2005 23:38 | 35.63                        | 0.13                                   | 0.19                                 | 0.11                             | 8.19                 |
| Dye Dump<br>#2 | CR29.0 | 9/27/2005 9:15  | 16                        |                                       |                 |                              |  |                                      | 0.92                             | 9.68                 |
|                | CR27.2 |                 |                           | 1.8                                   | 9/28/2005 11:01 | 25.76                        | 0.07                                   | 0.10                                 | 0.11                             | 8.19                 |
|                | CR25.6 |                 |                           | 3.4                                   | 9/29/2005 3:45  | 42.5                         | 0.08                                   | 0.12                                 | 0.10                             | 9.53                 |





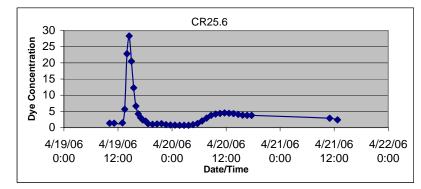


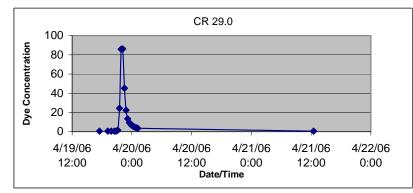
#### Appendix G

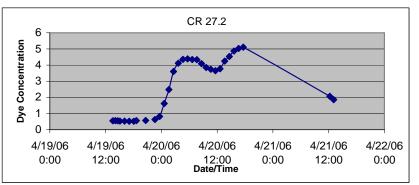
#### Clearwater River Watershed District Clearwater River Bacteria and DO TMDL

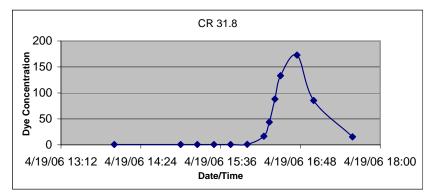
### April 2006 Time of Travel Study Results

|                | Site   | Dye Dump Time   | Dye Concentration<br>(oz) | Distance from<br>Dump Site<br>(miles) | Dye Peak Time   | Time of<br>Travel<br>(hours) | Avg<br>Reach<br>Velocity<br>(miles/hr) | Avg<br>Reach<br>Velocity<br>(ft/sec) | Avg Site<br>Measured<br>Velocity | Gauged<br>Flow (cfs) |
|----------------|--------|-----------------|---------------------------|---------------------------------------|-----------------|------------------------------|--|--------------------------------------|----------------------------------|----------------------|
| Dye Dump<br>#1 | CR35.3 | 4/19/2006 11:50 | 20                        |                                       |                 |                              |  |                                      | 2.23                             | 14.21                |
|                | CR31.8 |                 |                           | 3.5                                   | 4/19/2006 16:45 | 4.92                         | 0.71                                   | 1.04                                 | 1.45                             | 26.87                |
|                | CR29.0 |                 |                           | 6.3                                   | 4/19/2006 22:10 | 10.33                        | 0.61                                   | 0.89                                 | 1.32                             | 29.15                |
| Dye Dump<br>#2 | CR29.0 | 4/19/2006 10:35 | 20                        |                                       |                 |                              |  |                                      | 1.32                             | 29.15                |
|                | CR27.2 |                 |                           | 1.8                                   | 4/20/2006 5:38  | 19.05                        | 0.09                                   | 0.14                                 | 0.33                             | 34.11                |
|                | CR25.6 |                 |                           | 3.4                                   | 4/20/2006 11:40 | 25                           | 0.14                                   | 0.20                                 | 0.30                             | 32.63                |
| Dye Dump<br>#3 | CR27.2 | 4/19/2006 9:10  | 12                        |                                       |                 |                              |  |                                      | 0.33                             | 34.11                |
|                | CR25.6 |                 |                           | 1.6                                   | 4/19/2006 14:30 | 5.33                         | 0.30                                   | 0.44                                 | 0.30                             | 32.63                |



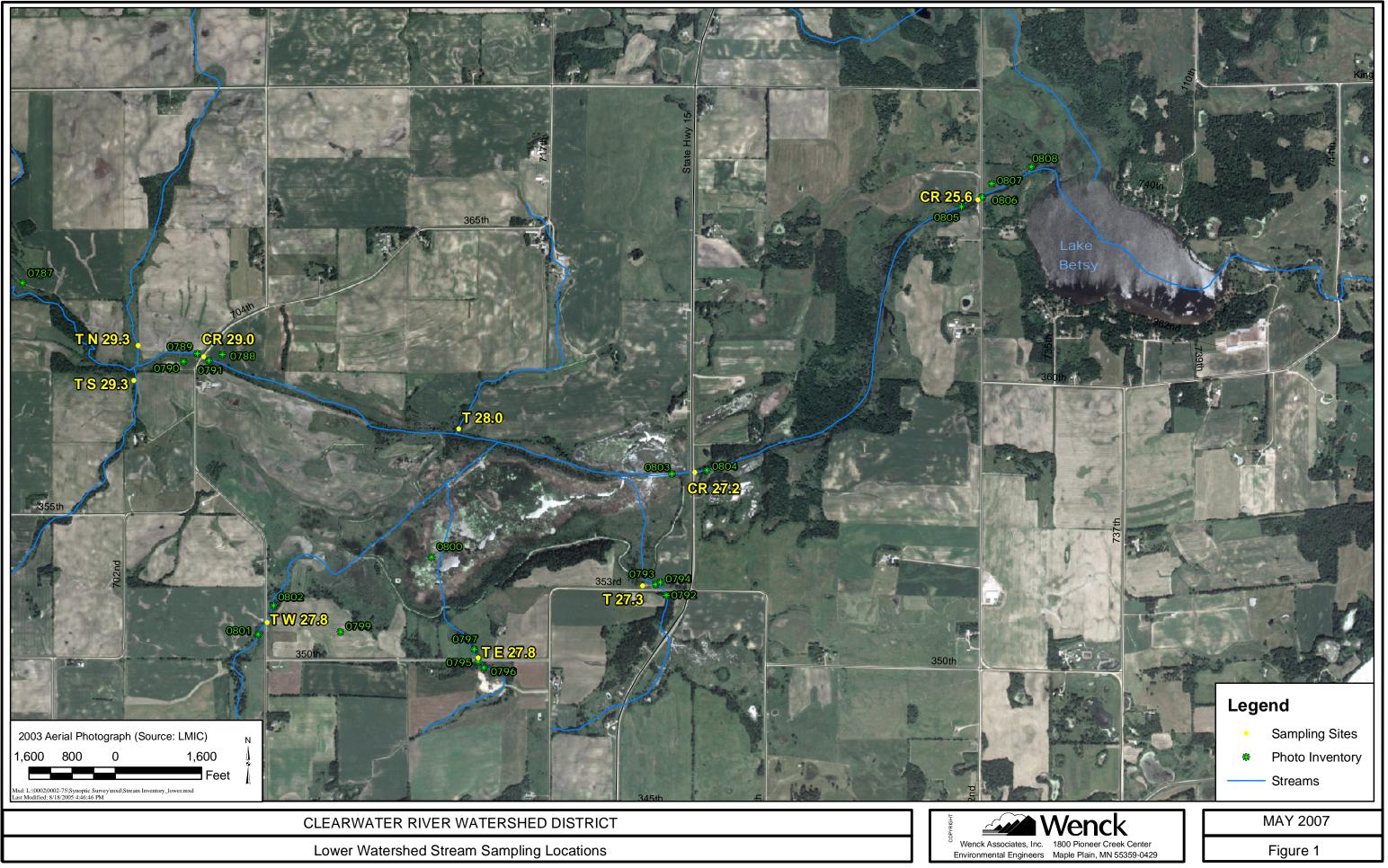


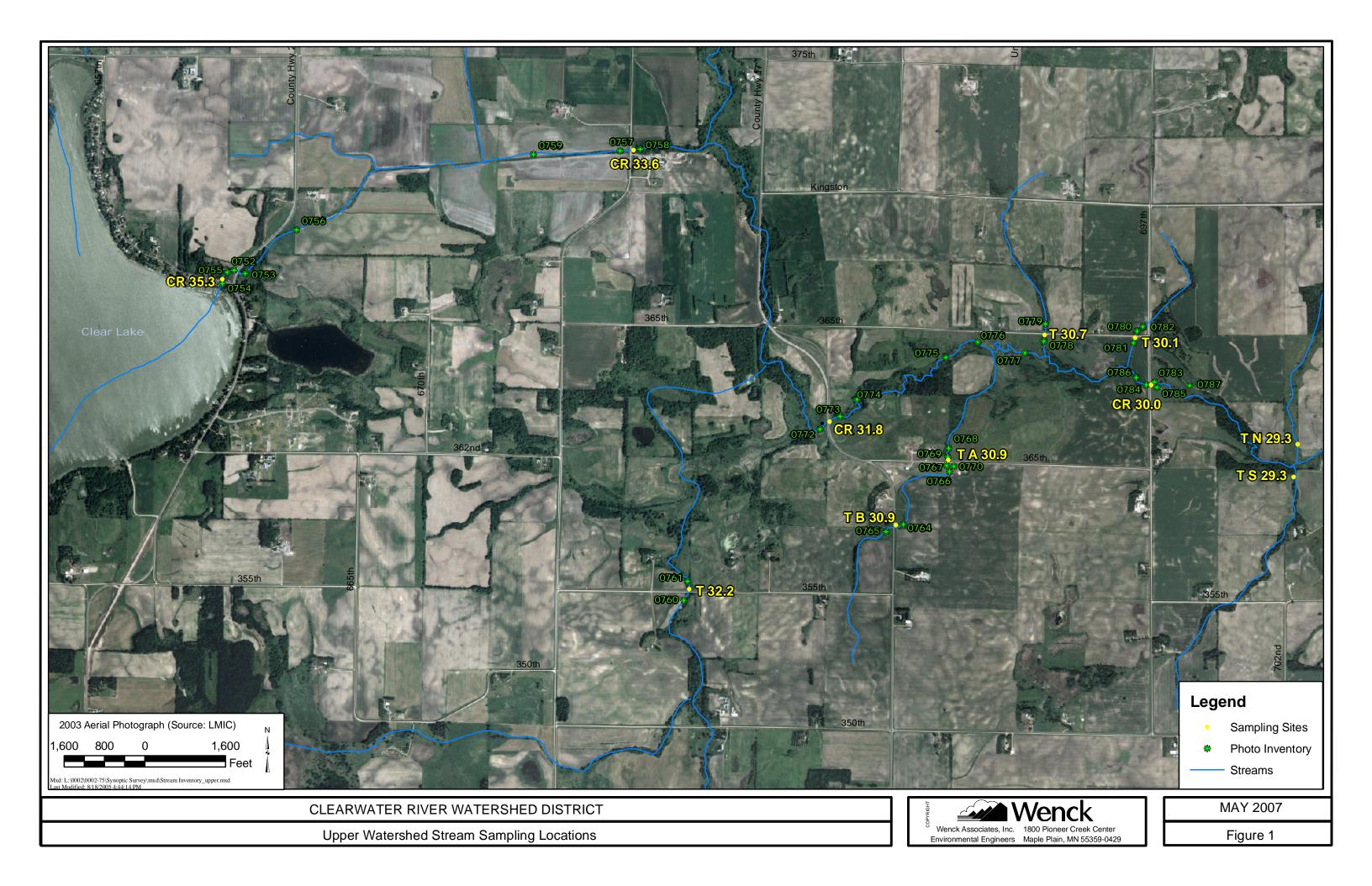


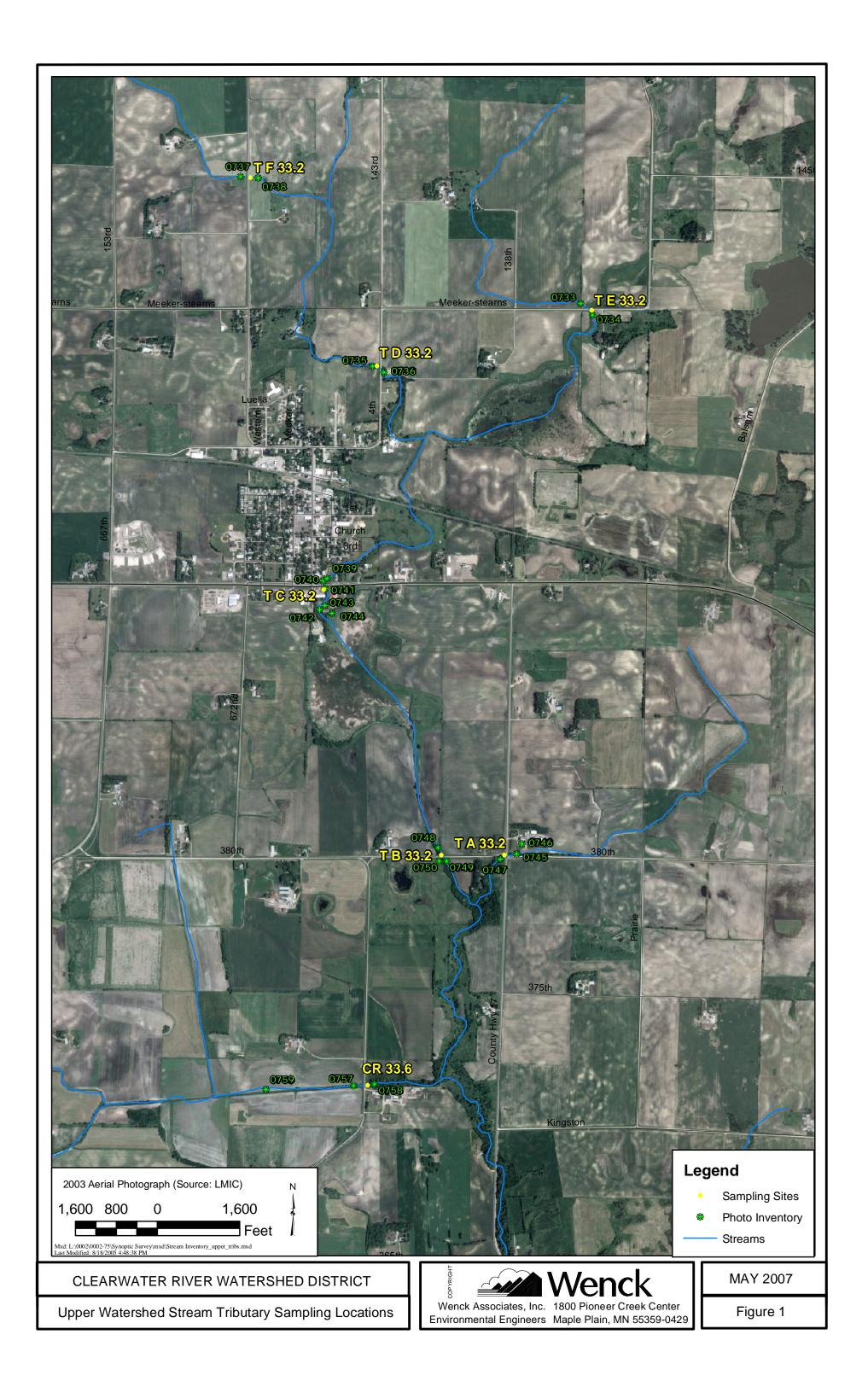


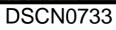
# Appendix H

**Field Survey Results** 

















DSCN0737



DSCN0736







DSCN0741



DSCN0740







DSCN0745



DSCN0744







DSCN0749



DSCN0748









DSCN0754





DSCN0757



DSCN0756











DSCN0762





DSCN0765



DSCN0764







DSCN0769



DSCN0768







DSCN0773



DSCN0772







DSCN0777





DSCN0778





DSCN0781



DSCN0780







DSCN0785



DSCN0784







DSCN0789



DSCN0788







DSCN0793





DSCN0794





DSCN0797





DSCN0798





DSCN0801



DSCN0800







DSCN0805



DSCN0804







Clearwater River TMDL **Physical Inventory** Date/Time\_08/14/05 R 25.6 Stream Site Clearwater River & Observer\_ Lake Bersy Access Water Body \_ **GPS** Coordinates: Photos: up 806 down down 17807 0808 Channel Morphometry Ditched and Straight Channel Undercat Banks **Riparian Land Use Characteristics** Downstream Upstream Pasture Forest Forest Vegetation Boxelder Riverbunk Empe C Oontail Reed Canary White Snakeroot anchived Buckthorn Tree Canopy and Shaded Areas Upistream Lownstream 90% 20% Sediment Type and Classification Dandy on edges Organic muck **Comments and Notes** upstream of site, cow pasture -orester O

Date/Time\_08 Stream Site Water Body <u>Clear water River</u> Observer

**GPS** Coordinates:

Photos:

0803 Up**sinkam** ()BOH Downestseam

Channel Morphometry Wide Channel Dingont Graight Riparian Land Use Characteristics Downstream Uptimean Fore St Wetland Vegetation Dewnstream Ash Reel Canary Bebb Willow

Ash Boxelder Westream Riel Cunary Bebbwilbw Sandbar Willow Tree Canopy and Shaded Areas Cattail 1) OW ASTREAM Upstream 6090 Plo 13

Sediment Type and Classification Wetland Solls Organic muck

**Comments and Notes** 

Straight dredged channel, ponded area downstream of read, surrounded by netland upstream

Clearwater River TMDL Physical Inventory Date/Time\_8/16/05 Stream Site Water Body Triburary @ 353rd Sr Observer WB, GN **GPS** Coordinates: Photos: 0792 Upstream 0793 DS 0744 DS Channel Morphometry Straight with Steep banks (upstream) **Riparjan Land Use Characteristics** Grassland Contract (BARD) Downstream Stinging Nettle Jewelweed Beto Willow Read Camiry Elm Boxelder Ash Vegetation Opstrum Tenswed Reed Camry Bur Cwamber Tree Canopy and Shaded Areas Clowngream 90% upstream Olo Sediment Type and Classification Praganic Matter Mucky **Comments and Notes** Upstream, Channel is vegetated and adjucent to ag fields, tarther upstream it is shaded by trees Lownstram by trees, with a more natural channel is Shated buffer Channe wider Negetated

Clearwater River TMDL **Physical Inventory** Date/Time\_\_\_08/16/05 ~E D.O Stream Site Water Body In, butary on 350th Sp Observer WB, GN **GPS** Coordinates: 0795 upstream 0796 upstream 0797 downstream Photos: **Channel Morphometry** Meandering Eroded Banks Braided Steep banks downcutting Riparian Land Use Characteristics Upstream Cow Pasture Safe Cow FOREST. 2°455 401 Vegetation Upgtheam Chanary Reed Canary Downstream Elm Boxelder Tervelung Rlack Willow oxelder Tree Canopy and Shaded Areas Buckton 90% Sediment Type and Classification -covered by soil upstream Clean Fine to medium wand **Comments and Notes** ow Pasture upstream, tracks evident in streambank, smell of Manure, bunkgeroded from cattle Cow Steep; heavily vegetated eroded and Jownstream, bank's are

Date/Time\_8/16/0 7, 8 Stream Site Water Body Tributary @ 707rh St Observer MB, GN

**GPS** Coordinates:

Photos: 10807 0900 Dunstream

**Channel Morphometry** Meandering Eraded Banks Under cut Banks (downstream)

Riparian Land Use Characteristics Grassland Ag Fields

Vegetation Jaxelder Sandbar Willow Bur Cucumber Native Restored Grasses upslope Reed Canary Stinging Nettle Jewelweed

Tree Canopy, and Shaded Areas 75%

Sediment Type and Classification

**Comments and Notes** 

woody plants. Riparian and

Date/Time\_<u>OB/16[05</u> Stream Site Water Body Clear water River @ 704th St Observer MB. G.N **GPS** Coordinates: Photos: 788 NP 789 NP Channel Morphometry down learning Indercut Banks Sediment Deposits Slight Meandering Draded Riparian Land Use Characteristics Ag(downstream)Residential Farm on upstream side Vegetation Black Willow Wild Grupe Sandbar Willow Bur Cucumber Bred Camp Brome BADESTER Reed Canary Tree Canopy and Shaded Areas Upstream - 600/0 Downstream - 900/0 Sediment Type and Classification Medium to course sund Gome gravel **Comments and Notes** Channel is nearly uniform width, slightly meandering Wider grassed buffer upstream (200') to stream, no animals evident Farm Acent

Date/Time Stream Site ( Water Body Clearwater River & 704th Observer WB GN

### **GPS** Coordinates:

Photos: 0784 - Upstream 0785-downstream 0786- downstream **Channel Morphometry** Meandering Underent banks Braided Sediment Deposits **Riparian Land Use Characteristics** Stream Downgreen Vegerated Buffer (Trues) Ag fields Vegetaled Batter Grassland Vegetation Bluck Willow Bur Cucumber Sandby Willow Reed Canary Tree Canopy and Shaded Areas Upstrum Downstrenm 1009/0 90%

## Sediment Type and Classification

Clean medium to coarge sand Organic material at surface

### **Comments and Notes**

pstream, channel is heavily vegetated by wordy vegetation, and ordered by agfields worstneam channel is bordered by contrassignels and shoulds et apprassignels Downstream.

Clearwater River TMDL Physical Inventory

Date/Time\_8/10/05 Stream Site Water Body Man Tributary on 365th 5th Observer WB, GN

**GPS** Coordinates:

Photos: 0783 - CR 0780-Upstream 0781-DOWNSTREAM Channel Morphometry Meandering Steep gradient Ercded Vank S(uppream) Riparian Land Use Characteristics Up. >own Vegetated baffer Ag fields Forestal Ag fields Vegetation Down Reed Canary Boxelder Sindbar Willow Bur Cucumber Sumac Boxelder 199 white Oak Wild Grape White Snike root Wood We the Tree Canopy and Shaded Areas 120-100% Lown 60%

Sediment Type and Classification Medium grained sand Coldoles and boulders

**Comments and Notes** 

Steep gradient stream with regetative by both sides succounded by agricultural fi

Date/Time\_8/16/05 509 Stream Site Water Body Tributary @ 365th St Observer WB, GN

**GPS** Coordinates:

Photos:

0778 - downstream 0779 - hporneam

Channel Morphometry Murrow Meandering channel Éroded Banks Undercutbanks Steep gradient Riparian Land Use Characteristics Upstreum Ag fields Forested buffer Grassland Vegetation Black Willow Goldenrod Boxelder Tewelwed Reed Canary Tree Canopy and Shaded Areas 90%

Sediment Type and Classification Coarse sand with some gravel Very little organic matter

**Comments and Notes** 

Stream has steep gradient, less grass in understory upstray, More crossion and undercutting upstream

Date/Time\_8/(6) Stream Site Water Body Tributary @ 355th St

Observer <u>M</u>

**GPS** Coordinates:

0706 - Upstreum Feedlot Photos: 0764-upstream T30,95 0765-downstream 0767 - Upstream Feedloc 0770 OTUB > COMMENTER **Channel Morphometry** Upgoream Narrow chamel with steep should banks 1)oursmun Channel "dens with flarter, bunks Some undercur and eroded bunks Riparian Land Use Characteristics Upstream Down Stream Agricultural Frelds Forested Farm with feedlor Grassland Vegetation DOWISTERIM Boxelder wild Grape Green Ash Thistle Bur Cucumber Tree Canopy and Shaded Areas Upstrum - 0% DOWASTREAM - 10090

Medium to course sands with organics

**Comments and Notes** 

Stream flows through feedbe with cattle in stream (215-20) upstream

Headily forested banks downstream

Date/Time\_8/16/05 Stream Site <u>CR 3</u>).8 Water Body Clearwater River@ 365th Observer WBGN

**GPS** Coordinates:

0772 - upstream 0773 - downstream Photos:

Channel Morphometry Meandering Undercuf banks Sediment deposits Braided channel **Riparian Land Use Characteristics** 

Wetland Forested

Vegetation Submergent, Coontail

Reed Canary Goldenrod Sundbar Willow

**Tree Canopy and Shaded Areas** 75%

Sediment Type and Classification

Fine to medium sand layers of gravel Comments and Notes

Stream has & flat sloped banks, flows through wetland area with wide buffer from ag crops,

Date/Time\_08/16/05 Stream Site 1 32.0 Water Body Tributary at 355th St Observer WB. G.N

**GPS** Coordinates:

Photos: 0760-upgream (0761 - downstream **Channel Morphometry** Meandering Wide regetated buffers Flat sloped banks Straighter channel downstream with Steeper ended and undercut banks Riparian Land Use Characteristics Upstream Forested ubthand Restored grassland Vegetation Dogwood Willow Bur Chevinber Reed Can any Wild Grape Coldenned Beggarstick Great Raciveed Soxelder Jene weed Tree Canopy and Shaded Areas  $100^{0/0}$ 

Sediment Type and Classification Medium to coarse Sands Organic layer on top

**Comments and Notes** 

*pstream* Narrower channel with Flatter slopes, more wagetation in understor Wetlands upstream

Ownstream Forested with steeper banks, wider chame, duy ont HPANN area Donde

Date/Time\_<u>8/16/05</u> 10:00 Stream Site <u>CR</u> 35,3 learwater River at Clear Observer WB, GN Water Body (

**GPS** Coordinates:

Photos: 0752 - QUERSTRAM 0753-upstream 0754-outlet from lake 0755-Campground Meandering and Straightened

**Riparian Land Use Characteristics** Dawnstream UPSTRAM Campground Mowed turf gress to stream edge Residential wetland FORGA Vegetation Kentucky Bluegrass Downstrum Reed Canary ottonwood Cattan Willow Tree Canopy and Shaded Areas 25º/0 ds 70% us

Sediment Type and Classification Gravel and Cobbles Medium to course sand

**Comments and Notes** 

utlet from Clear hake and residences upstream with mound turf grass ampground

Date/Time Stream Site ( <u>learwater</u> River Water Body \_

Observer\_WB,GN

**GPS Coordinates:** 

Photos:

0757 - upstream 0758 - downstream

Channel Morphometry Straightend Ditch Upstream Meandering downstream

**Riparian Land Use Characteristics** 95 100 F+ vegetated buffer 15 Ag fields Vegetation Reel Canary Smooth Brome Gullenral Tree Canopy and Shaded Areas 20% downstram Upstream 100% downstream

Sediment Type and Classification Upstream - medium to coarse sandy clay Downstream - coarser sand, some gravel and cobble

**Comments and Notes** 

narrow clitch with Steep banks hanne Straight stream, agricultura the) <u>`</u>5 hear has 1Stream INNE MON meanders ۵n sediment widenc and Carse Janno Stream arcu adjacent and tarm tô ban

Date/Time\_8/16/05 9:45 33.2 K Stream Site MTn. butary Water Body 370+2

Observer <u>WB</u> GA

**GPS** Coordinates:

Photos: 0748 - upstream 1749 - downstream Channel 0750 - Stream restoration, native grassland Channel Morphometry Straight channel Honded dugont area downstream Erosion control dow.1stream **Riparian Land Use Characteristics** Bestored Grassland VPSFream Ag land (Soybunstorn) Vegetation Bur reed Ash (00%Arrowherd (in channel) Restored Native grasses (downstream) Reed Canary Simontweed Boxelder Carrall Tree Canopy and Shaded Areas 25% upstneam (on TE bank only) 75% clownstream Sediment Type and Classification Medium to Course Sand 4 10% silt, some organics **Comments and Notes** Heavily regitated ditch upstream, with trees removed on West bank. Drain tile enters from E bank, 30 ft buffer on Stream restoration/erosion downstream, wide vegetated buffer, control grasskind Ne Gored 10 little Water Streambank

Date/Time\_<u>8/16/05</u> Stream Site C 380th Cty Hwy 17 Water Body

**GPS** Coordinates:

Photos: 0746 - Vpstream 0746 - Farm adjacent tostream 0747 - downGrream

**Channel Morphometry** 

Meandering Culvert under road drops down to stream

#### **Riparian Land Use Characteristics** Dosmein

Farm adjacent on N side Agriculture Mowed grass Vegetation 20% Reed Canary Stinging Nettle Bluck Willow Wild Grape 30% Boxelder Bur Cucumber Buck there Jewelwed

Downstream Forested area Res. Jence

Tree Canopy and Shaded Areas 80% (Boxelder, Buck+bon; Black Willow)

### Sediment Type and Classification

Fine to coarse, organic rich sand

#### **Comments and Notes**

Farm adjacent to stream on Nend grass moved down to ditch, Heavily forested downstream with a residence on stream

Date/Time\_\_\_/ 16/05 Stream Site TC 33,7 Water Body Tributary @ Hwy 55 in Watking Observer WB, GN

**GPS** Coordinates:

Photos: 0742 trash pile 0729 - Upstrum 0743 - mound 0749 - wetland ()740 - Culvert upstream coming from gas station 0741 - downstream Channel Morphometry Straight Channel (ds) Meundering upstream Suliment deposits Onder cutbulks Riparian Land Use Characteristics Residential (upsiream) Gus statton (upstream) Mowed grassto stream edge Vegetation 80% Reed Canary Great Ragineed Jewelward Areas Stinging Nettle Tree Canopy and Shaded Areas 60% (us) Boxelder Ash

Sediment Type and Classification Fine to Course sand

**Comments and Notes** 

Stream is more meandering upstream of road downstream, Flows through res channel adjacent to gas station. Dowrstream it flows through withand area a large mound of dirt Alar entrance to -Trash piles and CPETIAND pehind Storage building

Date/Time\_8/16/05 Stream Site 1 H 33 Water Body Tributary @ Colly 2

Observer \_\_\_\_\_\_

**GPS** Coordinates:

Photos: 0738-ds 0737-us

Channel Morphometry Straight, disched Channel Probably drained wetland areas

Riparian Land Use Characteristics US-Agriculture (Corn, Beans, Huy), Farm directly adjacent to ditch DS-Mound Huy/Grass Width of buffer vuries from 15-to 100ft Vegetation Wegetation BOBReed Canary Green Bulrush Jewelwed Bur Cuimber Stinging Nettle Thistle Smooth Brome

Tree Canopy and Shaded Areas  $(n)^{(0)}\omega$ 

Sediment Type and Classification Medium grained sandy loam Black organic we Hand soils Comments and Notes

Drainage ditch runs through mowed grass/hay and ag fields. Wetland area upstream

Observer

Date/Time\_O Stream Site Water Body Tributary @ 143d **GPS** Coordinates:

Photos: 0735-upstream 0736 - downstream

**Channel Morphometry** Meandering channel Deposits of debris and sediment

Riparian Land Use Characteristics Vegetated Buffer (30 ft) upgream 100 Kt downstream Agricultural (com, soybeans) Vegetation 70% Boxedder Boxeller Bur Cucumber hambynarters Goldenrod Wild Grape Jewelweed Stinging Nettle Smooth Brome (butter and

GN

Tree Canopy and Shaded Areas 90% (Boxelder, Ash)

Sediment Type and Classification time to cause sand

Some Cabble on dawnsteam end

**Comments and Notes** 

-Channel is completely dr Pool of water on de of water on hanne end downstream narcews

Date/Time\_\_\_\_\_ E 33,7 Stream Site Water Body Tributary @ Meeter-Stearns Observer

Observer\_WB\_\_\_\_

**GPS** Coordinates:

Photos: 0733 - upstream 0734 - downstream

Channel Morphometry Ditched Channel

Riparian Land Use Characteristics Agricultural Field (COM, being Grass next to ditch Grassed Banks (10ft)

Box Reed Canary Stinging Mittle Smooth Brome Alfalfa

Tree Canopy and Shaded Areas ()ి⁄ం

Sediment Type and Classification Silty Muck with some fine sand

**Comments and Notes** 

-Drainage Ditch flows through mound grassland, Mixed agriculture/ use on all sides of stream, Flow's through wetland downstream Channel shape varies from GIS coverage

# Appendix I

**Optical Brightener Sampling Results** 

#### **Appendix I: Optical Brightener Sampling Results**

Passive sampling for optical brighteners was conducted in the CRWD in 2006 to determine the role of failing septic systems in the dissolved oxygen and bacteria impairment.

Optical brighteners are fluorescent white dyes that are often added to laundry soaps and detergents. As a result of their use in laundry soaps, they typically can be found in domestic waste waters that contain laundry effluent. Optical brighteners are removed from waste water by binding to soil and organic particles. If they are not removed by a functioning septic system, they can enter groundwater and surface water bodies.

Because optical brighteners can be detected with the use of a long wave fluorescent, or black light, their presence can be detected in surface or groundwater. The presence of optical brighteners in surface or groundwater, while they are not necessarily harmful to the water themselves, can be an indicator of failing septic systems or a direct discharge of untreated waste water into a surface water body.

#### Methodology

Optical brightener sampling involves placing a sampling device into a stream and allowing the stream to flow through the device for a fixed period of time. As water flows through sampling device, the optical brighteners accumulate on the pad. The sampling device is then viewed under a fluorescent or black light. If fluorescent areas are seen on the pad under the light, the pad has been exposed to optical brighteners. If the pad does not fluoresce, it can be assumed that optical brighteners were not present in the stream in which it was deployed.

The sampling device is made up of an unwashed cotton pad that is placed inside of a black plastic mesh cage that secures the pad. The sampling device is then secured in flowing water in the stream.

Optical brightener sampling was conducted at four mainstem sites on the Clearwater River and one tributary stream (Figure I-1). The sampling devices were placed in the stream on April 19, 2006 and were collected May 2, 2006 (Figure I-1).

After the devices were collected from the stream, the cotton pads were cleaned of as much sediment and organic matter as possible, dried, and analyzed for the presence of optical brighteners in accordance with methodologies set forth in "An Optical Brightener Sampling Handbook" that can be found at <u>http://www.naturecompass.org/8tb/sampling/</u>.

#### Results

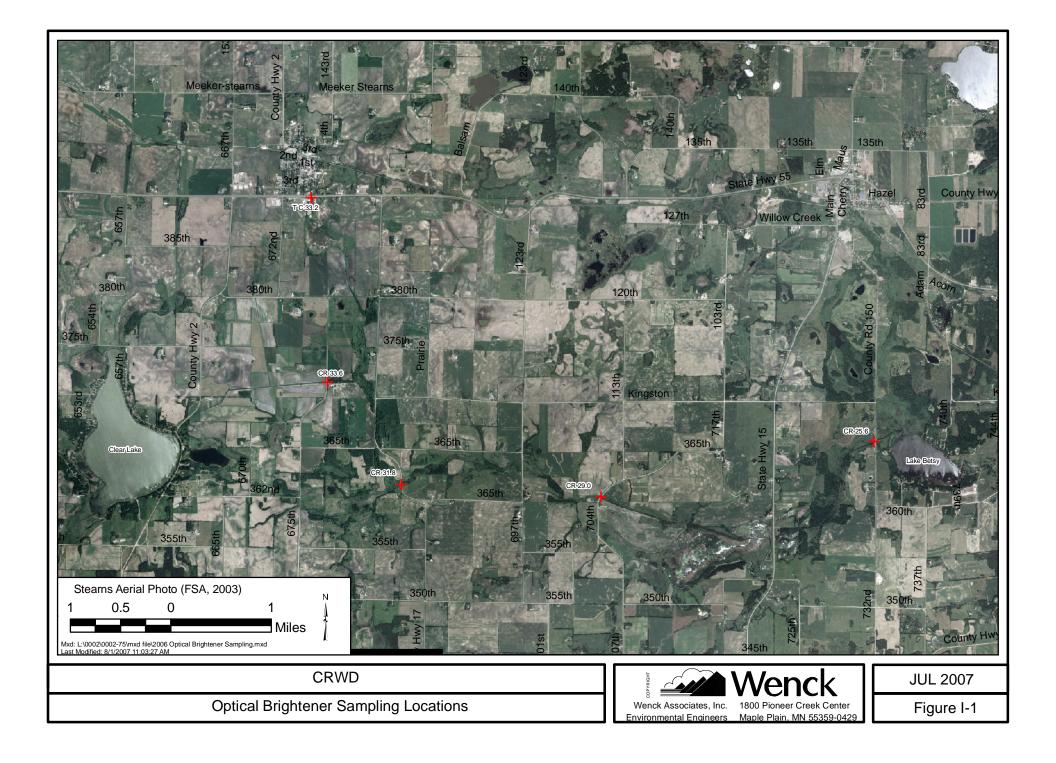
After the cotton pads collected from each site were dried, they were analyzed for the presence of optical brighteners by viewing them in a dark room under a black light. Indicators of optical brighteners were not detected on any of the pads.

#### Conclusions

Because no optical brighteners were found in the Clearwater River, and there are very few homes in close proximity to the stream, results indicate that failing septic systems are most likely not a significant contributor to elevated bacteria levels or oxygen demand in the impaired reach of the Clearwater River.

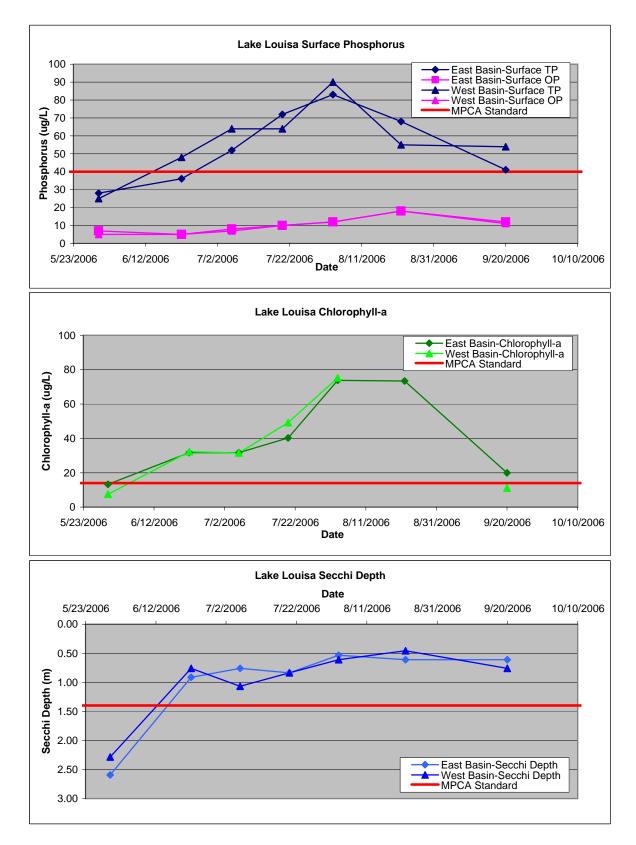
### Reference

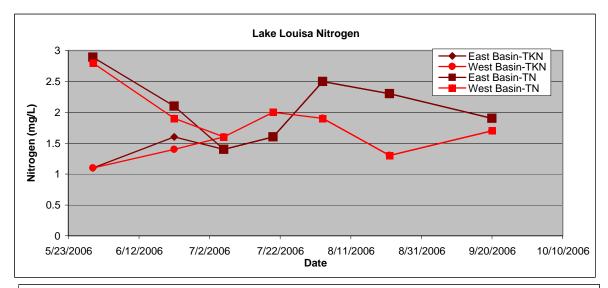
Sargent, Dave and Castonguay, Wayne. "An Optical Brightener Sampling Handbook" <a href="http://www.naturecompass.org/8tb/sampling/">http://www.naturecompass.org/8tb/sampling/</a>

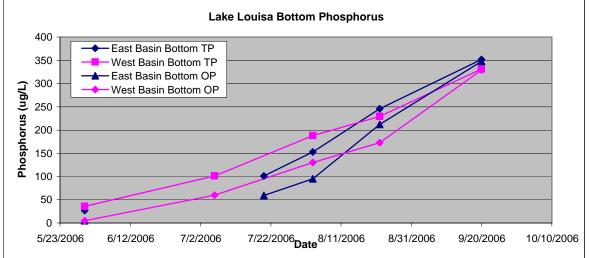


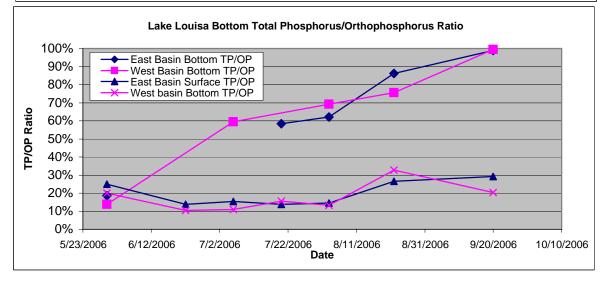
# Appendix J

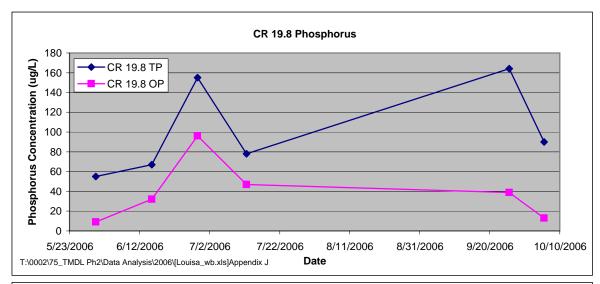
Lake Louisa Data Evaluation

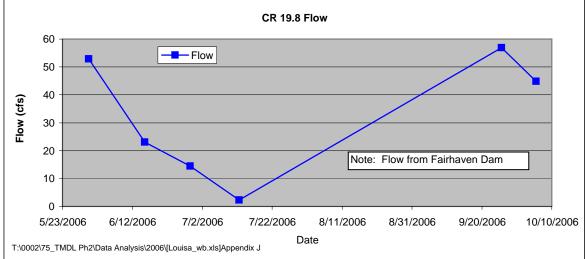


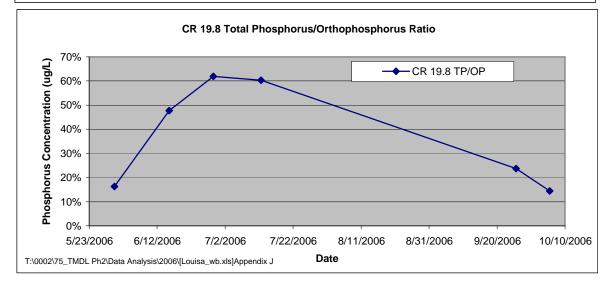


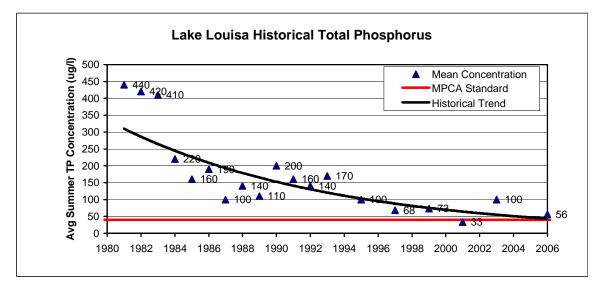


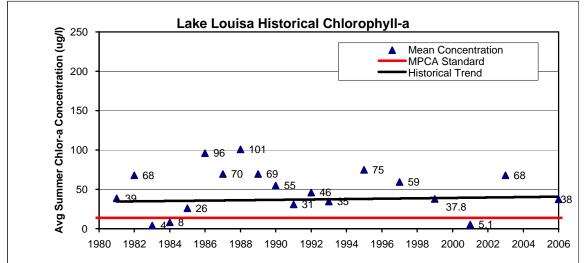


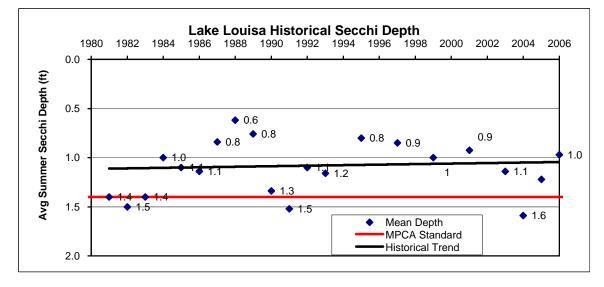


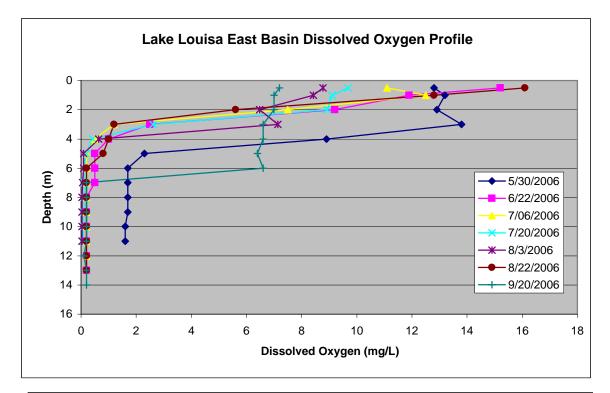


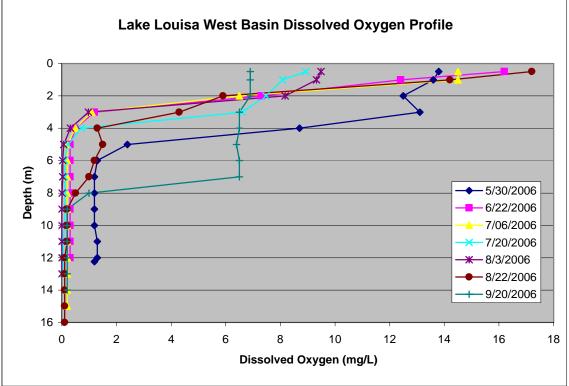


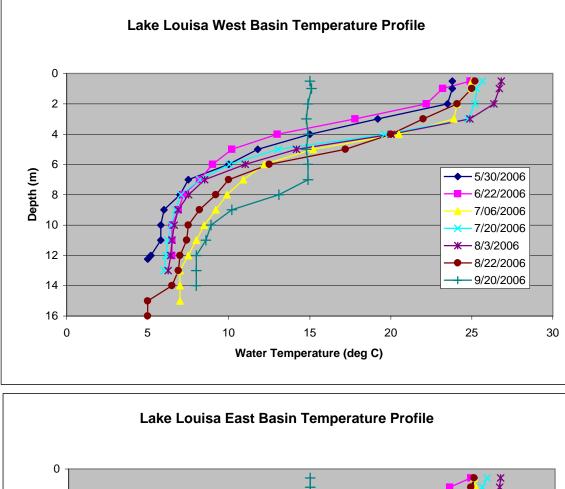


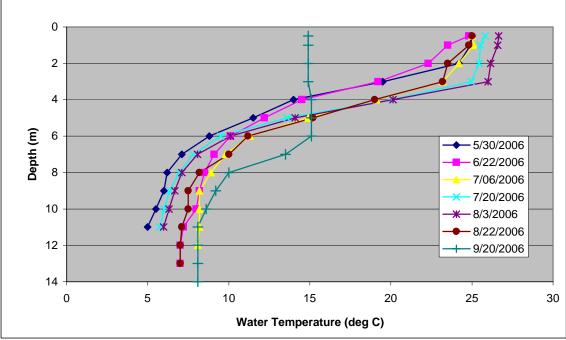


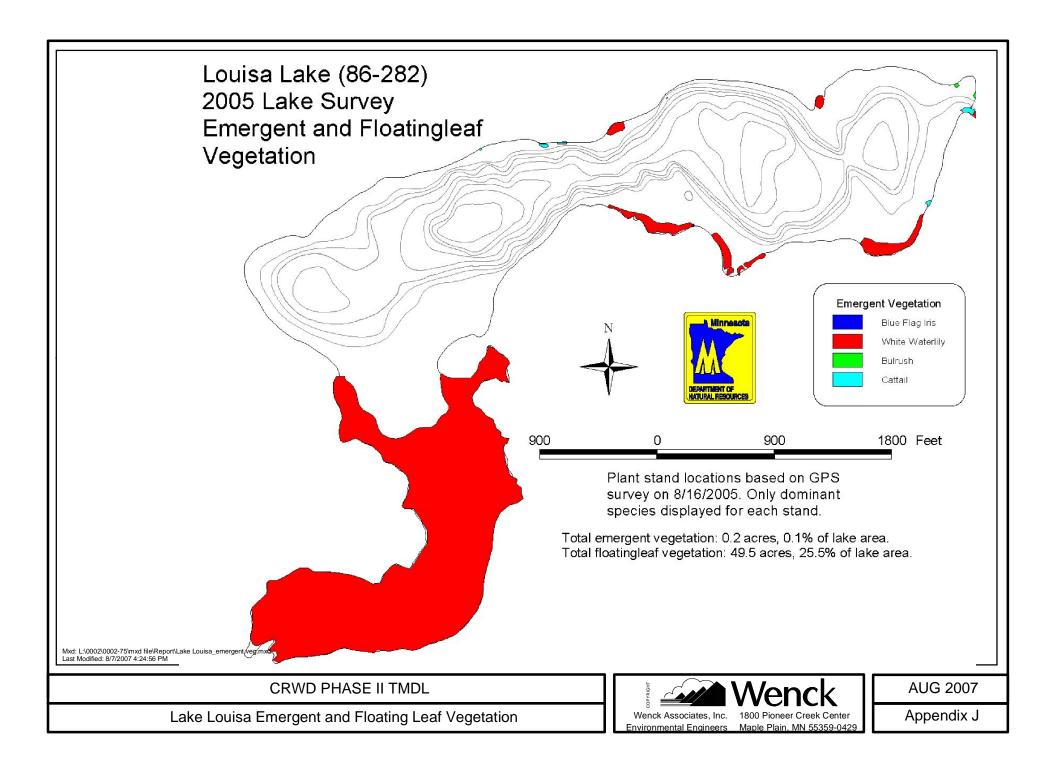




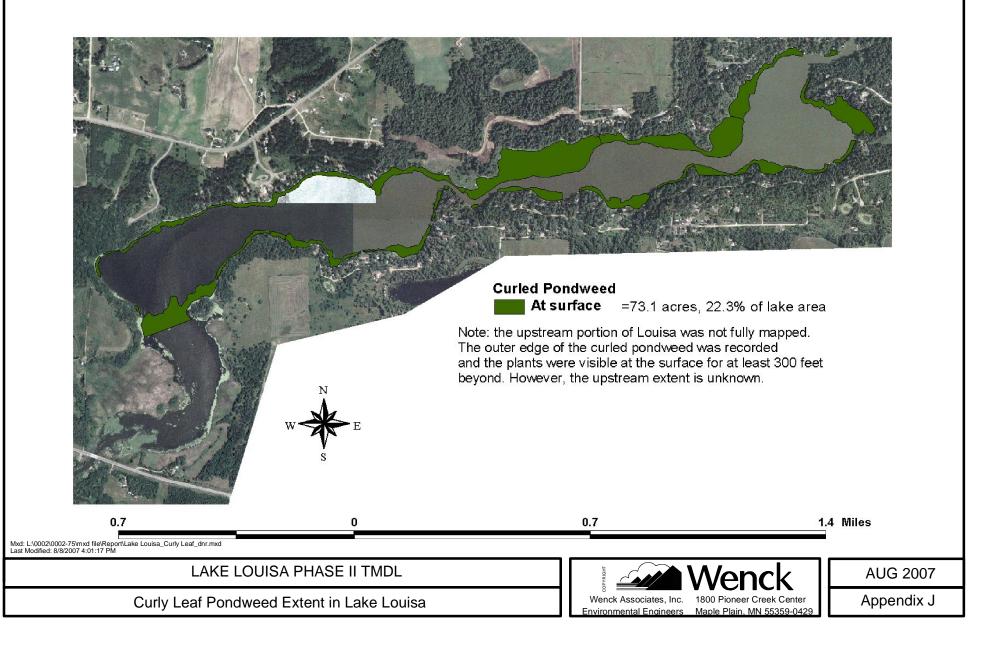


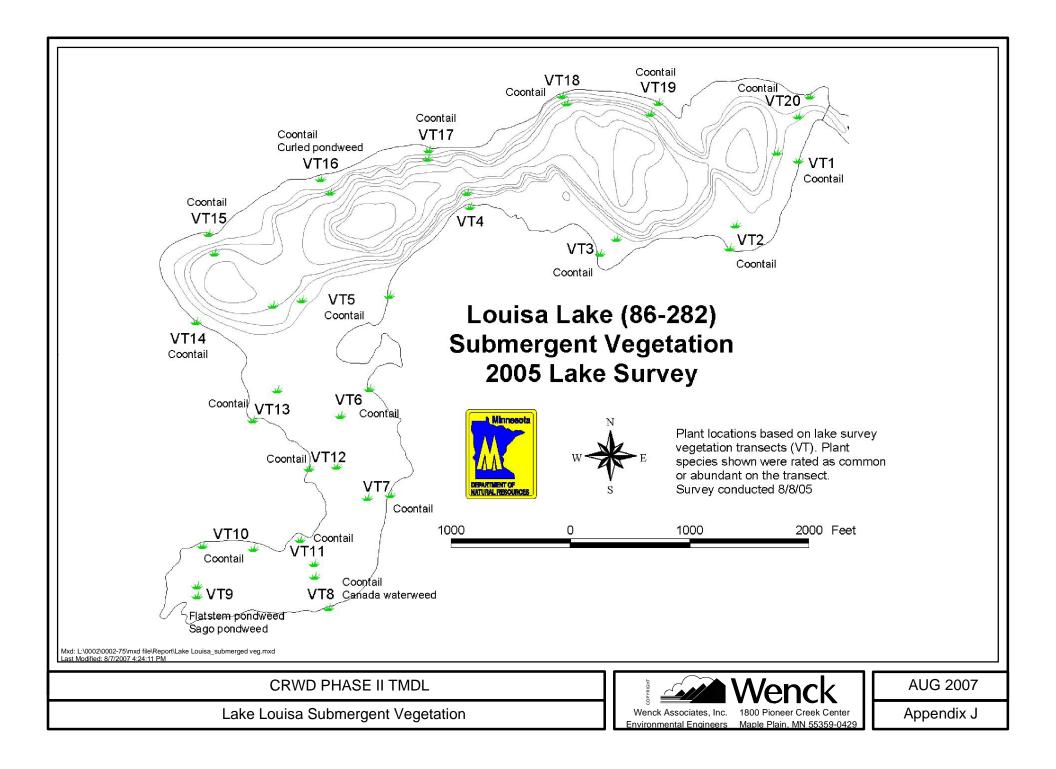






## Louisa/Marie Curled Pondweed 6/2/05





## Appendix K

## Lake Louisa Field Data and Laboratory Results

Date of Sampling: 5/30/06 Start Time: End Time: MB. Kh Sampler(s):

Lick

| Site Location: | 1-ake | Louisa | East |
|----------------|-------|--------|------|
|                | -     |        | ,    |

Site Description <u>LLOØ</u>

Chain of Custody:

Site Coordinates:

Expected Depth (ft): 36 Measured Depth (ft): 36 75°, Sunny Weather: Calm

Secchi Disk (ft):

leaf

Shar

Comments:

|           |               | Field M           | easurement | s             | m               |                      |
|-----------|---------------|-------------------|------------|---------------|-----------------|----------------------|
| Field     | Sample        | Temp (°C)         | Cond. (mS) | D.O. (mg/l)   | Depth (#)       | pH (S.U.)            |
| Sample ID | Date and Time |                   |            | TACRON        |                 |                      |
| LLOØIT    | 5/30/06 9:00  | 25.0              |            | 12:20         | 0.5             |                      |
|           | /             | 24.9              |            | 13 20         | 1.0             | •                    |
|           |               | 24.2              |            | 12.90         | 2.0             | •                    |
|           |               | 19.5              | •          | 13.80         | 3.0             | •                    |
| LLOOM     | 5/30/06 9:00  | 14.0              |            | 8.96          | 4.0             | 4                    |
|           |               | 11.5              |            | 2.30          | 5.0             |                      |
|           |               | 88                |            | 1.7           | 6.0             | •                    |
|           |               | 7.1               |            | 1.7           | 7.0             |                      |
|           |               | 6.7               | ,          | 1.7           | 8.0             |                      |
|           |               | $\underline{7,0}$ |            | <u> </u>      | 9.0             | •                    |
| LONIB     | 5/30/069:00   | 8,5               |            | , <u>6</u>    | 10.0            |                      |
|           |               | 5.0               |            | <u> </u> . &  | 11.0            |                      |
|           |               | -,-,              |            |               | 12              |                      |
|           |               |                   |            |               | 13              |                      |
|           |               |                   |            |               | 14              |                      |
|           |               |                   |            |               | 15              |                      |
|           |               |                   |            |               |                 | :<br>                |
|           |               |                   |            |               |                 |                      |
|           |               |                   |            |               |                 |                      |
|           |               |                   |            |               |                 |                      |
| ·····     |               |                   |            |               |                 |                      |
|           |               |                   |            |               |                 |                      |
|           |               |                   |            |               |                 |                      |
|           |               |                   |            |               |                 |                      |
|           |               |                   | Pro 2 -    |               |                 |                      |
|           |               | \$                | Кор -      |               |                 |                      |
|           |               |                   |            | Entered<br>QA | SWL<br>WB 10/10 | <b>8/25/0</b><br>106 |

| Date of Sampling | 5/30/06 |
|------------------|---------|
| Start Time:      | 9:40    |
| End Time:        | •       |
| Sampler(s):      | WB.KW   |

Comments:

Site Location: <u>LLOØ2</u>

Site Description Louisa West

Chain of Custody:

Site Coordinates:

Expected Depth (ft): 39 Measured Depth (ft): 39 Weather: 76,54nny Calm

Secchi Disk (ft): 7,5

|              |               | Field M     | easurement | S           |            |           |
|--------------|---------------|-------------|------------|-------------|------------|-----------|
| Field        | Sample        | Temp (°C)   | Cond. (mS) | D.O. (mg/l) | Depth (ft) | pH (S.U.) |
| Sample ID    | Date and Time |             |            |             |            |           |
| LLOØAT       | 5/30/06 9:45  | 23.0        |            | 13.8        | 0.5        | •         |
|              |               | 230         |            | 13.6        | 1.0        | •         |
|              |               | 33.5        | ,          | 12.5        | 2.0        | •         |
|              |               | 19.2        | •          | 13.1        | 3.0        | •         |
| LLOOZM       | 5B0/069:45    | 15 0        |            | 8.7         | 4.0        |           |
|              | 9,001         | <u>íí 8</u> |            | 2.4         | 5.0        | •         |
|              |               | 10 0        |            | 17          | 6.0        | •         |
|              |               | 7.5         |            | 1.2         | 7.0        |           |
|              |               | 7.0         |            | 1.2         | 8.0        | *         |
|              |               | 60          |            | <u> </u>    | 9.0        | ······    |
|              |               | 5.8         |            | 1.2         | 10.0       |           |
| LLOØZB(11.5) | 5/30/069:45   | 5,8         |            | 13          | 11.0       |           |
|              |               | 5:3         |            | 1/3         | 12         |           |
|              |               | 5,0         |            | 1/a         | 1312.25    |           |
|              |               |             |            |             | 14         |           |
|              |               |             |            |             | 15         |           |
|              |               |             |            |             |            |           |
|              |               |             |            |             |            |           |
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|              |               | रून<br>रून  | . · Miser  |             |            |           |

Entend SWL 8/24/06 QA WB 10/10/06

### Clearwater River Watershed Lake Sampling

| Date of Samplir                       | ng: CZZOG<br>ZCO<br>Zm with           |           |                  | Site Location                      | Louis        | )/                |
|---------------------------------------|---------------------------------------|-----------|------------------|------------------------------------|--------------|-------------------|
| Start Time:                           | 200                                   |           |                  |                                    |              | \$1               |
| End Time                              |                                       | <u> </u>  |                  | Site Descriptio                    | יליטסג       | 9                 |
| Samplor(c):                           | and the second                        |           |                  | One Descriptio                     | ····         |                   |
| Sampler(s).                           | Jur Wille                             |           |                  | Chain of Custo                     | ody:         |                   |
| Comments:                             |                                       |           | Site Coordina    | ites:                              |              |                   |
|                                       |                                       | _         |                  |                                    |              |                   |
|                                       |                                       | _         | -                |                                    | <b>F</b> ( ) |                   |
|                                       |                                       | _         |                  | xpected Depth (<br>easured Depth ( |              |                   |
|                                       |                                       | _         | Weather:         | easured Deptil (                   | 11).         | <u></u>           |
|                                       |                                       |           |                  | ···· 1                             |              |                   |
|                                       |                                       | _         | Suni             | ney                                |              |                   |
| Devel i Di L (0)                      | · 7 5                                 |           | 81°              |                                    |              |                   |
| Secchi Disk (ft):                     | ·                                     |           | · ·              |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           | easurement       |                                    |              |                   |
| Field<br>Sample ID                    | Sample<br>Date and Time               | Temp (°C) | Cond. (mS)       | D.O. (mg/l)                        | Depth (ft)   | <b>p</b> H (S.U.) |
| Sample ID                             |                                       | 2100      | ļ,               | 17 5                               | 0.5          |                   |
|                                       | 200                                   | 24.9      | <i> </i>         | 16.2                               | 0.5          | ·                 |
|                                       | · · · · · · · · · · · · · · · · · · · | 63.2      | •                | 12.4                               | 1.0<br>2.0   |                   |
|                                       |                                       | 1 5 1     | ·                |                                    | 3.0          | ·                 |
|                                       |                                       | 1-1-1-7   | ·                |                                    | 4.0          | · · · ·           |
|                                       |                                       | 10.7      | •                | 03                                 | 5.0          | •                 |
|                                       |                                       | 9.0       | ·                | $O_{3}$                            | 6.0          | •                 |
|                                       |                                       | -6-0      | ,                | 0.3                                | 7.0          | · · · · ·         |
| 1                                     |                                       | 7.7       | •                |                                    |              | ·                 |
|                                       |                                       | 1 2       |                  | 0.3                                | 8.0          | <b>i</b>          |
|                                       |                                       | 69        | · ·              | 0.3                                | 9.0          |                   |
|                                       |                                       | 6.5       |                  | -0.3                               | 10.0         |                   |
|                                       |                                       | 6.5       |                  | 0.3                                | 11.0         |                   |
|                                       |                                       | 6.5       |                  | 0.3                                | 12           |                   |
|                                       |                                       |           |                  |                                    | 13           |                   |
| · · · · · · · · · · · · · · · · · · · |                                       |           |                  |                                    | 14           |                   |
|                                       |                                       |           |                  |                                    | 15           |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       |                                       |           | -, <del>\/</del> |                                    |              |                   |
|                                       |                                       |           |                  |                                    |              |                   |
|                                       | ,                                     |           |                  |                                    |              |                   |

Entwigioj10/06

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## Clearwater River Watershed Lake Sampling

| Date of Sampling: 62206<br>Start Time: 300<br>End Time: | Site Location: LLOO2<br>Louisa               |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Sampler(s): Knivette                                    | Chain of Custody:                            |  |  |  |  |  |
| Comments:   | Site Coordinates:                            |  |  |  |  |  |
| ······································                  | Expected Depth (ft):<br>Measured Depth (ft): |  |  |  |  |  |
|   | Weather:<br>SUMPEY                           |  |  |  |  |  |
| Secchi Disk (ft): 3.0                                   | SUMPEY<br>82°                                |  |  |  |  |  |

|           |                                       | Field M      | leasurement | ts          |            |           |
|-----------|---------------------------------------|--------------|-------------|-------------|------------|-----------|
| Field     | Sample                                | Temp (°C)    | Cond. (mS)  | D.O. (mg/l) | Depth (ft) | pH (S.U.) |
| Sample ID | Date and Time                         |              |             |             |            |           |
|           |                                       | 24.8         |             | 15.0        | 0.5        |           |
|           |                                       | 23.5         |             | 11.9        | 1.0        | ,         |
|           |                                       | 22.3         |             | 9.2         | 2.0        | •         |
|           |                                       | 19.2         |             | 3.6         | 3.0        |           |
|           |                                       | 14.8         |             | 7.0         | 4.0        |           |
|           |                                       | 12.2         |             | 0.5         | 5.0        | ,         |
|           |                                       | 10.1         |             | 0.5         | 6.0        |           |
|           |                                       | <u> 9.1.</u> |             | 05          | 7.0        | 4         |
|           | ·                                     | 8.5          | •           | 02          | 8.0        |           |
|           | -                                     | 8.2          |             | 0.2         | 9.0        |           |
|           | <u> </u>                              | 80           |             | 02          | 10.0       |           |
|           |                                       | 7.2          |             | 0.2         | 11.0       |           |
|           |                                       | 70           |             | 0.2         | 12         |           |
|           |                                       | 70           |             | 0.7         | 13         |           |
|           |                                       |              | ·           |             | 14         |           |
|           |                                       |              |             |             | 15         |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           |                                       |              |             |             |            |           |
|           | · · · · · · · · · · · · · · · · · · · |              | •.          |             |            |           |
|           |                                       | 1            | Í           |             |            |           |

EN+ WB 10/10/06 Clearwater River Watershed Lake Sampling

| Start Time:<br>End Time:<br>Sampler(s):<br>Comments:<br>Secchi Disk (ft):<br>Field<br>Sample ID | Sample<br>Date and Time | Field M  | M<br>Weather:<br>5<br>7<br>1<br>easurement<br>Cond. (mS) | ts   | ody:<br>(ft):<br>(ft):<br>PM  | <b>5 2,6</b><br>6 <b>2,0</b><br>рн (s.u.) |
|---|-------------------------|----------|--|--|---|---|
| Comments:   | Sample<br>Date and Time |          | E<br>M<br>Weather:<br>S<br>2<br>2<br>2<br>2<br>2<br>2    | ates:<br>Expected Depth (<br>leasured Depth (<br>CHAR + C<br>7 C<br>5<br>TS<br>D.O. (mg/l) | (ft):<br>(ft):<br><b>COR</b><br><b>P</b><br><b>A</b><br>(<br>Depth (ft) |   |
| Secchi Disk (ft):   | Sample<br>Date and Time |          | E<br>M<br>Weather:<br>S<br>2<br>2<br>2<br>2<br>2<br>2    | ates:<br>Expected Depth (<br>leasured Depth (<br>CHAR + C<br>7 C<br>5<br>TS<br>D.O. (mg/l) | (ft):<br>(ft):<br><b>COR</b><br><b>P</b><br><b>A</b><br>(<br>Depth (ft) |   |
| Field   | Sample<br>Date and Time |          | M<br>Weather:<br>5<br>7<br>1<br>easurement<br>Cond. (mS) | leasured Depth<br><i>O 1441 - R - Q</i><br>7 <i>O</i><br>5<br>T<br>5<br><b>D.O.</b> (mg/l) | (ft):<br>Ph<br>Depth (ft)   |   |
| Field   | Sample<br>Date and Time |          | leasurement<br>Cond. (mS)                                | ts<br>D.O. (mg/l)  | Depth (ft)  |   |
|   | Date and Time           |          | Cond. (mS)   | D.O. (mg/l)  |   | рН (S.U.)                                 |
|   | Date and Time           |          | Cond. (mS)   | D.O. (mg/l)  |   | рН (S.U.)                                 |
| Sample ID D   |                         | 98       |  |  | 0.5   |   |
| ·   | 71-101                  |          |  |  | ΩE  |   |
|   | 1 18 110                |          | <u> </u>   | 0000   | 0.5   | ·   |
|   |                         | 25.1     | · .  | 1205   | 1.0   |   |
|   |                         | 2002     |  | 705  | 2.0   |   |
|   |                         | <u> </u> | ·  | 4. i B   | 3.0   | ·   |
|   |                         | <u> </u> | · · · · ·  | 0.5  | 4.0   | · · ·                                     |
| ·····   |                         | 0000     |  | <u> </u>   | 5.0   | ·   |
|   |                         |          | · @ · · _  | 0045   | 6.0<br>7.0  |   |
| ·····   |                         | 7820     | · · ·  |  | 8.0   | ,   |
|   |                         | O Val    | · ·  | <u> </u>   | 9.0   | •   |
|   |                         | 0.6      | •  |  | 10.0  | -   |
|   |                         | O.C.     |  |  | 11.0  | <b></b>                                   |
|   |                         | Stop 1   |  | 0.0  | 12  |   |
|   |                         |          |  | Q  | 13  |   |
|   |                         |          |  |  | 14  |   |
|   |                         |          |  |  | 15  |   |
|   |                         |          |  |  |   |   |
|   |                         |          |  |  |   |   |
|   |                         |          |  |  |   |   |
|   |                         |          |  |  |   |   |
|   |                         |          |  |  |   |   |
| ·····   | · · · · · ·             |          |  |  |   |   |
|   |                         |          |  |  |   |   |
|   |                         |          | . Ph.(.e.)   |  |   |   |
|   |                         |          | <u> </u>   | ·  |   |   |

Ent WB 10/10/02e

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| N==+ T:=:        | g: 7600                               | -         |               | Site Location:   | <u> </u>   |                                       |
|------------------|---------------------------------------|-----------|---------------|------------------|--|---------------------------------------|
| Start Time:      | 700                                   | _         |               |                  |  |                                       |
| and Time:        |                                       |           |               | Site Descriptio  | n  |                                       |
| Sampler(s):      | · · · · · · · · · · · · · · · · · · · | _         |               |                  |  |                                       |
|                  |                                       |           |               | Chain of Custo   | ody:   |                                       |
| comments:        |                                       | -         | Site Coordina | tes:             |  |                                       |
|                  |                                       | -         |               | xpected Depth (1 |  |                                       |
|                  |                                       | -         | M             | easured Depth (  | ft):   |                                       |
|                  |                                       | -<br>-    | Weather:      | CARRO            |  |                                       |
| ecchi Disk (ft): | 3.5                                   |           |               |                  |  | ~                                     |
|                  |                                       | Field M   | easurement    |                  |  |                                       |
| Field            | Sample                                | Temp (°C) | Cond. (mS)    | D.O. (mg/l)      | Depth (ft)   | pH (S.U                               |
| Sample ID        | Date and Time                         |           | 500           |                  |  | P777                                  |
|                  |                                       | 25        |               | 14.05            | 0.5  | <b>~~~</b>                            |
|                  |                                       |           |               | 102.00           | 1.0  |                                       |
|                  |                                       |           | •             |                  |  | •                                     |
| ·····            |                                       | 20.       | •             | 6.5              | 2.0  | •                                     |
|                  |                                       | 2241      | •<br>•        | 6.5              | 2.0 🖉  |                                       |
|                  |                                       | 28.1      |               | 6.5              | 2.0 <b>2</b><br>3.0<br>4.0   | •                                     |
|                  |                                       | 28.29     |               | 6.5              | 2.0 €<br>3.0<br>4.0<br>5.0   | •                                     |
|                  |                                       | 28:29     | · .           |                  | 2.0 2.0 2 2. | •                                     |
|                  |                                       | 2011      |               |                  | 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0  | •                                     |
|                  |                                       | 28.29     |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0  | ·<br>·<br>·                           |
|                  |                                       | 28.29     |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       | 2011      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       | 23,19     |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       | 23.1      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13   | ·<br>·<br>·                           |
|                  |                                       | 2241      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       | 2011      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       | 2341      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | · · · · · · · · · · · · · · · · · · · |
|                  |                                       | 2341      |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | ·<br>·<br>·                           |
|                  |                                       |           |               |                  | 2.0<br>3.0<br>4.0<br>5.0<br>6.0<br>7.0<br>8.0<br>9.0<br>10.0<br>11.0<br>12<br>13<br>14   | · · · · · · · · · · · · · · · · · · · |

ENT WB 10/10/06

 Date of Sampling:
 7/20/06

 Start Time:
 10:05

 End Time:
 10:45

 Sampler(s):
 WB

Comments: Water is green in color. Site Location: LLO01

Site Description Louisa-East Site

Chain of Custody:

Site Coordinates:

Expected Depth (ft): Measured Depth (ft): 34.3

Weather: 760 NE wind 5mph

Secchi Disk (ft):

|           |               | Field Me                              | easurement | 5            | т          |           |
|-----------|---------------|---------------------------------------|------------|--------------|------------|-----------|
| Field     | Sample        | Temp (°C)                             | Cond. (mS) | D.O. (mg/l)  | Depth (ft) | pH (S.U.) |
| Sample ID | Date and Time | • • • • • • • • • • • • • • • • • • • |            |              |            |           |
| LLOOIT005 | 7/20/06 10:15 | 25 81                                 | .590       | 9.68         | 0.5        | 8.39      |
| <u> </u>  |               | 25 52                                 | .593       | 9.11         | 1.0        | 8 33      |
|           |               | 25.44                                 | 592        | 8.93         | 2.0        | 8 29      |
|           |               | 24.95                                 | GÍĨ        | 2 6          | 3.0        | 8 04      |
| LLOOMONE  | 7120/06 10:20 | 24 95                                 | 68         | 0.42         | 4.0        | 7 75      |
|           |               | 13 59                                 | 772        | 0.18         | 5.0        | 7.63      |
|           |               | 9.49                                  | 836        | 0.10         | 6.0        | 751       |
|           |               | 7.79                                  | 884        | 0.12         | 7.0        | 7.42      |
|           |               | 6.95                                  | 930        | 0.12         | 8.0        | 7.35      |
|           |               | 6.35                                  | .95%       | <u>79.10</u> | 9.0        | 7.28      |
|           |               | 6.01                                  | . 982      | <u> </u>     | 10.0       | 7.29      |
| LL001B100 | 7/20/06 10:30 | 5.74                                  | ,993       | 0.06         | 17.0/0.5   | 7.16      |
|           |               |                                       |            |              | 12         |           |
|           |               |                                       |            |              | 13         |           |
|           |               |                                       |            |              | 14         |           |
|           |               |                                       |            |              | 15         |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               |                                       |            |              |            |           |
|           |               | ·%·                                   |            | Butaral      |            | alex la   |

WB 10/10/06

Entered Swi \$\$J06

| Start Time:<br>End Time:               | 11:55                                 |                  |                 | Site Description                     | Louisa-West                             | Site             |
|--|---------------------------------------|------------------|-----------------|--------------------------------------|---|------------------|
| Sampler(s):                            | WB                                    |                  |                 | Chain of Custoc                      | y;                                      |                  |
| Comments:                              | s areen                               |                  | Site Coordinate | es: 45 18                            | .46                                     |                  |
| suspended o                            | lage in                               |                  | E.v.            | 941 1                                | •                                       |                  |
| water col                              | что                                   |                  | Ex<br>Me        | pected Depth (ft<br>asured Depth (ff | ): 40,5                                 |                  |
| ······································ |                                       |                  | IV/eather       |                                      |   |                  |
|  |                                       |                  |                 | 5°, Sunns<br>E Wind                  | /                                       |                  |
|  | 075                                   |                  | N               | E wind                               | 5mph                                    |                  |
| Secchi Disk (ft):                      | J. 19.                                |                  |                 | - · ·                                |   |                  |
|  | 71 <b>*</b>                           | Field Me         | easurements     | 3                                    | <u></u>                                 |                  |
| Field                                  | Sample                                | Temp (ºC)        | Cond. (mS)      | D.O. (mg/l)                          | Depth (ft)                              | <b>pH</b> (S.U.) |
| Sample ID                              | Date and Time                         | <u>ACTES</u>     | 1.195           | 0 02                                 | 0.5                                     | 0 20             |
| LL0,027005                             | 1/00/00 11.05                         | 05.66            | 605             | 8.08                                 | 1.0                                     | 8 34             |
|  |                                       | 45 20            | 607             | 7.47                                 | 2.0                                     | 8.30             |
| ple.                                   |                                       | 24.77.           | 612             | 6.61                                 | 3.0                                     | 8 2:             |
| MANDGANONS                             | MARCH BO                              | 19.64            | . 695           | 0.71                                 | 4.0                                     | 782              |
| i                                      |                                       | 13.06            | . 794           | 0:22                                 | 5.0                                     | 7.6              |
|  |                                       | <u> 10 04</u>    | 858             | <u> </u>                             | 6.0<br>7.0                              |                  |
|  |                                       | 5.00             | 903             | 0.10                                 | 8.0                                     | 7 74             |
| · · ·                                  |                                       | 6.72             | 956             | 0.12                                 | 9.0                                     | 7 34             |
|  |                                       | 6.44             | .978            | 0.09                                 | 10.0                                    | 7.31             |
|  |                                       | 6.24             | 979             | 0.06                                 | 11.0                                    | 7.29             |
|  |                                       | 6.12             | . 986           | 0.06                                 | 12                                      | 7.28             |
| 1944-50109/K/1957                      | JPOOGENING.                           | 6.01             | . 996           | 0.07                                 | 13.0                                    | 7.24             |
|  |                                       |                  |                 |                                      | 14<br>15                                |                  |
|  |                                       |                  |                 |                                      | 10                                      |                  |
|  | *                                     |                  |                 |                                      |   |                  |
| -                                      |                                       | A <sub>k</sub> i |                 |                                      |   |                  |
|  | · · · · · · · · · · · · · · · · · · · | -24              |                 |                                      |   |                  |
|  |                                       |                  | w.9             |                                      |   |                  |
|  |                                       |                  |                 |                                      |   |                  |
|  |                                       |                  |                 |                                      |   |                  |
|  |                                       |                  |                 |                                      |   |                  |
|  |                                       | ~                | . Huch          |                                      | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                  |
|  |                                       | »···             |                 |                                      |   | A A              |
| <u> </u>                               |                                       |                  | Ente            | ud su                                | 16 8/                                   | 24/00            |
|  | NB<br>10/10/                          |                  | -mar A A        |                                      | 4                                       | - V              |

8/03/06 10:00

Secchi 2.0 Fz

| 1 | 1    |
|---|------|
| 1 | 6002 |
| 4 | a ya |

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| Depth | n Temp | DO     | Cond | l pH      |          |                                       |
|-------|--------|--------|------|-----------|----------|---------------------------------------|
| 0.5   | 26.82  |        | 586  | 8.62      |          |                                       |
| l     | 26,71  | 9.32   | 580  | 8.64      |          | 2                                     |
| 2     | 26.36  | 5 8.17 | 582  | 8.56      |          |                                       |
| 3     | 24,88  | 30.97  | 622  | 8.25      |          |                                       |
| 4     | 20.03  | 3 0.32 | 689  | 7.90      |          |                                       |
| 5     | 14,19  | 0.07   | 797  | 7.98      | M        | · · · · · · · · · · · · · · · · · · · |
| 6     | 11.03  | 0.03   | 856  | 7.56      |          | 2                                     |
| 7     | 8.5/   | 0.03   | 903  | 7.47      |          |                                       |
| 8     | 7,52   | 0,01   | 947  | 7.39      |          |                                       |
| 9     | 6.87   | 0      | 9.75 | 7.34      |          |                                       |
| 10    | 6.64   | O      | 997  | 7.30      | _        |                                       |
| 11    | 6.50   | 0      | 1006 | 7.27      |          |                                       |
| 12    | G.41   | 0      | 1009 | 7.25 12.1 | 5 B      |                                       |
| 13    | 6.27   | 0      | 1020 | 7.22      | <u>.</u> |                                       |

LLOØI

Secchi 1.75ft

|       | 1     |      |             |      | Þ        |
|-------|-------|------|-------------|------|----------|
| Depth | Temp  | Do   | Cond        | рH   |          |
| .5    | 26.65 | 8,77 | 568         | 8.61 | LLOOTTOP |
| 1.0   | 26,5E | 8.43 | 568         | 8.58 | /        |
| 2     | 26.15 | 6.48 | 573         | 8.47 |          |
| 3     | 25.99 | 7.14 | 569         | 8.46 |          |
| 4     | 20.14 | 0.64 | 681         | 8.01 |          |
| 5     | 14.10 | 0.09 | 777         | 7.65 | LLOOIM   |
| 6     | 10,10 | 0.09 | 846         | 7.52 |          |
| • 7   | 8.08  | 0.06 | <i>8</i> 83 | 7.44 |          |
| 00    | 7,11  | 0,03 | 930         | 7.35 |          |
| 9     | 6.68  | 0.03 | 964         | 7.28 |          |
| 10    | 6.31  | 0.03 | 983         | 7,23 | LLOØIB   |
| 1] /  | 5.98  | 0,03 | 1006        | 7.16 | 10.5     |

WB 10/10/06

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|                                       | Clea                                  | arwater River Wi | atersned Lake S                   | sampling                           |                                       |           |
|---------------------------------------|---------------------------------------|------------------|-----------------------------------|------------------------------------|---------------------------------------|-----------|
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       | ng: <b>8886</b>                       | <u>e</u> l       | 1991 - 1<br>19                    | Site Location:                     | LLO                                   | 01        |
| Start Time:<br>End Time:              | 1200                                  | -                |                                   | Site Description                   | n                                     |           |
| Sampler(s):                           | _K                                    | -                |                                   | Chain of Custo                     | dy:                                   |           |
| Comments:                             |                                       | -                | Site Coordinat                    | tes:                               |                                       |           |
| · · · · · · · · · · · · · · · · · · · | · · ·                                 | •<br>-<br>-      |                                   | pected Depth (f<br>asured Depth (f |                                       |           |
|                                       | · · · · · · · · · · · · · · · · · · · | -                | Weather:                          |                                    | <u>.().</u>                           |           |
|                                       |                                       |                  | 2                                 | MARY                               |                                       |           |
| Secchi Disk (ft):                     | 2                                     | -<br>            |                                   | 17                                 | · · · · · · · · · · · · · · · · · · · | ····      |
|                                       |                                       |                  | easurement                        |                                    | ø                                     |           |
| Field<br>Semale ID                    | Sample                                | Temp (°C)        | Cond. (mS)                        | D.O. (mg/l)                        | Depth (ft)                            | pH (S.U.) |
| Sample ID                             | Date and Time                         | 28               |                                   | 120                                | 0.5                                   |           |
|                                       |                                       | - A A            | -                                 | 19.9                               | 1.0                                   | •         |
|                                       |                                       | 20.0             |                                   |                                    | 2.0                                   |           |
|                                       |                                       | 23.6             |                                   | 1. 8                               | 3.0                                   | •         |
|                                       | -                                     | 74.0             |                                   | 1.0                                | 4.0                                   | •         |
|                                       |                                       | 68.0             | •                                 | 008                                | 5.0                                   |           |
|                                       |                                       | 11.2             |                                   | 6.2                                | 6.0                                   | •         |
|                                       |                                       | 10.0             |                                   | 0.20                               | 7.0                                   |           |
|                                       |                                       | -8.2             |                                   | 0.25                               | 8.0                                   | •         |
|                                       | ļ                                     | 6.5              |                                   | <u>6.</u>                          | 9.0                                   |           |
|                                       |                                       | -725             |                                   | 0.6                                | 10.0                                  |           |
|                                       |                                       |                  |                                   | 0.0                                | 11.0                                  |           |
|                                       |                                       | 720              | <u> </u>                          | 0.00                               | 12<br>13                              |           |
|                                       |                                       | <u> </u>         | · · · · · · · · · · · · · · · · · |                                    | 13                                    | · .       |
|                                       |                                       |                  |                                   |                                    | 14                                    |           |
|                                       |                                       |                  |                                   |                                    | 10                                    |           |
|                                       | <u> </u>                              |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
| · · · · ·                             |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       |                  |                                   |                                    |                                       |           |
|                                       |                                       | l l              |                                   |                                    | 1                                     |           |

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#### Clearwater River Watershed Lake Sampling

| Date of Samplin   | g: 92 500                             | ß         |               | Site Location:   | 660        | 02        |
|-------------------|---------------------------------------|-----------|---------------|------------------|------------|-----------|
| Start Time:       | 100                                   |           |               |                  |            |           |
| End Time:         | 1                                     |           |               | Site Descriptior | 1          |           |
| Sampler(s):       | · · · · · · · · · · · · · · · · · · · |           |               | p                | ·          |           |
|                   | · · · · · · · · · · · · · · · · · · · |           |               | Chain of Custo   | dy:        |           |
| Comments:         |                                       |           | Site Coordina | tes:             |            |           |
|                   |                                       |           |               | pected Depth (f  |            |           |
|                   | · · · · · · · · · · · · · · · · · · · |           |               | easured Depth (f | t):        |           |
| Secchi Disk (ft): | 1.5                                   |           | Weather:      | 780              | 9          |           |
|                   |                                       | Field Me  | easurement    | s                |            |           |
| Field             | Sample                                | Temp (°C) | Cond. (mS)    | D.O. (mg/l)      | Depth (ft) | pH (S.U.) |
| Sample ID         | Date and Time                         |           |               |                  |            |           |
|                   |                                       | 25.2      |               | 19.5             | 0.5        |           |
|                   |                                       | -25.0     |               | 14.5             | 1.0        |           |
|                   |                                       | 2 40      |               | <u>\$.</u>       | 2.0        | · ·       |
|                   |                                       | 26.0      |               | - 4.9            | 3.0        | •         |
|                   | []                                    |           |               | 1020             | 4.0        | •         |
|                   |                                       | 17.5      | •             | 0.5              | 5.0        | •         |
| · · · ·           |                                       | 2.05      |               | 1.0 00           | 6.0        | •         |
|                   |                                       | 10.0      |               | <u> </u>         | 7.0        |           |
|                   |                                       | <u> </u>  |               | 6.5              | 8.0        | •         |
|                   |                                       |           |               | Qoz              | 9.0        | !         |
|                   |                                       | - 25      |               |                  | 10.0       |           |
|                   | · · · · ·                             | 74        |               | Qob              | 11.0       |           |
|                   |                                       | 70        |               | 0.               | 12         |           |
|                   |                                       |           |               |                  | 13         |           |
|                   |                                       | 605       |               |                  | 14         |           |
|                   |                                       | <u></u>   |               | 6.1              | 15         |           |
|                   |                                       | 5.0       |               | <u>O</u> 0       |            |           |
|                   |                                       | <b>v</b>  |               | -                |            |           |
|                   |                                       |           |               |                  |            |           |
|                   |                                       |           |               |                  |            |           |
|                   |                                       |           |               |                  |            |           |
|                   |                                       |           |               |                  |            |           |
|                   |                                       |           |               |                  |            |           |
|                   |                                       |           |               |                  |            |           |
|                   | -                                     | κ,        |               |                  |            |           |
|                   | 1                                     |           |               |                  |            |           |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: LL001T

Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21430 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:00 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|                          | As Recei<br>Result | As Received Metho<br>Result RL |       | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|--------------------------------|-------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |                                |       |                     | 6 Jun 06         | DAP        |
| Solids, Total Suspended  | 2                  | mg/L                           | 2     | USGS I-3765-85      | 31 May 06 10:10  | RMV        |
| Chlorophyll a            | 13.2               | mg/cubic m                     | 1.0   | 10200H              | 2 Jun 06 7:20    | JD         |
| Nitrogen Total, Calculat | 2.9                | mg/L                           | NA    | Calc                | 1 Jun 06 15:47   | Calculated |
| Chloride                 | 21.0               | mq/L                           | 3.0   | 325.2               | 5 Jun 06 11:26   | RMV        |
| Nitrate+Nitrite          | 1.79               | mg/L as N                      | 0.20  | 353.2               | 1 Jun 06 15:47   | DAP        |
| Phosphorus, Total        | 0.028              | mg/L                           | 0.005 | EPA 365.1           | 6 Jun 06 13:03   | RMV        |
| Phosphorus, Ortho        | 0.007              | mg/L                           | 0.005 | EPA 365.1           | 31 May 06 16:35  | DAP        |
| Nitrogen, Total Kjeldahl | 1.1                | mg/L                           | 0.1   | SM 4500NorgB/NH3 E  | 1 Jun 06 6:45    | RSL        |

A Approved by: 6 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Elevated "Less Than Result" (<):  ${\mathfrak {E}}$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680

. = Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

eo B

# = Due to sample concentration
+ = Due to extract volume

= Due to extract volume

ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

ND MICRO # 1013-M

WES BOLL

Sample Description: LL001M

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

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Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21431 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:00 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|                         | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest |                       |              |                     | 6 Jun 06         | DAP     |
| Phosphorus, Total       | 0.035 mg/L            | 0.005        | EPA 365.1           | 6 Jun 06 13:03   | RMV     |
| Phosphorus, Ortho       | < 0.005 mg/L          | 0,005        | EPA 365.1           | 31 May 06 16:35  | DAP     |

Approved by: 6 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

CERTIFICATION: MN LAB # 027-015-125

= Reporting Limit

Elevated "Less Than Result" (<):  $\emptyset$  = Due to sample matrix ! = Due to sample quantity > Due to sample concentration

+ = Due to extract volume WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040

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IA LAB #: 132 IA LAB #: 022

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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: LL001B

Report Date: 21 Jun 06 Lab Number: 06-A21432 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:00 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|   | As Received<br>Result                    | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed  | Analyst |
|---|--|-------------------------|--------------------------------|---|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.027 mg/L<br>< 0.005 mg/L<br>0.050 mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 6 Jun 06<br>5 Jun 06<br>6 Jun 06 13:03<br>31 May 06 16:36<br>7 Jun 06 11:28 |         |

|   |  | 4 60 00                    |
|---|--|----------------------------|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN             | 8<br><b>V</b> -  | ary 3                      |
| Reporting Limit   |  |                            |
| Elevated "Less Than Result" (<): 0 = Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |                            |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680                                  | ND MICRO # 1013-M ND WW/DW # R-040 IA                                | A LAB #: 132 IA LAB #: 022 |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

#### Project Name: CLEARWATER RIVER STREAMS

Sample Description: LL002T

Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21433 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:45 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

#### Temp at Receipt: 4.0C

|                          | As Receiv<br>Result |            |       | Date<br>Analyzed   | Analyst         |            |
|--------------------------|---------------------|------------|-------|--------------------|-----------------|------------|
| Phosphorus Water Digest  |                     | *****      |       |                    | 6 Jun 06        | DAP        |
| Solids, Total Suspended  | 2                   | mg/L       | 2     | USGS I-3765-85     | 31 May 06 10:10 | RMV        |
| Chlorophyll a            | 7.4                 | mg/cubic m | 1.0   | 10200H             | 2 Jun 06 7:20   | JD         |
| Nitrogen Total, Calculat | 2.8                 | mg/L       | NA    | Calc               | 1 Jun 06 15:47  | Calculated |
| Chloride                 | 21,2                | mg/L       | 3.0   | 325.2              | 5 Jun 06 11:26  | RMV        |
| Nitrate+Nitrite          | 1.72                | mg/L as N  | 0.20  | 353.2              | 1 Jun 06 15:47  | DAP        |
| Phosphorus, Total        | 0.025               | mg/L       | 0.005 | EPA 365.1          | 6 Jun 06 13:03  | RMV        |
| Phosphorus, Ortho        | < 0.005             | mq/L       | 0.005 | EPA 365.1          | 31 May 06 16:36 | DAP        |
| Nitrogen, Total Kjeldahl | 1.1                 | mg/L       | 0.1   | SM 4500NorgB/NH3 E | 1 Jun 06 6:45   | RSL        |

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Ð. Approved by: (৯) Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

= Reporting Limit

Elevated "Less Than Result" (<): 0 = Due to sample matrix # = Due to sample concentration ! = Due to sample quantity + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447660 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Page: 1 of 1

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

Sample Description: LL002M

Report Date: 21 Jun 06 Lab Number: 06-A21434 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:45 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|                         | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest | ******                |              |                     | 6 Jun 06         | DAP     |
| Phosphorus, Total       | 0,034 mg/L            | 0.005        | EPA 365.1           | 6 Jun 06 13:03   | RMV     |
| Phosphorus, Ortho       | < 0.005 mg/L          | 0.005        | EPA 365.1           | 31 May 06 16:36  | DAP     |

P 3 Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN a = Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022 CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M

WES BOLL

Sample Description: LL002B

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER RIVER STREAMS

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Page: 1 of 1

Report Date: 21 Jun 06 Lab Number: 06-A21435 Work Order #:12-6363 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 30 May 06 9:45 Date Received: 30 May 06 18:22 PO #: CLEARWATER RIVER

Temp at Receipt: 4.0C

|   | As Recei<br>Result      | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed  | Analyst |
|---|-------------------------|----------------------|-------------------------|--------------------------------|---|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.036<br>0.005<br>0.235 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 6 Jun 06<br>5 Jun 06<br>6 Jun 06 13:03<br>31 May 06 16:36<br>7 Jun 06 11:28 |         |

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Ð. Es. Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Pro 10  $\mathcal{L}$  = Reporting Limit Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

Sample Description: LL001

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 9 Jul 06 Lab Number: 06-A26199 Work Order #:12-7480 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Jun 06 14:00 Date Received: 23 Jun 06 10:55

Temp at Receipt: 4.0 C

|                          | As Receiv<br>Result | ved Method<br>RL |       | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|---------------------|------------------|-------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                     |                  |       |                     | 26 Jun 06        | RLB        |
| Water Digestions         |                     |                  |       |                     | 27 Jun 06        | JMS        |
| Solids, Total Suspended  | 6                   | mg/L             | 2     | USGS I-3765-85      | 23 Jun 06 15:40  | CJL        |
| Chlorophyll a            | 31.7                | mg/cubic m       | 1.0   | 10200H              | 27 Jun 06 7:57   | JD         |
| Nitrogen Total, Calculat | 2.1                 | mg/L             | NA    | Calc                | 30 Jun 06 16:08  | Calculated |
| Chloride                 | 19.9                | mg/L             | 3.0   | 325.2               | 26 Jun 06 16:15  | RMV        |
| Nitrate+Nitrite          | 0.48                | mg/L as N        | 0.20  | 353.2               | 30 Jun 06 16:08  | DAP        |
| Phosphorus, Total        | 0.036               | mg/L             | 0.005 | EPA 365.1           | 27 Jun 06 9:25   | RMV        |
| Phosphorus, Ortho        | < 0.005             | mg/L             | 0.005 | EPA 365.1           | 23 Jun 06 17:15  | DAP        |
| Nitrogen, Total Kjeldahl | 1.6                 | mg/L             | 0.1   | SM 4500NorgB/NH3 E  | 26 Jun 06 12:55  | TAM        |
| Iron                     | 0.030               | mg/L             | 0.010 | 6010                | 7 Jul 06 10:20   | CJR        |

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Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Approved by:

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix # = ! = Due to sample quantity + =

WI LAB # 999447680

Laboratory Manager New Ulm, MN

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9. :

Jason G. Smith, Inorganic

# = Due to sample concentration
+ = Due to extract volume
ND MICRO # 1013-M ND WW/DW # R-040 IJ

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ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

Sample Description: LL002

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#### 1 of 1 Page:

Report Date: 9 Jul 06 Lab Number: 06-A26200 Work Order #:12-7480 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Jun 06 15:00 Date Received: 23 Jun 06 10:55

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Temp at Receipt: 4.0 C

|                          | As Receiv<br>Result | ived Method<br>RL |       | Method<br>Reference | Date<br>Analyzed | Analyst |
|--------------------------|---------------------|-------------------|-------|---------------------|------------------|---------|
| Phosphorus Water Digest  |                     |                   |       |                     | 26 Jun 06        | RLB     |
| Water Digestions         |                     |                   |       |                     | 27 Jun 06        | JMS     |
| Solids, Total Suspended  | 6                   | mg/L              | 2     | USGS I-3765-85      | 23 Jun 06 15:4   | 0 CJL   |
| Chlorophyll a            | 32.3                | mg/cubic m        | 1.0   | 10200H              | 27 Jun 06 7:5    | 7 JD    |
| Chloride                 | 19.6                | mg/L              | 3.0   | 325.2               | 26 Jun 06 16:3   | 5 RMV   |
| Nitrate+Nitrite          | 0.49                | mg/L as N         | 0.20  | 353.2               | 30 Jun 06 16:0   | 8 DAP   |
| Phosphorus, Total        | 0.048               | mg/L              | 0.005 | EPA 365.1           | 27 Jun 06 9:2    | 5 RMV   |
| Phosphorus, Ortho        | < 0.005             | mq/L              | 0.005 | EPA 365,1           | 23 Jun 06 17:1   | 5 DAP   |
| Nitrogen, Total Kjeldahl | 1.4                 | mg/L              | 0.1   | SM 4500NorgB/NH3 E  | 26 Jun 06 12:5   | 5 TAM   |
| Iron                     | 0.033               | mq/L              | 0.010 | 6010                | 7 Jul 06 10:2    | 0 CJR   |

P  $\leftarrow$ Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Ent 7/21/05 @B

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix !  $\simeq$  Due to sample quantity

WI LAB # 999447680 ND MICRO # 1013-M

# = Due to sample concentration
+ = Due to extract volume ND WW/DW # R-040

IA LAB #: 132

IA LAB #: 022

# RIVTI

WES BOLL

Project Name: CLEARWATER

Sample Description: LL001 TOP

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28434 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 8:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | s Received Me<br>esult RL |       | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|---------------------------|-------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |                           |       |                     | 17 Jul 06        | RLB        |
| Solids, Total Suspended  | 10                 | mg/L                      | 2     | USGS I-3765-85      | 7 Jul 06 14:45   | AKF        |
| Chlorophyll a            | 31.6               | mg/cubic m                | 1.0   | 10200H              | 12 Jul 06 8:46   | JD         |
| Nitrogen Total, Calculat | 1.4                | mg/L                      | NA    | Calc                | 11 Jul 06 15:51  | Calculated |
| Chloride                 | 21.2               | mg/L                      | 3.0   | 325.2               | 14 Jul 06 15:02  | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N                 | 0.2   | 353,2               | 11 Jul 06 15:51  | RMV        |
| Phosphorus, Total        | 0.052              | mg/L                      | 0.005 | EPA 365.1           | 18 Jul 06 11:02  | RMV        |
| Phosphorus, Ortho        | 0.008              | mg/L                      | 0.005 | EPA 365.1           | 7 Jul 06 16:55   | RMV        |
| Nitrogen, Total Kjeldahl | 1.4                | mg/L                      | 0.1   | SM 4500NorgB/NH3 E  | 10 Jul 06 13:40  | RSL        |

| Approved b |                                |
|------------|--------------------------------|
|            | Jason G. Smith, Inorganic      |
|            | Laboratory Manager New Ulm, MN |

VB 7/21/06 Ent

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680

# = Due to sample concentration + = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040

IA LAB #: 132 TA LAB #: 022

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WES BOLL

Project Name: CLEARWATER

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Sample Description: LL001 MIDDLE

MAPLE PLAIN MN 55359-9000



Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28436 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 8:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

7/21/06

Temp at Receipt: 5.0C

As Received Method Method Date Result RL Reference Analyzed Analyst Phosphorus Water Digest 17 Jul 06 RLB 0.005 18 Jul 06 11:02 Phosphorus, Total 0.049 mg/L EPA 365.1 RMV 0.012 0.005 7 Jul 06 16:55 EPA 365.1 RMV Phosphorus, Ortho mg∕L

| Approved by:    | Jan 8. Ent BS   |             | Ent                 | WB |
|-----------------|---|-------------|---------------------|----|
| npprovod oj.    | Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN | <b>ξ</b> ο. | ø1 <sub>1.1</sub> = |    |
| ≈ Reporting Lin | nit   |             |                     |    |



WES BOLL

Project Name: CLEARWATER

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Sample Description: LL001 BOTTOM

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28438 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 8:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

Temp at Receipt: 5.0C

|                         | As Received<br>Result |      | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest |                       |      |              |                     | 17 Jul 06        | RLB     |
| Water Digestions        |                       |      |              |                     | 12 Jul 06        | JMS     |
| Phosphorus, Total       | 0.577                 | mg/L | 0.005        | EPA 365.1           | 18 Jul 06 11:02  | RMV     |
| Phosphorus, Ortho       | 0.025                 | mg/L | 0.005        | EPA 365.1           | 7 Jul 06 15:56   | RMV     |
| Iron                    | 0.729                 | mg/L | 0.010        | 6010                | 12 Jul 06 14:21  | CJR     |

|  | Ent 7   | 121106 1     | WB       |
|--|---|--------------|----------|
| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                      | у.<br>У.  | QA NR        |          |
| · Reporting Limit  |   |              |          |
| Elevated "Less Than Result" {<}: $\emptyset = Due$ to sample matrix $! = Due$ to sample quantity | # = Due to sample concentration + = Due to extract volume |              |          |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680   | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB                 | #: 132 IA LA | B #: 023 |



WES BOLL

Project Name: CLEARWATER

Sample Description: LL002 TOP

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

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Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28435 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 9:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

Temp at Receipt: 5.0C

|                          | As Recei<br>Result | Received Method<br>sult RL |       | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|----------------------------|-------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |                            |       |                     | 17 Jul 06        | RLB        |
| Solids, Total Suspended  | 11                 | mg/L                       | 2     | USGS I-3765-85      | 7 Jul 06 14:45   | AKF        |
| Chlorophyll a            | 31.4               | mg/cubic m                 | 1.0   | 10200H              | 12 Jul 06 8:46   | JD         |
| Nitrogen Total, Calculat | 1.6                | mg/L                       | NA    | Calc                | 11 Jul 06 15:51  | Calculated |
| Chloride                 | 21.4               | mg/L                       | 3.0   | 325.2               | 14 Jul 06 15:02  | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N                  | 0.2   | 353.2               | 11 Jul 06 15:51  | RMV        |
| Phosphorus, Total        | 0.064              | mg/L                       | 0.005 | EPA 365.1           | 18 Jul 06 11:02  | RMV        |
| Phosphorus, Ortho        | 0.007              | mg/L                       | 0.005 | EPA 365.1           | 7 Jul 06 16:55   | RMV        |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L                       | 0.1   | SM 4500NorgB/NH3 E  | 10 Jul 06 13:40  | RSL        |

| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN                         | . 1944<br>1944 -   | Enr 7/21/06 WB |
|--|--|----------------|
| Reporting Limit  |  | V.C            |
| Elevated "Less Than Result" (<): $\emptyset$ = Due to sample matrix $!$ = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> | NA             |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600   | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132                     | IA LAB #: 022  |



WES BOLL

Project Name: CLEARWATER

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Sample Description: LL002 MIDDLE

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Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28437 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 9:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

Temp at Receipt: 5.0C

|                         | As Recei<br>Result | As Received<br>Result |       | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|--------------------|-----------------------|-------|---------------------|------------------|---------|
| Phosphorus Water Digest |                    |                       |       |                     | 17 Jul 06        | RLB     |
| Phosphorus, Total       | 0.060              | mg/L                  | 0.005 | EPA 365.1           | 18 Jul 06 11:02  | RMV     |
| Phosphorus, Ortho       | 0.006              | mg/L                  | 0.005 | EPA 365.1           | 7 Jul 06 15:56   | RMV     |

Ent: 7/21/06 WB A L <u>تد ۲</u> Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN 52 Reporting Limit Elevated "Less Than Result" (<): 0 = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

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Project Name: CLEARWATER

Sample Description: LL002 BOTTOM

Page: 1 of 1

Report Date: 18 Jul 06 Lab Number: 06-A28439 Work Order #:12-7936 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 6 Jul 06 9:30 Date Received: 7 Jul 06 10:05 PO #: CLEARWATER

#### Temp at Receipt: 5.0C

In Lloc 12B

|   | As Recei<br>Result | ved          | Method<br>RL   | Method<br>Reference    | Date<br>Analyzed                  | Analyst    |
|---|--------------------|--------------|----------------|------------------------|-----------------------------------|------------|
| Phosphorus Water Digest<br>Water Digestions |                    |              |                |                        | 17 Jul 06<br>12 Jul 06            | RLB<br>JMS |
| Phosphorus, Total<br>Phosphorus, Ortho      | 0.101<br>0.060     | mg/L<br>mg/L | 0.005<br>0.005 | EPA 365.1<br>EPA 365.1 | 18 Jul 06 11:02<br>7 Jul 06 15:56 | RMV<br>RMV |
| Iron  | 0.019              | mg/L         | 0.010          | 6010                   | 12 Jul 06 14:21                   |            |

|  | Enr 7/21100 000  |
|--|--|
| Approved by: Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MN               | , my   |
| Reporting Limit  |  |
| Elevated "Less Than Result" (<): $e$ = Due to sample matrix ! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600                                 | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022       |

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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER Project Number: 0002-75 Sample Description: LL001M045 Report Date: 30 Jul 06 Lab Number: 06-A31162 Work Order #:12-8455 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Jul 06 10:20 Date Received: 21 Jul 06 11:30 PO #: CLEARWATER Chain of Custody Number: 100214 Temp at Receipt: 2.0C

|                         | As Received<br>Result |       | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|-------|---------------------|------------------|---------|
| Phosphorus Water Digest |                       |       |                     | 24 Jul 06        | RMV     |
| Phosphorus, Total       | 0.041 mg/L            | 0.005 | EPA 365.1           | 25 Jul 06 7:27   | RMV     |
| Phosphorus, Ortho       | < 0.005 mg/L          | 0.005 | EPA 365.1           | 21 Jul 06 17:24  | RMV     |

A L Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN - Reporting Limit Elevated "Less Than Result" (<): @ >> Due to sample matrix ! = Due to sample quantity # ~ Due to sample concentration
+ ~ Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Page: 1 of 1

WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLEARWATER Project Number: 0002-75 Sample Description: LL001B100 Report Date: 30 Jul 06 Lab Number: 06-A31163 Work Order #:12-8455 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Jul 06 10:30 Date Received: 21 Jul 06 11:30 PO #: CLEARWATER Chain of Custody Number: 100214 Temp at Receipt: 2.0C

|  | As Received<br>Result |              | Method<br>RL   | Method<br>Reference    | Date<br>Analyzed                  | Analyst    |
|--|-----------------------|--------------|----------------|------------------------|-----------------------------------|------------|
| Phosphorus Water Digest                |                       |              |                | *****                  | 24 Jul 06<br>26 Jul 06            | RMV<br>JMS |
| Water Digestions                       | 0 101                 | / T          | 0 005          |                        | 25 Jul 06 7:29                    |            |
| Phosphorus, Total<br>Phosphorus, Ortho | $0.101 \\ 0.059$      | mg/L<br>mg/L | 0.005<br>0.005 | EPA 365.1<br>EPA 365.1 | 23 Jul 06 7:29<br>21 Jul 06 17:24 |            |
| Iron                                   | 0.052                 | mg/L         | 0.010          | 6010                   | 26 Jul 06 10:59                   |            |

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Ð. La car Es\_ Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN ×2. ; = Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix !  $\pi$  Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

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Project Name: CLEARWATER Project Number: 0002-75 Sample Description: LL001T005 Report Date: 30 Jul 06 Lab Number: 06-A31164 Work Order #:12-8455 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Jul 06 10:15 Date Received: 21 Jul 06 11:30 PO #: CLEARWATER Chain of Custody Number: 100214 Temp at Receipt: 2.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Jul 06        | RMV        |
| Solids, Total Suspended  | 18                 | mg/L       | 2            | USGS I-3765-85      | 21 Jul 06 15:10  | CJL        |
| Chlorophyll a            | 40.2               | mg/cubic m | 1.0          | 10200H              | 25 Jul 06 6:07   | JD         |
| Nitrogen Total, Calculat | 1.6                | mg/L       | NA           | Calc                | 30 Jul 06 10:53  | Calculated |
| Chloride                 | 22.7               | mg/L       | 3.0          | 325.2               | 28 Jul 06 13:57  | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 30 Jul 06 10:53  | RMV        |
| Phosphorus, Total        | 0.072              | mg/L       | 0.005        | EPA 365.1           | 25 Jul 06 7:29   | RMV        |
| Phosphorus, Ortho        | 0.010              | mg/L       | 0.005        | EPA 365.1           | 21 Jul 06 17:24  | RMV        |
| Nitrogen, Total Kjeldahl | 1.6                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 27 Jul 06 6:25   | TAM        |

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A · \_ Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN = Reporting Limit Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Project Name: CLEARWATER Project Number: 0002-75 Sample Description: LL002T005

Report Date: 30 Jul 06 Lab Number: 06-A31165 Work Order #:12-8455 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Jul 06 11:25 Date Received: 21 Jul 06 11:30 PO #: CLEARWATER Chain of Custody Number: 100214 Temp at Receipt: 2.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 24 Jul 06        | RMV        |
| Solids, Total Suspended  | < 2                | mg/L       | 2            | USGS I-3765-85      | 21 Jul 06 15:10  | CJL        |
| Chlorophyll a            | 49.2               | mg/cubic m | 1.0          | 10200H              | 25 Jul 06 6:07   | JD         |
| Nitrogen Total, Calculat | 2.0                | mg/L       | NA           | Calc                | 30 Jul 06 10:53  | Calculated |
| Chloride                 | 21.3               | mg/L       | 3.0          | 325.2               | 28 Jul 06 13:57  | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 30 Jul 06 10:53  | RMV        |
| Phosphorus, Total        | 0.064              | mg/L       | 0.005        | EPA 365.1           | 25 Jul 06 7:29   | RMV        |
| Phosphorus, Ortho        | 0.010              | mg/L       | 0.005        | EPA 365.1           | 21 Jul 06 17:24  | RMV        |
| Nitrogen, Total Kjeldahl | 2.0                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 27 Jul 06 6:25   | TAM        |

| Approved by:<br>Jason G. Smith, Inorganic<br>Laboratory Manager New Ulm, MA                 | WB  |          |
|---|---|----------|
| , = Reporting Limit   |   |          |
| Elevated "Less Than Result" (<); $\theta$ = Due to sample matrix ! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre>  |          |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447600                                      | ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022  |          |
| MVTL apparates the accuracy of the analysis done on the sample submitted for the            | time. It is not nossible for MVTL to examine that a test result obtained on a particular sample will be the sam | ar<br>rt |

WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLARWATER RIVER

Sample Description: LL001T

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33817 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 10:20 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

|                          | As Recei<br>Result | As Received<br>Result |       | Method<br>Reference                   | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|-----------------------|-------|---------------------------------------|------------------|------------|
| Phosphorus Water Digest  |                    |                       |       | · · · · · · · · · · · · · · · · · · · | 7 Aug 06         | RLB        |
| Solids, Total Suspended  | 16                 | mg/L                  | 2     | USGS I-3765-85                        | 4 Aug 06 15:15   | CJL        |
| Chlorophyll a            | 73.7               | mg/cubic m            | 1.0   | 10200H                                | 8 Aug 06 8:09    | JD         |
| Nitrogen Total, Calculat | 2.5                | mg/L                  | NA    | Calc                                  | 9 Aug 06 11:48   | Calculated |
| Chloride                 | 25.7               | mg/L                  | 3.0   | 325.2                                 | 5 Aug 06 14:57   | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N             | 0.2   | 353.2                                 | 9 Aug 06 11:48   | RMV        |
| Phosphorus, Total        | 0.083              | mg/L                  | 0.005 | EPA 365.1                             | 8 Aug 06 11:26   |            |
| Phosphorus, Ortho        | 0.012              | mq/L                  | 0.005 | EPA 365.1                             | 4 Aug 06 17:56   | RMV        |
| Nitrogen, Total Kjeldahl | 2.5                | mg/L                  | 0.1   | SM 4500NorgB/NH3 E                    | 7 Aug 06 15:55   | TAM        |

D. - &---Approved by: 65 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity

ue to sample matrix # = Due to sample concentration ue to sample quantity + = Due to extract volume WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 I.

ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLARWATER RIVER

Sample Description: LL001M

MAPLE PLAIN MN 55359-9000

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4

Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33818 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 10:20 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

|                         | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest |                       |              |                     | 7 Aug 06         | RLB     |
| Phosphorus, Total       | 0.062 mg/L            | 0.005        | EPA 365.1           | 8 Aug 06 11:26   | RMV     |
| Phosphorus, Ortho       | 0.005 mg/L            | 0.005        | EPA 365.1           | 4 Aug 06 17:56   | RMV     |

Ent

8. . Approved by: 5 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit

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WES BOLL

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR

Project Name: CLARWATER RIVER

Sample Description: LL001B

MAPLE PLAIN MN 55359-9000

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Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33819 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 10:20 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

| As R<br>Resu  |                         | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed   | Analyst |
|---|-------------------------|----------------------|-------------------------|--------------------------------|--|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.153<br>0.095<br>0.067 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 7 Aug 06<br>9 Aug 06<br>8 Aug 06 11:26<br>4 Aug 06 17:56<br>10 Aug 06 9:10 | RMV     |

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A L Approved by: <u>Zs</u> Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN \* 2 Reporting Limit Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CLARWATER RIVER

Sample Description: LL002T

Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33820 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 11:00 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|
| Phosphorus Water Digest  |                    |            |              |                     | 7 Aug 06         | RLB        |
| Solids, Total Suspended  | 16                 | mg/L       | 2            | USGS I-3765-85      | 4 Aug 06 15:15   | CJL        |
| Chlorophyll a            | 75.3               | mg/cubic m | 1.0          | 10200H              | 8 Aug 06 8:09    | JD         |
| Nitrogen Total, Calculat | 1.9                | mg/L       | NA           | Calc                | 9 Aug 06 11:48   | Calculated |
| Chloride                 | 25.5               | mg/L       | 3.0          | 325.2               | 5 Aug 06 14:57   | RMV        |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 9 Aug 06 11:48   | RMV        |
| Phosphorus, Total        | 0.090              | mg/L       | 0.005        | EPA 365.1           | 8 Aug 06 11:26   | RMV        |
| Phosphorus, Ortho        | 0.012              | mg/L       | 0.005        | EPA 365.1           | 4 Aug 06 17:56   | RMV        |
| Nitrogen, Total Kjeldahl | 1.9                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 7 Aug 06 15:55   | TAM        |

Đ. 5 Approved by: Jason G. Smith, Inorganic 7. . . . Laboratory Manager New Ulm, MN 82. Reporting Limit

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Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity = Due to sample concentration + - Due to extract volume WI LAB # 999447680 ND WW/DW # R-040 CERTIFICATION: MN LAB # 027-015-125 ND MICRO # 1013-M IA LAB #: 132 IA LAB #: 022

MVTL

WES BOLL

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

Project Name: CLARWATER RIVER

Sample Description: LL002M

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Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33821 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 11:00 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

| As Received<br>Result   |              | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|--------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest |              |              |                     | 7 Aug 06         | RLB     |
| Phosphorus, Total       | 0.067 mg/L   | 0.005        | EPA 365.1           | 8 Aug 06 11:27   | RMV     |
| Phosphorus, Ortho       | < 0.005 mg/L | 0.005        | EPA 365.1           | 4 Aug 06 17:57   | RMV     |

| Approved by:  | tnt<br>WB  |              |
|---|--|--------------|
| Laboratory Manager New Ulm, MN  | no.+<br>₽  |              |
| Reporting Limit   |  |              |
| Elevated "Less Than Result" {<}: $0 \approx$ Due to sample matrix<br>! = Due to sample quantity | <pre># = Due to sample concentration + = Due to extract volume</pre> |              |
| CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO                                 | # 1013-M ND WW/DW # R-040 IA LAB #: 132 I                            | A LAB #: 022 |



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Project Name: CLARWATER RIVER

Sample Description: LL002B

Page: 1 of 1

Report Date: 10 Aug 06 Lab Number: 06-A33822 Work Order #:12-8968 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 3 Aug 06 11:00 Date Received: 4 Aug 06 9:50 PO #: CLEARWATER RIVER

Temp at Receipt: 3.0 C

|   | As Recei<br>Result      | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed   | Analyst |
|---|-------------------------|----------------------|-------------------------|--------------------------------|--|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.188<br>0.130<br>0.047 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 7 Aug 06<br>9 Aug 06<br>8 Aug 06 11:27<br>4 Aug 06 17:57<br>10 Aug 06 9:10 |         |

| Approved by: | Jason G. Smith, Inorganic      |             |
|--------------|--------------------------------|-------------|
|              | Laboratory Manager New Ulm, MN | <u>e</u> a. |
|              |                                | *           |

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Reporting Limit

WES BOLL

Sample Description: LL001T

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Sep 06 Lab Number: 06-A36825 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 12:00 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|  | As Recei<br>Result  | ved   | Method<br>RL  | Method<br>Reference  | Date<br>Analyzed  | Analyst                               |
|--|---|---|---|--|---|---------------------------------------|
| Phosphorus Water Digest<br>Solids, Total Suspended<br>Chlorophyll a<br>Nitrogen Total, Calculat<br>Chloride<br>Nitrate+Nitrite<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Nitrogen, Total Kjeldahl | 19<br>73.3<br>2.3<br>22.3<br>< 0.2<br>0.068<br>0.018<br>2.3 | mg/L<br>mg/cubic m<br>mg/L<br>mg/L<br>mg/L as N<br>mg/L<br>mg/L<br>mg/L | 2<br>1.0<br>NA<br>3.0<br>0.2<br>0.005<br>0.005<br>0.1 | USGS I-3765-85<br>10200H<br>Calc<br>325.2<br>353.2<br>EPA 365.1<br>EPA 365.1<br>SM 4500NorgB/NH3 E | 26 Aug 06<br>23 Aug 06 15:00<br>25 Aug 06 7:35<br>30 Aug 06 12:36<br>25 Aug 06 12:36<br>30 Aug 06 12:36<br>28 Aug 06 11:31<br>24 Aug 06 7:22<br>25 Aug 06 11:45 | JD<br>Calculated<br>RMV<br>RMV<br>RMV |

£. . Approved by: GS. Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\emptyset$  = Due to sample matrix ! = Due to sample quantity

ue to sample matrix # = Due to sample concentration ue to sample quantity + = Due to extract volume WI LAB # 999447680 ND MICRO # 1013-M ND WW/DN # R-040 IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LL001M

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Sep 06 Lab Number: 06-A36826 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 12:15 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Received<br>Result  | Method<br>RL   | Method<br>Reference    | Date<br>Analyzed                               | Analyst           |
|---|------------------------|----------------|------------------------|--|-------------------|
| Phosphorus Water Digest<br>Phosphorus, Total<br>Phosphorus, Ortho | 0.063 mg/<br>0.018 mg/ | 0.005<br>0.005 | EPA 365.1<br>EPA 365.1 | 26 Aug 06<br>28 Aug 06 11:31<br>24 Aug 06 7:22 | RLB<br>RMV<br>RMV |

B. -<Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # \* Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LL001B

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Sep 06 Lab Number: 06-A36827 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 12:30 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Recei<br>Result      | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed  | Analyst |
|---|-------------------------|----------------------|-------------------------|--------------------------------|---|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.246<br>0.212<br>0.099 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 26 Aug 06<br>28 Aug 06<br>28 Aug 06 11:31<br>24 Aug 06 7:22<br>29 Aug 06 8:19 | RMV     |

-Â Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" {<}:  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022



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Sample Description: LL002T

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Sep 06 Lab Number: 06-A36828 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 13:00 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved       | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |  |
|--------------------------|--------------------|-----------|--------------|---------------------|------------------|------------|--|
| Phosphorus Water Digest  |                    |           |              |                     | 26 Aug 06        | RLB        |  |
| Nitrogen Total, Calculat | 1.3                | mg/L      | NA           | Calc                | 30 Aug 06 12:36  | Calculated |  |
| Chloride                 | 22.4               | mg/L      | 3.0          | 325.2               | 25 Aug 06 15:43  | RMV        |  |
| Nitrate+Nitrite          | < 0.2              | mg/L as N | 0.2          | 353.2               | 30 Aug 06 12:36  | RMV        |  |
| Phosphorus, Total        | 0.055              | mg/L      | 0.005        | EPA 365.1           | 28 Aug 06 11:31  | RMV        |  |
| Phosphorus, Ortho        | 0.018              | mq/L      | 0.005        | EPA 365.1           | 24 Aug 06 7:22   |            |  |
| Nitrogen, Total Kjeldahl | 1.3                | mg/L      | 0.1          | SM 4500NorgB/NH3 E  | 25 Aug 06 11:45  | TAM        |  |

A L Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<);  $\theta$  = Due to sample matrix ! = Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume

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WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LL002M

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Sep 06 Lab Number: 06-A36829 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 13:15 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Received<br>Result    | Method<br>RL   | Method<br>Reference    | Date<br>Analyzed                               | Analyst           |
|---|--------------------------|----------------|------------------------|--|-------------------|
| Phosphorus Water Digest<br>Phosphorus, Total<br>Phosphorus, Ortho | 0.069 mg/L<br>0.019 mg/L | 0.005<br>0.005 | EPA 365.1<br>EPA 365.1 | 26 Aug 06<br>28 Aug 06 11:31<br>24 Aug 06 7:22 | RLB<br>RMV<br>RMV |

Ent 8. H Approved by: 5 Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN Reporting Limit Elevated "Less Than Result" (<):  $\varrho$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LL002B

Project Name: CRWD

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1 of 1 Page:

Report Date: 4 Sep 06 Lab Number: 06-A36830 Work Order #:12-9581 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 22 Aug 06 13:30 Date Received: 23 Aug 06 10:10 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Recei<br>Result | ved                | Method<br>RL   | Method<br>Reference      | Date<br>Analyzed                  | Analyst    |  |
|---|--------------------|--------------------|----------------|--------------------------|-----------------------------------|------------|--|
| Phosphorus Water Digest<br>Water Digestions |                    | ·····              |                |                          | 26 Aug 06<br>28 Aug 06            | RLB<br>JMS |  |
| Solids, Total Suspended<br>Chlorophyll a    | 9<br>3.7           | mg/L<br>mg/cubic m | 2<br>1.0       | USGS I-3765-85<br>10200H | 23 Aug 06 15:00                   | CJL        |  |
| Phosphorus, Total                           | 0.229              | mg/L               | 0.005          | EPA 365.1                | 25 Aug 06 7:35<br>28 Aug 06 11:32 |            |  |
| Phosphorus, Ortho<br>Iron                   | 0.173<br>0.073     | mg/L<br>mg/L       | 0.005<br>0.010 | EPA 365.1<br>6010        | 24 Aug 06 7:23<br>29 Aug 06 8:19  |            |  |

B. L Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

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Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix !  $\approx$  Due to sample quantity

# = Due to sample concentration
+ = Due to extract volume ND WW/DW # R-040

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IA LAB #: 132 IA LAB #: 022

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WI LAB # 999447680 ND MICRO # 1013-M



WES BOLL

Sample Description: LLOO1 T

Project Name: CRWD

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Page: 1 of 1

Report Date: 4 Oct 06 Lab Number: 06-A41539 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 10:00 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|                          | As Received<br>Result |            | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |  |
|--------------------------|-----------------------|------------|--------------|---------------------|------------------|------------|--|
| Phosphorus Water Digest  |                       |            |              |                     | 26 Sep 06        | RMV        |  |
| Solids, Total Suspended  | 8                     | mg/L       | 2            | USGS I-3765-85      | 21 Sep 06 15:30  | CJL        |  |
| Chlorophyll a            | 19.9                  | mg/cubic m | 1.0          | 10200H              | 4 Oct 06 8:20    | JD         |  |
| Nitrogen Total, Calculat | 1.9                   | mg/L       | NA           | Calc                | 25 Sep 06 15:09  | Calculated |  |
| Chloride                 | 20.6                  | mg/L       | 3.0          | 325.2               | 29 Sep 06 14:36  | DAP        |  |
| Nitrate+Nitrite          | < 0.2                 | mg/L as N  | 0.2          | 353.2               | 25 Sep 06 15:09  | DAP        |  |
| Nitrogen, Ammonia        | 0.43                  | mg/L       | 0.08         | 4500 NH3 B, E       | 25 Sep 06 15:25  | RSL        |  |
| Phosphorus, Total        | 0.041                 | mg/L       | 0.005        | EPA 365.1           | 27 Sep 06 13:49  | DAP        |  |
| Phosphorus, Ortho        | 0,012                 | mg/L       | 0.005        | EPA 365.1           | 22 Sep 06 7:25   | RMV        |  |
| Nitrogen, Total Kjeldahl | 1.9                   | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 22 Sep 06 13:40  |            |  |

C. L Approved by: £ Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

= Reporting Limit

CERTIFICATION: NN LAB # 027-015-125

Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447680 ND MICRO # 1013-M

# = Due to sample concentration + = Due to extract volume 1013-M ND WW/DW # R-040 I

IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LLOO1 M

Project Name: CRWD

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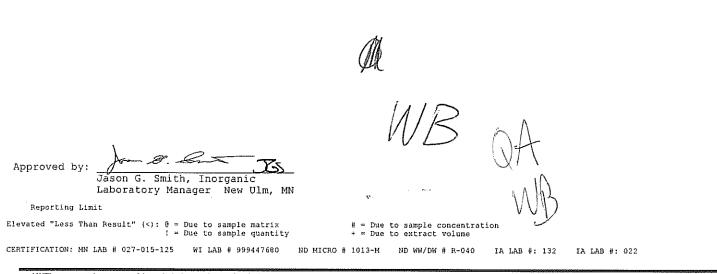
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Page: 1 of 1

Report Date: 4 Oct 06 Lab Number: 06-A41535 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 10:00 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|                         | As Received<br>Result | Method Method<br>RL Reference | Date<br>Analyzed Analyst |
|-------------------------|-----------------------|-------------------------------|--------------------------|
| Phosphorus Water Digest |                       |                               | 26 Sep 06 RMV            |
| Phosphorus, Total       | 0.028 mg/L            | 0.005 EPA 365.1               | 27 Sep 06 13:48 DAP      |
| Phosphorus, Ortho       | 0.009 mg/L            | 0.005 EPA 365.1               | 22 Sep 06 7:25 RMV       |



WES BOLL

Sample Description: LLOO1 B

Project Name: CRWD

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

MINNESOTA VALLEY TESTING LABORATORIES, INC.

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Page: 1 of 1

Report Date: 4 Oct 06 Lab Number: 06-A41537 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 10:00 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Receiv<br>Result     | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed   | Analyst |  |
|---|-------------------------|----------------------|-------------------------|--------------------------------|--|---------|--|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.352<br>0.348<br>0.085 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 26 Sep 06<br>26 Sep 06<br>27 Sep 06 13:49<br>22 Sep 06 7:25<br>26 Sep 06 15:25 | RMV     |  |

Þ. Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<): @ = Due to sample matrix ! = Due to sample quantity

WI LAB # 999447600

+ = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040

# = Due to sample concentration

IA LAB #: 132 IA LAB #: 022

WES BOLL

Sample Description: LLOO2 T

Project Name: CRWD

WENCK ASSOCIATES INC 1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

#### MINNESOTA VALLEY TESTING LABORATORIES, INC.

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Page: 1 of 1

Report Date: 4 Oct 06 Lab Number: 06-A41540 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 11:30 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|                          | As Recei<br>Result | ved        | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst    |  |
|--------------------------|--------------------|------------|--------------|---------------------|------------------|------------|--|
| Phosphorus Water Digest  |                    |            |              |                     | 26 Sep 06        | RMV        |  |
| Solids, Total Suspended  | 5                  | mg/L       | 2            | USGS I-3765-85      | 21 Sep 06 15:30  | CJL        |  |
| Chlorophyll a            | 10.9               | mg/cubic m | 1.0          | 10200H              | 4 Oct 06 8:20    | JD         |  |
| Nitrogen Total, Calculat | 1.7                | mg/L       | NA           | Calc                | 25 Sep 06 15:09  | Calculated |  |
| Chloride                 | 20.3               | mg/L       | 3.0          | 325.2               | 29 Sep 06 14:36  | DAP        |  |
| Nitrate+Nitrite          | < 0.2              | mg/L as N  | 0.2          | 353.2               | 25 Sep 06 15:09  | DAP        |  |
| Nitrogen, Ammonia        | 0.36               | mq/L       | 0.08         | 4500 NH3 B, E       | 25 Sep 06 15:25  | RSL        |  |
| Phosphorus, Total        | 0.054              | mg/L       | 0.005        | EPA 365.1           | 27 Sep 06 13:49  | DAP        |  |
| Phosphorus, Ortho        | 0.011              | mg/L       | 0.005        | EPA 365.1           | 22 Sep 06 7:25   | RMV        |  |
| Nitrogen, Total Kjeldahl | 1.7                | mg/L       | 0.1          | SM 4500NorgB/NH3 E  | 22 Sep 06 13:40  |            |  |

A Approved by: LS. Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN - Reporting Limit Elevated "Less Than Result" (<): (! = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration
+ = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132 IA LAB #: 022





WES BOLL WENCK ASSOCIATES INC 1800 PIONEER CRK CTR MAPLE PLAIN MN 55359-9000

Project Name: CRWD

Sample Description: LLOO2 M

1 of 1 Page:

Report Date: 4 Oct 06 Lab Number: 06-A41536 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 11:30 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|                         | As Received<br>Result | Method<br>RL | Method<br>Reference | Date<br>Analyzed | Analyst |
|-------------------------|-----------------------|--------------|---------------------|------------------|---------|
| Phosphorus Water Digest |                       |              |                     | 26 Sep 06        | RMV     |
| Phosphorus, Total       | 0.040 mg/L            | 0.005        | EPA 365.1           | 27 Sep 06 13:49  | DAP     |
| Phosphorus, Ortho       | 0.009 mg/L            | 0.005        | EPA 365.1           | 22 Sep 06 7:25   | RMV     |

Ð. Ŀ Approved by: Jason G. Smith, Inorganic

Laboratory Manager New Ulm, MN

Reporting Limit

Elevated "Less Than Result" (<):  $\theta$  = Due to sample matrix ! = Due to sample quantity # = Due to sample concentration + = Due to extract volume CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680

ND MICRO # 1013-M ND WW/DW # R-040

\*\*\*\*

IA LAB #: 132 IA LAB #: 022

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

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Page: 1 of 1

Report Date: 4 Oct 06 Lab Number: 06-A41538 Work Order #:12-10756 Account #: 013173 Sample Matrix: SURFACE WATER Date Sampled: 20 Sep 06 11:30 Date Received: 21 Sep 06 10:20 PO #: CRWD

Temp at Receipt: 4.0C

|   | As Receiv<br>Result     | ved                  | Method<br>RL            | Method<br>Reference            | Date<br>Analyzed   | Analyst |
|---|-------------------------|----------------------|-------------------------|--------------------------------|--|---------|
| Phosphorus Water Digest<br>Water Digestions<br>Phosphorus, Total<br>Phosphorus, Ortho<br>Iron | 0.331<br>0.329<br>0.074 | mg/L<br>mg/L<br>mg/L | 0.005<br>0.005<br>0.010 | EPA 365.1<br>EPA 365.1<br>6010 | 26 Sep 06<br>26 Sep 06<br>27 Sep 06 13:49<br>22 Sep 06 7:25<br>26 Sep 06 15:25 | RMV     |

8 -Approved by: Jason G. Smith, Inorganic Laboratory Manager New Ulm, MN

Reporting Limit

CERTIFICATION: MN LAB # 027-015-125

Elevated "Less Than Result" (<):  $\emptyset$  = Due to sample matrix ! = Due to sample quantity

WES BOLL

Sample Description: LLOO2 B

Project Name: CRWD

WENCK ASSOCIATES INC

1800 PIONEER CRK CTR

MAPLE PLAIN MN 55359-9000

WI LAB # 999447680 ND MICR

# = Due to sample concentration
+ = Due to extract volume ND MICRO # 1013-M ND WW/DW # R-040 IA LAB #: 132

#: 132 IA LAB #: 022

| MVIL  | <i>LABORAT</i><br>1126 North Fr<br>New Ulm, MN |   |                 | نتم<br>م        | J.              | ha             | lin             | ol          | f C          | us            | sto           | ody             | ' R         | lec                              | :01              | rd                | Pageof   |  |
|---|--|---|-----------------|-----------------|-----------------|----------------|-----------------|-------------|--------------|---------------|---------------|-----------------|-------------|----------------------------------|------------------|-------------------|--|--|
| Pi<br>Toll Free: (800)  | none: (507) 354-85<br>782-3557                 | 517<br>Fax: (507) 359-28                    | 90              |                 | ز/ / Work Order |                |                 |             |              |               |               | Ord             | der         | /3                               | 7-9              | 936               |  |  |
| Company Name an   | d Address:<br>und 4550C                        |   |                 |                 | Account #:      |                |                 |             |              |               |               |                 |             |                                  | Pho              | ne #:             |  |  |
| 1800 Pior   | 1800 Pioneer Creek Circle                      |   |                 |                 | Contact:        |                |                 |             |              |               |               |                 | Fax         | #:<br>For faxed report check box |                  |                   |  |  |
| Maple Plaine Minn 55359-9000<br>Billing Address (indicate if different from above): |  |   |                 |                 | Nai             | ne o           | of S            | amp         | oler         | :             |               |                 |             |                                  |                  | E-m               |  |  |
|   |  |   |                 |                 | Qu              | ote            | Nur             | nbe         | r            |               |               |                 |             |                                  |                  |                   | e Submitted:   |  |
|   |  |   |                 |                 | Pro             | jeci           | t Na            | me/         | Nur          | nbe           | er:           |                 |             |                                  |                  | Purchase Order #: |  |  |
|   | Sample   | Information                                 |                 |                 | Bottle Type     |                |                 |             |              |               |               | pe              |             |                                  |                  | Analysis          |  |  |
| Lab ≦<br>Number   | Sample ID                                      | Sample Type<br>(Food, Soil,<br>Water, Etc.) | Date<br>Sampled | Time<br>Sampled | VOC Vials       | 500 ml unpres. | 1000 ml unpres. | 500 ml HNO3 | 1000 ml HNO3 | 500 mi H2SO4  | 1000 ml H2SO4 | Sterile plastic | Amber H2SO4 | 500 ml NaOH                      | Filtered? Y or N | othefiction       | Analysis Required  |  |
|   | OOI TOP  | Water                                       | 76/06           | 830             |                 | J              |                 | - 47        |              | レ             | Ч             |                 | /           | - 4,5                            |                  | ノ                 | TP   |  |
| 36260   | of mid   |   | ŧ               | 830             |                 | 7              |                 |             |              | V             |               |                 |             |                                  |                  |                   | Orthophosphate /   |  |
|   | 01 Bollom                                      |   |                 | 830             |                 | V              |                 | -           | 1            | ~             |               |                 |             |                                  |                  |                   | TIÙ  |  |
| 35 600  | 02 TOP<br>02 Mich                              |   |                 | 930             | <u> </u>        | 2              |                 |             |              | $\mathcal{V}$ | J             |                 |             |                                  |                  | $\checkmark$      | NOZ+NO3V   |  |
| BFLLC   | 02 mich  | <u> </u>                                    |                 | 930             |                 |                |                 |             |              | /             |               |                 |             |                                  |                  |                   | TKN-Nitpogez   |  |
| 381 22  | 002 BOTTON                                     |   |                 | 930             | <u> </u>        | 2              |                 | /           | ·.           | 1             |               |                 |             |                                  |                  |                   | Chloride v   |  |
|   |  |   |                 |                 | ļ               |                |                 |             |              |               |               |                 |             |                                  |                  |                   | Iron v   |  |
|   | -  |   |                 |                 |                 |                |                 |             |              |               |               |                 |             |                                  |                  |                   | Chlorophyll Au   |  |
|   |  |   |                 |                 |                 |                |                 |             |              |               |               |                 |             |                                  |                  |                   | Chlorophyll Av   |  |
| Comments:   |  |   |                 |                 |                 |                |                 |             |              |               |               |                 |             |                                  |                  |                   | KEMSKE PAPER CO. / OSWALD PUBLISHING CO., NEW ULM, MN (800 782 3532) N74 |  |

| Transferred by:   | Date: | Time: | Sample Condition: | Received by: | _ Date:                               | Time:    | Temp: |
|-------------------|-------|-------|-------------------|--------------|---------------------------------------|----------|-------|
| 1. Fin les rettin | 7606  | 11:00 |                   | Mahmid       | 21/106                                | 10:05 21 | n 5   |
| 2.                |       |       |                   | 7            | , , , , , , , , , , , , , , , , , , , |          |       |

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| MVTL          | 1126 North Front Street<br>New Ulm, MN 56073             | i Imr                           |                   |         |            |                                       | Y RECOF   | <b>ND</b>                                    | Pag  |                    | `f_<br>)021 | <u>/</u><br>4           |  |  |
|---------------|--|---------------------------------|-------------------|---------|------------|---------------------------------------|---|--|--|--------------------|-------------|-------------------------|--|--|
| Toll Free:    | Phone: (507) 354-8517<br>(800) 782-3557 Fax: (507) 359-2 | 2890                            |                   |         |            |                                       | WORK ORDER                                      | ۹#   | 12-841-  | مستشر              |             |                         |  |  |
| Company Na    | me and Address:  |                                 |                   | Accoun  |            |                                       |   | P  | hone #:<br>(7 63)479 -   | 428                | 3           | <u>Addium ( rundad)</u> |  |  |
| 1800          | k Associates, Inc<br>Pioneer Creek Ct,                   |                                 |                   | Contact | les        | Ro                                    |   |  | ax #:  |                    |             | *                       |  |  |
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|               |  |                                 |                   | Project |            |                                       | nber:<br>Clearnater                             | P  | Purchase Order #:  |                    |             |                         |  |  |
| Lab           | Your Sample  | Sample                          | Date              |         |            | · · · · · · · · · · · · · · · · · · · | (Matrix or Substance)                           | ۸.   |  |                    |             |                         |  |  |
| Use<br>Only   | I.D. or Number<br>Example                                | Description<br>Tank Bottom      | Time<br>01/01/99  | Soil V  | /ater Fo   | ood<br>K                              | Other (Please Be Specif<br>Sampled Liquid Layer |  | Analyze For:   |                    |             |                         |  |  |
| 64            | LLOØIT005  | Tank #3                         | 11:45 a.m.<br>    |         | X          |                                       | Not bottom sludge                               |  | BOD, COD, Acetone, Shelf Life<br>TP, Ortho-P, TN, NO, +ND, TKN |                    |             |                         |  |  |
| A31162        | $h_{h}OOMA945$   |                                 | 7/20/06           |         | x          |                                       |   |  | Chloride<br>TP. Octor  | , <u>ŤŚŚ,</u><br>D | chloc-      | a                       |  |  |
| 63            | LLOVIBIOD  |                                 | 7/20/06           |         | X          |                                       |   |  | TP, Ortho-P, Total Fe  |                    |             |                         |  |  |
| 65            | LLOØDT005  |                                 | 7/20/06           |         | <u>X  </u> |                                       |   |  | TP, Ortho-P, TN, NOg+/   |                    |             |                         |  |  |
|               |  |                                 |                   |         |            |                                       |   |  | IKN, Ch  | 155,ch             | lor-a       |                         |  |  |
|               |  |                                 |                   |         |            |                                       |   |  |  |                    |             |                         |  |  |
|               |  |                                 |                   | _       |            |                                       |   |  |  |                    |             |                         |  |  |
| · ·           |  |                                 |                   |         |            |                                       |   |  |  |                    |             |                         |  |  |
|               | Transferred by:  | Comments:<br>(Sample Condition) | Date<br>Time      |         | Rece       | eived b                               | ру:   | Comments: Date °C<br>(Sample Condition) Time |  |                    |             |                         |  |  |
| 1             | Westly Boll  |                                 | -7/20/06<br> 4:00 | +-2     | ŹĄ         | l <u>s</u> f.                         | enid  | <u></u>                                      |  |                    |             |                         |  |  |
| 2             | V  |                                 |                   |         | /          | /                                     |   |  |  |                    |             | <u>`</u>                |  |  |
| Disposed o    | f By:  |                                 |                   | Dispo   | osal C     | omm                                   | ents:   |  |  |                    |             |                         |  |  |

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| Phone: (507) 354-8517<br>Toll Free: (800) 782-3557 Fax: (507) 359-2890  |  |                  | WORK ORDER #                                       | 12-8   | 968                                      |          |  |  |  |  |
|---|--|------------------|--|--|--|----------|--|--|--|--|
| Company Name and Address:<br>Wenck Associates<br>1800 Pioneer Creek Ctr |  | Account #:       |  | # <u>12 - 896 8</u><br>Phone #:<br>(763)479 - 4283 |  |          |  |  |  |  |
| 1800 Pioneer Creek Ctr<br>Maple Plain, MN 55359-024                     | 19                                       | Name of Sampler: |  | Fax #:   |  |          |  |  |  |  |
| Billing Address (indicate name and address if different                 |  | Quote #:         |  | For faxed report<br>Date Submitted:                | Check box                                |          |  |  |  |  |
|   |  | Project Name/Num |  | Purchase Order #:                                  |  |          |  |  |  |  |
|   |  | Clearwater River |  |  |  |          |  |  |  |  |
| Lab Your Sample<br>USE I.D. or Number                                   | Sample Date Date Date                    |                  | Matrix or Substance)<br>Other (Please Be Specific) | - Ana  | lyze For:                                |          |  |  |  |  |
| Only Example  | Tank Bottom 01/01/9<br>Tank #3 11:45 am. |                  | Sampled Liquid Layer<br>Not bottom sludge          | Vitamin A,<br>BOD, COD,                            | TKN, Iron, Calciur<br>Acetone, Shelf Lif | n<br>fe  |  |  |  |  |
| ABERTLLOOST   | 10:20<br>B/3/06                          | $- \chi$         | <u> </u>   | TP. Ontho-PTI                                      | V.ND+112                                 | TKAI     |  |  |  |  |
|   |  |                  |  | Chloride, 75                                       | is chlor-                                | ~        |  |  |  |  |
| 18 LLOOM  | 8/3/06                                   |                  |  | TP Artha   | $\rho$                                   | <u> </u> |  |  |  |  |
| 19 LLOØIB   | <u>8/3/0k</u>                            |                  |  | TP Anchas  | PIImo                                    |          |  |  |  |  |
| 20 LLODZT   | 8/3/CX                                   |                  | 1-1-yalloolaanaa,                                  | TP. Anthe P  | TN, NOSH                                 | NA TH    |  |  |  |  |
|   |  |                  |  |  | S. chlor-a                               | VG, INI  |  |  |  |  |
| 21 HOOD   | <u>8/3/06</u><br>11:00                   |                  |  | TP Antho   | <u>-P</u>                                |          |  |  |  |  |
| 22 LLODDB   | <u>8/3/0c</u>                            |                  |  | TP. Ortho-P. Iron                                  |  |          |  |  |  |  |
|   |  |                  |  | 1110000  | 1, LIUN                                  |          |  |  |  |  |
|   |  | _                | Adv  |  |  |          |  |  |  |  |
|   | Comments: Date<br>nple Condition) Time   | Received by      |  | Comments:<br>nple Condition)                       | Date<br>Time                             | °C       |  |  |  |  |
| 1 Wesley Poll   | <u>8/07/06</u><br>14:50                  | - MG             |  |  | 4 21606                                  | 3.0C     |  |  |  |  |
| 3   |  |                  |  |  |  |          |  |  |  |  |
| Disposed of By:   |  | Disposal Comme   | ants:  |  |  |          |  |  |  |  |

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|                            |                      |                                       |              |  |                          |       |  |         |           |                         |    |        |               |       | :   |        |               | 12-0581   |
|----------------------------|----------------------|---------------------------------------|--------------|--|--------------------------|-------|--|---------|-----------|-------------------------|----|--------|---------------|-------|---|--------|---------------|---|
| <b>r</b>                   | n                    |                                       |              |  |                          |       |  |         | Sugar"    |                         |    |        |               |       |   |        | ľ             | 10 6980   |
| CHAIN OF CUSTODY<br>RECORD |                      |                                       |              |  |                          |       | WENCK ASSOCIATES, INC.<br>1800 Pioneer Creek Ctr. – P.O. Box 249<br>Maple Plain, MN 55359-0249<br>Phone: (763) 479-4200<br>FAX: (763) 479-4242 |         |           |                         |    |        |               |       | FIELD COORDINATOR<br>Morm Wenck<br>AIRFUL NO. |        |               |   |
| PROJ. NO.                  |                      |                                       |              | PROJ. N.   | RWD.                     |       |  |         |           | Ph Co                   |    | + NO   | land          | 15    |   |        |               | REMARKS<br>alyses, Detection Limits,                    |
| SAMPLER                    | S (Signatu           | re)<br>7-2-                           | - las        | athe   |                          | SAM   | IPLE MA  | TRIX    | d1        | Orthophic<br>Phospheric | TN | NOZ+NO | RKN<br>Witrea | Chlon | Loal  | 551    | o Turna       | round Time, Preservation,<br>, Run/Hold, Previous Data) |
| Sample<br>I.D.             | Date                 | Time                                  | Comp.        | Grab   | Sample Description       | Soil  | Water  | Other   |           |                         |    |        |               |       |   |        |               |   |
| 1                          | 8220                 | 6 1200                                |              | /  | LLOUIT                   |       | -  |         | V         | ~                       | /  |        | /             |       |   | -      | -             | A 36825   |
| 2                          |                      | 1215                                  |              | ~  | LLOOIN                   | 1     | -  |         |           | /                       |    |        |               |       |   |        |               | 26  |
| 3                          |                      | 1230                                  |              |  | LLOOIB                   |       | ~  |         |           | /                       |    |        |               |       | ~   |        |               | 27  |
| 4                          |                      | 100                                   |              |  | LLOO 2T                  |       | /  |         | /         | -                       | /  |        | /             | /     |   |        |               | 28  |
| 5                          | *                    | 115                                   |              |  | L L 002 P                | 1     | /  |         |           |                         |    |        |               |       |   |        |               | 29  |
| 6                          |                      | 130                                   |              |  | LLUO2E                   | 3     | -  |         |           | /                       |    |        |               |       | ~   | 1      | ~ <u> </u>    | 30  |
|                            |                      |                                       |              |  |                          | <br>- |  |         | 5 anns    |                         |    |        |               |       |   |        |               |   |
|                            |                      |                                       | ,            |  |                          | *     | • •••••••  |         |           |                         |    |        |               |       |   |        |               |   |
| ·                          |                      | -                                     |              |  | -<br>                    |       |  |         |           |                         |    |        |               |       |   |        |               |   |
|                            |                      | · · · · · · · · · · · · · · · · · · · |              |  |                          |       |  |         |           |                         |    |        |               |       |   |        |               | 1   |
|                            |                      |                                       |              |  |                          |       |  |         |           |                         |    |        |               |       |   |        |               |   |
|                            |                      |                                       |              | L  |                          | ·     |  |         |           |                         |    |        |               |       |   |        |               |   |
| Relinquishe                | ed by: (Sig<br>Valle |                                       | Date<br>8220 | Time<br>5.00   | Relinquished by: (Signat | ure)  | <u>I</u>   | Relinqu | ished by: | (Signatur               | e) |        | Date          | Time  | Relinq  | uished | )<br>by: (Sig | gnature)  |
|                            |                      |                                       |              | for Laboratory by: (Signature) Date Time Sampling/Receipt Comments |                          |       |  |         |           |                         |    |        |               |       |   |        |               |   |

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|   |  |               |       |                       |   |  |       |          | · · · · · ·                         |          |        |                          |          |              |   |   | N   | <b>12</b> 697 5 |
|---|--|---------------|-------|-----------------------|---|--|-------|----------|-------------------------------------|----------|--------|--------------------------|----------|--------------|---|---|---|-----------------|
| CHAIN OF CUSTODY<br>RECORD                      |  |               |       |                       |   | WENCK ASSOCIATES, INC.<br>1800 Pioneer Creek Ctr. – P.O. Box 249<br>Maple Plain, MN 55359-0249<br>Phone: (763) 479-4200<br>FAX: (763; 479-4242 ₹ |       |          |                                     |          |        |                          |          |              | FIELD COORDINATOR<br>NOMMUENCK<br>AIRBILL NO. |   |   |                 |
| PROJ. NO.                                       |  |               |       | PROJ. N               | RWD   |  |       |          |                                     | nerus)   |        |                          | 04       | <u>) á</u> 4 | ر   |   | 2 phy   | REMARKS         |
| SAMPLERS (Signature)                            |  |               |       |                       | SAMPLE MATRIX   |  |       |          | C Mophes                            | 12       | 202    | TKN<br>Nit,              | Ch ler   | Torn         | T55   |   | lyses, Detection Limits,<br>round Time, Preservation,<br>, Run/Hold, Previous Data) |                 |
| Sample  |  |               |       |                       |   |  |       |          |                                     |          |        |                          |          |              |   |   |   |                 |
| I.D.  | Date   | Time          | Comp. | Grab                  | Sample Description                                      | Soil   | Water | Other    |                                     |          |        |                          |          |              |   | ļ | <u> </u>  |                 |
|   | 7200   | <u>4 1000</u> | 1     |                       | LL001 T   |  |       |          |                                     | -        |        | · · ·                    |          |              |   |   | ~   | A41539          |
|   |  |               |       |                       | LLOOT M   |  |       |          | -                                   |          |        |                          |          |              | ļ,  |   |   | A41535          |
|   |  |               |       |                       | LLOOI B   |  |       |          |                                     |          |        |                          |          |              |   |   |   | A41537          |
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|   | 7  |               |       |                       | L60021  |  |       | ·        |                                     |          |        |                          |          |              |   |   |   | A 41536         |
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|   | Relinquished by: (Signature) Date Time Relinquished by: (S<br>Conception of the second s |               |       | Relinquished by: (Sig | (Signature) Relinquished by: (Signature) Date Time Reli |  |       |          |                                     |          | Relinq | nquished by: (Signature) |          |              |   |   |   |                 |
| Relinquished by: (Signature) Date Time Received |  |               |       | Received for Laborato | for Laboratory by: (Signature) Date                     |  |       |          | Date Time Sampling/Receipt Comments |          |        |                          |          |              |   |   |   |                 |

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