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1.0 Introduction

The Clearwater River Watershed District (CRWD) has conducted a stream, precipitation, and lake monitoring program since 1980 (Appendix A). Ongoing monitoring is critical to establish baseline water quality and hydrologic data and to assess long-term water quality trends within the CRWD. Lake water quality has generally improved dramatically since the early 1980s, and in stream nutrient and sediment loads were reduced as the result of the CRWD’s Chain of Lakes Restoration Project and other District initiatives (Appendix B and C). However, some water bodies do not meet state water quality standards for designated uses (recreation or drinking water for example).

The CRWD, in partnership with the Minnesota Pollution Control Agency (MPCA), began a Total Maximum Daily Load (TMDL) study in 2003 to address the District’s impaired waters. The TMDL process establishes the amount of a given pollutant that the water body can assimilate while still meeting its designated uses. The TMDL studies are nearing final approval and the required nutrient, bacteria and oxygen demand load reductions have been quantified. The CRWD has identified a suite of implementation strategies in the watershed needed to meet water quality goals for impaired waters and to protect water quality of all CRWD waters.

The monitoring program going forward will:

1. Track progress towards water quality goals for impaired waters,
2. Fill data gaps identified in the TMDLs, and evaluate water quality through annual monitoring program,
3. Continue to provide baseline water quality data and calibration data sets to refine TMDL load reductions, and
4. Track long-term trends in all CRWD waters monitored ensuring early detection of declining trends.
As shown in Table 1.1, the TMDLs are complete and were approved by the MPCA. Further, the CRWD developed the required CRWD Watershed-wide Implementation Plan which was approved by the MPCA in May of 2009. Following the completion of the TMDLs, the CRWD undertook a revision of its Watershed Management Plan to reflect the recommendations in the TMDL and expand on them. TMDL reports can be found at the MPCA website at http://www.pca.state.mn.us/water/tmdl. The Watershed Management Plan will be available at the CWRD web site upon completion.

Table 1.1  Impaired Waters in CRWD

<table>
<thead>
<tr>
<th>Water</th>
<th>Impairment and Impaired Use</th>
<th>TMDL Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Lake (47-0095)</td>
<td>Nutrients, aquatic life and recreation</td>
<td>EPA Approved.</td>
</tr>
<tr>
<td>Lake Betsy (47-0042)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union Lake (86-0298)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scott Lake (86-0297)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Louisa (86-0282)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Marie (73-0014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Clearwater River, Clear Lake to Lake Betsy</td>
<td>Dissolved oxygen and bacteria, aquatic life &amp; recreation</td>
<td>EPA Approved.</td>
</tr>
<tr>
<td>Lake Caroline (86-0281)</td>
<td>Nutrients, aquatic life and recreation</td>
<td>EPA Approved.</td>
</tr>
<tr>
<td>Lake Augusta (86-0284)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swartout Lake (86-0208)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Albion (86-0212)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henshaw Lake (86-0213)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Clearwater River, Grass Lake to the Mississippi</td>
<td>Dissolved oxygen, aquatic life and recreation</td>
<td>Under consideration at MPCA for de-listing as data collected did not support the presence of an impairment.</td>
</tr>
</tbody>
</table>

Another TMDL effort is underway for the larger 8-digit hydrologic unit code (HUC) 07010203, which includes CRWD as well as the Sauk and Elk River watersheds (Figure 1.1). This process began in 2009 under the MPCA’s new approach to TMDLs called the watershed approach. The
watershed approach is a 10-year rotation for assessing waters of the state on the level of Minnesota’s major watersheds (8-digit HUCs). This process is scheduled to be completed in 2013, is being led by the Elk River Watershed Association (ERWSA) and may result in new impairments and TMDLs within the CRWD based on indices of biotic integrity. Future funding for TMDL related efforts will also largely be controlled by this process; as such it is important for CRWD to remain strongly involved in this process.

**Figure 1.1  Geographic Coverage of 8-Digit HUC Watershed TMDL Currently Underway**
To meet lake water quality goals, nutrient loads must be managed from both watershed sources and internal nutrient cycling sources. Several of the watershed management strategies identified for lakes will also assist with meeting bacteria and dissolved oxygen goals for the Clearwater River. Projects and programs to achieve water quality goals were identified in the CRWD Watershed-wide Implementation Plan and are expanded upon in the CRWD's Watershed Management Plan which has been submitted to BWSR for approval.

The CRWD has applied for grants in 2009 and 2010 to fund eight of the projects/programs identified. The CRWD received grants for four of the projects including two stream restorations, one stormwater reclamation and reuse project as well as a stream channel/wetland restoration of the Kingston Wetland. Projects and their status are described in Section 5 of this report.

The 2010 CRWD monitoring plan is found in Appendix A, and summarized below:

- Fourteen lakes were monitored in 2010. Additional sampling efforts in 2010 included better characterization of internal nutrient cycling by measuring the anoxic period explicitly through collection of additional temperature and dissolved profile data on selected lakes as well as collecting lake bottom samples to be analyzed for phosphorus and iron. The lakes monitored by CRWD in 2010 included Albion Lake, Lake Augusta, Lake Betsy, Lake Caroline, Cedar Lake, Clear Lake, Clearwater Lake West, Henshaw Lake, Lake Louisa, Lake Marie, Pleasant Lake, Scott Lake, Swartout Lake, and Union Lake.
- Lake sediment cores were collected from Lake Augusta and Scott Lake to measure release rates to quantify internal nutrient cycling.
- Long-term Clearwater River monitoring stations CR-28.2 located upstream of Lake Betsy and CR 10.5 located at the Grass Lake Dam were sampled as well as Warner Creek near its inflow to Clearwater Lake at WR-0.2. Two inlet streams that flow into Clear Lake were also sampled in 2010.
Citizen Precipitation Recorders (CPRs) maintained precipitation records in Watkins, Kimball, and Annandale. Citizen volunteers also measured Secchi depths in CRWD lakes in 2010.

Figure 1.2 shows the monitoring locations. Figure 1.3 shows locations of impaired water bodies in the CRWD.

Monitoring continued in the Cedar Lake subwatershed in 2010 to track progress on the Cedar Chain of Lakes Improvement Project #06-1. Samples were collected from Albion Lake, Cedar Lake, Henshaw Lake, and Swartout Lake as well as from selected tributary streams in the subwatershed. Vegetation surveys were also conducted on Swartout and Henshaw Lakes.
Figure 1.2 2010 Monitoring Locations
Figure 1.3 Impaired Water Bodies in CRWD
2.0 Hydrology

2.1 PRECIPITATION

Total annual precipitation during 2010 was four to eight inches above normal throughout the District. Precipitation was well above normal during the months of June, August, September, and December. Spring precipitation was slightly below normal but runoff from snowmelt was high. Table 2.1 summarizes 2010 precipitation levels and Appendix D contains summary charts for each station and the precipitation records for the CRWD.

Table 2.1 Clearwater River Watershed District 2010 Precipitation Records and Normals (inches)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>0.72</td>
<td>0.76</td>
<td>0.61</td>
<td>0.48</td>
<td>0.79</td>
<td>0.55</td>
<td>0.93</td>
</tr>
<tr>
<td>February</td>
<td>0.77</td>
<td>0.59</td>
<td>0.95</td>
<td>1.16</td>
<td>0.67</td>
<td>0.93</td>
<td>0.70</td>
</tr>
<tr>
<td>March</td>
<td>1.21</td>
<td>1.50</td>
<td>1.54</td>
<td>1.30</td>
<td>1.55</td>
<td>1.58</td>
<td>1.69</td>
</tr>
<tr>
<td>April</td>
<td>1.43</td>
<td>2.13</td>
<td>1.12</td>
<td>0.73</td>
<td>2.35</td>
<td>1.52</td>
<td>2.33</td>
</tr>
<tr>
<td>May</td>
<td>2.05</td>
<td>2.97</td>
<td>2.25</td>
<td>3.39</td>
<td>3.37</td>
<td>2.15</td>
<td>3.30</td>
</tr>
<tr>
<td>June</td>
<td>4.92</td>
<td>4.51</td>
<td>6.96</td>
<td>5.97</td>
<td>4.89</td>
<td>6.60</td>
<td>4.62</td>
</tr>
<tr>
<td>July</td>
<td>3.15</td>
<td>3.34</td>
<td>2.60</td>
<td>3.16</td>
<td>4.02</td>
<td>2.83</td>
<td>4.04</td>
</tr>
<tr>
<td>August</td>
<td>6.36</td>
<td>3.93</td>
<td>5.94</td>
<td>5.43</td>
<td>3.67</td>
<td>5.06</td>
<td>4.00</td>
</tr>
<tr>
<td>September</td>
<td>7.16</td>
<td>2.93</td>
<td>5.78</td>
<td>8.51</td>
<td>2.92</td>
<td>5.94</td>
<td>2.78</td>
</tr>
<tr>
<td>October</td>
<td>2.59</td>
<td>2.24</td>
<td>2.88</td>
<td>2.89</td>
<td>2.15</td>
<td>2.50</td>
<td>2.23</td>
</tr>
<tr>
<td>November</td>
<td>1.02</td>
<td>1.54</td>
<td>1.11</td>
<td>0.85</td>
<td>1.50</td>
<td>0.78</td>
<td>1.73</td>
</tr>
<tr>
<td>December</td>
<td>2.46</td>
<td>0.69</td>
<td>2.62</td>
<td>2.69</td>
<td>0.68</td>
<td>2.50</td>
<td>0.71</td>
</tr>
<tr>
<td>Total</td>
<td><strong>33.84</strong></td>
<td><strong>27.13</strong></td>
<td><strong>34.36</strong></td>
<td><strong>36.56</strong></td>
<td><strong>28.56</strong></td>
<td><strong>32.94</strong></td>
<td><strong>29.06</strong></td>
</tr>
</tbody>
</table>

Below Normal Precipitation
Above Normal Precipitation
2.2 RUNOFF AND DISCHARGE

In 2010, spring precipitation was slightly below normal but coincided with snowmelt to cause high flows in the Clearwater River in March. Above average precipitation in August and September led to high flows again in late summer and fall.

Runoff over the upper watershed was 7.9 inches at CR 28.2 and 13 inches at CR10.5 in the lower watershed, which was much larger in 2010 compared to the long term average runoff at CR 10.5 of 7.7 inches.

Average flows at CR 28.2 and CR10.5 were 54.6 cfs and 217.5 cfs respectively. Table 2.2 summarizes the runoff volumes and average flows for the monitoring stations. Table B-1 in Appendix B compares the long-term precipitation to runoff for the CRWD as recorded at CR 10.5. Figure B-1 in Appendix B compares historic annual runoff and precipitation in the CRWD.

Table 2.2 2010 Runoff Volume and Average Flow

<table>
<thead>
<tr>
<th>Station</th>
<th>Tributary Sub-watershed Area (acres)</th>
<th>Runoff Volume (ac-ft)</th>
<th>Runoff Over Watershed (inches)</th>
<th>Average Flow (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR 10.5</td>
<td>99,200</td>
<td>107,870</td>
<td>13.0</td>
<td>217.54</td>
</tr>
<tr>
<td>CR 28.2</td>
<td>33,977</td>
<td>22,370</td>
<td>7.9</td>
<td>54.60</td>
</tr>
<tr>
<td>WR0.2</td>
<td>12,667</td>
<td>2,835</td>
<td>2.7</td>
<td>5.60</td>
</tr>
<tr>
<td>CLN</td>
<td>1,055</td>
<td>1,089</td>
<td>12.4</td>
<td>2.37</td>
</tr>
<tr>
<td>CLS</td>
<td>1,404</td>
<td>808</td>
<td>6.9</td>
<td>1.76</td>
</tr>
</tbody>
</table>

Total runoff over the watershed was higher in 2010 than in recent years as shown in Table B-2 in Appendix B. However, the majority of the runoff occurred in June, September, and the end of October. There was little runoff in the watershed during most of the summer until August, September, and October, when precipitation events initiated another high flow event. Monitoring efforts were expanded in 2010 to add continuous monitoring at two sites, which allowed for better quantification of seasonal runoff.
Continuous Flow Sites

In 2010, two sites were monitored continuously. Rating curves were established for stations CR30.0, located just upstream of the Kingston Wetland, and at CLN, located on a tributary stream on the north side of Clear Lake. Figures 2.1 and 2.2 show the continuous flow record between late spring and early fall at each site.

Figure 2.1 Continuous Flow Monitoring at CR30.0

Figure 2.2 Continuous Flow Monitoring at Clear Lake North (CLN)
Flow monitoring began in early April at CR30.0 after large spring runoff events. This data was used to determine the continuous flow at CR28.2 to better predict the nutrient loading at that monitoring station.

Continuous monitoring began at CLN in early April. This data was used to determine the continuous flow rate at CLN and CLS, which is located on a tributary stream on the south side of Clear Lake, as well as the nutrient loading at both locations.
3.0 Water Quality

3.1 STREAM WATER QUALITY

CRWD lies in the NCHF Ecoregion but is close to the border with the Western Corn Belt Plains (WCBP) Ecoregion as demonstrated in Figure 3.1. The watersheds tributary to stations CLN, CLS, and CR28.2 have characteristics similar to the nearby WCBP ecoregion. For this reason, typical concentrations from both ecoregions are provided for comparison to mean concentrations at CRWD stream monitoring stations (Table 3.1).

Figure 3.1 Clearwater River Watershed District Ecoregions
Table 3.1  2010 CRWD Mean Concentrations and Ecoregion Typical Range

<table>
<thead>
<tr>
<th>Monitoring Location</th>
<th>2010 Flow-Weighted Mean TP (µg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR 10.5</td>
<td>32</td>
</tr>
<tr>
<td>CR 28.2</td>
<td>258</td>
</tr>
<tr>
<td>WR0.2</td>
<td>95</td>
</tr>
<tr>
<td>CLN</td>
<td>333</td>
</tr>
<tr>
<td>CLS</td>
<td>303</td>
</tr>
<tr>
<td>NCHF Ecoregion</td>
<td>60-150</td>
</tr>
<tr>
<td>Typical Range</td>
<td></td>
</tr>
<tr>
<td>WCBP Ecoregion</td>
<td>160-330</td>
</tr>
<tr>
<td>Typical Range</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring Location</th>
<th>2010 Flow-Weighted Mean TSS (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR 10.5</td>
<td>1.1</td>
</tr>
<tr>
<td>CR 28.2</td>
<td>3.5</td>
</tr>
<tr>
<td>WR0.2</td>
<td>5.5</td>
</tr>
<tr>
<td>CLN</td>
<td>1.3</td>
</tr>
<tr>
<td>CLS</td>
<td>4.7</td>
</tr>
<tr>
<td>NCHF Ecoregion</td>
<td>4.8-16</td>
</tr>
<tr>
<td>Typical Range</td>
<td></td>
</tr>
<tr>
<td>WCBP Ecoregion</td>
<td>10-61</td>
</tr>
<tr>
<td>Typical Range</td>
<td></td>
</tr>
</tbody>
</table>

3.1.1 Phosphorus Concentrations and Phosphorus Loads

Baseline total phosphorus (TP) concentrations in the Clearwater River remain low as compared with conditions monitored in the early 1980s. Flow-weighted mean total phosphorus concentrations at CR 28.2, just upstream of Lake Betsy, ranged from 740 to 920 µg/L in the early 1980s. The concentration was down to 258 µg/L in 2010, which is lower than concentrations seen in the early 1980s, but higher than in some recent years.

The TP load at CR 28.2 in 2010 was 23,955 lbs, higher than TP loads in recent years, but still far below the high TP loads observed in the early 1980s. The increased TP load in 2010 is due primarily to high flow events following the large storm events in June, September, and the end of October. Figure 3.2 shows the historical phosphorus load and flow-weighted mean concentration at CR 28.2.
Flow-weighted mean TP concentrations and phosphorus loads at CR 10.5 were calculated using flows over the dam calculated using stage measurements taken at the dam and an equation for flow over the weir. The estimated mean phosphorus concentration at CR 10.5 in 2010 was 32 μg/L and the estimated total phosphorus load was 9,149 lbs (Figure 3.3). While this is higher than loads observed in recent years, the load is well below historic levels.
In 2010, the flow-weighted mean TP concentration at WR 0.2 was 95 µg/L and the total phosphorus loads was 685 lbs at WR 0.2 (Figure 3.4), similar to concentrations and loads observed in recent years.

**Figure 3.4 Historical Total Phosphorus Loading and Mean Concentration at WR-0.2**

As demonstrated in Table 3.1 and Figure 3.5, flow-weighted mean phosphorus concentrations at WR0.2 and CR 10.5 were close to, or within, the typical range for both the NCHF Ecoregion. CR28.2, CLN, and CLS were within the range of the WCBP Ecoregion.

**Figure 3.5 2010 Phosphorus Mean Concentrations in the District**
As demonstrated in Table 3.2 phosphorus loading rates varied throughout the watershed. The loading rate from the upper watershed monitoring stations, CR 28.2, CLN, and CLS were 0.705 lbs/acre, 0.901 lbs/acre, and 0.295 lbs/acre, respectively. This was higher than loading rates observed at lower watershed stations CR10.5 and WR0.2, which were 0.092 lbs/acre and 0.054 lbs/acre, respectively. Loading rates for the upper most portion of the watershed likely are the truest measurement of watershed phosphorus export as loading data collected downstream reflects the sedimentation of phosphorus in District Lakes.

Table 3.2  2010 Phosphorus Loading Rates by Tributary Watershed

<table>
<thead>
<tr>
<th>Site</th>
<th>Watershed Area (acres)</th>
<th>Phosphorus Load (lbs)</th>
<th>Phosphorus Loading Rate (lbs/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR10.5</td>
<td>99,200</td>
<td>9,149</td>
<td>0.092</td>
</tr>
<tr>
<td>CR28.2</td>
<td>33,977</td>
<td>23,955</td>
<td>0.705</td>
</tr>
<tr>
<td>WR0.2</td>
<td>12,667</td>
<td>685</td>
<td>0.054</td>
</tr>
<tr>
<td>CLN</td>
<td>1,055</td>
<td>951</td>
<td>0.901</td>
</tr>
<tr>
<td>CLS</td>
<td>1,404</td>
<td>414</td>
<td>0.295</td>
</tr>
</tbody>
</table>

Soluble reactive phosphorus (SRP) (the dissolved form of phosphorus readily used by algae) was also monitored in 2010. Table 3.3 shows the ratio of the flow-weighted means of SRP to total phosphorus (TP) as a percentage at each monitoring site.

Table 3.3  Comparison of SRP to TP

<table>
<thead>
<tr>
<th>Site</th>
<th>% of TP as SRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR10.5</td>
<td>45%</td>
</tr>
<tr>
<td>CR28.2</td>
<td>75%</td>
</tr>
<tr>
<td>WR0.2</td>
<td>23%</td>
</tr>
<tr>
<td>CLN</td>
<td>83%</td>
</tr>
<tr>
<td>CLS</td>
<td>50%</td>
</tr>
</tbody>
</table>

SRP made up the majority of TP at stations CR28.2 and CLN, 75% and 83%, respectively. The high ratio at CR28.2 and CLN indicate the export of soluble phosphorus from the large wetlands upstream of both of these stations. These values are within the ranges of those observed historically, with the higher percentage of SRP likely due to low flow during late summer in
2010. The values potentially indicate the export of soluble phosphorus from wetlands in the upper watershed. Expanded monitoring upstream of these wetlands would help to verify the export of soluble phosphorus from the wetlands. Such monitoring is part of the work plan for the Kingston Wetland Feasibility Study and Restoration Project described in Section 5.

### 3.1.2 Total Suspended Solids

Samples were also analyzed for total suspended solids (TSS) in 2010. Mean concentrations of TSS are compared to typical Ecoregion concentrations in Figure 3.6. Mean concentrations were near or the below typical concentrations in the NCHF Ecoregion at all sites. The water clarity at these stations is expected to be good.

![Figure 3.6 2010 Total Suspended Solids Mean Concentrations in the District](image)

### 3.1.3 Additional Parameters

Dissolved oxygen was also measured at each stream monitoring location and concentrations are compared to the MPCA standard for impairment of 5 mg/L in Figure 3.7. Concentrations were below the impairment standard at all stations except CR10.5 and WR0.2, which were only impaired in the early part of August. The data collected at CR28.2 reflect the conclusions drawn in the TMDL, that low-flow DO violations occur downstream of Kingston Wetland and are driven primarily by wetland sediment oxygen demand (SOD). Stations CLN and CLS are also
located on ditches flowing through wetland areas, so low DO is also likely due to wetland SOD. DO data is collected to track progress towards TMDL implementation.

**Figure 3.7 2010 Dissolved Oxygen Concentrations and Comparison to Standard**

![Graph showing dissolved oxygen concentrations over time for 2010, with data points for different locations and DO standard.]  

Measurements of most probable number (MPN) of colony forming units (CFU) per 100 mL of E. coli were taken at two stream locations as a surrogate measurement of fecal coliform. Data was collected at CR 28.2 to track TMDL implementation progress. Data was collected by CRWD at CR0.1 at the request of the MPCA. Table 3.4 shows the monthly geometric means of E. coli at stations CR0.1 and CR28.2.

**Table 3.4  E. coli Monthly Geometric Means**

<table>
<thead>
<tr>
<th>CR0.1</th>
<th>E. coli Geometric Mean MPN/100mL</th>
<th># of Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>May</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>June</td>
<td>81</td>
<td>3</td>
</tr>
<tr>
<td>July</td>
<td>55</td>
<td>3</td>
</tr>
<tr>
<td>August</td>
<td>117</td>
<td>4</td>
</tr>
<tr>
<td>September</td>
<td>49</td>
<td>3</td>
</tr>
<tr>
<td>October</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>
CR0.1 did not exceed the Minnesota monthly chronic standard of 126 CFU/100mL during any of the months E. coli was measured. CR28.2 exceeded chronic standard during the months of July through October, with a spike of 1,011 MPN/100 mL in the month of August. However, the number of samples taken at each site was below the recommended five per calendar month. No measurements at either site exceeded the acute standard of 1260 CFU/100mL. Figure 3.8 shows the E. coli measurements during 2010.

### Figure 3.8  2010 E. coli Measurements

Additional stream water quality data is found in Appendix B, including summaries of historical phosphorus loads, stream flows, and flow-weighted mean concentrations.
3.2  LAKE WATER QUALITY

CRWD sampled fourteen lakes in 2010. Parameters analyzed in 2010 include surface total phosphorus, soluble reactive phosphorus, chlorophyll-a, and a field reading of Secchi depth. Surface samples characterize lake water quality. Samples for total phosphorus, soluble reactive phosphorus, and total iron were collected near the lake bottom. Water temperature and dissolved oxygen profiles were also collected at each lake to better characterize the period of anoxia and to help quantify internal loading.

3.2.1 2010 Monitoring Results

Water quality of the lakes monitored in 2010 was generally comparable to monitoring data collected in recent years. Summer average (June 1 to September 30) values were compared with the MPCA eutrophication standards for phosphorus, chlorophyll-a, and Secchi disk depth, based on Ecoregion and lake type. The MPCA uses separate standards for shallow (less than 15 foot maximum depth or 80% of lake area less than 15 feet deep) and deep lakes (greater than 15 foot maximum depth). The appropriate standards for lakes monitored in the CRWD, which is in the North Central Hardwood Forest Ecoregion, are shown in Table 3.5. The MPCA standards are also used as the TMDL goals for summer average concentrations and Secchi depth in District lakes.

Table 3.5 MPCA Standards for Lakes in the North Central Hardwood Forest Ecoregion

<table>
<thead>
<tr>
<th>Lake Category</th>
<th>Total Phosphorus (μg/L)</th>
<th>Chlorophyll-a (μg/L)</th>
<th>Secchi Depth (meters not less than)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow Lakes</td>
<td>60</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Deep Lakes</td>
<td>40</td>
<td>14</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Source: Minnesota Pollution Control Agency

Figures 3.9 and 3.10 compare the average total phosphorus concentrations in lakes sampled in 2010 to the TMDL goal.
Based on the 2010 monitoring data for each lake, Albion, Augusta, Betsy, Caroline, Clear, Henshaw, Louisa, Marie, Scott, Swartout, and Union Lakes were above the TMDL goal for total phosphorus. In general, summer average phosphorus concentrations were higher in some lakes in 2010 than historically, likely due to increased nutrient loads from increased runoff in the watershed. Summer average concentrations also may have been higher due to the September monitoring event occurring after some lakes began to mix and bottom phosphorus was
incorporated into the surface. Summer average phosphorus concentrations were notably higher in 2010 than recent years in Albion, Caroline, and Union Lakes.

Figures 3.11 and 3.12 compare the most recent summer average chlorophyll-a concentrations for fourteen CRWD lakes to the appropriate chlorophyll-a TMDL goal. All but one of lakes monitored had chlorophyll-a concentrations above the TMDL goal.

Summer average chlorophyll-a concentrations in 2010 were likely higher because of large storm events in June and September, which led to large runoff, increasing nutrient loading to the lakes.

**Figure 3.11  2010 Summer Average Chlorophyll-a Concentrations (Deep Lakes)**

![2010 Summer Average Chlorophyll-a Concentrations (Deep Lakes)](image-url)
Figures 3.13 and 3.14 compare the 2010 Secchi disk depth for fourteen CRWD lakes to the appropriate Secchi TMDL goal. The most recent average Secchi depths demonstrate that Albion, Betsy, Clear, Henshaw, Louisa, Marie, Scott, and Union Lakes are below the TMDL goal for Secchi depth. Summer average Secchi depths were notably lower than in recent years in Albion and Union Lakes, most likely due to summer algal blooms.
Water quality observed in lakes monitored during 2010 (Table 3.6) is within ranges seen in recent years with the exception of a few measurements that fell outside the historical range means.

### Table 3.6 2010 Mean In-Lake Total Phosphorus, Chlorophyll-a, and Secchi Depth, and Historical Ranges

<table>
<thead>
<tr>
<th>Lake</th>
<th>Total Phosphorus ug/L</th>
<th>Chlorophyll-a ug/L</th>
<th>Secchi Depth (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010 Mean</td>
<td>Historical Range Mean</td>
<td>2010 Mean</td>
</tr>
<tr>
<td>Albion</td>
<td>292</td>
<td>130-296</td>
<td>179</td>
</tr>
<tr>
<td>Augusta</td>
<td>48</td>
<td>28-300</td>
<td>26</td>
</tr>
<tr>
<td>Betsy</td>
<td>181</td>
<td>120-700</td>
<td>32</td>
</tr>
<tr>
<td>Caroline</td>
<td>68</td>
<td>36-300</td>
<td>40</td>
</tr>
<tr>
<td>Cedar</td>
<td>26</td>
<td>19-58</td>
<td>9</td>
</tr>
<tr>
<td>Clear</td>
<td>211</td>
<td>80-307</td>
<td>153</td>
</tr>
<tr>
<td>Clearwater West</td>
<td>30</td>
<td>25-160</td>
<td>34</td>
</tr>
<tr>
<td>Henshaw</td>
<td>105</td>
<td>90-390</td>
<td>114</td>
</tr>
<tr>
<td>Louisa</td>
<td>105</td>
<td>33-440</td>
<td>55</td>
</tr>
<tr>
<td>Marie</td>
<td>93</td>
<td>69-360</td>
<td>72</td>
</tr>
<tr>
<td>Pleasant</td>
<td>38</td>
<td>15-51</td>
<td>32</td>
</tr>
<tr>
<td>Scott</td>
<td>137</td>
<td>82-660</td>
<td>66</td>
</tr>
<tr>
<td>Swartout</td>
<td>330</td>
<td>200-421</td>
<td>29</td>
</tr>
<tr>
<td>Union</td>
<td>49</td>
<td>25-88</td>
<td>16</td>
</tr>
</tbody>
</table>

Above TMDL Goal

T:\0002\145\[LAKE_WQ_10.xls]Historical Table
Table 3.7 compares CRWD lakes to MPCA impairment standards and identifies phosphorus trends in each lake. Overall, based on the most recent monitoring data for all lakes within CRWD, water quality in most lakes is generally good and appears to be remaining stable or improving. However, water quality does not meet TMDL goals in 11 lakes.

### Table 3.7  Lake Trend and Impairment Summary

<table>
<thead>
<tr>
<th>Lake</th>
<th>Last Monitored</th>
<th>Phosphorus Trend</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albion</td>
<td>2010</td>
<td>Recent Increasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Augusta</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Full Use*</td>
</tr>
<tr>
<td>Bass</td>
<td>2009</td>
<td>Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Betsy</td>
<td>2010</td>
<td>Recent Increasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Caroline</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Cedar</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Clear</td>
<td>2010</td>
<td>Stable to Decreasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Clearwater East</td>
<td>2009</td>
<td>Recent Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Clearwater West</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Grass</td>
<td>2009</td>
<td>Decreasing Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Henshaw</td>
<td>2010</td>
<td>Recent Decreasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Little Mud</td>
<td>2009</td>
<td>Decreasing Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Louisa</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Marie</td>
<td>2010</td>
<td>Recent Stable Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Nixon</td>
<td>2009</td>
<td>Recent Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Otter</td>
<td>2009</td>
<td>Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Pleasant</td>
<td>2010</td>
<td>Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>School Section</td>
<td>2009</td>
<td>Stable Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Scott</td>
<td>2010</td>
<td>Stable to Decreasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Swartout</td>
<td>2010</td>
<td>Stable to Increasing Trend</td>
<td>Impaired</td>
</tr>
<tr>
<td>Union</td>
<td>2010</td>
<td>Decreasing Trend</td>
<td>Full Use</td>
</tr>
<tr>
<td>Wiegand</td>
<td>2009</td>
<td>Decreasing Trend</td>
<td>Full Use</td>
</tr>
</tbody>
</table>

* TMDL Impaired

Lake report cards are included in Appendix C. Citizen Secchi depths are found in Appendix E. Water quality lab reports are in Appendix F, and field notes are in Appendix G.
4.0 Cedar Lake Project #06-1

4.1 INTRODUCTION

The Cedar Chain of Lakes Restoration Project #06-1 began in 2007 as a response to a petition by lake shore residents to address the declining water quality and severe algae blooms in Cedar Lake. The goal of the project was to reduce the phosphorus load to Cedar Lake to 1,000 lbs and the in-lake summer average phosphorus concentration in Cedar Lake to 20 ug/L. An additional goal of the project was to further reduce phosphorus loading from upstream lakes by reducing the carp population of the lakes.

Several projects were implemented in 2007-2010 to reduce in lake phosphorus concentrations in Swartout, Albion, Henshaw, and Cedar Lakes. The projects that have been implemented include watershed BMPs such as tile inlet buffers and buffer strips, rough fish management activities, and the construction of the Segner Pond treatment wetland.

An evaluation of the Cedar Lake Project #06-1 was conducted in November 2009. The evaluation determined that further activities will be necessary to fully meet project goals and recommended the implementation of additional activities as needed.

The evaluation recommended that the following activities, as well as others to be identified through further evaluation may be required:

- Eliminate ISTS discharges;
- Aggressive curly leaf pondweed control;
- Removal of cormorants on Swartout Lake;
- Carp population reduction;
- Fish migration barriers between Albion and Swartout, and Henshaw and Swartout Lakes;
• Install fish barriers between Highway 55 and Cedar Lake, and Swartout Lake outlet at CR 6 to prevent upstream migration;
• Treat Swartout wetland outlet to remove phosphorus;
• Increase residence time on wetland between Swartout and Highway 55;
• Watershed best management practices;
• Buffer tile lines, ditches and streams;
• Lake shore management in Cedar, Swartout, Albion and Henshaw Lakes
• Ecological management of Henshaw, Albion and Swartout Lakes;
• Isolate Swartout Lake;
• Isolate wetland treatment system in the Highway 55 wetland;
• Install sedimentation basins;
• Promote Ag BMPS (P Testing and fertilizer application);
• Replace tile intakes with filters;
• Tile intake buffers;
• Buffer tributaries;
• Buffer stream banks
• Tile discharge management;
• Riparian pasture/grazing management;
• Lakeshore septic upgrade;
• Lakeshore restoration (shore land erosion);
• Shallow Lakes Management Plans;
• Public outreach; and
• Other activities as indicated by future project monitoring and evaluation.

4.2 MONITORING

As part of the evaluation of Project #06-1, monitoring was also recommended to continue in 2010. Cedar Lake, Swartout Lake, Albion Lake, and Henshaw Lake were monitored four times from June to September in 2010 as part of the project. Tributary streams to the lakes were also monitored while they were flowing at five locations in 2010.
4.2.1 Lake Monitoring

Cedar Lake

As shown on the Cedar Lake Report Card in Appendix C, the 2010 summer average total phosphorus concentration was below the TMDL goal concentration and was within the range seen in recent years. Total phosphorus and chlorophyll-a concentrations were lower than they were in 2009, even though runoff was generally greater across the watershed in 2010. Secchi depth was also improved in the lake from recent years.

While overall water quality appears to be stable or slightly improving in Cedar Lake, lake shore residents notified CRWD of a severe algal bloom in May 2010. The algal blooms resulted in reduced water clarity in the lake that continued through early July. The photo below shows a mass of blue-green algae that had accumulated on the western shoreline of the lake on May 19, 2010.

![Cedar Lake Algal Bloom-May 19, 2010](image)

A sample of the algae was collected and sent to a laboratory for analysis. The analysis determined that the algae bloom was comprised primarily of three different species of the cyanophyta division of algae (blue-green algae). While some blue green algae species may produce dangerous blooms that may be toxic or harmful to animals and humans, the three species
identified in the sample are species that do not typically produce toxic or harmful blooms. This algal bloom was similar to other blooms that occurred early in the season in previous years on Cedar Lake. These blooms are likely due to a pulse of nutrients to the lake that are incorporated by the algae. The pulse of nutrients may be from external runoff to the lake. Another possibility is that the source of the nutrient pulse is from the senescence of curly-leaf pondweed, which is present in small areas of the lake.

By early August, lake water clarity had improved and lake residents noted that the late summer water clarity was the best they had seen in recent years. Secchi disk data collected by CRWD and lakeshore residents substantiate these observations, as lake water clarity generally improved later in the monitoring season in 2010.

Although internal loading of phosphorus is not suspected to make up a significant portion of the phosphorus load in Cedar Lake, it is likely that there is some internal loading of phosphorus in the lake. Elevated concentrations of phosphorus near the lake bottom indicate potential for internal loading. Temperature and dissolved oxygen profile data indicate that the lake is stratified during most of the time period from June to November.

It is suspected that curly leaf pondweed may also contribute to internal loading in the lake by making phosphorus from buried lake sediment available in the water column during the growing season. Small areas of the lake containing curly leaf pondweed have been treated in recent years in an attempt to control the spread of the plant in the lake.

Cedar Lake was also sampled four times from June to September by a lake shore resident as part of a volunteer lake monitoring program. As shown in Table 4.1, the 2010 summer averages for total phosphorus, chlorophyll-a, and Secchi depth were very similar from both monitoring programs.
Table 4.1  2010 Cedar Lake Monitoring Data

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Total Phosphorus (ug/L)</th>
<th>Chlorophyll-a (ug/L)</th>
<th>Secchi Depth (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/16/10 7:10</td>
<td>40</td>
<td>10</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>7/7/10 6:15</td>
<td>24</td>
<td>3</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>8/17/10 7:14</td>
<td>17</td>
<td>11</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>9/21/10 7:30</td>
<td>24</td>
<td>10</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>2010 Average</td>
<td>26</td>
<td>9</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>6/27/2010</td>
<td>33</td>
<td>12</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>7/24/2010</td>
<td>20</td>
<td>5</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>8/22/2010</td>
<td>28</td>
<td>7</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>9/26/2010</td>
<td>29</td>
<td>10</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>2010 Average</td>
<td>28</td>
<td>9</td>
<td>2.6</td>
<td></td>
</tr>
</tbody>
</table>

Swartout Lake

Summer average phosphorus concentrations remained well above TMDL goals in Swartout Lake in 2010 but were slightly lower than seen in previous years. Chlorophyll-a concentrations were only slightly above TMDL goals and were well below the long term range for the lake.

Secchi disk depth was dramatically improved in 2010, as the summer average met the TMDL goal and the Secchi disk could be seen on the bottom of the lake in 11.5 feet of water during an early summer monitoring event.

The increase in water clarity is most likely due to an extensive fish kill that occurred in the late winter that dramatically reduced the rough fish, especially carp, population in the lake. Photos below show the large numbers of dead fish at the Swartout Lake outlet around ice out for the lake. A lake survey conducted by the MN DNR on April 21, 2010 found only four species of fish and no carp, indicating that the winterkill was extensive. With a reduced carp and rough fish population causing less disturbance to bottom sediments, the water clarity improved and also allowed for improved submergent vegetation growth in the lake in 2010.
A vegetation survey conducted with the MN DNR on August 19, 2010 found submergent vegetation growing at 30 of 64 sample points across the lake. The submergent vegetation included 11 species with sago pondweed, muskgrass, and coontail being the most common species observed. Figure 4.1 shows the water depth and submergent vegetation coverage as inventoried in 2010. In general, submergent vegetation was found at nearly all sample points that were less than seven feet deep. For comparison, in 2005 there was not any submergent vegetation found at any of the 64 sample points.
The dramatic improvement in water clarity and submergent vegetation growth due to decreased rough fish populations in 2010 are an indication of the role that rough fish play in decreasing water quality in shallow lakes, especially in Swartout Lake. The reduction in the carp population in Swartout Lake in 2010 allowed for a drastic improvement to the ecological health of the lake.
In 2010, large numbers of white pelicans, double crested cormorants, and various other shorebirds were noted to be nesting on the island in Swartout Lake. Lake shore residents had concerns about the foul odors emanating from the island and the potential for water quality issues in the lake from bird wastes. Two site visits were conducted to document and approximate the numbers of birds on the island and to collect samples to be analyzed for bacteria and total phosphorus near the island and in the center of the lake for comparison. Water quality parameters from the two sample events are summarized in Table 4.2 below.

### Table 4.2 2010 Swartout Island Monitoring

<table>
<thead>
<tr>
<th>Sampling Location</th>
<th>Date</th>
<th>Total Phosphorus (ug/L)</th>
<th>Ortho Phosphorus (ug/L)</th>
<th>Ammonia Nitrogen (mg/L)</th>
<th>E. coli (MPN/100 mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near Island</td>
<td>8/2/2010</td>
<td>581</td>
<td>126</td>
<td>0.135</td>
<td>597.4</td>
</tr>
<tr>
<td>Mid Lake</td>
<td>8/2/2010</td>
<td>366</td>
<td>129</td>
<td>&lt;0.02</td>
<td>14.4</td>
</tr>
<tr>
<td>Near Island</td>
<td>9/21/2010</td>
<td>291</td>
<td>55</td>
<td>0.02</td>
<td>9.8</td>
</tr>
<tr>
<td>Mid Lake</td>
<td>9/21/2010</td>
<td>251</td>
<td>41</td>
<td>&lt;0.02</td>
<td>5.2</td>
</tr>
</tbody>
</table>

The results from the August 2 sample event show that total phosphorus, ammonia nitrogen, and E. coli concentrations were significantly higher in the sample collected near the island. Results from the September 21 sample event indicate that total phosphorus concentrations were only slightly higher near the island and ammonia nitrogen and E. coli concentrations were similar at both sampling locations. These monitoring results indicate that bird wastes from the island running into the lake may elevate total phosphorus, ammonia, and E. coli concentrations directly adjacent to the island, but do not likely impact the overall lake.

An attempt was made to quantify the estimated impact of the nesting colony of birds on the total phosphorus load to Swartout Lake. In order to calculate this estimate, literature values for the phosphorus content in bird wastes were multiplied by the estimated population of birds on the island. Using this method, it was estimated that the potential load of phosphorus to the lake was approximately 9.5 lbs. This would represent a very small portion (0.12%) of the total phosphorus load to the lake, which is estimated to be 7,982 lbs. Even though elevated phosphorus concentrations were observed near the island during one of the sample events, it is
likely that the export of phosphorus from the island to the lake is diluted quickly as it mixes with the lake and does not represent a significant phosphorus source to the lake.

**Albion Lake**

In recent years, summer average phosphorus and chlorophyll-a concentrations in Albion Lake had decreased and water clarity had improved since the start of the Project. In 2010, summer average phosphorus and chlorophyll-a concentrations increased while water clarity decreased.

Although there were no fish population assessments conducted in Albion Lake in 2010, the apparent decreased water quality in Albion Lake may be related to an increase in rough fish populations in the lake. As shown in the Albion Lake Report Card in Appendix C, 2010 water quality was similar to 2006, when a MN DNR fish population assessment documented carp and other rough fish in the lake.

**Henshaw Lake**

Summer average phosphorus concentrations remained above the TMDL goal in Henshaw Lake in 2010, but were on the low end of the historical range for the lake. Summer average chlorophyll-a concentrations increased from 2009 while Secchi depth decreased.

A vegetation inventory conducted on the lake by the MN DNR on August 18, 2010 found submergent aquatic vegetation at only 12 of 53 sample points with sago pondweed and muskgrass the most common species observed. Figure 4.2 shows the submergent vegetation coverage and depth as inventoried. It is likely that turbid water and resuspension of sediments limits vegetation growth in Henshaw Lake.
While an extensive winterkill occurred on nearby Swartout Lake in 2010, a fish inventory conducted by the MN DNR April 16, 2010 found high densities of young carp and bullheads in Henshaw Lake, indicating that Henshaw Lake did not extensively winterkill. The presence of a large population of rough fish in the lake likely contributed to the apparent decline in water quality in Henshaw Lake in 2010.
The 2010 monitoring results and apparent connection of lake water quality to the status of fish communities in Swartout, Albion, and Henshaw Lakes further prove that when addressing impairments in shallow lakes it is also necessary to address the health of the biological communities in the lake. To improve the quality of shallow lakes, it is beneficial to restore the health of biological communities in the lake, including fish, plants, and zooplankton. Ideally, shallow lake management plans incorporating water level management to promote vegetation growth, and more drastic fish community management strategies, such as lake drawdowns or the application of Rotenone to promote rough fish kills, would be implemented. However, efforts to implement these strategies have been met with limited success so the implementation strategies have been limited thus far to rough fish barriers and harvesting, and watershed BMPs. Fish barriers that have been installed in the Cedar Lake Watershed are shown on Figure 4.3.

Stream Monitoring

Five tributary streams in the Cedar Lake subwatershed were also monitored in 2010. Locations of the monitored tributary streams are shown on Figure 4.3. Overall, stream flow in these tributaries was higher in 2010 than in recent years due to a large runoff from snowmelt in early spring and above normal precipitation during summer and fall. Most of the tributary streams were flowing for longer periods in 2010 than in the past years that the streams were monitored. The calculated phosphorus loads, average phosphorus concentrations, and runoff at each stream location monitored from 2007-2010 are shown below in Table 4.3.

<table>
<thead>
<tr>
<th>Site</th>
<th>Mean TP Concentration (ug/L)</th>
<th>TP Load (lbs)</th>
<th>Runoff (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE01</td>
<td>38</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>SHE01</td>
<td>283</td>
<td>222</td>
<td>195</td>
</tr>
<tr>
<td>SSW01</td>
<td>232</td>
<td>159</td>
<td>276</td>
</tr>
<tr>
<td>SSW02</td>
<td>96</td>
<td>301</td>
<td>345</td>
</tr>
<tr>
<td>SSW04</td>
<td>58</td>
<td>201</td>
<td>265</td>
</tr>
</tbody>
</table>

Overall, total phosphorus concentrations were lower at these monitoring locations than in previous years. However, as a result of the higher stream flow and higher runoff at each of the sites throughout the season, total external phosphorus loading to Cedar Lake and the other upper
watershed lakes was slightly higher at most locations in 2010 than in the previous years since 2007.

Figure 4.3 Stream Monitoring Locations
The overall external phosphorus load to Cedar Lake, as measured at monitoring site SSW04, was 1,149 lbs in 2010, slightly higher than the project goal of 1000 lbs. However, even with the higher external phosphorus load from the upper watershed, summer average phosphorus concentrations did not increase in Cedar Lake in 2010. This is an indication that a proportion of the phosphorus load to Cedar Lake is removed as the water is diverted into Segner Pond before entering the lake. Therefore, it appears that the Project has been effective in recent years in reducing the external load of phosphorus to Cedar Lake and maintaining the water quality in Cedar Lake.
5.0 Progress towards TMDL Water Quality Goals

The CRWD TMDL addresses water quality impairments in lakes and streams and identifies load reduction goals necessary to meet water quality standards. The CRWD Watershed-wide Implementation Plan was developed and approved by the MPCA in May of 2009. The 10-year plan identifies strategies and sets priorities to meet water quality goals in impaired waters.

The plan identifies the upper watershed as a high priority for implementing both capital and programmatic BMPs. Because of the flow-through nature of the Clearwater Chain of Lakes, the water quality in lakes upper watershed lakes like Clear Lake and Lake Betsy are primary drivers of water quality in downstream lakes like Clearwater Lake. The loads from these upper watershed lakes and their tributary watersheds are the primary driver of impairments in lakes further downstream. Clear Lake, Lake Betsy, and the tributary watersheds are targeted for intensive BMPs to not only improve water quality in those lakes, but to also reduce the load to downstream water bodies. All lakes will eventually be targeted, but the greatest impact will be made by initially focusing the efforts on improvements in the upstream end of the District and working downstream.

In 2010, the District implemented several BMPs identified in the CRWD Watershed-wide Implementation Plan to achieve water quality goals. In addition to implementing BMPs, supplemental water quality and hydrologic monitoring was conducted in accordance with recommendations of the implementation plan throughout the District to fill data gaps and better focus the implementation efforts. Upstream watersheds tributary to Clear Lake and Lake Betsy and other impaired lakes were the primary focus of additional monitoring. Additional monitoring tasks are described in Section 5.1.8 and Section 5.1.9.
5.1 TMDL IMPLEMENTATION PROJECTS AND PROGRAMS

Through the process of implementation, priority projects and programs are identified and implemented. In 2009, five priority projects were developed to the concept stage in order to apply for grants. Three additional projects were developed in 2010. Table 5.1 provides summary information for these projects and selected projects are described in more detail below.

To date, the CRWD has won three of the seven grants for which it has applied. The CRWD won a grant in partnership with the City of Kimball to construct a stormwater reclamation and reuse facility in the city limits to protect Willow Creek (a trout stream) and to reduce nutrient loads to Lake Betsy. The CRWD also secured two Minnesota Conservation Corps grants to restore two sections of stream in the upper watershed.

The grant application process and background work needed to secure these grants is under review.
### Table 5.1 Priority Implementation Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Potential TP Reduction (lbs/yr)</th>
<th>Estimated Cost of TP Reduction ($/lb)</th>
<th>Estimated Expense</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watkins Impoundment</td>
<td>796</td>
<td>$811/lb</td>
<td>$645,882</td>
<td>Hold for grant funds: Land was acquired for this project. An initial grant application for $351,906 scored highly but was not selected due to amount requested. Conducted additional feasibility work and completed another grant application which was not awarded. Will continue to seek grant funding for implementation.</td>
</tr>
<tr>
<td>City of Kimball Stormwater Reclamation and Reuse</td>
<td>257</td>
<td>$444/lb</td>
<td>$114,000</td>
<td>Implemented. Secured grant funds and partner contribution from the City of Kimball. Construction of the project was substantially completed November 2009. Final plantings and site stabilization scheduled for Spring 2011. Follow up monitoring will be required.</td>
</tr>
<tr>
<td>Fertilizer Field Trial</td>
<td>600</td>
<td>$295/lb</td>
<td>$177,000</td>
<td>Implemented in 2010 on approximately 1,000 acres. District funds were used. Grant applications have been unsuccessful to date.</td>
</tr>
<tr>
<td>Lake Betsy Hypolimnetic Withdrawal</td>
<td>480</td>
<td>$525/lb</td>
<td>$315,000</td>
<td>Additional data was collected to characterize internal load in 2009 and 2010. Future grant applications are scheduled for 2011.</td>
</tr>
<tr>
<td>Clear Lake V-Notch Weir</td>
<td>588</td>
<td>$128/lb</td>
<td>$75,000</td>
<td>CRWD is working towards securing an easement for the project. Monitoring data was collected in 2010.</td>
</tr>
<tr>
<td>Kingston Wetland Restoration</td>
<td>1,970</td>
<td>$375/lb</td>
<td>$739,000</td>
<td>A $404,300 grant was secured for this project. The workplan is under review with the EPA. We are scheduled to begin monitoring in 2011.</td>
</tr>
<tr>
<td>Conservation Corps Streambank Restoration</td>
<td>TP load reduction associated with sediment load reduction</td>
<td>--</td>
<td>$65,275</td>
<td>Implemented in 2010. CRWD secured a $28,875 grant for the project from Conservation Corps Minnesota. Work was completed along 2,800 linear feet of streambank. Opportunities to continue this work will be explored in 2011.</td>
</tr>
</tbody>
</table>

#### 5.1.1 Watkins Impoundment

The proposed project is the construction of an impoundment on a 20-acre CRWD-owned parcel of land northeast of the city to treat runoff discharged from the city's storm drainage system. The impoundment would be created by constructing an earthen dike across the creek that runs west to east across the parcel. Two subwatersheds totalling 740 acres of urban and agricultural land
drains through this creek to a nearby ditch. A sheet pile weir with a V-notch outlet point would control discharge from the impoundment. The impoundment is sized to store runoff from the 0.5 inch event, which would provide an annual nutrient removal efficiency of 25%. The impoundment would also potentially provide some removal of bacterial load from the agricultural land and biological oxygen demand currently stressing the Clearwater River.

The filter consists of 3/4 inch to 3 inch diameter limestone wrapped in geotextile fabric and staked in place at the outlet of the structure. As the water passes through the filter, the phosphorus comes in contact with and binds to the calcium in the limestone, and is removed from the water.

No grant funds were awarded for this project. In 2010, CRWD worked towards securing the land and conceptual design, and will continue to seek grant funding for this project.

5.1.2 City of Kimball
This project targets phosphorus removal for Lake Betsy and protection of the Willow Creek trout habitat by infiltrating the 1.5-inch storm event off 428 acres in and around the City of Kimball. Stormwater runoff from the City of Kimball drains untreated into Willow Creek, a trout stream. Willow Creek is tributary to Lake Betsy, which is impaired by excess nutrients.

It is estimated that this project will reduce phosphorus discharged to Willow Creek and Lake Betsy by 244 pounds annually, or about 3 percent of the 8,300 pound annual load reduction required for Lake Betsy. Kimball is one of two urban areas tributary to Lake Betsy, making it a targeted area for load reduction in the TMDL.

A grant was awarded for this project in 2009 and construction began on the project in 2010, with substantial completion of construction that year. Final stabilization will occur in the spring of 2011 when the project will come on line. The project consisted of a shallow basin to collect stormwater for irrigation of a near-by baseball field and infiltration to recharge shallow groundwater. The project also included limestone check dams and a rain garden. Education and
outreach curriculum centered around the project will be developed and implemented by the school district with support of CRWD staff.

5.1.3 Fertilizer Field Trial
The proposed soil testing and fertilizer application field trial includes systematic soil tests on up to 10,000 acres of critical cropland to determine the proper amount of fertilizer to be applied to each field. The applicator will use GPS to apply the correct amount of fertilizer in each grid of the fields based on the results of the soil tests.

This project began in 2010 on a selected 1,000 acres of land in the western portion of the watershed district tributary to Clear Lake and Lake Betsy. Monitoring results from initial soil testing and fertilizer application in 2010 have not yet been received. Analysis of the data will be used to recommend additional parcels for testing in 2011.

Monitoring will be conducted at drain tile outlets from selected fields. Samples will also be collected from two tile outlets in fields that are not a part of the field trial to be used as background data for comparison. The results will be publicized to encourage wider application of this technique.

This field trial will demonstrate the feasibility and utility of systematic soil testing in reducing fertilizer application and thus phosphorus load in agricultural runoff. This technology can be implemented throughout the agricultural areas of the state to cut down on fertilizer costs and reduce runoff of nutrients into adjacent water bodies.

The outcomes of the field trial are a reduction in phosphorus from fertilizer exported to impaired waters from cropland, and a quantification, evaluation, and publication of the load reduction achieved.
5.1.4 **Lake Betsy Hypolimnetic Withdrawal**

This proposed project would pump nutrient-rich water from the lake hypolimnion and use it to irrigate a nearby farm field. Intensive monitoring will be completed to evaluate the effectiveness of the BMP in reducing internal load. Lake inflows and outflows will be monitored for flow and quality, while weekly temperature and dissolved oxygen profiles and biweekly nutrient profiles will be taken to evaluate impact on lake water quality. Volume and timing of withdrawals will be tracked to estimate load reduction.

The proposed project will assess the cost-effectiveness of lake hypolimnetic withdrawal and irrigation as an internal phosphorus load management BMP, and evaluate its transferability to lakes in the Clearwater River Watershed District and elsewhere.

While this project was not implemented in 2010, monitoring efforts have continued on Lake Betsy to better quantify internal nutrient loading in the lake and better determine the feasibility of this proposed project.

5.1.5 **Clear Lake V-Notch Weir**

The proposed project will impound water by installing a V-notch weir on a Clear Lake tributary stream south of the lake. This will allow phosphorus to settle out of agricultural runoff before discharging to Clear Lake. The targeted load reduction for this project is 600-800 pounds of phosphorus annually. The phosphorus load removed through the proposed project represents a significant component of the required load reduction from watershed sources to Clear Lake. The V-notch imoundment will catch water from smaller runoff events while allowing controlled overflow of stormwater during larger storm events.

While this proposed project was not constructed in 2010, the District made progress on the project in 2010 by working towards securing an easement on the property and collecting monitoring data. Monitoring data in 2010 indicated that a large proportion of the total phosphorus consists of soluble phosphorus. Since the proposed weir construction will only reduce the particulate phosphorus component in water temporarily detained by the weir, it would
be beneficial to implement additional features of the project to reduce the soluble phosphorus as well.

5.1.6 Kingston Wetland Restoration

The purpose of the Kingston Wetland Feasibility Study and Restoration Project is to design and implement a restoration of the dissolved oxygen impaired Clearwater River and its 460 acre riparian Kingston Wetland to improve main channel dissolved oxygen concentrations in a DO impaired reach of the Clearwater River, reduce the seasonal export of soluble phosphorus to impaired lakes, and improve stream and wetland habitat.

Improvements in DO will be achieved by mitigating sediment oxygen demand in the wetland complex. The project also targets a 1,970 lb/year phosphorus reduction to downstream lakes by preventing soluble phosphorus export from the riparian wetland.

Monitoring will be conducted before and after the project is implemented.

A grant in the amount of $404,300 was awarded for this project in 2010. Monitoring and project design is scheduled to begin in 2011 as soon as the contract is executed with the MPCA.

5.1.7 Clearwater River Channel Stabilization

The purpose of this project is to stabilize the channel and bank in a reach of the Clearwater River that has an extensive tree canopy that does not allow for any ground vegetation, which has caused sloughing and incision of the channel banks. The outcomes of the project are to stop soil loss from the bank area by restoring vegetation, stop soil loss from the channel by installing bank toe protection and grade control, and installing grade control structures that will aerate water.

It is estimated that the project will reduce sediment transport in the stream from 147 tons/year to 10 tons/year which will also result in an associated reduction in phosphorus load. The project will also aid in reaerating the channel which will increase dissolved oxygen concentrations in the
stream. Some of the stream stabilization efforts will be in conjunction with pasture management to target bacteria load reductions as well as phosphorus load reductions.

The CRWD applied for and was awarded a grant in the amount of $28,875 from Conservation Corps Minnesota in 2010 to complete this work. The CRWD contributed matching funds for equipment purchase, design, coordination, and construction oversight.

The Conservation Corps crews began work in 2010 and were responsible for thinning trees, building and installing brush bundles, fabricating grade control structures from felled logs, live stake harvesting and installation, seeding slopes, and installing erosion control fabric along approximately 2,800 linear feet in the project area. The CRWD will explore opportunities to continue this work in 2011. Figure 5.1 shows the project area as well as photos of the streambank following completion of the work.

**Figure 5.1 Channel Stabilization Project Area**

![Map of the project area with photos of streambank stabilization work](image)
5.1.8 Expanded Monitoring
Additional monitoring tasks were performed in 2010 in order to better quantify internal loading of nutrients in CRWD lakes, to fill data gaps identified in the TMDL study, and to better calibrate water quality models. These monitoring efforts will assist in designing BMPs and load reduction projects, making implementation more efficient and effective.

5.1.9 Expanded Lake Water Quality Monitoring
Samples were collected near the bottom at each of the monitored lakes and analyzed for total phosphorus, soluble reactive phosphorus, and total iron. A summary of surface and bottom phosphorus concentrations, bottom iron concentrations, and a DO/temperature profile at each lake for each monitoring date is found in Appendix H.

Analysis of these parameters in bottom samples is helpful in estimating internal nutrient cycling in lakes. In-lake nutrient cycling is an important component of the whole lake nutrient budget. Phosphorus builds up in lake-bottom sediments due to increases in phosphorus load export from the tributary watershed.

Lake profile data, in which temperature and dissolved oxygen were recorded at 1 meter increments in each lake helps to identify the period of stratification in lakes. This data also allows quantification of the period of anoxia, defined as dissolved oxygen levels less than 2 mg/L, in each lake. Internal loading can be a result of sediment anoxia, where weakly bound phosphorus is released into the water column in a form readily available for phytoplankton production.

Table 5.2 provides a summary of conditions in CRWD lakes which can be used to determine the potential for in-lake nutrient cycling in each lake sampled in 2010. Generally, lakes which have high bottom phosphorus concentrations and periods of anoxia from stratification are susceptible to internal nutrient cycling.
Table 5.2  2010 Summer Average Concentrations and Lake Stratification Patterns

<table>
<thead>
<tr>
<th>Lake Name</th>
<th>Surface Summer Average TP (µg/L)</th>
<th>Surface Summer Average OP (µg/L)</th>
<th>Bottom Summer Average TP (µg/L)</th>
<th>Bottom Summer Average OP (µg/L)</th>
<th>Lake Stratification Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albion</td>
<td>292</td>
<td>22</td>
<td>230</td>
<td>22</td>
<td>Mixed</td>
</tr>
<tr>
<td>Augusta</td>
<td>48</td>
<td>17</td>
<td>470</td>
<td>416</td>
<td>Strongly Stratifies</td>
</tr>
<tr>
<td>Betsy</td>
<td>181</td>
<td>112</td>
<td>1480</td>
<td>1244</td>
<td>Weakly Stratifies</td>
</tr>
<tr>
<td>Caroline</td>
<td>68</td>
<td>26</td>
<td>1645</td>
<td>1500</td>
<td>Strongly Stratifies</td>
</tr>
<tr>
<td>Cedar</td>
<td>26</td>
<td>21</td>
<td>167</td>
<td>183</td>
<td>Strongly Stratifies</td>
</tr>
<tr>
<td>Clear</td>
<td>211</td>
<td>48</td>
<td>238</td>
<td>153</td>
<td>Polymictic</td>
</tr>
<tr>
<td>Clearwater West</td>
<td>30</td>
<td>19</td>
<td>121</td>
<td>70</td>
<td>Strongly Stratifies</td>
</tr>
<tr>
<td>Henshaw</td>
<td>105</td>
<td>22</td>
<td>110</td>
<td>21</td>
<td>Mixed</td>
</tr>
<tr>
<td>Louisa</td>
<td>105</td>
<td>40</td>
<td>1323</td>
<td>1215</td>
<td>Strongly Stratifies</td>
</tr>
<tr>
<td>Marie</td>
<td>93</td>
<td>32</td>
<td>1200</td>
<td>1099</td>
<td>Stratifies</td>
</tr>
<tr>
<td>Pleasant</td>
<td>38</td>
<td>17</td>
<td>184</td>
<td>145</td>
<td>Stratifies</td>
</tr>
<tr>
<td>Scott</td>
<td>137</td>
<td>80</td>
<td>286</td>
<td>202</td>
<td>Polymictic</td>
</tr>
<tr>
<td>Swartout</td>
<td>330</td>
<td>214</td>
<td>365</td>
<td>233</td>
<td>Polymictic</td>
</tr>
<tr>
<td>Union</td>
<td>49</td>
<td>16</td>
<td>1079</td>
<td>1031</td>
<td>Stratifies</td>
</tr>
</tbody>
</table>

Lake stratification patterns identified in Table 5.2 vary between water bodies. Lake stratification can drive anoxia, which can drive internal loading in deeper lakes. Identifying the stratification and anoxic period can guide design of efforts to reduce internal loading.

**Mixed and Polymictic:** In mixed water bodies, water temperature is fairly uniform from top to bottom in the lake. As a result, oxygen enriched water from near the surface is able to mix throughout the water column, and anoxia is typically not present. Polymictic lakes are lakes that develop a weak stratification and mix periodically throughout the growing season. As a result of the frequent mixing, anoxic conditions would likely occur infrequently.

**Stratified:** In stratified lakes a warm surface layer forms during summer months and the lake maintains a cooler lower layer in the lake and prevents mixing between the two layers. This does not allow oxygen enriched water to reach the bottom layer and anoxia can develop below the thermocline.
Lakes with high bottom phosphorus concentrations that experience anoxic conditions during periods when the lake is stratified have a high potential for internal loading. Lakes with the highest bottom concentrations of phosphorus in 2010 include Betsy, Caroline, Louisa, Marie, and Union. Based on the presence of high bottom phosphorus concentrations, lake stratification patterns and associated periods of anoxia during a given year, these lakes have a high potential for internal loading. Shallow lakes such as Henshaw, Albion and Swartout can load internally throughout the season based on disturbance of bottom sediments from wind and rough fish.

As shown on the Lake Report Cards in Appendix C, the bottom phosphorus concentrations in most lakes generally increases throughout the summer. This is especially evident in Betsy, Caroline, Augusta, Louisa, Marie, and Union Lakes. The bottom phosphorus concentrations in these lakes typically decrease after mixing with the entire water column during fall turnover.

5.2 INTERNAL LOAD ESTIMATION

One TMDL implementation plan recommendation was to verify the predicted high internal loads in some District lakes by measuring release rates and to better characterize the anoxic factor through collecting more temperature and DO profile measurements during the growing season annually. The anoxic factor can change annually with weather conditions, especially in shallow polymictic lakes.

In March 2010, sediment cores were collected at Augusta and Scott Lakes. The sediment cores were analyzed for phosphorus content and the phosphorus release rate under oxic and anoxic conditions from each lake was quantified. Similar sampling and analysis was conducted at Betsy and Clear Lakes in 2009.

The analysis of the sediment phosphorus content allows for the phosphorus to be characterized into two categories, redox-sensitive and biologically labile phosphorus, and refractory phosphorus. Redox-sensitive and biologically labile phosphorus is the form of phosphorus that is subject to recycling in the lake while refractory phosphorus is strongly bound and does not
readily cycle back into the lake. Data from the analysis of the sediment cores collected in 2010 and 2009 is summarized in Table 5.3.

Table 5.3 CRWD Lake Sediment Analysis Summary

<table>
<thead>
<tr>
<th>Lake</th>
<th>Oxic</th>
<th>Anoxic</th>
<th>Total Phosphorus (mg/g)</th>
<th>Redox-sensitive and biologically labile P (mg/g)</th>
<th>Percentage of redox-sensitive and biologically labile P</th>
<th>Refractory P (mg/g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta (2010)</td>
<td>Not detected</td>
<td>4.50</td>
<td>1.098</td>
<td>0.583</td>
<td>53.1%</td>
<td>0.540</td>
</tr>
<tr>
<td>Scott (2010)</td>
<td>Not detected</td>
<td>30.00</td>
<td>1.237</td>
<td>0.635</td>
<td>51.3%</td>
<td>0.665</td>
</tr>
<tr>
<td>Betsy (2009)</td>
<td>Not detected</td>
<td>19</td>
<td>1.419</td>
<td>0.753</td>
<td>53.1%</td>
<td>0.694</td>
</tr>
<tr>
<td>Clear (2009)</td>
<td>Not detected</td>
<td>2.4</td>
<td>1.462</td>
<td>0.353</td>
<td>24.1%</td>
<td>0.861</td>
</tr>
</tbody>
</table>

As observed in Betsy and Clear Lakes in 2009, phosphorus release was not detected from sediments under oxic conditions for either Augusta or Scott Lake. The sediment core analysis indicates that the phosphorus release rate from bottom sediments under anoxic conditions in Scott Lake is much higher than the release rate from Augusta Lake sediments. Analysis of the phosphorus content shows that the phosphorus content is similar in both lakes and the percentage of redox-sensitive and biologically labile phosphorus is also similar in both lakes. These results indicate that under anoxic conditions, internal loading of phosphorus can potentially result in a significant loading of phosphorus to both lakes.

The additional data collected on Augusta and Scott Lakes allows for the estimation of internal phosphorus loading in each lake. The measured release rates used in conjunction with additional temperature and DO profiles to define the summer stratification period were used to characterize internal loading. Similar data was collected in 2009 from Betsy and Clear Lake. Table 5.4 shows the predicted internal load and annual load allocations for Augusta, Scott, Betsy, and Clear Lakes as identified in the 2009 CRWD Lake Nutrient TMDL, the 2010 estimated internal phosphorus loads in the four lakes, as well as the 2009 estimated internal phosphorus load in Betsy and Clear Lakes. Some variability in the annual internal phosphorus load from year to year is expected, and is caused by variability in the depth of stratification and area of anoxia in the lakes.
Table 5.4  Predicted and Estimated Internal Phosphorus Loads

<table>
<thead>
<tr>
<th>Lake</th>
<th>Predicted Internal Load* (lbs/year)</th>
<th>Annual Phosphorus Load Allocation* (lbs/year)</th>
<th>Annual Phosphorus Internal Load Allocation* (lbs/year)</th>
<th>2009 Estimated Internal Phosphorus Load (lbs/year)</th>
<th>2010 Estimated Internal Phosphorus Load (lbs/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta</td>
<td>880</td>
<td>4,109</td>
<td>697</td>
<td>--</td>
<td>506</td>
</tr>
<tr>
<td>Scott</td>
<td>59</td>
<td>2,535</td>
<td>59</td>
<td>--</td>
<td>1,120</td>
</tr>
<tr>
<td>Betsy</td>
<td>7,080</td>
<td>2,868</td>
<td>354</td>
<td>1,354</td>
<td>1,849</td>
</tr>
<tr>
<td>Clear</td>
<td>8,364</td>
<td>1,250</td>
<td>21</td>
<td>76</td>
<td>142</td>
</tr>
</tbody>
</table>

*From CRWD Lake Nutrient TMDLs, 2009

The 2010 estimated internal phosphorus load in Lake Augusta was less than the modeled predicted internal load average and was less than the TMDL annual phosphorus internal load allocation for the lake. The 2010 estimated internal phosphorus load in Scott Lake was significantly higher than both the modeled average and the TMDL annual phosphorus internal load allocation for the lake. The result is that the TMDL predicted a much lower internal phosphorus load to Scott Lake than what was measured in 2010.

While the 2009 estimated internal phosphorus loads in Lake Betsy and Clear Lake appeared to be less than the modeled average they still are above the TMDL annual phosphorus internal load allocation for each lake.

Summaries of these lakes, including Lake Report Cards summarizing general lake information, historical and current water quality, and identifying TMDL goals are found in Appendix C.
6.0 Conclusions

1. Annual precipitation was above normal at monitored locations in 2010, and was above normal in most months. Significant precipitation events occurred throughout the year, especially in August, September, and October.

2. Runoff over the watershed at CR 28.2 was 7.9 inches, and at CR 10.5 was 13.0 inches. The higher than normal runoff in both portions of the watershed is due primarily to high flow events following snow melt and significant precipitation events throughout the year.

3. The Clearwater River phosphorus load was estimated at 9,149 pounds at CR 10.5, higher than loads in recent years due to increased runoff from above average precipitation, but similar to historical averages in years with similar precipitation. The upper watershed load at CR 28.2 was 23,955 pounds, which was significantly higher than loads measured in recent years due to increased runoff. Flow-weighted average concentrations were 32 µg/L and 258 µg/L at CR 10.5 and CR28.2, respectively. These concentrations were lower than historical averages at both sites and similar to concentrations seen in recent years.

4. Soluble phosphorus makes up a majority of total phosphorus at monitoring stations downstream of wetlands, indicating the export of soluble phosphorus from the wetlands. Expanded monitoring upstream of these wetlands would help to verify the export of soluble phosphorus from the wetlands. Projects implemented to reduce phosphorus should also contain a component to reduce soluble phosphorus if possible.
5. With the exception of the 11 lakes that are impaired in the watershed, the water quality of CRWD lakes is generally good. Water quality has generally improved or remained stable in the majority of the lakes in the CRWD in recent years.

6. Additional lake monitoring efforts conducted in 2010 confirm the impact of internal loading of nutrients in some CRWD lakes, as evidenced by monitoring data showing high bottom phosphorus concentrations and high phosphorus release rates from lake sediments. Monitoring data indicates that lakes especially susceptible to internal nutrient loading include Albion, Swartout, Henshaw, Augusta, Caroline, Louisa, Marie, Betsy, Scott, and Union. CRWD will continue to evaluate potential actions identified in the CRWD Watershed-wide Implementation Plan that address internal loading.

7. Continued monitoring as part of Project #06-1 indicates that external phosphorus loads to Cedar Lake were near project goals, even during a year with higher than normal runoff over the watershed. However, summer average phosphorus concentrations in Cedar Lake remain above the Project goal of 20 µg/L, indicating that additional load reductions, additional actions, and time are necessary to meet lake water quality goals.

8. The 2010 monitoring results in Swartout, Albion, and Henshaw Lakes made apparent the connection of lake water quality to the status of fish communities in these lakes. The development of shallow lake management plans incorporating measures such as water level management to promote vegetation growth and more drastic fish community management strategies, such as lake drawdowns or the application of Rotenone to promote rough fish kills would likely benefit these lakes.

9. The installation of two continuous stream flow monitoring sites and the continued additional frequency of monitoring at stream locations in 2010 allowed for an accurate estimation of runoff and phosphorus loading in CRWD. Additional lake monitoring efforts, including collecting bottom phosphorus and iron concentrations, collecting temperature and dissolved oxygen profiles more frequently, and conducting sediment phosphorus release studies led to better quantification of internal loading in District lakes.
in 2010. The CRWD should consider continuing the additional monitoring efforts in 2011 to more effectively design and implement load reduction projects.

10. In 2010, the CRWD made progress towards water quality goals established in the TMDLs by:
   - implementing additional monitoring which filled data gaps identified in the TMDL and which will assist in final design of capital improvement projects and targeting BMPs;
   - applying for and securing grant dollars for three projects;
   - implementing three projects identified in 2009, including:
     - beginning a targeted fertilizer application reduction project in the upper watershed,
     - completing construction on a stormwater reclamation and reuse project in the City of Kimball, and
     - completing a streambank restoration and stabilization project on the Clearwater River,
   - continuing to seek grant funding, monitoring, and securing land for additional projects including:
     - Watkins impoundment,
     - Lake Betsy hypolimnetic withdrawal, and
     - Clear Lake v-notch weir

11. In 2011, the CRWD plans to continue progress towards TMDL goals by:
   - continuing additional monitoring efforts to track effectiveness and improve efficiencies of implementation projects,
   - beginning monitoring and project design for the Kingston Wetland Restoration and Feasibility Study,
   - continuing to apply for grant dollars to fund other CRWD projects,
Appendix A

2010 Water Quality Monitoring Program
MEMORANDUM

TO: Clearwater River Watershed District Board of Managers

FROM: Norman C. Wenck
Engineer for the District

DATE: February 10, 2010

RE: Proposed 2010 Water Quality Monitoring Program

Introduction
The Clearwater River Watershed District conducts its annual water quality monitoring at selected lakes and locations on streams. The District’s proposed 2010 program is intended to provide data from sites throughout the District.

The 2010 proposed lake monitoring follows the long-term plan as shown in Table 1 and Figure 1. The proposed stream monitoring sites together with laboratory and field parameters are shown in Table 2.

Lake Monitoring
It is recommended that the District’s 2010 lake monitoring include the 10 lakes shown on Table 1, including Clearwater West, Augusta, Louisa, Caroline, Scott, Marie, Betsy, Pleasant, Clear, and Union. It is also recommended that surface and bottom water samples be collected at all of the sampled lakes. The proposed stations and the parameters to be monitored are shown on Table 2. Citizens also monitor approximately 10 lakes for secchi depth. Cedar, Albion, Henshaw, and Swartout Lakes will also be monitored as part of the Cedar, Albion, Swartout, Henshaw Improvement Project #06-1.

Stream Monitoring
The Clearwater River will be monitored twice a month from April-June and once a month from July-October at station CR28.2. The Clearwater River will also be monitored once a month from April-October at station CR 10.5 at Grass Lake. Warner Creek will be monitored once a month from April-October at WR 0.2. Two major inlets to Clear Lake will also be monitored in 2009 at stations Clear Lake North and Clear Lake South. These stations will be monitored for water quality and flow. Water quality parameters are total phosphorus, ortho phosphorus, and total suspended solids. CR 28.2 will also be monitored for *E. coli* bacteria. Tributary streams in the Cedar Lake subwatershed will also be monitored as part of Project #06-1.

Level Monitoring
It is recommended that the District install staff gauges at the outlets of Clear, Cedar, and Grass Lakes and enlist the help of lake residents to read the gauges on a weekly basis.

Estimated Cost
This proposed basic program is estimated to cost $24,500 plus an estimated additional 240 hours of CRWD staff time.

Recommended Supplemental Monitoring
In addition to the basic program, it is recommended that supplemental monitoring efforts be considered in 2010. The proposed supplemental monitoring efforts would allow the District to track the success of individual projects or to investigate specific water quality concerns.

Supplemental Monitoring Task 1: Collect additional temperature/dissolved oxygen profiles from selected lakes in the District to better characterize the anoxic factor in lakes.
It is recommended that the District collect profile data twice monthly starting in early May until the lake is stratified in Clear, Cedar, Betsy, Scott, and Augusta Lakes. Profiles should also be collected twice monthly starting in September until the lakes are mixed. Since the lakes are already being sampled monthly from June to September, this additional task would add four to six visits to each lake. This task would take approximately 40 to 60 hours of CRWD staff time to complete plus $1,000 for data management and reporting.

Supplemental Monitoring Task 2: Collect lake bottom sediment samples to quantify phosphorus release rates in selected District Lakes.
It is recommended that the District collect lake sediment samples from Scott and Augusta Lakes in 2010 to expand on monitoring performed in 2009. The cost of this task is approximately $3,500 per lake.

Supplemental Monitoring Task 3: Maintain continuous flow measurements at two locations in the watershed.
It is recommended that the District install pressure transducers at two sites, the north inlet to Clear Lake and at monitoring station CR 31.8, to measure continuous flows and better characterize runoff in these areas of the watershed. The approximate cost of this task, including equipment purchase is $4,800.

Equipment Purchase
The equipment used to gauge stream flow is in need of replacement. New equipment would improve the efficiency of data collection and improve the quality of the data. The cost of a new digital velocity meter to be used in stream flow gauging is approximately $3,200.

Summary
The proposed monitoring program continues the program in place since 1981, coordinates with other programs, and reflects input from the Board and citizens. Please feel free to call me at 763-479-4201 or Rebecca Kluckhohn at 763-479-4224 with any questions or comments that you may have.
### TABLE 1
PROPOSED LONG-TERM WATER QUALITY MONITORING PLAN FOR CRWD LAKES

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Number of Lakes Monitored W/ CRWD Funding: 9 9 20 6 9 9 10 10 7 10 9 14 22 14

Note:  
(1) Lake selection based on total lake size ranking scores (Lake Priority Ranking, 1990)  
(2) Part of Project #06-1  
(3) Added to assess trends  

T:\0002\145\CRWDSAMP_2010
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<th>Category</th>
<th>2010 Schedule</th>
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<td>June 1-5, July 6-10, August 3-7, September 7-11</td>
<td>The CRWD will monitor Clearwater (West), Augusta, Louisa, Caroline, Scott, Marie, Betsy, Pleasant, Clear, and Union Lakes.</td>
<td>Field: Secchi depth, DO and temperature profiles</td>
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<td>Cedar, Albion, Swartout, and Hensaw Lakes will be monitored under Project No. 06-1</td>
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<td>Citizen Secchi: 10 sites not listed here</td>
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<td>WR0.2</td>
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<td>Field: flows, DO and temperature profile</td>
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<td>Weekly</td>
<td>River Stage at CR10.5, lake Level at Clear Lake, Cedar Lake</td>
<td>Field: flows, DO and temperature profile</td>
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<td>Lab: total phosphorus, ortho phosphorus, total suspended solids</td>
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<td>Precipitation</td>
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<td>Tributaries Field: DO, temperature, conductivity, pH; Lab: total phosphorus, ortho phosphorus, TSS</td>
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<td>Lakes Field: Secchi, DO, temperature profiles</td>
<td>Lab: surface total phosphorus, ortho phosphorus, chlorophyll-a bottom: total phosphorus, ortho phosphorus, total iron</td>
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Appendix B

Historical Mean Flow and Phosphorus Loading
### APPENDIX B Table B-1
#### Historical Mean Flow and Phosphorus Loading

Clearwater River Watershed District

2010 Annual Report

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<th>Main Stem</th>
<th>Year</th>
<th>Average Stream Flow (cu m/sec)</th>
<th>Average Stream Flow (cfs)</th>
<th>Flow-Weighted Average Concentration (mg/l)</th>
<th>Total Phosphorus (kg)</th>
<th>Total Phosphorus Load (lb)</th>
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### APPENDIX B Table B-1

**Historical Mean Flow and Phosphorus Loading**

Clearwater River Watershed District

2010 Annual Report

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<th>Main Stem</th>
<th>Year</th>
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**NOTES:**

Flow values are time-weighted averages unless otherwise noted.

Total phosphorus values are flow- and time-weighted averages unless otherwise noted.

2. Station WR 0.2 was designated Station WC 0.2 in 1981-1983.
3. Phosphorus values in 2000 are flow-weighted and adjusted per log-log regression on flow so as to correspond to annual mean flows.
4. 2001 Flow and total phosphorus values are arithmetic averages.
5. 2001 total phosphorus loads estimated from arithmetic averages of flow and total phosphorus values.
6. Values in 2005 and 2006 were calculated using supplemental flow data from CSAH 40 near Clearwater.
### Appendix B-TABLE B-2

**YEARY PRECIPITATION AND RUNOFF TOTALS**

Clearwater River Watershed District

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**Mean** 29.43 7.7  
**Std. Dev.** 7.6 5.4

**NOTES:**

Whole watershed runoff is based on time-weighted average flow at Clearwater Lake outlet (station CR 10.5), and total drainage area of 155 square miles.

1. Data for single gauge in east-central part of watershed (Camp Heritage on Lake Caroline).

2. Average values of other stations in District were used to fill in missing data.
Appendix C

2010 Lake Report Cards
Lake Data

- **Surface Area:** 251 Acres
- **Maximum Depth:** 9 Feet
- **Contributing Subwatershed Area:** 1,094 acres

Tributary Sub watershed (shaded)

Albion Lake Annual Phosphorus Budget

- **Direct Watershed:** 342 lbs, Goal: 255 lbs, Reduction: 217 lbs
- **Septic Systems:** 14 lbs, Goal: 0 lbs, Reduction: 14 lbs
- **Atmospheric + Groundwater:** 60 lbs, Goal: 59 lbs
- **Internal:** 3449 lbs, Goal: 171 lbs, Reduction: 3278 lbs

Total Annual Phosphorus Budget: 3865 lbs, Goal: 355 lbs, Reduction: 3510 lbs

Albion Lake Historical Summer Mean Total Phosphorus

- **Summer Mean Total Phosphorus Concentration**
- **TMDL Goal TP Concentration:** 60 ug/L

Lake Albion 2010 Phosphorus Concentrations

- **Surface TP**
- **Surface Ortho-P**
- **Bottom TP**
- **Bottom Ortho-P**

Albion Lake 2010 Phosphorus Concentrations

- **Date:** 6/1, 6/16, 7/1, 7/16, 7/31, 8/15, 8/30, 9/14, 9/29
- **Phosphorus (ug/L):** 484, 228, 307, 149

Albion Lake Historical Summer Mean Total Phosphorus

- **Concentration (ug/L):** 130, 220, 199, 248, 296, 292

Appendix C
Albion Lake
2010 Lake Report Card

MPCA Standards for Shallow Lakes in the North Central Hardwood Forest:
- Total Phosphorus (TP): ≤ 60 ug/L
- Chlorophyll-a: ≤ 20 ug/L
- Secchi Depth: ≥ 1.0 meter

**Lake Albion Historical Summer Mean Chlorophyll-a**

- 2010 TP and Chlorophyll-a concentrations were higher than in recent years and are well above TMDL water quality goals.
- Water clarity decreased in 2010 as Secchi depth decreased to 0.4 m.
- Internal loads in Lake Albion are the major nutrient source to the lake.
- 2010 water quality was similar in Albion Lake to 2006, when a rough fish population was documented in the lake. It is possible that the decrease in water clarity and overall water quality may be attributed to a rough fish population that has reestablished in the lake.

**TMDL Activities**
- Due to Lake Albion’s small tributary watershed, the reduction of watershed loads alone will not be sufficient to achieve water quality goals for the lake.
- A significant reduction in the internal nutrient source will be required to meet water quality targets in the lake.
- Management strategies should be implemented carefully in order to establish a state of high ecological integrity in the lake.
- Nutrient reduction strategies implemented as part of the Cedar Lake Improvement Project have included watershed BMPs and rough fish management.
- A shallow lake management plan should be developed for the lake in the future.
2010 Lake Augusta Report Card

Lake Data

- Surface Area: 177 Acres
- Maximum Depth: 82 Feet
- Subwatershed Area: 62,936 acres

Tributary Sub watershed (shaded)

Lake Augusta Current Annual Phosphorus Budget

- Direct Watershed: 403 lbs
  - Goal: 276 lbs
  - Reduction: 127 lbs

- Upstream Lakes: 3,601 lbs
  - Goal: 2,429 lbs
  - Reduction: 1,172 lbs

- Septic Systems: 12 lbs
  - Goal: 0 lbs
  - Reduction: 12 lbs

- Atmospheric + Groundwater: 710 lbs
  - Goal: 704 lbs
  - Reduction: 6 lbs

- Internal: 880 lbs
  - Goal: 697 lbs
  - Reduction: 183 lbs

- Direct Watershed
  - Phosphorus Concentration
    - Date: 6/1
      - Surface TP: 30
      - Surface Ortho-P: 80
      - Bottom TP: 46
      - Bottom Ortho-P: 42

Lake Augusta 2010 Phosphorus Concentrations

Lake Augusta Historical Summer Mean Total Phosphorus

- Summer Mean TP Concentration
  - 1980: 260 ug/L
  - 1982: 300 ug/L

TMDL Goal TP Concentration: 40 ug/L
Lake Augusta
2010 Lake Report Card

Lake Augusta Historical Summer Mean Chlorophyll-a

Lake Augusta Historical Summer Mean Secchi Depth

2010 Summary

- While phosphorus and chlorophyll-a concentrations increased slightly and were above TMDL goals in 2010, water quality has improved since the 1980’s and current TP concentrations remain near TMDL goals.
- Water quality is dominated by loads from the Clearwater River and is buffered by upstream lakes.
- Monitoring data indicates a potential for high internal loads. Bottom TP is approximately a magnitude higher than surface concentrations.
- Analysis of phosphorus release rates from sediment cores collected in 2010 indicate that the internal load in 2010 was very similar to both the average load predicted by the TMDL and the TMDL allocation for internal loading.

TMDL Activities

- TMDL calls for a combination of watershed load reductions and internal load reductions in order to meet water quality goals.
- Activities implemented in the upstream watersheds (Clear Lake and Lake Betsy) will have a cumulative impact on downstream lakes.
- Phosphorus reduction activities identified for implementation by the TMDL Implementation Plan in the watersheds tributary to Lake Betsy and Clear Lake include BMPs, hypolimnetic withdrawal, Kingston Wetland restoration, targeted soil testing and GPS fertilizer application, and the construction of sedimentation ponds.

MPCA Proposed Deep Lake Standards for the North Central Hardwood Forest:
- Total Phosphorus (TP): ≤ 40 ug/L
- Chlorophyll-a: ≤ 14 ug/L
- Secchi Depth: ≥ 1.4 meter

Appendix C
Lake Betsy Report Card

Lake Data
- Surface Area: 153 Acres
- Maximum Depth: 23 Feet
- Subwatershed Area: 43,789 acres
- Mean Depth: 10 Feet

Tributary Sub watershed
( shaded)

Lake Betsy Current Annual Phosphorus Budget
- Total Phosphorus Budget: 22,043 lbs
  - Goal: 2,868 lbs
  - Reduction: 19,175 lbs
- Internal: 7,080 lbs
  - Goal: 354 lbs
  - Reduction: 6,726 lbs
- Upstream Lakes: 4,887 lbs
  - Goal: 733 lbs
  - Reduction: 4,154 lbs
- Atmospheric + Groundwater: 205 lbs
  - Goal: 205 lbs
  - Reduction: 0 lbs
- Septic Systems: 21 lbs
  - Goal: 0 lbs
  - Reduction: 21 lbs

Direct Watershed:
- 9,850 lbs
  - Goal: 1,547 lbs
  - Reduction: 8,303 lbs

Lake Betsy 2010 Phosphorus Concentrations

Lake Betsy Historical Summer Mean TP Concentrations
- Summer Mean TP Concentration
- MPCA TP Standard for Deep Lakes in the NCHF Ecoregion: 40 ug/L

Appendix C
2010 Summary

- Recent TP concentrations have been decreasing and remain below that of the early 1980’s but are still well above the TMDL goals.

- Chlorophyll-a and Secchi depth are near or at state standards.

- Water quality is dominated by loads from Clearwater River.

- Phosphorus release rates from sediment were measured in 2009 and internal loading was quantified in 2009 and 2010. While the internal load of phosphorus was below the TMDL modeled average during both years, it remained well above the TMDL allocation for internal load to the lake.

TMDL Activities

- TMDL calls for significant phosphorus reductions in watershed runoff and internal loading in order for Lake Betsy to meet state standards.

- The TMDL Implementation Plan identifies activities to be implemented in the watershed tributary to Lake Betsy, including BMPs, hypolimnetic withdrawal (potential 480 lb reduction), Kingston Wetland restoration (potential 1,970 lb reduction) and targeted soil testing and GPS fertilizer application (potential 600 lb reduction).

- Implementation activities in the watershed in 2010 included the construction of a sedimentation basin in Kimball, streambank restoration, and GPS fertilizer application and testing.
2010 Lake Caroline Report Card

Lake Data
Surface Area: 126 Acres
Maximum Depth: 45 Feet
Subwatershed Area: 60,132 acres

Lake Caroline Annual Phosphorus Budget
Total Annual
Phosphorus Budget: 5642 lbs
Goal: 3668 lbs
Reduction: 1974 lbs

Direct Watershed: 308 lbs
Goal: 298 lbs
Reduction: 10 lbs

Atmospheric + Groundwater: 822 lbs
Goal: 822 lbs

Septic Systems: 13 lbs
Goal: 0 lbs
Reduction: 13 lbs

Internal: 2342 lbs
Goal: 298 lbs
Reduction: 664 lbs

Lake Caroline 2010 Phosphorus Concentrations

Lake Caroline Summer Mean Total Phosphorus

Lake Caroline 2010 phosphorus concentrations graph

Appendix C
Lake Caroline

2010 Lake Report Card

MPCA Proposed Deep Lake Standards for the North Central Hardwood Forest:
- Total Phosphorus (TP): ≤ 40 ug/L
- Chlorophyll-a: ≤ 14 ug/L
- Secchi Depth: ≥ 1.4 meter

Lake Caroline Summer Mean Chlorophyll-a

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<tbody>
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Lake Caroline Summer Mean Secchi Depth

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2010 Summary

- TP and chlorophyll-a concentrations have increased slightly in recent years but remain below concentrations seen in the early 1980s.
- Secchi depth currently meets the TMDL goal.
- Water quality is dominated by loads from the Clearwater River and Lake Marie.
- High bottom phosphorus concentrations and periods of stratification in the summer months indicate that internal loading may contribute significant phosphorus to the lake.

TMDL Activities

- Measures recommended by the TMDL Implementation Plan for the upper watershed will help decrease the load of phosphorus to Lake Caroline.
- Water quality goals can be met through a combination of watershed management and internal load reductions.
Lake Data

- **Surface Area:** 783 Acres
- **Maximum Depth:** 108 Feet
- **Subwatershed Area:** 9,715 acres

**Tributary Sub watershed**

(Shaded)

### Cedar Lake 2010 Phosphorus Concentrations

<table>
<thead>
<tr>
<th>Date</th>
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### Cedar Lake Historical Summer Mean TP Concentrations

- **Goal TP Concentration:** 40 ug/L

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Cedar Lake
2010 Lake Report Card

MPCA Proposed Deep Lake Standards for the
North Central Hardwood Forest:
Total Phosphorus (TP): ≤ 40 ug/L
Chlorophyll-a: ≤ 14 ug/L
Secchi Depth: ≥ 1.4 meter

Cedar Lake Historical Summer Mean Chlorophyll-a

Cedar Lake Historical Summer Mean Secchi Depth

2010 Summary

- Phosphorus and chlorophyll-a concentrations are below TMDL goals and have remained stable or improved since the start of Project #06-1 in 2007.
- Phosphorus concentrations remain above the goal of 20 ug/L set by Project#06-1.
- Although periodic algal blooms are common early in the summer, overall water clarity remains good in the lake, as Secchi depth is better than the TMDL goal.
- The primary source of phosphorus is from the upper watersheds and Swartout, Albion, and Henshaw Lakes.

TMDL Activities

- Since 2007, the Cedar Lake Restoration Project has implemented fish barriers, buffers, tile inlet replacement, and the construction of Segner Pond, a wetland treatment basin.
- The goal of the project is to reduce the phosphorus load to Cedar Lake from the upper watershed.
- Measures recommended by the TMDL Implementation Plan for the impaired Swartout, Albion, and Henshaw Lakes will serve to improve water quality in Cedar Lake.
- Curly leaf pondweed was treated in small areas of the lake in 2010.
2010 Clear Lake Report Card

Lake Data
- Surface Area: 515 Acres
- Maximum Depth: 17 Feet
- Subwatershed Area: 6,801 acres
- Mean Depth: 9 Feet

Clear Lake Current Annual Phosphorus Budget
- Total Phosphorus Budget: 13,078 lbs
  - Goal: 1,250 lbs
  - Reduction: 11,828 lbs
- Direct Watershed: 4,347 lbs
  - Goal: 857 lbs
  - Reduction: 3,490 lbs
- Septic Systems: 7 lbs
  - Goal: 0 lbs
  - Reduction: 7 lbs
- Atmospheric + Groundwater: 359 lbs
  - Goal: 359 lbs

Clear Lake 2010 Phosphorus Concentrations

Clear Lake Historical Summer Mean TP Concentrations
- Mean Concentration
- TMDL Goal TP Concentration: 60 ug/L

Clearwater River Watershed District
Clear Lake

Wenck Associates, Inc. 1800 Pioneer Creek Center
Environmental Engineers Maple Plain, MN 55359

Appendix C

January 2011
Clear Lake

2010 Lake Report Card

2010 Summary

- Clear Lake is located at the headwaters of the Clearwater River.
- Phosphorus and chlorophyll-a concentrations were well above TMDL goals and were higher than in recent years in 2010.
- Secchi depth was similar to recent years and was above TMDL goals.
- Poor water quality and nuisance algal blooms are common in Clear Lake.
- Monitoring results from two inlet streams to Clear Lake in 2010 indicate high runoff and periodic high phosphorus concentrations in runoff to Clear Lake.

TMDL Activities

- The TMDL Implementation Plan calls for significant reductions in phosphorus from direct watershed runoff and internal loading in order for Clear Lake to meet state standards.
- All but 7 of the ISTSs on the lake have been routed to the City of Watkins WWTP, resulting in approximately 100 lbs. of TP reduction to the lake.
- Sedimentation ponds were installed at two inlets to the lake.
- Clear Lake Association has implemented curly leaf pondweed treatment and rough fish removal.
- Additional sedimentation ponds, the installation of a V-notch weir and watershed BMPs have been recommended as potential TP reduction strategies.
2010 Clearwater Lake (West) Report Card

Lake Data
Surface Area: 3,158 Acres
Maximum Depth: 73 Feet
Subwatershed Area: 100,232 acres

Tributary Sub watershed (shaded)

Clearwater West 2010 Phosphorus Concentrations

Clearwater (West) Lake Historical Summer Mean TP Concentrations

Mean Concentration
TMDL Goal: < 40 ug/L
Clearwater Lake West
2010 Lake Report Card

2010 Summary
- Water quality has improved significantly in Clearwater Lake since the early 1990s, as summer mean phosphorus and chlorophyll-a concentrations have decreased significantly and the lake meets recreational water quality goals.
- Water quality measurements have been stable over recent years and meet TMDL goals.
- An increase in summer average Chlorophyll-a in 2010 is due to one extremely high chlorophyll-a concentration from a sample collected during June 16. The remainder of chlorophyll-a concentrations for the rest of the year were similar to concentrations seen in past years.
- The majority of the phosphorus load to Clearwater Lake comes from the upstream watersheds.

Lake Management Activities
- Watershed loads to the Clearwater Lake have been below the established phosphorus loading goals of 5,000 lbs. in most recent years, with the exception of 2009.
- Measures that are put in place in the upper watershed as part of the TMDL Implementation Plan will also help to maintain or improve water quality in Clearwater Lake in the future. Specifically, BMPs, hypolimnetic withdrawal, Kingston Wetland restoration, targeted soil testing and GPS fertilizer application, and the construction of sedimentation ponds are identified for implementation in the upstream watersheds.

MPCA Standards for Deep Lakes in the North Central Hardwood Forest:
- Total Phosphorus (TP): ≤ 40 ug/L
- Chlorophyll-a: ≤ 14 ug/L
- Secchi Depth: ≥ 1.4 meter

Clearwater (West) Lake Historical Summer Mean Chlorophyll-a
- Mean Concentration
- TMDL Goal: < 14 ug/L

Clearwater (West) Lake Historical Summer Mean Secchi Depth
- Mean Depth
- TMDL Goal: > 1.4 m
2010 Lake Louisa Report Card

Lake Data

Surface Area: 193 Acres  
Maximum Depth: 44 Feet  
Subwatershed Area: 53,881 acres

Tributary Sub watershed  
(shaded)

Lake Louisa Annual Phosphorus Budget

- Direct Watershed: 296 lbs 
  Goal: 85 lbs  
  Reduction: 211 lbs
- Upstream Lakes: 5,764 lbs 
  Goal: 1,499 lbs  
  Reduction: 4,265 lbs
- Direct Watershed: 296 lbs 
  Goal: 233 lbs  
  Reduction: 63 lbs
- Septic Systems: 59 lbs 
  Goal: 0 lbs  
  Reduction: 59 lbs
- Atmospheric + Groundwater: 895 lbs 
  Goal: 895 lbs  
  Reduction: 0 lbs
- Internal: 631 lbs 
  Goal: 631 lbs  
  Reduction: 0 lbs

Lake Louisa 2010 Phosphorus Concentrations

- Surface TP
- Surface Ortho-P
- Bottom TP
- Bottom Ortho-P

Lake Louisa Historical Summer Mean Total Phosphorus

- Mean Concentration
- TMDL Goal TP Concentration: 40 ug/L

Appendix C

Clearwater River Watershed District
Lake Louisa

Wenck Associates, Inc.  1800 Pioneer Creek Center  
Environmental Engineers  Maple Plain, MN  55359

January 2011

Appendix C
**Lake Louisa**

**2010 Lake Report Card**

**MPCA Standards for Deep Lakes in the North Central Hardwood Forest:**
- **Total Phosphorus (TP):** ≤ 40 ug/L
- **Chlorophyll-a:** ≤ 14 ug/L
- **Secchi Depth:** ≥ 1.4 meter

---

**Lake Louisa Historical Summer Mean Chlorophyll-a**

- **Summer Mean Chlorophyll-a Concentration**
- **TMDL Goal Chlorophyll-a Concentration:** 14 ug/L

---

**Lake Louisa Historical Summer Mean Secchi Depth**

- **Secchi Depth TMDL Goal:** >1.4 m
- **Summer Mean Secchi Depth**

---

**2010 Summary**

- While summer average phosphorus, chlorophyll-a, and Secchi depth were above TMDL goals in 2010, water quality has improved significantly since the early 1980s.

- The 2010 summer average phosphorus concentration was higher than in recent years due primarily to elevated phosphorus concentrations during a late September sample event.

- Monitoring data indicates the potential for high internal loads in the lake as high bottom phosphorus concentrations were observed in 2010.

---

**TMDL Activities**

- Reducing phosphorus loads from upstream lakes and the direct tributary watershed will have the greatest impact on improving water quality in Lake Louisa.

- Phosphorus reduction strategies including BMPs, hypolimnetic withdrawal, Kingston Wetland restoration, targeted soil testing and GPS fertilizer application, and the construction of sedimentation ponds are identified by the TMDL Implementation Plan for the upstream watersheds.

- Lake management strategies have included rough fish removal since 1984 and aerators from 1985 to 1995.
2010 Lake Marie Report Card

Lake Data

Surface Area: 140 Acres
Maximum Depth: 36 Feet
Subwatershed Area: 59,837 acres

Tributary Sub watershed (shaded)

Lake Marie Annual Phosphorus Budget

- Atmospheric + Groundwater: 883 lbs (Goal: 883 lbs)
- Septic Systems: 74 lbs (Goal: 0 lbs, Reduction: 74 lbs)
- Upstream Lakes: 5,636 lbs (Goal: 2,002 lbs, Reduction: 2,734 lbs)
- Direct Watershed: 1,078 lbs (Goal: 492 lbs, Reduction: 584 lbs)
- Internal: 338 lbs (Goal: 236 lbs, Reduction: 102 lbs)

Lake Marie 2010 Phosphorus Concentrations

Lake Marie Historical Summer Mean Total Phosphorus

- Summer Mean Total Phosphorus Concentration
- TMDL Goal TP Concentration: 60 ug/L

Clearwater River Watershed District
Lake Marie

Wenck Associates, Inc. 1800 Pioneer Creek Center Environmental Engineers Maple Plain, MN 55359

January 2011
Appendix C
Lake Marie

2010 Lake Report Card

Lake Marie Summer Mean Chlorophyll-a

Lake Marie Historical Summer Mean Secchi Depth

2010 Summary

- Water quality has improved significantly and phosphorus and chlorophyll-a concentrations have remained relatively stable since the early 1990s.

- Summer mean phosphorus and chlorophyll-a concentrations increased from 2009 and did not meet TMDL goals in 2010. Phosphorus concentrations measured during the September monitoring event were extremely high, most likely due to the sample event occurring after the lake’s water column began to mix, bringing water with high phosphorus concentration from the bottom of the lake to the surface.

- Monitoring data demonstrates high bottom phosphorus concentrations, which indicates the potential for high internal loads in the lake.

TMDL Activities

- The reduction of phosphorus loads from upstream lakes and the direct tributary watershed will have the greatest impact on improving lake water quality.

- Lake management strategies have included rough fish removal since 1984 and aeration from 1985 to 1995.

- Phosphorus reduction activities identified for implementation by the TMDL Implementation Plan in the upstream watersheds tributary to Lake Betsy and Clear Lake include BMP’s, hypolimnetic withdrawal, Kingston Wetland restoration, soil testing and GPS fertilizer application, and the construction of sedimentation ponds.

MPCA Standards for Shallow Lakes in the North Central Hardwood Forest:

- Total Phosphorus (TP): ≤ 60 ug/L
- Chlorophyll-a: ≤ 20 ug/L
- Secchi Depth: ≥ 1.0 meter
2010 Pleasant Lake Report Card

Lake Data
Surface Area: 571 Acres
Maximum Depth: 74 Feet
Subwatershed Area: 4,325 acres

Surface Area: 571 Acres
Maximum Depth: 74 Feet
Subwatershed Area: 4,325 acres

Tributary Sub watershed

### Lake Data
- Surface Area: 571 Acres
- Maximum Depth: 74 Feet
- Subwatershed Area: 4,325 acres

### Tributary Sub watershed

### Pleasant Lake Historical Summer Mean Total Phosphorus

- **Summer Mean Total Phosphorus Concentration**
- **TMDL Goal TP Concentration**: 40 ug/L

### Pleasant Lake 2010 Phosphorus Concentrations

- **Surface TP**
- **Surface Ortho-P**
- **Bottom TP**
- **Bottom Ortho-P**

### 2010 Pleasant Lake Report Card

- **Lake Monitoring Location**
- **Inflow**
- **Outflow**

Clearwater River Watershed District

Pleasant Lake

Appendix C
Pleasant Lake
2010 Lake Report Card

MPCA Proposed Deep Lake Standards for the
North Central Hardwood Forest:
Total Phosphorus (TP): ≤ 40 ug/L
Chlorophyll-a: ≤ 14 ug/L
Secchi Depth: ≥ 1.4 meter

Pleasant Lake Historical Summer Mean Chlorophyll-a

Pleasant Lake Historical Summer Mean Secchi Depth

2010 Summary
• Current water quality is good in Pleasant Lake as phosphorus concentrations and secchi depths have met TMDL goals since 1993.
• The 2010 chlorophyll-a summer average concentration was higher than normal based on one extremely high concentration from a September 21 sample event. Concentrations from all other monitoring events in 2010 were near the long term average concentration for Pleasant Lake. (The average chlorophyll-a concentration without the September value was 12 ug/L.)

Water Quality Improvement Activities
• Good land management practices adjacent to the lakeshore, the upstream watershed, and in the City of Annandale will help to maintain the good water quality in Pleasant Lake.

2010 Summary
• Current water quality is good in Pleasant Lake as phosphorus concentrations and secchi depths have met TMDL goals since 1993.
• The 2010 chlorophyll-a summer average concentration was higher than normal based on one extremely high concentration from a September 21 sample event. Concentrations from all other monitoring events in 2010 were near the long term average concentration for Pleasant Lake. (The average chlorophyll-a concentration without the September value was 12 ug/L.)

Water Quality Improvement Activities
• Good land management practices adjacent to the lakeshore, the upstream watershed, and in the City of Annandale will help to maintain the good water quality in Pleasant Lake.

2010 Summary
• Current water quality is good in Pleasant Lake as phosphorus concentrations and secchi depths have met TMDL goals since 1993.
• The 2010 chlorophyll-a summer average concentration was higher than normal based on one extremely high concentration from a September 21 sample event. Concentrations from all other monitoring events in 2010 were near the long term average concentration for Pleasant Lake. (The average chlorophyll-a concentration without the September value was 12 ug/L.)

Water Quality Improvement Activities
• Good land management practices adjacent to the lakeshore, the upstream watershed, and in the City of Annandale will help to maintain the good water quality in Pleasant Lake.
2010 Scott Lake Lake Report Card

Lake Data
- Surface Area: 80 Acres
- Maximum Depth: 23 Feet
- Subwatershed Area: 51,000 acres

Tributary Sub watershed (shaded)

Scott Lake Annual Phosphorus Budget

Scott Lake Historical Summer Mean Total Phosphorus

Scott Lake 2010 Phosphorus Concentrations

Scott Lake Lake Report Card

Lake Monitoring Location
- Inflow
- Outflow

Lake Data

Surface Area: 80 Acres
Maximum Depth: 23 Feet
Subwatershed Area: 51,000 acres

Tributary Sub watershed (shaded)

Scott Lake Annual Phosphorus Budget

Direct Watershed: 2 lbs
Goal: 85 lbs
Reduction: 26 lbs

Upstream Lakes: 21,216 lbs
Goal: 2,068 lbs
Reduction: 14,148 lbs

Septic Systems: 0 lbs
Goal: 0 lbs
Reduction: 0 lbs

Internal: 59 lbs
Goal: 59 lbs

Atmospheric + Groundwater, 157 lbs
Goal: 197 lbs

Scott Lake 2010 Phosphorus Concentrations

Surface TP
Surface Ortho-P
Bottom TP
Bottom Ortho-P

Scott Lake Historical Summer Mean Total Phosphorus

Summer Mean Total Phosphorus Concentration
TMDL Goal TP Concentration: 40 ug/L
### Scott Lake 2010 Lake Report Card

**MPCA Standards for Deep Lakes in the North Central Hardwood Forest:**

- Total Phosphorus (TP): \( \leq 40 \, \text{ug/L} \)
- Chlorophyll-a: \( \leq 14 \, \text{ug/L} \)
- Secchi Depth: \( \geq 1.4 \, \text{meter} \)

#### Scott Lake Summer Mean Chlorophyll-a

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#### Scott Lake Historical Summer Mean Secchi Depth

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### 2010 Summary

- Water quality has improved since the 1980s in Scott Lake, as a decreasing trend in summer average phosphorus concentrations has been observed, correlating strongly with a decrease in total phosphorus loads in the Clearwater River.
- TP, chlorophyll-a, and Secchi depth measurements did not meet TMDL goals in 2010 but were similar to concentrations seen in recent years.
- Water quality in Scott Lake is dominated by the inflow from Lake Betsy. However, analysis of phosphorus released from the lake’s sediments and associated quantification of internal loading in 2010 indicate that internal loading may represent a significant source of phosphorus to the lake as well.

### TMDL Activities

- Reducing phosphorus loads from upstream lakes and the direct tributary watershed will have the greatest impact on improving water quality in Scott Lake. Controlling loads in Lake Betsy is the key to improving water quality in Scott Lake.
- Phosphorus reduction strategies including BMPs, hypolimnetic withdrawal, Kingston Wetland restoration, targeted soil testing and GPS fertilizer application, and the construction of sedimentation ponds are identified by the TMDL Implementation Plan for implementation in upstream watersheds.
- Sediment samples were collected and analyzed for phosphorus release in 2010 in order to better quantify internal nutrient loading in the lake.
2010 Swartout Lake Report Card

Lake Data

- Surface Area: 296 Acres
- Maximum Depth: 12 Feet
- Subwatershed Area: 5,551 acres

Tributary Sub watershed (shaded)

Swartout Lake Annual Phosphorus Budget

- Direct Watershed: 101 lbs
  - Goal: 300 lbs
  - Reduction: 71 lbs
- Upstream Lakes: 533 lbs
  - Goal: 20 lbs
  - Reduction: 41 lbs
- Atmospheric + Groundwater: 71 lbs
  - Goal: 71 lbs
- Septic Systems: 34 lbs
  - Goal: 0 lbs
  - Reduction: 34 lbs
- Internal: 633 lbs
  - Goal: 314 lbs
  - Reduction: 60 lbs

Total Annual Phosphorus Budget:
- 7,982 lbs
- Goal: 804 lbs
- Reduction: 7,178 lbs

Swartout Lake 2010 Phosphorus Concentrations

Swartout Lake Historical Summer Mean Total Phosphorus

- 1994: 370 ug/L
- 1996: 278 ug/L
- 1998: 354 ug/L
- 2000: 330 ug/L
- 2002: 421 ug/L
- 2004: 401 ug/L
- 2006: 372 ug/L
- 2008: 262 ug/L
- 2010: 310 ug/L

Summer Mean Total Phosphorus Concentration

TMDL Goal TP Concentration:
- 60 ug/L

Appendix C

Clearwater River Watershed District

Swartout Lake

Wenck Associates, Inc. 1800 Pioneer Creek Center Environmental Engineers Maple Plain, MN 55359

January 2011
Swartout Lake

2010 Lake Report Card

MPCA Standards for Shallow Lakes in the North Central Hardwood Forest:
Total Phosphorus (TP): \( \leq 60 \text{ ug/L} \)
Chlorophyll-a: \( \leq 20 \text{ ug/L} \)
Secchi Depth: \( \geq 1.0 \text{ meter} \)

2010 Summary
- While TP and chlorophyll-a concentrations do not meet TMDL goals, concentrations were lower than in recent years in 2010.
- Water clarity improved drastically in Swartout Lake due to an extensive winter fish kill in 2010.
- An aquatic vegetation inventory conducted in August 2010 found submergent vegetation growing at nearly half of the sample points around the lake. For comparison, in 2005 a survey found no vegetation growing at any of the sample points.
- Internal loads are the major source of nutrients to the lake.

TMDL Activities
- Swartout Lake receives significant nutrient loads from upstream lakes Albion and Henshaw. A reduction in these external loads as well as a significant reduction in internal nutrient cycling will be required to meet TMDL goals in Swartout Lake.
- Rough fish migration control and removal is an important element of lake management. Fish barriers have been installed on tributary streams to inhibit carp from reaching spawning wetlands. Rough fish harvest has been conducted during the winter as well.
Lake Data

- **Surface Area:** 93 Acres
- **Maximum Depth:** 35 Feet
- **Subwatershed Area:** 4,741 acres

**2010 Union Lake Report Card**

**Lake Union 2010 Phosphorus Concentrations**

- Surface TP: 82, 27, 19, 19, 68
- Surface Ortho-P: 58, 58, 58, 58, 58
- Bottom TP: 43, 43, 43, 43, 43
- Bottom Ortho-P: 31, 31, 31, 31, 31

**Union Lake Annual Phosphorus Budget**

- **Direct Watershed:**
  - Total Annual Phosphorus Budget: 770 lbs
  - Goal: 572 lbs
  - Reduction: 198 lbs

- **Upstream Lakes:**
  - Atmospheric + Groundwater: 170 lbs
  - Goal: 170 lbs
  - Reduction: 0 lbs

- **Septic Systems:**
  - 21 lbs
  - Goal: 0 lbs
  - Reduction: 21 lbs

- **Atmospheric + Groundwater:**
  - 170 lbs
  - Goal: 170 lbs
  - Reduction: 0 lbs

- **Internal:**
  - 74 lbs
  - Goal: 74 lbs
  - Reduction: 0 lbs

**Total Annual Phosphorus Budget:**

- **770 lbs**
- **Goal:** 572 lbs
- **Reduction:** 198 lbs

**Union Lake Historical Summer Mean Total Phosphorus**

- **Summer Mean Total Phosphorus Concentration**

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**TMDL Goal TP Concentration:** 40 ug/L

**Appendix C**
Union Lake Historical Summer Mean Chlorophyll-a

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TMDL Goal Chlorophyll-a Concentration: 14 ug/L

Union Lake Historical Summer Mean Secchi Depth

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Secchi Depth TMDL Goal: >1.4 m

2010 Summary

- Water quality in Union Lake is relatively good in comparison to Scott Lake downstream, which is primarily due to the small tributary watershed.
- While TMDL goals for TP, chlorophyll-a, and Secchi depth have been met in recent years for the lake, goals were not met in 2010.
- Overall, in-lake phosphorus concentrations have declined since 2002.

TMDL Activities

- Watershed loads appear to be the only reduction necessary for Union Lake to meet its water quality goals.
- Reducing phosphorus loads from upstream lakes and the direct tributary watershed will have the greatest impact on improving water quality in Union Lake.
- Phosphorus reduction strategies including BMPs, hypolimnetic withdrawal, targeted soil testing, and GPS fertilizer application, and the construction of sedimentation ponds are identified by the TMDL Implementation Plan for implementation in upstream watersheds.
Appendix D

Citizen Precipitation Records
Appendix D
Figure 1
Clearwater River Watershed District
2010 Annual Report

St. Cloud

Watkins

Annandale/Corrina

Kimball

T:\0002\145\Precip_10.xls\summary10
**Name:** Gary Klein  
**Address:** 310 Meeke Ave S  
**County:** Meeke  
**Township:** Meeke  
**Telephone No.:** (320) 764-2645

**MINNESOTA CLIMATOLOGICAL NETWORK**

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| Rain, Meas. Snow, etc. (_inches) | Snow (Inches & Tens) | Snow On Ground (Inches) | 24-HOUR AMOUNTS | Remarks: Give times and comments about events. (Temperature and Phenology items are very useful.) | Gauge Type (Check One): | Catch Opening Diameter/Size (Inches) | Maximum Catch Depth (Inches) | Board/Ruler/Post Used for Snow: | Yes | No |
|---|---|---|---|---|---|---|---|---|---|
| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
| 0.64 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| .20 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | TOTALS |

### Minnesota Climatological Network

**Watershed Management Organizations**

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<tbody>
<tr>
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#### 24-HOUR AMOUNTS

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**TOTALS** State Climatology Office, 439 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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**TOTALS** State Climatology Office, 439 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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State Climatology Office, 439 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108-6026
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**TOTALS**  State Climatology Office, 430 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
**Minnesota Climatological Network**

Name: Gary Klein  
Address: 310 Meeker Ave S, Watkins MN 55389  
County: Meeker  
Township: Forest Prairie  
Telephone: (320) 764-2645

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**TOTALS**

State Climatology Office, 439 Borlaug Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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**TOTALS**
### Minnesota Climatological Network

**Name:** VI NORTHE

**County Name:** WRIGHT

**Township Name:** FORINNE

**Address:** 9214 Kibby Ave NW Annandale MN

**Telephone No.:** 555-5678

#### 24-HOUR AMOUNTS

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State Climatology Office, 439 Borlaug Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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**TOTALS**

State Climatology Office, 439 Borlaff Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
### Minnesota Climatological Network

#### Name
Gail Schiefelbein

#### Address
35359 738 Avenue, Kumben, MN 55353

#### County Name
Mecleer

#### Township Name
Kingston Twp.

#### Telephone No.
1320, 298-8600

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#### Totals
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State Climatology Office, 439 Bortaug Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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State Climatology Office, 430 Borluff Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-6028
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**TOTALS**

Note: The document contains information about snowfall and measurements, including snow depth and gauges used for measurement. The totals of snowfall are also recorded at the end of the table.
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State Climatology Office, 439 Borlaug Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55103-6028
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State Climatology Office, 459 Bodee Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55108-2028
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**TOTALS:** 17.03
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<th>Snow On Ground (inches)</th>
<th>Remarks</th>
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State Climatology Office, 459 Borlaugh Hall, University of Minnesota, 1991 Upper Buford Circle, St. Paul, MN 55109-8028
Appendix E

Secchi Data from Citizen’s Lake Monitoring Program
Appendix E

Secchi Data from Citizen's Lake Monitoring Program

Clearwater River Watershed District
2010 Annual Report

MPCA Secchi depth standard for deep lakes in the NCHF Ecoregion: not less than 1.4 m

- Bass Caroline
- Clearwater 210
- Clearwater 211
- Clearwater 212
- Lousia 201
- Louisa 203
- Nixon
- Union
- Otter
- Clear
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10F-115</td>
<td>P06-1 Lakes</td>
<td></td>
<td>Dennis Loewen</td>
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</table>

<table>
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<th>Time Sampled</th>
<th>Date Received</th>
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## Parameter (Method, Reporting Limit)  

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<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus</td>
<td>EPA 365.3</td>
<td>0.005 mg/L</td>
<td>7/1/2010</td>
<td>0.484 mg/L</td>
<td></td>
<td>A</td>
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<tr>
<td>Orthophosphate</td>
<td>EPA 365.1</td>
<td>0.01 mg/L</td>
<td>6/17/2010 1150</td>
<td>0.0175 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A</td>
<td>SM 10260 H</td>
<td>1 µg/L</td>
<td>7/2/2010</td>
<td>8 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab #: 027-035-135

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

Lab File Number  Project Name  Sample Location  Sampled By
W10F-116              P06-1 Lakes       LAL/Bottom     Dennis Loewen

Date Sampled  Time Sampled  Date Received  Time Received  Temp

PARAMETER (METHOD, REPORTING LIMIT) DATE & TIME ANALYZED RESULTS BY BOTTLE
Total Phosphorus (EPA 365.3, 0.005 mg/L) 6/30/2010 0.182 mg/L A
Orthophosphate (EPA 365.1, 0.01 mg/L) 6/17/2010 1303 0.0101 mg/L EM B
Total Iron (EPA 6010, 50 µg/L) 6/29/2010 1731 150 µg/L C

Notes:
Total Phosphorus done by MN Lab # 027-035-135
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
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<th>Project Name</th>
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<tbody>
<tr>
<td>W10G-054</td>
<td>435</td>
<td>Alb Top</td>
<td>Dennis Loewen</td>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>7/7/2010</td>
<td>7:40 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.228 mg/L</td>
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<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>1653</td>
<td>0.0287 mg/L</td>
<td>EM</td>
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<tr>
<td>Chlorophyll A</td>
<td>7/21/2010</td>
<td>176 μg/L</td>
<td>C</td>
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**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margana, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110  
12/8/10
# NON-POTABLE WATER TEST REPORT

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<th>Results</th>
<th>BY</th>
<th>Bottle</th>
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<td>W10G-055</td>
<td>435</td>
<td>Albl Bottom</td>
<td>Dennis Loewen</td>
<td>7/7/2010</td>
<td>7:40 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.274 mg/L</td>
<td>A</td>
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<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>0.036 mg/L</td>
<td>EM</td>
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<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>7/26/2010</td>
<td>87.0 μg/L</td>
<td>C</td>
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Notes:
- T. Phosphorus tested by MN Lab # 027-035-135
- T Iron Tested by MN Lab # 027-053-137

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Water Laboratories Inc.

NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P. O Box 481, Annandale, MN 55302

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<tr>
<td>W10H-091</td>
<td>435</td>
<td>Alb Top</td>
<td>Dennis Loewen</td>
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Date Sampled: 8/17/2010  Time Sampled: 8:53 AM

Date Received: 8/17/2010  Time Received: 12:15 PM  Temp: 72

PARAMETER (METHOD, REPORTING LIMIT)  DATE & TIME ANALYZED  RESULTS  BY  BOTTLE

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<th>Bottle</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.307 mg/L</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010</td>
<td>0.0226 mg/L</td>
<td>EM</td>
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<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>443 µg/L</td>
<td>C</td>
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Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

NCO 12/8/10
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

Lab File Number: W10H-092
Project Name: 435
Sample Location: Alb Bottom
Sampled By: Dennis Loewen

Date Sampled: 8/17/2010
Time Sampled: 8:53 AM

Date Received: 8/17/2010
Time Received: 12:15 PM
Temp: 2

PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---------------------------------------|----------------------|--------|-----|-------|
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 8/23/2010            | 0.307 mg/L | A  |       |
Orthophosphate (EPA 365.1, 0.01 mg/L)  | 8/19/2010 0832       | 0.0246 mg/L| EM | B     |
Total Iron (EPA 6010, 50 µg/L)         | 8/27/2010 1454       | 72.7 µg/L  | C  |       |

Notes:
T. Phosphorus tested by MN Lab # 027-035-135.
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
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<th>RESULTS</th>
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<td>W101-116</td>
<td>435</td>
<td>Albion Top</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>8:59 AM</td>
<td>9/21/2010</td>
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<td>60.5</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
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<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
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<td>0.021 mg/L</td>
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<td></td>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>10/7/2010</td>
<td>88 µg/L</td>
<td>*</td>
<td>C</td>
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Notes:  
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

[signature]  
12/6/10
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-117</td>
<td>435</td>
<td>Albion Bottom</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>8:59 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
<td>68</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.156 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010</td>
<td>0.019 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/11/2010</td>
<td>83.6 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
*T. Phosphorus tested by MN Lab # 027-035-135  
**T. Iron Tested by MN Lab # 027-053-137

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

[Signature]

12/8/10
Non-Potable Water Test Report

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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<th>Time Received</th>
<th>Temp</th>
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**Parameter (Method, Reporting Limit)**

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.042 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 11:50</td>
<td>0.0114 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>7/2/2010</td>
<td>3 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: ___________
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/1/2010</td>
<td>0.469 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.418 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010 1717</td>
<td>ND μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
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**Notes:**

Total Phosphorus done by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

---

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---

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10G-060</td>
<td>435</td>
<td>Aug Top</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
<tbody>
<tr>
<td>7/7/2010</td>
<td>10:22 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
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<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/22/2010</td>
<td>0.079 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010 1653</td>
<td>0.0189 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>7/21/2010</td>
<td>66 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-061</td>
<td>435</td>
<td>Aug Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

**Date Sampled:** 7/7/2010  
**Time Sampled:** 10:22 AM  
**Date Received:** 7/7/2010  
**Time Received:** 12:57 PM  
**Temp:** 5

### PARAMETER (METHOD, REPORTING LIMIT)

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/22/2010</td>
<td>0.105 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>0.443 mg/L</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>7/26/2010</td>
<td>128 μg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus tested by MN Lab # 027-035-135  
T Iron Tested by MN Lab # 027-053-137  

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10H-097</td>
<td>205</td>
<td>Aug Top</td>
<td>Dennis Loewen</td>
<td>8/17/2010</td>
<td>11:05 AM</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.517 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.020 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>9/7/2010</td>
<td>15 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135
- Run again on 9/16/10 (pass holding time) to verify data.

---

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---

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027 141-110

---

[Signature]

Nco 12/18/10
## Water Laboratories Inc.

**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10H-098</td>
<td>205</td>
<td>Aug Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

**Date Sampled:** 8/17/2010  **Time Sampled:** 11:13 AM

**Date Received:** 8/17/2010  **Time Received:** 12:15 PM

### PARAMETER (METHOD, REPORTING LIMIT)

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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.029 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.481 mg/L *</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>8/27/2010 1510</td>
<td>ND µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137
- *Run again on 9/16/10 (pass holding time) to verify data.

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Report Submitted By: Ethel Margaria, Laboratory Director

Minnesota State Laboratory ID: 027-141-110
**Water Laboratories Inc.**

**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/30/2010</td>
<td>0.042 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>10/7/2010</td>
<td>18 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135.

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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## PARAMETER (METHOD, REPORTING LIMIT)

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/30/2010</td>
<td>0.573 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>0.538 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/11/2010 1156</td>
<td>64.4 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* T. Phosphorus tested by MN Lab # 027-035-135  
** T. Iron Tested by MN Lab # 027-053-137

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Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Date Sampled</th>
<th>Date Received</th>
<th>Time Sampled</th>
<th>Time Received</th>
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<tbody>
<tr>
<td>W10F-129</td>
<td>205</td>
<td>6/20/2010</td>
<td>6/21/2010</td>
<td>1:50 PM</td>
<td>8:30 AM</td>
</tr>
</tbody>
</table>

**Sample Location:** LBe Top

**Sampled By:** Betsy

**Sampled By:** Dennis Loewen

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.163 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/22/2010</td>
<td>1031</td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>7/2/2010</td>
<td>38 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-130</td>
<td>205</td>
<td>LBe Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>6/20/2010</td>
<td>1:55 PM</td>
<td>6/21/2010</td>
<td>8:30 AM</td>
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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.924 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/22/2010</td>
<td>0.607 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>6/29/2010</td>
<td>811 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Total Phosphorus done by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-162</td>
<td>205</td>
<td>BetsyTop</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21/2010</td>
<td>8:23 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td>5</td>
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<tr>
<th>PARAMETERS, METHOD, REPORTING LIMIT</th>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.158 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 09:01</td>
<td>0.101 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10290 H, 1ug/L)</td>
<td>8/11/2010</td>
<td>27 ug/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-163</td>
<td>205</td>
<td>Betsy Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21/2010</td>
<td>8:23 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td></td>
</tr>
</tbody>
</table>

**Parameters, Method, Reporting Limit**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>1.80 mg/L</td>
<td>**</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 09:01</td>
<td>1.49 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010 16:41</td>
<td>875 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus done by MN Lab # 027-035-135  
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

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P.O Box 481, Annandale, MN 55302

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-162</td>
<td>205</td>
<td>BelsyTop</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
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<table>
<thead>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tr>
<td>7/21/2010</td>
<td>8:23 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td>5</td>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.158 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.101 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>8/11/2010</td>
<td>27 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<thead>
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<tr>
<td>W10G-163</td>
<td>205</td>
<td>Belys Bottom</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
<tbody>
<tr>
<td>7/21/2010</td>
<td>8:23 AM</td>
<td>7/21/2010</td>
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**PARAMETERS, METHOD, REPORTING LIMIT**

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<tbody>
<tr>
<td>Total Phosphorus</td>
<td>EPA 365.3, 0.005 mg/L</td>
<td></td>
<td>7/27/2010</td>
<td>1.80 mg/L</td>
<td>:</td>
<td>A</td>
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<tr>
<td>Orthophosphate</td>
<td>EPA 365.1, 0.01 mg/L</td>
<td></td>
<td>7/22/2010</td>
<td>1.49 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron</td>
<td>EPA 200.7, 50 μg/L</td>
<td></td>
<td>8/2/2010</td>
<td>875 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory I.D. 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

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<thead>
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<th>Lab File Number</th>
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<th>Sample Location</th>
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<td>W10H-133</td>
<td>205</td>
<td>Betsy Top</td>
<td>Dennis Loewen</td>
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<table>
<thead>
<tr>
<th>Date Sampled</th>
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<th>Date Received</th>
<th>Time Received</th>
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<tbody>
<tr>
<td>8/24/2010</td>
<td>8:16 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.095 mg/L)</td>
<td>9/2/2010</td>
<td>0.214mg/L</td>
<td>A</td>
<td></td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>1059</td>
<td>0.179 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td></td>
<td>41 µg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110-
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10H-134</td>
<td>205</td>
<td>Betsy Bottom</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
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<td>8:16 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>3.0 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>2.73 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>8/27/2010</td>
<td>464 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
T. Phosphorus tested by MN Lab # 027-035-135
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-150</td>
<td>205</td>
<td>Betsy Top</td>
<td>Dennis Loewen</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Results</th>
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</thead>
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<tr>
<td>9/27/2010</td>
<td>8:56 AM</td>
<td>9/27/2010</td>
<td>1:10 PM</td>
<td></td>
</tr>
</tbody>
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**PARAMETER (METHOD, REPORTING LIMIT)**

<table>
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<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.190 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.146 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>10/7/2010</td>
<td>20 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.194 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 0958</td>
<td>0.148 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/11/2010 1214</td>
<td>223 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:

* T. Phosphorus tested by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-161</td>
<td>205 LAKES</td>
<td>LCo Top</td>
<td>Dennis Loewen</td>
<td>6/22/2010</td>
<td>12:50 PM</td>
<td>6/22/2010</td>
<td>3:00 PM</td>
<td>8</td>
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## PARAMETER (METHOD, REPORTING LIMIT)  

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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.028 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>7/21/2010</td>
<td>7 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-162</td>
<td>205 LAKES</td>
<td>LCa Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

Date Sampled: 6/22/2010  Time Sampled: 12:55 PM  Date Received: 6/22/2010  Time Received: 3:00 PM  Temp: 8

**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

<table>
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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>1.60 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>1.38 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010</td>
<td>144 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
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Notes:

Total Phosphorus done by MN Lab # 027-035-135
T. Iron Tested by MN Lab # 027-053-137

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# Non-Potable Water Test Report

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P.O Box 481, Annandale, MN 55302

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-168</td>
<td>205</td>
<td>Caroline Top</td>
<td>Dennis Loewen</td>
</tr>
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<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21/2010</td>
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<td>2:15 PM</td>
<td></td>
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## Parameters, Method, Reporting Limit

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Method</th>
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<tr>
<td>Total Phosphorus (EPA 365.3)</td>
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<td>7/27/2010</td>
<td>0.055 mg/L</td>
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<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1)</td>
<td></td>
<td>7/22/2010 0901</td>
<td>0.0172 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H)</td>
<td></td>
<td>8/11/2010</td>
<td>14 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

Lab File Number: W10G-169
Project Name: 205
Sample Location: Caroline Bottom
Sampled By: Dennis Loewen

Date Sampled: 7/21/2010
Time Sampled: 11:46 AM
Date Received: 7/21/2010
Time Received: 2:15 PM
Temp: 5

PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
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<th>RESULTS</th>
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<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>1.51 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010, 0901</td>
<td>1.35 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010, 1655</td>
<td>93.0 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-168</td>
<td>205</td>
<td>Caroline Top</td>
<td>Dennis Loewen</td>
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<th>Time Sampled</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.055 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0172 mg/L</td>
<td>EM B</td>
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<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>8/11/2010</td>
<td>14 μg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: [Signature]
Ethel Margana, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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<td>W1OG-169</td>
<td>205</td>
<td>Caroline Bottom</td>
<td>Dennis Loewen</td>
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<th>Results</th>
<th>By</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>1.51 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>1.35 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 260.7, 50 µg/L)</td>
<td>8/2/2010 1655</td>
<td>93.0 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus done by MN Lab # 027-035-135  
** T. Iron Tested by MN Lab # 027-053-137

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NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

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<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10H-143</td>
<td>205</td>
<td>Caroline Top</td>
<td>Dennis Loewen</td>
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<tr>
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<th>Date Received</th>
<th>Time Received</th>
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<td>11:16 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td>2</td>
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<tr>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>0.061 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>89 µg/L</td>
<td>C</td>
<td></td>
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</table>

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

NCO 12/6/10
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<thead>
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<tr>
<td>W10H-144</td>
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<td>Dennis Loewen</td>
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<th>Date Received</th>
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</thead>
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<tr>
<td>8/24/2010</td>
<td>11:16 AM</td>
<td>8/24/2010</td>
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**PARAMETER (METHOD, REPORTING LIMIT)**  

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<th>RESULTS</th>
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<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>1.47 mg/L</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>1.39 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>8/27/2010</td>
<td>105 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus tested by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

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<tr>
<th>Lab File Number</th>
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<th>Sample Location</th>
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<tbody>
<tr>
<td>W101-158</td>
<td>205</td>
<td>Caroline Top</td>
<td>Dennis Loewen</td>
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<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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### PARAMETER (METHOD, REPORTING LIMIT)  

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<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.129 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.034 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>10/7/2010</td>
<td>48 µg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

---

**Notes:**  
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135.

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Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W101-159</td>
<td>205</td>
<td>Caroline Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/7/2010</td>
<td>2.00 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010</td>
<td>1.88 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/9/2010</td>
<td>223 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:  
*T. Phosphorus tested by MN Lab # 027-035-135  
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>W10F-111</td>
<td>P06-1 Lakes</td>
<td>LCE Top Cedar</td>
<td>Dennis Loewen</td>
<td>6/18/2010</td>
<td>7:10 AM</td>
<td>6/17/2010</td>
<td>7:15 AM</td>
<td>7</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.040 mg/L</td>
<td>A</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>7/2/2010</td>
<td>10 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

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<td>W10F-112</td>
<td>P06-1 Lakes</td>
<td>LCE Bottom</td>
<td>Dennis Loewen</td>
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<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.144 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010, 1150</td>
<td>0.0935 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010, 1722</td>
<td>ND μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- Total Phosphorus done by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

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<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-050</td>
<td>435</td>
<td>Cedar Top</td>
<td>Dennis Loewen</td>
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<td>7/7/2010</td>
<td>6:15 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.024 mg/L</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010, 153</td>
<td>0.024 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>7/21/2010</td>
<td>3 µg/L</td>
<td>C</td>
<td></td>
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</tbody>
</table>

**Notes:**

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

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<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-051</td>
<td>435</td>
<td>Cedar Bottom</td>
<td>Dennis Loewen</td>
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<tr>
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<td>6:15 AM</td>
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<td>12:57 PM</td>
<td>5</td>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.173 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>1653</td>
<td>0.160 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Total Iron (EPA 8010, 50 mg/L)</td>
<td>7/26/2010</td>
<td>1423</td>
<td>ND μg/L</td>
<td>C</td>
</tr>
</tbody>
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**Notes:**

T. Phosphorus tested by MN Lab # 027-035-135
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141 110

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### NON-POTABLE WATER TEST REPORT

**Lab File Number:** W10H-087  
**Project Name:** 435  
**Sample Location:** Cedar Top  
**Sampled By:** Dennis Loewen  
**Date Sampled:** 8/17/2010  
**Time Sampled:** 7:14 AM  
**Date Received:** 8/17/2010  
**Time Received:** 12:15 PM  
**Temp:** 2

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<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.017 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.018 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>11 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**Lab File Number**
W10H-088

**Project Name**
435

**Sample Location**
Cedar Bottom

**Sampled By**
Dennis Loewen

**Date Sampled**
8/17/2010

**Time Sampled**
7:24 AM

**Date Received**
8/17/2010

**Time Received**
12:15 PM

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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.072 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.215 mg/L*</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>8/27/2010 1437</td>
<td>ND µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

T. Phosphorus tested by MN Lab # 027-035-135

T. Iron Tested by MN Lab # 027-053-137

*Run again on 9/16/10 (pass holding time) to verify data.

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

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<thead>
<tr>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W101-110</td>
<td>435</td>
<td>Cedar Top</td>
<td>Dennis Loewen</td>
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<th>Date Received</th>
<th>Time Received</th>
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<tbody>
<tr>
<td>9/21/2010</td>
<td>7:30 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.024 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>10/7/2010</td>
<td>10 µg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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<tr>
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<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W101-111</td>
<td>435</td>
<td>Cedar Bottom</td>
<td>Dennis Loawen</td>
</tr>
</tbody>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/21/2010</td>
<td>7:30 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
<td>6</td>
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### Parameter (Method, Reporting Limit)

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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.280 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>0.264 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>10/11/2010 1124</td>
<td>ND µg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:

* T. Phosphorus tested by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10F-127</td>
<td>205</td>
<td>LCL Top</td>
<td>Dennis Loewen</td>
<td>6/20/2010</td>
<td>12:46 PM</td>
<td>6/21/2010</td>
<td>8:30 AM</td>
<td>4</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>0.230 mg/L</td>
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<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>0.014 mg/L</td>
<td>EM</td>
<td>B</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>173 μg/L</td>
<td>C</td>
<td></td>
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</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

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# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

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<tr>
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<tr>
<td>W10F-128</td>
<td>205</td>
<td>LCL Bottom</td>
<td>Dennis Loewen</td>
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</table>

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<td>6/20/2010</td>
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<td>6/21/2010</td>
<td>8:30 AM</td>
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<th>RESULTS</th>
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<th>BOTTLE</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.035 mg/L)</td>
<td>6/30/2010</td>
<td>0.175 mg/L</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/22/2010 1031</td>
<td>0.271 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010</td>
<td>140 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135
T. Iron tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10G-160</td>
<td>205</td>
<td>Clear Top</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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PARAMETERS, METHOD, REPORTING LIMIT

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>EPA 365.3</td>
<td>0.025 mg/L</td>
<td>7/29/2010</td>
<td>0.146 mg/L</td>
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<tr>
<td>Orthophosphate</td>
<td>EPA 365.1</td>
<td>0.01 mg/L</td>
<td>7/22/2010</td>
<td>0.0268 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A</td>
<td>SM 10200</td>
<td>1.0 µg/L</td>
<td>8/11/2010</td>
<td>103 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-161</td>
<td>205</td>
<td>Clear Bottom</td>
<td>Dennis Loewen</td>
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<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.287 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 355.1, 0.01 mg/L)</td>
<td>7/22/2010</td>
<td>0.138 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 µg/L)</td>
<td>8/2/2010</td>
<td>195 µg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:

* Total Phosphorus done by MN Lab # 027-035-135  
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
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<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-160</td>
<td>205</td>
<td>Clear Top</td>
<td>Dennis Loewen</td>
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<table>
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<th>Results</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.148 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0268 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10290 H, 1μg/L)</td>
<td>8/11/2010</td>
<td>103 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-161</td>
<td>205</td>
<td>Clear Bottom</td>
<td>Dennis Loewen</td>
</tr>
<tr>
<td>Date Sampled</td>
<td>Time Sampled</td>
<td>Date Received</td>
<td>Temp</td>
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<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.287 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010</td>
<td>0.138 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010</td>
<td>195 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135  
** T. Iron Tested by MN Lab # 027-053-137

---

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---

Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

Lab File Number: W10H-131
Project Name: 205

Sample Location: Clearwater Top
Sampled By: Dennis Loewen

Date Sampled: 8/24/2010
Time Sampled: 9:13 AM

Date Received: 8/24/2010
Time Received: 12:30 PM
Temp: 2

### PARAMETER (METHOD, REPORTING LIMIT)

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>0.193 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>0.107 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>137 µg/L</td>
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<td>C</td>
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</tbody>
</table>

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margoria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**Sample Location:** Clearwater Bottom  
**Sampled By:** Dennis Loewen  
**Date Received:** 8/24/2010  
**Time Received:** 12:30 PM  
**Temp:** 2°C

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>0.197 mg/L</td>
<td>A</td>
<td></td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>0.159 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>8/27/2010</td>
<td>95.8 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135  
- T. Iron Tested by MN Lab # 027-053-137

---

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---

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-152</td>
<td>205</td>
<td>Clear Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
</table>

### PARAMETER (METHOD, REPORTING LIMIT) - DATE & TIME ANALYZED - RESULTS - BY BOTTLE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.272 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.045 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>10/7/2010</td>
<td>200 µg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.292 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010</td>
<td>0.045 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>10/11/2010</td>
<td>308 µg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
*T. Phosphorus tested by MN Lab # 027-035-135
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-116
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Results</th>
<th>Parameter</th>
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</table>

**PARAMETER (METHOD, REPORTING LIMIT)**  

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.039 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.0244 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>7/2/2010</td>
<td>99 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.144 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010  1150</td>
<td>0.0950 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010  1712</td>
<td>57.7 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

---

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---

*Report Submitted By:*  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-062</td>
<td>435</td>
<td>CLW Top</td>
<td>Dennis Loewen</td>
<td>7/7/2010</td>
<td>10:00 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
</tr>
</tbody>
</table>

## PARAMETER (METHOD, REPORTING LIMIT)  

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/22/2010</td>
<td>0.027 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010 1601</td>
<td>0.0123 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>7/21/2010</td>
<td>10 μg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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---

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**Lab File Number**: W10G-063  
**Project Name**: 435  
**Sample Location**: CLW Bottom  
**Sampled By**: Dennis Loewen

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/7/2010</td>
<td>10:00 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>0.070 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>0.0499 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010. 50 μg/L)</td>
<td>ND μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
</table>

PARAMETER (METHOD, REPORTING LIMIT)  DATE & TIME ANALYZED  RESULTS  BY  BOTTLE
Total Phosphorus (EPA 365.3, 0.005 mg/L)  8/23/2010  0.021 mg/L  A
Orthophosphate (EPA 365.1, 0.01 mg/L)  8/19/2010  0.0204 mg/L  EM  B
Chlorophyll A (SM 10200 H, 1μg/L)  9/7/2010  8 μg/L  C

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-119
## NON-POTABLE WATER TEST REPORT

**Lab File Number**: W10H-096  
**Project Name**: 205  
**Sample Location**: Clearwater Bottom  
**Sampled By**: Dennis Loewen

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter Method, Reporting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/17/2010</td>
<td>10:46 AM</td>
<td>8/17/2010</td>
<td>12:15 PM</td>
<td>2</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/23/2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/19/2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8/27/2010</td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135  
- T. Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**Water Laboratories Inc.**

**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-122</td>
<td>205</td>
<td>Clearwater West Top</td>
<td>Dennis Loewen</td>
</tr>
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</table>

<table>
<thead>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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**PARAMETER (METHOD, REPORTING LIMIT)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/30/2010</td>
<td>0.032 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>10/7/2010</td>
<td>20 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes.

*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: [Signature]  
Elhel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-123</td>
<td>205</td>
<td>Clearwater West Bottom</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>10:56 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
<td>60</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/30/2010</td>
<td>0.039 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>0.031 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/11/2010 1151</td>
<td>82.1 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
*T. Phosphorus tested by MN Lab # 027-035-135  
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
Non-Potable Water Test Report

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-113</td>
<td>P06-1 Lakes</td>
<td>LHe Top Henshaw</td>
<td>Dennis Loewen</td>
</tr>
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<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/16/2010</td>
<td>8:10 AM</td>
<td>6/17/2010</td>
<td>7:15 AM</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.086 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.0187 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>7/2/2010</td>
<td>59 μg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**Lab File Number**: W10F-114  
**Project Name**: P06-1 Lakes  
**Sample Location**: LHe Bottom  
**Sampled By**: Dennis Loewen

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/16/2010</td>
<td>8:12 AM</td>
<td>6/17/2010</td>
<td>7:15 AM</td>
<td>7</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
</tr>
</tbody>
</table>

### Results

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>6/30/2010</td>
<td>0.036 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>6/17/2010 1150</td>
<td>0.0176 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron</td>
<td>6/29/2010 1726</td>
<td>69.9 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

---

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---

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**Lab File Number**

<table>
<thead>
<tr>
<th>W10G-052</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>435</td>
<td>Hen top</td>
<td>Dennis Loewen</td>
<td></td>
</tr>
</tbody>
</table>

**Date Sampled**

<table>
<thead>
<tr>
<th>7/7/2010</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7:10 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
</tr>
</tbody>
</table>

**PARAMETER (METHOD, REPORTING LIMIT)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.074 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>1653</td>
<td>0.022 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>7/21/2010</td>
<td>56 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-053</td>
<td>435</td>
<td>Hen Bottom</td>
<td>Dennis Loewan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/7/2010</td>
<td>7:10 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
</tr>
</tbody>
</table>

**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

- **Total Phosphorus (EPA 365.3, 0.005 mg/L)**
  - Date & Time Analyzed: 7/20/2010
  - Results: 0.107 mg/L
  - By: A
  - Bottle: C

- **Orthophosphate (EPA 365.1, 0.01 mg/L)**
  - Date & Time Analyzed: 7/7/2010
  - Results: 0.0270 mg/L
  - By: FM
  - Bottle: B

- **Total Iron (EPA 6010, 50 μg/L)**
  - Date & Time Analyzed: 7/26/2010
  - Results: 157 μg/L
  - By: C

Notes:

- T. Phosphorus tested by MN Lab # 027-035-135
- T Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**Lab File Number**: W10H-089  
**Project Name**: 435  
**Sample Location**: Hen Top  
**Sampled By**: Dennis Loewen  
**Date Sampled**: 8/17/2010  
**Time Sampled**: 8:09 AM  
**Date Received**: 8/17/2010  
**Time Received**: 12:15 PM  
**Temp**: 2

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.141 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010</td>
<td>0.0235 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>9/7/2010</td>
<td>124 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margara, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10H-090</td>
<td>435</td>
<td>Hen Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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</thead>
<tbody>
<tr>
<td>8/17/2010</td>
<td>8:09 AM</td>
<td>8/17/2010</td>
<td>12:15 PM</td>
<td>72</td>
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</tbody>
</table>

<table>
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<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.132 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.0197 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>8/27/2010 1442</td>
<td>183 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-114</td>
<td>435</td>
<td>Henshaw Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

**Date Sampled:** 9/21/2010  
**Time Sampled:** 8:20 AM  
**Date Received:** 9/21/2010  
**Time Received:** 1:25 PM

**Temp:** 61°F

<table>
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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.109 mg/L</td>
<td>·</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>0.022 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>10/7/2010</td>
<td>214 μg/L</td>
<td>·</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
</table>

### PARAMETER (METHOD, REPORTING LIMIT)  

<table>
<thead>
<tr>
<th>Parameter Description</th>
<th>Method</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>EPA 365.3</td>
<td>0.005 mg/L</td>
<td>9/28/2010</td>
<td>0.106 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>EPA 365.1</td>
<td>0.01 mg/L</td>
<td>9/22/2010</td>
<td>0.021 mg/L</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Total Iron</td>
<td>EPA 6010</td>
<td>50 µg/L</td>
<td>10/11/2010</td>
<td>130 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
*T. Phosphorus tested by MN Lab # 027-035-135  
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-119

12/6/10

NCO
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-157</td>
<td>205 LAKES</td>
<td>LLo Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

- **Date Sampled**: 6/22/2010  
- **Time Sampled**: 12:01 AM  
- **Date Received**: 6/22/2010  
- **Time Received**: 3:00 PM  
- **Temp**: 8

## PARAMETER (METHOD, REPORTING LIMIT)  
**DATE & TIME ANALYZED**  
**RESULTS**  
**BY**  
**BOTTLE**

- **Total Phosphorus (EPA 365.3, 0.005 mg/L)**  
  - **Date & Time Analyzed**: 6/30/2010  
  - **Results**: 0.078 mg/L  
  - **By**: EM  
  - **Bottle**: A

- **Orthophosphate (EPA 365.1, 0.01 mg/L)**  
  - **Date & Time Analyzed**: 6/24/2010  
  - **Results**: 0.031 mg/L  
  - **By**: EM  
  - **Bottle**: B

- **Chlorophyll A (SM 10200 H, 1µg/L)**  
  - **Date & Time Analyzed**: 7/21/2010  
  - **Results**: 41 µg/L  
  - **By**: EM  
  - **Bottle**: C

---

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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---

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-158</td>
<td>205 LAKES</td>
<td>LLo Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
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<tr>
<td>6/22/2010</td>
<td>12:06 PM</td>
<td>6/22/2010</td>
<td>3:00 PM</td>
<td>8</td>
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</tbody>
</table>

## Parameter (Method, Reporting Limit)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>1.17 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>1131</td>
<td>0.909 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010</td>
<td>1811</td>
<td>ND μg/L</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:

- Total Phosphorus done by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-164</td>
<td>205</td>
<td>Louisa Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21/2010</td>
<td>11:04 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td>75</td>
</tr>
</tbody>
</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.074 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0182 mg/L</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 ug/L)</td>
<td>8/11/2010</td>
<td>30 ug/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-165</td>
<td>205</td>
<td>Louisa Bottom</td>
<td>Dennis Loewen</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tbody>
<tr>
<td>7/21/2010</td>
<td>11:04 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td>75</td>
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PARAMETERS, METHOD, REPORTING LIMIT

<table>
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<tr>
<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>1.29 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>1.19 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010 1646</td>
<td>155 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

AD
8/25/10
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-164</td>
<td>205</td>
<td>Louisa Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PARAMETERS, METHOD, REPORTING LIMIT</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.074 mg/L</td>
<td>:</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0182 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>8/11/2010</td>
<td>30 µg/L</td>
<td>:</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
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<tbody>
<tr>
<td>W10G-165</td>
<td>205</td>
<td>Louisa Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>1.29 mg/L</td>
<td>·</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010</td>
<td>1.19 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010</td>
<td>155 μg/L</td>
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<td>C</td>
</tr>
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**Notes:**

* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
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<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>W10H-139</td>
<td>205</td>
<td>Louisa Top</td>
<td>Dennis Loewen</td>
<td>8/24/2010</td>
<td>10:30 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td>2</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>0.102 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>0.021 mg/L</td>
<td>EM</td>
<td>B</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>9/7/2010</td>
<td>106 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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</thead>
<tbody>
<tr>
<td>W10H-140</td>
<td>205</td>
<td>Louisa Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
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<tbody>
<tr>
<td>8/24/2010</td>
<td>10:30 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td>2</td>
</tr>
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### PARAMETER (METHOD, REPORTING LIMIT)

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>1.21 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>1.20 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron</td>
<td>(EPA 6010, 50 µg/L)</td>
<td>8/27/2010</td>
<td>77.1 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

---

**Notes:**

- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By:  
Ethel Margana, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-154</td>
<td>205</td>
<td>Louisa Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tr>
<th>PARAMETER</th>
<th>METHOD, REPORTING LIMIT</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.166mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.090 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A</td>
<td>(SM 10200 H, 1μg/L)</td>
<td>10/7/2010</td>
<td>42 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302  

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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W101-155</td>
<td>205</td>
<td>Louisa Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
</tr>
</thead>
</table>

**Parameter (Method, Reporting Limit) | Date & Time Analyzed | Results | By | Bottle**
--- | --- | --- | --- | ---
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 10/7/2010 | 1.62 mg/L | A |
Orthophosphate (EPA 365.1, 0.01 mg/L) | 9/28/2010 | 1031 | 1.56 mg/L | EM |
Total Iron (EPA 6010, 50 μg/L) | 10/11/2010 | 1350 | 194 μg/L | C |

**Notes:**  
T. Phosphorus tested by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

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Ethel Margaria, Laboratory Director  
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# Non-Potable Water Test Report

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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-159</td>
<td>205 LAKES</td>
<td>LMa Top</td>
<td>Dennis Loewen</td>
<td>6/22/2010</td>
<td>12:22 PM</td>
<td>6/22/2010</td>
<td>3:00 PM</td>
<td>8</td>
</tr>
</tbody>
</table>

## Parameter (Method, Reporting Limit) | Date & Time Analyzed | Results | By | Bottle |
---|---|---|---|---|
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 6/30/2010 | 0.050 mg/L | EM | A |
Orthophosphate (EPA 365.1, 0.01 mg/L) | 6/24/2010 | 0.014 mg/L | B | |
Chlorophyll A (SM 10200 H, 1μg/L) | 7/21/2010 | 21 μg/L | C | |

**Notes:**
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-160</td>
<td>205 LAKES</td>
<td>LMa Bottom</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>6/22/2010</td>
<td>12:27 PM</td>
<td>6/22/2010</td>
<td>3:00 PM</td>
<td>8</td>
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## PARAMETER (METHOD, REPORTING LIMIT)  

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<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>1.09 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>6/29/2010</td>
<td>149 μg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus done by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

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NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
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<tr>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-166</td>
<td>205</td>
<td>Marie Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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PARAMETERS, METHOD, REPORTING LIMIT

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<th>Parameter</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3)</td>
<td>7/27/2010</td>
<td>0.052 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1)</td>
<td>7/22/2010 0901</td>
<td>0.0182 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H)</td>
<td>8/11/2010</td>
<td>14 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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CRWD (Wenck Associates, Inc.)
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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-167</td>
<td>205</td>
<td>Marie Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

Date Sampled: 7/21/2010  
Time Sampled: 11:28 AM  

Date Received: 7/21/2010  
Time Received: 2:15 PM  

Temp: 5

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
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<tr>
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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.621 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 09:01</td>
<td>0.544 mg/L</td>
<td>FM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200 7, 50 µg/L)</td>
<td>8/2/2010 16:51</td>
<td>110 µg/L</td>
<td>**</td>
<td>C</td>
</tr>
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Notes:

* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
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<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-166</td>
<td>205</td>
<td>Marie Top</td>
<td>Dennis Loewen</td>
</tr>
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<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tr>
<td>7/21/2010</td>
<td>11:26 AM</td>
<td>7/21/2010</td>
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**PARAMETERS, METHOD, REPORTING LIMIT**

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<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.052 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0182 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>8/11/2010</td>
<td>14 µg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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<tr>
<td>W10G-167</td>
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<td>Marie Bottom</td>
<td>Dennis Loewen</td>
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<tr>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.621 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010</td>
<td>0.544 mg/L</td>
<td>**</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010</td>
<td>110 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
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Notes:
* Total Phosphorus done by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10H-141</td>
<td>205</td>
<td>Maria Top</td>
<td>Dennis Loewen</td>
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<tr>
<td>8/24/2010</td>
<td>10:42 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
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**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

- **Total Phosphorus (EPA 365.3, 0.005 mg/L)**
  - 9/2/2010: 0.093 mg/L
  - Bottle: A

- **Orthophosphate (EPA 365.1, 0.01 mg/L)**
  - 8/25/2010: 0.0645 mg/L
  - Bottle: B

- **Chlorophyll A (SM 10200 H, 1µg/L)**
  - 9/7/2010: 139 µg/L
  - Bottle: C

**Notes:**

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**
P.O Box 481, Annandale, MN 55302

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<td>205</td>
<td>Marie Bottom</td>
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<td>10:42 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td>2</td>
</tr>
</tbody>
</table>

**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

| Total Phosphorus (EPA 365.3, 0.005 mg/L) | 9/2/2010 | 1.18 mg/L | A   |  |
| Orthophosphate (EPA 365.1, 0.01 mg/L)    | 8/25/2010 | 1059 | 1.14 mg/L | EM | B |
| Total Iron (EPA 6010, 50 μg/L)           | 8/27/2010 | 1553 | 152 μg/L | C   |  |

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

![Date]

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Water Laboratories Inc.

### NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<td>Dennis Loewen</td>
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<td>11:00 AM</td>
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### PARAMETER (METHOD, REPORTING LIMIT)  

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<th>BOTTLE</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.178 mg/L</td>
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<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.031 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 13200 H, 1 µg/L)</td>
<td>10/7/2010</td>
<td>112 µg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

**Report Submitted By:**  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/7/2010</td>
<td>1.75 mg/L</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010  1031</td>
<td>1.62 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/9/2010  0031</td>
<td>225 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* T. Phosphorus tested by MN Lab # 027-035-135
** T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/29/2010</td>
<td>0.077 mg/L</td>
<td>A</td>
<td></td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.0116 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>7/2/2010</td>
<td>18 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

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<th>Time Sampled</th>
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<tbody>
<tr>
<td>W10F-106</td>
<td>205</td>
<td>LPL Bottom</td>
<td>Dennis Loewen</td>
<td>6/16/2010</td>
<td>10:00 AM</td>
<td>6/17/2010</td>
<td>7:15 AM</td>
<td>7</td>
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</table>

PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 6/30/2010 | 0.070 mg/L | A
Orthophosphate (EPA 365.1, 0.01 mg/L) | 6/17/2010 1150 | 0.0192 mg/L | EM | B
Total Iron (EPA 6010, 50 µg/L) | 6/28/2010 1355 | 119 µg/L | C

Notes:
Total Phosphorus tested by MN Lab # 027-035-135
T. Iron tested by MN Lab # 027-053-137

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**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<th>Lab File Number</th>
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<tr>
<td>W10G-058</td>
<td>435</td>
<td>PI Top</td>
<td>Dennis Loewen</td>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/22/2010</td>
<td>0.017 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010 1653</td>
<td>0.017 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>7/21/2010</td>
<td>5 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
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<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/7/2010 1653</td>
<td>0.045 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Orthophosphate (EPA 385.1, 0.01 mg/L)</td>
<td>7/7/2010 1653</td>
<td>0.045 mg/L</td>
<td></td>
<td></td>
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<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>7/26/2010 1441</td>
<td>131 µg/L</td>
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**Notes:**  
T. Phosphorus tested by MN Lab # 027-035-135  
T Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

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<th>Sample Location</th>
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<td>205</td>
<td>Pleasant Top</td>
<td>Dennis Loewen</td>
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## Parameter (Method, Reporting Limit)  

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<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.024 mg/L</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010 0832</td>
<td>0.0237 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>13 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

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P.O Box 481, Annandale, MN 55302

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<td>W10H-100</td>
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<td>9:56 AM</td>
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<td>12:15 PM</td>
<td>2</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
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<tr>
<td></td>
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<td>Total Iron (EPA 6010, 50 µg/L)</td>
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<th>Bottle</th>
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<td>8/23/2010</td>
<td>0.184 mg/L</td>
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<td>A</td>
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<tr>
<td>8/19/2010 0832</td>
<td>0.100 mg/L</td>
<td></td>
<td>EM</td>
</tr>
<tr>
<td>8/27/2010 1515</td>
<td>351 µg/L</td>
<td></td>
<td>B</td>
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### Notes:
- T. Phosphorus tested by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

The text is handwritten in some parts and contains a signature in the lower right corner.
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<th>Time Sampled</th>
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<td>W10I-120</td>
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<td>Pleasant Top</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>10:14 AM</td>
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<th>Results</th>
<th>By</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.035 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010 1003</td>
<td>0.017 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 µg/L)</td>
<td>10/7/2010</td>
<td>92 µg/L</td>
<td>*</td>
<td>C</td>
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Notes:  
*T, Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**Lab File Number**: W101-121  
**Project Name**: 205  
**Sample Location**: Pleasant Bottom  
**Sampled By**: Dennis Loewen

<table>
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## PARAMETER (METHOD, REPORTING LIMIT)

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<th>Bottle</th>
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<td>Total Phosphorus</td>
<td>EPA 365.3, 0.005 mg/L</td>
<td>9/28/2010</td>
<td>0.436 mg/L</td>
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<td>Orthophosphate</td>
<td>EPA 365.1, 0.01 mg/L</td>
<td>9/22/2010 1003</td>
<td>0.414 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td></td>
<td>10/11/2010 1336</td>
<td>565 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

*T. Phosphorus tested by MN Lab # 027-035-135  
**T. Iron Tested by MN Lab # 027-053-137

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-153</td>
<td>205 LAKES</td>
<td>LSC Top</td>
<td>Dennis Loewen</td>
<td>6/22/2010</td>
<td>11:08 AM</td>
<td>6/22/2010</td>
<td>3:00 PM</td>
<td>8</td>
</tr>
</tbody>
</table>

## PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE
--- | --- | --- | --- | ---
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 6/30/2010 | 0.103 mg/L | EM | A
Orthophosphate (EPA 365.1, 0.01 mg/L) | 6/24/2010 | < 0.01 mg/L | EM | B
Chlorophyll A (SM 10200 H, 1μg/L) | 7/21/2010 | 122 μg/L | EM | C

Notes:
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: 
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**Lab File Number**: W10F-154  
**Project Name**: 205 LAKES  
**Sample Location**: LSoc Bottom  
**Sampled By**: Dennis Loewen  
**Date Sampled**: 6/22/2010  
**Time Sampled**: 11:13 AM  
**Date Received**: 6/22/2010  
**Time Received**: 3:00 PM  
**Temp**: 8°

### PARAMETER (METHOD, REPORTING LIMIT)

<table>
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<tr>
<th></th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.537 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>0.383 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>6/29/2010</td>
<td>111 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- Total Phosphorus done by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

---

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## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-159</td>
<td>205</td>
<td>Scott Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Result</th>
<th>BY</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.185 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0376 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>8/11/2010</td>
<td>68 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-159</td>
<td>205</td>
<td>Scott Top</td>
<td>Dennis Loewen</td>
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</table>

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<th>Date Sampled</th>
<th>Time Sampled</th>
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<th>Time Received</th>
<th>Temp</th>
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## PARAMETERS, METHOD, REPORTING LIMIT

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<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.185 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0976 mg/L</td>
<td>EM B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10230 H, 1µg/L)</td>
<td>8/11/2010</td>
<td>68 µg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

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P.O. Box 481, Annandale, MN 55302

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</thead>
<tbody>
<tr>
<td>W10H-135</td>
<td>205</td>
<td>Scott Top</td>
<td>Dennis Loewen</td>
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<tr>
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<th>Date Received</th>
<th>Time Received</th>
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<tbody>
<tr>
<td>8/24/2010</td>
<td>6:57 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/25/2010 1059</td>
<td>0.005 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/7/2010   43</td>
<td>0.018 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010   43</td>
<td>43 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-116

---

No
12/6/10
### Water Laboratories Inc.

**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10H-136</td>
<td>205</td>
<td>Scott Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/24/2010</td>
<td>6:57 AM</td>
<td>8/24/2010</td>
<td>12:30 PM</td>
<td></td>
</tr>
</tbody>
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### PARAMETER (METHOD, REPORTING LIMIT)

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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>0.144 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>0.086 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>8/27/2010</td>
<td>ND μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

T. Phosphorus tested by MN Lab # 027-035-135
T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**Lab File Number:** W101-146  
**Project Name:** 205  
**Sample Location:** Scott Top  
**Sampled By:** Dennis Loewen  
**Date Sampled:** 9/27/2010  
**Date Received:** 9/27/2010  
**Time Sampled:** 7:38 AM  
**Time Received:** 1:10 PM  
**Temp:** 6

## Parameter (Method, Reporting Limit)  
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<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.174 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.124 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>10/7/2010</td>
<td>30 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135.

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110  

333 East Main Street  
PO Box 388  
Elk River, MN 55330  
Phone: (763) 441-7509  
Fax: (763) 441-9176  
Email: h2olab@spacestar.net  
Web Site: www.waterlabs.net
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-147</td>
<td>205</td>
<td>Scott Bottom</td>
<td>Dennis Loewen</td>
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<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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</thead>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.178 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010, 1031</td>
<td>0.134 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>10/11/2010, 1205</td>
<td>189 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
*T. Phosphorus tested by MN Lab # 027-035-135
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

12/6/10
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10F-117</td>
<td>P06-1 Lakes</td>
<td>LSW Top Swain-Our Lake</td>
<td>Dennis Loewen</td>
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<tr>
<th>Date Sampled</th>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/1/2010</td>
<td>0.275 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010, 1303</td>
<td>0.224 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10220 H, 1μg/L)</td>
<td>7/2/2010</td>
<td>3 μg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Non-Potable Water Test Report

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-118</td>
<td>P06-1 Lakes</td>
<td>LSW Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

- **Date Sampled:** 6/16/2010
- **Time Sampled:** 9:13 AM

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<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/1/2010</td>
<td>0.421 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010</td>
<td>0.258 mg/L</td>
<td>EM B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>6/29/2010</td>
<td>97.7 µg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
- Total Phosphorus done by MN Lab # 027-035-135
- T. Iron Tested by MN Lab # 027-053-137

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-056</td>
<td>435</td>
<td>Swartout Top</td>
<td>Dennis Loewen</td>
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<th>Time Received</th>
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<tr>
<td>7/7/2010</td>
<td>8:15 AM</td>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/22/2010</td>
<td>0.310 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010 1653</td>
<td>0.272 mg/L</td>
<td>EM</td>
<td></td>
</tr>
<tr>
<td>Chlorophyll A (SM 10260 H, 1 µg/L)</td>
<td>7/21/2010</td>
<td>7 µg/L</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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<tbody>
<tr>
<td>W10G-057</td>
<td>435</td>
<td>Swartout Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
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<th>Date Sampled</th>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>7/7/2010</td>
<td>8:15 AM</td>
<td>7/7/2010</td>
<td>12:57 PM</td>
<td>5</td>
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</table>

**PARAMETER (METHOD, REPORTING LIMIT)**  
**DATE & TIME ANALYZED**  
**RESULTS**  
**BY**  
**BOTTLE**

- **Total Phosphorus (EPA 365.3, 0.005 mg/L)**  
  - Date & Time Analyzed: 7/22/2010  
  - Results: 0.366 mg/L  
  - By: A  
  - Bottle: N

- **Orthophosphate (EPA 365.1, 0.01 mg/L)**  
  - Date & Time Analyzed: 7/7/2010  
  - Results: 0.330 mg/L  
  - By: EM  
  - Bottle: B

- **Total Iron (EPA 6010, 50 μg/L)**  
  - Date & Time Analyzed: 7/26/2010  
  - Results: 80.7 μg/L  
  - By: C  
  - Bottle: N

---

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135  
- T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10H-001</td>
<td>(435)</td>
<td>SWART 1</td>
<td>DENNIS LOEWEN</td>
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<th>Date Received</th>
<th>Time Received</th>
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<tr>
<td>8/2/2010</td>
<td>1:40 PM</td>
<td>8/2/2010</td>
<td>2:40 PM</td>
<td>12</td>
</tr>
</tbody>
</table>

## PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|---|---|---|---|
Nitrite-Nitrates (EPA 353.2, 0.1 mg/L) | 8/3/2010 | 1335 | < 0.1 mg/L | MS | A |
TKN (EPA 351.2, 0.2 mg/L) | 8/23/2010 | 1537 | 2.74 mg/L | EM | B |
Ammonia (EPA 350.1, 0.02 mg/L) | 8/24/2010 | 1209 | 0.135 mg/L | EM | B |
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 8/12/2010 | 1209 | 0.581 mg/L | * | B |
Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L) | 8/4/2010 | 1550 | 0.126 mg/L | * | A |
E. Coli (Quanti-Trap 1.0 MPN/100mL) | 8/2/2010 | 1550 | 579.4 MPN/100mL | KK | C |

Notes:
** T. Phosphorus and Orthophosphate analyzed by MN# 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
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<td>SWART 2</td>
<td>DENNIS LOEWEN</td>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
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<td>8/2/2010</td>
<td>1:30 PM</td>
<td>8/2/2010</td>
<td>2:40 PM</td>
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### Parameter (Method, Reporting Limit)  

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrite + Nitrate (EPA 353.2, 0.1 mg/L)</td>
<td>8/3/2010 1335</td>
<td>&lt; 0.1 mg/L</td>
<td>MS</td>
<td>A</td>
</tr>
<tr>
<td>TKN (EPA 351.2, 0.2 mg/L)</td>
<td>8/23/2010 1537</td>
<td>2.19 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Ammonia (EPA 350.1, 0.02 mg/L)</td>
<td>8/24/2010 1209</td>
<td>&lt; 0.02 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005mg/L)</td>
<td>8/12/2010 1209</td>
<td>0.366 mg/L</td>
<td>*</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>8/4/2010 1550</td>
<td>0.129 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>E. Coli (Quanti- Tray 1.0 MPN/100mL)</td>
<td>8/2/2010 1550</td>
<td>14.4 MPN/100mL</td>
<td>KK</td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:  
* T. Phosphorus and Orthophosphate analyzed by MN# 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Lab File Number</th>
<th>Project Name</th>
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<th>Sampled By</th>
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<tbody>
<tr>
<td>W10H-093</td>
<td>435</td>
<td>Swart Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.477 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 355.1, 0.01 mg/L)</td>
<td>8/19/2010  0832</td>
<td>0.310 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>9/7/2010</td>
<td>101 µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
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<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10H-094</td>
<td>435</td>
<td>Swart Bottom</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

- **Date Sampled:** 8/17/2010  
- **Time Sampled:** 9:17 AM  
- **Date Received:** 8/17/2010  
- **Time Received:** 12:15 PM

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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/23/2010</td>
<td>0.418 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/19/2010, 0832</td>
<td>0.304 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 µg/L)</td>
<td>8/27/2010, 1459</td>
<td>ND µg/L</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- T. Phosphorus tested by MN Lab # 027-035-135  
- T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

[Signature]

333 East Main Street  
PO Box 368  
Elk River, MN 55330  
Phone: (763) 441-7509  
Fax: (763) 441-9176  
Email: h2olab@spacestar.net  
Web Site: www.waterlabs.net
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
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</thead>
<tbody>
<tr>
<td>W10I-112</td>
<td>435</td>
<td>Swartout Top</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>9:20 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
<td>60</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 366.1, 0.01 mg/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
</tr>
</tbody>
</table>

**Results**

<table>
<thead>
<tr>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/28/2010</td>
<td>0.258 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>9/22/2010 1003</td>
<td>0.049 mg/L</td>
<td>EM B</td>
</tr>
<tr>
<td>10/7/2010</td>
<td>3 µg/L</td>
<td>* C</td>
</tr>
</tbody>
</table>

**Notes:**
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10I-113</td>
<td>435</td>
<td>Swatout Bottom</td>
<td>Dennis Loewen</td>
<td>9/21/2010</td>
<td>9:20 AM</td>
<td>9/21/2010</td>
<td>1:25 PM</td>
<td>6</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.255 mg/L</td>
<td>*</td>
<td>A</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/22/2010</td>
<td>0.040 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Iron (EPA 5010, 50 μg/L)</td>
<td>10/11/2010</td>
<td>55.3 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
*T.* Phosphorus tested by MN Lab # 027-035-135  
**T.* Iron Tested by MN Lab # 027-053-137  

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10F-151</td>
<td>205 LAKES</td>
<td>Lun Top Union</td>
<td>Dennis Loewen</td>
</tr>
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**Date Sampled**: 6/22/2010  
**Time Sampled**: 10:23 AM  
**Date Received**: 6/22/2010  
**Time Received**: 3:00 PM  
**Temp**: 8

<table>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.082 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/24/2010</td>
<td>0.01 mg/L</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1μg/L)</td>
<td>7/21/2010</td>
<td>11 μg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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---

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CFWD (Wenok Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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<tbody>
<tr>
<td>W10F-152</td>
<td>20S LAKES</td>
<td>LU: 1 Bottom</td>
<td>Dennis Wosinen</td>
<td>6/22/2010</td>
<td>10:28 AM</td>
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<tr>
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<th>Bottle</th>
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<tbody>
<tr>
<td>6/22/2010</td>
<td>11:30 AM</td>
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## PARAMETER (METHOD, REPORTING LIMIT)

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<th>by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>6/30/2010 0.993 mg/L</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>6/24/2010 0.754 mg/L</td>
<td></td>
<td>EM</td>
</tr>
<tr>
<td>Total iron</td>
<td>6/28/2010 70.3 mg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

- Total Phosphorus done by MN Lab #027-035-135
- T. Iron Tested by MN Lab #027-053-147

---

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Report Submitted by: Ethel Mondale, Laboratory Manager
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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<th>Temp</th>
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**PARAMETERS, METHOD, REPORTING LIMIT**

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<tr>
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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.027 mg/L</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0191 mg/L</td>
<td>EM B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>8/11/2010</td>
<td>9 μg/L</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

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<thead>
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<th>Lab File Number</th>
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<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-158</td>
<td>205</td>
<td>Union Bottom</td>
<td>Dennis Loewen</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<th>PARAMETERS, METHOD, REPORTING LIMIT</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.863 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.780 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 µg/L)</td>
<td>8/2/2010 1632</td>
<td>125 µg/L</td>
<td><strong>C</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
* Total Phosphorus done by MN Lab #: 027-035-135
** T. Iron Tested by MN Lab #: 027-053-137

**AD 3/25/10**

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-157</td>
<td>205</td>
<td>Union Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21/2010</td>
<td>7:37 AM</td>
<td>7/21/2010</td>
<td>2:15 PM</td>
<td>87</td>
</tr>
</tbody>
</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.027 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0191 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
<td>8/11/2010</td>
<td>9 µg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:

* Total Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

The test results are only indicative of the sample tested from the sample point on the date collected.

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

333 East Main Street
PO Box 388
Elk River, MN 55330
Phone: (763) 441-7509
Fax: (763) 441-9176
Email: h2olab@spacestar.net
Web Site: www.waterlabs.net

Copy
No
12/8/10
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-158</td>
<td>205</td>
<td>Union Bottom</td>
<td>Dennis Loewen</td>
</tr>
<tr>
<td>Date Sampled</td>
<td>Time Sampled</td>
<td>Date Received</td>
<td>Temp</td>
</tr>
<tr>
<td>7/21/2010</td>
<td>7:37 AM</td>
<td>7/21/2010</td>
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<table>
<thead>
<tr>
<th>PARAMETERS, METHOD, REPORTING LIMIT</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.053 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 09:01</td>
<td>0.780 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 200.7, 50 μg/L)</td>
<td>8/2/2010 16:32</td>
<td>125 μg/L</td>
<td>**</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
- * Total Phosphorus done by MN Lab # 027-035-135
- ** T. Iron Tested by MN Lab # 027-053-137

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Water Laboratories Inc.

### NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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</thead>
<tbody>
<tr>
<td>W10H-137</td>
<td>205</td>
<td>Union Top</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<td>7:34 AM</td>
<td>8/24/2010</td>
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### PARAMETER (METHOD, REPORTING LIMIT)

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>EPA 365.3, 0.005 mg/L</td>
<td>9/2/2010</td>
<td>0.019 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>EPA 365.1, 0.01 mg/L</td>
<td>8/25/2010 1059</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A</td>
<td>SM 10200 H, 1 μg/L</td>
<td>9/7/2010</td>
<td>11 μg/L</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

### Notes:

T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135

![Signature](Image)

Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

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# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<td>205</td>
<td>Union Bottom</td>
<td>Dennis Loewen</td>
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</table>

<table>
<thead>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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</thead>
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<tr>
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<td>7:34 AM</td>
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<td>12:30 PM</td>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/2/2010</td>
<td>1.11 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>8/25/2010</td>
<td>1.11 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Iron (EPA 6010, 50 μg/L)</td>
<td>8/27/2010</td>
<td>134 μg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**  
T. Phosphorus tested by MN Lab # 027-035-135  
T. Iron Tested by MN Lab # 027-053-137

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W101-448</td>
<td>205</td>
<td>Union Top</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</table>

**PARAMETER (METHOD, REPORTING LIMIT)**

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/4/2010</td>
<td>0.068 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>9/28/2010 1031</td>
<td>0.020 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Chlorophyll A (SM 10200 H, 1 μg/L)</td>
<td>10/7/2010</td>
<td>33 μg/L</td>
<td>*</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:  
*T. Phosphorus and Chlorophyll a tested by MN Lab # 027-035-135.

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

Lab File Number  
W101-149

Project Name  
205

Sample Location  
Union Bottom

Sampled By  
Dennis Loewen

Date Sampled  
9/27/2010

Time Sampled  
8:18 AM

Date Received  
9/27/2010

Time Received  
1:10 PM

Temp  
6

PARAMETER (METHOD, REPORTING LIMIT)  

DATE & TIME ANALYZED  
RESULTS  

Total Phosphorus (EPA 365.3, 0.005 mg/L)  
10/7/2010  
1.51 mg/L  
*
A

Orthophosphate (EPA 365.1, 0.01 mg/L)  
9/28/2010  
1031  
1.48 mg/L  
EM
B

Total Iron (EPA 6010, 50 µg/L)  
10/11/2010  
1210  
270 µg/L  
**
C

Notes:
*T. Phosphorus tested by MN Lab # 027-035-135
**T. Iron Tested by MN Lab # 027-053-137

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID:* 027-141-110
Classical Chemistry Parameters

<table>
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<tr>
<th>Analyte</th>
<th>Result</th>
<th>MRL</th>
<th>Units</th>
<th>Dilution</th>
<th>Batch</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate as P</td>
<td>0.23</td>
<td>0.012 mg/L</td>
<td>2</td>
<td>B0C0317</td>
<td>3/19/10</td>
<td>3/19/10</td>
<td>EPA 365.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus, Total as P</td>
<td>0.28</td>
<td>0.010 mg/L</td>
<td>1</td>
<td>B0C0365</td>
<td>3/24/10</td>
<td>3/25/10</td>
<td>EPA 365.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**NON-POTABLE WATER TEST REPORT**

**WENCK ASSOCIATES (CRWD)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
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<tbody>
<tr>
<td>W10D-022</td>
<td>0002-129</td>
<td>CR 28.2</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
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<tr>
<th>Parameter</th>
<th>Method/Revs</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>(USGS I-3765-85)</td>
<td>(1.0 mg/L)</td>
<td>4/8/2010</td>
<td>1410</td>
<td>2.0 mg/L</td>
<td>KK</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>4/7/2010</td>
<td>1218</td>
<td>0.0543 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Report of Analysis

**Name:** WATER LABORATORY INC  
PO BOX 388  
ELK RIVER, MN 55330

**Report Date:** 4/12/2010  
**Date:** 4/12/2010

**Sample ID/Invoice #:** 076878  
**Account #:** 004188  
**Internal Lab #:** 90919  
**Sample Type:** Water  
**Client Sample ID:** W100022  
**Sample Date:** 4/6/2010 8:55 AM  
**Sampler:** D.L.  
**Receipt Date:** 4/6/2010 11:55 AM  
**Receipt Temp.:** 6°C

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Approved Method</th>
<th>Reporting Limit</th>
<th>Sample Result</th>
<th>Units</th>
<th>Sample Prep Date/Time</th>
<th>Analysis Date/Time</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli (Quanti-Tray)</td>
<td>Quanti-Tray</td>
<td>1</td>
<td>7.4</td>
<td>MPN/100mL</td>
<td>4/6/2010 12:50</td>
<td>4/6/2010 12:55</td>
<td>mm</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td>EPA 365.3</td>
<td>0.005</td>
<td>0.166</td>
<td>mg/L</td>
<td>4/6/2010 03:30</td>
<td>4/6/2010 03:30</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Comments:

Report Approved by: [Signature]

Note: The results listed within the report relate only to the sample received on the dates indicated. We do not accept any liability for use of these results. This report must not be reproduced, except in full, without the written approval from Stearns DHIA Laboratories.
# Non-Potable Water Test Report

**Water Laboratories Inc.**

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10D-093</td>
<td></td>
<td>CR 28.2</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
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<td>4/19/2010</td>
<td>8:41 AM</td>
<td>4/19/2010</td>
<td>9:50 AM</td>
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</tr>
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</table>

## Parameters, Method, Reporting Limit

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev. 2.0)</td>
<td>0.01 mg/L</td>
<td>4/22/2010 15:45</td>
<td>0.0549 mg/L</td>
</tr>
<tr>
<td>TSS</td>
<td>(USGS 1-3765-85)</td>
<td>1.0 mg/L</td>
<td>4/22/2010 16:00</td>
<td>2.25 mg/L</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev. 2.0)</td>
<td>0.1 mg/L</td>
<td>4/22/2010 03:40</td>
<td>0.0999 mg/L</td>
</tr>
<tr>
<td>E. coli (QUANTI-TRAY)</td>
<td></td>
<td></td>
<td>4/20/2010 12:00</td>
<td>13.5 MPN/100 ml</td>
</tr>
</tbody>
</table>

**Bottle**
- A
- EM
- B
- C

**Notes:**
Total Phosphorus and E. coli performed by MN Lab # 027-145-378

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

---

Report Submitted By:
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

8/24/10

333 East Main Street
PO Box 388
Elk River, MN 55330
Phone: (763) 441-7509
Fax: (763) 441-9176
Email: h2olab@spacestar.net
Web Site: www.waterlabs.net
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W1OE-003</td>
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<td>CR 28.2</td>
<td>DENNIS LOWEN</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
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<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>5/5/2010</td>
<td>1148</td>
<td>0.0519 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>TSS</td>
<td>(USGS 1-3765-85)</td>
<td>(1.0 mg/L)</td>
<td>5/6/2010</td>
<td>1630</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0)</td>
<td>(0.1 mg/L)</td>
<td>5/6/2010</td>
<td>1615</td>
<td>0.11 mg/L</td>
<td>EM/B</td>
</tr>
<tr>
<td>E. coli</td>
<td>(Quanti-Tray. 1 MPN/100mL)</td>
<td></td>
<td>5/3/2010</td>
<td>1130</td>
<td>34.4 MPN/100mL</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-145-378

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10E-075</td>
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<td>CR 28.2</td>
<td>DENNIS LOEWEN</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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## PARAMETER (METHOD, REPORTING LIMIT)

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<tr>
<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>5/17/2010 0930</td>
<td>15.0 MPN/100mL</td>
<td>EM</td>
<td>C</td>
</tr>
<tr>
<td>TSS (USGS 1-3755-85, 1.0 mg/L)</td>
<td>5/20/2010 1710</td>
<td>1.5 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>5/20/2010 1603</td>
<td>0.0351 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.4, 0.05 mg/L)</td>
<td>5/27/2010 0030</td>
<td>0.072 mg/L</td>
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<td></td>
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</table>

Notes:

T. Phosphorus analyzed by MN LAB # 027-035-135
Orthophosphate Reagent Blank does not meet the quality assurance criteria.

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<tr>
<td>W10F-003</td>
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<td>DENNIS LOEWEN</td>
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<th>Time Received</th>
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<tr>
<td>6/1/2010</td>
<td>8:04 AM</td>
<td>6/1/2010</td>
<td>10:00 AM</td>
<td>3</td>
</tr>
</tbody>
</table>

## PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|------------------|---------|----|-------|
Orthophosphate (EPA 365.1, 0.01 mg/L) | 6/2/2010 | 1200 | 0.140 mg/L | EM | A    |
TSS (USGS 1-3765-85, 1.0 mg/L) | 6/3/2010 | 1630 | < 1.0 mg/L | EM | A    |
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 6/7/2010 | 0232 | 0.232 mg/L | EM | B    |
E. Coli (Quanti-Tray, 1.0 MPN/100mL) | 6/1/2010 | 1220 | 28.8 MPN/100mL | EM | C    |

Notes:
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10F-131</td>
<td>205</td>
<td>CR 28.2</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
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<table>
<thead>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<td>6/21/2010</td>
<td>6:45 AM</td>
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<td>8:30 AM</td>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.261 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/22/2010</td>
<td>0.186 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/24/2010</td>
<td>2.75 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>E. Coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>6/21/2010</td>
<td>16.8 MPN/100mL</td>
<td>EM</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10G-018</td>
<td>205</td>
<td>CR 28.2</td>
<td>Dennis Loewen</td>
</tr>
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**Date Sampled:** 7/6/2010  **Time Sampled:** 7:25 AM

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.962 mg/L</td>
<td>A</td>
<td></td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/7/2010</td>
<td>7.5 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>0.619 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>E. Coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>7/6/2010</td>
<td>461.1 MPN/100mL</td>
<td>EM</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>W10H-050</td>
<td>205</td>
<td>CR 28.2</td>
<td>Dennis Loewen</td>
<td>8/10/2010</td>
<td>7:35 AM</td>
<td>8/10/2010</td>
<td>10:30 AM</td>
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## PARAMETER (METHOD, REPORTING LIMIT)

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<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/19/2010</td>
<td>1.74 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>8/19/2010</td>
<td>32.5 mg/L **</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>8/10/2010</td>
<td>0.602 mg/L+</td>
<td>*</td>
<td>B</td>
</tr>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>8/10/2010</td>
<td>1011.2 MPN/100 ml</td>
<td>KK</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus & Orthophosphate done by MN Lab # 027-035-135
**TSS re-run on 8/19/10.
* Sample analyzed past the holding time.

---

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

## Water Laboratories Inc.

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W101-048</td>
<td>205 STREAMS</td>
<td>CR 28.2</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

**Date Sampled:** 9/13/2010  
**Time Sampled:** 8:30 AM

**Date Received:** 9/13/2010  
**Time Received:** 11:25 AM

### PARAMETER (METHOD, REPORTING LIMIT)

<table>
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<tr>
<th>Parameter</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.200 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>9/16/2010</td>
<td>1730</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>9/14/2010</td>
<td>0841</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>E. Coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>9/13/2010</td>
<td>1200</td>
<td>EM</td>
<td>C</td>
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<tr>
<td>162.4 MPN/100mL</td>
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</table>

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margeria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10J-024</td>
<td>205 STREAMS</td>
<td>CR 2B.2</td>
<td>Dennis Loewen</td>
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<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>10/5/2010</td>
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<td>10/5/2010</td>
<td>1:35 PM</td>
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### PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|---|---|---|---|
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 10/14/2010 | 0.180 mg/L | · | A |
TSS (USGS 1-3765-85, 1.0 mg/L) | 10/7/2010 | 1700 | 7.0 mg/L | EM | B |
Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L) | 10/6/2010 | 1227 | 0.140 mg/L | EM | B |
E. Coli (Quanti-Tray, 1.0 MPN/100mL) | 10/5/2010 | 1400 | 144.5 MPN/100mL | EM | C |

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

---

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**WENCK ASSOCIATES (CRWD)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10D-024</td>
<td>0002-129</td>
<td>CR 10.5</td>
<td>DENNIS LOEWEN</td>
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## PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
<th>Parameter</th>
<th>Method</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>(USGS I-3765-85), (1.0 mg/L)</td>
<td>4/8/2010 1410</td>
<td>2.75 mg/L</td>
<td>KK</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/7/2010 1218</td>
<td>0.0120 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: Ethel Margara, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**Report of Analysis**

**Name:** WATER LABORATORY INC  
PO BOX 38k  
BLK RIVER, MN 55330

**Sample ID/Invoice #:** 076880  
**Account #:** 004188  
**Internal ID #:** 90921  
**Sample Type:** Water  
**Client Sample ID:** W100024  
**Sample Date:** 4/6/2010 10:00 AM  
**Sampler:** D.L.  
**Receipt Date:** 4/6/2010 11:55 AM  
**Receipt Temp:** 6°C

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<th>Units</th>
<th>Sample Prep Date/Time</th>
<th>Analysis Date/Time</th>
<th>Analyst</th>
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<tbody>
<tr>
<td>Phosphorous, Total</td>
<td>EPA 365.3</td>
<td>0.005</td>
<td>3.161</td>
<td>mg/L</td>
<td>4/09/2010 03:30</td>
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<td></td>
</tr>
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</table>

**Comments:**

Report Approved by:

Anna Schermer, Environmental Chemist  
Laura Peterson, Lab Tech  
Melinda Mason, Lab Tech

**Note:** The results listed within the report relate only to the sample received on the dates indicated. We do not accept any liability for use of these results. This report must not be reproduced, except in full, without the written approval from Stearns DHIA Laboratories.
### Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10E-005</td>
<td></td>
<td>CR 10.5</td>
<td>DENNIS LOWEN</td>
</tr>
</tbody>
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- **Date Sampled:** 5/3/2010
- **Time Sampled:** 8:51 AM
- **Date Received:** 5/3/2010
- **Time Received:** 10:15 AM
- **Temp:** 5

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<th>Parameter</th>
<th>Method/Revs</th>
<th>Result</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Orthophosphate</td>
<td>EPA 365.1 Rev 2.0</td>
<td>0.0222 mg/L</td>
<td>EM</td>
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<tr>
<td>Total Phosphorus</td>
<td>USGS 1-3765-85</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>TSS</td>
<td>EPA 365.4 Rev 2.0</td>
<td>0.056 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**
- Total Phosphorus done by MN Lab # 027-145-378

---

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Report Submitted By: Ethel Margaria, Laboratory Director

Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10F-005</td>
<td>CR 10.5</td>
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<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<td>6/1/2010</td>
<td>9:18 AM</td>
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<td>10:00 AM</td>
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<td>3.0</td>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/2/2010 1200</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3755-85, 1.0 mg/L)</td>
<td>6/3/2010 1630</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/7/2010</td>
<td>0.033 mg/L</td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:  
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**Lab File Number:** W10G-020  
**Project Name:** 205  
**Sample Location:** CR 10.5  
**Sampled By:** Dennis Loewen  
**Date Sampled:** 7/5/2010  
**Time Sampled:** 8:25 AM  
**Date Received:** 7/6/2010  
**Time Received:** 9:10 AM  
**Temp:** 3

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.034 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/7/2010</td>
<td>1.0 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>0.0136 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**Lab File Number:** W10H-052  
**Project Name:** 205  
**Sample Location:** CR 10.5

<table>
<thead>
<tr>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/10/2010</td>
<td>9:30 AM</td>
<td>8/10/2010</td>
<td>10:30 AM</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 385.3, 0.005 mg/L)</td>
<td>8/16/2010</td>
<td>0.028 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS I-3765-85, 1.0 mg/L)</td>
<td>8/19/2010</td>
<td>1700</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 309.0 Rev 2.1, 0.05 mg/L)</td>
<td>8/12/2010</td>
<td>&lt; 0.05 mg/L+</td>
<td>*</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus & Orthophosphate done by MN Lab # 027-035-135
+ Sample analyzed past the holding time.

---

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Report Submitted By: [Signature]  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

[Handwritten date: 11/18/10]
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-050</td>
<td>205 STREAMS</td>
<td>CR 10.5</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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### PARAMETER (METHOD, REPORTING LIMIT)  
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.027 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>9/16/2010</td>
<td>1730</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>9/14/2010</td>
<td>0841</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10J-026</td>
<td>205 STREAMS</td>
<td>CR 10.5</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tr>
<td>10/5/2010</td>
<td>12:35 PM</td>
<td>10/5/2010</td>
<td>1:35 PM</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>10/14/2010</td>
<td>0.022 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>10/7/2010</td>
<td>1700 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>10/6/2010</td>
<td>1227 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:

* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: [Signature]
Ethel Margara, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

WENCK ASSOCIATES (CRWD)

Lab File Number: W10D-025
Project Name: 0002-129
Sample Location: CR 0.1
Sampled By: DENNIS LOEWEN

Date Sampled: 4/6/2010
Time Sampled: 10:20 AM
Date Received: 4/6/2010
Time Received: 10:30 AM
Temp: 5

PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E COLI (QUANTI-TRAY)</td>
<td>4/6/2010</td>
<td>1255 MPN/100ml</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
SAMPLE ANALYZED BY MN LAB # 027-145-378

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

WENCK ASSOCIATES (CRWD)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10D-057</td>
<td></td>
<td>CR 0.1</td>
<td>DENNIS LOEWEN</td>
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</tbody>
</table>

<table>
<thead>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
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<td>10:55 AM</td>
<td>6</td>
</tr>
</tbody>
</table>

## PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>E COLI (QUANTI-TRAY)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4/13/2010</td>
<td>1235</td>
<td>2</td>
<td>MPN/100mL</td>
</tr>
</tbody>
</table>

**Notes:**

SAMPLE ANALYZED BY MN LAB # 027-145-378

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Report Submitted By: [Signature]

Ethel Margaria, Laboratory Director

Minnesota State Laboratory ID: 027-141-119
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10D-094</td>
<td></td>
<td>CR 0.1</td>
<td>DENNIS LOEWEN</td>
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</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tr>
<td>4/19/2010</td>
<td>8:37 AM</td>
<td>4/19/2010</td>
<td>9:50 AM</td>
<td>7</td>
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</table>

## Parameters, Method, Reporting Limit

<table>
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<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray)</td>
<td>4/20/2010</td>
<td>1200 MPN/100mL</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

Analysis was performed by MN Lab # 027-145-378

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10E-006</td>
<td></td>
<td>CR 0.1</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>PARAMETERS, METHOD, REPORTING LIMIT</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. COli (QUANTI-TRAY, 1MPN/100mL)</td>
<td>5/3/2010</td>
<td>1130</td>
<td>FM</td>
<td>A</td>
</tr>
</tbody>
</table>

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

Lab File Number: W10E-042
Project Name: CR DAM
Sample Location: CR DAM
Sampled By: K. KLOEPPNER

Date Sampled: 5/10/2010
Time Sampled: 6:15 AM
Date Received: 5/10/2010
Time Received: 8:00 AM
Temp: 7

PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method</th>
<th>Reporting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. COIL</td>
<td>QUANTI-TRAY, 1 MPN/100ml</td>
<td></td>
</tr>
</tbody>
</table>

DATE & TIME ANALYZED: 5/10/2010
RESULTS: 124 MPN/100ml

BY: EM
BOTTLE: A

Notes:

AD 8/24/10

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-118
## NON-POTABLE WATER TEST REPORT

**Lab File Number:** W10E-076  
**Sample Location:** CR 0.1  
**Sampled By:** DENNIS LOEWEN  
**Date Sampled:** 5/17/2010  
**Time Sampled:** 7:20 AM  
**Date Received:** 5/17/2010  
**Time Received:** 8:10 AM  
**Temp:** 6

### PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
<th>Parameter</th>
<th>Method</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. COLI</td>
<td>QUANTI-TRAY, 1 MPN/100mL</td>
<td>5/17/2010 0930</td>
<td>34.4 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-006</td>
<td></td>
<td>CR 0.1</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
<tbody>
<tr>
<td>6/1/2010</td>
<td>9:45 AM</td>
<td>6/1/2010</td>
<td>10:00 AM</td>
<td>3</td>
</tr>
</tbody>
</table>

### PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|---|---|---|---|
E. coli (Quanti-Tray, 1.0 MPN/100mL) | 6/1/2010 | 1220 | EM | A |

Notes:
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10H-053</td>
<td>205</td>
<td>CR 0.1</td>
<td>Dennis Loewen</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>8/10/2010</td>
<td>9:56 AM</td>
<td>8/10/2010</td>
<td>10:30 AM</td>
<td>2</td>
</tr>
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**PARAMETER (METHOD, REPORTING LIMIT)**

<table>
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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli</td>
<td>8/10/2010 1350</td>
<td>149.1 MPN/100mL</td>
<td>KIK</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10J-128</td>
<td>CR 0.1</td>
<td></td>
<td>KK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/20/2010</td>
<td>9:10 AM</td>
<td>10/20/2010</td>
<td>9:45 AM</td>
<td>6</td>
</tr>
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</table>

**PARAMETER (METHOD, REPORTING LIMIT)**  

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>10/20/2010 1230</td>
<td>12.4 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-086</td>
<td></td>
<td>CLEARWATER DAM</td>
<td>KEVIN KLOEPNER</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/16/2010</td>
<td>7:00 AM</td>
<td>6/16/2010</td>
<td>8:00 AM</td>
<td>2</td>
</tr>
</tbody>
</table>

## PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E. coli (Quanti-Tray, 1.0 MPN/100mL)</strong></td>
<td>6/16/2010 0900</td>
<td>165.2 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

24/8/10
CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-132</td>
<td>205</td>
<td>CR 0.1</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/21/2010</td>
<td>7:30 AM</td>
<td>6/21/2010</td>
<td>8:30 AM</td>
<td>4</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>6/21/2010 1100</td>
<td>59.4 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:  

---  

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

Lab File Number  
W10G-021

Project Name  
205

Sample Location  
CR 0.1

Sampled By  
Dennis Loewen

Date Sampled  
7/6/2010

Time Sampled  
9:00 AM

Date Received  
7/6/2010

Time Received  
9:10 AM

Temp  
3

PARAMETER (METHOD, REPORTING LIMIT)  
DATE & TIME ANALYZED  
RESULTS  
BY  
BOTTLE

E. coli (Quantiti-Tray, 1.0 MPN/100mL)  

7/6/2010 1030  
90.8 MPN/100mL  
EM  
A

Notes:

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-062</td>
<td></td>
<td>Clearwater Dam</td>
<td>Kevin Kloepnner</td>
<td>7/13/2010</td>
<td>8:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>7/13/2010 1120</td>
<td>35.5 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**Lab File Number:** W10G-125  
**Project Name:**  
**Sample Location:** Clearwater Dam  
**Sampled By:** Kevin Kloepner

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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/20/2010</td>
<td>10:30 AM</td>
<td>7/20/2010</td>
<td>12:15 PM</td>
<td>4</td>
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<table>
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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>7/20/2010 1310</td>
<td>50.5 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
Water Laboratories Inc.

NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10H-114</td>
<td></td>
<td>Clearwater Dam</td>
<td>Kevin Kloeppner</td>
<td>8/19/2010</td>
<td>11:10 AM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/19/2010</td>
<td>11:45 AM</td>
<td>5</td>
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</table>

<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>8/19/2010 1250</td>
<td>65.0 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:

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Report Submitted By: [Signature]
Ethel Margana, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
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<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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</thead>
<tbody>
<tr>
<td>W10H-122</td>
<td></td>
<td>Clearwater Dam</td>
<td>Kevin Kloeppner</td>
<td>8/24/2010</td>
<td>7:25 AM</td>
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<table>
<thead>
<tr>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tbody>
<tr>
<td>8/24/2010</td>
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**PARAMETER (METHOD, REPORTING LIMIT)**

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<th>Parameter</th>
<th>Method</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td></td>
<td></td>
<td>8/24/2010 1245</td>
<td>130.4 MPN/100mL</td>
<td>EM A</td>
</tr>
</tbody>
</table>

Notes:

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
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<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-126</td>
<td></td>
<td></td>
<td>Kevin Kloeppner</td>
<td>9/22/2010</td>
<td>5:30 AM</td>
<td>9/22/2010</td>
<td>6:00 AM</td>
<td>68</td>
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<table>
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<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>9/22/2010 06:15</td>
<td>65.9 MPN/100mL</td>
<td>EM</td>
<td>A</td>
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</tbody>
</table>

Notes:

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
### Water Laboratories Inc.

#### NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10J-091</td>
<td></td>
<td>CLEARWATER DAM</td>
<td>KK</td>
<td>10/14/2010</td>
<td>9:05 AM</td>
<td>10/14/2010</td>
<td>9:35 AM</td>
<td>2</td>
</tr>
</tbody>
</table>

**PARAMETER (METHOD, REPORTING LIMIT)**  
**DATE & TIME ANALYZED**  
**RESULTS**  
**BY**  
**BOTTLE**

- E. coli (Quanti-Tray, 1.0 MPN/100mL)  
  Date & Time Analyzed: 10/14/2010  
  Time: 10:10  
  Results: 27.1 MPN/100mL  
  By: EM  
  Bottle: A

---

**Notes:**

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---

Report Submitted By:  
Ethel Margara, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110  
AD 11/8/10
**NON-POTABLE WATER TEST REPORT**

**WENCK ASSOCIATES (CRWD)**

<table>
<thead>
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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10D-023</td>
<td>0002-129</td>
<td>WR 0.2</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

<table>
<thead>
<tr>
<th>TSS</th>
<th>(USGS I-3765-85), (1.0 mg/L)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4/6/2010</td>
<td>1410</td>
<td>KK</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/7/2010</td>
<td>1218</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0166 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

| AD 824/10 |

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
Report of Analysis

Name: WATER LABORATORY INC
PO BOX 388
ELK RIVER, MN 55330

Sample ID/Invoice #: 076579
Account #: 004188
Internal ID#: 90020
Sample Type: Water
Client Sample ID: W10D023
Sample Date: 4/6/2010 9:30 AM
Sampler: D.L.
Receipt Date: 4/6/2010 11:55 AM
Receipt Temp: 6°C

<table>
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<tr>
<th>Analyte</th>
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<th>Reporting Limit</th>
<th>Sample Result</th>
<th>Units</th>
<th>Sample Prep Date/Time</th>
<th>Analysis Date/Time</th>
<th>Analyst</th>
</tr>
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<tbody>
<tr>
<td>Phosphorus, Total</td>
<td>EPA 365.3</td>
<td>0.005</td>
<td>0.122</td>
<td>mg/L</td>
<td>4/09/2010 03:36</td>
<td>mmm</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

Report Approved by: [Signature]
Angela Schelping, Environmental Chemist
Laura Polurzen, Lab Tech
Melinda Mason, Lab Tech

Note: The results listed within the report relate only to the sample received on the date indicated. We do not accept any liability for use of these results. This report must not be reproduced, except in full, without the written approval from Stearns DHIA Laboratories.
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10E-004</td>
<td></td>
<td>WR 0.2</td>
<td>DENNIS LOWEN</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method/Code</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphates</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>5/5/2010 1148</td>
<td>0.0257 mg/L</td>
</tr>
<tr>
<td>TSS</td>
<td>(USGS 1-3755-85)</td>
<td>(1.0 mg/L)</td>
<td>5/6/2010 1630</td>
<td>3.25 mg/L</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0)</td>
<td>(0.1 mg/L)</td>
<td>5/6/2010 1615</td>
<td>0.084 mg/L</td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-145-378

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wencck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10F-004</td>
<td></td>
<td>WR 0.2</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
</table>

**Date Sampled**: 6/1/2010  
**Time Sampled**: 8:45 AM  
**Date Received**: 6/1/2010  
**Time Received**: 10:00 AM  
**Temp**: 3

### Parameter (Method, Reporting Limit)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/2/2010 1200</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/3/2010 1630</td>
<td>3.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/7/2010 0048</td>
<td>0.048 mg/L</td>
<td>B</td>
<td></td>
</tr>
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</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135

---

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---

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-019</td>
<td>205</td>
<td>WR 0.2</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
<tbody>
<tr>
<td>7/6/2010</td>
<td>8:00 AM</td>
<td>7/6/2010</td>
<td>9:10 AM</td>
<td>3</td>
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<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.124 mg/L</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/7/2010 1800</td>
<td>12.5 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010 1601</td>
<td>0.0279 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:  
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

The text is hand-dated "Aug 4th 10".
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10H-051</td>
<td>205</td>
<td>WR 0.2</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
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<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/10/2010</td>
<td>9:45 AM</td>
<td>8/10/2010</td>
<td>10:30 AM</td>
<td>2</td>
</tr>
</tbody>
</table>

### PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|-------------------|---------|----|-------|
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 8/16/2010 | 0.096 mg/L | * | A |
TSS (USGS 1-3765-85, 1.0 mg/L) | 8/19/2010 | 9.5 mg/L** | EM | B |
Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L) | 8/12/2010 | < 0.05 mg/L+ | * | B |

### Notes:
* Total Phosphorus & Orthophosphate done by MN Lab # 027-035-135
**TSS re-run on 8/19/10.
+ Sample analyzed past the holding time.

---

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Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

AD 11/18/10
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-049</td>
<td>205 STREAMS</td>
<td>WR 0.2</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.071 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>9/16/2010 1730</td>
<td>2.5 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>9/14/2010 0841</td>
<td>0.0467 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135

---

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Lab File Number</th>
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<tbody>
<tr>
<td>W10J-025</td>
<td>205 STREAMS</td>
<td>WR 0.2</td>
<td>Dennis Loewen</td>
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<tr>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<tr>
<td>10/5/2010</td>
<td>12:15 PM</td>
<td>10/5/2010</td>
<td>1:35 PM</td>
<td>4</td>
</tr>
</tbody>
</table>

### PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
---|---------------------|--------|----|-------|
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 10/14/2010 | 0.037 mg/L | * | A |
TSS (USGS 1-3765-85, 1.0 mg/L) | 10/7/2010 | 1700 | 2.5 mg/L | EM | B |
Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L) | 10/6/2010 | 1227 | 0.025 mg/L | EM | B |

**Notes:**
* Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
Clear Lake North  
1001282-02 (Water)  
3/18/10 10:30

Classical Chemistry Parameters

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>MRL</th>
<th>Units</th>
<th>Dilution</th>
<th>Batch</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Method</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Orthophosphate as P</td>
<td>0.41</td>
<td>0.030 mg/L</td>
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<td>B0C0317</td>
<td>3/19/10</td>
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<td>EPA 365.3</td>
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<tr>
<td>Phosphorus, Total as P</td>
<td>0.44</td>
<td>0.010 mg/L</td>
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<td>B0C0365</td>
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<td>3/26/10</td>
<td>EPA 365.3</td>
<td></td>
<td></td>
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</table>
## NON-POTABLE WATER TEST REPORT

### WENCK ASSOCIATES (CRWD)

<table>
<thead>
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<th>Sample Location</th>
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<tr>
<td>W10D-020</td>
<td>0002-129</td>
<td>CLN</td>
<td>DENNIS LOEWEN</td>
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<th>Date Received</th>
<th>Time Received</th>
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<tr>
<td>4/6/2010</td>
<td>7:00 AM</td>
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<td>10:30 AM</td>
<td>5</td>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Parameter</th>
<th>Method</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>(USGS 1-3765-85), (1.0 mg/L)</td>
<td>4/8/2010 1410</td>
<td>1.50 mg/L</td>
<td>KK</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/7/2010 1218</td>
<td>0.0553 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

---

**Notes:**

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Report of Analysis

Name: WATER LABORATORY INC  
PO BOX 388  
BLK RIVER, MN 55330

Sample ID/Invoice #: 076876  
Account #: 004188  
Internal ID#: 90917  
Sample Type: Water  
Client Sample ID: W100020  
Sample Date: 4/6/2010 7:00 AM  
Sampler: D.L.  
Receipt Date: 4/6/2010 11:55 AM  
Receipt Temp: 6°C

<table>
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<tr>
<th>Analyte</th>
<th>Approved Method</th>
<th>Reporting Limit</th>
<th>Sample Limit</th>
<th>Units</th>
<th>Sample Prep Date/Time</th>
<th>Analysis Date/Time</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorous, Total</td>
<td>EPA 365.3</td>
<td>0.005</td>
<td>0.117</td>
<td>mg/L</td>
<td>4/09/2010 03:30</td>
<td>N/A</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Comments:

Report Approved by:  
Angela Schnurpe, Environmental Chemist  
Laurie Potenson, Lab Tech  
Melinda Mason, Lab Tech

Note: The results listed within the report relate only to the sample received on the dates indicated. We do not accept any liability for use of these results. This report must not be reproduced, except in full, without the written approval from Stearns DHIA Laboratories.
## NON-POTABLE WATER TEST REPORT

### CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10E-001</td>
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<td>CLN</td>
<td>DENNIS LOEWEN</td>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method/Spec</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>5/5/2010 114B</td>
<td>0.197mg/L</td>
<td>EM  A</td>
<td></td>
<td></td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-89), (1.0 mg/L)</td>
<td>5/5/2010 1630</td>
<td>&lt; 1.0 mg/L</td>
<td>EM  A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev. 2.0, (0.1 mg/L)</td>
<td>5/6/2010 1615</td>
<td>0.253 mg/L</td>
<td>B</td>
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<td></td>
</tr>
</tbody>
</table>

### Notes:

Total Phosphorus done by MN Lab # 027-145-378

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10F-001</td>
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<td>CLN</td>
<td>DENNIS LOEWEN</td>
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</table>

Date Sampled: 6/1/2010  
Time Sampled: 7:15 AM  

Date Received: 6/1/2010  
Time Received: 10:00 AM  
Temp: 3

PARAMETER (METHOD, REPORTING LIMIT)  
DATE & TIME ANALYZED  
RESULTS  
BY  
BOTTLE

Orthophosphate (EPA 365.1, 0.01 mg/L)  
6/2/2010  
1200  
0.421 mg/L  
EM  
A

TSS (USGS 1-3765-85, 1.0 mg/L)  
6/3/2010  
1630  
1.86 mg/L  
EM  
A

Total Phosphorus (EPA 365.3, 0.005 mg/L)  
6/11/2010  
0.548 mg/L  
B

Notes:  
Total Phosphorus done by MN Lab # 027-035-135

The test results are only indicative of the sample tested from the sample point on the date collected.  
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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
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<th>Parameter (Method, Reporting Limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10G-016</td>
<td>205</td>
<td>CLN</td>
<td>Dennis Loewen</td>
<td>7/5/2010</td>
<td>6:18 AM</td>
<td>7/6/2010</td>
<td>9:10 AM</td>
<td>3</td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
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<tr>
<td></td>
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<tr>
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<td>0.739 mg/L</td>
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<td></td>
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<td></td>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
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<td></td>
<td>7/7/2010</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1800</td>
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<td>2.25 mg/L</td>
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<td></td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
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<tr>
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<td>7/7/2010</td>
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<td></td>
<td></td>
<td>1601</td>
<td></td>
<td>0.505 mg/L</td>
</tr>
</tbody>
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**Notes:**  
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Temp</th>
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<td>W10H-048</td>
<td>205</td>
<td>CLN</td>
<td>Dennis Loewen</td>
<td>8/10/2010</td>
<td>6:34 AM</td>
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<table>
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<tr>
<th>Parameter (Method, Reporting Limit)</th>
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<th>Results</th>
<th>By</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/16/2010</td>
<td>0.355 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>8/19/2010</td>
<td>1700 mg/L**</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>8/12/2010</td>
<td>0.206 mg/L+</td>
<td>*</td>
<td>B</td>
</tr>
</tbody>
</table>

### Notes:
- * Total Phosphorus & Orthophosphate done by MN Lab # 027-035-135
- **TSS re-run on 8/19/10
- + Sample analyzed past the holding time.

The test results are only indicative of the sample tested from the sample point on the date collected.

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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By:
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
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<th>Temp</th>
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<td>W101-046</td>
<td>205 STREAMS</td>
<td>CLN</td>
<td>Dennis Loewen</td>
<td>9/13/2010</td>
<td>7:00 AM</td>
<td>9/13/2010</td>
<td>11:25 AM</td>
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<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>RESULTS</th>
<th>TEMP</th>
<th>BOTTLE</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>0.257 mg/L</td>
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<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-65, 1.0 mg/L)</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>0.219 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110  
Signature: [Signature]  
Date: 11/18/10
**Water Laboratories Inc.**

**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Lab File Number</th>
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<td>205 STREAMS</td>
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<td>Dennis Lcewen</td>
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<th>Time Received</th>
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<td>10/5/2010</td>
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<td>10/5/2010</td>
<td>1:35 PM</td>
<td>4</td>
</tr>
</tbody>
</table>

**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

- **Total Phosphorus (EPA 356.3, 0.005 mg/L)**  
  10/14/2010  
  0.173 mg/L  
  *  
  A

- **TSS (USGS 1-3765-85, 1.0 mg/L)**  
  10/7/2010  
  1700  
  < 1.0 mg/L  
  EM  
  B

- **Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)**  
  10/6/2010  
  1227  
  0.147 mg/L  
  EM  
  B

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margara, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

[Signature]

[Date] 11/11/10
### Clear Lake South
1001282-03 (Water)
3/18/10 11:00

#### Classical Chemistry Parameters

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>MRL</th>
<th>Units</th>
<th>Dilution</th>
<th>Batch</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Method</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate as P</td>
<td>0.17</td>
<td>0.0060</td>
<td>mg/L</td>
<td>I</td>
<td>BOC0317</td>
<td>3/19/10</td>
<td>3/19/10</td>
<td>EPA 365.3</td>
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<tr>
<td>Phosphorus, Total as P</td>
<td>0.23</td>
<td>0.010</td>
<td>mg/L</td>
<td>I</td>
<td>BOC0365</td>
<td>3/24/10</td>
<td>3/26/10</td>
<td>EPA 365.3</td>
<td></td>
</tr>
</tbody>
</table>

EPA Lab ID: MN00063

The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
**NON-POTABLE WATER TEST REPORT**

WENCK ASSOCIATES (CRWD)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
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<tbody>
<tr>
<td>W10D-021</td>
<td>0002-129</td>
<td>CLS</td>
<td>DENNIS LOEWEN</td>
</tr>
</tbody>
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<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</table>

**PARAMETERS, METHOD, REPORTING LIMIT**

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<tr>
<th>Parameter</th>
<th>Method &amp; Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>(USGS I-3765-85), (1.0 mg/L)</td>
<td>4/6/2010</td>
<td>1410</td>
<td>1.75 mg/L</td>
<td>KK</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/7/2010</td>
<td>1218</td>
<td>0.066 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
Report of Analysis

Name: WATER LABORATORY INC
PO BOX 385
ELK RIVER, MN 55330

Sample ID/Invoice #: 076577
Account #: 004188
Internal ID#: 90918
Sample Type: Water
Client Sample ID: W103021
Sample Date: 4/6/2010 7:35 AM
Sampler: D.L.
Receipt Date: 4/6/2010 11:55 AM
Receipt Temp: 6°C

<table>
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<tr>
<th>Analyte</th>
<th>Approved Method</th>
<th>Reporting Limit</th>
<th>Sample Result</th>
<th>Units</th>
<th>Sample Prep Date/Time</th>
<th>Analysis Date/Time</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorous, Total</td>
<td>EPA 365.3</td>
<td>0.005</td>
<td>0.147</td>
<td>mg/L</td>
<td></td>
<td>4/9/2010 03:30</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Comments:

Report Approved by:
Angela Schepkin, Environmental Chemist
Laurin Peterson, Lab Tech
Malinda Mazen, Lab Tech

Note: The results listed within the report relate only to the sample received on the dates indicated. We do not accept any liability for use of these results. This report must not be reproduced, except in full, without the written approval from Stearns DHIA Laboratories.
## Non-Potable Water Test Report

**Lab File Number:** W10E-002  
**Project Name:** CRWD (Wenck Associates, Inc.)  
**Sample Location:** CLS  
**Sampled By:** DENNIS LOEWEN  
**Date Sampled:** 5/3/2010  
**Time Sampled:** 7:19 AM  
**Date Received:** 5/3/2010  
**Time Received:** 10:15 AM  
**Temp:** 5

### Parameters, Method, Reporting Limit

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<th>Method/Rev.</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td></td>
<td>5/5/2010</td>
<td>1148</td>
<td>0.159 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>TSS</td>
<td>(USGS 1-3765-85), (1.0 mg/L)</td>
<td></td>
<td>5/5/2010</td>
<td>1630</td>
<td>1.5 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev. 2.0), (0.1 mg/L)</td>
<td></td>
<td>5/6/2010</td>
<td>1615</td>
<td>0.114 mg/L</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-145-378

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

## Details:

- **CRWD (Wenck Associates, Inc.)**
- **Lab File Number:** W10F-002
- **Project Name:** CLS
- **Sample Location:**
- **Sampled By:** DENNIS LOEWEN
- **Date Sampled:** 6/1/2010
- **Time Sampled:** 7:38 AM
- **Date Received:** 6/1/2010
- **Time Received:** 10:00 AM
- **Temp:** 3

## Parameters and Results:

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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/2/2010 1200</td>
<td>0.031 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/3/2010 1630</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/7/2010</td>
<td>0.140 mg/L</td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

---

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-017</td>
<td>205</td>
<td>CLS</td>
<td>Dennis Loewen</td>
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### Parameter (Method, Reporting Limit)

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<th>Results</th>
<th>BY</th>
<th>Bottle</th>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/20/2010</td>
<td>0.980 mg/L</td>
<td>A</td>
<td></td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/7/2010</td>
<td>1800</td>
<td>12.5 mg/L</td>
<td>EM</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/7/2010</td>
<td>1601</td>
<td>0.329 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**  
Total Phosphorus done by MN Lab # 027-035-135

The test results are only indicative of the sample tested from the sample point on the date collected.  
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Report Submitted By:  
Ethel Margeria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<th>Sample Location</th>
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<tr>
<td>W10H-049</td>
<td>205</td>
<td>CLS</td>
<td>Dennis Loewen</td>
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</table>

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<th>Date Received</th>
<th>Time Received</th>
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<td>8/10/2010</td>
<td>7:00 AM</td>
<td>8/10/2010</td>
<td>10:30 AM</td>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>8/16/2010</td>
<td>0.120 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>8/19/2010</td>
<td>1.5 mg/L</td>
<td>**</td>
<td>EM</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L)</td>
<td>8/12/2010</td>
<td>0.053 mg/L+</td>
<td>*</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
- Total Phosphorus & Orthophosphate done by MN Lab # 027-035-135
- TSS re-run on 8/19/10.
+ Sample analyzed past the holding time.

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

AD 11/18/10
# NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>9/28/2010</td>
<td>0.093 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>9/16/2010</td>
<td>1730</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 300.0 Rev 2.1, 0.65 mg/L)</td>
<td>9/14/2010</td>
<td>0841</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**  
* Total Phosphorus done by MN Lab # 027-035-135

---

The test results are only indicative of the sample tested from the sample point on the date collected.  
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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>W10J-023</td>
<td>205 STREAMS</td>
<td>CLS</td>
<td>Dennis Loewen</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/5/2010</td>
<td>10:50 AM</td>
<td>10/5/2010</td>
<td>1:35 PM</td>
<td>4</td>
</tr>
</tbody>
</table>

### PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE |
--- | --- | --- | --- | --- |
Total Phosphorus (EPA 365.3, 0.005 mg/L) | 10/14/2010 | 0.081 mg/L | * | A |
TSS (USGS 1-3765-85, 1.0 mg/L) | 10/6/2010 | 1700 | EM | B |
Orthophosphate (EPA 300.0 Rev 2.1, 0.05 mg/L) | 10/6/2010 | 1227 | 2.0 mg/L | 0.071 mg/L | EM | B |

**Notes:**
* Total Phosphorus done by MN Lab # 027-035-135

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By:Ethel Margana, Laboratory Director
Minnesota State Laboratory ID: 027-141 110

[Signature] 16/10/10
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
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<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-051</td>
<td>205 STREAMS</td>
<td>CR 0.2</td>
<td>Dennis Loewen</td>
<td>9/13/2010</td>
<td>10:40 AM</td>
<td>9/13/2010</td>
<td>11:25 AM</td>
<td>8</td>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>9/13/2010 1200</td>
<td>36.9 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

Lab File Number          Project Name          Sample Location          Sampled By
W101-160                 CR 0.2               CR 0.1                     Dennis Loewen

Date Sampled          Time Sampled          Date Received          Time Received          Temp
9/27/2010              12:30 PM              9/27/2010                 1:10 PM                 68

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>9/27/2010 1330</td>
<td>48.7 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

AD 11/18/10
Water Laboratories Inc.

NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10J-027</td>
<td>205 STREAMS</td>
<td>CR 0.2</td>
<td>Dennis Loewen</td>
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Date Sampled: 10/5/2010  
Time Sampled: 1:00 PM  
Date Received: 10/5/2010  
Time Received: 1:35 PM  
Temp: 4

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<tr>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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</thead>
<tbody>
<tr>
<td>E. coli (Quanti-Tray, 1.0 MPN/100mL)</td>
<td>10/5/2010 1400</td>
<td>15.0 MPN/100mL</td>
<td>EM</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes.

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110  

[Signature]

AD 11/8/10
# Water Laboratories Inc.

## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10C-094</td>
<td></td>
<td>SSW01</td>
<td>Was Boll</td>
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<table>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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</thead>
<tbody>
<tr>
<td>3/24/2010</td>
<td>8:15 AM</td>
<td>3/25/2010</td>
<td>7:00 AM</td>
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## PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method/Standard</th>
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<th>Date &amp; Time Analyzed</th>
<th>Results (mg/L)</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0)</td>
<td>(0.1 mg/L)</td>
<td>3/29/2010</td>
<td>0.222</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-85)</td>
<td>(1.0 mg/L)</td>
<td>3/25/2010</td>
<td>6.0</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>3/26/2010</td>
<td>0.058</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

8/24/10
# NON-POTABLE WATER TEST REPORT

CFWD (Wenck Associates, Inc.)

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<td>SSW 01</td>
<td>WESLEY BOLL</td>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate, (EPA 365.1 Rev. 2.0), (0.01 mg/L)</td>
<td>5/20/2010 1603</td>
<td>0.0106 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS, (USGS 1-3765-85), (1.0 mg/L)</td>
<td>5/20/2010 1710</td>
<td>6.5 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus, (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>5/27/2010</td>
<td>0.053 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

Total Phosphorus done by MN Lab # 027-035-135
Orthophosphate Reagent Blank does not meet the quality assurance criteria.

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By:
[Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**Lab File Number**
W10F-089

**Project Name**
SSW 01

**Sample Location**
SSW 01

**Sampled By**
WESLEY BOLL

**Date Sampled**
6/15/2010

**Date Received**
6/16/2010

**Time Sampled**
9:15 AM

**Time Received**
7:30 AM

**Temp**
2

<table>
<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.214 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/17/2010 1700</td>
<td>1.75 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/29/2010</td>
<td>0.272 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10G-150</td>
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<td>SSW 01</td>
<td>Wes Boll</td>
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<th>Date Received</th>
<th>Time Received</th>
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<td>7/21/2010</td>
<td>8:50 AM</td>
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<td>2:20 PM</td>
<td>5</td>
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PARAMETERS, METHOD, REPORTING LIMIT

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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td></td>
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<td>7/29/2010</td>
<td>0.412 mg/L</td>
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<td>A</td>
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<td>TSS (USGS 1-3755-85, 1.0 mg/L)</td>
<td></td>
<td></td>
<td>7/22/2010</td>
<td>1530</td>
<td>FM</td>
<td>B</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td></td>
<td></td>
<td>7/22/2010</td>
<td>0901</td>
<td>FM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135

The test results are only indicative of the sample tested from the sample point on the date collected.
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Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<tr>
<td>W10C-095</td>
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<td>SSW02</td>
<td>Wes Boll</td>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tr>
<td>3/24/2010</td>
<td>9:10 AM</td>
<td>3/25/2010</td>
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## PARAMETERS, METHOD, REPORTING LIMIT

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<th>DATE &amp; TIME ANALYZED</th>
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<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0)</td>
<td>(0.1 mg/L)</td>
<td>3/29/2010</td>
<td>1426</td>
<td>0.224 mg/L</td>
<td>EM</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-85)</td>
<td>(1.0 mg/L)</td>
<td>3/25/2010</td>
<td>1600</td>
<td>1.25 mg/L</td>
<td>EM</td>
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<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>3/26/2010</td>
<td>1110</td>
<td>0.499 mg/L</td>
<td>EM</td>
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</tbody>
</table>

## Notes:

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
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<tr>
<td>W10E-113</td>
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<td>WESLEY BOLL</td>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate, (EPA 365.1 Rev 2.0)</td>
<td>5/20/2010 1603</td>
<td>0.152 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS, (USGS 1-3765-85), (1.0 mg/L)</td>
<td>5/20/2010 1710</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus, (EPA 365.3 Rev 2.0), (0.005 mg/L)</td>
<td>5/27/2010 217</td>
<td>0.217 mg/L</td>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135
Orthophosphate Reagent Blank does not meet the quality assurance criteria.

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<tbody>
<tr>
<td>W10F-090</td>
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<td>SSW 02</td>
<td>WESLEY BOLL</td>
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</table>

<table>
<thead>
<tr>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
</table>

**PARAMETER (METHOD, REPORTING LIMIT) | DATE & TIME ANALYZED | RESULTS | BY | BOTTLE**

- Orthophosphate (EPA 365.1, 0.01 mg/L) | 6/17/2010 11:50 | 0.178 mg/L | EM | A
- TSS (USGS 1-3765-85, 1.0 mg/L) | 6/17/2010 17:00 | 7.25 mg/L | EM | A
- Total Phosphorus (EPA 365.3, 0.005 mg/L) | 6/29/2010 | 0.248 mg/L |   | B

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: 
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
CRWD (Wenck Associates, Inc.)
P.O. Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
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<td>Wes Boll</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

<table>
<thead>
<tr>
<th></th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.435 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1.3765-85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.340 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**
* Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
SSW04
1001282-05 (Water)
3/18/10 12:30

Classical Chemistry Parameters

<table>
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<th>Analyte</th>
<th>Result</th>
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<th>Units</th>
<th>Dilution</th>
<th>Batch</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Method</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate as P</td>
<td>0.20</td>
<td>0.0060</td>
<td>mg/L</td>
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<td>B0C0317</td>
<td>3/19/10</td>
<td>3/19/10</td>
<td>EPA 365.3</td>
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<tr>
<td>Phosphorus, Total as P</td>
<td>0.27</td>
<td>0.010</td>
<td>mg/L</td>
<td>1</td>
<td>B0C0366</td>
<td>3/25/10</td>
<td>3/26/10</td>
<td>EPA 365.3</td>
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</tr>
</tbody>
</table>
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10C-098</td>
<td></td>
<td>SSW04</td>
<td>Wes Boll</td>
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<tr>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
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</thead>
<tbody>
<tr>
<td>3/24/2010</td>
<td>10:00 AM</td>
<td>3/25/2010</td>
<td>7:00 AM</td>
<td>2</td>
</tr>
</tbody>
</table>

### PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
<th>Parameter</th>
<th>Method Details</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0). (0.1 mg/L)</td>
<td>3/29/2010</td>
<td>1426</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS</td>
<td>(USGS 1-3765-86). (1.0 mg/L)</td>
<td>3/25/2010</td>
<td>1600</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0). (0.01 mg/L)</td>
<td>3/26/2010</td>
<td>1110</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

[Signature]

8/2/110
## Non-Potable Water Test Report

**Lab File Number:** W10E-110  
**Project Name:** CRWD (Wenck Associates, Inc.)  
**Sample Location:** SSW 04  
**Sampled By:** Wesley Boll  
**Date Sampled:** 5/20/2010  
**Time Sampled:** 8:50 AM  
**Date Received:** 5/20/2010  
**Time Received:** 1:00 PM  
**Temp:** 0

<table>
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<th>Parameter (Method, Reporting Limit)</th>
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<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1 Rev. 2.0), (0.01 mg/L)</td>
<td>5/20/2010 1603</td>
<td>0.0988 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85), (1.0 mg/L)</td>
<td>5/22/2010 1710</td>
<td>1.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>5/27/2010</td>
<td>0.170 mg/L</td>
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<td></td>
</tr>
</tbody>
</table>

### Notes:
- Total Phosphorus done by MN Lab # 027-035-135
- Orthophosphate Reagent Blank does not meet the quality assurance criteria.

---

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

---

Report Submitted By: Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110

---

333 East Main Street  
PO Box 388  
Elk River, MN 55330  
Phone: (763) 441-7509  
Fax: (763) 441-9176  
Email: h2olab@spacestar.net  
Web Site: www.waterlabs.net
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
</tr>
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<tbody>
<tr>
<td>W10F-093</td>
<td>SSW 04</td>
<td>WESLEY BOLL</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<td>6/15/2010</td>
<td>10:00 AM</td>
<td>6/16/2010</td>
<td>7:30 AM</td>
<td>2</td>
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<table>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.243 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/17/2010 1700</td>
<td>2.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010 1700</td>
<td>0.349 mg/L</td>
<td></td>
<td>B</td>
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</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By:
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

AD 9/25/10
CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

Lab File Number: W10G-154
Project Name: SSW 04
Sample Location: SSW 04
Sampled By: Wes Boll

Date Sampled: 7/21/2010
Time Sampled: 9:45 AM
Date Received: 7/21/2010
Time Received: 2:20 PM
Temp: 5

PARAMETERS, METHOD, REPORTING LIMIT

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<th>By</th>
<th>Bottle</th>
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<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.911 mg/L</td>
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<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.684 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**Lab File Number**: W10C-096  
**Sample Location**: SDD01  
**Sampled By**: Wes Boll

<table>
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<th>Time Received</th>
<th>Temp</th>
<th>Parameters, Method, Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/24/2010</td>
<td>9:30 AM</td>
<td>3/25/2010</td>
<td>7:00 AM</td>
<td></td>
<td>Total Phosphorus, (EPA 365.4 Rev 2.0), (0.1 mg/L)</td>
<td>3/29/2010</td>
<td>1426</td>
<td>EM</td>
<td>A</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TSS, (USGS 1-3765-85), (1.0 mg/L)</td>
<td>3/25/2010</td>
<td>1600</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthophosphate, (EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>3/26/2010</td>
<td>1110</td>
<td>0.080 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

**Notes:**

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
**Non-Potable Water Test Report**

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate, (EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>5/20/2010 1603</td>
<td>0.0225 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS, (USGS 1-3765-85), (1.0 mg/L)</td>
<td>5/20/2010 1710</td>
<td>3.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus, (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>5/27/2010</td>
<td>0.049 mg/L</td>
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<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Total Phosphorus done by MN Lab # 027-035-135
- Orthophosphate Reagent Blank does not meet the quality assurance criteria.

---

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
<th>Date Sampled</th>
<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Results</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>W10F-091</td>
<td></td>
<td>SDD 01</td>
<td>WESLEY BOLL</td>
<td>6/15/2010</td>
<td>9:30 AM</td>
<td>6/16/2010</td>
<td>7:30 AM</td>
<td>2</td>
<td></td>
<td></td>
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<thead>
<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.149 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/17/2010 1700</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/29/2010 0253</td>
<td>0.253 mg/L</td>
<td></td>
<td>B</td>
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</tbody>
</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
CRWD (Wenck Associates, Inc.)

**Non-Potable Water Test Report**

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<th>Lab File Number</th>
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<tr>
<td>W10E-115</td>
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<td>SCE 01</td>
<td>WESLEY BOLL</td>
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<th>Time Received</th>
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<td>5/20/2010</td>
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<td>1:00 PM</td>
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**Parameter (Method, Reporting Limit)**

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<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>5/20/2010 1603</td>
<td>0.0189 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3705-85)</td>
<td>5/20/2010 1710</td>
<td>5.5 mg/L</td>
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<td>Total Phosphorus</td>
<td>(EPA 365.3 Rev 2.0)</td>
<td>5/27/2010 042</td>
<td>0.042 mg/L</td>
<td></td>
<td>B</td>
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</table>

**Notes:**

- Total Phosphorus done by MN Lab # 027-035-135
- Orthophosphate Reagent Blank does not meet the quality assurance criteria.

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Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

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<td>WESLEY BOLL</td>
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<th>Time Received</th>
<th>Temp</th>
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</thead>
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<td>6/15/2010</td>
<td>10:45 AM</td>
<td>6/16/2010</td>
<td>7:30 AM</td>
<td>2</td>
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<table>
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<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.013 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/17/2010 1700</td>
<td>4.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/29/2010</td>
<td>0.029 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110

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# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
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<tbody>
<tr>
<td>W10G-149</td>
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<td>SCE 01</td>
<td>Wes Boll</td>
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<th>Time Received</th>
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<tr>
<td>7/21/2010</td>
<td>8:30 AM</td>
<td>7/21/2010</td>
<td>2:20 PM</td>
<td>5</td>
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## PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
<th>Parameter</th>
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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/27/2010</td>
<td>0.021 mg/L</td>
<td>*</td>
<td>A</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>2.37 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0141 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:  
* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
### NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
<thead>
<tr>
<th>Lab File Number</th>
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<th>Sample Location</th>
<th>Sampled By</th>
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</thead>
<tbody>
<tr>
<td>W10C-097</td>
<td></td>
<td>SHEO1</td>
<td>Wes Boll</td>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/24/2010</td>
<td>9:45 AM</td>
<td>3/25/2010</td>
<td>7:00 AM</td>
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### PARAMETERS, METHOD, REPORTING LIMIT

<table>
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<tr>
<th>Parameter</th>
<th>Method</th>
<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.4 Rev 2.0)</td>
<td>(0.1 mg/L)</td>
<td>3/29/2010</td>
<td>1426</td>
<td>&lt; 0.1 mg/L</td>
<td>EM</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-85)</td>
<td>(1.0 mg/L)</td>
<td>3/25/2010</td>
<td>1600</td>
<td>5.25 mg/L</td>
<td>EM</td>
</tr>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>3/26/2010</td>
<td>1110</td>
<td>0.015 mg/L</td>
<td>EM</td>
</tr>
</tbody>
</table>

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10E-111</td>
<td>SHE 01</td>
<td>WESLEY BOLL</td>
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<th>Date Received</th>
<th>Time Received</th>
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<th>RESULTS</th>
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<tbody>
<tr>
<td>5/20/2010</td>
<td>9:10 AM</td>
<td>5/20/2010</td>
<td>1:00 PM</td>
<td>70</td>
<td></td>
</tr>
</tbody>
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**PARAMETER (METHOD, REPORTING LIMIT)**

- **Orthophosphate**
  - (EPA 365.1 Rev 2.0) (0.01 mg/L)
  - Date & Time Analyzed: 5/20/2010
  - Result: 1608
  - BY: EM A

- **TSS**
  - (USGS 1-3765-95) (1.0 mg/L)
  - Date & Time Analyzed: 5/20/2010
  - Result: 1710
  - BY: EM A

- **Total Phosphorus**
  - (EPA 365.3 Rev. 2.0) (0.005 mg/L)
  - Date & Time Analyzed: 5/27/2010
  - Result: 0.156 mg/L
  - BY: EM B

**Notes:**

Total Phosphorus done by MN Lab # 027-035-135
Orthophosphate Reagent Blank does not meet the quality assurance criteria.
## Non-Potable Water Test Report

**Lab File Number:** W10F-092  
**Project Name:** SHE 01  
**Sample Location:** SHE 01  
**Sampled By:** WESLEY BOLL

<table>
<thead>
<tr>
<th>Date Sampled</th>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter Description</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/15/2010</td>
<td>9:40 AM</td>
<td>6/16/2010</td>
<td>7:30 AM</td>
<td>2</td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010</td>
<td>1150</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/17/2010</td>
<td>1700</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>6/29/2010</td>
<td>0.136 mg/L</td>
<td></td>
<td>B</td>
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</tbody>
</table>

### Notes:
Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

Lab File Number: W10G-153
Project Name: SHE 01
Sample Location: SHE 01
Sampled By: Wes Boll

Date Sampled: 7/21/2010
Time Sampled: 9:30 AM
Date Received: 7/21/2010
Time Received: 2:20 PM
Temp: 5

PARAMETERS, METHOD, REPORTING LIMIT

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<th>BY</th>
<th>Bottle</th>
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<tr>
<td>*Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.200 mg/L</td>
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<td>A</td>
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<tr>
<td>TSS (USGS 1.3765.85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>13.0 mg/L</td>
<td>EM</td>
<td>B</td>
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<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.0327 mg/L</td>
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</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# Classical Chemistry Parameters

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<th>Analyte</th>
<th>Result</th>
<th>MRL</th>
<th>Units</th>
<th>Dilution</th>
<th>Batch</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Method</th>
<th>Notes</th>
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<tr>
<td>Orthophosphate as P</td>
<td>0.46</td>
<td>0.030</td>
<td>mg/L</td>
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<td>B0C0317</td>
<td>3/19/10</td>
<td>3/19/10</td>
<td>EPA 365.3</td>
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<tr>
<td>Phosphorus, Total as P</td>
<td>0.52</td>
<td>0.020</td>
<td>mg/L</td>
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<td>B0C0366</td>
<td>3/25/10</td>
<td>3/26/10</td>
<td>EPA 365.3</td>
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### NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
<th>Sample Location</th>
<th>Sampled By</th>
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<tbody>
<tr>
<td>W10F-094</td>
<td></td>
<td>SEGNER</td>
<td>WESLEY BOLL</td>
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<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
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<tr>
<th>PARAMETER (METHOD, REPORTING LIMIT)</th>
<th>DATE &amp; TIME ANALYZED</th>
<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010 1150</td>
<td>0.239 mg/L</td>
<td>EM</td>
<td>A</td>
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<td>Total Phosphorus, (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010 030</td>
<td>0.387 mg/L</td>
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<td>B</td>
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</table>

**Notes:**
Total Phosphorus done by MN Lab # 027-035-135

---

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Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**Non-Potable Water Test Report**

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<tr>
<th>Lab File Number</th>
<th>Project Name</th>
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<tr>
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<td>WESLEY BOLL</td>
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<th>Time Sampled</th>
<th>Date Received</th>
<th>Time Received</th>
<th>Temp</th>
<th>Parameter (Method, Reporting Limit)</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/15/2010</td>
<td>10:30 AM</td>
<td></td>
<td>6/16/2010</td>
<td>2</td>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/17/2010</td>
<td>1150</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Phosphorus, (EPA 365.3, 0.005 mg/L)</td>
<td>6/30/2010</td>
<td>0.339 mg/L</td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
# NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<tbody>
<tr>
<td>W10G-155</td>
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<td>SEGNER</td>
<td>Wes Boll</td>
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<th>Date Received</th>
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<tbody>
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## PARAMETERS, METHOD, REPORTING LIMIT

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<tr>
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<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.580 mg/L</td>
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<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3755-85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>138 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.350 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:

* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: [Signature]

Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
<thead>
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<tr>
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<th>Time Received</th>
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<tr>
<td>4/21/2010</td>
<td>10:00 AM</td>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>By</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3 Rev 2.0)</td>
<td>(0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.049 mg/L</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-145-378

---

The test results are only indicative of the sample tested from the sample point on the date collected.

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---

Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

CRWD (Wenck Associates, Inc.)

<table>
<thead>
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<td>WES BOLL</td>
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<th>Temp</th>
<th>Parameters, Method, Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/21/2010</td>
<td></td>
<td>4/21/2010</td>
<td>12:40 PM</td>
<td>4</td>
<td>Orthophosphate, (EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/21/2010 1545</td>
<td>0.0158 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TSS, (USGS 1-3765-85), (1.0 mg/L)</td>
<td>4/22/2010 1600</td>
<td>13.5 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Phosphorus, (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.141 mg/L</td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-145-37B

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)

<table>
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<td>WES BOLL</td>
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<td>12:30 PM</td>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate, (EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/21/2010 1545</td>
<td>0.0652 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS, (USGS 1-3765-85), (1.9 mg/L)</td>
<td>4/22/2010 1600</td>
<td>11.5 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus, (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.246 mg/L</td>
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<td></td>
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</table>

Notes:
Total Phosphorus done by MN Lab # 027-145-378

The test results are only indicative of the sample tested from the sample point on the date collected.
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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

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<tr>
<th>Lab File Number</th>
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<tbody>
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<td>WES BOLL</td>
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<tr>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate (EPA 365.1 Rev 2.0) (0.01 mg/L)</td>
<td>4/21/2010 1545</td>
<td>0.0134 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3765-85) (1.0 mg/L)</td>
<td>4/22/2010 1600</td>
<td>9.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus (EPA 365.3 Rev. 2.0) (0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.161 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total Phosphorus done by MN Lab # 027-145-378

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

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<tr>
<th>Lab File Number</th>
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<tbody>
<tr>
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<td>WES BOLL</td>
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**PARAMETERS, METHOD, REPORTING LIMIT**

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<th>Reporting Limit</th>
<th>Date &amp; Time Analyzed</th>
<th>Results</th>
<th>BY</th>
<th>BOTTLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0), (0.01 mg/L)</td>
<td>4/21/2010</td>
<td>1545</td>
<td>0.169 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-85), (1.0 mg/L)</td>
<td>4/22/2010</td>
<td>1600</td>
<td>2.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>4/23/2010</td>
<td>1400</td>
<td>0.301 mg/L</td>
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<td>B</td>
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</table>

**Notes:**

Total Phosphorus and E. coli done by MN Lab # 027-145-378

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
**NON-POTABLE WATER TEST REPORT**

CRWD (Wenck Associates, Inc.)

<table>
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<tr>
<th>Lab File Number</th>
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<tr>
<td>4/21/2010</td>
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<th>RESULTS</th>
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<th>BOTTLE</th>
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<tr>
<td>Orthophosphate. (EPA 365.1 Rev 2.0) (0.01 mg/L)</td>
<td>4/21/2010 1545</td>
<td>0.0250 mg/L</td>
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<td>A</td>
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<tr>
<td>TSS. (USGS 1-3765-95). (1.0 mg/L)</td>
<td>4/22/2010 1600</td>
<td>&lt; 1.0 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus. (EPA 365.3 Rev. 2.0). (0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.097 mg/L</td>
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<td>B</td>
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</table>

**Notes:**

Total Phosphorus done by MN Lab # 027-145-378

---

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Report Submitted By: [Signature]
Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**

<table>
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<td>SHE 01</td>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Result</th>
<th>By</th>
<th>Bottle</th>
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</thead>
<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>(0.01 mg/L)</td>
<td>4/21/2010 1545</td>
<td>0.0235 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>TSS</td>
<td>(USGS 1-3765-95)</td>
<td>(1.0 mg/L)</td>
<td>4/22/2010 1600</td>
<td>9.25 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3 Rev. 2.0)</td>
<td>(0.005 mg/L)</td>
<td>4/28/2010 1400</td>
<td>0.186 mg/L</td>
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### Notes:

Total Phosphorus done by MN Lab # 027-145-378

---

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---

Report Submitted By:  

[Signature]

Ethel Margaria, Laboratory Director  

Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

Lab File Number  
W10D-120

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Sample Location  
SCE 01

Sampled By  
WES BOLL

### PARAMETERS, METHOD, REPORTING LIMIT

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<th>Method</th>
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<th>Date &amp; Time Analyzed</th>
<th>Results</th>
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<tbody>
<tr>
<td>Orthophosphate</td>
<td>(EPA 365.1 Rev 2.0)</td>
<td>0.01 mg/L</td>
<td>4/21/2010 1545</td>
<td>0.0179 mg/L</td>
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<td>A</td>
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<td>TSS</td>
<td>(USGS 1-3765-95)</td>
<td>1.0 mg/L</td>
<td>4/22/2010 1600</td>
<td>14.5 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>(EPA 365.3 Rev. 2.0)</td>
<td>0.005 mg/L</td>
<td>4/28/2010 1400</td>
<td>0.037 mg/L</td>
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Notes:

Total Phosphorus done by MN Lab # 027-145-378

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)

<table>
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<th>RESULTS</th>
<th>BY</th>
<th>BOTTLE</th>
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<tbody>
<tr>
<td>Orthophosphate, (EPA 365.1 Rev. 2.0), (0.01 mg/L)</td>
<td>5/20/2010 1603</td>
<td>&lt; 0.01 mg/L</td>
<td>EM</td>
<td>A</td>
</tr>
<tr>
<td>TSS, (USGS 1-3766-85), (1.0 mg/L)</td>
<td>5/20/2010 1710</td>
<td>3.25 mg/L</td>
<td>EM</td>
<td>A</td>
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<tr>
<td>Total Phosphorus, (EPA 365.3 Rev. 2.0), (0.005 mg/L)</td>
<td>5/27/2010 0041</td>
<td>0.041 mg/L</td>
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**Notes:**

- Total Phosphorus done by MN Lab # 05/26/2010
- Orthophosphate Reagent Blank does not meet the quality assurance criteria.

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without written approval from Water Laboratories, Inc. Water Laboratories, Inc. is certified by the State of Minnesota under the Clean Water Program.

Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)  
P.O Box 481, Annandale, MN 55302

<table>
<thead>
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<th>Sample Location</th>
<th>Sampled By</th>
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### PARAMETERS, METHOD, REPORTING LIMIT

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<tbody>
<tr>
<td>Total Phosphorus (EPA 365.3, 0.005 mg/L)</td>
<td>7/29/2010</td>
<td>0.911 mg/L</td>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>TSS (USGS 1-3785-85, 1.0 mg/L)</td>
<td>7/22/2010 1530</td>
<td>2.25 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.717 mg/L</td>
<td>EM</td>
<td>B</td>
</tr>
</tbody>
</table>

**Notes:**

* Total Phosphorus done by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

<table>
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<tr>
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<td>Wes Boll</td>
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<tr>
<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
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<td>2.25 mg/L</td>
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<td>B</td>
</tr>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>7/22/2010 0901</td>
<td>0.717 mg/L</td>
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Notes:
* Total Phosphorus done by MN Lab # 027-035-135

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Report Submitted By: Ethel Margana, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

**CRWD (Wenck Associates, Inc.)**  
P.O Box 481, Annandale, MN 55302

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<th>Time Sampled</th>
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<td>W10F-155</td>
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<td>FDI Field Duplicate</td>
<td>Dennis Loewen</td>
<td>6/22/2010</td>
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<td>Chlorophyll A (SM 10200 H, 1µg/L)</td>
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<td>11 µg/L</td>
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Notes:

Chlorophyll a tested by MN Lab # 027-035-135

---

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Report Submitted By:  
Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
# Non-Potable Water Test Report

**CRWD (Wenck Associates, Inc.)**  
P.O. Box 481, Annandale, MN 55302

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**Notes:**  
Total Phosphorus done by MN Lab # 027-035-135

---

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Ethel Margaria, Laboratory Director  
Minnesota State Laboratory ID: 027-141-110
## NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
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**Date Sampled**: 6/1/2010  **Time Sampled**: 7:40 AM  **Date Received**: 6/1/2010  **Time Received**: 10:00 AM  **Temp**: 3

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<th>BOTTLE</th>
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<tbody>
<tr>
<td>Orthophosphate (EPA 365.1, 0.01 mg/L)</td>
<td>6/2/2010</td>
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<td>A</td>
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<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
<td>6/3/2010</td>
<td>1630</td>
<td>EM</td>
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**Notes:**

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NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
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Notes:

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Minnesota State Laboratory ID: 027-141-110
NON-POTABLE WATER TEST REPORT

CRWD (Wenck Associates, Inc.)
P.O Box 481, Annandale, MN 55302

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**PARAMETER (METHOD, REPORTING LIMIT)**

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<td>TSS (USGS 1-3765-85, 1.0 mg/L)</td>
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Notes:
Total Phosphorus done by MN Lab # 027-035-135.

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Report Submitted By: Ethel Margaria, Laboratory Director
Minnesota State Laboratory ID: 027-141-110
Appendix G

2010 Field Notes and Measurements
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Secchi 11' 850 1.5 810

Secchi 11' Time Top Bottom

Secchi 2' Time Top Bottom

Secchi 1'5 810

Time Top Bottom

June 16th 2010

WB 8/31/10
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August 17, 2010

Secchi D.O.

Time 8:09

Secchi 1.5'

Time 9:17

Secchi 0.6

Time 8:53
## Quaintout

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WB

17/8/10
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July 21, 2010

Secchi 5.0

Time T 8:23

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Secchi 1.5

Time T 9:44

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Augusta 24, 2010
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Augusta 24, 2010
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Sept 27, 2010
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Cedar Lake 108'

June 16th, 2010

Secchi 7'

Time Top 7:10

Time Bottom

32.8

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Surface time: 6:15

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August 17, 2010
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June 16th 2010

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**Caroline**

**August 24, 2010**

**Time 11:14**

**Secchi 1.5’**

*Very Windy Today*

*hard to hold anchor*

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**Union - 35’**

**Aug 24, 2010**

**Time 7:34**

**Secchi 5.5’**

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**Time** 8:18  
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### June 22-2010

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August 24, 2010
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12 = 39.36

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10 = 32.80

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Time: 10:42
Secchi: 4.0

Date: 9-27/10
Time: 11:00
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Pleasant 42°

June 16th 2010

Secchi 9.5

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Date: 9/21
Time: 10:14
Secchi: 6'-0"

68.88' = 21 meters

WB
12/18/10
## Clearwater River Watershed District

### Lake Level Form

**Lake Name:** GRASS LAKE DAM  
**Volunteer Name:** Jerry Rasberg

<table>
<thead>
<tr>
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<th>Staff Gauge Reading</th>
<th>Comments</th>
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<td>11: AM</td>
<td>3.25</td>
<td>4 AM 3/4 AM 4-27-10</td>
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<tr>
<td>Tue 7-4-10</td>
<td>9: AM</td>
<td>3.00</td>
<td>None</td>
</tr>
<tr>
<td>Tue 7-11-10</td>
<td>3: PM</td>
<td>3.10</td>
<td>4 AM 1: PM Rain</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Staff Gauge Reading</td>
<td>Comments</td>
</tr>
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<td>-------</td>
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</tr>
<tr>
<td>5/18 Tue</td>
<td>11 AM</td>
<td>3.18</td>
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<tr>
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<td>3.185</td>
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<td>Rain set Sat Sun 1/5 Tue</td>
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# Clearwater River Watershed District

## Lake Level Form

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<tr>
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<td>5 PM</td>
<td>3.05 - 3.10</td>
<td>HARD TO READ</td>
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<td>1 PM</td>
<td>3.06</td>
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<td>12 PM</td>
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Lake Name: 

Volunteer Name: 

[Image of the page]
# Clearwater River Watershed District

## Lake Level Form

**Lake Name:** Grass Lake

**Volunteer Name:** Jerry Rohay

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<td>9/1</td>
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<td>Time</td>
<td>Note</td>
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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 0002-129
Date: 04/06/10
Sampler(s): DL
Start Time: 6:55
End Time: 7:25
Channel Conditions: Clear
COC Number: 

Site Location: Clear Lake North
Site Description: Water Very Clear
Weather: Overcast 48°
Samples Taken: Yes
Sample Time: 7:00
DTW Measurement: 2.17

Notes:

Field Parameters

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<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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4.98

Stage Ht: 7' 2"  
Rated Flow:  
Gauged Flow: 2.80 cfs

Stream Gauging Data

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<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>Velocity 80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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<tr>
<td>Right</td>
<td>1'</td>
<td>2'</td>
<td>.43</td>
<td>.47</td>
<td>.38</td>
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<td>Right</td>
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<td>2'</td>
<td>.39</td>
<td>.41</td>
<td>.28</td>
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Field Form: 2009 Stream Sampling

Client: CRWD

Site Location: CL North

Project No.: 05/03/10

Site Description: Clear & Clean

Date: 06/03/10

Weather: Overcast

Sampler(s): DL

Samples Taken: Yes

Start Time: 6:30

Sample Time: 6:45 a.m.

End Time: 6:57

Sample Time: 6:45 a.m.

Channel Conditions: __________

COC Number: __________

DTW Measurement: 2.50'

Notes: No Vegetation

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Stage Ht: 274.2' 6"

Rated Flow: __________

Gauged Flow: 0.83 cfs

Stream Gauging Data

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<th>Area (ft²)</th>
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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.
Date: June 1, 2010
Sampler(s): DL
Start Time: 7:10 am
End Time: 7:23 am
Channel Conditions: Dark; some algae on surface
COC Number:

Site Location: CLN
Site Description:
Weather: Light clouds
Samples Taken: Yes
Sample Time: 7:15 am
DTW Measurement: 2.58

Notes:

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Stage Ht: 2' 7"  
Rated Flow:  
Gauged Flow: 0.65 cfs

Stream Gauging Data

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<td>0.14</td>
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<tr>
<td>Left</td>
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<td>0.15</td>
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<tr>
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<td>0.15</td>
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</tr>
</tbody>
</table>

63°
# Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Site Location:** Clear Lake N  
**Site Description:** Very poor  
**Weather:**  
**Samples Taken:** (Yes) No  
**Sample Time:** 6:18 a.m.  
**DTW Measurement:** 2.08  

### Field Parameters

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<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<tbody>
<tr>
<td>CN</td>
<td>21.3</td>
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<td>0.19</td>
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</table>

### Field Notes

- Channel Conditions: Looked like & smelled like sewage (gray water)
- Stage Ht: 48 2' 1"  
- Rated Flow:  
- Gauged Flow: 2.65

### Stream Gauging Data

<table>
<thead>
<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>Velocity 80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft²/sec)</th>
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<tbody>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>1' Left</td>
<td>1'</td>
<td>2'</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td>2'</td>
<td>1'</td>
<td>.46</td>
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<td></td>
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</tr>
<tr>
<td>1' Right</td>
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<td>1'</td>
<td>.43</td>
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<td></td>
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</table>
### Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Site Location:** CLN  
**Project No.:**  
**Date:** 08/09/10  
**Sampler(s):** Dennis  
**Start Time:** 6:35  
**End Time:** 6:54  
**Channel Conditions:**  
**COC Number:**  

#### Field Parameters

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<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<tr>
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<td>23.1</td>
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#### Notes:
Vegetation: Some duckweed

#### Stream Gauging Data

<table>
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<tr>
<th>Distance from Initial Point (ft)</th>
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<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</tbody>
</table>

#### Stage Ht: 2' 11.5''
(Depth to Water)

Rated Flow:  
Gauged Flow: 0.10 cfs  

NCO
Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: ________

Date: 09/13/10

Sampler(s): D.L

Start Time: 6:55

End Time: ________

Channel Conditions: ________

COC Number: ________

Site Location: CLW

Site Description: ________

Weather: ________

Samples Taken: Yes

Sample Time: 7:00 a.m.

DTW Measurement: ________

Notes: ________

Field Parameters

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<th>D.O. (mg/L)</th>
<th>pH (S.U.)</th>
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<td>1.44</td>
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Stage Ht: ________

Rated Flow: ________

Gauged Flow: 0.79 cfs

Stream Gauging Data

<table>
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<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>Velocity 80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</table>

March 27, 2020
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 0002-129
Date: 04/06/10
Sampler(s): DL
Start Time: 7:35
End Time: 8:00
Channel Conditions: Clear
COC Number: 

Site Location: Clear Lake South
Site Description: Calm, Very Clear
Weather: Overcast, 48°
Samples Taken: Yes
Sample Time: 7:35
DTW Measurement: 2.0

Notes: SEM

<table>
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<tr>
<th>Sample I.D.</th>
<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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Stage Ht: 2'
Rated Flow: 
Gauged Flow: 2.57 cfs

Stream Gauging Data

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<th>Velocity 80% Depth</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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<td>1'</td>
<td>2' 2&quot;</td>
<td>.43</td>
<td>.39</td>
<td>.28</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2' 1&quot;</td>
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<td>.48</td>
<td>.51</td>
<td>.44</td>
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<td>.49</td>
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<td>.42</td>
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</table>

March 27, 2002
8/24/10
# Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Site Location:** CLS

**Project No.:**  
**Date:** 05/03/10

**Sampler(s):**  
**Start Time:** 7:05  
**End Time:** 7:21

**Channel Conditions:**  
**COC Number:**

### Field Parameters

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<th>Sample I.D.</th>
<th>Temp. (°C)</th>
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<th>pH (S.U.)</th>
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</tbody>
</table>

**Stage Ht:** 2' 5½"  
**Notes:** Some vegetation algae on surface

**Rated Flow:**  
**Gauged Flow:** 0.73 cfs

### Stream Gauging Data

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<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</table>
Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: __________

Date: June 1, 2010

Sampler(s): DL

Start Time: 7:30 am

End Time: 7:43 am

Channel Conditions: light algae on surface

COC Number: __________

Site Location: CL8

Site Description: __________

Weather: Light Clouds

Samples Taken: Yes

Sample Time: 7:38 am

DTW Measurement: 2' 5½" / 0.46'

Field Parameters

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<th>pH (S.U.)</th>
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Stage Ht: 2' 5½"  
Rated Flow: __________

Gauged Flow: 0.82 cfs

Stream Gauging Data

<table>
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<tr>
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<th>Width (ft)</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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<tr>
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<td>Center</td>
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<td>__________</td>
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<td>__________</td>
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<tr>
<td>Left</td>
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<td>__________</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
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</tbody>
</table>
Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: 7-6-10

Sampler(s): Dennis

Start Time: ____________

End Time: ____________

Channel Conditions: film on surface clarity minimal

Site Location: Clearlake S

Site Description: ____________

Weather: ____________

Samples Taken: Yes No

Sample Time: 6:50 a.m

DTW Measurement: 1.97'

Notes: ____________

Field Parameters

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<th>Temp. (°C)</th>
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<th>pH (S.U.)</th>
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<tbody>
<tr>
<td>CLS</td>
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<td>.32</td>
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</table>

Stage Ht: 1' 11''

Rated Flow: ____________

Gauged Flow: 2.50 cfs

N=0

Stream Gauging Data

<table>
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<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</tr>
<tr>
<td>1' Left</td>
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<td>.3' 0.12</td>
<td>.4'</td>
<td>.41</td>
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<tr>
<td>1' Right</td>
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<td>.37</td>
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</tbody>
</table>
Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: ____________________________

Site Location: CLS

Site Description: ____________________________

Weather: Clouding up Very Humid

Samples Taken: Yes No

Sample Time: ____________________________

Channel Conditions: ____________________________

End Time: 7:40

COC Number: ____________________________

DTW Measurement: 2.71

Notes: Duck Weed

vegetation

Rooster, Hen & 5 young

2

Stage Ht: 2' 8.5"

Rated Flow: ____________

Gauged Flow: 0.12 cfs

Stream Gauging Data

<table>
<thead>
<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
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<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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<td>Right</td>
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</table>
**Field Form: 2009 Stream Sampling**

**Client:** CRWD

**Site Location:** CLS

**Site Description:**

**Weather:** Sunny & Clear 46°

**Samples Taken:** Yes

**Sample Time:** 7:40

**DTW Measurement:** 2.62

**Notes:** Covered w/ Rock Wed

---

**Field Parameters**

<table>
<thead>
<tr>
<th>Sample LD.</th>
<th>Temp. (°C)</th>
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<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<td></td>
<td>11.5</td>
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<td>2.10</td>
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</table>

**Stage Ht:** 2' 7½"  

**Rated Flow:**  

**Gauged Flow:** 0.75 cfs

---

**Stream Gauging Data**

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<tr>
<th>Distance from Initial Point (ft)</th>
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</table>

March 27, 2011

[Signature: J.D. 11/18/11]
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 10-5-10
Date: 10-5-10
Sampler(s): D. L.
Start Time: 10:25
End Time: 10:40
Channel Conditions: Clear, some vegetation
COC Number: 

Site Location: CLN
Site Description:
Weather: Clean & Sunny
Samples Taken: Yes
Sample Time: 10:30

DTW Measurement: 2'2½" 2.31'

Notes: several cover fish

<table>
<thead>
<tr>
<th>Sample I.D.</th>
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<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<tbody>
<tr>
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<td>8.2</td>
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<td>1.65</td>
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</table>

Stage Ht:Rated Flow: Gauged Flow: 3,95 cfs

48° Calvert

Stream Gauging Data

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<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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<tr>
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</table>
Field Form: 2009 Stream Sampling

Client: CRWD  Site Location: CLS
Project No.:  Site Description: 
Date: 10-5-10  Weather: Clear/Sunny
Sampler(s): D.L.  Samples Taken: Yes
Start Time: 10:46  Sample Time: 10:50
End Time: 10:56
Channel Conditions: Fairly Clear - lots of vegetation
COC Number: 

<table>
<thead>
<tr>
<th>Field Parameters</th>
<th>Sample I.D.</th>
<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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Stage Ht: 
Rated Flow: 
Gauged Flow: 1.85 cfs

Notes: Not as much duckweed - assume it's due to increased flow.

Stream Gauging Data

<table>
<thead>
<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>Velocity 80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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T:\01815\040312Field Forest\Gauging Form  March 27, 2002
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 0002-129
Date: 04/06/10
Sampler(s): DL
Start Time: 8:50
End Time: 
Channel Conditions: 
COC Number: 

Site Location: CR 28.2
Site Description: Somewhat Strong Flow
Weather: Overcast 48°
Samples Taken: Yes
Sample Time: 8:55
DTW Measurement: 

Notes: Some Vegetation
(probably last year?)

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<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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Stage Ht: 4'2.5"
Rated Flow: 
Gauged Flow: 35.64 cfs

Stream Gauging Data

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<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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T/08/5/04/2003 Field Form/Gauging Form
March 27, 2012
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: D
Date: 04/19/10
Sampler(s): DL
Start Time: 8:06
End Time: 8:35
Channel Conditions: Clear with some vegetation

Site Location: CR 28.2
Site Description: Clear
Weather: Clear & Sunny around 52°
Samples Taken: Yes
Sample Time: 8:31

COC Number:

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<tr>
<th>Sample I.D.</th>
<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<tbody>
<tr>
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Notes:
- Seemed to be lots of dead vegetation flowing

Stage Ht: 4' 4"
Rated Flow: __________________ Gauged Flow: 27.02 cfs

Stream Gauging Data

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<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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March 27, 2002
AP 8/24/10
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 
Date: 05/03/10
Sampler(s): DL
Start Time: 
End Time: 
Channel Conditions: 
COC Number: 

Site Location: CR 28, PA
Site Description: 
Weather: Cold, overcast, 47° windy
Samples Taken: Yes
Sample Time: 7:54
DTW Measurement: 

Notes: Some vegetation

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<th>Sample I.D.</th>
<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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<tbody>
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Stage Ht: 4' 7"  Rated Flow: __________  Gauged Flow: 15.41 cfs

Stream Gauging Data

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<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity (80% Depth)</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</table>
Field Form: 2009 Stream Sampling

Client: CRWD
Project No: __________
Date: March 17, 2010
Sampler(s): DL
Start Time: 6:30
End Time: 6:35
Channel Conditions: Clear
COC Number: __________

Site Location: CR 28.2
Site Description: Lots of Vegetation
Weather: Clear & Sunny
Samples Taken: Yes
Sample Time: 6:40 a.m.

DTW Measurement: __________

Notes: Some Carp in channel

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<th>Sample I.D.</th>
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<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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Stage Ht: 3' 7"
Rated Flow: __________
Gauged Flow: 34.00 cfs

Stream Gauging Data

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<th>Width (ft)</th>
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<th>Velocity (60% Depth)</th>
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<th>80% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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</table>
# Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Site Location:** CR 28.2  

**Project No.:** 
**Date:** June 1st 2010  
**Sampler(s):** DL  
**Start Time:** 8:50  
**End Time:** 
**Channel Conditions:** Heavy F.C.P.  
**COC Number:** 

**Site Description:** 
**Weather:** 
**Samples Taken:** Yes  
**Sample Time:** 8:04  
**DTW Measurement:** 

## Field Parameters

<table>
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<tr>
<th>Sample I.D.</th>
<th>Temp. (°C)</th>
<th>Cond. (mS/cm)</th>
<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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**Stage Ht.:** 4'6"  
**Rated Flow:** 
**Gauged Flow:** 6.20  

## Stream Gauging Data

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<tr>
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<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
<th>Velocity 80% Depth</th>
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<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: CR
Date: 7-6-10
Sampler(s): Dennis
Start Time: 
End Time: 
Site Location: CR 28.2
Site Description: heavy vegetation
Weather: 
Samples Taken: Yes
Sample Time: 7:25 AM
Channel Conditions: Lots of vegetation floating
DTW Measurement: 
COE Number: Slight string - S.

Notes: 70°
South Box Culvert choked

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<th>Temp. (°C)</th>
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Stage Ht: 3’ 8”
Rated Flow: 
Gauged Flow: 16.81 cfs

Stream Gauging Data

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Seemed to have a mass of vegetation in front of culvert north side.
north culvert

March 27, 2001
**Field Form: 2009 Stream Sampling**

- **Client:** CRWD
- **Site Location:** CR 28.7
- **Date:** 08/28/10
- **Sampler:** Dennis
- **Start Time:** 7:38
- **End Time:** 8:02
- **Weather:** 77° Very Humid
- **Samples Taken:** Yes
- **Sample Time:** 8:00 am
- **DTW Measurement:**

**Notes:** Thick with duck weed, saw some bugs. Appeared to be heavy vegetation. Slight Stench. Estimate: 1.20 cfs

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**Stage Ht:** 5' 6"  
**Rated Flow:**

**Stream Gauging Data**

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Field Form: 2009 Stream Sampling

Client: CRWD  Site Location: CR 28.2
Project No.:  Site Description: 
Date: 09/13/10  Weather: Sunny
Sampler(s): 
Start Time: 8:14  Samples Taken: Yes
End Time: Clear  Sample Time: 8:30
Channel Conditions: DTW Measurement: 4' 5"
COC Number: 

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Stage Ht: 4' 5"  Rated Flow:  Gauged Flow: 21.08 cfs

Stream Gauging Data

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end  1.4  Qmax: 0.03
**Field Form: 2009 Stream Sampling**

Client: CRWD  
Project No.:  
Date: 10-5-10  
Sampler(s): D. L  
Start Time: 11:15  
End Time: 11:45  
Channel Conditions: Murky  
COC Number:  

**Site Location:** CR 28.2  
**Site Description:**  
**Weather:** Clear/Sunny  
**Samples Taken:** Yes  
**Sample Time:** 11:25  
**DTW Measurement:** 3' 8½ 3.66  

### Field Parameters

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**Stage Ht:**  
**Rated Flow:**  
**Gauged Flow:** 43.10

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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 0052-129
Date: 04/06/10
Sampler(s): J.L.
Start Time: 9:25
End Time: 
Channel Conditions: Water Clean - Silt bottom

Site Location: WR 0.2
Site Description: Mary little vegetation
Weather: Overcast - 47°
Samples Taken: Yes
Sample Time: 9:30

DTW Measurement: 4' 7"

COC Number: 

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Stage Ht: 4' 7"

Notes: 

Rated Flow: 

Gauged Flow: 20.57 cfs

Stream Gauging Data

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T:3153104255/Field Form/Gauging Form
March 27, 2002
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 
Date: 05/03/10
Sampler(s): D. L.
Start Time: 8:27
End Time: 
Channel Conditions: 
COC Number: 

Site Location: ER WR 0.3
Site Description: 
Weather: Overcast 47°
Samples Taken: Yes
Sample Time: 8:35
DTW Measurement: 5' 5.5"

Notes: 

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Stage Ht: 5' 5½"  
Rated Flow:  
Gauged Flow: 9.09 cfs  
N=0

Stream Gauging Data

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T:04/10/09 U:02/20/09 Field Form/Gauging Form
March 27, 2001
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 
Date: June 1 2010
Sampler(s): DL
Start Time: 8:35
End Time: 9:00
Channel Conditions: 
COC Number: 

Site Location: WRD 2
Site Description: Clear some vegetation
Weather: Sunny
Samples Taken: Yes
Sample Time: 8:45
DTW Measurement: 6' 2"

Notes: 

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Stage Ht: 
Rated Flow: 
Gauged Flow: 4.03 cfs

Stream Gauging Data

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Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: 7-6-10

Date: 7-6-10

Sampler(s): Dennis

Start Time: 7:55

End Time: 8:20

Channel Conditions: Very Turbid

COC Number: 

Site Location: WRO12

Site Description: 

Weather: 

Samples Taken: (Yes) No

Sample Time: 8:00

DTW Measurement: 4' 9"

Notes: lots of vegetation along banks. None in channel (main)

Stage Ht: 4' 9"

Rated Flow: 

Gauged Flow: 6.06 cfs

Stream Gauging Data

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<tr>
<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
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<th>Velocity 20% Depth</th>
<th>Average Velocity (ft/sec)</th>
<th>Area (ft²)</th>
<th>Discharge (Q, ft³/sec)</th>
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**Field Form: 2009 Stream Sampling**

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<td>Date</td>
<td>08/24/10</td>
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<td>End Time</td>
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<tr>
<td>Site Description</td>
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<tr>
<td>Weather</td>
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<td>Samples Taken</td>
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<td>Sample Time</td>
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<td>DTW Measurement</td>
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### Field Parameters

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Stage Ht: 6' 0"

Rated Flow: 0.42 cfs

Gauged Flow: 0.42 cfs

### Stream Gauging Data

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<th>Distance from Initial Point (ft)</th>
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<th>Discharge (Q, ft²/sec)</th>
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March 27, 2001
Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 09/13/10
Date: 09/13/10
Sampler(s): 
Start Time: 
End Time: 9:58
Channel Conditions: 1.9s Veg along Bank, Water Very Clear

Site Location: WRD.2
Site Description: 
Weather: 
Samples Taken: Yes
Sample Time: 

DTW Measurement: 

Notes: 

Field Parameters

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Stage Ht: 5' 8"
Rated Flow: 
Gauged Flow: 1.80 cfs

Stream Gauging Data

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March 27, 2002

11/18/10 AD
Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: 10-5-10

Date: 10-5-10

Sampler(s): D. L.

Start Time: 12:05

End Time: 12:25

Channel Conditions: Clear & High

COC Number: 

Site Location: WR 0.2

Site Description: 

Weather: Clear & Sunny

Samples Taken: Yes

Sample Time: 12:15

DTW Measurement: 4' 10" 4.83

Notes: Water level up after quite a bit of rain. Lots of vegetation. Lots of leaves falling.

Gauged Flow: 6.68 cfs

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<th>Velocity (60% Depth)</th>
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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 5002-129
Date: 04/06/10
Sampler(s): D.L.
Start Time: 8:55
End Time: 
Channel Conditions: 
COC Number: 

Site Location: CR 16.5
Site Description: Unburned except along
Weather: Overcast 48°
Samples Taken: Yes
Sample Time: 10:00

DTW Measurement: 
Notes: Taken from dam cat-walk

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<th>pH (S.U.)</th>
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Stage Ht: 
Rated Flow: 
Gauged Flow: 

Stream Gauging Data

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<th>Distance from Initial Point (ft)</th>
<th>Width (ft)</th>
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<th>Area (ft²)</th>
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### Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Date:** 05/03/10  
**Sampler(s):**  
**Start Time:** 8:51  
**End Time:** 9:10  
**Channel Conditions:** Clear  
**COC Number:**

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#### Field Parameters

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**Stage Ht:** 3.18'  
**Gauged Flow:**

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<th>Area (ft²)</th>
<th>Discharge (Q, ft²/sec)</th>
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**Notes:**

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**DTW Measurement:**

---

**Site Location:** B. CR 10.5  
**Site Description:**

---

**Weather:**

---

**Samples Taken:** Yes  
**Sample Time:** 9:00  
**Sample Time:**
Field Form: 2009 Stream Sampling

Client: CRWD

Site Location: CR 10.5

Project No.: 

Site Description: 

Date: June 1st 2010

Weather: 

Sampler(s): DL

Samples Taken: Yes No

Start Time: 9:08

Sample Time: 

End Time: 9:22

Channel Conditions: Clear

DTW Measurement: 

COC Number: 

Notes: 

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<th>D.O. (mg/l)</th>
<th>pH (S.U.)</th>
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Stage Ht: 3.1

Rated Flow: 

Gauged Flow: 

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<th>Depth (ft)</th>
<th>Velocity (60% Depth)</th>
<th>Velocity 20% Depth</th>
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<th>Area (ft²)</th>
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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: 
Date: 7-6-10
Sampler(s): Dennis
Start Time: 
End Time: 
Channel Conditions: 
COC Number: 

Site Location: CR 10.5
Site Description: 
Weather: 
Samples Taken: Yes
No
Sample Time: 8:26

DTW Measurement: 

Notes: 

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Stage Ht: 4.05'

Heel: 1.37

Rated Flow: 
Gauged Flow: 

Stream Gauging Data

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Field Form: 2009 Stream Sampling

**Client:** CRWD

**Project No.:**

**Date:** 08/10/10

**Sampler(s):**

**Start Time:** 9:29

**End Time:** 9:35

**Channel Conditions:**

**COC Number:**

**Site Location:** CR 10.5

**Site Description:**

**Weather:** Very Humid

**Samples Taken:** Yes

**Sample Time:** 9:30

**DTW Measurement:**

**Notes:**

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<th>pH (S.U.)</th>
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**Stage Ht:** 2' 9"

**Head:** 0.22

**Rated Flow:**

**Gauged Flow:**

**Stream Gauging Data**

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</table>
# Field Form: 2009 Stream Sampling

**Client:** CRWD  
**Site Location:** CR 10.5

**Project No.:**  
**Date:** 9-13-10  
**Sampler(s):** DL

**Site Description:** Clear  
**Weather:** Sunny/Clear 64°

**Samples Taken:** Yes No

**Sample Time:** 10:10

**End Time:** 10:20

**Channel Conditions:**  
**COC Number:**

**DTW Measurement:**

---

**Field Parameters**

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**Notes:** Very Clear

---

**Stage Ht:** 3.20  
**Rated Flow:**  
**Gauged Flow:**

---

**Stream Gauging Data**

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Field Form: 2009 Stream Sampling

Client: CRWD
Site Location: CR10.5

Project No.: _______ Site Description: _______

Date: 10-5-10 Weather: Clay/Sunny

Sampler(s): DL Samples Taken: Yes / No

Start Time: 12:29 Sample Time: 12:35
End Time: 12:46

Channel Conditions: Clear

COC Number: _______

DTW Measurement: Gauged 4.15
Dam 7010 at 2.68

Notes:

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Stage Ht: 1.47
Rated Flow: _______ Gauged Flow: _______

Stream Gauging Data

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Field Form: 2009 Stream Sampling

Client: CRWD

Project No.: 05/03/00

Date: 05/03/00

Sampler(s): Dennis

Start Time: 

End Time: 

Channel Conditions: 

COC Number: 

Site Location: CR 0.1

Site Description: 

Weather: 

Samples Taken: Yes No

Sample Time: 9:24

DTW Measurement: 

Notes: 

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Stage Ht: 

Rated Flow: 

Gauged Flow: 

Stream Gauging Data

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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: DL
Date: June 1, 2010
Sampler(s): DL
Start Time: 
End Time: 
Channel Conditions: 
COC Number: 
Site Location: CRD.1
Site Description: 
Weather: 
Samples Taken: Yes
Sample Time: 
DTW Measurement: 
Notes: 

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Stage Ht: 
Rated Flow: 
Gauged Flow: 

Stream Gauging Data

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Field Form: 2009 Stream Sampling

Client: CRWD
Project No.: CRW
Date: 7-6-10
Sampler(s): Denis
Start Time: 
End Time: 
Channel Conditions: 
COC Number: 

Site Location: CR 04
Site Description: 
Weather: 
Samples Taken: Yes
Sample Time: 9:10
DTW Measurement: 

Notes: High Flow

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Stage Ht: 
Rated Flow: 
Gauged Flow:

Stream Gauging Data

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</tbody>
</table>
Appendix H

Lake Phosphorus and Profile Data
2010 Lake Albion Surface Phosphorus Concentrations

2010 Lake Albion Bottom Phosphorus and Iron

2010 Lake Albion Temperature Profile

2010 Lake Albion DO Profile

T:\0002\145\Lake Profiles_2010Appendix I
2010 Lake Augusta Surface Phosphorus Concentrations

2010 Lake Augusta Bottom Phosphorus and Iron

2010 Lake Augusta Temperature Profile

2010 Lake Augusta DO Profile
2010 Lake Betsy Surface Phosphorus Concentrations

2010 Lake Betsy Bottom Phosphorus and Iron

2010 Lake Betsy Temperature Profile

2010 Lake Betsy DO Profile

T:\0002\145\Lake Profiles_2010Appendix I
2010 Clear Lake Surface Phosphorus Concentrations

2010 Clear Lake Bottom Phosphorus and Iron

2010 Clear Lake Temperature Profile

2010 Clear Lake DO Profile
2010 Henshaw Lake Surface Phosphorus Concentrations

2010 Henshaw Lake Bottom Phosphorus and Iron

2010 Henshaw Lake Temperature Profile

2010 Henshaw Lake DO Profile
2010 Pleasant Lake Surface Phosphorus Concentrations

2010 Pleasant Lake Bottom Phosphorus and Iron

2010 Pleasant Lake Temperature Profile

2010 Pleasant Lake DO Profile
2010 Scott Lake Surface Phosphorus Concentrations

Surface TP: 185, 174
Surface Ortho-P: 103, 85

2010 Scott Lake Bottom Phosphorus and Iron

Bottom TP: 500, 300, 100
Bottom OP: 0.2, 0.15, 0.1
Total Fe: 0, 0.05, 0.02

2010 Scott Lake Temperature Profile

Temperature (degC) and Depth (m)

2010 Scott Lake DO Profile

Dissolved Oxygen (mg/L) and Depth (m)
2010 Swartout Lake Surface Phosphorus Concentrations

Surface TP
Surface Ortho-P

2010 Swartout Lake Bottom Phosphorus and Iron

Bottom TP
Bottom OP
Total Fe

2010 Swartout Lake Temperature Profile

2010 Swartout Lake DO Profile

Anoxia< 2 mg/L
2010 Lake Union Surface Phosphorus Concentrations

2010 Lake Union Bottom Phosphorus and Iron

2010 Union Lake Temperature Profile

2010 Union Lake DO Profile