Florida Onsite Sewage Nitrogen Reduction Strategies Study

Task B.7

B-HS5 Field System Monitoring Report No. 3

Progress Report

March 2014
Florida Onsite Sewage Nitrogen Reduction Strategies Study

TASK B.7
PROGRESS REPORT

B-HS5 Field System Monitoring Report No. 3

Prepared for:
Florida Department of Health
Division of Disease Control and Health Protection
Bureau of Environmental Health
Onsite Sewage Programs
4042 Bald Cypress Way Bin #A-08
Tallahassee, FL 32399-1713

FDOH Contract CORCL

March 2014

Prepared by:

Hazen and Sawyer
Environmental Engineers & Scientists

In Association With:

AET
Applied Environmental Technology
B-HS5 Field System
Monitoring Report No. 3

1.0 Background
Task B of the Florida Onsite Sewage Nitrogen Reduction Strategies Study (FOSNRS) includes performing field experiments to critically evaluate the performance of nitrogen removal technologies that were identified in FOSNRS Task A.9 and pilot tested in PNRS II. To meet this objective, full scale treatment systems are being installed at various residential sites in Florida and monitored over an extended timeframe under actual onsite conditions. The Task B Quality Assurance Project Plan (Task B.5) documents the objectives, monitoring framework, sample frequency and duration, and analytical methods to be used at the home sites. This report documents the third sample event of the passive nitrogen reduction system at home site B-HS5 in Seminole County, Florida.

2.0 Purpose
Operation of the B-HS5 system was initiated on July 9, 2013. This monitoring report documents data collected from the third B-HS5 monitoring and sampling event conducted on February 3, 2014 (Experimental Day 209). This monitoring event consisted of collecting flow measurements from the household water use meter, treatment system flow meters, recording electricity use, monitoring of field parameters, collection of water samples from nine points in the treatment system, and chemical analyses of water samples by a NELAC certified laboratory. In addition, daily samples were collected February 4th through February 7th, 2014 to evaluate daily variation of the treatment system.

3.0 Materials and Methods
3.1 Project Site
The B-HS5 field site is located in Seminole County, FL. The nitrogen reducing onsite treatment system for the single family residence was installed in June 2013. Design and construction details were presented previously in the Task B.6 document. Figure 1 is a system schematic showing the system components and layout of the installation. A flow schematic of the system is shown in Figure 2. The PNRS system consists of the
addition of three tanks to the existing permitted system: a 1500 gallon plastic tank Stage 1 unsaturated media filter; 300 gallon concrete pump tank; and 1,500 gallon two chamber concrete Stage 2 saturated media biofilter. The existing 1,350 gallon concrete septic tank continues to provide primary treatment for the PNRS system. Based on measured average wastewater flow and tank volumes, there is over a ten day transit time through the treatment system prior to dispersal. The denitrified treated effluent is discharged into the soil via the existing drainfield which is a standard bed.
Figure 1
Plan View of B-HS5 System Layout
Figure 2
Flow Schematic of B-HS5 PNRS
3.2 Monitoring and Sample Locations and Identification

The four primary monitoring points for the B-HS5 system are shown in Figure 3. Household wastewater enters the primary tank and exits as septic tank effluent through an effluent filter screen into the Stage 1 biofilter. The first primary monitoring point, B-HS5-STE, is the effluent sampled approximately 1.5 feet below the surface of the primary tank prior to the effluent filter (Figure 4), which is referred to as primary effluent or septic tank effluent (STE). Samples from monitoring point B-HS5-STE are representative of the whole household wastewater and represent the influent to the remainder of the onsite nitrogen reduction system.
Figure 3
B-HS5 Sample and Monitoring Locations
Figure 4
Primary Tank (B-HS5-STE sample)

The primary tank contents are discharged by gravity to a distribution box, located inside the Stage 1 biofilter, which splits the flow between two perforated distribution pipes along the top of the unsaturated Stage 1 biofilter media. In the Stage 1 biofilter, wastewater percolates downward through the unsaturated expanded clay media where nitrification occurs. The Stage 1 biofilter contains 12.8 inches of coarse expanded clay media (Riverlite™ 1/4; 1.1 to 4.8 mm) above 21 inches of finer expanded clay media (Riverlite™ 3/16; 0.6 to 2.4 mm). Stage 1 biofilter effluent flows into the pump tank by gravity. The second primary sampling point (B-HS5-ST1), is sampled approximately 1.5 feet below the surface of the pump tank representing the Stage 1 biofilter effluent (Figure 5).
Figure 5
Stage 1 Effluent in Pump Tank (B-HS5-ST1 sample)

The pump tank discharge is split via two throttling gate valves which allow for optional recycling of a portion of the Stage 1 biofilter effluent with the balance proceeding to the Stage 2 biofilter. The system was designed with two operational modes. In the first mode, 100 percent of the Stage 1 effluent discharges to the Stage 2 biofilter. Initial operation of B-HS5 is in the non-recirculation mode. The second operating mode is to recirculate the Stage 1 effluent to the top of the Stage 1 biofilter and disperse it by five spray nozzles. The recirculated effluent would have an opportunity to mix with incoming septic tank effluent discharged by the distribution box. Recirculation back to the Stage 1 biofilter increases the hydraulic loading on the Stage 1 biofilter.

Effluent from the unsaturated (Stage 1) media tank enters the denitrification (Stage 2) biofilter into a standing water column lying above the media in the first chamber (lignocellulosic media), flows downward through the media, moves laterally through the baffle wall to the bottom of the second chamber, and upward through the media in the second chamber (elemental sulfur and oyster shell).
The first chamber of the Stage 2 biofilter contains 42-inches of lignocellulosic media. Stainless steel samplers are positioned at 12-inch increments for vertical profiling throughout the lignocellulosic media. The third primary sampling point is a stainless steel sampler positioned at the bottom of the lignocellulosic media (B-HS5-LIGNO-0) with tubing to the surface. The B-HS5-LIGNO-0 sample represents the lignocellulosic media effluent (Figure 6).

A collection pipe along the bottom transfers the first chamber (lignocellulosic media) effluent to the second chamber, which contains 18-inches of elemental sulfur mixed with oyster shell media. The fourth primary sampling point, B-HS5-ST2, is the second chamber of the Stage 2 biofilter effluent which is sampled approximately 1 foot below the...
surface of the effluent baffle tee. This sample location is after passage through the sulfur media; it is the final effluent from the treatment system prior to being discharged to the soil infiltration system, or drainfield (Figure 7).

Figure 7
Second chamber of Stage 2 biofilter (B-HS5-ST2 sample)
3.3 Operational Monitoring

Start-up of the system occurred on July 9, 2013 (Experimental Day 0). The PNRS system has operated continually since that date. For this third formal sampling event, the water meter for the house and treatment system flow meters were read and recorded on February 3, 2014. The household water meter is located on the potable water line from the onsite well prior to entering the household plumbing. The water meter does not include the irrigation water use. Therefore, the water meter reading should be indicative of the wastewater flow to the system.

As previously discussed, the pump tank discharge is split via two throttling gate valves which allow for a portion of the Stage 1 biofilter effluent to be sent back to the Stage 1 biofilter spray nozzles (for recirculation) with the rest proceeding to the Stage 2 biofilter. The treatment system flow meters (Figure 1) are located on the pump tank discharge lines following the flow split, and record the cumulative flow in gallons pumped from the pump chamber to the Stage 1 biofilter (R flowmeter) and Stage 2 biofilter (F flowmeter). Currently, the mode of operation is set to non-recirculation mode, where 100 percent of the pumped flow is directed to the Stage 2 biofilter. For this sample event, the F flowmeter (Figure 1), which is located following the split on the line from the pump tank, records the cumulative forward flow in gallons pumped to the Stage 2 biofilter. The control panel includes telemetry where reports are generated regarding alarms, pump cycles, and other information using a Vericomm control panel system.

3.4 Energy Consumption

Energy consumption was monitored using an electrical meter installed between the main power box for the house and the control panel. The electrical meter records the cumulative power usage of the system in kilowatt-hours. The power usage of the system is primarily due to the single lift station pump installed within the pump tank, although a small amount of power is used by the control panel itself. There are no chemicals added to the system. However, the Stage 2 biofilter media (lignocellulosic and sulfur) are “reactive” media which will be consumed during operation. The Stage 2 biofilter was initially filled with 42 inches of lignocellulosic media and 18 inches of sulfur and oyster shell mixture media, which ostensibly will last for many years without replenishment or replacement.

3.5 Water Quality Sample Collection and Analyses

The third formal sample event (Sample Event No. 3) was conducted on February 3, 2014 (Experimental Day 209). A full suite of influent, intermediate and effluent water quality samples were collected from the system for water quality analysis. Samples were collected at each of the four monitoring points described in Section 3.2: B-HS5-
STE, B-HS5-ST1, B-HS5-LIGNO-0, and B-HS5-ST2. A peristaltic pump was used to collect samples and route them directly into analysis-specific containers after sufficient flushing of the tubing had occurred. Field parameters were then recorded.

Immediately subsequent to the regular samples for each primary monitoring point, additional sample was collected to be filtered at the laboratory (0.45 micron filter) for analysis of CBOD₅ and the nitrogen species to allow for comparison to the unfiltered sample water quality results. In addition, a field sample duplicate was taken. The field sample duplicate (B-HS5-ST2) was collected immediately subsequent to the regular samples.

The analysis-specific containers were supplied by the analytical laboratory and contained appropriate preservatives. The analysis-specific containers were labeled, placed in coolers and transported on ice to the analytical laboratories. Each sample container was secured in packing material as appropriate to prevent damage and spills, and was recorded on chain-of-custody forms supplied by the laboratory. Chain of custody forms, provided in Appendix A, were used to document the transfer of samples from field personnel to the analytical laboratory.

Field parameters were measured using portable electronic probes and included temperature (Temp), dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, and specific conductance. The field parameters were measured by placing the analytical probes in a container overflowing with sample water. The influent, intermediate, and effluent samples were analyzed by the laboratory for: total alkalinity, chemical oxygen demand (COD), total Kjeldahl nitrogen (TKN-N), ammonia nitrogen (NH₃-N), nitrate nitrogen (NO₃-N), nitrite nitrogen (NO₂-N), total phosphorus (TP), orthophosphate (Ortho P), total suspended solids (TSS), volatile suspended solids (VSS), total organic carbon (TOC), fecal coliform (fecal), and E.coli. The influent and sulfur media samples included sulfate, sulfide, and hydrogen sulfide (unionized). All analyses were performed by an independent and fully NELAC certified analytical laboratory (Southern Analytical Laboratory). Table 1 lists the analytical parameters, analytical methods, and detection limits for laboratory analyses.

Similar methods were used for the daily sample collection and analysis that was conducted on February 4 through February 7, 2014.
Table 1
Analytical Parameters, Method of Analysis, and Detection Limits

<table>
<thead>
<tr>
<th>Analytical Parameter</th>
<th>Method of Analysis</th>
<th>Method Detection Limit (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Alkalinity as CaCO₃</td>
<td>SM 2320B</td>
<td>2 mg/L</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>EPA 410.4</td>
<td>10 mg/L</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen (TKN-N)</td>
<td>EPA 351.2</td>
<td>0.05 mg/L</td>
</tr>
<tr>
<td>Ammonia Nitrogen (NH₃-N)</td>
<td>EPA 350.1</td>
<td>0.005 mg/L</td>
</tr>
<tr>
<td>Nitrate Nitrogen (NO₃-N)</td>
<td>EPA 300.0</td>
<td>0.01 mg/L</td>
</tr>
<tr>
<td>Nitrite Nitrogen (NO₂-N)</td>
<td>EPA 300.0</td>
<td>0.01 mg/L</td>
</tr>
<tr>
<td>Nitrate+Nitrite Nitrogen (NOX-N)</td>
<td>EPA 300.0</td>
<td>0.02 mg/L</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>SM 4500P-E</td>
<td>0.01 mg/L</td>
</tr>
<tr>
<td>Orthophosphate as P (Ortho P)</td>
<td>EPA 300.0</td>
<td>0.01 mg/L</td>
</tr>
<tr>
<td>Carbonaceous Biological Oxygen Demand (CBOD₅)</td>
<td>SM5210B</td>
<td>2 mg/L</td>
</tr>
<tr>
<td>Total Solids (TS)</td>
<td>EPA 160.3</td>
<td>0.01 % by wt</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>SM 2540D</td>
<td>1 mg/L</td>
</tr>
<tr>
<td>Volatile Suspended Solids (VSS)</td>
<td>EPA 160.4</td>
<td>1 mg/L</td>
</tr>
<tr>
<td>Total Organic Carbon (TOC)</td>
<td>SM5310B</td>
<td>0.06 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>EPA 300.0</td>
<td>2.0 mg/L</td>
</tr>
<tr>
<td>Sulfide</td>
<td>SM 4500SF</td>
<td>0.10 mg/L</td>
</tr>
<tr>
<td>Hydrogen Sulfide (unionized)</td>
<td>SM 4550SF</td>
<td>0.01 mg/L</td>
</tr>
<tr>
<td>Fecal Coliform (fecal)</td>
<td>SM9222D</td>
<td>1 ct/100mL</td>
</tr>
<tr>
<td>E.coli</td>
<td>SM9223B</td>
<td>2 ct/100mL</td>
</tr>
</tbody>
</table>

4.0 Results and Discussion

4.1 Operational Monitoring

Table 2 provides a summary of the household water use since the water meter installation on February 12, 2013. The treatment system flow meter readings for the B-HS5 field site are summarized in Table 3. The operation and maintenance log which includes actions taken since start-up is provided in Appendix B. Summary tables of the Vericomm PLC recorded data are provided in Appendix C, Table C.1 and Table C.2. These include daily and cumulative pump runtime and system alarms that are used to check general pump operation and performance.
Table 2
Summary of Household Water Use Flowmeter

<table>
<thead>
<tr>
<th>Date and Time Read</th>
<th>Cumulative Volume (gallons)</th>
<th>Average Daily Household Flow between readings, Q (gpd)</th>
<th>Average Daily Household Flow Since start-up, Q (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/12/2013 10:30</td>
<td>166.0</td>
<td>INSTALLED</td>
<td>INSTALLED</td>
</tr>
<tr>
<td>2/21/2013 10:45</td>
<td>1,130.3</td>
<td>107.0</td>
<td>107.0</td>
</tr>
<tr>
<td>2/28/2013 11:45</td>
<td>2,323.9</td>
<td>169.5</td>
<td>134.4</td>
</tr>
<tr>
<td>3/7/2013 10:25</td>
<td>2,832.1</td>
<td>73.2</td>
<td>115.9</td>
</tr>
<tr>
<td>6/14/2013 13:00</td>
<td>13,460.9</td>
<td>107.2</td>
<td>108.9</td>
</tr>
<tr>
<td>6/25/2013 8:53</td>
<td>14,860.1</td>
<td>129.2</td>
<td>110.5</td>
</tr>
<tr>
<td>7/23/2013 8:31</td>
<td>17,659.4</td>
<td>100.0</td>
<td>108.7</td>
</tr>
<tr>
<td>7/29/2013 11:10</td>
<td>18,769.2</td>
<td>181.6</td>
<td>111.4</td>
</tr>
<tr>
<td>8/15/2013 12:28</td>
<td>21,078.4</td>
<td>135.4</td>
<td>113.6</td>
</tr>
<tr>
<td>8/27/2013 9:15</td>
<td>22,427.8</td>
<td>113.7</td>
<td>113.6</td>
</tr>
<tr>
<td>9/27/2013 10:40</td>
<td>25,738.3</td>
<td>106.6</td>
<td>112.6</td>
</tr>
<tr>
<td>11/8/2013 10:30</td>
<td>31,992.8</td>
<td>148.9</td>
<td>118.3</td>
</tr>
<tr>
<td>11/27/2013 11:12</td>
<td>34,400.8</td>
<td>126.5</td>
<td>118.9</td>
</tr>
<tr>
<td>12/4/2013 14:34</td>
<td>35,292.8</td>
<td>124.9</td>
<td>119.0</td>
</tr>
<tr>
<td>12/23/2013 12:38</td>
<td>37,649.1</td>
<td>124.5</td>
<td>119.3</td>
</tr>
<tr>
<td>1/23/2014 10:00</td>
<td>42,526.6</td>
<td>157.9</td>
<td>122.8</td>
</tr>
<tr>
<td>1/31/2014 13:00</td>
<td>43,688.6</td>
<td>143.0</td>
<td>123.3</td>
</tr>
<tr>
<td>2/3/2014 8:40</td>
<td>43,688.6</td>
<td>0.0</td>
<td>122.3</td>
</tr>
<tr>
<td>2/4/2014 11:45</td>
<td>43,841.1</td>
<td>135.1</td>
<td>122.3</td>
</tr>
<tr>
<td>2/5/2014 9:45</td>
<td>43,928.5</td>
<td>95.3</td>
<td>122.3</td>
</tr>
<tr>
<td>2/6/2014 8:20</td>
<td>44,029.1</td>
<td>106.9</td>
<td>122.2</td>
</tr>
<tr>
<td>2/7/2014 10:30</td>
<td>44,175.2</td>
<td>134.0</td>
<td>122.2</td>
</tr>
</tbody>
</table>

From start-up through February 3, 2014, the average household water use was 122.2 gallons per day with periods of higher and lower flows (Table 2). The homeowners were on vacation over the weekend prior to the sample event.
Table 3
Summary of Treatment System Flowmeters

<table>
<thead>
<tr>
<th>Date</th>
<th>Recirculation Pumped Flow, R Water Meter Reading</th>
<th>Average Recirculation Ratio</th>
<th>Stage 2 Biofilter Pumped Flow, F Water Meter Reading</th>
<th>Average Daily Stage 2, Q between readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/5/2013 12:00</td>
<td>386.1</td>
<td>0.0</td>
<td></td>
<td>Installed</td>
</tr>
<tr>
<td>7/9/2013 15:20</td>
<td>386.1</td>
<td>0.0</td>
<td>167.5</td>
<td>Following testing</td>
</tr>
<tr>
<td>7/12/2013 14:13</td>
<td>386.1</td>
<td>0.0</td>
<td>207.4</td>
<td>13.5</td>
</tr>
<tr>
<td>7/17/2013 9:02</td>
<td>386.1</td>
<td>0.0</td>
<td>995.6</td>
<td>164.8</td>
</tr>
<tr>
<td>7/23/2013 8:31</td>
<td>386.1</td>
<td>0.0</td>
<td>1,642.9</td>
<td>108.3</td>
</tr>
<tr>
<td>7/29/2013 11:10</td>
<td>386.1</td>
<td>0.0</td>
<td>2,733.4</td>
<td>178.5</td>
</tr>
<tr>
<td>8/6/2013 8:51</td>
<td>386.1</td>
<td>0.0</td>
<td>3,894.7</td>
<td>146.9</td>
</tr>
<tr>
<td>8/15/2013 11:40</td>
<td>386.1</td>
<td>0.0</td>
<td>4,884.6</td>
<td>108.6</td>
</tr>
<tr>
<td>8/27/2013 9:15</td>
<td>386.1</td>
<td>0.0</td>
<td>6,135.4</td>
<td>105.1</td>
</tr>
<tr>
<td>9/27/2013 10:40</td>
<td>386.1</td>
<td>0.0</td>
<td>9,035.2</td>
<td>93.4</td>
</tr>
<tr>
<td>11/8/2013 10:30</td>
<td>386.1</td>
<td>0.0</td>
<td>14,347.7</td>
<td>126.5</td>
</tr>
<tr>
<td>11/27/2013 10:55</td>
<td>386.1</td>
<td>0.0</td>
<td>16,591.6</td>
<td>118.0</td>
</tr>
<tr>
<td>12/4/2013 13:45</td>
<td>386.1</td>
<td>0.0</td>
<td>17,474.0</td>
<td>124.0</td>
</tr>
<tr>
<td>12/23/2013 12:38</td>
<td>386.1</td>
<td>0.0</td>
<td>19,610.1</td>
<td>112.7</td>
</tr>
<tr>
<td>1/23/2014 10:00</td>
<td>386.1</td>
<td>0.0</td>
<td>24,359.1</td>
<td>153.7</td>
</tr>
<tr>
<td>1/31/2014 13:00</td>
<td>386.1</td>
<td>0.0</td>
<td>25,506.3</td>
<td>141.2</td>
</tr>
<tr>
<td>2/3/2014 8:40</td>
<td>386.1</td>
<td>0.0</td>
<td>25,551.0</td>
<td>15.9</td>
</tr>
<tr>
<td>2/4/2014 11:45</td>
<td>386.1</td>
<td>0.0</td>
<td>25,659.1</td>
<td>95.7</td>
</tr>
<tr>
<td>2/5/2014 9:45</td>
<td>386.1</td>
<td>0.0</td>
<td>25,737.2</td>
<td>85.3</td>
</tr>
<tr>
<td>2/6/2014 8:20</td>
<td>386.1</td>
<td>0.0</td>
<td>25,836.3</td>
<td>105.3</td>
</tr>
<tr>
<td>2/7/2014 10:30</td>
<td>386.1</td>
<td>0.0</td>
<td>25,952.1</td>
<td>106.2</td>
</tr>
<tr>
<td>Total average start-up to 2/7/14</td>
<td>0.0</td>
<td>121.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The two throttling gate valves control the fraction of Stage 1 effluent that is recirculated and the fraction sent to the Stage 2 biofilter. The gate valves were initially set so that 100 percent of the flow is to the Stage 2 tank (0 recycle ratio). From start-up through February 7, 2014, the average pumped flow (forward flow to the Stage 2 biofilter) was 121.2 gallons per day which correlates well with the household water use.
4.2 Energy Consumption

Energy consumption is monitored using an electrical meter installed between the main power box for the house and the control panel to record cumulative power usage of the pump in kilowatt-hours. The recorded electrical use for the system is summarized in Table 4.

<table>
<thead>
<tr>
<th>Date and Time Read</th>
<th>Electrical Meter Reading</th>
<th>Average Daily Electrical Use between readings</th>
<th>Average Electrical Use per Gallon Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cumulative (kWh)</td>
<td>(kWh/day)</td>
<td>(kWh/gal)</td>
</tr>
<tr>
<td>7/5/2013 12:00</td>
<td>Installed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/9/2013 15:20</td>
<td>0.3</td>
<td>Start-up</td>
<td></td>
</tr>
<tr>
<td>7/12/2013 14:13</td>
<td>0.4</td>
<td>0.03</td>
<td>0.0025</td>
</tr>
<tr>
<td>7/17/2013 9:02</td>
<td>0.6</td>
<td>0.04</td>
<td>0.0004</td>
</tr>
<tr>
<td>7/23/2013 8:32</td>
<td>0.8</td>
<td>0.03</td>
<td>0.0003</td>
</tr>
<tr>
<td>7/29/2013 11:10</td>
<td>1.2</td>
<td>0.07</td>
<td>0.0005</td>
</tr>
<tr>
<td>8/6/2013 8:51</td>
<td>1.5</td>
<td>0.04</td>
<td>0.0003</td>
</tr>
<tr>
<td>8/15/2013 11:40</td>
<td>1.8</td>
<td>0.03</td>
<td>0.0003</td>
</tr>
<tr>
<td>8/27/2013 9:15</td>
<td>2.2</td>
<td>0.03</td>
<td>0.0003</td>
</tr>
<tr>
<td>9/27/2013 10:40</td>
<td>3.1</td>
<td>0.03</td>
<td>0.0003</td>
</tr>
<tr>
<td>11/8/2013 10:30</td>
<td>4.8</td>
<td>0.04</td>
<td>0.0003</td>
</tr>
<tr>
<td>11/27/2013 10:55</td>
<td>5.5</td>
<td>0.04</td>
<td>0.0003</td>
</tr>
<tr>
<td>12/4/2013 13:45</td>
<td>5.8</td>
<td>0.04</td>
<td>0.0003</td>
</tr>
<tr>
<td>12/23/2013 12:38</td>
<td>6.5</td>
<td>0.04</td>
<td>0.0003</td>
</tr>
<tr>
<td>1/23/2014 10:00</td>
<td>8.0</td>
<td>0.05</td>
<td>0.0003</td>
</tr>
<tr>
<td>1/31/2014 13:00</td>
<td>8.4</td>
<td>0.05</td>
<td>0.0003</td>
</tr>
<tr>
<td>2/3/2014 8:40</td>
<td>8.4</td>
<td>0.00</td>
<td>0.0000</td>
</tr>
<tr>
<td>Total average start-up to 2/3/14</td>
<td>0.04</td>
<td>0.0003</td>
<td></td>
</tr>
</tbody>
</table>

The total average electrical use through February 3, 2014 was 0.04 kWh per day. The average electrical use per gallon treated was 0.0003 kWh per gallon treated, and this parameter has been fairly stable since start-up.
4.3 Water Quality

Water quality analytical results for Sample Event No. 3 are listed in Table 5. Nitrogen results are graphically displayed in Figure 8. A summary of the water quality data collected to date for the test system is presented in Table 6. The laboratory report containing the raw analytical data is included in Appendix A. The following discussion summarizes the water quality analytical results. The performance of the various system components was compared by considering the changes through treatment of nitrogen species (TKN-N, NH₃-N, and NOₓ-N), as well as supporting water quality parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>STAGE 1</th>
<th>STAGE 2 LIGNO</th>
<th>STAGE 2 SULFUR</th>
<th>DISPERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD₅ mg/L</td>
<td>79</td>
<td>13</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>TKN mg N/L</td>
<td>66</td>
<td>6.4</td>
<td>4.7</td>
<td>1.7</td>
</tr>
<tr>
<td>NH₃ mg N/L</td>
<td>59</td>
<td>4.2</td>
<td>0.38</td>
<td>0.17</td>
</tr>
<tr>
<td>NOₓ mg N/L</td>
<td>ND</td>
<td>39.0</td>
<td>0.04</td>
<td>ND</td>
</tr>
<tr>
<td>TN mg N/L</td>
<td>66</td>
<td>45.4</td>
<td>4.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Sulfate mg/L</td>
<td>2.2</td>
<td>21</td>
<td>18</td>
<td>98</td>
</tr>
<tr>
<td>Fecal Coliform (CFU/100mL)</td>
<td>24,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Figure 8
Graphical Representation of Nitrogen Results
Sample Event No. 3, February 3, 2014 (Experimental Day 209)
**Septic Tank Effluent (STE) Quality:** The water quality characteristics of STE collected in Sample Event 3 were within the typical range generally expected for domestic STE. The measured STE total nitrogen (TN) concentration was 66 mg/L, which is within the range that has been typically reported for Florida single family residence STE.

**Stage 1 Effluent (ST1):** The Stage 1 effluent NH₃-N levels was 4.2 mg/L with a DO level at 3.23 mg/L (Table 5). The Stage 1 effluent TSS concentration was below the method detection limit of 1 mg/L and CBOD₅ was 13 mg/L. The Stage 1 effluent NOₓ-N was 39 mg/L. The Stage 1 biofilter showed incomplete nitrification with an effluent NH₃-N concentration of 4.2 mg/L and TKN of 6.4 mg/L.

**Stage 2 Biofilter Effluent (LIGNO-0” and ST2):** Effluent NOₓ-N from the Stage 2 biofilter monitoring point was below the method detection limit of 0.02 mg/L. The low NOₓ-N was accompanied by a measured 0.08 mg/L DO and -202.3 mV ORP. The lignocellulosic media effluent NOₓ-N was 0.04 mg/L. The Stage 2 system produced a highly reducing environment and achieved essentially complete NOₓ-N reduction. Final total nitrogen (TN) in the treatment system effluent was 1.72 mg/L. The Stage 2 biofilter effluent and lignocellulosic media effluent CBOD₅ concentrations were 7 and 11 mg/L, respectively. The Stage 2 effluent sulfate concentration was 98 mg/L. The Stage 2 biofilter effluent fecal coliform and e-coli concentrations were 1,000 and 52 ct/100 mL, respectively.

In addition during this monitoring event, daily samples were collected from the nitrogen reducing onsite treatment system to evaluate the variability of daily data. Water quality analytical results, for Sample Events No. 4 through 7 are summarized in Appendix A, Table A.1 through Table A.4. Key parameter mean and standard deviations for these five sample events are provided in Figure 9. In addition, the total nitrogen time series for these five sample events are graphically displayed in Figure 10 for the treatment sample locations.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>STE</th>
<th>STAGE 1</th>
<th>STAGE 2 LIGNO</th>
<th>STAGE 2 SULFUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD₅ mg/l</td>
<td>66 ± 19</td>
<td>13 ± 4</td>
<td>13 ± 3</td>
<td>10 ± 5</td>
</tr>
<tr>
<td>TKN mg N/l</td>
<td>66 ± 3</td>
<td>4.4 ± 1.2</td>
<td>2.1 ± 1.5</td>
<td>1.4 ± 0.3</td>
</tr>
<tr>
<td>NH₃ mg N/l</td>
<td>61 ± 1</td>
<td>2.0 ± 1.4</td>
<td>0.13 ± 0.14</td>
<td>0.35 ± 0.21</td>
</tr>
<tr>
<td>NO₃ mg N/l</td>
<td>0.03 ± 0.03</td>
<td>42 ± 6</td>
<td>3.7 ± 2.5</td>
<td>0.05 ± 0.07</td>
</tr>
<tr>
<td>TN mg N/l</td>
<td>66 ± 3</td>
<td>46 ± 6</td>
<td>5.8 ± 1.6</td>
<td>1.5 ± 0.3</td>
</tr>
<tr>
<td>Sulfate mg/l</td>
<td>2 ± 0.5</td>
<td>29 ± 7</td>
<td>23 ± 3</td>
<td>77 ± 16</td>
</tr>
<tr>
<td>Fecal Coliform geomean (CFU/100mL)</td>
<td>24,711</td>
<td>2,397</td>
<td>489</td>
<td>98</td>
</tr>
</tbody>
</table>

Figure 9
February 3rd through February 7th, 2014
Mean and Standard Deviations from Daily Sample Events
Figure 10
Graphical Representation of Total Nitrogen Time Series
February 3rd through February 7th, 2014
# Table 5

## Water Quality Analytical Results

| Sample ID          | Date/Time  | Temp (°C) | pH  | Specific Conductance (µS/cm) | DO (mg/L) | ORP (mV) | Total Alkalinity (mg/L) | TSS (mg/L) | VSS (mg/L) | CBOD<sub>5</sub> (mg/L) | COD (mg/L) | TN (mg/L) N | Organic N (mg/L) | NH<sub>4</sub>-N (mg/L N) | NO<sub>2</sub>-N (mg/L N) | NO<sub>3</sub>-N (mg/L N) | NO<sub>x</sub> (mg/L N) | TIN (mg/L N) | TP (mg/L) | Ortho P (mg/L P) | Sulfate (mg/L) | Hydrogen Sulfide (mg/L) | Sulfide (mg/L) | Fecal (Ct/100 mL) | E-coli (Ct/100 mL) | TOC (mg/L) |
|--------------------|------------|-----------|-----|-------------------------------|-----------|----------|------------------------|-----------|-----------|------------------------|-----------|----------------|----------------|------------------------|------------------------|------------------------|----------------|----------------|----------------|----------------|
| BHSS-STE          | 2/3/14 10:10 | 19.9      | 7.33 | 1162                           | 0.08      | -238.9   | 390                    | 25        | 22        | 79                     | 37        | 66.02         | 66             | 7                      | 59                    | 0.01                  | 0.01          | 0.02          | 59.02         | 7.2          | 5           | 2.2          | 6.9          | 10        | 24000       | 5500          | 32              |
| BHSS-STE-FILTERED | 2/3/14 10:10 | 19.9      | 7.33 | 1162                           | 0.08      | -238.9   | 24         | 29.04     | 60          | 2                      | 58        | 0.04          | 0.04           | 58.04                 |                       |                       |               |               |                 |               |             |               |              |           |            |              |               |             |
| BHSS-STE          | 2/3/14 9:45  | 21.2      | 6.99 | 1168                           | 3.23      | 130.0    | 220                    | 3         | 11        | 23                     | 45.4      | 6.4           | 2.2            | 4.2                    | 39                    | 0.01                  | 0.01          | 0.01          | 39            | 43.2          | 3           | 1.7          | 0.2           | 0.4          | 1000       | 10           | 6.7           |
| BHSS-STE-FILTERED | 2/3/14 9:45  | 21.2      | 6.99 | 1168                           | 3.23      | 130.0    | 3                      | 44.4      | 5.4        | 1.3                     | 4.1        | 39            | 0.01           | 0.01                    | 39                    | 43.2                   | 0.01          | 0.01          | 39            | 43.1          | 2           | 1.7          | 0.2           | 0.4          | 1000       | 10           | 6.7           |
| BHSS-UGNO-0       | 2/3/14 9:20  | 19.3      | 6.70 | 1037                           | 0.23      | -23.6    | 380                    | 3         | 9         | 11                     | 41        | 4.7           | 4.7            | 4.32                   | 0.04                    | 0.04                  | 0.04          | 0.04          | 0.42          | 1.5           | 0.51        | 0.18         | 0.54          | 0.81        | 1000       | 41           | 11            |
| BHSS-UGNO-0-FILTERED | 2/3/14 9:20  | 19.3      | 6.70 | 1037                           | 0.23      | -23.6    | 2                      | 0.8       | 0.78       | 0.48                    | 0.3        | 0.01          | 0.01           | 0.02                    | 0.02                   | 0.02                  | 0.02          | 0.02          | 0.32          | 1.3           | 0.41        | 0.98         | 1.3           | 2           | 1000       | 52           | 9.2           |
| BHSS-UGNO-0       | 2/3/14 8:55  | 18.3      | 6.79 | 1135                           | 0.08      | -202.3   | 350                    | 1         | 1         | 7                       | 23        | 1.7           | 1.7            | 1.59                   | 0.17                    | 0.01                  | 0.01          | 0.01          | 0.19          | 1.1           | 0.41        | 0.98         | 1.3           | 2           | 1000       | 52           | 9.2           |
| BHSS-UGNO-0-FILTERED | 2/3/14 8:55  | 18.3      | 6.79 | 1135                           | 0.08      | -202.3   | 3                      | 0.94      | 0.92       | 0.48                    | 0.44       | 0.01          | 0.01           | 0.02                    | 0.02                   | 0.02                  | 0.02          | 0.02          | 0.46          | 0.98          | 1           | 0.98         | 1.3           | 2           | 1000       | 52           | 9.2           |
| BHSS-ST2          | 2/3/14 9:00  | 18.3      | 6.79 | 1135                           | 0.08      | -202.3   | 340                    | 1         | 8         | 25                      | 1.7        | 1.7           | 1.21           | 0.49                    | 0.01                    | 0.01                  | 0.01          | 0.02          | 0.51          | 1.1           | 0.42        | 1.10         | 1.6           | 1           | 1000       | 31           | 8.6           |
| BHSS-ST2-DUP      | 2/3/14 8:55  | 18.3      | 6.79 | 1135                           | 0.08      | -202.3   | 3                      | 0.94      | 0.92       | 0.48                    | 0.44       | 0.01          | 0.01           | 0.02                    | 0.02                   | 0.02                  | 0.02          | 0.02          | 0.46          | 0.98          | 1           | 0.98         | 1.3           | 2           | 1000       | 52           | 9.2           |
| BHSS-ST2-FILTERED | 2/3/14 8:55  | 18.3      | 6.79 | 1135                           | 0.08      | -202.3   | 2                      | 0.94      | 0.92       | 0.48                    | 0.44       | 0.01          | 0.01           | 0.02                    | 0.02                   | 0.02                  | 0.02          | 0.02          | 0.46          | 0.98          | 1           | 0.98         | 1.3           | 2           | 1000       | 52           | 9.2           |

Notes:

1. Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NO<sub>x</sub>.
2. Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH<sub>3</sub>
3. Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH<sub>3</sub> and NO<sub>x</sub>

Gray-shaded data points indicate values below method detection level (mdl), mdl value used for statistical analyses.

Yellow-shaded data points indicate the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit, value used for statistical analysis.

Too many colonies were present. The numeric value represents the filtration volume.

Results based on colony counts outside the ideal range.

Sample held beyond the acceptable holding time.
### Table 6
Summary of Water Quality Data

| Sample ID | Statistics | Temp (°C) | pH | Specific Conductance (μS/cm) | DO (mg/L) | ORP (mV) | Total Alkalinity (mg/L) | TSS (mg/L) | VSS (mg/L) | CBOD₅ (mg/L) | COD (mg/L) | TN (mg/L) | Organic N (mg/L) | NH₄-N (mg/L) | NO₂-N (mg/L) | NO₃-N (mg/L) | NOx (mg/L) | TIN (mg/L) | TP (mg/L) | Ortho P (mg/L) | Sulfate (mg/L) | Hydrogen Sulphide (mg/L) | Fecal (CT/100 mL) | E.coli (CT/100 mL) | TOC (mg/L) |
|-----------|------------|-----------|----|-------------------------------|-----------|----------|-------------------------|-----------|----------|-------------|-----------|----------|-----------------|-------------|-------------|--------------|----------|---------|----------|------------|----------------|-----------------|-----------------|-------------|
| Stage 1   |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |
|           |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |
| Stage 2   |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |
|           |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |
| Stage 3   |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |
| Tap       |            |           |    |                               |           |          |                         |           |          |              |           |          |                 |             |             |               |          |         |           |            |                 |                 |                 |             |

Notes:
1. Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NOₓ.
2. Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH₄.
3. Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH₄ and NOₓ.
4. Fecal coliform and pH values are reported as geometric mean.

---

**Sample held beyond the acceptable holding time**

---

**Too many colonies were present. The numeric value represents the filtration volume.**

---

**Yellow-shaded data points indicate values below method detection level (mdl), md value used for statistical analyses.**

---

**Gray-shaded data points indicate below method detection level (mdl), md value used for statistical analyses.**
5.0  B-HS5 Sample Event No. 3: Summary and Recommendations

5.1  Summary
The results of the third sampling event indicate that the system is operating well and no adjustments are recommended at this time. The Sample Event No. 3 results indicate that:

- Septic tank effluent (STE) quality is characteristic of typical household STE quality. The total nitrogen concentration of 66 mg/L is within the range of values typically reported for Florida single family residence STE.

- The Stage 1 biofilter converted most of the ammonia N to oxidized nitrogen; effluent contained 6.4 mg/L TKN, of which 4.2 mg/L was ammonia.

- The Stage 2 biofilter produced a reducing environment and effluent NO\textsubscript{2}-N was below the method detection limit of 0.02 mg N/L.

- The total nitrogen concentration in the final effluent from the total treatment system was 1.72 mg/L, an approximately 97% reduction from STE.

- The four additional daily sample events of the treatment system performed in conjunction with this formal sample event showed relatively small variations in system performance. The final effluent mean total nitrogen concentration during the first week of February 2014 was 1.5 mg/L, an average 98% reduction from STE. On a mass basis, the total nitrogen that was reduced occurred within:
  - Stage 1 biofilter reduced 31%
  - Stage 2 lignocellulosic media chamber reduced 62%
  - Stage 2 sulfur media chamber reduced 7%.

5.2  Recommendations
No operational adjustments are recommended at this time, and continued sampling should provide additional insight to system performance.
Appendix A: Laboratory Report
## Table A.1
### Water Quality Analytical Results
February 4, 2014

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sample Date/Time</th>
<th>Temp (°C)</th>
<th>pH</th>
<th>Specific Conductance (µS/cm)</th>
<th>DO (mg/L)</th>
<th>ORP (mV)</th>
<th>TSS (mg/L)</th>
<th>VSS (mg/L)</th>
<th>CBOD₅ (mg/L)</th>
<th>COD (mg/L)</th>
<th>TN (mg/L N)</th>
<th>Organic N (mg/L N)</th>
<th>NO₂-N (mg/L N)</th>
<th>NO₃-N (mg/L N)</th>
<th>NOx (mg/L N)</th>
<th>TIN (mg/L N)</th>
<th>TP (mg/L)</th>
<th>Ortho P (mg/L P)</th>
<th>Sulfate (mg/L)</th>
<th>Hydrogen Sulfide (mg/L)</th>
<th>Sulfide (mg/L)</th>
<th>Fecal (CT/100 mL)</th>
<th>E-coli (CT/100 mL)</th>
<th>TDOC (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>2/4/14 12:40</td>
<td>19.1</td>
<td>7.42</td>
<td>1048</td>
<td>0.08</td>
<td>-244.8</td>
<td>400</td>
<td>39</td>
<td>39</td>
<td>78</td>
<td>200</td>
<td>62.08</td>
<td>0.08</td>
<td>0.01</td>
<td>0.08</td>
<td>60.08</td>
<td>5.9</td>
<td>5.4</td>
<td>2.4</td>
<td>3.3</td>
<td>11</td>
<td>3100</td>
<td>2800</td>
<td>37</td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>2/4/14 12:25</td>
<td>20.36</td>
<td>6.75</td>
<td>1057</td>
<td>1.64</td>
<td>-47.0</td>
<td>210</td>
<td>3</td>
<td>3</td>
<td>38</td>
<td>18</td>
<td>37.6</td>
<td>0.39</td>
<td>0.4</td>
<td>0.4</td>
<td>34</td>
<td>2.1</td>
<td>1.4</td>
<td>0.25</td>
<td>0.01</td>
<td>0.1</td>
<td>8100</td>
<td>3600</td>
<td>5.7</td>
</tr>
<tr>
<td>BHS5-LIGNO-0</td>
<td>2/4/14 11:50</td>
<td>20.52</td>
<td>6.85</td>
<td>962</td>
<td>0.98</td>
<td>0.8</td>
<td>360</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>5.8</td>
<td>1.3</td>
<td>1.23</td>
<td>0.08</td>
<td>2.6</td>
<td>1.9</td>
<td>4.5</td>
<td>4.58</td>
<td>1.1</td>
<td>0.75</td>
<td>27</td>
<td>0.01</td>
<td>0.3</td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>2/4/14 12:10</td>
<td>18.48</td>
<td>6.91</td>
<td>991</td>
<td>0.10</td>
<td>-247.5</td>
<td>360</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>39</td>
<td>1.52</td>
<td>1.5</td>
<td>1.34</td>
<td>0.16</td>
<td>0.03</td>
<td>0.01</td>
<td>0.02</td>
<td>0.18</td>
<td>1.2</td>
<td>0.76</td>
<td>81</td>
<td>3.4</td>
<td>6</td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>2/4/14 12:15</td>
<td>18.48</td>
<td>6.91</td>
<td>991</td>
<td>0.10</td>
<td>-247.5</td>
<td>360</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>37</td>
<td>1.62</td>
<td>1.6</td>
<td>1.46</td>
<td>0.14</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.16</td>
<td>1.1</td>
<td>0.76</td>
<td>84</td>
<td>3.3</td>
<td>5.8</td>
</tr>
<tr>
<td>BHS5-FB</td>
<td>2/4/14 12:05</td>
<td>27</td>
<td>5.01</td>
<td>1.01</td>
<td>7.85</td>
<td>1.01</td>
<td>5300</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>0.07</td>
<td>0.05</td>
<td>0.041</td>
<td>0.009</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.029</td>
<td>0.01</td>
<td>0.01</td>
<td>0.2</td>
<td>0.01</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Notes:
1. Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NO₃.
2. Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH₃.
3. Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH₃ and NO₃.

Gray-shaded data points indicate values below method detection level (mdl), mdl value used for statistical analyses.

Yellow-shaded data points indicate the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit, value used for statistical analysis.

Too many colonies were present. The numeric value represents the filtration volume.

Results based on colony counts outside the ideal range.
### Table A.2
Water Quality Analytical Results
February 5, 2014

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sample Date/Time</th>
<th>Temp (°C)</th>
<th>pH</th>
<th>Specific Conductance (us/cm)</th>
<th>DO (mg/L)</th>
<th>ORP (mV)</th>
<th>Total Alkalinity (mg/L)</th>
<th>TSS (mg/L)</th>
<th>VSS (mg/L)</th>
<th>CBOD₅ (mg/L)</th>
<th>COD (mg/L)</th>
<th>TN (mg/L N)</th>
<th>Organic N (mg/L N)¹</th>
<th>NH₄-N (mg/L N)</th>
<th>NO₂-N (mg/L N)</th>
<th>NO₃-N (mg/L N)</th>
<th>NOx (mg/L N)</th>
<th>TIN (mg/L N)¹</th>
<th>TP (mg/L)</th>
<th>Ortho P (mg/L P)</th>
<th>Sulfate (mg/L)</th>
<th>Hydrogen Sulfide (mg/L)</th>
<th>Sulfide (mg/L)</th>
<th>Fecal (Ct/100 mL)</th>
<th>E-coli (Ct/100 mL)</th>
<th>TOC (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>2/5/14 10:10</td>
<td>20.2</td>
<td>7.31</td>
<td>1151</td>
<td>400</td>
<td>42</td>
<td>36</td>
<td>32</td>
<td>270</td>
<td>69.02</td>
<td>69</td>
<td>7</td>
<td>62</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>62.02</td>
<td>6</td>
<td>5.4</td>
<td>1.3</td>
<td>2.9</td>
<td>8.5</td>
<td>40000</td>
<td>1700</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>2/5/14 10:05</td>
<td>20.11</td>
<td>6.78</td>
<td>1073</td>
<td>210</td>
<td>2</td>
<td>14</td>
<td>33</td>
<td>51.13</td>
<td>1.7</td>
<td>1.9</td>
<td>47</td>
<td>0.53</td>
<td>47.53</td>
<td>49.43</td>
<td>2</td>
<td>1.9</td>
<td>0.79</td>
<td>1.2</td>
<td>7.1</td>
<td>1480</td>
<td>140</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-LIGNO-G</td>
<td>2/5/14 9:50</td>
<td>20.84</td>
<td>6.57</td>
<td>948</td>
<td>390</td>
<td>2</td>
<td>16</td>
<td>47</td>
<td>3.98</td>
<td>0.88</td>
<td>0.808</td>
<td>0.072</td>
<td>1.1</td>
<td>2</td>
<td>3.1</td>
<td>1.17</td>
<td>1.5</td>
<td>23</td>
<td>1.8</td>
<td>450</td>
<td>98</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>2/5/14 9:50</td>
<td>18.7</td>
<td>7.04</td>
<td>1005</td>
<td>350</td>
<td>3</td>
<td>3</td>
<td>91</td>
<td>1.12</td>
<td>1.1</td>
<td>0.65</td>
<td>0.45</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
<td>0.47</td>
<td>1.3</td>
<td>1.94</td>
<td>78.3</td>
<td>3.8</td>
<td>7.1</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>2/5/14 9:55</td>
<td>18.7</td>
<td>7.04</td>
<td>1005</td>
<td>360</td>
<td>3</td>
<td>3</td>
<td>91</td>
<td>1.02</td>
<td>1.0</td>
<td>0.55</td>
<td>0.45</td>
<td>0.01</td>
<td>0.03</td>
<td>0.02</td>
<td>0.47</td>
<td>1.3</td>
<td>0.96</td>
<td>78</td>
<td>3.8</td>
<td>7.1</td>
<td>30</td>
<td>30</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

¹Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NO₃.
²Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH₄.
³Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH₄ and NO₃.

Gray-shaded data points indicate values below method detection level (mdl), mdl value used for statistical analyses.

Yellow-shaded data points indicate the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit, value used for statistical analysis.

Too many colonies were present. The numeric value represents the filtration volume.

Results based on colony counts outside the ideal range.

---

FLORIDA ONSITE SEWAGE NITROGEN REDUCTION STRATEGIES STUDY
B-HS5 FIELD SYSTEM MONITORING REPORT NO. 3
HAZEN AND SAWYER, P.C.
### Table A.3
Water Quality Analytical Results
February 6, 2014

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sample Date/Time</th>
<th>Temp (°C)</th>
<th>pH</th>
<th>Specific Conductance (µS/cm)</th>
<th>DO (mg/L)</th>
<th>ORP (mV)</th>
<th>Total Alkalinity (mg/L)</th>
<th>TN (mg/L N)</th>
<th>Organic N (mg/L N)</th>
<th>NH₄-N (mg/L N)</th>
<th>NO₂-N (mg/L N)</th>
<th>NO₃-N (mg/L N)</th>
<th>NOx (mg/L N)</th>
<th>TIN (mg/L N)</th>
<th>TP (mg/L)</th>
<th>Ortho P (mg/L P)</th>
<th>Sulfate (mg/L)</th>
<th>Hydrogen Sulfide (mg/L)</th>
<th>Sulfide (mg/L)</th>
<th>Fecal (Ct/100 mL)</th>
<th>E-coli (Ct/100 mL)</th>
<th>TOC (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>2/6/14 8:47</td>
<td>20.1</td>
<td>7.42</td>
<td>1192</td>
<td>0.01</td>
<td>-301.9</td>
<td>430</td>
<td>66.02</td>
<td>66</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>62.02</td>
<td>6.8</td>
<td>5.3</td>
<td>1.3</td>
<td>2.2</td>
<td>7.3</td>
<td>27000</td>
<td>1700</td>
<td>20</td>
<td>86</td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>2/6/14 8:50</td>
<td>20.14</td>
<td>6.76</td>
<td>1087</td>
<td>1.80</td>
<td>-71.0</td>
<td>210</td>
<td>52.69</td>
<td>4.3</td>
<td>2.9</td>
<td>48</td>
<td>48.39</td>
<td>49.79</td>
<td>2.2</td>
<td>1.7</td>
<td>0.01</td>
<td>0.1</td>
<td>0.1</td>
<td>1500</td>
<td>42</td>
<td>5.5</td>
<td>81</td>
</tr>
<tr>
<td>BHS5-LIGNO-0</td>
<td>2/6/14 8:30</td>
<td>18.7</td>
<td>6.71</td>
<td>1006</td>
<td>0.28</td>
<td>-129.8</td>
<td>390</td>
<td>1.9</td>
<td>1.855</td>
<td>2.5</td>
<td>1.4</td>
<td>4.2</td>
<td>1.3</td>
<td>0.58</td>
<td>0.23</td>
<td>0.01</td>
<td>0.1</td>
<td>0.1</td>
<td>200</td>
<td>31</td>
<td>11</td>
<td>111</td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>2/6/14 8:25</td>
<td>19.03</td>
<td>6.75</td>
<td>1008</td>
<td>0.15</td>
<td>-243.2</td>
<td>380</td>
<td>1.72</td>
<td>2.0</td>
<td>2</td>
<td>0.65</td>
<td>0.01</td>
<td>0.65</td>
<td>1.5</td>
<td>1.27</td>
<td>0.01</td>
<td>0.2</td>
<td>0.02</td>
<td>35</td>
<td>0.58</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>2/6/14 8:30</td>
<td>19.03</td>
<td>6.75</td>
<td>1008</td>
<td>0.15</td>
<td>-243.2</td>
<td>380</td>
<td>1.92</td>
<td>1.9</td>
<td>1.9</td>
<td>0.63</td>
<td>0.01</td>
<td>0.65</td>
<td>1.4</td>
<td>0.88</td>
<td>0.01</td>
<td>0.2</td>
<td>0.01</td>
<td>100</td>
<td>20</td>
<td>8.3</td>
<td>11</td>
</tr>
<tr>
<td>BHS5-EB</td>
<td>2/6/14 9:05</td>
<td>17.7</td>
<td>6.23</td>
<td>2.43</td>
<td>8.15</td>
<td>-36.7</td>
<td>22</td>
<td>0.07</td>
<td>0.05</td>
<td>0.041</td>
<td>0.009</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.029</td>
<td>0.01</td>
<td>0.2</td>
<td>0.01</td>
<td>1</td>
<td>12</td>
<td>0.06</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes:

1. Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NOₓ.
2. Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH₃.
3. Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH₃ and NOₓ.

Gray-shaded data points indicate values below method detection level (mdl), mdl value used for statistical analyses.

Yellow-shaded data points indicate the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit, value used for statistical analysis.

Too many colonies were present. The numeric value represents the filtration volume.

Results based on colony counts outside the ideal range.

---

FLORIDA ONSITE SEWAGE NITROGEN REDUCTION STRATEGIES STUDY
B-HSS FIELD SYSTEM MONITORING REPORT NO. 3
HAZEN AND SAWYER, P.C.
<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sample Date/Time</th>
<th>Temp (°C)</th>
<th>pH</th>
<th>Specific Conductance (μS/cm)</th>
<th>DO (mg/L)</th>
<th>ORP (mV)</th>
<th>Total Alkalinity (mg/L)</th>
<th>TSS (mg/L)</th>
<th>VSS (mg/L)</th>
<th>CBOD₅ (mg/L)</th>
<th>COD (mg/L)</th>
<th>TN (mg/L)</th>
<th>Total Alkalinity (mg/L)³</th>
<th>Organic N (mg/L N)</th>
<th>NH₃-N (mg/L N)</th>
<th>NO₂-N (mg/L N)</th>
<th>NO₃-N (mg/L N)</th>
<th>NOx (mg/L N)</th>
<th>TIN (mg/L N)³</th>
<th>TP (mg/L)</th>
<th>Ortho P (mg/L)</th>
<th>Sulfate (mg/L)</th>
<th>Hydrogen Sulfide (mg/L)</th>
<th>Sulfide (mg/L)</th>
<th>Fecal (Ct/100 mL)</th>
<th>E-coli (Ct/100 mL)</th>
<th>TOC (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>2/7/14 10:55</td>
<td>20.2</td>
<td>7.69</td>
<td>1206</td>
<td>0.03</td>
<td>-307.4</td>
<td>420</td>
<td>32</td>
<td>28</td>
<td>72</td>
<td>140</td>
<td>68.02</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>61.02</td>
<td>6.3</td>
<td>3.7</td>
<td>2.1</td>
<td>1.6</td>
<td>8.1</td>
<td>93600</td>
<td>1800</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>2/7/14 10:55</td>
<td>20.14</td>
<td>6.75</td>
<td>1070</td>
<td>1.93</td>
<td>-77.3</td>
<td>210</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>40</td>
<td>43.43</td>
<td>3.9</td>
<td>1.6</td>
<td>2.8</td>
<td>0.53</td>
<td>39.53</td>
<td>1.4</td>
<td>25</td>
<td>0.27</td>
<td>0.4</td>
<td>4400</td>
<td>72</td>
<td>5.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-LIGNO-0</td>
<td>2/7/14 10:35</td>
<td>18.4</td>
<td>7.38</td>
<td>1063</td>
<td>0.14</td>
<td>-177.0</td>
<td>360</td>
<td>2</td>
<td>3</td>
<td>14</td>
<td>22</td>
<td>8.28</td>
<td>1.5</td>
<td>1.42</td>
<td>0.08</td>
<td>5.9</td>
<td>6.8</td>
<td>0.95</td>
<td>0.49</td>
<td>24</td>
<td>0.06</td>
<td>600</td>
<td>63</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>2/7/14 10:55</td>
<td>18.9</td>
<td>6.79</td>
<td>995</td>
<td>0.38</td>
<td>-229.7</td>
<td>380</td>
<td>3</td>
<td>3</td>
<td>16</td>
<td>45</td>
<td>1.18</td>
<td>1</td>
<td>0.69</td>
<td>0.31</td>
<td>0.17</td>
<td>0.18</td>
<td>0.49</td>
<td>0.49</td>
<td>24</td>
<td>0.06</td>
<td>600</td>
<td>63</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>2/7/14 10:40</td>
<td>18.9</td>
<td>6.79</td>
<td>995</td>
<td>0.38</td>
<td>-229.7</td>
<td>370</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td>33</td>
<td>1.29</td>
<td>1</td>
<td>0.76</td>
<td>0.32</td>
<td>0.17</td>
<td>0.18</td>
<td>0.53</td>
<td>1.1</td>
<td>0.5</td>
<td>0.18</td>
<td>600</td>
<td>63</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. Total Nitrogen (TN) is a calculated value equal to the sum of TKN and NOₓ.
2. Organic Nitrogen (ON) is a calculated value equal to the difference of TKN and NH₃.
3. Total Inorganic Nitrogen (TIN) is a calculated value equal to the sum of NH₃ and NOₓ.

Gray-shaded data points indicate values below method detection level (mdl), mdl value used for statistical analyses.

Yellow-shaded data points indicate the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit, value used for statistical analysis.

Too many colonies were present. The numeric value represents the filtration volume.

Results based on colony counts outside the ideal range.

Table A.4
Water Quality Analytical Results
February 7, 2014

"Too many colonies were present. The numeric value represents the filtration volume."
Laboratory Report

Project Name: B-HS5 SE#3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401201-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/03/14 10:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Client Provided Field Data

- **pH**: 7.33
- **Temperature**: 19.9 °C
- **Conductivity**: 1162 umhos
- **Dissolved Oxygen**: 0.08 mg/L

**Inorganics**

- **Hydrogen Sulfide (Unionized)**: mg/L, 6.9, SM 4550SF, 0.04, 0.01, 02/08/14 09:00, 02/13/14 15:52, 1
- **Ammonia as N**: mg/L, 59, EPA 350.1, 2.0, 0.47, 02/05/14 17:28, 50
- **Carbonaceous BOD**: mg/L, 79, SM 5210B, 2, 2, 02/04/14 15:07, 02/09/14 09:57, 1
- **Chemical Oxygen Demand**: mg/L, 37, EPA 410.4, 25, 10, 02/06/14 12:00, 1
- **Nitrate (as N)**: mg/L, 0.01 U, EPA 300.0, 0.04, 0.01, 02/05/14 04:25, 1
- **Nitrite (as N)**: mg/L, 0.01 U, EPA 300.0, 0.04, 0.01, 02/05/14 04:25, 1
- **Orthophosphate as P**: mg/L, 5.0, EPA 300.0, 0.040, 0.010, 02/05/14 04:25, 1
- **Phosphorous - Total as P**: mg/L, 7.2, SM 4500P-E, 0.20, 0.050, 02/04/14 09:50, 02/05/14 15:07, 5
- **Sulfate**: mg/L, 2.2, EPA 300.0, 0.60, 0.20, 02/05/14 04:25, 1
- **Sulfide**: mg/L, 10, SM 4500SF, 0.40, 0.10, 02/08/14 13:52, 1
- **Total Alkalinity**: mg/L, 390, SM 2320B, 8.0, 2.0, 02/14/14 11:50, 1
- **Total Kjeldahl Nitrogen**: mg/L, 66, EPA 351.2, 8.3, 2.1, 02/04/14 11:28, 02/06/14 15:23, 41.67
- **Total Organic Carbon**: mg/L, 32, SM 5310B, 1.0, 0.060, 02/05/14 20:30, 1
- **Total Suspended Solids**: mg/L, 25, SM 2540D, 1, 1, 02/05/14 10:49, 02/10/14 10:58, 1
- **Volatile Suspended Solids**: mg/L, 22, EPA 160.4, 1, 1, 02/05/14 10:49, 02/10/14 10:58, 1
- **Nitrate+Nitrite (N)**: mg/L, 0.02 U, EPA 300.0, 0.08, 0.02, 02/05/14 04:25, 1

**Microbiology**

- **E. Coli**: MPN/100 mL, 5,500, SM 9223B, 2.0, 2.0, 02/03/14 18:03, 02/04/14 12:49, 1
- **Fecal Coliforms**: CFU/100 ml, 24,000, SM 9222D, 1, 1, 02/03/14 17:40, 02/04/14 15:40, 1

Sample Description: BHS5-STE-FILTERED

- **Matrix**: Wastewater
- **SAL Sample Number**: 1401201-02
- **Date/Time Collected**: 02/03/14 10:10
- **Collected by**: Josefin Hirst
- **Date/Time Received**: 02/03/14 16:30

Client Provided Field Data

- **pH**: 7.33
- **Temperature**: 19.9 °C
- **Conductivity**: 1162 umhos
- **Dissolved Oxygen**: 0.08 mg/L

Florida Certification Number: E84129
NELAP Accredited
# Laboratory Report

## Project Name: B-HS5 SE#3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE-FILTERED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401201-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/03/14 10:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganic, Dissolved

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>58</td>
<td>EPA 350.1</td>
<td>2.0</td>
<td>0.47</td>
<td>02/18/14 17:24</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>24</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/10/14 12:17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.04</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 04:34</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 04:34</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>60</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.050</td>
<td>02/18/14 16:46</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.04 I</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 04:34</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Lab filtration for diss. analytes

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
<td>6.99</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>21.2 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>1168 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>3.23 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.20</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 09:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>4.2</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/05/14 16:11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>13</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/09/14 09:57</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>23 I</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/05/14 15:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 300.0</td>
<td>0.40</td>
<td>0.10</td>
<td>02/05/14 08:30</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 07:50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>1.7</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 07:50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>3.0</td>
<td>SM 4500P-E</td>
<td>0.080</td>
<td>0.020</td>
<td>02/04/14 09:50</td>
<td>02/05/14 15:08</td>
<td>2</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>21</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 07:50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.40</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/08/14 13:52</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>220</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/14/14 11:56</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>6.4</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/06/14 16:33</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>6.7</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/05/14 20:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>SM 2540D</td>
<td>1</td>
<td></td>
<td>02/10/14 10:58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td></td>
<td>02/10/14 10:58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 300.0</td>
<td>0.44</td>
<td>0.11</td>
<td>02/05/14 08:30</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

---

Florida Certification Number: E84129

NELAP Accredited

Page 2 of 24
## Laboratory Report

### Project Name: B-HS5 SE#3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>10 Q</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/03/14 18:03</td>
<td>02/04/14 12:49</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>1,000</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/03/14 17:40</td>
<td>02/04/14 15:40</td>
<td>1</td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH (6.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>21.2 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td>1168 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>3.23 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>29</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 04:53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganic, Dissolved

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>4.1</td>
<td>EPA 350.1</td>
<td>0.20</td>
<td>0.047</td>
<td>02/18/14 17:31</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>2 U</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/10/14 12:17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 300.0</td>
<td>0.40</td>
<td>0.10</td>
<td>02/05/14 08:30</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 04:53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>5.4</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.050</td>
<td>02/18/14 16:46</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 300.0</td>
<td>0.44</td>
<td>0.11</td>
<td>02/05/14 08:30</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
Laboratory Report

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-LIGNO-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401201-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/03/14 09:20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>0.23 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inorganics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.54</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 09:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.38</td>
<td>EPA 350.1</td>
<td>0.04</td>
<td>0.009</td>
<td>02/05/14 16:13</td>
<td>02/14/14 12:06</td>
<td>1</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>11</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/04/14 15:07</td>
<td>02/09/14 09:57</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>41</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/05/14 09:18</td>
<td>02/05/14 15:18</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.04</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.001</td>
<td>02/05/14 05:02</td>
<td>02/05/14 05:02</td>
<td>1</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.001</td>
<td>02/05/14 05:02</td>
<td>02/05/14 05:02</td>
<td>1</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.51</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.010</td>
<td>02/05/14 05:02</td>
<td>02/05/14 05:02</td>
<td>1</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.5</td>
<td>SM 4500P-E</td>
<td>0.04</td>
<td>0.010</td>
<td>02/04/14 09:50</td>
<td>02/05/14 15:10</td>
<td>1</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>18</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.2</td>
<td>02/05/14 05:02</td>
<td>02/05/14 05:02</td>
<td>1</td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.81</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/08/14 13:52</td>
<td>02/14/14 12:06</td>
<td>1</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>380</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/05/14 10:49</td>
<td>02/05/14 10:58</td>
<td>1</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>4.7</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/04/14 11:27</td>
<td>02/06/14 11:45</td>
<td>1</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>11</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/05/14 20:30</td>
<td>02/05/14 20:30</td>
<td>1</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/14 10:58</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/14 10:58</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.04</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 05:02</td>
<td>02/05/14 05:02</td>
<td>1</td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>41 Q</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/03/14 18:03</td>
<td>02/04/14 12:49</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>1,000 Q</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/03/14 17:40</td>
<td>02/04/14 15:40</td>
<td>1</td>
</tr>
</tbody>
</table>

Sample Description BHS5-LIGNO-0-FILTERED
Matrix Wastewater
SAL Sample Number 1401201-06
Date/Time Collected 02/03/14 09:20
Collected by Josefin Hirst
Date/Time Received 02/03/14 16:30

**Client Provided Field Data**

<table>
<thead>
<tr>
<th>Field Data</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>19.3 °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td>1037 umhos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.23 mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Inorganic, Dissolved**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>EPA 350.1</td>
<td>0.04</td>
<td>0.009</td>
<td>02/18/14 16:47</td>
<td>02/14/14 12:06</td>
<td>1</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/05/14 08:30</td>
<td>02/10/14 12:17</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:12</td>
<td>02/05/14 05:12</td>
<td>1</td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager
# Laboratory Report

## Project Name: B-HS5 SE#3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-LIGNO-0-FILTERED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401201-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/03/14 09:20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>0.78</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.050</td>
<td>02/05/14 11:50</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrile (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 05:12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lab filtration for diss. analytes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Project Name: BHS5-ST2

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401201-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/03/14 08:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td>6.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>18.3 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>1135 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>0.08 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>mg/L</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>1.3</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 09:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.17</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td></td>
<td>02/06/14 08:11</td>
<td>1</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>7</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/04/14 15:07</td>
<td>02/09/14 09:57</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>23</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/05/14 15:18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:21</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:21</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.41</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td></td>
<td>02/05/14 05:21</td>
<td>1</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>1.1</td>
<td>SM 4500P-E</td>
<td>0.040</td>
<td>0.010</td>
<td>02/04/14 09:50</td>
<td>02/05/14 15:11</td>
<td>1</td>
</tr>
<tr>
<td>Sulfate</td>
<td>98</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 05:21</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sulfide</td>
<td>2.0</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/08/14 13:52</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>350</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/14/14 12:15</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.7</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/04/14 11:27</td>
<td>02/06/14 11:47</td>
<td>1</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>9.2</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td></td>
<td>02/05/14 20:30</td>
<td>1</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/14 10:58</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/14 10:58</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrile (N)</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 05:21</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>52 Q</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/03/14 18:03</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 mL</td>
<td>1,000 Q</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/03/14 17:40</td>
</tr>
</tbody>
</table>
Laboratory Report

**Project Name**: B-HS5 SE#3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td></td>
<td>BHS5-ST2-DUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td></td>
<td>1401201-08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td></td>
<td>02/03/14 09:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td></td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Client Provided Field Data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.79</td>
</tr>
<tr>
<td>Temperature</td>
<td>18.3 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1135 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.08 mg/L</td>
</tr>
</tbody>
</table>

**Inorganics**

<table>
<thead>
<tr>
<th>Substance</th>
<th>mg/L</th>
<th>Result</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide</td>
<td>1.0</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 09:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.49</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/06/14 08:12</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>8</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/04/14 15:07</td>
<td>02/09/14 09:57</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>25</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/05/14 09:18</td>
<td>02/05/14 15:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:31</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:31</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.42</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 05:31</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>1.1</td>
<td>SM 4500P-E</td>
<td>0.040</td>
<td>0.010</td>
<td>02/04/14 09:50</td>
<td>02/05/14 15:12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>110</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 05:31</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>1.6</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/08/14 13:52</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>340</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/14/12 12:23</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.7</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/04/14 11:27</td>
<td>02/06/11 11:48</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>8.6</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.60</td>
<td>02/05/14 20:30</td>
<td>02/05/14 15:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/10 10:58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/05/14 10:49</td>
<td>02/10/10 10:58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 05:31</td>
<td>02/05/14 05:31</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Microbiology**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
</tr>
</tbody>
</table>

**Sample Description**: BHS5-ST2-FILTERED

**Matrix**: Wastewater

<table>
<thead>
<tr>
<th>SAL Sample Number</th>
<th>Date/Time Collected</th>
<th>Collected by</th>
<th>Date/Time Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1401201-09</td>
<td>02/03/14 08:55</td>
<td>Josefin Hirst</td>
<td>02/03/14 16:30</td>
</tr>
</tbody>
</table>

**Client Provided Field Data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.79</td>
</tr>
<tr>
<td>Temperature</td>
<td>18.3 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1135 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.08 mg/L</td>
</tr>
</tbody>
</table>
Laboratory Report

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST2-FILTERED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401201-09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/03/14 08:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/03/14 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Inorganics**

**Inorganic, Dissolved**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>98</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 05:40</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.44</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/18/14 16:48</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>2 U</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/05/14 08:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:40</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 05:40</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>0.92</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.050</td>
<td>02/18/14 16:46</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 05:40</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Lab filtration for diss. analytes
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40409 - Digestion for TP by EPA 365.2/SM4500PE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40409-BLK1)</td>
<td></td>
<td>0.010</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.010</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.80</td>
<td>100</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40409-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.80</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>1.0</td>
<td>0.0203</td>
<td>103</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40409-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401032-02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>1.05</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>1.0</td>
<td>0.0203</td>
<td>103</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Spike Dup (BB40409-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401032-02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>1.03</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>1.0</td>
<td>0.0221</td>
<td>101</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Spike Dup (BB40409-MSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401168-02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>1.04</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>1.0</td>
<td>0.0203</td>
<td>101</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40416 - Digestion for TKN by EPA 351.2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40416-BLK1)</td>
<td></td>
<td>0.05</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>0.495</td>
<td>104</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40416-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.42</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>0.495</td>
<td>104</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40416-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401168-02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>3.14</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>0.495</td>
<td>104</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40416 - Digestion for TKN by EPA 351.2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40416-MS2) Source: 1401171-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.29</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>90</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40416-MSD1) Source: 1401146-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>3.19</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>0.495</td>
<td>106</td>
<td>90-110</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40416-MSD2) Source: 1401171-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.46</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>97</td>
<td>90-110</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40417 - Digestion for TKN by EPA 351.2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40417-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40417-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.70</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>106</td>
<td></td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40417-MS1) Source: 1401199-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.73</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>108</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40417-MS2) Source: 1401199-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.68</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>106</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40417-MSD1) Source: 1401199-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.38</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>94</td>
<td>90-110</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40417-MSD2) Source: 1401199-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.62</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>104</td>
<td>90-110</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Prepared: 02/04/14 Analyzed: 02/06/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40422 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40422-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.010 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.20 U</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40422-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.884</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>98</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.44</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>105</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.50</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.78</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>105</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40422-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.71</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>101</td>
<td>85-115</td>
<td>4</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.855</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>95</td>
<td>85-115</td>
<td>3</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.50</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>107</td>
<td>85-115</td>
<td>0.2</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.30</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>103</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40422 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>42.4</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>33.1</td>
<td>103</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.66</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>0.0370</td>
<td>95</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.51</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>108</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>3.29</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>2.32</td>
<td>108</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Matrix Spike (BB40422-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.68</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>ND</td>
<td>99</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.43</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>102</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>90.0 L</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>98.3</td>
<td>NR</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>1.36</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>0.432</td>
<td>103</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40439 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40439-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2  U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40439-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>210</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>105</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40439 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40439-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>207</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>103</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40439-DUP1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401169-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>140</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>150</td>
<td>5</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40502 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40502-BL1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>10 U</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40502-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>47</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>94</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40502-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401200-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>43</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>86</td>
<td>85-115</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40502-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401200-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>43</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>86</td>
<td>85-115</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td><strong>Batch BB40510 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40510-BL1K1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40510-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>49.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>50</td>
<td>98</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>Source Result</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40510 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40510-DUP1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401199-01</td>
<td>Prepared: 02/05/14</td>
<td>Analyzed: 02/10/14</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>17.5</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>18.0</td>
<td></td>
<td></td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>16.5</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>17.0</td>
<td></td>
<td></td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td><strong>Batch BB40532 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40532-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009 U</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40532-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.51</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td></td>
<td>102</td>
<td>90-110</td>
</tr>
<tr>
<td>Matrix Spike (BB40532-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401196-07</td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.020</td>
<td>99</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40532-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401254-07</td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.50</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.021</td>
<td>97</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40532-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401196-07</td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.51</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.020</td>
<td>98</td>
<td>90-110</td>
<td>0.8</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40532-MSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401254-07</td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.021</td>
<td>99</td>
<td>90-110</td>
<td>3</td>
</tr>
<tr>
<td><strong>Batch BB40533 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40533-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared &amp; Analyzed: 02/05/14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009 U</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40533 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40533-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>107</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40533-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>106</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40533-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N : S AT 109%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40546 - TOC prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40546-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>0.060</td>
<td>U</td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40546-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>9.60</td>
<td></td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>96</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40546-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>10.6</td>
<td></td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>0.656</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40546-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>10.4</td>
<td></td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>0.656</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40621 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40621-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>10 U</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager

Page 14 of 24
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40621 - COD prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40621-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40621-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401256-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40621-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401256-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>85-115</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Batch BB40801 - Sulfide prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40801-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40801-BLK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40801-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40801-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40801-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401199-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40801-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401199-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40801 - Sulfide prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40801-MSD1)</td>
<td>Source: 1401199-21</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40801-MSD2)</td>
<td>Source: 1401199-22</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Batch BB41346 - alkalinity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41346-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0 U</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41346-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>103</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41346-MS1)</td>
<td>Source: 1401533-01</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>270</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>160</td>
<td>88</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41346-MSD1)</td>
<td>Source: 1401533-01</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>270</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>160</td>
<td>88</td>
<td>80-120</td>
<td>0.2</td>
<td>26</td>
</tr>
<tr>
<td>Batch BB42017 - Ion Chromatography 300.0 Prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB42017-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42017-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.63</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>96</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42017 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS Dup (BB42017-BSD1)</strong></td>
<td>Prepared &amp; Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.65</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>97</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>102</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB42017-MS1)</strong></td>
<td>Source: 1401224-05</td>
<td>Prepared &amp; Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.630</td>
<td>40</td>
<td>10</td>
<td>mg/L</td>
<td>1700</td>
<td></td>
<td>40.0</td>
<td>85-115</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>102</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganic, Dissolved - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40422 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40422-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40422-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.78</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>105</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.50</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS Dup (BB40422-BSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.71</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.50</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40422-MS1) Source: 1401200-09</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.66</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>0.0370</td>
<td>95</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.51</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>108</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40422-MS2) Source: 1401201-09</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.68</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>ND</td>
<td>99</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.43</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>102</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganic, Dissolved - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40514 - BOD Dissolved</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40514-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40514-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>198</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>99</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40514-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>202</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40514-DUP1)</td>
<td>Source: 1401200-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>ND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

**Batch BB40521 - Digestion for TKN by EPA 351.2**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB40521-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.050 U</td>
<td>0.20</td>
<td>0.050</td>
<td>mg/L</td>
<td>1.0</td>
<td>92</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40521-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.915</td>
<td>0.20</td>
<td>0.050</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40521-MS1)</td>
<td>Source: 1401199-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.05</td>
<td>0.20</td>
<td>0.050</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.03</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40521-MS2)</td>
<td>Source: 1401201-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.72</td>
<td>0.20</td>
<td>0.050</td>
<td>mg/L</td>
<td>1.0</td>
<td>0.780</td>
<td>94</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40521-MSD1)</td>
<td>Source: 1401199-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.07</td>
<td>0.20</td>
<td>0.050</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.03</td>
<td>103</td>
<td>90-110</td>
<td>0.6</td>
<td>20</td>
</tr>
</tbody>
</table>
### Inorganic, Dissolved - Quality Control

<table>
<thead>
<tr>
<th>Batch BB40521 - Digestion for TKN by EPA 351.2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analyte</strong></td>
<td><strong>Result</strong></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40521-MSD2) Source: 1401201-06</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.70</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>1401201-06</td>
</tr>
<tr>
<td><strong>Prepared:</strong></td>
<td>02/05/14</td>
</tr>
<tr>
<td><strong>Analyzed:</strong></td>
<td>02/18/14</td>
</tr>
<tr>
<td>** Spike Level**</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Source Result</strong></td>
<td>0.780</td>
</tr>
<tr>
<td><strong>%REC</strong></td>
<td>92</td>
</tr>
<tr>
<td><strong>%REC Limits</strong></td>
<td>90-110</td>
</tr>
<tr>
<td><strong>RPD</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>RPD Limit</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Batch BB41303 - Ammonia by SEAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blank (BB41303-BLK1)</strong></td>
<td>Prepared &amp; Analyzed: 02/18/14</td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.009</td>
</tr>
<tr>
<td><strong>LCS (BB41303-BS1)</strong></td>
<td>Prepared &amp; Analyzed: 02/18/14</td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41303-MS1)</strong> Source: 1401199-07</td>
<td></td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41303-MS2)</strong> Source: 1401201-06</td>
<td></td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.80</td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41303-MSD1)</strong> Source: 1401199-07</td>
<td></td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.57</td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41303-MSD2)</strong> Source: 1401201-06</td>
<td></td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>0.75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Batch BB42017 - Ion Chromatography 300.0 Prep</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blank (BB42017-BLK1)</strong></td>
<td>Prepared &amp; Analyzed: 02/21/14</td>
</tr>
<tr>
<td><strong>Nitrate (as N)</strong></td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Surrogate: Dichloroacetate</strong></td>
<td>1.02</td>
</tr>
</tbody>
</table>

| Florida Certification Number: E84129       |  |
| NELAP Accredited                          |  |
| Francis I. Daniels, Laboratory Director   |  |
| Leslie C. Boardman, Q.A. Manager          |  |
Inorganic, Dissolved - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42017 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB42017-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.63</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>96</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.983</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>98</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS Dup (BB42017-BSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.65</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>97</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>102</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB42017-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.630</td>
<td>40</td>
<td>10</td>
<td>mg/L</td>
<td>1700</td>
<td>40.0</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>102</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Microbiology - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40402 - FC-MF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40402-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td>Prepared: 02/03/14 Analyzed: 02/04/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40402-DUP1)</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td>Prepared: 02/03/14 Analyzed: 02/04/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401199-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared: 02/03/14 Analyzed: 02/04/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40402-DUP2)</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401199-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared: 02/03/14 Analyzed: 02/04/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40402-DUP3)</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401200-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepared: 02/03/14 Analyzed: 02/04/14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
* Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with "**", all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.

Q  Sample held beyond the accepted holding time.
L  Off-scale high. Result exceeded highest calibration standard.

Questions regarding this report should be directed to:
  Kathryn Nordmark
  Telephone (813) 855-1844   FAX (813) 855-2218
  Kathryn@southernanalyticallabs.com
<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Description</th>
<th>Date/Time</th>
<th>Matrix</th>
<th>Parameter</th>
<th>Container</th>
<th>Temperature</th>
<th>Conductivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>BHSS-STE</td>
<td>2/1/14</td>
<td>WW</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>02</td>
<td>BHSS-STE-FILTERED</td>
<td>10:10</td>
<td>WW</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>BHSS-ST1</td>
<td>9:45</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>BHSS-ST1-FILTERED</td>
<td>9:45</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>BHSS-LIGNO-O</td>
<td>9:20</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>BHSS-LIGNO-O-FILTERED</td>
<td>9:20</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>BHSS-ST2</td>
<td>8:35</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>BHSS-ST2-DUP</td>
<td>8:00</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>BHSS-ST2-FILTERED</td>
<td>8:35</td>
<td>WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>BHSS-EB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instructions / Remarks:
- Seal intact?
- Samples intact upon arrival?
- Received on ice? Temp
- Proper preservatives indicated?
- Rec'd within holding time?
- Volatiles rec'd w/o headspace?
- Proper containers used?
### Laboratory Report

**Project Name** | B-HS5 SE#4
---|---

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401256-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/04/14 12:40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/04/14 15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.42</td>
</tr>
<tr>
<td>Temperature</td>
<td>19.1 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1048 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.08 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>3.3</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>02/13/14 15:52</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>60</td>
<td>EPA 350.1</td>
<td>2.0</td>
<td>0.47</td>
<td>02/12/14 11:36</td>
<td>50</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>78</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>02/11/14 14:01</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>200</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/05/14 15:18</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.08</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 23:05</td>
<td>1</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 23:05</td>
<td>1</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>5.4</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 23:05</td>
<td>1</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>5.9</td>
<td>SM 4500P-E</td>
<td>0.80</td>
<td>0.20</td>
<td>02/19/14 08:47</td>
<td>20</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>2.4</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 23:05</td>
<td>1</td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>11</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>400</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/14/14 14:19</td>
<td>1</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>62</td>
<td>EPA 351.2</td>
<td>8.3</td>
<td>2.1</td>
<td>02/05/14 11:47</td>
<td>41.67</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>37</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.60</td>
<td>02/06/14 14:53</td>
<td>1</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>39</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.08</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 23:05</td>
<td>1</td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>2,800</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/04/14 16:54</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>3,100</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/04/14 16:43</td>
<td>1</td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.75</td>
</tr>
<tr>
<td>Temperature</td>
<td>20.16 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1057 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>1.64 mg/L</td>
</tr>
</tbody>
</table>

---

**Florida Certification Number:** E84129  
**NELAP Accredited:**

---

**February 24, 2014**  
**Work Order:** 1401256  
**Hazen and Sawyer**  
**10002 Princess Palm Ave, Suite 200**  
**Tampa, FL 33619**

---

**Francis I. Daniels, Laboratory Director**  
**Leslie C. Boardman, Q.A. Manager**
# Laboratory Report

## Project Name: B-HS5 SE#4

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401256-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/04/14 12:25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/04/14 15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

- **Hydrogen Sulfide (Unionized)**
  - mg/L: 0.01 U
  - Method: SM 4550SF
  - PQL: 0.04
  - MDL: 0.01
  - Prepared: 02/11/14 08:00
  - Analyzed: 02/13/14 15:52
  - Dilution: 1

- **Ammonia as N**
  - mg/L: 0.39
  - Method: EPA 350.1
  - PQL: 0.040
  - MDL: 0.009
  - Prepared: 02/12/14 11:38

- **Carbonaceous BOD**
  - mg/L: 18
  - Method: SM 5210B
  - PQL: 2
  - MDL: 2
  - Prepared: 02/06/14 09:00
  - Analyzed: 02/11/14 14:01

- **Chemical Oxygen Demand**
  - mg/L: 18 I
  - Method: EPA 410.4
  - PQL: 25
  - MDL: 10
  - Prepared: 02/05/14 15:18

- **Nitrate (as N)**
  - mg/L: 34
  - Method: EPA 300.0
  - PQL: 0.04
  - MDL: 0.01
  - Prepared: 02/05/14 23:15

- **Nitrite (as N)**
  - mg/L: 0.40
  - Method: EPA 300.0
  - PQL: 0.04
  - MDL: 0.01
  - Prepared: 02/05/14 23:15

- **Orthophosphate as P**
  - mg/L: 1.4
  - Method: EPA 300.0
  - PQL: 0.040
  - MDL: 0.010
  - Prepared: 02/05/14 23:15

- **Phosphorous - Total as P**
  - mg/L: 2.1
  - Method: SM 4500P-E
  - PQL: 0.20
  - MDL: 0.050
  - Prepared: 02/19/14 08:47
  - Analyzed: 02/21/14 12:59

- **Sulfate**
  - mg/L: 25
  - Method: EPA 300.0
  - PQL: 0.60
  - MDL: 0.20
  - Prepared: 02/05/14 23:15

- **Sulfide**
  - mg/L: 0.10 U
  - Method: SM 4500SF
  - PQL: 0.40
  - MDL: 0.10
  - Prepared: 02/11/14 09:00

- **Total Alkalinity**
  - mg/L: 210
  - Method: SM 2320B
  - PQL: 8.0
  - MDL: 2.0
  - Prepared: 02/14/14 14:24

- **Total Kjeldahl Nitrogen**
  - mg/L: 3.6
  - Method: EPA 351.2
  - PQL: 0.20
  - MDL: 0.05
  - Prepared: 02/05/14 11:47
  - Analyzed: 02/07/14 13:06

- **Total Organic Carbon**
  - mg/L: 5.7
  - Method: SM 5310B
  - PQL: 1.0
  - MDL: 0.060
  - Prepared: 02/06/14 15:43

- **Total Suspended Solids**
  - mg/L: 3
  - Method: SM 2540D
  - PQL: 1
  - MDL: 1
  - Prepared: 02/06/14 15:56

- **Volatile Suspended Solids**
  - mg/L: 3
  - Method: EPA 160.4
  - PQL: 1
  - MDL: 1
  - Prepared: 02/07/14 15:56

- **Nitrate+Nitrite (N)**
  - mg/L: 34
  - Method: EPA 300.0
  - PQL: 0.08
  - MDL: 0.02
  - Prepared: 02/05/14 23:15

### Microbiology

- **E. Coli**
  - MPN/100 mL: 3,600
  - Method: SM 9223B
  - PQL: 2.0
  - MDL: 2.0
  - Prepared: 02/04/14 16:54
  - Analyzed: 02/05/14 11:09

- **Fecal Coliforms**
  - CFU/100 ml: 8,100
  - Method: SM 9222D
  - PQL: 1
  - MDL: 1
  - Prepared: 02/04/14 16:43
  - Analyzed: 02/05/14 15:02

## Client Provided Field Data

- **pH**: 6.58
- **Temperature**: 20.81 °C
- **Conductivity**: 962 umhos
- **Dissolved Oxygen**: 0.98 mg/L

### Inorganics

- **Hydrogen Sulfide (Unionized)**
  - mg/L: 0.01 U
  - Method: SM 4550SF
  - PQL: 0.04
  - MDL: 0.01
  - Prepared: 02/11/14 08:00
  - Analyzed: 02/13/14 15:52

- **Ammonia as N**
  - mg/L: 0.087
  - Method: EPA 350.1
  - PQL: 0.040
  - MDL: 0.009
  - Prepared: 02/12/14 11:40

- **Carbonaceous BOD**
  - mg/L: 9
  - Method: SM 5210B
  - PQL: 2
  - MDL: 2
  - Prepared: 02/06/14 09:00
  - Analyzed: 02/11/14 14:01

- **Chemical Oxygen Demand**
  - mg/L: 17 I
  - Method: EPA 410.4
  - PQL: 25
  - MDL: 10
  - Prepared: 02/06/14 09:30
  - Analyzed: 02/12/14 12:00

---

Florida Certification Number: E84129

NELAP Accredited
### Laboratory Report

#### Project Name: B-HS5 SE#4

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401256-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/04/14 11:50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/04/14 15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>2.6</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 23:24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>1.9</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 23:24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.75</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 23:24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.1</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 08:47</td>
<td>2/21/14 12:59</td>
<td>5</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>27</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 23:24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.10 U</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>360</td>
<td>SM 2320B</td>
<td>8.00</td>
<td>2.0</td>
<td>02/14/14 14:33</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.3</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/05/14 11:47</td>
<td>02/07/14 13:07</td>
<td>1</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>9.9</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 14:53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>5</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>4</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>4.5</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 23:24</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Microbiology**

- **E. Coli** MPN/100 mL: 120
  - SM 9223B: 2.0
  - SM 9223B: 2.0
  - 02/04/14 16:54
  - 02/05/14 11:09
  - 1

- **Fecal Coliforms** CFU/100 ml: 520
  - SM 9222D: 1
  - SM 9222D: 1
  - 02/04/14 16:43
  - 02/05/14 15:02
  - 1

### Client Provided Field Data

- **pH**: 6.91
- **Temperature**: 18.48 °C
- **Conductivity**: 991 umhos
- **Dissolved Oxygen**: 0.10 mg/L

#### Inorganics

- **Hydrogen Sulfide (Unionized)** mg/L: 3.4
  - SM 4500SF: 0.04
  - SM 4500SF: 0.01
  - 02/11/14 08:00
  - 02/13/14 15:52
  - 1

- **Ammonia as N** mg/L: 0.16
  - EPA 350.1: 0.040
  - EPA 350.1: 0.009
  - 02/12/14 11:42
  - 1

- **Carbonaceous BOD** mg/L: 5
  - SM 5210B: 2
  - SM 5210B: 2
  - 02/06/14 09:00
  - 02/11/14 14:01
  - 1

- **Chemical Oxygen Demand** mg/L: 39
  - EPA 410.4: 25
  - EPA 410.4: 10
  - 02/06/14 12:00
  - 1

- **Nitrate (as N)** mg/L: 0.01 U
  - EPA 300.0: 0.04
  - EPA 300.0: 0.01
  - 02/05/14 23:33
  - 1

- **Nitrite (as N)** mg/L: 0.01 U
  - EPA 300.0: 0.04
  - EPA 300.0: 0.01
  - 02/05/14 23:33
  - 1

- **Orthophosphate as P** mg/L: 0.76
  - EPA 300.0: 0.040
  - EPA 300.0: 0.010
  - 02/05/14 23:33
  - 1

- **Phosphorous - Total as P** mg/L: 1.2
  - SM 4500P-E: 0.20
  - SM 4500P-E: 0.050
  - 02/19/14 08:47
  - 02/21/14 12:59
  - 5

- **Sulfate** mg/L: 81
  - EPA 300.0: 0.60
  - EPA 300.0: 0.20
  - 02/05/14 23:33
  - 1

---

Florida Certification Number: E84129
NELAP Accredited

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager

Page 3 of 17
# Laboratory Report

## Project Name: B-HS5 SE#4

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td>BHS5-ST2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401256-04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/04/14 12:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/04/14 15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>6.0</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>360</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/14/14 14:41</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.5</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/05/14 11:47</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>9.0</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 14:53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>1</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 23:33</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>20</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/04/14 16:54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>30</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/04/14 16:43</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## Sample Description: BHS5-ST2-DUP

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td>BHS5-ST2-DUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401256-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/04/14 12:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/04/14 15:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
<td>6.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>18.48 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>991 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>0.10 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>3.3</td>
<td>SM 4500SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.14</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/12/14 11:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>5</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>37</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/06/14 09:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 12:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 12:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.76</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 12:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.1</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 08:47</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>84</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.02</td>
<td>02/05/14 12:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>5.8</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>360</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/04/14 14:50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.6</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/05/14 11:47</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>8.8</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 14:53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>1</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129

NELAP Accredited

Page 4 of 17
# Laboratory Report

## Project Name

<table>
<thead>
<tr>
<th>Parameters</th>
<th>B-HS5 SE#4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Description</strong></td>
<td>BHS5-ST2-DUP</td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td>Wastewater</td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
<td>1401256-05</td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
<td>02/04/14 12:15</td>
</tr>
<tr>
<td><strong>Collected by</strong></td>
<td>Josefin Hirst</td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
<td>02/04/14 15:30</td>
</tr>
</tbody>
</table>

**Inorganics**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.009 U</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/12/14 12:47</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>2 U</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>10 U</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/06/14 09:30</td>
<td>02/14/14 12:00</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 12:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/05/14 12:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.010 U</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/05/14 12:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>0.010 U</td>
<td>SM 4500P-E</td>
<td>0.040</td>
<td>0.010</td>
<td>02/19/14 08:47</td>
<td>02/21/14 12:59</td>
<td>1</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>0.20 U</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/05/14 12:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.10 U</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>2.0 U</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/18/14 10:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>0.05 U</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/05/14 11:47</td>
<td>02/07/14 13:12</td>
<td>1</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>0.060 U</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 14:53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/05/14 12:46</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## Microbiology

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>420</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>02/04/14 16:54</td>
<td>02/05/14 11:09</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>5,300</td>
<td>SM 9222D</td>
<td>1</td>
<td>02/04/14 16:43</td>
<td>02/05/14 15:02</td>
</tr>
</tbody>
</table>

---

**Client Provided Field Data**

- **pH**: 5.01
- **Temperature**: 27.0 °C
- **Conductivity**: 1.01 umhos
- **Dissolved Oxygen**: 7.85 mg/L

---

Florida Certification Number: E84129
NELAP Accredited

Page 5 of 17
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40502 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40502-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>10 U</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40502-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>47</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40502-MS1)</td>
<td>Source: 1401200-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>43</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40502-MSD1)</td>
<td>Source: 1401200-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>43</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40516 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40516-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.20 U</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.010 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.00</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.00</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.00</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.00</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40516-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.60</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.82</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.901 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>100</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.55</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>111</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.07</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>107</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LCS Dup (BB40516-BSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.40</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>104</td>
<td></td>
<td>85-115</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.878</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td>98</td>
<td></td>
<td>85-115</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.80</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>106</td>
<td></td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.54</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>110</td>
<td></td>
<td>85-115</td>
<td>0.9</td>
<td>200</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Matrix Spike (BB40516-MS1)** | Source: 1401257-04 | Prepared & Analyzed: 02/06/14 |
| Sulfate                  | 39.0    | 0.60 | 0.20 | mg/L  | 9.0         | 29.9           | 100 | 85-115      |
| Nitrate (as N)           | 1.48    | 0.04 | 0.01 | mg/L  | 1.4         | ND             | 106 | 85-115      |
| Orthophosphate as P      | 3.64    | 0.040| 0.010| mg/L  | 0.90        | 2.75           | 99  | 85-115      |
| Nitrate (as N)           | 1.61    | 0.04 | 0.01 | mg/L  | 1.7         | 0.0400         | 92  | 85-115      |
| Surrogate: Dichloroacetate | 0.910  |      |      | mg/L  | 1.0         | 91             | 90-115 |
| Surrogate: Dichloroacetate | 0.910  |      |      | mg/L  | 1.0         | 91             | 90-115 |
| Surrogate: Dichloroacetate | 0.910  |      |      | mg/L  | 1.0         | 91             | 90-115 |
| Surrogate: Dichloroacetate | 0.910  |      |      | mg/L  | 1.0         | 91             | 90-115 |

| **Matrix Spike (BB40516-MS2)** | Source: 1401260-01 | Prepared & Analyzed: 02/06/14 |
| Sulfate                  | 41.0    | 0.60 | 0.20 | mg/L  | 9.0         | 30.8           | 112 | 85-115      |
| Orthophosphate as P      | 0.537   | 0.040| 0.010| mg/L  | 0.90        | ND             | 60  | 85-115      |
| Nitrate (as N)           | 1.73    | 0.04 | 0.01 | mg/L  | 1.7         | 0.0390         | 99  | 85-115      |
| Nitrite (as N)           | 1.43    | 0.04 | 0.01 | mg/L  | 1.4         | ND             | 102 | 85-115      |
| Surrogate: Dichloroacetate | 0.989  |      |      | mg/L  | 1.0         | 99             | 90-115 |
| Surrogate: Dichloroacetate | 0.989  |      |      | mg/L  | 1.0         | 99             | 90-115 |
| Surrogate: Dichloroacetate | 0.989  |      |      | mg/L  | 1.0         | 99             | 90-115 |
| Surrogate: Dichloroacetate | 0.989  |      |      | mg/L  | 1.0         | 99             | 90-115 |
**Inorganics - Quality Control**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40519 - Digestion for TKN by EPA 351.2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40519-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05 U</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40519-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.64</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>104</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40519-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.43</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>96</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40519-MS2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.37</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>94</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB40519-MSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.50</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>99</td>
<td>90-110</td>
<td>3</td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB40519-MSD2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.38</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>2.5</td>
<td>ND</td>
<td>94</td>
<td>90-110</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Batch BB40621 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40621-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>10 U</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40621-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>90</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40621-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>85-115</td>
<td></td>
</tr>
</tbody>
</table>
Inorgansics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40621 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB40621-MSD1)</strong></td>
<td><strong>Source: 1401256-06</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>85-115</td>
<td>0</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>45</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>90</td>
<td>85-115</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td><strong>Batch BB40625 - TOC prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blank (BB40625-BLK1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>0.060 U</td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>ND</td>
<td>99</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40625-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>9.88</td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>ND</td>
<td>99</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40625-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>9.24</td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>ND</td>
<td>92</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB40625-MSD1)</strong></td>
<td><strong>Source: 1401256-06</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>ND</td>
<td>92</td>
<td>85-115</td>
<td>1</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>9.11</td>
<td>1.0</td>
<td>0.060</td>
<td>mg/L</td>
<td>10</td>
<td>ND</td>
<td>91</td>
<td>85-115</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>Batch BB40626 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blank (BB40626-BLK1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40626-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>48.5</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>50</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duplicate (BB40626-DUP1)</strong></td>
<td><strong>Source: 1401256-01</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39.0</td>
<td>5</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>41.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>41.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40629 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>202</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>94</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>95</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>198</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>99</td>
<td>85-115</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>191</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>95</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>95</td>
<td>85-115</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40629-DUP1)</td>
<td>Source: 1401256-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>5</td>
<td>0</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Table: Batch BB40629 - BOD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analyte</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td><em>Carbonaceous BOD</em></td>
</tr>
<tr>
<td><em>Duplicate (BB40629-DUP3)</em></td>
</tr>
</tbody>
</table>

## Batch BB41123 - Ammonia by SEAL

<table>
<thead>
<tr>
<th>Table: Blank (BB41123-BLK1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analyte</strong></td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
<tr>
<td>LCS (BB41123-BS1)</td>
</tr>
<tr>
<td>Matrix Spike (BB41123-MS1)</td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
<tr>
<td>Matrix Spike (BB41123-MS2)</td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41123-MSD1)</td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41123-MSD2)</td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
</tbody>
</table>

## Blank (BB41140-BLK1)

<table>
<thead>
<tr>
<th><strong>Analyte</strong></th>
<th><strong>Result</strong></th>
<th><strong>PQL</strong></th>
<th><strong>MDL</strong></th>
<th><strong>Units</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
</tr>
</tbody>
</table>
### Inorganics - Quality Control

#### Batch BB41140 - Sulfide prep

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB41140-BLK2)</td>
<td>Prepared &amp; Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41140-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>5.04</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41140-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41140-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>ND</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41140-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>ND</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41140-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>ND</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41140-MSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>ND</td>
<td>85-115</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

#### Batch BB41407 - alkalinity

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB41407-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41407-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td></td>
<td>108</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41407 - alkalinity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41407-MS1)</td>
<td>Source: 1401533-02</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>290</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>150</td>
<td>110</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41407-MSD1)</td>
<td>Source: 1401533-02</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>290</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>150</td>
<td>108</td>
<td>80-120</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td><strong>Batch BB41905 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41905-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.010</td>
<td>U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41905-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.467</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>93</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41905-MS1)</td>
<td>Source: 1401256-06</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.485</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>97</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41905-MS2)</td>
<td>Source: 1401258-07</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.476</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>95</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41905-MSD1)</td>
<td>Source: 1401256-06</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.493</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>99</td>
<td>90-110</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41905-MSD2)</td>
<td>Source: 1401258-07</td>
<td>Prepared &amp; Analyzed: 02/14/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.474</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>95</td>
<td>90-110</td>
<td>0.3</td>
<td>25</td>
</tr>
<tr>
<td><strong>Batch BB41920 - alkalinity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41920-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0</td>
<td>U</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41920 - alkalinity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB41920-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td></td>
<td>108</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41920-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>280</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td></td>
<td>160</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41920-MSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>280</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td></td>
<td>160</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Microbiology - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40449 - FC-MF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40449-BLK1)</td>
<td></td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td></td>
<td></td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40449-DUP1)</td>
<td>Source: 1401256-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td></td>
<td></td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td></td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Duplicate (BB40449-DUP2)</td>
<td>Source: 1401258-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td></td>
<td></td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td></td>
<td></td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>
Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with "**", all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.

J5 Matrix spike of this sample was outside typical range. All other QC criteria were acceptable.

Questions regarding this report should be directed to:
Kathryn Nordmark
Telephone (813) 855-1844  FAX (813) 855-2218
Kathryn@southernanalyticallabs.com
<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Date</th>
<th>Time</th>
<th>Matrix</th>
<th>Compost</th>
<th>FC-MF-FC-CO</th>
<th>Total Alkalinity</th>
<th>TSS</th>
<th>VSS</th>
<th>NOx</th>
<th>NO3</th>
<th>TP</th>
<th>Acetate</th>
<th>H2S</th>
<th>40mL HCl</th>
<th>TOC</th>
<th>pH</th>
<th>Temperature</th>
<th>Conductivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>2/4/14</td>
<td>12:45</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.42</td>
<td>79.1</td>
<td>1048</td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>2/4/14</td>
<td>12:25</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.72</td>
<td>20.16</td>
<td>1057</td>
</tr>
<tr>
<td>BHS5-LIGNO-0</td>
<td>1/5D</td>
<td></td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.58</td>
<td>20.81</td>
<td>962</td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>1/10</td>
<td></td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.91</td>
<td>28.46</td>
<td>991</td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>1/15</td>
<td></td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.71</td>
<td>18.46</td>
<td>991</td>
</tr>
<tr>
<td>BHS5-LD2</td>
<td>1/5D</td>
<td></td>
<td>R</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.01</td>
<td>27.0</td>
<td>1.01</td>
</tr>
</tbody>
</table>

### Containers Prepared

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Received</th>
<th>Seal Intact?</th>
<th>Samples Intact upon arrival?</th>
<th>Samples Intact upon arrival?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/30/14</td>
<td>13:00</td>
<td>N</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2/4/14</td>
<td>12:05</td>
<td>N</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2/4/14</td>
<td>12:05</td>
<td>N</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Instructions / Remarks

- Seal Intact?
- Samples Intact upon arrival?
- Proper containers used?
## Laboratory Report

### Project Name: B-HS5 SE#5

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401346-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/05/14 10:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/05/14 14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.31</td>
</tr>
<tr>
<td>Temperature</td>
<td>20.2 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1151 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.07 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>2.9</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>62</td>
<td>EPA 350.1</td>
<td>2.0</td>
<td>0.47</td>
<td>02/18/14 12:06</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>32</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>270</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/07/14 12:25</td>
<td>02/17/14 09:00</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 20:16</td>
<td>02/06/14 20:16</td>
<td>1</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 20:16</td>
<td>02/06/14 20:16</td>
<td>1</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>5.4</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/06/14 20:16</td>
<td>02/06/14 20:16</td>
<td>1</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>6.0</td>
<td>SM 4500P-E</td>
<td>0.80</td>
<td>0.20</td>
<td>02/19/14 08:50</td>
<td>02/21/14 13:08</td>
<td>20</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>1.3</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/06/14 20:16</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>8.5</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>400</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 12:38</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>69</td>
<td>EPA 351.2</td>
<td>4.0</td>
<td>1.0</td>
<td>02/19/14 08:50</td>
<td>02/21/14 13:12</td>
<td>20</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>36</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 22:18</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>42</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>36</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/06/14 20:16</td>
<td>02/06/14 20:16</td>
<td>1</td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>1,700</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/05/14 16:05</td>
<td>02/06/14 10:18</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>49,000</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 15:31</td>
<td>02/06/14 14:09</td>
<td>1</td>
</tr>
</tbody>
</table>

### Sample Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.78</td>
</tr>
<tr>
<td>Temperature</td>
<td>20.1 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1073 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>1.69 mg/L</td>
</tr>
</tbody>
</table>

---

Florida Certification Number: E84129

NELAP Accredited
## Laboratory Report

### Project Name: B-HS5 SE#5

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401346-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/05/14 10:05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/05/14 14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.79</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>1.9</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/18/14 09:56</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>14</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>33</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/07/14 12:25</td>
<td>02/07/14 14:00</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>47</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 20:26</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.53</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 20:26</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>1.9</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/06/14 20:26</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>2.0</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 08:50</td>
<td>02/21/14 13:08</td>
<td>5</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>37</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/06/14 20:26</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>1.2</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>210</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 12:38</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>3.6</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 08:50</td>
<td>02/21/14 13:12</td>
<td>5</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>7.1</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.60</td>
<td>02/06/14 22:18</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>47</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/06/14 20:26</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>140</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/05/14 16:05</td>
<td>02/06/14 10:18</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>1,480</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 15:31</td>
<td>02/06/14 14:09</td>
<td>1</td>
</tr>
</tbody>
</table>

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.57</td>
</tr>
<tr>
<td>Temperature</td>
<td>20.8 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>946 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.56 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.072</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/18/14 09:58</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>16</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>47</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/07/14 12:25</td>
<td>02/07/14 14:00</td>
<td>1</td>
</tr>
</tbody>
</table>

---

Florida Certification Number: E84129

NELAP Accredited

March 14, 2014

Work Order: 1401346

Hazen and Sawyer
10002 Princess Palm Ave, Suite 200
Tampa, FL 33619

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager
### Laboratory Report

<table>
<thead>
<tr>
<th>Project Name</th>
<th>B-HS5 SE#5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameters</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>Sample Description</td>
<td>BHS5-LIGNO-0</td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401346-03</td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/05/14 09:50</td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/05/14 14:00</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client Provided Field Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Description</strong></td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
</tr>
<tr>
<td><strong>Collected by</strong></td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
</tr>
<tr>
<td><strong>pH</strong></td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
</tr>
<tr>
<td><strong>Conductivity</strong></td>
</tr>
<tr>
<td><strong>Dissolved Oxygen</strong></td>
</tr>
<tr>
<td><strong>Inorganics</strong></td>
</tr>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
</tr>
<tr>
<td>Ammonia as N</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
</tr>
<tr>
<td>Sulfate</td>
</tr>
</tbody>
</table>
### Laboratory Report

#### Project Name: B-HS5 SE#5

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401346-04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/05/14 09:50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/05/14 14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>7.7</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>350</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 12:38</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.1</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 08:50</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>10</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 22:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/06/14 20:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>20</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/05/14 16:05</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>30</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 15:31</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Sample Description</strong></td>
<td></td>
<td>BHS5-ST2-DUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
<td></td>
<td>1401346-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
<td></td>
<td>02/05/14 09:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collected by</strong></td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
<td></td>
<td>02/05/14 14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Client Provided Field Data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td>7.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>18.7 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>1005 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>0.12 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inorganics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>4.0</td>
<td>SM 4500SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/11/14 08:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.45</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/18/14 15:49</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>9</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>29</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/06/14 12:25</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 12:28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/06/14 12:28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.96</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/06/14 12:28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.3</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 08:50</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>82</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/06/14 12:28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>8.1</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/11/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>360</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 12:38</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.0</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 08:50</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>10</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/06/14 22:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Laboratory Report

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST2-DUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401346-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/05/14 09:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/05/14 14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/06/14 11:54</td>
<td>02/07/14 15:56</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/06/14 12:28</td>
<td>02/06/14 12:28</td>
<td>1</td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>30</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/05/14 16:05</td>
<td>02/06/14 10:18</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>30</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/05/14 15:31</td>
<td>02/06/14 14:09</td>
<td>1</td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40626 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40626-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40626-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>48.5</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>50</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40626-DUP1)</td>
<td>Source: 1401256-01</td>
<td></td>
<td></td>
<td></td>
<td>Pre pared: 02/06/14 Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>41.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>41.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>39.0</td>
<td>5</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40629 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>202</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>94</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40629 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>200</td>
<td>95</td>
<td>85-115</td>
</tr>
<tr>
<td>LCS Duplicate (BB40629-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>198</td>
<td>2</td>
<td>200</td>
<td>99</td>
<td>2</td>
</tr>
<tr>
<td>LCS Duplicate (BB40629-BSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>191</td>
<td>2</td>
<td>200</td>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>LCS Duplicate (BB40629-BSD3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>200</td>
<td>95</td>
<td>0</td>
</tr>
<tr>
<td><strong>Duplicate (BB40629-DUP1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Duplicate (BB40629-DUP2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>16</td>
<td>2</td>
<td>16</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Duplicate (BB40629-DUP3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>120</td>
<td>2</td>
<td>98</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40636 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40636-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.20</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.010</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacacetate</td>
<td>1.02</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-115</td>
</tr>
<tr>
<td>Surrogate: Dichloroacacetate</td>
<td>1.02</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-115</td>
</tr>
<tr>
<td>Surrogate: Dichloroacacetate</td>
<td>1.02</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-115</td>
</tr>
<tr>
<td>Surrogate: Dichloroacacetate</td>
<td>1.02</td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td>90-115</td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40636 - Ion Chromatography 300.0 Prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40636-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.874</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>97</td>
<td></td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.45</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>104</td>
<td></td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.15</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>102</td>
<td></td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.73</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>102</td>
<td></td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.02</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>102</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40636-BSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.29</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>103</td>
<td></td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.907</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>101</td>
<td></td>
<td>85-115</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.75</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>103</td>
<td></td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.47</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>105</td>
<td></td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>105</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40636-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401368-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>2.31</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>1.46</td>
<td>94</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.75</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.55</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>111</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>22.5</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>14.3</td>
<td>90</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.917</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>92</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.917</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>92</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.917</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>92</td>
<td></td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40636 - Ion Chromatography 300.0 Prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40636-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.75</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>ND</td>
<td>103</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>8.01</td>
<td>0.04</td>
<td>0.10</td>
<td>mg/L</td>
<td>0.90</td>
<td>7.12</td>
<td>99</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.49</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>14.4</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>5.39</td>
<td>100</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Batch BB40657 - TOC prep

| Blank (BB40657-BLK1)          |        |      |      |       |             |                |      |             |     |           |
| Total Organic Carbon          | 0.060  | 1.0  | 0.060| mg/L  |             |                |      |             |     |           |

LCS (BB40657-BS1) Prepared & Analyzed: 02/06/14

| Total Organic Carbon          | 9.36   | 1.0  | 0.060| mg/L  | 10          | 94             | 90-110 |             |     |           |

Matrix Spike (BB40657-MS1) Prepared & Analyzed: 02/06/14

| Total Organic Carbon          | 8.61   | 1.0  | 0.060| mg/L  | 10          | ND            | 86    | 85-115      |     |           |

Matrix Spike Dup (BB40657-MSD1) Prepared & Analyzed: 02/06/14

| Total Organic Carbon          | 8.62   | 1.0  | 0.060| mg/L  | 10          | ND            | 86    | 85-115      | 0.2 | 10        |

Batch BB40717 - COD prep

| Blank (BB40717-BLK1)          |        |      |      |       |             |                |      |             |     |           |
| Chemical Oxygen Demand        | 10 U   | 25   | 10   | mg/L  |             |                |      |             |     |           |
### Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40717 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40717-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>100</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40717-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401346-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>74</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>29</td>
<td>90</td>
<td>85-115</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40717-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401346-05</td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

**Batch BB41140 - Sulfide prep**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB41140-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41140-BLK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41140-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>5.04</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41140-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41140-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401258-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41140-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401317-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Florida Certification Number: E84129

NELAP Accredited

March 14, 2014

Work Order: 1401346

Hazen and Sawyer
10002 Princess Palm Ave, Suite 200
Tampa, FL 33619

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager

Page 10 of 16
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41140 - Sulfide prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41140-MSD1)</td>
<td><strong>Source:</strong> 1401258-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td>0</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41140-MSD2)</strong></td>
<td><strong>Source:</strong> 1401317-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td>4</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB41437 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41437-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009</td>
<td>U</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41437-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>106</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41437-MS1)</strong></td>
<td><strong>Source:</strong> 1401611-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.56</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.036</td>
<td>105</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41437-MS2)</strong></td>
<td><strong>Source:</strong> 1401686-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.031</td>
<td>98</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41437-MSD1)</strong></td>
<td><strong>Source:</strong> 1401611-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.036</td>
<td>100</td>
<td>90-110</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41437-MSD2)</strong></td>
<td><strong>Source:</strong> 1401686-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.031</td>
<td>97</td>
<td>90-110</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB41906 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41906-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.010</td>
<td>U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05</td>
<td>U</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited

March 14, 2014
10002 Princess Palm Ave, Suite 200
Tampa, FL 33619

Work Order: 1401346

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41906 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41906-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.475</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>95</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.929</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>93</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41906-MS1)</strong></td>
<td>Source: 1401575-02</td>
<td>Prepared: 02/19/14 Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.59</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>96</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.498</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>93</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB41906-MS2)</strong></td>
<td>Source: 1401611-07</td>
<td>Prepared: 02/19/14 Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.68</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>106</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41906-MSD1)</strong></td>
<td>Source: 1401575-02</td>
<td>Prepared: 02/19/14 Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.61</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>98</td>
<td>90-110</td>
<td>1</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.493</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>92</td>
<td>90-110</td>
<td>1</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB41906-MSD2)</strong></td>
<td>Source: 1401611-07</td>
<td>Prepared: 02/19/14 Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.69</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>103</td>
<td>90-110</td>
<td>0.9</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.666</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>106</td>
<td>90-110</td>
<td>0.2</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

**Batch BB41920 - alkalinity**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB41920-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41920-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>108</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB41920 - alkalinity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41920-MS1)</td>
<td>Source: 1401795-01</td>
<td>Prepared &amp; Analyzed: 02/19/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>280</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>160</td>
<td>99</td>
<td>80-120</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41920-MSD1)</td>
<td>Source: 1401795-01</td>
<td>Prepared &amp; Analyzed: 02/19/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>280</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>160</td>
<td>99</td>
<td>80-120</td>
<td>0</td>
<td>26</td>
</tr>
</tbody>
</table>
Microbiology - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40543 - FC-MF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40543-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td>Prepared: 02/05/14</td>
<td>Analyzed: 02/06/14</td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40543-DUP1)</td>
<td>Source: 1401349-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td>Prepared: 02/05/14</td>
<td>Analyzed: 02/06/14</td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40543-DUP2)</td>
<td>Source: 1401353-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td>Prepared: 02/05/14</td>
<td>Analyzed: 02/06/14</td>
<td></td>
</tr>
</tbody>
</table>
* Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with **, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.

Questions regarding this report should be directed to:

    Kathryn Nordmark
    Telephone (813) 855-1844    FAX (813) 855-2218
    Kathryn@southernanalyticallabs.com
<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Date</th>
<th>Time</th>
<th>Matrix</th>
<th>Composite</th>
<th>Grab</th>
<th>125mL NaS-O, FC-MF, FC-QT</th>
<th>Total Alkalinity</th>
<th>TSS, VSS</th>
<th>SO4</th>
<th>Ca</th>
<th>Mg</th>
<th>Na</th>
<th>K</th>
<th>Acetate</th>
<th>500mL NaOH, Zn</th>
<th>40mL HCl</th>
<th>TOC</th>
<th>K</th>
<th>Temperature</th>
<th>Conductivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>3/5/14</td>
<td>16:10</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.31</td>
<td>20.2</td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>3/5/14</td>
<td>16:10</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.78</td>
<td>20.1</td>
</tr>
<tr>
<td>BHS5-LIGNO-0</td>
<td>3/5/14</td>
<td>16:10</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.54</td>
<td>20.8</td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>3/5/14</td>
<td>16:10</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.04</td>
<td>18.7</td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>3/5/14</td>
<td>16:10</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.04</td>
<td>18.7</td>
</tr>
<tr>
<td>BHS5-EB</td>
<td>3/5/14</td>
<td>16:10</td>
<td>R</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Containers Prepared / Relinquished:**
- Date/Time: 1/19/14, Received: 1/20/14, 10:30
- Date/Time: 1/29/14, Relinquished: 1/29/14, 10:30
- Date/Time: 1/4/14, Received: 1/5/14, 10:30
- Date/Time: 1/25/14, Relinquished: 1/25/14, 10:30
- Date/Time: 1/25/14, Received: 1/25/14, 10:30
- Date/Time: 1/25/14, Relinquished: 1/25/14, 10:30

**Instructions / Remarks:**
- Seal intact? Y N
- Samples intact upon arrival? N
- Proper preservatives indicated? Y N
- Rec'd within holding time? Y N
- Volatiles rec'd w/out headspace? Y N
- Proper containers used? Y N
Laboratory Report

Project Name: B-HS5 SE#6

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401419-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/06/14 08:47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/06/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Client Provided Field Data**

- pH: 7.42
- Temperature: 20.1 °C
- Conductivity: 1192 umhos
- Dissolved Oxygen: 0.00 mg/L

**Inorganics**

- Hydrogen Sulfide (Unionized): 2.2 mg/L (SM 4550SF, 0.04, 0.01, 02/12/14 08:00, 02/13/14 15:52, 1)
- Ammonia as N: 62 mg/L (EPA 350.1, 2.0, 0.47, 02/20/14 15:20, 50)
- Carbonaceous BOD: 67 mg/L (SM 5210B, 2, 2, 02/06/14 15:35, 02/11/14 14:01, 1)
- Chemical Oxygen Demand: 140 mg/L (EPA 410.4, 25, 10, 02/10/14 09:30, 02/10/14 12:30, 1)
- Nitrate (as N): 0.01 mg/L U (EPA 300.0, 0.04, 0.01, 02/07/14 22:40, 1)
- Nitrite (as N): 0.01 mg/L (EPA 300.0, 0.04, 0.01, 02/07/14 22:40, 1)
- Orthophosphate as P: 5.3 mg/L (EPA 300.0, 0.04, 0.01, 02/07/14 22:40, 1)
- Phosphorous - Total as P: 6.8 mg/L (SM 4500P-E, 0.80, 0.20, 02/19/14 10:54, 02/24/14 15:44, 20)
- Sulfate: 1.3 mg/L (EPA 300.0, 0.60, 0.20, 02/07/14 22:40, 1)
- Sulfide: 7.3 mg/L (SM 4500SF, 0.40, 0.10, 02/12/14 09:00, 1)
- Total Alkalinity: 430 mg/L (SM 2320B, 8.0, 2.0, 02/19/14 16:30, 1)
- Total Kjeldahl Nitrogen: 66 mg/L (EPA 351.2, 4.0, 1.0, 02/19/14 10:54, 02/24/14 15:39, 20)
- Total Organic Carbon: 20 mg/L (SM 5310B, 1.0, 0.060, 02/12/14 09:37, 1)
- Total Suspended Solids: 22 mg/L (SM 2540D, 1, 1, 02/10/14 10:00, 02/11/14 14:09, 1)
- Volatile Suspended Solids: 22 mg/L (EPA 160.4, 1, 1, 02/10/14 10:00, 02/11/14 14:09, 1)
- Nitrate+Nitrite (N): 0.02 mg/L U (EPA 300.0, 0.08, 0.02, 02/07/14 22:40, 1)

**Microbiology**

- E. Coli: MPN/100 mL, 1,700 (SM 9223B, 2.0, 2.0, 02/06/14 16:03, 02/07/14 10:07, 1)
- Fecal Coliforms: CFU/100 ml, 27,000 (SM 9222D, 1, 1, 02/06/14 15:42, 02/07/14 13:42, 1)

Sample Description: BHS5-ST1
Matrix: Wastewater
SAL Sample Number: 1401419-02
Date/Time Collected: 02/06/14 08:50
Collected by: Sean Schmidt
Date/Time Received: 02/06/14 13:45

**Client Provided Field Data**

- pH: 6.76
- Temperature: 20.14 °C
- Conductivity: 1087 umhos
- Dissolved Oxygen: 1.80 mg/L
# Laboratory Report

## Project Name: B-HS5 SE#6

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401419-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/06/14</td>
<td>08:50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/06/14</td>
<td>13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/12/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>1.4</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/20/14 15:22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>9</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 15:35</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>16 I</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/10/14 11:30</td>
<td>02/10/14 16:45</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>48</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 22:49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.39</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 22:49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>1.7</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/07/14 22:49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>2.2</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:44</td>
<td>5</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>35</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/07/14 22:49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.10 U</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/12/14 09:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>210</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 16:30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>4.3</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:39</td>
<td>5</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>5.5</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 09:37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>48</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/07/14 22:49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>41</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/06/14 16:03</td>
<td>02/07/14 10:07</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>1,500</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 15:42</td>
<td>02/07/14 13:42</td>
<td>1</td>
</tr>
</tbody>
</table>

## Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.71</td>
</tr>
<tr>
<td>Temperature</td>
<td>18.7 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1060 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.28 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/12/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.045</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/20/14 15:24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>17</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 15:35</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>22 I</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/10/14 11:30</td>
<td>02/10/14 16:45</td>
<td>1</td>
</tr>
</tbody>
</table>
# Laboratory Report

**Project Name**: B-HS5 SE#6  

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td>BHS5-LIGNO-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401419-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/06/14 08:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/06/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>2.9</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:27</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>1.4</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:27</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.58</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/07/14 23:27</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.1</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 10:54</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>23</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/07/14 23:27</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.10 U</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/12/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>390</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 16:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.9</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 10:54</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>11</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 09:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>4</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>4</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/11/14 14:09</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>4.3</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/07/14 23:27</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>31</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/06/14 16:03</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>200</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 15:42</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Sample Description**: BHS5-ST2  
**Matrix**: Wastewater  
**SAL Sample Number**: 1401419-04  
**Date/Time Collected**: 02/06/14 08:25  
**Collected by**: Sean Schmidt  
**Date/Time Received**: 02/06/14 13:45

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.75</td>
</tr>
<tr>
<td>Temperature</td>
<td>19.03 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1008 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.15 mg/L</td>
</tr>
</tbody>
</table>

**Inorganics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>2.7</td>
<td>SM 4500SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/12/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.65</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/21/14 08:15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>13</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 15:35</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>43</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/10/14 11:30</td>
<td>02/10/14 16:45</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.87</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/07/14 23:29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.5</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 10:54</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>71</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/12/14 08:29</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

---

**Florida Certification Number**: E84129  
**NELAP Accredited**

---

**March 18, 2014**  
**Work Order**: 1401419  
**Tampa, FL 33619**  

---

Francis I. Daniels, Laboratory Director  
Leslie C. Boardman, Q.A. Manager
# Laboratory Report

## Project Name: B-HS5 SE#6

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401419-04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/06/14 08:25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/06/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>4.0</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/12/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>380</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 16:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.7</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 10:54</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>8.1</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 09:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/07/14 23:29</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Microbiology

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>20</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/06/14 16:03</td>
<td>02/07/14 10:07</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>100</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 15:42</td>
<td>02/07/14 13:42</td>
<td>1</td>
</tr>
</tbody>
</table>

## Client Provided Field Data

<table>
<thead>
<tr>
<th>Data Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.75</td>
</tr>
<tr>
<td>Temperature</td>
<td>19.03 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>1008 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.15 mg/L</td>
</tr>
</tbody>
</table>

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Value</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>2.7</td>
<td>SM 4500SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/12/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.63</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/20/14 13:41</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>13</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 15:35</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>45</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/10/14 11:30</td>
<td>02/10/14 16:45</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.88</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/07/14 23:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.4</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:44</td>
<td>5</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>74</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/07/14 23:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>4.0</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/12/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>380</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 16:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.9</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:39</td>
<td>5</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>8.3</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 09:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
</tbody>
</table>

---

Florida Certification Number: E84129
NELAP Accredited

March 18, 2014
Work Order: 1401419

Hazen and Sawyer
10002 Princess Palm Ave, Suite 200
Tampa, FL 33619

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager
# Laboratory Report

## Project Name: B-HS5 SE#6

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Description</strong></td>
<td></td>
<td>BHS5-ST2-DUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
<td></td>
<td>1401419-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
<td></td>
<td>02/06/14 08:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collected by</strong></td>
<td></td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
<td></td>
<td>02/06/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Volatile Suspended Solids</strong></td>
<td>mg/L</td>
<td>2</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
<tr>
<td><strong>Nitrate+Nitrite (N)</strong></td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/07/14 23:46</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E. Coli</strong></td>
<td>MPN/100 mL</td>
<td>20</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/06/14 16:03</td>
<td>02/07/14 10:07</td>
<td>1</td>
</tr>
<tr>
<td><strong>Fecal Coliforms</strong></td>
<td>CFU/100 ml</td>
<td>100</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 15:42</td>
<td>02/07/14 13:42</td>
<td>1</td>
</tr>
</tbody>
</table>

## Project Name: BHS5-EB

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Description</strong></td>
<td></td>
<td>BHS5-EB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td></td>
<td>Reagent Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
<td></td>
<td>1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
<td></td>
<td>02/06/14 09:05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collected by</strong></td>
<td></td>
<td>Sean Schmidt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
<td></td>
<td>02/06/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Client Provided Field Data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td></td>
<td>6.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td></td>
<td>17.7 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conductivity</strong></td>
<td></td>
<td>2.43 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dissolved Oxygen</strong></td>
<td></td>
<td>8.15 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inorganics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydrogen Sulfide (Unionized)</strong></td>
<td>mg/L</td>
<td>0.01 U</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/12/14 08:00</td>
<td>02/13/14 15:52</td>
<td>1</td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>mg/L</td>
<td>0.009 U</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/20/14 12:19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Carbonaceous BOD</strong></td>
<td>mg/L</td>
<td>2 U</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/06/14 15:35</td>
<td>02/11/14 14:01</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chemical Oxygen Demand</strong></td>
<td>mg/L</td>
<td>10 U</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/10/14 11:30</td>
<td>02/10/14 16:45</td>
<td>1</td>
</tr>
<tr>
<td><strong>Nitrate (as N)</strong></td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Nitrite (as N)</strong></td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/07/14 23:55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Orthophosphate as P</strong></td>
<td>mg/L</td>
<td>0.010 U</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/07/14 23:55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Phosphorous - Total as P</strong></td>
<td>mg/L</td>
<td>0.010 U</td>
<td>SM 4500P-E</td>
<td>0.040</td>
<td>0.010</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:44</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sulfate</strong></td>
<td>mg/L</td>
<td>0.20 U</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/07/14 23:55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Sulfide</strong></td>
<td>mg/L</td>
<td>0.10 U</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/12/14 09:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Alkalinity</strong></td>
<td>mg/L</td>
<td>2.0 U</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/19/14 16:30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Kjeldahl Nitrogen</strong></td>
<td>mg/L</td>
<td>0.05 U</td>
<td>EPA 351.2</td>
<td>0.20</td>
<td>0.05</td>
<td>02/19/14 10:54</td>
<td>02/24/14 15:39</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Organic Carbon</strong></td>
<td>mg/L</td>
<td>0.060 U</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 09:37</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Suspended Solids</strong></td>
<td>mg/L</td>
<td>1 U</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
<tr>
<td><strong>Volatile Suspended Solids</strong></td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:00</td>
<td>02/11/14 14:09</td>
<td>1</td>
</tr>
<tr>
<td><strong>Nitrate+Nitrite (N)</strong></td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/07/14 23:55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E. Coli</strong></td>
<td>MPN/100 mL</td>
<td>2.0</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/06/14 16:03</td>
<td>02/07/14 10:07</td>
<td>1</td>
</tr>
<tr>
<td><strong>Fecal Coliforms</strong></td>
<td>CFU/100 ml</td>
<td>1 U</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/06/14 15:42</td>
<td>02/07/14 13:42</td>
<td>1</td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>%REC</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40629 - BOD</td>
<td></td>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/11/14</td>
<td>200</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK1)</td>
<td>2 U</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK2)</td>
<td>2 U</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40629-BLK3)</td>
<td>2 U</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS1)</td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS2)</td>
<td>189</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40629-BS3)</td>
<td>189</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD1)</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>99</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD2)</td>
<td>191</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>95</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>LCS Dup (BB40629-BSD3)</td>
<td>189</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>95</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>Duplicate (BB40629-DUP1)</td>
<td></td>
<td></td>
<td>Source: 1401256-05</td>
<td>200</td>
<td>95</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbonaceous BOD</td>
<td>5</td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>5</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40629 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40629-DUP2)</td>
<td>Source: 1401349-05</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>16</td>
<td>2</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14 Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40629-DUP3)</td>
<td>Source: 1401375-01</td>
<td>120</td>
<td>2</td>
<td>2</td>
<td>98</td>
<td>18</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14 Analyzed: 02/11/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40711 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40711-BLK1)</td>
<td>Prepared &amp; Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.010</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.20</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40711-BS1)</strong></td>
<td>Prepared &amp; Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.11</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.881</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>98</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.71</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>101</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.47</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>105</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40711 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.882</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>98</td>
<td>85-115</td>
<td>0.1</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.22</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>102</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.47</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>105</td>
<td>85-115</td>
<td>0.2</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.73</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>102</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.11</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>111</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40711-MS1)</strong></td>
<td>Source: 1401419-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>17.0</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>47.6</td>
<td>NR</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>4.5</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>34.7</td>
<td>109</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>2.56</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>1.75</td>
<td>90</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40711-MS2)</strong></td>
<td>Source: 1401421-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>3.77</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>0.90</td>
<td>2.81</td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>1.40</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td>ND</td>
<td>100</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>3.1</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td>26.4</td>
<td>108</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.60</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td>0.0370</td>
<td>92</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.995</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.995</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.995</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>0.995</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>100</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40718 - TOC prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40718-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>0.060 U</td>
<td>1.0</td>
<td>0.060 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40718-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>10.4</td>
<td>1.0</td>
<td>0.060 mg/L</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>104</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB40718-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401437-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>8.93</td>
<td>1.0</td>
<td>0.060 mg/L</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>ND</td>
<td>89</td>
<td>85-115</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB40718-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401437-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>8.57</td>
<td>1.0</td>
<td>0.060 mg/L</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>ND</td>
<td>86</td>
<td>85-115</td>
</tr>
</tbody>
</table>

|                      |         |     |     |       |             |               |      |             |     |           |
| **Batch BB41012 - COD prep**  |         |     |     |       |             |               |      |             |     |           |
| Blank (BB41012-BLK1)         |         |     |     |       |             |               |      |             |     |           |
| Chemical Oxygen Demand       | 10 U    | 25  | 10 mg/L |             |             |               |      |             |     |           |
| LCS (BB41012-BS1)            |         |     |     |       |             |               |      |             |     |           |
| Chemical Oxygen Demand       | 50      | 25  | 10 mg/L |             |             |               | 50   | 100         | 90-110 |           |
| Matrix Spike (BB41012-MS1)   |         |     |     |       |             | Source: 1401349-06 |      |             |     |           |
| Chemical Oxygen Demand       | 50      | 25  | 10 mg/L |             |             |               | 50   | ND          | 100   | 85-115    |
| Matrix Spike Dup (BB41012-MSD1)|        |     |     |       |             | Source: 1401349-06 |      |             |     |           |
| Chemical Oxygen Demand       | 49      | 25  | 10 mg/L |             |             |               | 50   | ND          | 98    | 85-115    |

|                      |         |     |     |       |             |               |      |             |     |           |
| **Batch BB41014 - COD prep**  |         |     |     |       |             |               |      |             |     |           |
| Blank (BB41014-BLK1)         |         |     |     |       |             |               |      |             |     |           |
| Chemical Oxygen Demand       | 10 U    | 25  | 10 mg/L |             |             |               |      |             |     |           |
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41014 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41014-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>52</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>104</td>
<td>90-110</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41014-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>77</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>29</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41014-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>72</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>29</td>
<td>85-115</td>
<td>7</td>
</tr>
<tr>
<td><strong>Batch BB41205 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41205-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41205-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>50.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>50</td>
<td>100</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB41205-DUP1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>12.0</td>
<td>1</td>
<td></td>
<td>mg/L</td>
<td>13.0</td>
<td>8</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>18.0</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>19.0</td>
<td>5</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB41245 - Sulfide prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41245-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41245 - Sulfide prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41245-BL2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41245-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41245-BS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41245-MS1)</td>
<td>Source: 1401349-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41245-MS2)</td>
<td>Source: 1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41245-MSD1)</td>
<td>Source: 1401349-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41245-MSD2)</td>
<td>Source: 1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB41915 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41915-BL1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05 U</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.010 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41915-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.924</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>92</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.502</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>100</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41915 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41915-MS1)</td>
<td>Source: 1401419-06</td>
<td>Prepared: 02/19/14</td>
<td>Analyzed: 02/24/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.988</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>99</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.513</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>103</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41915-MS2)</td>
<td>Source: 1401421-02</td>
<td>Prepared: 02/19/14</td>
<td>Analyzed: 02/24/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.25</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.64</td>
<td>62</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.579</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.0729</td>
<td>101</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41915-MSD1)</td>
<td>Source: 1401419-06</td>
<td>Prepared: 02/19/14</td>
<td>Analyzed: 02/24/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>1.01</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>101</td>
<td>90-110</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.500</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>100</td>
<td>90-110</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41915-MSD2)</td>
<td>Source: 1401421-02</td>
<td>Prepared: 02/19/14</td>
<td>Analyzed: 02/24/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>2.72</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.64</td>
<td>108</td>
<td>90-110</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.573</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.0729</td>
<td>100</td>
<td>90-110</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td><strong>Batch BB41943 - alkalinity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41943-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0 U</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41943-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41943-MS1)</td>
<td>Source: 1401419-06</td>
<td>Prepared &amp; Analyzed: 02/19/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>ND</td>
<td>108</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41943-MSD1)</td>
<td>Source: 1401419-06</td>
<td>Prepared &amp; Analyzed: 02/19/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>ND</td>
<td>108</td>
<td>80-120</td>
<td>0</td>
<td>26</td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42006 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB42006-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009 U</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42006-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>105</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42006-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>ND</td>
<td>108</td>
</tr>
<tr>
<td>Source: 1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42006-MS2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>ND</td>
<td>109</td>
</tr>
<tr>
<td>Source: 1401421-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42006-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>ND</td>
<td>108</td>
</tr>
<tr>
<td>Source: 1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42006-MSD2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>ND</td>
<td>107</td>
</tr>
<tr>
<td>Source: 1401421-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB42007 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB42007-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009 U</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42007-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>105</td>
<td>90-110</td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42007-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td></td>
<td>0.045</td>
<td>96</td>
</tr>
<tr>
<td>Source: 1401419-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42007 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42007-MS2)</td>
<td>Source: 1401794-07</td>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.027</td>
<td>100</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42007-MSD1)</td>
<td>Source: 1401419-03</td>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.57</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.045</td>
<td>104</td>
<td>90-110</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42007-MSD2)</td>
<td>Source: 1401794-07</td>
<td>Prepared &amp; Analyzed: 02/20/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.027</td>
<td>98</td>
<td>90-110</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
Microbiology - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC Limits</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch BB40665 - FC-MF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40665-BLK1)</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40665-DUP1)</td>
<td>Source: 1401419-06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40665-DUP2)</td>
<td>Source: 1401421-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td>ND</td>
<td></td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/06/14</td>
<td>Analyzed: 02/07/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with "**, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.

L Off-scale high. Result exceeded highest calibration standard.

Questions regarding this report should be directed to:
Kathryn Nordmark
Telephone (813) 855-1844  FAX (813) 855-2218
Kathryn@southernanalyticallabs.com
<table>
<thead>
<tr>
<th>Sample No</th>
<th>Sample Description</th>
<th>Date/Time</th>
<th>Matrix</th>
<th>Composite</th>
<th>125mL NaSIO₃</th>
<th>FC-MF, FQ-CPT</th>
<th>NH₄, NH₃, TSS, TOC</th>
<th>Carbon, SO₂,</th>
<th>500mL H₂SO₄, Acetate</th>
<th>40mL HCl, TOC</th>
<th>Temp</th>
<th>Conductivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>BHS5-STE</td>
<td>2/6/14</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>7.82</td>
<td>70.1</td>
</tr>
<tr>
<td>02</td>
<td>BHS5-ST1</td>
<td>05:50</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6.76</td>
<td>20.1</td>
</tr>
<tr>
<td>03</td>
<td>BHS5-UGNO-0</td>
<td>05:30</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6.71</td>
<td>18.7</td>
</tr>
<tr>
<td>04</td>
<td>BHS5-ST2</td>
<td>05:25</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6.75</td>
<td>19.03</td>
</tr>
<tr>
<td>05</td>
<td>BHS5-ST2-DUP</td>
<td>05:30</td>
<td>WW</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>06</td>
<td>BHS5-EB</td>
<td>09:05</td>
<td>R</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6.23</td>
<td>17.7</td>
</tr>
</tbody>
</table>

**Parameters / Container Description**

**Contaminates**

- Date/Time: 4/05
- Received: 1-30-14
- Seal intact? N NA
- Samples intact upon arrival? N NA
- Received on ice? Temp. N NA
- Proper preservatives indicated? N NA
- Rec'd w/ thin holding time? N NA
- Volatiles rec'd w/out headspace? Y N
- Proper containers used? N NA

**Remarks**

- Instructions / Remarks
- Chain of Custody

**Notes:**

- Client Name: Hazan and Sawyer
- Project Name / Location: BHS5-GE#6
# Laboratory Report

## Project Name: B-HS5 SE#7

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-STE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401481-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/07/14 10:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/07/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Client Provided Field Data

### pH 7.63

### Temperature 20.2 °C

### Conductivity 1206 umhos

### Dissolved Oxygen 0.03 mg/L

### Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>1.6</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/14/14 08:20</td>
<td>02/14/14 10:28</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>61</td>
<td>EPA 350.1</td>
<td>2.0</td>
<td>0.47</td>
<td>02/21/14 15:26</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>72</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/07/14 14:00</td>
<td>02/12/14 09:03</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>140</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/12/14 12:30</td>
<td>02/12/14 15:00</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:26</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:26</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>3.7</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/08/14 07:26</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>6.3</td>
<td>SM 4500P-E</td>
<td>0.80</td>
<td>0.20</td>
<td>02/21/14 15:14</td>
<td>02/25/14 14:45</td>
<td>20</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>2.1</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/08/14 07:26</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>8.1</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/14/14 10:23</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>420</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/20/14 14:45</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>68</td>
<td>EPA 351.2</td>
<td>4.0</td>
<td>1.0</td>
<td>02/21/14 15:14</td>
<td>02/25/14 16:50</td>
<td>20</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>33</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 23:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>32</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:02</td>
<td>02/12/14 11:44</td>
<td>1</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>28</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:02</td>
<td>02/12/14 11:44</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.02 U</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/08/14 07:26</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## Microbiology

### E. Coli MPN/100 mL 1,800

### Fecal Coliforms CFU/100 ml 93,600

### Sample Description: BHS5-ST1

### Matrix: Wastewater

### Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
<td>6.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>20.14 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>1070 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>1.93 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Laboratory Report

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td></td>
<td>BHS5-ST1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix</td>
<td></td>
<td>Wastewater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td></td>
<td>1401481-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td></td>
<td>02/07/14 10:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected by</td>
<td></td>
<td>Josefin Hirst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time Received</td>
<td></td>
<td>02/07/14 13:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.27</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/14/14 08:20</td>
<td>02/14/14 10:28</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>2.3</td>
<td>EPA 350.1</td>
<td>0.080</td>
<td>0.019</td>
<td>02/21/14 16:44</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>9</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/07/14 14:00</td>
<td>02/12/14 09:03</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>10 U</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/12/14 15:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>39</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:35</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.53</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:35</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>1.4</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/08/14 07:35</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>2.1</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/25/14 14:45</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>25</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/08/14 07:35</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfdie</td>
<td>mg/L</td>
<td>0.40</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/14/14 10:23</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>210</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/20/14 14:45</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>3.9</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/25/14 16:50</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>5.5</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 23:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/12/14 11:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/12/14 11:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>40</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/08/14 07:35</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## Microbiology

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>72</td>
<td>SM 9223B</td>
<td>2.0</td>
<td>2.0</td>
<td>02/07/14 15:20</td>
<td>02/08/14 12:30</td>
<td>1</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>4,400</td>
<td>SM 9222D</td>
<td>1</td>
<td>1</td>
<td>02/07/14 15:15</td>
<td>02/08/14 13:25</td>
<td>1</td>
</tr>
</tbody>
</table>

## Client Provided Field Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
<td>7.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>18.4 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductivity</td>
<td></td>
<td>1063 umhos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>0.14 mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Inorganics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>0.06</td>
<td>SM 4550SF</td>
<td>0.04</td>
<td>0.01</td>
<td>02/14/14 08:20</td>
<td>02/14/14 10:28</td>
<td>1</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.080</td>
<td>EPA 350.1</td>
<td>0.040</td>
<td>0.009</td>
<td>02/21/14 15:39</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>14</td>
<td>SM 5210B</td>
<td>2</td>
<td>2</td>
<td>02/07/14 14:00</td>
<td>02/12/14 09:03</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>12 l</td>
<td>EPA 410.4</td>
<td>25</td>
<td>10</td>
<td>02/12/14 15:00</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number:  E84129

NELAP Accredited

Page 2 of 16
# Laboratory Report

<table>
<thead>
<tr>
<th>Project Name</th>
<th>B-HS5 SE#7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameters</strong></td>
<td></td>
</tr>
<tr>
<td>Sample Description</td>
<td>BHS5-LIGNO-0</td>
</tr>
<tr>
<td>Matrix</td>
<td>Wastewater</td>
</tr>
<tr>
<td>SAL Sample Number</td>
<td>1401481-03</td>
</tr>
<tr>
<td>Date/Time Collected</td>
<td>02/07/14 10:35</td>
</tr>
<tr>
<td>Collected by</td>
<td>Josefin Hirst</td>
</tr>
<tr>
<td>Date/Time Received</td>
<td>02/07/14 13:45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>5.9</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.88</td>
<td>EPA 300.0</td>
<td>0.04</td>
<td>0.01</td>
<td>02/08/14 07:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.49</td>
<td>EPA 300.0</td>
<td>0.040</td>
<td>0.010</td>
<td>02/08/14 07:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>0.95</td>
<td>SM 4500P-E</td>
<td>0.20</td>
<td>0.050</td>
<td>02/21/14 15:14</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>24</td>
<td>EPA 300.0</td>
<td>0.60</td>
<td>0.20</td>
<td>02/08/14 07:44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>0.20 I</td>
<td>SM 4500SF</td>
<td>0.40</td>
<td>0.10</td>
<td>02/14/14 10:23</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>360</td>
<td>SM 2320B</td>
<td>8.0</td>
<td>2.0</td>
<td>02/21/14 14:00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.5</td>
<td>EPA 351.2</td>
<td>1.0</td>
<td>0.25</td>
<td>02/21/14 15:14</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>9.3</td>
<td>SM 5310B</td>
<td>1.0</td>
<td>0.060</td>
<td>02/12/14 23:18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>2</td>
<td>SM 2540D</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:02</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>1 U</td>
<td>EPA 160.4</td>
<td>1</td>
<td>1</td>
<td>02/10/14 10:02</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>6.8</td>
<td>EPA 300.0</td>
<td>0.08</td>
<td>0.02</td>
<td>02/08/14 07:44</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Microbiology**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>63</td>
<td>SM 9223B</td>
<td>2.0</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>600</td>
<td>SM 9222D</td>
<td>1</td>
</tr>
</tbody>
</table>

**Client Provided Field Data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.79</td>
</tr>
<tr>
<td>Temperature</td>
<td>18.9 °C</td>
</tr>
<tr>
<td>Conductivity</td>
<td>995 umhos</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>0.38 mg/L</td>
</tr>
</tbody>
</table>

**Inorganics**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Unionized)</td>
<td>mg/L</td>
<td>4.6</td>
<td>SM 4550SF</td>
<td>0.04</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>0.31</td>
<td>EPA 350.1</td>
<td>0.040</td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>mg/L</td>
<td>16</td>
<td>SM 5210B</td>
<td>2</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>35</td>
<td>EPA 410.4</td>
<td>25</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>0.17</td>
<td>EPA 300.0</td>
<td>0.04</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>mg/L</td>
<td>0.01 U</td>
<td>EPA 300.0</td>
<td>0.04</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>mg/L</td>
<td>0.86</td>
<td>EPA 300.0</td>
<td>0.040</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>mg/L</td>
<td>1.3</td>
<td>SM 4500P-E</td>
<td>0.20</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>55</td>
<td>EPA 300.0</td>
<td>0.60</td>
</tr>
</tbody>
</table>
# Laboratory Report

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Results *</th>
<th>Method</th>
<th>PQL</th>
<th>MDL</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Description</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SAL Sample Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Collected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/Time Received</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>mg/L</td>
<td>7.3</td>
<td></td>
<td>0.4</td>
<td>0.1</td>
<td></td>
<td>02/14/14</td>
<td>10:23</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>mg/L</td>
<td>380</td>
<td></td>
<td>8.0</td>
<td>2.0</td>
<td></td>
<td>02/21/14</td>
<td>14:00</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>1.0</td>
<td>0.25</td>
<td></td>
<td>02/21/14</td>
<td>15:14</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>7.1</td>
<td></td>
<td>1.0</td>
<td>0.060</td>
<td></td>
<td>02/12/14</td>
<td>23:18</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>02/12/14</td>
<td>11:44</td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>mg/L</td>
<td>3</td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>02/12/14</td>
<td>11:44</td>
</tr>
<tr>
<td>Nitrate+Nitrite (N)</td>
<td>mg/L</td>
<td>0.17</td>
<td></td>
<td>0.08</td>
<td>0.02</td>
<td></td>
<td>02/08/14</td>
<td>08:22</td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>MPN/100 mL</td>
<td>10</td>
<td></td>
<td>0.2</td>
<td>2.0</td>
<td></td>
<td>02/07/14</td>
<td>15:20</td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>CFU/100 ml</td>
<td>100</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>02/07/14</td>
<td>15:15</td>
</tr>
</tbody>
</table>

| Sample Description                |       |           |          |     |     |          |          |          |
| **Matrix**                        |       |           |          |     |     |          |          |          |
| **SAL Sample Number**             |       |           |          |     |     |          |          |          |
| **Date/Time Collected**           |       |           |          |     |     |          |          |          |
| **Date/Time Received**            |       |           |          |     |     |          |          |          |
| **Client Provided Field Data**    |       |           |          |     |     |          |          |          |
| pH                                |       | 6.79      |          |     |     |          |          |          |
| Temperature                       |       | 18.9 °C   |          |     |     |          |          |          |
| Conductivity                      |       | 995 umhos |          |     |     |          |          |          |
| Dissolved Oxygen                  |       | 0.38 mg/L |          |     |     |          |          |          |
| **Inorganics**                    |       |           |          |     |     |          |          |          |
| Hydrogen Sulfide (Unionized)      | mg/L  | 4.4       |          | 0.04| 0.01|          | 02/14/14| 10:28  | 1        |
| Ammonia as N                      | mg/L  | 0.32      |          | 0.04| 0.009|         | 02/21/14| 08:41  | 1        |
| Carbonaceous BOD                  | mg/L  | 17        |          | 2   | 2   |          | 02/07/14| 14:00  | 1        |
| Chemical Oxygen Demand            | mg/L  | 33        |          | 25  | 10  |          | 02/12/14| 12:30  | 1        |
| Nitrate (as N)                    | mg/L  | 0.17      |          | 0.04| 0.01|          | 02/08/14| 08:31  | 1        |
| Nitrite (as N)                    | mg/L  | 0.01 U    |          | 0.04| 0.01|          | 02/08/14| 08:31  | 1        |
| Orthophosphate as P               | mg/L  | 0.91      |          | 0.04| 0.01|          | 02/08/14| 08:31  | 1        |
| Phosphorous - Total as P          | mg/L  | 1.3       |          | 0.20| 0.050|         | 02/21/14| 15:14  | 5        |
| Sulfate                           | mg/L  | 54        |          | 0.60| 0.20|          | 02/08/14| 08:31  | 1        |
| Sulfide                           | mg/L  | 6.8       |          | 0.40| 0.10|          | 02/14/14| 10:23  | 1        |
| Total Alkalinity                  | mg/L  | 370       |          | 8.0 | 2.0 |          | 02/21/14| 14:00  | 1        |
| Total Kjeldahl Nitrogen           | mg/L  | 1.1       |          | 1.0 | 0.25|          | 02/21/14| 15:14  | 5        |
| Total Organic Carbon              | mg/L  | 7.1       |          | 1.0 | 0.060|         | 02/12/14| 23:18  | 1        |
| Total Suspended Solids            | mg/L  | 3         |          | 1   | 1   |          | 02/10/14| 10:02  | 1        |

Florida Certification Number: E84129
NELAP Accredited
# Laboratory Report

**Project Name** | **B-HS5 SE#7**
---|---
**Parameters** | **Units** | **Results** | **Method** | **PQL** | **MDL** | **Prepared** | **Analyzed** | **Dilution**
Sample Description | BHS5-ST2-DUP | | | | | |
Matrix | Wastewater | | | | | |
SAL Sample Number | 1401481-05 | | | | | |
Date/Time Collected | 02/07/14 10:40 | | | | | |
Collected by | Josefin Hirst | | | | | |
Date/Time Received | 02/07/14 13:45 | | | | | |
Volatile Suspended Solids | mg/L | 3 | EPA 160.4 | 1 | 02/10/14 10:02 | 02/12/14 11:44 | 1 |
Nitrate+Nitrite (N) | mg/L | 0.17 | EPA 300.0 | 0.08 | 02/08/14 08:31 | 1 |
**Microbiology** | | | | | | |
E. Coli | MPN/100 mL | 31 | SM 9223B | 2.0 | 02/07/14 15:20 | 02/08/14 12:30 | 1 |
Fecal Coliforms | CFU/100 ml | 100 | SM 9222D | 1 | 02/07/14 15:15 | 02/08/14 13:25 | 1 |
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40716 - BOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40716-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40716-BLK2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>2 U</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40716-BS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>193</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>97</td>
<td>85</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS (BB40716-BS2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>182</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>91</td>
<td>85</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS Dup (BB40716-BSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>185</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>92</td>
<td>85</td>
<td>85-115</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LCS Dup (BB40716-BSD2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>189</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>200</td>
<td>94</td>
<td>85</td>
<td>85-115</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duplicate (BB40716-DUP1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>18</td>
<td>7</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401420-05</td>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duplicate (BB40716-DUP2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbonaceous BOD</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>mg/L</td>
<td>17</td>
<td>6</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: 1401481-05</td>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/12/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB40723 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40723-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.20 U</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.010 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>0.01 U</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40723 - Ion Chromatography 300.0 Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB40723-BS1)</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.823</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td></td>
<td>91</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.50</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td></td>
<td>107</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>9.20</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td></td>
<td>102</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.75</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>103</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.10</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>110</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS Dup (BB40723-BSD1)</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>8.94</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td></td>
<td>99</td>
<td>85-115</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.65</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>97</td>
<td>85-115</td>
<td>6</td>
<td>200</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.45</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td></td>
<td>104</td>
<td>85-115</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>0.812</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td></td>
<td>90</td>
<td>85-115</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.04</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>104</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB40723-MS1)</strong></td>
<td>Source: 1401481-03</td>
<td>Prepared &amp; Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthophosphate as P</td>
<td>1.44</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.90</td>
<td></td>
<td>0.494</td>
<td>105</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>2.32</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.4</td>
<td></td>
<td>0.876</td>
<td>104</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>7.78</td>
<td>0.04</td>
<td>0.01</td>
<td>mg/L</td>
<td>1.7</td>
<td></td>
<td>5.92</td>
<td>110</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Sulfate</td>
<td>33.0</td>
<td>0.60</td>
<td>0.20</td>
<td>mg/L</td>
<td>9.0</td>
<td></td>
<td>23.9</td>
<td>100</td>
<td>85-115</td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.12</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>112</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.12</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>112</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.12</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>112</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.12</td>
<td></td>
<td></td>
<td>mg/L</td>
<td>1.0</td>
<td></td>
<td>112</td>
<td>90-115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Florida Certification Number: E84129
NELAP Accredited
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
</table>
| Batch BB40723 - Ion Chromatography 300.0 Prep

<table>
<thead>
<tr>
<th>Matrix Spike (BB40723-MS2)</th>
<th>Source: 1401482-05</th>
<th>Prepared &amp; Analyzed: 02/08/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphate as P</td>
<td>4.48</td>
<td>0.040</td>
</tr>
<tr>
<td>Sulfate</td>
<td>29.5</td>
<td>0.60</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.72</td>
<td>0.04</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>1.39</td>
<td>0.04</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td>mg/L</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td>mg/L</td>
</tr>
<tr>
<td>Surrogate: Dichloroacetate</td>
<td>1.05</td>
<td>mg/L</td>
</tr>
</tbody>
</table>

| Batch BB41125 - TOC prep

<table>
<thead>
<tr>
<th>Blank (BB41125-BLK1)</th>
<th>Prepared &amp; Analyzed: 02/12/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Carbon</td>
<td>0.060 U</td>
</tr>
</tbody>
</table>

| LCS (BB41125-BS1) |
|-------------------|-------------------------------|
| Total Organic Carbon | 10.1                        | 1.0                            | 0.060 | mg/L      |

<table>
<thead>
<tr>
<th>Matrix Spike (BB41125-MS1)</th>
<th>Source: 1401583-03</th>
<th>Prepared &amp; Analyzed: 02/12/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Carbon</td>
<td>9.25</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Matrix Spike Dup (BB41125-MSD1)</th>
<th>Source: 1401583-03</th>
<th>Prepared &amp; Analyzed: 02/12/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Carbon</td>
<td>9.10</td>
<td>1.0</td>
</tr>
</tbody>
</table>

| Batch BB41224 - COD prep

<table>
<thead>
<tr>
<th>Blank (BB41224-BLK1)</th>
<th>Prepared &amp; Analyzed: 02/12/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Oxygen Demand</td>
<td>10 U</td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41224 - COD prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41224-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>49</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td></td>
<td>98</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41224-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>49</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>98</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41224-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>mg/L</td>
<td>50</td>
<td>ND</td>
<td>100</td>
<td>85-115</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td><strong>Batch BB41431 - Sulfide prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41431-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.10 U</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41431-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td></td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41431-MS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.64</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>93</td>
<td>85-115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41431-MSD1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfide</td>
<td>4.84</td>
<td>0.40</td>
<td>0.10</td>
<td>mg/L</td>
<td>5.0</td>
<td>ND</td>
<td>97</td>
<td>85-115</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Batch BB41709 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41709-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB41709 - VSS Prep</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41709-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>48.5</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>50</td>
<td>97</td>
<td>85-115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB41709-DUP1)</td>
<td>Source: 1401420-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>2.00</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>2.00</td>
<td>0</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Suspended Solids</td>
<td>2.00</td>
<td>1</td>
<td>1</td>
<td>mg/L</td>
<td>2.00</td>
<td>0</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB41944 - alkalinity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB41944-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>2.0</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB41944-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>120</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>99</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB41944-MS1)</td>
<td>Source: 1401421-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>340</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>210</td>
<td>99</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB41944-MSD1)</td>
<td>Source: 1401421-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>340</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>210</td>
<td>99</td>
<td>80-120</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Batch BB42007 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB42007-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.009</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42007-BS1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>105</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
</table>

**Batch BB42007 - Ammonia by SEAL**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Source</th>
<th>Prepared &amp; Analyzed</th>
<th>Result</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix Spike (BB42007-MS1)</td>
<td>1401419-03</td>
<td>02/20/14</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.045</td>
<td>96</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42007-MS2)</td>
<td>1401794-07</td>
<td>02/20/14</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.027</td>
<td>100</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42007-MSD1)</td>
<td>1401419-03</td>
<td>02/20/14</td>
<td>0.57</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.045</td>
<td>104</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42007-MSD2)</td>
<td>1401794-07</td>
<td>02/20/14</td>
<td>0.52</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.027</td>
<td>98</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Batch BB42102 - Ammonia by SEAL**

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Prepared &amp; Analyzed</th>
<th>Result</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (BB42102-BLK1)</td>
<td>02/21/14</td>
<td>0.009</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>101</td>
<td>90-110</td>
</tr>
<tr>
<td>LCS (BB42102-BS1)</td>
<td>02/22/14</td>
<td>0.50</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>103</td>
<td>90-110</td>
</tr>
<tr>
<td>Matrix Spike (BB42102-MS1)</td>
<td>1401480-07</td>
<td>02/21/14</td>
<td>0.51</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike (BB42102-MS2)</td>
<td>1401818-07</td>
<td>02/21/14</td>
<td>0.53</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.038</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matrix Spike Dup (BB42102-MSD1)</td>
<td>1401480-07</td>
<td>02/21/14</td>
<td>0.54</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42102 - Ammonia by SEAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>0.58</td>
<td>0.040</td>
<td>0.009</td>
<td>mg/L</td>
<td>0.50</td>
<td>0.038</td>
<td>108</td>
<td>90-110</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

**Batch BB42122 - alkalinity**

<table>
<thead>
<tr>
<th>Blank (BB42122-BLK1)</th>
<th>Prepared &amp; Analyzed: 02/21/14</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Alkalinity</td>
<td>2.0 U</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42122-BS1)</td>
<td>Prepared &amp; Analyzed: 02/21/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>130</td>
<td>8.0</td>
<td>2.0</td>
<td>mg/L</td>
<td>120</td>
<td>108</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Matrix Spike (BB42122-MS1) | Prepared & Analyzed: 02/21/14**

| Total Alkalinity | 570 | 8.0 | 2.0 | mg/L | 120 | 450 | 99 | 80-120 |

**Matrix Spike Dup (BB42122-MSD1) | Source: 1401482-05**

| Total Alkalinity | 570 | 8.0 | 2.0 | mg/L | 120 | 450 | 99 | 80-120 | 0 | 26 |

**Batch BB42128 - Digestion for TP and TKN**

<table>
<thead>
<tr>
<th>Blank (BB42128-BLK1)</th>
<th>Prepared: 02/21/14  Analyzed: 02/25/14</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.010 U</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.05 U</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS (BB42128-BS1)</td>
<td>Prepared: 02/21/14  Analyzed: 02/25/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.469</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>94</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.967</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>97</td>
<td>90-110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inorganics - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source Result</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB42128 - Digestion for TP and TKN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB42128-MS1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.488</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>98</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.983</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>98</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike (BB42128-MS2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401750-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.470</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>94</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.998</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>100</td>
<td>90-110</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB42128-MSD1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401480-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.949</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>95</td>
<td>90-110</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.466</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>93</td>
<td>90-110</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td><strong>Matrix Spike Dup (BB42128-MSD2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Source: 1401750-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorous - Total as P</td>
<td>0.480</td>
<td>0.040</td>
<td>0.010</td>
<td>mg/L</td>
<td>0.50</td>
<td>ND</td>
<td>96</td>
<td>90-110</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>0.960</td>
<td>0.20</td>
<td>0.05</td>
<td>mg/L</td>
<td>1.0</td>
<td>ND</td>
<td>96</td>
<td>90-110</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>
# Microbiology - Quality Control

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>PQL</th>
<th>MDL</th>
<th>Units</th>
<th>Spike Level</th>
<th>Source</th>
<th>%REC</th>
<th>%REC Limits</th>
<th>RPD</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch BB40725 - FC-MF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank (BB40725-BLK1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicate (BB40725-DUP1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Coliforms</td>
<td>1 U</td>
<td>1</td>
<td>1</td>
<td>CFU/100 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>200</td>
</tr>
<tr>
<td>Source: 1401480-07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared: 02/07/14</td>
<td>Analyzed: 02/08/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
* Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with **, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.

Questions regarding this report should be directed to:

Kathryn Nordmark
Telephone (813) 855-1844  FAX (813) 855-2218
Kathryn@southernanalyticallabs.com
**Client Name**: Hazan and Sawyer

**Project Name / Location**: BHS5 SE#7

**Sample Description**

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Matrix</th>
<th>Date/Time</th>
<th>Date/Time</th>
<th>Date/Time</th>
<th>Date/Time</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS5-STE</td>
<td>WW</td>
<td>2/11/14</td>
<td>10:55</td>
<td>2/11/14</td>
<td>12:00</td>
<td>10:55</td>
</tr>
<tr>
<td>BHS5-ST1</td>
<td>WW</td>
<td>10:55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-LIGNO-O</td>
<td>WW</td>
<td>10:35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2</td>
<td>WW</td>
<td>10:35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-ST2-DUP</td>
<td>WW</td>
<td>10:40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHS5-EB</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Matrix Codes**:

- DW: Drinking Water
- WW: Wastewater
- SW: Surface Water
- SL: Sludge
- SO: Soil
- GW: Groundwater
- SA: Saline Water
- O: Other
- R: Reagent Water

**Instructions / Remarks**

- Samples intact upon arrival?
- Proper preservation indicated?
- Recorded within holding time?
- Volatiles rec'd w/out headspace?
- Proper containers used?

**Sample Container Information**

- Date/Time: 12/4/14
- Received: 1-30-14
- Relinquished: 2-17-14
- Date/Time: 2-17-14
- Received: 1-21-14
- Relinquished: 2-7-14

**Chain of Custody**
## Appendix B: Operation & Maintenance Log

### Table B.1

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/24/2013</td>
<td>Construction - Stage 1 and Stage 2 tanks installed</td>
</tr>
<tr>
<td>6/25/2013</td>
<td>Construction - Drainfield distribution box installed and all pipework</td>
</tr>
<tr>
<td>7/9/2013</td>
<td>System Start-up</td>
</tr>
<tr>
<td>7/17/2013</td>
<td>Bull run valve switched from drainfield to Stage 1 biofilter</td>
</tr>
<tr>
<td>7/23/2013</td>
<td>System check</td>
</tr>
<tr>
<td>7/29/2013</td>
<td>Construction - sod installation</td>
</tr>
<tr>
<td>8/6/2013</td>
<td>Preliminary sample event No. 1</td>
</tr>
<tr>
<td>8/15/2013</td>
<td>Need to add soil around low side of pump tank riser</td>
</tr>
<tr>
<td>8/27/2013</td>
<td>Preliminary sample event No. 2</td>
</tr>
<tr>
<td>9/27/2013</td>
<td>System check</td>
</tr>
<tr>
<td>11/8/2013</td>
<td>System check</td>
</tr>
<tr>
<td>11/27/2013</td>
<td>System check</td>
</tr>
<tr>
<td>12/4/2013</td>
<td>Sample Event No. 2</td>
</tr>
<tr>
<td>12/23/2013</td>
<td>System check</td>
</tr>
<tr>
<td>1/23/2014</td>
<td>System check</td>
</tr>
<tr>
<td>1/31/2014</td>
<td>System check</td>
</tr>
<tr>
<td>2/3/2014</td>
<td>Sample Event No. 3</td>
</tr>
<tr>
<td>2/4/2014</td>
<td>Sample Event No. 4</td>
</tr>
<tr>
<td>2/5/2014</td>
<td>Sample Event No. 5</td>
</tr>
<tr>
<td>2/6/2014</td>
<td>Sample Event No. 6</td>
</tr>
<tr>
<td>2/7/2014</td>
<td>Sample Event No. 7</td>
</tr>
</tbody>
</table>
## Appendix C: Vericomm PLC Data

### Table C.1
Vericomm Data Dec 4, 2013 through Jan 31, 2014

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>1 Alarm Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>2 Alert Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>3 System Mode</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>4 Timer Mode</td>
<td>Normal</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>5 Active Off Time</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
</tr>
<tr>
<td>6 Active On Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>7 Pump Mode</td>
<td>OffCycl</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>8 Pump Status</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>9 Pump Cycles Today</td>
<td>5.0 Cycles</td>
<td>2.0 Cycles</td>
<td>4.0 Cycles</td>
<td>3.0 Cycles</td>
</tr>
<tr>
<td>10 Override Cycles Today</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
</tr>
<tr>
<td>11 Pump Run Time Today</td>
<td>3.5 Minutes</td>
<td>1.5 Minutes</td>
<td>2.9 Minutes</td>
<td>2.1 Minutes</td>
</tr>
</tbody>
</table>

### Settings

<table>
<thead>
<tr>
<th>Point</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 Off Cycle Time</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
</tr>
<tr>
<td>18 On Cycle Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>19 Override Off Cycle Time</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
</tr>
<tr>
<td>20 Override On Cycle Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>21 Minimum Override Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
</tr>
<tr>
<td>22 Override Cycle Limit per Day</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
</tr>
<tr>
<td>23 Time Limit per Day</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
</tr>
<tr>
<td>24 High Level Pump Test</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
</tr>
<tr>
<td>25 Alarm Update Interval</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
</tr>
<tr>
<td>26 Page Delay</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
</tr>
<tr>
<td>27 Page Interval</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
</tr>
<tr>
<td>28 Local Alarm Delay</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
</tr>
<tr>
<td>29 Local Reactivate Delay</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
</tr>
</tbody>
</table>

### Troubleshooting

<table>
<thead>
<tr>
<th>Point</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 Top Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>34 Middle Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>35 Bottom Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>36 Contactor Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>37 Pump Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>38 Filter Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>39 Tank Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>40 Power Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

### Flow Data

<table>
<thead>
<tr>
<th>Point</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 Pump Run Time Today</td>
<td>3.5 Minutes</td>
<td>1.5 Minutes</td>
<td>2.9 Minutes</td>
<td>2.1 Minutes</td>
</tr>
<tr>
<td>50 Override Cycles Today</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>51 Pump Cycles Today</td>
<td>5.0 Cycles</td>
<td>2.0 Cycles</td>
<td>4.0 Cycles</td>
<td>3.0 Cycles</td>
</tr>
<tr>
<td>52 Average Run Time per Cycle Today</td>
<td>0.7 Minutes</td>
<td>0.8 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>53 Brownouts Today</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### 30-Day History Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>30 Day Average Run Time per Day</td>
<td>4.9 Minutes</td>
<td>5.6 Minutes</td>
<td>4.2 Minutes</td>
<td>4.3 Minutes</td>
</tr>
<tr>
<td>66</td>
<td>30 Day Average Override Cycles per Day</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
</tr>
<tr>
<td>67</td>
<td>30 Day Average Cycles per Day</td>
<td>6.9 Cycles</td>
<td>7.9 Cycles</td>
<td>5.9 Cycles</td>
<td>6.1 Cycles</td>
</tr>
<tr>
<td>68</td>
<td>30 Day Average Run Time per Cycle</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>71</td>
<td>30 Day Total Pump Run Time</td>
<td>148.3 Minutes</td>
<td>168.4 Minutes</td>
<td>125.5 Minutes</td>
<td>130.4 Minutes</td>
</tr>
<tr>
<td>72</td>
<td>30 Day Total Override Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
</tr>
<tr>
<td>73</td>
<td>30 Day Total Cycles</td>
<td>208.0 Cycles</td>
<td>236.0 Cycles</td>
<td>176.0 Cycles</td>
<td>183.0 Cycles</td>
</tr>
<tr>
<td>76</td>
<td>30 Day Total Brownouts</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Totalized Pump Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>Pump Total Run Time</td>
<td>16.0 Hours</td>
<td>15.3 Hours</td>
<td>12.5 Hours</td>
<td>11.2 Hours</td>
</tr>
<tr>
<td>83</td>
<td>Pump Total Cycles</td>
<td>1357.0 Cycles</td>
<td>1298.0 Cycles</td>
<td>1056.0 Cycles</td>
<td>947.0 Cycles</td>
</tr>
</tbody>
</table>

### Miscellaneous

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>Pump On Auto</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>147</td>
<td>Pump Test Today</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>148</td>
<td>Pump Check Enable</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>149</td>
<td>Total Override Cycles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>150</td>
<td>High Level Condition</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>151</td>
<td>Leak Check Enable</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>152</td>
<td>Brownout State</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>153</td>
<td>Test Mode</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

### Alarm Points

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>161</td>
<td>General Alarm</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>162</td>
<td>New Alarm</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>163</td>
<td>Update Central Enable</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>167</td>
<td>Page Alarm Start</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>168</td>
<td>Pager Signal</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>169</td>
<td>Local Alarm Start</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>170</td>
<td>Local Alarm Silence</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

### Inputs & Outputs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>177</td>
<td>High Level/Override Timer Float Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>178</td>
<td>Timer Float Input</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>179</td>
<td>Redundant Off Float &amp; Low Level Alarm Input</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>181</td>
<td>Push To Silence Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>182</td>
<td>Auxiliary Contact Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>186</td>
<td>Pump Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>188</td>
<td>Alarm Light Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>189</td>
<td>Audible Alarm Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>
### Table C.2
**Vericomm Data Feb 3, 2014 through Feb 7, 2014**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>1 Alarm Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>2 Alert Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>3 System Mode</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>5 Timer Mode</td>
<td>Off</td>
<td>Off</td>
<td>Normal</td>
<td>Normal</td>
<td>Off</td>
</tr>
<tr>
<td>6 Active Off Time</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
</tr>
<tr>
<td>7 Active On Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>9 Pump Mode</td>
<td>Off</td>
<td>Off</td>
<td>OffCycl</td>
<td>OffCycl</td>
<td>Off</td>
</tr>
<tr>
<td>10 Pump Status</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>11 Pump Cycles Today</td>
<td>1.0 Cycles</td>
<td>2.0 Cycles</td>
<td>1.0 Cycles</td>
<td>1.0 Cycles</td>
<td>1.0 Cycles</td>
</tr>
<tr>
<td>12 Pump Run Time Today</td>
<td>0.7 Minutes</td>
<td>1.5 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.6 Minutes</td>
</tr>
<tr>
<td>Settings</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>Point</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>17 Off Cycle Time</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
<td>60.0 Minutes</td>
</tr>
<tr>
<td>18 On Cycle Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>19 Override Off Cycle Time</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
</tr>
<tr>
<td>20 Override On Cycle Time</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
</tr>
<tr>
<td>21 Minimum Override Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
<td>3.0 Cycles</td>
</tr>
<tr>
<td>22 Override Cycle Limit per Day</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
<td>7.0 Cycles</td>
</tr>
<tr>
<td>24 Time Limit per Day</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
<td>16.0 Minutes</td>
</tr>
<tr>
<td>25 High Level Pump Test</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
<td>2.0 Minutes</td>
</tr>
<tr>
<td>26 Alarm Update Interval</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
</tr>
<tr>
<td>29 Page Delay</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
<td>960.0 Minutes</td>
</tr>
<tr>
<td>30 Page Interval</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
<td>30.0 Minutes</td>
</tr>
<tr>
<td>31 Local Alarm Delay</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
<td>1140.0 Minutes</td>
</tr>
<tr>
<td>32 Local Reactivate Delay</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
<td>120.0 Minutes</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>Point</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>33 Top Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>34 Middle Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>35 Bottom Float Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>37 Contactor Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>38 Pump Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>40 Filter Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>41 Tank Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>43 Power Status</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
<tr>
<td>Flow Data</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>Point</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>49 Pump Run Time Today</td>
<td>0.7 Minutes</td>
<td>1.5 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.6 Minutes</td>
</tr>
<tr>
<td>50 Override Cycles Today</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>51 Pump Cycles Today</td>
<td>1.0 Cycles</td>
<td>2.0 Cycles</td>
<td>1.0 Cycles</td>
<td>1.0 Cycles</td>
<td>1.0 Cycles</td>
</tr>
<tr>
<td>52 Average Run Time per Cycle Today</td>
<td>0.7 Minutes</td>
<td>0.8 Minutes</td>
<td>0.7 Minutes</td>
<td>0.7 Minutes</td>
<td>0.6 Minutes</td>
</tr>
<tr>
<td>54 Brownouts Today</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### Table C.2 (continued)

**Vericomm Data Feb 3, 2014 through Feb 7, 2014**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Description</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>65 30 Day Average Run Time per Day</td>
<td>4.5 Minutes</td>
<td>4.5 Minutes</td>
<td>4.5 Minutes</td>
<td>4.6 Minutes</td>
<td>4.6 Minutes</td>
</tr>
<tr>
<td>66 30 Day Average Override Cycles per Day</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
</tr>
<tr>
<td>67 30 Day Average Cycles per Day</td>
<td>6.3 Cycles</td>
<td>6.3 Cycles</td>
<td>6.4 Cycles</td>
<td>6.4 Cycles</td>
<td>6.5 Cycles</td>
</tr>
<tr>
<td>71 30 Day Total Pump Run Time</td>
<td>133.7 Minutes</td>
<td>133.7 Minutes</td>
<td>135.8 Minutes</td>
<td>136.6 Minutes</td>
<td>138.1 Minutes</td>
</tr>
<tr>
<td>72 30 Day Total Override Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
<td>0.0 Cycles</td>
</tr>
<tr>
<td>73 30 Day Total Cycles</td>
<td>188.0 Cycles</td>
<td>188.0 Cycles</td>
<td>191.0 Cycles</td>
<td>192.0 Cycles</td>
<td>194.0 Cycles</td>
</tr>
<tr>
<td>76 30 Day Total Brownouts</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Totalized Pump Data</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Description</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>82 Pump Total Run Time</td>
<td>16.3 Hours</td>
<td>16.2 Hours</td>
<td>16.2 Hours</td>
<td>16.1 Hours</td>
<td>16.1 Hours</td>
</tr>
<tr>
<td>83 Pump Total Cycles</td>
<td>1380.0 Cycles</td>
<td>1374.0 Cycles</td>
<td>1369.0 Cycles</td>
<td>1365.0 Cycles</td>
<td>1360.0 Cycles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Description</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>145 Pump On Auto</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>147 Pump Test Today</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>148 Pump Check Enable</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>149 Total Override Cycles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>150 High Level Condition</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>151 Leak Check Enable</td>
<td>Off</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>Off</td>
</tr>
<tr>
<td>152 Brownout State</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>153 Test Mode</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alarm Points</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Description</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>161 General Alarm</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>162 New Alarm</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>163 Update Central Enable</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>167 Page Alarm Start</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>168 Pager Signal</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>169 Local Alarm Start</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>170 Local Alarm Silence</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs &amp; Outputs</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Description</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>174 High Level/Override Timer Float Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>176 Timer Float Input</td>
<td>Off</td>
<td>Off</td>
<td>On</td>
<td>On</td>
<td>Off</td>
</tr>
<tr>
<td>179 Redundant Off Float &amp; Low Level Alarm Input</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>181 Push To Silence Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>182 Auxiliary Contact Input</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>185 Pump Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>186 Alarm Light Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>189 Audible Alarm Output</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>