

| Week | Grab Sample Date | Sample Type | BIOFOR C | | | | | BIOFOR N | | | | | BIOSTYR | | | | | |
|--------------------|------------------|-------------|-------------|------------|------------|-----------|----------|-------------|------------|------------|-----------|----------|-------------|------------|------------|-----------|----------|--|
| | | | TBOD (mg/l) | TSS (mg/l) | VSS (mg/l) | TS (% WT) | VS (%WT) | TBOD (mg/l) | TSS (mg/l) | VSS (mg/l) | TS (% WT) | VS (%WT) | TBOD (mg/l) | TSS (mg/l) | VSS (mg/l) | TS (% WT) | VS (%WT) | |
| 4 | 18-Mar-04 | Supernatant | 154 | 216 | 172 | | | 97.5 | 122 | 98.4 | | | | | | | | |
| | | Solids | | | | 1.53 | 75.6 | | | | 0.89 | 57.1 | | | | | | |
| 4 | 20-Mar-04 | Supernatant | 155 | 247 | 195 | | | 86.4 | 89.7 | 65.4 | | | | | | | | |
| | | Solids | | | | 1.82 | 69 | | | | | | | | | | | |
| 5 | 24-Mar-04 | Supernatant | 118 | 165 | 124 | | | 127 | 101 | 68.9 | | | 87.3 | 143 | 114 | | | |
| | | Solids | | | | 0.59 | 71.7 | | | | 0.13 | ND | | | | 0.51 | 63.6 | |
| 5 | 26-Mar-04 | Supernatant | 144 | 224 | 186 | | | 86.7 | 108 | 80.2 | | | 90.8 | 159 | 129 | | | |
| | | Solids | | | | 1.5 | 68.3 | | | | ND | ND | | | | 1.25 | 76.9 | |
| 6 | 1-Apr-04 | Supernatant | 109 | 186 | 143 | | | 85.2 | 89.8 | 68.4 | | | 49.8 | 106 | 86.4 | | | |
| | | Solids | | | | 2.14 | 76.7 | | | | 1.44 | 72.7 | | | | 2.34 | 75 | |
| 6 | 3-Apr-04 | Supernatant | 177 | 233 | 185 | | | 83.5 | 59.8 | 49 | | | 80.8 | 119 | 97.6 | | | |
| | | Solids | | | | 2.22 | 72 | | | | 1.41 | 75 | | | | 2.28 | 74 | |
| 7 | 9-Apr-04 | Supernatant | 181 | 199 | 166 | | | 87.8 | 99 | 65.8 | | | 99.5 | 182 | 148 | | | |
| | | Solids | | | | 1.29 | 69.4 | | | | ND | ND | | | | 2.1 | 73 | |
| 7 | 11-Apr-04 | Supernatant | 164 | 192 | 157 | | | 84.6 | 81.6 | 63 | | | 103 | 171 | 143 | | | |
| | | Solids | | | | 1.56 | 73.8 | | | | ND | ND | | | | 1.14 | 71.4 | |
| 8 | 17-Apr-04 | Supernatant | | 181 | 162 | | | | | | | | | 151 | 125 | | | |
| | | Solids | | | | 1.16 | 66.7 | | | | | | | | | 1.48 | 75 | |
| 9 | 21-Apr-04 | Supernatant | 147 | 217 | 173 | | | 80.8 | 37.3 | 30 | | | 158 | 208 | 169 | | | |
| | | Solids | | | | 1.8 | 73.8 | | | | ND | ND | | | | 1.89 | 80 | |
| 9 | 23-Apr-04 | Supernatant | 124 | 223 | 180 | | | 40.8 | 33.6 | 26.4 | | | 185 | 227 | 189 | | | |
| | | Solids | | | | 0.4 | 54.1 | | | | 0.16 | 25 | | | | 1.17 | 72.4 | |
| 10 | 27-Apr-04 | Supernatant | | 234 | 177 | | | 65.1 | 69.2 | 54 | | | 111 | 161 | 133 | | | |
| | | Solids | | | | 1.43 | 71.9 | | | | 2.24 | 57.1 | | | | 2.57 | 75.4 | |
| 10 | 29-Apr-04 | Supernatant | 111 | 195 | 160 | | | 58.6 | 57 | 48.8 | | | 112 | 174 | 150 | | | |
| | | Solids | | | | 1.65 | 71.1 | | | | 1.16 | 66.7 | | | | 2.76 | 74.6 | |
| 11 | 5-May-04 | Supernatant | 143 | 60 | 46.2 | | | 54.1 | 65.8 | 51.6 | | | 133 | 181 | 155 | | | |
| | | Solids | | | | 1.62 | 80 | | | | | | | | | 2.57 | 78.6 | |
| 11 | 7-May-04 | Supernatant | 145 | 197 | 168 | | | 52.3 | 58.2 | 45.8 | | | | | | | | |
| | | Solids | | | | 0.82 | 65.9 | | | | 0.24 | 50 | | | | | | |
| 12 | 13-May-04 | Supernatant | 122 | 161 | 133 | | | 39.6 | 38.1 | 29.3 | | | 140 | 179 | 151 | | | |
| | | Solids | | | | 1.43 | 75 | | | | ND | ND | | | | 2.71 | 76.2 | |
| 12 | 15-May-04 | Supernatant | 205 | 185 | 158 | | | 70.8 | 67.8 | 54 | | | 91.2 | 137 | 120 | | | |
| | | Solids | | | | 1.46 | 70 | | | | 1.59 | 75 | | | | 2.64 | 76.7 | |
| 13 | 17-May-04 | Supernatant | 185 | 182 | 148 | | | | | | | | 123 | 204 | 177 | | | |
| | | Solids | | | | 0.97 | 72.1 | | | | | | | | | 2.61 | 78.6 | |
| 14 | 23-May-04 | Supernatant | 189 | 308 | 257 | | | | | | | | 109 | 132 | 114 | | | |
| | | Solids | | | | 0.59 | 69 | | | | | | | | | 2.47 | 76.9 | |
| 14 | 27-May-04 | Supernatant | | | | | | | | | | | 120 | 29.9 | 26.3 | | | |
| | | Solids | | | | | | | | | | | | | | 2.55 | 73.2 | |
| Week 4 Average | | | 155 | 232 | 184 | 1.68 | 72 | 92 | 106 | 82 | 0.89 | 57 | | | | | | |
| Week 4 Min | | | 154 | 216 | 172 | 1.53 | 69 | 86 | 90 | 65 | 0.89 | 57 | | | | | | |
| Week 4 Max | | | 155 | 247 | 195 | 1.82 | 76 | 98 | 122 | 98 | 0.89 | 57 | | | | | | |
| Week 5 & 6 Average | | | 137 | 202 | 160 | 1.61 | 72 | 96 | 90 | 67 | 0.99 | 74 | 77.2 | 132 | 107 | 1.60 | 72 | |
| Week 5&6 Min | | | 109 | 165 | 124 | 0.59 | 68 | 84 | 60 | 49 | 0.13 | 73 | 49.8 | 106 | 86 | 0.51 | 64 | |
| Week 5&6 Max | | | 177 | 233 | 186 | 2.22 | 77 | 127 | 108 | 80 | 1.44 | 75 | 90.8 | 159 | 129 | 2.34 | 77 | |
| Week 7 & 8 Average | | | 158 | 203 | 163 | 1.79 | 72 | 86 | 88 | 65 | 1.43 | 74 | 84.8 | 147 | 121 | 1.99 | 75 | |
| Week 7&8 Min | | | 109 | 186 | 143 | 1.29 | 68 | 84 | 60 | 49 | 1.41 | 73 | 49.8 | 106 | 86 | 1.25 | 73 | |
| Week 7&8 Max | | | 181 | 233 | 185 | 2.22 | 77 | 88 | 108 | 80 | 1.44 | 75 | 103.0 | 182 | 148 | 2.34 | 77 | |
| Week 7-14 Average | | | 156 | 195 | 160 | 1.24 | 70 | 63 | 61 | 47 | 1.08 | 55 | 124 | 176 | 148 | 2.18 | 76 | |
| Week 7- 14 Min | | | 111 | 60 | 46 | 0.40 | 54 | 40 | 34 | 26 | 0.16 | 25 | 91 | 132 | 114 | 1.14 | 71 | |
| Week 7-14 Max | | | 205 | 308 | 257 | 1.80 | 80 | 88 | 99 | 66 | 2.24 | 75 | 185 | 227 | 189 | 2.76 | 80 | |

WEEK 1

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 2/23/2004 | 7:00 | 20.0 | 0.15 | 6.89 | 34.0 |
| | 14:00 | 22.2 | 1.40 | 7.06 | 18.6 |
| 2/24/2004 | 7:00 | 21.0 | 0.07 | 6.87 | 29.1 |
| | 14:15 | 22.5 | 0.10 | 7.06 | 40.0 |
| | 22:30 | 20.2 | 0.30 | 6.95 | 41.1 |
| 2/25/2004 | 6:40 | 21.1 | 0.07 | 6.9 | 43.6 |
| | 11:20 | 21.2 | 0.10 | 6.88 | 39.2 |
| | 23:30 | 20.3 | 0.20 | 6.97 | 42.3 |
| 2/26/2004 | 7:30 | 20.8 | 0.10 | 6.98 | 47.8 |
| | 13:16 | 23.5 | 0.10 | 7.02 | 34.7 |
| | 23:30 | 20.2 | 0.30 | 6.97 | 41.3 |
| 2/27/2004 | 6:55 | 21.0 | 0.09 | 6.97 | 38.3 |
| | 12:20 | 21.3 | 0.08 | 7.13 | 17.8 |
| | 23:30 | 19.9 | 0.11 | 6.98 | 41.3 |
| 2/28/2004 | 7:00 | 22.7 | 0.30 | 6.97 | 41.4 |
| | 14:00 | 21.4 | 0.60 | 7.13 | 45.5 |
| 2/29/2004 | 7:15 | 22.2 | 0.15 | 6.94 | 41.5 |
| | 14:11 | 22.4 | 0.13 | 7.04 | 35.4 |
| | 22:30 | 18.5 | 0.10 | 6.9 | 49.9 |
| | 23:00 | 20.7 | 0.40 | 6.9 | 49.8 |
| Min | | 18.5 | 0.1 | 6.9 | 17.8 |
| Max | | 23.5 | 1.4 | 7.1 | 49.9 |
| Avg | | 21.2 | 0.2 | 7.0 | 38.9 |

WEEK 2

| 13Inf | | Portable Meter Readings | | | |
|----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/1/2004 | 6:30 | 21.0 | 0.08 | 6.92 | 37.9 |
| | 12:56 | 25.0 | 0.10 | 7.18 | 24.8 |
| | 23:00 | 25.0 | 0.30 | 7.00 | 53.1 |
| 3/2/2004 | 6:45 | 21.3 | 0.06 | 6.94 | 36.9 |
| | 11:32 | 21.4 | 0.10 | 7.02 | 27.5 |
| | 22:00 | 20.4 | 0.20 | 7.04 | 40.4 |
| 3/3/2004 | 6:50 | 21.3 | 0.06 | 6.99 | 45.2 |
| | 13:12 | 23.6 | 0.20 | 7.02 | 46.6 |
| | 22:30 | 20.5 | 0.13 | 6.99 | 47.0 |
| 3/4/2004 | 6:45 | 21.6 | 0.06 | 7.00 | 51.7 |
| | 13:12 | 22.7 | 0.10 | 7.27 | 32.9 |
| | 23:00 | 21.5 | 0.11 | 6.96 | 48.5 |
| 3/5/2004 | 6:55 | 21.5 | 0.10 | 7.10 | 49.5 |
| | 13:06 | 22.9 | 0.10 | 7.07 | 54.1 |
| | 23:00 | 21.6 | 0.11 | 7.02 | 50.8 |
| 3/6/2004 | 7:45 | 21.5 | 0.20 | 6.89 | 40.9 |
| | 13:00 | 23.1 | 0.08 | 6.87 | 34.5 |
| | 22:00 | 21.9 | 0.10 | 6.84 | 47.2 |
| 3/7/2004 | 7:40 | 21.5 | 0.26 | 6.83 | 53.3 |
| | 22:30 | 21.6 | 0.15 | 6.86 | 51.1 |
| Min | | 20.4 | 0.1 | 6.8 | 24.8 |
| Max | | 25.0 | 0.3 | 7.3 | 54.1 |
| Avg | | 22.0 | 0.1 | 7.0 | 43.7 |

WEEK 3

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/8/2004 | 6:45 | 22.4 | 0.08 | 6.85 | 67.6 |
| | 12:46 | 24.5 | 0.60 | 6.83 | 37.8 |
| | 21:30 | 22.5 | 0.17 | 6.98 | 48.5 |
| 3/9/2004 | 6:35 | 22.6 | 0.05 | 6.99 | 55.8 |
| | 13:24 | 23.9 | 0.20 | 7.17 | 35.6 |
| | 23:00 | 22.0 | 0.20 | 6.82 | 62.7 |
| 3/10/2004 | 6:55 | 22.7 | 0.04 | 6.90 | 61.9 |
| | 13:15 | 22.7 | 0.70 | 7.02 | 48.7 |
| | 22:00 | 22.5 | 0.16 | 6.90 | 43.3 |
| 3/11/2004 | 6:45 | 22.6 | 0.06 | 6.89 | 48.2 |
| | 13:52 | 22.3 | 0.10 | 7.01 | 33.6 |
| | 22:00 | 22.3 | 0.12 | 6.92 | 46.3 |
| 3/12/2004 | 7:00 | 22.5 | 0.07 | 6.92 | 71.7 |
| | 11:45 | 22.0 | 0.20 | 7.02 | 22.9 |
| | 22:00 | 22.3 | 0.12 | 7.02 | 46.7 |
| 3/13/2004 | 7:30 | 21.8 | 0.27 | 6.77 | 31.4 |
| | 14:30 | 21.5 | 0.21 | 6.89 | 46.5 |
| | 23:00 | 22.1 | 0.20 | 6.79 | 58.0 |
| 3/14/2004 | 6:55 | 22.0 | 0.28 | 6.87 | 43.6 |
| | 13:10 | 22.6 | 0.23 | 6.83 | 16.8 |
| | 22:00 | 22.0 | 0.40 | 6.88 | 46.3 |
| Min | | 21.5 | 0.0 | 6.8 | 16.8 |
| Max | | 24.5 | 0.7 | 7.2 | 71.7 |
| Avg | | 22.5 | 0.2 | 6.9 | 46.4 |

WEEK 4

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/15/2004 | 6:45 | 22.2 | 0.12 | 6.87 | 47.9 |
| | 12:56 | 22.8 | 0.20 | 6.97 | 39.3 |
| | 23:30 | 22.3 | 0.20 | 6.88 | 5.3 |
| 3/16/2004 | 6:55 | 22.5 | 0.08 | 6.91 | 46.6 |
| | 12:54 | 22.6 | 0.10 | 6.94 | 41.0 |
| | 23:59 | 22.0 | 0.20 | 6.80 | 52.1 |
| 3/17/2004 | 6:45 | 22.7 | 0.07 | 6.85 | 55.0 |
| | 12:58 | 21.8 | 0.20 | 6.94 | 42.9 |
| | 22:00 | 22.5 | 0.09 | 6.90 | 47.9 |
| 3/18/2004 | 6:55 | 22.9 | 0.06 | 6.85 | 50.7 |
| | 13:00 | 21.9 | 0.10 | 6.85 | 45.1 |
| | 22:00 | 22.4 | 0.12 | 6.83 | 51.1 |
| 3/19/2004 | 6:45 | 22.6 | 0.08 | 6.86 | 57.5 |
| | 13:00 | | 0.10 | 6.87 | 41.1 |
| | 22:00 | 21.5 | 0.12 | 6.89 | 54.8 |
| 3/20/2004 | 7:30 | 21.7 | 0.40 | 6.94 | 42.3 |
| | 13:00 | 23.0 | 0.21 | 6.86 | 49.0 |
| | 23:00 | 25.0 | 0.10 | 6.80 | 4.9 |
| 3/21/2004 | 7:15 | 22.6 | 0.18 | 6.75 | 38.9 |
| | 9:30 | 22.7 | 0.19 | 6.51 | 40.6 |
| | 23:00 | | 0.10 | 6.79 | 53.5 |
| Min | | 21.5 | 0.1 | 6.5 | 4.9 |
| Max | | 25.0 | 0.4 | 7.0 | 57.5 |
| Avg | | 22.5 | 0.1 | 6.9 | 43.2 |

WEEK 5

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/22/2004 | 6:45 | 23.1 | 0.05 | 6.82 | 63.7 |
| | 13:03 | | 1.20 | 6.98 | 40.3 |
| | 23:00 | | 0.30 | 6.90 | 46.4 |
| 3/23/2004 | 6:55 | 23.1 | 0.03 | 6.89 | 43.6 |
| | 12:58 | | 0.10 | 6.85 | 38.6 |
| 3/24/2004 | 6:55 | 23.3 | 0.05 | 6.88 | 50.8 |
| | 12:47 | | 0.09 | 6.96 | 37.4 |
| | 0:00 | 22.5 | 0.12 | 6.83 | 39.8 |
| 3/25/2004 | 6:50 | 23.0 | 0.09 | 6.86 | 54.5 |
| | 13:00 | 23.6 | 0.06 | 6.93 | 44.5 |
| | 23:00 | 22.7 | 0.10 | 6.85 | 44.2 |
| 3/26/2004 | 6:50 | 23.2 | 0.04 | 6.88 | 46.7 |
| | 12:50 | 25.0 | 0.10 | 6.83 | 31.8 |
| | 22:00 | 23.1 | 0.09 | 6.93 | 43.4 |
| 3/27/2003 | 7:35 | 23.1 | 0.19 | 6.67 | 35.4 |
| | 9:50 | 25.4 | 0.18 | 6.81 | 31.3 |
| | 14:15 | 24.0 | 0.19 | 6.90 | 46.3 |
| | 23:00 | 23.0 | 0.10 | 6.92 | 54.7 |
| 3/28/2004 | 7:30 | 23.3 | 0.20 | 6.79 | 32.1 |
| | 13:10 | 24.7 | 0.26 | 6.94 | 36.8 |
| | | | | | |
| | Min | 22.5 | 0.0 | 6.7 | 31.3 |
| | Max | 25.4 | 1.2 | 7.1 | 75.2 |
| | Avg | 23.5 | 0.2 | 6.9 | 44.6 |

WEEK 6

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/29/2004 | 6:30 | 25.0 | 0.09 | 6.79 | 51.0 |
| | 12:45 | 25.1 | 0.10 | 6.84 | 45.7 |
| | 1:00 | 22.7 | 0.20 | 6.93 | 60.0 |
| 3/30/2004 | 6:48 | 23.0 | 0.11 | 7.18 | 40.4 |
| | 12:45 | 23.3 | 0.20 | 7.04 | 39.8 |
| | 23:30 | 23.0 | 0.10 | 6.55 | 51.6 |
| | 0:20 | 22.6 | 0.10 | 6.94 | 68.3 |
| 3/31/2004 | 7:00 | 23.4 | 0.17 | 6.58 | 37.2 |
| | 23:30 | 23.3 | 0.17 | 6.57 | 49.9 |
| 4/1/2004 | 6:50 | 23.6 | 0.06 | 6.94 | 39.9 |
| | 13:00 | 23.9 | 0.50 | 7.32 | 49.0 |
| | 22:00 | 23.3 | 0.06 | 7.12 | 59.8 |
| 4/2/2004 | 6:50 | 23.2 | 0.04 | 7.08 | 53.1 |
| | 13:00 | 23.7 | 0.10 | 7.17 | 37.2 |
| 4/3/2004 | 7:00 | 22.5 | 0.05 | 7.00 | 43.6 |
| | 14:00 | 23.9 | 0.34 | 7.05 | 42.8 |
| | 22:00 | 23.2 | 0.08 | 7.04 | 57.0 |
| 4/4/2004 | 8:00 | 21.8 | 0.14 | 6.97 | 46.8 |
| | 10:45 | 22.8 | 0.20 | 7.03 | 40.1 |
| | 15:00 | 23.0 | 0.20 | 7.11 | 48.5 |
| | 23:00 | 23.9 | 0.10 | 7.14 | 75.2 |
| | Min | 21.8 | 0.0 | 6.6 | 37.2 |
| | Max | 25.1 | 0.5 | 7.3 | 75.2 |
| | Avg | 23.3 | 0.1 | 7.0 | 49.4 |

WEEK 7

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/5/2004 | 6:35 | 23.7 | 0.05 | 7.07 | |
| | 12:55 | 23.4 | 0.20 | 7.09 | 47.7 |
| | 22:30 | 22.8 | 0.10 | 7.28 | 63.0 |
| 4/6/2004 | 6:45 | 23.6 | 0.05 | 7.06 | 73.1 |
| | 13:10 | 24.6 | 0.10 | 6.93 | 36.3 |
| | 22:30 | 23.1 | 0.10 | 7.18 | 62.8 |
| 4/7/2004 | 6:50 | 23.9 | 0.04 | 7.05 | 70.8 |
| | 12:35 | 24.3 | 0.07 | 7.13 | 39.8 |
| | 22:00 | 23.6 | 0.06 | 7.15 | 54.0 |
| 4/8/2004 | 6:45 | 23.6 | 0.06 | 7.04 | 72.0 |
| | 12:45 | 24.1 | 0.10 | 7.09 | 41.9 |
| | 22:00 | 22.9 | 0.13 | 6.72 | 53.4 |
| 4/9/2004 | 6:50 | 23.9 | 0.04 | 7.05 | 56.8 |
| | 13:25 | 25.0 | 0.06 | 7.01 | 38.4 |
| | 22:00 | 23.7 | 0.06 | 7.18 | 59.3 |
| 4/10/2004 | 7:15 | 23.8 | 0.14 | 6.92 | 42.0 |
| | 15:40 | 24.1 | 0.50 | 7.05 | 44.5 |
| | 23:30 | 21.3 | 0.20 | 7.00 | 55.8 |
| 4/11/2004 | 7:30 | 23.6 | 0.13 | 6.96 | 46.6 |
| | 13:32 | 24.8 | 0.12 | 7.10 | 40.1 |
| | 23:00 | 21.7 | 0.10 | 6.87 | 48.6 |
| Min | | 21.3 | 0.0 | 6.7 | 36.3 |
| Max | | 25.0 | 0.5 | 7.3 | 73.1 |
| Avg | | 23.6 | 0.1 | 7.0 | 52.3 |

WEEK 8

| 13Inf | | Portable Meter Readings | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/12/2004 | 7:00 | 24.0 | 0.11 | 6.89 | 50.5 |
| | 13:00 | 25.4 | 0.10 | 6.88 | 42.7 |
| | 23:30 | 19.6 | 0.30 | 6.00 | 44.9 |
| 4/13/2004 | 6:45 | 22.7 | 0.70 | 7.09 | 61.6 |
| | 13:00 | 25.1 | 0.10 | 7.00 | 53.5 |
| | 23:30 | 21.7 | 0.30 | 6.90 | 57.0 |
| 4/14/2004 | 7:15 | 23.9 | 0.08 | 7.18 | 64.5 |
| | 12:40 | 25.5 | 0.06 | 7.02 | 52.3 |
| | 22:00 | 23.3 | 0.12 | 7.02 | 57.5 |
| 4/15/2004 | | 24.0 | 0.03 | 6.93 | 80.9 |
| | 13:00 | 25.4 | 0.20 | 6.92 | 50.7 |
| | 22:30 | 23.7 | 0.18 | 7.21 | 77.8 |
| 4/16/2004 | 6:50 | 23.6 | 0.06 | 6.88 | 75.3 |
| | 13:00 | 24.5 | 0.10 | 6.96 | 66.5 |
| | 22:00 | 23.7 | 0.09 | 6.91 | 52.3 |
| 4/17/2004 | 7:30 | 24.3 | 0.09 | 6.95 | 50.1 |
| | 13:00 | 22.6 | 0.21 | 6.99 | 45.3 |
| | 23:50 | 22.5 | 0.20 | 6.94 | 101.0 |
| 4/18/2004 | 7:05 | 20.5 | 0.10 | 6.98 | 87.5 |
| | 12:35 | 23.8 | 0.08 | 6.86 | 93.1 |
| Min | | 19.6 | 0.0 | 6.0 | 42.7 |
| Max | | 25.5 | 0.7 | 7.2 | 101.0 |
| Avg | | 23.5 | 0.2 | 6.9 | 63.3 |

WEEK 2

| Instrument Readings-BIOSTYR | | | | | | | |
|-----------------------------|-------|-------------------------|---------------------|--------------------|-------------|----------------------|----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) |
| 3/6/2004 | 7:45 | 3 | 6 | 4.8 | 7.2 | 215.9 | 16.9 |
| | 13:00 | 3 | 6 | 5.3 | 7.2 | 215.8 | 16.8 |

WEEK 5

| Instrument Readings-BIOSTYR | | | | | | | | Portable Meter Readings-13BSEff | | | |
|-----------------------------|-------|-------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/22/2004 | 6:50 | 4.0 | 5.0 | 6.0 | 6.9 | 255.5 | 56.4 | 22.5 | 5.4 | 6.9 | 12.1 |
| | 13:03 | 4.0 | 9.1 | 5.9 | 7.0 | 219.2 | 20.1 | | 5.6 | 7 | 157.0 |
| | 23:00 | | | | | | | | | | |
| 3/23/2004 | 6:45 | 4.0 | 9.0 | 4.8 | 7.0 | 229.4 | 30.3 | 21.7 | 5.0 | 6.96 | 26.6 |
| | 13:20 | 4.0 | 9.0 | 6.0 | 7.0 | 215.9 | 17.3 | | 6.4 | 7.07 | 42.7 |
| 3/24/2004 | 6:45 | 3.0 | 9.0 | 5.0 | 6.9 | 243.3 | 43.9 | 22.7 | 5.8 | 6.89 | 9.5 |
| | 12:47 | 3.0 | 8.9 | 4.9 | 7.0 | 218.2 | 18.9 | | 5.4 | 6.93 | 94.6 |
| | 0:00 | 3.0 | 9.0 | 4.6 | 6.8 | 248.0 | 50.0 | 22.1 | 5.0 | 6.92 | 9.7 |
| 3/25/2004 | 6:45 | 3.0 | 9.0 | 4.4 | 6.8 | 280.5 | 82.0 | 22.2 | 5.5 | 6.88 | 10.1 |
| | 13:03 | 4.0 | 9.0 | 5.1 | 7.0 | 214.1 | 13.0 | 23.6 | 6.5 | 7.01 | 141.0 |
| | 23:00 | 4.0 | 9.0 | 5.7 | 6.8 | 239.0 | 39.9 | 21.6 | 6.5 | 6.99 | 5.5 |
| 3/26/2004 | 6:45 | 4.0 | 9.0 | 5.6 | 6.8 | 267.0 | 68.0 | 22.2 | 6.4 | 6.95 | 5.4 |
| | 12:50 | 4.0 | 9.3 | 5.8 | 7.0 | 224.3 | 25.5 | 25.0 | 6.8 | 6.97 | 10.4 |
| | 22:00 | 4.1 | 8.9 | 5.9 | 6.9 | 248.0 | 50.0 | 22.5 | 6.5 | 7.00 | 6.4 |
| 3/27/2003 | 7:22 | 4.0 | 9.0 | | | | | 21.9 | 6.3 | 7.07 | 6.2 |
| | 10:05 | 4.0 | 9.0 | 5.9 | 6.9 | 221.2 | 22.4 | 24.9 | 6.2 | 7.03 | 30.0 |
| | 14:00 | 4.0 | 9.0 | 5.9 | 7.0 | | | 23.7 | 6.2 | 7.50 | 6.1 |
| | 23:00 | | | | | | | | | | |
| 3/28/2004 | 7:50 | 4.0 | 9.0 | 5.5 | 6.8 | 278.4 | 79.4 | 22.8 | 6.2 | | 5.6 |
| | 13:10 | 4.0 | 9.0 | 5.4 | 6.9 | 227.9 | 28.6 | 25.1 | 6.3 | 7.04 | 7.5 |
| | | | | | | | | | | | |
| | Min | 3.0 | 5.0 | 4.4 | 6.8 | 214.1 | 13.0 | 21.6 | 5.0 | 6.9 | 5.4 |
| | Max | 4.1 | 9.3 | 6.0 | 7.0 | 280.5 | 82.0 | 25.1 | 6.8 | 7.5 | 157.0 |
| | Avg | 3.8 | 8.8 | 5.4 | 6.9 | 239.4 | 40.4 | 23.0 | 6.0 | 7.0 | 32.6 |

WEEK 6

| Instrument Readings-BIOSTYR | | | | | | | | Portable Meter Readings-13BSEff | | | |
|-----------------------------|-------|-------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/29/2004 | 6:40 | 4.0 | 9.0 | 4.4 | 6.8 | 278.2 | 79.7 | 25.0 | 6.7 | 6.8 | 6.94 |
| | 12:45 | 4.0 | 9.0 | 5.9 | 6.9 | 220.9 | 21.8 | 25.9 | 6.0 | 6.88 | 28.2 |
| 3/30/2004 | 6:48 | 4.1 | 9.0 | 6.0 | 6.9 | 274.0 | 74.6 | 22.9 | 6.0 | 7.05 | 6.80 |
| | 12:45 | 4.0 | 10.8 | 6.2 | 6.9 | 231.8 | 33.1 | 23.7 | 6.2 | 7.16 | 8.70 |
| 3/31/2004 | 7:00 | 4.0 | 9.0 | 5.7 | 6.8 | 236.8 | 37.4 | 22.7 | 5.8 | 6.68 | 14.9 |
| | 23:30 | 4.0 | 8.0 | 6.3 | 7.0 | 223.5 | 24.7 | 22.1 | 7.4 | 6.62 | 17.7 |
| 4/1/2004 | 6:55 | 4.0 | 8.0 | 6.4 | 6.9 | 255.4 | 56.4 | 22.6 | 7.0 | 7.22 | 6.91 |
| | 13:00 | | | | | | | 23.8 | 5.5 | 7.35 | 10.7 |
| | 22:00 | 4.0 | 8.4 | 6.2 | 7.0 | 217.4 | 18.6 | 21.8 | 6.9 | 7.12 | 14.3 |
| 4/2/2004 | 6:45 | 4.0 | 8.0 | 6.2 | 6.9 | 250.0 | 50.7 | 21.5 | 7.1 | 7.24 | 7.5 |
| | 13:00 | 4.0 | 10.8 | 5.8 | 7.0 | 218.7 | 18.9 | 24.3 | 6.3 | 7.34 | 13.3 |
| 4/3/2004 | 7:15 | 4.0 | 9.0 | 5.3 | 6.9 | 222.4 | 24.5 | 22.5 | 4.1 | 6.93 | 42.7 |
| | 14:10 | 4.0 | 9.0 | 5.2 | 7.0 | 213.8 | 14.8 | 24.3 | 6.1 | 7.22 | 16.9 |
| | 22:00 | 4.0 | 9.0 | 6.0 | 6.9 | 241.4 | 42.5 | 21.9 | 6.8 | 7.23 | 5.9 |
| 4/4/2004 | 8:10 | 4.1 | 8.9 | 4.9 | 6.8 | 283.2 | 84.1 | 22.5 | 6.7 | 7.19 | 7.9 |
| | 10:50 | 2.0 | 7.9 | 4.0 | 6.9 | 214.5 | 15.4 | 22.4 | 6.2 | 7.27 | 36.0 |
| | 15:00 | 4.0 | 9.0 | 5.0 | 6.8 | 255.8 | 56.2 | 22.1 | 7.2 | 7.21 | 4.1 |
| | 23:00 | 4.0 | 7.1 | 3.3 | 6.8 | 236.5 | 37.9 | 22.6 | 6.0 | 7.16 | 6.2 |
| | Min | 2.0 | 7.1 | 3.3 | 6.8 | 213.8 | 14.8 | 21.5 | 4.1 | 6.6 | 4.1 |
| | Max | 4.1 | 10.8 | 6.4 | 7.0 | 283.2 | 84.1 | 25.9 | 7.4 | 7.4 | 42.7 |
| | Avg | 3.9 | 8.8 | 5.5 | 6.9 | 239.7 | 40.7 | 23.0 | 6.3 | 7.1 | 14.2 |

WEEK 7

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/5/2004 | 6:50 | 2.0 | 7.0 | 3.0 | 6.7 | 258.0 | 59.4 | 22.6 | 5.6 | 7.1 | 9.6 |
| | 12:55 | 2.0 | 7.0 | 3.1 | 6.7 | 217.0 | 18.1 | 23.9 | 5.3 | 7.14 | 27.6 |
| | 22:30 | | 2.9 | 5.5 | 7.0 | 208.5 | 8.2 | 21.2 | 7.3 | 7.33 | 9.1 |
| 4/6/2004 | 6:40 | 3.0 | 2.9 | 5.8 | 6.9 | 211.1 | 11.5 | 21.3 | 7.1 | 7.34 | 13.1 |
| | 13:10 | 3.0 | 7.7 | 4.8 | 6.9 | 214.5 | 14.7 | 24.2 | 6.1 | 6.87 | 14.7 |
| | 22:30 | | 7.0 | 5.0 | 6.9 | 226.9 | 26.4 | 21.8 | 6.7 | 7.19 | 9.4 |
| 4/7/2004 | 6:40 | 3.0 | 6.5 | 5.0 | 6.8 | 249.0 | 49.0 | 22.7 | 6.3 | 7.15 | 6.2 |
| | 12:55 | 1.0 | 6.2 | 1.9 | 6.7 | 221.5 | 21.4 | 23.4 | 3.5 | 7.17 | 7.6 |
| | 22:00 | 3.0 | 7.2 | 4.3 | 6.3 | 220.1 | 20.2 | 22.8 | 5.6 | 7.22 | 7.3 |
| 4/8/2004 | 6:40 | 3.0 | 7.1 | 4.7 | 6.2 | 240.0 | 40.0 | 22.8 | 6.0 | 7.12 | 4.8 |
| | 12:45 | 3.0 | 7.5 | 4.9 | 6.8 | 218.5 | 18.4 | 23.7 | 5.8 | 7.21 | 22.7 |
| | 22:00 | 5.0 | 7.5 | 6.3 | 7.0 | 231.8 | 24.4 | 22.4 | 7.1 | 6.91 | 10.7 |
| 4/9/2004 | 6:45 | 5.0 | 7.4 | 6.2 | 6.9 | 267.0 | 60.0 | 23.1 | 6.8 | 6.16 | 5.3 |
| | 13:25 | 5.0 | 7.0 | 6.0 | 7.0 | 215.8 | 11.7 | 24.5 | 6.7 | 7.33 | 8.8 |
| | 23:00 | 1.7 | 7.6 | 5.0 | 6.7 | 232.1 | 25.1 | 22.5 | 4.5 | 7.02 | 10.0 |
| 4/10/2004 | 7:30 | 1.8 | 7.7 | 5.0 | 6.7 | 263.4 | 56.8 | 22.9 | 4.4 | 6.94 | 54.6 |
| | 16:35 | 1.3 | 7.5 | 4.2 | | | | 24.0 | 4.4 | 7.27 | 5.1 |
| | 23:30 | 3.2 | 7.4 | 6.4 | 6.7 | 239.3 | 32.1 | 21.2 | 4.4 | 7.00 | 6.4 |
| 4/11/2004 | 7:35 | 3.2 | 7.5 | 6.5 | 6.7 | 276.3 | 69.3 | 22.8 | 6.5 | 7.20 | 4.5 |
| | 13:30 | 3.2 | 7.6 | 6.3 | 6.8 | 226.1 | 18.5 | 24.3 | 6.2 | 7.28 | 5.0 |
| | 23:00 | 7.5 | | 6.2 | 6.7 | 251.7 | 3.2 | 23.3 | 5.5 | 6.90 | 6.7 |
| Min | | 1.0 | 2.9 | 1.9 | 6.2 | 208.5 | 3.2 | 21.2 | 3.5 | 6.2 | 4.5 |
| Max | | 7.5 | 7.7 | 6.5 | 7.0 | 276.3 | 69.3 | 24.5 | 7.3 | 7.3 | 54.6 |
| Avg | | 3.2 | 6.8 | 5.1 | 6.8 | 234.4 | 29.4 | 22.9 | 5.8 | 7.1 | 11.9 |

WEEK 8

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/12/2004 | 7:00 | 3.2 | 7.6 | 6.0 | 6.7 | 292.5 | 86.6 | 21.0 | 6.3 | 7.0 | 5.5 |
| | 13:00 | 3.2 | 7.6 | 5.9 | 6.8 | 227.7 | 20.2 | 25.0 | 6.4 | 7 | 9.7 |
| | 23:30 | 3.2 | 7.6 | 6.2 | 6.9 | 252.4 | 44.6 | 21.5 | 7.3 | 6.90 | 6.7 |
| 4/13/2004 | 6:40 | 3.2 | 7.5 | 6.0 | 6.8 | 300.0 | 93.5 | 22.3 | 6.5 | 7.05 | 5.7 |
| | 13:00 | 3.2 | 7.4 | 5.9 | 6.8 | 223.3 | 16.0 | 24.1 | 6.4 | 7.11 | 13.5 |
| | 23:30 | 1.7 | 7.4 | 4.0 | 6.7 | 249.0 | 42.3 | 20.4 | 5.0 | 6.70 | 7.3 |
| 4/14/2004 | 7:10 | 1.9 | 7.5 | 4.0 | 6.6 | 283.0 | 75.8 | 23.0 | 5.1 | 7.10 | 5.5 |
| | 12:40 | 2.0 | 7.5 | 4.0 | 6.8 | 219.7 | 12.5 | 25.2 | 5.2 | 7.04 | 9.6 |
| | 22:00 | 2.1 | 7.5 | 4.0 | 6.7 | 238.6 | 31.3 | 22.0 | 5.6 | 7.00 | 5.9 |
| 4/15/2004 | | 2.2 | 7.4 | 4.0 | 6.7 | 271.0 | 64.0 | 22.5 | 5.6 | 6.95 | 4.6 |
| | 13:00 | 4.8 | 7.4 | 5.0 | 6.9 | 214.8 | 7.3 | 25.3 | 6.6 | 7.22 | 12.0 |
| | 22:30 | 4.8 | 7.5 | 5.0 | 6.8 | 234.8 | 6.8 | 22.3 | 7.5 | 7.22 | 6.9 |
| 4/16/2004 | 6:45 | 5.0 | 7.5 | 4.8 | 6.8 | 270.0 | 61.5 | 22.9 | 6.6 | 7.13 | 4.9 |
| | 13:00 | 1.5 | 7.6 | 1.2 | 6.7 | 223.2 | 15.0 | 24.5 | 3.9 | 6.95 | 12.0 |
| | 22:15 | 1.5 | 7.6 | 0.2 | 6.7 | 248.5 | 40.7 | 22.1 | 3.3 | 6.93 | 13.8 |
| 4/17/2004 | 7:30 | 1.5 | 7.5 | 0.2 | 6.8 | 222.6 | 14.9 | 22.1 | 3.0 | 7.08 | 46.3 |
| | 13:00 | 1.5 | 7.5 | 0.5 | 6.7 | 222.3 | 15.4 | 20.7 | 4.2 | 7.01 | 13.3 |
| | 23:50 | 1.5 | 7.5 | 0.3 | 6.7 | 241.6 | 35.0 | 20.3 | 4.2 | 6.87 | 11.2 |
| 4/18/2004 | 7:16 | 1.5 | 7.5 | 0.1 | 6.7 | 268.7 | 61.3 | 22.1 | 3.3 | 6.94 | 13.9 |
| | 12:40 | 1.5 | 7.6 | 0.1 | 6.8 | 225.4 | 18.3 | 24.0 | 3.1 | 6.94 | 11.1 |
| Min | | 1.5 | 7.4 | 0.1 | 6.6 | 214.8 | 6.8 | 20.3 | 3.0 | 6.7 | 4.6 |
| Max | | 5.0 | 7.6 | 6.2 | 6.9 | 300.0 | 93.5 | 25.3 | 7.5 | 7.2 | 46.3 |
| Avg | | 2.6 | 7.5 | 3.4 | 6.8 | 246.5 | 38.2 | 22.7 | 5.2 | 7.0 | 11.0 |

WEEK 1

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 2/23/2004 | 6:40 | 5.45 | 3.00 | 9.6 | 17.9 | 7.3 | 7.38 | 13.00 |
| | 14:20 | 6.06 | 7.97 | 8.0 | 21.1 | 7.5 | 7.41 | 24.40 |
| | 20:30 | 6.35 | 8.68 | 10.0 | 18.9 | 6.3 | 6.89 | 9.63 |
| 2/24/2004 | 7:00 | 5.94 | 8.50 | 10.8 | 20.4 | 8.5 | 7.35 | 7.96 |
| | 14:16 | 6.01 | 8.67 | 8.0 | 22.2 | 8.1 | 6.84 | 5.71 |
| | 22:30 | 6.23 | 8.78 | 10.0 | 19.9 | 6.8 | 7.43 | 7.04 |
| 2/25/2004 | 6:45 | 5.84 | 8.90 | 11.3 | 19.8 | 8.8 | 7.44 | 6.27 |
| | 11:31 | 5.66 | 8.75 | 11.0 | 20.8 | 8.3 | 7.44 | 5.99 |
| | 23:30 | 5.45 | 6.77 | 9.0 | 19.5 | 9.0 | 7.44 | 9.02 |
| 2/26/2004 | 7:15 | 5.70 | 9.00 | 9.7 | 18.3 | 9.0 | 7.53 | 7.68 |
| | 13:17 | 6.00 | 8.61 | 9.0 | 22.7 | 7.3 | 7.18 | 14.00 |
| | 23:30 | 6.00 | 9.03 | 10.0 | 19.5 | 8.2 | 7.06 | 4.44 |
| 2/27/2004 | 6:50 | 6.00 | 8.77 | 10.9 | 20.0 | 8.0 | 7.04 | 2.76 |
| | 12:20 | 6.00 | 8.40 | 11.0 | 21.1 | 7.0 | 7.14 | 2.29 |
| | 22:30 | 8.00 | 8.79 | 10.0 | 19.7 | 8.1 | 7.15 | 14.00 |
| 2/28/2004 | 7:00 | 7.00 | 8.80 | 10.0 | 22.2 | 8.0 | 7.21 | 7.48 |
| | 14:00 | 7.00 | 8.73 | 7.5 | 22.0 | 4.8 | 7.12 | 13.40 |
| 2/29/2004 | 7:15 | 6.00 | 9.23 | 11.0 | 21.1 | 7.0 | 7.11 | 14.20 |
| | 15:00 | 6.00 | 9.25 | 8.0 | 22.5 | 7.5 | 7.16 | 15.40 |
| | 22:30 | 6.00 | 8.69 | 8.0 | 18.1 | 7.7 | 7.10 | 15.40 |
| | 23:00 | 6.00 | 8.81 | 10.0 | 20.6 | 7.1 | 7.00 | 13.90 |
| Min | | 5.5 | 3.0 | 7.5 | 17.9 | 4.8 | 6.8 | 2.3 |
| Max | | 8.0 | 9.3 | 11.3 | 22.7 | 9.0 | 7.5 | 24.4 |
| Avg | | 6.1 | 8.4 | 9.7 | 20.4 | 7.6 | 7.2 | 10.2 |

WEEK 2

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/1/2004 | 6:30 | 3.50 | 7.72 | 11.2 | 19.9 | 6.6 | 6.98 | 9.28 |
| | 12:56 | 3.00 | 8.47 | 11.0 | 25.0 | 6.6 | 7.15 | 8.93 |
| | 23:00 | 10.00 | 8.52 | 8.0 | 25.0 | 4.3 | 7.00 | 11.30 |
| 3/2/2004 | 6:45 | 3.00 | 8.80 | 11.1 | 20.0 | 4.4 | 6.88 | 11.80 |
| | 11:32 | 3.00 | 8.59 | 11.0 | 21.5 | 6.4 | 7.14 | 6.85 |
| | 22:00 | 3.00 | 8.70 | 8.0 | 20.9 | 5.9 | 7.04 | 12.90 |
| 3/3/2004 | 6:40 | 3.00 | 8.70 | 11.5 | 20.0 | 4.3 | 6.90 | 10.90 |
| | 13:13 | 3.00 | 8.73 | 10.5 | 23.8 | 6.0 | 7.01 | 8.45 |
| | 22:30 | 2.08 | 8.73 | 10.0 | 20.6 | 6.2 | 7.06 | 12.30 |
| 3/4/2004 | 6:35 | 2.13 | 8.80 | 11.1 | 21.2 | 6.0 | 7.01 | 10.30 |
| | 13:13 | 2.18 | 8.84 | 10.5 | 22.3 | 5.5 | 7.08 | 7.08 |
| | 23:00 | 2.10 | 8.94 | 10.0 | 21.1 | 5.9 | 6.99 | 11.30 |
| 3/5/2004 | 6:50 | 2.11 | 8.80 | 11.4 | 21.1 | 6.4 | 7.13 | 5.09 |
| | 13:08 | 2.18 | 8.90 | 11.0 | 23.1 | 5.5 | 6.98 | 5.87 |
| | 23:00 | 2.15 | 9.18 | 10.5 | 21.4 | 5.7 | 6.96 | 11.30 |
| 3/6/2004 | 8:00 | 2.20 | 9.35 | 11.5 | 21.5 | 5.4 | 6.89 | 7.70 |
| | 13:15 | 2.08 | 8.80 | 11.0 | 22.7 | 5.9 | 6.88 | 11.10 |
| | 22:00 | 2.11 | 8.83 | 10.0 | 21.5 | 5.7 | 6.90 | 13.90 |
| 3/7/2004 | 7:40 | 2.15 | 8.76 | 11.5 | 21.3 | 5.2 | 6.24 | 9.89 |
| | 22:30 | 2.14 | 8.81 | 10.0 | 21.4 | 5.7 | 6.45 | 10.20 |
| Min | | 2.1 | 7.7 | 8.0 | 19.9 | 4.3 | 6.2 | 5.1 |
| Max | | 10.0 | 9.4 | 11.5 | 25.0 | 6.6 | 7.2 | 13.9 |
| Avg | | 2.9 | 8.7 | 10.5 | 21.8 | 5.7 | 6.9 | 9.8 |

8.79

WEEK 3

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/8/2004 | 6:45 | 2.00 | 8.00 | 9.1 | 22.6 | 5.2 | 6.91 | 9.97 |
| | 12:46 | 2.09 | 7.61 | 7.5 | 24.8 | 4.8 | 7.03 | 17.50 |
| | 21:30 | 2.09 | 7.74 | 9.5 | 22.7 | 5.5 | 6.96 | 11.40 |
| 3/9/2004 | 6:35 | 2.03 | 8.00 | 9.8 | 22.4 | 4.4 | 6.95 | 24.30 |
| | 13:24 | 2.12 | 8.93 | 8.5 | 24.0 | 5.2 | 7.16 | 9.86 |
| | 23:00 | 2.09 | 7.77 | 10.0 | 21.6 | 5.5 | 6.96 | 11.20 |
| 3/10/2004 | 6:55 | 2.07 | 8.03 | 10.8 | 22.1 | 5.3 | 6.91 | 8.49 |
| | 13:15 | 2.10 | 8.01 | 10.5 | 22.4 | 5.4 | 7.02 | 11.20 |
| | 22:00 | 2.09 | 7.69 | 10.0 | 22.3 | 5.2 | 7.00 | 9.80 |
| 3/11/2004 | 6:45 | 2.09 | 8.15 | 10.7 | 22.5 | 5.0 | 6.91 | 8.10 |
| | 13:50 | 2.08 | 8.49 | 10.5 | 22.5 | 5.3 | 6.94 | 7.44 |
| | 22:00 | 2.07 | 7.90 | 9.5 | 22.0 | 5.5 | 6.91 | 6.81 |
| 3/12/2004 | 6:50 | 2.07 | 7.80 | 10.8 | 22.3 | 5.0 | 6.80 | 6.94 |
| | 11:45 | 2.05 | 8.05 | 11.0 | 21.8 | 5.4 | 7.03 | 6.10 |
| | 22:00 | 2.06 | 7.71 | 9.5 | 22.0 | 5.7 | 7.10 | 8.31 |
| 3/13/2004 | 7:45 | 2.07 | 8.03 | 10.0 | 22.3 | 5.0 | 6.97 | 7.32 |
| | 14:30 | 2.16 | 8.35 | 10.0 | 21.3 | 5.2 | 6.95 | 6.70 |
| | 23:00 | 2.09 | 8.33 | 10.0 | 21.9 | 5.5 | 6.81 | 12.10 |
| 3/14/2004 | 6:59 | 2.05 | 7.68 | 10.0 | 21.7 | 5.3 | 6.96 | 6.88 |
| | 12:57 | 2.03 | 8.97 | 10.5 | 22.7 | 5.9 | 6.92 | 7.67 |
| | 22:00 | 2.07 | 7.95 | 10.0 | 21.6 | 5.9 | 6.89 | 8.07 |
| Min | | 2.0 | 7.6 | 7.5 | 21.3 | 4.4 | 6.8 | 6.1 |
| Max | | 2.2 | 9.0 | 11.0 | 24.8 | 5.9 | 7.2 | 24.3 |
| Avg | | 2.1 | 8.1 | 9.9 | 22.4 | 5.3 | 7.0 | 9.8 |

8.46

WEEK 4

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/15/2004 | 6:45 | 2:38 | 8.46 | 10.00 | 22.3 | 5.1 | 6.9 | 6.90 |
| | 12:58 | 2.08 | 8.10 | 8.5 | 22.9 | 5.7 | 6.97 | 40.00 |
| | 23:30 | 2.06 | 8.22 | 10.0 | 21.9 | 5.7 | 6.96 | 7.21 |
| 3/16/2004 | 6:50 | 2.07 | 8.10 | 10.2 | 22.2 | 5.0 | 7.00 | 14.60 |
| | 12:49 | 2.05 | 8.12 | 10.0 | 22.2 | 5.4 | 7.04 | 8.81 |
| | 23:59 | 2.04 | 7.91 | 10.0 | 21.4 | 7.6 | 6.80 | 8.00 |
| 3/17/2004 | 6:35 | 2.06 | 8.30 | 10.3 | 22.2 | 5.6 | 6.86 | 4.71 |
| | 13:00 | 2.02 | 7.95 | 10.0 | 21.6 | 5.8 | 7.01 | 4.95 |
| | 22:00 | 2.04 | 7.91 | 10.0 | 22.1 | 5.8 | 7.03 | 5.35 |
| 3/18/2004 | 6:45 | 2.05 | 7.97 | 10.8 | 22.2 | 5.7 | 6.90 | 5.07 |
| | 13:04 | 2.05 | 7.98 | 11.0 | 21.8 | 5.1 | 6.98 | 5.79 |
| | 22:00 | 1.69 | 7.88 | 10.0 | 21.9 | 5.5 | 6.91 | 5.41 |
| 3/19/2004 | 6:40 | 1.87 | 8.00 | 10.6 | 22.2 | 5.4 | 6.87 | 5.52 |
| | 13:05 | 1.85 | 7.64 | 11.0 | | 4.9 | 6.98 | 4.82 |
| | 22:00 | 1.87 | 7.93 | 10.0 | 21.0 | 5.7 | 6.63 | 9.43 |
| 3/20/2004 | 7:45 | 1.88 | 7.81 | 10.0 | 22.0 | 5.0 | 7.08 | 4.44 |
| | 13:00 | 1.83 | 7.78 | 10.0 | 22.9 | 5.0 | 7.04 | 6.68 |
| | 23:00 | 1.80 | 8.00 | 5.0 | 25.0 | 5.7 | 6.80 | 7.80 |
| 3/21/2004 | 7:25 | 1.85 | 8.13 | 10.5 | 22.2 | 5.1 | 6.93 | 11.10 |
| | 9:30 | 1.84 | 7.69 | 10.0 | 22.1 | 5.0 | 7.02 | 30.50 |
| | 23:00 | 1.80 | 8.57 | 5.0 | | 5.2 | 6.86 | 9.15 |
| Min | | 1.7 | 7.6 | 5.0 | 21.0 | 4.9 | 6.6 | 4.4 |
| Max | | 2.1 | 8.6 | 11.0 | 25.0 | 7.6 | 7.1 | 40.0 |
| Avg | | 1.9 | 8.0 | 9.7 | 22.2 | 5.5 | 6.9 | 9.8 |

system may have been backwashing. BW timer was affected when system went down. Anil reprogrammed the backwash timing on Sunday.

WEEK 5

| Date | Time | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|------|
| | | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | |
| 3/22/2004 | 6:35 | 1.84 | 7.17 | 10.5 | 22.3 | 5.3 | 6.8 | 6.89 | |
| | 13:17 | 1.80 | 8.46 | 8.5 | | 5.7 | 7.02 | 8.70 | |
| | 23:00 | 1.80 | 8.50 | 10.0 | | 5.0 | 6.80 | 7.30 | |
| 3/23/2004 | 6:35 | 1.80 | 7.13 | 10.0 | 22.2 | 4.6 | 6.95 | 15.20 | |
| | 13:04 | 1.78 | 8.86 | 10.0 | | 4.2 | 6.90 | 31.20 | |
| 3/24/2004 | 6:45 | 1.80 | 8.50 | 10.3 | 22.6 | 5.3 | 6.89 | 6.78 | |
| | 12:45 | 1.82 | 8.73 | 9.5 | | 5.1 | 7.01 | 19.80 | |
| | 0:00 | 1.78 | 7.88 | 10.0 | | 22.1 | 5.2 | 7.0 | 6.68 |
| 3/25/2004 | 6:45 | 1.80 | 7.35 | 10.5 | 22.4 | 4.9 | 6.9 | 6.78 | |
| | 13:05 | 1.87 | 7.42 | 10.0 | | 23.7 | 5.7 | 7.00 | 7.83 |
| | 23:00 | 1.75 | 8.75 | 10.0 | | 21.5 | 5.5 | 7.03 | 5.09 |
| 3/26/2004 | 6:40 | 1.76 | 7.50 | 10.8 | 22.3 | 5.5 | 6.96 | 5.55 | |
| | 12:50 | 1.82 | 7.61 | 11.0 | | 25.0 | 5.9 | 7.01 | 4.82 |
| | 22:00 | 1.81 | 7.31 | 10.0 | | 22.7 | 5.6 | 7.04 | 6.12 |
| 3/27/2004 | 7:35 | 1.84 | 6.83 | 10.5 | 21.9 | 5.5 | 6.67 | 4.18 | |
| | 9:52 | 1.80 | 7.19 | 10.5 | | 23.9 | 5.2 | 6.97 | 3.43 |
| | 14:15 | 1.82 | 8.50 | 7.5 | | 23.0 | 7.7 | 6.46 | 2.68 |
| | 23:00 | 1.81 | 6.55 | 10.0 | | 22.4 | 5.0 | 6.79 | 2.58 |
| 3/28/2004 | 7:40 | 1.87 | 8.65 | 11.0 | 22.9 | 5.2 | 6.92 | 4.36 | |
| | 13:00 | 1.82 | 7.51 | 10.0 | | 25.4 | 5.3 | 7.10 | 7.02 |
| Min | | 1.8 | 6.6 | 7.5 | 21.5 | 4.2 | 6.5 | 2.6 | |
| Max | | 1.9 | 8.9 | 11.0 | 25.4 | 7.7 | 7.1 | 31.2 | |
| Avg | | 1.8 | 7.8 | 10.0 | 22.9 | 5.4 | 6.9 | 8.1 | |

WEEK 6

| Date | Time | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|-------|
| | | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | |
| 3/29/2004 | 6:35 | 1.75 | 8.30 | 10.0 | 23.3 | 6.4 | 7.5 | 4.60 | |
| | 12:45 | 1.85 | 7.36 | 10.0 | | 25.6 | 5.0 | 6.95 | 4.70 |
| | 1:00 | 1.78 | 8.54 | 10.0 | | 20.8 | 5.7 | 7 | 4.36 |
| 3/30/2004 | 6:38 | 1.80 | 7.38 | 11.5 | 21.6 | 6.7 | 6.86 | 6.70 | |
| | 12:50 | 1.81 | 7.81 | 12.0 | | 24.1 | 4.8 | 7.18 | 4.80 |
| | 23:30 | 1.80 | 7.86 | 10.0 | | 22.1 | 5.9 | 6.63 | 6.40 |
| | 0:20 | 1.80 | 8.57 | 10.0 | | 21.9 | 5.6 | 7.03 | 5.59 |
| 3/31/2004 | 7:35 | 1.78 | 7.46 | 11.0 | 22.8 | 5.3 | 6.79 | 11.00 | |
| | 23:00 | 1.77 | 7.56 | 9.5 | | 22.4 | 5.0 | 6.35 | 8.43 |
| 4/1/2004 | 6:45 | 1.77 | 7.60 | 10.4 | 22.7 | 5.5 | 7.05 | 5.68 | |
| | 13:00 | 1.77 | 7.20 | 10.0 | | 23.8 | 5.3 | 7.2 | 9.24 |
| | 22:00 | 1.74 | 7.31 | 10.0 | | 22.2 | 5.2 | 7.2 | 9.43 |
| 4/2/2004 | 6:40 | 1.74 | 7.52 | 10.9 | 22.3 | 4.8 | 7.00 | 6.34 | |
| | 13:00 | 1.82 | 7.26 | 10.0 | | 24.3 | 4.8 | 7.35 | 7.68 |
| 4/3/2004 | 8:00 | 1.73 | 7.54 | 10.5 | 23.7 | 4.0 | 7.07 | 5.69 | |
| | 14:20 | 1.77 | 7.51 | 10.0 | | 24.4 | 4.7 | 6.91 | 6.65 |
| | 22:00 | 1.68 | 8.57 | 10.0 | | 22.2 | 4.9 | 7.16 | 7.63 |
| 4/4/2004 | 8:15 | 1.73 | 7.41 | 10.0 | 22.2 | 3.9 | 7.15 | 7.02 | |
| | 10:55 | 1.69 | 6.18 | 10.0 | | 21.7 | 8.6 | 7.20 | 30.70 |
| | 15:00 | 1.70 | 6.52 | 10.0 | | 22.2 | 4.3 | 6.95 | 6.64 |
| | 23:00 | 1.56 | 6.29 | 10.0 | | 22.3 | 4.6 | 7.13 | 6.40 |
| Min | | 1.6 | 6.2 | 9.5 | 20.8 | 3.9 | 6.4 | 4.4 | |
| Max | | 1.9 | 8.6 | 12.0 | 25.6 | 8.6 | 7.5 | 30.7 | |
| Avg | | 1.8 | 7.5 | 10.3 | 22.8 | 5.3 | 7.0 | 7.9 | |

WEEK 7

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/5/2004 | 6:45 | 1.57 | 6.25 | 10.5 | 22.9 | 4.5 | 7.1 | 6.58 |
| | 13:00 | 1.59 | 6.17 | 10.5 | 24.0 | 4.4 | 7.28 | 5.34 |
| | 22:30 | 1.57 | 5.82 | 10.0 | 20.3 | 8.6 | 6.96 | 6.09 |
| 4/6/2004 | 6:55 | 1.56 | 6.61 | 10.5 | 22.7 | 3.9 | 7.06 | 5.91 |
| | 13:10 | 1.61 | 6.68 | 10.5 | 23.8 | 6.0 | 6.90 | 4.66 |
| | 22:30 | 1.57 | 6.55 | 10.0 | 21.1 | 4.5 | 7.18 | 5.69 |
| 4/7/2004 | 6:35 | 1.57 | 6.20 | 10.4 | 22.7 | 3.6 | 7.05 | 4.92 |
| | 12:57 | 1.58 | 6.21 | 11.0 | 24.0 | 5.3 | 7.14 | 4.62 |
| | 22:00 | 1.56 | 6.53 | 4.0 | 23.4 | 5.1 | 7.04 | 10.40 |
| 4/8/2004 | 6:35 | 1.54 | 6.04 | 10.3 | 23.5 | 5.1 | 7.07 | 6.29 |
| | 12:50 | 1.48 | 6.25 | 10.0 | 23.9 | 5.3 | 7.1 | 9.23 |
| | 22:00 | 1.99 | 5.57 | 8.0 | 22.6 | 5.0 | 6.6 | 6.88 |
| 4/9/2004 | 6:40 | 1.44 | 6.45 | 10.6 | 23.0 | 4.8 | 7.00 | 6.31 |
| | 13:25 | 1.47 | 6.17 | 10.5 | 24.6 | 5.0 | 6.97 | 5.43 |
| | 23:00 | 1.45 | 6.41 | 10.0 | 22.4 | 5.3 | 7.18 | 8.31 |
| 4/10/2004 | 7:30 | 1.43 | 6.45 | 10.5 | 23.2 | 4.8 | 7.02 | 5.63 |
| | 16:30 | 1.42 | 6.29 | 8.0 | 24.3 | 3.8 | 7.22 | 7.40 |
| | 23:30 | 1.40 | 6.30 | 4.1 | 21.0 | 5.4 | 7.00 | 7.40 |
| 4/11/2004 | 7:40 | 1.43 | 6.63 | 10.5 | 22.7 | 4.6 | 7.13 | 5.98 |
| | 13:15 | 1.45 | 6.45 | 10.0 | 24.4 | 4.9 | 7.19 | 7.46 |
| | 23:00 | 1.42 | 6.47 | 10.0 | 22.3 | 6.5 | 6.98 | 8.61 |
| Min | | 1.4 | 5.6 | 4.0 | 20.3 | 3.6 | 6.6 | 4.6 |
| Max | | 2.0 | 6.7 | 11.0 | 24.6 | 8.6 | 7.3 | 10.4 |
| Avg | | 1.5 | 6.3 | 9.5 | 23.0 | 5.1 | 7.1 | 6.6 |

WEEK 8

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/12/2004 | 7:00 | 1.98 | 5.46 | 8.0 | 21.1 | 4.0 | 6.9 | 5.52 |
| | 13:00 | 1.48 | 6.25 | 10.5 | 25.1 | 4.9 | 6.88 | 6.80 |
| | 23:30 | 1.40 | 6.30 | 4.2 | 21.8 | 6.0 | 7 | 6.51 |
| 4/13/2004 | 6:40 | 1.44 | 6.20 | 10.5 | 22.6 | 4.9 | 6.98 | 7.13 |
| | 13:00 | 2.31 | 6.31 | 10.0 | 24.1 | 4.3 | 7.04 | 7.64 |
| | 23:30 | 1.90 | 5.10 | 9.0 | 21.0 | 2.9 | 6.90 | 49.40 |
| 4/14/2004 | 7:05 | 1.30 | 6.10 | 8.1 | 22.6 | 3.0 | 7.30 | 81.60 |
| | 12:40 | 1.41 | 6.26 | 8.0 | 24.8 | 3.1 | 7.15 | 44.90 |
| | 22:00 | 1.66 | 6.33 | 9.0 | 23.2 | 7.7 | 7.03 | 15.70 |
| 4/15/2004 | | 1.65 | 6.30 | 9.6 | 22.5 | 5.8 | 7.01 | 7.60 |
| | 13:00 | 1.40 | 6.30 | 9.5 | 24.9 | 5.2 | 7.0 | 5.84 |
| | 22:30 | 1.42 | 6.27 | 10.0 | 22.5 | 5.9 | 7.1 | 6.20 |
| 4/16/2004 | 6:40 | 1.41 | 6.25 | 10.4 | 22.9 | 5.3 | 6.94 | 4.81 |
| | 13:00 | 1.43 | 6.07 | 10.5 | 24.4 | 4.2 | 7.01 | 3.97 |
| | 22:00 | 1.37 | 6.24 | 9.0 | 21.0 | 6.0 | 7.01 | 5.12 |
| 4/17/2004 | 7:45 | 1.38 | 6.35 | 10.0 | 22.9 | 5.2 | 7.06 | 3.59 |
| | 13:00 | 1.35 | 6.31 | 11.0 | 20.5 | 5.8 | 6.99 | 4.81 |
| | 23:50 | 1.38 | 6.22 | 10.0 | 21.0 | 6.8 | 7.12 | 3.02 |
| 4/18/2004 | 7:20 | 1.41 | 6.22 | 10.0 | 21.9 | 5.8 | 7.14 | 3.29 |
| | 12:50 | 1.42 | 6.24 | 10.0 | 23.8 | 4.9 | 7.06 | 4.11 |
| Min | | 1.3 | 5.1 | 4.2 | 20.5 | 2.9 | 6.9 | 3.0 |
| Max | | 2.3 | 6.4 | 11.0 | 25.1 | 7.7 | 7.3 | 81.6 |
| Avg | | 1.5 | 6.2 | 9.4 | 22.7 | 5.1 | 7.0 | 13.9 |

WEEK 1

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 2/23/2004 | 6:40 | 3.63 | 5.80 | 8.9 | 17.5 | 8.7-9.0 | 7.13 | 11.90 |
| | 14:40 | 3.51 | 6.94 | 7.1 | 21.3 | 6.0 | 7.23 | 9.95 |
| | 20:30 | 3.93 | 7.99 | 9.0 | 18.5 | 6.4 | 6.90 | 8.75 |
| 2/24/2004 | 7:00 | 3.93 | 7.70 | 9.2 | 19.2 | 6.8 | 7.22 | 10.10 |
| | 14:17 | 3.13 | 8.51 | 7.3 | 22.5 | 6.4 | 7.25 | 12.90 |
| | 22:30 | 3.76 | 8.36 | 9.0 | 19.5 | 7.7 | 7.29 | 10.10 |
| 2/25/2004 | 6:50 | 3.75 | 7.85 | 9.4 | 18.4 | 6.8 | 7.15 | 7.35 |
| | 11:26 | 3.32 | 8.42 | 8.5 | 20.8 | 7.0 | 7.16 | 19.00 |
| | 23:30 | 3.71 | 7.42 | 8.5 | 19.1 | 6.6 | 7.29 | 6.81 |
| 2/26/2004 | 7:00 | 4.20 | 6.68 | 8.4 | 16.0 | 6.9 | 7.39 | 4.15 |
| | 13:20 | 4.00 | 8.92 | 7.0 | 22.0 | 6.0 | 6.90 | 3.55 |
| | 23:30 | 4.00 | 7.47 | 9.0 | 19.5 | 7.1 | 6.67 | 3.27 |
| 2/27/2004 | 6:50 | 4.00 | 7.94 | 8.4 | 19.0 | 7.2 | 6.62 | 3.46 |
| | 12:20 | 4.00 | 8.70 | 7.5 | 21.0 | 4.4 | 7.05 | 2.70 |
| | 22:30 | 4.00 | 8.19 | 8.5 | 19.0 | 5.2 | 6.88 | 4.19 |
| 2/28/2004 | 7:00 | 3.00 | 8.10 | 8.0 | 22.2 | 5.3 | 6.83 | 3.82 |
| | 14:00 | 4.00 | 7.30 | 7.0 | 21.7 | 5.1 | 6.73 | 4.45 |
| 2/29/2004 | 7:20 | 4.00 | 7.01 | 9.0 | 21.1 | 5.5 | 6.21 | 4.88 |
| | 14:45 | 4.00 | 6.25 | 6.5 | 22.5 | 5.7 | 6.61 | 5.58 |
| | 22:30 | 4.00 | 7.74 | 9.0 | 17.8 | 6.2 | 6.70 | 4.50 |
| | 23:00 | 4.00 | 7.31 | 8.0 | 20.6 | 5.5 | 6.60 | 3.70 |
| | Min | 3.0 | 5.8 | 6.5 | 16.0 | 4.4 | 6.2 | 2.7 |
| | Max | 4.2 | 8.9 | 9.4 | 22.5 | 7.7 | 7.4 | 19.0 |
| | Avg | 3.8 | 7.6 | 8.2 | 20.0 | 6.2 | 6.9 | 6.9 |

WEEK 2

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/1/2004 | 6:30 | 2.80 | 7.05 | 8.8 | 19.4 | 6.7 | 6.68 | 4.00 |
| | 12:56 | 4.50 | 7.16 | 7.5 | 25.0 | 6.3 | 6.72 | 4.54 |
| | 23:00 | 9.00 | 7.31 | 9.0 | 25.0 | 7.0 | 6.50 | 4.14 |
| 3/2/2004 | 6:45 | >4 | 7.38 | 9.0 | 19.0 | 5.7 | 6.62 | 3.52 |
| | 11:32 | 4.00 | 8.42 | 8.0 | 20.9 | 4.7 | 6.70 | 7.41 |
| | 22:00 | 3.00 | 6.90 | 9.0 | 20.2 | 6.5 | 6.88 | 8.63 |
| 3/3/2004 | 6:45 | 3.00 | 7.00 | 9.2 | 19.0 | 6.9 | 6.74 | 5.19 |
| | 13:15 | 4.25 | 7.95 | 7.5 | 23.2 | 6.0 | 6.69 | 5.63 |
| | 22:30 | 2.40 | 8.47 | 9.0 | 19.8 | 6.6 | 6.87 | 9.15 |
| 3/4/2004 | 6:30 | 2.43 | 8.30 | 8.8 | 20.0 | 6.4 | 6.76 | 5.69 |
| | 13:14 | 2.46 | 8.56 | 7.5 | 22.0 | 6.9 | 6.89 | 9.75 |
| | 23:00 | 2.54 | 8.39 | 9.0 | 20.6 | 7.3 | 6.55 | 7.28 |
| 3/5/2004 | 6:50 | 2.56 | 7.80 | 9.1 | 20.4 | 8.0 | 7.01 | 7.51 |
| | 13:10 | 2.45 | 8.13 | 7.5 | 22.9 | 6.8 | 6.69 | 4.50 |
| | 23:00 | 2.54 | 8.45 | 9.5 | 21.1 | 7.3 | 6.60 | 6.62 |
| 3/6/2004 | 8:15 | 2.54 | 8.15 | 9.0 | 21.2 | 6.4 | 6.58 | 4.54 |
| | 13:15 | 2.55 | 8.20 | 9.0 | 22.4 | 5.7 | 6.60 | 8.60 |
| | 22:00 | 2.42 | 7.84 | 9.5 | 21.2 | 6.0 | 6.73 | 8.77 |
| 3/7/2004 | 7:46 | 2.42 | 7.86 | 9.0 | 21.1 | 6.0 | 6.61 | 5.77 |
| | 22:30 | 2.40 | 7.85 | 9.0 | 21.2 | 6.1 | 6.64 | 6.71 |
| | Min | 2.4 | 6.9 | 7.5 | 19.0 | 4.7 | 6.5 | 3.5 |
| | Max | 9.0 | 8.6 | 9.5 | 25.0 | 8.0 | 7.0 | 9.8 |
| | Avg | 3.2 | 7.9 | 8.7 | 21.3 | 6.5 | 6.7 | 6.4 |

WEEK 3

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/8/2004 | 6:40 | 2.51 | 7.51 | 8.8 | 22.4 | 6.0 | 6.50 | 4.32 |
| | 12:49 | 2.46 | 9.23 | 6.5 | 24.8 | 5.9 | 6.62 | 15.10 |
| | 21:30 | 2.62 | 7.44 | 8.5 | 22.8 | 6.4 | 6.69 | 8.52 |
| 3/9/2004 | 6:40 | 2.51 | 6.95 | 8.8 | 22.0 | 6.3 | 6.59 | 6.59 |
| | 13:25 | 2.41 | 7.58 | 7.0 | 23.9 | 5.7 | 6.81 | 8.90 |
| | 23:00 | 2.61 | 7.36 | 9.0 | 20.9 | 5.8 | 6.73 | 5.52 |
| 3/10/2004 | 6:45 | 2.65 | 7.00 | 9.2 | 21.6 | 7.4 | 6.65 | 6.14 |
| | 13:15 | 2.55 | 7.06 | 8.5 | 22.5 | 6.5 | 6.70 | 10.10 |
| | 22:00 | 2.57 | 7.27 | 9.0 | 21.8 | 7.4 | 6.70 | 6.17 |
| 3/11/2004 | 6:50 | 2.55 | 6.78 | 9.0 | 22.2 | 6.8 | 6.66 | 5.18 |
| | 13:51 | 2.51 | 6.69 | 9.0 | 22.3 | 6.1 | 6.62 | 4.73 |
| | 22:00 | 2.54 | 7.50 | 9.0 | 21.2 | 6.8 | 6.88 | 5.33 |
| 3/12/2004 | 6:55 | 0.00 | 7.90 | 9.2 | 21.8 | 6.2 | 6.76 | 3.60 |
| | 11:45 | 0.00 | | | | | | |
| | 22:00 | 0.03 | 7.81 | 8.0 | 21.2 | 3.9 | 7.09 | 5.72 |
| 3/13/2004 | 7:45 | 0.00 | 7.60 | 8.0 | 22.0 | 3.9 | 6.91 | 6.62 |
| | 14:30 | 0.02 | 5.29 | 9.5 | 21.3 | 3.3 | 6.92 | 8.94 |
| | 23:00 | 0.00 | 6.16 | 9.0 | 21.5 | 4.0 | 6.97 | 12.60 |
| 3/14/2004 | 7:01 | 0.02 | 5.44 | 9.5 | 21.2 | 3.5 | 6.98 | 7.38 |
| | 12:57 | 0.00 | 7.43 | 8.0 | 22.3 | 4.0 | 6.97 | 3.83 |
| | 22:00 | 0.00 | 7.10 | 9.0 | 21.1 | 3.9 | 6.95 | 5.61 |
| Min | | 0.0 | 5.3 | 6.5 | 20.9 | 3.3 | 6.5 | 3.6 |
| Max | | 2.7 | 9.2 | 9.5 | 24.8 | 7.4 | 7.1 | 15.1 |
| Avg | | 1.5 | 7.2 | 8.6 | 22.0 | 5.5 | 6.8 | 7.0 |

WEEK 4

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/15/2004 | 6:45 | 0.08 | 0.00 | 7.5 | | | | |
| | 12:58 | unit not in operation | | | | | | |
| | 23:30 | 0.00 | 6.92 | 10.0 | 21.3 | 4.7 | 6.23 | 7.56 |
| 3/16/2004 | 6:45 | 0.00 | 8.00 | 9.7 | 21.2 | 5.6 | 7.09 | 9.00 |
| | 12:53 | 2.54 | 7.33 | 8.6 | 21.9 | 6.5 | 6.90 | 10.80 |
| | 23:59 | 2.50 | 7.50 | 9.0 | 20.7 | 7.2 | 6.90 | 6.90 |
| 3/17/2004 | 6:40 | 2.53 | 7.30 | 9.2 | 21.4 | 6.4 | 6.58 | 4.66 |
| | 13:03 | 2.49 | 7.42 | 9.0 | 21.4 | 7.1 | 6.83 | 4.10 |
| | 22:00 | 2.52 | 6.79 | 9.0 | 21.7 | 7.4 | 6.93 | 3.65 |
| 3/18/2004 | 6:50 | 2.52 | 6.80 | 9.2 | 21.9 | 6.9 | 6.45 | 3.54 |
| | 13:07 | 2.51 | 8.32 | 8.5 | 21.9 | 5.8 | 6.69 | 7.30 |
| | 22:00 | 2.52 | 7.37 | 9.0 | 21.5 | 5.7 | 6.71 | 3.53 |
| 3/19/2004 | 6:40 | 2.51 | 7.20 | 8.9 | 21.7 | 5.9 | 6.37 | 3.32 |
| | 13:08 | 2.47 | 7.58 | 8.5 | | 5.8 | 6.58 | 3.77 |
| | 23:00 | 2.47 | 0.00 | 7.0 | | | | |
| 3/20/2004 | 7:30 | 2.50 | 0.00 | 6.0 | 20.4 | 6.1 | 6.77 | 6.02 |
| | 13:00 | 2.49 | 8.86 | 8.0 | 22.4 | 5.4 | 6.66 | 6.00 |
| | 23:00 | 2.50 | 7.50 | 8.0 | | 6.2 | 6.40 | 4.40 |
| 3/21/2004 | 7:20 | 2.49 | 7.15 | 9.0 | 21.5 | 5.8 | 6.29 | 2.92 |
| | 9:35 | 2.48 | 7.15 | 7.0 | 20.9 | 6.4 | 6.65 | 3.89 |
| | 23:00 | 2.46 | 0.00 | 7.0 | | 5.4 | 6.58 | 3.77 |
| Min | | 0.0 | 0.0 | 6.0 | 20.4 | 4.7 | 6.2 | 2.9 |
| Max | | 2.5 | 8.9 | 10.0 | 22.4 | 7.4 | 7.1 | 10.8 |
| Avg | | 2.1 | 6.0 | 8.4 | 21.5 | 6.1 | 6.6 | 5.3 |

WEEK 5

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/22/2004 | 6:40 | 2.47 | 0.00 | 7.00 | | | | |
| | 13:21 | 2.48 | 7.25 | 8.0 | | 5.7 | 6.5 | 5.82 |
| | 23:00 | 2.50 | 6.90 | 8.4 | | 5.6 | 6.50 | 3.90 |
| 3/23/2004 | 6:40 | 2.46 | 6.55 | 8.7 | 21.4 | 7.0 | 6.36 | 3.23 |
| | 13:08 | 2.49 | 6.67 | 8.5 | | 6.2 | 6.41 | 5.32 |
| 3/24/2004 | 6:45 | 2.50 | 6.53 | 8.9 | 21.8 | 7.3 | 6.91 | 2.67 |
| | 12:45 | 2.47 | 7.30 | 8.0 | | 6.2 | 6.78 | 5.04 |
| | 0:00 | 2.49 | 6.56 | 8.5 | 21.5 | 5.6 | 6.52 | 3.32 |
| 3/25/2004 | 6:35 | 2.47 | 6.40 | 9.0 | 22.0 | 7.1 | 6.36 | 2.79 |
| | 13:10 | 2.46 | 6.83 | 8.0 | 23.9 | 6.1 | 6.41 | 3.55 |
| | 23:00 | 2.45 | 7.17 | 8.5 | 20.7 | | 6.75 | 4.11 |
| 3/26/2004 | 6:35 | 2.47 | 7.50 | 9.0 | 21.9 | 6.0 | 6.41 | 2.99 |
| | 12:50 | 2.39 | 7.01 | 8.5 | 25.0 | 6.0 | 6.50 | 4.16 |
| | 22:00 | 2.48 | 6.76 | 9.0 | 22.7 | 6.0 | 6.53 | 3.90 |
| 3/27/2004 | 7:30 | 2.41 | 7.11 | 8.5 | 20.9 | 6.4 | 6.33 | 3.07 |
| | 9:55 | 2.45 | 7.10 | 8.5 | 23.4 | 5.0 | 6.41 | 2.57 |
| | 14:20 | 2.80 | 7.00 | 6.0 | 24.4 | 4.7 | 6.92 | 10.20 |
| | 23:00 | 2.48 | 7.09 | 8.0 | 22.1 | 5.6 | 6.97 | 8.51 |
| 3/28/2004 | 7:45 | 2.45 | 6.75 | 8.5 | 22.4 | 6.6 | 6.28 | 1.99 |
| | 13:15 | 2.34 | 7.19 | 7.0 | 25.3 | 4.5 | 6.39 | 4.57 |
| Min | | 2.3 | 0.0 | 6.0 | 20.7 | 4.5 | 6.3 | 2.0 |
| Max | | 2.8 | 7.5 | 9.0 | 25.3 | 7.3 | 7.0 | 10.2 |
| Avg | | 2.5 | 6.6 | 8.2 | 22.6 | 6.0 | 6.5 | 4.3 |

WEEK 6

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 3/29/2004 | 6:45 | 2.34 | 5.90 | 8.00 | 25.0 | 5.8 | 6.8 | 1.95 |
| | 12:45 | 2.28 | 6.12 | 7.0 | 25.6 | 5.8 | 6.47 | 2.46 |
| | 1:00 | 2.48 | 6.53 | 8.0 | 20.7 | 7.8 | 6.70 | 2.71 |
| 3/30/2004 | 6:38 | 2.51 | 6.28 | 8.5 | 22.5 | 5.1 | 7.05 | 1.84 |
| | 12:50 | 2.50 | 7.15 | 8.0 | 24.0 | 5.7 | 6.79 | 4.56 |
| | 23:30 | 2.54 | 6.07 | 8.0 | 21.5 | 6.8 | 5.76 | 2.46 |
| 3/31/2004 | 0:20 | 2.49 | 6.52 | 8.0 | 21.4 | 7.9 | 6.80 | 2.32 |
| | 8:00 | 2.49 | 6.02 | 8.5 | 22.4 | 6.2 | 6.38 | 2.11 |
| | 23:00 | 2.52 | 6.03 | 8.0 | 21.4 | 6.8 | 6.09 | 2.83 |
| 4/1/2004 | 6:40 | 2.52 | 6.13 | 8.8 | 22.1 | 7.0 | 6.54 | 2.10 |
| | 13:00 | 2.51 | 7.01 | 8.0 | 23.9 | 6.0 | 6.61 | 7.01 |
| | 22:00 | 2.51 | 6.34 | 9.0 | 21.5 | 6.0 | 7.15 | 3.68 |
| 4/2/2004 | 6:35 | 2.54 | 6.25 | 8.5 | 20.9 | 6.8 | 6.63 | 3.09 |
| | 13:00 | 2.56 | 6.79 | 8.0 | 24.0 | 6.4 | 6.72 | 2.49 |
| 4/3/2004 | 8:15 | 2.52 | 7.05 | 8.5 | 23.3 | 5.6 | 6.70 | 3.03 |
| | 14:30 | 2.53 | 6.78 | 8.0 | 24.3 | 5.2 | 6.74 | 6.41 |
| | 22:00 | 2.55 | 6.81 | 8.5 | 21.7 | 5.7 | 6.64 | 3.59 |
| 4/4/2004 | 8:20 | 2.53 | 5.41 | 8.5 | 22.9 | 6.3 | 6.78 | 2.26 |
| | 11:00 | 2.54 | 5.93 | 8.5 | 23.2 | 6.3 | 6.80 | 2.94 |
| | 15:00 | 2.55 | 5.51 | 8.0 | 21.6 | 6.9 | 7.04 | 2.71 |
| | 23:00 | 2.22 | 5.68 | 8.0 | 21.6 | 6.0 | 6.67 | 2.41 |
| Min | | 2.2 | 5.4 | 7.0 | 20.7 | 5.1 | 5.8 | 1.8 |
| Max | | 2.6 | 7.2 | 9.0 | 25.6 | 7.9 | 7.2 | 7.0 |
| Avg | | 2.5 | 6.3 | 8.2 | 22.6 | 6.3 | 6.7 | 3.1 |

WEEK 7

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/5/2004 | 6:40 | 2.21 | 5.66 | 9.00 | 22.4 | 5.9 | 6.6 | 2.40 |
| | 13:00 | 2.17 | 6.31 | 8.0 | 24.2 | 6.0 | 6.95 | 6.71 |
| | 22:30 | 2.20 | 5.75 | 8.0 | 21.4 | 5.4 | 6.73 | 2.79 |
| 4/6/2004 | 6:50 | 2.21 | 5.42 | 8.3 | 22.5 | 6.5 | 6.60 | 3.07 |
| | 13:10 | 2.17 | 5.62 | 8.0 | 23.7 | 3.9 | 6.54 | 3.47 |
| | 22:30 | 2.19 | 5.02 | 8.0 | 21.8 | 6.4 | 6.83 | 2.35 |
| 4/7/2004 | 6:30 | 2.22 | 4.90 | 8.7 | 22.5 | 6.2 | 6.54 | 2.66 |
| | 12:57 | 2.16 | 4.80 | 8.0 | 23.7 | 6.8 | 6.96 | 5.95 |
| | 22:00 | 2.14 | 5.81 | 8.0 | 22.5 | 6.4 | 6.61 | 3.35 |
| 4/8/2004 | 6:30 | 2.13 | 5.80 | 8.1 | 21.7 | 6.8 | 6.58 | 2.35 |
| | 12:50 | 1.99 | 5.79 | 8.0 | 23.3 | 6.9 | 6.85 | 2.61 |
| | 22:00 | 1.45 | 6.39 | 9.0 | 22.8 | 6.9 | 6.34 | 2.12 |
| 4/9/2004 | 6:35 | 1.98 | 5.70 | 8.2 | 22.5 | 6.9 | 6.45 | 1.98 |
| | 13:25 | 1.89 | 6.56 | 7.5 | 24.2 | 6.2 | 6.54 | 5.46 |
| | 23:00 | 1.99 | 6.37 | 7.5 | 22.3 | 6.6 | 6.43 | 2.83 |
| 4/10/2004 | 7:40 | 1.97 | 6.38 | 8.0 | 22.7 | 6.4 | 6.80 | 2.86 |
| | 16:00 | 1.96 | 5.59 | 7.0 | 24.0 | 4.2 | 6.80 | 1.82 |
| | 23:30 | 2.00 | 5.60 | 7.5 | 18.7 | 7.4 | 6.40 | 1.70 |
| 4/11/2004 | 7:45 | 1.97 | 5.50 | 6.0 | 22.5 | 7.4 | 6.71 | 2.09 |
| | 13:25 | 1.87 | 5.46 | 7.0 | 24.1 | 6.2 | 7.32 | 7.36 |
| | 23:00 | 1.88 | 5.49 | 8.0 | 20.7 | 7.0 | 6.84 | 5.40 |
| Min | | 1.5 | 4.8 | 6.0 | 18.7 | 3.9 | 6.3 | 1.7 |
| Max | | 2.2 | 6.6 | 9.0 | 24.2 | 7.4 | 7.3 | 7.4 |
| Avg | | 2.0 | 5.7 | 7.9 | 22.6 | 6.3 | 6.7 | 3.4 |

WEEK 8

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) |
| 4/12/2004 | 7:00 | 1.44 | 6.23 | 10.50 | 22.0 | 5.4 | 6.9 | 5.79 |
| | 13:00 | 1.91 | 5.46 | 7.0 | 24.8 | 6.6 | 6.51 | 2.00 |
| | 23:30 | 2.00 | 5.20 | 9.0 | 21.8 | 7.6 | 7.00 | 2.42 |
| 4/13/2004 | 6:40 | 2.00 | 5.15 | 8.1 | 21.3 | 6.8 | 7.19 | 1.98 |
| | 13:00 | 1.93 | 5.76 | 7.5 | 23.5 | 6.1 | 6.68 | 6.02 |
| | 23:30 | 1.00 | 6.20 | 3.0 | 21.2 | 6.8 | 6.80 | 5.70 |
| 4/14/2004 | 7:00 | 1.98 | 5.21 | 8.4 | 22.2 | 6.5 | 6.67 | 6.47 |
| | 12:40 | 1.99 | 5.57 | 8.5 | 24.3 | 6.5 | 6.65 | 6.62 |
| | 22:30 | 0.00 | 5.01 | 7.5 | 22.2 | 3.6 | 7.05 | 47.90 |
| 4/15/2004 | | 0.00 | 5.10 | 8.0 | 21.3 | 3.8 | 7.10 | 40.30 |
| | 13:00 | 0.00 | 5.92 | 7.5 | 24.9 | 2.9 | 7.04 | 14.40 |
| | 22:30 | 0.00 | 5.67 | 7.5 | 21.4 | 3.3 | 6.77 | 8.43 |
| 4/16/2004 | 6:35 | 0.00 | 5.70 | 7.6 | 21.7 | 3.1 | 7.00 | 7.25 |
| | 13:00 | 0.00 | 5.81 | 7.5 | 23.7 | 3.3 | 7.07 | 5.34 |
| | 22:30 | 0.00 | 5.36 | 7.5 | 20.9 | 4.3 | 7.11 | 3.75 |
| 4/17/2004 | 8:00 | 0.00 | 5.40 | 8.00 | 21.9 | 3.5 | 7.1 | 2.80 |
| | 13:00 | 0.00 | 5.50 | 8.0 | 20.1 | 3.7 | 7.07 | 5.40 |
| | 23:50 | 0.00 | 5.40 | 7.5 | 19.6 | 4.9 | 7.18 | 3.81 |
| 4/18/2004 | 7:25 | 0.00 | 5.41 | 8.00 | 20.9 | 3.8 | 7.1 | 2.79 |
| | 13:00 | 0.00 | 5.47 | 8.0 | 23.0 | 3.8 | 6.93 | 3.36 |
| Min | | 0.0 | 5.0 | 3.0 | 19.6 | 2.9 | 6.5 | 2.0 |
| Max | | 2.0 | 6.2 | 10.5 | 24.9 | 7.6 | 7.2 | 47.9 |
| Avg | | 0.7 | 5.5 | 7.7 | 22.1 | 4.8 | 6.9 | 9.1 |

WEEK 9

| 13Inf | | Portable Meter Readings | | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/19/2004 | 6:45 | 23.3 | 0.06 | 6.85 | 60.4 | |
| | 13:00 | 25.5 | 0.10 | 6.90 | 55.6 | |
| | 23:45 | 22.5 | 0.10 | 6.90 | 63.1 | |
| 4/20/2004 | 6:45 | 23.8 | 0.04 | 6.86 | 60.6 | |
| | 12:45 | 26.0 | 0.05 | 7.01 | 101.0 | |
| | 23:45 | 23.0 | 0.50 | 6.89 | 55.7 | |
| 4/21/2004 | 6:40 | 24.0 | 0.07 | 6.91 | 55.0 | |
| | 13:00 | 25.6 | 0.30 | 6.94 | 98.9 | |
| | 22:30 | 23.0 | 0.21 | 7.00 | 55.6 | |
| 4/22/2004 | 6:45 | 23.4 | 0.09 | 6.91 | 66.4 | |
| | 13:00 | 26.0 | 0.07 | 7.07 | 147.0 | |
| | 22:00 | 23.8 | 0.12 | 6.82 | 131.0 | |
| 4/23/2004 | 6:50 | 23.5 | 0.06 | 6.87 | 80.1 | |
| | 13:00 | 26.0 | 0.10 | 7.07 | 130.0 | |
| | 23:30 | 23.9 | 0.05 | 6.73 | 59.9 | |
| 4/24/2004 | 8:20 | 23.9 | 0.14 | 6.91 | 94.5 | 16 |
| | 10:00 | 25.5 | 0.15 | 6.87 | 68.6 | 12 |
| 4/25/2004 | 1:30 | 23.2 | 0.10 | 6.84 | 123.0 | |
| | 8:00 | 24.2 | 0.09 | 6.94 | 77.0 | 16 |
| | 14:00 | 25.9 | 0.05 | 7.07 | 58.6 | 19 |
| 4/26/2004 | 0:30 | 22.9 | 0.10 | 6.86 | 161.0 | |
| | Min | 22.5 | 0.0 | 6.7 | 55.0 | 12 |
| | Max | 26.0 | 0.5 | 7.1 | 161.0 | 19 |
| | Avg | 24.2 | 0.1 | 6.9 | 85.9 | 16 |

WEEK 9

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/19/2004 | 6:40 | 1.5 | 7.6 | | 6.7 | 284.0 | 76.0 | 21.9 | 2.6 | 6.8 | 13.7 | |
| | 13:00 | 1.5 | 7.9 | | 6.2 | 222.1 | 14.8 | 24.5 | 3.5 | 6.83 | 11.3 | |
| | 23:45 | 1.0 | 7.5 | 1.9 | 6.2 | 236.5 | 29.1 | 22.2 | 2.3 | 6.84 | 20.6 | |
| 4/20/2004 | 6:45 | 1.0 | 7.6 | 0.1 | 6.2 | 257.0 | 49.7 | 22.6 | 2.1 | 6.77 | 23.7 | |
| | 12:45 | 0.9 | 7.5 | 0.4 | 6.3 | 223.6 | 16.0 | 25.0 | 2.2 | 6.86 | 18.0 | |
| | 23:45 | 1.0 | 7.5 | | 6.3 | 246.8 | 39.0 | 22.1 | 2.6 | 6.87 | 23.4 | |
| 4/21/2004 | 6:40 | 1.0 | 7.5 | | 6.2 | 266.0 | 58.6 | 23.2 | 2.0 | 6.83 | 29.0 | |
| | 13:00 | 2.0 | 7.4 | 0.8 | 6.3 | 224.1 | 16.8 | 25.4 | 4.2 | 6.91 | 15.1 | |
| | 22:30 | 2.0 | 7.6 | 2.3 | 6.2 | 248.1 | 40.1 | 22.3 | 5.1 | 6.98 | 11.5 | |
| 4/22/2004 | 6:40 | 2.0 | 7.5 | 2.0 | 6.2 | 282.0 | 75.0 | 22.9 | 4.5 | 6.89 | 9.2 | |
| | 13:00 | 2.0 | 7.6 | 1.4 | 6.3 | 227.7 | 20.9 | 25.4 | 4.0 | 6.95 | 14.2 | |
| | 22:00 | 7.5 | 7.6 | 2.6 | 6.2 | 256.0 | 48.3 | 23.0 | 4.4 | 6.98 | 13.3 | |
| 4/23/2004 | 6:45 | 2.0 | 7.5 | 2.8 | 6.1 | 300.0 | 93.0 | 22.5 | 4.7 | 6.86 | 8.1 | |
| | 13:00 | 1.5 | 7.2 | 0.8 | 6.3 | 223.1 | 15.7 | 25.4 | 3.6 | 6.91 | 11.8 | |
| | 23:30 | 1.5 | 7.6 | 1.0 | 6.2 | 253.0 | 45.9 | 22.7 | 3.7 | 6.93 | 9.9 | |
| 4/24/2004 | 8:23 | 1.5 | 7.5 | 0.6 | 6.2 | 290.7 | 84.2 | 23.9 | 3.5 | 6.87 | 8.2 | |
| | 10:00 | 1.4 | 7.6 | 0.9 | 6.7 | 219.6 | 12.0 | 24.2 | 3.6 | 6.93 | 28.4 | 39 |
| 4/25/2004 | 1:30 | 1.5 | 7.5 | 0.1 | 6.7 | 268.0 | 61.3 | 22.4 | 3.8 | 6.94 | 12.0 | |
| | 8:00 | 1.5 | 7.5 | 0.1 | 6.7 | 298.5 | 91.3 | 23.6 | 3.3 | 6.93 | 10.7 | 52 |
| | 14:00 | 2.0 | 7.5 | 0.1 | 6.8 | 233.2 | 25.9 | 25.1 | 4.7 | 7.02 | 8.7 | 58 |
| 4/26/2004 | 0:30 | 1.5 | 7.4 | 1.2 | 6.7 | 266.5 | 60.7 | 22.8 | 5.2 | 6.95 | 8.9 | |
| Min | | 0.9 | 7.2 | 0.1 | 6.1 | 219.6 | 12.0 | 21.9 | 2.0 | 6.8 | 8.1 | 39 |
| Max | | 7.5 | 7.9 | 2.8 | 6.8 | 300.0 | 93.0 | 25.4 | 5.2 | 7.0 | 29.0 | 58 |
| Avg | | 1.8 | 7.5 | 1.1 | 6.4 | 253.6 | 46.4 | 23.5 | 3.6 | 6.9 | 14.7 | 50 |

WEEK 9

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/19/2004 | 6:35 | 1.40 | 6.27 | 10.4 | 22.1 | 4.6 | 6.9 | 5.23 | |
| | 13:00 | 1.44 | 6.23 | 10.5 | 24.3 | 5.3 | 6.89 | 4.28 | |
| | 23:45 | 1.39 | 6.40 | 10.0 | 21.1 | 5.5 | 7.1 | 5.86 | |
| 4/20/2004 | 6:30 | 1.40 | 6.30 | 10.3 | 22.8 | 4.5 | 6.90 | 5.30 | |
| | 12:45 | 1.41 | 6.14 | 10.0 | 24.9 | 4.6 | 6.94 | 6.15 | |
| 4/21/2004 | 23:45 | 1.38 | 6.29 | 9.5 | 21.7 | 5.5 | 7.07 | 5.52 | |
| | 6:40 | 1.38 | 6.24 | 10.0 | 23.1 | 4.7 | 6.95 | 7.00 | |
| | 13:00 | 1.44 | 5.98 | 9.5 | 25.4 | 4.2 | 6.89 | 7.70 | |
| 4/22/2004 | 22:30 | 1.40 | 6.26 | 9.2 | 22.3 | 5.5 | 7.05 | 7.41 | |
| | 6:35 | 1.36 | 6.20 | 10.1 | 23.0 | 4.8 | 6.95 | 6.14 | |
| | 13:00 | 1.43 | 6.32 | 10.0 | 25.3 | 3.5 | 6.9 | 6.75 | |
| 4/23/2004 | 22:00 | 1.40 | 6.22 | 9.0 | 22.8 | 4.9 | 7.1 | 7.62 | |
| | 6:40 | 1.34 | 5.50 | 10.3 | 22.4 | 4.8 | 6.90 | 4.60 | |
| | 13:00 | 1.51 | 6.15 | 9.5 | 25.3 | 5.0 | 6.90 | 5.67 | |
| 4/24/2004 | 23:30 | 1.44 | 6.33 | 9.0 | 22.7 | 4.5 | 7.16 | 7.73 | |
| | 8:27 | 1.48 | 6.24 | 10.0 | 24.0 | 3.5 | 7.13 | 6.92 | 53 |
| | 10:06 | 1.45 | 6.27 | 10.0 | 24.4 | 3.5 | 7.08 | 8.49 | 48 |
| 4/25/2004 | 1:30 | 1.47 | 6.24 | 10.0 | 20.6 | 5.2 | 7.08 | 11.40 | |
| | 8:15 | 1.49 | 6.25 | 10.0 | 23.8 | 3.4 | 7.05 | 15.10 | 63 |
| | 14:00 | 1.44 | 6.23 | 9.0 | 24.7 | 4.3 | 7.02 | 15.40 | 45 |
| 4/26/2004 | 0:30 | 1.52 | 7.59 | 10.0 | 22.8 | 4.4 | 7.04 | 7.81 | |
| Min | | 1.3 | 5.5 | 9.0 | 20.6 | 3.4 | 6.9 | 4.3 | 45 |
| Max | | 1.5 | 7.6 | 10.5 | 25.4 | 5.5 | 7.2 | 15.4 | 63 |
| Avg | | 1.4 | 6.3 | 9.8 | 23.3 | 4.6 | 7.0 | 7.5 | 52 |

WEEK 9

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/19/2004 | 6:30 | 0.0 | 5.20 | 7.9 | 20.0 | 3.6 | 7.0 | 4.79 | |
| | 13:00 | 0.0 | 6.05 | 7.5 | 23.7 | 3.8 | 6.94 | 4.69 | |
| | 23:45 | 2.22 | 5.67 | 8.5 | 20.9 | 6.7 | 6.45 | 5.10 | |
| 4/20/2004 | 6:35 | 2.17 | 5.64 | 8.6 | 21.7 | 6.4 | 6.39 | 5.26 | |
| | 12:45 | 2.14 | 5.80 | 8.5 | 24.3 | 5.3 | 6.37 | 3.14 | |
| | 23:45 | 2.97 | 5.59 | 8.0 | 21.8 | 6.0 | 6.57 | 4.00 | |
| 4/21/2004 | 6:35 | 3.62 | 5.50 | 8.2 | 22.1 | 5.0 | 6.30 | 2.39 | |
| | 13:00 | 3.54 | 5.76 | 7.5 | 24.6 | 6.4 | 6.42 | 5.46 | |
| | 22:30 | 3.66 | 5.30 | 8.0 | 22.5 | 6.7 | 6.09 | 3.57 | |
| 4/22/2004 | 6:30 | 3.60 | 5.10 | 8.3 | 22.0 | 6.7 | 6.30 | 2.27 | |
| | 13:00 | 3.17 | 5.46 | 8.0 | 24.6 | 5.7 | 6.45 | 3.05 | |
| | 22:00 | 3.60 | 4.74 | 8.0 | 22.7 | 6.1 | 6.29 | 3.20 | |
| 4/23/2004 | 6:35 | | 4.60 | 9.4 | 21.3 | 6.2 | 6.30 | 1.90 | |
| | 13:00 | 3.16 | 6.36 | 8.0 | 25.0 | 4.9 | 6.36 | 3.13 | |
| | 23:30 | 3.22 | 5.94 | 8.0 | 22.5 | 5.1 | 6.56 | 3.68 | |
| 4/24/2004 | 8:30 | | 6.28 | 7.5 | 23.6 | 4.5 | 6.4 | 2.27 | 62 |
| | 10:10 | | 6.14 | 7.5 | 24.3 | 4.5 | 6.43 | 2.28 | 59 |
| 4/25/2004 | 1:30 | 2.38 | 4.63 | 8.0 | 21.0 | 5.6 | 6.41 | 2.35 | |
| | 8:15 | 2.78 | 4.51 | 8.0 | 23.2 | 4.0 | 6.5 | 2.30 | 51 |
| | 14:00 | 2.54 | 5.30 | 7.5 | 24.7 | 3.9 | 7.10 | 2.99 | 64 |
| 4/26/2004 | 0:30 | 2.65 | 5.14 | 8.0 | 22.5 | 4.8 | 6.99 | 6.41 | |
| | Min | 0.0 | 4.5 | 7.5 | 20.0 | 3.6 | 6.1 | 1.9 | 51 |
| | Max | 3.7 | 6.4 | 9.4 | 25.0 | 6.7 | 7.1 | 6.4 | 64 |
| | Avg | 2.6 | 5.5 | 8.0 | 22.8 | 5.3 | 6.5 | 3.5 | 59 |

WEEK 9

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 4/19/2004 | 9:00 | 3.00 | 3.0 | 89.90 | 0.00 | 6.70 | 194.1-203.5 | 88.5 | 8.6 | 28.75 | 1421 | 1440 |
| 4/21/2004 | 9:00 | 3.00 | 3.0 | 90.60 | 0.00 | 6.30 | 202.7 | 65.2 | 1 | 29.25 | 1422 | 1440 |
| 4/23/2004 | 9:00 | 2.00 | 2.0 | 89.50 | 2.70 | 6.30 | 112.4 | 24 | 4.5 | 29 | 1425 | 1440 |
| 4/25/2004 | 9:00 | 3.00 | 3.0 | 90.00 | 0.10 | 6.80 | 121.6 | 0 | | 29.5 | 1440 | 1440 |

2.8

90.0

WEEK 9

| BIOFOR -C | | Instrument Readings | | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|--|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) | |
| | | | | | | | Before BW | After BW | | | |
| 4/19/2004 | 13:30 | 1.43 | 16.0 | 25.71 | 22.00 | 11 | 85 | 24 | 1372 | 1372 | |
| 4/21/2004 | 13:30 | 1.37 | 16.0 | 25.62 | 22.50 | 10 --7 | 83 | 31 | 1372 | 1372 | |
| 4/23/2004 | 13:30 | 1.52 | 16.0 | 25.56 | 24.00 | 7 | 80 | 24 | 1372 | 1372 | |
| 4/25/2004 | 14:00 | 1.43 | 16.0 | 26.00 | 23.00 | 9 | 63 | 35 | 1372 | 1372 | |

25.72

WEEK 9

| BIOFOR -N | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | Before BW | After BW | | |
| 4/19/2004 | 10:00 | | 9.0 | 15.07 | | 11 | 16.75 | | 2812 | 2812 |
| 4/21/2004 | 10:00 | 4.15 | 9.0 | 15.50 | 15 | 8.5--7 | 38 | 32.5 | 2812 | 2812 |
| 4/23/2004 | 10:00 | 3.08 | 9.0 | 15.87 | 15 | 8 | 40 | 28 | 2812 | 2812 |
| 4/25/2004 | 10:55 | 2.58 | 9.0 | 15.00 | 14 | 8 | 40 | 34 | 2812 | 2812 |

15.36

| Imhoff Cone Testing | | | | | | | | | | | | | |
|---------------------|-----------|---------|---------|-------------|-----|----------|---------|-------------|-----|----------|---------|-------------|-----|
| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | | | | 14:15 | 15 | 13 | 41 | 11:40 | 15 | 2.7 | 19 |
| | | | | | | | 30 | 12.5 | | | 30 | 5.3 | |
| 2 | 3/2/2004 | | | | | 13:00 | 15 | 23 | 52 | 11:00 | 15 | 5 | 26 |
| | | | | | | | 30 | 24 | | | 30 | 7.5 | |
| 3 | 3/10/2004 | | | | | 14:30 | 15 | 45 | 27 | 10:55 | 15 | 15 | 38 |
| | | | | | | | 30 | 40 | | | 30 | 15.5 | |
| 3 | 3/14/2004 | | | | | 15:00 | | | 23 | 11:50 | | | 8 |
| | | | | | | | 30 | 18 | | | 30 | 0.4 | |
| 4 | 3/18/2004 | | | | | 14:22 | 15 | 37 | 41 | 11:20 | 15 | 12.5 | 54 |
| | | | | | | | 30 | 28 | | | 30 | 14 | |
| 4 | 3/20/2004 | | | | | 14:00 | 15 | | 33 | 11:30 | 15 | 0.5 | 14 |
| | | | | | | | 30 | 50 | | | 30 | 1.5 | |
| 5 | 3/24/2004 | 12:20 | 15 | 50 | 56 | 14:25 | 15 | 35 | 37 | 11:10 | 15 | 1.5 | 19 |
| | | | 30 | 38 | | | 30 | 29 | | | 30 | 3.5 | |
| 5 | 3/26/2004 | 9:25 | 15 | 42 | 33 | 14:15 | 15 | 35 | 36 | 10:50 | 15 | 0.1 | 8 |
| | | | 30 | 30 | | | 30 | 30 | | | 30 | 1 | |
| 5 | 3/28/2004 | 9:30 | 15 | 28 | 47 | 14:45 | 15 | 25 | 34 | 11:45 | 15 | 2 | 14 |
| | | | 30 | 24 | | | 30 | 27 | | | 30 | 2.5 | |
| 6 | 4/1/2004 | 9:30 | 15 | 29 | 26 | 14:35 | 15 | 29 | 30 | 11:25 | 15 | 6.5 | 33 |
| | | | 30 | 21 | | | 30 | 24 | | | 30 | 7.5 | |
| 6 | 4/3/2004 | 10:00 | 15 | 100 | 57 | 13:30 | 15 | 35 | 33 | 13:00 | 15 | 7.5 | 37 |
| | | | 30 | 80 | | | 30 | 30 | | | 30 | 6 | |
| 7 | 4/9/2004 | 9:25 | 15 | 48 | 30 | 14:20 | 15 | 29 | 27 | 10:55 | 15 | 0.1 | |
| | | | 30 | 35 | | | 30 | 25 | | | 30 | 0.4 | |
| 8 | 4/17/2004 | 10:53 | 15 | 34 | 51 | 13:55 | 15 | 20 | 42 | | 15 | | |
| | | | 30 | 25 | | | 30 | 18 | | | 30 | | |
| 9 | 4/21/2004 | 9:30 | 15 | 25 | 33 | 14:25 | 15 | 28 | 35 | 11:00 | 15 | 0 | |
| | | | 30 | 20 | | | 30 | 24 | | | 30 | <0.1 | |
| 9 | 4/23/2004 | 9:25 | 15 | 40 | | 14:15 | 15 | 18 | | 10:55 | 15 | 0.2 | |
| | | | 30 | 35 | | | 30 | 15 | | | 30 | 0.2 | |
| | | | 15 | | | | 15 | | | | 15 | | |
| | | | 30 | | | | 30 | | | | 30 | | |

WEEK 6

| BIOSTYR | | Instrument Readings | | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|-------|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | | Before BW | After BW | | | |
| 3/30/2004 | 9:00 | | 4.0 | 92.30 | 5.40 | 7.00 | 199.4 | 117.4 | 84.7 | 20.3 | | 1440 | 1440 |
| 4/1/2004 | 9:00 | | 4.0 | 90.30 | 3.30 | 7.10 | 196.4 | 117.8 | 60 | 12 | 31 | 1440 | 1440 |
| 4/3/2004 | 8:30 | | 4.0 | 88.00 | 5.20 | 7.00 | 205 | | 222.4 | 211.8 | 40 | 1440 | 1440 |

WEEK 7

| BIOSTYR | | Instrument Readings | | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|--|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | | Before BW | After BW | | | |
| 4/5/2004 | 9:00 | 3.00 | 3.0 | 91.80 | 2.70 | 6.80 | 203.2 | | 16.6 | 9.9 | 40.25 | 1440 | 1440 |
| 4/7/2004 | 9:00 | 3.00 | 3.0 | 91.80 | 3.50 | 6.80 | 118.9 | | 34.7 | 13.1 | 29.75 | 1440 | 1440 |
| 4/9/2004 | 9:00 | | 3.2 | 90.20 | 5.30 | 6.90 | 107.4 | | 67.7 | 0 | 29 | 1440 | 1440 |
| 4/11/2004 | 9:00 | 0.00 | 3.0 | 96.10 | 3.80 | 6.80 | 118.3 | | | 0 | 30.5 | 1436 | 1440 |

WEEK 8

| BIOSTYR | | Instrument Readings | | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|--|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | | Before BW | After BW | | | |
| 4/13/2004 | 9:00 | | 3.0 | 85.60 | 4.90 | 6.90 | 195.8-202.8 | | 19.7 | 10.3 | 40 | 1440 | 1440 |
| 4/15/2004 | 9:00 | 3.20 | 3.2 | 95.30 | 3.30 | 6.70 | 198 | | 76 | | 30.75 | 1418 | 1440 |
| 4/17/2004 | 9:00 | 0.00 | 3.0 | 85.00 | 0.10 | 6.80 | 122 | | 0 | | 29.5 | 1436 | 1440 |

WEEK 1

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|----------------------|----------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | Before BW | After BW | Before BW | After BW | | |
| 2/27/2004 | 14:30 | 6.0 | 16.0 | 26 | 11 | 9 | 84 | 37 | | 1370 |
| 2/29/2004 | 13:24 | 6.0 | 16.0 | 25.75 | 9 | | | | 1 | 1370 |
| 3/2/2004 | 12:00 | 6.0 | 16.0 | 26 | 11 | | 90 | 36.5 | | 1440 |

WEEK 2

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|----------------------|----------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | Before BW | After BW | Before BW | After BW | | |
| 3/4/2004 | 13:30 | 2.12 | 16.0 | 25.72 | 12 | | 93 | 35.5 | 1370 | 1370 |
| 3/6/2004 | 13:21 | 2.08 | 16.0 | 25.79 | 11 | | 100 | 36 | 2780 | 2810 |

WEEK 3

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|----------------------|----------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | Before BW | After BW | Before BW | After BW | | |
| 3/8/2004 | 13:21 | 2.03 | 16.0 | 26.44 | 8.5 | | 45 | 31 | 1370 | 1370 |
| 3/10/2004 | 13:25 | 2.10 | 16.0 | 25.80 | 10.5 | | 85 | 34 | 1370 | 1370 |
| 3/12/2004 | 13:30 | 2.07 | 16.0 | 25.36 | 11 | | 94 | 27 | 1370 | |
| 3/14/2004 | 13:30 | 2.02 | 15.0 | 26.04 | 10 | | 64.5 | 48 | 1370 | 1370 |

WEEK 4

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|----------------------|----------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | Before BW | After BW | Before BW | After BW | | |
| 3/16/2004 | 13:30 | 2.04 | 16.0 | 37.72 | 6.5 | 10 | 62 | 26 | 1370 | 1370 |
| 3/18/2004 | 13:30 | 2.02 | 15.0 | 25.48 | 12.5 | | 90 | 36.5 | 1370 | 1370 |
| 3/20/2004 | 13:30 | 1.80 | 16.8 | 25.10 | 11.5 | | 73.5 | 28 | 1370 | 1370 |

WEEK 5

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|----------------------|----------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | Before BW | After BW | Before BW | After BW | | |
| 3/22/2004 | 13:15 | 1.82 | 16.0 | 26.49 | 10 | | 71 | 35 | 1370 | 1370 |
| 3/24/2004 | 13:30 | 1.73 | 15.0 | 25.30 | 9.5 | 8 | 60 | 32 | 1370 | 1370 |
| 3/26/2004 | 13:30 | 1.79 | 16.0 | 25.48 | 11 | 8 | | 27 | 1370 | 1370 |
| 3/28/2004 | 13:30 | 1.84 | 16.0 | 25.23 | 8 | | | 24.87 | 1370 | 1370 |

Imhoff Cone Testing

| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
|------|-----------|---------|----------|-------------|-----|----------|----------|-------------|-----|----------|----------|-------------|-----|
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | | | | 14:15 | 15 30 | 13 12.5 | 41 | 11:40 | 15 30 | 2.7 5.3 | 19 |
| 2 | 3/2/2004 | | | | | 13:00 | 15 30 | 23 24 | 52 | 11:00 | 15 30 | 5 7.5 | 26 |
| 3 | 3/10/2004 | | | | | 14:30 | 15 30 | 45 40 | 27 | 10:55 | 15 30 | 15 15.5 | 38 |
| 3 | 3/14/2004 | | | | | 15:00 | 30 | 18 | 23 | 11:50 | 30 | 0.4 | 8 |
| 4 | 3/18/2004 | | | | | 14:22 | 15 30 | 37 28 | 41 | 11:20 | 15 30 | 12.5 14 | 54 |
| 4 | 3/20/2004 | | | | | 14:00 | 15 30 | 50 | 33 | 11:30 | 15 30 | 0.5 1.5 | 14 |
| 5 | 3/24/2004 | 12:20 | 15 30 | 50 38 | 56 | 14:25 | 15 30 | 35 29 | 37 | 11:10 | 15 30 | 1.5 3.5 | 19 |
| 5 | 3/26/2004 | 9:25 | 15 30 | 42 30 | 33 | 14:15 | 15 30 | 35 30 | 36 | 10:50 | 15 30 | 0.1 1 | 8 |
| 5 | 3/28/2004 | 9:30 | 15 30 | 28 24 | 47 | 14:45 | 15 30 | 25 27 | 34 | 11:45 | 15 30 | 2 2.5 | 14 |
| 6 | 4/1/2004 | 9:30 | 15 30 | 29 21 | 26 | 14:35 | 15 30 | 29 24 | 30 | 11:25 | 15 30 | 6.5 7.5 | 33 |
| 6 | 4/3/2004 | 10:00 | 15 30 | 100 80 | 57 | 13:30 | 15 30 | 35 30 | 33 | 13:00 | 15 30 | 7.5 6 | 37 |
| 7 | 4/9/2004 | 9:25 | 15 30 | 48 35 | | 14:20 | 15 30 | 29 25 | | 10:55 | 15 30 | 0.1 0.4 | |
| 8 | 4/17/2004 | 10:53 | 15 30 | 34 25 | | 13:55 | 15 30 | 20 18 | | | 15 30 | | |
| | | | 15 30 | | | | 15 30 | | | | 15 30 | | |
| | | | 15 30 | | | | 15 30 | | | | 15 30 | | |
| | | | 15 30 | | | | 15 30 | | | | 15 30 | | |

WEEK 10

| 13Inf | | Portable Meter Readings | | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/26/2004 | 7:30 | 24.0 | 0.05 | 7.00 | 72.1 | 20 |
| | 13:00 | 26.4 | 0.10 | 6.93 | 60.4 | 22 |
| | 23:00 | 23.2 | 0.10 | 6.84 | 124.0 | |
| 4/27/2004 | 6:50 | 24.0 | 0.09 | 6.91 | 66.2 | 21 |
| | 13:10 | 25.6 | 0.20 | 7.03 | 65.9 | 18 |
| | 23:30 | 23.9 | 0.10 | 6.91 | 94.5 | |
| 4/28/2004 | 6:35 | 23.6 | 0.12 | 6.96 | 86.0 | 16 |
| | 13:00 | 25.5 | 0.10 | 6.97 | 57.8 | 16 |
| | 22:00 | 23.7 | 0.20 | 7.01 | 57.9 | |
| 4/29/2004 | 6:55 | 23.8 | 0.10 | 6.93 | 84.1 | 18 |
| | 13:00 | 26.6 | 0.20 | 6.94 | 56.8 | 14 |
| | 22:40 | 22.8 | 0.28 | 6.78 | 81.7 | |
| 4/30/2004 | 7:05 | 22.0 | 0.20 | 7.07 | 59.1 | 17 |
| | 13:00 | 25.9 | 0.40 | 6.98 | 59.7 | 13 |
| | 22:00 | 23.3 | 0.25 | 7.00 | 66.4 | 13 |
| 5/1/2004 | 7:10 | 21.1 | 0.37 | 6.91 | 61.8 | 14 |
| | 13:35 | 25.3 | 0.55 | 6.84 | 63.8 | 8 |
| | 23:00 | 22.9 | 0.10 | 6.67 | 63.7 | 13 |
| 5/2/2004 | 7:00 | 24.3 | 0.08 | 7.00 | 57.5 | 16 |
| | 14:00 | 25.2 | 0.15 | 6.86 | 68.2 | |
| | 22:00 | 24.4 | 0.30 | 6.70 | 64.5 | 12 |
| Min | | 21.1 | 0.1 | 6.7 | 56.8 | 8 |
| Max | | 26.6 | 0.6 | 7.1 | 124.0 | 22 |
| Avg | | 24.2 | 0.2 | 6.9 | 70.1 | 16 |

WEEK 10

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (°C) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/26/2004 | 7:15 | 2.0 | 7.5 | 1.5 | 6.7 | 300.4 | 92.8 | 22.9 | 4.6 | 6.94 | 7.6 | 56 |
| | 13:00 | 2.0 | 7.5 | 0.8 | 6.8 | 229.0 | 21.9 | 25.5 | 4.7 | 6.92 | 8.8 | 56 |
| | 23:00 | 1.5 | 7.5 | 1.0 | 6.7 | 268.0 | 61.3 | 22.4 | 3.8 | 6.94 | 12.0 | |
| 4/27/2004 | 6:45 | 2.0 | 7.5 | 1.0 | 6.8 | 221.0 | 6.8 | 22.8 | 4.1 | 6.98 | 9.9 | 52 |
| | 13:10 | 2.0 | 7.2 | 1.0 | 6.8 | 222.0 | 15.3 | 26.0 | 4.9 | 6.96 | 8.7 | 56 |
| | 23:30 | 1.5 | 7.5 | 0.6 | 6.2 | 290.7 | 84.3 | 23.8 | 3.4 | 6.87 | 8.2 | |
| 4/28/2004 | 6:30 | 2.0 | 7.5 | 0.7 | 6.7 | 273.0 | 65.0 | 22.8 | 4.9 | 6.89 | 7.6 | 53 |
| | 13:00 | 2.0 | 7.6 | 0.6 | 6.7 | 225.7 | 19.4 | 24.3 | 5.4 | 6.96 | 9.3 | 52 |
| | 22:00 | 2.0 | 7.6 | 0.5 | 6.8 | 255.0 | 48.7 | 23.4 | 5.3 | 7.05 | 8.7 | |
| 4/29/2004 | 6:50 | 2.0 | 7.5 | 0.3 | 6.7 | 291.0 | 83.0 | 23.1 | 5.1 | 6.90 | 7.4 | 54 |
| | 13:00 | 2.0 | 7.5 | 4.8 | 6.3 | 225.3 | 18.1 | 25.5 | 4.7 | 6.90 | 13.7 | 52 |
| | 23:00 | 2.0 | 7.5 | 4.5 | 6.2 | 263.0 | 55.5 | 23.2 | 4.3 | 6.96 | 9.2 | |
| 4/30/2004 | 7:00 | 2.0 | 7.5 | 4.4 | 6.2 | 296.0 | 89.0 | 22.8 | 4.5 | 7.00 | 8.9 | 54 |
| | 13:00 | 2.0 | 7.0 | 3.9 | 6.2 | 199.6 | 96.4 | 24.6 | 4.0 | 6.88 | 10.5 | 57 |
| | 22:00 | 2.0 | 7.6 | 4.5 | 6.8 | 221.8 | 14.3 | 23.1 | 4.6 | 6.95 | 14.3 | 48 |
| 5/1/2004 | 7:13 | 2.0 | 7.5 | 4.2 | 6.8 | 247.3 | 40.1 | 22.5 | 4.5 | 6.89 | 10.1 | 53 |
| | 13:40 | 2.0 | 7.5 | 4.1 | 6.8 | 223.1 | 15.6 | 25.3 | 5.5 | 6.90 | 10.1 | 45 |
| | 23:00 | 2.0 | 7.5 | 3.4 | 6.7 | 257.0 | 50.0 | 22.8 | 4.0 | 6.70 | 10.5 | 46 |
| 5/2/2004 | 7:15 | 2.0 | 7.3 | 1.9 | 6.7 | 303.5 | 98.0 | 25.3 | 3.3 | 6.97 | 8.2 | 51 |
| | 14:10 | 1.4 | 7.5 | 0.9 | 6.8 | 219.3 | 12.0 | 24.5 | 3.6 | 6.94 | 29.2 | |
| | 22:00 | 1.7 | 7.5 | 0.5 | 6.9 | 259.0 | 51.4 | 25.0 | 3.3 | 6.20 | 13.0 | 34 |
| | Min | 1.4 | 7.0 | 0.3 | 6.2 | 199.6 | 6.8 | 22.4 | 3.3 | 6.2 | 7.4 | 34 |
| | Max | 2.0 | 7.6 | 4.8 | 6.9 | 303.5 | 98.0 | 26.0 | 5.5 | 7.1 | 29.2 | 57 |
| | Avg | 1.9 | 7.5 | 2.1 | 6.6 | 251.9 | 49.5 | 23.9 | 4.4 | 6.9 | 10.8 | 51 |

WEEK 10

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/26/2004 | 7:00 | 1.50 | 4.48 | 9.8 | 22.9 | 4.5 | 6.9 | 7.99 | 58 |
| | 13:00 | 1.47 | 5.08 | 9.0 | 25.5 | 4.2 | 6.98 | 7.53 | 61 |
| | 23:00 | 1.47 | 6.24 | 10.0 | 20.6 | 5.2 | 7.08 | 11.40 | |
| 4/27/2004 | 6:40 | 1.50 | 6.25 | 10.4 | 23.8 | 4.7 | 6.90 | 5.30 | 60 |
| | 13:10 | 1.42 | 6.68 | 10.5 | 26.0 | 5.3 | 6.94 | 3.88 | 59 |
| | 23:30 | 6.89 | 6.24 | 10.0 | 23.9 | 3.5 | 7.13 | 6.92 | |
| 4/28/2004 | 6:30 | 1.46 | 6.30 | 10.0 | 23.5 | 5.3 | 6.96 | 4.43 | 52 |
| | 13:00 | 1.45 | 6.69 | 10.0 | 24.6 | 5.5 | 6.98 | 5.15 | 55 |
| | 22:00 | 1.45 | 6.29 | 9.0 | 23.5 | 6.0 | 7.16 | 5.48 | |
| 4/29/2004 | 6:45 | 1.49 | 6.27 | 10.0 | 23.3 | 5.8 | 6.96 | 4.45 | 57 |
| | 13:00 | 1.53 | 6.22 | 10.0 | 25.6 | 5.5 | 6.9 | 5.45 | 54 |
| | 22:30 | 1.43 | 6.24 | 10.0 | 22.4 | 5.1 | 7.0 | 3.25 | |
| 4/30/2004 | 6:55 | 1.43 | 6.20 | 10.6 | 22.9 | 5.2 | 7.00 | 4.27 | 57 |
| | 13:00 | 1.42 | 6.20 | 10.5 | 24.8 | 4.6 | 6.91 | 5.24 | 57 |
| | 22:00 | 1.43 | 6.25 | 9.0 | 23.2 | 5.0 | 6.94 | 7.33 | 48 |
| 5/1/2004 | 7:17 | 1.44 | 5.96 | 10.0 | 22.8 | 5.4 | 7.03 | 6.02 | 57 |
| | 13:25 | 1.44 | 6.28 | 8.0 | 25.1 | 6.0 | 6.98 | 5.97 | 53 |
| | 23:00 | 1.40 | 6.20 | 3.5 | 23.6 | 5.1 | 6.91 | 10.80 | 48 |
| 5/2/2004 | 7:30 | 1.44 | 6.45 | 9.5 | 25.4 | 5.7 | 7.02 | 6.78 | 54 |
| | 14:20 | 1.47 | 6.30 | 10.0 | 24.9 | 3.5 | 7.10 | 8.53 | |
| | 22:00 | 1.40 | 6.20 | 3.1 | 24.8 | 5.7 | 7.00 | 7.82 | 47 |
| Min | | 1.4 | 4.5 | 3.1 | 20.6 | 3.5 | 6.9 | 3.3 | 47 |
| Max | | 6.9 | 6.7 | 10.6 | 26.0 | 6.0 | 7.2 | 11.4 | 61 |
| Avg | | 1.7 | 6.1 | 9.2 | 24.0 | 5.1 | 7.0 | 6.4 | 55 |

WEEK 10

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 4/26/2004 | 7:00 | 2.6 | 5.20 | 8.1 | 22.7 | 3.8 | 7.0 | 11.20 | 40 |
| | 13:00 | 2.3 | 5.54 | 7.0 | 24.8 | 4.0 | 7.04 | 8.09 | 43 |
| | 23:00 | 2.38 | 4.63 | 8.0 | 21.1 | 5.6 | 6.41 | 2.34 | |
| 4/27/2004 | 6:35 | 2.22 | 5.30 | 9.0 | 22.8 | 6.5 | 6.52 | 2.28 | 65 |
| | 13:10 | 2.03 | 5.51 | 7.5 | 25.2 | 6.6 | 6.68 | 5.60 | 65 |
| | 23:30 | 6.32 | 6.28 | 8.0 | 23.6 | 4.5 | 6.38 | 2.27 | |
| 4/28/2004 | 6:40 | 2.10 | 4.80 | 8.3 | 21.6 | 7.4 | 6.63 | 1.76 | 62 |
| | 13:00 | 2.08 | 6.04 | 8.5 | 23.1 | 7.1 | 6.67 | 2.11 | 63 |
| | 22:00 | 2.12 | 5.73 | 8.1 | 22.5 | 7.3 | 6.37 | 2.18 | |
| 4/29/2004 | 6:40 | 2.15 | 5.99 | 8.6 | 21.3 | 7.4 | 6.45 | 2.99 | 63 |
| | 13:00 | 2.07 | 6.78 | 8.0 | 24.6 | 6.6 | 6.44 | 7.22 | 62 |
| | 22:30 | 2.19 | 5.94 | 8.5 | 21.8 | 6.5 | 6.36 | 2.10 | |
| 4/30/2004 | 6:50 | 2.14 | 5.98 | 8.8 | 21.6 | 7.3 | 6.56 | 1.85 | 64 |
| | 13:00 | 2.06 | 5.04 | 7.5 | 24.1 | 6.1 | 6.64 | 2.13 | 64 |
| | 22:00 | 2.14 | 5.30 | 8.0 | 22.4 | 7.3 | 6.14 | 2.56 | 61 |
| 5/1/2004 | 7:20 | 2.16 | 5.19 | 7.5 | 22.6 | 7.0 | 6.7 | 2.80 | 65 |
| | 13:35 | 2.10 | 5.39 | 6.5 | 25.1 | 7.8 | 6.67 | 5.80 | 60 |
| | 23:00 | 2.00 | 4.80 | 7.5 | 23.3 | 6.8 | 6.50 | 3.21 | 59 |
| 5/2/2004 | 7:45 | 2.08 | 4.51 | 7.5 | 25.2 | 6.1 | 6.8 | 2.55 | 62 |
| | 14:25 | 6.30 | 6.19 | 7.5 | 25.1 | 4.5 | 6.48 | 2.31 | |
| | 22:00 | 2.10 | 4.80 | 7.5 | 25.7 | 6.4 | 6.70 | 2.30 | 55 |
| | Min | 2.0 | 4.5 | 6.5 | 21.1 | 3.8 | 6.1 | 1.8 | 40 |
| | Max | 6.3 | 6.8 | 9.0 | 25.7 | 7.8 | 7.0 | 11.2 | 65 |
| | Avg | 2.6 | 5.5 | 7.9 | 23.3 | 6.3 | 6.6 | 3.6 | 60 |

WEEK 10

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 4/27/2004 | 9:00 | 2.00 | 3.0 | 90.40 | 0.60 | 6.70 | 203.5 | 25.3 | 7.6 | 40.75 | 1422 | 1440 |
| 4/29/2004 | 9:00 | 2.00 | 3.0 | 89.10 | 0.20 | 6.70 | 205.8 | 92.3 | 9.2 | 28.5 | 1421 | 1440 |
| 5/1/2004 | | | | 82-88 | | | 126.8 | | | 28.5 | | |

WEEK 10

| BIOFOR -C | | Instrument Readings | | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|--|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) | |
| | | | | | | | Before BW | After BW | | | |
| 4/27/2004 | 13:30 | 1.42 | 16.0 | 26.12 | 23.00 | 10.5 | 81 | 34.25 | 1372 | 1372 | |
| 4/29/2004 | 13:30 | 1.43 | 16.0 | 25.66 | 22.50 | 10 | 71 | 38.75 | 1372 | 1372 | |
| 5/1/2004 | 13:35 | 1.43 | 16.0 | 25.76 | | | 54.25 | | 1372 | 1372 | |

25.85

WEEK 10

| BIOFOR -N | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | Before BW | After BW | | |
| 4/27/2004 | 10:00 | 1.93 | 9.0 | 15.08 | 15 | 12 | 65 | 35 | 2812 | 2812 |
| 4/29/2004 | 10:00 | 2.01 | 9.0 | 15.15 | 15 | 11 | 46.5 | 36 | 2812 | 2812 |
| 5/1/2004 | 10:00 | 2.00 | 9.0 | 15.00 | 17.75 | | 44.5 | 19.5 | 2812 | 2812 |
| | | | | | | | | | | |

15.08

WEEK 11

| 13Inf | | Portable Meter Readings | | | | |
|----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/3/2004 | 6:50 | 25.0 | 0.05 | 6.77 | 73.5 | 13 |
| | 13:00 | 27.1 | 0.10 | 6.80 | 65.3 | 15 |
| | 22:00 | 23.5 | | 6.80 | 72.4 | 12 |
| 5/4/2004 | 7:00 | 24.6 | 0.08 | 6.81 | 66.5 | 16 |
| | 13:00 | 26.3 | 0.09 | 6.85 | 62.0 | 21 |
| | 23:30 | 24.7 | 0.20 | 6.80 | 61.1 | 13 |
| 5/5/2004 | 6:45 | 24.6 | 0.06 | 6.78 | 72.3 | 13 |
| | 13:00 | 26.5 | 0.10 | 6.80 | 66.6 | 15 |
| | 23:00 | 24.5 | 0.10 | 6.87 | 78.1 | 23 |
| 5/6/2004 | 6:45 | 24.6 | 0.05 | 6.75 | 81.7 | 15 |
| | 13:00 | 26.6 | 0.10 | 6.89 | 67.1 | 11 |
| | 23:00 | 24.3 | 0.13 | 6.66 | 62.0 | 13 |
| 5/7/2004 | 6:55 | 25.2 | 0.06 | 6.86 | 58.6 | 17 |
| | 13:00 | 26.5 | 0.06 | 6.93 | 45.4 | 20 |
| | 22:00 | 25.0 | 0.10 | 6.88 | 52.8 | 21 |
| 5/8/2004 | 7:00 | 25.4 | 0.08 | 7.03 | 37.1 | 26 |
| | | | | | | |
| 5/9/2004 | 2:00 | 24.2 | 0.10 | 6.69 | 51.0 | 19 |
| | 7:10 | 23.5 | 0.16 | 6.82 | 50.6 | 20 |
| | 13:35 | 26.2 | 0.12 | 6.94 | 30.7 | 18 |
| | 22:10 | 24.7 | 0.00 | 6.68 | 51.5 | 19 |
| | Min | 23.5 | 0.0 | 6.7 | 30.7 | 11 |
| | Max | 27.1 | 0.2 | 7.0 | 81.7 | 26 |
| | Avg | 25.2 | 0.1 | 6.8 | 60.3 | 17 |

WEEK 11

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (°C) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/3/2004 | 6:45 | 1.7 | 7.6 | 0.4 | 6.7 | 301.0 | 94.0 | 24.5 | 3.0 | 6.73 | 13.7 | 40 |
| | 13:00 | 1.7 | 7.5 | 0.5 | 6.8 | 242.9 | 35.7 | 27.9 | 3.1 | 6.82 | 15.5 | 40 |
| | 22:00 | 1.7 | 7.5 | 0.4 | 6.8 | 287.0 | 0.7 | 22.4 | | 6.40 | 12.7 | 40 |
| 5/4/2004 | 6:50 | 3.0 | 0.0 | 0.6 | 6.7 | 210.0 | 0.0 | 23.6 | 3.0 | 6.80 | 12.0 | 41 |
| | 13:00 | 1.7 | 7.5 | 0.5 | 6.8 | 231.1 | 23.4 | 26.4 | 3.4 | 6.85 | 15.3 | 47 |
| | 23:30 | 1.7 | 7.5 | 0.3 | 6.7 | 276.6 | 69.3 | 24.2 | 2.8 | 6.50 | 10.3 | 44 |
| 5/5/2004 | 6:40 | 1.7 | 7.5 | 0.1 | 6.7 | 301.0 | 93.6 | 23.8 | 2.8 | 6.75 | 12.3 | 42 |
| | 13:00 | 1.7 | 7.5 | 0.1 | 6.9 | 236.9 | 29.7 | 26.6 | 3.4 | 6.81 | 14.2 | 42 |
| | 23:00 | 1.7 | 7.5 | 0.1 | 6.6 | 297.0 | 91.0 | 23.6 | 3.2 | 6.92 | 12.0 | 47 |
| 5/6/2004 | 6:45 | 0.0 | 0.0 | 0.0 | 6.6 | 191.0 | 0.0 | 22.7 | 3.5 | 6.70 | 16.5 | 39 |
| | 13:00 | 2.0 | 7.2 | 0.1 | 6.1 | 232.6 | 25.1 | 25.7 | 4.1 | 6.87 | 36.5 | 38 |
| | 23:00 | 2.0 | 7.6 | 0.1 | 6.1 | 284.6 | 78.1 | 23.2 | 4.2 | 6.98 | 15.9 | 45 |
| 5/7/2004 | 6:50 | 2.0 | 7.6 | 0.1 | 6.1 | 300.0 | 94.0 | 24.1 | 3.9 | 6.82 | 18.0 | 41 |
| | 13:00 | 2.0 | 7.5 | 0.0 | 6.2 | 231.0 | 23.6 | 23.7 | 2.2 | 6.94 | 34.8 | 38 |
| | 22:00 | 2.0 | 7.5 | 4.4 | 6.8 | 227.0 | 20.1 | 24.6 | 4.6 | 7.00 | 13.9 | 44 |
| 5/8/2004 | 7:15 | 2.0 | 7.6 | 4.5 | 6.8 | 266.0 | 58.6 | 24.4 | 4.1 | 7.02 | 8.1 | 53 |
| | | | | | | | | | | | | |
| 5/9/2004 | 2:00 | 1.7 | 7.4 | 3.4 | | 297.2 | 90.5 | 23.1 | 3.8 | 6.58 | 8.9 | 50 |
| | 7:15 | 1.7 | 7.5 | 3.1 | 6.7 | 252.7 | 45.3 | 24.1 | 3.5 | 6.84 | 9.0 | 47 |
| | 13:40 | 0.0 | 7.5 | 0.0 | 6.4 | 228.8 | 21.5 | 26.2 | 0.1 | 6.71 | 27.3 | 23 |
| | 22:10 | 1.7 | 7.2 | 1.2 | 6.3 | 270.5 | 63.5 | 23.4 | 3.5 | 6.65 | 11.7 | 50 |
| | Min | 0.0 | 0.0 | 0.0 | 6.1 | 191.0 | 0.0 | 22.4 | 0.1 | 6.4 | 8.1 | 23 |
| | Max | 3.0 | 7.6 | 4.5 | 6.9 | 301.0 | 94.0 | 27.9 | 4.6 | 7.0 | 36.5 | 53 |
| | Avg | 1.7 | 6.7 | 1.0 | 6.6 | 258.2 | 47.9 | 24.4 | 3.3 | 6.8 | 15.9 | 43 |

WEEK 11

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/3/2004 | 6:40 | 1.39 | 4.40 | 9.2 | 24.6 | 4.3 | 6.9 | 10.50 | 54 |
| | 13:00 | 1.41 | 5.44 | 7.5 | 27.7 | 4.8 | 6.83 | 12.80 | 41 |
| | 22:00 | 1.40 | 3.30 | 3.1 | 23.8 | | 7 | 5.80 | 53 |
| 5/4/2004 | 6:45 | 1.42 | 2.30 | 9.0 | 24.2 | 4.9 | 6.93 | 4.97 | 60 |
| | 13:00 | 1.40 | 6.27 | 8.5 | 26.4 | 6.5 | 6.87 | 4.79 | 58 |
| | 23:30 | 1.42 | 6.34 | 3.6 | 24.1 | 5.2 | 6.90 | 10.00 | 48 |
| 5/5/2004 | 6:35 | 1.45 | 6.40 | 9.8 | 24.2 | 5.1 | 6.90 | 8.96 | 52 |
| | 13:00 | 1.45 | 6.23 | 10.0 | 26.4 | 5.0 | 6.85 | 7.63 | 50 |
| | 23:00 | 1.42 | 6.27 | 10.0 | 23.9 | 5.2 | 6.82 | 5.04 | 54 |
| 5/6/2004 | 6:30 | 1.43 | 6.30 | 10.0 | 23.7 | 5.0 | 6.85 | 5.35 | 55 |
| | 13:00 | 1.41 | 6.43 | 7.5 | 25.9 | 5.4 | 7.0 | 9.54 | 48 |
| | 23:00 | 1.41 | 6.29 | 9.0 | 22.9 | 7.0 | 6.7 | 3.19 | 60 |
| 5/7/2004 | 6:45 | 1.44 | 6.30 | 9.7 | 24.8 | 4.6 | 6.90 | 9.00 | 45 |
| | 13:00 | 1.40 | 6.32 | 9.0 | 26.3 | 4.6 | 6.90 | 24.80 | 37 |
| | 22:00 | 1.44 | 6.22 | 9.0 | 25.0 | 3.3 | 7.00 | 8.08 | 46 |
| 5/8/2004 | 7:15 | 1.45 | 6.22 | 10.0 | 24.5 | 3.5 | 7.04 | 15.20 | 54 |
| | | | | | | | | | |
| 5/9/2004 | 2:00 | 1.45 | 4.00 | 9.0 | 23.9 | 5.3 | 6.88 | 7.55 | 60 |
| | 7:20 | 1.46 | 6.27 | 10.0 | 24.0 | 3.5 | 6.97 | 8.97 | 56 |
| | 13:25 | 1.50 | 5.98 | 8.5 | 25.9 | 4.2 | 6.92 | 17.10 | 50 |
| | 22:10 | 1.41 | 6.33 | 9.0 | 24.0 | 4.5 | 6.82 | 9.07 | 54 |
| Min | | 1.4 | 2.3 | 3.1 | 22.9 | 3.3 | 6.7 | 3.2 | 37 |
| Max | | 1.5 | 6.4 | 10.0 | 27.7 | 7.0 | 7.0 | 24.8 | 60 |
| Avg | | 1.4 | 5.7 | 8.6 | 24.8 | 4.8 | 6.9 | 9.4 | 52 |

WEEK 11

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/3/2004 | 6:55 | 2.0 | 4.20 | 7.9 | 24.6 | 6.6 | 6.6 | 2.04 | 63 |
| | 13:00 | 2.0 | 5.91 | 6.0 | 28.3 | 5.9 | 6.68 | 11.20 | 57 |
| | 22:00 | 2.00 | 5.74 | 8.5 | 24.2 | | 6.60 | 4.80 | 58 |
| 5/4/2004 | 6:40 | 2.10 | 6.10 | 8.0 | 23.5 | 6.2 | 6.32 | 3.43 | 62 |
| | 13:00 | 2.09 | 5.41 | 7.0 | 26.4 | 6.0 | 6.55 | 2.65 | 65 |
| | 23:30 | 2.14 | 5.14 | 9.0 | 24.4 | 5.9 | 6.60 | 3.00 | 58 |
| 5/5/2004 | 6:30 | 2.15 | 5.00 | 8.0 | 23.5 | 6.9 | 6.40 | 2.92 | 59 |
| | 13:00 | 2.09 | 5.83 | 7.0 | 25.8 | 6.4 | 6.62 | 7.37 | 60 |
| | 23:00 | 2.18 | 5.72 | 8.0 | 23.5 | 6.1 | 6.48 | 2.85 | 61 |
| 5/6/2004 | 6:30 | 2.17 | 5.70 | 8.2 | 23.0 | 6.4 | 6.30 | 2.03 | 63 |
| | 14:30 | 2.01 | 5.80 | 6.5 | 25.1 | 7.5 | 6.87 | 3.64 | 64 |
| | 23:00 | 2.13 | 5.56 | 8.0 | 23.3 | 5.3 | 7.06 | 6.54 | 50 |
| 5/7/2004 | 6:40 | 2.12 | 5.40 | 7.9 | 23.8 | 6.6 | 6.58 | 2.66 | 59 |
| | 13:00 | 2.11 | 5.71 | 7.5 | 26.1 | 6.7 | 6.62 | 6.64 | 56 |
| | 22:00 | 2.16 | 4.99 | 7.5 | 24.7 | 6.8 | 6.56 | 4.00 | 60 |
| 5/8/2004 | 7:30 | 2.14 | 4.73 | 8.0 | 23.7 | 5.8 | 6.7 | 2.52 | 63 |
| | | | | | | | | | |
| 5/9/2004 | 2:00 | 2.11 | 4.85 | 8.0 | 22.8 | 6.9 | 6.49 | 2.65 | 65 |
| | 7:22 | 2.12 | 4.87 | 8.0 | 23.9 | 6.1 | 6.5 | 3.53 | 62 |
| | 13:30 | 2.00 | 5.51 | 7.0 | 26.1 | 6.2 | 6.64 | 4.20 | 58 |
| | 22:10 | 2.10 | 5.93 | 8.0 | 24.3 | 5.9 | 6.37 | 3.46 | 61 |
| | Min | 2.0 | 4.2 | 6.0 | 22.8 | 5.3 | 6.3 | 2.0 | 50 |
| | Max | 2.2 | 6.1 | 9.0 | 28.3 | 7.5 | 7.1 | 11.2 | 65 |
| | Avg | 2.1 | 5.4 | 7.7 | 24.6 | 6.3 | 6.6 | 4.1 | 60 |

WEEK 11

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|---------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (wc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 5/5/2004 | 9:00 | 1.70 | 3.0 | 89.20 | 0.20 | 6.70 | 202.1 | | 14.8 | 24 | 1415 | 1440 |
| 5/9/2004 | 9:05 | 0.00 | 3.0 | 90.90 | 2.10 | 6.90 | 117.6 | 0 | 0 | 41 | 1440 | 1440 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

90.05

| Imhoff Cone Testing | | | | | | | | | | | | | |
|---------------------|-----------|---------|---------|-------------|-----|----------|---------|-------------|-----|----------|---------|-------------|-----|
| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | | | | 14:15 | 15 | 13 | 41 | 11:40 | 15 | 2.7 | 19 |
| | | | | | | | 30 | 12.5 | | | 30 | 5.3 | |
| 2 | 3/2/2004 | | | | | 13:00 | 15 | 23 | 52 | 11:00 | 15 | 5 | 26 |
| | | | | | | | 30 | 24 | | | 30 | 7.5 | |
| 3 | 3/10/2004 | | | | | 14:30 | 15 | 45 | 27 | 10:55 | 15 | 15 | 38 |
| | | | | | | | 30 | 40 | | | 30 | 15.5 | |
| 3 | 3/14/2004 | | | | | 15:00 | | | 23 | 11:50 | | | 8 |
| | | | | | | | 30 | 18 | | | 30 | 0.4 | |
| 4 | 3/18/2004 | | | | | 14:22 | 15 | 37 | 41 | 11:20 | 15 | 12.5 | 54 |
| | | | | | | | 30 | 28 | | | 30 | 14 | |
| 4 | 3/20/2004 | | | | | 14:00 | 15 | | 33 | 11:30 | 15 | 0.5 | 14 |
| | | | | | | | 30 | 50 | | | 30 | 1.5 | |
| 5 | 3/24/2004 | 12:20 | 15 | 50 | 56 | 14:25 | 15 | 35 | 37 | 11:10 | 15 | 1.5 | 19 |
| | | | 30 | 38 | | | 30 | 29 | | | 30 | 3.5 | |
| 5 | 3/26/2004 | 9:25 | 15 | 42 | 33 | 14:15 | 15 | 35 | 36 | 10:50 | 15 | 0.1 | 8 |
| | | | 30 | 30 | | | 30 | 30 | | | 30 | 1 | |
| 5 | 3/28/2004 | 9:30 | 15 | 28 | 47 | 14:45 | 15 | 25 | 34 | 11:45 | 15 | 2 | 14 |
| | | | 30 | 24 | | | 30 | 27 | | | 30 | 2.5 | |
| 6 | 4/1/2004 | 9:30 | 15 | 29 | 26 | 14:35 | 15 | 29 | 30 | 11:25 | 15 | 6.5 | 33 |
| | | | 30 | 21 | | | 30 | 24 | | | 30 | 7.5 | |
| 6 | 4/3/2004 | 10:00 | 15 | 100 | 57 | 13:30 | 15 | 35 | 33 | 13:00 | 15 | 7.5 | 37 |
| | | | 30 | 80 | | | 30 | 30 | | | 30 | 6 | |
| 7 | 4/9/2004 | 9:25 | 15 | 48 | 30 | 14:20 | 15 | 29 | 27 | 10:55 | 15 | 0.1 | 4 |
| | | | 30 | 35 | | | 30 | 25 | | | 30 | 0.4 | |
| 8 | 4/17/2004 | 10:53 | 15 | 34 | 51 | 13:55 | 15 | 20 | 42 | | 15 | | |
| | | | 30 | 25 | | | 30 | 18 | | | 30 | | |
| 9 | 4/21/2004 | 9:30 | 15 | 25 | 33 | 14:25 | 15 | 28 | 35 | 11:00 | 15 | 0 | 2 |
| | | | 30 | 20 | | | 30 | 24 | | | 30 | <0.1 | |
| 9 | 4/23/2004 | 9:25 | 15 | 40 | 31 | 14:15 | 15 | 18 | 27 | 10:55 | 15 | 0.2 | 7 |
| | | | 30 | 35 | | | 30 | 15 | | | 30 | 0.2 | |
| 10 | 4/27/2004 | 9:25 | 15 | 32 | 29 | 14:25 | 15 | 25 | 41 | 11:00 | 15 | 4.5 | 18 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 3.5 | |
| 10 | 4/29/2004 | 9:30 | 15 | 32 | 28 | 14:15 | 15 | 27 | 36 | 10:55 | 15 | 1.3 | 29 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 2 | |
| 11 | 5/5/2004 | 9:30 | 15 | 33 | 29 | 14:15 | 15 | 31 | 35 | 11:00 | 15 | 0 | 0 |
| | | | 30 | 27 | | | 30 | 24 | | | 30 | 0.1 | |
| 11 | 5/7/2004 | | | | | 14:15 | 15 | 25 | | 10:45 | 15 | 0.3 | |
| | | | | | | | 30 | 24 | | | 30 | 0.5 | |

WEEK 12

| 13Inf | | Portable Meter Readings | | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/10/2004 | 6:40 | 24.9 | 0.07 | 6.81 | 71.2 | 18 |
| | 13:00 | 25.6 | 0.08 | 6.87 | 41.4 | 19 |
| 5/11/2004 | 1:15 | 24.6 | 0.00 | 6.67 | 49.3 | 14 |
| | 7:30 | 24.2 | 0.09 | 6.76 | 61.6 | 16 |
| | 13:00 | 26.6 | 0.08 | 6.87 | 50.2 | 15 |
| 5/12/2004 | 1:15 | 24.0 | 0.00 | 6.67 | 53.5 | 13 |
| | 7:10 | 25.0 | 0.06 | 6.81 | 72.6 | 15 |
| | 13:00 | 26.6 | 0.10 | 6.97 | 44.6 | 19 |
| | 22:20 | 24.2 | 0.09 | 6.94 | 46.5 | 19 |
| 5/13/2004 | | 25.3 | 0.06 | 6.80 | 54.0 | 16 |
| | 13:05 | 26.7 | 0.10 | 6.95 | 31.0 | 22 |
| | 22:00 | 25.1 | 0.10 | 6.86 | 37.1 | 17 |
| 5/14/2004 | 7:15 | 24.6 | 0.09 | 6.84 | 62.2 | 21 |
| | 13:00 | 26.8 | 0.05 | 6.93 | 33.7 | 18 |
| | 22:00 | 25.2 | 0.09 | 6.87 | 50.6 | 18 |
| 5/15/2004 | 7:30 | 25.8 | 0.09 | 6.91 | 43.2 | 18 |
| | 14:40 | 26.2 | 0.08 | 6.94 | 47.7 | 17 |
| | 23:00 | 24.4 | 0.20 | 6.74 | 55.2 | 15 |
| 5/16/2004 | 7:15 | 23.8 | 0.08 | 6.88 | 50.5 | 18 |
| | 22:30 | 24.1 | 0.20 | 6.86 | | 12 |
| Min | | 23.8 | 0.0 | 6.7 | 31.0 | 12 |
| Max | | 26.8 | 0.2 | 7.0 | 72.6 | 22 |
| Avg | | 25.2 | 0.1 | 6.8 | 50.3 | 17 |

WEEK 12

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (°C) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/10/2004 | 6:40 | 1.7 | 7.2 | 0.6 | 6.3 | 242.8 | 35.4 | 23.4 | 3.2 | 6.83 | 11.2 | 47 |
| | 13:00 | 1.7 | 7.3 | 0.2 | 6.3 | 237.6 | 30.4 | 25.1 | 3.0 | 6.79 | 14.0 | 46 |
| 5/11/2004 | 1:15 | 1.7 | 6.5 | 0.0 | 6.3 | 278.1 | 71.4 | 23.1 | 3.0 | 6.63 | 13.3 | 43 |
| | 7:30 | 1.7 | 6.4 | 0.0 | 6.8 | 240.0 | 33.6 | 23.1 | 2.4 | 6.82 | 16.6 | 41 |
| | 13:00 | 1.7 | 7.5 | 3.4 | 6.8 | 230.1 | 22.8 | 26.3 | 3.1 | 6.78 | 22.6 | 36 |
| 5/12/2004 | 1:15 | 1.7 | 7.5 | 2.3 | 6.8 | 265.0 | 57.3 | 22.8 | 4.2 | 6.73 | 11.6 | 50 |
| | 7:10 | 1.7 | 7.5 | 1.4 | 6.8 | 285.0 | 77.5 | 24.0 | 3.1 | 6.82 | 12.6 | 47 |
| | 13:00 | 1.7 | 7.6 | 1.4 | 6.8 | 229.9 | 22.4 | 26.6 | 3.4 | 6.89 | 15.6 | 44 |
| | 22:20 | 1.7 | 7.5 | 3.6 | 6.8 | 257.7 | 49.9 | 23.4 | 3.9 | 6.88 | 13.6 | 50 |
| 5/13/2004 | | 1.7 | 7.4 | 2.1 | 6.8 | 281.0 | 73.0 | 24.1 | 3.4 | 6.82 | 12.6 | 49 |
| | 13:05 | 1.7 | 7.4 | 2.1 | 6.8 | 230.6 | 23.6 | 26.5 | 3.3 | 6.84 | 14.3 | 48 |
| | 22:00 | 2.0 | 7.5 | 4.1 | 6.8 | 225.0 | 18.0 | 24.5 | 5.0 | 6.99 | 11.8 | 51 |
| 5/14/2004 | 7:15 | 1.6 | 7.5 | 3.9 | 6.8 | 254.7 | 47.2 | 23.8 | 4.8 | 6.87 | 5.0 | 57 |
| | 13:00 | 1.0 | 7.5 | 1.0 | 6.8 | 227.1 | 19.9 | 26.6 | 2.3 | 6.83 | 8.8 | 47 |
| | 22:00 | 2.0 | 7.5 | 2.9 | 6.7 | 249.0 | 43.5 | 24.7 | 4.6 | 6.92 | 7.0 | 53 |
| 5/15/2004 | 7:30 | 2.0 | 7.4 | 2.3 | 6.7 | 286.7 | 78.7 | 25.0 | 3.7 | 6.98 | 8.3 | 55 |
| | 14:40 | 2.0 | 7.5 | 2.0 | 6.8 | 230.4 | 22.8 | 25.4 | 3.9 | 6.94 | 7.9 | 56 |
| | 23:00 | 1.5 | 7.4 | 2.0 | 6.7 | 269.3 | 60.7 | 23.6 | 4.2 | 6.81 | 8.2 | 53 |
| 5/16/2004 | 7:15 | 2.0 | 7.5 | 1.9 | 6.7 | 299.0 | 92.2 | 23.9 | 4.2 | 6.96 | 9.9 | 54 |
| | 22:30 | 1.5 | 7.5 | 2.3 | 6.7 | 259.7 | 52.4 | 23.1 | 4.2 | 6.93 | 28.4 | 38 |
| | | | | | | | | | | | | |
| | Min | 1.0 | 6.4 | 0.0 | 6.3 | 225.0 | 18.0 | 22.8 | 2.3 | 6.6 | 5.0 | 36 |
| | Max | 2.0 | 7.6 | 4.1 | 6.8 | 299.0 | 92.2 | 26.6 | 5.0 | 7.0 | 28.4 | 57 |
| | Avg | 1.7 | 7.4 | 2.0 | 6.7 | 253.9 | 46.6 | 24.5 | 3.6 | 6.9 | 12.7 | 48 |

14.2
7.9

WEEK 12

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/10/2004 | 6:40 | 1.40 | 6.12 | 9.8 | 23.6 | 4.6 | 6.97 | 15.70 | 52 |
| | 13:00 | 1.43 | 6.25 | 10.0 | 25.4 | 3.6 | 6.86 | 32.20 | 48 |
| 5/11/2004 | 1:15 | 1.40 | 6.30 | 9.0 | 23.6 | 4.3 | 6.76 | 14.50 | 46 |
| | 7:30 | 1.44 | 7.20 | 10.0 | 23.4 | 3.2 | 6.92 | 22.50 | 46 |
| | 13:00 | 1.44 | 6.24 | 9.5 | 25.9 | 2.3 | 6.71 | 26.10 | 44 |
| 5/12/2004 | 1:15 | 1.40 | 4.51 | 9.0 | 23.5 | 4.6 | 6.84 | 9.19 | 52 |
| | 7:10 | 1.40 | 4.70 | 9.4 | 24.2 | 4.4 | 6.83 | 13.50 | 52 |
| | 13:00 | 1.50 | 5.51 | 8.5 | 26.6 | 3.1 | 6.93 | 21.90 | 49 |
| | 22:15 | 1.39 | 3.76 | 8.5 | 22.8 | 6.4 | 6.29 | 3.79 | 62 |
| 5/13/2004 | | 1.43 | 3.10 | 9.0 | 23.8 | 5.6 | 6.93 | 4.44 | 60 |
| | 13:05 | 1.47 | 6.27 | 9.0 | 26.4 | 4.9 | 6.83 | 6.61 | 55 |
| | 22:00 | 1.42 | 6.26 | 9.0 | 25.0 | 2.0 | 7.0 | 10.10 | 45 |
| 5/14/2004 | 7:15 | 2.40 | 6.37 | 8.5 | | | | | |
| | 13:00 | 1.45 | 6.47 | 8.0 | 26.5 | 3.2 | 7.10 | 149.0 | 10 |
| | 22:00 | 2.46 | 6.05 | 9.0 | 24.9 | 5.7 | 6.91 | 11.50 | 45 |
| 5/15/2004 | 7:45 | 2.44 | 6.30 | 9.0 | 25.3 | 4.5 | 7.02 | 6.74 | 56 |
| | 14:50 | 1.45 | 6.35 | 9.0 | 25.8 | 5.2 | 7.08 | 7.72 | 55 |
| | 23:00 | 1.47 | 5.81 | 10.0 | 23.2 | 4.3 | 6.83 | 14.50 | 48 |
| 5/16/2004 | 7:22 | 1.47 | 6.14 | 9.5 | 24.1 | 3.6 | 7.05 | 13.00 | 53 |
| | 22:30 | 1.49 | 7.45 | 9.0 | 22.5 | 4.4 | 7.08 | 8.49 | 48 |
| Min | | 1.4 | 3.1 | 8.0 | 22.5 | 2.0 | 6.3 | 3.8 | 10 |
| Max | | 2.5 | 7.5 | 10.0 | 26.6 | 6.4 | 7.1 | 149.0 | 62 |
| Avg | | 1.6 | 5.9 | 9.1 | 24.6 | 4.2 | 6.9 | 20.6 | 49 |

WEEK 12

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/10/2004 | 6:40 | 2.0 | 5.68 | 7.0 | 23.6 | 4.6 | 7.0 | 15.70 | 52 |
| | 13:00 | 2.1 | 5.43 | 8.0 | 24.2 | 6.6 | 6.53 | 2.51 | 64 |
| 5/11/2004 | 1:15 | 2.09 | 4.78 | 8.0 | 23.1 | 6.6 | 6.39 | 2.37 | 61 |
| | 7:30 | 2.10 | 4.60 | 8.0 | 22.3 | 6.6 | 6.57 | 2.67 | 60 |
| | 13:00 | 2.05 | 5.72 | 7.5 | 24.6 | 6.4 | 6.61 | 4.27 | 61 |
| 5/12/2004 | 1:15 | 2.10 | 5.11 | 8.0 | 22.8 | 6.9 | 6.25 | 2.41 | 61 |
| | 7:10 | 2.00 | 4.86 | 8.0 | 24.0 | 6.7 | 6.40 | 2.62 | 62 |
| | 13:00 | 2.01 | 5.76 | 7.5 | 25.6 | 6.0 | 6.46 | 2.94 | 61 |
| | 22:15 | 2.10 | 6.15 | 8.0 | 23.3 | 5.6 | 7.12 | 6.05 | 56 |
| 5/13/2004 | | 0.00 | | 6.8 | 22.6 | 5.7 | 6.30 | 2.89 | 64 |
| | 13:05 | 2.07 | 5.80 | 7.5 | 26.0 | 6.0 | 6.55 | 3.94 | 62 |
| | 22:00 | 2.11 | 5.75 | 8.0 | 24.5 | 5.8 | 6.33 | 3.76 | 58 |
| 5/14/2004 | 7:15 | 2.11 | 5.60 | 8.5 | 23.2 | 5.8 | 6.40 | 4.85 | 54 |
| | 13:00 | 2.08 | 5.86 | 8.0 | 26.1 | 5.4 | 6.52 | 11.70 | 51 |
| | 22:00 | 2.14 | 5.73 | 8.5 | 25.2 | 5.9 | 6.26 | 5.99 | 58 |
| 5/15/2004 | 7:45 | 2.14 | 5.72 | 8.5 | 24.6 | 5.3 | 6.9 | 3.45 | 63 |
| | 15:00 | 2.10 | 5.76 | 7.0 | 25.1 | 5.3 | 6.88 | 4.58 | 62 |
| | 23:00 | 2.10 | 5.15 | 8.0 | 22.0 | 6.7 | 6.64 | 2.78 | 59 |
| 5/16/2004 | 7:25 | 2.09 | 5.06 | 7.5 | 23.1 | 6.4 | 7.1 | 3.03 | 62 |
| | 22:30 | 2.06 | 0.00 | 7.0 | | | | | |
| Min | | 0.0 | 0.0 | 6.8 | 22.0 | 4.6 | 6.3 | 2.4 | 51 |
| Max | | 2.1 | 6.2 | 8.5 | 26.1 | 6.9 | 7.1 | 15.7 | 64 |
| Avg | | 2.0 | 5.2 | 7.8 | 24.0 | 6.0 | 6.6 | 4.7 | 60 |

WEEK 12

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|---------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (wc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 5/11/2004 | 9:00 | 1.70 | 3.0 | 91.40 | 0.00 | 7.00 | 202.3 | 40.7 | 13.1 | 41.25 | 1419 | 1440 |
| 5/13/2004 | 9:00 | | 3.0 | 90.80 | 1.40 | 6.90 | 121.6 | 78.2 | 8.5 | 29.5 | 1420 | 1440 |
| 5/15/2004 | 9:00 | 2.00 | 3.0 | 88.90 | 2.10 | 6.70 | 178.8 | 83 | 6.5 | 29.5 | 1433 | 1440 |

90.37

WEEK 12

| BIOFOR -C | | Instrument Readings | | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|-----|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | |
| 5/11/2004 | 13:30 | 1.56 | 16.0 | 25.74 | 23.75 | 9 | 7 | 68 | 31 | 1372 | 1372 |
| 5/13/2004 | 13:30 | 1.48 | 16.0 | 25.57 | 23.00 | 9 | 7.5 | 57 | 33 | 1370 | 1370 |
| 5/15/2004 | 13:30 | 1.45 | 16.0 | 26.50 | 22.00 | 9 | | 66 | 23.5 | 1372 | 1372 |
| | | | | | | | | | | | |

| Imhoff Cone Testing | | | | | | | | | | | | | |
|---------------------|-----------|---------|---------|-------------|-----|----------|---------|-------------|-----|----------|---------|-------------|-----|
| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | 15 | 50 | 56 | 14:25 | 15 | 35 | 37 | 11:10 | 15 | 1.5 | 19 |
| | | | 30 | 38 | | | 30 | 29 | | | 30 | 3.5 | |
| 2 | 3/2/2004 | | 15 | 42 | 33 | 14:15 | 15 | 35 | 36 | 10:50 | 15 | 0.1 | 8 |
| | | | 30 | 30 | | | 30 | 30 | | | 30 | 1 | |
| 3 | 3/10/2004 | | 15 | 28 | 47 | 14:45 | 15 | 25 | 34 | 11:45 | 15 | 2 | 14 |
| | | | 30 | 24 | | | 30 | 27 | | | 30 | 2.5 | |
| 3 | 3/14/2004 | | 15 | 29 | 26 | 14:35 | 15 | 29 | 30 | 11:25 | 15 | 6.5 | 33 |
| | | | 30 | 21 | | | 30 | 24 | | | 30 | 7.5 | |
| 4 | 3/18/2004 | | 15 | 100 | 57 | 13:30 | 15 | 35 | 33 | 13:00 | 15 | 7.5 | 37 |
| | | | 30 | 80 | | | 30 | 30 | | | 30 | 6 | |
| 4 | 3/20/2004 | | 15 | 48 | 30 | 14:20 | 15 | 29 | 27 | 10:55 | 15 | 0.1 | 4 |
| | | | 30 | 35 | | | 30 | 25 | | | 30 | 0.4 | |
| 5 | 3/24/2004 | 12:20 | 15 | 34 | 51 | 13:55 | 15 | 20 | 42 | | 15 | | |
| | | | 30 | 25 | | | 30 | 18 | | | 30 | | |
| 5 | 3/26/2004 | 9:25 | 15 | 25 | 33 | 14:25 | 15 | 28 | 35 | 11:00 | 15 | 0 | 2 |
| | | | 30 | 20 | | | 30 | 24 | | | 30 | <0.1 | |
| 5 | 3/28/2004 | 9:30 | 15 | 40 | 31 | 14:15 | 15 | 18 | 27 | 10:55 | 15 | 0.2 | 7 |
| | | | 30 | 35 | | | 30 | 15 | | | 30 | 0.2 | |
| 6 | 4/1/2004 | 9:30 | 15 | 32 | 29 | 14:25 | 15 | 25 | 41 | 11:00 | 15 | 4.5 | 18 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 3.5 | |
| 6 | 4/3/2004 | 10:00 | 15 | 32 | 28 | 14:15 | 15 | 27 | 36 | 10:55 | 15 | 1.3 | 29 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 2 | |
| 7 | 4/9/2004 | 9:25 | 15 | 33 | 29 | 14:15 | 15 | 31 | 35 | 11:00 | 15 | 0 | 0 |
| | | | 30 | 27 | | | 30 | 24 | | | 30 | 0.1 | |
| 7 | 4/17/2004 | 10:53 | 15 | 25 | 30 | 14:20 | 15 | 25 | | 10:45 | 15 | 0.3 | |
| | | | 30 | 24 | | | 30 | 24 | | | 30 | 0.5 | |
| 8 | 4/21/2004 | 9:30 | 15 | 19 | | 14:15 | 15 | 24 | | 11:00 | 15 | <0.1 | |
| | | | 30 | 16 | | | 30 | 18 | | | 30 | <0.1 | |
| 8 | 4/23/2004 | 9:25 | 15 | 17 | | 15:00 | 15 | 45 | | 12:00 | 15 | 20 | |
| | | | 30 | 13 | | | 30 | 40 | | | 30 | 17 | |

WEEK 13

| 13Inf | | Portable Meter Readings | | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/17/2004 | | 22.9 | 0.14 | 7.04 | 145.0 | 5 |
| | 15:15 | 26.4 | 0.60 | 7.05 | 45.9 | 20 |
| 5/18/2004 | 1:40 | 24.3 | 0.20 | 7.04 | 63.0 | 15 |
| | 6:55 | 24.9 | 0.43 | 6.90 | 61.8 | 18 |
| | 13:00 | 26.8 | 0.10 | | | |
| | 23:00 | 23.2 | 0.10 | 6.84 | 84.0 | 14 |
| 5/19/2004 | | 25.3 | 0.06 | 7.02 | 67.4 | 16 |
| | 13:00 | 26.8 | 0.10 | 6.85 | 47.1 | 19 |
| | 22:00 | 25.6 | 0.09 | 6.90 | 46.6 | 16 |
| 5/20/2004 | | 25.7 | 0.04 | 6.89 | 54.0 | 20 |
| | 13:00 | 26.9 | 0.05 | 7.09 | 37.2 | 17 |
| | 22:00 | 25.2 | 0.12 | 7.00 | 44.4 | 19 |
| 5/21/2004 | | 25.7 | 0.07 | 7.02 | 52.3 | 18 |
| | 13:00 | 26.6 | 0.10 | 6.92 | 47.3 | 19 |
| | 22:00 | 25.2 | 0.10 | 6.94 | 42.7 | 18 |
| 5/22/2004 | 7:15 | 25.4 | 0.08 | 6.79 | 51.0 | 18 |
| | 9:02 | 25.2 | 0.13 | 6.74 | 47.6 | 19 |
| 5/23/2004 | 7:00 | 25.4 | 0.09 | 6.85 | 33.0 | 27 |
| | 14:30 | 25.6 | 0.12 | 6.88 | 39.0 | 25 |
| 5/24/2004 | 1:00 | 24.4 | 0.10 | 6.80 | | 21 |
| | Min | 22.9 | 0.0 | 6.7 | 33.0 | 5 |
| | Max | 26.9 | 0.6 | 7.1 | 145.0 | 27 |
| | Avg | 25.4 | 0.1 | 6.9 | 56.1 | 18 |

WEEK 13

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (°C) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/17/2004 | | 2.0 | 6.1 | 2.0 | 6.7 | 289.0 | 70.0 | 23.8 | 4.5 | 6.98 | 6.7 | 56 |
| | 15:15 | 5.0 | 7.6 | 4.0 | 6.8 | 203.2 | 17.7 | 24.6 | 4.0 | 7.07 | | |
| 5/18/2004 | 1:40 | 1.5 | 7.5 | 3.4 | 6.8 | 228.9 | 21.3 | 23.9 | 4.5 | 7.01 | 8.0 | 50 |
| | 7:55 | | | | | 189.0 | | | | | | |
| | 13:00 | 2.0 | 7.5 | 3.0 | 6.8 | 219.9 | 12.0 | 26.8 | 4.1 | 6.89 | 12.2 | 50 |
| | 23:00 | 1.5 | 4.5 | 0.1 | 6.7 | 268.1 | 61.3 | 22.4 | 3.8 | 6.94 | 7.1 | 37 |
| 5/19/2004 | | 2.0 | 7.5 | 4.0 | 6.7 | 261.0 | 54.0 | 24.4 | 3.8 | 6.95 | 10.2 | 49 |
| | 13:00 | 2.0 | 7.5 | 3.9 | 6.8 | 223.1 | 15.7 | 26.6 | 3.9 | 6.84 | 14.0 | 44 |
| | 22:00 | 2.0 | 7.5 | 3.9 | 6.8 | 250.0 | 42.7 | 25.0 | 4.0 | 6.87 | 13.4 | 46 |
| 5/20/2004 | | 2.0 | 7.5 | 3.2 | 6.7 | 290.0 | 82.0 | 24.8 | 3.7 | 6.80 | 10.1 | 49 |
| | 13:00 | 2.0 | 7.5 | 3.5 | 6.8 | 227.2 | 19.9 | 26.1 | 4.2 | 7.01 | 13.4 | 48 |
| | 22:00 | 7.5 | 7.4 | 2.2 | 6.7 | 266.2 | 58.7 | 24.7 | 4.0 | 6.95 | 7.7 | 49 |
| 5/21/2004 | | 2.0 | 7.4 | 2.8 | 6.7 | 294.3 | 87.1 | 24.5 | 4.4 | 6.98 | | 51 |
| | 13:00 | 2.0 | 7.5 | 2.9 | 6.8 | 229.1 | 21.7 | 26.1 | 4.3 | 7.02 | 10.9 | 48 |
| | 22:00 | 2.0 | 7.5 | 1.6 | 6.7 | 263.0 | 55.5 | 24.5 | 4.1 | 7.02 | 8.7 | 46 |
| 5/22/2004 | 7:25 | 2.0 | 7.6 | 2.1 | 6.7 | 229.5 | 21.8 | 24.1 | 3.7 | 6.89 | 36.4 | 41 |
| | 8:55 | 2.0 | 7.5 | 1.8 | 6.8 | 235.6 | 28.5 | 24.8 | 3.9 | 6.84 | 9.1 | 37 |
| 5/23/2004 | 7:00 | 2.0 | 7.5 | 1.5 | 6.7 | 290.3 | 82.3 | 24.6 | 3.9 | 6.91 | 9.1 | 59 |
| | 14:45 | 2.0 | 7.5 | 1.7 | 6.8 | 228.3 | 21.4 | 24.9 | 4.0 | 6.93 | 11.2 | 58 |
| 5/24/2004 | 1:00 | 2.0 | 7.5 | 4.1 | 6.7 | 259.6 | 51.9 | 23.5 | 4.0 | 6.80 | 6.6 | 50 |
| | Min | 1.5 | 4.5 | 0.1 | 6.7 | 189.0 | 12.0 | 22.4 | 3.7 | 6.8 | 6.6 | 37 |
| | Max | 7.5 | 7.6 | 4.1 | 6.8 | 294.3 | 87.1 | 26.8 | 4.5 | 7.1 | 36.4 | 59 |
| | Avg | 2.4 | 7.3 | 2.7 | 6.7 | 247.3 | 43.4 | 24.7 | 4.0 | 6.9 | 11.5 | 48 |

WEEK 13

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/17/2004 | | | | | 24.3 | 3.2 | 7.03 | 30.50 | 45 |
| | 15:15 | 1.48 | 5.83 | 7.5 | 25.7 | 4.6 | 7.16 | 21.40 | 40 |
| 5/18/2004 | 1:40 | 1.50 | 6.32 | 10.0 | 23.5 | 3.8 | 7.07 | 25.50 | 40 |
| | 7:45 | 1.50 | 6.19 | 9.0 | 23.1 | 3.8 | 7.33 | 38.10 | 41 |
| | 13:00 | 1.48 | 5.61 | 8.0 | 26.7 | 3.8 | 6.96 | 15.80 | 41 |
| | 23:00 | 1.47 | 6.24 | 10.0 | 21.6 | 5.2 | 7.07 | 11.40 | 47 |
| 5/19/2004 | | 1.53 | 4.7-6.8 | 9.8 | 24.4 | 3.0 | 6.97 | 32.90 | 41 |
| | 13:00 | 1.47 | 6.20 | 8.0 | 26.0 | 3.7 | 6.94 | 19.20 | 36 |
| | 22:00 | 1.56 | 6.30 | 9.0 | 24.7 | 3.2 | 6.96 | 15.90 | 44 |
| 5/20/2004 | | 1.54 | 6.28 | 9.7 | 24.4 | 2.5 | 6.87 | 33.50 | 39 |
| | 13:00 | 1.46 | 6.12 | 8.0 | 26.1 | 3.4 | 7.07 | 22.00 | 40 |
| | 22:00 | 1.54 | 5.96 | 9.5 | 24.4 | 2.9 | 7.0 | 18.60 | 41 |
| 5/21/2004 | | 1.50 | 4.53 | 9.0 | 24.3 | 2.5 | 7.09 | 19.20 | 44 |
| | 13:00 | 1.53 | 6.02 | 7.5 | 26.3 | 3.6 | 7.03 | 17.4 | 40 |
| | 22:00 | 1.53 | 6.24 | 9.5 | 24.5 | 2.4 | 7.07 | 22.40 | 37 |
| 5/22/2004 | 7:28 | 1.54 | 7.31 | 10.0 | 24.3 | 2.2 | 6.95 | 43.90 | 38 |
| | 9:08 | 1.52 | 6.07 | 10.0 | 25.1 | 2.2 | 6.92 | 47.20 | 36 |
| 5/23/2004 | 7:30 | 1.50 | 6.50 | 9.5 | 24.5 | 2.8 | 6.98 | 18.10 | 53 |
| | 14:45 | 1.45 | 6.28 | 8.0 | 24.8 | 2.9 | 7.01 | 17.10 | 54 |
| 5/24/2004 | 1:00 | 1.50 | 6.30 | 8.0 | 23.2 | 3.0 | 6.80 | 8.10 | 48 |
| | Min | 1.5 | 4.5 | 7.5 | 21.6 | 2.2 | 6.8 | 8.1 | 36 |
| | Max | 1.6 | 7.3 | 10.0 | 26.7 | 5.2 | 7.3 | 47.2 | 54 |
| | Avg | 1.5 | 6.1 | 8.9 | 24.6 | 3.2 | 7.0 | 23.9 | 42 |

WEEK 13

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/17/2004 | | | no flow | | | | | | |
| | 15:15 | 2.1 | 0.00 | 6.0 | | | | | |
| 5/18/2004 | 1:40 | 2.09 | 1.67 | 8.0 | 21.9 | 7.2 | 6.65 | 2.79 | 59 |
| | 7:40 | 2.00 | 1.60 | 7.0 | 23.6 | 7.5 | 7.10 | 4.60 | 62 |
| | 23:00 | 2.38 | 4.63 | 8.0 | 21.1 | 5.6 | 6.41 | 2.35 | 63 |
| 5/19/2004 | | 2.12 | 1.30 | 7.7 | | | | | |
| | 13:00 | 2.09 | 2.16 | 6.5 | 23.7 | 6.1 | 7.26 | 5.68 | 60 |
| | 22:00 | 2.07 | 1.64 | 7.0 | 24.2 | 6.8 | 6.90 | 4.86 | 59 |
| 5/20/2004 | | | | | | | | | |
| | 13:00 | 2.09 | 2.21 | 7.0 | 24.3 | 6.8 | 7.25 | 4.34 | 59 |
| | 22:00 | 2.08 | 1.48 | 7.0 | 23.8 | 6.5 | 6.85 | 3.31 | 59 |
| 5/21/2004 | | 2.08 | 1.20 | 6.3 | | | | | |
| | 13:00 | 2.02 | 1.54 | 7.0 | 24.2 | 7.0 | 7.07 | 6.12 | 59 |
| | 22:00 | 2.08 | 1.37 | 7.0 | 23.5 | 6.5 | 6.85 | 6.44 | 58 |
| 5/22/2004 | 7:30 | 2.08 | 1.23 | 7.5 | 22.8 | 7.6 | 7.0 | 3.40 | 54 |
| | 9:05 | 2.07 | 1.81 | 7.5 | 23.9 | 6.6 | 6.96 | 3.25 | 58 |
| 5/23/2004 | 7:45 | 2.07 | 0.80 | 7.0 | 22.9 | 6.0 | 6.9 | 3.52 | 68 |
| | 14:50 | 2.08 | 1.00 | 7.0 | 23.2 | 5.8 | 6.92 | 4.57 | 67 |
| 5/24/2004 | 1:00 | 2.00 | 0.00 | 8.4 | 21.1 | 7.2 | 7.00 | 2.70 | 67 |
| | Min | 2.0 | 0.0 | 6.0 | 21.1 | 5.6 | 6.4 | 2.4 | 54 |
| | Max | 2.4 | 4.6 | 8.4 | 24.3 | 7.6 | 7.3 | 6.4 | 68 |
| | Avg | 2.1 | 1.5 | 7.2 | 23.2 | 6.6 | 6.9 | 4.1 | 61 |

WEEK 13

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|----------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 5/17/2004 | 9:00 | | 3.0 | 85.70 | 1.70 | 6.70 | 107.8 | | | 28 | 1423 | 1440 |
| 5/19/2004 | 9:00 | | 3.0 | 103.50 | 2.50 | 6.80 | 199.1 | 63.7 | | 35 | 1421 | 1440 |
| 5/21/2004 | 9:00 | | 3.0 | 104.10 | 2.00 | 6.80 | 299.4-204.1 | 93.4 | | 36 | 1419 | 1440 |
| 5/23/2004 | 9:00 | | 3.0 | 102.00 | 1.50 | 6.70 | 184 | 0 | | 37 | 1439 | 1440 |

WEEK 13

| BIOFOR -C | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | Before BW | After BW | | |
| 5/17/2004 | 13:30 | 1.42 | 16.0 | 26.54 | 23.00 | 8-7.5 | | 28 | 1370 | 1370 |
| 5/19/2004 | 10:00 | 1.41 | 16.0 | 26.72 | 24.00 | 9 | 55 | 24 | 1372 | 1372 |
| 5/21/2004 | 10:00 | 1.45 | 16.0 | 26.32 | 24.00 | 8 | >90 | 43.5 | 1372 | 1372 |
| 5/23/2004 | 10:00 | 1.40 | 16.0 | 26.00 | 21.00 | 10 | 53 | 20 | 1372 | 1372 |

WEEK 13

| BIOFOR -N | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | Before BW | After BW | | |
| 5/17/2004 | 11:44 | 2.11 | 9.0 | 15.53 | 10 | 9.5 | | 6 | | |
| 5/19/2004 | 13:30 | 2.14 | 9.0 | 15.07 | | 9.5 | 7.75 | 6.5 | 2812 | 2812 |
| 5/21/2004 | 13:30 | 2.00 | 9.0 | 15.00 | | 7.0 | 10.5 | 7 | 2812 | 2812 |
| 5/23/2004 | 14:30 | 2.03 | 9.0 | 15.00 | | 9.0 | 11 | 7 | 2812 | 2812 |

| Imhoff Cone Testing | | | | | | | | | | | | | |
|---------------------|-----------|---------|---------|-------------|-----|----------|---------|---------------|-----|----------|---------|-------------|-----|
| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | | | | 14:15 | 15 | 13 | 41 | 11:40 | 15 | 2.7 | 19 |
| | | | | | | | 30 | 12.5 | | | 30 | 5.3 | |
| 2 | 3/2/2004 | | | | | 13:00 | 15 | 23 | 52 | 11:00 | 15 | 5 | 26 |
| | | | | | | | 30 | 24 | | | 30 | 7.5 | |
| 3 | 3/10/2004 | | | | | 14:30 | 15 | 45 | 27 | 10:55 | 15 | 15 | 38 |
| | | | | | | | 30 | 40 | | | 30 | 15.5 | |
| 3 | 3/14/2004 | | | | | 15:00 | | | 23 | 11:50 | | | 8 |
| | | | | | | | 30 | 18 | | | 30 | 0.4 | |
| 4 | 3/18/2004 | | | | | 14:22 | 15 | 37 | 41 | 11:20 | 15 | 12.5 | 54 |
| | | | | | | | 30 | 28 | | | 30 | 14 | |
| 4 | 3/20/2004 | | | | | 14:00 | 15 | | 33 | 11:30 | 15 | 0.5 | 14 |
| | | | | | | | 30 | 50 | | | 30 | 1.5 | |
| 5 | 3/24/2004 | 12:20 | 15 | 50 | 56 | 14:25 | 15 | 35 | 37 | 11:10 | 15 | 1.5 | 19 |
| | | | 30 | 38 | | | 30 | 29 | | | 30 | 3.5 | |
| 5 | 3/26/2004 | 9:25 | 15 | 42 | 33 | 14:15 | 15 | 35 | 36 | 10:50 | 15 | 0.1 | 8 |
| | | | 30 | 30 | | | 30 | 30 | | | 30 | 1 | |
| 5 | 3/28/2004 | 9:30 | 15 | 28 | 47 | 14:45 | 15 | 25 | 34 | 11:45 | 15 | 2 | 14 |
| | | | 30 | 24 | | | 30 | 27 | | | 30 | 2.5 | |
| 6 | 4/1/2004 | 9:30 | 15 | 29 | 26 | 14:35 | 15 | 29 | 30 | 11:25 | 15 | 6.5 | 33 |
| | | | 30 | 21 | | | 30 | 24 | | | 30 | 7.5 | |
| 6 | 4/3/2004 | 10:00 | 15 | 100 | 57 | 13:30 | 15 | 35 | 33 | 13:00 | 15 | 7.5 | 37 |
| | | | 30 | 80 | | | 30 | 30 | | | 30 | 6 | |
| 7 | 4/9/2004 | 9:25 | 15 | 48 | 30 | 14:20 | 15 | 29 | 27 | 10:55 | 15 | 0.1 | 4 |
| | | | 30 | 35 | | | 30 | 25 | | | 30 | 0.4 | |
| 8 | 4/17/2004 | 10:53 | 15 | 34 | 51 | 13:55 | 15 | 20 | 42 | | 15 | | |
| | | | 30 | 25 | | | 30 | 18 | | | 30 | | |
| 9 | 4/21/2004 | 9:30 | 15 | 25 | 33 | 14:25 | 15 | 28 | 35 | 11:00 | 15 | 0 | 2 |
| | | | 30 | 20 | | | 30 | 24 | | | 30 | <0.1 | |
| 9 | 4/23/2004 | 9:25 | 15 | 40 | 31 | 14:15 | 15 | 18 | 27 | 10:55 | 15 | 0.2 | 7 |
| | | | 30 | 35 | | | 30 | 15 | | | 30 | 0.2 | |
| 10 | 4/27/2004 | 9:25 | 15 | 32 | 29 | 14:25 | 15 | 25 | 41 | 11:00 | 15 | 4.5 | 18 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 3.5 | |
| 10 | 4/29/2004 | 9:30 | 15 | 32 | 28 | 14:15 | 15 | 27 | 36 | 10:55 | 15 | 1.3 | 29 |
| | | | 30 | 25 | | | 30 | 22 | | | 30 | 2 | |
| 11 | 5/5/2004 | 9:30 | 15 | 33 | 29 | 14:15 | 15 | 31 | 35 | 11:00 | 15 | 0 | 0 |
| | | | 30 | 27 | | | 30 | 24 | | | 30 | 0.1 | |
| 11 | 5/7/2004 | | | | | 14:15 | 15 | 25 | | 10:45 | 15 | 0.3 | |
| | | | | | | | 30 | 24 | | | 30 | 0.5 | |
| 12 | 5/13/2004 | 9:25 | 15 | 19 | | 14:15 | 15 | 24 | | 11:00 | 15 | <0.1 | |
| | | | 30 | 16 | | | 30 | 18 | | | 30 | <0.1 | |
| 12 | 5/15/2004 | 9:25 | 15 | 17 | | 15:00 | 15 | 45 | | 12:00 | 15 | 20 | |
| | | | 30 | 13 | | | 30 | 40 | | | 30 | 17 | |
| 13 | 5/17/2004 | 9:32 | 15 | 19 | | 14:20 | 15 | no separation | | 12:30 | 15 | >0.1 | |
| | | | 30 | 16 | | | 30 | 49 | | | 30 | >0.1 | |
| 13 | 5/23/2004 | 9:30 | 15 | 25 | | 11:00 | 15 | no separation | | | | | |
| | | | 30 | 22 | | | 30 | 80 | | | | | |

WEEK 14

| 13Inf | | Portable Meter Readings | | | | |
|-----------|-------|-------------------------|-----------|------|-----------------|---------|
| Date | Time | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/24/2004 | 7:00 | 22.6 | 1.20 | 6.65 | 68.1 | 15 |
| | 13:00 | 26.3 | 0.10 | 6.97 | 34.1 | 20 |
| 5/25/2004 | 0:00 | 22.6 | 0.20 | 7.10 | 71.0 | 17 |
| | 7:00 | 21.4 | 0.50 | 7.02 | 65.4 | 13 |
| | 13:00 | 26.5 | 0.10 | 6.88 | 36.8 | |
| 5/26/2004 | 0:30 | 23.6 | 0.20 | 6.80 | 58.0 | 20 |
| | 6:35 | 25.6 | 0.03 | 6.94 | 62.8 | 14 |
| | 13:00 | 26.6 | 0.06 | 7.00 | 49.2 | 15 |
| | 23:00 | 25.2 | 0.80 | 6.95 | 63.2 | 48 |
| 5/27/2004 | | 25.3 | 0.05 | 6.85 | 82.9 | 10 |
| | 13:00 | 26.6 | 0.10 | 6.75 | 39.5 | 14 |
| | 23:00 | 25.0 | 0.90 | 6.72 | 51.4 | 15 |
| 5/28/2004 | | 25.5 | 0.04 | 6.83 | 79.7 | 13 |
| | 13:00 | 25.8 | 0.10 | 6.82 | 48.1 | 16 |
| | 23:00 | 25.1 | 0.80 | 6.86 | 63.0 | 13 |
| 5/29/2004 | 8:05 | 23.4 | 0.09 | 6.67 | 43.0 | 18 |
| | 13:00 | 25.4 | 0.09 | 6.75 | 63.5 | 19 |
| | 14:20 | 23.4 | 0.08 | 6.78 | 51.6 | |
| | 23:00 | 25.0 | 0.90 | 6.95 | 65.0 | 14 |
| 5/30/2004 | 7:00 | 25.8 | 0.06 | 6.91 | 42.8 | 20 |
| | 12:00 | 25.9 | 0.07 | 6.94 | 45.3 | 19 |
| Min | | 21.4 | 0.03 | 6.7 | 34.1 | 10 |
| Max | | 26.6 | 1.2 | 7.1 | 82.9 | 48 |
| Avg | | 24.9 | 0.3 | 6.9 | 56.4 | 18 |

WEEK 14

| | | Instrument Readings-BIOSTYR | | | | | | Portable Meter Readings-13BSEff | | | | |
|-----------|-------|-----------------------------|---------------------|--------------------|-------------|----------------------|----------------|---------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Effluent DO (mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (iwc) | Temperature (°C) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/24/2004 | 7:00 | 2.0 | 7.4 | 3.2 | 6.7 | 297.0 | 90.1 | 20.2 | 4.8 | 7.10 | 8.1 | 52 |
| | 13:00 | 2.0 | 7.5 | 2.4 | 6.8 | 229.2 | 21.4 | 25.6 | 3.6 | 6.84 | 13.1 | 44 |
| 5/25/2004 | 0:00 | 2.0 | 7.5 | 2.4 | 6.8 | 268.0 | 60.0 | 22.9 | 3.7 | 7.00 | 8.4 | 42 |
| | 7:00 | 2.0 | 7.4 | 1.8 | 6.8 | 225.9 | 18.9 | 20.3 | 3.4 | 7.06 | 102.0 | 29 |
| | 13:00 | 2.0 | 7.2 | 1.4 | 6.9 | 226.0 | 18.6 | 26.2 | 3.4 | 6.95 | 11.8 | |
| 5/26/2004 | 0:30 | 2.0 | 6.9 | 3.9 | 6.8 | 256.0 | 49.0 | 23.6 | 4.2 | 6.90 | 6.6 | 48 |
| | 6:35 | 2.0 | 6.8 | 3.6 | 6.8 | 280.0 | 72.0 | 24.5 | 3.9 | 7.00 | 6.8 | 51 |
| | 13:00 | 2.0 | 6.9 | 3.2 | 6.9 | 224.1 | 16.7 | 26.3 | 3.5 | 7.08 | 12.7 | 43 |
| | 23:00 | 2.0 | 6.7 | 3.1 | 6.8 | 264.0 | 57.8 | 23.6 | 3.9 | 7.05 | 9.2 | 48 |
| 5/27/2004 | | 2.0 | 6.8 | 2.1 | 6.8 | 297.0 | 90.0 | 24.6 | 3.4 | 6.97 | 10.4 | 50 |
| | 13:00 | 2.0 | 7.0 | 3.7 | 6.9 | 229.6 | 22.2 | 25.9 | 3.2 | 6.89 | 12.5 | 44 |
| | 23:00 | 2.0 | 7.5 | 3.1 | 6.7 | 294.0 | 87.0 | 24.4 | 3.2 | 6.99 | 10.0 | 50 |
| 5/28/2004 | | 2.0 | 7.4 | 6.7 | 294.0 | 87.0 | | | | | | |
| | 13:00 | 2.0 | 7.5 | 2.9 | 6.9 | 224.8 | 17.2 | 25.3 | 3.5 | 6.96 | 12.7 | 47 |
| | 23:00 | 2.0 | 7.5 | 2.4 | 6.8 | 271.0 | 65.0 | 23.8 | 3.5 | 6.96 | 8.1 | 49 |
| 5/29/2004 | 8:10 | 2.0 | 7.5 | 2.5 | 6.7 | 291.1 | 83.2 | 24.1 | 3.5 | 6.83 | 16.8 | 49 |
| | 13:00 | 2.0 | 7.5 | 2.2 | 6.8 | 225.5 | 18.8 | 25.5 | 2.9 | 6.86 | 9.4 | 46 |
| | 14:20 | 2.0 | 7.5 | 2.9 | 6.7 | 248.0 | 43.3 | 24.6 | 4.6 | 6.92 | 7.0 | |
| | 23:00 | 2.0 | 7.5 | 1.7 | 6.7 | 284.0 | 77.0 | 23.7 | 3.8 | 6.88 | 8.5 | 46 |
| 5/30/2004 | 7:15 | 2.0 | 7.5 | 1.9 | 6.7 | 296.0 | 88.7 | 24.9 | 2.8 | 6.91 | 9.3 | 56 |
| | 12:00 | 2.0 | 7.5 | 1.4 | 6.8 | 208.4 | 12.0 | 25.1 | 2.6 | 6.94 | 6.6 | 58 |
| 5/31/2004 | 1:25 | 2.0 | 7.5 | 2.0 | 6.7 | 277.6 | 69.8 | | | | | |
| | Min | 2.0 | 6.7 | 1.4 | 6.7 | 87.0 | 12.0 | 20.2 | 2.6 | 6.8 | 6.6 | 29 |
| | Max | 2.0 | 7.5 | 6.7 | 294.0 | 297.0 | 90.1 | 26.3 | 4.8 | 7.1 | 102.0 | 58 |
| | Avg | 2.0 | 7.3 | 2.8 | 19.8 | 250.2 | 51.4 | 24.3 | 3.6 | 7.0 | 14.5 | 47 |

17.6
10.4

WEEK 14

| | | Instrument Readings-BIOFOR C | | | Portable Meter Readings-13BFCEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/24/2004 | 7:00 | 1.47 | 5.92 | 10.0 | 19.0 | 3.3 | 7.15 | 46.80 | 40 |
| | 13:00 | 1.44 | 6.46 | 8.0 | 25.4 | 2.6 | 6.89 | 25.00 | 41 |
| 5/25/2004 | 0:00 | 1.50 | 6.20 | 8.5 | 21.1 | 3.6 | 7.1 | 8.30 | 38 |
| | 7:00 | 1.50 | 6.00 | 8.8 | 20.2 | 3.5 | 6.51 | 22.10 | 35 |
| 5/26/2004 | 0:30 | 1.50 | 4.70 | 9.0 | 23.3 | 1.9 | 6.90 | 59.00 | 33 |
| | 6:35 | 1.53 | 3.00 | 10.4 | 24.4 | 1.2 | 7.09 | 88.10 | 19 |
| | 13:00 | 1.42 | 6.22 | 7.5 | 26.5 | 2.7 | 7.14 | 42.70 | 30 |
| 5/27/2004 | 23:00 | 1.47 | 6.20 | 9.0 | 23.0 | 4.3 | 6.96 | 8.21 | 61 |
| | | 1.52 | 7.95 | 9.8 | 24.5 | 1.8 | 6.96 | 59.50 | 36 |
| | 13:00 | 1.47 | 7.21 | 8.0 | 26.0 | 2.0 | 6.92 | 31.20 | 36 |
| 5/28/2004 | 23:00 | 1.48 | 6.07 | 9.5 | 23.6 | 5.5 | 6.71 | 3.46 | 60 |
| | | 1.54 | 6.70 | 10.0 | 24.6 | 1.4 | 7.0 | 76.00 | 29 |
| | 13:00 | 1.40 | 6.10 | 8.0 | 25.4 | 2.5 | 6.93 | 24.30 | 37 |
| 5/29/2004 | 23:00 | 1.40 | 4.70 | 9.0 | 23.7 | 1.6 | 6.94 | 54.4 | 37 |
| | 8:12 | 1.40 | 3.64 | 9.0 | 24.3 | 1.2 | 6.77 | 62.50 | 37 |
| | 13:10 | 1.38 | 3.50 | 6.5 | 25.8 | 3.2 | 6.91 | 25.70 | 33 |
| 5/30/2004 | 14:25 | 2.46 | 6.04 | 9.0 | 24.8 | 5.8 | 6.92 | 11.80 | |
| | 23:00 | 1.44 | 4.75 | 9.0 | 23.8 | 1.6 | 6.95 | 54.00 | 37 |
| | 7:30 | 1.47 | 5.50 | 9.0 | 25.0 | 1.3 | 6.99 | 58.90 | 40 |
| 5/31/2004 | 12:00 | 1.43 | 7.50 | 7.0 | 25.1 | 1.5 | 6.97 | 56.30 | 42 |
| | 1:25 | 1.42 | 6.32 | 9.0 | | | | | |
| Min | | 1.4 | 3.0 | 6.5 | 19.0 | 1.2 | 6.5 | 3.5 | 19 |
| Max | | 2.5 | 8.0 | 10.4 | 26.5 | 5.8 | 7.2 | 88.1 | 61 |
| Avg | | 1.5 | 5.7 | 8.8 | 24.0 | 2.6 | 6.9 | 40.9 | 38 |

WEEK 14

| | | Instrument Readings-BIOFOR N | | | Portable Meter Readings-13BFNEff | | | | |
|-----------|-------|------------------------------|---------------------|-----------------------|----------------------------------|-----------|------|-----------------|---------|
| Date | Time | Process air flow (csfm) | Influent flow (gpm) | Column pressure (psi) | Temperature (oC) | DO (mg/L) | pH | Turbidity (NTU) | UVT (%) |
| 5/24/2004 | 7:00 | | | | 20.1 | 6.7 | 7.0 | 3.00 | 65 |
| | 13:00 | 2.0 | 2.30 | 7.2 | 22.7 | 7.3 | 7.04 | 8.34 | 63 |
| 5/25/2004 | 0:00 | 2.00 | 1.20 | 8.5 | 20.6 | 7.6 | 7.10 | 8.30 | 56 |
| 5/26/2004 | 0:30 | 2.00 | 1.60 | 9.0 | 22.4 | 7.0 | 6.90 | 3.50 | 60 |
| | 6:35 | 2.07 | 1.50 | 7.3 | 21.9 | 7.2 | 7.10 | | |
| | 13:00 | 2.01 | 2.12 | 7.2 | 24.4 | 6.5 | 7.16 | 18.90 | 51 |
| | 23:00 | 2.06 | 1.15 | 7.0 | 22.2 | 7.2 | 7.11 | 15.30 | 48 |
| 5/27/2004 | | 2.00 | 1.27 | 7.3 | 22.0 | 7.0 | 7.15 | 5.26 | 63 |
| | 13:00 | 2.04 | 1.67 | 6.5 | | | | | |
| | 23:00 | 2.08 | 1.54 | 7.0 | 23.0 | 7.3 | 6.83 | 18.90 | 48 |
| 5/28/2004 | | 2.10 | 1.50 | 7.2 | 22.5 | 6.5 | 7.10 | 5.16 | 63 |
| | 13:00 | 2.07 | 2.28 | 7.0 | 23.0 | 6.7 | 7.18 | 6.94 | 62 |
| | 23:00 | 2.06 | 0.69 | 7.0 | 21.7 | 7.3 | 6.95 | 4.39 | 62 |
| 5/29/2004 | 8:15 | 2.08 | 0.85 | 7.0 | 22.3 | 7.0 | 6.68 | 5.45 | 60 |
| | 14:25 | 2.13 | 5.71 | 8.4 | 25.0 | 5.9 | 6.25 | 5.97 | |
| | 23:00 | 2.11 | 0.00 | 7.0 | 21.7 | 7.1 | 7.0 | 4.55 | 60 |
| 5/30/2004 | 7:45 | 2.09 | 1.60 | 7.0 | 23.5 | 5.8 | 7.01 | 6.45 | 65 |
| | 12:00 | 2.09 | 2.20 | 7.0 | 23.4 | 5.6 | 7.03 | 6.54 | 64 |
| 5/31/2004 | 1:25 | 2.09 | 0.93 | 7.0 | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Min | 2.0 | 0.0 | 6.5 | 20.1 | 5.6 | 6.3 | 3.0 | 48 |
| | Max | 2.1 | 5.7 | 9.0 | 25.0 | 7.6 | 7.2 | 18.9 | 65 |
| | Avg | 2.1 | 1.7 | 7.3 | 22.5 | 6.8 | 7.0 | 7.9 | 59 |

WEEK 14

| BIOSTYR | | Instrument Readings | | | | | | | | | | |
|-----------|------|-------------------------|--------------------------|---------------------|-------------------|-------------|----------------------|---------------|----------|--------------------------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Effluent DO(mg/L) | Effluent pH | Inlet pressure (psi) | Headloss (wc) | | Backwash tank level (in) | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | | Before BW | After BW | | | |
| 5/25/2004 | 9:00 | 2.00 | 3.0 | 104.70 | 0.20 | 6.80 | 202.1 | 28.3 | 0 | 50.75 | 1418 | 1440 |
| 5/27/2004 | 9:00 | 2.00 | 3.0 | 104.70 | 1.60 | 6.80 | 202.2 | 92.7 | 0 | 37.5 | 1421 | 1440 |
| 5/29/2004 | 9:10 | 2.00 | 3.0 | 101.30 | 1.30 | 6.80 | 111.4 | | | | 1429 | 1440 |
| | | | | | | | | | | | | |

103.57

WEEK 14

| BIOFOR -N | | Instrument Readings | | | | | | | | |
|-----------|-------|-------------------------|--------------------------|---------------------|--------------------------|----------------------|----------------|----------|-------------------------|---------------------------|
| Date | Time | Process air flow (scfm) | Backwash air flow (scfm) | Backwash flow (gpm) | Backwash tank level (in) | Inlet pressure (psi) | Headloss (iwc) | | Time till next BW (min) | Max time between BW (min) |
| | | | | | | | Before BW | After BW | | |
| 5/25/2004 | 14:00 | 2.00 | 9.0 | 15.26 | | 10.5 | | | 2812 | 2812 |
| 5/27/2004 | 13:30 | 2.15 | 9.0 | 15.22 | | 10.5 | | | 2812 | 2812 |
| 5/29/2004 | 13:35 | 2.00 | 9.0 | 15.00 | | | | | 2812 | 2812 |
| | | | | | | | | | | |

| Imhoff Cone Testing | | | | | | | | | | | | | |
|---------------------|-----------|---------|----------|-------------|-----|----------|----------|--------------------------------|-----|----------|----------|--------------|-----|
| Week | Date | Biostyr | | | | Biofor C | | | | Biofor N | | | |
| | | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI | Time | Minutes | Volume (mL) | SVI |
| 1 | 2/27/2004 | | | | | 14:15 | 15 30 | 13 12.5 | 41 | 11:40 | 15 30 | 2.7 5.3 | 19 |
| 2 | 3/2/2004 | | | | | 13:00 | 15 30 | 23 24 | 52 | 11:00 | 15 30 | 5 7.5 | 26 |
| 3 | 3/10/2004 | | | | | 14:30 | 15 30 | 45 40 | 27 | 10:55 | 15 30 | 15 15.5 | 38 |
| 3 | 3/14/2004 | | | | | 15:00 | 30 | 18 | 23 | 11:50 | 30 | 0.4 | 8 |
| 4 | 3/18/2004 | | | | | 14:22 | 15 30 | 37 28 | 41 | 11:20 | 15 30 | 12.5 14 | 54 |
| 4 | 3/20/2004 | | | | | 14:00 | 15 30 | 50 | 33 | 11:30 | 15 30 | 0.5 1.5 | 14 |
| 5 | 3/24/2004 | 12:20 | 15 30 | 50 38 | 56 | 14:25 | 15 30 | 35 29 | 37 | 11:10 | 15 30 | 1.5 3.5 | 19 |
| 5 | 3/26/2004 | 9:25 | 15 30 | 42 30 | 33 | 14:15 | 15 30 | 35 30 | 36 | 10:50 | 15 30 | 0.1 1 | 8 |
| 5 | 3/28/2004 | 9:30 | 15 30 | 28 24 | 47 | 14:45 | 15 30 | 25 27 | 34 | 11:45 | 15 30 | 2 2.5 | 14 |
| 6 | 4/1/2004 | 9:30 | 15 30 | 29 21 | 26 | 14:35 | 15 30 | 29 24 | 30 | 11:25 | 15 30 | 6.5 7.5 | 33 |
| 6 | 4/3/2004 | 10:00 | 15 30 | 100 80 | 57 | 13:30 | 15 30 | 35 30 | 33 | 13:00 | 15 30 | 7.5 6 | 37 |
| 7 | 4/9/2004 | 9:25 | 15 30 | 48 35 | 30 | 14:20 | 15 30 | 29 25 | 27 | 10:55 | 15 30 | 0.1 0.4 | 4 |
| 8 | 4/17/2004 | 10:53 | 15 30 | 34 25 | 51 | 13:55 | 15 30 | 20 18 | 42 | | 15 30 | | |
| 9 | 4/21/2004 | 9:30 | 15 30 | 25 20 | 33 | 14:25 | 15 30 | 28 24 | 35 | 11:00 | 15 30 | 0 <0.1 | 2 |
| 9 | 4/23/2004 | 9:25 | 15 30 | 40 35 | 31 | 14:15 | 15 30 | 18 15 | 27 | 10:55 | 15 30 | 0.2 0.2 | 7 |
| 10 | 4/27/2004 | 9:25 | 15 30 | 32 25 | 29 | 14:25 | 15 30 | 25 22 | 41 | 11:00 | 15 30 | 4.5 3.5 | 18 |
| 10 | 4/29/2004 | 9:30 | 15 30 | 32 25 | 28 | 14:15 | 15 30 | 27 22 | 36 | 10:55 | 15 30 | 1.3 2 | 29 |
| 11 | 5/5/2004 | 9:30 | 15 30 | 33 27 | 29 | 14:15 | 15 30 | 31 24 | 35 | 11:00 | 15 30 | 0 0.1 | 0 |
| 11 | 5/7/2004 | | | | | 14:15 | 15 30 | 25 24 | 37 | 10:45 | 15 30 | 0.3 0.5 | 7 |
| 12 | 5/13/2004 | 9:25 | 15 30 | 19 16 | 23 | 14:15 | 15 30 | 24 18 | 38 | 11:00 | 15 30 | <0.1 0.1 | 2 |
| 12 | 5/15/2004 | 9:25 | 15 30 | 17 13 | 28 | 15:00 | 15 30 | 45 40 | 57 | 12:00 | 15 30 | 20 17 | 63 |
| 13 | 5/17/2004 | 9:32 | 15 30 | 19 16 | 23 | 14:20 | 15 30 | no separation 49 | 59 | 12:30 | 15 30 | >0.1 >0.1 | |
| 13 | 5/23/2004 | 9:30 | 15 30 | 25 22 | 32 | 11:00 | 15 30 | no separation 80 | | | | | |
| 14 | 5/25/2004 | 9:33 | 15 30 | 28 24 | 29 | 11:00 | 15 30 | no separation no separation | | | | | |