

WATER SYSTEM ANNUAL REPORT



2010



WATER SYSTEM

ANNUAL REPORT

2010

TABLE OF CONTENTS

Page

REPORT BODY

| | |
|---|-----|
| Report Summary..... | iii |
| A. System Makeup..... | 1 |
| B. System Maintenance..... | 3 |
| C. Scheduled Maintenance..... | 5 |
| D. System Budget..... | 7 |
| E. Water Sampling & Testing Program..... | 8 |
| F. Water Quality Response Notification..... | 13 |
| G. Water Quality Test Results..... | 15 |
| H. Water System Security..... | 18 |
| I. Water Emergency Plan..... | 18 |
| J. Water Main Break Procedure..... | 19 |

TABLES

| | |
|---|----|
| Table 1: City of Surrey 2010 Water Main Inventory..... | 2 |
| Table 2: City of Surrey Water Distribution System 2010 and 2011 Water Quality Maintenance Budgets..... | 7 |
| Table 3: Number of Year 2010 Water Test Samples..... | 12 |
| Table 4: Water Quality Response Procedure..... | 13 |
| Table 5: Year 2000 to 2010 HPC Positive Samples Summary >500..... | 16 |

FIGURES

| | |
|---|----|
| Figure 1: 2010 City of Surrey Water Works Operations & Maintenance Organizational Chart..... | 3 |
| Figure 2: Unidirectional Flushing Program..... | 6 |
| Figure 3: Water Sampling Sites Legend..... | 10 |
| Figure 4: Water Sampling Sites..... | 11 |

GRAPHS

| | |
|---|----|
| Graph 1: Comparison of Annual HPC results >500 CFU in the City of Surrey Water System..... | 17 |
|---|----|

APPENDIX ‘A’ 2010 Water Quality Laboratory Test Results

APPENDIX ‘B’ Water Quality Monitoring and Reporting Plan for MetroVancouver
and Member Municipalities

APPENDIX ‘C’ B.C. Drinking Water Protection Regulation
Guidelines for Canadian Drinking Water Quality – Summary Table

APPENDIX ‘D’ B.C. Centre for Disease Control
Drinking Water and Those with Weakened Immune Systems

REPORT SUMMARY

In 2010, the City of Surrey purchased all the water that it supplied to City of Surrey residents from Metro Vancouver. The City of Surrey's water distribution system is connected to the Metro Vancouver distribution system at the discharge points at each of six (6) Metro Vancouver water reservoirs and eleven (11) Metro Vancouver connection chambers located throughout the City.

The City's piped water distribution system includes pipes with a total length of over 1,800 km and includes ten (10) pump stations.

Surrey's geography and development pattern is serviced with eight (8) different water pressure zones.

The City's regular maintenance program for its water system components includes a regular program of unidirectional water main flushing of every pipe in the system at least once every four (4) years. This unidirectional approach to flushing ensures that water from non-flushed mains does not flow into recently flushed mains. The City's maintenance program combined with an ongoing program of pipe size upgrades and water supply controls by Metro Vancouver has eliminated the need for any abrasive, mechanical cleaning of the City's water mains.

Monitoring of the quality of the water within the City's water system is undertaken at fifty-one (51) water-sampling sites located strategically across the City. Weekly samples are collected by both City and Metro Vancouver staff. These samples are tested at Metro Vancouver's testing laboratory in Burnaby for such things as temperature, turbidity, chlorine residual, and bacteria.

In 2010 approximately 19% of the City's water operating and maintenance budget was spent on water quality-related work. Three thousand one hundred and nine (3,109) water samples were analyzed with none of the samples indicating any presence of e-coli coliforms and all samples meeting the standards contained in the B.C. Drinking Water Protection Regulation (BCDWPR) and the Guidelines for Canadian Drinking Water Quality (GCDWQ). Audit samples taken in 2010 by the Fraser Health Authority throughout the system confirmed Metro Vancouver laboratory test results. This is consistent with previous years' results in relation water samples taken from the City's water system.

The City has established response procedures to deal with water quality issues and for pipe breaks. The procedures incorporate both agency notification and steps for physical repair. Integral to the response procedures are well-defined communication links between the City staff, Metro Vancouver staff and the Fraser Health Authority (FHA) staff. The City has developed a response plan for major water emergencies, which has been successfully tested in concert with other Metro Vancouver member municipalities.

As in previous years, water in sections of the distribution system has from time to time exhibited lower than desirable chlorine residual values. This circumstance will be reviewed with Metro Vancouver staff and representatives of the Fraser Health Authority with a view to determining if any changes are necessary to the operational and/or maintenance procedures followed by the City or if capital improvements should be undertaken.

Where water sample test results revealed (through the use of heterotrophic plate counts, HPC) bacterial growth beyond acceptable limits, staff took action to flush the related sections of water main to address the problem. These areas typically exhibit low chlorine residuals, low water demand and/or circulation restrictions in the system.

Metro Vancouver's laboratory technicians perform quarterly tests on the City's water system for disinfection by-products (Haloacetic Acids and Trihalomethanes), and semi-annual tests for pH and select metal concentrations. These were carried out at sampling sites in accordance with a monitoring and reporting plan established between the City staff and Metro Vancouver staff. The results of these tests demonstrated that water quality remained within acceptable levels as recommended in the Guidelines for Canadian Drinking Water Quality.

Except for a few circumstances where fire hydrants were opened without authorization or were damaged by accidents, there were no incidents of tampering or vandalism with the City's water system in 2010. System security includes lighting, locks and alarms at pump stations as well as check valves on service connections. The City also has a cross-connection program to guard against contaminants entering the system due to faulty connections. This is addressed in more detail in the following paragraph. All of these measures provide protection against tampering or vandalism.

The City monitors water service connections to commercial/industrial businesses on an on-going basis through a cross-connection control (CCC) program that includes a database of backflow prevention devices. In 2010, the number of backflow prevention assemblies registered with the City increased by 15%. This brings the number of registered backflow prevention devices to over 6,700. The City's CCC program requires that the owner test the device annually to confirm that it is working properly. In 2010, the City achieved over 95% compliance with this requirement, an increase of 5% in comparison to the previous year.

The City of Surrey is remaining diligent in ensuring the City's water distribution system is maintained to high quality standards, which will ensure the delivery of high quality water to the City's residents and businesses.



WATER SYSTEM ANNUAL REPORT for 2010

A. System Makeup

In 2010, the City of Surrey obtained all of its potable water from Metro Vancouver and its impounded reservoirs on the Capilano, Seymour, and the Coquitlam Rivers. The new Seymour-Capilano treatment plant officially opened on May 7, 2010. This plant is now producing filtered and UV treated water, a small portion of which enters Surrey's water distribution system. The majority of Surrey's water continues to come from the Coquitlam watershed. Metro Vancouver manages the impoundments, treats the water, and transports it to six storage reservoirs in the City. The reservoir water is then discharged into the City-owned distribution system. The City also has eleven source connections made directly to Metro Vancouver supply mains from the reservoirs. Metro Vancouver re-chlorinates all the supply water prior to it entering the City's distribution system.

The City's water distribution network, approximately 1,800 km long, incorporates water mains, water testing stations, pump stations, service connections and water meters. The detailed breakdown of the current water main inventory is given in Table 1, "City of Surrey 2010 Water Main Inventory" (pg. 2).

The distribution system utilizes eight different pressure zones. The separation of zones is achieved by the combined use of pressure reducing stations, closed valves, check valves, and dead end pipe runs.

The City has a considerable number of dead end conditions created by the combined effects of pressure zone boundaries, cul-de-sacs, the extension of water mains into sparsely populated rural areas, and by the geographical constraints of ravines, creeks, foreshores, and floodplains. The exact number and classification of these conditions has not been tabulated. To enhance the water quality at the most adversely affected locations, City crews conduct regular flushing of the mains in addition to the annual unidirectional flushing program.

**Table 1:
City of Surrey 2010 Water Main Inventory**

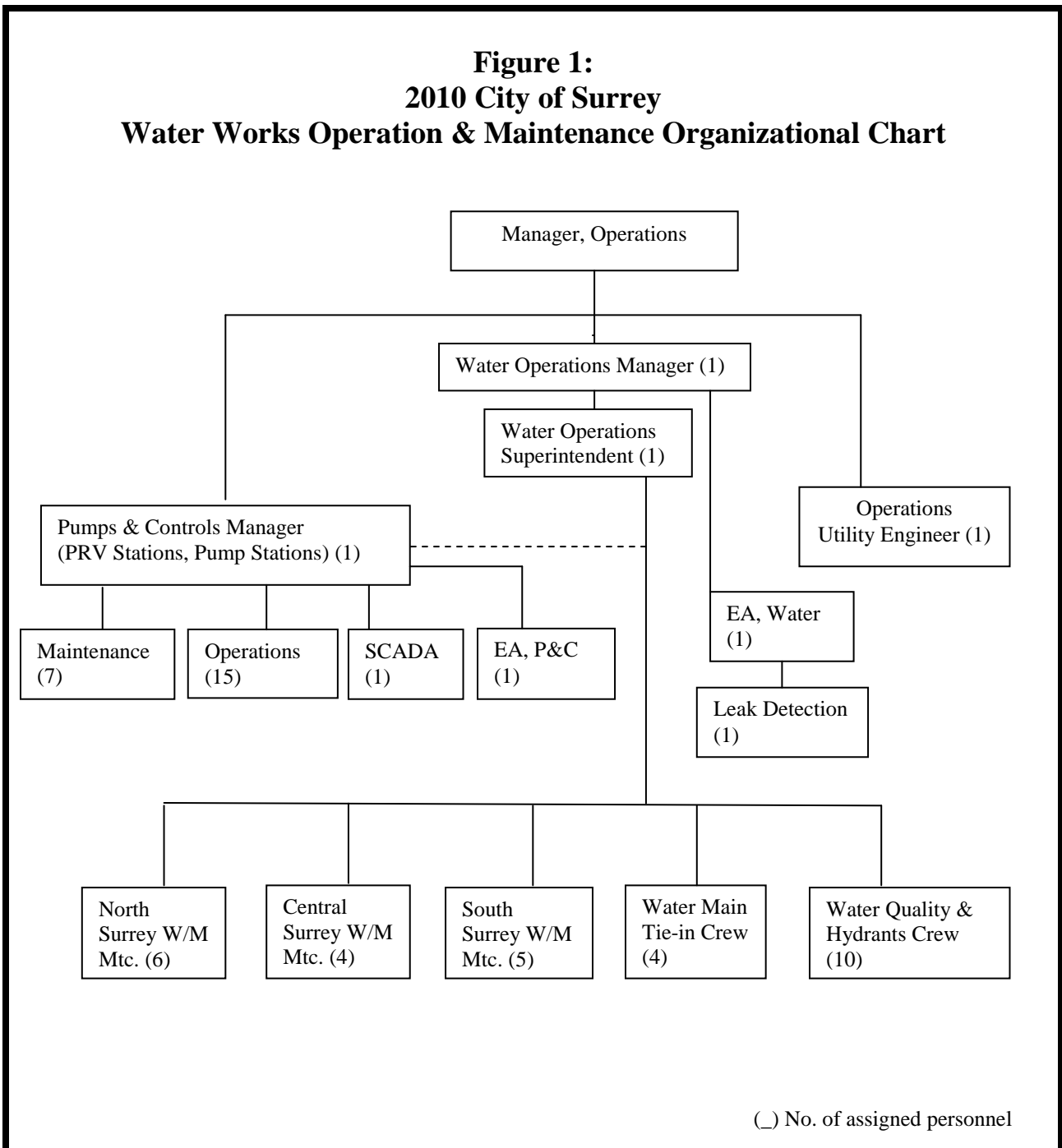
| Main Size (mm) | Main Length (m) by Material | | | | | | | | |
|-------------------|-----------------------------|---------------|----------------|------------|----------------|--------------|---------------|----------------|---------------|
| | AC | CC | CI | CU | DI | GI | PE | PVC | ST |
| 25 | | | | 107 | | 308 | 65 | 142 | |
| 50 | 141 | 25 | 82 | 172 | 45 | 2,696 | 1,664 | 4,071 | |
| 75 | | | | | 163 | | | 104 | |
| 100 | 10,326 | | 12,511 | | 55,954 | 20 | 22,428 | 11,299 | 420 |
| 150 | 44,090 | | 68,303 | | 314,804 | | 5,775 | 93,479 | 393 |
| 200 | 22,961 | | 22,964 | | 165,925 | | | 296,509 | 792 |
| 250 | 224 | | 3,566 | | 60,459 | | | 69,234 | 171 |
| 300 | 13,241 | 2 | 17,106 | | 221,968 | | 171 | 99,288 | 2,404 |
| 350 | | | | | 37,049 | | | 1,273 | 668 |
| 400 | | | | | 33,618 | | | 36 | 1,038 |
| 450 | | 8,635 | | | 35,490 | | | 356 | 274 |
| 500 | | 3 | | | 6,291 | | | | 24 |
| 525 | | | | | | | | | 4,977 |
| 600 | | 9,628 | | | 6,938 | | | | 3,669 |
| 750 | | 304 | | | 2,050 | | | | 4,656 |
| 900 | | 33 | | | 840 | | | | 367 |
| 1050 | | | | | | | | | 62 |
| 1200 | | | | | | | | | 84 |
| SUBTOTAL | 90,983 | 18,630 | 124,532 | 279 | 941,594 | 3,024 | 30,103 | 575,791 | 19,999 |
| TOTAL | 1,804,935 | | | | | | | | |

| Pipe Material Legend | |
|----------------------|--------------------|
| AC | Asbestos-Cement |
| CC | Concrete Cylinder |
| CI | Cast Iron |
| CU | Copper |
| DI | Ductile Iron |
| GI | Galvanized Iron |
| PE | Polyethylene |
| PVC | Polyvinyl Chloride |
| ST | Steel |

B. System Maintenance

The City of Surrey has a team of thirty-three personnel assigned specifically to the operation and maintenance of the underground pipe system and utilizes the shared services of a Utility Engineer and an additional twenty-five personnel to operate and maintain the City's pump stations and pressure reducing stations.

The maintenance organization structure is shown in Figure 1 (below).



The duties and responsibilities of the various crews and staff members are as follows:

- a) **Water Maintenance Crews (North, Central & South):**
Provide maintenance of services, mains and of all appurtenances, on-demand flushing, and emergency repairs.
- b) **Water Main Tie-in Crew:**
Provide construction of old main to new main tie-ins, monitoring of private contractor's tie-in construction, record keeping of tie-in details, chlorine residual testing prior to main activation, construction of new pressure reducing stations.
- c) **Water Quality & Hydrants Crew:**
Provide scheduled and on-demand flushing of City mains, on-demand testing for chlorine residuals of City mains and new construction, water sampling collection for quality analysis, hydrant maintenance.
- d) **Pumps & Control Maintenance Crew:**
Provide scheduled and emergency repairs and upkeep on the mechanical components of water pump stations, and pressure reducing stations.
- e) **Pumps & Control Operations Crew:**
Provide daily operational and, as required, emergency adjustments to the mechanical and electrical controls on the water pump stations, and pressure reducing stations.
- f) **Pumps & Controls SCADA:**
Provide monitoring of pump station operations, coordinate alarm responses with maintenance crews, assess and develop upgrade projects for more efficient pump stations.
- g) **Water Operations Superintendent:**
Supervise and provide technical assistance to Operations Crews, provide input and technical assistance on distribution system expansions and upgrades.
- h) **Utility Engineer:**
Provide technical assistance with water quality issues, water meters, and distribution system expansions.
- i) **Engineering Assistants (Water and P&C):**
Provide technical and organizational assistance and support to Operations Crews and Management. Assist in work programming, data management, quality control and department planning.
- j) **Leak Detection:**
Conduct both proactive and reactive leak detection work using acoustic leak detection equipment and other detection methods. Assist work crews in accurately locating known leaks.

C. Scheduled Maintenance

To maintain the quality of the water throughout the distribution system, the City has an annual unidirectional flushing program which aims to flush all mains at least once every four years. “On demand” flushing also occurs as needed in conjunction with water quality testing results and with line repairs. The flushing serves to remove stagnant water and sediment from the pipes in support of the drinking water quality objectives.

Figure 2, “Unidirectional Flushing Program” (pg. 6), shows the five major zones and sub-areas of the unidirectional flushing program. Each year’s program originates near the discharge of a Metro Vancouver storage reservoir, and extends in a unidirectional pattern from there. This ensures that water from non-flushed mains does not flow into recently flushed mains. A reduction in crew availability resulted in a flushing area smaller than projected goals.

The scheduled flushing program is carried out during the low demand season of the year. All flushed water is treated with Sodium Thiosulphate to ensure compliance with Ministry of Environment guidelines for water entering streams.

The City does not carry out any abrasive cleaning, pigging, swabbing, etc. of the water system as neither quality assessments nor pipeline flow restrictions have justified such procedures. The City has, over the past thirty-five years, replaced and upgraded much of its earlier installed mains to meet current fire flow standards and pipe material specifications. In doing so, the City has avoided the need for more elaborate cleaning methods.

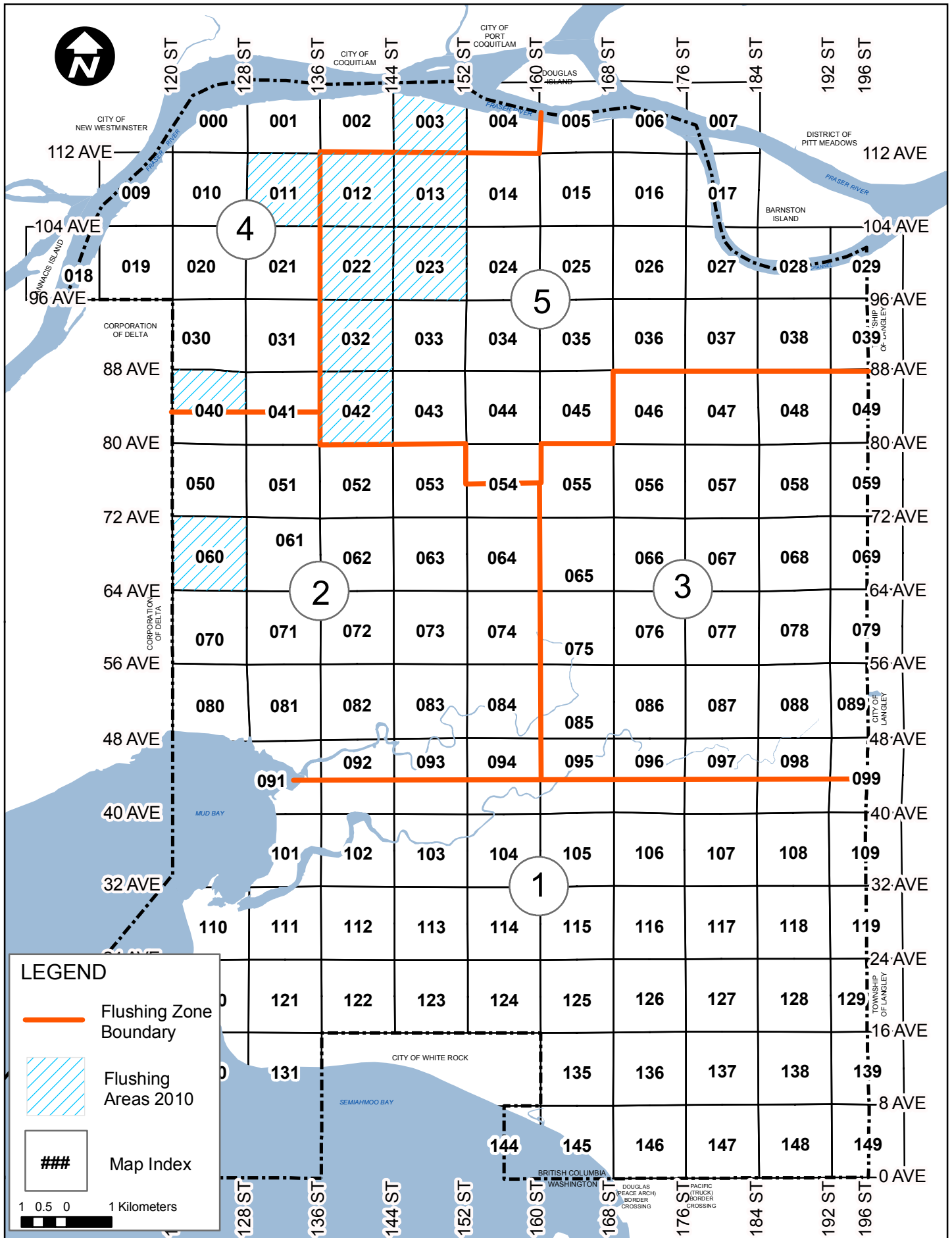


Fig 2: UNIDIRECTIONAL FLUSHING PROGRAM

D. System Budget

A summary of activities and annual budgets related to water quality preservation of the City's water distribution system is shown in Table 2 (below). These budgets represent approximately 19% of the City's annual Water Utility Operations & Maintenance budget. The remaining 81% is utilized for the operation and maintenance of the City's water valves, meters, and service connections, for the provision of related operational support services, and for electrical power for the water pump stations.

**Table 2:
City of Surrey Water Distribution System
2010 and 2011 Water Quality Maintenance Budgets**

| Description | 2010 Budget | 2011 Budget |
|---------------------------|--------------------|--------------------|
| Main Line Repairs | \$348,800 | \$359,200 |
| Line Flushing (450 km/yr) | \$228,800 | \$235,600 |
| Hydrant Maint. (2100/yr) | \$320,100 | \$425,200 |
| PRV Maint. | \$246,400 | \$256,300 |
| Pump Stations Maint. (10) | \$392,000 | \$407,600 |
| Water Quality Monitoring | \$92,500 | \$96,200 |
| TOTALS* | \$1,628,600 | \$1,780,100 |

* Total Water Distribution System Operations & Maintenance Budget is: \$8,914,800 for Year 2010, and \$9,190,800 for Year 2011

E. Water Sampling & Testing Program

The City of Surrey supplies safe drinking water to its customers under an Operating Permit, issued by the Medical Health Officer of the Fraser Health Authority (FHA).

Fifty-one water sampling site locations are utilized to monitor the City's water quality. The sampling sites and their locations are displayed in Figure 3, "Water Sampling Sites Legend" (pg. 10) and Figure 4, "Water Sampling Sites" (pg. 11). Weekly water testing results for the year 2010 are included in Appendix 'A' of this report. The test samples are collected by City and Metro Vancouver staff, and the results analyzed in Metro Vancouver's laboratory. Metro Vancouver's laboratory is approved by the Provincial Health Officer for bacteriological analysis and is certified by the Canadian Association for Laboratory Accreditation (CALA) for the testing of general parameters, metals, trihalomethanes (THM's), total coliforms, and fecal coliforms.

In the year 2010, a total of 3109 water samples were tested with a monthly maximum of 343, a monthly minimum of 193, and a monthly mean of 259 samples being taken. This number of samples compares favourably with the B.C. Drinking Water Protection Regulation (BCDWPR) and the Guidelines for Canadian Drinking Water Quality (GCDWQ) recommendations of minimum numbers of monthly samples of 127 and 136, respectively. A summary of the number of samples taken at each sampling site is shown in Table 3, "Number of Year 2010 Water Test Samples" (pg. 12).

The City relies extensively on both the specific results and general trends of these weekly test results to ensure that conditions are not present, nor developing, which could pose a risk to our residents. Additional information about drinking water and those with weakened immune systems can be found in Appendix D of this report.

The City has not had to add any chemicals to the distribution system to offset any excesses in the bacterial or chemical quality of the water. Higher than preferred heterotrophic plate counts (HPC) at a sampling site are treated immediately by waterline flushing carried out by City maintenance staff. High turbidity and/or E. coli coliform results, if any, are referred to the FHA directly by Metro Vancouver Laboratory.

There were no test samples in which the total coliform (T.coli) count exceeded the BCDWPR and the GCDWQ's maximum limit of 10 total coliforms per 100 ml in a 30-day period. However, there were three samples with T.coli counts of 1 per 100 ml. Upon flushing and re-sampling, the T.coli counts returned to values of less than could be detected by Metro Vancouver's laboratory. There were no confirmed causes for the positive T.coli test results, although a possible cause might have been unrelated contamination of the sampling bottles. There was one sample which indicated a possible presence of E.coli but immediate repeat sampling at the location revealed no further E.coli.

Line flushing, by City forces, occurs on a demand basis whenever the HPC count exceeds 500 CFU/ml, and whenever any positive coliform count is detected.

Metro Vancouver's laboratory also tests the City water system for pH and disinfection by-products: Haloacetic acids (five) (HAA5) and Trihalomethanes (THM's). The detailed

results of these tests along with a comparison of annual disinfection by-products in graphical format are included in Appendix 'A' of this report. pH measurement was done at three of the test sampling sites. The recorded pH's had a median value of 7.6 with a maximum of 7.9, and a minimum of 7.5.

THM disinfection by-products were measured at seven of the test sampling sites. The results show the total THM's 2010 running average to be 40 parts per billion (ppb), which is less than the GCDWQ acceptable concentration of 100 ppb.

HAA5 disinfection by-products were measured at six of the test sampling sites. The results show the total HAA5's 2010 running average to be 71 ppb, which is less than the GCDWQ acceptable concentration of 80 ppb.

Metro Vancouver's laboratory tested for concentrations of copper, iron, lead, zinc and other metals two times at three of the stations in 2010. The measured concentration of copper, iron, lead and zinc were all less than the GCDWQ recommended maximum concentrations. The detailed results of these tests are included in Appendix 'A' of this report.

The City has 576 km of polyvinyl chloride mains in the distribution system. Metro Vancouver's laboratory examined four sampling sites for the presence of vinyl chlorides and determined the concentration of vinyl chlorides to be less than the laboratory's minimum detection limit of 0.5 ppb. The maximum acceptable concentration recommended by the GCDWQ is 2 ppb. The detailed results of these tests are included in Appendix 'A' of this report.

Due to the lack of supplied water contact with pesticides, herbicides, or parasites, the City has not tested for these substances or organisms.

In 2010, there were an estimated total of 200 maintenance crew responses to public concerns about water quality. This number equates to 1.8 water quality concern responses per 1,000 customers and is similar to the values in past years. Generally, odour and taste issues are resolved by main flushing, and/or promoting longer running of tap water before use by the concerned consumer.

Turbidity (cloudiness), odour, and taste complaints are typically received at a rate of two to four per week, and are dealt with on an individual basis. Turbidity issues are typically the result of line flushing operations and do not usually require follow up action by our maintenance crews.

| SITE NUMBER | LOCATION | SAMPLE BY |
|-------------|--|-----------------|
| 901 | NW CORNER 180 ST & 92 AVE | METRO VANCOUVER |
| 902 | ACROSS FROM 18995 87A AVE IN SCHOOL BULEVARD | METRO VANCOUVER |
| 903 | 19287 98A AVE BY HYDRANT 4085 | METRO VANCOUVER |
| 904 | E OF HYDRANT 4737 ON TRIGGS RD | METRO VANCOUVER |
| 905 | SE CORNER 170A ST & 102 AVE | METRO VANCOUVER |
| 906 | SE CORNER 161 ST & 102 AVE | METRO VANCOUVER |
| 907 | 10796 155A ST ON 108 AVE. 100f E OF 15A ST | METRO VANCOUVER |
| 908 | 112 AVE & 159A ST ON NW CORNER | METRO VANCOUVER |
| 909 | 14669 WELLINGTON DR. E P/L BY HYDRANT | METRO VANCOUVER |
| 910 | SW CORNER OF 115 AVE & BEDFORD DR | METRO VANCOUVER |
| 911 | 12893 114A AVE | METRO VANCOUVER |
| 912 | 10680 TIMBERLAND RD 1 BLK S OF PINE RD HYDRNT 6745 | METRO VANCOUVER |
| 913 | 11878 98A AVE. 25f W OF E P/L | METRO VANCOUVER |
| 914 | SE CORNER OF 105 AVE & 132 ST | METRO VANCOUVER |
| 915 | WHALLEY PUMP STATION | METRO VANCOUVER |
| 916 | NE CORNER OF 97A AVE & 137 ST | METRO VANCOUVER |
| 917 | E OF P/L 13031 LANARK PL | METRO VANCOUVER |
| 918 | SW CORNER GLEN PL & LAUDER DR | METRO VANCOUVER |
| 919 | NW CORNER 92A AVE & 151 ST | METRO VANCOUVER |
| 920 | SE CORNER 162 ST & 90 AVE | METRO VANCOUVER |
| 921 | NE CORNER OF 170A ST & 80 AVE | METRO VANCOUVER |
| 922 | 7768 155 ST NW P/L | METRO VANCOUVER |
| 923 | NE P/L 8241 120A ST | METRO VANCOUVER |
| 924 | S SIDE OF 74 AVE. 100m W/O 138 ST | METRO VANCOUVER |
| 925 | NE CORNER OF 62 AVE & 128 ST | SURREY |
| 926 | W P/L 12059 56 AVE | SURREY |
| 927 | NW CORNER OF 66 AVE & 148 ST | SURREY |
| 928 | W P/L 15349 OFF 57 AVE | SURREY |
| 929 | SE CORNER OF LOMBARD PL & 144A ST | SURREY |
| 930 | S OF 3031 139 ST | SURREY |
| 931 | SW CORNER OF 124 ST & 24 AVE | SURREY |
| 932 | BESIDE HYDRANT W SIDE OF 126A ST & 1463. S OF ROW | SURREY |
| 933 | ACROSS FROM 13341 15B AVE. S SIDE | SURREY |
| 934 | NE CORNER OF 146 ST & 16A AVE | SURREY |
| 935 | BESIDE MAIL BOX NW CORNER OF 11 AVE & 164 ST | SURREY |
| 936 | 17195 0 AVE | SURREY |
| 937 | NE CORNER OF 21A AVE & 180 ST. B.S. HYDRO BOX | SURREY |
| 938 | SE CORNER OF 172 ST & 31 AVE | SURREY |
| 939 | SW CORNER OF 156 ST & 38 A AVE | SURREY |
| 940 | ACROSS 15909 24 AVE AT SOUTH WORKYARD | SURREY |
| 941 | SE CORNER OF 57A AVE & OLD MCLELLAN RD | SURREY |
| 942 | BEHIND 5963 176 ST IN LANE | SURREY |
| 943 | SE CORNER OF 54 AVE & 184 ST | SURREY |
| 944 | NE CORNER OF 60 AVE & 189 ST | SURREY |
| 945 | PRODUCTION BLVRD & 55 AVE | SURREY |
| 946 | SE CORNER 63A AVE & 195B ST | SURREY |
| 947 | NW CORNER 68 AVE & 192 ST | SURREY |
| 948 | NW CORNER 66 AVE & 172 ST | SURREY |
| 949 | SE CORNER 182 ST & 74 AVE | METRO VANCOUVER |
| 951 | NE CORNER 192 ST & 21 AVE | SURREY |
| 952 | WPL 19026 28 AVE | SURREY |

Fig. 3: WATER SAMPLING SITES LEGEND

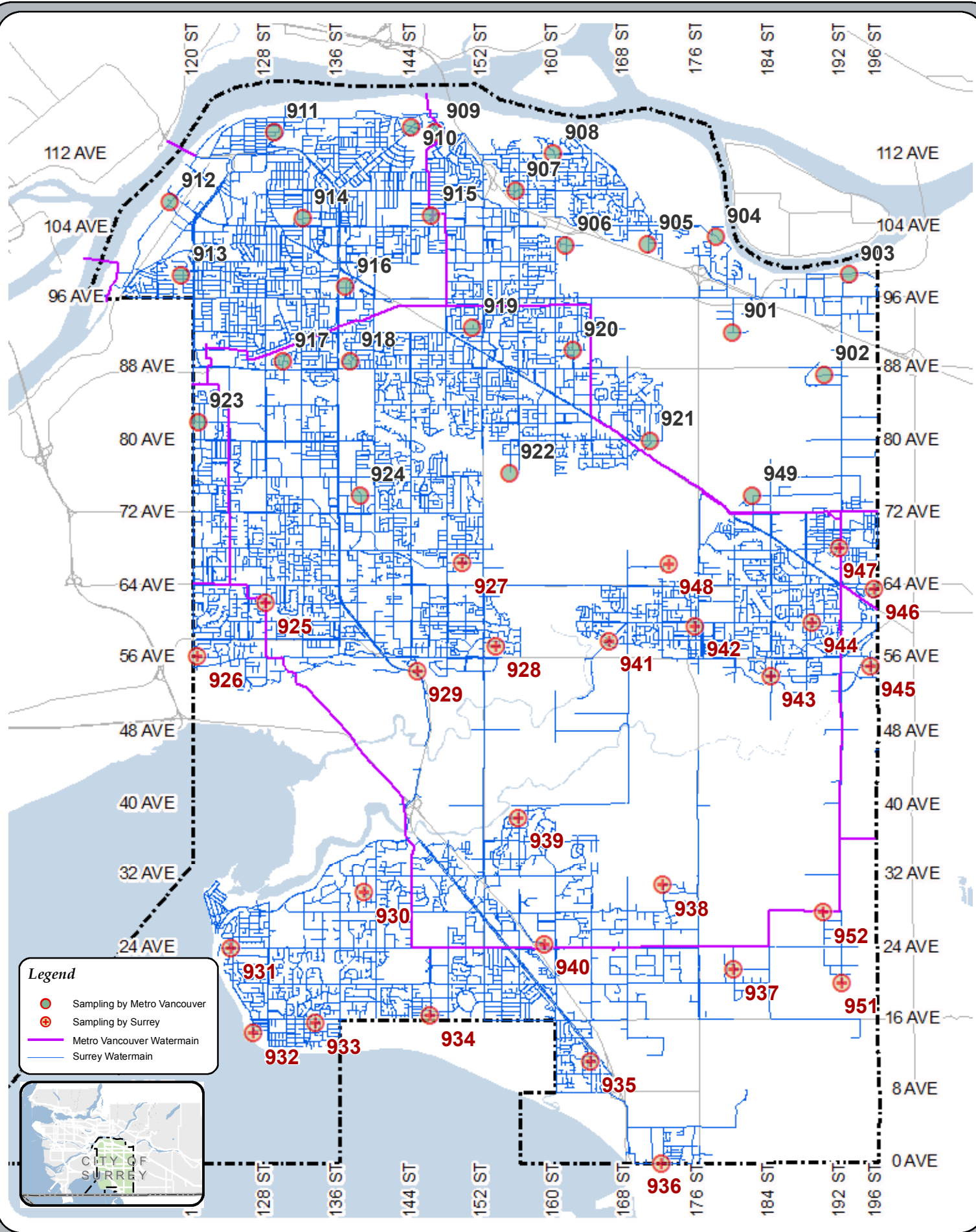
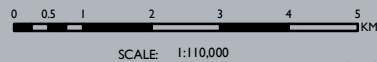


Fig. 4: WATER SAMPLING SITES



The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, legal descriptions and encumbrances must be confirmed at the Land Title Office.

Table 3: Number of Year 2010 Water Test Samples

| SITE | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Station Total |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------|
| 901 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 4 | 4 | 7 | 7 | 6 | 67 |
| 902 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 8 | 6 | 69 |
| 903 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 7 | 6 | 68 |
| 904 | 4 | 7 | 7 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 7 | 6 | 67 |
| 905 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 7 | 6 | 68 |
| 906 | 2 | 4 | 8 | 6 | 4 | 6 | 5 | 5 | 4 | 5 | 6 | 3 | 58 |
| 907 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 7 | 6 | 68 |
| 908 | 4 | 7 | 8 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 7 | 6 | 68 |
| 909 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 7 | 7 | 4 | 8 | 76 |
| 910 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 7 | 7 | 3 | 6 | 73 |
| 911 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 7 | 7 | 5 | 8 | 77 |
| 912 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 7 | 7 | 4 | 8 | 76 |
| 913 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 7 | 7 | 5 | 8 | 77 |
| 914 | 4 | 6 | 9 | 5 | 5 | 9 | 7 | 6 | 7 | 7 | 4 | 8 | 77 |
| 915 | 4 | 6 | 9 | 6 | 5 | 9 | 6 | 7 | 7 | 7 | 4 | 8 | 78 |
| 916 | 4 | 6 | 9 | 5 | 5 | 9 | 7 | 6 | 7 | 7 | 5 | 8 | 78 |
| 917 | 4 | 6 | 9 | 5 | 5 | 9 | 7 | 6 | 7 | 7 | 4 | 4 | 73 |
| 918 | 4 | 6 | 9 | 5 | 5 | 9 | 6 | 6 | 8 | 7 | 4 | 8 | 77 |
| 919 | 4 | 6 | 9 | 6 | 4 | 6 | 6 | 5 | 4 | 5 | 3 | 0 | 58 |
| 920 | 5 | 4 | 9 | 6 | 4 | 7 | 5 | 5 | 4 | 5 | 6 | 6 | 66 |
| 921 | 5 | 6 | 9 | 6 | 4 | 6 | 5 | 5 | 4 | 5 | 6 | 6 | 67 |
| 922 | 4 | 5 | 9 | 6 | 4 | 7 | 5 | 5 | 4 | 5 | 6 | 6 | 66 |
| 923 | 5 | 6 | 9 | 5 | 5 | 9 | 5 | 7 | 7 | 7 | 5 | 8 | 78 |
| 924 | 4 | 4 | 8 | 6 | 4 | 6 | 6 | 5 | 4 | 5 | 6 | 7 | 65 |
| 925 | 3 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 52 |
| 926 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 927 | 2 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 51 |
| 928 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 929 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 930 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 931 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 932 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 933 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 934 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 935 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 936 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 937 | 5 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 938 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 939 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 52 |
| 940 | 4 | 3 | 5 | 0 | 0 | 1 | 4 | 4 | 5 | 4 | 4 | 5 | 39 |
| 941 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 942 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 943 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 944 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 945 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 946 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 51 |
| 947 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 50 |
| 948 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 51 |
| 949 | 4 | 11 | 13 | 8 | 5 | 10 | 7 | 5 | 6 | 7 | 10 | 8 | 94 |
| 951 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| 952 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 51 |
| Monthly Total | 193 | 245 | 343 | 247 | 212 | 303 | 257 | 242 | 266 | 267 | 245 | 289 | 3109 |
| Monthly Minimum | 193 | | | | | | | | | | | | |
| Monthly Maximum | 343 | | | | | | | | | | | | |
| Monthly Median | 252 | | | | | | | | | | | | |

F. Water Quality Response Notification

The City has developed, jointly with Metro Vancouver and its member municipalities, and with FHA, a notification procedure for situations affecting water quality. The City adheres to this procedure when line breaks occur or if a contamination condition is suspected. The City, through Metro Vancouver's testing laboratory, also notifies the FHA if any fecal coliform count is detected. This notification procedure is shown in Table 4 (below).

**Table 4:
Water Quality Response Procedure**

| Situation | Notifying Agency | Agency Notified | Time Frame for Notification |
|--|--|--|--|
| Metro Vancouver E.Coli Positive Sample | Metro Vancouver | Metro Vancouver, MHO City of Surrey | Immediate |
| Municipal E.Coli Positive Sample | Laboratory ² City of Surrey ³ | MHO (or delegate) | Immediate |
| Chemical Contamination – Metro Vancouver | Metro Vancouver | Metro Vancouver, MHO, City of Surrey ¹ | Immediate |
| Chemical Contamination – City of Surrey | City of Surrey | MHO (or delegate) | Immediate |
| Turbidity > 5 NTU | Metro Vancouver | Metro Vancouver, MHO, and City of Surrey ¹ | Immediate |
| Disinfection Failure – Source Water (Primary Disinfection) | Metro Vancouver | Metro Vancouver, MHO, and City of Surrey ¹ | Immediate (As per DWPA) |
| Disinfection Failure – Rechlorination (Secondary Disinfection) | Metro Vancouver | Metro Vancouver, MHO, and City of Surrey ¹ | Immediate, in any situation in which the BCSDWR or the GCDWQ may not be met. |
| Loss of Pressure Due to High Demand | City of Surrey | MHO (or delegate), Metro Vancouver | Immediate |
| Line Break – City of Surrey ⁴ | City of Surrey | MHO (or delegate) | As soon as possible |
| Line Break – Metro Vancouver ⁴ | Metro Vancouver | City of Surrey | Optional |
| Line Break – City of Surrey ⁵ | City of Surrey | MHO (or delegate) | Immediate |
| Line Break – Metro Vancouver ⁵ | Metro Vancouver | Metro Vancouver, MHO, City of Surrey ¹ | Immediate |

1. City of Surrey to notify Fraser Health Authority.
2. Laboratory to immediately notify the MHO, DWO (or FHA delegates) and the water supplier as per section 12(1) of the DWPA.
3. City of Surrey to immediately notify the MHO, DWO (or FHA delegates) as per section 12(2) of the DWPA.
4. With no suspected contamination.
5. With suspected contamination.

G. Water Quality Test Results

The bacteriological quality of the City's distributed water remains high as evidenced by sampling results related to both E.coli and total coliforms.

The pipe condition environment is closely monitored by base indicators (HPC counts, chlorine residual values, turbidity counts) and for trends that would indicate conditions are developing that could promote the growth of harmful bacteria. The GCDWQ recommends that re-sampling occur if samples contain more than 500 heterotrophic bacteria colonies (HPC) per milliliter. This recommendation is followed by the City, as well as flushing of the main adjacent to the affected sampling sites. Water stagnation and/or inadequate circulation in the City's mains are the likely causes for all of the results with greater than 500 HPC's.

In 2010, 2% of the samples taken showed HPC's higher than 500 using a laboratory testing method incorporating a 5 day incubation period and a temperature of 28°C. Table 5, "Year 2000 to 2010 HPC Positive Samples Summary >500" (pg. 16) summarizes the incidents of HPC's greater than 500 for years from 2000 to 2010. These results are also displayed in graphical form in Graph 1, "Comparison of Annual HPC Results >500 CFU in the City of Surrey's Water System" (pg. 17).

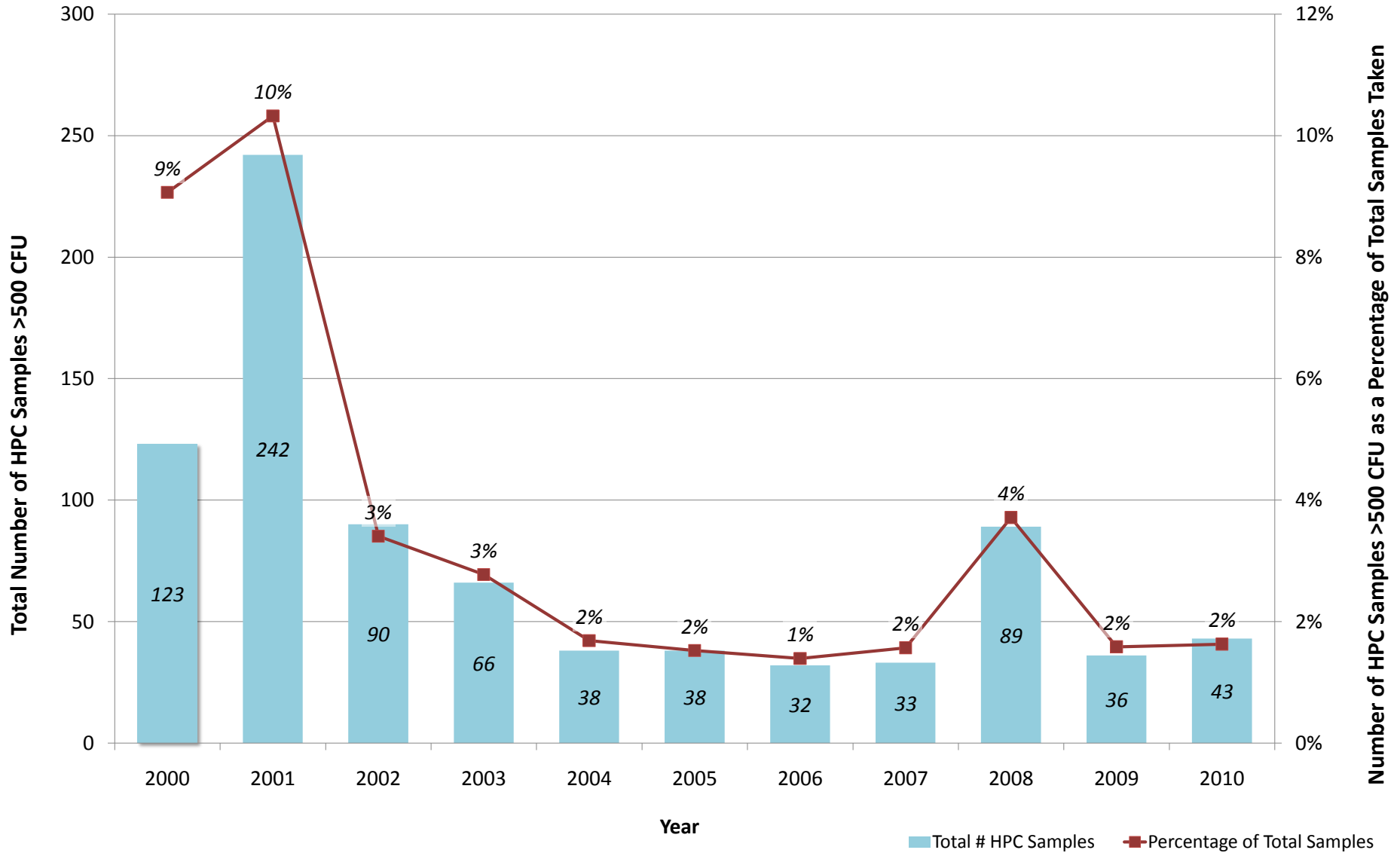
Approximately 11% of the water samples analyzed had free chlorine residual values less than the 0.1 mg/l considered optimum for the distribution system. This percentage is similar to that obtained in 2009 and higher than those obtained in 2008 and 2007 (8.5%, 5.3% respectively).

The City continues to closely monitor incidents of low chlorine residuals (<0.1 mg/L) and high HPC (>500 CFU/mls) to determine if there is any correlation between these results and certain system conditions such as maintenance work or underutilized water mains. Although no definite causes have been identified, areas with high HPC have been found to be limited to the southern portion of the City's distribution network. This is an area with relatively poor circulation due to partial build-out conditions. Every effort is being made by the City to improve water quality including efforts at the planning level to loop the extremities and non-built out portions of the water infrastructure.

Table 5: Year 2000 to 2010 HPC Positive Samples Summary >500

| Sampling Site | No. of Samples Tested | | | | | | | | | | No. of HPC Results >500 | | | | | | | | | | % of Samples >500 | | | | | | | | | | | | |
|---------------|-----------------------|------|------|------|------|------|------|------|------|------|-------------------------|------|------|------|------|------|------|------|------|------|-------------------|------|------|-------|------|------|------|------|------|------|------|------|------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| 901 | 38 | 48 | 51 | 47 | 48 | 50 | 48 | 47 | 46 | 55 | 67 | 1 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3% | 12.5% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| 902 | 40 | 48 | 51 | 50 | 46 | 55 | 49 | 44 | 47 | 59 | 69 | 0 | 4 | 1 | 6 | 4 | 4 | 6 | 1 | 0 | 0 | 0 | 0% | 8% | 2% | 12% | 9% | 7% | 12% | 2% | 0% | 0% | 0% |
| 903 | 37 | 53 | 50 | 46 | 46 | 59 | 50 | 47 | 48 | 55 | 68 | 0 | 6 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 0% | 11% | 0% | 2% | 2% | 2% | 2% | 0% | 0% | 4% | |
| 904 | 37 | 48 | 52 | 44 | 44 | 53 | 46 | 38 | 48 | 53 | 67 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 4% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 905 | 39 | 49 | 52 | 44 | 47 | 53 | 47 | 41 | 46 | 59 | 68 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | |
| 906 | 40 | 35 | 52 | 52 | 45 | 47 | 40 | 42 | 46 | 46 | 58 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8% | 9% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 907 | 9 | 48 | 51 | 47 | 45 | 49 | 46 | 44 | 47 | 56 | 68 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 908 | 0 | 34 | 56 | 47 | 46 | 57 | 47 | 43 | 48 | 57 | 68 | 0 | 9 | 5 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 26% | 9% | 0% | 2% | 2% | 0% | 0% | 2% | 0% | 0% | |
| 909 | 0 | 33 | 48 | 49 | 47 | 46 | 46 | 38 | 59 | 65 | 76 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 910 | 23 | 51 | 51 | 49 | 48 | 46 | 48 | 39 | 60 | 69 | 73 | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0% | 18% | 4% | 0% | 0% | 0% | 0% | 0% | 3% | 0% | |
| 911 | 48 | 51 | 55 | 47 | 51 | 47 | 42 | 43 | 60 | 62 | 77 | 15 | 15 | 18 | 4 | 8 | 8 | 0 | 2 | 0 | 0 | 0 | 31% | 29% | 33% | 9% | 16% | 17% | 0% | 5% | 0% | 0% | |
| 912 | 51 | 48 | 42 | 47 | 46 | 47 | 43 | 43 | 54 | 65 | 76 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 7 | 9 | 0 | 0 | 0% | 4% | 0% | 0% | 0% | 0% | 16% | 17% | 0% | 0% | |
| 913 | 51 | 52 | 48 | 45 | 48 | 44 | 45 | 40 | 53 | 64 | 77 | 1 | 7 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2% | 13% | 2% | 0% | 0% | 0% | 3% | 0% | 0% | 0% | |
| 914 | 23 | 48 | 51 | 45 | 45 | 46 | 42 | 39 | 62 | 67 | 77 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4% | 8% | 2% | 0% | 0% | 0% | 0% | 3% | 0% | 0% | |
| 915 | 51 | 50 | 57 | 50 | 47 | 47 | 54 | 44 | 64 | 66 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 916 | 1 | 31 | 30 | 25 | 48 | 44 | 40 | 41 | 55 | 63 | 78 | 0 | 19 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 61% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 917 | 0 | 28 | 51 | 45 | 46 | 47 | 41 | 43 | 55 | 63 | 73 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 2% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 918 | 26 | 50 | 49 | 45 | 45 | 49 | 50 | 39 | 55 | 64 | 77 | 0 | 7 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 14% | 8% | 11% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 919 | 51 | 51 | 53 | 53 | 44 | 45 | 41 | 44 | 50 | 64 | 77 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 6% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 920 | 50 | 54 | 55 | 51 | 44 | 42 | 39 | 43 | 49 | 58 | 66 | 0 | 3 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0% | 6% | 0% | 4% | 2% | 2% | 0% | 0% | 0% | 2% | |
| 921 | 46 | 46 | 45 | 47 | 43 | 46 | 45 | 44 | 52 | 57 | 67 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | |
| 922 | 0 | 54 | 59 | 49 | 46 | 50 | 35 | 45 | 51 | 56 | 66 | 0 | 15 | 4 | 3 | 4 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 28% | 7% | 6% | 9% | 8% | 0% | 2% | 2% | 0% | |
| 923 | 48 | 48 | 50 | 49 | 46 | 43 | 40 | 39 | 57 | 65 | 78 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | |
| 924 | 24 | 48 | 45 | 48 | 44 | 46 | 44 | 41 | 47 | 59 | 65 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 2% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 925 | 47 | 47 | 37 | 46 | 44 | 51 | 45 | 49 | 47 | 49 | 52 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0% | 11% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | |
| 926 | 52 | 51 | 46 | 47 | 44 | 53 | 50 | 48 | 46 | 49 | 51 | 1 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2% | 2% | 9% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 927 | 48 | 52 | 46 | 46 | 44 | 50 | 50 | 49 | 44 | 47 | 51 | 20 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42% | 8% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 928 | 51 | 51 | 45 | 47 | 44 | 51 | 49 | 48 | 48 | 45 | 51 | 0 | 0 | 1 | 6 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0% | 0% | 2% | 13% | 2% | 2% | 0% | 0% | 2% | 0% | |
| 929 | 9 | 47 | 45 | 46 | 43 | 51 | 50 | 50 | 44 | 49 | 51 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 0% | 2% | 2% | 2% | 0% | 0% | 0% | 0% | |
| 930 | 51 | 54 | 50 | 51 | 45 | 45 | 47 | 41 | 47 | 47 | 52 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 10% | 13% | 0% | 0% | 0% | 0% | 0% | 0% | 13% | | |
| 931 | 52 | 49 | 51 | 52 | 45 | 46 | 44 | 42 | 47 | 49 | 52 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 | 4% | 0% | 0% | 0% | 2% | 2% | 0% | 0% | 0% | 10% | |
| 932 | 50 | 50 | 51 | 52 | 45 | 46 | 47 | 42 | 47 | 48 | 52 | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 1 | 6% | 0% | 0% | 0% | 0% | 11% | 0% | 2% | 0% | 2% | |
| 933 | 31 | 60 | 63 | 53 | 46 | 50 | 48 | 43 | 47 | 47 | 52 | 2 | 24 | 15 | 7 | 1 | 1 | 5 | 2 | 11 | 1 | 1 | 6% | 40% | 24% | 13% | 2% | 2% | 10% | 5% | 23% | 2% | |
| 934 | 0 | 25 | 53 | 52 | 44 | 58 | 48 | 40 | 47 | 48 | 51 | 0 | 0 | 3 | 4 | 3 | 3 | 1 | 2 | 5 | 2 | 2 | 0% | 0% | 6% | 8% | 7% | 5% | 2% | 5% | 11% | 4% | |
| 935 | 50 | 49 | 51 | 52 | 45 | 47 | 47 | 43 | 47 | 48 | 51 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 4% | 4% | 2% | 0% | 0% | 2% | 2% | 0% | 4% | 0% | |
| 936 | 5 | 48 | 52 | 52 | 44 | 48 | 48 | 43 | 48 | 47 | 51 | 4 | 6 | 1 | 1 | 3 | 3 | 3 | 5 | 3 | 2 | 1 | 80% | 13% | 2% | 2% | 7% | 6% | 6% | 12% | 6% | 2% | |
| 937 | 31 | 56 | 54 | 52 | 44 | 48 | 44 | 43 | 46 | 49 | 52 | 15 | 12 | 2 | 2 | 0 | 0 | 2 | 5 | 3 | 1 | 0 | 48% | 21% | 4% | 4% | 0% | 0% | 5% | 12% | 7% | 2% | |
| 938 | 31 | 51 | 53 | 52 | 45 | 48 | 44 | 44 | 47 | 49 | 51 | 24 | 10 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77% | 20% | 6% | 8% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 939 | 51 | 53 | 53 | 52 | 45 | 47 | 44 | 43 | 47 | 48 | 52 | 2 | 8 | 4 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 4% | 15% | 8% | 4% | 0% | 0% | 0% | 2% | 2% | 2% | |
| 940 | 51 | 51 | 53 | 53 | 46 | 48 | 40 | 44 | 47 | 48 | 39 | 12 | 4 | 3 | 1 | 0 | 0 | 3 | 1 | 7 | 2 | 2 | 24% | 8% | 6% | 2% | 0% | 0% | 8% | 2% | 15% | 4% | |
| 941 | 50 | 52 | 46 | 46 | 43 | 57 | 48 | 49 | 46 | 48 | 51 | 1 | 7 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 0 | 1 | 2% | 13% | 0% | 0% | 0% | 4% | 2% | 4% | 0% | 2% | |
| 942 | 0 | 26 | 47 | 46 | 45 | 52 | 50 | 47 | 45 | 48 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0% | 0% | 0% | 0% | 0% | 2% | 2% | 0% | 0% | 0% | |
| 943 | 49 | 48 | 50 | 43 | 35 | 42 | 63 | 60 | 51 | 48 | 51 | 1 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2% | 10% | 8% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 944 | 50 | 51 | 45 | 46 | 44 | 51 | 47 | 47 | 46 | 48 | 51 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0% | 0% | 0% | 2% | 2% | 2% | 2% | 0% | 0% | 0% | |
| 945 | 9 | 57 | 59 | 55 | 51 | 59 | 35 | 32 | 43 | 48 | 51 | 0 | 13 | 2 | 4 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0% | 23% | 3% | 7% | 2% | 2% | 0% | 3% | 0% | 0% | |
| 946 | 31 | 53 | 46 | 47 | 45 | 51 | 52 | 47 | 45 | 47 | 51 | 5 | 7 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 16% | 13% | 0% | 2% | 4% | 4% | 0% | 0% | 0% | 0% | |
| 947 | 50 | 51 | 46 | 45 | 43 | 51 | 51 | 46 | 48 | 48 | 50 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 2% | 0% | 2% | 2% | 0% | 0% | 0% | 0% | |
| 948 | 50 | 50 | 48 | 46 | 43 | 53 | 51 | 46 | 46 | 46 | 51 | 3 | 5 | 2 | 6 | 4 | 4 | 0 | 1 | 1 | 0 | 3 | 6% | 10% | 4% | 13% | 9% | 8% | 0% | 2% | 0% | 6% | |
| 949 | 0 | 27 | 54 | 54 | 46 | 47 | 44 | 47 | 52 | 78 | 94 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| 951 | | | | | | | | | | | 43 | 43 | 51 | | | | | | | | | | | | | | | | | 63% | 56% | 27% | |
| 952 | | | | | | | | | | 48 | 48 | 51 | | | | | | | | | | | | | | | | | | | 21% | 2% | 2% |
| AVERAGE | | | | | | | | | | | | | | | | | | | | | | | 9% | 10% | 3% | 3% | 2% | 2% | 1% | 2% | 4% | 2% | 2% |
| TOTALS | 1632 | 2315 | 2448 | 2354 | 2213 | 2408 | 2254 | 2144 | 2518 | 2748 | 3109 | 123 | 242 | 90 | 66 | 38 | 38 | 32 | 33 | 89 | 36 | 43 | | | | | | | | | | | |

**Graph 1: Comparison of Annual HPC Results >500 CFU
in the City of Surrey's Water System**



H. Water System Security

A combination of measures are utilized to provide security for the distribution system. All pump stations utilize external security lighting and have locked access doors/ground hatches. All stations are also provided with intrusion alarms that are SCADA monitored. Security fencing is installed at those pump stations with highly visible access door/ground hatches.

All new service connections installed since 1998 incorporate check valves as a component of the meter/meter setter installation.

Back flow controls on commercial/industrial businesses are monitored on an on-going basis through the City's cross-connection control (CCC) program. The program, administered by the City's Engineering Department, incorporates site inspection, testing, and annual certification of back-flow prevention devices. Program priorities are based on the hazard potential associated with each business.

In 2010, the number of testable backflow prevention assemblies registered with the City increased by 15%. This brings the number of registered backflow prevention devices to approximately 6,700. The City's CCC program requires that the registrant test their devices annually and in 2010 the City realized over 95% compliance, an increase of 5% from the previous year. This increase is the result of continued communication efforts such as direct contact and follow-up through phone calls and/or written notices to our non-compliant customers.

Except for the occasional unauthorized opening, theft of parts, or accident affecting fire hydrants, and a few instances of graffiti on fire hydrants, there were no incidents of vandalism to the City's water system in 2010.

I. Water Emergency Plan

As a component part of the City of Surrey Engineering Department Emergency Plan, the City has prepared a Water Continuity Plan (WCP). The testing of a draft WCP occurred in November 2007. This focused primarily on communications and was successfully carried out in concert with other Metro Vancouver member municipalities. This plan was updated in 2009 and submitted to the FHA.

The WCP follows the British Columbia Emergency Response Management System methodology. The WCP focuses on loss of Metro Vancouver water supply, water quality degradation, seismic hazards, and flooding. However, the response priorities, goals and activities lend themselves to most other emergency situations. Utilization of the Operations Departments' Water Maintenance, and Pumps and Controls Crews, as well as Technical Planning staff, are included in the Engineering Department's Emergency Plan.

J. Water Main Break Procedure

Water main break repairs are made utilizing the following repair procedures. These procedures are based on the American Water Works Association (AWWA) Standards and BMPs.

Step 1: Repairs Where No Groundwater Has Entered Into Water Main

- (a) Locate the break. Manager to advise FHA Environmental Health Officer of situation if main is greater than 150 mm diameter. Advise affected customers of pending flow and pressure reductions (dependent on crew availability).
- (b) Isolation valves shall be left open sufficiently to maintain positive pressure in the water main. The water main will have a positive outflow of water until the trench is excavated below the invert of the pipe.
- (c) If it can be determined that no contaminants have entered the water main, disinfection is undertaken by swabbing the pipe and repair materials with a 6% chlorine solution. No bacterial tests are carried out.
- (d) After repairs have been completed, the water main will be flushed.
- (e) If positive pressure cannot be maintained, and further disinfection is required, continue with Step 2.

Step 2: Repairs Where Groundwater Contamination Of The Water Main Has Occurred

These are repairs where positive pressure cannot be maintained due to the nature of the break (i.e. a large section of pipe has blown out).

- (a) Manager to advise FHA Environmental Health Officer of situation. Advise affected customers of pending flow and pressure reductions (dependent on crew availability).
- (b) Isolation valves should be “cracked” open to maintain water in the main as close to the break as possible to prevent debris entering the main.

- (c) Excavate below invert of the water main, and maintain groundwater to that level.
- (d) Spray trench walls and floor with 6% chlorine solution.
- (e) If material or groundwater has entered the pipe, it should be flushed out, if possible, by “cracking” open isolation valves at each end. Advise adjacent customers to open and run outside hose bibs until water runs clear and to then repeat this procedure inside their homes/building.
- (f) All water main and repair materials will be swabbed with 6% chlorine solution before installation.
- (g) On completion of repairs, the water main will be flushed through an appropriate appurtenance which creates water flow of >2.5 ft/sec. Scour main until turbidity is <10 NTU
- (h) On completion of flushing, a bacterial sample shall be taken as close to the repair area as possible, as well as control sample from the flushing water source. FHA Environmental Health Officer will be notified of action taken.
- (i) If samples are positive, further testing and flushing will be required, and following a review with FHA Environmental Health Officer, further chlorination may be required.

Step 3: E. coli Contamination of a Water Main

If E. coli contamination of a water main has occurred (e.g. a water main and sanitary sewer main are broken in a common trench):

- a. The valves on either side of the contaminated section will be shut down.
- b. Water Operations Manager and FHA Environmental Health Officer will be notified immediately. The Water Operations Manager in consultation with the FHA Environmental Health Officer will determine if a boil water advisory is warranted. If it is warranted, the Water Operations Manager will initiate the City’s issuance of the Boil Water advisory.
- c. The water main repairs will be completed as in Step 2.
- d. The water main will be chlorinated at minimum 200 ppm for two hours. The chlorine residual, after the two hours retention time, will

not be less than 100 ppm, or the water main will have to be flushed and rechlorinated until it meets the minimum 100 ppm.

- e. After completion of the chlorination, the water main must be flushed until the chlorine level is below 1 ppm. Individual water services should also be flushed to remove the chlorine to less than 1 ppm. Bacterial samples will be taken from the isolated section of main and a central sample outside the isolated section.
- f. The water main will be placed back in operation upon receipt of three negative sets of bacteriological results taken 24 hours apart, and with the approval of the FHA Medical Health Officer.

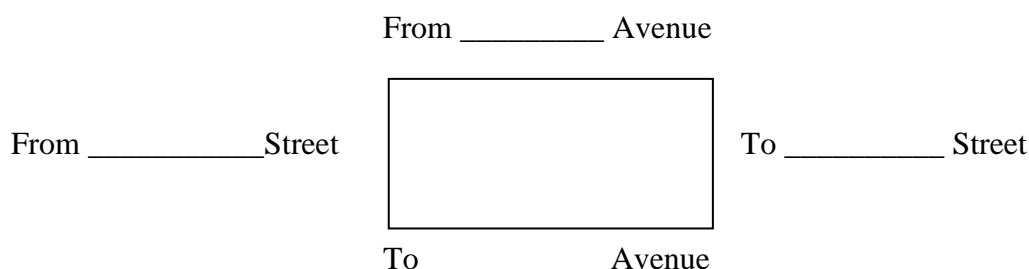
The City of Surrey Boil Water Advisory is shown on the page 22. It is a component part of the City's Water Quality Contingency Plan for a bacteriological contamination of the City's water.

For Release to Radio and Television Stations

CITY OF SURREY- BOIL WATER ADVISORY

Due to _____

The City of Surrey, advises the public that the water supply in the area below has become contaminated and may not be safe for human consumption. In order to ensure the safety of the water supply, all water must be boiled rapidly for at least one minute before being used for drinking, brushing teeth, washing food etc. The area involved is as follows:



NOTES TO THE PERSON GIVING THE ADVISORY NOTICE

- A. In the first line "Due To" indicate the reason for the advisory. e.g., "Due to the presence of E. Coli in the test results".
- B. It may be necessary to give only very general locations at the beginning with more exact locations identified when more information becomes available, recognizing that it is preferable to overstate the size of the area involved.

Also,

Metro Vancouver should be notified immediately. During regular working days notify either Bob Jones at 604-451-6001 or pager 604-645-0593 or cell 604-230-8142, Judith Smith at 604-451-6004 or cell 604-250-5703, or, Drew Gibson at 604-451-6008, or cell 604-312-3585.

THE FRASER HEALTH AUTHORITY ENVIRONMENTAL HEALTH OFFICER SHOULD HAVE BEEN ALREADY CONSULTED (1-604-870-7900 regular office hours). Outside regular office hours call 604-527-4806.

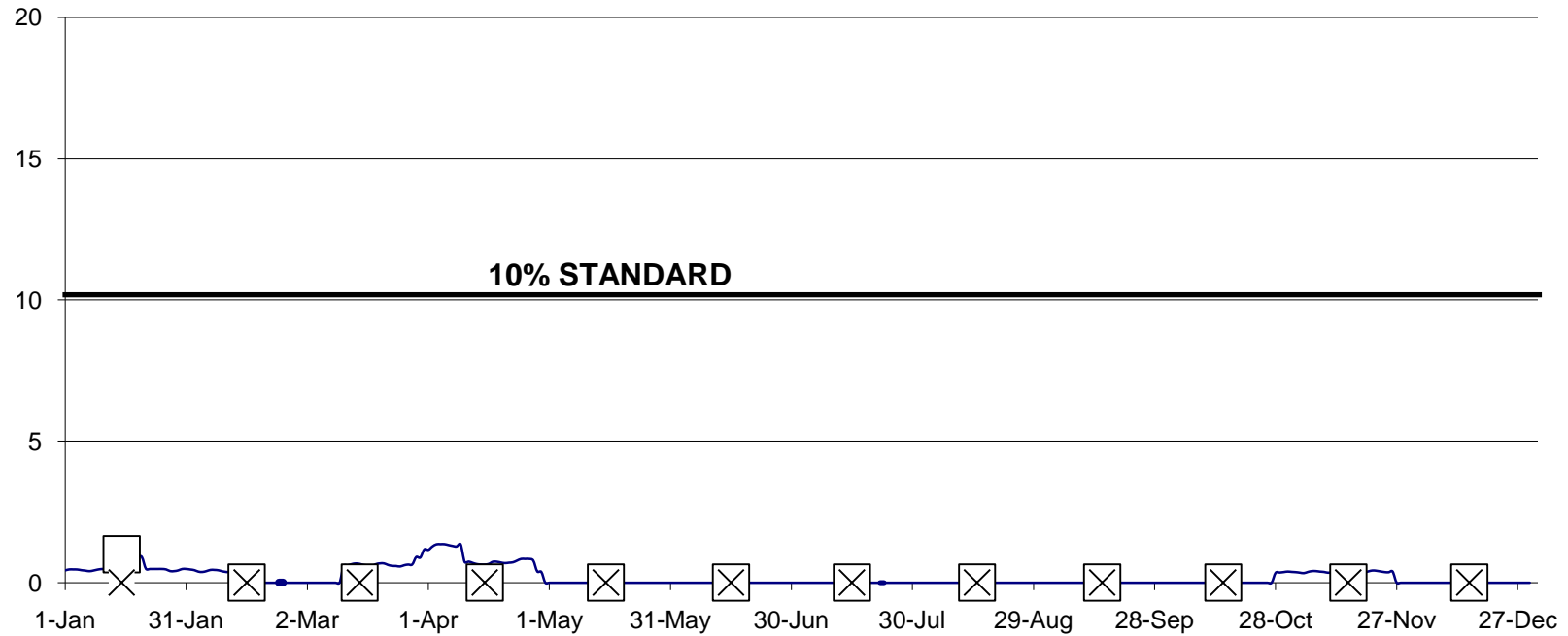
REMOVE THE BOIL WATER ADVISORY AFTER CONSULTATION WITH THE MEDICAL HEALTH OFFICER. Follow a similar notification procedure as the one used above.

APPENDIX 'A'

2010 Water Quality Laboratory Test Results

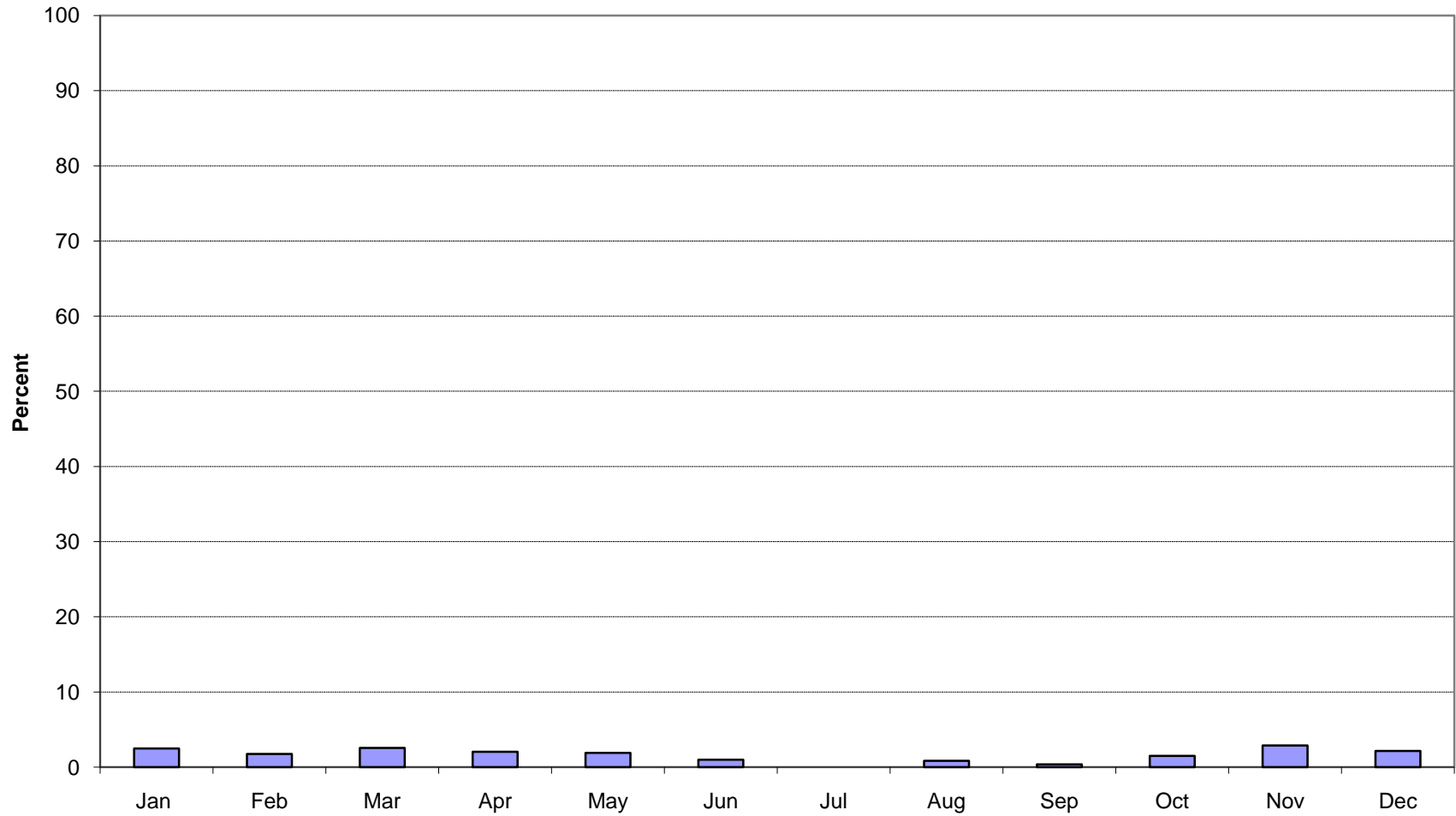
CITY OF SURREY - 2010

Results of Bacteriological Analyses of Potable Water Samples Compliance With BC Drinking Water Protection Regulation



- Percent of samples positive for coliform bacteria in a 30 day period ending on date shown (10% allowed)
- Number of samples positive for E. coli bacteria (none allowed)
- × Number of samples per month containing more than 10 coliform bacteria per 100 mL (none allowed)

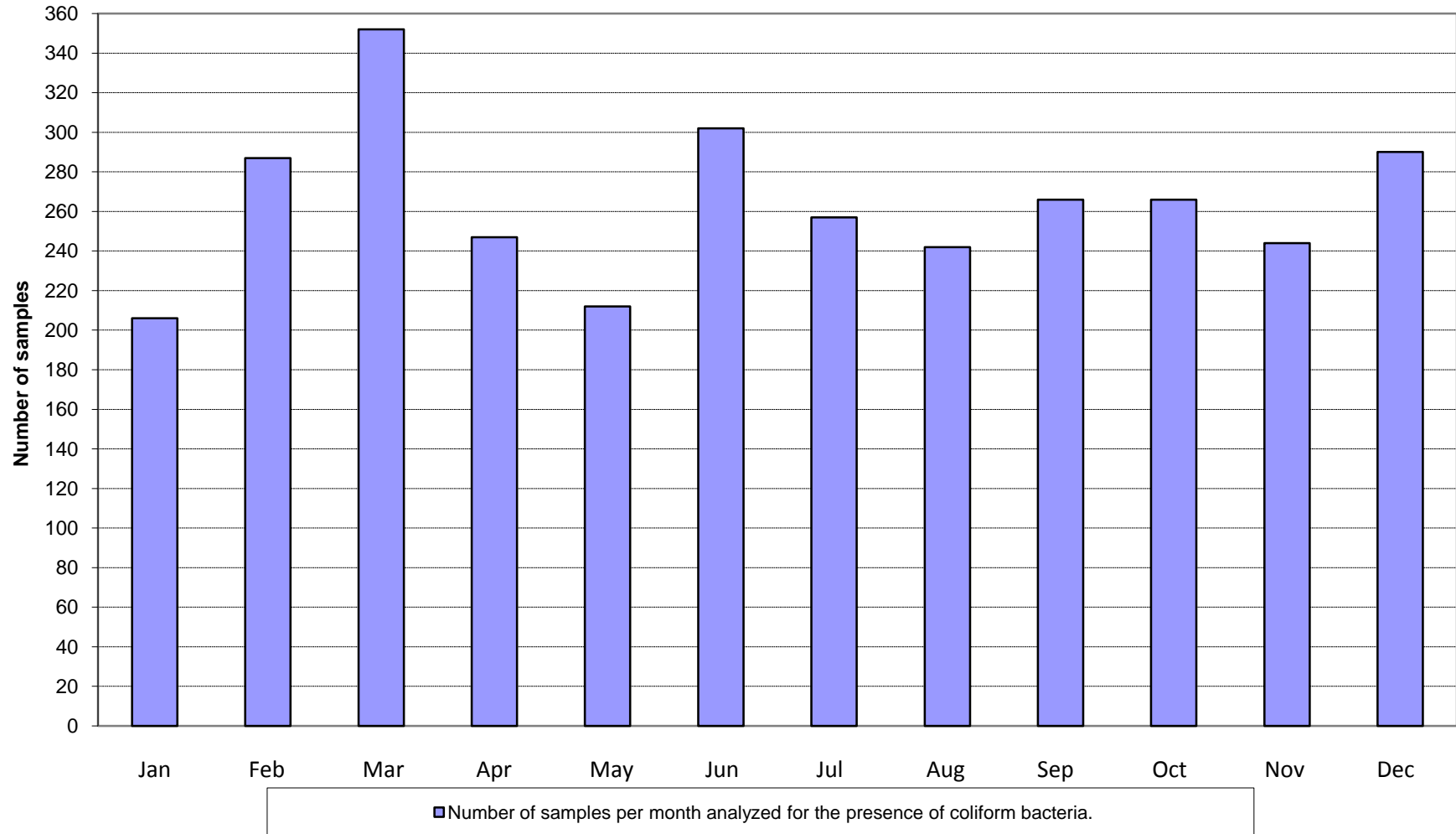
CITY OF SURREY - MONTHLY HPC COUNTS FOR 2010



■ Percent of samples per month containing greater than 500 CFU/mL of heterotrophic plate count (HPC) bacteria. High HPC levels are an indication of bacterial regrowth.

CITY OF SURREY - 2010

Number of Monthly Samples Analyzed for Presence of Coliform Bacteria



City of Surrey

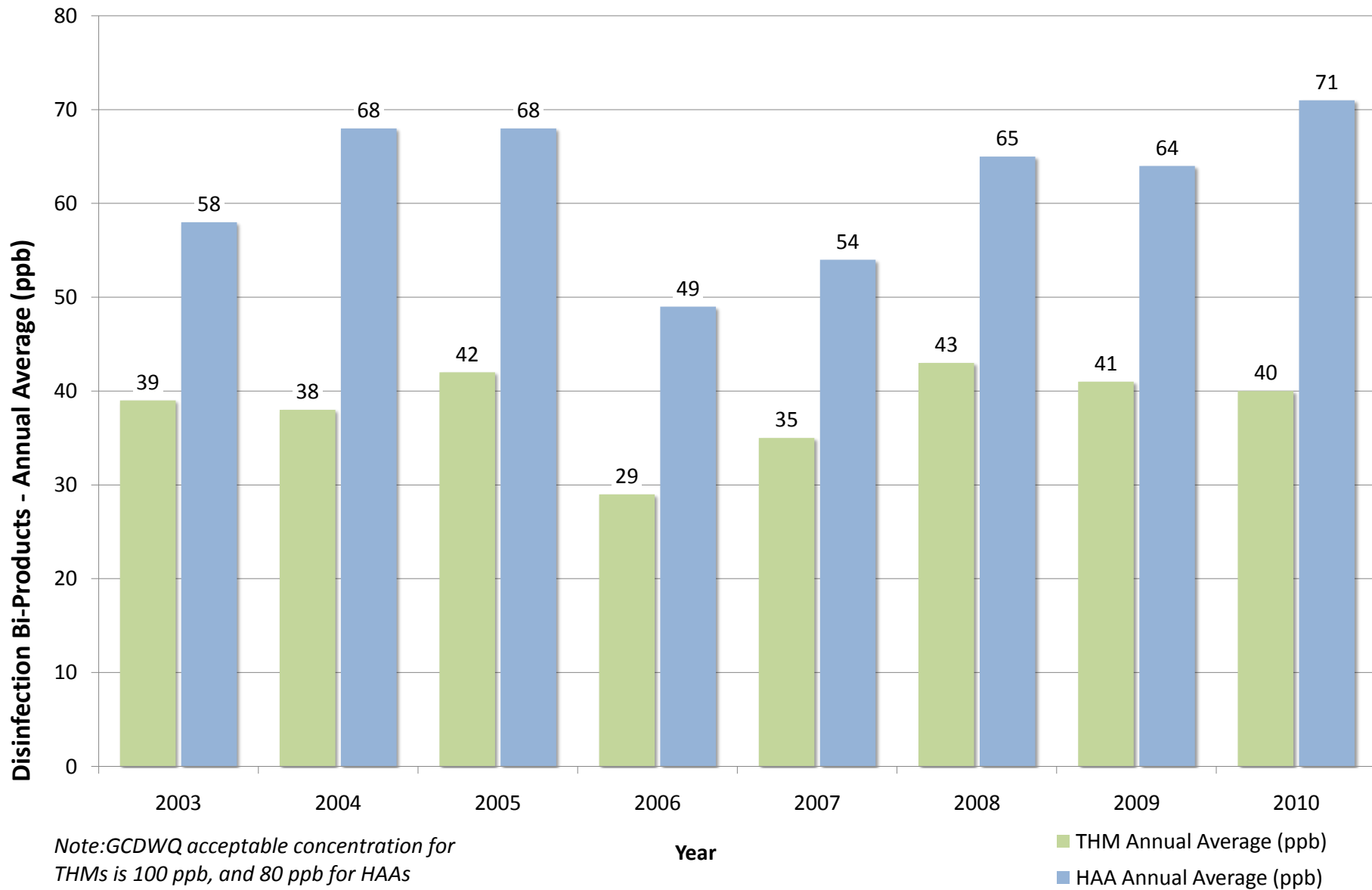
2010 Disinfection By-products (THM, HAA) & pH Monitoring Results

| Sample Station ID | Sample Location | Date Sampled | THM (ppb) | | | | | HAA (ppb) | | | | | | Extras pH, units pH | |
|-------------------|--------------------------------------|------------------|----------------------|-----------|----------------------|------------|-----------------------|--------------------|---------------------|----------------------|-----------------------|----------------------|-----------------------|------------------------|--|
| | | | Bromodichloromethane | Bromoform | Chlorodibromomethane | Chloroform | Total Trihalomethanes | Dibromoacetic Acid | Dichloroacetic Acid | Monobromoacetic Acid | Monochloroacetic Acid | Trichloroacetic Acid | Total Haloacetic Acid | | |
| SUR-902 | 18995 - 87A Ave. | 01-20-2010 11:46 | <1 | <1 | <1 | 28 | 29 | | | | | | | | |
| SUR-902 | 18995 - 87A Ave. | 05-19-2010 7:41 | <1 | <1 | <1 | 32 | 33 | | | | | | | | |
| SUR-902 | 18995 - 87A Ave. | 09-16-2010 7:21 | <1 | <1 | <1 | 24 | 24 | | | | | | | | |
| SUR-902 | 18995 - 87A Ave. | 11-23-2010 7:42 | 1 | <1 | <1 | 38 | 39 | | | | | | | | |
| SUR-922 | 7768 - 155 St. | 02-09-2010 8:07 | <0.4 | <1 | <0.5 | 23 | 23 | <0.5 | 18 | <1 | 10 | 32 | 60 | | |
| SUR-922 | 7768 - 155 St. | 05-18-2010 8:03 | <1 | <1 | <1 | 29 | 29 | <0.5 | 11 | <1 | <2 | 30 | 40 | | |
| SUR-922 | 7768 - 155 St. | 09-13-2010 9:07 | 1 | <1 | <1 | 28 | 29 | <0.5 | 7 | <1 | 2 | 23 | 32 | | |
| SUR-922 | 7768 - 155 St. | 11-22-2010 8:33 | <1 | <1 | <1 | 43 | 43 | <0.5 | 11 | <1 | 2 | 62 | 76 | 7.5 | |
| SUR-926 | 12059 - 56 Ave. | 01-21-2010 8:15 | <1 | <1 | <1 | 42 | 43 | <0.5 | 39 | <1 | 13 | 38.6 | 91 | | |
| SUR-926 | 12059 - 56 Ave. | 05-20-2010 8:45 | <1 | <1 | <1 | 59 | 59 | <0.5 | 46 | <1 | 8 | 51 | 105 | | |
| SUR-926 | 12059 - 56 Ave. | 09-16-2010 12:20 | 1 | <1 | <1 | 28 | 29 | <0.5 | 23 | <1 | 10 | 32 | 64 | | |
| SUR-926 | 12059 - 56 Ave. | 11-25-2010 9:20 | <1 | <1 | <1 | 28 | 28 | <0.5 | 18 | <1 | 15 | 34 | 68 | | |
| SUR-928 | 15349 - 57 Ave. | 01-21-2010 9:45 | <1 | <1 | <1 | 50 | 50 | <0.5 | 40 | <1 | 18 | 39 | 97 | | |
| SUR-928 | 15349 - 57 Ave. | 05-20-2010 9:20 | <1 | <1 | <1 | 65 | 65 | <0.5 | 48 | <1 | 9 | 52 | 109 | | |
| SUR-928 | 15349 - 57 Ave. | 09-16-2010 8:33 | 1 | <1 | <1 | 26 | 27 | <0.5 | 21 | <1 | 6 | 29 | 56 | | |
| SUR-928 | 15349 - 57 Ave. | 11-25-2010 11:05 | <1 | <1 | <1 | 30 | 30 | <0.5 | 15 | <1 | 6 | 27 | 49 | | |
| SUR-930 | SW Ent. To Pkwy, S of 3031 - 139 St. | 01-20-2010 8:20 | <1 | <1 | <1 | 39 | 39 | <0.5 | 25 | <1 | 8 | 32.9 | 67 | | |
| SUR-930 | SW Ent. To Pkwy, S of 3031 - 139 St. | 05-19-2010 8:20 | <1 | <1 | <1 | 38 | 38 | <0.5 | 19 | <1 | 3 | 35 | 57 | | |
| SUR-930 | SW Ent. To Pkwy, S of 3031 - 139 St. | 09-15-2010 8:10 | 1 | <1 | <1 | 38 | 39 | <0.5 | 24 | <1 | 6 | 54 | 84 | | |
| SUR-930 | SW Ent. To Pkwy, S of 3031 - 139 St. | 11-25-2010 9:55 | 1 | <1 | <1 | 58 | 59 | <0.5 | 14 | <1 | 2 | 62 | 78 | 7.6 | |
| SUR-931 | 124 St. & 24 Ave. | 01-20-2010 8:45 | <1 | <1 | <1 | 39 | 39 | <0.5 | 37 | <1 | 9 | 43.4 | 90 | | |
| SUR-931 | 124 St. & 24 Ave. | 05-19-2010 8:50 | <1 | <1 | <1 | 44 | 44 | <0.5 | 21 | <1 | 4 | 31 | 56 | | |
| SUR-931 | 124 St. & 24 Ave. | 09-15-2010 8:40 | 1 | <1 | <1 | 39 | 40 | <0.5 | 23 | <1 | 4 | 52 | 80 | | |
| SUR-931 | 124 St. & 24 Ave. | 11-25-2010 10:10 | 1 | <1 | <1 | 57 | 58 | <0.5 | 8 | <1 | <2 | 61 | 69 | | |
| SUR-940 | 24 Ave., by south depot | 01-20-2010 12:45 | <1 | <1 | <1 | 35 | 35 | <0.5 | 23 | <1 | 8 | 23.4 | 55 | | |
| SUR-940 | 24 Ave., by south depot | 06-30-2010 12:45 | 1 | <1 | <1 | 57 | 58 | 0.5 | 12 | <1 | <2 | 41 | 55 | | |
| SUR-940 | 24 Ave., by south depot | 09-15-2010 12:45 | 1 | <1 | <1 | 38 | 39 | <0.5 | 24 | <1 | 4 | 49 | 78 | | |
| SUR-940 | 24 Ave., by south depot | 11-25-2010 10:35 | 1 | <1 | <1 | 42 | 44 | <0.5 | 29 | <1 | 8 | 56 | 93 | 7.9 | |

City of Surrey
2010 Disinfection By-products (THM, HAA) Running Quarterly Averages

| Sample Station ID | Date & Time Sampled | THM (ppb) | | | | | Total THM Quarterly Average | HAA (ppb) | | | | | | Total HAA Quarterly Average | |
|-------------------|---------------------|----------------------|-----------|----------------------|------------|-----------------------|-----------------------------|--------------------|---------------------|----------------------|-----------------------|----------------------|-----------------------|-----------------------------|--|
| | | Bromodichloromethane | Bromoform | Chlorodibromomethane | Chloroform | Total Trihalomethanes | | Dibromoacetic Acid | Dichloroacetic Acid | Monobromoacetic Acid | Monochloroacetic Acid | Trichloroacetic Acid | Total Haloacetic Acid | | |
| SUR-902 | 05-28-2009 8:57 | <1 | <1 | <1 | 24 | 24 | | | | | | | | | |
| SUR-902 | 08-17-2009 7:52 | <1 | <1 | <1 | 24 | 24 | | | | | | | | | |
| SUR-902 | 11-25-2009 8:28 | <1 | <1 | <1 | 33 | 33 | | <0.5 | 17 | <1 | 5 | 22.8 | 45 | | |
| SUR-902 | 01-20-2010 11:46 | <1 | <1 | <1 | 28 | 29 | 28 | | | | | | | | |
| SUR-902 | 05-19-2010 7:41 | <1 | <1 | <1 | 32 | 33 | 30 | | | | | | | | |
| SUR-902 | 09-16-2010 7:21 | <1 | <1 | <1 | 24 | 24 | 30 | | | | | | | | |
| SUR-902 | 11-23-2010 7:42 | 1 | <1 | <1 | 38 | 39 | 31 | | | | | | | | |
| SUR-922 | 05-28-2009 8:20 | <1 | <1 | <1 | 35 | 35 | | <0.5 | 16 | <1 | 8 | 22 | 46 | | |
| SUR-922 | 08-18-2009 11:45 | <1 | <1 | <1 | 32 | 32 | | <0.5 | 16 | <1 | 6 | 28 | 50 | | |
| SUR-922 | 11-25-2009 10:35 | <1 | <1 | <1 | 37 | 37 | | <0.5 | 22 | <1 | 7 | 22.9 | 52 | | |
| SUR-922 | 02-09-2010 8:07 | <0.4 | <1 | <0.5 | 23 | 23 | 32 | <0.5 | 18 | <1 | 10 | 32 | 60 | 52 | |
| SUR-922 | 05-18-2010 8:03 | <1 | <1 | <1 | 29 | 29 | 30 | <0.5 | 11 | <1 | <2 | 30 | 40 | 51 | |
| SUR-922 | 09-13-2010 9:07 | 1 | <1 | <1 | 28 | 29 | 30 | <0.5 | 7 | <1 | 2 | 23 | 32 | 46 | |
| SUR-922 | 11-22-2010 8:33 | <1 | <1 | <1 | 43 | 43 | 31 | <0.5 | 11 | <1 | 2 | 62 | 76 | 52 | |
| SUR-926 | 05-28-2009 12:45 | <1 | <1 | <1 | 61 | 61 | | <0.5 | 30 | <1 | 5 | 38 | 73 | | |
| SUR-926 | 08-20-2009 8:15 | <1 | <1 | <1 | 43 | 43 | | <0.5 | 22 | <1 | 2 | 29 | 53 | | |
| SUR-926 | 11-26-2009 9:05 | <1 | <1 | <1 | 45 | 45 | | <0.5 | 18 | <1 | 4 | 28.6 | 51 | | |
| SUR-926 | 01-21-2010 8:15 | <1 | <1 | <1 | 42 | 43 | 48 | <0.5 | 39 | <1 | 13 | 38.6 | 91 | 67 | |
| SUR-926 | 05-20-2010 8:45 | <1 | <1 | <1 | 59 | 59 | 48 | <0.5 | 46 | <1 | 8 | 51 | 105 | 75 | |
| SUR-926 | 09-16-2010 12:20 | 1 | <1 | <1 | 28 | 29 | 44 | <0.5 | 23 | <1 | 10 | 32 | 64 | 78 | |
| SUR-926 | 11-25-2010 9:20 | <1 | <1 | <1 | 28 | 28 | 40 | <0.5 | 18 | <1 | 15 | 34 | 68 | 82 | |
| SUR-928 | 05-28-2009 9:45 | <1 | <1 | <1 | 78 | 78 | | <0.5 | 26 | <1 | 5 | 35 | 66 | | |
| SUR-928 | 08-20-2009 9:40 | <1 | <1 | <1 | 44 | 44 | | <0.5 | 23 | <1 | 8 | 26 | 57 | | |
| SUR-928 | 11-26-2009 10:25 | <1 | <1 | <1 | 23 | 23 | | <0.5 | 33 | <1 | 5 | 55.3 | 93 | | |
| SUR-928 | 01-21-2010 9:45 | <1 | <1 | <1 | 50 | 50 | 49 | <0.5 | 40 | <1 | 18 | 39 | 97 | 78 | |
| SUR-928 | 05-20-2010 9:20 | <1 | <1 | <1 | 65 | 65 | 46 | <0.5 | 48 | <1 | 9 | 52 | 109 | 89 | |
| SUR-928 | 09-16-2010 8:33 | 1 | <1 | <1 | 26 | 27 | 41 | <0.5 | 21 | <1 | 6 | 29 | 56 | 89 | |
| SUR-928 | 11-25-2010 11:05 | <1 | <1 | <1 | 30 | 30 | 43 | <0.5 | 15 | <1 | 6 | 27 | 49 | 78 | |
| SUR-930 | 05-29-2009 10:00 | <1 | <1 | <1 | 44 | 44 | | <0.5 | 38 | <1 | 9 | 39 | 86 | | |
| SUR-930 | 08-19-2009 8:15 | 1 | <1 | <1 | 33 | 34 | | | | | | | | | |
| SUR-930 | 09-16-2009 9:10 | | | | | | | <0.5 | 29 | <1 | 10 | 41 | 80 | | |
| SUR-930 | 11-25-2009 8:15 | <1 | <1 | <1 | 48 | 48 | | <0.5 | 16 | <1 | 5 | 42.3 | 63 | | |
| SUR-930 | 01-20-2010 8:20 | <1 | <1 | <1 | 39 | 39 | 40 | <0.5 | 25 | <1 | 8 | 32.9 | 67 | 70 | |
| SUR-930 | 05-19-2010 8:20 | <1 | <1 | <1 | 38 | 38 | 42 | <0.5 | 19 | <1 | 3 | 35 | 57 | 67 | |
| SUR-930 | 09-15-2010 8:10 | 1 | <1 | <1 | 38 | 39 | 41 | <0.5 | 24 | <1 | 6 | 54 | 84 | 68 | |
| SUR-930 | 11-25-2010 9:55 | 1 | <1 | <1 | 58 | 59 | 44 | <0.5 | 14 | <1 | 2 | 62 | 78 | 72 | |
| SUR-931 | 05-29-2009 9:35 | <1 | <1 | <1 | 39 | 39 | | <0.5 | 43 | <1 | 11 | 39 | 93 | | |
| SUR-931 | 08-19-2009 8:40 | <1 | <1 | <1 | 32 | 32 | | | | | | | | | |
| SUR-931 | 09-16-2009 9:30 | | | | | | | <0.5 | 34 | <1 | 17 | 44 | 95 | | |
| SUR-931 | 11-25-2009 8:40 | <1 | <1 | <1 | 40 | 40 | | <0.5 | 61 | <1 | 8 | 58.6 | 130 | | |
| SUR-931 | 01-20-2010 8:45 | <1 | <1 | <1 | 39 | 39 | 37 | <0.5 | 37 | <1 | 9 | 43.4 | 90 | 105 | |
| SUR-931 | 05-19-2010 8:50 | <1 | <1 | <1 | 44 | 44 | 41 | <0.5 | 21 | <1 | 4 | 31 | 56 | 93 | |
| SUR-931 | 09-15-2010 8:40 | 1 | <1 | <1 | 39 | 40 | 41 | <0.5 | 23 | <1 | 4 | 52 | 80 | 89 | |
| SUR-931 | 11-25-2010 10:10 | 1 | <1 | <1 | 57 | 58 | 45 | <0.5 | 8 | <1 | <2 | 61 | 69 | 74 | |
| SUR-940 | 05-29-2009 8:45 | <1 | <1 | <1 | 35 | 35 | | <0.5 | 34 | <1 | 8 | 33 | 75 | | |
| SUR-940 | 08-19-2009 12:40 | <1 | <1 | <1 | 30 | 30 | | | | | | | | | |
| SUR-940 | 09-16-2009 13:05 | | | | | | | <0.5 | 24 | <1 | 13 | 40 | 77 | | |
| SUR-940 | 11-25-2009 12:55 | <1 | <1 | <1 | 38 | 38 | | <0.5 | 31 | <1 | 15 | 47.6 | 94 | | |
| SUR-940 | 01-20-2010 12:45 | <1 | <1 | <1 | 35 | 35 | 34 | <0.5 | 23 | <1 | 8 | 23.4 | 55 | 75 | |
| SUR-940 | 06-30-2010 12:45 | 1 | <1 | <1 | 57 | 58 | 44 | 0.5 | 12 | <1 | <2 | 41 | 55 | 70 | |
| SUR-940 | 09-15-2010 12:45 | 1 | <1 | <1 | 38 | 39 | 43 | <0.5 | 24 | <1 | 4 | 49 | 78 | 71 | |
| SUR-940 | 11-25-2010 10:35 | 1 | <1 | <1 | 42 | 44 | 44 | <0.5 | 29 | <1 | 8 | 56 | 93 | 70 | |

Comparison of Annual Disinfection Bi-Product Averages in the City of Surrey's Water System



City of Surrey
2010 Semi-annual Metals Monitoring Results

| Sample Station ID | Sample Station Location | Date Sampled | Aluminum Total mg/L | Arsenic Total mg/L | Barium Total mg/L | Boron Total mg/L | Cadmium Total mg/L | Calcium Total mg/L | Chromium Total mg/L | Cobalt Total mg/L | Copper Total mg/L | Iron Total mg/L | Lead Total mg/L | Magnesium Total mg/L | Manganese Total mg/L | Molybdenum Total mg/L | Nickel Total mg/L | Selenium Total mg/L | Silver Total mg/L | Sodium Total mg/L | Zinc Total mg/L |
|-------------------|-------------------------|--------------|---------------------|--------------------|-------------------|------------------|--------------------|--------------------|---------------------|-------------------|-------------------|-----------------|-----------------|----------------------|----------------------|-----------------------|-------------------|---------------------|-------------------|-------------------|-----------------|
| SUR-922 | 7768 - 155 St. | 06-09-2010 | 0.09 | <0.01 | 0.003 | <0.02 | <0.0005 | 1.11 | <0.001 | <0.001 | <0.002 | 0.06 | <0.001 | 0.1 | 0.004 | <0.002 | <0.001 | <0.01 | <0.001 | 6.4 | 0.002 |
| SUR-922 | 7768 - 155 St. | 12-01-2010 | 0.08 | <0.01 | 0.002 | <0.02 | <0.0005 | 1.07 | <0.001 | <0.001 | <0.002 | 0.04 | <0.001 | 0.1 | 0.001 | <0.002 | <0.001 | <0.01 | <0.001 | 7.5 | <0.002 |
| SUR-928 | 15349 - 57 Ave. | 06-10-2010 | 0.08 | <0.01 | 0.003 | <0.02 | <0.0005 | 2.2 | <0.001 | <0.001 | 0.003 | 0.04 | <0.001 | 0.1 | 0.002 | <0.002 | <0.001 | <0.01 | <0.001 | 4.9 | 0.006 |
| SUR-928 | 15349 - 57 Ave. | 11-12-2010 | 0.06 | <0.01 | 0.004 | <0.02 | <0.0005 | 3.24 | <0.001 | <0.001 | <0.002 | 0.02 | <0.001 | 0.13 | 0.002 | <0.002 | <0.001 | <0.01 | <0.001 | 2.9 | <0.002 |
| SUR-931 | 124 St. & 24 Ave. | 06-10-2010 | 0.08 | <0.01 | 0.003 | <0.02 | <0.0005 | 1.3 | <0.001 | <0.001 | <0.002 | 0.05 | <0.001 | 0.07 | 0.002 | <0.002 | <0.001 | <0.01 | <0.001 | 6.6 | 0.004 |
| SUR-931 | 124 St. & 24 Ave. | 11-12-2010 | 0.11 | <0.01 | 0.003 | <0.02 | <0.0005 | 1.43 | <0.001 | <0.001 | <0.002 | 0.07 | <0.001 | 0.07 | 0.002 | <0.002 | <0.001 | <0.01 | <0.001 | 7.5 | <0.002 |

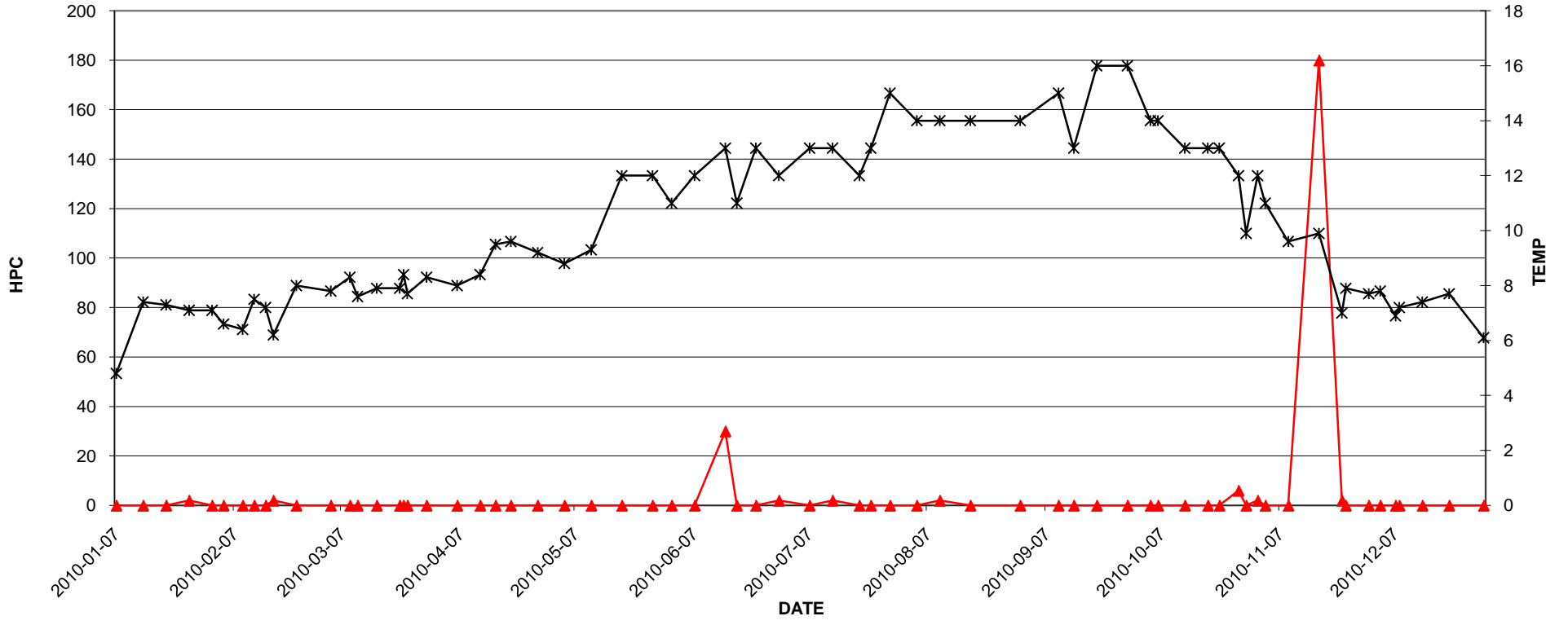
City of Surrey
2010 Vinyl Chloride Results

| Sample Station ID | Sample Station Location | 1st half of 2010 | | 2nd half of 2010 | |
|-------------------|-------------------------------------|------------------|--------------|------------------|--------------|
| | | Date Sampled | Results µg/L | Date Sampled | Results µg/L |
| 901 | 180 St. & 92 Ave. | 07-Jun-10 | <0.5 | 23-Nov-10 | <0.5 |
| 902 | 18995 87A Ave. | 07-Jun-10 | <0.5 | 23-Nov-10 | <0.5 |
| 928 | 15349 57 Ave. | 10-Jun-10 | <0.5 | 12-Nov-10 | <0.5 |
| 930 | SW Ent. To Pkwy., S of 3031 139 St. | 10-Jun-10 | <0.5 | 17-Nov-10 | <0.5 |

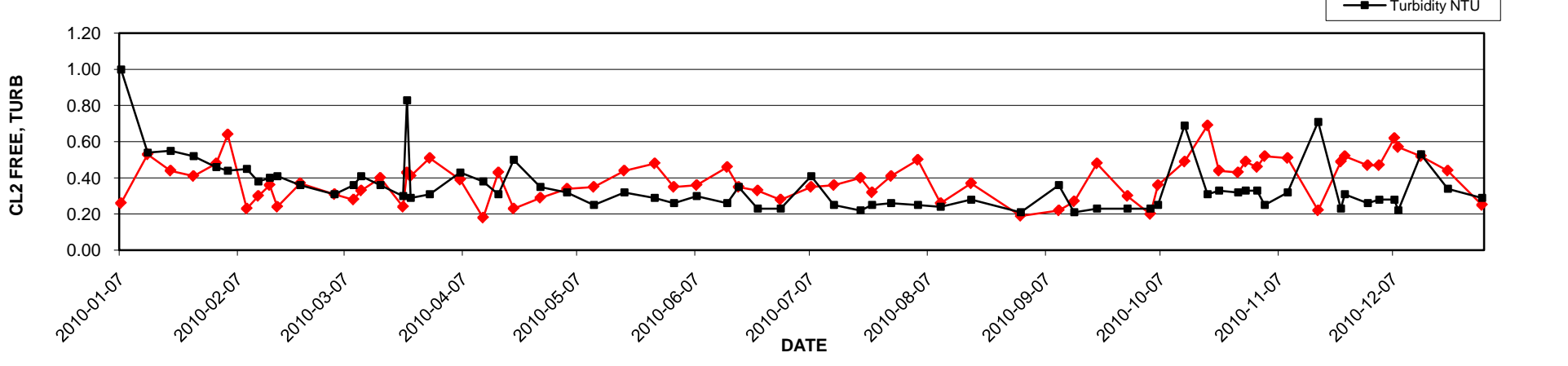
2010 GVRD Laboratory Report - DM901 (NW CORNER 180ST. & 92 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.26 | <1 | <2 | <1 | 4.8 | 1.00 |
| 14-Jan | 0.53 | <1 | <2 | <1 | 7.4 | 0.54 |
| 20-Jan | 0.44 | <1 | <2 | <1 | 7.3 | 0.55 |
| 26-Jan | 0.41 | <1 | 2 | <1 | 7.1 | 0.52 |
| 01-Feb | 0.48 | <1 | <2 | <1 | 7.1 | 0.46 |
| 04-Feb | 0.64 | <1 | <2 | <1 | 6.6 | 0.44 |
| 09-Feb | 0.23 | <1 | <2 | <1 | 6.4 | 0.45 |
| 12-Feb | 0.30 | <1 | <2 | <1 | 7.5 | 0.38 |
| 15-Feb | 0.36 | <1 | <2 | <1 | 7.2 | 0.40 |
| 17-Feb | 0.24 | <1 | 2 | <1 | 6.2 | 0.41 |
| 23-Feb | 0.37 | <1 | <2 | <1 | 8 | 0.36 |
| 04-Mar | 0.31 | <1 | <2 | <1 | 7.8 | 0.31 |
| 09-Mar | 0.28 | <1 | <2 | <1 | 8.3 | 0.36 |
| 11-Mar | 0.33 | <1 | <2 | <1 | 7.6 | 0.41 |
| 16-Mar | 0.40 | <1 | <2 | <1 | 7.9 | 0.36 |
| 22-Mar | 0.24 | <1 | <2 | <1 | 7.9 | 0.30 |
| 23-Mar | 0.43 | <1 | <2 | <1 | 8.4 | 0.83 |
| 24-Mar | 0.41 | <1 | <2 | <1 | 7.7 | 0.29 |
| 29-Mar | 0.51 | <1 | <2 | <1 | 8.3 | 0.31 |
| 06-Apr | 0.39 | <1 | <2 | <1 | 8 | 0.43 |
| 12-Apr | 0.18 | <1 | <2 | <1 | 8.4 | 0.38 |
| 16-Apr | 0.43 | <1 | <2 | <1 | 9.5 | 0.31 |
| 20-Apr | 0.23 | <1 | <2 | <1 | 9.6 | 0.50 |
| 27-Apr | 0.29 | <1 | <2 | <1 | 9.2 | 0.35 |
| 04-May | 0.34 | <1 | <2 | <1 | 8.8 | 0.32 |
| 11-May | 0.35 | <1 | <2 | <1 | 9.3 | 0.25 |
| 19-May | 0.44 | <1 | <2 | <1 | 12 | 0.32 |
| 27-May | 0.48 | <1 | <2 | <1 | 12 | 0.29 |
| 01-Jun | 0.35 | <1 | <2 | <1 | 11 | 0.26 |
| 07-Jun | 0.36 | <1 | <2 | <1 | 12 | 0.30 |
| 15-Jun | 0.46 | <1 | 30 | <1 | 13 | 0.26 |
| 18-Jun | 0.35 | <1 | <2 | <1 | 11 | 0.35 |
| 23-Jun | 0.33 | <1 | <2 | <1 | 13 | 0.23 |
| 29-Jun | 0.28 | <1 | 2 | <1 | 12 | 0.23 |
| 07-Jul | 0.35 | <1 | <2 | <1 | 13 | 0.41 |
| 13-Jul | 0.36 | <1 | 2 | <1 | 13 | 0.25 |
| 20-Jul | 0.40 | <1 | <2 | <1 | 12 | 0.22 |
| 23-Jul | 0.32 | <1 | <2 | <1 | 13 | 0.25 |
| 28-Jul | 0.41 | <1 | <2 | <1 | 15 | 0.26 |
| 04-Aug | 0.50 | <1 | <2 | <1 | 14 | 0.25 |
| 10-Aug | 0.26 | <1 | 2 | <1 | 14 | 0.24 |
| 18-Aug | 0.37 | <1 | <2 | <1 | 14 | 0.28 |
| 31-Aug | 0.19 | <1 | <2 | <1 | 14 | 0.21 |
| 10-Sep | 0.22 | <1 | <2 | <1 | 15 | 0.36 |
| 14-Sep | 0.27 | <1 | <2 | <1 | 13 | 0.21 |
| 20-Sep | 0.48 | <1 | <2 | <1 | 16 | 0.23 |
| 28-Sep | 0.30 | <1 | <2 | <1 | 16 | 0.23 |
| 04-Oct | 0.20 | <1 | <2 | <1 | 14 | 0.23 |
| 06-Oct | 0.36 | <1 | <2 | <1 | 14 | 0.25 |
| 13-Oct | 0.49 | <1 | <2 | <1 | 13 | 0.69 |
| 19-Oct | 0.69 | <1 | <2 | <1 | 13 | 0.31 |
| 22-Oct | 0.44 | <1 | <2 | <1 | 13 | 0.33 |
| 27-Oct | 0.43 | <1 | 6 | <1 | 12 | 0.32 |
| 29-Oct | 0.49 | <1 | <2 | <1 | 9.9 | 0.33 |
| 01-Nov | 0.46 | <1 | 2 | <1 | 12 | 0.33 |
| 03-Nov | 0.52 | <1 | <2 | <1 | 11 | 0.25 |
| 09-Nov | 0.51 | <1 | <2 | <1 | 9.6 | 0.32 |
| 17-Nov | 0.22 | <1 | 180 | <1 | 9.9 | 0.71 |
| 23-Nov | 0.49 | <1 | 2 | <1 | 7 | 0.23 |
| 24-Nov | 0.52 | <1 | <2 | <1 | 7.9 | 0.31 |
| 30-Nov | 0.47 | <1 | <2 | <1 | 7.7 | 0.26 |
| 03-Dec | 0.47 | <1 | <2 | <1 | 7.8 | 0.28 |
| 07-Dec | 0.62 | <1 | <2 | <1 | 6.9 | 0.28 |
| 08-Dec | 0.57 | <1 | <2 | <1 | 7.2 | 0.22 |
| 14-Dec | 0.52 | <1 | <2 | <1 | 7.4 | 0.53 |
| 21-Dec | 0.44 | <1 | <2 | <1 | 7.7 | 0.34 |
| 30-Dec | 0.25 | <1 | NA | <1 | 6.1 | 0.29 |

DM901 (NW CORNER 180ST. & 92 AVE.) - 2010 TEST RESULTS

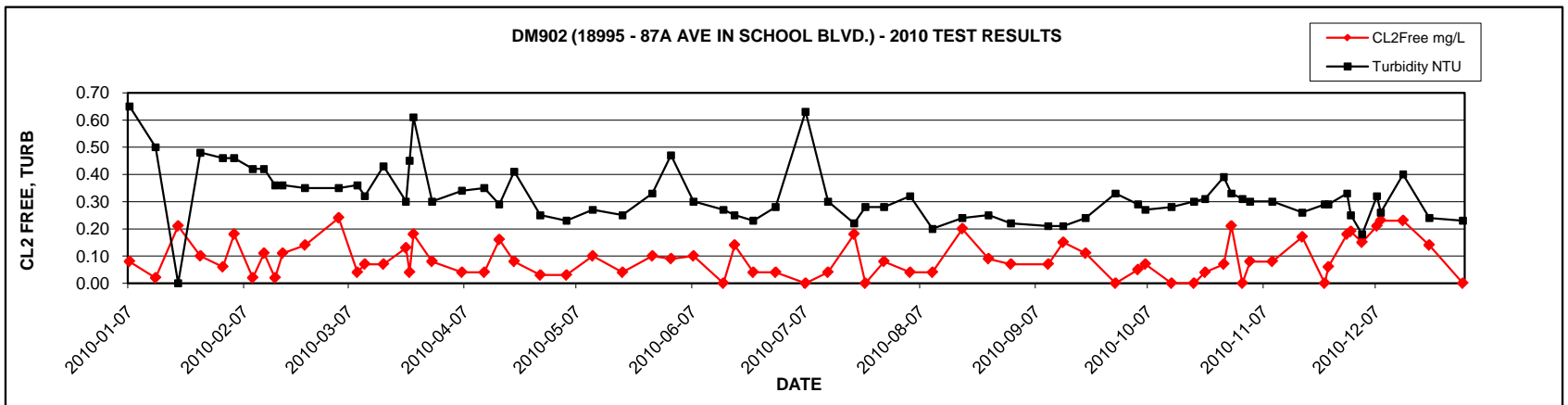
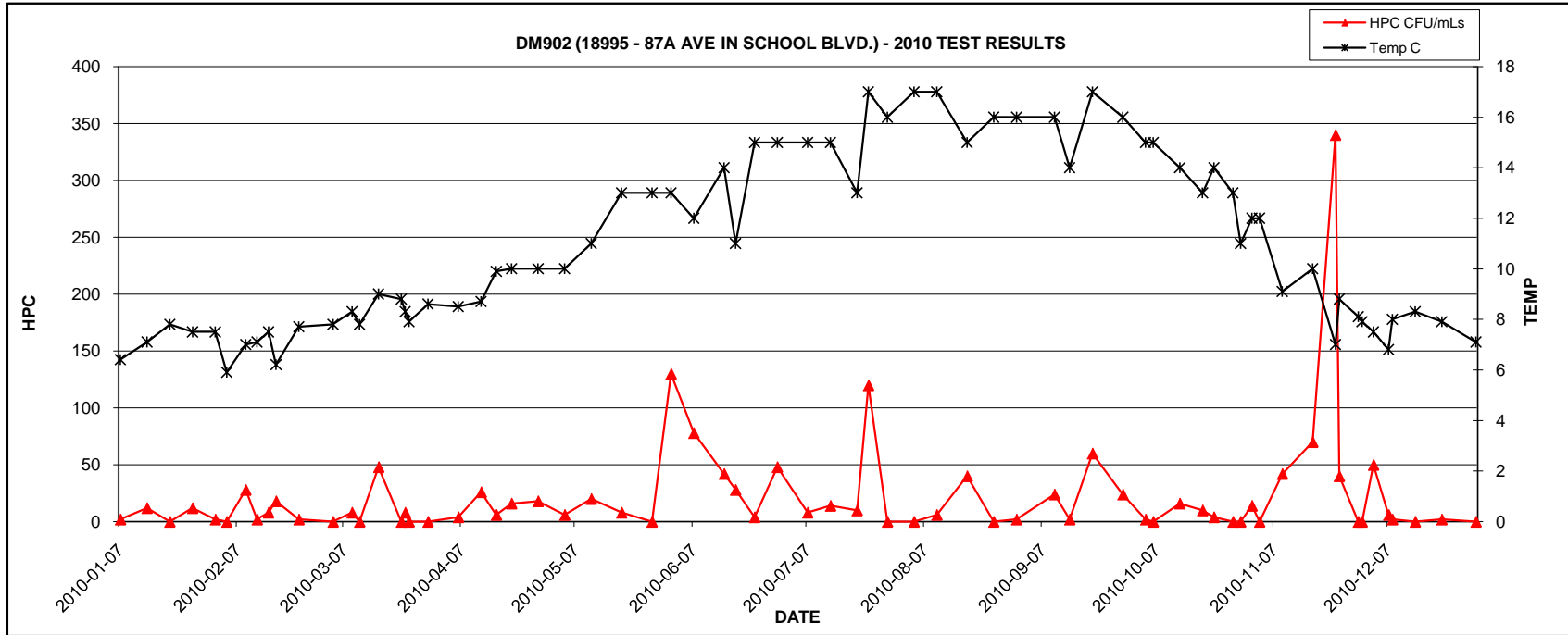


DM901 (NW CORNER 180ST. & 92AVE.) - 2010 TEST RESULTS



2010 GVRD Laboratory Report - DM902 (18995 - 87A AVE IN SCHOOL BLVD.)

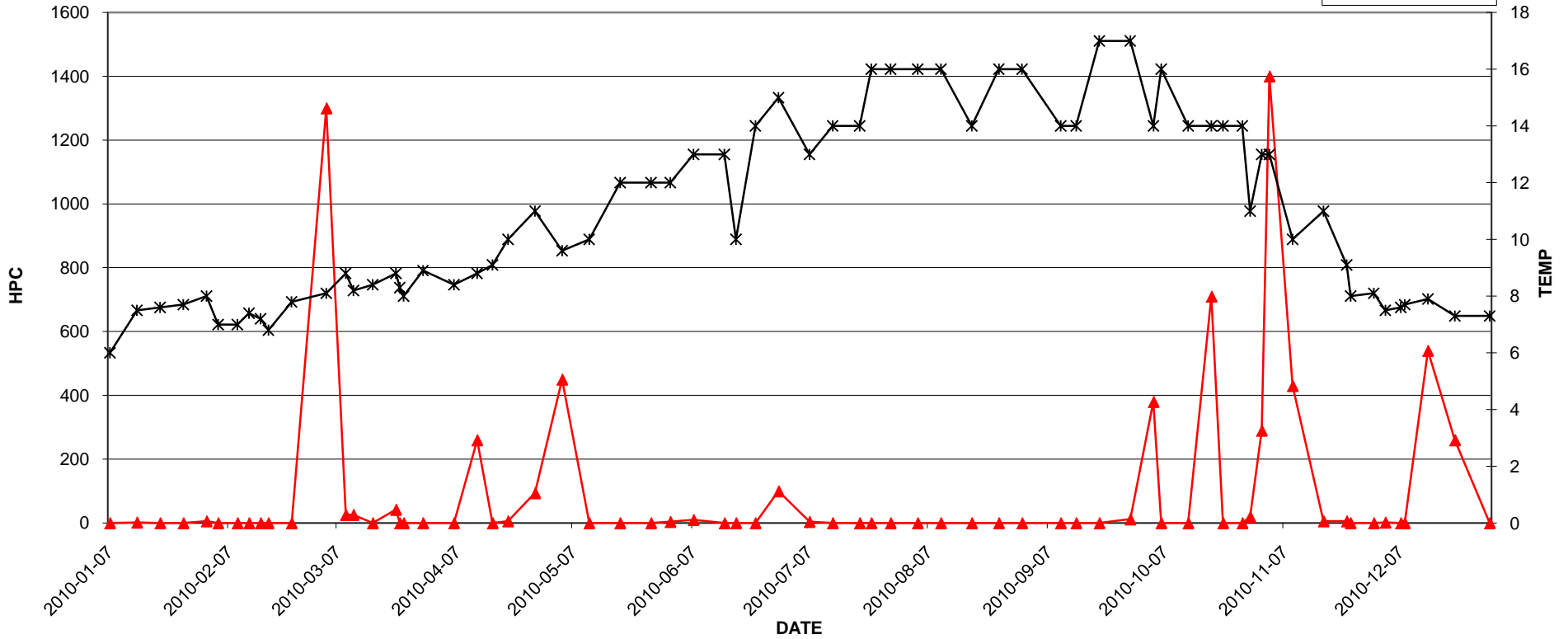
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.08 | <1 | 2 | <1 | 6.4 | 0.65 |
| 14-Jan | 0.02 | <1 | 12 | <1 | 7.1 | 0.50 |
| 20-Jan | 0.21 | <1 | <2 | <1 | 7.8 | LA |
| 26-Jan | 0.10 | <1 | 12 | <1 | 7.5 | 0.48 |
| 01-Feb | 0.06 | <1 | 2 | <1 | 7.5 | 0.46 |
| 04-Feb | 0.18 | <1 | <2 | <1 | 5.9 | 0.46 |
| 09-Feb | 0.02 | <1 | 28 | <1 | 7 | 0.42 |
| 12-Feb | 0.11 | <1 | 2 | <1 | 7.1 | 0.42 |
| 15-Feb | 0.02 | <1 | 8 | <1 | 7.5 | 0.36 |
| 17-Feb | 0.11 | <1 | 18 | <1 | 6.2 | 0.36 |
| 23-Feb | 0.14 | <1 | 2 | <1 | 7.7 | 0.35 |
| 04-Mar | 0.24 | <1 | <2 | <1 | 7.8 | 0.35 |
| 09-Mar | 0.04 | <1 | 8 | <1 | 8.3 | 0.36 |
| 11-Mar | 0.07 | <1 | <2 | <1 | 7.8 | 0.32 |
| 16-Mar | 0.07 | <1 | 48 | <1 | 9 | 0.43 |
| 22-Mar | 0.13 | <1 | <2 | <1 | 8.8 | 0.30 |
| 23-Mar | 0.04 | <1 | 8 | <1 | 8.3 | 0.45 |
| 24-Mar | 0.18 | <1 | <2 | <1 | 7.9 | 0.61 |
| 29-Mar | 0.08 | <1 | <2 | <1 | 8.6 | 0.30 |
| 06-Apr | 0.04 | <1 | 4 | <1 | 8.5 | 0.34 |
| 12-Apr | 0.04 | <1 | 26 | <1 | 8.7 | 0.35 |
| 16-Apr | 0.16 | <1 | 6 | <1 | 9.9 | 0.29 |
| 20-Apr | 0.08 | <1 | 16 | <1 | 10 | 0.41 |
| 27-Apr | 0.03 | <1 | 18 | <1 | 10 | 0.25 |
| 04-May | 0.03 | <1 | 6 | <1 | 10 | 0.23 |
| 11-May | 0.10 | <1 | 20 | <1 | 11 | 0.27 |
| 19-May | 0.04 | <1 | 8 | <1 | 13 | 0.25 |
| 27-May | 0.10 | <1 | <2 | <1 | 13 | 0.33 |
| 01-Jun | 0.09 | <1 | 130 | <1 | 13 | 0.47 |
| 07-Jun | 0.10 | <1 | 78 | <1 | 12 | 0.30 |
| 15-Jun | <0.01 | <1 | 42 | <1 | 14 | 0.27 |
| 18-Jun | 0.14 | <1 | 28 | <1 | 11 | 0.25 |
| 23-Jun | 0.04 | <1 | 4 | <1 | 15 | 0.23 |
| 29-Jun | 0.04 | <1 | 48 | <1 | 15 | 0.28 |
| 07-Jul | <0.01 | <1 | 8 | <1 | 15 | 0.63 |
| 13-Jul | 0.04 | <1 | 14 | <1 | 15 | 0.30 |
| 20-Jul | 0.18 | <1 | 10 | <1 | 13 | 0.22 |
| 23-Jul | <0.01 | <1 | 120 | <1 | 17 | 0.28 |
| 28-Jul | 0.08 | <1 | <2 | <1 | 16 | 0.28 |
| 04-Aug | 0.04 | <1 | <2 | <1 | 17 | 0.32 |
| 10-Aug | 0.04 | <1 | 6 | <1 | 17 | 0.20 |
| 18-Aug | 0.20 | <1 | 40 | <1 | 15 | 0.24 |
| 25-Aug | 0.09 | <1 | <2 | <1 | 16 | 0.25 |
| 31-Aug | 0.07 | <1 | 2 | <1 | 16 | 0.22 |
| 10-Sep | 0.07 | <1 | 24 | <1 | 16 | 0.21 |
| 14-Sep | 0.15 | <1 | 2 | <1 | 14 | 0.21 |
| 20-Sep | 0.11 | <1 | 60 | <1 | 17 | 0.24 |
| 28-Sep | <0.01 | <1 | 24 | <1 | 16 | 0.33 |
| 04-Oct | 0.05 | <1 | 2 | <1 | 15 | 0.29 |
| 06-Oct | 0.07 | <1 | <2 | <1 | 15 | 0.27 |
| 13-Oct | <0.01 | <1 | 16 | <1 | 14 | 0.28 |
| 19-Oct | <0.01 | <1 | 10 | <1 | 13 | 0.30 |
| 22-Oct | 0.04 | <1 | 4 | <1 | 14 | 0.31 |
| 27-Oct | 0.07 | <1 | <2 | <1 | 13 | 0.39 |
| 29-Oct | 0.21 | <1 | <2 | <1 | 11 | 0.33 |
| 01-Nov | <0.01 | <1 | 14 | <1 | 12 | 0.31 |
| 03-Nov | 0.08 | <1 | <2 | <1 | 12 | 0.30 |
| 09-Nov | 0.08 | <1 | 42 | <1 | 9.1 | 0.30 |
| 17-Nov | 0.17 | <1 | 70 | <1 | 10 | 0.26 |
| 23-Nov | <0.01 | <1 | 340 | <1 | 7 | 0.29 |
| 24-Nov | 0.06 | <1 | 40 | <1 | 8.8 | 0.29 |
| 29-Nov | 0.18 | <1 | <2 | <1 | 8.1 | 0.33 |
| 30-Nov | 0.19 | <1 | <2 | <1 | 7.9 | 0.25 |
| 03-Dec | 0.15 | <1 | 50 | <1 | 7.5 | 0.18 |
| 07-Dec | 0.21 | <1 | 6 | <1 | 6.8 | 0.32 |
| 08-Dec | 0.23 | <1 | 2 | <1 | 8 | 0.26 |
| 14-Dec | 0.23 | <1 | LA | <1 | 8.3 | 0.40 |
| 21-Dec | 0.14 | <1 | 2 | <1 | 7.9 | 0.24 |
| 30-Dec | <0.01 | <1 | NA | <1 | 7.1 | 0.23 |



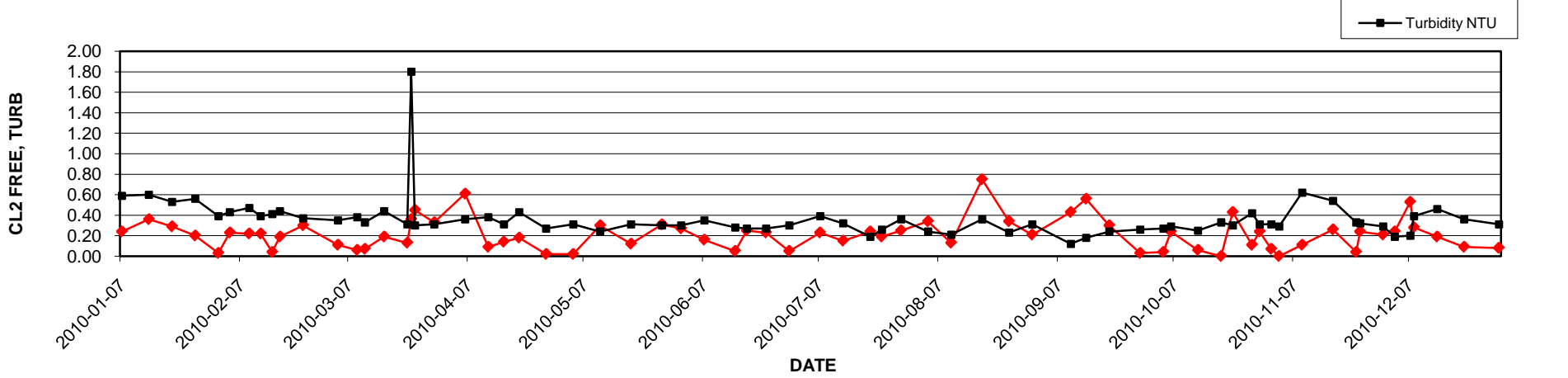
2010 GVRD Laboratory Report - DM903 (192 - 98A AVE BY HYD # 4085)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.24 | <1 | <2 | <1 | 6 | 0.59 |
| 14-Jan | 0.36 | <1 | 2 | <1 | 7.5 | 0.60 |
| 20-Jan | 0.29 | <1 | <2 | <1 | 7.6 | 0.53 |
| 26-Jan | 0.20 | <1 | <2 | <1 | 7.7 | 0.56 |
| 01-Feb | 0.03 | <1 | 6 | <1 | 8 | 0.39 |
| 04-Feb | 0.23 | <1 | <2 | <1 | 7 | 0.43 |
| 09-Feb | 0.22 | <1 | <2 | <1 | 7 | 0.47 |
| 12-Feb | 0.22 | <1 | <2 | <1 | 7.4 | 0.39 |
| 15-Feb | 0.04 | <1 | <2 | <1 | 7.2 | 0.41 |
| 17-Feb | 0.19 | <1 | <2 | <1 | 6.8 | 0.44 |
| 23-Feb | 0.30 | <1 | <2 | <1 | 7.8 | 0.37 |
| 04-Mar | 0.11 | <1 | 1300 | <1 | 8.1 | 0.35 |
| 09-Mar | 0.06 | <1 | 26 | <1 | 8.8 | 0.38 |
| 11-Mar | 0.07 | <1 | 26 | <1 | 8.2 | 0.33 |
| 16-Mar | 0.19 | <1 | <2 | <1 | 8.4 | 0.44 |
| 22-Mar | 0.13 | <1 | 42 | <1 | 8.8 | 0.31 |
| 23-Mar | 0.36 | <1 | <2 | <1 | 8.3 | 1.80 |
| 24-Mar | 0.45 | <1 | <2 | <1 | 8 | 0.30 |
| 29-Mar | 0.33 | <1 | <2 | <1 | 8.9 | 0.31 |
| 06-Apr | 0.61 | <1 | <2 | <1 | 8.4 | 0.36 |
| 12-Apr | 0.09 | <1 | 260 | <1 | 8.8 | 0.38 |
| 16-Apr | 0.14 | <1 | <2 | <1 | 9.1 | 0.31 |
| 20-Apr | 0.18 | <1 | 6 | <1 | 10 | 0.43 |
| 27-Apr | 0.02 | <1 | 94 | <1 | 11 | 0.27 |
| 04-May | 0.02 | <1 | 450 | <1 | 9.6 | 0.31 |
| 11-May | 0.30 | <1 | <2 | <1 | 10 | 0.24 |
| 19-May | 0.12 | <1 | <2 | <1 | 12 | 0.31 |
| 27-May | 0.31 | <1 | <2 | <1 | 12 | 0.30 |
| 01-Jun | 0.27 | <1 | 4 | <1 | 12 | 0.30 |
| 07-Jun | 0.16 | <1 | 10 | <1 | 13 | 0.35 |
| 15-Jun | 0.05 | <1 | <2 | <1 | 13 | 0.28 |
| 18-Jun | 0.25 | <1 | <2 | <1 | 10 | 0.27 |
| 23-Jun | 0.23 | <1 | <2 | <1 | 14 | 0.27 |
| 29-Jun | 0.05 | <1 | 100 | <1 | 15 | 0.30 |
| 07-Jul | 0.23 | <1 | 4 | <1 | 13 | 0.39 |
| 13-Jul | 0.15 | <1 | <2 | <1 | 14 | 0.32 |
| 20-Jul | 0.24 | <1 | <2 | <1 | 14 | 0.19 |
| 23-Jul | 0.19 | <1 | <2 | <1 | 16 | 0.26 |
| 28-Jul | 0.25 | <1 | <2 | <1 | 16 | 0.36 |
| 04-Aug | 0.34 | <1 | <2 | <1 | 16 | 0.24 |
| 10-Aug | 0.13 | <1 | <2 | <1 | 16 | 0.21 |
| 18-Aug | 0.75 | <1 | <2 | <1 | 14 | 0.36 |
| 25-Aug | 0.34 | <1 | <2 | <1 | 16 | 0.23 |
| 31-Aug | 0.21 | <1 | <2 | <1 | 16 | 0.31 |
| 10-Sep | 0.43 | <1 | <2 | <1 | 14 | 0.12 |
| 14-Sep | 0.56 | <1 | <2 | <1 | 14 | 0.18 |
| 20-Sep | 0.30 | <1 | <2 | <1 | 17 | 0.24 |
| 28-Sep | 0.03 | <1 | 12 | <1 | 17 | 0.26 |
| 04-Oct | 0.04 | <1 | 380 | <1 | 14 | 0.27 |
| 06-Oct | 0.24 | <1 | <2 | <1 | 16 | 0.29 |
| 13-Oct | 0.06 | <1 | <2 | <1 | 14 | 0.25 |
| 19-Oct | <0.01 | <1 | 710 | <1 | 14 | 0.33 |
| 22-Oct | 0.43 | <1 | <2 | <1 | 14 | 0.30 |
| 27-Oct | 0.11 | <1 | <2 | <1 | 14 | 0.42 |
| 29-Oct | 0.24 | <1 | 20 | <1 | 11 | 0.31 |
| 01-Nov | 0.07 | <1 | 290 | <1 | 13 | 0.31 |
| 03-Nov | <0.01 | <1 | 1400 | <1 | 13 | 0.29 |
| 09-Nov | 0.11 | <1 | 430 | <1 | 10 | 0.62 |
| 17-Nov | 0.26 | <1 | 6 | <1 | 11 | 0.54 |
| 23-Nov | 0.04 | <1 | 6 | <1 | 9.1 | 0.33 |
| 24-Nov | 0.24 | <1 | <2 | <1 | 8 | 0.32 |
| 30-Nov | 0.21 | <1 | <2 | <1 | 8.1 | 0.29 |
| 03-Dec | 0.24 | <1 | 2 | <1 | 7.5 | 0.19 |
| 07-Dec | 0.53 | <1 | <2 | <1 | 7.6 | 0.20 |
| 08-Dec | 0.28 | <1 | LA | <1 | 7.7 | 0.39 |
| 14-Dec | 0.19 | <1 | 540 | <1 | 7.9 | 0.46 |
| 21-Dec | 0.09 | <1 | 260 | <1 | 7.3 | 0.36 |
| 30-Dec | 0.08 | <1 | NA | <1 | 7.3 | 0.31 |

DM903 (192 - 98A AVE BY HYD # 4085) - 2010 TEST RESULTS



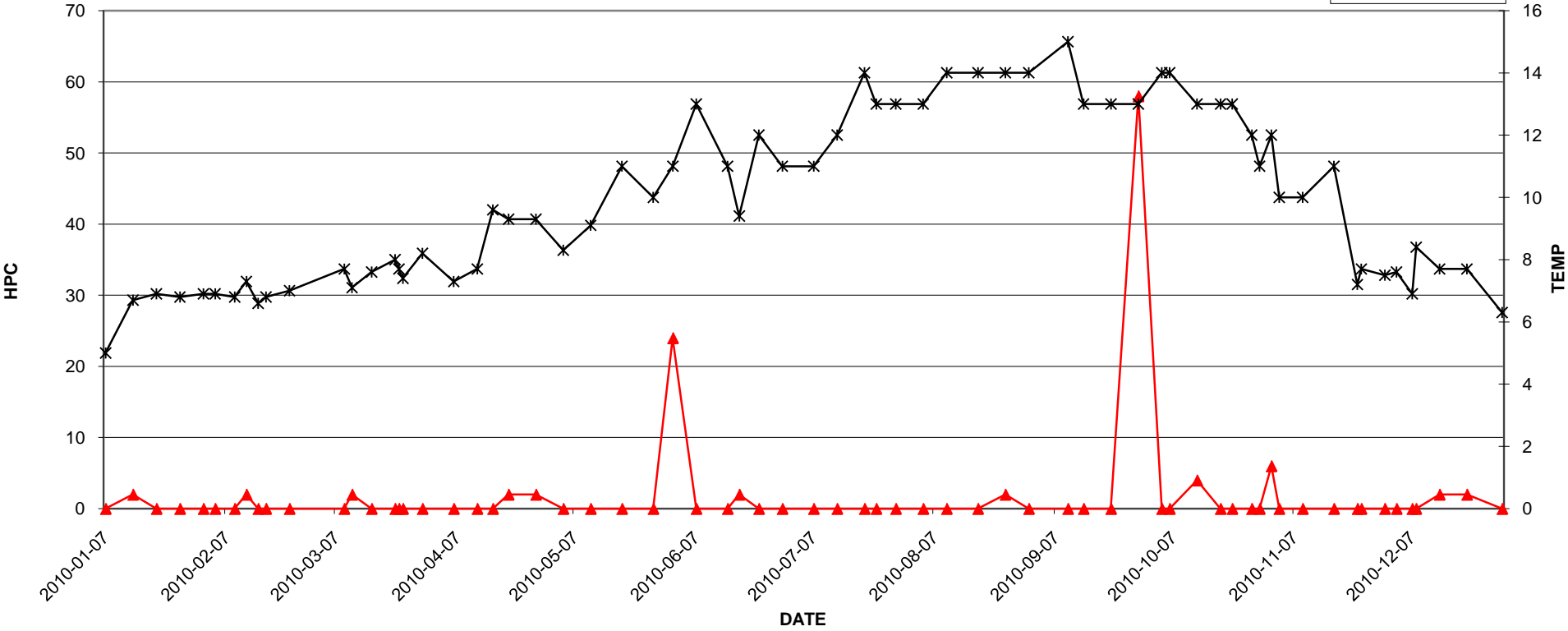
DM903 (192 - 98A AVE BY HYD # 4085) - 2010 TEST RESULTS



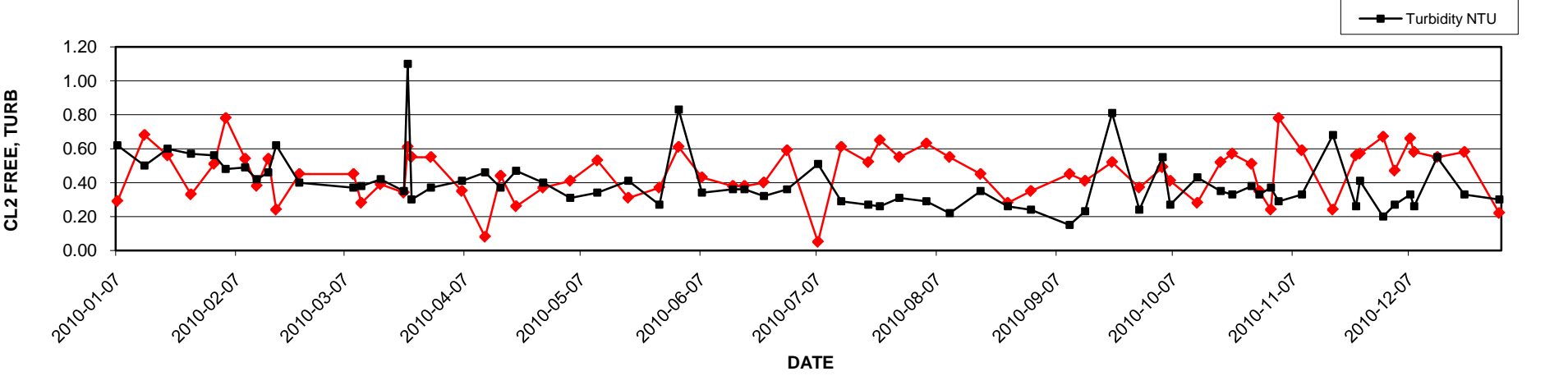
2010 GVRD Laboratory Report - DM904 (E OF HYDR No. 4737 ON TRIGGS RD.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.29 | <1 | <2 | <1 | 5 | 0.62 |
| 14-Jan | 0.68 | <1 | 2 | <1 | 6.7 | 0.50 |
| 20-Jan | 0.56 | <1 | <2 | <1 | 6.9 | 0.60 |
| 26-Jan | 0.33 | <1 | <2 | <1 | 6.8 | 0.57 |
| 01-Feb | 0.51 | <1 | <2 | <1 | 6.9 | 0.56 |
| 04-Feb | 0.78 | <1 | <2 | <1 | 6.9 | 0.48 |
| 09-Feb | 0.54 | <1 | <2 | <1 | 6.8 | 0.49 |
| 12-Feb | 0.38 | <1 | 2 | <1 | 7.3 | 0.42 |
| 15-Feb | 0.54 | <1 | <2 | <1 | 6.6 | 0.46 |
| 17-Feb | 0.24 | <1 | <2 | <1 | 6.8 | 0.62 |
| 23-Feb | 0.45 | <1 | <2 | <1 | 7 | 0.40 |
| 09-Mar | 0.45 | <1 | <2 | <1 | 7.7 | 0.37 |
| 11-Mar | 0.28 | <1 | 2 | <1 | 7.1 | 0.38 |
| 16-Mar | 0.39 | <1 | <2 | <1 | 7.6 | 0.42 |
| 22-Mar | 0.34 | <1 | <2 | <1 | 8 | 0.35 |
| 23-Mar | 0.61 | <1 | <2 | <1 | 7.7 | 1.10 |
| 24-Mar | 0.55 | <1 | <2 | <1 | 7.4 | 0.30 |
| 29-Mar | 0.55 | <1 | <2 | <1 | 8.2 | 0.37 |
| 06-Apr | 0.35 | <1 | <2 | <1 | 7.3 | 0.41 |
| 12-Apr | 0.08 | <1 | <2 | <1 | 7.7 | 0.46 |
| 16-Apr | 0.44 | <1 | <2 | <1 | 9.6 | 0.37 |
| 20-Apr | 0.26 | <1 | 2 | <1 | 9.3 | 0.47 |
| 27-Apr | 0.37 | <1 | 2 | <1 | 9.3 | 0.40 |
| 04-May | 0.41 | <1 | <2 | <1 | 8.3 | 0.31 |
| 11-May | 0.53 | <1 | <2 | <1 | 9.1 | 0.34 |
| 19-May | 0.31 | <1 | <2 | <1 | 11 | 0.41 |
| 27-May | 0.37 | <1 | <2 | <1 | 10 | 0.27 |
| 01-Jun | 0.61 | <1 | 24 | <1 | 11 | 0.83 |
| 07-Jun | 0.43 | <1 | <2 | <1 | 13 | 0.34 |
| 15-Jun | 0.38 | <1 | <2 | <1 | 11 | 0.36 |
| 18-Jun | 0.38 | <1 | 2 | <1 | 9.4 | 0.36 |
| 23-Jun | 0.40 | <1 | <2 | <1 | 12 | 0.32 |
| 29-Jun | 0.59 | <1 | <2 | <1 | 11 | 0.36 |
| 07-Jul | 0.05 | <1 | <2 | <1 | 11 | 0.51 |
| 13-Jul | 0.61 | <1 | <2 | <1 | 12 | 0.29 |
| 20-Jul | 0.52 | <1 | <2 | <1 | 14 | 0.27 |
| 23-Jul | 0.65 | <1 | <2 | <1 | 13 | 0.26 |
| 28-Jul | 0.55 | <1 | <2 | <1 | 13 | 0.31 |
| 04-Aug | 0.63 | <1 | <2 | <1 | 13 | 0.29 |
| 10-Aug | 0.55 | <1 | <2 | <1 | 14 | 0.22 |
| 18-Aug | 0.45 | <1 | <2 | <1 | 14 | 0.35 |
| 25-Aug | 0.28 | <1 | 2 | <1 | 14 | 0.26 |
| 31-Aug | 0.35 | <1 | <2 | <1 | 14 | 0.24 |
| 10-Sep | 0.45 | <1 | <2 | <1 | 15 | 0.15 |
| 14-Sep | 0.41 | <1 | <2 | <1 | 13 | 0.23 |
| 21-Sep | 0.52 | <1 | <2 | <1 | 13 | 0.81 |
| 28-Sep | 0.37 | <1 | 58 | <1 | 13 | 0.24 |
| 04-Oct | 0.49 | <1 | <2 | <1 | 14 | 0.55 |
| 06-Oct | 0.41 | <1 | <2 | <1 | 14 | 0.27 |
| 13-Oct | 0.28 | <1 | 4 | <1 | 13 | 0.43 |
| 19-Oct | 0.52 | <1 | <2 | <1 | 13 | 0.35 |
| 22-Oct | 0.57 | <1 | <2 | <1 | 13 | 0.33 |
| 27-Oct | 0.51 | <1 | <2 | <1 | 12 | 0.38 |
| 29-Oct | 0.35 | <1 | <2 | <1 | 11 | 0.33 |
| 01-Nov | 0.24 | <1 | 6 | <1 | 12 | 0.37 |
| 03-Nov | 0.78 | <1 | <2 | <1 | 10 | 0.29 |
| 09-Nov | 0.59 | <1 | <2 | <1 | 10 | 0.33 |
| 17-Nov | 0.24 | <1 | <2 | <1 | 11 | 0.68 |
| 23-Nov | 0.56 | <1 | <2 | <1 | 7.2 | 0.26 |
| 24-Nov | 0.57 | <1 | <2 | <1 | 7.7 | 0.41 |
| 30-Nov | 0.67 | <1 | LA | <1 | 7.5 | 0.20 |
| 03-Dec | 0.47 | <1 | <2 | <1 | 7.6 | 0.27 |
| 07-Dec | 0.66 | <1 | <2 | <1 | 6.9 | 0.33 |
| 08-Dec | 0.58 | <1 | LA | <1 | 8.4 | 0.26 |
| 14-Dec | 0.55 | <1 | 2 | <1 | 7.7 | 0.55 |
| 21-Dec | 0.58 | <1 | 2 | <1 | 7.7 | 0.33 |
| 30-Dec | 0.22 | <1 | NA | <1 | 6.3 | 0.30 |

DM904 (E OF HYDR No. 4737 ON TRIGGS RD.) - 2010 TEST RESULTS



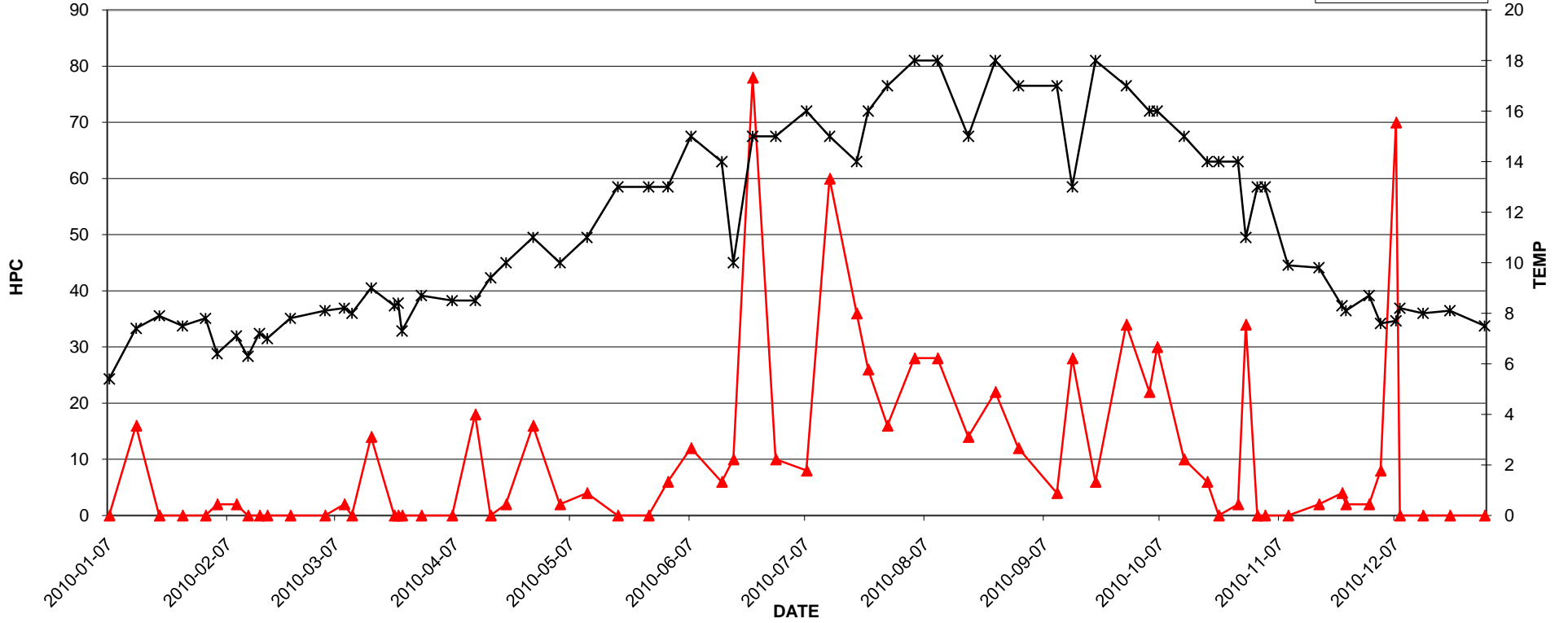
DM904 (E OF HYDR No. 4737 ON TRIGGS RD.) - 2010 TEST RESULTS



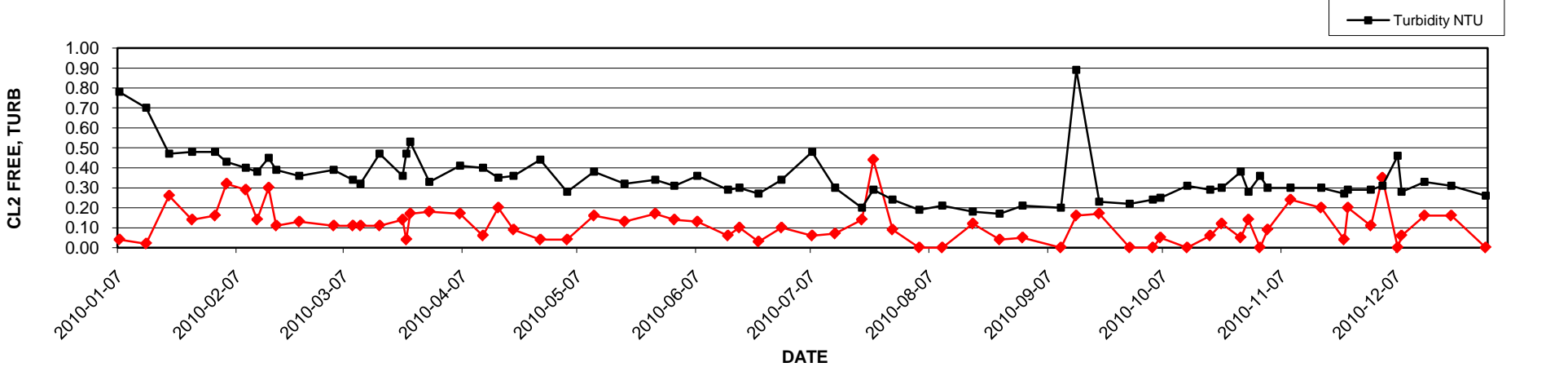
2010 GVRD Laboratory Report - DM905 (SE CORNER 170A ST. & 102 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.04 | <1 | <2 | <1 | 5.4 | 0.78 |
| 14-Jan | 0.02 | <1 | 16 | <1 | 7.4 | 0.70 |
| 20-Jan | 0.26 | <1 | <2 | <1 | 7.9 | 0.47 |
| 26-Jan | 0.14 | <1 | <2 | <1 | 7.5 | 0.48 |
| 01-Feb | 0.16 | <1 | <2 | <1 | 7.8 | 0.48 |
| 04-Feb | 0.32 | <1 | 2 | <1 | 6.4 | 0.43 |
| 09-Feb | 0.29 | <1 | 2 | <1 | 7.1 | 0.40 |
| 12-Feb | 0.14 | <1 | <2 | <1 | 6.3 | 0.38 |
| 15-Feb | 0.30 | <1 | <2 | <1 | 7.2 | 0.45 |
| 17-Feb | 0.11 | <1 | <2 | <1 | 7 | 0.39 |
| 23-Feb | 0.13 | <1 | <2 | <1 | 7.8 | 0.36 |
| 04-Mar | 0.11 | <1 | <2 | <1 | 8.1 | 0.39 |
| 09-Mar | 0.11 | <1 | 2 | <1 | 8.2 | 0.34 |
| 11-Mar | 0.11 | <1 | <2 | <1 | 8 | 0.32 |
| 16-Mar | 0.11 | <1 | 14 | <1 | 9 | 0.47 |
| 22-Mar | 0.14 | <1 | <2 | <1 | 8.3 | 0.36 |
| 23-Mar | 0.04 | <1 | <2 | <1 | 8.4 | 0.47 |
| 24-Mar | 0.17 | <1 | <2 | <1 | 7.3 | 0.53 |
| 29-Mar | 0.18 | <1 | <2 | <1 | 8.7 | 0.33 |
| 06-Apr | 0.17 | <1 | <2 | <1 | 8.5 | 0.41 |
| 12-Apr | 0.06 | <1 | 18 | <1 | 8.5 | 0.40 |
| 16-Apr | 0.20 | <1 | <2 | <1 | 9.4 | 0.35 |
| 20-Apr | 0.09 | <1 | 2 | <1 | 10 | 0.36 |
| 27-Apr | 0.04 | <1 | 16 | <1 | 11 | 0.44 |
| 04-May | 0.04 | <1 | 2 | <1 | 10 | 0.28 |
| 11-May | 0.16 | <1 | 4 | <1 | 11 | 0.38 |
| 19-May | 0.13 | <1 | <2 | <1 | 13 | 0.32 |
| 27-May | 0.17 | <1 | <2 | <1 | 13 | 0.34 |
| 01-Jun | 0.14 | <1 | 6 | <1 | 13 | 0.31 |
| 07-Jun | 0.13 | <1 | 12 | <1 | 15 | 0.36 |
| 15-Jun | 0.06 | <1 | 6 | <1 | 14 | 0.29 |
| 18-Jun | 0.10 | <1 | 10 | <1 | 10 | 0.30 |
| 23-Jun | 0.03 | <1 | 78 | <1 | 15 | 0.27 |
| 29-Jun | 0.10 | <1 | 10 | <1 | 15 | 0.34 |
| 07-Jul | 0.06 | <1 | 8 | <1 | 16 | 0.48 |
| 13-Jul | 0.07 | <1 | 60 | <1 | 15 | 0.30 |
| 20-Jul | 0.14 | <1 | 36 | <1 | 14 | 0.20 |
| 23-Jul | 0.44 | <1 | 26 | <1 | 16 | 0.29 |
| 28-Jul | 0.09 | <1 | 16 | <1 | 17 | 0.24 |
| 04-Aug | <0.01 | <1 | 28 | <1 | 18 | 0.19 |
| 10-Aug | <0.01 | <1 | 28 | <1 | 18 | 0.21 |
| 18-Aug | 0.12 | <1 | 14 | <1 | 15 | 0.18 |
| 25-Aug | 0.04 | <1 | 22 | <1 | 18 | 0.17 |
| 31-Aug | 0.05 | <1 | 12 | <1 | 17 | 0.21 |
| 10-Sep | <0.01 | <1 | 4 | <1 | 17 | 0.20 |
| 14-Sep | 0.16 | <1 | 28 | <1 | 13 | 0.89 |
| 20-Sep | 0.17 | <1 | 6 | <1 | 18 | 0.23 |
| 28-Sep | <0.01 | <1 | 34 | <1 | 17 | 0.22 |
| 04-Oct | <0.01 | <1 | 22 | <1 | 16 | 0.24 |
| 06-Oct | 0.05 | <1 | 30 | <1 | 16 | 0.25 |
| 13-Oct | <0.01 | <1 | 10 | <1 | 15 | 0.31 |
| 19-Oct | 0.06 | <1 | 6 | <1 | 14 | 0.29 |
| 22-Oct | 0.12 | <1 | <2 | <1 | 14 | 0.30 |
| 27-Oct | 0.05 | <1 | 2 | <1 | 14 | 0.38 |
| 29-Oct | 0.14 | <1 | 34 | <1 | 11 | 0.28 |
| 01-Nov | <0.01 | <1 | <2 | <1 | 13 | 0.36 |
| 03-Nov | 0.09 | <1 | <2 | <1 | 13 | 0.30 |
| 09-Nov | 0.24 | <1 | <2 | <1 | 9.9 | 0.30 |
| 17-Nov | 0.20 | <1 | 2 | <1 | 9.8 | 0.30 |
| 23-Nov | 0.04 | <1 | 4 | <1 | 8.3 | 0.27 |
| 24-Nov | 0.20 | <1 | 2 | <1 | 8.1 | 0.29 |
| 30-Nov | 0.11 | <1 | 2 | <1 | 8.7 | 0.29 |
| 03-Dec | 0.35 | <1 | 8 | <1 | 7.6 | 0.31 |
| 07-Dec | <0.01 | <1 | 70 | <1 | 7.7 | 0.46 |
| 08-Dec | 0.06 | <1 | LA | <1 | 8.2 | 0.28 |
| 14-Dec | 0.16 | <1 | <2 | <1 | 8 | 0.33 |
| 21-Dec | 0.16 | <1 | <2 | <1 | 8.1 | 0.31 |
| 30-Dec | <0.01 | <1 | NA | <1 | 7.5 | 0.26 |

DM905 (SE CORNER 170A ST. & 102 AVE.) - 2010 TEST RESULTS



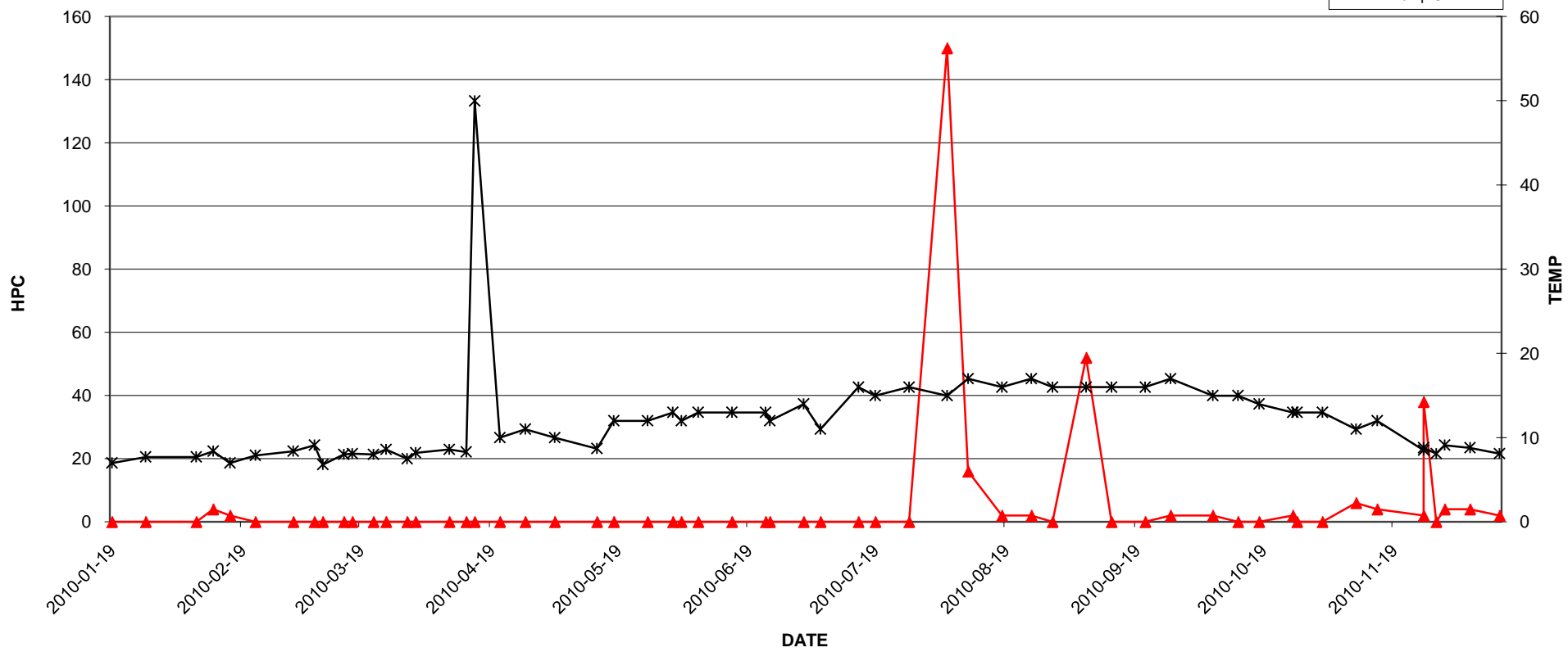
DM905 (SE CORNER 170A ST. & 102 AVE.) - 2010 TEST RESULTS



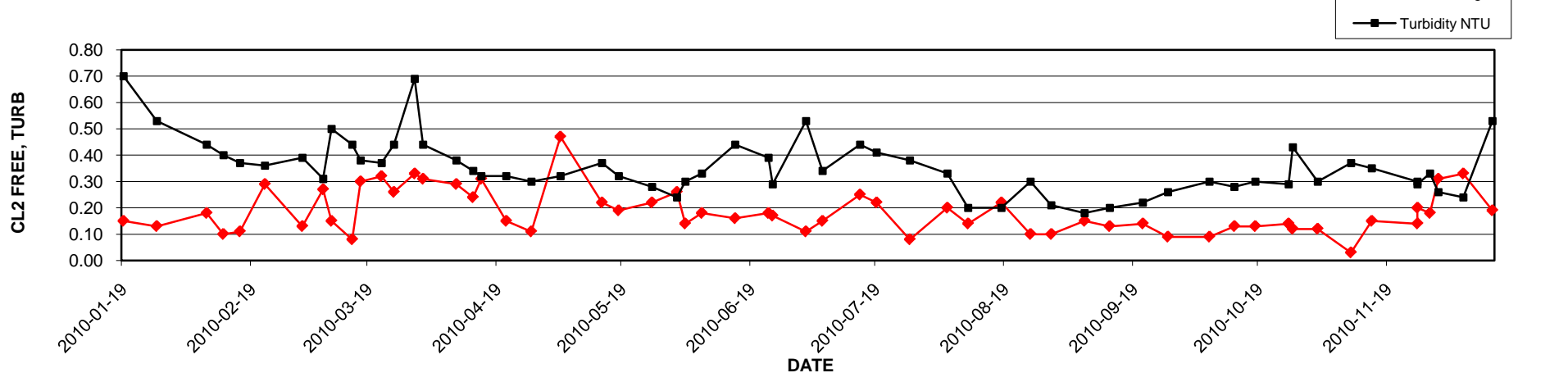
2010 GVRD Laboratory Report - DM906 (SE CORNER 161 ST. & 102 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 19-Jan | 0.15 | <1 | <2 | <1 | 7 | 0.70 |
| 27-Jan | 0.13 | <1 | <2 | <1 | 7.7 | 0.53 |
| 08-Feb | 0.18 | <1 | <2 | <1 | 7.7 | 0.44 |
| 12-Feb | 0.10 | <1 | 4 | <1 | 8.4 | 0.40 |
| 16-Feb | 0.11 | <1 | 2 | <1 | 7 | 0.37 |
| 22-Feb | 0.29 | <1 | <2 | <1 | 7.9 | 0.36 |
| 03-Mar | 0.13 | <1 | <2 | <1 | 8.4 | 0.39 |
| 08-Mar | 0.27 | <1 | <2 | <1 | 9.1 | 0.31 |
| 10-Mar | 0.15 | <1 | <2 | <1 | 6.8 | 0.50 |
| 15-Mar | 0.08 | <1 | <2 | <1 | 8 | 0.44 |
| 17-Mar | 0.30 | <1 | <2 | <1 | 8.1 | 0.38 |
| 22-Mar | 0.32 | <1 | <2 | <1 | 8 | 0.37 |
| 25-Mar | 0.26 | <1 | <2 | <1 | 8.6 | 0.44 |
| 30-Mar | 0.33 | <1 | <2 | <1 | 7.5 | 0.69 |
| 01-Apr | 0.31 | <1 | <2 | <1 | 8.2 | 0.44 |
| 09-Apr | 0.29 | <1 | <2 | <1 | 8.6 | 0.38 |
| 13-Apr | 0.24 | <1 | <2 | <1 | 8.3 | 0.34 |
| 15-Apr | 0.31 | <1 | <2 | <1 | 50 | 0.32 |
| 21-Apr | 0.15 | <1 | <2 | <1 | 10 | 0.32 |
| 27-Apr | 0.11 | <1 | <2 | <1 | 11 | 0.30 |
| 04-May | 0.47 | <1 | <2 | <1 | 10 | 0.32 |
| 14-May | 0.22 | <1 | <2 | <1 | 8.7 | 0.37 |
| 18-May | 0.19 | <1 | <2 | <1 | 12 | 0.32 |
| 26-May | 0.22 | <1 | <2 | <1 | 12 | 0.28 |
| 01-Jun | 0.26 | <1 | <2 | <1 | 13 | 0.24 |
| 03-Jun | 0.14 | <1 | <2 | <1 | 12 | 0.30 |
| 07-Jun | 0.18 | <1 | <2 | <1 | 13 | 0.33 |
| 15-Jun | 0.16 | <1 | <2 | <1 | 13 | 0.44 |
| 23-Jun | 0.18 | <1 | <2 | <1 | 13 | 0.39 |
| 24-Jun | 0.17 | <1 | <2 | <1 | 12 | 0.29 |
| 02-Jul | 0.11 | <1 | <2 | <1 | 14 | 0.53 |
| 06-Jul | 0.15 | <1 | <2 | <1 | 11 | 0.34 |
| 15-Jul | 0.25 | <1 | <2 | <1 | 16 | 0.44 |
| 19-Jul | 0.22 | <1 | <2 | <1 | 15 | 0.41 |
| 27-Jul | 0.08 | <1 | <2 | <1 | 16 | 0.38 |
| 05-Aug | 0.20 | <1 | 150 | <1 | 15 | 0.33 |
| 10-Aug | 0.14 | <1 | 16 | <1 | 17 | 0.20 |
| 18-Aug | 0.22 | <1 | 2 | <1 | 16 | 0.20 |
| 25-Aug | 0.10 | <1 | 2 | <1 | 17 | 0.30 |
| 30-Aug | 0.10 | <1 | <2 | <1 | 16 | 0.21 |
| 07-Sep | 0.15 | <1 | 52 | <1 | 16 | 0.18 |
| 13-Sep | 0.13 | <1 | <2 | <1 | 16 | 0.20 |
| 21-Sep | 0.14 | <1 | <2 | <1 | 16 | 0.22 |
| 27-Sep | 0.09 | <1 | 2 | <1 | 17 | 0.26 |
| 07-Oct | 0.09 | <1 | 2 | <1 | 15 | 0.30 |
| 13-Oct | 0.13 | <1 | <2 | <1 | 15 | 0.28 |
| 18-Oct | 0.13 | <1 | <2 | <1 | 14 | 0.30 |
| 26-Oct | 0.14 | <1 | 2 | <1 | 13 | 0.29 |
| 27-Oct | 0.12 | <1 | <2 | <1 | 13 | 0.43 |
| 02-Nov | 0.12 | <1 | <2 | <1 | 13 | 0.30 |
| 10-Nov | 0.03 | <1 | 6 | <1 | 11 | 0.37 |
| 15-Nov | 0.15 | <1 | 4 | <1 | 12 | 0.35 |
| 26-Nov | 0.14 | <1 | 2 | <1 | 8.5 | 0.30 |
| 26-Nov | 0.20 | <1 | 38 | <1 | 8.8 | 0.29 |
| 29-Nov | 0.18 | <1 | <2 | <1 | 8.1 | 0.33 |
| 01-Dec | 0.31 | <1 | 4 | <1 | 9.1 | 0.26 |
| 07-Dec | 0.33 | <1 | 4 | <1 | 8.8 | 0.24 |
| 14-Dec | 0.19 | <1 | 2 | <1 | 8.1 | 0.53 |

DM906 (SE CORNER 161 ST. & 102 AVE.) - 2010 TEST RESULTS

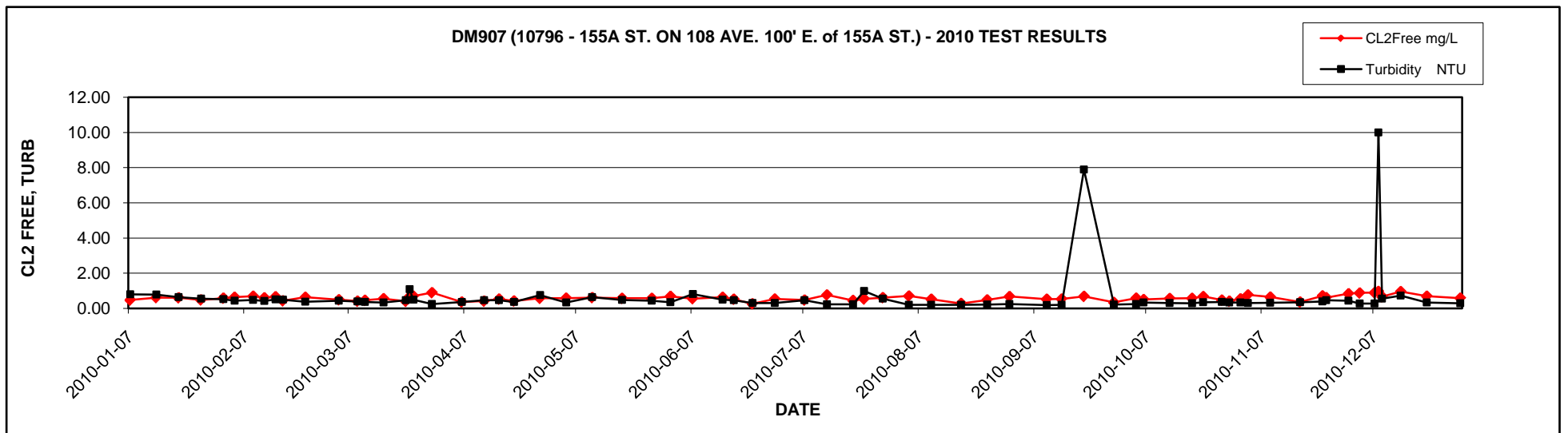
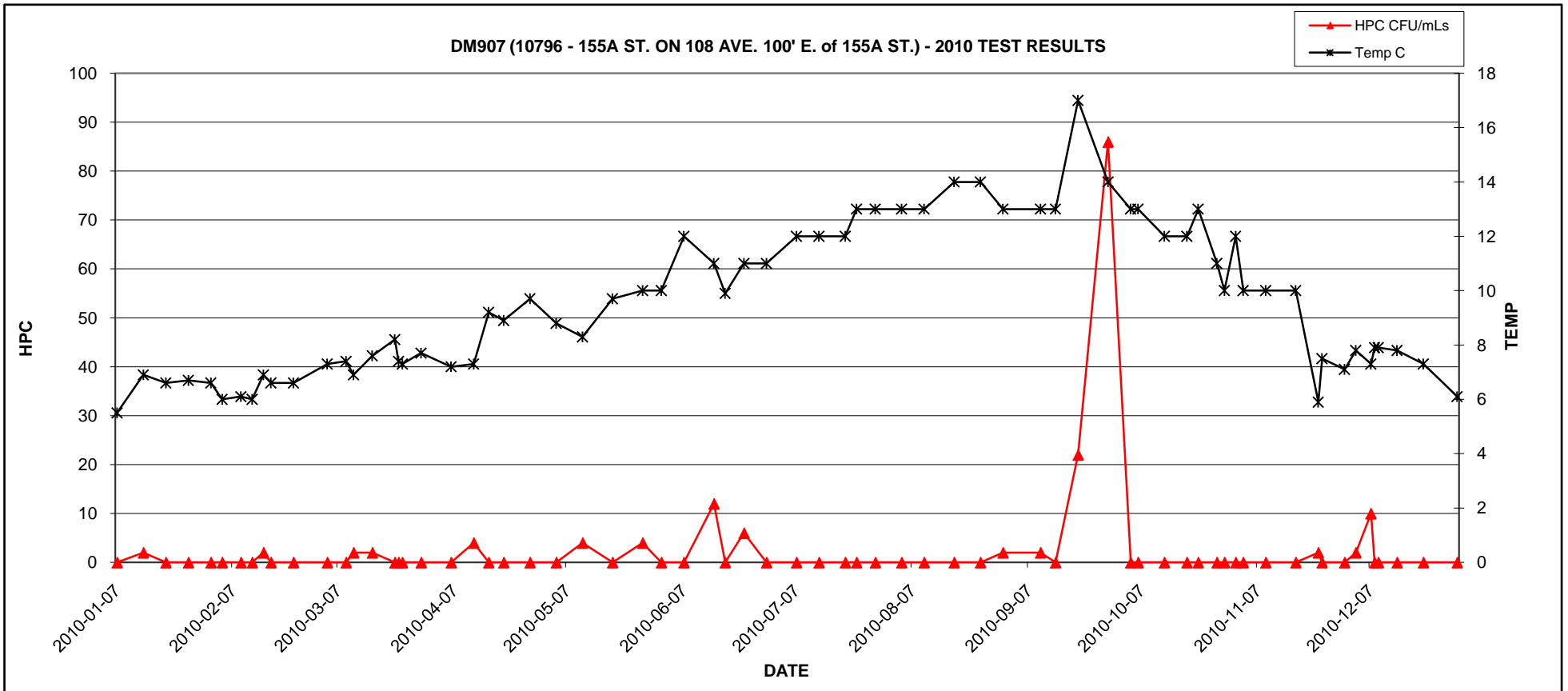


DM906 (SE CORNER 161 ST. & 102 AVE.) - 2010 TEST RESULTS



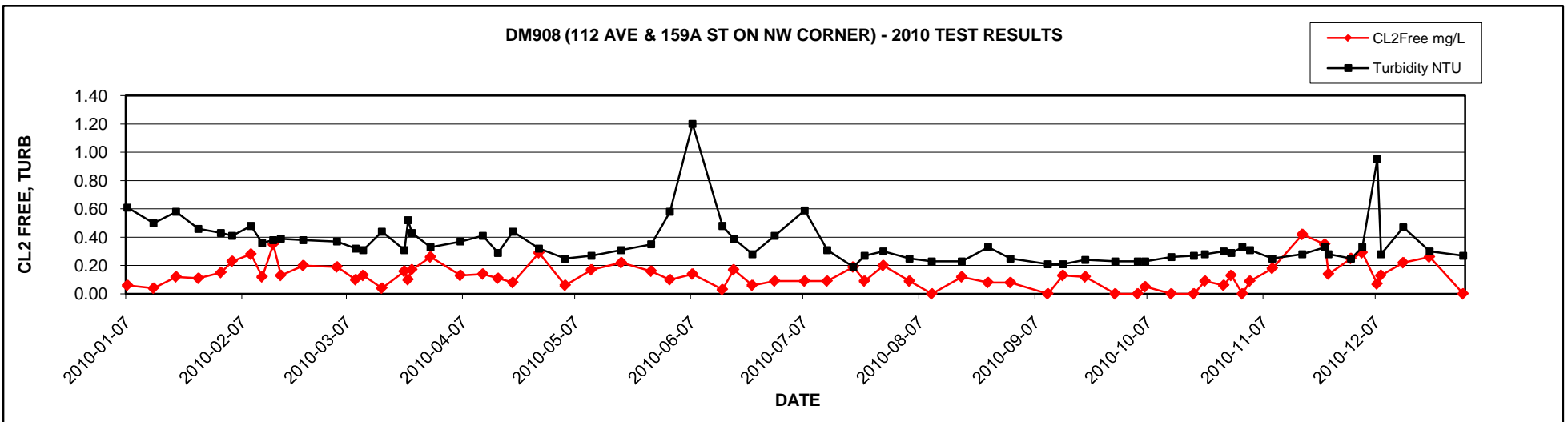
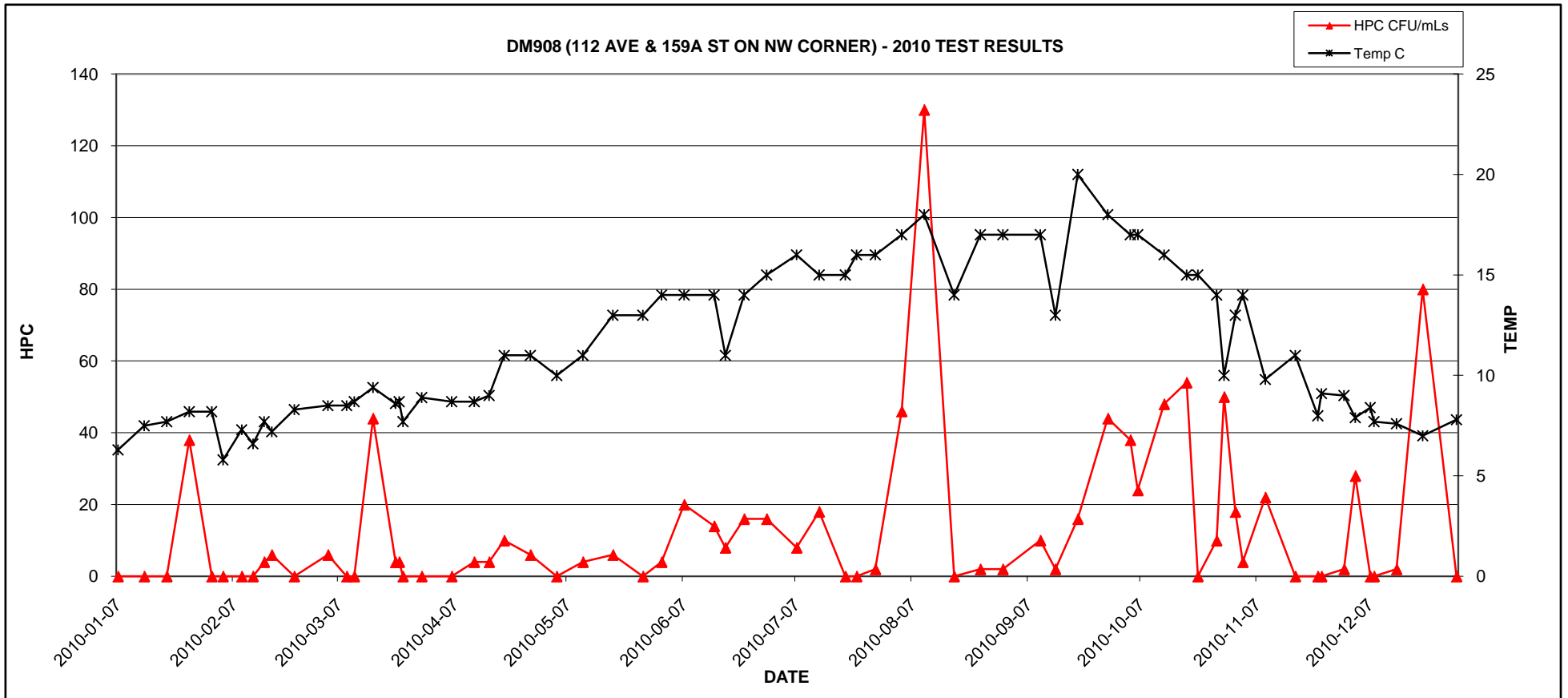
2010 GVRD Laboratory Report - DM907 (10796 - 155A ST. ON 108 AVE. 100' E. of 155A ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.48 | <1 | <2 | <1 | 5.5 | 0.81 |
| 14-Jan | 0.62 | <1 | 2 | <1 | 6.9 | 0.80 |
| 20-Jan | 0.61 | <1 | <2 | <1 | 6.6 | 0.65 |
| 26-Jan | 0.49 | <1 | <2 | <1 | 6.7 | 0.56 |
| 01-Feb | 0.59 | <1 | <2 | <1 | 6.6 | 0.53 |
| 04-Feb | 0.64 | <1 | <2 | <1 | 6 | 0.45 |
| 09-Feb | 0.70 | <1 | <2 | <1 | 6.1 | 0.49 |
| 12-Feb | 0.61 | <1 | <2 | <1 | 6 | 0.43 |
| 15-Feb | 0.67 | <1 | 2 | <1 | 6.9 | 0.52 |
| 17-Feb | 0.44 | <1 | <2 | <1 | 6.6 | 0.50 |
| 23-Feb | 0.64 | <1 | <2 | <1 | 6.6 | 0.39 |
| 04-Mar | 0.50 | <1 | <2 | <1 | 7.3 | 0.44 |
| 09-Mar | 0.42 | <1 | <2 | <1 | 7.4 | 0.40 |
| 11-Mar | 0.47 | <1 | 2 | <1 | 6.9 | 0.38 |
| 16-Mar | 0.56 | <1 | 2 | <1 | 7.6 | 0.35 |
| 22-Mar | 0.41 | <1 | <2 | <1 | 8.2 | 0.48 |
| 23-Mar | 0.68 | <1 | <2 | <1 | 7.4 | 1.10 |
| 24-Mar | 0.70 | <1 | <2 | <1 | 7.3 | 0.51 |
| 29-Mar | 0.90 | <1 | <2 | <1 | 7.7 | 0.26 |
| 06-Apr | 0.37 | <1 | <2 | <1 | 7.2 | 0.38 |
| 12-Apr | 0.42 | <1 | 4 | <1 | 7.3 | 0.48 |
| 16-Apr | 0.54 | <1 | <2 | <1 | 9.2 | 0.48 |
| 20-Apr | 0.43 | <1 | <2 | <1 | 8.9 | 0.38 |
| 27-Apr | 0.58 | <1 | <2 | <1 | 9.7 | 0.76 |
| 04-May | 0.59 | <1 | <2 | <1 | 8.8 | 0.35 |
| 11-May | 0.62 | <1 | 4 | <1 | 8.3 | 0.65 |
| 19-May | 0.58 | <1 | <2 | <1 | 9.7 | 0.49 |
| 27-May | 0.58 | <1 | 4 | <1 | 10 | 0.45 |
| 01-Jun | 0.69 | <1 | <2 | <1 | 10 | 0.36 |
| 07-Jun | 0.56 | <1 | <2 | <1 | 12 | 0.82 |
| 15-Jun | 0.64 | <1 | 12 | <1 | 11 | 0.51 |
| 18-Jun | 0.53 | <1 | <2 | <1 | 9.9 | 0.47 |
| 23-Jun | 0.27 | <1 | 6 | <1 | 11 | 0.31 |
| 29-Jun | 0.54 | <1 | <2 | <1 | 11 | 0.31 |
| 07-Jul | 0.48 | <1 | <2 | <1 | 12 | 0.47 |
| 13-Jul | 0.77 | <1 | <2 | <1 | 12 | 0.25 |
| 20-Jul | 0.46 | <1 | <2 | <1 | 12 | 0.25 |
| 23-Jul | 0.54 | <1 | <2 | <1 | 13 | 1.00 |
| 28-Jul | 0.62 | <1 | <2 | <1 | 13 | 0.57 |
| 04-Aug | 0.71 | <1 | <2 | <1 | 13 | 0.21 |
| 10-Aug | 0.53 | <1 | <2 | <1 | 13 | 0.21 |
| 18-Aug | 0.29 | <1 | <2 | <1 | 14 | 0.21 |
| 25-Aug | 0.49 | <1 | <2 | <1 | 14 | 0.23 |
| 31-Aug | 0.68 | <1 | 2 | <1 | 13 | 0.26 |
| 10-Sep | 0.53 | <1 | 2 | <1 | 13 | 0.20 |
| 14-Sep | 0.54 | <1 | <2 | <1 | 13 | 0.22 |
| 20-Sep | 0.69 | <1 | 22 | <1 | 17 | 7.90 |
| 28-Sep | 0.35 | <1 | 86 | <1 | 14 | 0.23 |
| 04-Oct | 0.59 | <1 | <2 | <1 | 13 | 0.26 |
| 06-Oct | 0.51 | <1 | <2 | <1 | 13 | 0.34 |
| 13-Oct | 0.57 | <1 | <2 | <1 | 12 | 0.32 |
| 19-Oct | 0.58 | <1 | <2 | <1 | 12 | 0.30 |
| 22-Oct | 0.68 | <1 | <2 | <1 | 13 | 0.36 |
| 27-Oct | 0.48 | <1 | <2 | <1 | 11 | 0.37 |
| 29-Oct | 0.42 | <1 | <2 | <1 | 10 | 0.34 |
| 01-Nov | 0.55 | <1 | <2 | <1 | 12 | 0.35 |
| 03-Nov | 0.77 | <1 | <2 | <1 | 10 | 0.31 |
| 09-Nov | 0.65 | <1 | <2 | <1 | 10 | 0.33 |
| 17-Nov | 0.37 | <1 | <2 | <1 | 10 | 0.36 |
| 23-Nov | 0.72 | <1 | 2 | <1 | 5.9 | 0.41 |
| 24-Nov | 0.62 | <1 | <2 | <1 | 7.5 | 0.47 |
| 30-Nov | 0.84 | <1 | <2 | <1 | 7.1 | 0.45 |
| 03-Dec | 0.88 | <1 | 2 | <1 | 7.8 | 0.29 |
| 07-Dec | 0.90 | <1 | 10 | <1 | 7.3 | 0.29 |
| 08-Dec | 0.97 | <1 | LA | <1 | 7.9 | 10.00 |
| 09-Dec | 0.67 | <1 | <2 | <1 | 7.9 | 0.56 |
| 14-Dec | 0.96 | <1 | <2 | <1 | 7.8 | 0.73 |
| 21-Dec | 0.70 | <1 | <2 | <1 | 7.3 | 0.35 |
| 30-Dec | 0.59 | <1 | NA | <1 | 6.1 | 0.30 |



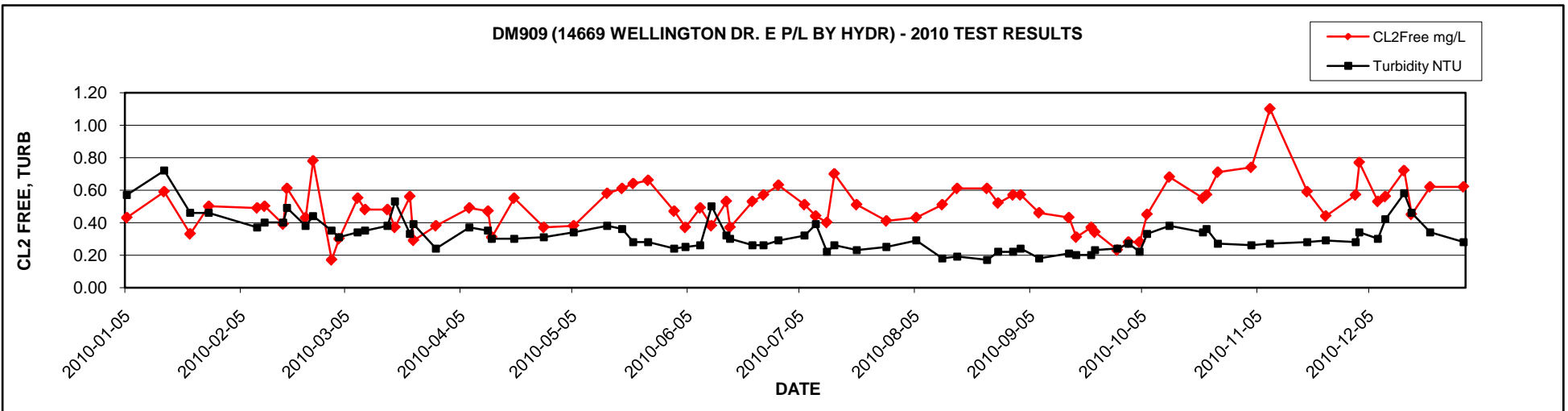
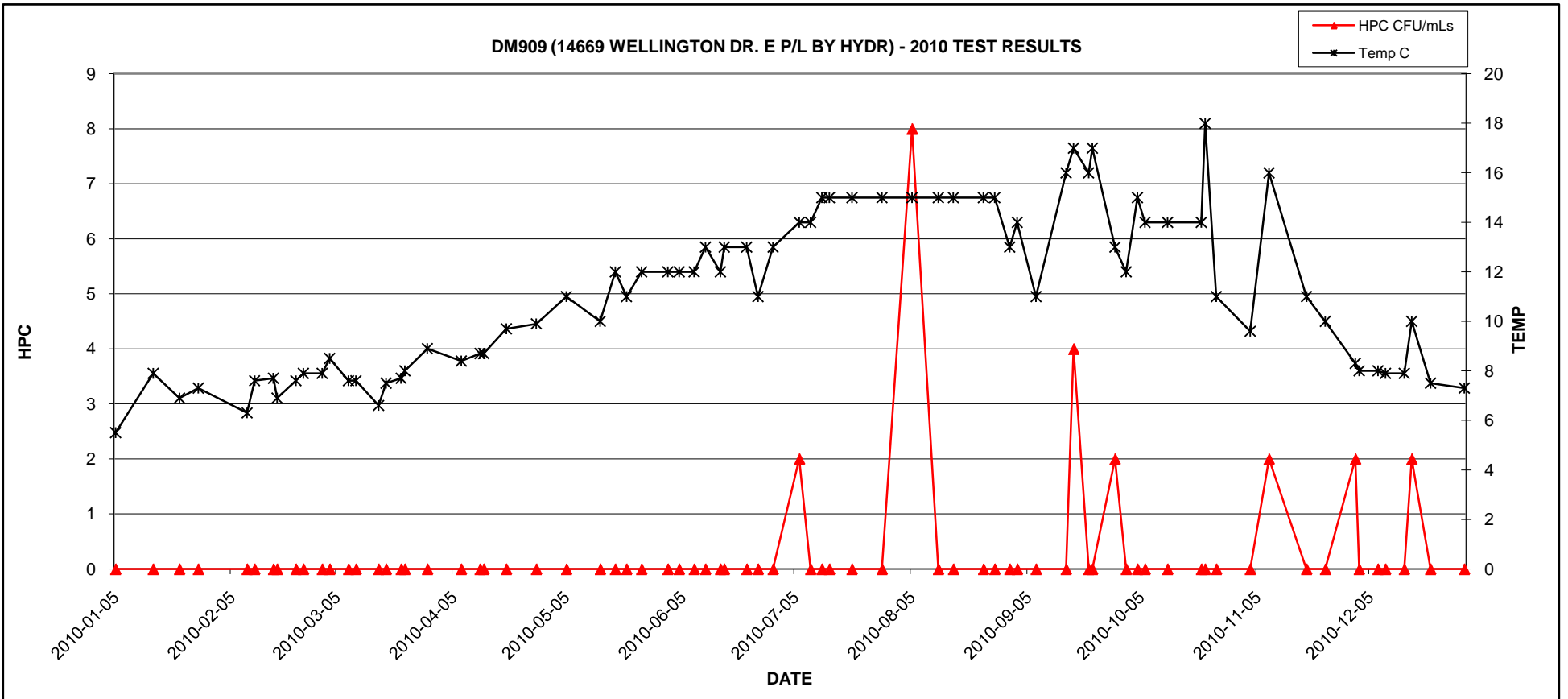
2010 GVRD Laboratory Report - DM908 (112 AVE & 159A ST ON NW CORNER)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.06 | <1 | <2 | <1 | 6.3 | 0.61 |
| 14-Jan | 0.04 | <1 | <2 | <1 | 7.5 | 0.50 |
| 20-Jan | 0.12 | <1 | <2 | <1 | 7.7 | 0.58 |
| 26-Jan | 0.11 | <1 | 38 | <1 | 8.2 | 0.46 |
| 01-Feb | 0.15 | <1 | <2 | <1 | 8.2 | 0.43 |
| 04-Feb | 0.23 | <1 | <2 | <1 | 5.8 | 0.41 |
| 09-Feb | 0.28 | <1 | <2 | <1 | 7.3 | 0.48 |
| 12-Feb | 0.12 | <1 | <2 | <1 | 6.6 | 0.36 |
| 15-Feb | 0.35 | <1 | 4 | <1 | 7.7 | 0.38 |
| 17-Feb | 0.13 | <1 | 6 | <1 | 7.2 | 0.39 |
| 23-Feb | 0.20 | <1 | <2 | <1 | 8.3 | 0.38 |
| 04-Mar | 0.19 | <1 | 6 | <1 | 8.5 | 0.37 |
| 09-Mar | 0.10 | <1 | <2 | <1 | 8.5 | 0.32 |
| 11-Mar | 0.13 | <1 | <2 | <1 | 8.7 | 0.31 |
| 16-Mar | 0.04 | <1 | 44 | <1 | 9.4 | 0.44 |
| 22-Mar | 0.16 | <1 | 4 | <1 | 8.6 | 0.31 |
| 23-Mar | 0.10 | <1 | 4 | <1 | 8.7 | 0.52 |
| 24-Mar | 0.17 | <1 | <2 | <1 | 7.7 | 0.43 |
| 29-Mar | 0.26 | <1 | <2 | <1 | 8.9 | 0.33 |
| 06-Apr | 0.13 | <1 | <2 | <1 | 8.7 | 0.37 |
| 12-Apr | 0.14 | <1 | 4 | <1 | 8.7 | 0.41 |
| 16-Apr | 0.11 | <1 | 4 | <1 | 9 | 0.29 |
| 20-Apr | 0.08 | <1 | 10 | <1 | 11 | 0.44 |
| 27-Apr | 0.29 | <1 | 6 | <1 | 11 | 0.32 |
| 04-May | 0.06 | <1 | <2 | <1 | 10 | 0.25 |
| 11-May | 0.17 | <1 | 4 | <1 | 11 | 0.27 |
| 19-May | 0.22 | <1 | 6 | <1 | 13 | 0.31 |
| 27-May | 0.16 | <1 | <2 | <1 | 13 | 0.35 |
| 01-Jun | 0.10 | <1 | 4 | <1 | 14 | 0.58 |
| 07-Jun | 0.14 | <1 | 20 | <1 | 14 | 1.20 |
| 15-Jun | 0.03 | <1 | 14 | <1 | 14 | 0.48 |
| 18-Jun | 0.17 | <1 | 8 | <1 | 11 | 0.39 |
| 23-Jun | 0.06 | <1 | 16 | <1 | 14 | 0.28 |
| 29-Jun | 0.09 | <1 | 16 | <1 | 15 | 0.41 |
| 07-Jul | 0.09 | <1 | 8 | <1 | 16 | 0.59 |
| 13-Jul | 0.09 | <1 | 18 | <1 | 15 | 0.31 |
| 20-Jul | 0.19 | <1 | <2 | <1 | 15 | 0.19 |
| 23-Jul | 0.09 | <1 | <2 | <1 | 16 | 0.27 |
| 28-Jul | 0.20 | <1 | 2 | <1 | 16 | 0.30 |
| 04-Aug | 0.09 | <1 | 46 | <1 | 17 | 0.25 |
| 10-Aug | <0.01 | <1 | 130 | <1 | 18 | 0.23 |
| 18-Aug | 0.12 | <1 | <2 | <1 | 14 | 0.23 |
| 25-Aug | 0.08 | <1 | 2 | <1 | 17 | 0.33 |
| 31-Aug | 0.08 | <1 | 2 | <1 | 17 | 0.25 |
| 10-Sep | <0.01 | <1 | 10 | <1 | 17 | 0.21 |
| 14-Sep | 0.13 | <1 | 2 | <1 | 13 | 0.21 |
| 20-Sep | 0.12 | <1 | 16 | <1 | 20 | 0.24 |
| 28-Sep | <0.01 | <1 | 44 | <1 | 18 | 0.23 |
| 04-Oct | <0.01 | <1 | 38 | <1 | 17 | 0.23 |
| 06-Oct | 0.05 | <1 | 24 | <1 | 17 | 0.23 |
| 13-Oct | <0.01 | <1 | 48 | <1 | 16 | 0.26 |
| 19-Oct | <0.01 | <1 | 54 | <1 | 15 | 0.27 |
| 22-Oct | 0.09 | <1 | <2 | <1 | 15 | 0.28 |
| 27-Oct | 0.06 | <1 | 10 | <1 | 14 | 0.30 |
| 29-Oct | 0.13 | <1 | 50 | <1 | 10 | 0.29 |
| 01-Nov | <0.01 | <1 | 18 | <1 | 13 | 0.33 |
| 03-Nov | 0.09 | <1 | 4 | <1 | 14 | 0.31 |
| 09-Nov | 0.18 | <1 | 22 | <1 | 9.8 | 0.25 |
| 17-Nov | 0.42 | <1 | <2 | <1 | 11 | 0.28 |
| 23-Nov | 0.35 | <1 | <2 | <1 | 8 | 0.33 |
| 24-Nov | 0.14 | <1 | <2 | <1 | 9.1 | 0.28 |
| 30-Nov | 0.25 | <1 | 2 | <1 | 9 | 0.25 |
| 03-Dec | 0.29 | <1 | 28 | <1 | 7.9 | 0.33 |
| 07-Dec | 0.07 | <1 | <2 | <1 | 8.4 | 0.95 |
| 08-Dec | 0.13 | <1 | LA | <1 | 7.7 | 0.28 |
| 14-Dec | 0.22 | <1 | 2 | <1 | 7.6 | 0.47 |
| 21-Dec | 0.26 | <1 | 80 | <1 | 7 | 0.30 |
| 30-Dec | <0.01 | <1 | NA | <1 | 7.8 | 0.27 |



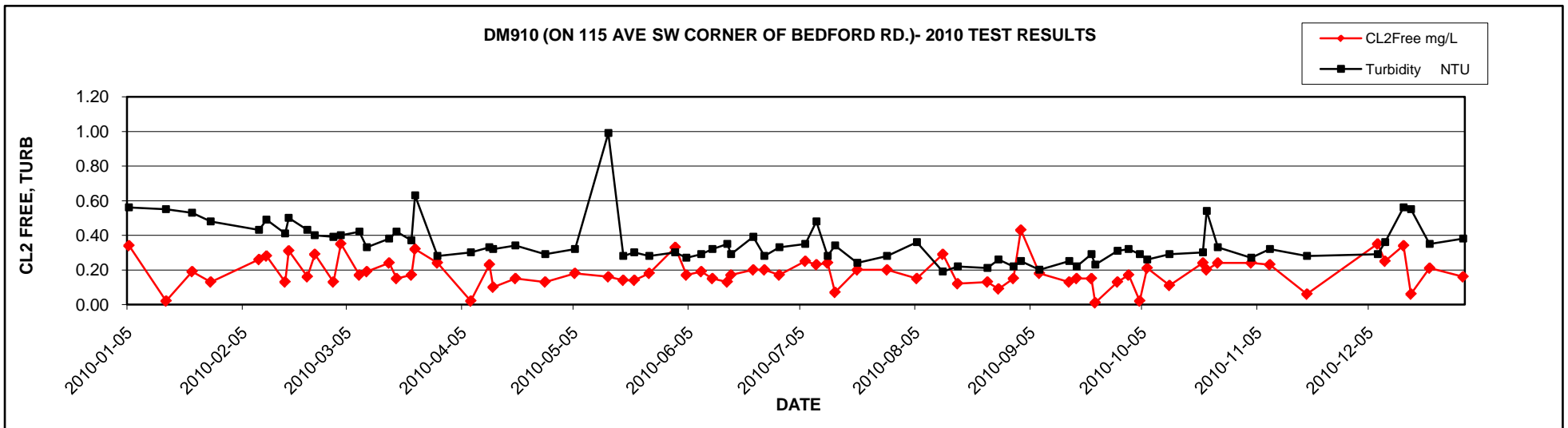
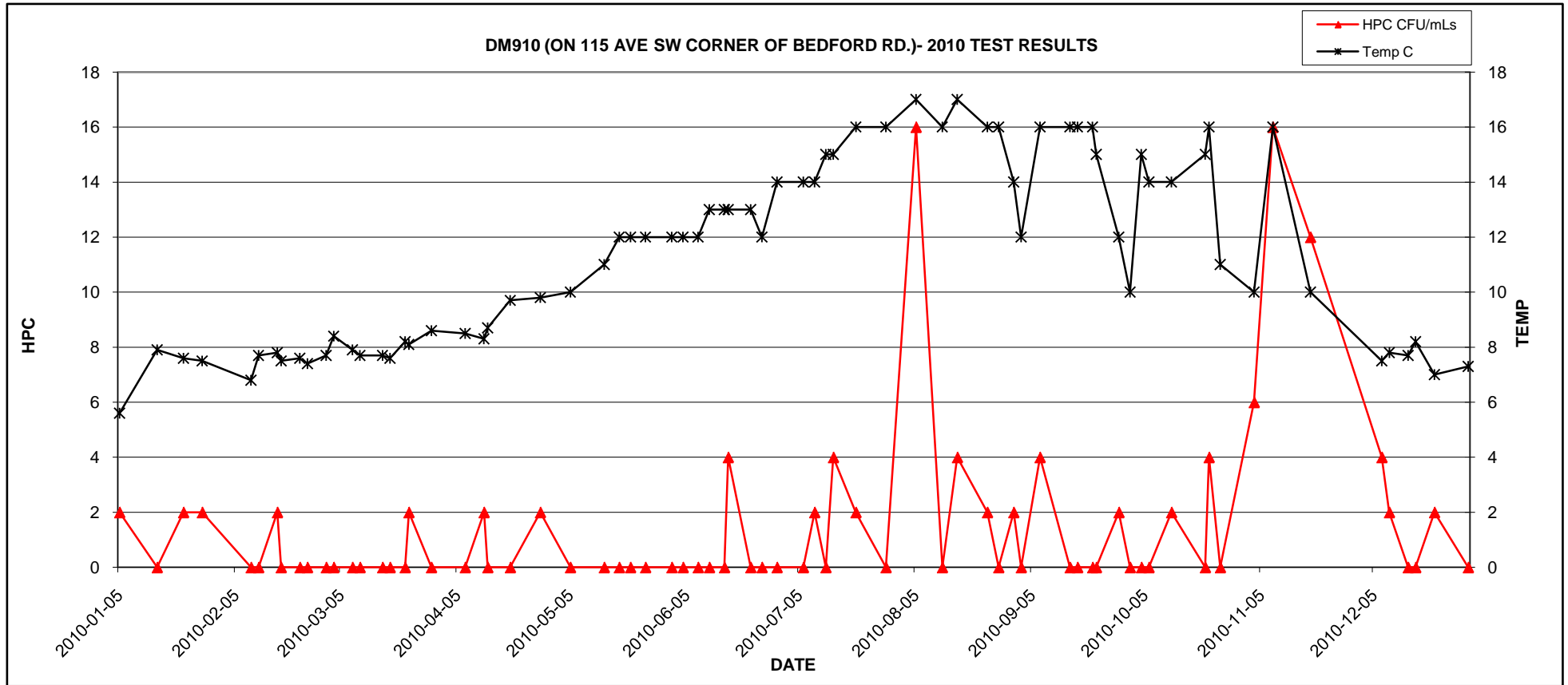
2010 GVRD Laboratory Report - DM909 (14669 WELLINGTON DR. E P/L BY HYDR)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.43 | <1 | <2 | <1 | 5.5 | 0.57 |
| 15-Jan | 0.59 | <1 | <2 | <1 | 7.9 | 0.72 |
| 22-Jan | 0.33 | <1 | <2 | <1 | 6.9 | 0.46 |
| 27-Jan | 0.50 | <1 | <2 | <1 | 7.3 | 0.46 |
| 09-Feb | 0.49 | <1 | <2 | <1 | 6.3 | 0.37 |
| 11-Feb | 0.50 | <1 | <2 | <1 | 7.6 | 0.40 |
| 16-Feb | 0.39 | <1 | <2 | <1 | 7.7 | 0.40 |
| 17-Feb | 0.61 | <1 | <2 | <1 | 6.9 | 0.49 |
| 22-Feb | 0.43 | <1 | <2 | <1 | 7.6 | 0.38 |
| 24-Feb | 0.78 | <1 | <2 | <1 | 7.9 | 0.44 |
| 01-Mar | 0.17 | <1 | <2 | <1 | 7.9 | 0.35 |
| 03-Mar | 0.30 | <1 | <2 | <1 | 8.5 | 0.31 |
| 08-Mar | 0.55 | <1 | <2 | <1 | 7.6 | 0.34 |
| 10-Mar | 0.48 | <1 | <2 | <1 | 7.6 | 0.35 |
| 16-Mar | 0.48 | <1 | <2 | <1 | 6.6 | 0.38 |
| 18-Mar | 0.37 | <1 | <2 | <1 | 7.5 | 0.53 |
| 22-Mar | 0.56 | <1 | <2 | <1 | 7.7 | 0.33 |
| 23-Mar | 0.29 | <1 | <2 | <1 | 8 | 0.39 |
| 29-Mar | 0.38 | <1 | <2 | <1 | 8.9 | 0.24 |
| 07-Apr | 0.49 | <1 | <2 | <1 | 8.4 | 0.37 |
| 12-Apr | 0.47 | <1 | <2 | <1 | 8.7 | 0.35 |
| 13-Apr | 0.31 | <1 | <2 | <1 | 8.7 | 0.30 |
| 19-Apr | 0.55 | <1 | <2 | <1 | 9.7 | 0.30 |
| 27-Apr | 0.37 | <1 | <2 | <1 | 9.9 | 0.31 |
| 05-May | 0.38 | <1 | <2 | <1 | 11 | 0.34 |
| 14-May | 0.58 | <1 | <2 | <1 | 10 | 0.38 |
| 18-May | 0.61 | <1 | <2 | <1 | 12 | 0.36 |
| 21-May | 0.64 | <1 | <2 | <1 | 11 | 0.28 |
| 25-May | 0.66 | <1 | <2 | <1 | 12 | 0.28 |
| 01-Jun | 0.47 | <1 | <2 | <1 | 12 | 0.24 |
| 04-Jun | 0.37 | <1 | <2 | <1 | 12 | 0.25 |
| 08-Jun | 0.49 | <1 | <2 | <1 | 12 | 0.26 |
| 11-Jun | 0.38 | <1 | <2 | <1 | 13 | 0.50 |
| 15-Jun | 0.53 | <1 | <2 | <1 | 12 | 0.32 |
| 16-Jun | 0.37 | <1 | <2 | <1 | 13 | 0.30 |
| 22-Jun | 0.53 | <1 | <2 | <1 | 13 | 0.26 |
| 25-Jun | 0.57 | <1 | <2 | <1 | 11 | 0.26 |
| 29-Jun | 0.63 | <1 | <2 | <1 | 13 | 0.29 |
| 06-Jul | 0.51 | <1 | 2 | <1 | 14 | 0.32 |
| 09-Jul | 0.44 | <1 | <2 | <1 | 14 | 0.39 |
| 12-Jul | 0.40 | <1 | <2 | <1 | 15 | 0.22 |
| 14-Jul | 0.70 | <1 | <2 | <1 | 15 | 0.26 |
| 20-Jul | 0.51 | <1 | <2 | <1 | 15 | 0.23 |
| 28-Jul | 0.41 | <1 | <2 | <1 | 15 | 0.25 |
| 05-Aug | 0.43 | <1 | 8 | <1 | 15 | 0.29 |
| 12-Aug | 0.51 | <1 | <2 | <1 | 15 | 0.18 |
| 16-Aug | 0.61 | <1 | <2 | <1 | 15 | 0.19 |
| 24-Aug | 0.61 | <1 | <2 | <1 | 15 | 0.17 |
| 27-Aug | 0.52 | <1 | <2 | <1 | 15 | 0.22 |
| 31-Aug | 0.57 | <1 | <2 | <1 | 13 | 0.22 |
| 02-Sep | 0.57 | <1 | <2 | <1 | 14 | 0.24 |
| 07-Sep | 0.46 | <1 | <2 | <1 | 11 | 0.18 |
| 15-Sep | 0.43 | <1 | <2 | <1 | 16 | 0.21 |
| 17-Sep | 0.31 | <1 | 4 | <1 | 17 | 0.20 |
| 21-Sep | 0.37 | <1 | <2 | <1 | 16 | 0.20 |
| 22-Sep | 0.34 | <1 | <2 | <1 | 17 | 0.23 |
| 28-Sep | 0.23 | <1 | 2 | <1 | 13 | 0.24 |
| 01-Oct | 0.28 | <1 | <2 | <1 | 12 | 0.27 |
| 04-Oct | 0.28 | <1 | <2 | <1 | 15 | 0.22 |
| 06-Oct | 0.45 | <1 | <2 | <1 | 14 | 0.33 |
| 12-Oct | 0.68 | <1 | <2 | <1 | 14 | 0.38 |
| 21-Oct | 0.55 | <1 | <2 | <1 | 14 | 0.34 |
| 22-Oct | 0.57 | <1 | <2 | <1 | 18 | 0.36 |
| 25-Oct | 0.71 | <1 | <2 | <1 | 11 | 0.27 |
| 03-Nov | 0.74 | <1 | <2 | <1 | 9.6 | 0.26 |
| 08-Nov | 1.10 | <1 | 2 | <1 | 16 | 0.27 |
| 18-Nov | 0.59 | <1 | <2 | <1 | 11 | 0.28 |
| 23-Nov | 0.44 | <1 | <2 | <1 | 10 | 0.29 |
| 01-Dec | 0.57 | <1 | 2 | <1 | 8.3 | 0.28 |
| 02-Dec | 0.77 | <1 | <2 | <1 | 8 | 0.34 |
| 07-Dec | 0.53 | <1 | <2 | <1 | 8 | 0.30 |
| 09-Dec | 0.56 | <1 | <2 | <1 | 7.9 | 0.42 |
| 14-Dec | 0.72 | <1 | <2 | <1 | 7.9 | 0.58 |
| 16-Dec | 0.45 | <1 | 2 | <1 | 10 | 0.46 |
| 21-Dec | 0.62 | <1 | <2 | <1 | 7.5 | 0.34 |
| 30-Dec | 0.62 | <1 | NA | <1 | 7.3 | 0.28 |



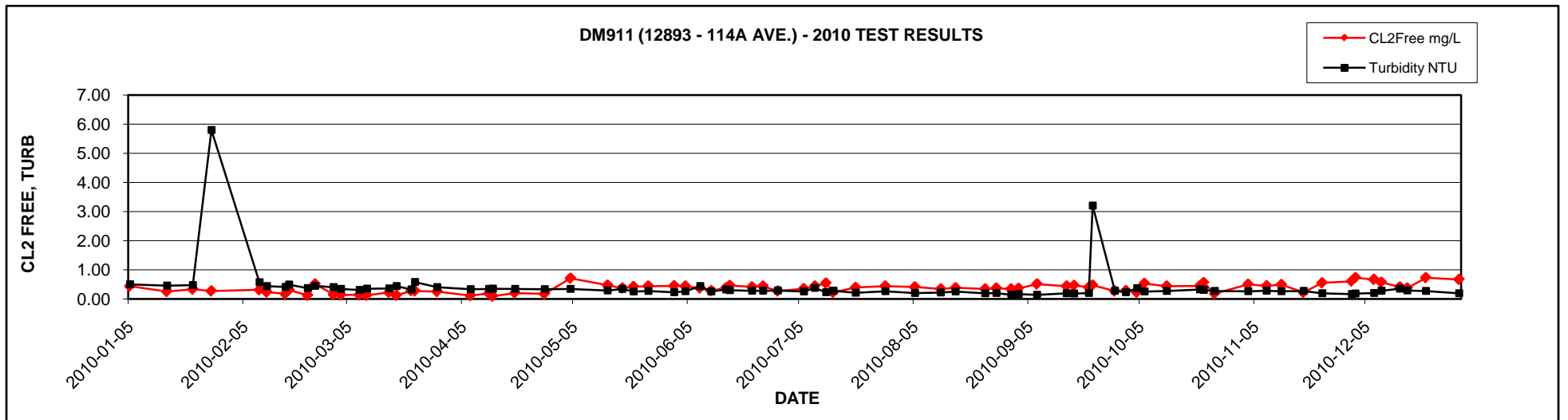
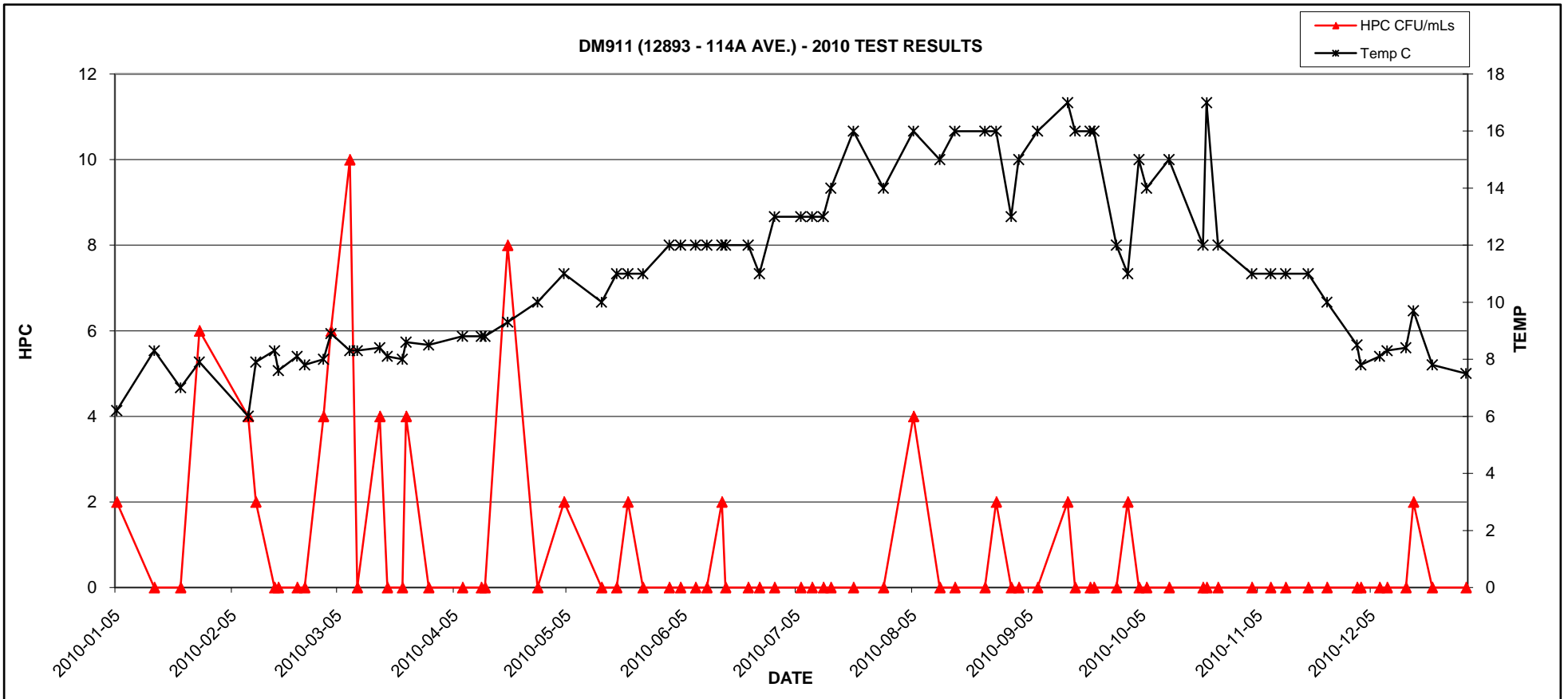
2010 GVRD Laboratory Report - DM910 (ON 115 AVE SW CORNER OF BEDFORD RD.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.34 | <1 | 2 | <1 | 5.6 | 0.56 |
| 15-Jan | 0.02 | <1 | <2 | <1 | 7.9 | 0.55 |
| 22-Jan | 0.19 | <1 | 2 | <1 | 7.6 | 0.53 |
| 27-Jan | 0.13 | <1 | 2 | <1 | 7.5 | 0.48 |
| 09-Feb | 0.26 | <1 | <2 | <1 | 6.8 | 0.43 |
| 11-Feb | 0.28 | <1 | <2 | <1 | 7.7 | 0.49 |
| 16-Feb | 0.13 | <1 | 2 | <1 | 7.8 | 0.41 |
| 17-Feb | 0.31 | <1 | <2 | <1 | 7.5 | 0.50 |
| 22-Feb | 0.16 | <1 | <2 | <1 | 7.6 | 0.43 |
| 24-Feb | 0.29 | <1 | <2 | <1 | 7.4 | 0.40 |
| 01-Mar | 0.13 | <1 | <2 | <1 | 7.7 | 0.39 |
| 03-Mar | 0.35 | <1 | <2 | <1 | 8.4 | 0.40 |
| 08-Mar | 0.17 | <1 | <2 | <1 | 7.9 | 0.42 |
| 10-Mar | 0.19 | <1 | <2 | <1 | 7.7 | 0.33 |
| 16-Mar | 0.24 | <1 | <2 | <1 | 7.7 | 0.38 |
| 18-Mar | 0.15 | <1 | <2 | <1 | 7.6 | 0.42 |
| 22-Mar | 0.17 | <1 | <2 | <1 | 8.2 | 0.37 |
| 23-Mar | 0.32 | <1 | 2 | <1 | 8.1 | 0.63 |
| 29-Mar | 0.24 | <1 | <2 | <1 | 8.6 | 0.28 |
| 07-Apr | 0.02 | <1 | <2 | <1 | 8.5 | 0.30 |
| 12-Apr | 0.23 | <1 | 2 | <1 | 8.3 | 0.33 |
| 13-Apr | 0.10 | <1 | <2 | <1 | 8.7 | 0.32 |
| 19-Apr | 0.15 | <1 | <2 | <1 | 9.7 | 0.34 |
| 27-Apr | 0.13 | <1 | 2 | <1 | 9.8 | 0.29 |
| 05-May | 0.18 | <1 | <2 | <1 | 10 | 0.32 |
| 14-May | 0.16 | <1 | <2 | <1 | 11 | 0.99 |
| 18-May | 0.14 | <1 | <2 | <1 | 12 | 0.28 |
| 21-May | 0.14 | <1 | <2 | <1 | 12 | 0.30 |
| 25-May | 0.18 | <1 | <2 | <1 | 12 | 0.28 |
| 01-Jun | 0.33 | <1 | <2 | <1 | 12 | 0.30 |
| 04-Jun | 0.17 | <1 | <2 | <1 | 12 | 0.27 |
| 08-Jun | 0.19 | <1 | <2 | <1 | 12 | 0.29 |
| 11-Jun | 0.15 | <1 | <2 | <1 | 13 | 0.32 |
| 15-Jun | 0.13 | <1 | <2 | <1 | 13 | 0.35 |
| 16-Jun | 0.17 | <1 | 4 | <1 | 13 | 0.29 |
| 22-Jun | 0.20 | <1 | <2 | <1 | 13 | 0.39 |
| 25-Jun | 0.20 | <1 | <2 | <1 | 12 | 0.28 |
| 29-Jun | 0.17 | <1 | <2 | <1 | 14 | 0.33 |
| 06-Jul | 0.25 | <1 | <2 | <1 | 14 | 0.35 |
| 09-Jul | 0.23 | <1 | 2 | <1 | 14 | 0.48 |
| 12-Jul | 0.24 | <1 | <2 | <1 | 15 | 0.28 |
| 14-Jul | 0.07 | <1 | 4 | <1 | 15 | 0.34 |
| 20-Jul | 0.20 | <1 | 2 | <1 | 16 | 0.24 |
| 28-Jul | 0.20 | <1 | <2 | <1 | 16 | 0.28 |
| 05-Aug | 0.15 | <1 | 16 | <1 | 17 | 0.36 |
| 12-Aug | 0.29 | <1 | <2 | <1 | 16 | 0.19 |
| 16-Aug | 0.12 | <1 | 4 | <1 | 17 | 0.22 |
| 24-Aug | 0.13 | <1 | 2 | <1 | 16 | 0.21 |
| 27-Aug | 0.09 | <1 | <2 | <1 | 16 | 0.26 |
| 31-Aug | 0.15 | <1 | 2 | <1 | 14 | 0.22 |
| 02-Sep | 0.43 | <1 | <2 | <1 | 12 | 0.25 |
| 07-Sep | 0.18 | <1 | 4 | <1 | 16 | 0.20 |
| 15-Sep | 0.13 | <1 | <2 | <1 | 16 | 0.25 |
| 17-Sep | 0.15 | <1 | <2 | <1 | 16 | 0.22 |
| 21-Sep | 0.15 | <1 | <2 | <1 | 16 | 0.29 |
| 22-Sep | 0.01 | <1 | <2 | <1 | 15 | 0.23 |
| 28-Sep | 0.13 | <1 | 2 | <1 | 12 | 0.31 |
| 01-Oct | 0.17 | <1 | <2 | <1 | 10 | 0.32 |
| 04-Oct | 0.02 | <1 | <2 | <1 | 15 | 0.29 |
| 06-Oct | 0.21 | <1 | <2 | <1 | 14 | 0.26 |
| 12-Oct | 0.11 | <1 | 2 | <1 | 14 | 0.29 |
| 21-Oct | 0.24 | <1 | <2 | <1 | 15 | 0.30 |
| 22-Oct | 0.20 | <1 | 4 | <1 | 16 | 0.54 |
| 25-Oct | 0.24 | <1 | <2 | <1 | 11 | 0.33 |
| 03-Nov | 0.24 | <1 | 6 | <1 | 10 | 0.27 |
| 08-Nov | 0.23 | <1 | 16 | <1 | 16 | 0.32 |
| 18-Nov | 0.06 | <1 | 12 | <1 | 10 | 0.28 |
| 07-Dec | 0.35 | <1 | 4 | <1 | 7.5 | 0.29 |
| 09-Dec | 0.25 | <1 | 2 | <1 | 7.8 | 0.36 |
| 14-Dec | 0.34 | <1 | <2 | <1 | 7.7 | 0.56 |
| 16-Dec | 0.06 | <1 | <2 | <1 | 8.2 | 0.55 |
| 21-Dec | 0.21 | <1 | 2 | <1 | 7 | 0.35 |
| 30-Dec | 0.16 | <1 | NA | <1 | 7.3 | 0.38 |



2010 GVRD Laboratory Report - DM911 (12893 - 114A AVE.)

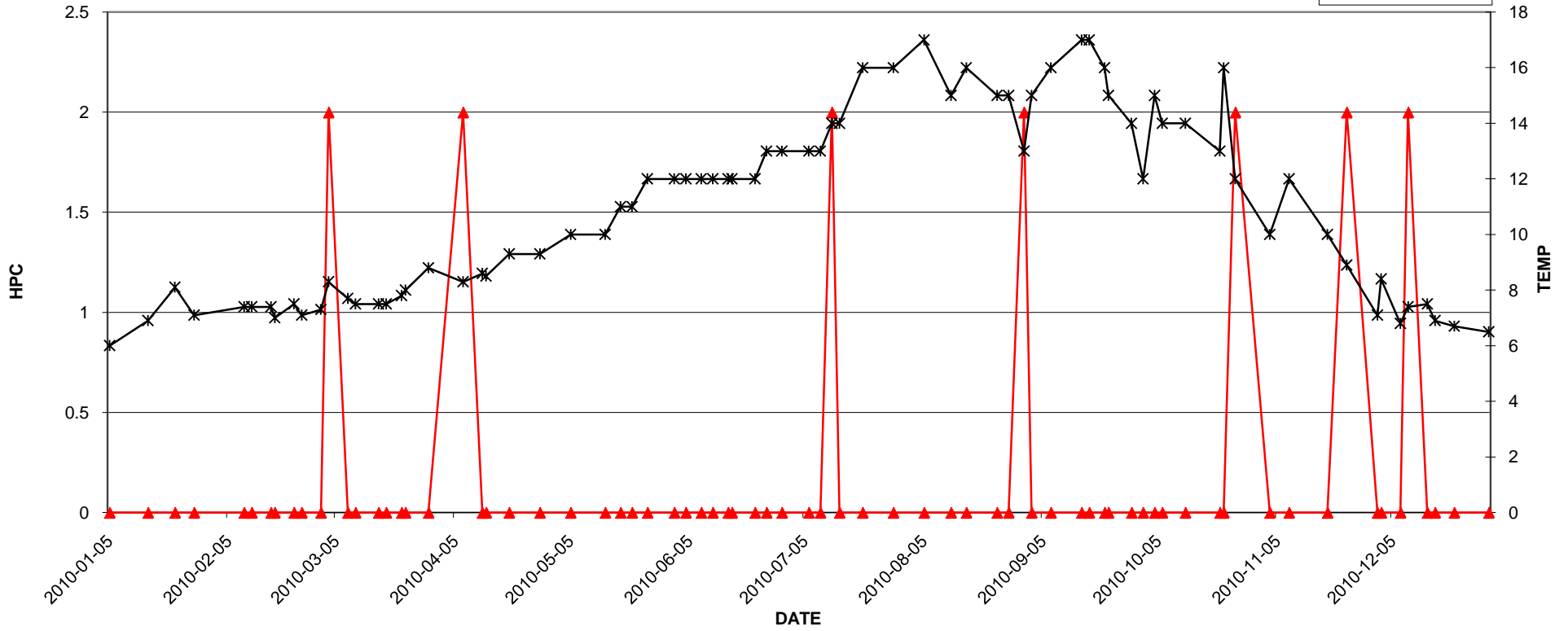
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.44 | <1 | 2 | <1 | 6.2 | 0.50 |
| 15-Jan | 0.25 | <1 | <2 | <1 | 8.3 | 0.46 |
| 22-Jan | 0.33 | <1 | <2 | <1 | 7 | 0.47 |
| 27-Jan | 0.27 | <1 | 6 | <1 | 7.9 | 5.80 |
| 09-Feb | 0.31 | <1 | 4 | <1 | 6 | 0.57 |
| 11-Feb | 0.23 | <1 | 2 | <1 | 7.9 | 0.44 |
| 16-Feb | 0.17 | <1 | <2 | <1 | 8.3 | 0.41 |
| 17-Feb | 0.30 | <1 | <2 | <1 | 7.6 | 0.49 |
| 22-Feb | 0.12 | <1 | <2 | <1 | 8.1 | 0.37 |
| 24-Feb | 0.51 | <1 | <2 | <1 | 7.8 | 0.45 |
| 01-Mar | 0.15 | <1 | 4 | <1 | 8 | 0.40 |
| 03-Mar | 0.13 | <1 | 6 | <1 | 8.9 | 0.34 |
| 08-Mar | 0.14 | <1 | 10 | <1 | 8.3 | 0.31 |
| 10-Mar | 0.12 | <1 | <2 | <1 | 8.3 | 0.35 |
| 16-Mar | 0.22 | <1 | 4 | <1 | 8.4 | 0.36 |
| 18-Mar | 0.12 | <1 | <2 | <1 | 8.1 | 0.44 |
| 22-Mar | 0.28 | <1 | <2 | <1 | 8 | 0.32 |
| 23-Mar | 0.27 | <1 | 4 | <1 | 8.6 | 0.58 |
| 29-Mar | 0.25 | <1 | <2 | <1 | 8.5 | 0.40 |
| 07-Apr | 0.11 | <1 | <2 | <1 | 8.8 | 0.33 |
| 12-Apr | 0.19 | <1 | <2 | <1 | 8.8 | 0.34 |
| 13-Apr | 0.09 | <1 | <2 | <1 | 8.8 | 0.35 |
| 19-Apr | 0.20 | <1 | 8 | <1 | 9.3 | 0.34 |
| 27-Apr | 0.17 | <1 | <2 | <1 | 10 | 0.33 |
| 04-May | 0.71 | <1 | 2 | <1 | 11 | 0.34 |
| 14-May | 0.47 | <1 | <2 | <1 | 10 | 0.29 |
| 18-May | 0.37 | <1 | <2 | <1 | 11 | 0.34 |
| 21-May | 0.42 | <1 | 2 | <1 | 11 | 0.25 |
| 25-May | 0.44 | <1 | <2 | <1 | 11 | 0.27 |
| 01-Jun | 0.45 | <1 | <2 | <1 | 12 | 0.23 |
| 04-Jun | 0.44 | <1 | <2 | <1 | 12 | 0.26 |
| 08-Jun | 0.37 | <1 | <2 | <1 | 12 | 0.44 |
| 11-Jun | 0.28 | <1 | <2 | <1 | 12 | 0.25 |
| 15-Jun | 0.38 | <1 | 2 | <1 | 12 | 0.32 |
| 16-Jun | 0.46 | <1 | <2 | <1 | 12 | 0.30 |
| 22-Jun | 0.41 | <1 | <2 | <1 | 12 | 0.28 |
| 25-Jun | 0.44 | <1 | <2 | <1 | 11 | 0.28 |
| 29-Jun | 0.27 | <1 | <2 | <1 | 13 | 0.29 |
| 06-Jul | 0.35 | <1 | <2 | <1 | 13 | 0.25 |
| 09-Jul | 0.44 | <1 | <2 | <1 | 13 | 0.38 |
| 12-Jul | 0.54 | <1 | <2 | <1 | 13 | 0.23 |
| 14-Jul | 0.22 | <1 | <2 | <1 | 14 | 0.28 |
| 20-Jul | 0.39 | <1 | <2 | <1 | 16 | 0.21 |
| 28-Jul | 0.44 | <1 | <2 | <1 | 14 | 0.26 |
| 05-Aug | 0.41 | <1 | 4 | <1 | 16 | 0.20 |
| 12-Aug | 0.34 | <1 | <2 | <1 | 15 | 0.22 |
| 16-Aug | 0.38 | <1 | <2 | <1 | 16 | 0.25 |
| 24-Aug | 0.34 | <1 | <2 | <1 | 16 | 0.19 |
| 27-Aug | 0.37 | <1 | 2 | <1 | 16 | 0.20 |
| 31-Aug | 0.34 | <1 | <2 | <1 | 13 | 0.14 |
| 02-Sep | 0.36 | <1 | <2 | <1 | 15 | 0.17 |
| 07-Sep | 0.51 | <1 | <2 | <1 | 16 | 0.14 |
| 15-Sep | 0.44 | <1 | 2 | <1 | 17 | 0.19 |
| 17-Sep | 0.46 | <1 | <2 | <1 | 16 | 0.18 |
| 21-Sep | 0.40 | <1 | <2 | <1 | 16 | 0.20 |
| 22-Sep | 0.47 | <1 | <2 | <1 | 16 | 3.20 |
| 28-Sep | 0.27 | <1 | <2 | <1 | 12 | 0.28 |
| 01-Oct | 0.28 | <1 | 2 | <1 | 11 | 0.23 |
| 04-Oct | 0.22 | <1 | <2 | <1 | 15 | 0.37 |
| 06-Oct | 0.53 | <1 | <2 | <1 | 14 | 0.25 |
| 12-Oct | 0.44 | <1 | <2 | <1 | 15 | 0.27 |
| 21-Oct | 0.45 | <1 | <2 | <1 | 12 | 0.32 |
| 22-Oct | 0.56 | <1 | <2 | <1 | 17 | 0.31 |
| 25-Oct | 0.18 | <1 | <2 | <1 | 12 | 0.27 |
| 03-Nov | 0.50 | <1 | <2 | <1 | 11 | 0.26 |
| 08-Nov | 0.45 | <1 | <2 | <1 | 11 | 0.28 |
| 12-Nov | 0.49 | <1 | <2 | <1 | 11 | 0.26 |
| 18-Nov | 0.22 | <1 | <2 | <1 | 11 | 0.27 |
| 23-Nov | 0.55 | <1 | <2 | <1 | 10 | 0.19 |
| 01-Dec | 0.61 | <1 | <2 | <1 | 8.5 | 0.17 |
| 02-Dec | 0.73 | <1 | <2 | <1 | 7.8 | 0.18 |
| 07-Dec | 0.67 | <1 | <2 | <1 | 8.1 | 0.20 |
| 09-Dec | 0.57 | <1 | <2 | <1 | 8.3 | 0.28 |
| 14-Dec | 0.41 | <1 | <2 | <1 | 8.4 | 0.35 |
| 16-Dec | 0.37 | <1 | 2 | <1 | 9.7 | 0.29 |
| 21-Dec | 0.73 | <1 | <2 | <1 | 7.8 | 0.27 |
| 30-Dec | 0.67 | <1 | NA | <1 | 7.5 | 0.19 |



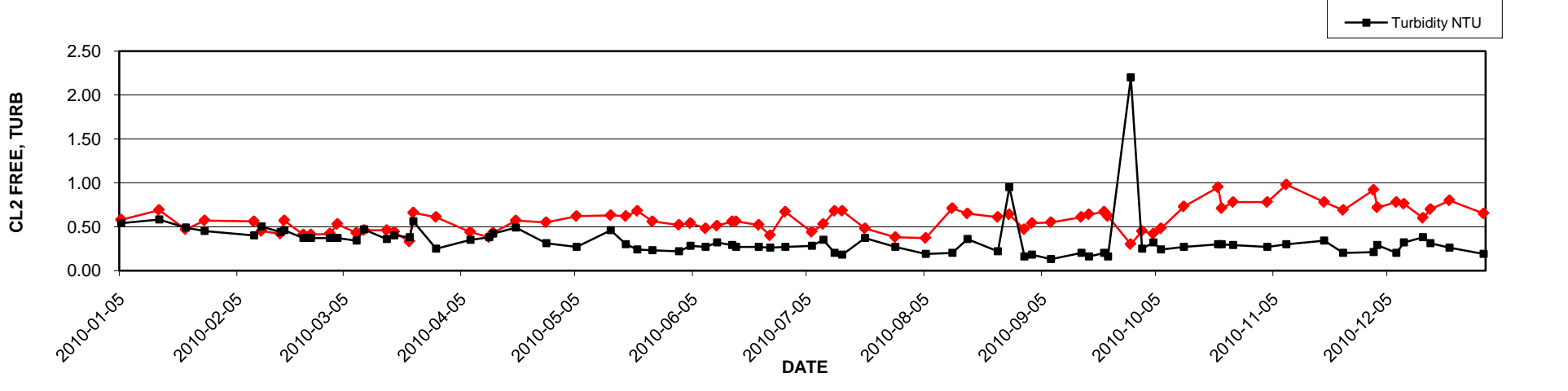
2010 GVRD Laboratory Report - DM912 (TIMBERLAND RD. 1 BLK S. of PINE RD.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.58 | <1 | <2 | <1 | 6 | 0.54 |
| 15-Jan | 0.69 | <1 | <2 | <1 | 6.9 | 0.58 |
| 22-Jan | 0.47 | <1 | LA | <1 | 8.1 | 0.49 |
| 27-Jan | 0.57 | <1 | <2 | <1 | 7.1 | 0.45 |
| 09-Feb | 0.56 | <1 | <2 | <1 | 7.4 | 0.40 |
| 11-Feb | 0.45 | <1 | <2 | <1 | 7.4 | 0.50 |
| 16-Feb | 0.42 | <1 | <2 | <1 | 7.4 | 0.44 |
| 17-Feb | 0.57 | <1 | <2 | <1 | 7 | 0.46 |
| 22-Feb | 0.41 | <1 | <2 | <1 | 7.5 | 0.37 |
| 24-Feb | 0.41 | <1 | <2 | <1 | 7.1 | 0.37 |
| 01-Mar | 0.42 | <1 | <2 | <1 | 7.3 | 0.37 |
| 03-Mar | 0.53 | <1 | 2 | <1 | 8.3 | 0.37 |
| 08-Mar | 0.43 | <1 | <2 | <1 | 7.7 | 0.34 |
| 10-Mar | 0.46 | <1 | <2 | <1 | 7.5 | 0.47 |
| 16-Mar | 0.46 | <1 | <2 | <1 | 7.5 | 0.36 |
| 18-Mar | 0.44 | <1 | <2 | <1 | 7.5 | 0.40 |
| 22-Mar | 0.33 | <1 | <2 | <1 | 7.8 | 0.38 |
| 23-Mar | 0.66 | <1 | <2 | <1 | 8 | 0.56 |
| 29-Mar | 0.61 | <1 | <2 | <1 | 8.8 | 0.25 |
| 07-Apr | 0.44 | <1 | 2 | <1 | 8.3 | 0.35 |
| 12-Apr | 0.38 | <1 | <2 | <1 | 8.6 | 0.38 |
| 13-Apr | 0.43 | <1 | <2 | <1 | 8.5 | 0.42 |
| 19-Apr | 0.57 | <1 | <2 | <1 | 9.3 | 0.49 |
| 27-Apr | 0.55 | <1 | <2 | <1 | 9.3 | 0.31 |
| 05-May | 0.62 | <1 | <2 | <1 | 10 | 0.27 |
| 14-May | 0.63 | <1 | <2 | <1 | 10 | 0.46 |
| 18-May | 0.62 | <1 | <2 | <1 | 11 | 0.30 |
| 21-May | 0.68 | <1 | <2 | <1 | 11 | 0.24 |
| 25-May | 0.56 | <1 | <2 | <1 | 12 | 0.23 |
| 01-Jun | 0.52 | <1 | <2 | <1 | 12 | 0.22 |
| 04-Jun | 0.54 | <1 | <2 | <1 | 12 | 0.28 |
| 08-Jun | 0.48 | <1 | <2 | <1 | 12 | 0.27 |
| 11-Jun | 0.51 | <1 | <2 | <1 | 12 | 0.32 |
| 15-Jun | 0.56 | <1 | <2 | <1 | 12 | 0.29 |
| 16-Jun | 0.56 | <1 | <2 | <1 | 12 | 0.27 |
| 22-Jun | 0.52 | <1 | <2 | <1 | 12 | 0.27 |
| 25-Jun | 0.40 | <1 | <2 | <1 | 13 | 0.26 |
| 29-Jun | 0.67 | <1 | <2 | <1 | 13 | 0.27 |
| 06-Jul | 0.44 | <1 | <2 | <1 | 13 | 0.28 |
| 09-Jul | 0.53 | <1 | <2 | <1 | 13 | 0.35 |
| 12-Jul | 0.68 | <1 | 2 | <1 | 14 | 0.20 |
| 14-Jul | 0.68 | <1 | <2 | <1 | 14 | 0.18 |
| 20-Jul | 0.48 | <1 | <2 | <1 | 16 | 0.37 |
| 28-Jul | 0.38 | <1 | <2 | <1 | 16 | 0.27 |
| 05-Aug | 0.37 | <1 | <2 | <1 | 17 | 0.19 |
| 12-Aug | 0.71 | <1 | <2 | <1 | 15 | 0.20 |
| 16-Aug | 0.65 | <1 | <2 | <1 | 16 | 0.36 |
| 24-Aug | 0.61 | <1 | <2 | <1 | 15 | 0.22 |
| 27-Aug | 0.64 | <1 | <2 | <1 | 15 | 0.95 |
| 31-Aug | 0.47 | <1 | 2 | <1 | 13 | 0.16 |
| 02-Sep | 0.54 | <1 | <2 | <1 | 15 | 0.18 |
| 07-Sep | 0.55 | <1 | <2 | <1 | 16 | 0.13 |
| 15-Sep | 0.61 | <1 | <2 | <1 | 17 | 0.20 |
| 17-Sep | 0.64 | <1 | <2 | <1 | 17 | 0.16 |
| 21-Sep | 0.67 | <1 | <2 | <1 | 16 | 0.20 |
| 22-Sep | 0.62 | <1 | <2 | <1 | 15 | 0.16 |
| 28-Sep | 0.30 | <1 | <2 | <1 | 14 | 2.20 |
| 01-Oct | 0.45 | <1 | <2 | <1 | 12 | 0.25 |
| 04-Oct | 0.42 | <1 | <2 | <1 | 15 | 0.32 |
| 06-Oct | 0.48 | <1 | <2 | <1 | 14 | 0.24 |
| 12-Oct | 0.73 | <1 | <2 | <1 | 14 | 0.27 |
| 21-Oct | 0.95 | <1 | <2 | <1 | 13 | 0.30 |
| 22-Oct | 0.71 | <1 | <2 | <1 | 16 | 0.30 |
| 25-Oct | 0.78 | <1 | 2 | <1 | 12 | 0.29 |
| 03-Nov | 0.78 | <1 | <2 | <1 | 10 | 0.27 |
| 08-Nov | 0.98 | <1 | <2 | <1 | 12 | 0.30 |
| 18-Nov | 0.78 | <1 | <2 | <1 | 10 | 0.34 |
| 23-Nov | 0.69 | <1 | 2 | <1 | 8.9 | 0.20 |
| 01-Dec | 0.92 | <1 | <2 | <1 | 7.1 | 0.21 |
| 02-Dec | 0.72 | <1 | <2 | <1 | 8.4 | 0.29 |
| 07-Dec | 0.78 | <1 | <2 | <1 | 6.8 | 0.20 |
| 09-Dec | 0.76 | <1 | 2 | <1 | 7.4 | 0.32 |
| 14-Dec | 0.60 | <1 | <2 | <1 | 7.5 | 0.38 |
| 16-Dec | 0.70 | <1 | <2 | <1 | 6.9 | 0.31 |
| 21-Dec | 0.80 | <1 | <2 | <1 | 6.7 | 0.26 |
| 30-Dec | 0.65 | <1 | NA | <1 | 6.5 | 0.19 |

DM912 (TIMBERLAND RD. 1 BLK S. of PINE RD.) - 2010 TEST RESULTS

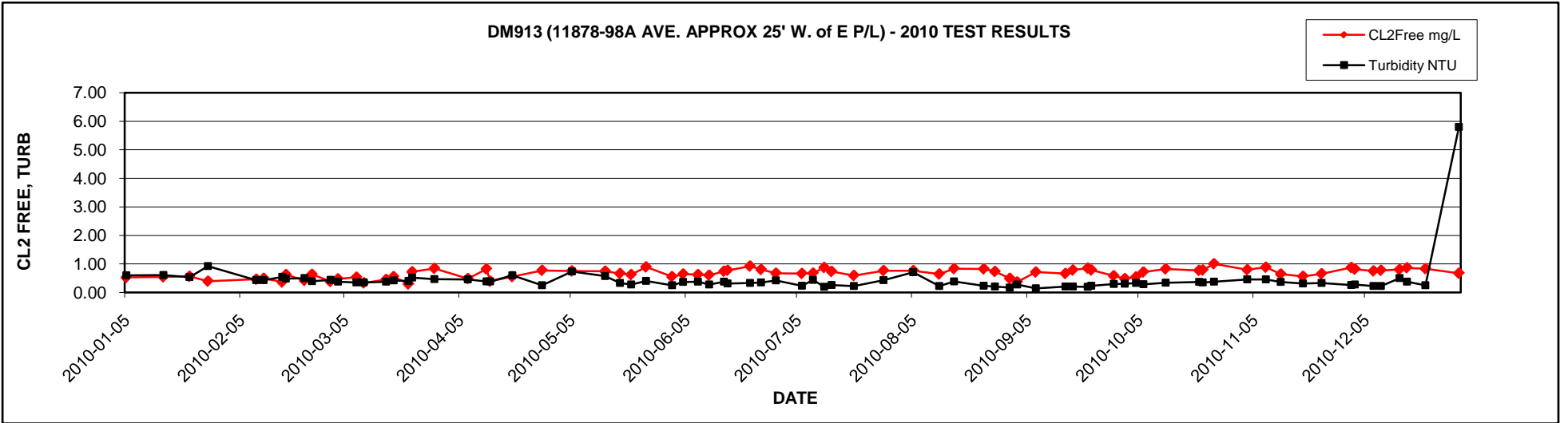
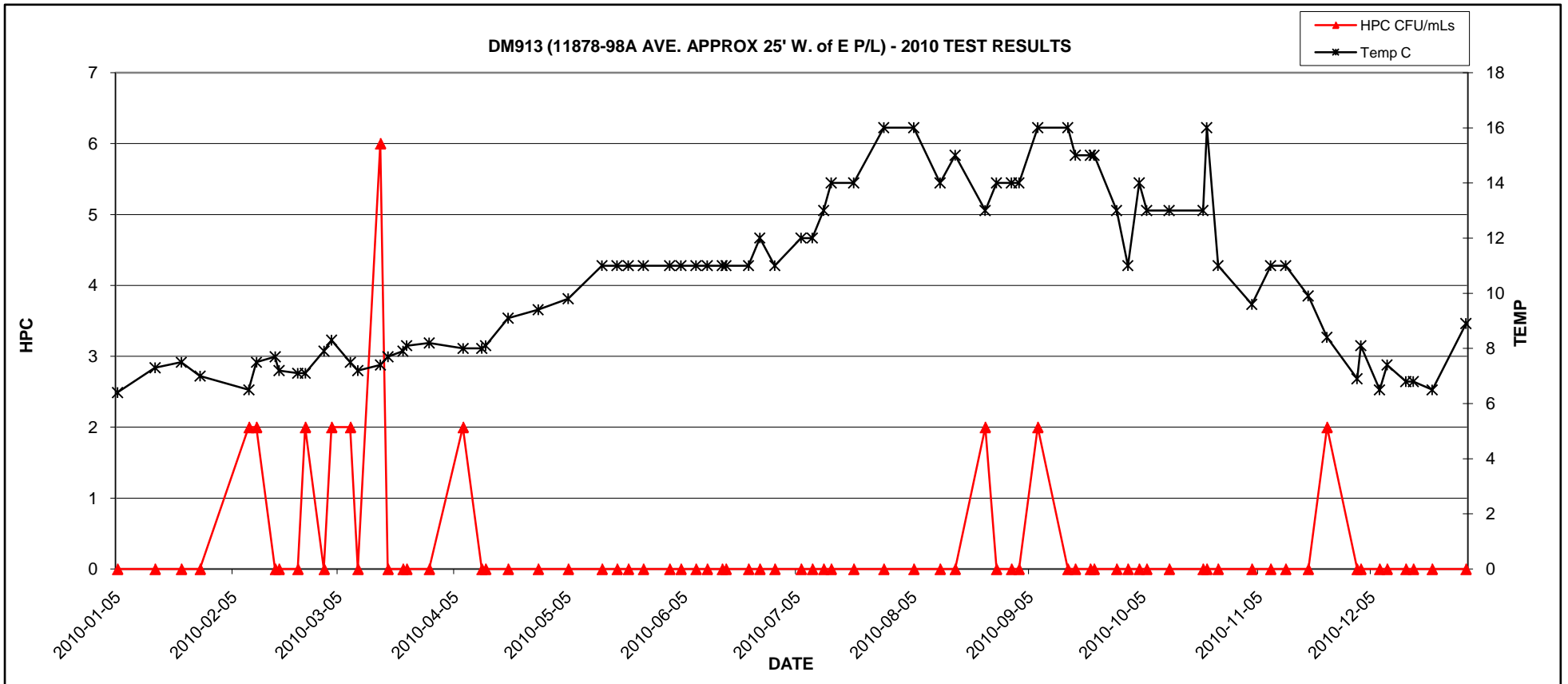


DM912 (TIMBERLAND RD. 1 BLK S. of PINE RD.) - 2010 TEST RESULTS



2010 GVRD Laboratory Report - DM913 (11878-98A AVE. APPROX 25' W. of E P/L)

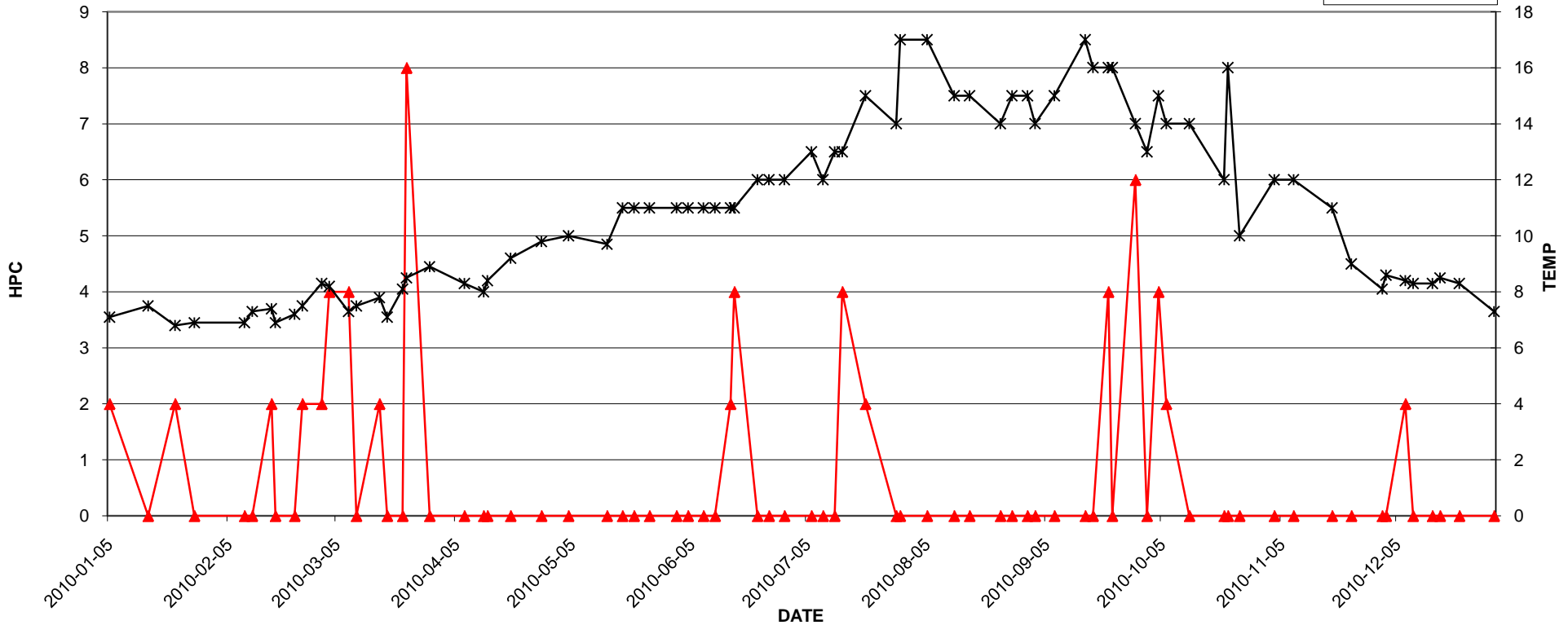
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.52 | <1 | <2 | <1 | 6.4 | 0.60 |
| 15-Jan | 0.54 | <1 | <2 | <1 | 7.3 | 0.61 |
| 22-Jan | 0.56 | <1 | <2 | <1 | 7.5 | 0.53 |
| 27-Jan | 0.39 | <1 | <2 | <1 | 7 | 0.92 |
| 09-Feb | 0.46 | <1 | 2 | <1 | 6.5 | 0.43 |
| 11-Feb | 0.49 | <1 | 2 | <1 | 7.5 | 0.43 |
| 16-Feb | 0.36 | <1 | <2 | <1 | 7.7 | 0.54 |
| 17-Feb | 0.62 | <1 | <2 | <1 | 7.2 | 0.48 |
| 22-Feb | 0.42 | <1 | <2 | <1 | 7.1 | 0.50 |
| 24-Feb | 0.63 | <1 | 2 | <1 | 7.1 | 0.39 |
| 01-Mar | 0.38 | <1 | <2 | <1 | 7.9 | 0.44 |
| 03-Mar | 0.47 | <1 | 2 | <1 | 8.3 | 0.37 |
| 08-Mar | 0.53 | <1 | 2 | <1 | 7.5 | 0.35 |
| 10-Mar | 0.33 | <1 | <2 | <1 | 7.2 | 0.35 |
| 16-Mar | 0.45 | <1 | 6 | <1 | 7.4 | 0.37 |
| 18-Mar | 0.55 | <1 | <2 | <1 | 7.7 | 0.42 |
| 22-Mar | 0.29 | <1 | <2 | <1 | 7.9 | 0.40 |
| 23-Mar | 0.72 | <1 | <2 | <1 | 8.1 | 0.52 |
| 29-Mar | 0.84 | <1 | <2 | <1 | 8.2 | 0.46 |
| 07-Apr | 0.48 | <1 | 2 | <1 | 8 | 0.45 |
| 12-Apr | 0.82 | <1 | <2 | <1 | 8 | 0.38 |
| 13-Apr | 0.39 | <1 | <2 | <1 | 8.1 | 0.38 |
| 19-Apr | 0.55 | <1 | <2 | <1 | 9.1 | 0.60 |
| 27-Apr | 0.77 | <1 | <2 | <1 | 9.4 | 0.25 |
| 05-May | 0.75 | <1 | <2 | <1 | 9.8 | 0.73 |
| 14-May | 0.74 | <1 | <2 | <1 | 11 | 0.57 |
| 18-May | 0.66 | <1 | <2 | <1 | 11 | 0.33 |
| 21-May | 0.62 | <1 | <2 | <1 | 11 | 0.27 |
| 25-May | 0.89 | <1 | <2 | <1 | 11 | 0.40 |
| 01-Jun | 0.55 | <1 | <2 | <1 | 11 | 0.25 |
| 04-Jun | 0.64 | <1 | <2 | <1 | 11 | 0.36 |
| 08-Jun | 0.62 | <1 | <2 | <1 | 11 | 0.37 |
| 11-Jun | 0.60 | <1 | <2 | <1 | 11 | 0.27 |
| 15-Jun | 0.74 | <1 | <2 | <1 | 11 | 0.37 |
| 16-Jun | 0.77 | <1 | <2 | <1 | 11 | 0.31 |
| 22-Jun | 0.92 | <1 | <2 | <1 | 11 | 0.33 |
| 25-Jun | 0.80 | <1 | <2 | <1 | 12 | 0.35 |
| 29-Jun | 0.67 | <1 | <2 | <1 | 11 | 0.42 |
| 06-Jul | 0.66 | <1 | <2 | <1 | 12 | 0.23 |
| 09-Jul | 0.67 | <1 | <2 | <1 | 12 | 0.44 |
| 12-Jul | 0.87 | <1 | <2 | <1 | 13 | 0.19 |
| 14-Jul | 0.73 | <1 | <2 | <1 | 14 | 0.26 |
| 20-Jul | 0.59 | <1 | <2 | <1 | 14 | 0.22 |
| 28-Jul | 0.76 | <1 | <2 | <1 | 16 | 0.43 |
| 05-Aug | 0.76 | <1 | <2 | <1 | 16 | 0.70 |
| 12-Aug | 0.64 | <1 | <2 | <1 | 14 | 0.22 |
| 16-Aug | 0.83 | <1 | <2 | <1 | 15 | 0.38 |
| 24-Aug | 0.82 | <1 | 2 | <1 | 13 | 0.23 |
| 27-Aug | 0.73 | <1 | <2 | <1 | 14 | 0.20 |
| 31-Aug | 0.49 | <1 | <2 | <1 | 14 | 0.17 |
| 02-Sep | 0.36 | <1 | <2 | <1 | 14 | 0.27 |
| 07-Sep | 0.71 | <1 | 2 | <1 | 16 | 0.14 |
| 15-Sep | 0.66 | <1 | <2 | <1 | 16 | 0.20 |
| 17-Sep | 0.78 | <1 | <2 | <1 | 15 | 0.20 |
| 21-Sep | 0.85 | <1 | <2 | <1 | 15 | 0.19 |
| 22-Sep | 0.78 | <1 | <2 | <1 | 15 | 0.23 |
| 28-Sep | 0.58 | <1 | <2 | <1 | 13 | 0.29 |
| 01-Oct | 0.48 | <1 | <2 | <1 | 11 | 0.30 |
| 04-Oct | 0.54 | <1 | <2 | <1 | 14 | 0.33 |
| 06-Oct | 0.71 | <1 | <2 | <1 | 13 | 0.28 |
| 12-Oct | 0.82 | <1 | <2 | <1 | 13 | 0.34 |
| 21-Oct | 0.77 | <1 | <2 | <1 | 13 | 0.36 |
| 22-Oct | 0.78 | <1 | <2 | <1 | 16 | 0.35 |
| 25-Oct | 1.00 | <1 | <2 | <1 | 11 | 0.37 |
| 03-Nov | 0.79 | <1 | <2 | <1 | 9.6 | 0.45 |
| 08-Nov | 0.88 | <1 | <2 | <1 | 11 | 0.45 |
| 12-Nov | 0.64 | <1 | <2 | <1 | 11 | 0.36 |
| 18-Nov | 0.56 | <1 | <2 | <1 | 9.9 | 0.31 |
| 23-Nov | 0.65 | <1 | 2 | <1 | 8.4 | 0.33 |
| 01-Dec | 0.87 | <1 | <2 | <1 | 6.9 | 0.26 |
| 02-Dec | 0.81 | <1 | <2 | <1 | 8.1 | 0.27 |
| 07-Dec | 0.75 | <1 | <2 | <1 | 6.5 | 0.22 |
| 09-Dec | 0.77 | <1 | <2 | <1 | 7.4 | 0.22 |
| 14-Dec | 0.80 | <1 | <2 | <1 | 6.8 | 0.50 |
| 16-Dec | 0.86 | <1 | <2 | <1 | 6.8 | 0.37 |
| 21-Dec | 0.83 | <1 | <2 | <1 | 6.5 | 0.25 |
| 30-Dec | 0.67 | <1 | NA | <1 | 8.9 | 5.80 |



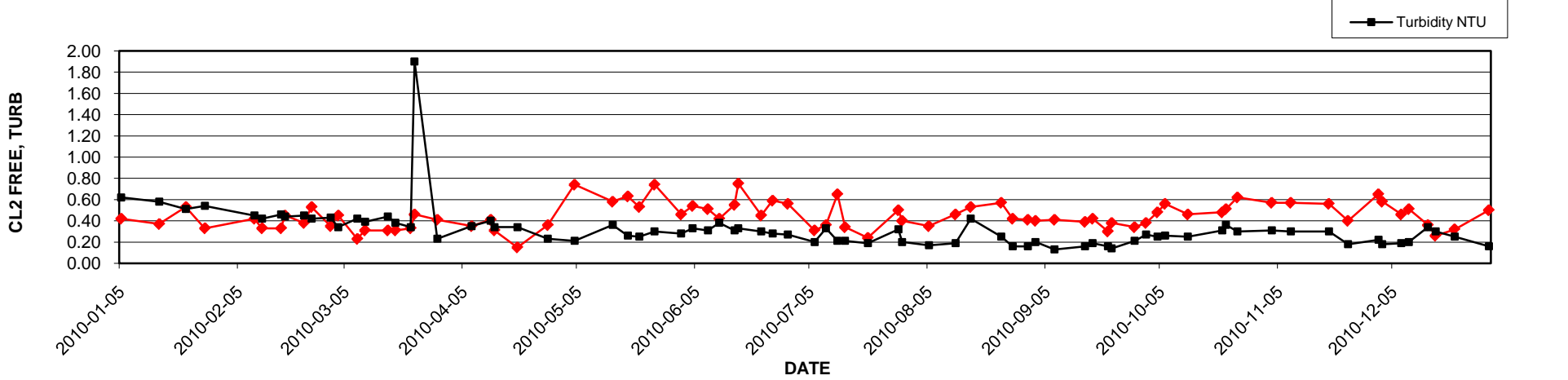
2010 GVRD Laboratory Report - DM914 (SW CORNER on 105 AVE AT 132 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.42 | <1 | 2 | <1 | 7.1 | 0.62 |
| 15-Jan | 0.37 | <1 | <2 | <1 | 7.5 | 0.58 |
| 22-Jan | 0.53 | <1 | 2 | <1 | 6.8 | 0.51 |
| 27-Jan | 0.33 | <1 | <2 | <1 | 6.9 | 0.54 |
| 09-Feb | 0.42 | <1 | <2 | <1 | 6.9 | 0.45 |
| 11-Feb | 0.33 | <1 | <2 | <1 | 7.3 | 0.42 |
| 16-Feb | 0.33 | <1 | 2 | <1 | 7.4 | 0.46 |
| 17-Feb | 0.45 | <1 | <2 | <1 | 6.9 | 0.44 |
| 22-Feb | 0.38 | <1 | <2 | <1 | 7.2 | 0.45 |
| 24-Feb | 0.53 | <1 | 2 | <1 | 7.5 | 0.42 |
| 01-Mar | 0.35 | <1 | 2 | <1 | 8.3 | 0.43 |
| 03-Mar | 0.45 | <1 | 4 | <1 | 8.2 | 0.34 |
| 08-Mar | 0.23 | <1 | 4 | <1 | 7.3 | 0.42 |
| 10-Mar | 0.31 | <1 | <2 | <1 | 7.5 | 0.39 |
| 16-Mar | 0.31 | <1 | 2 | <1 | 7.8 | 0.44 |
| 18-Mar | 0.31 | <1 | <2 | <1 | 7.1 | 0.38 |
| 22-Mar | 0.33 | <1 | <2 | <1 | 8.1 | 0.34 |
| 23-Mar | 0.46 | <1 | 8 | <1 | 8.5 | 1.90 |
| 29-Mar | 0.41 | <1 | <2 | <1 | 8.9 | 0.23 |
| 07-Apr | 0.35 | <1 | LA | <1 | 8.3 | 0.35 |
| 12-Apr | 0.41 | <1 | <2 | <1 | 8 | 0.40 |
| 13-Apr | 0.31 | <1 | <2 | <1 | 8.4 | 0.34 |
| 19-Apr | 0.15 | <1 | <2 | <1 | 9.2 | 0.34 |
| 27-Apr | 0.36 | <1 | <2 | <1 | 9.8 | 0.23 |
| 04-May | 0.74 | <1 | <2 | <1 | 10 | 0.21 |
| 14-May | 0.58 | <1 | <2 | <1 | 9.7 | 0.36 |
| 18-May | 0.63 | <1 | <2 | <1 | 11 | 0.26 |
| 21-May | 0.53 | <1 | <2 | <1 | 11 | 0.25 |
| 25-May | 0.74 | <1 | <2 | <1 | 11 | 0.30 |
| 01-Jun | 0.46 | <1 | <2 | <1 | 11 | 0.28 |
| 04-Jun | 0.54 | <1 | <2 | <1 | 11 | 0.33 |
| 08-Jun | 0.51 | <1 | <2 | <1 | 11 | 0.31 |
| 11-Jun | 0.42 | <1 | <2 | <1 | 11 | 0.38 |
| 15-Jun | 0.55 | <1 | 2 | <1 | 11 | 0.31 |
| 16-Jun | 0.75 | <1 | 4 | <1 | 11 | 0.33 |
| 22-Jun | 0.45 | <1 | <2 | <1 | 12 | 0.30 |
| 25-Jun | 0.59 | <1 | <2 | <1 | 12 | 0.28 |
| 29-Jun | 0.56 | <1 | <2 | <1 | 12 | 0.27 |
| 06-Jul | 0.31 | <1 | <2 | <1 | 13 | 0.20 |
| 09-Jul | 0.36 | <1 | <2 | <1 | 12 | 0.33 |
| 12-Jul | 0.65 | <1 | <2 | <1 | 13 | 0.21 |
| 14-Jul | 0.34 | <1 | 4 | <1 | 13 | 0.21 |
| 20-Jul | 0.24 | <1 | 2 | <1 | 15 | 0.19 |
| 28-Jul | 0.50 | <1 | <2 | <1 | 14 | 0.32 |
| 29-Jul | 0.40 | <1 | <2 | <1 | 17 | 0.20 |
| 05-Aug | 0.35 | <1 | <2 | <1 | 17 | 0.17 |
| 12-Aug | 0.46 | <1 | <2 | <1 | 15 | 0.19 |
| 16-Aug | 0.53 | <1 | <2 | <1 | 15 | 0.42 |
| 24-Aug | 0.57 | <1 | <2 | <1 | 14 | 0.25 |
| 27-Aug | 0.42 | <1 | <2 | <1 | 15 | 0.16 |
| 31-Aug | 0.41 | <1 | <2 | <1 | 15 | 0.16 |
| 02-Sep | 0.40 | <1 | <2 | <1 | 14 | 0.20 |
| 07-Sep | 0.41 | <1 | <2 | <1 | 15 | 0.13 |
| 15-Sep | 0.39 | <1 | <2 | <1 | 17 | 0.16 |
| 17-Sep | 0.42 | <1 | <2 | <1 | 16 | 0.19 |
| 21-Sep | 0.30 | <1 | 4 | <1 | 16 | 0.16 |
| 22-Sep | 0.38 | <1 | <2 | <1 | 16 | 0.14 |
| 28-Sep | 0.34 | <1 | 6 | <1 | 14 | 0.21 |
| 01-Oct | 0.38 | <1 | <2 | <1 | 13 | 0.27 |
| 04-Oct | 0.48 | <1 | 4 | <1 | 15 | 0.25 |
| 06-Oct | 0.56 | <1 | 2 | <1 | 14 | 0.26 |
| 12-Oct | 0.46 | <1 | <2 | <1 | 14 | 0.25 |
| 21-Oct | 0.48 | <1 | <2 | <1 | 12 | 0.31 |
| 22-Oct | 0.51 | <1 | <2 | <1 | 16 | 0.36 |
| 25-Oct | 0.62 | <1 | <2 | <1 | 10 | 0.30 |
| 03-Nov | 0.57 | <1 | <2 | <1 | 12 | 0.31 |
| 08-Nov | 0.57 | <1 | <2 | <1 | 12 | 0.30 |
| 18-Nov | 0.56 | <1 | <2 | <1 | 11 | 0.30 |
| 23-Nov | 0.40 | <1 | <2 | <1 | 9 | 0.18 |
| 01-Dec | 0.65 | <1 | <2 | <1 | 8.1 | 0.22 |
| 02-Dec | 0.58 | <1 | <2 | <1 | 8.6 | 0.18 |
| 07-Dec | 0.46 | <1 | 2 | <1 | 8.4 | 0.19 |
| 09-Dec | 0.51 | <1 | <2 | <1 | 8.3 | 0.20 |
| 14-Dec | 0.36 | <1 | <2 | <1 | 8.3 | 0.34 |
| 16-Dec | 0.26 | <1 | <2 | <1 | 8.5 | 0.30 |
| 21-Dec | 0.32 | <1 | <2 | <1 | 8.3 | 0.25 |
| 30-Dec | 0.50 | <1 | NA | <1 | 7.3 | 0.16 |

DM914 (SW CORNER on 105 AVE AT 132 ST.) - 2010 TEST RESULTS

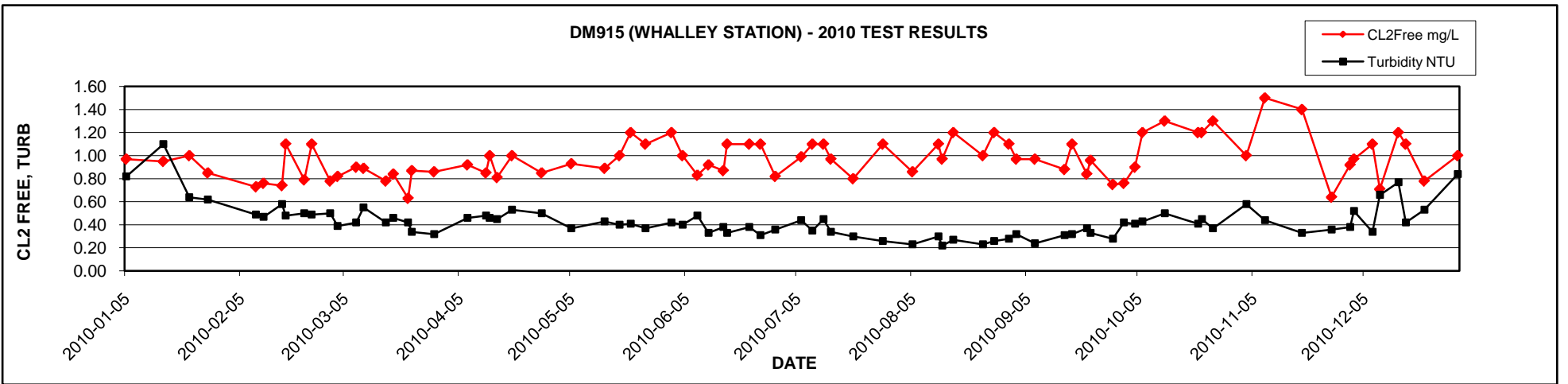
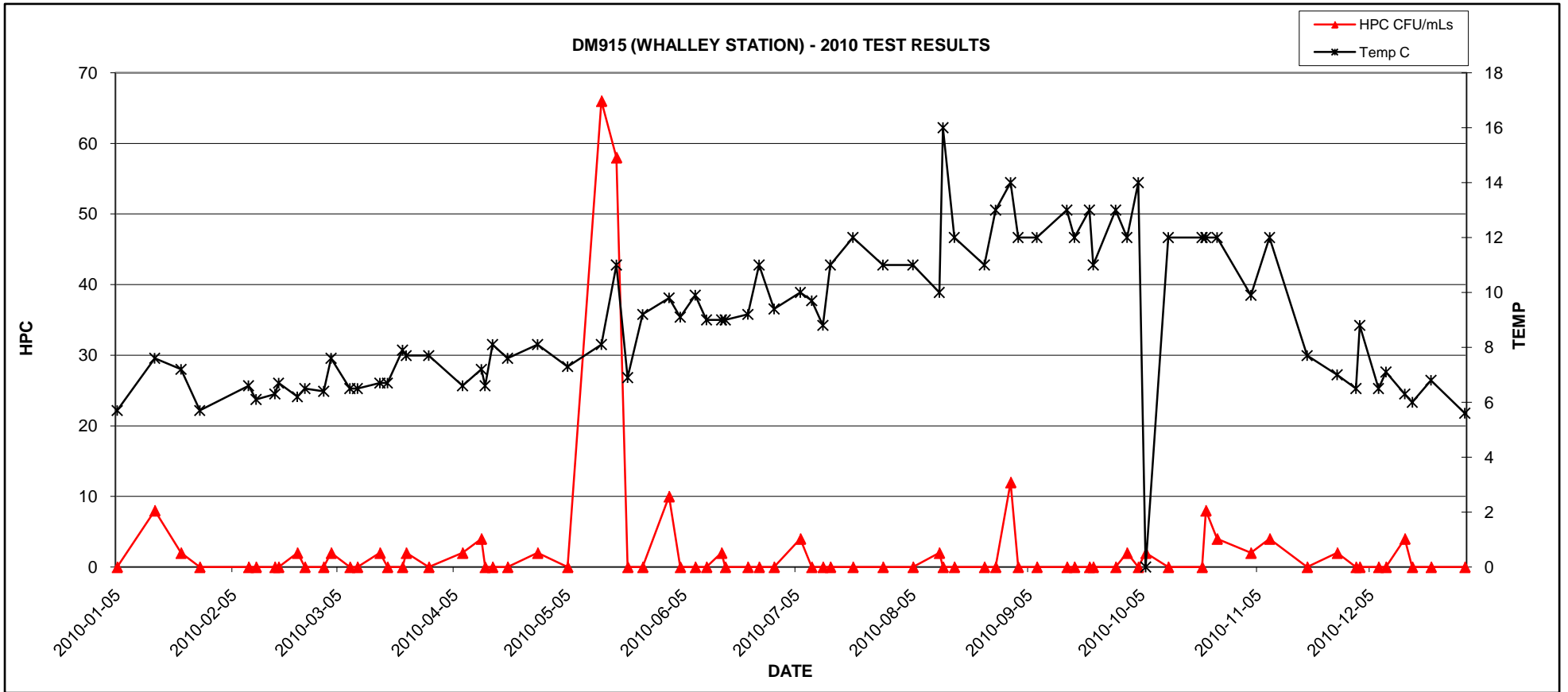


DM914 (SW CORNER on 105 AVE AT 132 ST.) - 2010 TEST RESULTS



2010 GVRD Laboratory Report - DM915 (WHALLEY STATION)

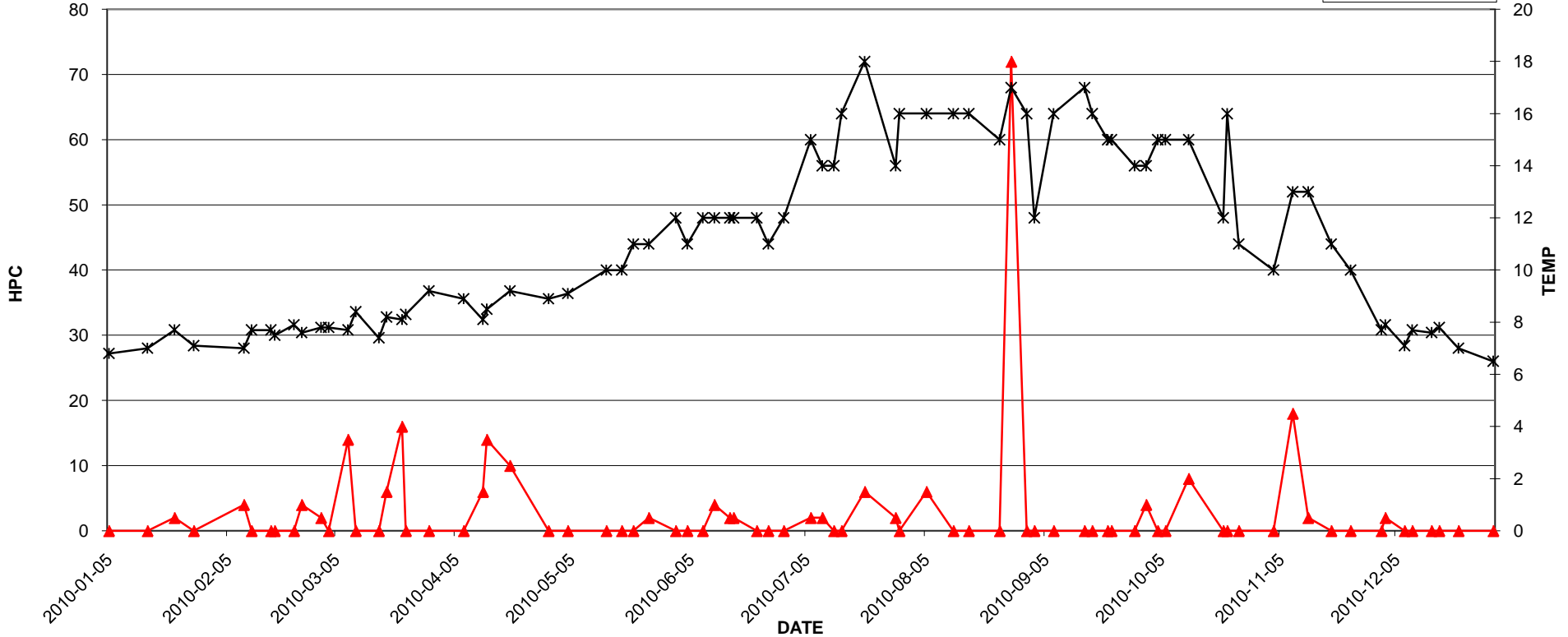
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.97 | <1 | <2 | <1 | 5.7 | 0.82 |
| 15-Jan | 0.95 | <1 | 8 | <1 | 7.6 | 1.10 |
| 22-Jan | 1.00 | <1 | 2 | <1 | 7.2 | 0.64 |
| 27-Jan | 0.85 | <1 | <2 | <1 | 5.7 | 0.62 |
| 09-Feb | 0.73 | <1 | <2 | <1 | 6.6 | 0.49 |
| 11-Feb | 0.76 | <1 | <2 | <1 | 6.1 | 0.47 |
| 16-Feb | 0.74 | <1 | <2 | <1 | 6.3 | 0.58 |
| 17-Feb | 1.10 | <1 | <2 | <1 | 6.7 | 0.48 |
| 22-Feb | 0.79 | <1 | 2 | <1 | 6.2 | 0.50 |
| 24-Feb | 1.10 | <1 | <2 | <1 | 6.5 | 0.49 |
| 01-Mar | 0.78 | <1 | <2 | <1 | 6.4 | 0.50 |
| 03-Mar | 0.82 | <1 | 2 | <1 | 7.6 | 0.39 |
| 08-Mar | 0.90 | <1 | <2 | <1 | 6.5 | 0.42 |
| 10-Mar | 0.89 | <1 | <2 | <1 | 6.5 | 0.55 |
| 16-Mar | 0.78 | <1 | 2 | <1 | 6.7 | 0.42 |
| 18-Mar | 0.84 | <1 | <2 | <1 | 6.7 | 0.46 |
| 22-Mar | 0.63 | <1 | <2 | <1 | 7.9 | 0.42 |
| 23-Mar | 0.87 | <1 | 2 | <1 | 7.7 | 0.34 |
| 29-Mar | 0.86 | <1 | <2 | <1 | 7.7 | 0.32 |
| 07-Apr | 0.92 | <1 | 2 | <1 | 6.6 | 0.46 |
| 12-Apr | 0.85 | <1 | 4 | <1 | 7.2 | 0.48 |
| 13-Apr | 1.00 | <1 | <2 | <1 | 6.6 | 0.46 |
| 15-Apr | 0.81 | <1 | <2 | <1 | 8.1 | 0.45 |
| 19-Apr | 1.00 | <1 | <2 | <1 | 7.6 | 0.53 |
| 27-Apr | 0.85 | <1 | 2 | <1 | 8.1 | 0.50 |
| 05-May | 0.93 | <1 | <2 | <1 | 7.3 | 0.37 |
| 14-May | 0.89 | <1 | 66 | <1 | 8.1 | 0.43 |
| 18-May | 1.00 | <1 | 58 | <1 | 11 | 0.40 |
| 21-May | 1.20 | <1 | <2 | <1 | 6.9 | 0.41 |
| 25-May | 1.10 | <1 | <2 | <1 | 9.2 | 0.37 |
| 01-Jun | 1.20 | <1 | 10 | <1 | 9.8 | 0.42 |
| 04-Jun | 1.00 | <1 | <2 | <1 | 9.1 | 0.40 |
| 08-Jun | 0.83 | <1 | <2 | <1 | 9.9 | 0.48 |
| 11-Jun | 0.92 | <1 | <2 | <1 | 9 | 0.33 |
| 15-Jun | 0.87 | <1 | 2 | <1 | 9 | 0.38 |
| 16-Jun | 1.10 | <1 | <2 | <1 | 9 | 0.33 |
| 22-Jun | 1.10 | <1 | <2 | <1 | 9.2 | 0.38 |
| 25-Jun | 1.10 | <1 | <2 | <1 | 11 | 0.31 |
| 29-Jun | 0.82 | <1 | <2 | <1 | 9.4 | 0.36 |
| 06-Jul | 0.99 | <1 | 4 | <1 | 10 | 0.44 |
| 09-Jul | 1.10 | <1 | <2 | <1 | 9.7 | 0.35 |
| 12-Jul | 1.10 | <1 | <2 | <1 | 8.8 | 0.45 |
| 14-Jul | 0.97 | <1 | <2 | <1 | 11 | 0.34 |
| 20-Jul | 0.80 | <1 | <2 | <1 | 12 | 0.30 |
| 28-Jul | 1.10 | <1 | <2 | <1 | 11 | 0.26 |
| 05-Aug | 0.86 | <1 | <2 | <1 | 11 | 0.23 |
| 12-Aug | 1.10 | <1 | 2 | <1 | 10 | 0.30 |
| 13-Aug | 0.97 | <1 | <2 | <1 | 16 | 0.22 |
| 16-Aug | 1.20 | <1 | <2 | <1 | 12 | 0.27 |
| 24-Aug | 1.00 | <1 | <2 | <1 | 11 | 0.23 |
| 27-Aug | 1.20 | <1 | <2 | <1 | 13 | 0.26 |
| 31-Aug | 1.10 | <1 | 12 | <1 | 14 | 0.28 |
| 02-Sep | 0.97 | <1 | <2 | <1 | 12 | 0.32 |
| 07-Sep | 0.97 | <1 | <2 | <1 | 12 | 0.24 |
| 15-Sep | 0.88 | <1 | <2 | <1 | 13 | 0.31 |
| 17-Sep | 1.10 | <1 | <2 | <1 | 12 | 0.32 |
| 21-Sep | 0.84 | <1 | <2 | <1 | 13 | 0.37 |
| 22-Sep | 0.96 | <1 | <2 | <1 | 11 | 0.33 |
| 28-Sep | 0.75 | <1 | <2 | <1 | 13 | 0.28 |
| 01-Oct | 0.76 | <1 | 2 | <1 | 12 | 0.42 |
| 04-Oct | 0.90 | <1 | <2 | <1 | 14 | 0.41 |
| 06-Oct | 1.20 | <1 | 2 | <1 | LA | 0.43 |
| 12-Oct | 1.30 | <1 | <2 | <1 | 12 | 0.50 |
| 21-Oct | 1.20 | <1 | <2 | <1 | 12 | 0.41 |
| 22-Oct | 1.20 | <1 | 8 | <1 | 12 | 0.45 |
| 25-Oct | 1.30 | <1 | 4 | <1 | 12 | 0.37 |
| 03-Nov | 1.00 | <1 | 2 | <1 | 9.9 | 0.58 |
| 08-Nov | 1.50 | <1 | 4 | <1 | 12 | 0.44 |
| 18-Nov | 1.40 | <1 | <2 | <1 | 7.7 | 0.33 |
| 26-Nov | 0.64 | <1 | 2 | <1 | 7 | 0.36 |
| 01-Dec | 0.92 | <1 | <2 | <1 | 6.5 | 0.38 |
| 02-Dec | 0.97 | <1 | <2 | <1 | 8.8 | 0.52 |
| 07-Dec | 1.10 | <1 | <2 | <1 | 6.5 | 0.34 |
| 09-Dec | 0.71 | <1 | <2 | <1 | 7.1 | 0.66 |
| 14-Dec | 1.20 | <1 | 4 | <1 | 6.3 | 0.77 |
| 16-Dec | 1.10 | <1 | <2 | <1 | 6 | 0.42 |
| 21-Dec | 0.78 | <1 | <2 | <1 | 6.8 | 0.53 |
| 30-Dec | 1.00 | <1 | NA | <1 | 5.6 | 0.84 |



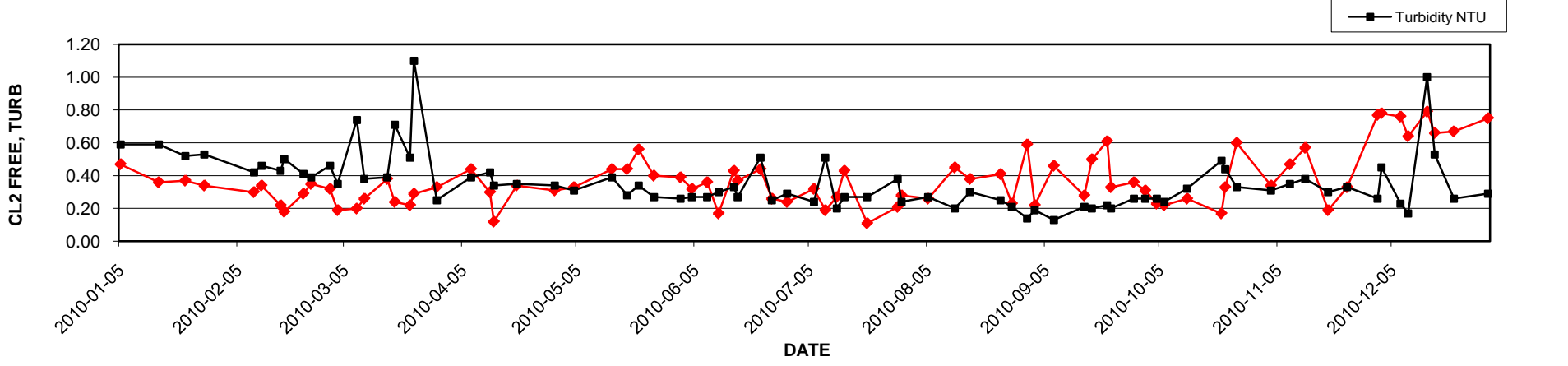
2010 GVRD Laboratory Report - DM916 (NE Corner 97A Ave. / 137 St.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.47 | <1 | <2 | <1 | 6.8 | 0.59 |
| 15-Jan | 0.36 | <1 | <2 | <1 | 7 | 0.59 |
| 22-Jan | 0.37 | <1 | 2 | <1 | 7.7 | 0.52 |
| 27-Jan | 0.34 | <1 | <2 | <1 | 7.1 | 0.53 |
| 09-Feb | 0.30 | <1 | 4 | <1 | 7 | 0.42 |
| 11-Feb | 0.34 | <1 | <2 | <1 | 7.7 | 0.46 |
| 16-Feb | 0.22 | <1 | <2 | <1 | 7.7 | 0.43 |
| 17-Feb | 0.18 | <1 | <2 | <1 | 7.5 | 0.50 |
| 22-Feb | 0.29 | <1 | <2 | <1 | 7.9 | 0.41 |
| 24-Feb | 0.35 | <1 | 4 | <1 | 7.6 | 0.39 |
| 01-Mar | 0.32 | <1 | 2 | <1 | 7.8 | 0.46 |
| 03-Mar | 0.19 | <1 | <2 | <1 | 7.8 | 0.35 |
| 08-Mar | 0.20 | <1 | 14 | <1 | 7.7 | 0.74 |
| 10-Mar | 0.26 | <1 | <2 | <1 | 8.4 | 0.38 |
| 16-Mar | 0.38 | <1 | <2 | <1 | 7.4 | 0.39 |
| 18-Mar | 0.24 | <1 | 6 | <1 | 8.2 | 0.71 |
| 22-Mar | 0.22 | <1 | 16 | <1 | 8.1 | 0.51 |
| 23-Mar | 0.29 | <1 | <2 | <1 | 8.3 | 1.10 |
| 29-Mar | 0.33 | <1 | <2 | <1 | 9.2 | 0.25 |
| 07-Apr | 0.44 | <1 | <2 | <1 | 8.9 | 0.39 |
| 12-Apr | 0.30 | <1 | 6 | <1 | 8.1 | 0.42 |
| 13-Apr | 0.12 | <1 | 14 | <1 | 8.5 | 0.34 |
| 19-Apr | 0.34 | <1 | 10 | <1 | 9.2 | 0.35 |
| 29-Apr | 0.31 | <1 | <2 | <1 | 8.9 | 0.34 |
| 04-May | 0.33 | <1 | <2 | <1 | 9.1 | 0.31 |
| 14-May | 0.44 | <1 | <2 | <1 | 10 | 0.39 |
| 18-May | 0.44 | <1 | <2 | <1 | 10 | 0.28 |
| 21-May | 0.56 | <1 | <2 | <1 | 11 | 0.34 |
| 25-May | 0.40 | <1 | 2 | <1 | 11 | 0.27 |
| 01-Jun | 0.39 | <1 | <2 | <1 | 12 | 0.26 |
| 04-Jun | 0.32 | <1 | <2 | <1 | 11 | 0.27 |
| 08-Jun | 0.36 | <1 | <2 | <1 | 12 | 0.27 |
| 11-Jun | 0.17 | <1 | 4 | <1 | 12 | 0.30 |
| 15-Jun | 0.43 | <1 | 2 | <1 | 12 | 0.33 |
| 16-Jun | 0.37 | <1 | 2 | <1 | 12 | 0.27 |
| 22-Jun | 0.44 | <1 | <2 | <1 | 12 | 0.51 |
| 25-Jun | 0.26 | <1 | <2 | <1 | 11 | 0.25 |
| 29-Jun | 0.24 | <1 | <2 | <1 | 12 | 0.29 |
| 06-Jul | 0.32 | <1 | 2 | <1 | 15 | 0.24 |
| 09-Jul | 0.19 | <1 | 2 | <1 | 14 | 0.51 |
| 12-Jul | 0.27 | <1 | <2 | <1 | 14 | 0.20 |
| 14-Jul | 0.43 | <1 | <2 | <1 | 16 | 0.27 |
| 20-Jul | 0.11 | <1 | 6 | <1 | 18 | 0.27 |
| 28-Jul | 0.21 | <1 | 2 | <1 | 14 | 0.38 |
| 29-Jul | 0.28 | <1 | <2 | <1 | 16 | 0.24 |
| 05-Aug | 0.26 | <1 | 6 | <1 | 16 | 0.27 |
| 12-Aug | 0.45 | <1 | <2 | <1 | 16 | 0.20 |
| 16-Aug | 0.38 | <1 | <2 | <1 | 16 | 0.30 |
| 24-Aug | 0.41 | <1 | <2 | <1 | 15 | 0.25 |
| 27-Aug | 0.23 | <1 | 72 | <1 | 17 | 0.21 |
| 31-Aug | 0.59 | <1 | <2 | <1 | 16 | 0.14 |
| 02-Sep | 0.22 | <1 | <2 | <1 | 12 | 0.19 |
| 07-Sep | 0.46 | <1 | <2 | <1 | 16 | 0.13 |
| 15-Sep | 0.28 | <1 | <2 | <1 | 17 | 0.21 |
| 17-Sep | 0.50 | <1 | <2 | <1 | 16 | 0.20 |
| 21-Sep | 0.61 | <1 | <2 | <1 | 15 | 0.22 |
| 22-Sep | 0.33 | <1 | <2 | <1 | 15 | 0.20 |
| 28-Sep | 0.36 | <1 | <2 | <1 | 14 | 0.26 |
| 01-Oct | 0.31 | <1 | 4 | <1 | 14 | 0.26 |
| 04-Oct | 0.23 | <1 | <2 | <1 | 15 | 0.26 |
| 06-Oct | 0.22 | <1 | <2 | <1 | 15 | 0.24 |
| 12-Oct | 0.26 | <1 | 8 | <1 | 15 | 0.32 |
| 21-Oct | 0.17 | <1 | <2 | <1 | 12 | 0.49 |
| 22-Oct | 0.33 | <1 | <2 | <1 | 16 | 0.44 |
| 25-Oct | 0.60 | <1 | <2 | <1 | 11 | 0.33 |
| 03-Nov | 0.34 | <1 | <2 | <1 | 10 | 0.31 |
| 08-Nov | 0.47 | <1 | 18 | <1 | 13 | 0.35 |
| 12-Nov | 0.57 | <1 | 2 | <1 | 13 | 0.38 |
| 18-Nov | 0.19 | <1 | <2 | <1 | 11 | 0.30 |
| 23-Nov | 0.33 | <1 | <2 | <1 | 10 | 0.33 |
| 01-Dec | 0.77 | <1 | <2 | <1 | 7.7 | 0.26 |
| 02-Dec | 0.78 | <1 | 2 | <1 | 7.9 | 0.45 |
| 07-Dec | 0.76 | <1 | <2 | <1 | 7.1 | 0.23 |
| 09-Dec | 0.64 | <1 | <2 | <1 | 7.7 | 0.17 |
| 14-Dec | 0.79 | <1 | <2 | <1 | 7.6 | 1.00 |
| 16-Dec | 0.66 | <1 | <2 | <1 | 7.8 | 0.53 |
| 21-Dec | 0.67 | <1 | <2 | <1 | 7 | 0.26 |
| 30-Dec | 0.75 | <1 | NA | <1 | 6.5 | 0.29 |

DM916 (NE Corner 97A Ave. / 137 St.) - 2010 TEST RESULTS

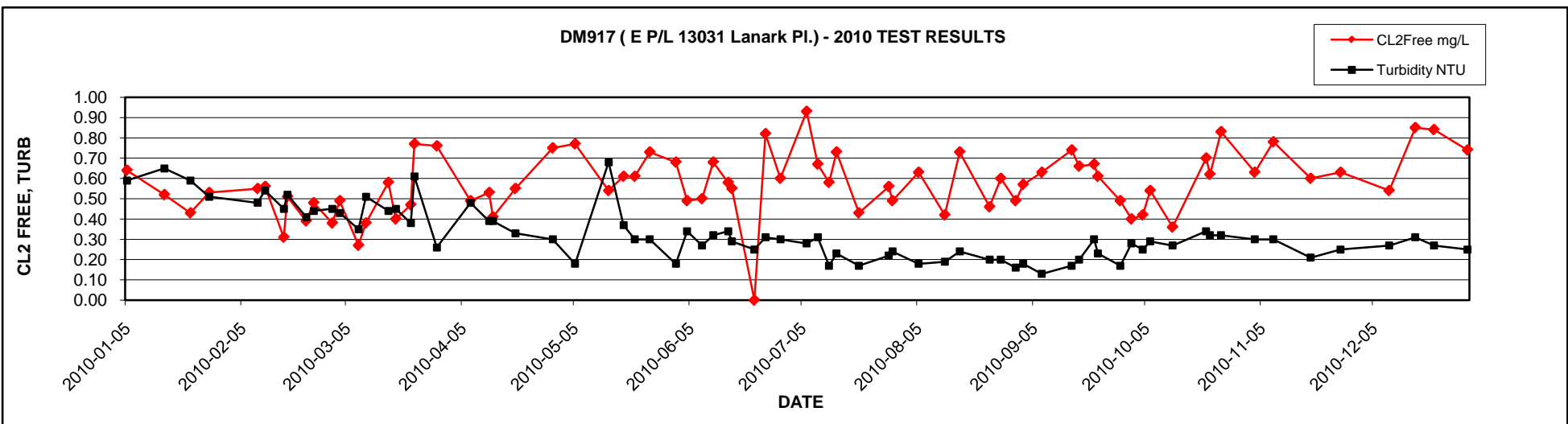
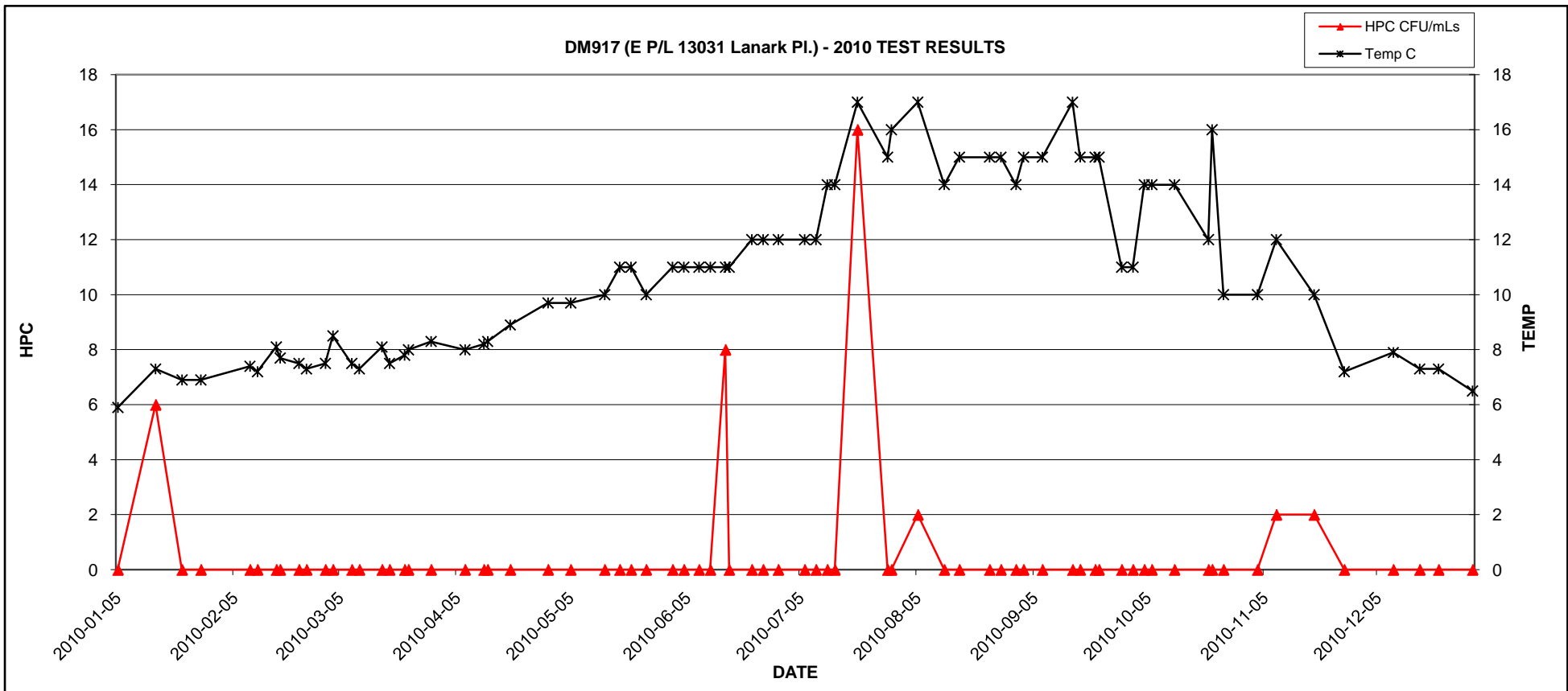


DM916 (NE Corner 97A Ave. / 137 St.) - 2010 TEST RESULTS



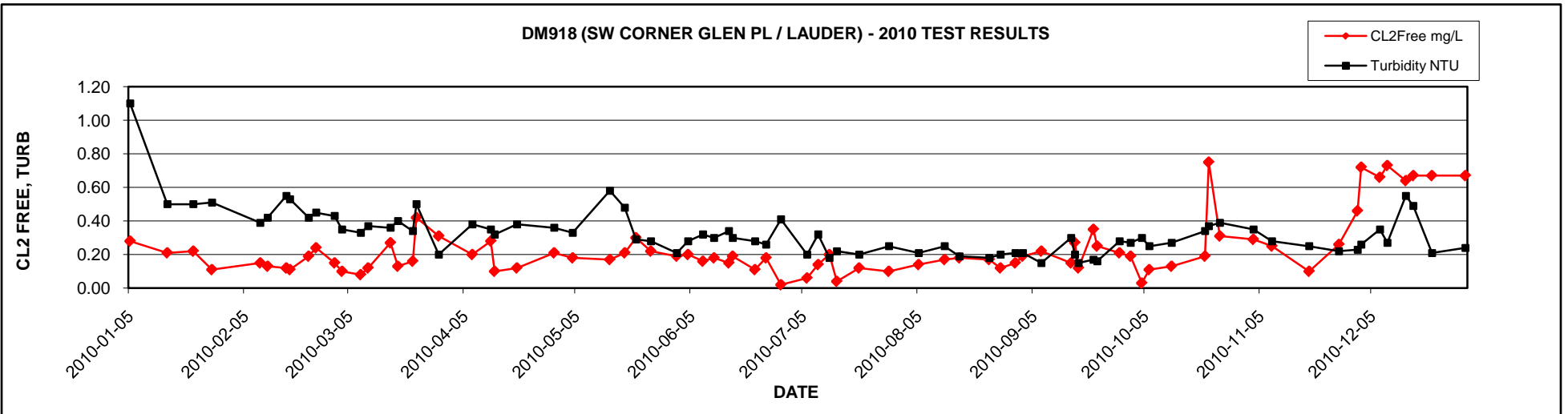
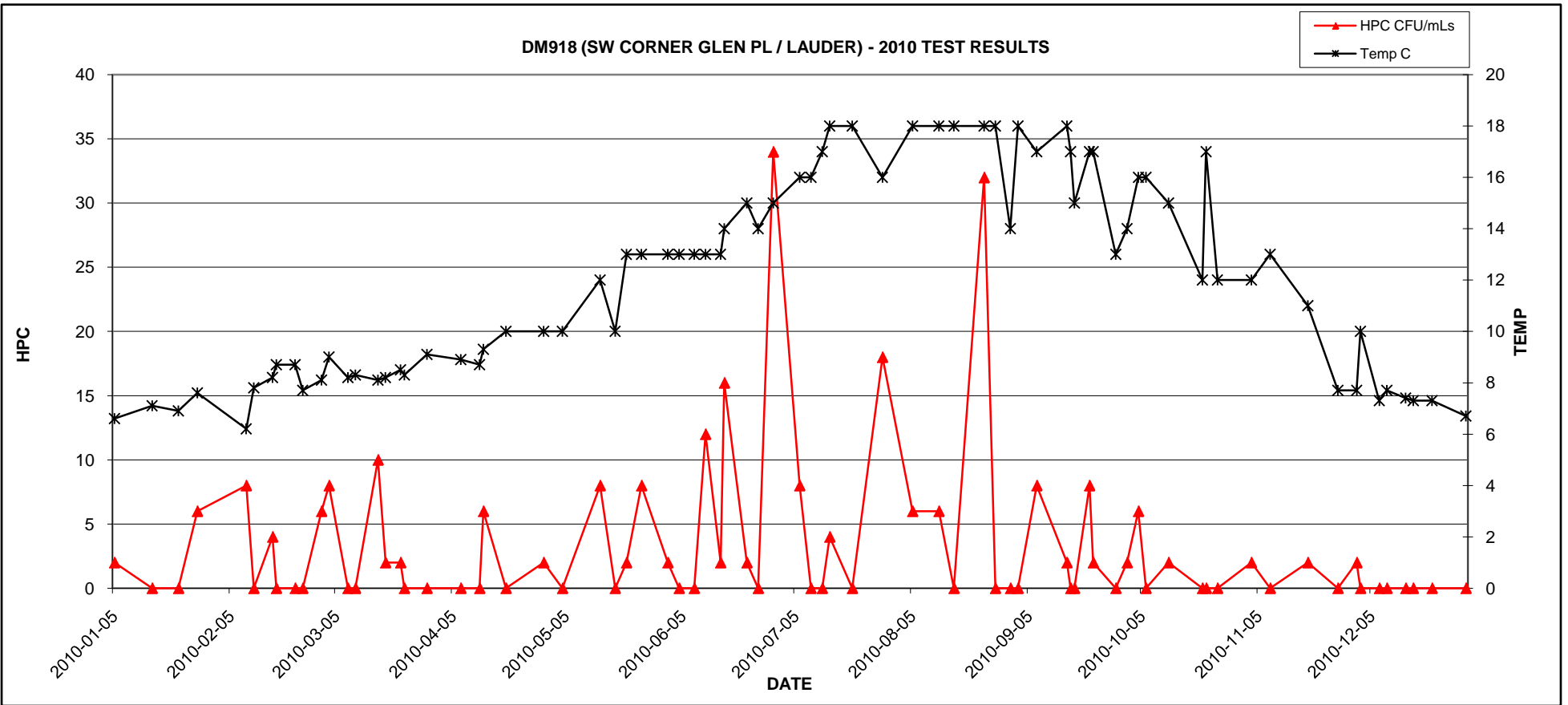
2010 GVRD Laboratory Report - DM917 (E P/L 13031 Lanark Pl.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.64 | <1 | <2 | <1 | 5.9 | 0.59 |
| 15-Jan | 0.52 | <1 | 6 | <1 | 7.3 | 0.65 |
| 22-Jan | 0.43 | <1 | <2 | <1 | 6.9 | 0.59 |
| 27-Jan | 0.53 | <1 | <2 | <1 | 6.9 | 0.51 |
| 09-Feb | 0.55 | <1 | <2 | <1 | 7.4 | 0.48 |
| 11-Feb | 0.56 | <1 | <2 | <1 | 7.2 | 0.54 |
| 16-Feb | 0.31 | <1 | <2 | <1 | 8.1 | 0.45 |
| 17-Feb | 0.51 | <1 | <2 | <1 | 7.7 | 0.52 |
| 22-Feb | 0.39 | <1 | <2 | <1 | 7.5 | 0.41 |
| 24-Feb | 0.48 | <1 | <2 | <1 | 7.3 | 0.44 |
| 01-Mar | 0.38 | <1 | <2 | <1 | 7.5 | 0.45 |
| 03-Mar | 0.49 | <1 | <2 | <1 | 8.5 | 0.43 |
| 08-Mar | 0.27 | <1 | <2 | <1 | 7.5 | 0.35 |
| 10-Mar | 0.38 | <1 | <2 | <1 | 7.3 | 0.51 |
| 16-Mar | 0.58 | <1 | <2 | <1 | 8.1 | 0.44 |
| 18-Mar | 0.40 | <1 | <2 | <1 | 7.5 | 0.45 |
| 22-Mar | 0.47 | <1 | <2 | <1 | 7.8 | 0.38 |
| 23-Mar | 0.77 | <1 | <2 | <1 | 8 | 0.61 |
| 29-Mar | 0.76 | <1 | <2 | <1 | 8.3 | 0.26 |
| 07-Apr | 0.49 | <1 | <2 | <1 | 8 | 0.48 |
| 12-Apr | 0.53 | <1 | <2 | <1 | 8.2 | 0.39 |
| 13-Apr | 0.41 | <1 | <2 | <1 | 8.3 | 0.39 |
| 19-Apr | 0.55 | <1 | <2 | <1 | 8.9 | 0.33 |
| 29-Apr | 0.75 | <1 | <2 | <1 | 9.7 | 0.30 |
| 05-May | 0.77 | <1 | <2 | <1 | 9.7 | 0.18 |
| 14-May | 0.54 | <1 | <2 | <1 | 10 | 0.68 |
| 18-May | 0.61 | <1 | <2 | <1 | 11 | 0.37 |
| 21-May | 0.61 | <1 | <2 | <1 | 11 | 0.30 |
| 25-May | 0.73 | <1 | <2 | <1 | 10 | 0.30 |
| 01-Jun | 0.68 | <1 | <2 | <1 | 11 | 0.18 |
| 04-Jun | 0.49 | <1 | <2 | <1 | 11 | 0.34 |
| 08-Jun | 0.50 | <1 | <2 | <1 | 11 | 0.27 |
| 11-Jun | 0.68 | <1 | <2 | <1 | 11 | 0.32 |
| 15-Jun | 0.58 | <1 | 8 | <1 | 11 | 0.34 |
| 16-Jun | 0.55 | <1 | <2 | <1 | 11 | 0.29 |
| 22-Jun | LA | <1 | <2 | <1 | 12 | 0.25 |
| 25-Jun | 0.82 | <1 | <2 | <1 | 12 | 0.31 |
| 29-Jun | 0.60 | <1 | <2 | <1 | 12 | 0.30 |
| 06-Jul | 0.93 | <1 | <2 | <1 | 12 | 0.28 |
| 09-Jul | 0.67 | <1 | <2 | <1 | 12 | 0.31 |
| 12-Jul | 0.58 | <1 | <2 | <1 | 14 | 0.17 |
| 14-Jul | 0.73 | <1 | <2 | <1 | 14 | 0.23 |
| 20-Jul | 0.43 | <1 | 16 | <1 | 17 | 0.17 |
| 28-Jul | 0.56 | <1 | <2 | <1 | 15 | 0.22 |
| 29-Jul | 0.49 | <1 | <2 | <1 | 16 | 0.24 |
| 05-Aug | 0.63 | <1 | 2 | <1 | 17 | 0.18 |
| 12-Aug | 0.42 | <1 | <2 | <1 | 14 | 0.19 |
| 16-Aug | 0.73 | <1 | <2 | <1 | 15 | 0.24 |
| 24-Aug | 0.46 | <1 | <2 | <1 | 15 | 0.20 |
| 27-Aug | 0.60 | <1 | <2 | <1 | 15 | 0.20 |
| 31-Aug | 0.49 | <1 | <2 | <1 | 14 | 0.16 |
| 02-Sep | 0.57 | <1 | <2 | <1 | 15 | 0.18 |
| 07-Sep | 0.63 | <1 | <2 | <1 | 15 | 0.13 |
| 15-Sep | 0.74 | <1 | <2 | <1 | 17 | 0.17 |
| 17-Sep | 0.66 | <1 | <2 | <1 | 15 | 0.20 |
| 21-Sep | 0.67 | <1 | <2 | <1 | 15 | 0.30 |
| 22-Sep | 0.61 | <1 | <2 | <1 | 15 | 0.23 |
| 28-Sep | 0.49 | <1 | <2 | <1 | 11 | 0.17 |
| 01-Oct | 0.40 | <1 | <2 | <1 | 11 | 0.28 |
| 04-Oct | 0.42 | <1 | <2 | <1 | 14 | 0.25 |
| 06-Oct | 0.54 | <1 | <2 | <1 | 14 | 0.29 |
| 12-Oct | 0.36 | <1 | <2 | <1 | 14 | 0.27 |
| 21-Oct | 0.70 | <1 | <2 | <1 | 12 | 0.34 |
| 22-Oct | 0.62 | <1 | <2 | <1 | 16 | 0.32 |
| 25-Oct | 0.83 | <1 | <2 | <1 | 10 | 0.32 |
| 03-Nov | 0.63 | <1 | <2 | <1 | 10 | 0.30 |
| 08-Nov | 0.78 | <1 | 2 | <1 | 12 | 0.30 |
| 18-Nov | 0.60 | <1 | 2 | <1 | 10 | 0.21 |
| 26-Nov | 0.63 | <1 | <2 | <1 | 7.2 | 0.25 |
| 09-Dec | 0.54 | <1 | <2 | <1 | 7.9 | 0.27 |
| 16-Dec | 0.85 | <1 | <2 | <1 | 7.3 | 0.31 |
| 21-Dec | 0.84 | <1 | <2 | <1 | 7.3 | 0.27 |
| 30-Dec | 0.74 | <1 | NA | <1 | 6.5 | 0.25 |



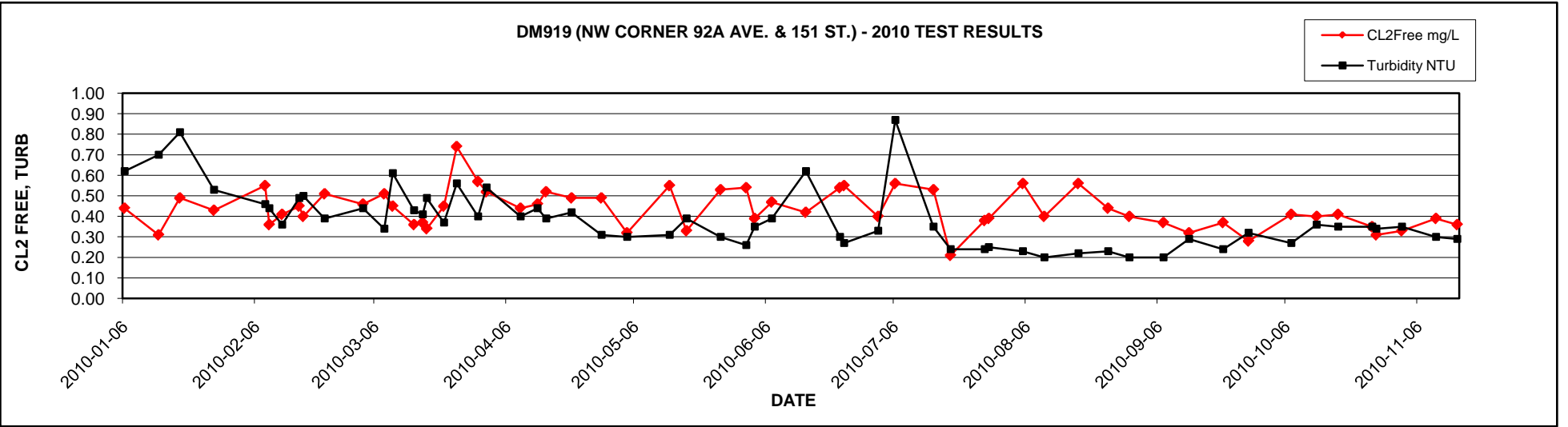
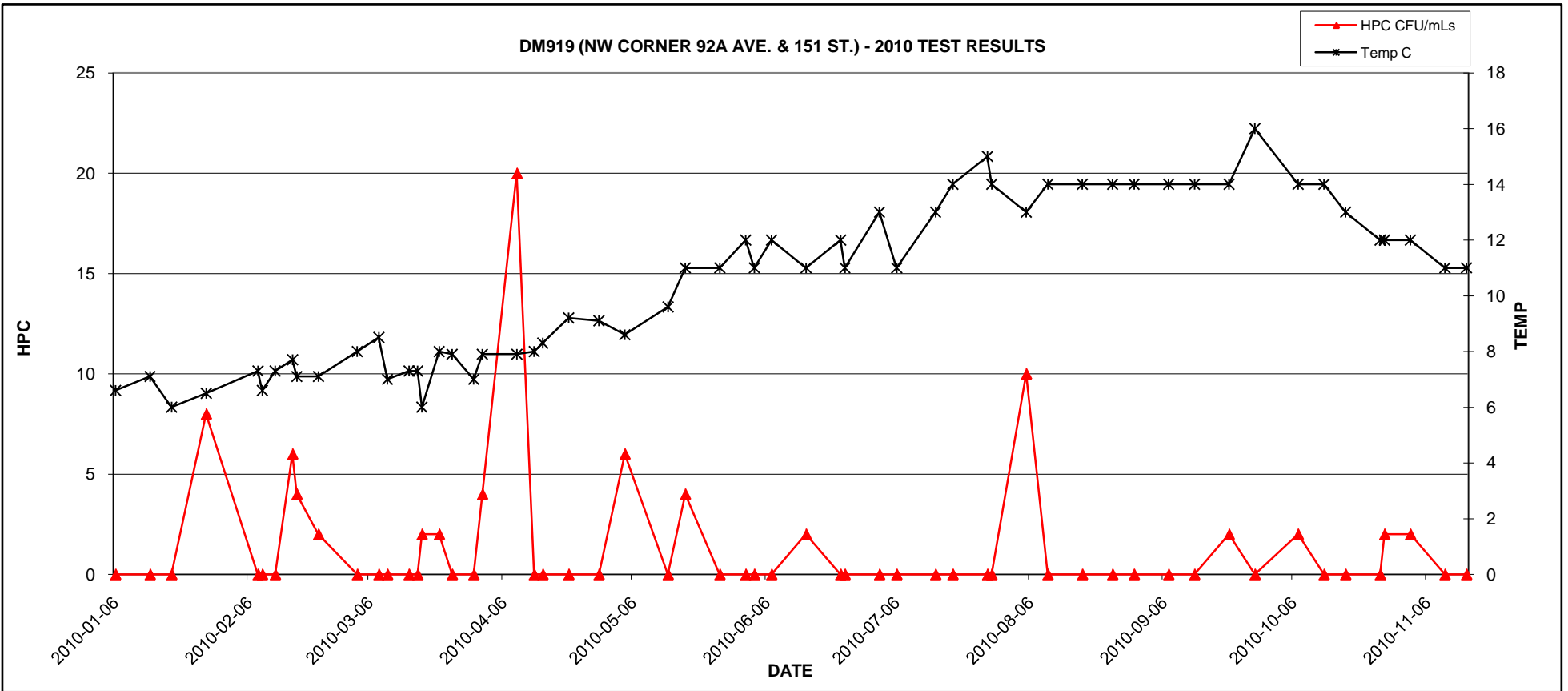
2010 GVRD Laboratory Report - DM918 (SW CORNER GLEN PL / LAUDER)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 05-Jan | 0.28 | <1 | 2 | <1 | 6.6 | 1.10 |
| 15-Jan | 0.21 | <1 | <2 | <1 | 7.1 | 0.50 |
| 22-Jan | 0.22 | <1 | <2 | <1 | 6.9 | 0.50 |
| 27-Jan | 0.11 | <1 | 6 | <1 | 7.6 | 0.51 |
| 09-Feb | 0.15 | <1 | 8 | <1 | 6.2 | 0.39 |
| 11-Feb | 0.13 | <1 | <2 | <1 | 7.8 | 0.42 |
| 16-Feb | 0.12 | <1 | 4 | <1 | 8.2 | 0.55 |
| 17-Feb | 0.11 | <1 | <2 | <1 | 8.7 | 0.53 |
| 22-Feb | 0.19 | <1 | <2 | <1 | 8.7 | 0.42 |
| 24-Feb | 0.24 | <1 | <2 | <1 | 7.7 | 0.45 |
| 01-Mar | 0.15 | <1 | 6 | <1 | 8.1 | 0.43 |
| 03-Mar | 0.10 | <1 | 8 | <1 | 9 | 0.35 |
| 08-Mar | 0.08 | <1 | <2 | <1 | 8.2 | 0.33 |
| 10-Mar | 0.12 | <1 | <2 | <1 | 8.3 | 0.37 |
| 16-Mar | 0.27 | <1 | 10 | <1 | 8.1 | 0.36 |
| 18-Mar | 0.13 | <1 | 2 | <1 | 8.2 | 0.40 |
| 22-Mar | 0.16 | <1 | 2 | <1 | 8.5 | 0.34 |
| 23-Mar | 0.42 | <1 | <2 | <1 | 8.3 | 0.50 |
| 29-Mar | 0.31 | <1 | <2 | <1 | 9.1 | 0.20 |
| 07-Apr | 0.20 | <1 | <2 | <1 | 8.9 | 0.38 |
| 12-Apr | 0.28 | <1 | <2 | <1 | 8.7 | 0.35 |
| 13-Apr | 0.10 | <1 | 6 | <1 | 9.3 | 0.32 |
| 19-Apr | 0.12 | <1 | <2 | <1 | 10 | 0.38 |
| 29-Apr | 0.21 | <1 | 2 | <1 | 10 | 0.36 |
| 04-May | 0.18 | <1 | <2 | <1 | 10 | 0.33 |
| 14-May | 0.17 | <1 | 8 | <1 | 12 | 0.58 |
| 18-May | 0.21 | <1 | <2 | <1 | 10 | 0.48 |
| 21-May | 0.30 | <1 | 2 | <1 | 13 | 0.29 |
| 25-May | 0.22 | <1 | 8 | <1 | 13 | 0.28 |
| 01-Jun | 0.19 | <1 | 2 | <1 | 13 | 0.21 |
| 04-Jun | 0.20 | <1 | <2 | <1 | 13 | 0.28 |
| 08-Jun | 0.16 | <1 | <2 | <1 | 13 | 0.32 |
| 11-Jun | 0.18 | <1 | 12 | <1 | 13 | 0.30 |
| 15-Jun | 0.15 | <1 | 2 | <1 | 13 | 0.34 |
| 16-Jun | 0.19 | <1 | 16 | <1 | 14 | 0.30 |
| 22-Jun | 0.11 | <1 | 2 | <1 | 15 | 0.28 |
| 25-Jun | 0.18 | <1 | <2 | <1 | 14 | 0.26 |
| 29-Jun | 0.02 | <1 | 34 | <1 | 15 | 0.41 |
| 06-Jul | 0.06 | <1 | 8 | <1 | 16 | 0.20 |
| 09-Jul | 0.14 | <1 | <2 | <1 | 16 | 0.32 |
| 12-Jul | 0.20 | <1 | <2 | <1 | 17 | 0.18 |
| 14-Jul | 0.04 | <1 | 4 | <1 | 18 | 0.22 |
| 20-Jul | 0.12 | <1 | <2 | <1 | 18 | 0.20 |
| 28-Jul | 0.10 | <1 | 18 | <1 | 16 | 0.25 |
| 05-Aug | 0.14 | <1 | 6 | <1 | 18 | 0.21 |
| 12-Aug | 0.17 | <1 | 6 | <1 | 18 | 0.25 |
| 16-Aug | 0.18 | <1 | <2 | <1 | 18 | 0.19 |
| 24-Aug | 0.17 | <1 | 32 | <1 | 18 | 0.18 |
| 27-Aug | 0.12 | <1 | <2 | <1 | 18 | 0.20 |
| 31-Aug | 0.15 | <1 | <2 | <1 | 14 | 0.21 |
| 02-Sep | 0.19 | <1 | <2 | <1 | 18 | 0.21 |
| 07-Sep | 0.22 | <1 | 8 | <1 | 17 | 0.15 |
| 15-Sep | 0.15 | <1 | 2 | <1 | 18 | 0.30 |
| 16-Sep | 0.27 | <1 | <2 | <1 | 17 | 0.20 |
| 17-Sep | 0.12 | <1 | <2 | <1 | 15 | 0.15 |
| 21-Sep | 0.35 | <1 | 8 | <1 | 17 | 0.17 |
| 22-Sep | 0.25 | <1 | 2 | <1 | 17 | 0.16 |
| 28-Sep | 0.21 | <1 | <2 | <1 | 13 | 0.28 |
| 01-Oct | 0.19 | <1 | 2 | <1 | 14 | 0.27 |
| 04-Oct | 0.03 | <1 | 6 | <1 | 16 | 0.30 |
| 06-Oct | 0.11 | <1 | <2 | <1 | 16 | 0.25 |
| 12-Oct | 0.13 | <1 | 2 | <1 | 15 | 0.27 |
| 21-Oct | 0.19 | <1 | <2 | <1 | 12 | 0.34 |
| 22-Oct | 0.75 | <1 | <2 | <1 | 17 | 0.37 |
| 25-Oct | 0.31 | <1 | <2 | <1 | 12 | 0.39 |
| 03-Nov | 0.29 | <1 | 2 | <1 | 12 | 0.35 |
| 08-Nov | 0.25 | <1 | <2 | <1 | 13 | 0.28 |
| 18-Nov | 0.10 | <1 | 2 | <1 | 11 | 0.25 |
| 26-Nov | 0.26 | <1 | <2 | <1 | 7.7 | 0.22 |
| 01-Dec | 0.46 | <1 | 2 | <1 | 7.7 | 0.23 |
| 02-Dec | 0.72 | <1 | <2 | <1 | 10 | 0.26 |
| 07-Dec | 0.66 | <1 | <2 | <1 | 7.3 | 0.35 |
| 09-Dec | 0.73 | <1 | <2 | <1 | 7.7 | 0.27 |
| 14-Dec | 0.64 | <1 | <2 | <1 | 7.4 | 0.55 |
| 16-Dec | 0.67 | <1 | <2 | <1 | 7.3 | 0.49 |
| 21-Dec | 0.67 | <1 | <2 | <1 | 7.3 | 0.21 |
| 30-Dec | 0.67 | <1 | NA | <1 | 6.7 | 0.24 |



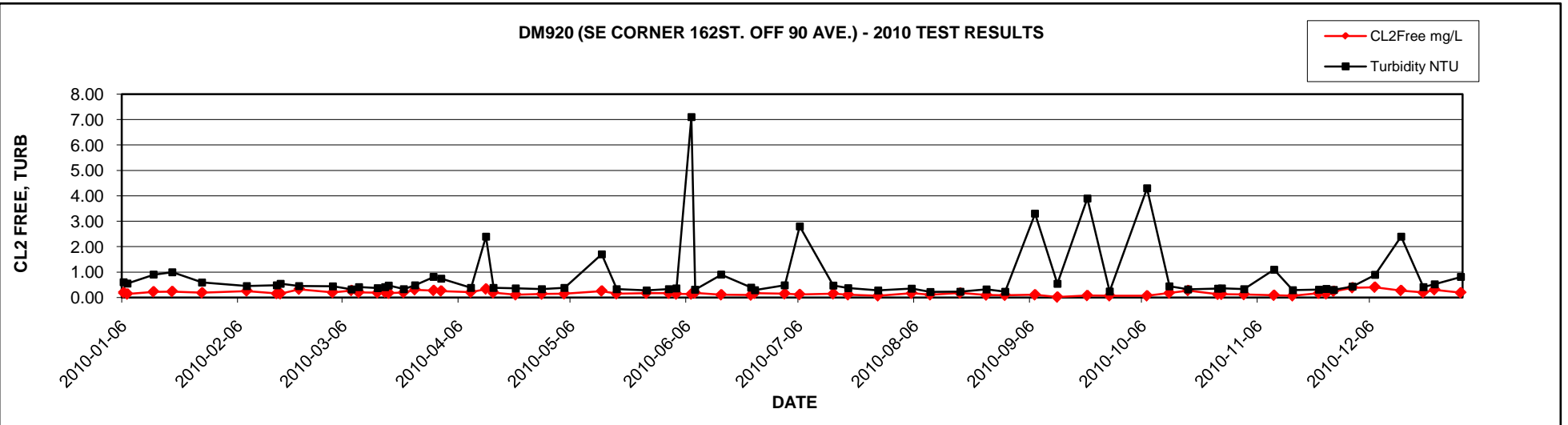
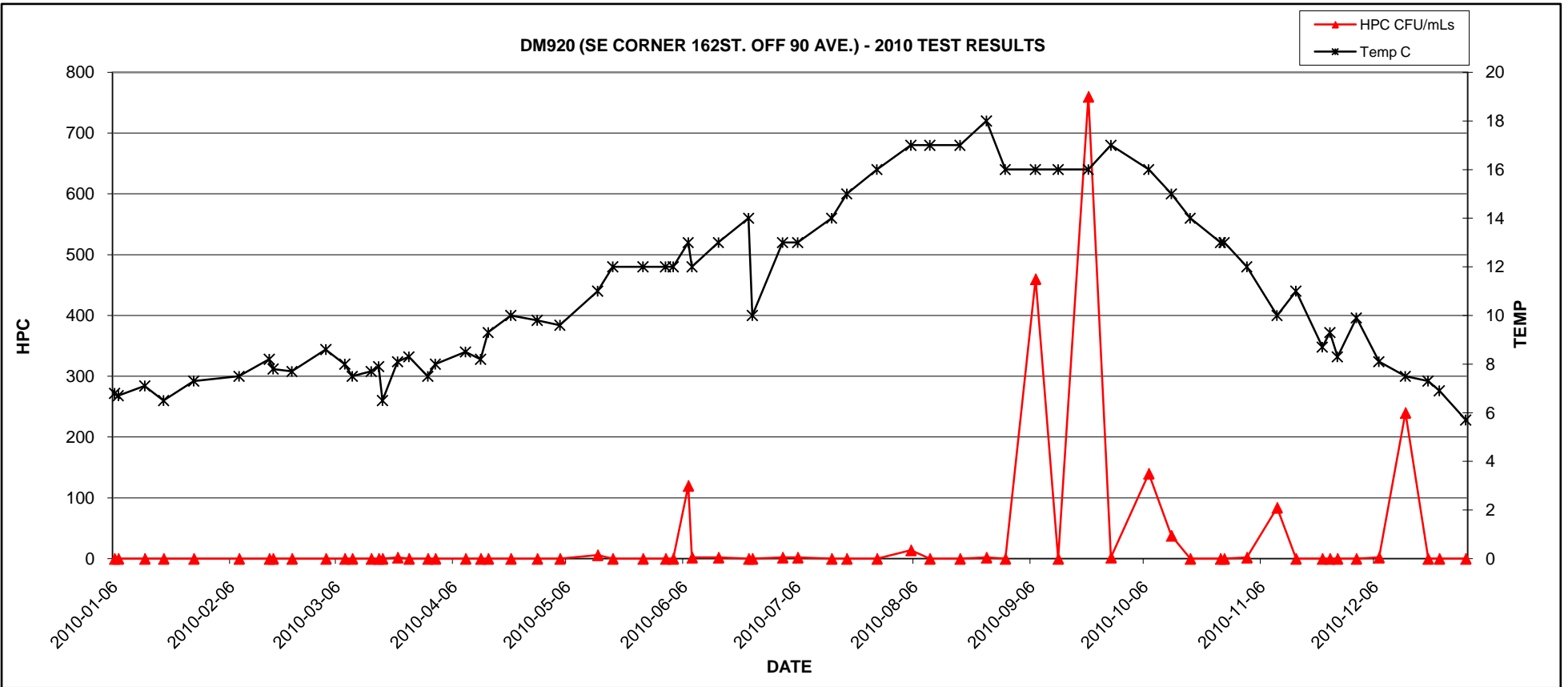
2010 GVRD Laboratory Report - DM919 (NW CORNER 92A AVE. & 151 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.44 | <1 | <2 | <1 | 6.6 | 0.62 |
| 14-Jan | 0.31 | <1 | <2 | <1 | 7.1 | 0.70 |
| 19-Jan | 0.49 | <1 | <2 | <1 | 6 | 0.81 |
| 27-Jan | 0.43 | <1 | 8 | <1 | 6.5 | 0.53 |
| 08-Feb | 0.55 | <1 | <2 | <1 | 7.3 | 0.46 |
| 09-Feb | 0.36 | <1 | <2 | <1 | 6.6 | 0.44 |
| 12-Feb | 0.41 | <1 | <2 | <1 | 7.3 | 0.36 |
| 16-Feb | 0.45 | <1 | 6 | <1 | 7.7 | 0.49 |
| 17-Feb | 0.40 | <1 | 4 | <1 | 7.1 | 0.50 |
| 22-Feb | 0.51 | <1 | 2 | <1 | 7.1 | 0.39 |
| 03-Mar | 0.46 | <1 | <2 | <1 | 8 | 0.44 |
| 08-Mar | 0.51 | <1 | <2 | <1 | 8.5 | 0.34 |
| 10-Mar | 0.45 | <1 | <2 | <1 | 7 | 0.61 |
| 15-Mar | 0.36 | <1 | <2 | <1 | 7.3 | 0.43 |
| 17-Mar | 0.37 | <1 | <2 | <1 | 7.3 | 0.41 |
| 18-Mar | 0.34 | <1 | 2 | <1 | 6 | 0.49 |
| 22-Mar | 0.45 | <1 | 2 | <1 | 8 | 0.37 |
| 25-Mar | 0.74 | <1 | <2 | <1 | 7.9 | 0.56 |
| 30-Mar | 0.57 | <1 | <2 | <1 | 7 | 0.40 |
| 01-Apr | 0.52 | <1 | 4 | <1 | 7.9 | 0.54 |
| 09-Apr | 0.44 | <1 | 20 | <1 | 7.9 | 0.40 |
| 13-Apr | 0.46 | <1 | <2 | <1 | 8 | 0.44 |
| 15-Apr | 0.52 | <1 | <2 | <1 | 8.3 | 0.39 |
| 21-Apr | 0.49 | <1 | <2 | <1 | 9.2 | 0.42 |
| 28-Apr | 0.49 | <1 | <2 | <1 | 9.1 | 0.31 |
| 04-May | 0.32 | <1 | 6 | <1 | 8.6 | 0.30 |
| 14-May | 0.55 | <1 | <2 | <1 | 9.6 | 0.31 |
| 18-May | 0.33 | <1 | 4 | <1 | 11 | 0.39 |
| 26-May | 0.53 | <1 | <2 | <1 | 11 | 0.30 |
| 01-Jun | 0.54 | <1 | <2 | <1 | 12 | 0.26 |
| 03-Jun | 0.39 | <1 | <2 | <1 | 11 | 0.35 |
| 07-Jun | 0.47 | <1 | <2 | <1 | 12 | 0.39 |
| 15-Jun | 0.42 | <1 | 2 | <1 | 11 | 0.62 |
| 23-Jun | 0.54 | <1 | <2 | <1 | 12 | 0.30 |
| 24-Jun | 0.55 | <1 | <2 | <1 | 11 | 0.27 |
| 02-Jul | 0.40 | <1 | <2 | <1 | 13 | 0.33 |
| 06-Jul | 0.56 | <1 | <2 | <1 | 11 | 0.87 |
| 15-Jul | 0.53 | <1 | <2 | <1 | 13 | 0.35 |
| 19-Jul | 0.21 | <1 | <2 | <1 | 14 | 0.24 |
| 27-Jul | 0.38 | <1 | <2 | <1 | 15 | 0.24 |
| 28-Jul | 0.39 | <1 | <2 | <1 | 14 | 0.25 |
| 05-Aug | 0.56 | <1 | 10 | <1 | 13 | 0.23 |
| 10-Aug | 0.40 | <1 | <2 | <1 | 14 | 0.20 |
| 18-Aug | 0.56 | <1 | <2 | <1 | 14 | 0.22 |
| 25-Aug | 0.44 | <1 | <2 | <1 | 14 | 0.23 |
| 30-Aug | 0.40 | <1 | <2 | <1 | 14 | 0.20 |
| 07-Sep | 0.37 | <1 | <2 | <1 | 14 | 0.20 |
| 13-Sep | 0.32 | <1 | <2 | <1 | 14 | 0.29 |
| 21-Sep | 0.37 | <1 | 2 | <1 | 14 | 0.24 |
| 27-Sep | 0.28 | <1 | <2 | <1 | 16 | 0.32 |
| 07-Oct | 0.41 | <1 | 2 | <1 | 14 | 0.27 |
| 13-Oct | 0.40 | <1 | <2 | <1 | 14 | 0.36 |
| 18-Oct | 0.41 | <1 | <2 | <1 | 13 | 0.35 |
| 26-Oct | 0.35 | <1 | <2 | <1 | 12 | 0.35 |
| 27-Oct | 0.31 | <1 | 2 | <1 | 12 | 0.34 |
| 02-Nov | 0.33 | <1 | 2 | <1 | 12 | 0.35 |
| 10-Nov | 0.39 | <1 | <2 | <1 | 11 | 0.30 |
| 15-Nov | 0.36 | <1 | <2 | <1 | 11 | 0.29 |



2010 GVRD Laboratory Report - DM920 (SE CORNER 162ST. OFF 90 AVE.)

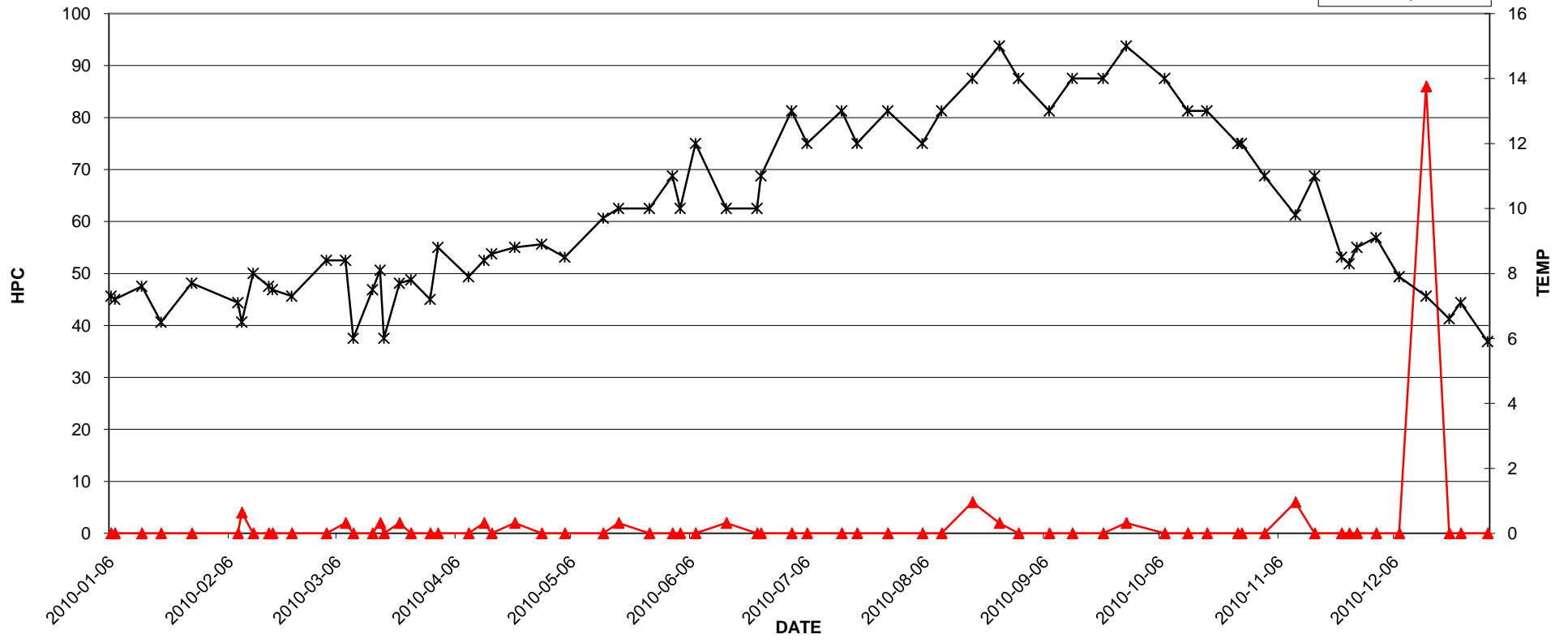
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.20 | <1 | <2 | <1 | 6.8 | 0.60 |
| 07-Jan | 0.14 | <1 | <2 | <1 | 6.7 | 0.55 |
| 14-Jan | 0.23 | <1 | <2 | <1 | 7.1 | 0.90 |
| 19-Jan | 0.24 | <1 | <2 | <1 | 6.5 | 1.00 |
| 27-Jan | 0.19 | <1 | <2 | <1 | 7.3 | 0.59 |
| 08-Feb | 0.26 | <1 | <2 | <1 | 7.5 | 0.45 |
| 16-Feb | 0.16 | <1 | <2 | <1 | 8.2 | 0.48 |
| 17-Feb | 0.15 | <1 | <2 | <1 | 7.8 | 0.54 |
| 22-Feb | 0.33 | <1 | <2 | <1 | 7.7 | 0.45 |
| 03-Mar | 0.20 | <1 | <2 | <1 | 8.6 | 0.44 |
| 08-Mar | 0.28 | <1 | <2 | <1 | 8 | 0.32 |
| 10-Mar | 0.20 | <1 | <2 | <1 | 7.5 | 0.41 |
| 15-Mar | 0.19 | <1 | <2 | <1 | 7.7 | 0.37 |
| 17-Mar | 0.22 | <1 | <2 | <1 | 7.9 | 0.41 |
| 18-Mar | 0.17 | <1 | <2 | <1 | 6.5 | 0.47 |
| 22-Mar | 0.20 | <1 | 2 | <1 | 8.1 | 0.33 |
| 25-Mar | 0.31 | <1 | <2 | <1 | 8.3 | 0.48 |
| 30-Mar | 0.28 | <1 | <2 | <1 | 7.5 | 0.81 |
| 01-Apr | 0.26 | <1 | <2 | <1 | 8 | 0.74 |
| 09-Apr | 0.21 | <1 | <2 | <1 | 8.5 | 0.38 |
| 13-Apr | 0.34 | <1 | <2 | <1 | 8.2 | 2.40 |
| 15-Apr | 0.19 | <1 | <2 | <1 | 9.3 | 0.38 |
| 21-Apr | 0.11 | <1 | <2 | <1 | 10 | 0.36 |
| 28-Apr | 0.14 | <1 | <2 | <1 | 9.8 | 0.33 |
| 04-May | 0.15 | <1 | <2 | <1 | 9.6 | 0.38 |
| 14-May | 0.26 | <1 | 6 | <1 | 11 | 1.70 |
| 18-May | 0.15 | <1 | <2 | <1 | 12 | 0.33 |
| 26-May | 0.17 | <1 | <2 | <1 | 12 | 0.28 |
| 01-Jun | 0.17 | <1 | <2 | <1 | 12 | 0.33 |
| 03-Jun | 0.14 | <1 | <2 | <1 | 12 | 0.36 |
| 07-Jun | 0.14 | <1 | 120 | <1 | 13 | 7.10 |
| 08-Jun | 0.18 | <1 | 2 | <1 | 12 | 0.31 |
| 15-Jun | 0.11 | <1 | 2 | <1 | 13 | 0.90 |
| 23-Jun | 0.10 | <1 | <2 | <1 | 14 | 0.39 |
| 24-Jun | 0.17 | <1 | <2 | <1 | 10 | 0.29 |
| 02-Jul | 0.15 | <1 | 2 | <1 | 13 | 0.48 |
| 06-Jul | 0.12 | <1 | 2 | <1 | 13 | 2.80 |
| 15-Jul | 0.15 | <1 | <2 | <1 | 14 | 0.47 |
| 19-Jul | 0.11 | <1 | <2 | <1 | 15 | 0.37 |
| 27-Jul | 0.07 | <1 | <2 | <1 | 16 | 0.28 |
| 05-Aug | 0.17 | <1 | 14 | <1 | 17 | 0.35 |
| 10-Aug | 0.11 | <1 | <2 | <1 | 17 | 0.22 |
| 18-Aug | 0.18 | <1 | <2 | <1 | 17 | 0.23 |
| 25-Aug | 0.10 | <1 | 2 | <1 | 18 | 0.32 |
| 30-Aug | 0.09 | <1 | <2 | <1 | 16 | 0.23 |
| 07-Sep | 0.11 | <1 | 460 | <1 | 16 | 3.30 |
| 13-Sep | 0.02 | <1 | <2 | <1 | 16 | 0.54 |
| 21-Sep | 0.08 | <1 | 760 | <1 | 16 | 3.90 |
| 27-Sep | 0.07 | <1 | 2 | <1 | 17 | 0.24 |
| 07-Oct | 0.07 | <1 | 140 | <1 | 16 | 4.30 |
| 13-Oct | 0.18 | <1 | 38 | <1 | 15 | 0.44 |
| 18-Oct | 0.28 | <1 | <2 | <1 | 14 | 0.32 |
| 26-Oct | 0.13 | <1 | <2 | <1 | 13 | 0.35 |
| 27-Oct | 0.13 | <1 | <2 | <1 | 13 | 0.36 |
| 02-Nov | 0.12 | <1 | 2 | <1 | 12 | 0.33 |
| 10-Nov | 0.09 | <1 | 84 | <1 | 10 | 1.10 |
| 15-Nov | 0.07 | <1 | <2 | <1 | 11 | 0.29 |
| 22-Nov | 0.17 | <1 | <2 | <1 | 8.7 | 0.31 |
| 24-Nov | 0.15 | <1 | <2 | <1 | 9.3 | 0.34 |
| 26-Nov | 0.25 | <1 | <2 | <1 | 8.3 | 0.30 |
| 01-Dec | 0.39 | <1 | <2 | <1 | 9.9 | 0.43 |
| 07-Dec | 0.41 | <1 | 2 | <1 | 8.1 | 0.89 |
| 14-Dec | 0.28 | <1 | 240 | <1 | 7.5 | 2.40 |
| 20-Dec | 0.20 | <1 | <2 | <1 | 7.3 | 0.41 |
| 23-Dec | 0.31 | <1 | <2 | <1 | 6.9 | 0.52 |
| 30-Dec | 0.19 | <1 | NA | <1 | 5.7 | 0.81 |



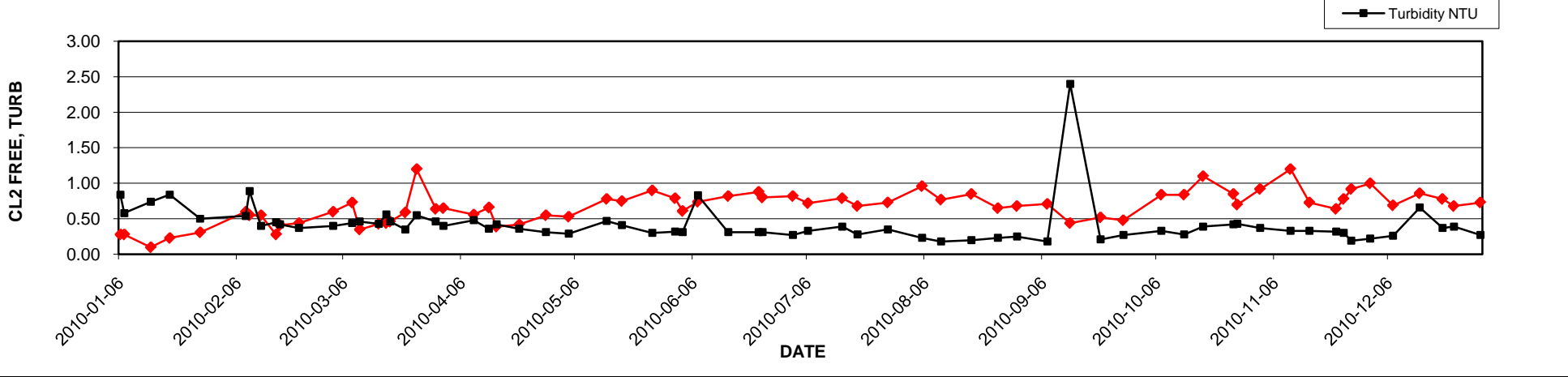
2010 GVRD Laboratory Report - DM921 (NE CORNER 170A ST. OFF 80 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.28 | <1 | <2 | <1 | 7.3 | 0.84 |
| 07-Jan | 0.28 | <1 | <2 | <1 | 7.2 | 0.58 |
| 14-Jan | 0.10 | <1 | <2 | <1 | 7.6 | 0.74 |
| 19-Jan | 0.23 | <1 | <2 | <1 | 6.5 | 0.84 |
| 27-Jan | 0.31 | <1 | <2 | <1 | 7.7 | 0.50 |
| 08-Feb | 0.60 | <1 | <2 | <1 | 7.1 | 0.54 |
| 09-Feb | 0.55 | <1 | 4 | <1 | 6.5 | 0.89 |
| 12-Feb | 0.55 | <1 | <2 | <1 | 8 | 0.40 |
| 16-Feb | 0.28 | <1 | <2 | <1 | 7.6 | 0.45 |
| 17-Feb | 0.41 | <1 | <2 | <1 | 7.5 | 0.42 |
| 22-Feb | 0.44 | <1 | <2 | <1 | 7.3 | 0.37 |
| 03-Mar | 0.60 | <1 | <2 | <1 | 8.4 | 0.40 |
| 08-Mar | 0.73 | <1 | 2 | <1 | 8.4 | 0.44 |
| 10-Mar | 0.35 | <1 | <2 | <1 | 6 | 0.46 |
| 15-Mar | 0.43 | <1 | <2 | <1 | 7.5 | 0.43 |
| 17-Mar | 0.44 | <1 | 2 | <1 | 8.1 | 0.56 |
| 18-Mar | 0.46 | <1 | <2 | <1 | 6 | 0.46 |
| 22-Mar | 0.59 | <1 | 2 | <1 | 7.7 | 0.35 |
| 25-Mar | 1.20 | <1 | <2 | <1 | 7.8 | 0.55 |
| 30-Mar | 0.64 | <1 | <2 | <1 | 7.2 | 0.46 |
| 01-Apr | 0.65 | <1 | <2 | <1 | 8.8 | 0.40 |
| 09-Apr | 0.56 | <1 | <2 | <1 | 7.9 | 0.48 |
| 13-Apr | 0.66 | <1 | 2 | <1 | 8.4 | 0.36 |
| 15-Apr | 0.39 | <1 | <2 | <1 | 8.6 | 0.42 |
| 21-Apr | 0.42 | <1 | 2 | <1 | 8.8 | 0.36 |
| 28-Apr | 0.55 | <1 | <2 | <1 | 8.9 | 0.31 |
| 04-May | 0.53 | <1 | <2 | <1 | 8.5 | 0.29 |
| 14-May | 0.78 | <1 | <2 | <1 | 9.7 | 0.47 |
| 18-May | 0.75 | <1 | 2 | <1 | 10 | 0.41 |
| 26-May | 0.90 | <1 | <2 | <1 | 10 | 0.30 |
| 01-Jun | 0.79 | <1 | <2 | <1 | 11 | 0.32 |
| 03-Jun | 0.61 | <1 | <2 | <1 | 10 | 0.31 |
| 07-Jun | 0.74 | <1 | <2 | <1 | 12 | 0.83 |
| 15-Jun | 0.82 | <1 | 2 | <1 | 10 | 0.31 |
| 23-Jun | 0.88 | <1 | <2 | <1 | 10 | 0.31 |
| 24-Jun | 0.80 | <1 | <2 | <1 | 11 | 0.31 |
| 02-Jul | 0.82 | <1 | <2 | <1 | 13 | 0.27 |
| 06-Jul | 0.72 | <1 | <2 | <1 | 12 | 0.33 |
| 15-Jul | 0.79 | <1 | <2 | <1 | 13 | 0.39 |
| 19-Jul | 0.68 | <1 | <2 | <1 | 12 | 0.28 |
| 27-Jul | 0.73 | <1 | <2 | <1 | 13 | 0.35 |
| 05-Aug | 0.96 | <1 | <2 | <1 | 12 | 0.23 |
| 10-Aug | 0.77 | <1 | <2 | <1 | 13 | 0.18 |
| 18-Aug | 0.85 | <1 | 6 | <1 | 14 | 0.20 |
| 25-Aug | 0.65 | <1 | 2 | <1 | 15 | 0.23 |
| 30-Aug | 0.68 | <1 | <2 | <1 | 14 | 0.25 |
| 07-Sep | 0.71 | <1 | <2 | <1 | 13 | 0.18 |
| 13-Sep | 0.44 | <1 | <2 | <1 | 14 | 2.40 |
| 21-Sep | 0.52 | <1 | <2 | <1 | 14 | 0.21 |
| 27-Sep | 0.48 | <1 | 2 | <1 | 15 | 0.27 |
| 07-Oct | 0.84 | <1 | <2 | <1 | 14 | 0.33 |
| 13-Oct | 0.84 | <1 | <2 | <1 | 13 | 0.28 |
| 18-Oct | 1.10 | <1 | <2 | <1 | 13 | 0.39 |
| 26-Oct | 0.85 | <1 | <2 | <1 | 12 | 0.42 |
| 27-Oct | 0.70 | <1 | <2 | <1 | 12 | 0.43 |
| 02-Nov | 0.92 | <1 | <2 | <1 | 11 | 0.37 |
| 10-Nov | 1.20 | <1 | 6 | <1 | 9.8 | 0.33 |
| 15-Nov | 0.73 | <1 | <2 | <1 | 11 | 0.33 |
| 22-Nov | 0.64 | <1 | <2 | <1 | 8.5 | 0.32 |
| 24-Nov | 0.78 | <1 | <2 | <1 | 8.3 | 0.30 |
| 26-Nov | 0.92 | <1 | <2 | <1 | 8.8 | 0.19 |
| 01-Dec | 1.00 | <1 | <2 | <1 | 9.1 | 0.22 |
| 07-Dec | 0.69 | <1 | <2 | <1 | 7.9 | 0.26 |
| 14-Dec | 0.86 | <1 | 86 | <1 | 7.3 | 0.66 |
| 20-Dec | 0.78 | <1 | <2 | <1 | 6.6 | 0.37 |
| 23-Dec | 0.68 | <1 | <2 | <1 | 7.1 | 0.39 |
| 30-Dec | 0.73 | <1 | NA | <1 | 5.9 | 0.27 |

DM921 (NE CORNER 170A ST. OFF 80 AVE.) - 2010 TEST RESULTS



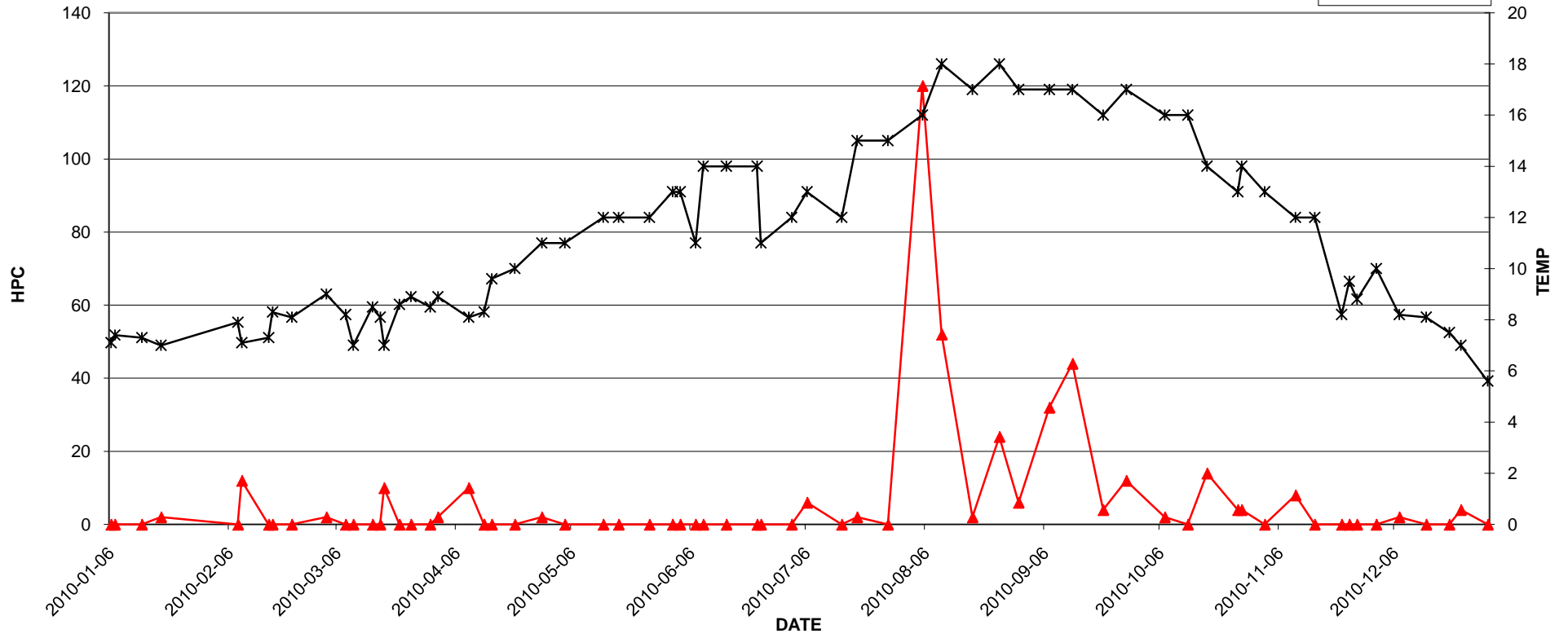
DM921 (NE CORNER 170A ST. OFF 80 AVE.) - 2010 TEST RESULTS



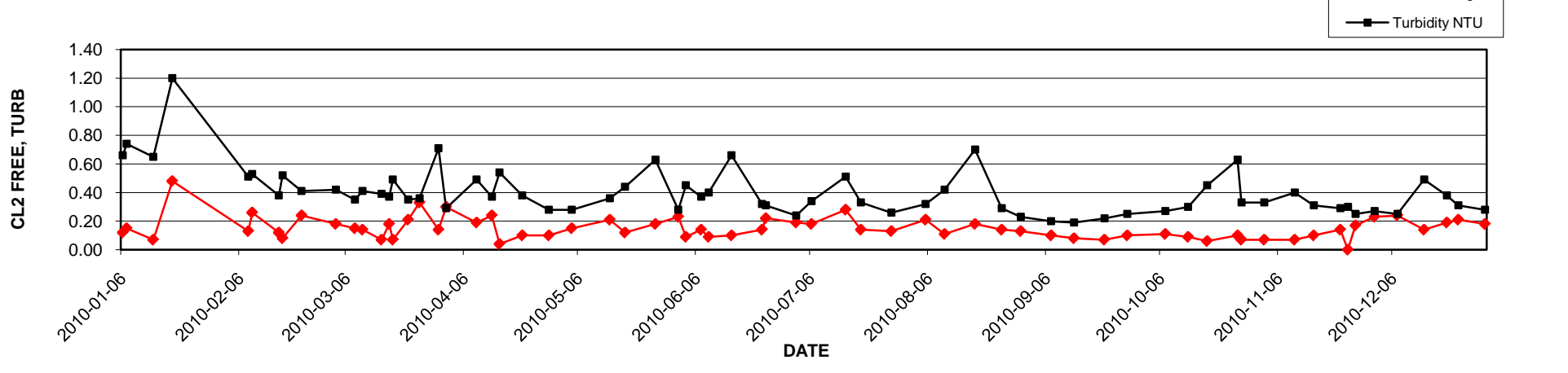
2010 GVRD Laboratory Report - DM922 (7768 155 ST NW P/L)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.12 | <1 | <2 | <1 | 7.1 | 0.66 |
| 07-Jan | 0.15 | <1 | <2 | <1 | 7.4 | 0.74 |
| 14-Jan | 0.07 | <1 | <2 | <1 | 7.3 | 0.65 |
| 19-Jan | 0.48 | <1 | 2 | <1 | 7 | 1.20 |
| 08-Feb | 0.13 | <1 | <2 | <1 | 7.9 | 0.51 |
| 09-Feb | 0.26 | <1 | 12 | <1 | 7.1 | 0.53 |
| 16-Feb | 0.12 | <1 | <2 | <1 | 7.3 | 0.38 |
| 17-Feb | 0.08 | <1 | <2 | <1 | 8.3 | 0.52 |
| 22-Feb | 0.24 | <1 | <2 | <1 | 8.1 | 0.41 |
| 03-Mar | 0.18 | <1 | 2 | <1 | 9 | 0.42 |
| 08-Mar | 0.15 | <1 | <2 | <1 | 8.2 | 0.35 |
| 10-Mar | 0.14 | <1 | <2 | <1 | 7 | 0.41 |
| 15-Mar | 0.07 | <1 | <2 | <1 | 8.5 | 0.39 |
| 17-Mar | 0.18 | <1 | <2 | <1 | 8.1 | 0.37 |
| 18-Mar | 0.07 | <1 | 10 | <1 | 7 | 0.49 |
| 22-Mar | 0.21 | <1 | <2 | <1 | 8.6 | 0.35 |
| 25-Mar | 0.33 | <1 | <2 | <1 | 8.9 | 0.36 |
| 30-Mar | 0.14 | <1 | <2 | <1 | 8.5 | 0.71 |
| 01-Apr | 0.30 | <1 | 2 | <1 | 8.9 | 0.29 |
| 09-Apr | 0.19 | <1 | 10 | <1 | 8.1 | 0.49 |
| 13-Apr | 0.24 | <1 | <2 | <1 | 8.3 | 0.37 |
| 15-Apr | 0.04 | <1 | <2 | <1 | 9.6 | 0.54 |
| 21-Apr | 0.10 | <1 | <2 | <1 | 10 | 0.38 |
| 28-Apr | 0.10 | <1 | 2 | <1 | 11 | 0.28 |
| 04-May | 0.15 | <1 | <2 | <1 | 11 | 0.28 |
| 14-May | 0.21 | <1 | <2 | <1 | 12 | 0.36 |
| 18-May | 0.12 | <1 | <2 | <1 | 12 | 0.44 |
| 26-May | 0.18 | <1 | <2 | <1 | 12 | 0.63 |
| 01-Jun | 0.23 | <1 | <2 | <1 | 13 | 0.28 |
| 03-Jun | 0.09 | <1 | <2 | <1 | 13 | 0.45 |
| 07-Jun | 0.14 | <1 | <2 | <1 | 11 | 0.37 |
| 09-Jun | 0.09 | <1 | <2 | <1 | 14 | 0.40 |
| 15-Jun | 0.10 | <1 | <2 | <1 | 14 | 0.66 |
| 23-Jun | 0.14 | <1 | <2 | <1 | 14 | 0.32 |
| 24-Jun | 0.22 | <1 | <2 | <1 | 11 | 0.31 |
| 02-Jul | 0.19 | <1 | <2 | <1 | 12 | 0.24 |
| 06-Jul | 0.18 | <1 | 6 | <1 | 13 | 0.34 |
| 15-Jul | 0.28 | <1 | <2 | <1 | 12 | 0.51 |
| 19-Jul | 0.14 | <1 | 2 | <1 | 15 | 0.33 |
| 27-Jul | 0.13 | <1 | <2 | <1 | 15 | 0.26 |
| 05-Aug | 0.21 | <1 | 120 | <1 | 16 | 0.32 |
| 10-Aug | 0.11 | <1 | 52 | <1 | 18 | 0.42 |
| 18-Aug | 0.18 | <1 | 2 | <1 | 17 | 0.70 |
| 25-Aug | 0.14 | <1 | 24 | <1 | 18 | 0.29 |
| 30-Aug | 0.13 | <1 | 6 | <1 | 17 | 0.23 |
| 07-Sep | 0.10 | <1 | 32 | <1 | 17 | 0.20 |
| 13-Sep | 0.08 | <1 | 44 | <1 | 17 | 0.19 |
| 21-Sep | 0.07 | <1 | 4 | <1 | 16 | 0.22 |
| 27-Sep | 0.10 | <1 | 12 | <1 | 17 | 0.25 |
| 07-Oct | 0.11 | <1 | 2 | <1 | 16 | 0.27 |
| 13-Oct | 0.09 | <1 | <2 | <1 | 16 | 0.30 |
| 18-Oct | 0.06 | <1 | 14 | <1 | 14 | 0.45 |
| 26-Oct | 0.10 | <1 | 4 | <1 | 13 | 0.63 |
| 27-Oct | 0.07 | <1 | 4 | <1 | 14 | 0.33 |
| 02-Nov | 0.07 | <1 | <2 | <1 | 13 | 0.33 |
| 10-Nov | 0.07 | <1 | 8 | <1 | 12 | 0.40 |
| 15-Nov | 0.10 | <1 | <2 | <1 | 12 | 0.31 |
| 22-Nov | 0.14 | <1 | <2 | <1 | 8.2 | 0.29 |
| 24-Nov | <0.01 | <1 | <2 | <1 | 9.5 | 0.30 |
| 26-Nov | 0.17 | <1 | <2 | <1 | 8.8 | 0.25 |
| 01-Dec | 0.23 | <1 | <2 | <1 | 10 | 0.27 |
| 07-Dec | 0.24 | <1 | 2 | <1 | 8.2 | 0.25 |
| 14-Dec | 0.14 | <1 | <2 | <1 | 8.1 | 0.49 |
| 20-Dec | 0.19 | <1 | <2 | <1 | 7.5 | 0.38 |
| 23-Dec | 0.21 | <1 | 4 | <1 | 7 | 0.31 |
| 30-Dec | 0.18 | <1 | NA | <1 | 5.6 | 0.28 |

DM922 (7768 155 ST NW P/L) - 2010 TEST RESULTS

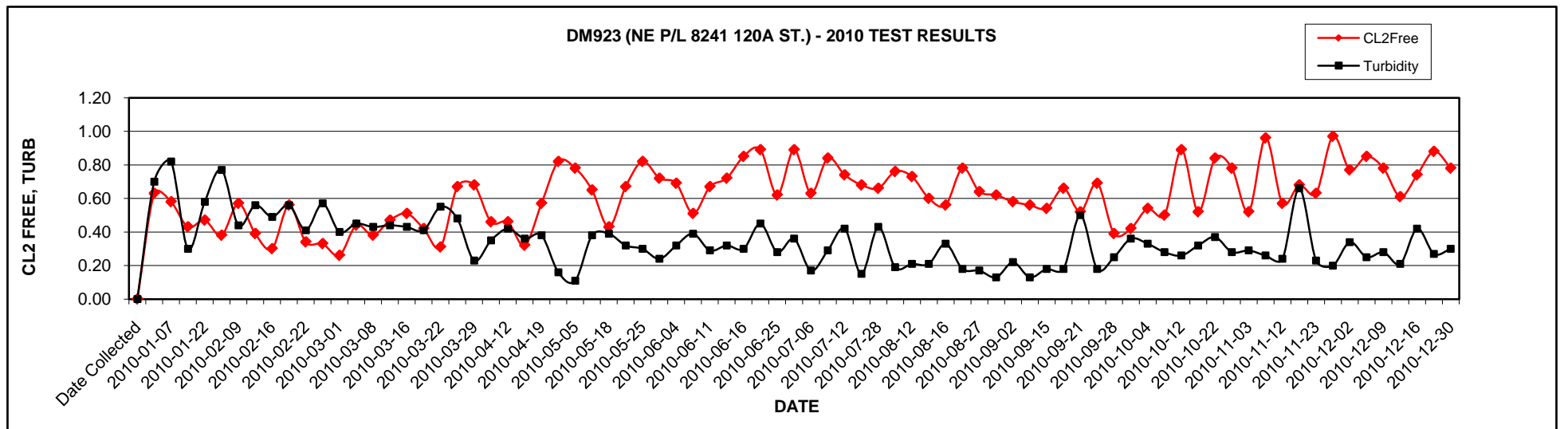
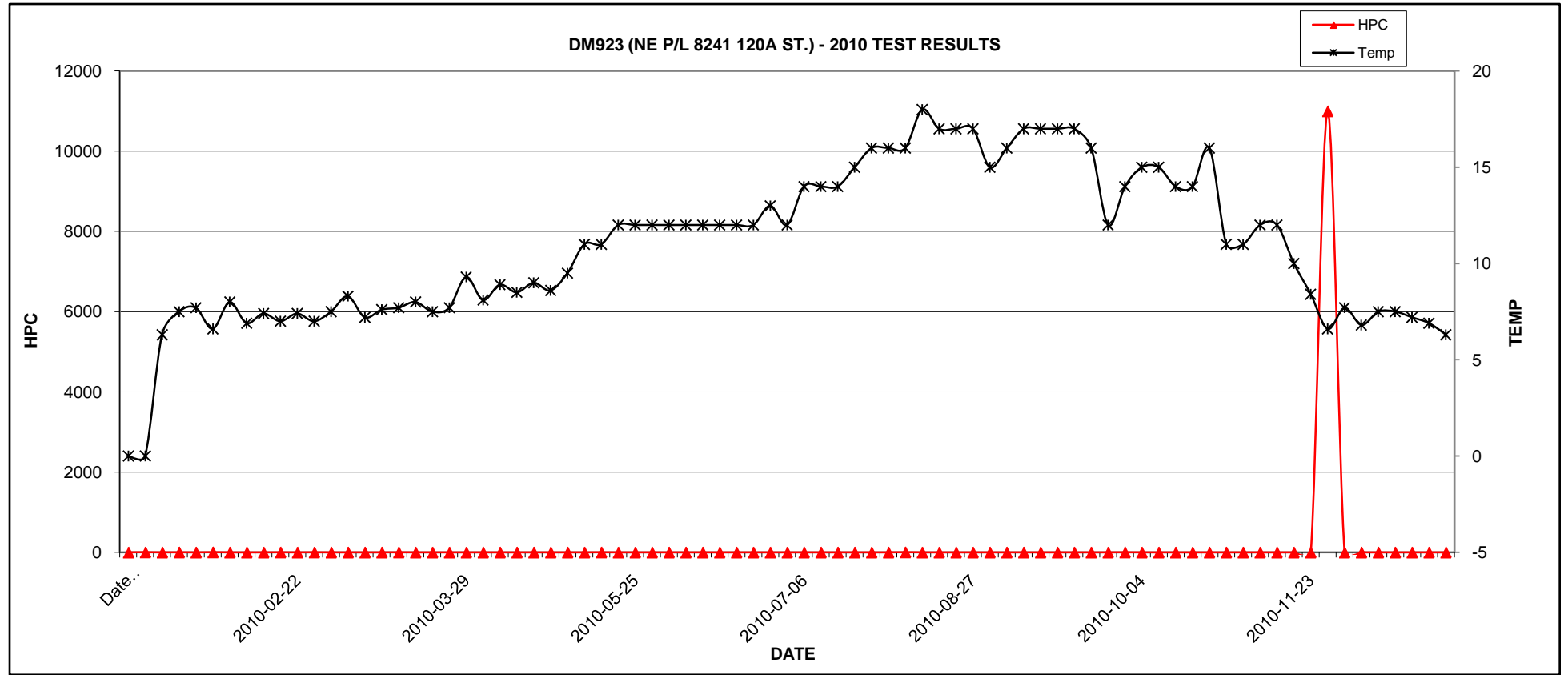


DM922 (7768 155 ST NW P/L) - 2010 TEST RESULTS



2010 GVRD Laboratory Report - DM923 (NE P/L 8241 120A ST.)

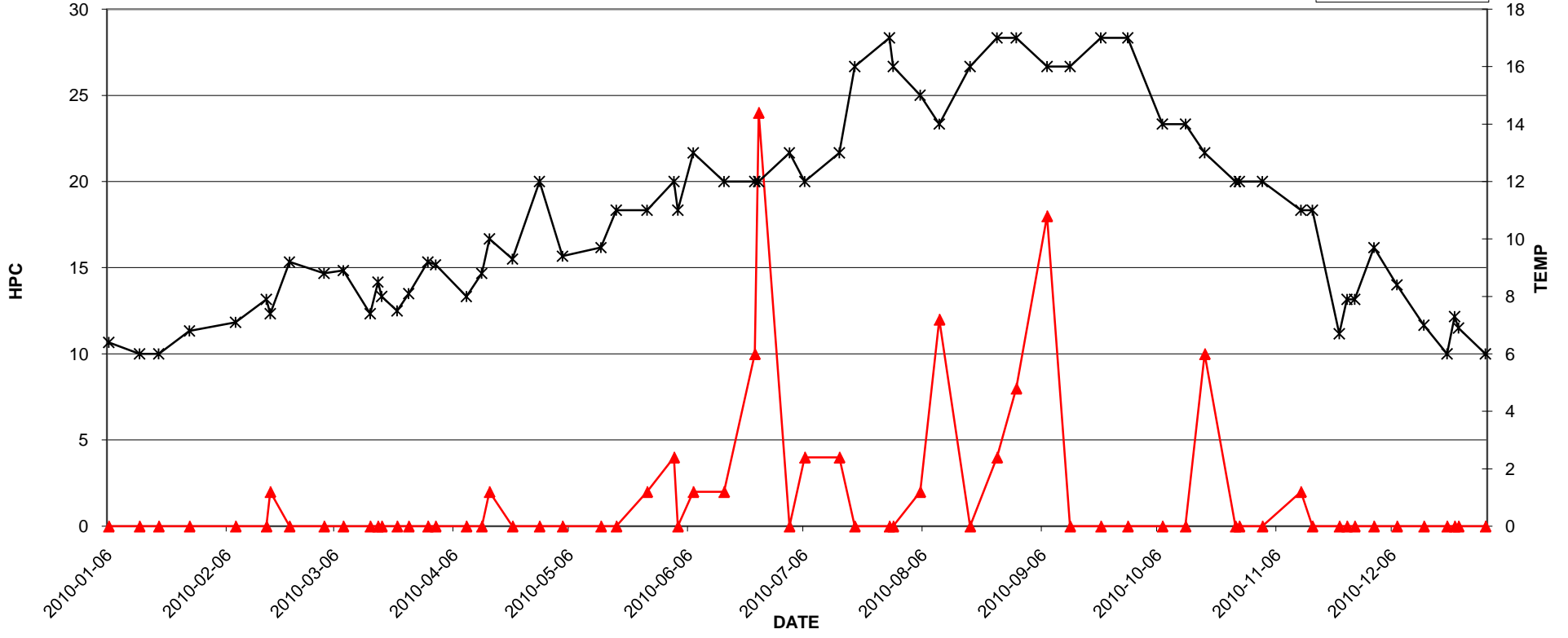
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 2010-01-05 | 0.63 | <1 | 4 | <1 | LA | 0.70 |
| 2010-01-07 | 0.58 | <1 | <2 | <1 | 6.3 | 0.82 |
| 2010-01-15 | 0.43 | <1 | 2 | <1 | 7.5 | 0.30 |
| 2010-01-22 | 0.47 | <1 | <2 | <1 | 7.7 | 0.58 |
| 2010-01-27 | 0.38 | <1 | 4 | <1 | 6.6 | 0.77 |
| 2010-02-09 | 0.57 | <1 | <2 | <1 | 8 | 0.44 |
| 2010-02-11 | 0.39 | <1 | <2 | <1 | 6.9 | 0.56 |
| 2010-02-16 | 0.30 | <1 | <2 | <1 | 7.4 | 0.49 |
| 2010-02-17 | 0.56 | <1 | 2 | <1 | 7 | 0.56 |
| 2010-02-22 | 0.34 | <1 | <2 | <1 | 7.4 | 0.41 |
| 2010-02-24 | 0.33 | <1 | 2 | <1 | 7 | 0.57 |
| 2010-03-01 | 0.26 | <1 | <2 | <1 | 7.5 | 0.40 |
| 2010-03-03 | 0.44 | <1 | <2 | <1 | 8.3 | 0.45 |
| 2010-03-08 | 0.38 | <1 | <2 | <1 | 7.2 | 0.43 |
| 2010-03-10 | 0.47 | <1 | <2 | <1 | 7.6 | 0.44 |
| 2010-03-16 | 0.51 | <1 | 2 | <1 | 7.7 | 0.43 |
| 2010-03-18 | 0.42 | <1 | <2 | <1 | 8 | 0.41 |
| 2010-03-22 | 0.31 | <1 | <2 | <1 | 7.5 | 0.55 |
| 2010-03-23 | 0.67 | <1 | <2 | <1 | 7.7 | 0.48 |
| 2010-03-29 | 0.68 | <1 | <2 | <1 | 9.3 | 0.23 |
| 2010-04-07 | 0.46 | <1 | <2 | <1 | 8.1 | 0.35 |
| 2010-04-12 | 0.46 | <1 | <2 | <1 | 8.9 | 0.42 |
| 2010-04-13 | 0.32 | <1 | <2 | <1 | 8.5 | 0.36 |
| 2010-04-19 | 0.57 | <1 | <2 | <1 | 9 | 0.38 |
| 2010-04-29 | 0.82 | <1 | <2 | <1 | 8.6 | 0.16 |
| 2010-05-05 | 0.78 | <1 | <2 | <1 | 9.5 | 0.11 |
| 2010-05-14 | 0.65 | <1 | <2 | <1 | 11 | 0.38 |
| 2010-05-18 | 0.43 | <1 | 2 | <1 | 11 | 0.39 |
| 2010-05-21 | 0.67 | <1 | <2 | <1 | 12 | 0.32 |
| 2010-05-25 | 0.82 | <1 | <2 | <1 | 12 | 0.30 |
| 2010-06-01 | 0.72 | <1 | <2 | <1 | 12 | 0.24 |
| 2010-06-04 | 0.69 | <1 | <2 | <1 | 12 | 0.32 |
| 2010-06-08 | 0.51 | <1 | <2 | <1 | 12 | 0.39 |
| 2010-06-11 | 0.67 | <1 | <2 | <1 | 12 | 0.29 |
| 2010-06-15 | 0.72 | <1 | <2 | <1 | 12 | 0.32 |
| 2010-06-16 | 0.85 | <1 | <2 | <1 | 12 | 0.30 |
| 2010-06-22 | 0.89 | <1 | <2 | <1 | 12 | 0.45 |
| 2010-06-25 | 0.62 | <1 | <2 | <1 | 13 | 0.28 |
| 2010-06-29 | 0.89 | <1 | <2 | <1 | 12 | 0.36 |
| 2010-07-06 | 0.63 | <1 | <2 | <1 | 14 | 0.17 |
| 2010-07-09 | 0.84 | <1 | <2 | <1 | 14 | 0.29 |
| 2010-07-12 | 0.74 | <1 | <2 | <1 | 14 | 0.42 |
| 2010-07-14 | 0.68 | <1 | <2 | <1 | 15 | 0.15 |
| 2010-07-28 | 0.66 | <1 | <2 | <1 | 16 | 0.43 |
| 2010-08-05 | 0.76 | <1 | <2 | <1 | 16 | 0.19 |
| 2010-08-12 | 0.73 | <1 | 4 | <1 | 16 | 0.21 |
| 2010-08-13 | 0.60 | <1 | <2 | <1 | 18 | 0.21 |
| 2010-08-16 | 0.56 | <1 | <2 | <1 | 17 | 0.33 |
| 2010-08-24 | 0.78 | <1 | <2 | <1 | 17 | 0.18 |
| 2010-08-27 | 0.64 | <1 | <2 | <1 | 17 | 0.17 |
| 2010-08-31 | 0.62 | <1 | <2 | <1 | 15 | 0.13 |
| 2010-09-02 | 0.58 | <1 | <2 | <1 | 16 | 0.22 |
| 2010-09-07 | 0.56 | <1 | <2 | <1 | 17 | 0.13 |
| 2010-09-15 | 0.54 | <1 | <2 | <1 | 17 | 0.18 |
| 2010-09-17 | 0.66 | <1 | <2 | <1 | 17 | 0.18 |
| 2010-09-21 | 0.52 | <1 | <2 | <1 | 17 | 0.50 |
| 2010-09-22 | 0.69 | <1 | <2 | <1 | 16 | 0.18 |
| 2010-09-28 | 0.39 | <1 | <2 | <1 | 12 | 0.25 |
| 2010-10-01 | 0.42 | <1 | 2 | <1 | 14 | 0.36 |
| 2010-10-04 | 0.54 | <1 | <2 | <1 | 15 | 0.33 |
| 2010-10-06 | 0.50 | <1 | <2 | <1 | 15 | 0.28 |
| 2010-10-12 | 0.89 | <1 | <2 | <1 | 14 | 0.26 |
| 2010-10-21 | 0.52 | <1 | <2 | <1 | 14 | 0.32 |
| 2010-10-22 | 0.84 | <1 | <2 | <1 | 16 | 0.37 |
| 2010-10-25 | 0.78 | <1 | <2 | <1 | 11 | 0.28 |
| 2010-11-03 | 0.52 | <1 | <2 | <1 | 11 | 0.29 |
| 2010-11-08 | 0.96 | <1 | <2 | <1 | 12 | 0.26 |
| 2010-11-12 | 0.57 | <1 | <2 | <1 | 12 | 0.24 |
| 2010-11-18 | 0.68 | <1 | <2 | <1 | 10 | 0.66 |
| 2010-11-23 | 0.63 | <1 | <2 | <1 | 8.4 | 0.23 |
| 2010-12-01 | 0.97 | <1 | 11000 | <1 | 6.6 | 0.20 |
| 2010-12-02 | 0.77 | <1 | <2 | <1 | 7.7 | 0.34 |
| 2010-12-07 | 0.85 | <1 | <2 | <1 | 6.8 | 0.25 |
| 2010-12-09 | 0.78 | <1 | <2 | <1 | 7.5 | 0.28 |
| 2010-12-14 | 0.61 | <1 | <2 | <1 | 7.5 | 0.21 |
| 2010-12-16 | 0.74 | <1 | <2 | <1 | 7.2 | 0.42 |
| 2010-12-21 | 0.88 | <1 | <2 | <1 | 6.9 | 0.27 |
| 2010-12-30 | 0.78 | <1 | NA | <1 | 6.3 | 0.30 |



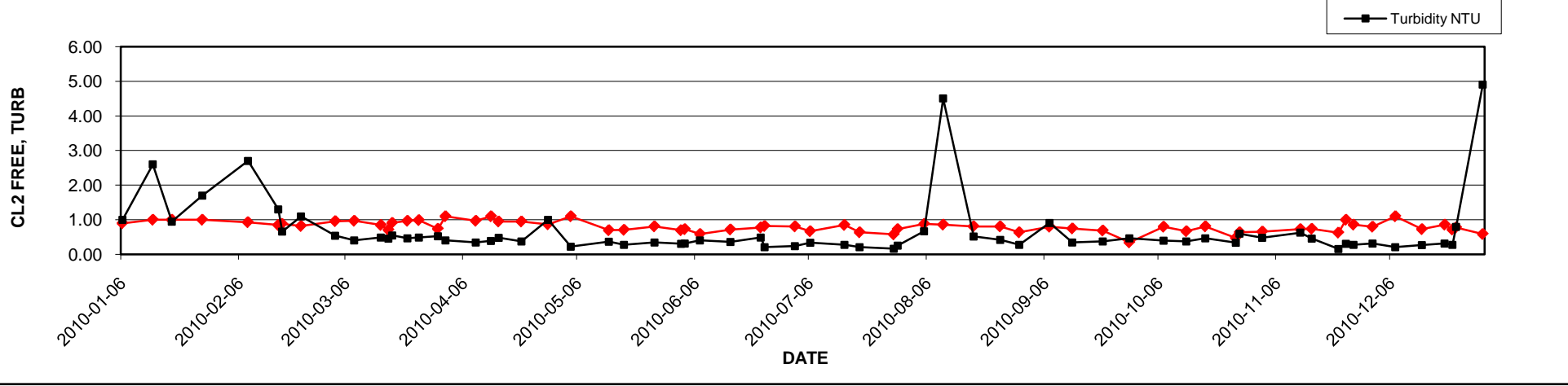
2010 GVRD Laboratory Report - DM924 (100M W/138 ST. S. SIDE of 74 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.90 | <1 | <2 | <1 | 6.4 | 1.00 |
| 14-Jan | 1.00 | <1 | <2 | <1 | 6 | 2.60 |
| 19-Jan | 1.00 | <1 | <2 | <1 | 6 | 0.95 |
| 27-Jan | 1.00 | <1 | <2 | <1 | 6.8 | 1.70 |
| 08-Feb | 0.93 | <1 | <2 | <1 | 7.1 | 2.70 |
| 16-Feb | 0.85 | <1 | NA | <1 | 7.9 | 1.30 |
| 17-Feb | 0.88 | <1 | 2 | <1 | 7.4 | 0.66 |
| 22-Feb | 0.82 | <1 | <2 | <1 | 9.2 | 1.10 |
| 03-Mar | 0.96 | <1 | <2 | <1 | 8.8 | 0.54 |
| 08-Mar | 0.97 | <1 | <2 | <1 | 8.9 | 0.41 |
| 15-Mar | 0.85 | <1 | <2 | <1 | 7.4 | 0.49 |
| 17-Mar | 0.71 | <1 | <2 | <1 | 8.5 | 0.46 |
| 18-Mar | 0.91 | <1 | <2 | <1 | 8 | 0.55 |
| 22-Mar | 0.97 | <1 | <2 | <1 | 7.5 | 0.47 |
| 25-Mar | 0.99 | <1 | <2 | <1 | 8.1 | 0.49 |
| 30-Mar | 0.74 | <1 | <2 | <1 | 9.2 | 0.53 |
| 01-Apr | 1.10 | <1 | <2 | <1 | 9.1 | 0.41 |
| 09-Apr | 0.97 | <1 | <2 | <1 | 8 | 0.35 |
| 13-Apr | 1.10 | <1 | <2 | <1 | 8.8 | 0.39 |
| 15-Apr | 0.95 | <1 | 2 | <1 | 10 | 0.48 |
| 21-Apr | 0.95 | <1 | <2 | <1 | 9.3 | 0.38 |
| 28-Apr | 0.87 | <1 | <2 | <1 | 12 | 1.00 |
| 04-May | 1.10 | <1 | <2 | <1 | 9.4 | 0.23 |
| 14-May | 0.70 | <1 | <2 | <1 | 9.7 | 0.37 |
| 18-May | 0.71 | <1 | <2 | <1 | 11 | 0.28 |
| 26-May | 0.81 | <1 | 2 | <1 | 11 | 0.35 |
| 02-Jun | 0.70 | <1 | 4 | <1 | 12 | 0.31 |
| 03-Jun | 0.73 | <1 | <2 | <1 | 11 | 0.32 |
| 07-Jun | 0.59 | <1 | 2 | <1 | 13 | 0.41 |
| 15-Jun | 0.72 | <1 | 2 | <1 | 12 | 0.36 |
| 23-Jun | 0.78 | <1 | 10 | <1 | 12 | 0.49 |
| 24-Jun | 0.82 | <1 | 24 | <1 | 12 | 0.21 |
| 02-Jul | 0.81 | <1 | <2 | <1 | 13 | 0.24 |
| 06-Jul | 0.67 | <1 | 4 | <1 | 12 | 0.34 |
| 15-Jul | 0.85 | <1 | 4 | <1 | 13 | 0.28 |
| 19-Jul | 0.64 | <1 | <2 | <1 | 16 | 0.21 |
| 28-Jul | 0.58 | <1 | <2 | <1 | 17 | 0.17 |
| 29-Jul | 0.73 | <1 | <2 | <1 | 16 | 0.26 |
| 05-Aug | 0.88 | <1 | 2 | <1 | 15 | 0.67 |
| 10-Aug | 0.86 | <1 | 12 | <1 | 14 | 4.50 |
| 18-Aug | 0.81 | <1 | <2 | <1 | 16 | 0.52 |
| 25-Aug | 0.81 | <1 | 4 | <1 | 17 | 0.42 |
| 30-Aug | 0.64 | <1 | 8 | <1 | 17 | 0.28 |
| 07-Sep | 0.80 | <1 | 18 | <1 | 16 | 0.91 |
| 13-Sep | 0.75 | <1 | <2 | <1 | 16 | 0.35 |
| 21-Sep | 0.69 | <1 | <2 | <1 | 17 | 0.38 |
| 28-Sep | 0.35 | <1 | <2 | <1 | 17 | 0.47 |
| 07-Oct | 0.80 | <1 | <2 | <1 | 14 | 0.40 |
| 13-Oct | 0.67 | <1 | <2 | <1 | 14 | 0.38 |
| 18-Oct | 0.81 | <1 | 10 | <1 | 13 | 0.47 |
| 26-Oct | 0.48 | <1 | <2 | <1 | 12 | 0.34 |
| 27-Oct | 0.64 | <1 | <2 | <1 | 12 | 0.60 |
| 02-Nov | 0.66 | <1 | <2 | <1 | 12 | 0.48 |
| 12-Nov | 0.73 | <1 | 2 | <1 | 11 | 0.63 |
| 15-Nov | 0.74 | <1 | <2 | <1 | 11 | 0.46 |
| 22-Nov | 0.63 | <1 | <2 | <1 | 6.7 | 0.16 |
| 24-Nov | 1.00 | <1 | <2 | <1 | 7.9 | 0.31 |
| 26-Nov | 0.86 | <1 | <2 | <1 | 7.9 | 0.28 |
| 01-Dec | 0.80 | <1 | <2 | <1 | 9.7 | 0.32 |
| 07-Dec | 1.10 | <1 | <2 | <1 | 8.4 | 0.21 |
| 14-Dec | 0.73 | <1 | <2 | <1 | 7 | 0.27 |
| 20-Dec | 0.86 | <1 | <2 | <1 | 6 | 0.32 |
| 22-Dec | 0.72 | <1 | <2 | <1 | 7.3 | 0.28 |
| 23-Dec | 0.78 | <1 | <2 | <1 | 6.9 | 0.80 |
| 30-Dec | 0.59 | <1 | NA | <1 | 6 | 4.90 |

DM924 (100M W/138 ST. S. SIDE of 74 AVE.) - 2010 TEST RESULTS

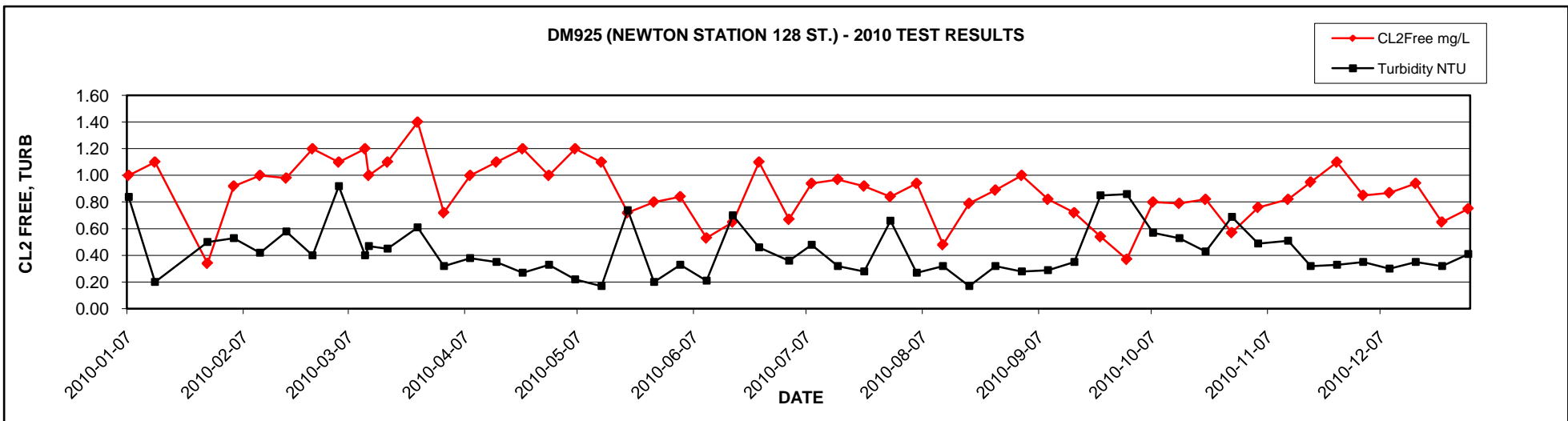
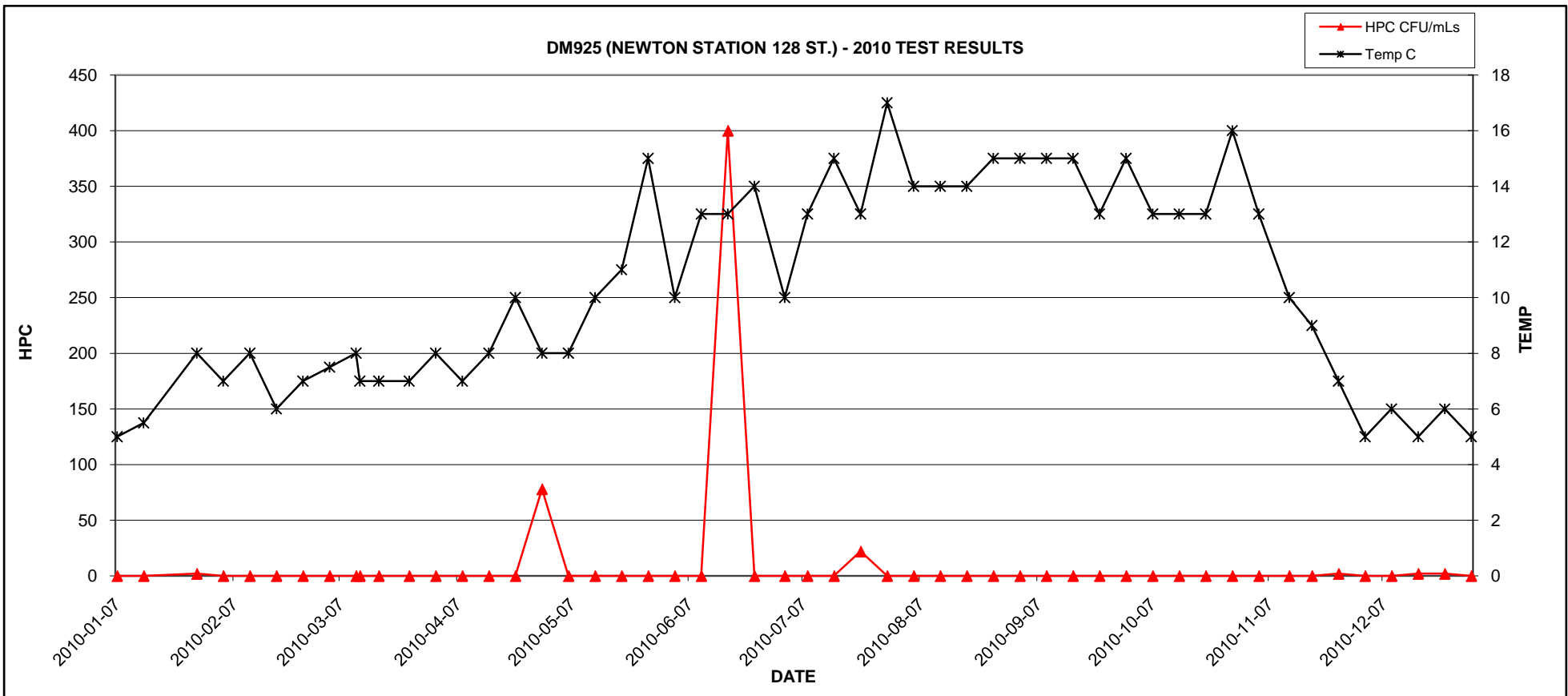


DM924 (100M W/138 ST. S. SIDE of 74 AVE.) - 2010 TEST RESULTS



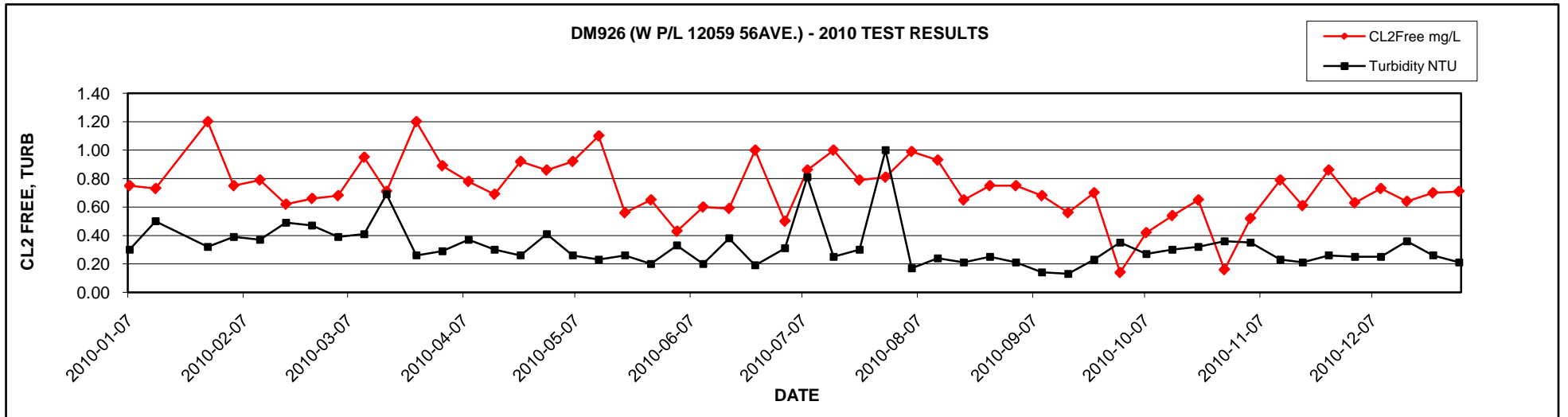
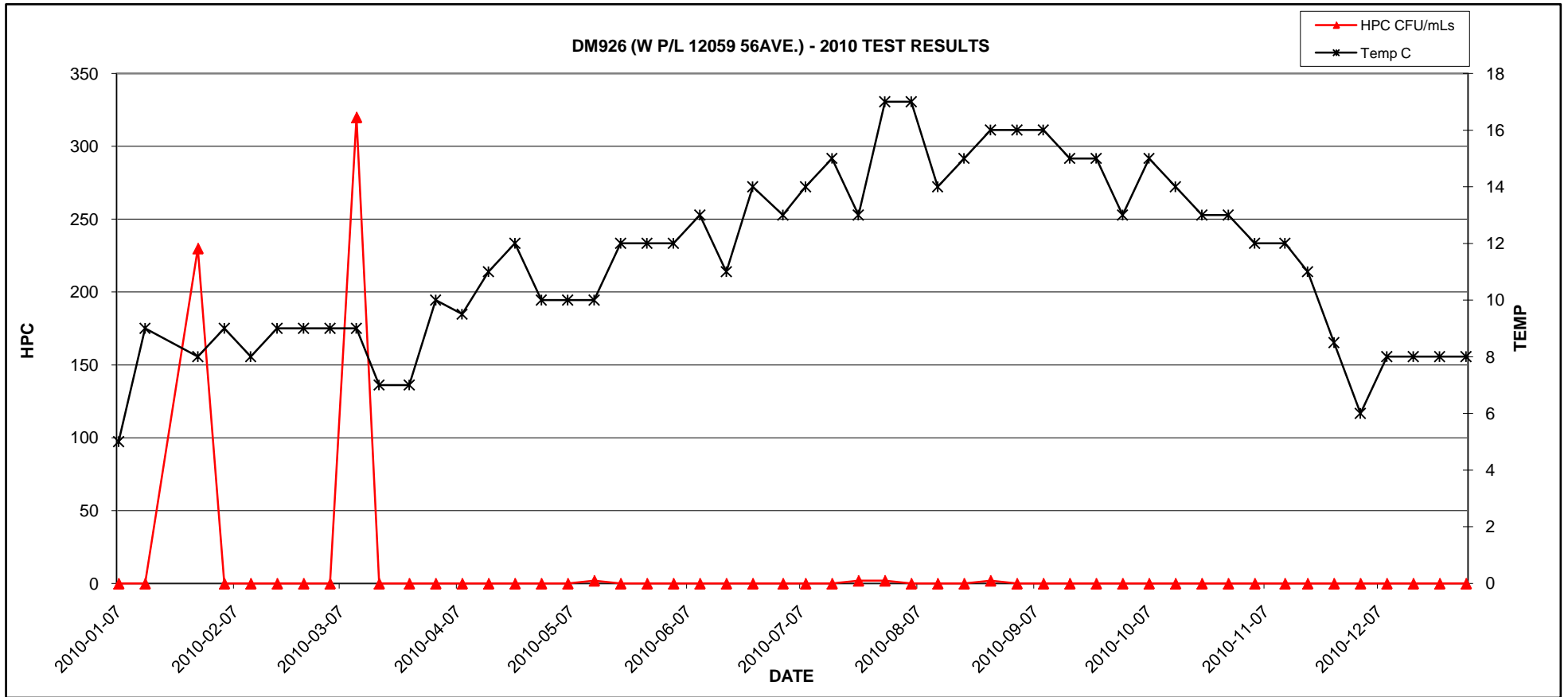
2010 GVRD Laboratory Report - DM925 (NEWTON STATION 128 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 1.00 | <1 | <2 | <1 | 5 | 0.84 |
| 14-Jan | 1.10 | <1 | <2 | <1 | 5.5 | 0.20 |
| 28-Jan | 0.34 | <1 | 2 | <1 | 8 | 0.50 |
| 04-Feb | 0.92 | <1 | <2 | <1 | 7 | 0.53 |
| 11-Feb | 1.00 | <1 | <2 | <1 | 8 | 0.42 |
| 18-Feb | 0.98 | <1 | <2 | <1 | 6 | 0.58 |
| 25-Feb | 1.20 | <1 | <2 | <1 | 7 | 0.40 |
| 04-Mar | 1.10 | <1 | <2 | <1 | 7.5 | 0.92 |
| 11-Mar | 1.20 | <1 | <2 | <1 | 8 | 0.40 |
| 12-Mar | 1.00 | <1 | <2 | <1 | 7 | 0.47 |
| 17-Mar | 1.10 | <1 | <2 | <1 | 7 | 0.45 |
| 25-Mar | 1.40 | <1 | <2 | <1 | 7 | 0.61 |
| 01-Apr | 0.72 | <1 | <2 | <1 | 8 | 0.32 |
| 08-Apr | 1.00 | <1 | <2 | <1 | 7 | 0.38 |
| 15-Apr | 1.10 | <1 | <2 | <1 | 8 | 0.35 |
| 22-Apr | 1.20 | <1 | <2 | <1 | 10 | 0.27 |
| 29-Apr | 1.00 | <1 | 78 | <1 | 8 | 0.33 |
| 06-May | 1.20 | <1 | <2 | <1 | 8 | 0.22 |
| 13-May | 1.10 | <1 | <2 | <1 | 10 | 0.17 |
| 20-May | 0.72 | <1 | <2 | <1 | 11 | 0.74 |
| 27-May | 0.80 | <1 | LA | <1 | 15 | 0.20 |
| 03-Jun | 0.84 | <1 | <2 | <1 | 10 | 0.33 |
| 10-Jun | 0.53 | <1 | <2 | <1 | 13 | 0.21 |
| 17-Jun | 0.65 | <1 | 400 | <1 | 13 | 0.70 |
| 24-Jun | 1.10 | <1 | <2 | <1 | 14 | 0.46 |
| 02-Jul | 0.67 | <1 | <2 | <1 | 10 | 0.36 |
| 08-Jul | 0.94 | <1 | <2 | <1 | 13 | 0.48 |
| 15-Jul | 0.97 | <1 | <2 | <1 | 15 | 0.32 |
| 22-Jul | 0.92 | <1 | 22 | <1 | 13 | 0.28 |
| 29-Jul | 0.84 | <1 | <2 | <1 | 17 | 0.66 |
| 05-Aug | 0.94 | <1 | <2 | <1 | 14 | 0.27 |
| 12-Aug | 0.48 | <1 | <2 | <1 | 14 | 0.32 |
| 19-Aug | 0.79 | <1 | <2 | <1 | 14 | 0.17 |
| 26-Aug | 0.89 | <1 | <2 | <1 | 15 | 0.32 |
| 02-Sep | 1.00 | <1 | <2 | <1 | 15 | 0.28 |
| 09-Sep | 0.82 | <1 | <2 | <1 | 15 | 0.29 |
| 16-Sep | 0.72 | <1 | <2 | <1 | 15 | 0.35 |
| 23-Sep | 0.54 | <1 | <2 | <1 | 13 | 0.85 |
| 30-Sep | 0.37 | <1 | <2 | <1 | 15 | 0.86 |
| 07-Oct | 0.80 | <1 | <2 | <1 | 13 | 0.57 |
| 14-Oct | 0.79 | <1 | <2 | <1 | 13 | 0.53 |
| 21-Oct | 0.82 | <1 | <2 | <1 | 13 | 0.43 |
| 28-Oct | 0.57 | <1 | <2 | <1 | 16 | 0.69 |
| 04-Nov | 0.76 | <1 | <2 | <1 | 13 | 0.49 |
| 12-Nov | 0.82 | <1 | <2 | <1 | 10 | 0.51 |
| 18-Nov | 0.95 | <1 | <2 | <1 | 9 | 0.32 |
| 25-Nov | 1.10 | <1 | 2 | <1 | 7 | 0.33 |
| 02-Dec | 0.85 | <1 | <2 | <1 | 5 | 0.35 |
| 09-Dec | 0.87 | <1 | <2 | <1 | 6 | 0.30 |
| 16-Dec | 0.94 | <1 | 2 | <1 | 5 | 0.35 |
| 23-Dec | 0.65 | <1 | 2 | <1 | 6 | 0.32 |
| 30-Dec | 0.75 | <1 | NA | <1 | 5 | 0.41 |



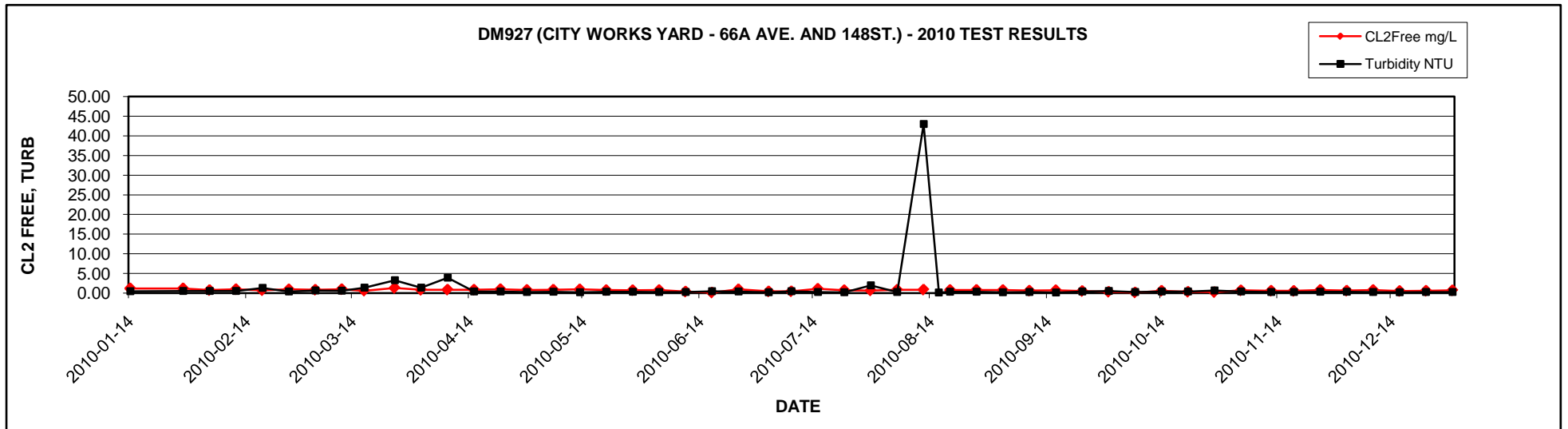
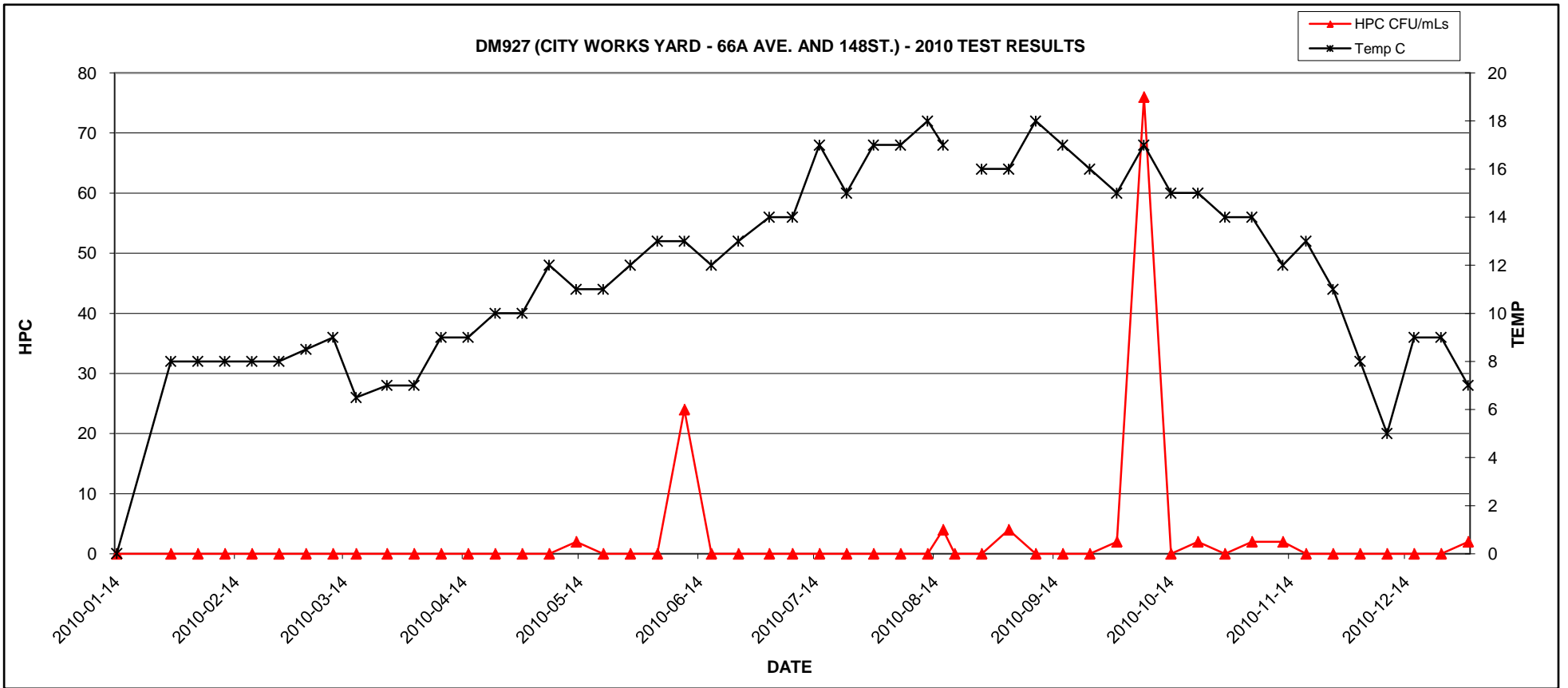
2010 GVRD Laboratory Report - DM926 (W P/L 12059 56AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.75 | <1 | <2 | <1 | 5 | 0.30 |
| 14-Jan | 0.73 | <1 | <2 | <1 | 9 | 0.50 |
| 28-Jan | 1.20 | <1 | 230 | <1 | 8 | 0.32 |
| 04-Feb | 0.75 | <1 | <2 | <1 | 9 | 0.39 |
| 11-Feb | 0.79 | <1 | <2 | <1 | 8 | 0.37 |
| 18-Feb | 0.62 | <1 | <2 | <1 | 9 | 0.49 |
| 25-Feb | 0.66 | <1 | <2 | <1 | 9 | 0.47 |
| 04-Mar | 0.68 | <1 | <2 | <1 | 9 | 0.39 |
| 11-Mar | 0.95 | <1 | 320 | <1 | 9 | 0.41 |
| 17-Mar | 0.71 | <1 | <2 | <1 | 7 | 0.69 |
| 25-Mar | 1.20 | <1 | <2 | <1 | 7 | 0.26 |
| 01-Apr | 0.89 | <1 | <2 | <1 | 10 | 0.29 |
| 08-Apr | 0.78 | <1 | <2 | <1 | 9.5 | 0.37 |
| 15-Apr | 0.69 | <1 | <2 | <1 | 11 | 0.30 |
| 22-Apr | 0.92 | <1 | <2 | <1 | 12 | 0.26 |
| 29-Apr | 0.86 | <1 | <2 | <1 | 10 | 0.41 |
| 06-May | 0.92 | <1 | <2 | <1 | 10 | 0.26 |
| 13-May | 1.10 | <1 | 2 | <1 | 10 | 0.23 |
| 20-May | 0.56 | <1 | <2 | <1 | 12 | 0.26 |
| 27-May | 0.65 | <1 | <2 | <1 | 12 | 0.20 |
| 03-Jun | 0.43 | <1 | <2 | <1 | 12 | 0.33 |
| 10-Jun | 0.60 | <1 | <2 | <1 | 13 | 0.20 |
| 17-Jun | 0.59 | <1 | <2 | <1 | 11 | 0.38 |
| 24-Jun | 1.00 | <1 | <2 | <1 | 14 | 0.19 |
| 02-Jul | 0.50 | <1 | <2 | <1 | 13 | 0.31 |
| 08-Jul | 0.86 | <1 | <2 | <1 | 14 | 0.81 |
| 15-Jul | 1.00 | <1 | <2 | <1 | 15 | 0.25 |
| 22-Jul | 0.79 | <1 | 2 | <1 | 13 | 0.30 |
| 29-Jul | 0.81 | <1 | 2 | <1 | 17 | 1.00 |
| 05-Aug | 0.99 | <1 | <2 | <1 | 17 | 0.17 |
| 12-Aug | 0.93 | <1 | <2 | <1 | 14 | 0.24 |
| 19-Aug | 0.65 | <1 | <2 | <1 | 15 | 0.21 |
| 26-Aug | 0.75 | <1 | 2 | <1 | 16 | 0.25 |
| 02-Sep | 0.75 | <1 | <2 | <1 | 16 | 0.21 |
| 09-Sep | 0.68 | <1 | <2 | <1 | 16 | 0.14 |
| 16-Sep | 0.56 | <1 | <2 | <1 | 15 | 0.13 |
| 23-Sep | 0.70 | <1 | <2 | <1 | 15 | 0.23 |
| 30-Sep | 0.14 | <1 | <2 | <1 | 13 | 0.35 |
| 07-Oct | 0.42 | <1 | <2 | <1 | 15 | 0.27 |
| 14-Oct | 0.54 | <1 | <2 | <1 | 14 | 0.30 |
| 21-Oct | 0.65 | <1 | <2 | <1 | 13 | 0.32 |
| 28-Oct | 0.16 | <1 | <2 | <1 | 13 | 0.36 |
| 04-Nov | 0.52 | <1 | <2 | <1 | 12 | 0.35 |
| 12-Nov | 0.79 | <1 | <2 | <1 | 12 | 0.23 |
| 18-Nov | 0.61 | <1 | <2 | <1 | 11 | 0.21 |
| 25-Nov | 0.86 | <1 | <2 | <1 | 8.5 | 0.26 |
| 02-Dec | 0.63 | <1 | <2 | <1 | 6 | 0.25 |
| 09-Dec | 0.73 | <1 | <2 | <1 | 8 | 0.25 |
| 16-Dec | 0.64 | <1 | <2 | <1 | 8 | 0.36 |
| 23-Dec | 0.70 | <1 | <2 | <1 | 8 | 0.26 |
| 30-Dec | 0.71 | <1 | NA | <1 | 8 | 0.21 |



2010 GVRD Laboratory Report - DM927 (CITY WORKS YARD - 66A AVE. AND 148ST.)

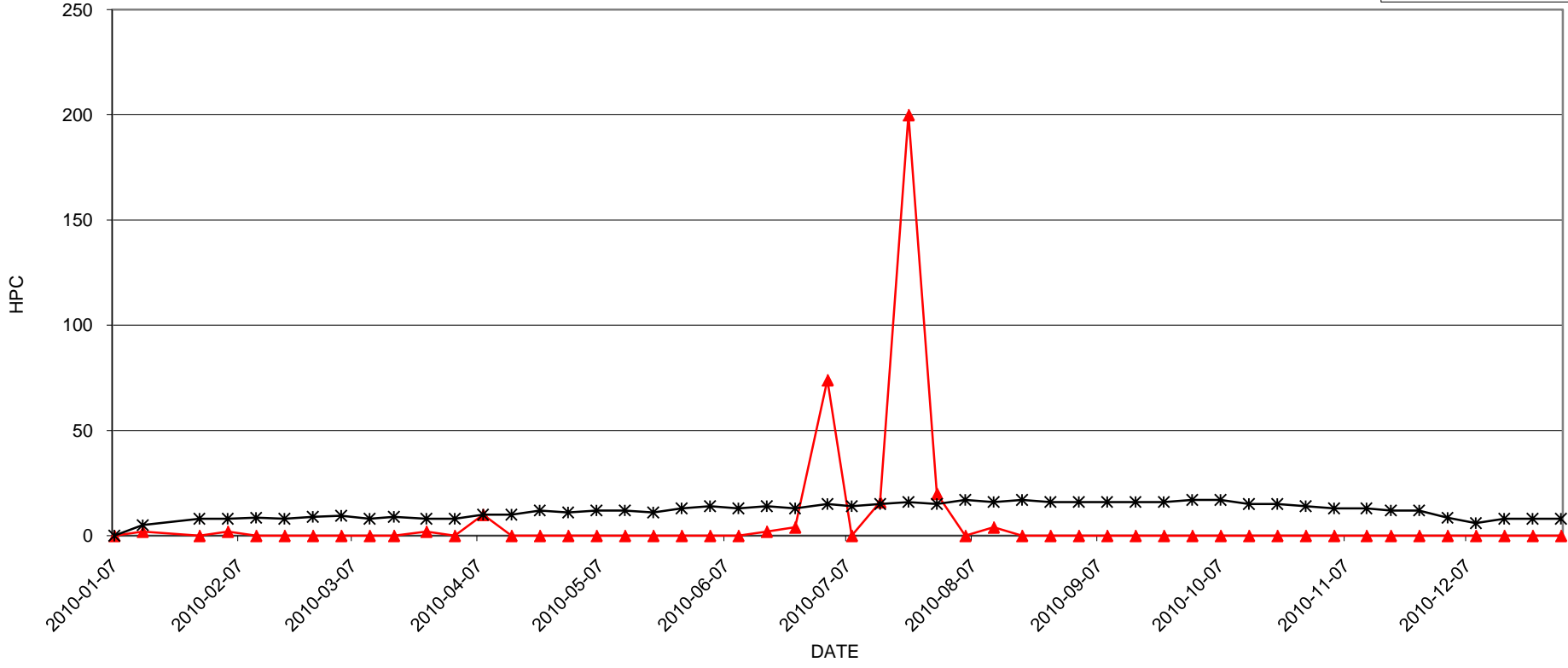
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 14-Jan | 1.20 | <1 | <2 | <1 | 8 | 0.50 |
| 28-Jan | 1.20 | <1 | <2 | <1 | 8 | 0.55 |
| 04-Feb | 0.77 | <1 | <2 | <1 | 8 | 0.55 |
| 11-Feb | 1.00 | <1 | <2 | <1 | 8 | 0.55 |
| 18-Feb | 0.74 | <1 | <2 | <1 | 8 | 1.30 |
| 25-Feb | 0.96 | <1 | <2 | <1 | 8.5 | 0.41 |
| 04-Mar | 0.86 | <1 | <2 | <1 | 9 | 0.70 |
| 11-Mar | 1.00 | <1 | <2 | <1 | 6.5 | 0.58 |
| 17-Mar | 0.62 | <1 | <2 | <1 | 7 | 1.40 |
| 25-Mar | 1.30 | <1 | <2 | <1 | 7 | 3.30 |
| 01-Apr | 0.83 | <1 | <2 | <1 | 9 | 1.40 |
| 08-Apr | 0.88 | <1 | <2 | <1 | 9 | 3.90 |
| 15-Apr | 0.87 | <1 | <2 | <1 | 10 | 0.39 |
| 22-Apr | 1.00 | <1 | <2 | <1 | 10 | 0.38 |
| 29-Apr | 0.82 | <1 | <2 | <1 | 12 | 0.28 |
| 06-May | 0.87 | <1 | 2 | <1 | 11 | 0.32 |
| 13-May | 0.95 | <1 | <2 | <1 | 11 | 0.23 |
| 20-May | 0.77 | <1 | <2 | <1 | 12 | 0.34 |
| 27-May | 0.74 | <1 | <2 | <1 | 13 | 0.33 |
| 03-Jun | 0.78 | <1 | 24 | <1 | 13 | 0.29 |
| 10-Jun | 0.40 | <1 | <2 | <1 | 12 | 0.30 |
| 17-Jun | 0.15 | <1 | <2 | <1 | 13 | 0.50 |
| 24-Jun | 0.96 | <1 | <2 | <1 | 14 | 0.43 |
| 02-Jul | 0.44 | <1 | <2 | <1 | 14 | 0.24 |
| 08-Jul | 0.46 | <1 | <2 | <1 | 17 | 0.45 |
| 15-Jul | 1.10 | <1 | <2 | <1 | 15 | 0.28 |
| 22-Jul | 0.74 | <1 | <2 | <1 | 17 | 0.24 |
| 29-Jul | 0.69 | <1 | <2 | <1 | 17 | 2.00 |
| 05-Aug | 0.85 | <1 | <2 | <1 | 18 | 0.27 |
| 12-Aug | 0.88 | <1 | 4 | <1 | 17 | 43.00 |
| 16-Aug | | <1 | <2 | <1 | | 0.17 |
| 19-Aug | 0.80 | <1 | <2 | <1 | 16 | 0.34 |
| 26-Aug | 0.82 | <1 | 4 | <1 | 16 | 0.34 |
| 02-Sep | 0.78 | <1 | <2 | <1 | 18 | 0.24 |
| 09-Sep | 0.63 | <1 | <2 | <1 | 17 | 0.28 |
| 16-Sep | 0.74 | <1 | <2 | <1 | 16 | 0.15 |
| 23-Sep | 0.53 | <1 | 2 | <1 | 15 | 0.41 |
| 30-Sep | 0.34 | <1 | 76 | <1 | 17 | 0.56 |
| 07-Oct | 0.17 | <1 | <2 | <1 | 15 | 0.31 |
| 14-Oct | 0.60 | <1 | 2 | <1 | 15 | 0.44 |
| 21-Oct | 0.34 | <1 | <2 | <1 | 14 | 0.43 |
| 28-Oct | 0.25 | <1 | 2 | <1 | 14 | 0.67 |
| 04-Nov | 0.70 | <1 | 2 | <1 | 12 | 0.38 |
| 12-Nov | 0.61 | <1 | <2 | <1 | 13 | 0.28 |
| 18-Nov | 0.57 | <1 | <2 | <1 | 11 | 0.28 |
| 25-Nov | 0.81 | <1 | <2 | <1 | 8 | 0.34 |
| 02-Dec | 0.63 | <1 | <2 | <1 | 5 | 0.37 |
| 09-Dec | 0.79 | <1 | <2 | <1 | 9 | 0.28 |
| 16-Dec | 0.55 | <1 | <2 | <1 | 9 | 0.24 |
| 23-Dec | 0.61 | <1 | 2 | <1 | 7 | 0.30 |
| 30-Dec | 0.71 | <1 | NA | <1 | 7 | 0.29 |



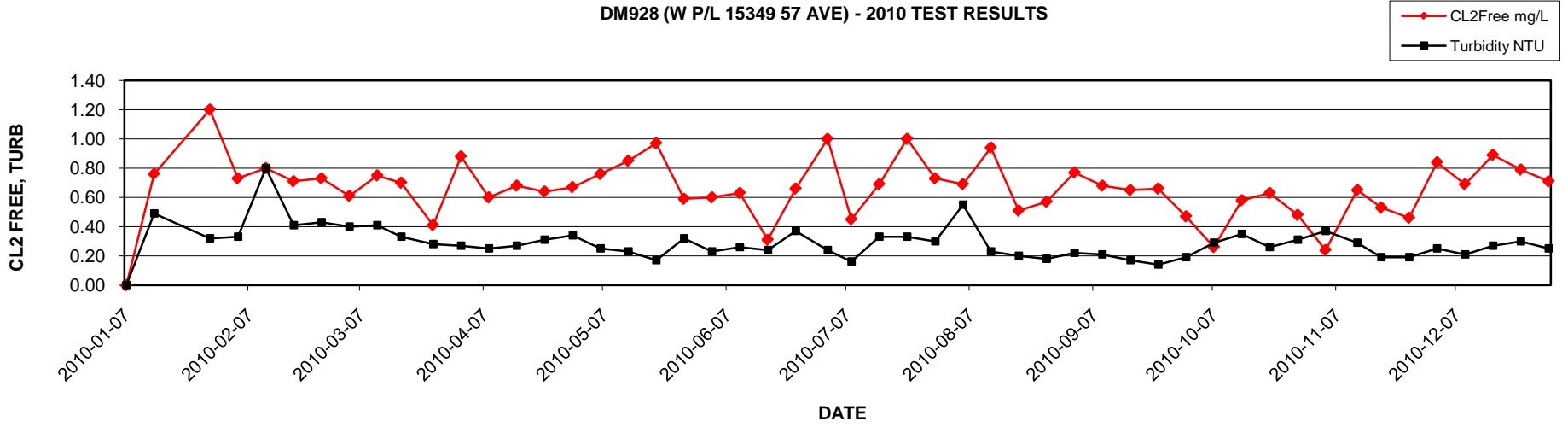
2010 GVRD Laboratory Report - DM928 (W P/L 15349 57 AVE)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.76 | <1 | 2 | <1 | 5 | 0.49 |
| 14-Jan | 1.20 | <1 | <2 | <1 | 8 | 0.32 |
| 28-Jan | 0.73 | <1 | 2 | <1 | 8 | 0.33 |
| 04-Feb | 0.80 | <1 | <2 | <1 | 8.5 | 0.80 |
| 11-Feb | 0.71 | <1 | <2 | <1 | 8 | 0.41 |
| 18-Feb | 0.73 | <1 | <2 | <1 | 9 | 0.43 |
| 25-Feb | 0.61 | <1 | <2 | <1 | 9.5 | 0.40 |
| 04-Mar | 0.75 | <1 | <2 | <1 | 8 | 0.41 |
| 11-Mar | 0.70 | <1 | <2 | <1 | 9 | 0.33 |
| 17-Mar | 0.41 | <1 | 2 | <1 | 8 | 0.28 |
| 25-Mar | 0.88 | <1 | <2 | <1 | 8 | 0.27 |
| 01-Apr | 0.60 | <1 | 10 | <1 | 10 | 0.25 |
| 08-Apr | 0.68 | <1 | <2 | <1 | 10 | 0.27 |
| 15-Apr | 0.64 | <1 | <2 | <1 | 12 | 0.31 |
| 22-Apr | 0.67 | <1 | <2 | <1 | 11 | 0.34 |
| 29-Apr | 0.76 | <1 | <2 | <1 | 12 | 0.25 |
| 06-May | 0.85 | <1 | <2 | <1 | 12 | 0.23 |
| 13-May | 0.97 | <1 | <2 | <1 | 11 | 0.17 |
| 20-May | 0.59 | <1 | <2 | <1 | 13 | 0.32 |
| 27-May | 0.60 | <1 | <2 | <1 | 14 | 0.23 |
| 03-Jun | 0.63 | <1 | <2 | <1 | 13 | 0.26 |
| 10-Jun | 0.31 | <1 | 2 | <1 | 14 | 0.24 |
| 17-Jun | 0.66 | <1 | 4 | <1 | 13 | 0.37 |
| 24-Jun | 1.00 | <1 | 74 | <1 | 15 | 0.24 |
| 02-Jul | 0.45 | <1 | <2 | <1 | 14 | 0.16 |
| 08-Jul | 0.69 | <1 | 16 | <1 | 15 | 0.33 |
| 15-Jul | 1.00 | <1 | 200 | <1 | 16 | 0.33 |
| 22-Jul | 0.73 | <1 | 20 | <1 | 15 | 0.30 |
| 29-Jul | 0.69 | <1 | <2 | <1 | 17 | 0.55 |
| 05-Aug | 0.94 | <1 | 4 | <1 | 16 | 0.23 |
| 12-Aug | 0.51 | <1 | <2 | <1 | 17 | 0.20 |
| 19-Aug | 0.57 | <1 | <2 | <1 | 16 | 0.18 |
| 26-Aug | 0.77 | <1 | <2 | <1 | 16 | 0.22 |
| 02-Sep | 0.68 | <1 | <2 | <1 | 16 | 0.21 |
| 09-Sep | 0.65 | <1 | <2 | <1 | 16 | 0.17 |
| 16-Sep | 0.66 | <1 | <2 | <1 | 16 | 0.14 |
| 23-Sep | 0.47 | <1 | <2 | <1 | 17 | 0.19 |
| 30-Sep | 0.26 | <1 | <2 | <1 | 17 | 0.29 |
| 07-Oct | 0.58 | <1 | <2 | <1 | 15 | 0.35 |
| 14-Oct | 0.63 | <1 | <2 | <1 | 15 | 0.26 |
| 21-Oct | 0.48 | <1 | <2 | <1 | 14 | 0.31 |
| 28-Oct | 0.24 | <1 | <2 | <1 | 13 | 0.37 |
| 04-Nov | 0.65 | <1 | <2 | <1 | 13 | 0.29 |
| 12-Nov | 0.53 | <1 | <2 | <1 | 12 | 0.19 |
| 18-Nov | 0.46 | <1 | <2 | <1 | 12 | 0.19 |
| 25-Nov | 0.84 | <1 | <2 | <1 | 8.5 | 0.25 |
| 02-Dec | 0.69 | <1 | <2 | <1 | 6 | 0.21 |
| 09-Dec | 0.89 | <1 | <2 | <1 | 8 | 0.27 |
| 16-Dec | 0.79 | <1 | <2 | <1 | 8 | 0.30 |
| 23-Dec | 0.71 | <1 | <2 | <1 | 8 | 0.25 |
| 30-Dec | 0.75 | <1 | NA | <1 | 5 | 0.24 |

DM928 (W P/L 15349 57 AVE) - 2010 TEST RESULTS

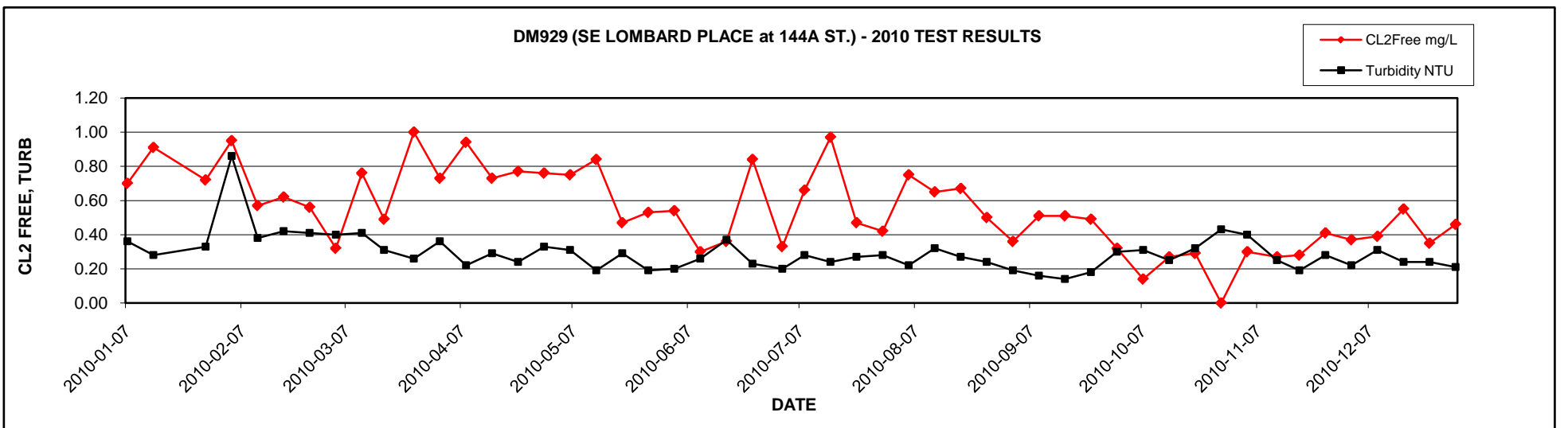
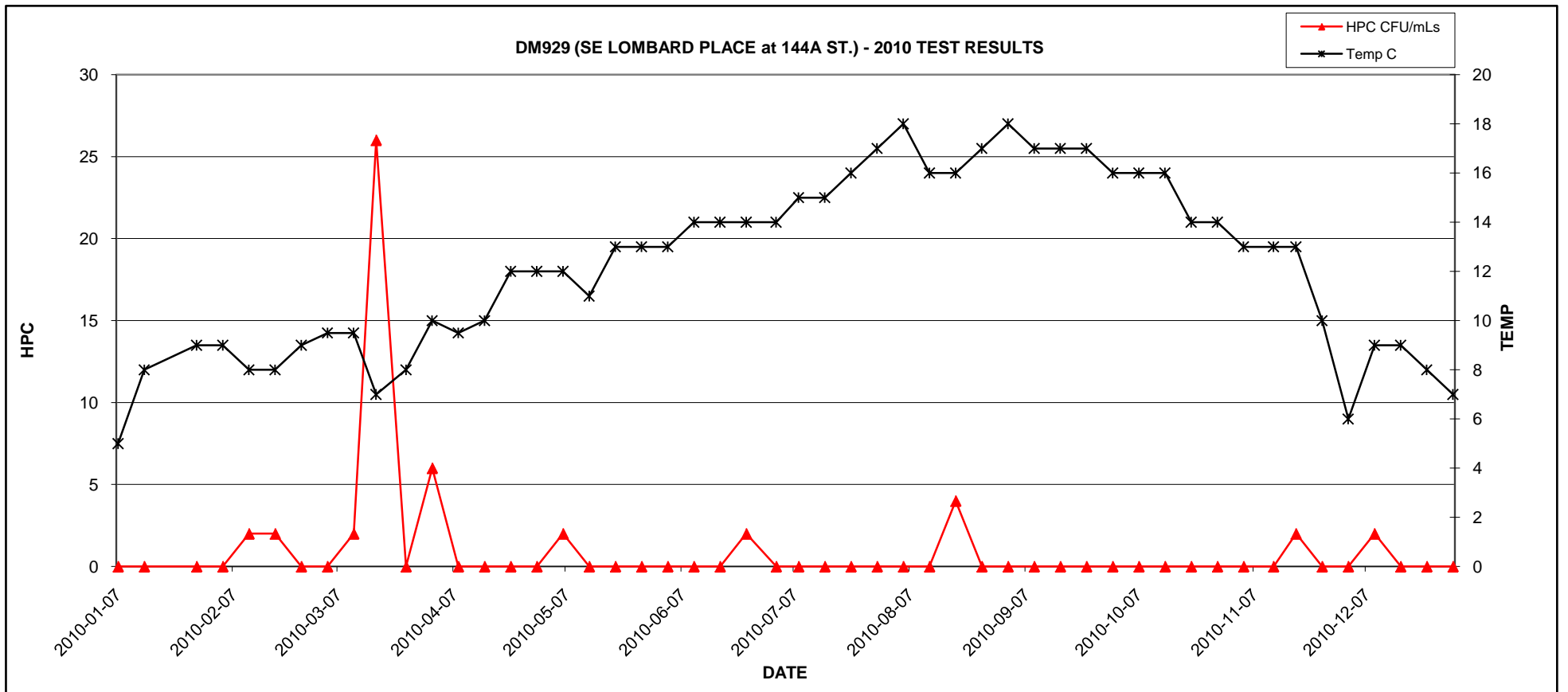


DM928 (W P/L 15349 57 AVE) - 2010 TEST RESULTS



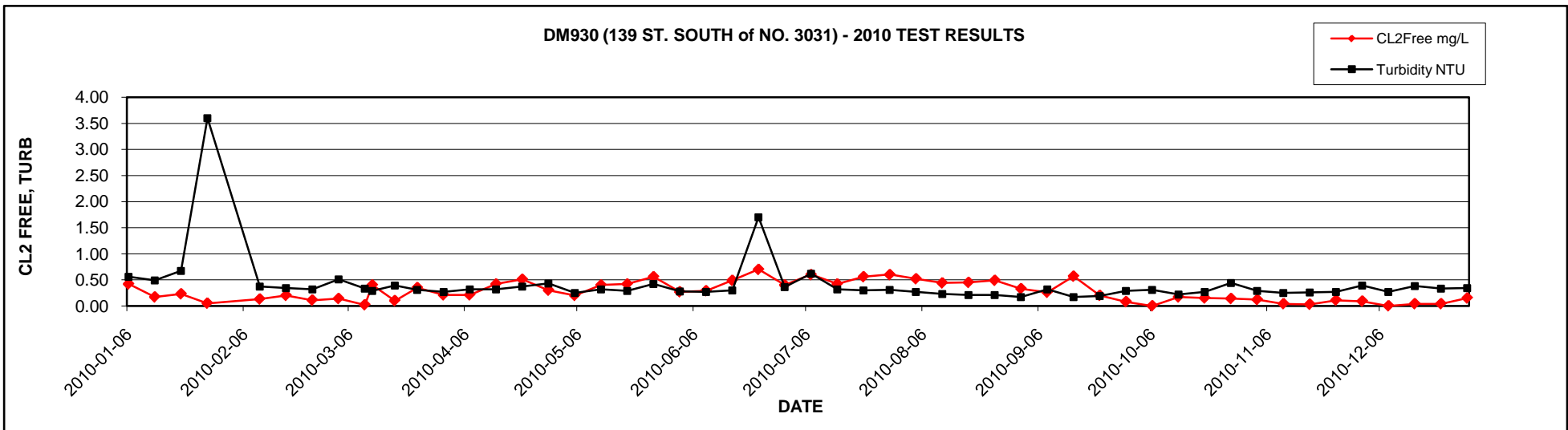
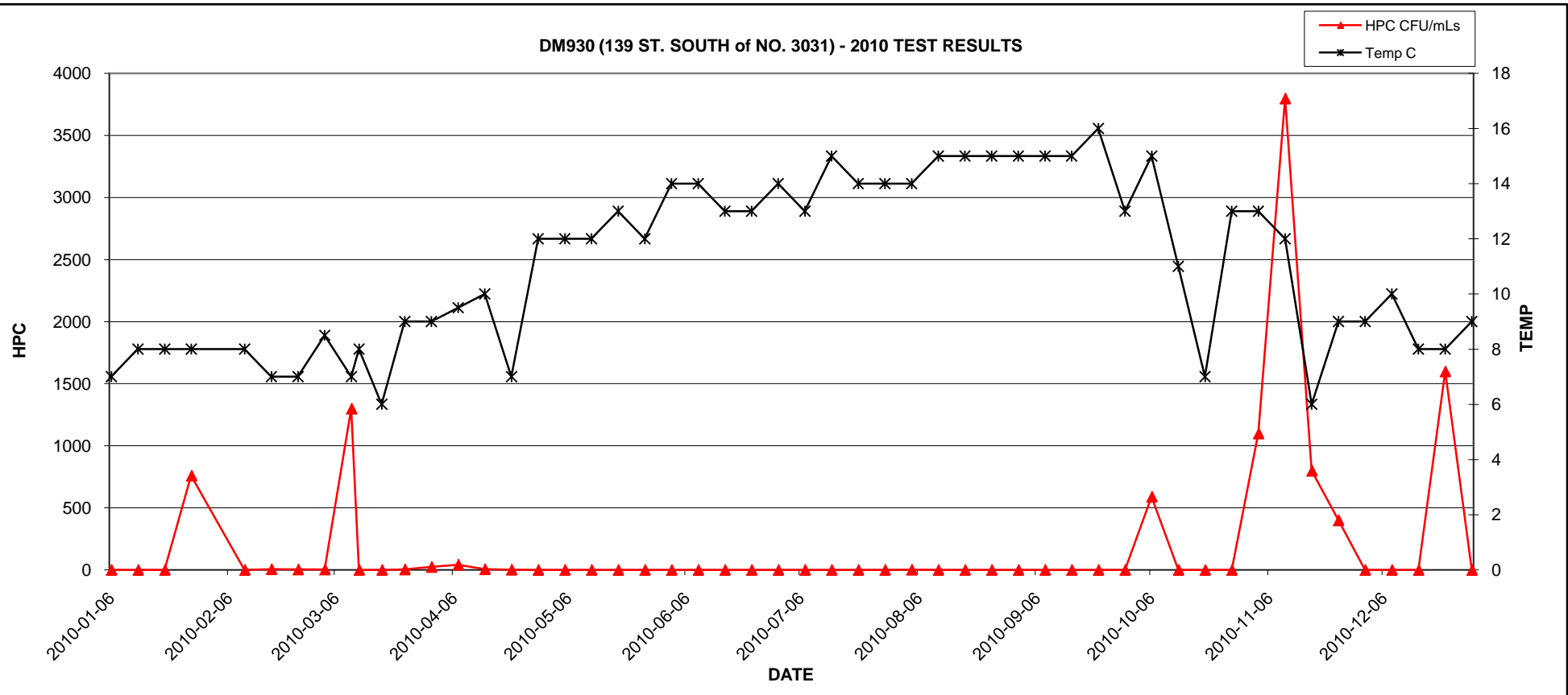
2010 GVRD Laboratory Report - DM929 (SE LOMBARD PLACE at 144A ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.70 | <1 | <2 | <1 | 5 | 0.36 |
| 14-Jan | 0.91 | <1 | <2 | <1 | 8 | 0.28 |
| 28-Jan | 0.72 | <1 | <2 | <1 | 9 | 0.33 |
| 04-Feb | 0.95 | <1 | <2 | <1 | 9 | 0.86 |
| 11-Feb | 0.57 | <1 | 2 | <1 | 8 | 0.38 |
| 18-Feb | 0.62 | <1 | 2 | <1 | 8 | 0.42 |
| 25-Feb | 0.56 | <1 | <2 | <1 | 9 | 0.41 |
| 04-Mar | 0.32 | <1 | <2 | <1 | 9.5 | 0.40 |
| 11-Mar | 0.76 | <1 | 2 | <1 | 9.5 | 0.41 |
| 17-Mar | 0.49 | <1 | 26 | <1 | 7 | 0.31 |
| 25-Mar | 1.00 | <1 | <2 | <1 | 8 | 0.26 |
| 01-Apr | 0.73 | <1 | 6 | <1 | 10 | 0.36 |
| 08-Apr | 0.94 | <1 | <2 | <1 | 9.5 | 0.22 |
| 15-Apr | 0.73 | <1 | <2 | <1 | 10 | 0.29 |
| 22-Apr | 0.77 | <1 | <2 | <1 | 12 | 0.24 |
| 29-Apr | 0.76 | <1 | <2 | <1 | 12 | 0.33 |
| 06-May | 0.75 | <1 | 2 | <1 | 12 | 0.31 |
| 13-May | 0.84 | <1 | <2 | <1 | 11 | 0.19 |
| 20-May | 0.47 | <1 | <2 | <1 | 13 | 0.29 |
| 27-May | 0.53 | <1 | <2 | <1 | 13 | 0.19 |
| 03-Jun | 0.54 | <1 | <2 | <1 | 13 | 0.20 |
| 10-Jun | 0.30 | <1 | <2 | <1 | 14 | 0.26 |
| 17-Jun | 0.36 | <1 | <2 | <1 | 14 | 0.37 |
| 24-Jun | 0.84 | <1 | 2 | <1 | 14 | 0.23 |
| 02-Jul | 0.33 | <1 | <2 | <1 | 14 | 0.20 |
| 08-Jul | 0.66 | <1 | <2 | <1 | 15 | 0.28 |
| 15-Jul | 0.97 | <1 | <2 | <1 | 15 | 0.24 |
| 22-Jul | 0.47 | <1 | <2 | <1 | 16 | 0.27 |
| 29-Jul | 0.42 | <1 | <2 | <1 | 17 | 0.28 |
| 05-Aug | 0.75 | <1 | <2 | <1 | 18 | 0.22 |
| 12-Aug | 0.65 | <1 | <2 | <1 | 16 | 0.32 |
| 19-Aug | 0.67 | <1 | 4 | <1 | 16 | 0.27 |
| 26-Aug | 0.50 | <1 | <2 | <1 | 17 | 0.24 |
| 02-Sep | 0.36 | <1 | <2 | <1 | 18 | 0.19 |
| 09-Sep | 0.51 | <1 | <2 | <1 | 17 | 0.16 |
| 16-Sep | 0.51 | <1 | <2 | <1 | 17 | 0.14 |
| 23-Sep | 0.49 | <1 | <2 | <1 | 17 | 0.18 |
| 30-Sep | 0.32 | <1 | <2 | <1 | 16 | 0.30 |
| 07-Oct | 0.14 | <1 | <2 | <1 | 16 | 0.31 |
| 14-Oct | 0.27 | <1 | <2 | <1 | 16 | 0.25 |
| 21-Oct | 0.29 | <1 | <2 | <1 | 14 | 0.32 |
| 28-Oct | <0.01 | <1 | <2 | <1 | 14 | 0.43 |
| 04-Nov | 0.30 | <1 | <2 | <1 | 13 | 0.40 |
| 12-Nov | 0.27 | <1 | <2 | <1 | 13 | 0.25 |
| 18-Nov | 0.28 | <1 | 2 | <1 | 13 | 0.19 |
| 25-Nov | 0.41 | <1 | <2 | <1 | 10 | 0.28 |
| 02-Dec | 0.37 | <1 | <2 | <1 | 6 | 0.22 |
| 09-Dec | 0.39 | <1 | 2 | <1 | 9 | 0.31 |
| 16-Dec | 0.55 | <1 | <2 | <1 | 9 | 0.24 |
| 23-Dec | 0.35 | <1 | <2 | <1 | 8 | 0.24 |
| 30-Dec | 0.46 | <1 | NA | <1 | 7 | 0.21 |



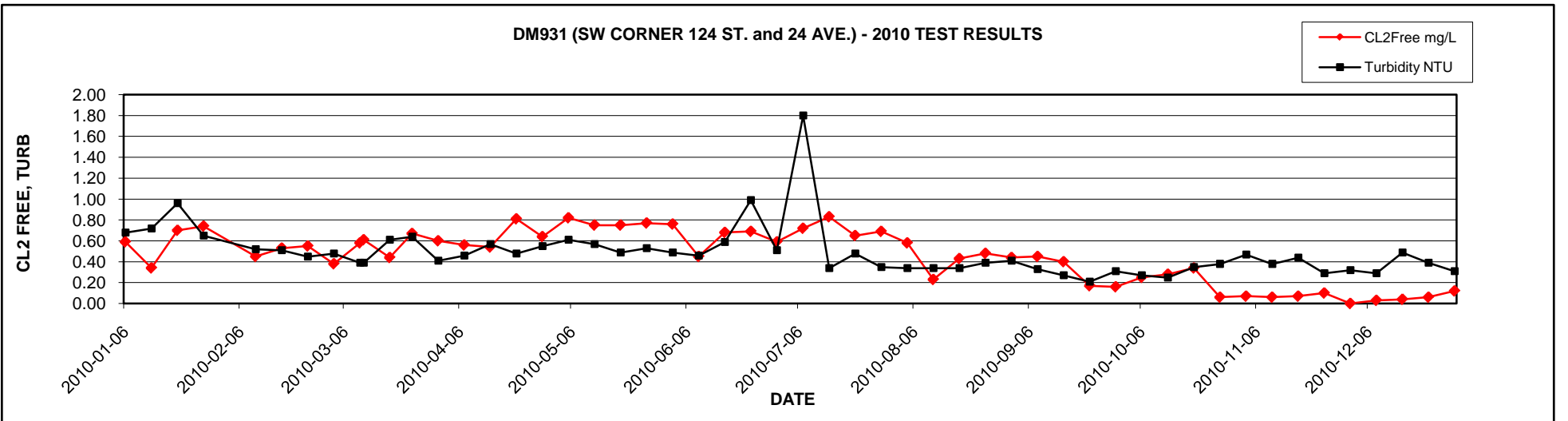
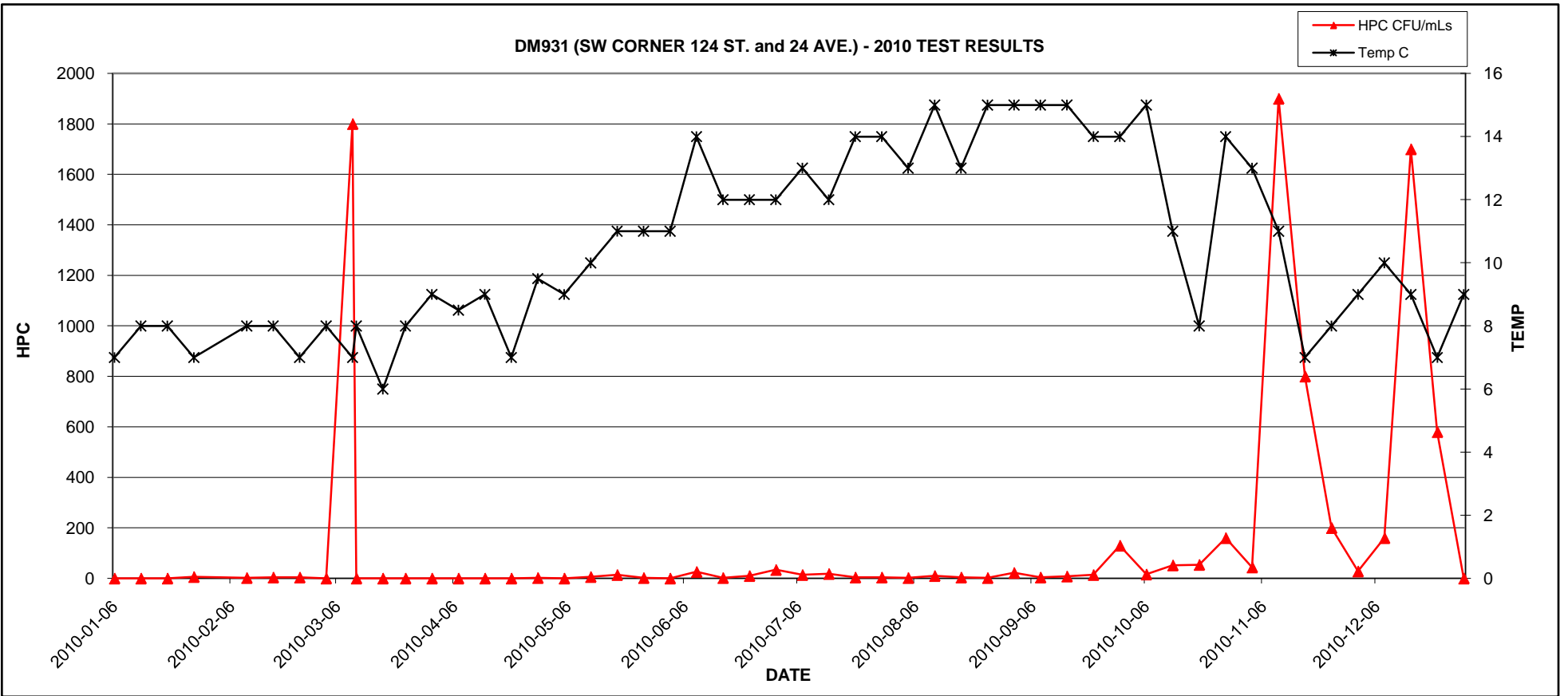
2010 GVRD Laboratory Report - DM930 (139 ST. SOUTH of NO. 3031)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.42 | <1 | <2 | <1 | 7 | 0.56 |
| 13-Jan | 0.17 | <1 | <2 | <1 | 8 | 0.49 |
| 20-Jan | 0.23 | <1 | <2 | <1 | 8 | 0.67 |
| 27-Jan | 0.05 | <1 | 760 | <1 | 8 | 3.60 |
| 10-Feb | 0.13 | <1 | <2 | <1 | 8 | 0.37 |
| 17-Feb | 0.20 | <1 | 6 | <1 | 7 | 0.34 |
| 24-Feb | 0.11 | <1 | 4 | <1 | 7 | 0.32 |
| 03-Mar | 0.14 | <1 | 4 | <1 | 8.5 | 0.51 |
| 10-Mar | 0.02 | CG | 1300 | CG | 7 | 0.33 |
| 12-Mar | 0.40 | <1 | <2 | <1 | 8 | 0.29 |
| 18-Mar | 0.10 | <1 | <2 | <1 | 6 | 0.39 |
| 24-Mar | 0.35 | <1 | 4 | <1 | 9 | 0.31 |
| 31-Mar | 0.21 | <1 | 24 | <1 | 9 | 0.27 |
| 07-Apr | 0.21 | <1 | 42 | <1 | 9.5 | 0.32 |
| 14-Apr | 0.42 | <1 | 6 | <1 | 10 | 0.32 |
| 21-Apr | 0.51 | <1 | 2 | <1 | 7 | 0.37 |
| 28-Apr | 0.30 | <1 | <2 | <1 | 12 | 0.43 |
| 05-May | 0.20 | <1 | <2 | <1 | 12 | 0.25 |
| 12-May | 0.40 | <1 | <2 | <1 | 12 | 0.32 |
| 19-May | 0.42 | <1 | <2 | <1 | 13 | 0.29 |
| 26-May | 0.56 | <1 | <2 | <1 | 12 | 0.42 |
| 02-Jun | 0.27 | <1 | <2 | <1 | 14 | 0.28 |
| 09-Jun | 0.29 | <1 | <2 | <1 | 14 | 0.27 |
| 16-Jun | 0.49 | <1 | <2 | <1 | 13 | 0.30 |
| 23-Jun | 0.70 | <1 | <2 | <1 | 13 | 1.70 |
| 30-Jun | 0.40 | <1 | <2 | <1 | 14 | 0.36 |
| 07-Jul | 0.60 | <1 | <2 | <1 | 13 | 0.62 |
| 14-Jul | 0.42 | <1 | <2 | <1 | 15 | 0.32 |
| 21-Jul | 0.56 | <1 | <2 | <1 | 14 | 0.30 |
| 28-Jul | 0.60 | <1 | <2 | <1 | 14 | 0.31 |
| 04-Aug | 0.52 | <1 | 2 | <1 | 14 | 0.27 |
| 11-Aug | 0.44 | <1 | <2 | <1 | 15 | 0.23 |
| 18-Aug | 0.45 | <1 | <2 | <1 | 15 | 0.21 |
| 25-Aug | 0.49 | <1 | <2 | <1 | 15 | 0.21 |
| 01-Sep | 0.33 | <1 | <2 | <1 | 15 | 0.17 |
| 08-Sep | 0.26 | <1 | <2 | <1 | 15 | 0.32 |
| 15-Sep | 0.57 | <1 | <2 | <1 | 15 | 0.17 |
| 22-Sep | 0.20 | <1 | <2 | <1 | 16 | 0.19 |
| 29-Sep | 0.08 | <1 | <2 | <1 | 13 | 0.29 |
| 06-Oct | <0.01 | <1 | 590 | <1 | 15 | 0.31 |
| 13-Oct | 0.17 | <1 | <2 | <1 | 11 | 0.22 |
| 20-Oct | 0.15 | <1 | <2 | <1 | 7 | 0.27 |
| 27-Oct | 0.14 | <1 | <2 | <1 | 13 | 0.44 |
| 03-Nov | 0.12 | <1 | 1100 | <1 | 13 | 0.29 |
| 10-Nov | 0.04 | <1 | 3800 | <1 | 12 | 0.25 |
| 17-Nov | 0.03 | <1 | 800 | <1 | 6 | 0.26 |
| 24-Nov | 0.11 | <1 | 400 | <1 | 9 | 0.27 |
| 01-Dec | 0.09 | <1 | <2 | <1 | 9 | 0.39 |
| 08-Dec | <0.01 | <1 | <2 | <1 | 10 | 0.27 |
| 15-Dec | 0.04 | <1 | <2 | <1 | 8 | 0.38 |
| 22-Dec | 0.04 | <1 | 1600 | <1 | 8 | 0.33 |
| 29-Dec | 0.15 | <1 | NA | <1 | 9 | 0.34 |



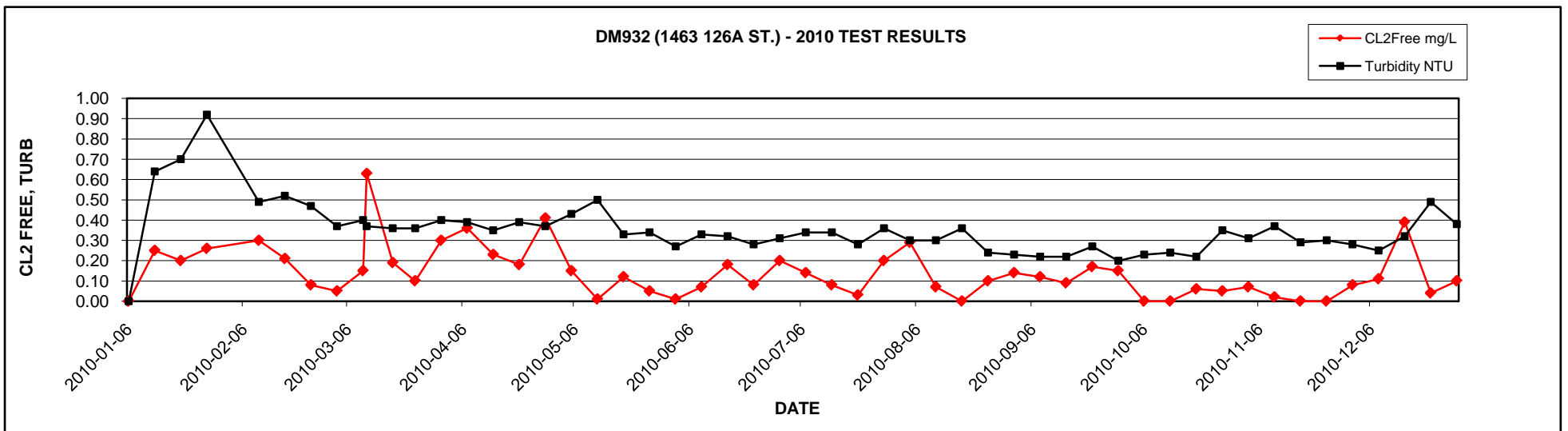
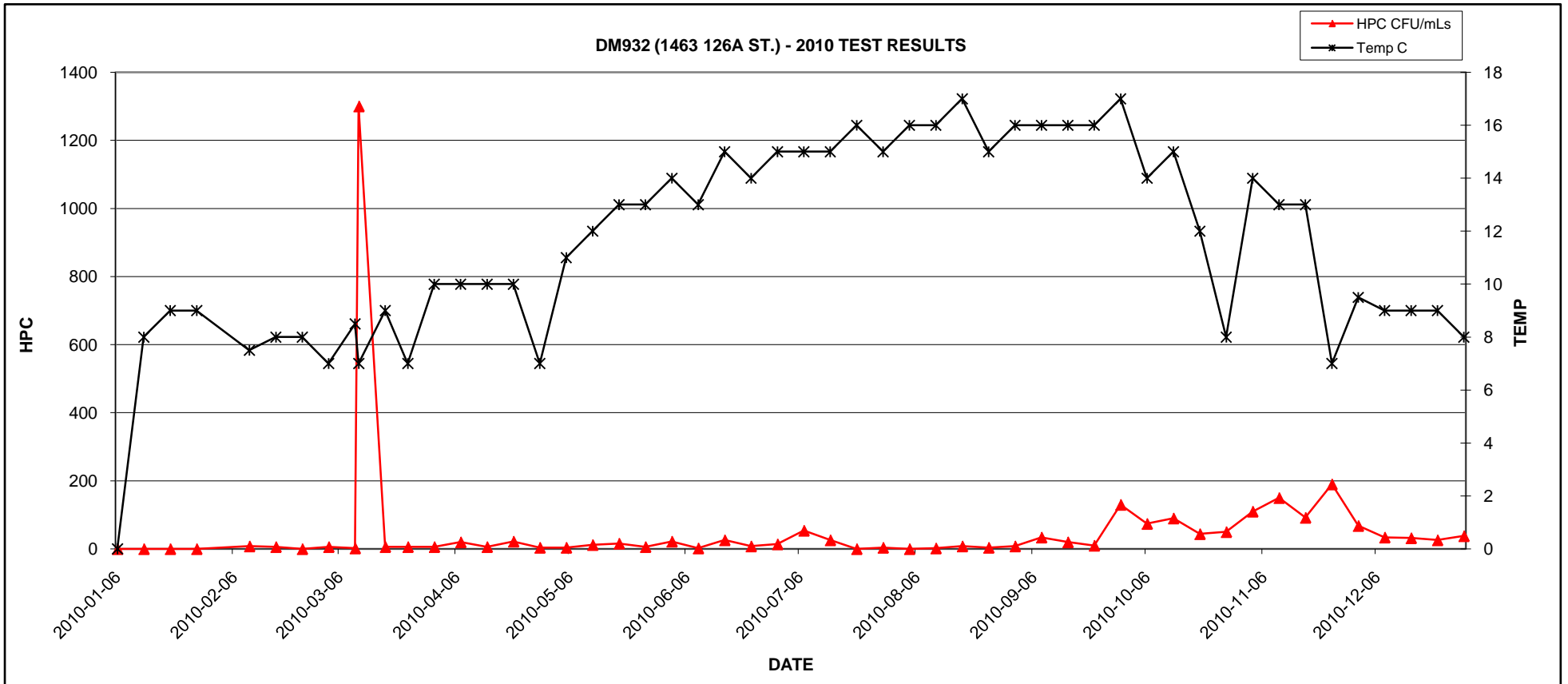
2010 GVRD Laboratory Report - DM931 (SW CORNER 124 ST. and 24 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.59 | <1 | <2 | <1 | 7 | 0.68 |
| 13-Jan | 0.34 | <1 | <2 | <1 | 8 | 0.72 |
| 20-Jan | 0.70 | <1 | <2 | <1 | 8 | 0.96 |
| 27-Jan | 0.74 | <1 | 6 | <1 | 7 | 0.65 |
| 10-Feb | 0.45 | <1 | 2 | <1 | 8 | 0.52 |
| 17-Feb | 0.53 | <1 | 4 | <1 | 8 | 0.51 |
| 24-Feb | 0.55 | <1 | 4 | <1 | 7 | 0.45 |
| 03-Mar | 0.38 | <1 | <2 | <1 | 8 | 0.48 |
| 10-Mar | 0.58 | CG | 1800 | CG | 7 | 0.39 |
| 11-Mar | 0.61 | <1 | <2 | <1 | 8 | 0.39 |
| 18-Mar | 0.44 | <1 | <2 | <1 | 6 | 0.61 |
| 24-Mar | 0.67 | <1 | <2 | <1 | 8 | 0.64 |
| 31-Mar | 0.60 | <1 | <2 | <1 | 9 | 0.41 |
| 07-Apr | 0.56 | <1 | <2 | <1 | 8.5 | 0.46 |
| 14-Apr | 0.54 | <1 | <2 | <1 | 9 | 0.57 |
| 21-Apr | 0.81 | <1 | <2 | <1 | 7 | 0.48 |
| 28-Apr | 0.64 | <1 | 2 | <1 | 9.5 | 0.55 |
| 05-May | 0.82 | <1 | <2 | <1 | 9 | 0.61 |
| 12-May | 0.75 | <1 | 6 | <1 | 10 | 0.57 |
| 19-May | 0.75 | <1 | 14 | <1 | 11 | 0.49 |
| 26-May | 0.77 | <1 | 2 | <1 | 11 | 0.53 |
| 02-Jun | 0.76 | <1 | <2 | <1 | 11 | 0.49 |
| 09-Jun | 0.45 | <1 | 26 | <1 | 14 | 0.46 |
| 16-Jun | 0.68 | <1 | 2 | <1 | 12 | 0.59 |
| 23-Jun | 0.69 | <1 | 10 | <1 | 12 | 0.99 |
| 30-Jun | 0.59 | <1 | 34 | <1 | 12 | 0.51 |
| 07-Jul | 0.72 | <1 | 14 | <1 | 13 | 1.80 |
| 14-Jul | 0.83 | <1 | 18 | <1 | 12 | 0.34 |
| 21-Jul | 0.65 | <1 | 4 | <1 | 14 | 0.48 |
| 28-Jul | 0.69 | <1 | 4 | <1 | 14 | 0.35 |
| 04-Aug | 0.58 | <1 | 2 | <1 | 13 | 0.34 |
| 11-Aug | 0.23 | <1 | 10 | <1 | 15 | 0.34 |
| 18-Aug | 0.43 | <1 | 4 | <1 | 13 | 0.34 |
| 25-Aug | 0.48 | <1 | 2 | <1 | 15 | 0.39 |
| 01-Sep | 0.44 | <1 | 22 | <1 | 15 | 0.41 |
| 08-Sep | 0.45 | <1 | 4 | <1 | 15 | 0.33 |
| 15-Sep | 0.40 | <1 | 8 | <1 | 15 | 0.27 |
| 22-Sep | 0.17 | <1 | 14 | <1 | 14 | 0.21 |
| 29-Sep | 0.16 | <1 | 130 | <1 | 14 | 0.31 |
| 06-Oct | 0.25 | <1 | 16 | <1 | 15 | 0.27 |
| 13-Oct | 0.28 | <1 | 52 | <1 | 11 | 0.25 |
| 20-Oct | 0.34 | <1 | 54 | <1 | 8 | 0.35 |
| 27-Oct | 0.06 | <1 | 160 | <1 | 14 | 0.38 |
| 03-Nov | 0.07 | <1 | 44 | <1 | 13 | 0.47 |
| 10-Nov | 0.06 | <1 | 1900 | <1 | 11 | 0.38 |
| 17-Nov | 0.07 | <1 | 800 | <1 | 7 | 0.44 |
| 24-Nov | 0.10 | <1 | 200 | <1 | 8 | 0.29 |
| 01-Dec | <0.01 | <1 | 28 | <1 | 9 | 0.32 |
| 08-Dec | 0.03 | <1 | 160 | <1 | 10 | 0.29 |
| 15-Dec | 0.04 | <1 | 1700 | <1 | 9 | 0.49 |
| 22-Dec | 0.06 | <1 | 580 | <1 | 7 | 0.39 |
| 29-Dec | 0.12 | <1 | NA | <1 | 9 | 0.31 |



2010 GVRD Laboratory Report - DM932 (1463 126A ST.)

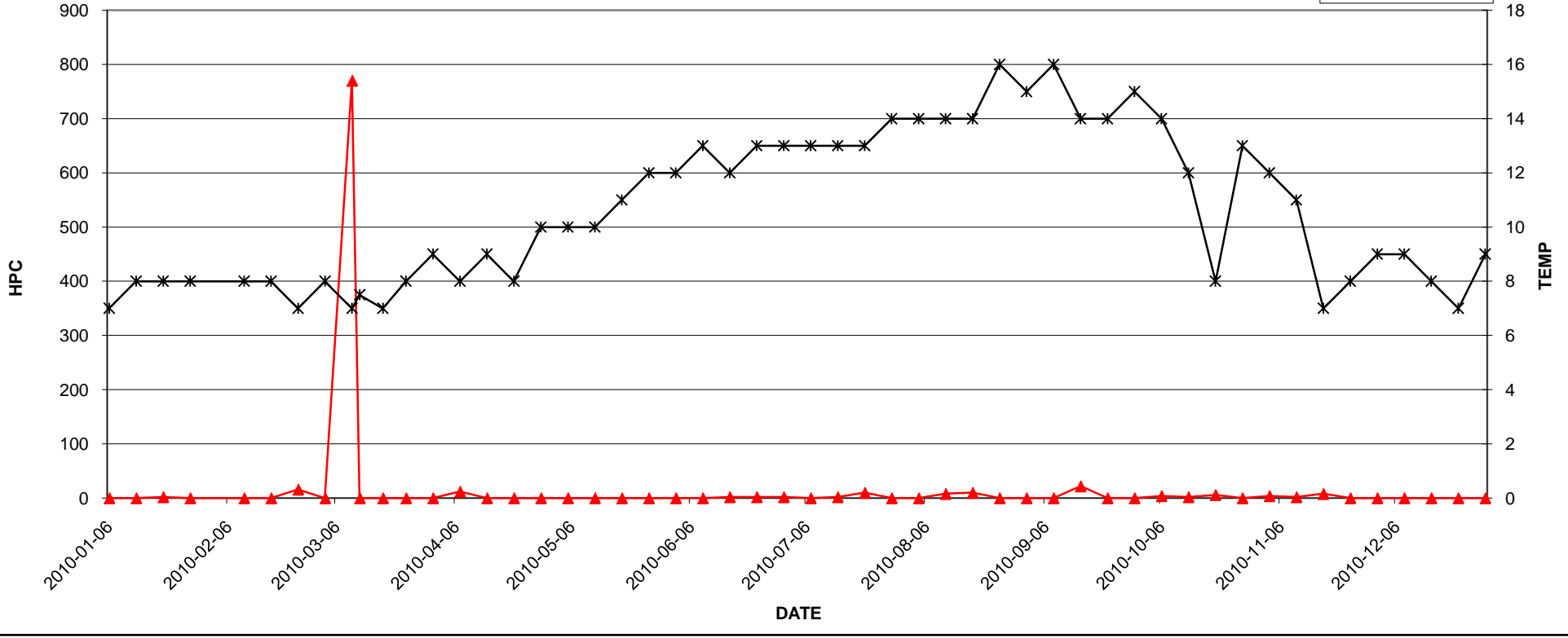
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.25 | <1 | <2 | <1 | 8 | 0.64 |
| 13-Jan | 0.20 | <1 | <2 | <1 | 9 | 0.70 |
| 20-Jan | 0.26 | <1 | <2 | <1 | 9 | 0.92 |
| 27-Jan | 0.30 | <1 | 8 | <1 | 7.5 | 0.49 |
| 10-Feb | 0.21 | <1 | 6 | <1 | 8 | 0.52 |
| 17-Feb | 0.08 | <1 | <2 | <1 | 8 | 0.47 |
| 24-Feb | 0.05 | <1 | 6 | <1 | 7 | 0.37 |
| 03-Mar | 0.15 | <1 | 2 | <1 | 8.5 | 0.40 |
| 10-Mar | 0.63 | CG | 1300 | CG | 7 | 0.37 |
| 11-Mar | 0.19 | <1 | 6 | <1 | 9 | 0.36 |
| 18-Mar | 0.10 | <1 | 6 | <1 | 7 | 0.36 |
| 24-Mar | 0.30 | <1 | 6 | <1 | 10 | 0.40 |
| 31-Mar | 0.36 | <1 | 20 | <1 | 10 | 0.39 |
| 07-Apr | 0.23 | <1 | 6 | <1 | 10 | 0.35 |
| 14-Apr | 0.18 | <1 | 22 | <1 | 10 | 0.39 |
| 21-Apr | 0.41 | <1 | 4 | <1 | 7 | 0.37 |
| 28-Apr | 0.15 | <1 | 4 | <1 | 11 | 0.43 |
| 05-May | 0.01 | <1 | 12 | <1 | 12 | 0.50 |
| 12-May | 0.12 | <1 | 16 | <1 | 13 | 0.33 |
| 19-May | 0.05 | <1 | 6 | <1 | 13 | 0.34 |
| 26-May | 0.01 | <1 | 22 | <1 | 14 | 0.27 |
| 02-Jun | 0.07 | <1 | 2 | <1 | 13 | 0.33 |
| 09-Jun | 0.18 | <1 | 26 | <1 | 15 | 0.32 |
| 16-Jun | 0.08 | <1 | 8 | <1 | 14 | 0.28 |
| 23-Jun | 0.20 | <1 | 14 | <1 | 15 | 0.31 |
| 30-Jun | 0.14 | <1 | 54 | <1 | 15 | 0.34 |
| 07-Jul | 0.08 | <1 | 26 | <1 | 15 | 0.34 |
| 14-Jul | 0.03 | <1 | <2 | <1 | 16 | 0.28 |
| 21-Jul | 0.20 | <1 | 4 | <1 | 15 | 0.36 |
| 28-Jul | 0.29 | <1 | <2 | <1 | 16 | 0.30 |
| 04-Aug | 0.07 | <1 | 2 | <1 | 16 | 0.30 |
| 11-Aug | <0.01 | <1 | 8 | <1 | 17 | 0.36 |
| 18-Aug | 0.10 | <1 | 4 | <1 | 15 | 0.24 |
| 25-Aug | 0.14 | <1 | 8 | <1 | 16 | 0.23 |
| 01-Sep | 0.12 | <1 | 34 | <1 | 16 | 0.22 |
| 08-Sep | 0.09 | <1 | 20 | <1 | 16 | 0.22 |
| 15-Sep | 0.17 | <1 | 10 | <1 | 16 | 0.27 |
| 22-Sep | 0.15 | <1 | 130 | <1 | 17 | 0.20 |
| 29-Sep | <0.01 | <1 | 74 | <1 | 14 | 0.23 |
| 06-Oct | <0.01 | <1 | 90 | <1 | 15 | 0.24 |
| 13-Oct | 0.06 | <1 | 44 | <1 | 12 | 0.22 |
| 20-Oct | 0.05 | <1 | 50 | <1 | 8 | 0.35 |
| 27-Oct | 0.07 | <1 | 110 | <1 | 14 | 0.31 |
| 03-Nov | 0.02 | <1 | 150 | <1 | 13 | 0.37 |
| 10-Nov | <0.01 | <1 | 92 | <1 | 13 | 0.29 |
| 17-Nov | <0.01 | <1 | 190 | <1 | 7 | 0.30 |
| 24-Nov | 0.08 | <1 | 68 | <1 | 9.5 | 0.28 |
| 01-Dec | 0.11 | <1 | 34 | <1 | 9 | 0.25 |
| 08-Dec | 0.39 | <1 | 32 | <1 | 9 | 0.32 |
| 15-Dec | 0.04 | <1 | 26 | <1 | 9 | 0.49 |
| 22-Dec | 0.10 | <1 | 38 | <1 | 8 | 0.38 |
| 29-Dec | 0.13 | <1 | NA | <1 | 10 | 0.30 |



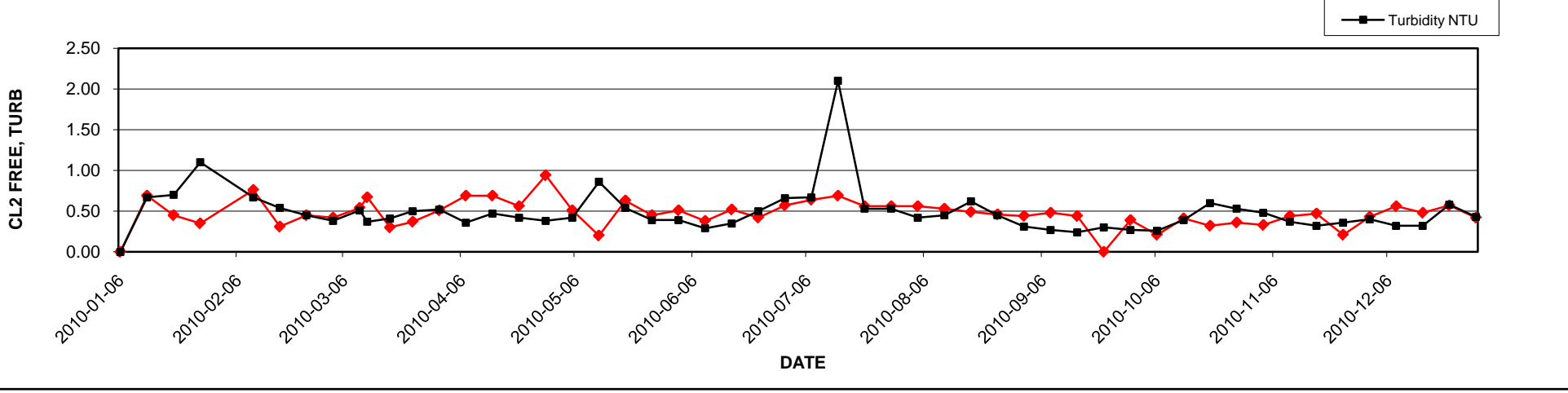
2010 GVRD Laboratory Report - DM933 (SOUTHSIDE 15B AVE. at 13341)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.69 | <1 | <2 | <1 | 7 | 0.67 |
| 13-Jan | 0.45 | <1 | <2 | <1 | 8 | 0.70 |
| 20-Jan | 0.35 | <1 | 2 | <1 | 8 | 1.10 |
| 27-Jan | 0.76 | <1 | <2 | <1 | 8 | 0.67 |
| 10-Feb | 0.31 | <1 | <2 | <1 | 8 | 0.54 |
| 17-Feb | 0.45 | <1 | <2 | <1 | 8 | 0.45 |
| 24-Feb | 0.42 | <1 | 16 | <1 | 7 | 0.38 |
| 03-Mar | 0.54 | <1 | <2 | <1 | 8 | 0.51 |
| 10-Mar | 0.67 | CG | 770 | CG | 7 | 0.37 |
| 12-Mar | 0.30 | <1 | <2 | <1 | 7.5 | 0.41 |
| 18-Mar | 0.37 | <1 | <2 | <1 | 7 | 0.50 |
| 24-Mar | 0.51 | <1 | <2 | <1 | 8 | 0.52 |
| 31-Mar | 0.69 | <1 | <2 | <1 | 9 | 0.36 |
| 07-Apr | 0.69 | <1 | 12 | <1 | 8 | 0.47 |
| 14-Apr | 0.56 | <1 | <2 | <1 | 9 | 0.42 |
| 21-Apr | 0.94 | <1 | <2 | <1 | 8 | 0.38 |
| 28-Apr | 0.51 | <1 | <2 | <1 | 10 | 0.42 |
| 05-May | 0.20 | <1 | <2 | <1 | 10 | 0.86 |
| 12-May | 0.63 | <1 | <2 | <1 | 10 | 0.54 |
| 19-May | 0.45 | <1 | <2 | <1 | 11 | 0.39 |
| 26-May | 0.51 | <1 | <2 | <1 | 12 | 0.39 |
| 02-Jun | 0.38 | <1 | <2 | <1 | 12 | 0.29 |
| 09-Jun | 0.52 | <1 | <2 | <1 | 13 | 0.35 |
| 16-Jun | 0.42 | <1 | 2 | <1 | 12 | 0.50 |
| 23-Jun | 0.57 | <1 | 2 | <1 | 13 | 0.66 |
| 30-Jun | 0.64 | <1 | 2 | <1 | 13 | 0.67 |
| 07-Jul | 0.69 | <1 | <2 | <1 | 13 | 2.10 |
| 14-Jul | 0.56 | <1 | 2 | <1 | 13 | 0.53 |
| 21-Jul | 0.56 | <1 | 10 | <1 | 13 | 0.53 |
| 28-Jul | 0.56 | <1 | <2 | <1 | 14 | 0.42 |
| 04-Aug | 0.53 | <1 | <2 | <1 | 14 | 0.45 |
| 11-Aug | 0.49 | <1 | 8 | <1 | 14 | 0.62 |
| 18-Aug | 0.46 | <1 | 10 | <1 | 14 | 0.45 |
| 25-Aug | 0.44 | <1 | <2 | <1 | 16 | 0.31 |
| 01-Sep | 0.48 | <1 | <2 | <1 | 15 | 0.27 |
| 08-Sep | 0.44 | <1 | <2 | <1 | 16 | 0.24 |
| 15-Sep | <0.01 | <1 | 22 | <1 | 14 | 0.30 |
| 22-Sep | 0.39 | <1 | <2 | <1 | 14 | 0.27 |
| 29-Sep | 0.21 | <1 | <2 | <1 | 15 | 0.26 |
| 06-Oct | 0.41 | <1 | 4 | <1 | 14 | 0.39 |
| 13-Oct | 0.32 | <1 | 2 | <1 | 12 | 0.60 |
| 20-Oct | 0.36 | <1 | 6 | <1 | 8 | 0.53 |
| 27-Oct | 0.33 | <1 | <2 | <1 | 13 | 0.48 |
| 03-Nov | 0.44 | <1 | 4 | <1 | 12 | 0.37 |
| 10-Nov | 0.47 | <1 | 2 | <1 | 11 | 0.32 |
| 17-Nov | 0.21 | <1 | 8 | <1 | 7 | 0.36 |
| 24-Nov | 0.43 | <1 | <2 | <1 | 8 | 0.40 |
| 01-Dec | 0.56 | <1 | <2 | <1 | 9 | 0.32 |
| 08-Dec | 0.48 | <1 | <2 | <1 | 9 | 0.32 |
| 15-Dec | 0.57 | <1 | <2 | <1 | 8 | 0.58 |
| 22-Dec | 0.42 | <1 | <2 | <1 | 7 | 0.43 |
| 29-Dec | 0.32 | <1 | NA | <1 | 9 | 0.39 |

DM933 (SOUTHSIDE 15B AVE. at 13341) - 2010 TEST RESULTS

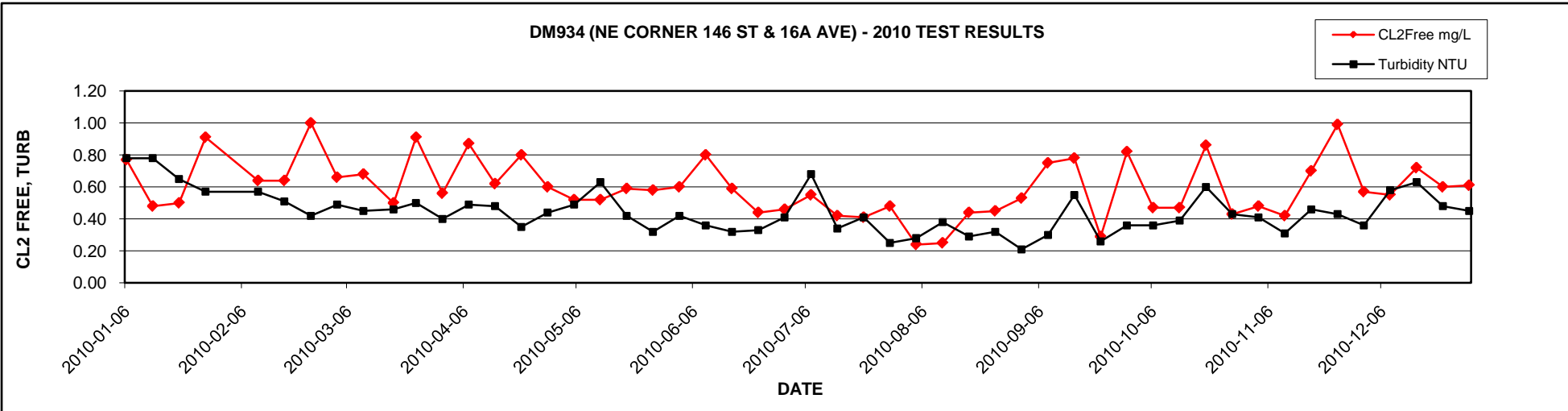
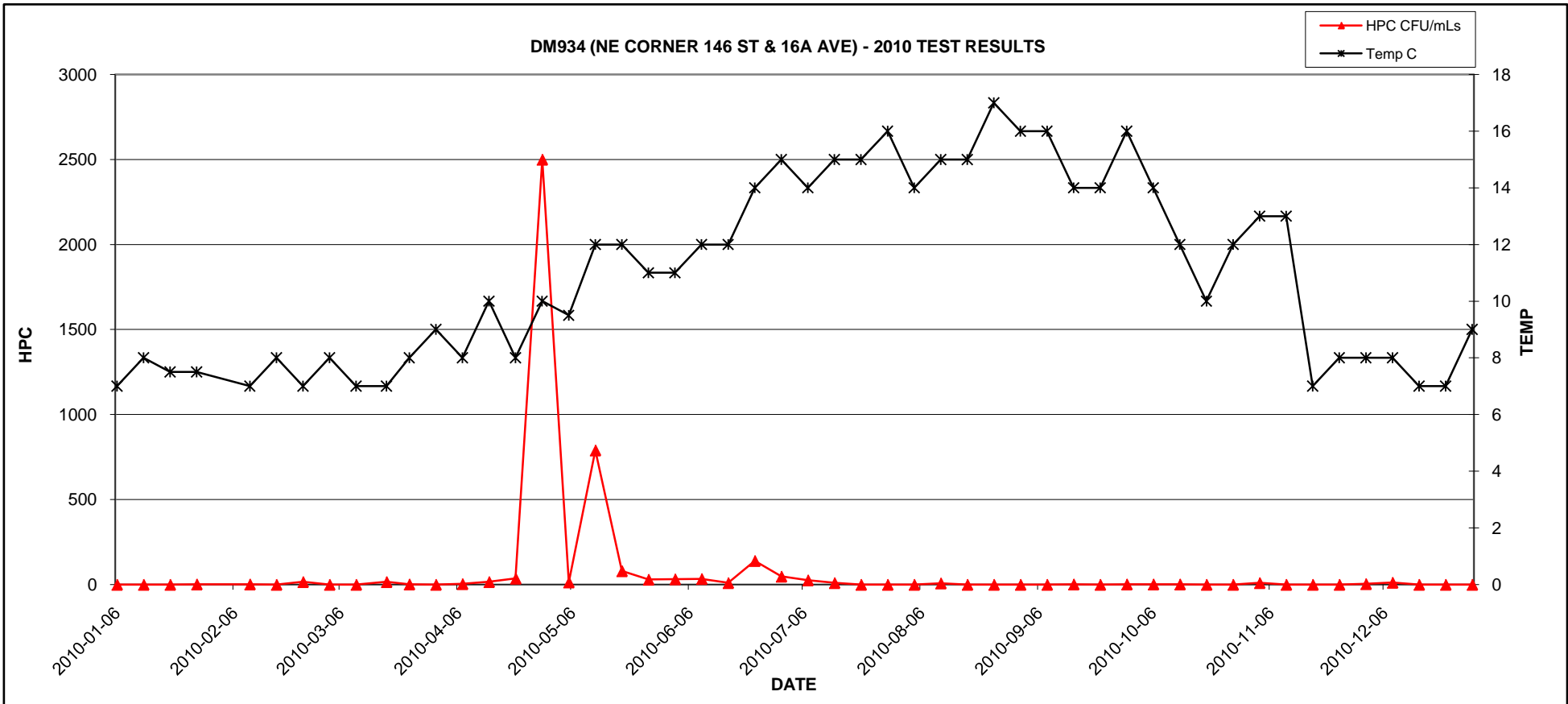


DM933 (SOUTHSIDE 15B AVE. at 13341) - 2010 TEST RESULTS



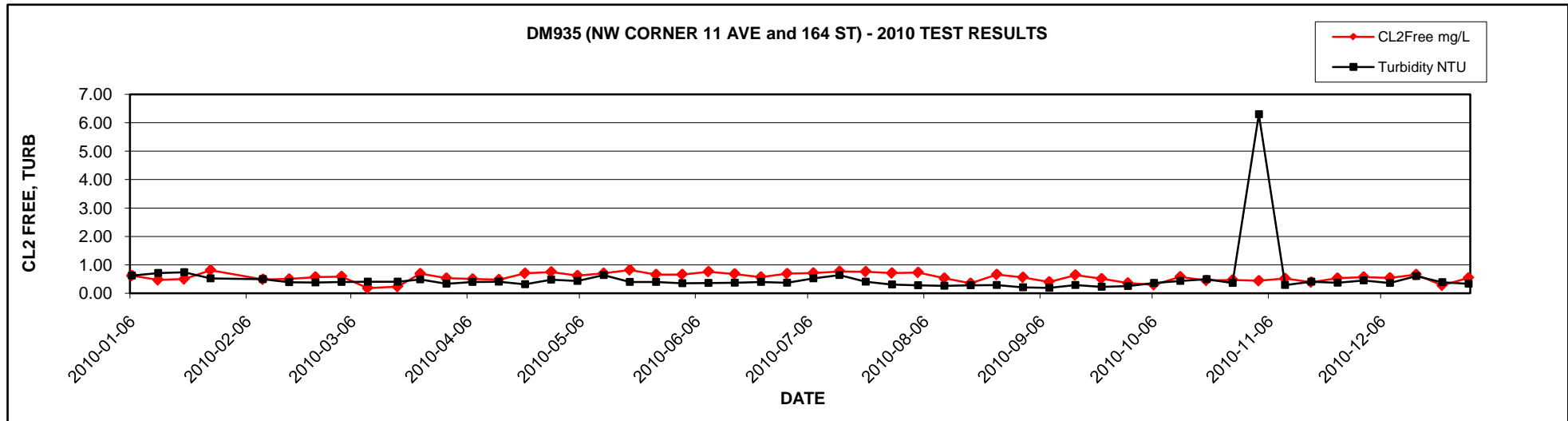
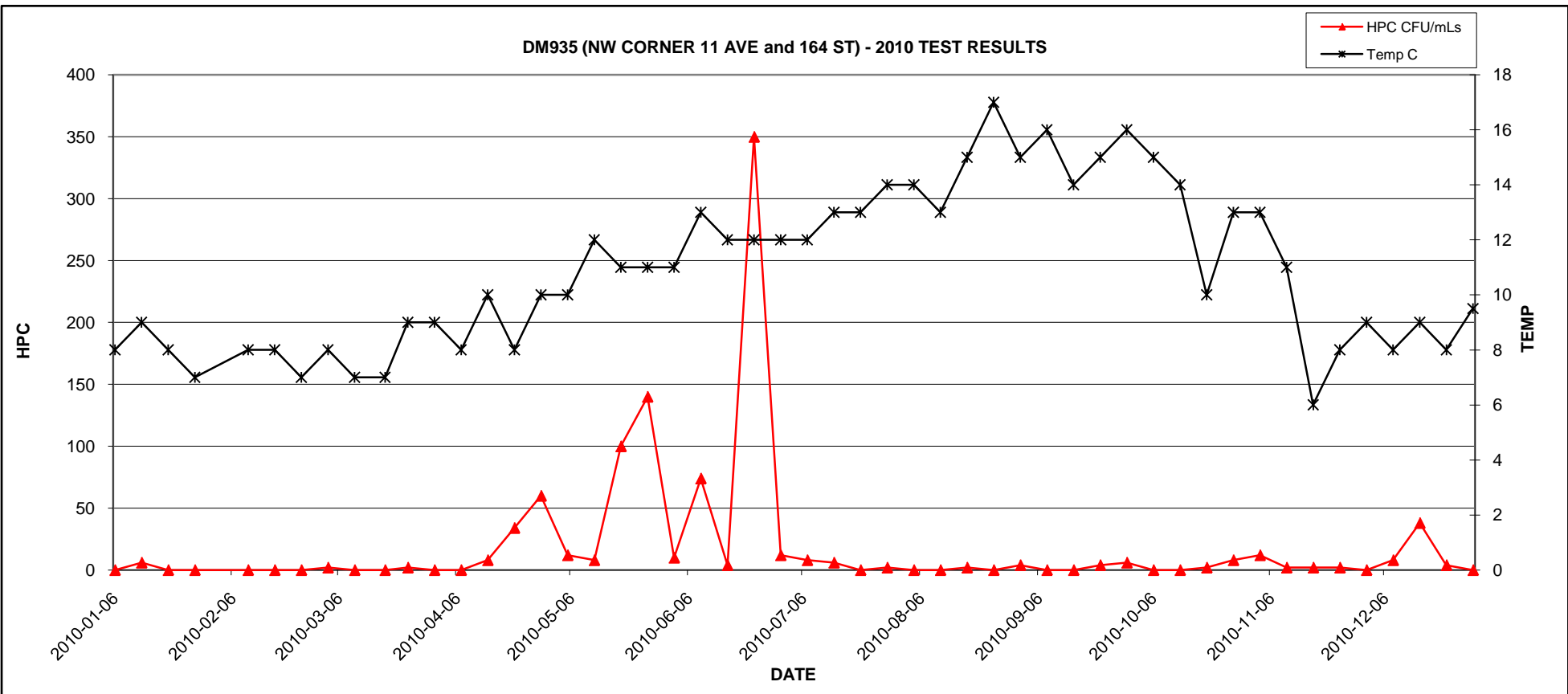
2010 GVRD Laboratory Report - DM934 (NE CORNER 146 ST & 16A AVE)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.77 | <1 | <2 | <1 | 7 | 0.78 |
| 13-Jan | 0.48 | <1 | <2 | <1 | 8 | 0.78 |
| 20-Jan | 0.50 | <1 | <2 | <1 | 7.5 | 0.65 |
| 27-Jan | 0.91 | <1 | 2 | <1 | 7.5 | 0.57 |
| 10-Feb | 0.64 | <1 | 2 | <1 | 7 | 0.57 |
| 17-Feb | 0.64 | <1 | <2 | <1 | 8 | 0.51 |
| 24-Feb | 1.00 | <1 | 16 | <1 | 7 | 0.42 |
| 03-Mar | 0.66 | <1 | <2 | <1 | 8 | 0.49 |
| 10-Mar | 0.68 | <1 | <2 | <1 | 7 | 0.45 |
| 18-Mar | 0.50 | <1 | 16 | <1 | 7 | 0.46 |
| 24-Mar | 0.91 | <1 | 2 | <1 | 8 | 0.50 |
| 31-Mar | 0.56 | <1 | <2 | <1 | 9 | 0.40 |
| 07-Apr | 0.87 | <1 | 4 | <1 | 8 | 0.49 |
| 14-Apr | 0.62 | <1 | 16 | <1 | 10 | 0.48 |
| 21-Apr | 0.80 | <1 | 36 | <1 | 8 | 0.35 |
| 28-Apr | 0.60 | <1 | 2500 | <1 | 10 | 0.44 |
| 05-May | 0.52 | <1 | 14 | <1 | 9.5 | 0.49 |
| 12-May | 0.52 | <1 | 790 | <1 | 12 | 0.63 |
| 19-May | 0.59 | <1 | 80 | <1 | 12 | 0.42 |
| 26-May | 0.58 | <1 | 30 | <1 | 11 | 0.32 |
| 02-Jun | 0.60 | <1 | 32 | <1 | 11 | 0.42 |
| 09-Jun | 0.80 | <1 | 34 | <1 | 12 | 0.36 |
| 16-Jun | 0.59 | <1 | 10 | <1 | 12 | 0.32 |
| 23-Jun | 0.44 | <1 | 140 | <1 | 14 | 0.33 |
| 30-Jun | 0.46 | <1 | 48 | <1 | 15 | 0.41 |
| 07-Jul | 0.55 | <1 | 26 | <1 | 14 | 0.68 |
| 14-Jul | 0.42 | <1 | 10 | <1 | 15 | 0.34 |
| 21-Jul | 0.41 | <1 | <2 | <1 | 15 | 0.41 |
| 28-Jul | 0.48 | <1 | <2 | <1 | 16 | 0.25 |
| 04-Aug | 0.24 | <1 | <2 | <1 | 14 | 0.28 |
| 11-Aug | 0.25 | <1 | 8 | <1 | 15 | 0.38 |
| 18-Aug | 0.44 | <1 | <2 | <1 | 15 | 0.29 |
| 25-Aug | 0.45 | <1 | <2 | <1 | 17 | 0.32 |
| 01-Sep | 0.53 | <1 | <2 | <1 | 16 | 0.21 |
| 08-Sep | 0.75 | <1 | <2 | <1 | 16 | 0.30 |
| 15-Sep | 0.78 | <1 | 2 | <1 | 14 | 0.55 |
| 22-Sep | 0.29 | <1 | <2 | <1 | 14 | 0.26 |
| 29-Sep | 0.82 | <1 | 2 | <1 | 16 | 0.36 |
| 06-Oct | 0.47 | <1 | 2 | <1 | 14 | 0.36 |
| 13-Oct | 0.47 | <1 | 2 | <1 | 12 | 0.39 |
| 20-Oct | 0.86 | <1 | <2 | <1 | 10 | 0.60 |
| 27-Oct | 0.43 | <1 | <2 | <1 | 12 | 0.43 |
| 03-Nov | 0.48 | <1 | 10 | <1 | 13 | 0.41 |
| 10-Nov | 0.42 | <1 | <2 | <1 | 13 | 0.31 |
| 17-Nov | 0.70 | <1 | <2 | <1 | 7 | 0.46 |
| 24-Nov | 0.99 | <1 | <2 | <1 | 8 | 0.43 |
| 01-Dec | 0.57 | <1 | 4 | <1 | 8 | 0.36 |
| 08-Dec | 0.55 | <1 | 12 | <1 | 8 | 0.58 |
| 15-Dec | 0.72 | <1 | <2 | <1 | 7 | 0.63 |
| 22-Dec | 0.60 | <1 | <2 | <1 | 7 | 0.48 |
| 29-Dec | 0.61 | <1 | NA | <1 | 9 | 0.45 |



2010 GVRD Laboratory Report - DM935 (NW CORNER 11 AVE and 164 ST)

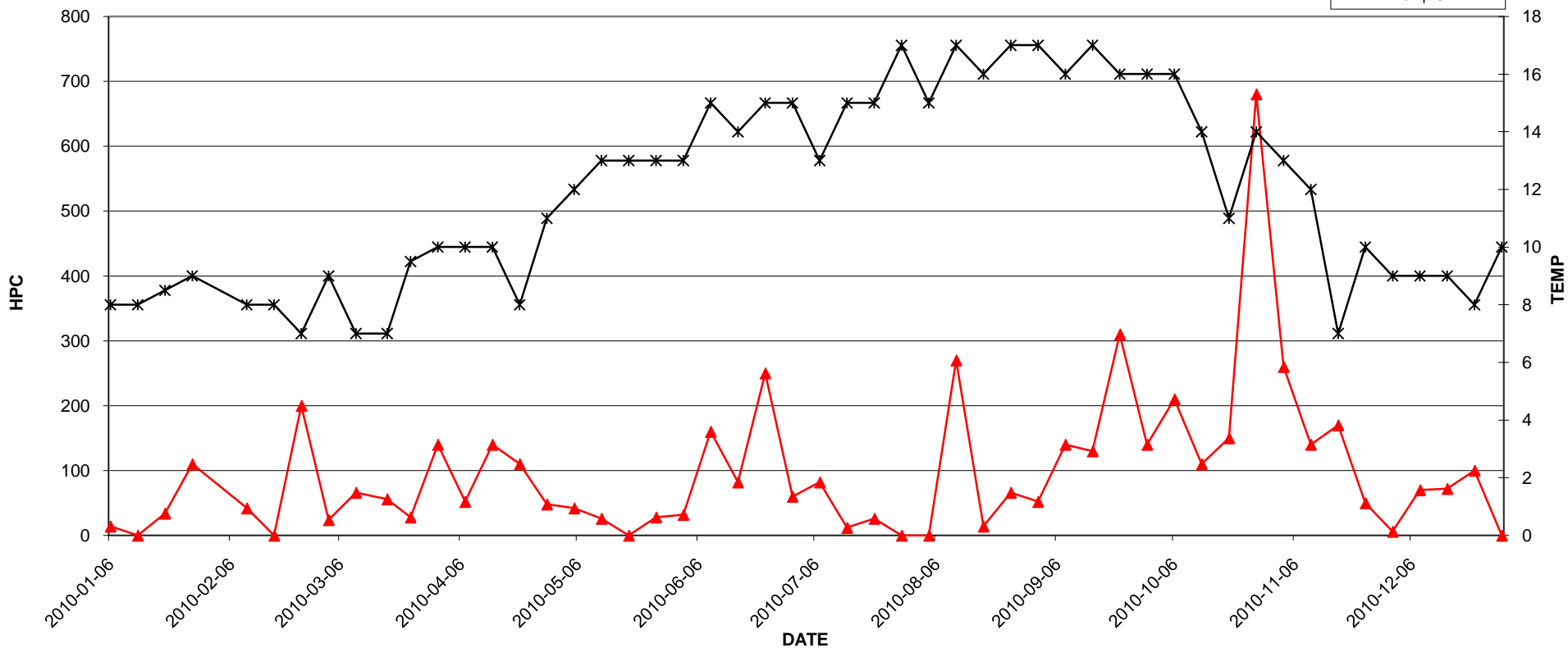
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.62 | <1 | <2 | <1 | 8 | 0.62 |
| 13-Jan | 0.47 | <1 | 6 | <1 | 9 | 0.71 |
| 20-Jan | 0.50 | <1 | <2 | <1 | 8 | 0.74 |
| 27-Jan | 0.81 | <1 | <2 | <1 | 7 | 0.52 |
| 10-Feb | 0.49 | <1 | <2 | <1 | 8 | 0.50 |
| 17-Feb | 0.50 | <1 | <2 | <1 | 8 | 0.39 |
| 24-Feb | 0.57 | <1 | <2 | <1 | 7 | 0.38 |
| 03-Mar | 0.59 | <1 | 2 | <1 | 8 | 0.40 |
| 10-Mar | 0.18 | <1 | <2 | <1 | 7 | 0.41 |
| 18-Mar | 0.23 | <1 | <2 | <1 | 7 | 0.41 |
| 24-Mar | 0.69 | <1 | 2 | <1 | 9 | 0.49 |
| 31-Mar | 0.53 | <1 | <2 | <1 | 9 | 0.33 |
| 07-Apr | 0.50 | <1 | <2 | <1 | 8 | 0.40 |
| 14-Apr | 0.48 | <1 | 8 | <1 | 10 | 0.41 |
| 21-Apr | 0.70 | <1 | 34 | <1 | 8 | 0.32 |
| 28-Apr | 0.75 | <1 | 60 | <1 | 10 | 0.48 |
| 05-May | 0.62 | <1 | 12 | <1 | 10 | 0.43 |
| 12-May | 0.70 | <1 | 8 | <1 | 12 | 0.64 |
| 19-May | 0.82 | <1 | 100 | <1 | 11 | 0.40 |
| 26-May | 0.66 | <1 | 140 | <1 | 11 | 0.40 |
| 02-Jun | 0.66 | <1 | 10 | <1 | 11 | 0.35 |
| 09-Jun | 0.76 | <1 | 74 | <1 | 13 | 0.36 |
| 16-Jun | 0.68 | <1 | 4 | <1 | 12 | 0.37 |
| 23-Jun | 0.57 | <1 | 350 | <1 | 12 | 0.40 |
| 30-Jun | 0.69 | <1 | 12 | <1 | 12 | 0.37 |
| 07-Jul | 0.71 | <1 | 8 | <1 | 12 | 0.52 |
| 14-Jul | 0.77 | <1 | 6 | <1 | 13 | 0.64 |
| 21-Jul | 0.76 | <1 | <2 | <1 | 13 | 0.41 |
| 28-Jul | 0.71 | <1 | 2 | <1 | 14 | 0.31 |
| 04-Aug | 0.73 | <1 | <2 | <1 | 14 | 0.28 |
| 11-Aug | 0.53 | <1 | <2 | <1 | 13 | 0.26 |
| 18-Aug | 0.35 | <1 | 2 | <1 | 15 | 0.28 |
| 25-Aug | 0.66 | <1 | <2 | <1 | 17 | 0.29 |
| 01-Sep | 0.56 | <1 | 4 | <1 | 15 | 0.21 |
| 08-Sep | 0.40 | <1 | <2 | <1 | 16 | 0.19 |
| 15-Sep | 0.64 | <1 | <2 | <1 | 14 | 0.29 |
| 22-Sep | 0.51 | <1 | 4 | <1 | 15 | 0.23 |
| 29-Sep | 0.36 | <1 | 6 | <1 | 16 | 0.25 |
| 06-Oct | 0.30 | <1 | <2 | <1 | 15 | 0.36 |
| 13-Oct | 0.58 | <1 | <2 | <1 | 14 | 0.43 |
| 20-Oct | 0.45 | <1 | 2 | <1 | 10 | 0.50 |
| 27-Oct | 0.47 | <1 | 8 | <1 | 13 | 0.36 |
| 03-Nov | 0.44 | <1 | 12 | <1 | 13 | 6.30 |
| 10-Nov | 0.52 | <1 | 2 | <1 | 11 | 0.29 |
| 17-Nov | 0.39 | <1 | 2 | <1 | 6 | 0.41 |
| 24-Nov | 0.53 | <1 | 2 | <1 | 8 | 0.37 |
| 01-Dec | 0.57 | <1 | <2 | <1 | 9 | 0.45 |
| 08-Dec | 0.54 | <1 | 8 | <1 | 8 | 0.36 |
| 15-Dec | 0.66 | <1 | 38 | <1 | 9 | 0.60 |
| 22-Dec | 0.28 | <1 | 4 | <1 | 8 | 0.39 |
| 29-Dec | 0.54 | <1 | NA | <1 | 9.5 | 0.33 |



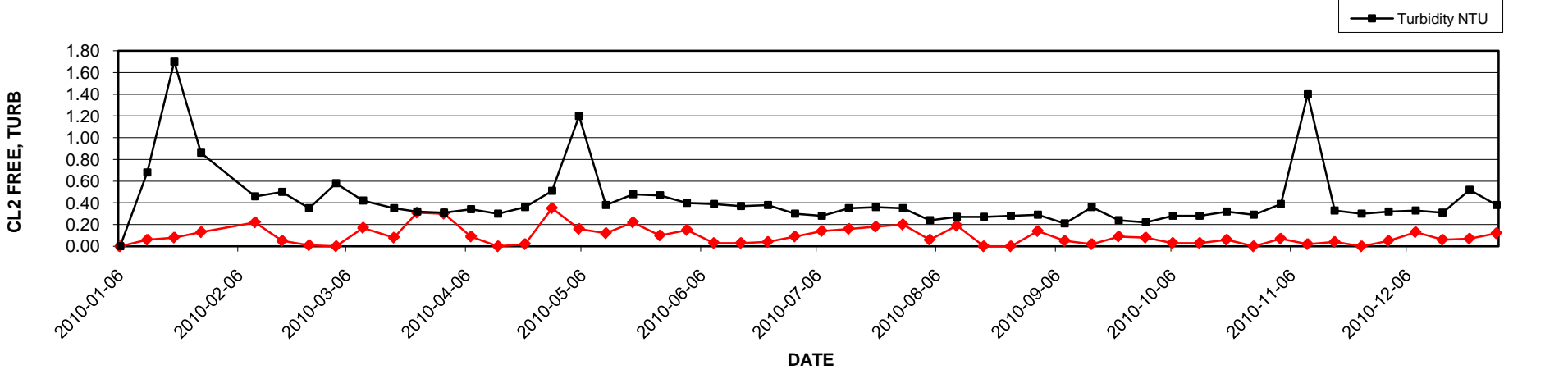
2010 GVRD Laboratory Report - DM936 (NW 0 AVE. at 172 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.06 | <1 | 14 | <1 | 8 | 0.68 |
| 13-Jan | 0.08 | <1 | <2 | <1 | 8 | 1.70 |
| 20-Jan | 0.13 | <1 | 34 | <1 | 8.5 | 0.86 |
| 27-Jan | 0.22 | <1 | 110 | <1 | 9 | 0.46 |
| 10-Feb | 0.05 | <1 | 42 | <1 | 8 | 0.50 |
| 17-Feb | 0.01 | <1 | <2 | <1 | 8 | 0.35 |
| 24-Feb | <0.01 | <1 | 200 | <1 | 7 | 0.58 |
| 03-Mar | 0.17 | <1 | 24 | <1 | 9 | 0.42 |
| 10-Mar | 0.08 | <1 | 66 | <1 | 7 | 0.35 |
| 18-Mar | 0.31 | <1 | 56 | <1 | 7 | 0.32 |
| 24-Mar | 0.30 | <1 | 28 | <1 | 9.5 | 0.31 |
| 31-Mar | 0.09 | <1 | 140 | <1 | 10 | 0.34 |
| 07-Apr | <0.01 | <1 | 52 | <1 | 10 | 0.30 |
| 14-Apr | 0.02 | <1 | 140 | <1 | 10 | 0.36 |
| 21-Apr | 0.35 | <1 | 110 | <1 | 8 | 0.51 |
| 28-Apr | 0.16 | <1 | 48 | <1 | 11 | 1.20 |
| 05-May | 0.12 | <1 | 42 | <1 | 12 | 0.38 |
| 12-May | 0.22 | <1 | 26 | <1 | 13 | 0.48 |
| 19-May | 0.10 | <1 | <2 | <1 | 13 | 0.47 |
| 26-May | 0.15 | <1 | 28 | <1 | 13 | 0.40 |
| 02-Jun | 0.03 | <1 | 32 | <1 | 13 | 0.39 |
| 09-Jun | 0.03 | <1 | 160 | <1 | 15 | 0.37 |
| 16-Jun | 0.04 | <1 | 82 | <1 | 14 | 0.38 |
| 23-Jun | 0.09 | <1 | 250 | <1 | 15 | 0.30 |
| 30-Jun | 0.14 | <1 | 60 | <1 | 15 | 0.28 |
| 07-Jul | 0.16 | <1 | 82 | <1 | 13 | 0.35 |
| 14-Jul | 0.18 | <1 | 12 | <1 | 15 | 0.36 |
| 21-Jul | 0.20 | <1 | 26 | <1 | 15 | 0.35 |
| 28-Jul | 0.06 | <1 | <2 | <1 | 17 | 0.24 |
| 04-Aug | 0.19 | <1 | <2 | <1 | 15 | 0.27 |
| 11-Aug | <0.01 | <1 | 270 | <1 | 17 | 0.27 |
| 18-Aug | <0.01 | <1 | 14 | <1 | 16 | 0.28 |
| 25-Aug | 0.14 | <1 | 66 | <1 | 17 | 0.29 |
| 01-Sep | 0.05 | <1 | 52 | <1 | 17 | 0.21 |
| 08-Sep | 0.02 | <1 | 140 | <1 | 16 | 0.36 |
| 15-Sep | 0.09 | <1 | 130 | <1 | 17 | 0.24 |
| 22-Sep | 0.08 | <1 | 310 | <1 | 16 | 0.22 |
| 29-Sep | 0.03 | <1 | 140 | <1 | 16 | 0.28 |
| 06-Oct | 0.03 | <1 | 210 | <1 | 16 | 0.28 |
| 13-Oct | 0.06 | <1 | 110 | <1 | 14 | 0.32 |
| 20-Oct | <0.01 | <1 | 150 | <1 | 11 | 0.29 |
| 27-Oct | 0.07 | <1 | 680 | <1 | 14 | 0.39 |
| 03-Nov | 0.02 | <1 | 260 | <1 | 13 | 1.40 |
| 10-Nov | 0.04 | <1 | 140 | <1 | 12 | 0.33 |
| 17-Nov | <0.01 | <1 | 170 | <1 | 7 | 0.30 |
| 24-Nov | 0.05 | <1 | 50 | <1 | 10 | 0.32 |
| 01-Dec | 0.13 | <1 | 6 | <1 | 9 | 0.33 |
| 08-Dec | 0.06 | <1 | 70 | <1 | 9 | 0.31 |
| 15-Dec | 0.07 | <1 | 72 | <1 | 9 | 0.52 |
| 22-Dec | 0.12 | <1 | 100 | <1 | 8 | 0.38 |
| 29-Dec | 0.10 | <1 | NA | <1 | 10 | 0.32 |

DM936 (NW 0 AVE. at 172 ST.) - 2010 TEST RESULTS

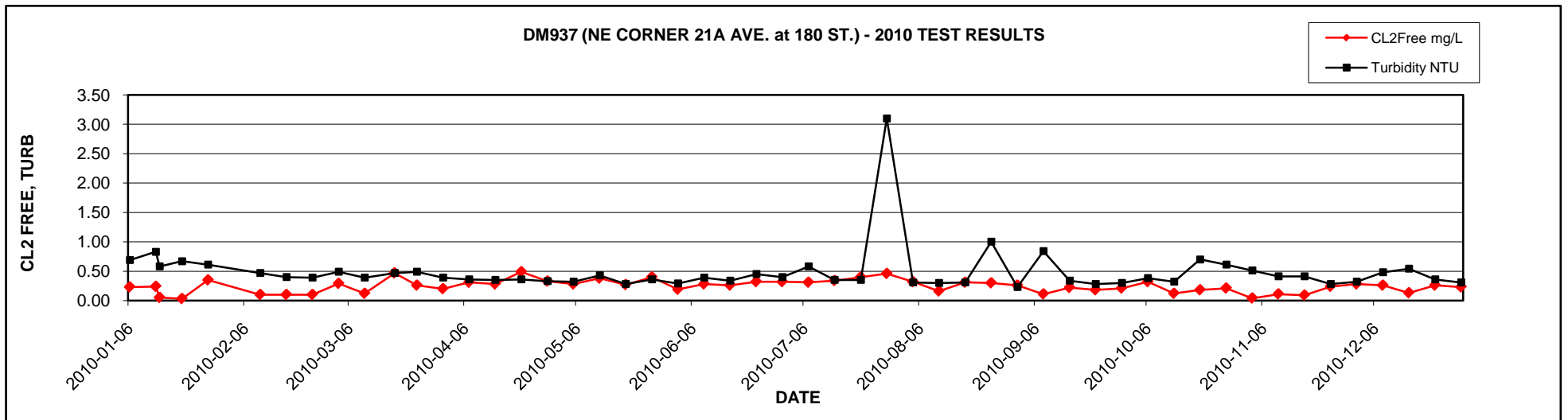
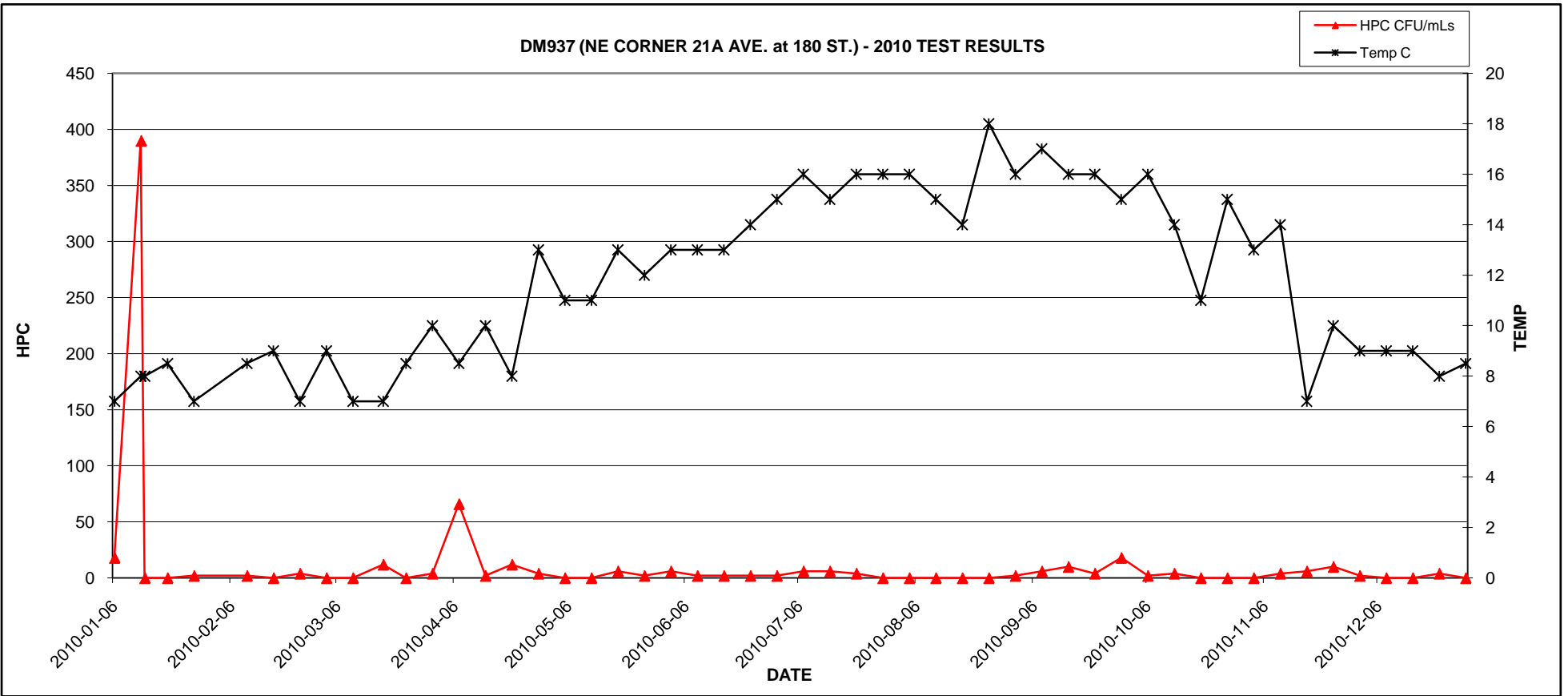


DM936 (NW 0 AVE. at 172 ST.) - 2010 TEST RESULTS



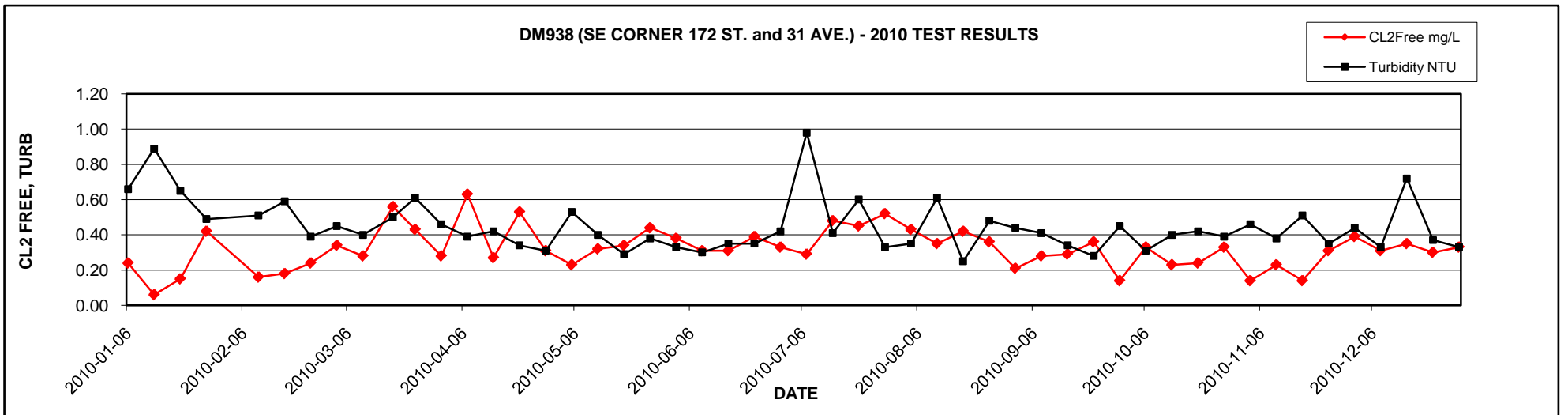
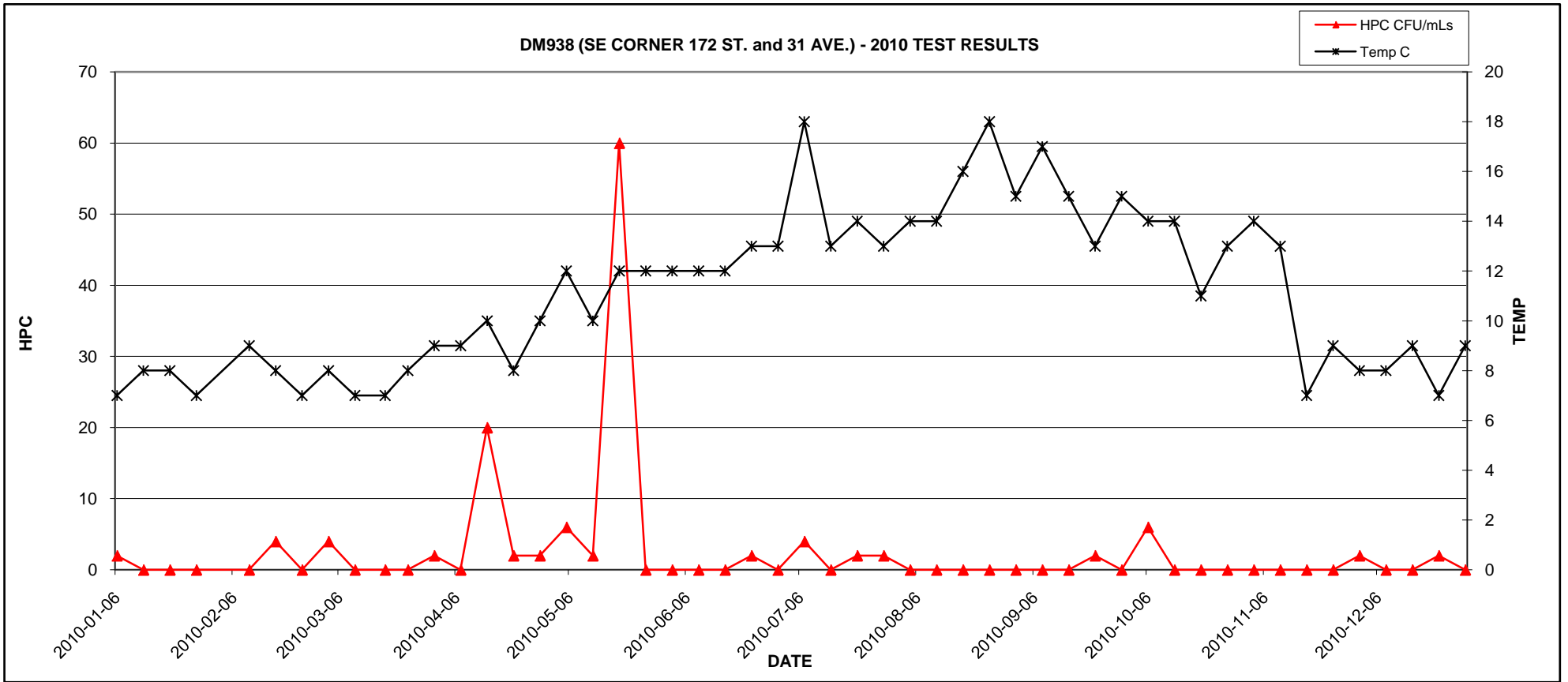
2010 GVRD Laboratory Report - DM937 (NE CORNER 21A AVE. at 180 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.23 | <1 | 18 | <1 | 7 | 0.69 |
| 13-Jan | 0.24 | 1 | 390 | 1 | 8 | 0.83 |
| 14-Jan | 0.05 | <1 | <2 | <1 | 8 | 0.58 |
| 20-Jan | 0.03 | <1 | <2 | <1 | 8.5 | 0.67 |
| 27-Jan | 0.35 | <1 | 2 | <1 | 7 | 0.61 |
| 10-Feb | 0.10 | <1 | 2 | <1 | 8.5 | 0.47 |
| 17-Feb | 0.10 | <1 | <2 | <1 | 9 | 0.40 |
| 24-Feb | 0.10 | <1 | 4 | <1 | 7 | 0.39 |
| 03-Mar | 0.29 | <1 | NA | <1 | 9 | 0.49 |
| 10-Mar | 0.12 | <1 | <2 | <1 | 7 | 0.39 |
| 18-Mar | 0.47 | <1 | 12 | <1 | 7 | 0.47 |
| 24-Mar | 0.26 | <1 | <2 | <1 | 8.5 | 0.49 |
| 31-Mar | 0.20 | <1 | 4 | <1 | 10 | 0.39 |
| 07-Apr | 0.31 | <1 | 66 | <1 | 8.5 | 0.36 |
| 14-Apr | 0.28 | <1 | 2 | <1 | 10 | 0.35 |
| 21-Apr | 0.49 | <1 | 12 | <1 | 8 | 0.36 |
| 28-Apr | 0.33 | <1 | 4 | <1 | 13 | 0.33 |
| 05-May | 0.28 | <1 | <2 | <1 | 11 | 0.32 |
| 12-May | 0.38 | <1 | <2 | <1 | 11 | 0.43 |
| 19-May | 0.27 | <1 | 6 | <1 | 13 | 0.28 |
| 26-May | 0.40 | <1 | 2 | <1 | 12 | 0.36 |
| 02-Jun | 0.19 | <1 | 6 | <1 | 13 | 0.29 |
| 09-Jun | 0.28 | <1 | 2 | <1 | 13 | 0.39 |
| 16-Jun | 0.26 | <1 | 2 | <1 | 13 | 0.34 |
| 23-Jun | 0.32 | <1 | 2 | <1 | 14 | 0.45 |
| 30-Jun | 0.32 | <1 | 2 | <1 | 15 | 0.40 |
| 07-Jul | 0.31 | <1 | 6 | <1 | 16 | 0.58 |
| 14-Jul | 0.34 | <1 | 6 | <1 | 15 | 0.35 |
| 21-Jul | 0.40 | <1 | 4 | <1 | 16 | 0.35 |
| 28-Jul | 0.46 | <1 | <2 | <1 | 16 | 3.10 |
| 04-Aug | 0.32 | <1 | <2 | <1 | 16 | 0.31 |
| 11-Aug | 0.16 | <1 | <2 | <1 | 15 | 0.30 |
| 18-Aug | 0.31 | <1 | <2 | <1 | 14 | 0.31 |
| 25-Aug | 0.30 | <1 | <2 | <1 | 18 | 1.00 |
| 01-Sep | 0.26 | <1 | 2 | <1 | 16 | 0.23 |
| 08-Sep | 0.11 | <1 | 6 | <1 | 17 | 0.84 |
| 15-Sep | 0.22 | <1 | 10 | <1 | 16 | 0.34 |
| 22-Sep | 0.18 | <1 | 4 | <1 | 16 | 0.28 |
| 29-Sep | 0.21 | <1 | 18 | <1 | 15 | 0.30 |
| 06-Oct | 0.32 | <1 | 2 | <1 | 16 | 0.38 |
| 13-Oct | 0.12 | <1 | 4 | <1 | 14 | 0.32 |
| 20-Oct | 0.18 | <1 | >11000 | <1 | 11 | 0.70 |
| 27-Oct | 0.21 | <1 | <2 | <1 | 15 | 0.61 |
| 03-Nov | 0.04 | <1 | <2 | <1 | 13 | 0.51 |
| 10-Nov | 0.11 | <1 | 4 | <1 | 14 | 0.41 |
| 17-Nov | 0.09 | <1 | 6 | <1 | 7 | 0.41 |
| 24-Nov | 0.24 | <1 | 10 | <1 | 10 | 0.28 |
| 01-Dec | 0.28 | <1 | 2 | <1 | 9 | 0.32 |
| 08-Dec | 0.26 | <1 | <2 | <1 | 9 | 0.48 |
| 15-Dec | 0.13 | <1 | <2 | <1 | 9 | 0.54 |
| 22-Dec | 0.26 | <1 | 4 | <1 | 8 | 0.36 |
| 29-Dec | 0.23 | <1 | NA | <1 | 8.5 | 0.31 |



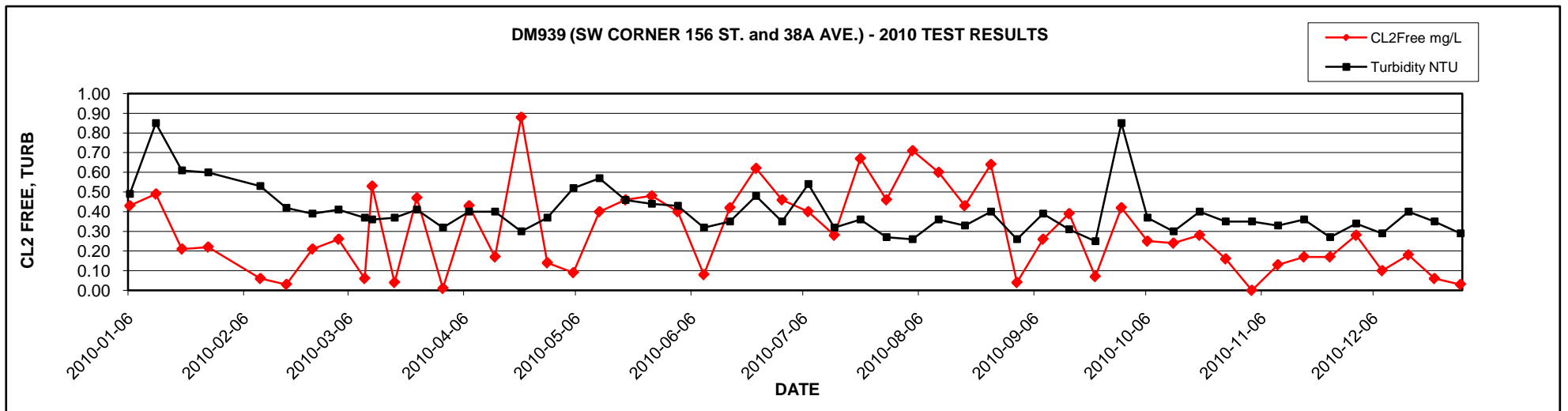
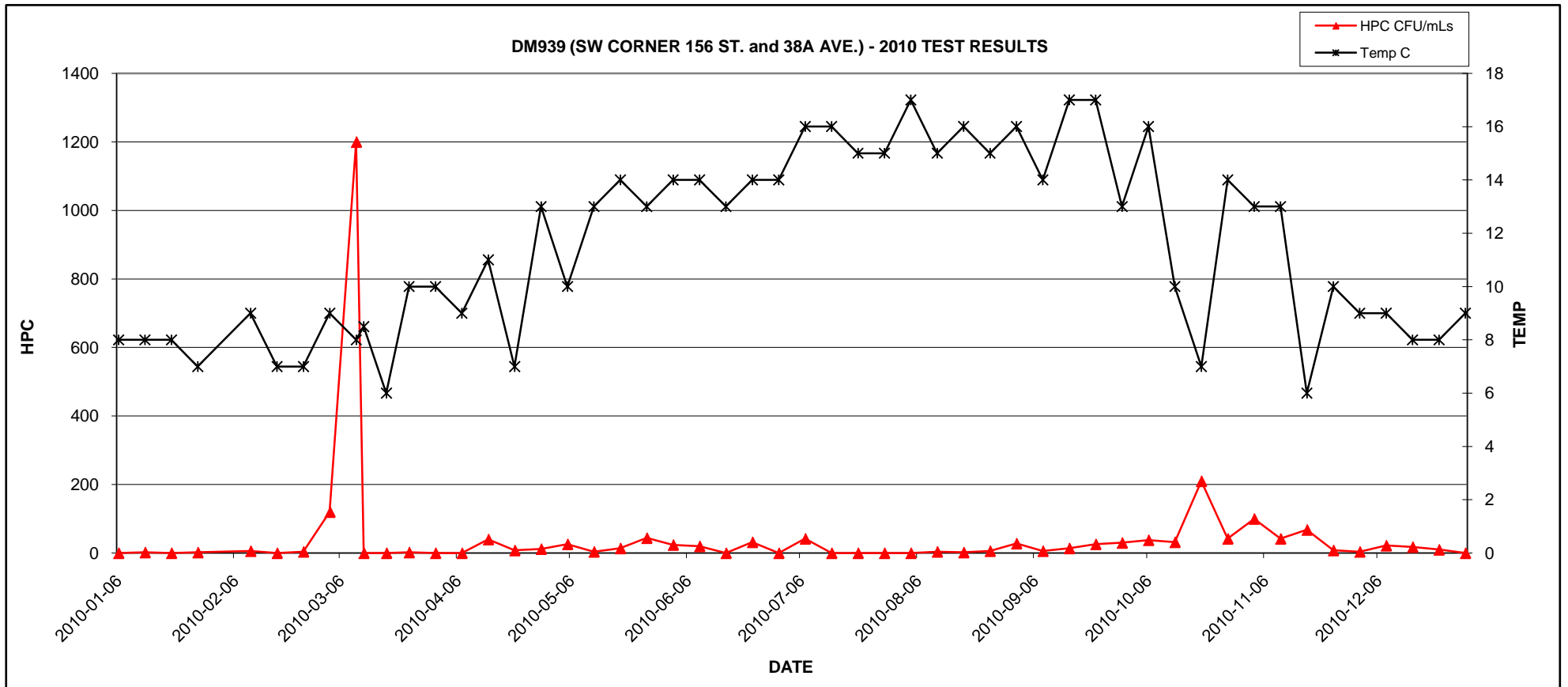
2010 GVRD Laboratory Report - DM938 (SE CORNER 172 ST. and 31 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.24 | <1 | 2 | <1 | 7 | 0.66 |
| 13-Jan | 0.06 | <1 | <2 | <1 | 8 | 0.89 |
| 20-Jan | 0.15 | <1 | <2 | <1 | 8 | 0.65 |
| 27-Jan | 0.42 | <1 | <2 | <1 | 7 | 0.49 |
| 10-Feb | 0.16 | <1 | <2 | <1 | 9 | 0.51 |
| 17-Feb | 0.18 | <1 | 4 | <1 | 8 | 0.59 |
| 24-Feb | 0.24 | <1 | <2 | <1 | 7 | 0.39 |
| 03-Mar | 0.34 | <1 | 4 | <1 | 8 | 0.45 |
| 10-Mar | 0.28 | <1 | <2 | <1 | 7 | 0.40 |
| 18-Mar | 0.56 | <1 | <2 | <1 | 7 | 0.50 |
| 24-Mar | 0.43 | <1 | <2 | <1 | 8 | 0.61 |
| 31-Mar | 0.28 | <1 | 2 | <1 | 9 | 0.46 |
| 07-Apr | 0.63 | <1 | <2 | <1 | 9 | 0.39 |
| 14-Apr | 0.27 | <1 | 20 | <1 | 10 | 0.42 |
| 21-Apr | 0.53 | <1 | 2 | <1 | 8 | 0.34 |
| 28-Apr | 0.31 | <1 | 2 | <1 | 10 | 0.31 |
| 05-May | 0.23 | <1 | 6 | <1 | 12 | 0.53 |
| 12-May | 0.32 | <1 | 2 | <1 | 10 | 0.40 |
| 19-May | 0.34 | <1 | 60 | <1 | 12 | 0.29 |
| 26-May | 0.44 | <1 | <2 | <1 | 12 | 0.38 |
| 02-Jun | 0.38 | <1 | <2 | <1 | 12 | 0.33 |
| 09-Jun | 0.31 | <1 | <2 | <1 | 12 | 0.30 |
| 16-Jun | 0.31 | <1 | <2 | <1 | 12 | 0.35 |
| 23-Jun | 0.39 | <1 | 2 | <1 | 13 | 0.35 |
| 30-Jun | 0.33 | <1 | <2 | <1 | 13 | 0.42 |
| 07-Jul | 0.29 | <1 | 4 | <1 | 18 | 0.98 |
| 14-Jul | 0.48 | <1 | <2 | <1 | 13 | 0.41 |
| 21-Jul | 0.45 | <1 | 2 | <1 | 14 | 0.60 |
| 28-Jul | 0.52 | <1 | 2 | <1 | 13 | 0.33 |
| 04-Aug | 0.43 | <1 | <2 | <1 | 14 | 0.35 |
| 11-Aug | 0.35 | <1 | <2 | <1 | 14 | 0.61 |
| 18-Aug | 0.42 | <1 | <2 | <1 | 16 | 0.25 |
| 25-Aug | 0.36 | <1 | <2 | <1 | 18 | 0.48 |
| 01-Sep | 0.21 | <1 | <2 | <1 | 15 | 0.44 |
| 08-Sep | 0.28 | <1 | <2 | <1 | 17 | 0.41 |
| 15-Sep | 0.29 | <1 | <2 | <1 | 15 | 0.34 |
| 22-Sep | 0.36 | <1 | 2 | <1 | 13 | 0.28 |
| 29-Sep | 0.14 | <1 | <2 | <1 | 15 | 0.45 |
| 06-Oct | 0.33 | <1 | 6 | <1 | 14 | 0.31 |
| 13-Oct | 0.23 | <1 | <2 | <1 | 14 | 0.40 |
| 20-Oct | 0.24 | <1 | <2 | <1 | 11 | 0.42 |
| 27-Oct | 0.33 | <1 | LA | <1 | 13 | 0.39 |
| 03-Nov | 0.14 | <1 | <2 | <1 | 14 | 0.46 |
| 10-Nov | 0.23 | <1 | <2 | <1 | 13 | 0.38 |
| 17-Nov | 0.14 | <1 | <2 | <1 | 7 | 0.51 |
| 24-Nov | 0.31 | <1 | <2 | <1 | 9 | 0.35 |
| 01-Dec | 0.39 | <1 | 2 | <1 | 8 | 0.44 |
| 08-Dec | 0.31 | <1 | <2 | <1 | 8 | 0.33 |
| 15-Dec | 0.35 | <1 | <2 | <1 | 9 | 0.72 |
| 22-Dec | 0.30 | <1 | 2 | <1 | 7 | 0.37 |
| 29-Dec | 0.33 | <1 | NA | <1 | 9 | 0.33 |



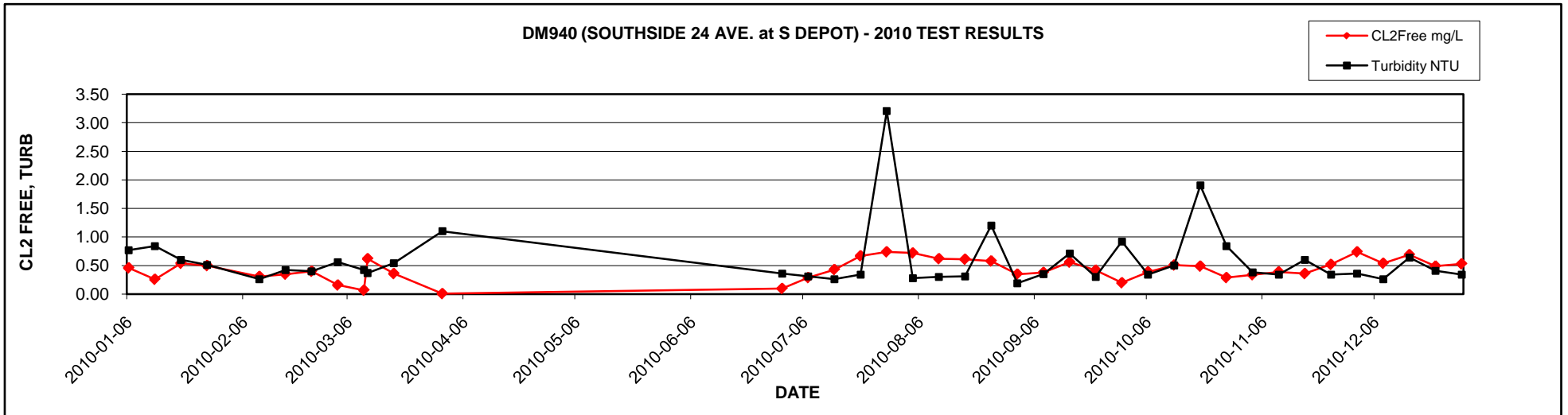
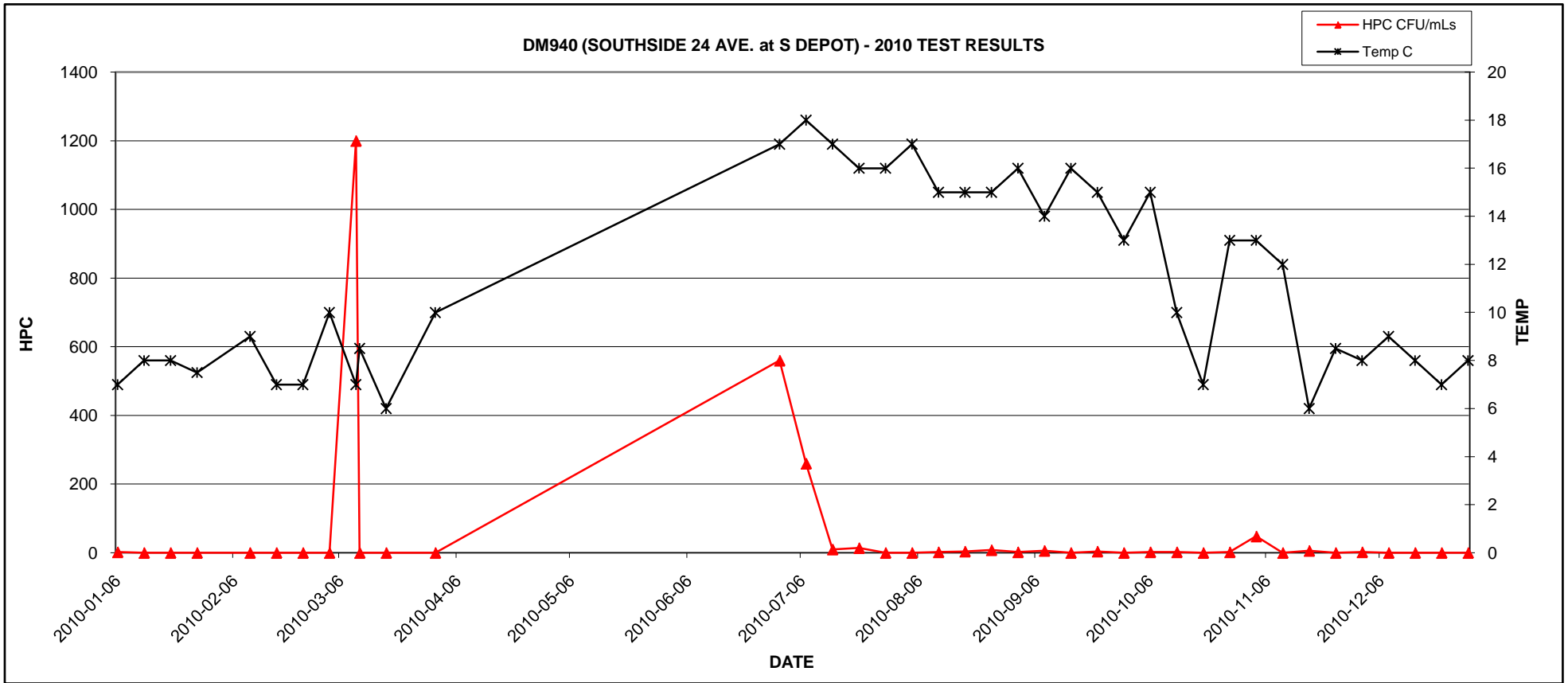
2010 GVRD Laboratory Report - DM939 (SW CORNER 156 ST. and 38A AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.43 | <1 | <2 | <1 | 8 | 0.49 |
| 13-Jan | 0.49 | <1 | 2 | <1 | 8 | 0.85 |
| 20-Jan | 0.21 | <1 | <2 | <1 | 8 | 0.61 |
| 27-Jan | 0.22 | <1 | 2 | <1 | 7 | 0.60 |
| 10-Feb | 0.06 | <1 | 6 | <1 | 9 | 0.53 |
| 17-Feb | 0.03 | <1 | <2 | <1 | 7 | 0.42 |
| 24-Feb | 0.21 | <1 | 4 | <1 | 7 | 0.39 |
| 03-Mar | 0.26 | <1 | 120 | <1 | 9 | 0.41 |
| 10-Mar | 0.06 | CG | 1200 | CG | 8 | 0.37 |
| 12-Mar | 0.53 | <1 | <2 | <1 | 8.5 | 0.36 |
| 18-Mar | 0.04 | <1 | <2 | <1 | 6 | 0.37 |
| 24-Mar | 0.47 | <1 | 2 | <1 | 10 | 0.41 |
| 31-Mar | 0.01 | <1 | <2 | <1 | 10 | 0.32 |
| 07-Apr | 0.43 | <1 | <2 | <1 | 9 | 0.40 |
| 14-Apr | 0.17 | <1 | 40 | <1 | 11 | 0.40 |
| 21-Apr | 0.88 | <1 | 8 | <1 | 7 | 0.30 |
| 28-Apr | 0.14 | <1 | 12 | <1 | 13 | 0.37 |
| 05-May | 0.09 | <1 | 26 | <1 | 10 | 0.52 |
| 12-May | 0.40 | <1 | 4 | <1 | 13 | 0.57 |
| 19-May | 0.46 | <1 | 14 | <1 | 14 | 0.46 |
| 26-May | 0.48 | <1 | 44 | <1 | 13 | 0.44 |
| 02-Jun | 0.40 | <1 | 24 | <1 | 14 | 0.43 |
| 09-Jun | 0.08 | <1 | 20 | <1 | 14 | 0.32 |
| 16-Jun | 0.42 | <1 | <2 | <1 | 13 | 0.35 |
| 23-Jun | 0.62 | <1 | 32 | <1 | 14 | 0.48 |
| 30-Jun | 0.46 | <1 | <2 | <1 | 14 | 0.35 |
| 07-Jul | 0.40 | <1 | 42 | <1 | 16 | 0.54 |
| 14-Jul | 0.28 | <1 | <2 | <1 | 16 | 0.32 |
| 21-Jul | 0.67 | <1 | <2 | <1 | 15 | 0.36 |
| 28-Jul | 0.46 | <1 | <2 | <1 | 15 | 0.27 |
| 04-Aug | 0.71 | <1 | <2 | <1 | 17 | 0.26 |
| 11-Aug | 0.60 | <1 | 4 | <1 | 15 | 0.36 |
| 18-Aug | 0.43 | <1 | 2 | <1 | 16 | 0.33 |
| 25-Aug | 0.64 | <1 | 6 | <1 | 15 | 0.40 |
| 01-Sep | 0.04 | <1 | 28 | <1 | 16 | 0.26 |
| 08-Sep | 0.26 | <1 | 6 | <1 | 14 | 0.39 |
| 15-Sep | 0.39 | <1 | 14 | <1 | 17 | 0.31 |
| 22-Sep | 0.07 | <1 | 26 | <1 | 17 | 0.25 |
| 29-Sep | 0.42 | <1 | 30 | <1 | 13 | 0.85 |
| 06-Oct | 0.25 | <1 | 38 | <1 | 16 | 0.37 |
| 13-Oct | 0.24 | <1 | 32 | <1 | 10 | 0.30 |
| 20-Oct | 0.28 | <1 | 210 | <1 | 7 | 0.40 |
| 27-Oct | 0.16 | <1 | 42 | <1 | 14 | 0.35 |
| 03-Nov | <0.01 | <1 | 100 | <1 | 13 | 0.35 |
| 10-Nov | 0.13 | <1 | 42 | <1 | 13 | 0.33 |
| 17-Nov | 0.17 | <1 | 68 | <1 | 6 | 0.36 |
| 24-Nov | 0.17 | <1 | 8 | <1 | 10 | 0.27 |
| 01-Dec | 0.28 | <1 | 4 | <1 | 9 | 0.34 |
| 08-Dec | 0.10 | <1 | 22 | <1 | 9 | 0.29 |
| 15-Dec | 0.18 | <1 | 18 | <1 | 8 | 0.40 |
| 22-Dec | 0.06 | <1 | 10 | <1 | 8 | 0.35 |
| 29-Dec | 0.03 | <1 | NA | <1 | 9 | 0.29 |



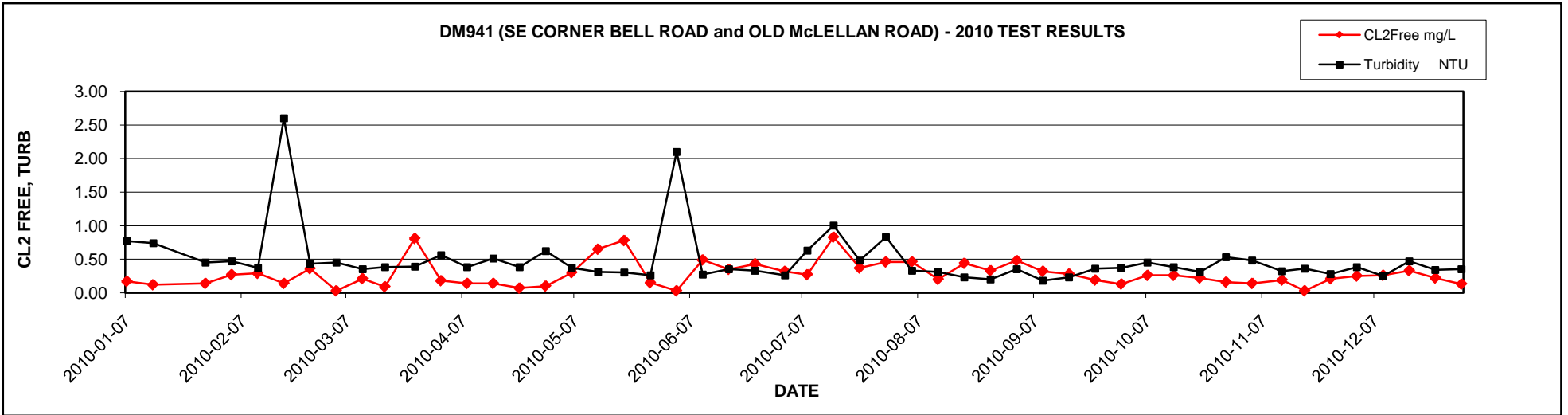
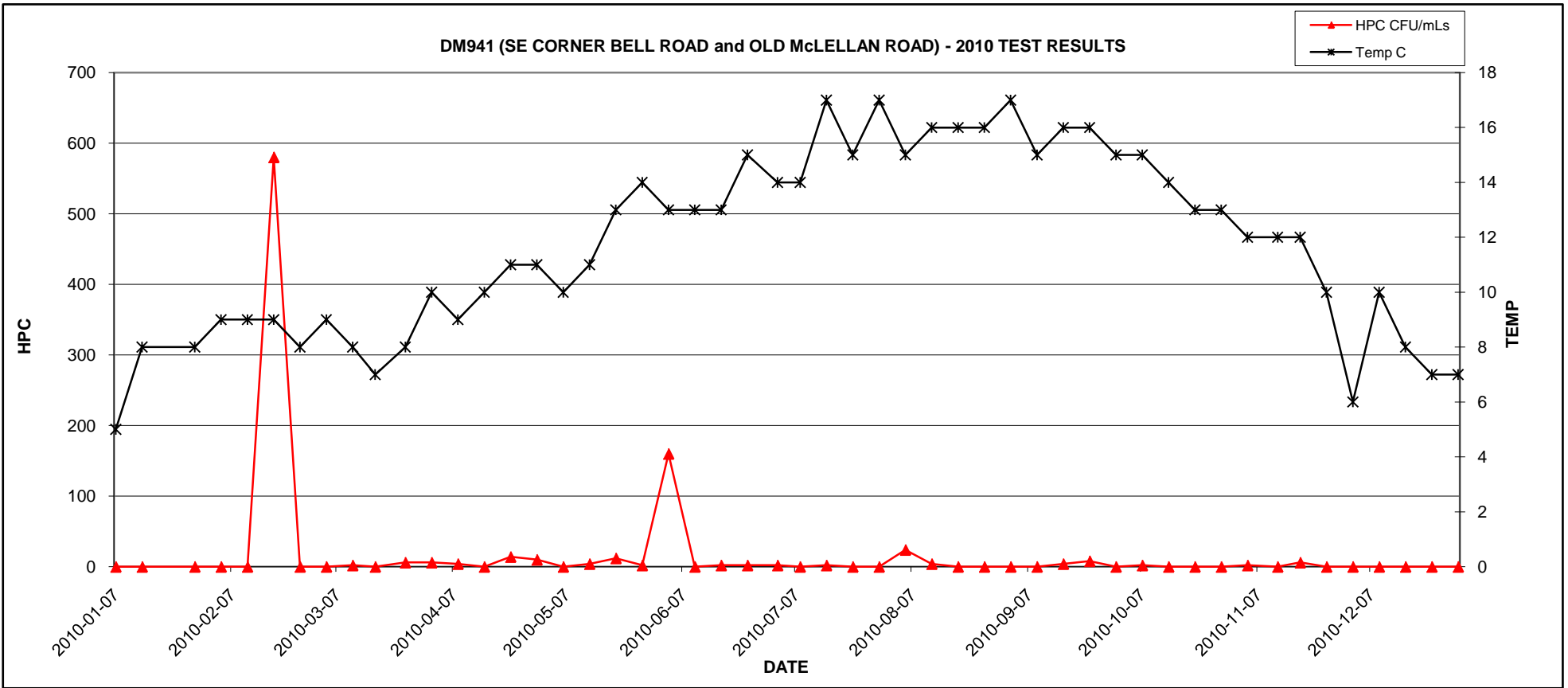
2010 GVRD Laboratory Report - DM940 (SOUTHSIDE 24 AVE. at S DEPOT)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 06-Jan | 0.46 | <1 | 2 | <1 | 7 | 0.77 |
| 13-Jan | 0.26 | <1 | <2 | <1 | 8 | 0.84 |
| 20-Jan | 0.54 | <1 | <2 | <1 | 8 | 0.60 |
| 27-Jan | 0.50 | <1 | <2 | <1 | 7.5 | 0.51 |
| 10-Feb | 0.31 | <1 | <2 | <1 | 9 | 0.26 |
| 17-Feb | 0.35 | <1 | <2 | <1 | 7 | 0.42 |
| 24-Feb | 0.40 | <1 | <2 | <1 | 7 | 0.40 |
| 03-Mar | 0.16 | <1 | <2 | <1 | 10 | 0.56 |
| 10-Mar | 0.07 | CG | 1200 | CG | 7 | 0.42 |
| 11-Mar | 0.62 | <1 | <2 | <1 | 8.5 | 0.37 |
| 18-Mar | 0.36 | <1 | <2 | <1 | 6 | 0.54 |
| 31-Mar | 0.01 | <1 | NA | 2 | 10 | 1.10 |
| 30-Jun | 0.10 | <1 | 560 | <1 | 17 | 0.36 |
| 07-Jul | 0.29 | <1 | 260 | <1 | 18 | 0.31 |
| 14-Jul | 0.43 | <1 | 10 | <1 | 17 | 0.26 |
| 21-Jul | 0.67 | <1 | 14 | <1 | 16 | 0.34 |
| 28-Jul | 0.74 | <1 | <2 | <1 | 16 | 3.20 |
| 04-Aug | 0.72 | <1 | <2 | <1 | 17 | 0.28 |
| 11-Aug | 0.62 | <1 | 2 | <1 | 15 | 0.30 |
| 18-Aug | 0.61 | <1 | 4 | <1 | 15 | 0.31 |
| 25-Aug | 0.58 | <1 | 8 | <1 | 15 | 1.20 |
| 01-Sep | 0.35 | <1 | 2 | <1 | 16 | 0.19 |
| 08-Sep | 0.38 | <1 | 6 | <1 | 14 | 0.35 |
| 15-Sep | 0.56 | <1 | <2 | <1 | 16 | 0.71 |
| 22-Sep | 0.42 | <1 | 4 | <1 | 15 | 0.30 |
| 29-Sep | 0.20 | <1 | <2 | <1 | 13 | 0.92 |
| 06-Oct | 0.39 | <1 | 2 | <1 | 15 | 0.34 |
| 13-Oct | 0.51 | <1 | 2 | <1 | 10 | 0.50 |
| 20-Oct | 0.49 | <1 | <2 | <1 | 7 | 1.90 |
| 27-Oct | 0.29 | <1 | 2 | <1 | 13 | 0.84 |
| 03-Nov | 0.34 | <1 | 48 | <1 | 13 | 0.38 |
| 10-Nov | 0.39 | <1 | <2 | <1 | 12 | 0.34 |
| 17-Nov | 0.36 | <1 | 6 | <1 | 6 | 0.60 |
| 24-Nov | 0.52 | <1 | <2 | <1 | 8.5 | 0.34 |
| 01-Dec | 0.74 | <1 | 2 | <1 | 8 | 0.36 |
| 08-Dec | 0.54 | <1 | <2 | <1 | 9 | 0.26 |
| 15-Dec | 0.69 | <1 | <2 | <1 | 8 | 0.64 |
| 22-Dec | 0.49 | <1 | <2 | <1 | 7 | 0.41 |
| 29-Dec | 0.53 | <1 | NA | <1 | 8 | 0.34 |



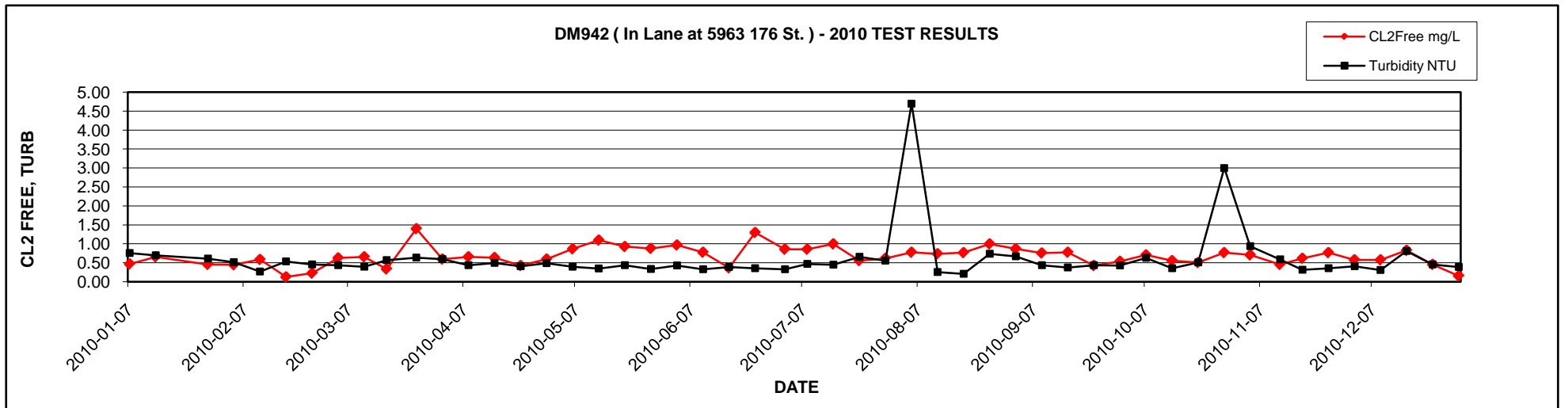
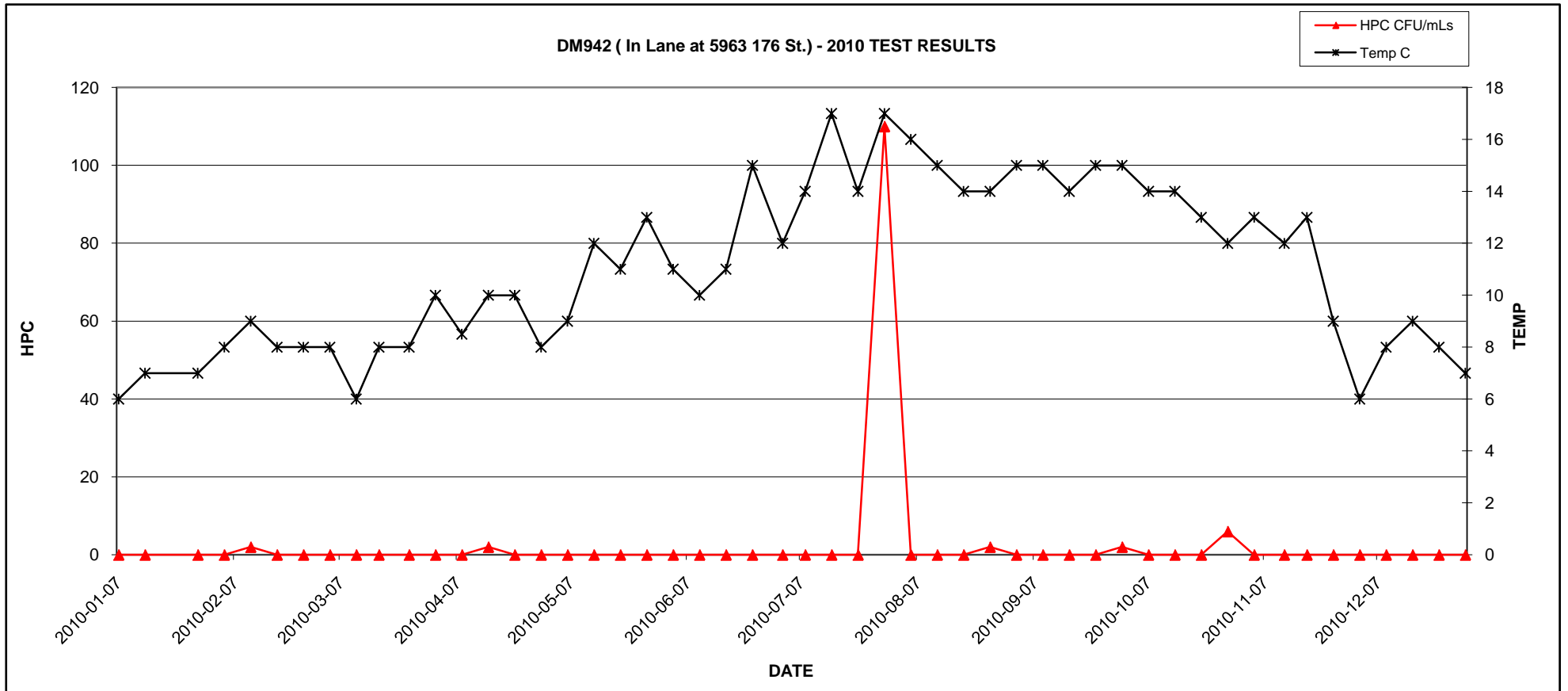
2010 GVRD Laboratory Report - DM941 (SE CORNER BELL ROAD and OLD McLELLAN ROAD)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.17 | <1 | <2 | <1 | 5 | 0.77 |
| 14-Jan | 0.12 | <1 | <2 | <1 | 8 | 0.74 |
| 28-Jan | 0.14 | <1 | <2 | <1 | 8 | 0.45 |
| 04-Feb | 0.27 | <1 | <2 | <1 | 9 | 0.47 |
| 11-Feb | 0.29 | <1 | LA | <1 | 9 | 0.37 |
| 18-Feb | 0.14 | <1 | 580 | <1 | 9 | 2.60 |
| 25-Feb | 0.36 | <1 | <2 | <1 | 8 | 0.43 |
| 04-Mar | 0.03 | <1 | <2 | <1 | 9 | 0.45 |
| 11-Mar | 0.21 | <1 | 2 | <1 | 8 | 0.35 |
| 17-Mar | 0.09 | <1 | <2 | <1 | 7 | 0.38 |
| 25-Mar | 0.81 | <1 | 6 | <1 | 8 | 0.39 |
| 01-Apr | 0.18 | <1 | 6 | <1 | 10 | 0.56 |
| 08-Apr | 0.14 | <1 | 4 | <1 | 9 | 0.38 |
| 15-Apr | 0.14 | <1 | <2 | <1 | 10 | 0.51 |
| 22-Apr | 0.07 | <1 | 14 | <1 | 11 | 0.38 |
| 29-Apr | 0.10 | <1 | 10 | <1 | 11 | 0.62 |
| 06-May | 0.30 | <1 | <2 | <1 | 10 | 0.37 |
| 13-May | 0.65 | <1 | 4 | <1 | 11 | 0.31 |
| 20-May | 0.78 | <1 | 12 | <1 | 13 | 0.30 |
| 27-May | 0.15 | <1 | 2 | <1 | 14 | 0.26 |
| 03-Jun | 0.03 | <1 | 160 | <1 | 13 | 2.10 |
| 10-Jun | 0.49 | <1 | <2 | <1 | 13 | 0.27 |
| 17-Jun | 0.35 | <1 | 2 | <1 | 13 | 0.35 |
| 24-Jun | 0.43 | <1 | 2 | <1 | 15 | 0.33 |
| 02-Jul | 0.32 | <1 | 2 | <1 | 14 | 0.26 |
| 08-Jul | 0.27 | <1 | <2 | <1 | 14 | 0.63 |
| 15-Jul | 0.83 | <1 | 2 | <1 | 17 | 1.00 |
| 22-Jul | 0.37 | <1 | <2 | <1 | 15 | 0.48 |
| 29-Jul | 0.46 | <1 | <2 | <1 | 17 | 0.83 |
| 05-Aug | 0.46 | <1 | 24 | <1 | 15 | 0.33 |
| 12-Aug | 0.20 | <1 | 4 | <1 | 16 | 0.31 |
| 19-Aug | 0.44 | <1 | <2 | <1 | 16 | 0.23 |
| 26-Aug | 0.33 | <1 | <2 | <1 | 16 | 0.20 |
| 02-Sep | 0.48 | <1 | <2 | <1 | 17 | 0.35 |
| 09-Sep | 0.32 | <1 | <2 | <1 | 15 | 0.18 |
| 16-Sep | 0.28 | <1 | 4 | <1 | 16 | 0.23 |
| 23-Sep | 0.19 | <1 | 8 | <1 | 16 | 0.36 |
| 30-Sep | 0.13 | <1 | <2 | <1 | 15 | 0.37 |
| 07-Oct | 0.26 | <1 | 2 | <1 | 15 | 0.45 |
| 14-Oct | 0.26 | <1 | <2 | <1 | 14 | 0.38 |
| 21-Oct | 0.22 | <1 | <2 | <1 | 13 | 0.31 |
| 28-Oct | 0.16 | <1 | <2 | <1 | 13 | 0.53 |
| 04-Nov | 0.14 | <1 | 2 | <1 | 12 | 0.48 |
| 12-Nov | 0.19 | <1 | <2 | <1 | 12 | 0.32 |
| 18-Nov | 0.03 | <1 | 6 | <1 | 12 | 0.36 |
| 25-Nov | 0.21 | <1 | <2 | <1 | 10 | 0.28 |
| 02-Dec | 0.25 | <1 | <2 | <1 | 6 | 0.38 |
| 09-Dec | 0.26 | <1 | <2 | <1 | 10 | 0.25 |
| 16-Dec | 0.33 | <1 | <2 | <1 | 8 | 0.47 |
| 23-Dec | 0.22 | <1 | <2 | <1 | 7 | 0.34 |
| 30-Dec | 0.13 | <1 | NA | <1 | 7 | 0.35 |



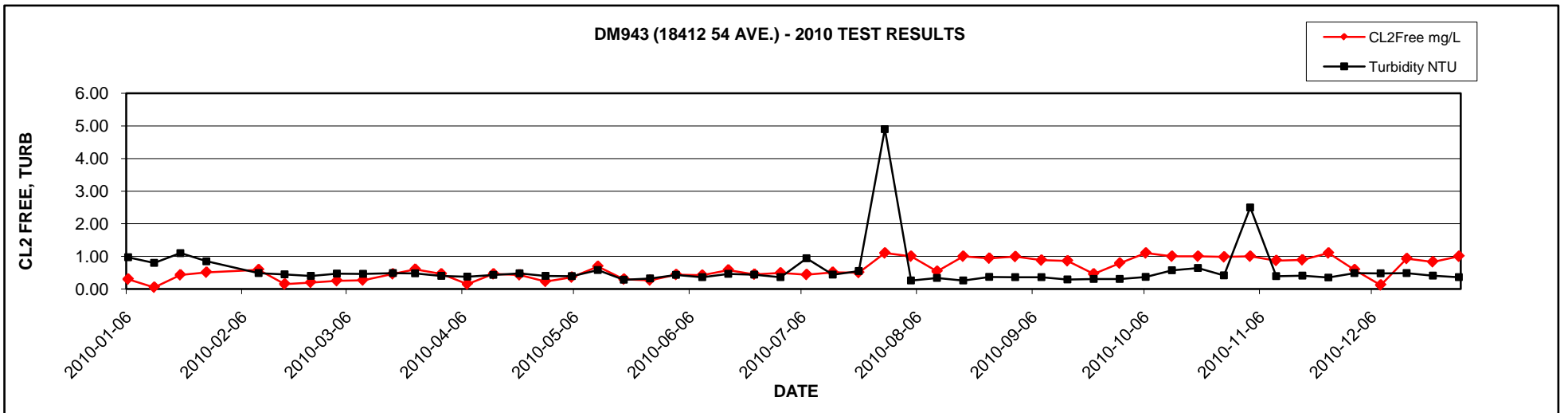
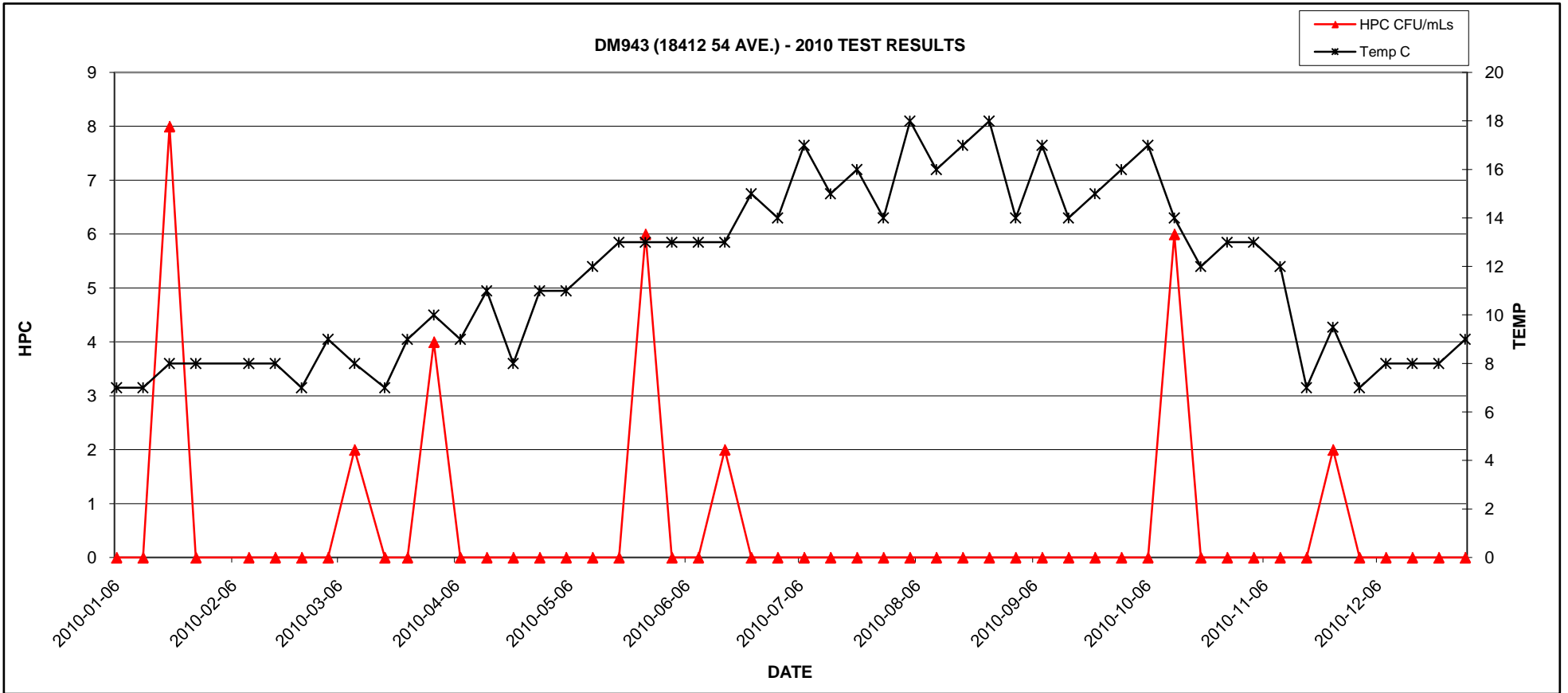
2010 GVRD Laboratory Report - DM942 (In Lane at 5963 176 St.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.47 | <1 | <2 | <1 | 6 | 0.76 |
| 14-Jan | 0.66 | <1 | <2 | <1 | 7 | 0.70 |
| 28-Jan | 0.46 | <1 | <2 | <1 | 7 | 0.61 |
| 04-Feb | 0.45 | <1 | <2 | <1 | 8 | 0.52 |
| 11-Feb | 0.59 | <1 | 2 | <1 | 9 | 0.27 |
| 18-Feb | 0.13 | <1 | <2 | <1 | 8 | 0.54 |
| 25-Feb | 0.23 | <1 | <2 | <1 | 8 | 0.46 |
| 04-Mar | 0.63 | <1 | <2 | <1 | 8 | 0.44 |
| 11-Mar | 0.66 | <1 | <2 | <1 | 6 | 0.40 |
| 17-Mar | 0.34 | <1 | <2 | <1 | 8 | 0.57 |
| 25-Mar | 1.40 | <1 | <2 | <1 | 8 | 0.64 |
| 01-Apr | 0.60 | <1 | <2 | <1 | 10 | 0.60 |
| 08-Apr | 0.66 | <1 | <2 | <1 | 8.5 | 0.44 |
| 15-Apr | 0.64 | <1 | 2 | <1 | 10 | 0.50 |
| 22-Apr | 0.43 | <1 | <2 | <1 | 10 | 0.41 |
| 29-Apr | 0.60 | <1 | <2 | <1 | 8 | 0.49 |
| 06-May | 0.87 | <1 | <2 | <1 | 9 | 0.40 |
| 13-May | 1.10 | <1 | <2 | <1 | 12 | 0.35 |
| 20-May | 0.93 | <1 | <2 | <1 | 11 | 0.44 |
| 27-May | 0.88 | <1 | <2 | <1 | 13 | 0.34 |
| 03-Jun | 0.97 | <1 | <2 | <1 | 11 | 0.43 |
| 10-Jun | 0.78 | <1 | <2 | <1 | 10 | 0.33 |
| 17-Jun | 0.37 | <1 | <2 | <1 | 11 | 0.39 |
| 24-Jun | 1.30 | <1 | <2 | <1 | 15 | 0.36 |
| 02-Jul | 0.86 | <1 | <2 | <1 | 12 | 0.33 |
| 08-Jul | 0.86 | <1 | <2 | <1 | 14 | 0.47 |
| 15-Jul | 1.00 | <1 | <2 | <1 | 17 | 0.45 |
| 22-Jul | 0.56 | <1 | <2 | <1 | 14 | 0.66 |
| 29-Jul | 0.62 | <1 | 110 | <1 | 17 | 0.56 |
| 05-Aug | 0.78 | <1 | <2 | <1 | 16 | 4.70 |
| 12-Aug | 0.74 | <1 | <2 | <1 | 15 | 0.26 |
| 19-Aug | 0.77 | <1 | <2 | <1 | 14 | 0.21 |
| 26-Aug | 1.00 | <1 | 2 | <1 | 14 | 0.74 |
| 02-Sep | 0.87 | <1 | <2 | <1 | 15 | 0.67 |
| 09-Sep | 0.76 | <1 | <2 | <1 | 15 | 0.44 |
| 16-Sep | 0.78 | <1 | <2 | <1 | 14 | 0.38 |
| 23-Sep | 0.43 | <1 | <2 | <1 | 15 | 0.44 |
| 30-Sep | 0.54 | <1 | 2 | <1 | 15 | 0.43 |
| 07-Oct | 0.71 | <1 | <2 | <1 | 14 | 0.63 |
| 14-Oct | 0.56 | <1 | <2 | <1 | 14 | 0.36 |
| 21-Oct | 0.51 | <1 | <2 | <1 | 13 | 0.51 |
| 28-Oct | 0.77 | <1 | 6 | <1 | 12 | 3.00 |
| 04-Nov | 0.71 | <1 | <2 | <1 | 13 | 0.94 |
| 12-Nov | 0.46 | <1 | <2 | <1 | 12 | 0.59 |
| 18-Nov | 0.62 | <1 | <2 | <1 | 13 | 0.32 |
| 25-Nov | 0.77 | <1 | <2 | <1 | 9 | 0.36 |
| 02-Dec | 0.58 | <1 | <2 | <1 | 6 | 0.41 |
| 09-Dec | 0.58 | <1 | <2 | <1 | 8 | 0.31 |
| 16-Dec | 0.83 | <1 | <2 | <1 | 9 | 0.81 |
| 23-Dec | 0.46 | <1 | <2 | <1 | 8 | 0.46 |
| 30-Dec | 0.16 | <1 | NA | <1 | 7 | 0.39 |



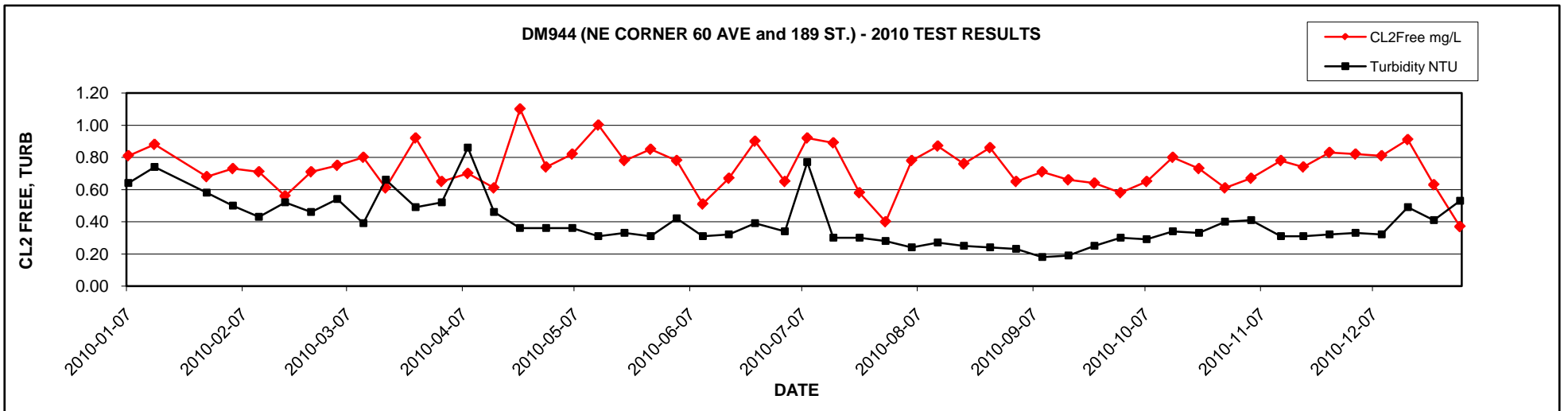
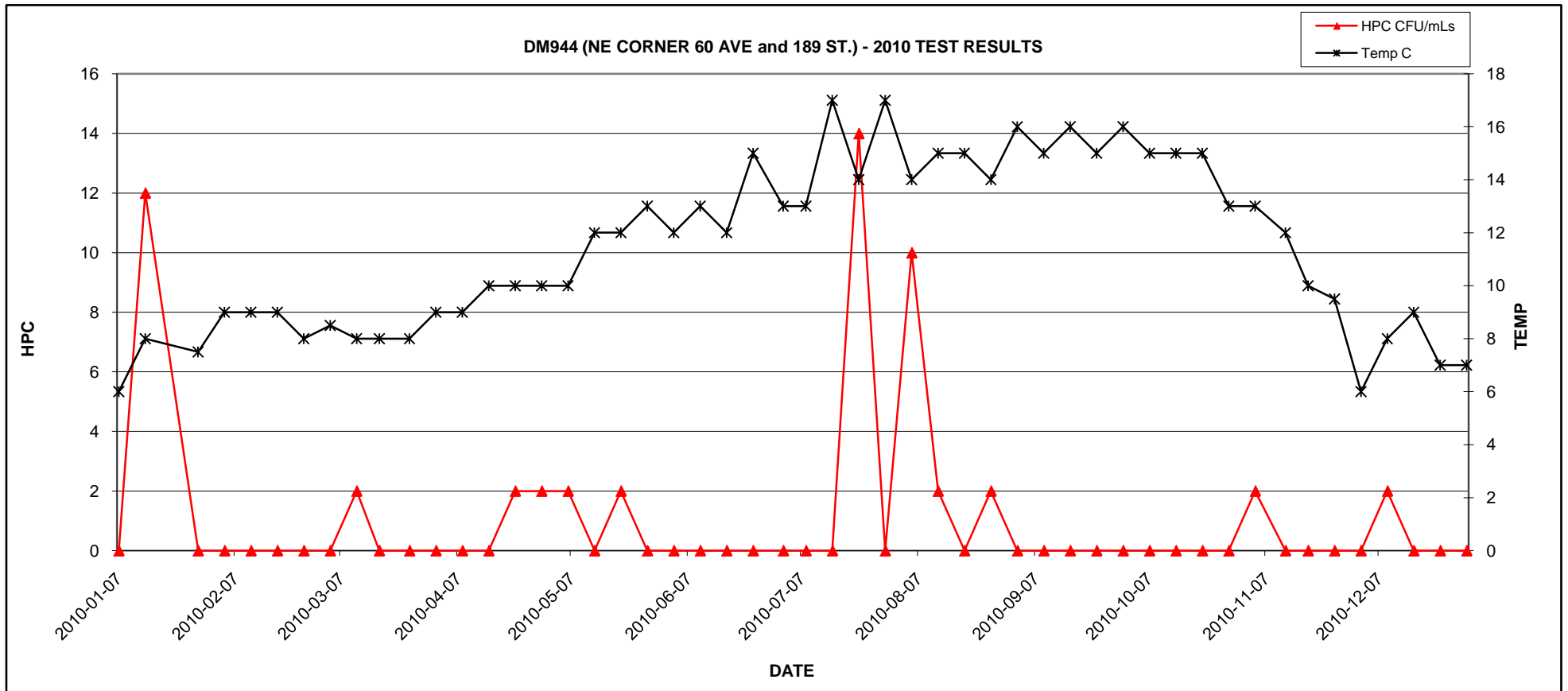
2010 GVRD Laboratory Report - DM943 (18412 54 AVE.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 06-Jan | 0.30 | <1 | <2 | <1 | 7 | 0.97 |
| 13-Jan | 0.05 | <1 | <2 | <1 | 7 | 0.80 |
| 20-Jan | 0.43 | <1 | 8 | <1 | 8 | 1.10 |
| 27-Jan | 0.51 | <1 | <2 | <1 | 8 | 0.85 |
| 10-Feb | 0.59 | <1 | <2 | <1 | 8 | 0.49 |
| 17-Feb | 0.15 | <1 | <2 | <1 | 8 | 0.45 |
| 24-Feb | 0.20 | <1 | <2 | <1 | 7 | 0.40 |
| 03-Mar | 0.25 | <1 | <2 | <1 | 9 | 0.47 |
| 10-Mar | 0.27 | <1 | 2 | <1 | 8 | 0.46 |
| 18-Mar | 0.46 | <1 | <2 | <1 | 7 | 0.49 |
| 24-Mar | 0.60 | <1 | <2 | <1 | 9 | 0.48 |
| 31-Mar | 0.46 | <1 | 4 | <1 | 10 | 0.40 |
| 07-Apr | 0.15 | <1 | <2 | <1 | 9 | 0.38 |
| 14-Apr | 0.46 | <1 | <2 | <1 | 11 | 0.43 |
| 21-Apr | 0.43 | <1 | <2 | <1 | 8 | 0.48 |
| 28-Apr | 0.23 | <1 | <2 | <1 | 11 | 0.40 |
| 05-May | 0.36 | <1 | <2 | <1 | 11 | 0.39 |
| 12-May | 0.69 | <1 | <2 | <1 | 12 | 0.58 |
| 19-May | 0.30 | <1 | <2 | <1 | 13 | 0.28 |
| 26-May | 0.27 | <1 | 6 | <1 | 13 | 0.32 |
| 02-Jun | 0.44 | <1 | <2 | <1 | 13 | 0.43 |
| 09-Jun | 0.42 | <1 | <2 | <1 | 13 | 0.36 |
| 16-Jun | 0.58 | <1 | 2 | <1 | 13 | 0.46 |
| 23-Jun | 0.45 | <1 | <2 | <1 | 15 | 0.44 |
| 30-Jun | 0.49 | <1 | <2 | <1 | 14 | 0.36 |
| 07-Jul | 0.44 | <1 | <2 | <1 | 17 | 0.94 |
| 14-Jul | 0.51 | <1 | <2 | <1 | 15 | 0.44 |
| 21-Jul | 0.50 | <1 | <2 | <1 | 16 | 0.55 |
| 28-Jul | 1.10 | <1 | <2 | <1 | 14 | 4.90 |
| 04-Aug | 1.00 | <1 | <2 | <1 | 18 | 0.26 |
| 11-Aug | 0.54 | <1 | <2 | <1 | 16 | 0.34 |
| 18-Aug | 1.00 | <1 | <2 | <1 | 17 | 0.26 |
| 25-Aug | 0.94 | <1 | <2 | <1 | 18 | 0.37 |
| 01-Sep | 0.99 | <1 | <2 | <1 | 14 | 0.36 |
| 08-Sep | 0.88 | <1 | <2 | <1 | 17 | 0.36 |
| 15-Sep | 0.86 | <1 | <2 | <1 | 14 | 0.29 |
| 22-Sep | 0.46 | <1 | <2 | <1 | 15 | 0.31 |
| 29-Sep | 0.79 | <1 | <2 | <1 | 16 | 0.31 |
| 06-Oct | 1.10 | <1 | <2 | <1 | 17 | 0.37 |
| 13-Oct | 1.00 | <1 | 6 | <1 | 14 | 0.57 |
| 20-Oct | 1.00 | <1 | <2 | <1 | 12 | 0.64 |
| 27-Oct | 0.98 | <1 | <2 | <1 | 13 | 0.42 |
| 03-Nov | 1.00 | <1 | <2 | <1 | 13 | 2.50 |
| 10-Nov | 0.87 | <1 | <2 | <1 | 12 | 0.39 |
| 17-Nov | 0.89 | <1 | <2 | <1 | 7 | 0.41 |
| 24-Nov | 1.10 | <1 | 2 | <1 | 9.5 | 0.35 |
| 01-Dec | 0.59 | <1 | <2 | <1 | 7 | 0.49 |
| 08-Dec | 0.12 | <1 | <2 | <1 | 8 | 0.48 |
| 15-Dec | 0.93 | <1 | <2 | <1 | 8 | 0.49 |
| 22-Dec | 0.83 | <1 | <2 | <1 | 8 | 0.41 |
| 29-Dec | 1.00 | <1 | NA | <1 | 9 | 0.36 |



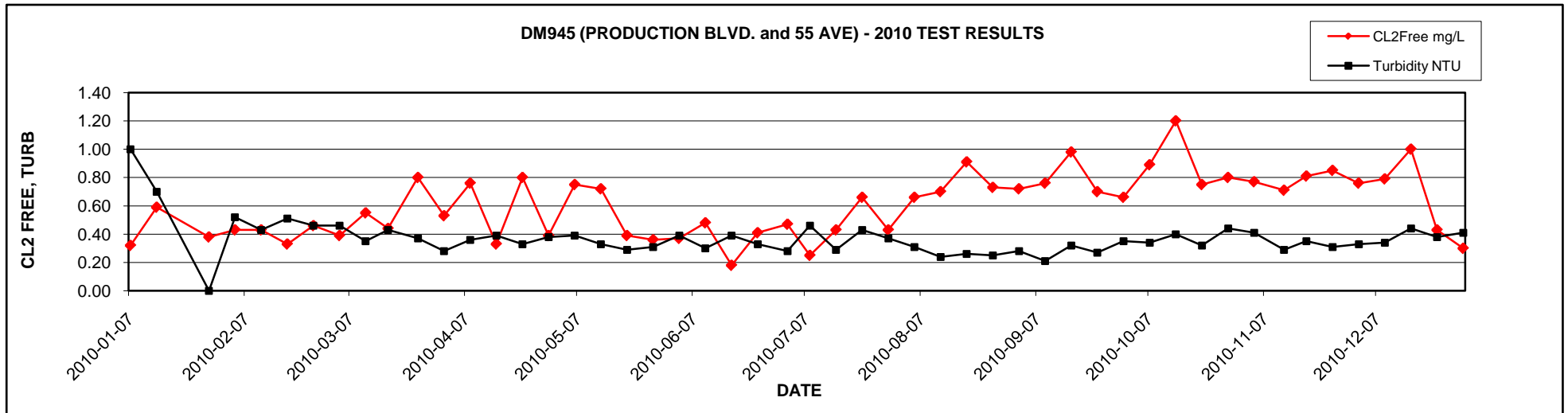
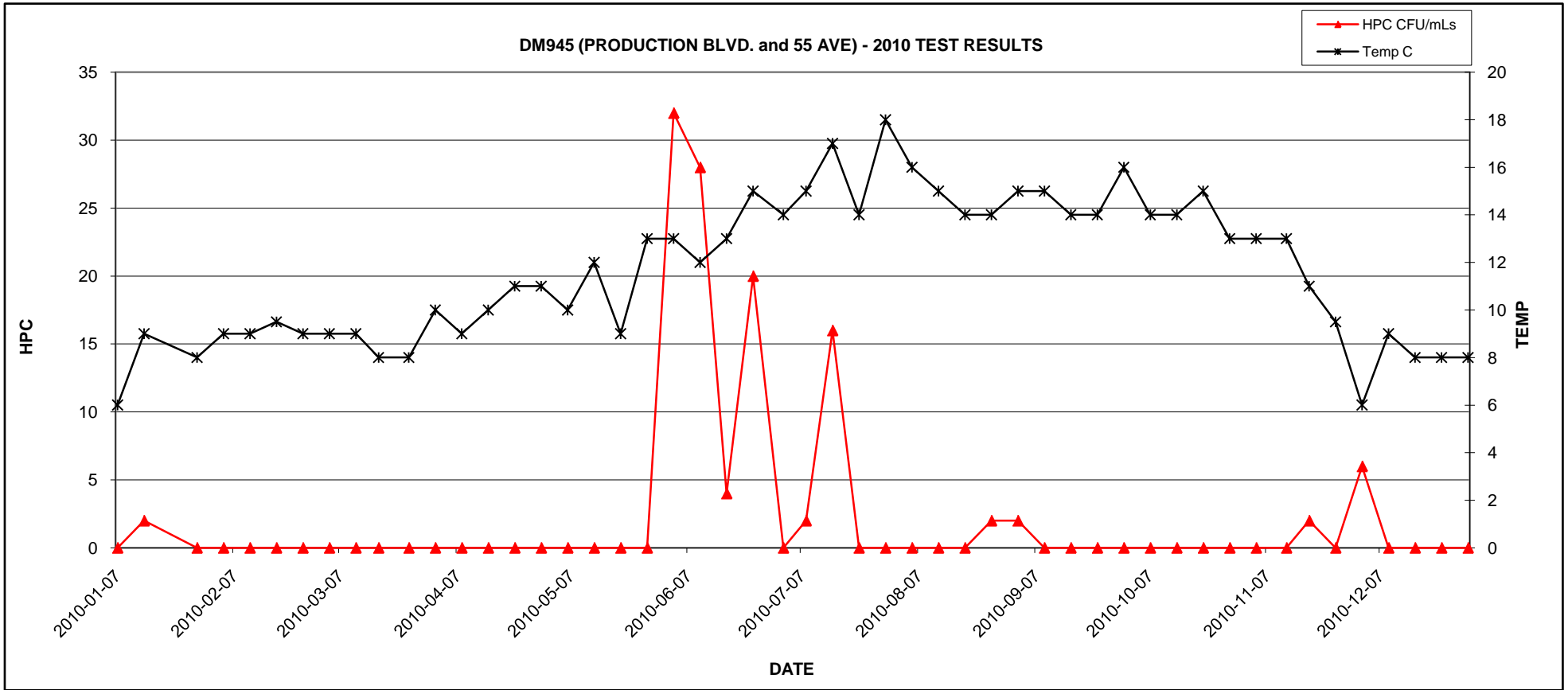
2010 GVRD Laboratory Report - DM944 (NE CORNER 60 AVE and 189 ST.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.81 | <1 | <2 | <1 | 6 | 0.64 |
| 14-Jan | 0.88 | <1 | 12 | <1 | 8 | 0.74 |
| 28-Jan | 0.68 | <1 | <2 | <1 | 7.5 | 0.58 |
| 04-Feb | 0.73 | <1 | <2 | <1 | 9 | 0.50 |
| 11-Feb | 0.71 | <1 | <2 | <1 | 9 | 0.43 |
| 18-Feb | 0.56 | <1 | <2 | <1 | 9 | 0.52 |
| 25-Feb | 0.71 | <1 | <2 | <1 | 8 | 0.46 |
| 04-Mar | 0.75 | <1 | <2 | <1 | 8.5 | 0.54 |
| 11-Mar | 0.80 | <1 | 2 | <1 | 8 | 0.39 |
| 17-Mar | 0.61 | <1 | <2 | <1 | 8 | 0.66 |
| 25-Mar | 0.92 | <1 | <2 | <1 | 8 | 0.49 |
| 01-Apr | 0.65 | <1 | <2 | <1 | 9 | 0.52 |
| 08-Apr | 0.70 | <1 | NA | <1 | 9 | 0.86 |
| 15-Apr | 0.61 | <1 | <2 | <1 | 10 | 0.46 |
| 22-Apr | 1.10 | <1 | 2 | <1 | 10 | 0.36 |
| 29-Apr | 0.74 | <1 | 2 | <1 | 10 | 0.36 |
| 06-May | 0.82 | <1 | 2 | <1 | 10 | 0.36 |
| 13-May | 1.00 | <1 | <2 | <1 | 12 | 0.31 |
| 20-May | 0.78 | <1 | 2 | <1 | 12 | 0.33 |
| 27-May | 0.85 | <1 | <2 | <1 | 13 | 0.31 |
| 03-Jun | 0.78 | <1 | <2 | <1 | 12 | 0.42 |
| 10-Jun | 0.51 | <1 | <2 | <1 | 13 | 0.31 |
| 17-Jun | 0.67 | <1 | <2 | <1 | 12 | 0.32 |
| 24-Jun | 0.90 | <1 | <2 | <1 | 15 | 0.39 |
| 02-Jul | 0.65 | <1 | <2 | <1 | 13 | 0.34 |
| 08-Jul | 0.92 | <1 | <2 | <1 | 13 | 0.77 |
| 15-Jul | 0.89 | <1 | <2 | <1 | 17 | 0.30 |
| 22-Jul | 0.58 | <1 | 14 | <1 | 14 | 0.30 |
| 29-Jul | 0.40 | <1 | <2 | <1 | 17 | 0.28 |
| 05-Aug | 0.78 | <1 | 10 | <1 | 14 | 0.24 |
| 12-Aug | 0.87 | <1 | 2 | <1 | 15 | 0.27 |
| 19-Aug | 0.76 | <1 | <2 | <1 | 15 | 0.25 |
| 26-Aug | 0.86 | <1 | 2 | <1 | 14 | 0.24 |
| 02-Sep | 0.65 | <1 | <2 | <1 | 16 | 0.23 |
| 09-Sep | 0.71 | <1 | <2 | <1 | 15 | 0.18 |
| 16-Sep | 0.66 | <1 | <2 | <1 | 16 | 0.19 |
| 23-Sep | 0.64 | <1 | <2 | <1 | 15 | 0.25 |
| 30-Sep | 0.58 | <1 | <2 | <1 | 16 | 0.30 |
| 07-Oct | 0.65 | <1 | <2 | <1 | 15 | 0.29 |
| 14-Oct | 0.80 | <1 | <2 | <1 | 15 | 0.34 |
| 21-Oct | 0.73 | <1 | <2 | <1 | 15 | 0.33 |
| 28-Oct | 0.61 | <1 | <2 | <1 | 13 | 0.40 |
| 04-Nov | 0.67 | <1 | 2 | <1 | 13 | 0.41 |
| 12-Nov | 0.78 | <1 | <2 | <1 | 12 | 0.31 |
| 18-Nov | 0.74 | <1 | <2 | <1 | 10 | 0.31 |
| 25-Nov | 0.83 | <1 | <2 | <1 | 9.5 | 0.32 |
| 02-Dec | 0.82 | <1 | <2 | <1 | 6 | 0.33 |
| 09-Dec | 0.81 | <1 | 2 | <1 | 8 | 0.32 |
| 16-Dec | 0.91 | <1 | <2 | <1 | 9 | 0.49 |
| 23-Dec | 0.63 | <1 | <2 | <1 | 7 | 0.41 |
| 30-Dec | 0.37 | <1 | NA | <1 | 7 | 0.53 |



2010 GVRD Laboratory Report - DM945 (PRODUCTION BLVD. and 55 AVE)

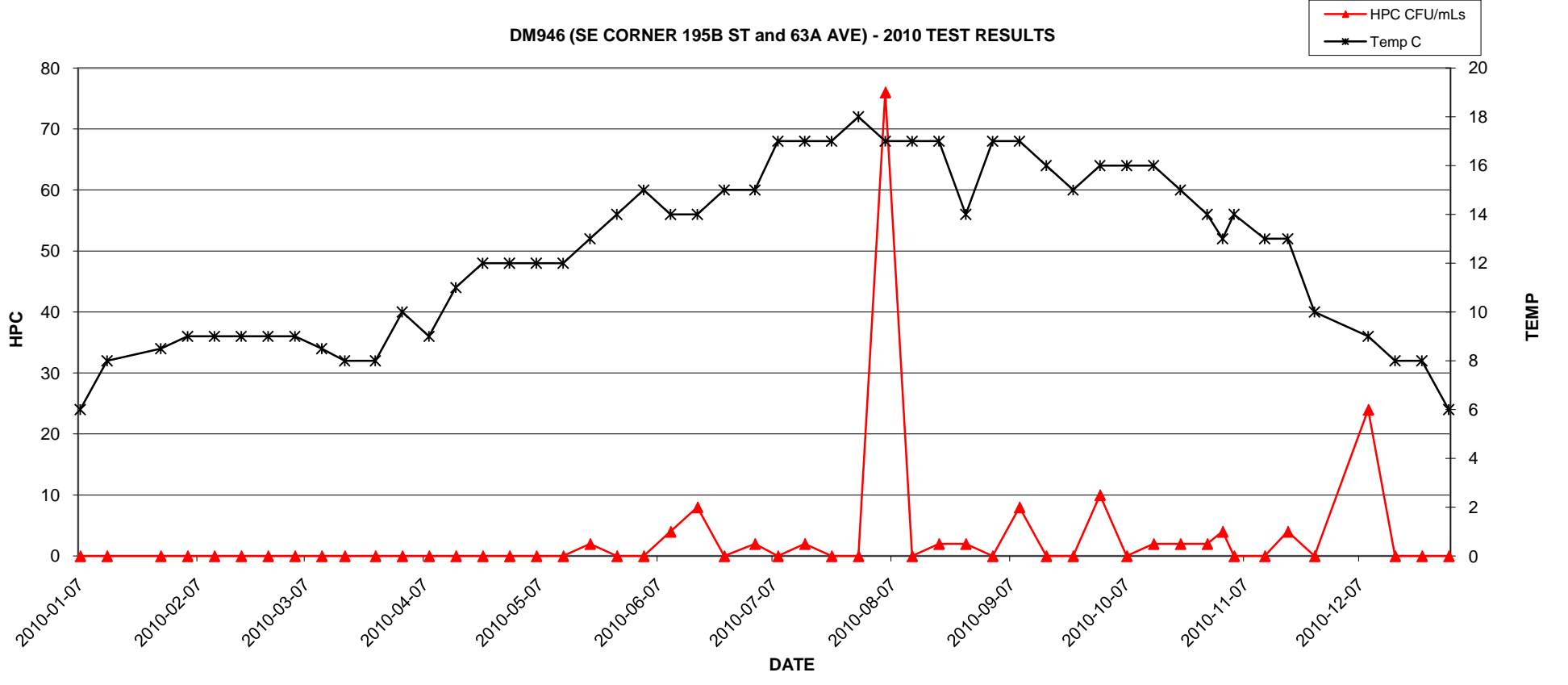
| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 07-Jan | 0.32 | <1 | <2 | <1 | 6 | 1.00 |
| 14-Jan | 0.59 | <1 | 2 | <1 | 9 | 0.70 |
| 28-Jan | 0.38 | <1 | <2 | <1 | 8 | LA |
| 04-Feb | 0.43 | <1 | <2 | <1 | 9 | 0.52 |
| 11-Feb | 0.43 | <1 | <2 | <1 | 9 | 0.43 |
| 18-Feb | 0.33 | <1 | <2 | <1 | 9.5 | 0.51 |
| 25-Feb | 0.46 | <1 | <2 | <1 | 9 | 0.46 |
| 04-Mar | 0.39 | <1 | <2 | <1 | 9 | 0.46 |
| 11-Mar | 0.55 | <1 | <2 | <1 | 9 | 0.35 |
| 17-Mar | 0.44 | <1 | <2 | <1 | 8 | 0.43 |
| 25-Mar | 0.80 | <1 | <2 | <1 | 8 | 0.37 |
| 01-Apr | 0.53 | <1 | <2 | <1 | 10 | 0.28 |
| 08-Apr | 0.76 | <1 | <2 | <1 | 9 | 0.36 |
| 15-Apr | 0.33 | <1 | <2 | <1 | 10 | 0.39 |
| 22-Apr | 0.80 | <1 | <2 | <1 | 11 | 0.33 |
| 29-Apr | 0.39 | <1 | <2 | <1 | 11 | 0.38 |
| 06-May | 0.75 | <1 | <2 | <1 | 10 | 0.39 |
| 13-May | 0.72 | <1 | <2 | <1 | 12 | 0.33 |
| 20-May | 0.39 | <1 | <2 | <1 | 9 | 0.29 |
| 27-May | 0.36 | <1 | <2 | <1 | 13 | 0.31 |
| 03-Jun | 0.37 | <1 | 32 | <1 | 13 | 0.39 |
| 10-Jun | 0.48 | <1 | 28 | <1 | 12 | 0.30 |
| 17-Jun | 0.18 | <1 | 4 | <1 | 13 | 0.39 |
| 24-Jun | 0.41 | <1 | 20 | <1 | 15 | 0.33 |
| 02-Jul | 0.47 | <1 | <2 | <1 | 14 | 0.28 |
| 08-Jul | 0.25 | <1 | 2 | <1 | 15 | 0.46 |
| 15-Jul | 0.43 | <1 | 16 | <1 | 17 | 0.29 |
| 22-Jul | 0.66 | <1 | <2 | <1 | 14 | 0.43 |
| 29-Jul | 0.43 | <1 | <2 | <1 | 18 | 0.37 |
| 05-Aug | 0.66 | <1 | <2 | <1 | 16 | 0.31 |
| 12-Aug | 0.70 | <1 | <2 | <1 | 15 | 0.24 |
| 19-Aug | 0.91 | <1 | <2 | <1 | 14 | 0.26 |
| 26-Aug | 0.73 | <1 | 2 | <1 | 14 | 0.25 |
| 02-Sep | 0.72 | <1 | 2 | <1 | 15 | 0.28 |
| 09-Sep | 0.76 | <1 | <2 | <1 | 15 | 0.21 |
| 16-Sep | 0.98 | <1 | <2 | <1 | 14 | 0.32 |
| 23-Sep | 0.70 | <1 | <2 | <1 | 14 | 0.27 |
| 30-Sep | 0.66 | <1 | <2 | <1 | 16 | 0.35 |
| 07-Oct | 0.89 | <1 | <2 | <1 | 14 | 0.34 |
| 14-Oct | 1.20 | <1 | <2 | <1 | 14 | 0.40 |
| 21-Oct | 0.75 | <1 | <2 | <1 | 15 | 0.32 |
| 28-Oct | 0.80 | <1 | <2 | <1 | 13 | 0.44 |
| 04-Nov | 0.77 | <1 | <2 | <1 | 13 | 0.41 |
| 12-Nov | 0.71 | <1 | <2 | <1 | 13 | 0.29 |
| 18-Nov | 0.81 | <1 | 2 | <1 | 11 | 0.35 |
| 25-Nov | 0.85 | <1 | <2 | <1 | 9.5 | 0.31 |
| 02-Dec | 0.76 | <1 | 6 | <1 | 6 | 0.33 |
| 09-Dec | 0.79 | <1 | <2 | <1 | 9 | 0.34 |
| 16-Dec | 1.00 | <1 | <2 | <1 | 8 | 0.44 |
| 23-Dec | 0.43 | <1 | <2 | <1 | 8 | 0.38 |
| 30-Dec | 0.30 | <1 | NA | <1 | 8 | 0.41 |



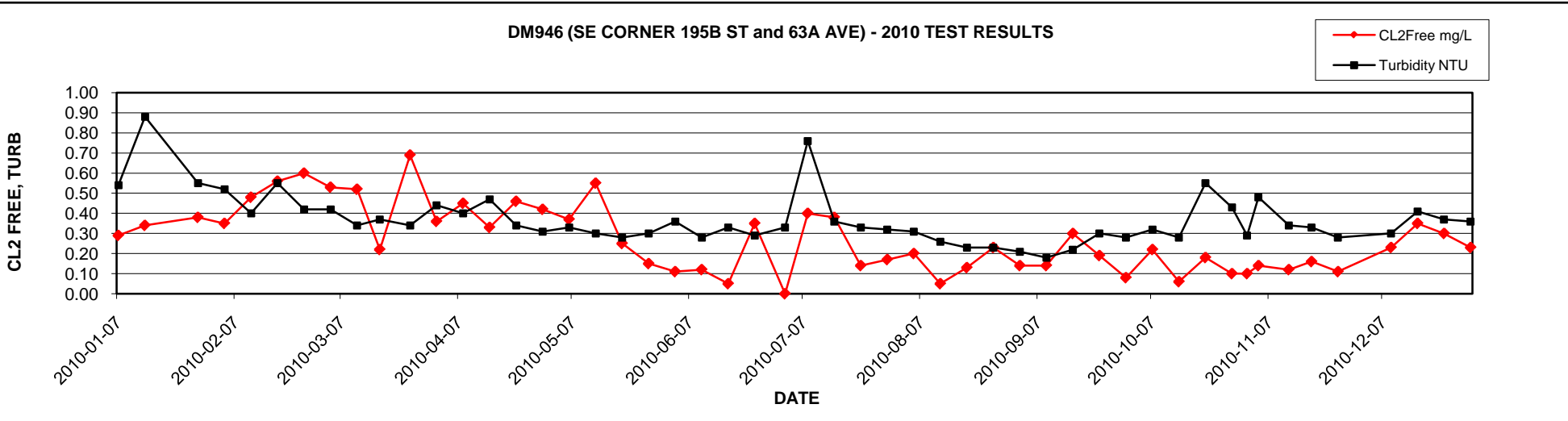
2010 GVRD Laboratory Report - DM946 (SE CORNER 195B ST and 63A AVE)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 07-Jan | 0.29 | <1 | <2 | <1 | 6 | 0.54 |
| 14-Jan | 0.34 | <1 | <2 | <1 | 8 | 0.88 |
| 28-Jan | 0.38 | <1 | <2 | <1 | 8.5 | 0.55 |
| 04-Feb | 0.35 | <1 | <2 | <1 | 9 | 0.52 |
| 11-Feb | 0.48 | <1 | <2 | <1 | 9 | 0.40 |
| 18-Feb | 0.56 | <1 | <2 | <1 | 9 | 0.55 |
| 25-Feb | 0.60 | <1 | <2 | <1 | 9 | 0.42 |
| 04-Mar | 0.53 | <1 | <2 | <1 | 9 | 0.42 |
| 11-Mar | 0.52 | <1 | <2 | 1 | 8.5 | 0.34 |
| 17-Mar | 0.22 | <1 | <2 | <1 | 8 | 0.37 |
| 25-Mar | 0.69 | <1 | <2 | <1 | 8 | 0.34 |
| 01-Apr | 0.36 | <1 | <2 | <1 | 10 | 0.44 |
| 08-Apr | 0.45 | <1 | <2 | <1 | 9 | 0.40 |
| 15-Apr | 0.33 | <1 | <2 | <1 | 11 | 0.47 |
| 22-Apr | 0.46 | <1 | <2 | <1 | 12 | 0.34 |
| 29-Apr | 0.42 | <1 | <2 | <1 | 12 | 0.31 |
| 06-May | 0.37 | <1 | <2 | <1 | 12 | 0.33 |
| 13-May | 0.55 | <1 | <2 | <1 | 12 | 0.30 |
| 20-May | 0.25 | <1 | 2 | <1 | 13 | 0.28 |
| 27-May | 0.15 | <1 | <2 | <1 | 14 | 0.30 |
| 03-Jun | 0.11 | <1 | <2 | <1 | 15 | 0.36 |
| 10-Jun | 0.12 | <1 | 4 | <1 | 14 | 0.28 |
| 17-Jun | 0.05 | <1 | 8 | <1 | 14 | 0.33 |
| 24-Jun | 0.35 | <1 | <2 | <1 | 15 | 0.29 |
| 02-Jul | <0.01 | <1 | 2 | <1 | 15 | 0.33 |
| 08-Jul | 0.40 | <1 | <2 | <1 | 17 | 0.76 |
| 15-Jul | 0.38 | <1 | 2 | <1 | 17 | 0.36 |
| 22-Jul | 0.14 | <1 | <2 | <1 | 17 | 0.33 |
| 29-Jul | 0.17 | <1 | <2 | <1 | 18 | 0.32 |
| 05-Aug | 0.20 | <1 | 76 | <1 | 17 | 0.31 |
| 12-Aug | 0.05 | <1 | <2 | <1 | 17 | 0.26 |
| 19-Aug | 0.13 | <1 | 2 | <1 | 17 | 0.23 |
| 26-Aug | 0.23 | <1 | 2 | <1 | 14 | 0.23 |
| 02-Sep | 0.14 | <1 | <2 | <1 | 17 | 0.21 |
| 09-Sep | 0.14 | <1 | 8 | <1 | 17 | 0.18 |
| 16-Sep | 0.30 | <1 | <2 | <1 | 16 | 0.22 |
| 23-Sep | 0.19 | <1 | <2 | <1 | 15 | 0.30 |
| 30-Sep | 0.08 | <1 | 10 | <1 | 16 | 0.28 |
| 07-Oct | 0.22 | <1 | <2 | <1 | 16 | 0.32 |
| 14-Oct | 0.06 | <1 | 2 | <1 | 16 | 0.28 |
| 21-Oct | 0.18 | <1 | 2 | <1 | 15 | 0.55 |
| 28-Oct | 0.10 | <1 | 2 | 1 | 14 | 0.43 |
| 01-Nov | 0.10 | <1 | 4 | <1 | 13 | 0.29 |
| 04-Nov | 0.14 | <1 | <2 | <1 | 14 | 0.48 |
| 12-Nov | 0.12 | <1 | <2 | <1 | 13 | 0.34 |
| 18-Nov | 0.16 | <1 | 4 | <1 | 13 | 0.33 |
| 25-Nov | 0.11 | <1 | <2 | <1 | 10 | 0.28 |
| 09-Dec | 0.23 | <1 | 24 | <1 | 9 | 0.30 |
| 16-Dec | 0.35 | <1 | <2 | <1 | 8 | 0.41 |
| 23-Dec | 0.30 | <1 | <2 | <1 | 8 | 0.37 |
| 30-Dec | 0.23 | <1 | NA | <1 | 6 | 0.36 |

DM946 (SE CORNER 195B ST and 63A AVE) - 2010 TEST RESULTS

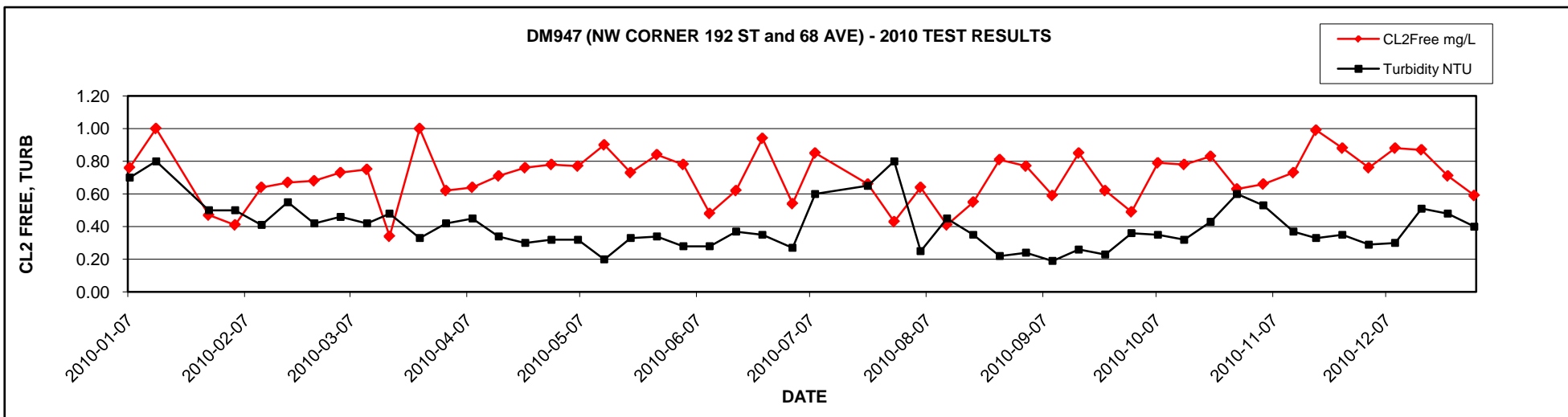
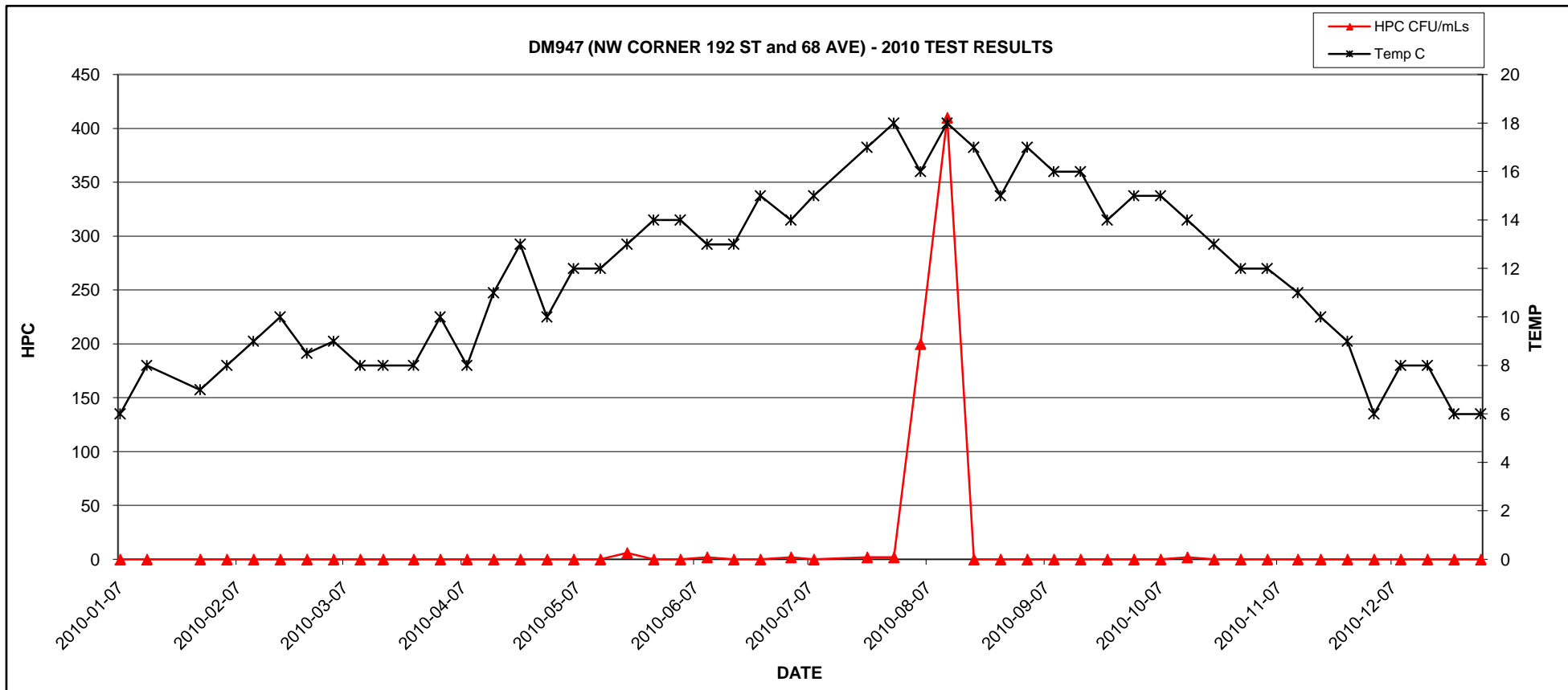


DM946 (SE CORNER 195B ST and 63A AVE) - 2010 TEST RESULTS



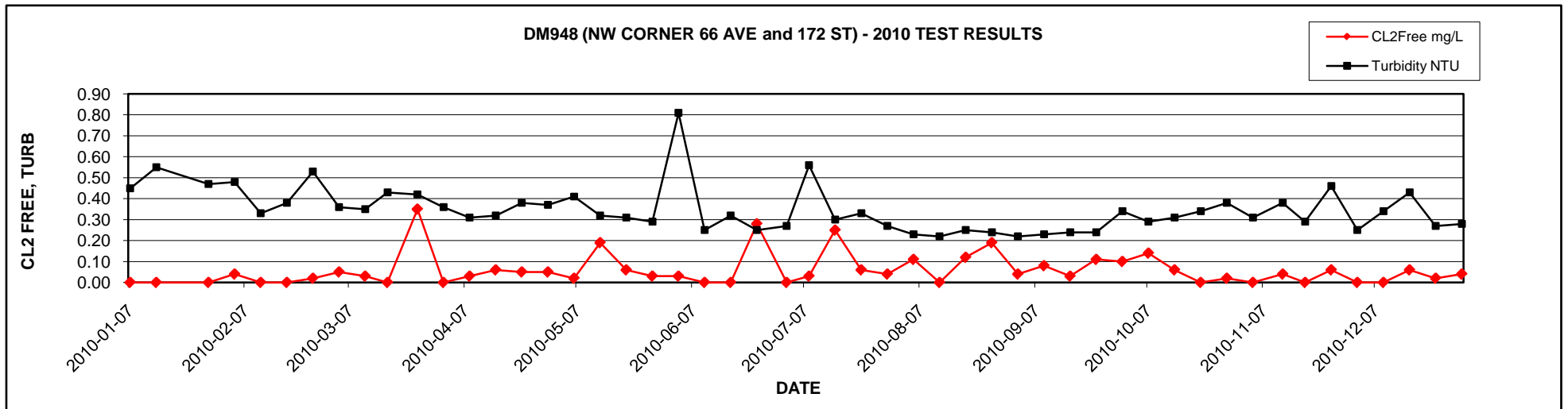
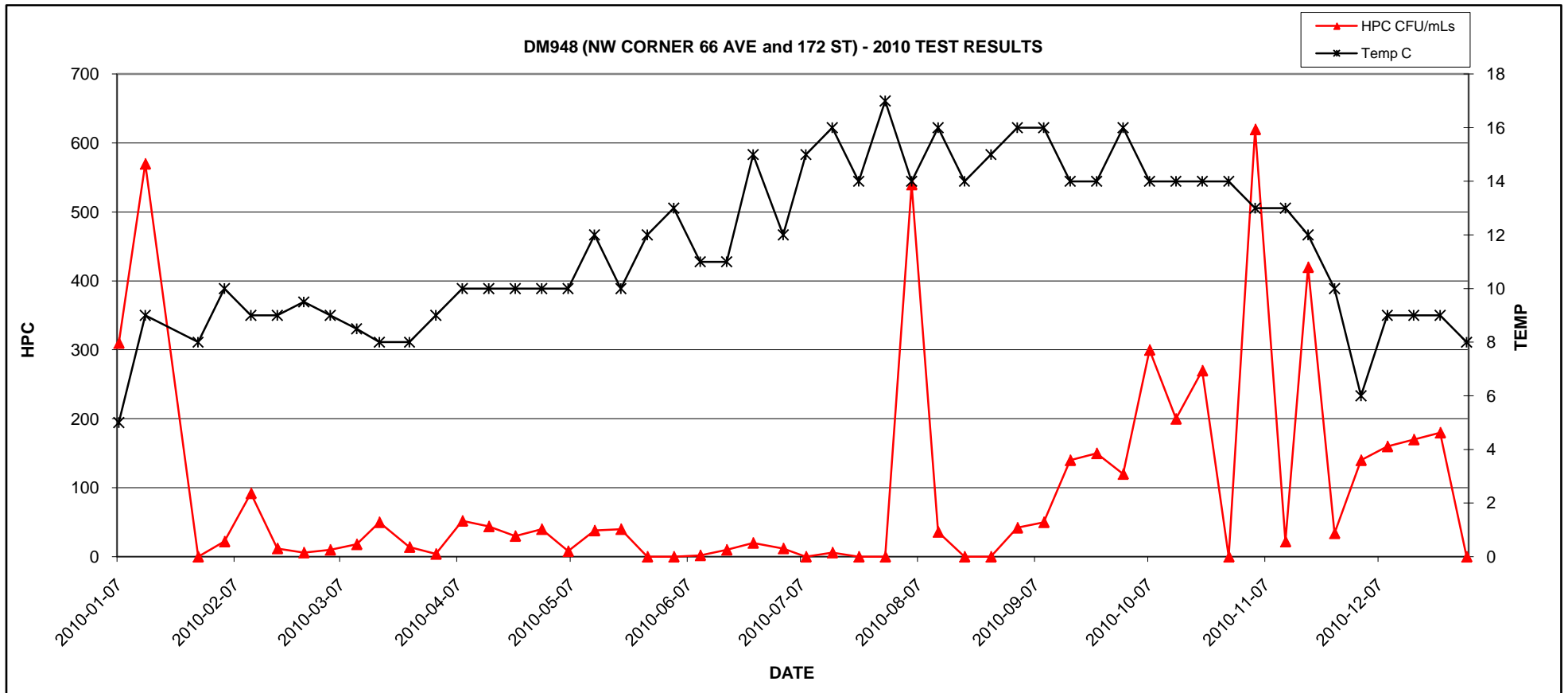
2010 GVRD Laboratory Report - DM947 (NW CORNER 192 ST and 68 AVE)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 07-Jan | 0.76 | <1 | <2 | <1 | 6 | 0.70 |
| 14-Jan | 1.00 | <1 | <2 | <1 | 8 | 0.80 |
| 28-Jan | 0.47 | <1 | <2 | <1 | 7 | 0.50 |
| 04-Feb | 0.41 | <1 | <2 | <1 | 8 | 0.50 |
| 11-Feb | 0.64 | <1 | <2 | <1 | 9 | 0.41 |
| 18-Feb | 0.67 | <1 | <2 | <1 | 10 | 0.55 |
| 25-Feb | 0.68 | <1 | <2 | <1 | 8.5 | 0.42 |
| 04-Mar | 0.73 | <1 | <2 | <1 | 9 | 0.46 |
| 11-Mar | 0.75 | <1 | <2 | <1 | 8 | 0.42 |
| 17-Mar | 0.34 | <1 | <2 | <1 | 8 | 0.48 |
| 25-Mar | 1.00 | <1 | <2 | <1 | 8 | 0.33 |
| 01-Apr | 0.62 | <1 | <2 | <1 | 10 | 0.42 |
| 08-Apr | 0.64 | <1 | NA | <1 | 8 | 0.45 |
| 15-Apr | 0.71 | <1 | <2 | <1 | 11 | 0.34 |
| 22-Apr | 0.76 | <1 | <2 | <1 | 13 | 0.30 |
| 29-Apr | 0.78 | <1 | <2 | <1 | 10 | 0.32 |
| 06-May | 0.77 | <1 | <2 | <1 | 12 | 0.32 |
| 13-May | 0.90 | <1 | <2 | <1 | 12 | 0.20 |
| 20-May | 0.73 | <1 | 6 | <1 | 13 | 0.33 |
| 27-May | 0.84 | <1 | <2 | <1 | 14 | 0.34 |
| 03-Jun | 0.78 | <1 | <2 | <1 | 14 | 0.28 |
| 10-Jun | 0.48 | <1 | 2 | <1 | 13 | 0.28 |
| 17-Jun | 0.62 | <1 | <2 | <1 | 13 | 0.37 |
| 24-Jun | 0.94 | <1 | <2 | <1 | 15 | 0.35 |
| 02-Jul | 0.54 | <1 | 2 | <1 | 14 | 0.27 |
| 08-Jul | 0.85 | <1 | <2 | <1 | 15 | 0.60 |
| 22-Jul | 0.66 | <1 | 2 | <1 | 17 | 0.65 |
| 29-Jul | 0.43 | <1 | 2 | <1 | 18 | 0.80 |
| 05-Aug | 0.64 | <1 | 200 | <1 | 16 | 0.25 |
| 12-Aug | 0.41 | <1 | 410 | <1 | 18 | 0.45 |
| 19-Aug | 0.55 | <1 | <2 | <1 | 17 | 0.35 |
| 26-Aug | 0.81 | <1 | <2 | <1 | 15 | 0.22 |
| 02-Sep | 0.77 | <1 | <2 | <1 | 17 | 0.24 |
| 09-Sep | 0.59 | <1 | <2 | <1 | 16 | 0.19 |
| 16-Sep | 0.85 | <1 | <2 | <1 | 16 | 0.26 |
| 23-Sep | 0.62 | <1 | <2 | <1 | 14 | 0.23 |
| 30-Sep | 0.49 | <1 | <2 | <1 | 15 | 0.36 |
| 07-Oct | 0.79 | <1 | <2 | <1 | 15 | 0.35 |
| 14-Oct | 0.78 | <1 | 2 | <1 | 14 | 0.32 |
| 21-Oct | 0.83 | <1 | <2 | <1 | 13 | 0.43 |
| 28-Oct | 0.63 | <1 | <2 | <1 | 12 | 0.60 |
| 04-Nov | 0.66 | <1 | <2 | <1 | 12 | 0.53 |
| 12-Nov | 0.73 | <1 | <2 | <1 | 11 | 0.37 |
| 18-Nov | 0.99 | <1 | <2 | <1 | 10 | 0.33 |
| 25-Nov | 0.88 | <1 | <2 | <1 | 9 | 0.35 |
| 02-Dec | 0.76 | <1 | <2 | <1 | 6 | 0.29 |
| 09-Dec | 0.88 | <1 | <2 | <1 | 8 | 0.30 |
| 16-Dec | 0.87 | <1 | <2 | <1 | 8 | 0.51 |
| 23-Dec | 0.71 | <1 | <2 | <1 | 6 | 0.48 |
| 30-Dec | 0.59 | <1 | NA | <1 | 6 | 0.40 |



2010 GVRD Laboratory Report - DM948 (NW CORNER 66 AVE and 172 ST)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 07-Jan | <0.01 | <1 | 310 | <1 | 5 | 0.45 |
| 14-Jan | <0.01 | <1 | 570 | <1 | 9 | 0.55 |
| 28-Jan | <0.01 | <1 | <2 | <1 | 8 | 0.47 |
| 04-Feb | 0.04 | <1 | 22 | <1 | 10 | 0.48 |
| 11-Feb | <0.01 | <1 | 92 | <1 | 9 | 0.33 |
| 18-Feb | <0.01 | <1 | 12 | <1 | 9 | 0.38 |
| 25-Feb | 0.02 | <1 | 6 | <1 | 9.5 | 0.53 |
| 04-Mar | 0.05 | <1 | 10 | <1 | 9 | 0.36 |
| 11-Mar | 0.03 | <1 | 18 | <1 | 8.5 | 0.35 |
| 17-Mar | <0.01 | <1 | 50 | <1 | 8 | 0.43 |
| 25-Mar | 0.35 | <1 | 14 | <1 | 8 | 0.42 |
| 01-Apr | <0.01 | <1 | 4 | <1 | 9 | 0.36 |
| 08-Apr | 0.03 | <1 | 52 | <1 | 10 | 0.31 |
| 15-Apr | 0.06 | <1 | 44 | <1 | 10 | 0.32 |
| 22-Apr | 0.05 | <1 | 30 | <1 | 10 | 0.38 |
| 29-Apr | 0.05 | <1 | 40 | <1 | 10 | 0.37 |
| 06-May | 0.02 | <1 | 8 | <1 | 10 | 0.41 |
| 13-May | 0.19 | <1 | 38 | <1 | 12 | 0.32 |
| 20-May | 0.06 | <1 | 40 | <1 | 10 | 0.31 |
| 27-May | 0.03 | <1 | LA | <1 | 12 | 0.29 |
| 03-Jun | 0.03 | <1 | <2 | <1 | 13 | 0.81 |
| 10-Jun | <0.01 | <1 | 2 | <1 | 11 | 0.25 |
| 17-Jun | <0.01 | <1 | 10 | <1 | 11 | 0.32 |
| 24-Jun | 0.28 | <1 | 20 | <1 | 15 | 0.25 |
| 02-Jul | <0.01 | <1 | 12 | <1 | 12 | 0.27 |
| 08-Jul | 0.03 | <1 | <2 | <1 | 15 | 0.56 |
| 15-Jul | 0.25 | <1 | 6 | <1 | 16 | 0.30 |
| 22-Jul | 0.06 | <1 | <2 | <1 | 14 | 0.33 |
| 29-Jul | 0.04 | <1 | <2 | <1 | 17 | 0.27 |
| 05-Aug | 0.11 | <1 | 540 | <1 | 14 | 0.23 |
| 12-Aug | <0.01 | <1 | 36 | <1 | 16 | 0.22 |
| 19-Aug | 0.12 | <1 | <2 | <1 | 14 | 0.25 |
| 26-Aug | 0.19 | <1 | <2 | <1 | 15 | 0.24 |
| 02-Sep | 0.04 | <1 | 42 | <1 | 16 | 0.22 |
| 09-Sep | 0.08 | <1 | 50 | <1 | 16 | 0.23 |
| 16-Sep | 0.03 | <1 | 140 | <1 | 14 | 0.24 |
| 23-Sep | 0.11 | <1 | 150 | <1 | 14 | 0.24 |
| 30-Sep | 0.10 | <1 | 120 | <1 | 16 | 0.34 |
| 07-Oct | 0.14 | <1 | 300 | <1 | 14 | 0.29 |
| 14-Oct | 0.06 | <1 | 200 | <1 | 14 | 0.31 |
| 21-Oct | <0.01 | <1 | 270 | <1 | 14 | 0.34 |
| 28-Oct | 0.02 | <1 | <2 | <1 | 14 | 0.38 |
| 04-Nov | <0.01 | <1 | 620 | <1 | 13 | 0.31 |
| 12-Nov | 0.04 | <1 | 22 | <1 | 13 | 0.38 |
| 18-Nov | <0.01 | <1 | 420 | <1 | 12 | 0.29 |
| 25-Nov | 0.06 | <1 | 34 | <1 | 10 | 0.46 |
| 02-Dec | <0.01 | <1 | 140 | <1 | 6 | 0.25 |
| 09-Dec | <0.01 | <1 | 160 | <1 | 9 | 0.34 |
| 16-Dec | 0.06 | <1 | 170 | <1 | 9 | 0.43 |
| 23-Dec | 0.02 | <1 | 180 | <1 | 9 | 0.27 |
| 30-Dec | 0.04 | <1 | NA | <1 | 8 | 0.28 |

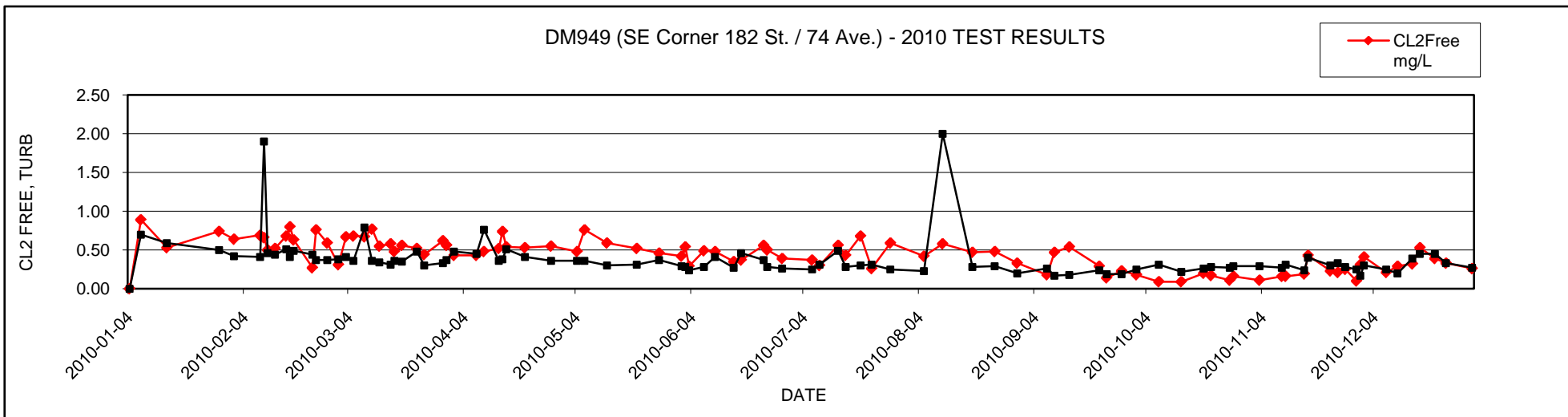
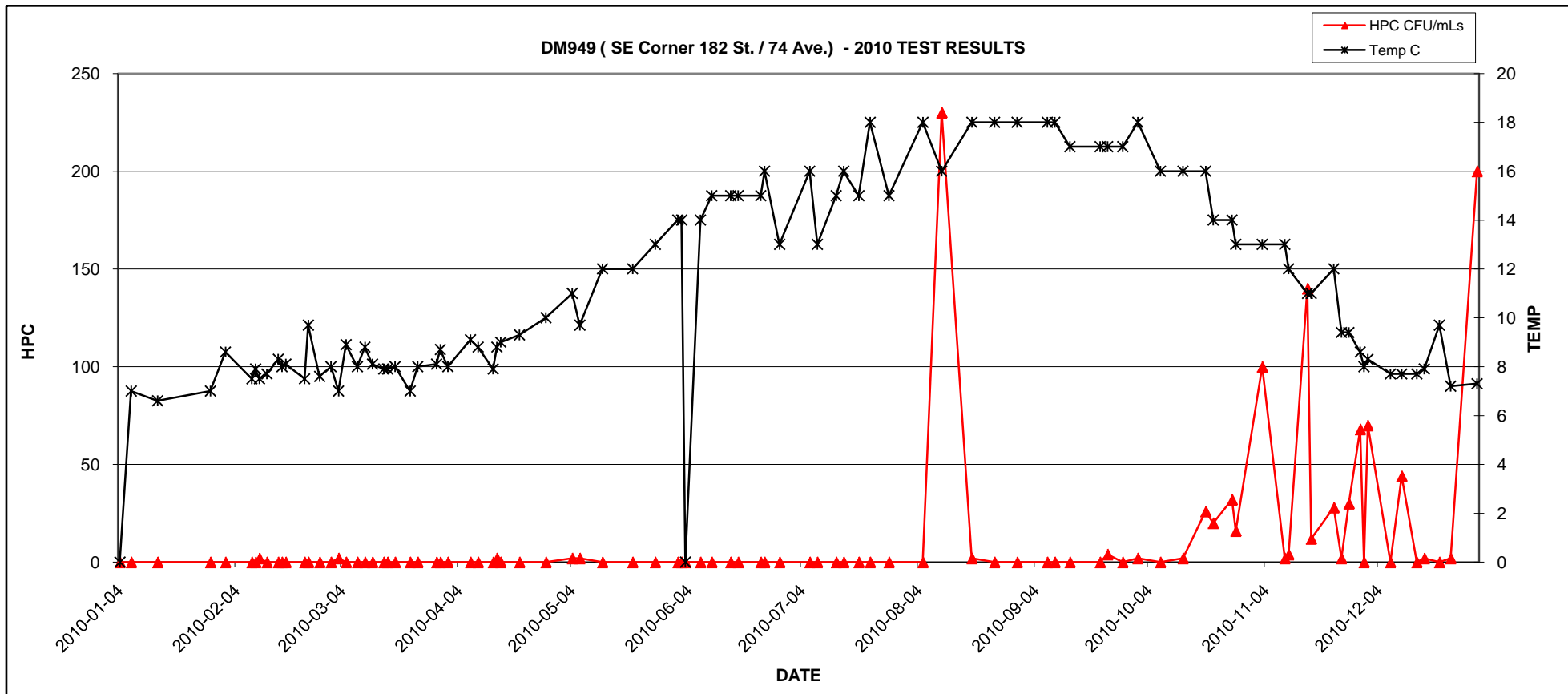


2010 GVRD Laboratory Report - DM949 (SE Corner 182 St. / 74 Ave.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 04-Jan | 0.89 | <1 | <2 | <1 | 7 | 0.70 |
| 07-Jan | 0.53 | <1 | <2 | <1 | 6.6 | 0.59 |
| 14-Jan | 0.74 | <1 | <2 | <1 | 7 | 0.50 |
| 28-Jan | 0.64 | <1 | <2 | <1 | 8.6 | 0.42 |
| 01-Feb | 0.69 | <1 | <2 | <1 | 7.5 | 0.41 |
| 08-Feb | 0.66 | <1 | <2 | <1 | 7.9 | 1.90 |
| 09-Feb | 0.50 | <1 | 2 | <1 | 7.5 | 0.46 |
| 10-Feb | 0.52 | <1 | <2 | <1 | 7.7 | 0.44 |
| 12-Feb | 0.68 | <1 | <2 | <1 | 8.3 | 0.51 |
| 15-Feb | 0.80 | <1 | <2 | <1 | 8 | 0.41 |
| 16-Feb | 0.63 | <1 | <2 | <1 | 8.1 | 0.49 |
| 17-Feb | 0.27 | <1 | <2 | <1 | 7.5 | 0.44 |
| 22-Feb | 0.76 | <1 | <2 | <1 | 9.7 | 0.37 |
| 23-Feb | 0.59 | <1 | <2 | <1 | 7.6 | 0.37 |
| 26-Feb | 0.31 | <1 | <2 | <1 | 8 | 0.38 |
| 01-Mar | 0.67 | <1 | 2 | <1 | 7 | 0.41 |
| 03-Mar | 0.68 | <1 | <2 | <1 | 8.9 | 0.36 |
| 05-Mar | 0.67 | <1 | <2 | <1 | 8 | 0.79 |
| 08-Mar | 0.77 | <1 | <2 | <1 | 8.8 | 0.36 |
| 10-Mar | 0.55 | <1 | <2 | <1 | 8.1 | 0.34 |
| 12-Mar | 0.58 | <1 | <2 | <1 | 7.9 | 0.31 |
| 15-Mar | 0.48 | <1 | <2 | <1 | 7.9 | 0.36 |
| 16-Mar | 0.56 | <1 | <2 | <1 | 8 | 0.35 |
| 18-Mar | 0.52 | <1 | <2 | <1 | 7 | 0.48 |
| 22-Mar | 0.44 | <1 | <2 | <1 | 8 | 0.30 |
| 24-Mar | 0.62 | <1 | <2 | <1 | 8.1 | 0.33 |
| 29-Mar | 0.56 | <1 | <2 | <1 | 8.7 | 0.37 |
| 30-Mar | 0.43 | <1 | <2 | <1 | 8 | 0.48 |
| 01-Apr | 0.43 | <1 | <2 | <1 | 9.1 | 0.45 |
| 07-Apr | 0.48 | <1 | <2 | <1 | 8.8 | 0.76 |
| 09-Apr | 0.52 | <1 | <2 | <1 | 7.9 | 0.36 |
| 13-Apr | 0.74 | <1 | 2 | <1 | 8.8 | 0.38 |
| 14-Apr | 0.54 | <1 | <2 | <1 | 9 | 0.51 |
| 15-Apr | 0.53 | <1 | <2 | <1 | 9.3 | 0.41 |
| 20-Apr | 0.55 | <1 | <2 | <1 | 10 | 0.36 |
| 27-Apr | 0.48 | <1 | 2 | <1 | 11 | 0.36 |
| 04-May | 0.76 | <1 | 2 | <1 | 9.7 | 0.36 |
| 06-May | 0.59 | <1 | <2 | <1 | 12 | 0.30 |
| 12-May | 0.52 | <1 | <2 | <1 | 12 | 0.31 |
| 20-May | 0.46 | <1 | <2 | <1 | 13 | 0.37 |
| 26-May | 0.42 | <1 | <2 | <1 | 14 | 0.29 |
| 01-Jun | 0.54 | <1 | <2 | <1 | 14 | 0.28 |
| 02-Jun | 0.29 | <1 | <2 | <1 | LA | 0.24 |
| 03-Jun | 0.49 | <1 | <2 | <1 | 14 | 0.28 |
| 07-Jun | 0.48 | <1 | <2 | <1 | 15 | 0.41 |
| 10-Jun | 0.35 | <1 | <2 | <1 | 15 | 0.27 |
| 15-Jun | 0.37 | <1 | <2 | <1 | 15 | 0.46 |
| 17-Jun | 0.56 | <1 | <2 | <1 | 15 | 0.37 |

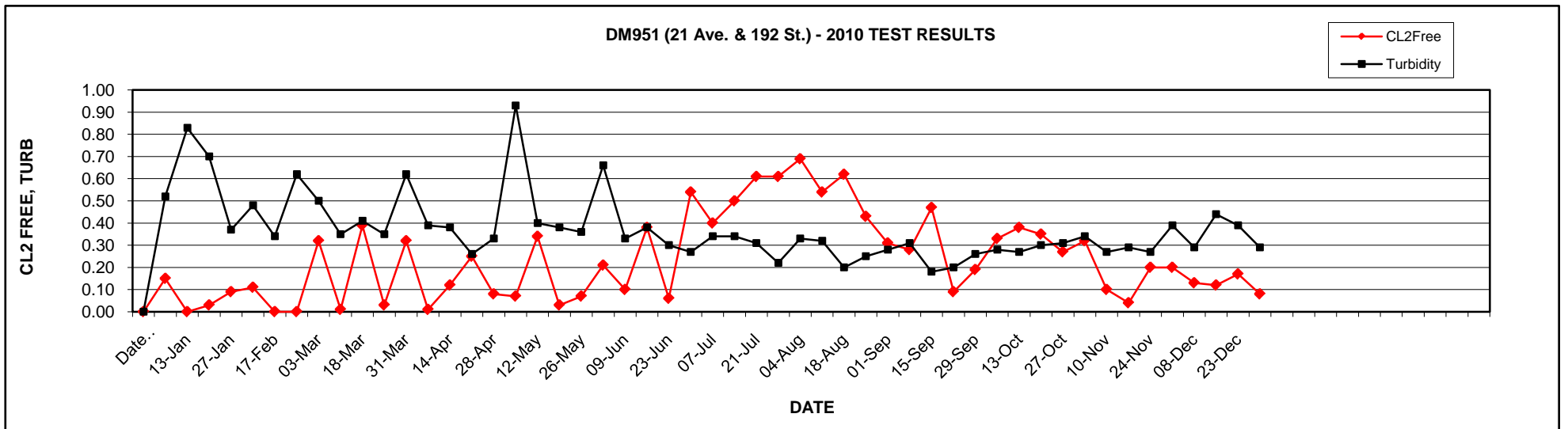
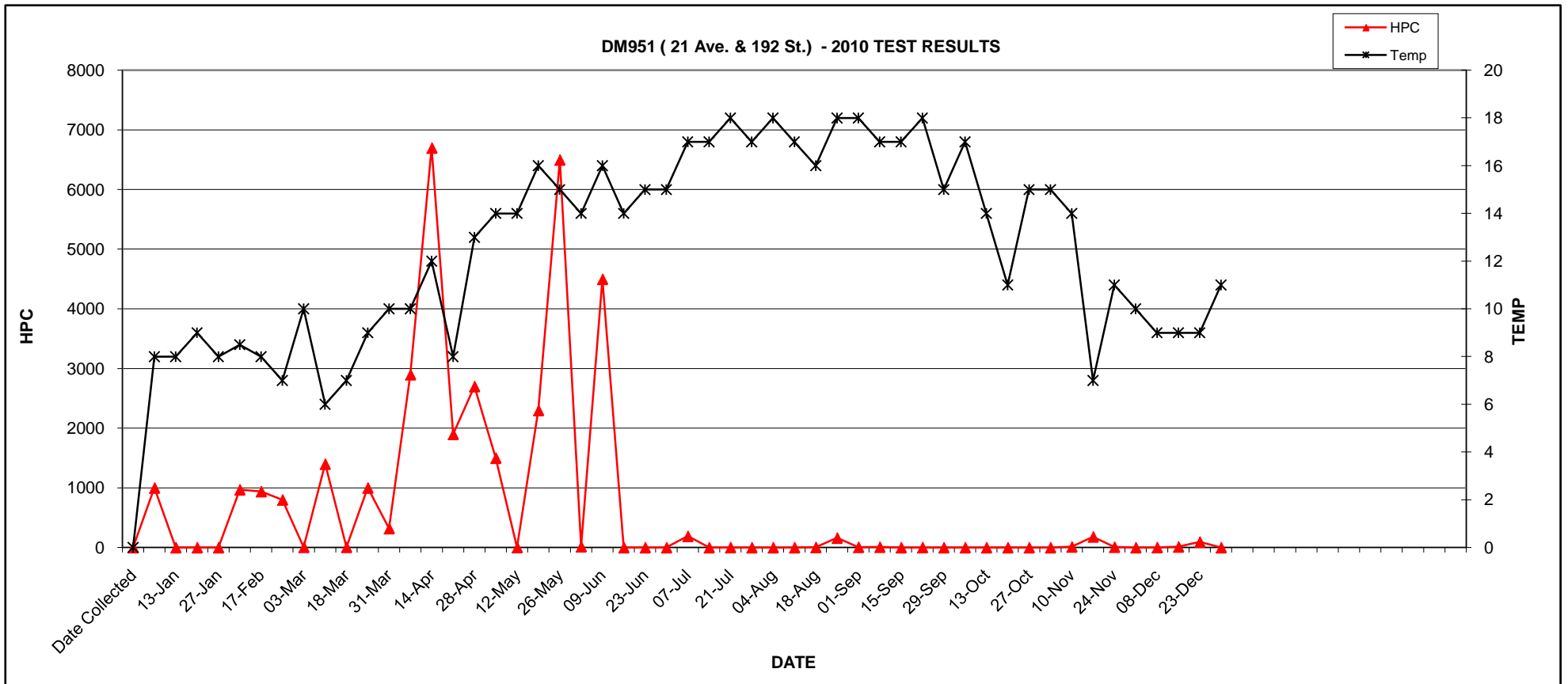
2010 GVRD Laboratory Report - DM949 (SE Corner 182 St. / 74 Ave.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 23-Jun | 0.50 | <1 | <2 | <1 | 16 | 0.28 |
| 24-Jun | 0.39 | <1 | <2 | <1 | 13 | 0.26 |
| 28-Jun | 0.37 | <1 | <2 | <1 | 16 | 0.25 |
| 06-Jul | 0.30 | <1 | <2 | <1 | 13 | 0.31 |
| 08-Jul | 0.56 | <1 | LA | <1 | 15 | 0.49 |
| 13-Jul | 0.43 | <1 | <2 | <1 | 16 | 0.28 |
| 15-Jul | 0.68 | <1 | <2 | <1 | 15 | 0.30 |
| 19-Jul | 0.26 | <1 | <2 | <1 | 18 | 0.31 |
| 22-Jul | 0.59 | <1 | <2 | <1 | 15 | 0.25 |
| 27-Jul | 0.42 | <1 | <2 | <1 | 18 | 0.23 |
| 05-Aug | 0.58 | <1 | 230 | <1 | 16 | 2.00 |
| 10-Aug | 0.47 | <1 | 2 | <1 | 18 | 0.28 |
| 18-Aug | 0.48 | <1 | <2 | <1 | 18 | 0.29 |
| 24-Aug | 0.33 | <1 | <2 | <1 | 18 | 0.20 |
| 30-Aug | 0.18 | <1 | <2 | <1 | 18 | 0.26 |
| 07-Sep | 0.47 | <1 | <2 | <1 | 18 | 0.17 |
| 09-Sep | 0.54 | <1 | <2 | <1 | 17 | 0.18 |
| 13-Sep | 0.29 | <1 | <2 | <1 | 17 | 0.24 |
| 21-Sep | 0.14 | <1 | 4 | <1 | 17 | 0.19 |
| 23-Sep | 0.23 | <1 | <2 | <1 | 17 | 0.19 |
| 27-Sep | 0.18 | <1 | 2 | <1 | 18 | 0.25 |
| 01-Oct | 0.09 | <1 | <2 | <1 | 16 | 0.31 |
| 07-Oct | 0.09 | <1 | 2 | <1 | 16 | 0.22 |
| 13-Oct | 0.20 | <1 | 26 | <1 | 16 | 0.26 |
| 19-Oct | 0.17 | <1 | 20 | <1 | 14 | 0.28 |
| 21-Oct | 0.11 | <1 | 32 | <1 | 14 | 0.27 |
| 26-Oct | 0.16 | <1 | 16 | <1 | 13 | 0.29 |
| 27-Oct | 0.11 | <1 | 100 | <1 | 13 | 0.29 |
| 03-Nov | 0.16 | <1 | 2 | <1 | 13 | 0.27 |
| 09-Nov | 0.16 | <1 | 4 | <1 | 12 | 0.31 |
| 10-Nov | 0.43 | <1 | 12 | <1 | 11 | 0.40 |
| 16-Nov | 0.19 | <1 | 140 | <1 | 11 | 0.24 |
| 15-Nov | 0.23 | <1 | 28 | <1 | 12 | 0.30 |
| 22-Nov | 0.21 | <1 | 2 | <1 | 9.4 | 0.33 |
| 24-Nov | 0.25 | <1 | 30 | <1 | 9.4 | 0.28 |
| 26-Nov | 0.10 | <1 | 68 | <1 | 8.6 | 0.25 |
| 29-Nov | 0.31 | <1 | <2 | <1 | 8 | 0.17 |
| 30-Nov | 0.41 | <1 | 70 | <1 | 8.3 | 0.30 |
| 01-Dec | 0.21 | <1 | <2 | <1 | 7.7 | 0.25 |
| 07-Dec | 0.29 | <1 | 44 | <1 | 7.7 | 0.20 |
| 10-Dec | 0.32 | <1 | LA | <1 | 7.7 | 0.39 |
| 14-Dec | 0.53 | <1 | 2 | <1 | 7.9 | 0.45 |
| 16-Dec | 0.39 | <1 | <2 | <1 | 9.7 | 0.45 |
| 20-Dec | 0.33 | <1 | 2 | <1 | 7.2 | 0.33 |
| 23-Dec | 0.26 | <1 | 200 | <1 | 7.3 | 0.27 |
| 30-Dec | 0.20 | <1 | NA | <1 | 5.8 | 0.26 |



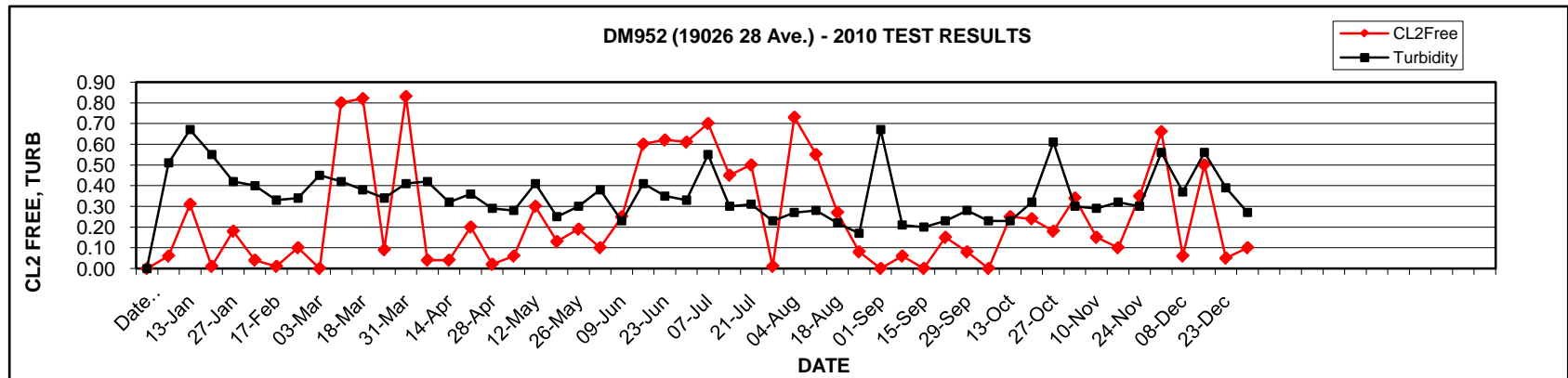
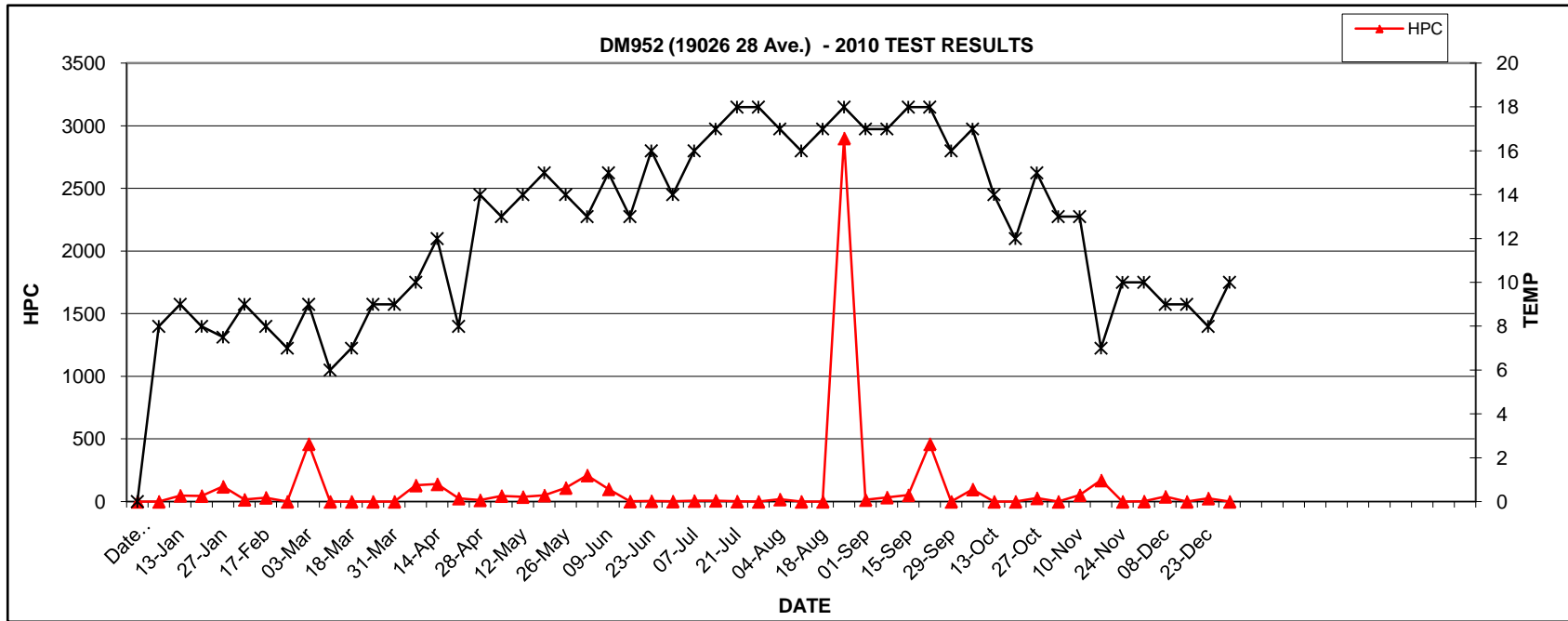
2010 GVRD Laboratory Report - DM951 (21 Ave. & 192 St.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|-----------------------|-------------------------|----------------------------|------------------------|----------------------------|-------------------|--------------------------|
| 06-Jan | 0.15 | <1 | 1000 | <1 | 8 | 0.52 |
| 13-Jan | <0.01 | <1 | >11000 | <1 | 8 | 0.83 |
| 20-Jan | 0.03 | <1 | >11000 | <1 | 9 | 0.70 |
| 27-Jan | 0.09 | <1 | LA | <1 | 8 | 0.37 |
| 10-Feb | 0.11 | <1 | 970 | <1 | 8.5 | 0.48 |
| 17-Feb | <0.01 | <1 | 940 | <1 | 8 | 0.34 |
| 24-Feb | <0.01 | <1 | 800 | <1 | 7 | 0.62 |
| 03-Mar | 0.32 | <1 | 6 | <1 | 10 | 0.50 |
| 10-Mar | 0.01 | <1 | 1400 | <1 | 6 | 0.35 |
| 18-Mar | 0.39 | <1 | 6 | <1 | 7 | 0.41 |
| 24-Mar | 0.03 | <1 | 1000 | <1 | 9 | 0.35 |
| 31-Mar | 0.32 | <1 | 320 | <1 | 10 | 0.62 |
| 07-Apr | 0.01 | <1 | 2900 | <1 | 10 | 0.39 |
| 14-Apr | 0.12 | <1 | 6700 | <1 | 12 | 0.38 |
| 21-Apr | 0.25 | <1 | 1900 | <1 | 8 | 0.26 |
| 28-Apr | 0.08 | <1 | 2700 | <1 | 13 | 0.33 |
| 05-May | 0.07 | <1 | 1500 | <1 | 14 | 0.93 |
| 12-May | 0.34 | <1 | 2 | <1 | 14 | 0.40 |
| 19-May | 0.03 | <1 | 2300 | <1 | 16 | 0.38 |
| 26-May | 0.07 | <1 | 6500 | <1 | 15 | 0.36 |
| 02-Jun | 0.21 | <1 | 16 | <1 | 14 | 0.66 |
| 09-Jun | 0.10 | <1 | 4500 | <1 | 16 | 0.33 |
| 16-Jun | 0.38 | <1 | <2 | <1 | 14 | 0.38 |
| 23-Jun | 0.06 | <1 | >11000 | <1 | 15 | 0.30 |
| 30-Jun | 0.54 | <1 | <2 | <1 | 15 | 0.27 |
| 07-Jul | 0.40 | <1 | 190 | <1 | 17 | 0.34 |
| 14-Jul | 0.50 | <1 | <2 | <1 | 17 | 0.34 |
| 21-Jul | 0.61 | <1 | 2 | <1 | 18 | 0.31 |
| 28-Jul | 0.61 | <1 | <2 | <1 | 17 | 0.22 |
| 04-Aug | 0.69 | <1 | <2 | <1 | 18 | 0.33 |
| 11-Aug | 0.54 | <1 | <2 | <1 | 17 | 0.32 |
| 18-Aug | 0.62 | <1 | 4 | <1 | 16 | 0.20 |
| 25-Aug | 0.43 | <1 | 160 | <1 | 18 | 0.25 |
| 01-Sep | 0.31 | <1 | 6 | <1 | 18 | 0.28 |
| 08-Sep | 0.28 | <1 | 8 | <1 | 17 | 0.31 |
| 15-Sep | 0.47 | <1 | <2 | <1 | 17 | 0.18 |
| 22-Sep | 0.09 | <1 | 2 | <1 | 18 | 0.20 |
| 29-Sep | 0.19 | <1 | <2 | <1 | 15 | 0.26 |
| 06-Oct | 0.33 | <1 | <2 | <1 | 17 | 0.28 |
| 13-Oct | 0.38 | <1 | <2 | <1 | 14 | 0.27 |
| 20-Oct | 0.35 | <1 | <2 | <1 | 11 | 0.30 |
| 27-Oct | 0.27 | <1 | <2 | <1 | 15 | 0.31 |
| 04-Nov | 0.32 | <1 | <2 | <1 | 15 | 0.34 |
| 10-Nov | 0.10 | <1 | 12 | <1 | 14 | 0.27 |
| 17-Nov | 0.04 | <1 | 180 | <1 | 7 | 0.29 |
| 24-Nov | 0.20 | <1 | 8 | <1 | 11 | 0.27 |
| 01-Dec | 0.20 | <1 | <2 | <1 | 10 | 0.39 |
| 08-Dec | 0.13 | <1 | 2 | <1 | 9 | 0.29 |
| 15-Dec | 0.12 | <1 | 12 | <1 | 9 | 0.44 |
| 23-Dec | 0.17 | <1 | 94 | <1 | 9 | 0.39 |
| 29-Dec | 0.08 | <1 | NA | <1 | 11 | 0.29 |



2010 GVRD Laboratory Report - DM952 (19026 28 Ave.)

| Date Collected | CL2Free mg/L | Ecoli MF/100mLs | HPC CFU/mLs | Tcoli MF/100mLs | Temp C | Turbidity NTU |
|----------------|-----------------|--------------------|----------------|--------------------|-----------|------------------|
| 06-Jan | 0.06 | <1 | <2 | <1 | 8 | 0.51 |
| 13-Jan | 0.31 | <1 | 48 | <1 | 9 | 0.67 |
| 20-Jan | 0.01 | <1 | 46 | <1 | 8 | 0.55 |
| 27-Jan | 0.18 | <1 | 120 | <1 | 7.5 | 0.42 |
| 10-Feb | 0.04 | <1 | 16 | <1 | 9 | 0.40 |
| 17-Feb | 0.01 | <1 | 32 | <1 | 8 | 0.33 |
| 24-Feb | 0.10 | <1 | <2 | <1 | 7 | 0.34 |
| 03-Mar | <0.01 | <1 | 460 | <1 | 9 | 0.45 |
| 10-Mar | 0.80 | <1 | <2 | <1 | 6 | 0.42 |
| 18-Mar | 0.82 | <1 | <2 | <1 | 7 | 0.38 |
| 24-Mar | 0.09 | <1 | NA | <1 | 9 | 0.34 |
| 31-Mar | 0.83 | <1 | <2 | <1 | 9 | 0.41 |
| 07-Apr | 0.04 | <1 | 130 | <1 | 10 | 0.42 |
| 14-Apr | 0.04 | <1 | 140 | <1 | 12 | 0.32 |
| 21-Apr | 0.20 | <1 | 26 | <1 | 8 | 0.36 |
| 28-Apr | 0.02 | <1 | 12 | <1 | 14 | 0.29 |
| 05-May | 0.06 | <1 | 46 | <1 | 13 | 0.28 |
| 12-May | 0.30 | <1 | 38 | <1 | 14 | 0.41 |
| 19-May | 0.13 | <1 | 50 | <1 | 15 | 0.25 |
| 26-May | 0.19 | <1 | 110 | <1 | 14 | 0.30 |
| 02-Jun | 0.10 | <1 | 210 | <1 | 13 | 0.38 |
| 09-Jun | 0.25 | <1 | 100 | <1 | 15 | 0.23 |
| 16-Jun | 0.60 | <1 | 2 | <1 | 13 | 0.41 |
| 23-Jun | 0.62 | <1 | 4 | <1 | 16 | 0.35 |
| 30-Jun | 0.61 | <1 | 2 | <1 | 14 | 0.33 |
| 07-Jul | 0.70 | <1 | 6 | <1 | 16 | 0.55 |
| 14-Jul | 0.45 | <1 | 8 | <1 | 17 | 0.30 |
| 21-Jul | 0.50 | <1 | 2 | <1 | 18 | 0.31 |
| 28-Jul | 0.01 | <1 | <2 | <1 | 18 | 0.23 |
| 04-Aug | 0.73 | <1 | 18 | <1 | 17 | 0.27 |
| 11-Aug | 0.55 | <1 | <2 | <1 | 16 | 0.28 |
| 18-Aug | 0.27 | <1 | <2 | <1 | 17 | 0.22 |
| 25-Aug | 0.08 | <1 | 2900 | <1 | 18 | 0.17 |
| 01-Sep | <0.01 | <1 | 14 | <1 | 17 | 0.67 |
| 08-Sep | 0.06 | <1 | 34 | <1 | 17 | 0.21 |
| 15-Sep | <0.01 | <1 | 52 | <1 | 18 | 0.20 |
| 22-Sep | 0.15 | <1 | 460 | <1 | 18 | 0.23 |
| 29-Sep | 0.08 | <1 | <2 | <1 | 16 | 0.28 |
| 06-Oct | <0.01 | <1 | 98 | <1 | 17 | 0.23 |
| 13-Oct | 0.25 | <1 | <2 | <1 | 14 | 0.23 |
| 20-Oct | 0.24 | <1 | <2 | <1 | 12 | 0.32 |
| 27-Oct | 0.18 | <1 | 28 | <1 | 15 | 0.61 |
| 04-Nov | 0.34 | <1 | <2 | <1 | 13 | 0.30 |
| 10-Nov | 0.15 | <1 | 52 | <1 | 13 | 0.29 |
| 17-Nov | 0.10 | <1 | 170 | <1 | 7 | 0.32 |
| 24-Nov | 0.35 | <1 | <2 | <1 | 10 | 0.30 |
| 01-Dec | 0.66 | <1 | 2 | <1 | 10 | 0.56 |
| 08-Dec | 0.06 | <1 | 40 | <1 | 9 | 0.37 |
| 15-Dec | 0.50 | <1 | <2 | <1 | 9 | 0.56 |
| 23-Dec | 0.05 | <1 | 26 | <1 | 8 | 0.39 |
| 29-Dec | 0.10 | <1 | NA | <1 | 10 | 0.27 |



APPENDIX ‘B’

Water Quality Monitoring and Reporting Plan for Metro Vancouver and Member Municipalities

Water Quality Monitoring and Reporting Plan
For The GVRD and Member Municipalities



Greater
Vancouver
Regional
District

January 2006

Table of Contents

| | |
|---|----|
| 1. INTRODUCTION | 1 |
| 1.1 Background | 1 |
| Table 1. Water Supplier Responsibilities Under the Drinking Water Protection Act..... | 1 |
| 1.2 Quality Control..... | 2 |
| 2. DEFINITIONS | 3 |
| 3. SOURCE (UNTREATED) WATER QUALITY MONITORING | 3 |
| 3.1 Microbiological Monitoring | 4 |
| 3.1.1 Bacteria | 4 |
| 3.1.2 <i>Giardia</i> and <i>Cryptosporidium</i> | 4 |
| 3.2 Chemical and Physical Monitoring | 4 |
| 3.2.1 Turbidity | 4 |
| 3.2.2 General Chemical and Physical Quality | 4 |
| Table 2. Physical and Chemical Testing of GVRD Source Waters (S) | 5 |
| 4. TRANSMISSION/DISTRIBUTION SYSTEM MONITORING – TREATED WATER..... | 6 |
| 4.1 Bacteriology Sampling Stations – Type, Location and Number..... | 6 |
| 4.1.1 GVRD Transmission Mains and Reservoirs..... | 6 |
| 4.1.2 Municipal Distribution Mains..... | 6 |
| Table 3. Bacteriology Monitoring – Municipal Samples..... | 7 |
| 4.2 Chemical and Physical Parameters..... | 8 |
| 4.2.1 GVRD Transmission Mains..... | 8 |
| Table 4. Chemical/Physical Monitoring in GVRD Transmission System..... | 8 |
| 4.2.2 Municipal Distribution Mains..... | 9 |
| Table 5. Chemical/Physical Monitoring in Municipal Distribution Systems | 9 |
| 5. REPORTING | 10 |
| Table 6. Reports | 10 |
| 6. EMERGENCY RESPONSE | 11 |
| 6.1 Notification Requirements | 11 |
| Table 7. Notification for Unusual Situations Affecting Water Potability..... | 11 |
| 6.2 Response Plans | 12 |
| 6.3 Major Emergency Situations..... | 12 |

Appendices

- Appendix 1 GVRD Drinking Water Quality Monitoring Sites
- Appendix 2 Municipal Drinking Water Quality Monitoring Sites
- Appendix 3 Response Protocols for Water Emergencies
- Appendix 4 Contingency Plan for Water Quality

1. Introduction

1.1 Background

The Water Quality Monitoring and Reporting Plan (WQMRP) was originally developed under the BC Safe Drinking Water Regulation (BCSDWR) which was promulgated under the Health Act in 1992. In short, the BCSDWR required suppliers of drinking water (purveyors) in BC to hold an Operating Permit which, in effect, confirmed that the Medical Health Officer for the area in question had approved of the public water supply and the purveyor's plans for assuring potability, monitoring, reporting and notification in the case of emergency or other unusual circumstances. The BCSDWR was replaced in 2003 with the BC Drinking Water Protection Regulation (BCDWPR) under the Drinking Water Protection Act (DWPA) which was promulgated in 2001. This update builds on the original WQMRP which was published in May of 2000 as a result of joint efforts between the GVRD, GVRD Municipalities, and the Region's Medical Health Officers. All parties mentioned above have been involved in the update of the plan.

The Drinking Water Protection Act places a number of responsibilities on water suppliers. Sections relevant to this plan are shown in the table below:

Table 1. Water Supplier Responsibilities Under the Drinking Water Protection Act

| Section of Act | Requirement | Relevance |
|----------------|--|--|
| 8 | Operating Permits and Requirements For Water Systems | Places monitoring and reporting responsibilities on water suppliers. |
| 10 | Emergency Response and Contingency Plans | Places requirement for emergency response and contingency plans on water suppliers. |
| 11 | Water Monitoring Requirements | Outlines water monitoring and associated responsibilities for water suppliers. |
| 12 | Notice if Immediate Reporting Standard Not Met | Outlines immediate reporting responsibilities for laboratories and water suppliers. |
| 13 | Water Supplier Must Report Threats to Drinking Water | Places notification responsibilities on water suppliers for situations where the water might not be potable. |
| 15 | Publication of Other Information | Places reporting responsibilities on water suppliers. |

Even though this document describes a monitoring and reporting plan for the GVRD and its member municipalities using GVRD water sources, it can also be used as a template for monitoring and reporting on separate water supplies that exist within some municipalities. Many of the monitoring initiatives described in this plan are already in place. Hence, it is written for the most part in the present tense.

1.2 Quality Control

All analyses should be conducted by a laboratory that is approved by the Provincial Health Officer for bacteriological analyses and is certified by the Canadian Association for Environmental Analytical Laboratories (CAEAL) or an equivalent certification program for the other tests performed. It is recognized that certification may not be available for all parameters.

With the exception of *Giardia* and *Cryptosporidium*, all of the microbiological analyses discussed in this report are performed at the GVRD laboratory except for those for the City of Vancouver which are performed at the Provincial Health laboratory (BCCDC laboratory). The Provincial Health Officer has approved both laboratories for the analysis of drinking water samples.

For water from GVRD sources (Capilano, Seymour, Coquitlam) many of the chemical and physical analyses are performed by the GVRD laboratory. The GVRD laboratory is a member and is accredited by CAEAL. The GVRD laboratory is accredited (or certified) for many of the available parameters offered by CAEAL including general parameters, metals, trihalomethanes (THMs) and total coliforms. The GVRD laboratory also performs analyses for haloacetic acids (HAAs). CAEAL does not offer certification for HAAs or for radioisotopes.

Analyses for organic chemical contaminants (herbicides, pesticides, etc.) and uranium and radioactivity as shown in the Guidelines For Canadian Drinking Water Quality are performed by contract laboratories. The contract laboratories are accredited and the scope of accreditation includes the following parameters: BTEX, PAHs, THMs and specific pesticides. The GVRD uses the Wisconsin State Laboratory of Hygiene, at the University of Wisconsin Center for Health Sciences, for radioactivity analyses. The US Environmental Protection Agency has certified this laboratory for radioactivity related analyses.

CAEAL certification and accreditation are valuable but they are no substitute for critical review of laboratory results (including review of Quality Control/Quality Assurance procedures and results) by the agency responsible for reporting the results. The GVRD reviews all laboratory results (including results from the GVRD laboratory and contract laboratories) for QA/QC and municipalities should do the same for results not reviewed for QA/QC by the GVRD.

Samples should be collected and shipped in accordance with the most recent edition (21st edition now available) of Standard Methods For The Examination of Water and Wastewater (APHA, AWWA, WEF).

2. Definitions

| | |
|-------------------------|---|
| BCDWPR | British Columbia Drinking Water Protection Regulation |
| BCSDWR | British Columbia Safe Drinking Water Regulation |
| CAEAL | Canadian Association for Environmental Analytical Laboratories |
| Distribution System (D) | Municipally owned and operated water mains and reservoirs |
| DWO | Drinking Water Officer |
| DWPA | Drinking Water Protection Act |
| DWPR | Drinking Water Protection Regulation |
| <i>E. coli</i> | <i>Escherichia coli</i> is a member of the coliform group, part of the family Enterobacteriaceae, and is described as a facultative anaerobic, Gram-negative, non-spore forming, rod-shaped bacterium that possesses the enzyme β -glucuronidase. |
| GCDWQ | Guidelines For Canadian Drinking Water Quality |
| HPC | Heterotrophic Plate Count |
| LCOC | Lake City Operations Centre (GVRD) |
| Primary Disinfection | Initial disinfection of the water as it enters the water transmission system |
| SCADA | Supervisory Control and Data Acquisition (system) |
| Source Water (S) | Untreated water as it enters the GVRD water supply intakes. |
| Total Coliform | Gram-negative, non-spore forming, rod-shaped bacterium that develops a red colony with a metallic (golden) sheen within 24 hours at 35 °C on an endo-type medium containing lactose. |
| Transmission System (T) | Large diameter water mains and water reservoirs operated by the GVRD. |
| WQMRP | Water Quality Monitoring and Reporting Plan |

3. Source (Untreated) Water Quality Monitoring

The GVRD monitors both the microbiological and chemical characteristics of the three major water sources, Capilano, Seymour and Coquitlam. Where a municipality uses a water source other than that from the GVRD (i.e. from Capilano, Seymour or Coquitlam), it is the responsibility of the municipality to monitor the source water. Every effort is made to carry out the various monitoring programs according to the frequencies discussed below, however, it should be recognized that occasionally a scheduled sample may be missed due to equipment failure or inclement weather conditions.

3.1 Microbiological Monitoring

3.1.1 Bacteria

An important consideration in the type and degree of treatment required for a water supply is the bacteriological quality of the source water. In order to assist this assessment process in the GVRD, and to maintain an ongoing record of source water quality, samples of untreated water are collected at the water supply intakes daily and analyzed for *E. coli*.

3.1.2 *Giardia* and *Cryptosporidium*

The GVRD routinely monitors the source waters at the water supply intakes for *Giardia* and *Cryptosporidium*. One sample is taken at each intake every week. Analysis is carried out at the Enhanced Water Testing Laboratory, University of British Columbia.

3.2 Chemical and Physical Monitoring

3.2.1 Turbidity

Since elevated turbidity levels in water may interfere with disinfection, it is important that a water utility monitors the turbidity of the source water on a regular basis. Samples are collected daily from all three sources and analyzed for turbidity in the laboratory. These readings constitute the GVRD's official turbidity readings, which are made available to the public daily. In addition, the GVRD has in-line turbidity monitors at all water supply intakes. Results from these monitors are transmitted via SCADA to LCOC where appropriate action (changes in the operation of the water system) can be taken should a turbidity problem develop.

3.2.2 General Chemical and Physical Quality

The chemical and physical characteristics of each water supply (before treatment) are tested on a routine basis according to the frequencies shown in Table 2. Monitoring is used to demonstrate compliance with the GCDWQ, provide up-to-date background information on water quality and to assess long term changes. Some water quality characteristics, such as iron, ammonia and organic carbon, are monitored more frequently by the GVRD depending on operational requirements and other needs. Samples for source water analysis are collected just up-stream of chlorination in the chlorination plants.

Table 2. Physical and Chemical Testing of GVRD Source Waters (S)

| Parameter | Frequency |
|--|---------------|
| Aldicarb | Annually |
| Aldrin + Dieldrin | Annually |
| Antimony | Semi-annually |
| Aluminum (Tot. & Diss.) | Semi-annually |
| Arsenic | Semi-annually |
| Atrazine + Metabolites | Annually |
| Azinphos-Methyl | Annually |
| Barium | Semi-annually |
| Bendiocarb | Annually |
| Benzene | Annually |
| Benzo(α)pyrene | Semi-annually |
| Boron | Semi-annually |
| Bromide | Quarterly |
| Bromoxynil | Annually |
| Cadmium | Semi-annually |
| Carbaryl | Annually |
| Carbofuran | Annually |
| Carbon Tetrachloride | Annually |
| Chloride | Annually |
| Chlorpyrifos | Annually |
| Chromium | Semi-annually |
| Colour | Weekly |
| Copper | Semi-annually |
| Cyanazine | Annually |
| Cyanide | Annually |
| Diazinon | Annually |
| Dicamba | Annually |
| Dichlorobenzene, 1,2- | Annually |
| Dichlorobenzene, 1,4- | Annually |
| Dichloroethane, 1,2- | Annually |
| Dichloroethylene, 1,1- | Annually |
| Dichloromethane | Annually |
| Dichlorophenol, 2,4- | Annually |
| Dichlorophenoxyacetic Acid 2,4 (2,4-D) | Annually |
| Diclofop-Methyl | Annually |
| Dimethoate | Annually |
| Dinoseb | Annually |
| Diquat | Annually |
| Diuron | Annually |
| Ethylbenzene | Annually |
| Fluoride | Annually |

| Parameter | Frequency |
|--------------------------------------|-----------------|
| Glyphosate | Annually |
| Iron | Semi-annually |
| Lead | Semi-annually |
| Malathion | Annually |
| Manganese | Semi-annually |
| Mercury | Semi-annually |
| Methoxychlor | Annually |
| Metolachlor | Annually |
| Metribuzin | Annually |
| Monochlorobenzene | Annually |
| Nitrate | Semi-annually |
| Nitritotriacetic Acid (NTA) | Annually |
| Odour | Complaint Basis |
| Paraquat (As Dichloride) | Annually |
| Parathion | Annually |
| Pentachlorophenol | Annually |
| pH | Weekly |
| Phorate | Annually |
| Picloram | Annually |
| Radionuclides (Gross Alpha And Beta) | Annually |
| Selenium | Annually |
| Simazine | Annually |
| Sodium | Semi-annually |
| Sulphate | Semi-annually |
| Sulphide (as H ₂ S) | N/A * |
| Taste | Complaint Basis |
| Temperature | Quarterly |
| Terbufos | Annually |
| Tetrachloroethylene | Annually |
| Tetrachlorophenol, 2,3,4,6- | Annually |
| Toluene | Annually |
| Total Diss. Solids (TDS) | Semi-annually |
| Trichloroethylene | Annually |
| Trichlorophenol, 2,4,6- | Annually |
| Trifluralin | Annually |
| Turbidity | Daily |
| Uranium | Annually |
| Vinyl Chloride | Annually |
| Xylenes (Total) | Annually |
| Zinc | Semi-annually |

* Sulphide (as H₂S) not monitored on surface water supplies; should be monitored on well water.

4. Transmission/Distribution System Monitoring – Treated Water

4.1 Bacteriology Sampling Stations – Type, Location and Number

Dedicated sampling stations connected directly to the water main are preferred (over convenience stations in public buildings) for a number of reasons including consistency of results and accessibility. If the sample is not constantly running the sample line should be of suitable size to allow water from the main to reach the sample tap after a brief period of flushing.

4.1.1 GVRD Transmission Mains and Reservoirs

Each day, the GVRD collects a sample from each water supply at a location downstream of disinfection and upstream of the first customer. The GVRD also collects samples weekly from sites at or just before the last connection on all supply mains as well as at other sites of interest including sites just after river crossings. Samples are also collected weekly from all GVRD treated water reservoirs.

4.1.2 Municipal Distribution Mains

Municipal sampling locations for monitoring the bacteriological quality of the delivered water are distributed as follows:

- 10% source water - *this refers to water entering the municipal distribution grid from the GVRD transmission mains*. Samples taken from GVRD transmission mains in the area can be used to meet this requirement as well as samples from the municipal distribution system just downstream of the connection to the GVRD transmission main.
- 40% medium flow.
- 40% low flow.
- 10% dead ends, unlooped lines, stagnant areas.

The number of samples per municipality, as recommended by the Guidelines For Canadian Drinking Water Quality, is based on population (Table 3). Samples collected from all sites in the GVRD transmission system and reservoirs are analyzed for total coliform bacteria. Samples from municipal distribution systems are analyzed for total coliform and *E. coli* bacteria. All samples analyzed in the GVRD laboratory are also tested for the presence of Heterotrophic Plate Count bacteria on R2A media, with a 5 day incubation at 28 °C. This test is used to monitor the system for the early warning signs of regrowth.

GVRD sampling locations are shown in Appendix 1. Sampling locations in the municipal distribution systems are shown in Appendix 2.

Table 3. Bacteriology Monitoring – Municipal Samples

| City | Population (2004) | Number of Sample Sites | Minimum Number of Samples per Month as Required by Schedule B of the DWPR |
|--------------------------|--------------------------|-------------------------------|--|
| Burnaby | 209,328 | 57 | 111 |
| Coquitlam | 126,434 | 28 | 103 |
| Delta | 101,125 | 26 | 100 |
| Langley City | 24,980 | 13 | 25 |
| Langley Township | 93,650 | 22 | 99 |
| Maple Ridge | 72,937 | 12 | 73 |
| New Westminster | 60,123 | 10 | 60 |
| North Vancouver City | 48,619 | 15 | 49 |
| North Vancouver District | 86,359 | 34 | 86 |
| Pitt Meadows | 16,267 | 7 | 16 |
| Port Coquitlam | 58,070 | 10 | 58 |
| Port Moody | 27,466 | 6 | 27 |
| Richmond | 176,438 | 25 | 108 |
| Surrey | 401,839 | 49 | 130 |
| Vancouver | 578,112 | 48 | 148 |
| West Vancouver | 44,545 | 17 | 45 |
| Total | 2,126,292 | 379 | 1238 |

This monitoring program provides a representative picture of drinking water quality in the GVRD water system and within municipal mains. It does not provide a definite picture of drinking water quality within buildings, where water quality can change significantly due to pipe materials, standing times, temperature, and other factors. It can be assumed that samples taken within buildings will be of different quality than those taken from sites on municipal mains.

4.2 Chemical and Physical Parameters

4.2.1 GVRD Transmission Mains

Table 4 lists the chemical and physical testing program proposed for GVRD transmission mains. Sampling for the effects of water main lining associated problems will require expanding the sampling for the associated parameters (eg. BTEX) into affected municipal distribution systems as is described in the table.

Table 4. Chemical/Physical Monitoring in GVRD Transmission System

| Parameter | Location | Frequency |
|-------------------------|--|--|
| Benzo(α)pyrene | GVRD mains with history of coal tar related problems and a representative number of affected municipal distribution mains. | Semi-annually |
| Bromate | GVRD mains downstream of ozonation. | Quarterly |
| Chloride | GVRD System. Primary chlorination evaluation stations and downstream of the secondary disinfection stations. | Semi-annually |
| Ethylbenzene | GVRD mains with history of epoxy lining related problems and a representative number of affected municipal distribution mains. | As required |
| Haloacetic acids | GVRD Sites – end of transmission system. | Quarterly |
| Odour | Any or all sites. | Complaint Basis |
| pH | GVRD Sites – before and after corrosion control. | Semi-annually |
| Sodium | GVRD Sites – after corrosion control and secondary disinfection. | Semi-annually |
| Taste | Any or all sites. | Complaint Basis |
| Temperature | GVRD Sites – primary disinfection evaluation stations. | Quarterly |
| Toluene | GVRD mains with history of epoxy lining related problems and a representative number of affected municipal distribution mains. | As required |
| Total Dissolved Solids | GVRD Sites – pre and post corrosion control. | Semi-annually |
| Trihalomethanes | GVRD Sites – end of transmission system. | Quarterly |
| Turbidity | GVRD Sites – after treatment. | Collected with bacteriological samples |
| Xylenes | GVRD mains with history of epoxy lining related problems and a representative number of affected municipal distribution mains. | As required |

4.2.2 Municipal Distribution Mains

The proposed monitoring program for chemical and physical characteristics of the water in municipal distribution mains is shown in Table 5. Except where otherwise noted, approximately 10% of the sample sites in each municipal system will be sampled for the following parameters at the frequency shown. The sample sites for this testing will be selected with regard to local conditions including factors such as water source, pipe materials, location of water treatment facilities, etc.

Table 5. Chemical/Physical Monitoring in Municipal Distribution Systems

| Parameter | Location | Frequency |
|------------------------|---|--|
| Free Chlorine Residual | All | Tests run when bacteriological samples are taken |
| Copper | Municipal Distribution System ** | Semi-annually |
| Haloacetic acids | Municipal Sites – cross section, representative of all three sources. Minimum of one per municipality. | Quarterly |
| Iron | Representative municipal sites – unlined iron and steel mains. | Semi-annually |
| Lead | Municipal Distribution System ** | Semi-annually |
| Odour | Any or all sites. | Complaint Basis * |
| pH | Municipal Sites – cross section, representative of all three sources. Minimum of one per municipality. | Semi-annually |
| Taste | Any or all sites. | Complaint Basis * |
| Temperature | Representative municipal sites. | Quarterly |
| Trihalomethanes | Municipal Sites – cross section, representative of all sources, minimum of three per municipality. | Quarterly |
| Turbidity | Municipal Sites – all. | Collected with bacteriological samples |
| Vinyl Chloride | Municipal sites where PVC pipe is used in the distribution system – minimum of one per potentially affected system. | Semi-annually |
| Zinc | Municipal Distribution System ** | Semi-annually |

* If a complaint comes to the GVRD, the GVRD will bring it to the attention of the relevant municipality.

** The GCDWQ stipulate that samples for metals analysis should be from a flushed location. This provides rationale to sample for metals in the distribution system as opposed to locations in buildings.

5. Reporting

Section 15 (b) of the DWPA requires a water supplier to report on monitoring results. As well, in accordance with Sec. 11 of the DWPR, each purveyor, municipal and the GVRD, must make an annual written report to the consumers and to its Medical Health Officer by the end of June. The annual report will include the quality of the water with respect to all microbiological and chemical standards. This report must also include the purveyor's plan (including time lines) for addressing any standards that are not met. Reporting is summarized in Table 6.

Table 6. Reports

| Title | Report Content | Target Audience | Frequency |
|---|---|--|--|
| GVRD Routine Municipal Reports | Municipal distribution system microbiological analyses and related parameters (chlorine, turbidity, temperature, HPC).* | Municipalities** Health Regions | Batch basis. In general once per week. |
| GVRD Monthly Reports | GVRD transmission mains microbiological analyses and related parameters (chlorine, turbidity, temperature, HPC). Information is used to supplement municipal monitoring data. | Health Regions | Monthly |
| GVRD (GVWD) Annual Water Quality Report | GVRD source water microbiological, chemical and physical quality, GVRD treated water quality, municipal water quality. Summary presentation of all monitoring information. | Health Regions GVRD Board Municipal Councils General Public | Annually (Public Report by the end of June) |
| Municipal Annual Water Quality Reports | Municipal distribution system water quality, microbiological and related parameters (see Table 5). Summary presentation of all source water chemistry and distribution system water monitoring information. | Health Regions Municipal Councils General Public | Annually (Public Report by the end of June) |

* Reports from GVRD lab for samples from municipalities using GVRD lab.

** Preliminary reports are provided verbally or by electronic mail immediately if the GVRD laboratory suspects a problem at a particular sample site. Written reports are sent out by the GVRD lab only after data have been certified. Results not meeting standards will be highlighted in written reports where possible.

The WQMRP has been accepted by both Vancouver Coastal Health and the Fraser Health Authority. The WQMRP is intended to fully meet the requirements of the DWPA and the DWPR however it is acknowledged that there may be circumstances that the water supplier's MHO, DWO (or DWO delegate) may place additional requirements in accordance with the provisions of the DWPA.

6. Emergency Response

6.1 Notification Requirements

Public health should be notified in the situations shown in Table 7.

Table 7. Notification for Unusual Situations Affecting Water Potability

| Situation | Notifying Agency | Agency Notified | Time Frame For Notification |
|--|--|---|--|
| GVRD <i>E. Coli</i> Positive Sample | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate |
| Municipal <i>E. Coli</i> Positive Sample | Laboratory ² Municipality ³ | MHO (or delegate) | Immediate |
| Chemical Contamination - GVRD | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate |
| Chemical Contamination - Municipality | Municipality | MHO (or delegate) | Immediate |
| Turbidity > 5 NTU | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate |
| Disinfection Failure – Source Water (Primary Disinfection) | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate (As per DWPA) |
| Disinfection Failure – Rechlorination (Secondary Disinfection) | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate, in any situation in which the BCDWPR or the GCDWQ may not be met. |
| Loss of Pressure Due to High Demand | Municipality | MHO (or delegate) GVRD | Immediate |
| Line Break ⁴ – Municipality | Municipality | MHO (or delegate) | As required by Health Regions |
| Line Break ⁴ – GVRD | GVRD | Municipality(ies) | As required by Municipalities |
| Line Break ⁵ – Municipality | Municipality | MHO (or delegate) | Immediate |
| Line Break ⁵ – GVRD | GVRD | GVRD MHO Municipality(ies) ¹ | Immediate |

1. Affected municipality(ies) to notify local public health contact.
2. Laboratory to immediately notify the MHO, DWO (or delegates) and the water supplier as per section 12 (1) of the DWPA.
3. Municipality to immediately notify the MHO, DWO (or delegates) as per section 12 (2) of the DWPA.
4. With no suspected contamination.
5. With suspected contamination.

6.2 Response Plans

Emergency situations with the GVRD and municipal water supplies have been divided into four main areas of response as follows:

- An *E. coli* positive sample (in either the GVRD water system or in a municipal water system).
- Loss of disinfection.
- A turbidity event.
- Loss of GVRD and municipal water system integrity (potential contamination).

A response protocol for each situation is provided in Appendix 3.

In addition, under Sec. 10 of the DWPA, each municipality is required to have its own emergency response plan to cover specific emergencies.

A Contingency Plan for Water Quality is provided in Appendix 4 for those situations where a boil water advisory may be required.

6.3 Major Emergency Situations

Major natural disasters such as earthquakes would require the implementation of the emergency response plans that have been or are being developed by the GVRD and each of the member municipalities. Documentation of these plans is beyond the scope of this document.

APPENDIX ‘C’

B.C. Drinking Water Protection Regulation

Guidelines for Canadian Drinking Water Quality – Summary Table

B.C Drinking Water Protection Regulation



B.C. Reg. 200/2003

Deposited May 16, 2003

O.C. 508/2003

Drinking Water Protection Act
DRINKING WATER PROTECTION REGULATION

[includes amendments up to B.C. Reg. 87/2011, May 19, 2011]

Contents

- 1 Definitions
- 2 Standards for potable water
- 3 Domestic water system
- 3.1 Exemptions
 - 4 Prescribed water supply systems
 - 5 Treatment
 - 6 Construction permits
 - 7 Operating permits and fees
- 7.1 Decals
- 7.2 Permits and decals not transferable
- 7.3 Temporary facilities
 - 8 Water monitoring analysis
 - 9 Immediate reporting standard
- 10 Public notification
- 11 Time limits for publication
- 12 Qualification standards for persons operating water supply systems
- 13 Emergency response and contingency plan
- 14 Well floodproofing
- 15 Assessment response plan

Schedule A

Schedule B

Schedule C

Definitions

1 In this regulation:

"Act" means the *Drinking Water Protection Act*;

"building system" means a system, within a building, to which the British Columbia Plumbing Code applies, that receives water from a water supply system operating under a valid operating permit under the Act;

"connection" means the line from the water main to a dwelling, campsite or premises;

"decal" means an adhesive label that is issued and affixed to an operating permit at the time fees under this regulation are paid or remitted;

"fiscal year" means the period from April 1 in one year to March 31 in the next year;

"small system" means a water supply system that serves up to 500 individuals during any 24 hour period.

"system within a system" means a water supply system that, in the opinion of a drinking water officer or issuing official,

(a) redistributes water from a water supply system operating under a valid operating permit under the Act, and

(b) does not require further treatment processes, additional infrastructure or ongoing maintenance to prevent a drinking water health hazard.

[en. B.C. Reg. 352/2005, s. 1; am. B.C. Regs. 5/2007, App. 1, s. 1; 363/2008, s. 1; 87/2011, s. 1.]

Standards for potable water

2 The prescribed water quality standards for potable water are set out in Schedule A.

Domestic water system

3 The following are excluded from the definition of "domestic water system" in the Act:

(a) equipment, works and facilities constructed, operated or maintained

(i) under a licence, as defined in the *Water Act*, for conservation, power or storage purposes,

(ii) under a permit issued under the *Water Act*,

(iii) for bottled water production or distribution, or

(iv) for drinking water dispensing machines;

(b) a reservoir relating to a licence or permit referred to in paragraph (a);

(c) a building system;

(d) a system within a system.

[en. B.C. Reg. 352/2005, s. 2; am. B.C. Regs. 363/2008, s. 2; 87/2011, s. 2.]

Exemptions

3.1 A small system is exempt from section 6 of the Act if

(a) the system does not provide water for human consumption or food preparation purposes, and is not connected to a water supply system that provides water for human consumption and food preparation purposes, or

(b) each recipient of the water from the system has a point of entry or point of use treatment system that makes the water potable.

[en. B.C. Reg. 352/2005, s. 3.]

Prescribed water supply systems

- 4** (1) All water supply systems are prescribed for the purposes of sections 8, 10, 11 and 22 (1) (b) of the Act.
- (2) All water supply systems, except small systems, are prescribed for the purposes of section 9 of the Act.

[en. B.C. Reg. 352/2005, s. 4.]

Treatment

- 5** (1) In this section:

"ground water" means ground water as defined in section 1 of the *Water Act*;

"surface water" means water from a source which is open to the atmosphere and includes streams, lakes, rivers, creeks and springs.

- (2) For the purposes of section 6 (b) of the Act, drinking water from a water supply system must be disinfected by a water supplier if the water originates from

- (a) surface water, or
- (b) ground water that, in the opinion of a drinking water officer, is at risk of containing pathogens.

[am. B.C. Reg. 352/2005, s. 5.]

Construction permits

- 6** (1) The following individuals are authorized to issue construction permits:
- (a) a drinking water officer who is a professional engineer, or who is working under the direction of a professional engineer;
 - (b) a professional engineer who has been approved by a drinking water officer.
- (2) An issuing official under subsection (1) may issue a construction permit to a person after receiving an application in a form satisfactory to the issuing official.
- (3) A person does not require a construction permit
- (a) if the person is undertaking emergency repairs to a water supply system,
 - (b) for a water supply system that is a tank truck or a vehicle water tank, or
 - (c) for a small system, provided that an issuing official waives the requirement for a construction permit.
- (4) A valid and subsisting construction permit that was issued under section 2 of the Safe Drinking Water Regulation, B.C. Reg. 230/92, before the repeal of that regulation is deemed to be a construction permit issued under this regulation and remains valid until its expiration date unless earlier surrendered, suspended or cancelled.

[am. B.C. Reg. 352/2005, s. 6.]

Operating permits and fees

- 7** (1) A drinking water officer may issue an operating permit to a water supplier after receiving
- (a) an application for an operating permit in a form satisfactory to the drinking water officer, and
 - (b) the fee set out in Schedule C.
- (2) An operating permit in force on March 31 of a year expires on March 31 of that year.
- (3) Despite subsection (2), an operating permit issued for a period of less than 12 months expires on the date specified on the approved application.
- (4) A drinking water officer may renew an operating permit if
- (a) the operating permit was in force anytime during the 12 months prior to the renewal in respect of the same water supply system, and
 - (b) the fee set out in Schedule C is paid before the effective date of the renewal.
- (5) Approval is given for the remission of a fee paid under this section if
- (a) the water supplier applies for the remission, and
 - (b) the fee is for a month of the fiscal year for which the water supplier was not required to have the operating permit to which the fee applies.
- (6) A valid and subsisting operating permit that was issued under section 4 of the Safe Drinking Water Regulation, B.C. Reg. 230/92, before the repeal of that regulation is deemed to be an operating permit issued under this regulation and remains valid until its expiration date unless earlier surrendered, suspended or cancelled.

[en. B.C. Reg. 5/2007, App. 1, s. 2.]

Decals

- 7.1** (1) If, in accordance with section 7, an operating permit is issued or renewed, a drinking water officer must issue a decal to the water supplier to cover the period for which the fee is paid.
- (2) If an operating permit does not bear a decal or if that decal does not cover the current date, then the operating permit is not valid.

[en. B.C. Reg. 5/2007, App. 1, s. 2.]

Permits and decals not transferable

- 7.2** An operating permit or a decal is not transferable.

[en. B.C. Reg. 5/2007, App. 1, s. 2.]

Temporary facilities

- 7.3** Despite sections 7 and 7.1, if an operating permit is issued for no more than 14 days during a fiscal year, then
- (a) approval is given for a reduction in the applicable fee so that the water

supplier is not required to pay the fee set out in the Schedule, and

(b) the operating permit is not required to bear a decal to be valid.

[en. B.C. Reg. 5/2007, App. 1, s. 2.]

Water monitoring analysis

8 (1) A water supplier must transport water samples to a laboratory in accordance with the procedures established by a drinking water officer.

(2) For the purpose of section 11 (1) of the Act, a water supplier must monitor for total coliform bacteria and, effective April 1, 2006, *Escherichia coli*, at the frequencies set out in Schedule B of this regulation.

(3) Despite subsection (2), a drinking water officer may establish different sampling frequencies for a water supplier.

(4) A laboratory carrying out monitoring analyses for the parameters referred to in subsection (2) must be approved in writing by the Provincial health officer.

(5) If requested to do so by a drinking water officer, a laboratory must provide to the drinking water officer, the water supplier, or both, a report

(a) listing all water samples sent by the water supplier to the laboratory, and

(b) describing, for all samples analyzed, the results of any monitoring analyses for total coliform bacteria and *Escherichia coli*.

[am. B.C. Reg. 352/2005, s. 7.]

Immediate reporting standard

9 (1) Subject to subsection (2), immediate reporting is required under section 12 of the Act if the water quality standards in Schedule A are not met for the fecal coliform bacteria or *Escherichia coli* parameters.

(2) Immediate reporting is not required if a water sample that failed to meet the immediate reporting standard

(a) was collected from a location in the water supply system before the water is treated for the removal or inactivation of pathogens,

(b) is not used for domestic purposes, or

(c) is water for which a public advisory to boil for drinking water has been issued.

Public notification

10 If water provided by a domestic water system is not or may not be potable water, the owner of a public premises that is served by the domestic water system must do both of the following:

(a) notify the public that the water is not potable water by posting a sign at every sink or drinking water fountain accessible to the public;

(b) if normal business practices provide an opportunity, verbally advise any

person who may use the domestic water system for a domestic purpose that the water is not potable water.

Time limits for publication

- 11** For the purposes of section 15 (b) of the Act, a water supplier must prepare and make public, within 6 months of the end of the calendar year, an annual report of the results of the monitoring required by this regulation, its operating permit or the drinking water officer.

Qualification standards for persons operating water supply systems

- 12** (1) In this section, "**Environmental Operators Certification Program**" means the program of classification and certification for water supply system operators established in British Columbia by the Environmental Operators Certification Program Society.
- (2) Subject to subsections (3) and (6), a person is qualified to operate, maintain or repair a water supply system if the person is certified by the Environmental Operators Certification Program for that class of system as classified under the Environmental Operators Certification Program.
- (3) Subsection (2) applies to water supply systems classified as level 1 or level 2, and effective January 1, 2006, water supply systems classified as level 3.
- (4) Despite section 4 (2) of this regulation, an operating permit may require a person to be certified to operate, maintain or repair a small system.
- (5) Despite subsection (3), an operating permit may establish a later date on which subsection (2) applies to a water supply system.
- (6) Subsection (2) does not apply to a person with specialist knowledge immediately relevant to maintenance or repair of a water supply system provided the maintenance or repair is conducted following procedures approved by a person certified by the Environmental Operators Certification Program.

[en. B.C. Reg. 352/2005, s. 8.]

Emergency response and contingency plan

- 13** (1) In this section, "**public health inspector**" means a public health inspector as defined in the *Health Act*.
- (2) A water supplier must include the following in an emergency response and contingency plan:
- (a) the names and telephone numbers of
 - (i) the management personnel for the water supply system,
 - (ii) the drinking water officer, medical health officer and public health inspector, and
 - (iii) other agencies and officials specified by the drinking water officer;
 - (b) the persons referred to in paragraph (a) to be contacted in each type of emergency or abnormal operational circumstance;
 - (c) the steps to follow in the event of an emergency or abnormal operational

circumstance;

(d) protocols to follow respecting public notice if an immediate reporting standard is not met.

(3) A water supplier must

(a) make the emergency response and contingency plan accessible to the staff of the water supplier, and

(b) provide a copy of the emergency response and contingency plan to the drinking water officer.

(4) A water supplier must make a summary of the emergency response and contingency plan accessible to the users served by its water supply system.

(5) A water supplier must not include in the summary referred to in subsection (4) any information that may reasonably pose a risk to the water supply system.

Well floodproofing

14 For the purpose of section 16 of the Act, the following persons must floodproof their wells in the manner described in section 11 (2) (a) and (b) of the Ground Water Protection Regulation:

(a) the owner or operator of a well that provides or may provide drinking water and that is identified in an assessment as being at risk of flooding;

(b) the owner of a well completed after October 31, 2005 that is for the purpose of supplying a water supply system.

[en. B.C. Reg. 300/2004.]

Assessment response plan

15 For the purposes of section 22 (3) of the Act, an assessment response plan must include provisions to identify, eliminate and prevent cross connections with non-potable water sources.

Schedule A

Water Quality Standards for Potable Water

(sections 2 and 9)

| Parameter: | Standard: |
|---|--|
| Fecal coliform bacteria | No detectable fecal coliform bacteria per 100 ml |
| <i>Escherichia coli</i> | No detectable <i>Escherichia coli</i> per 100 ml |
| Total coliform bacteria | |
| (a) 1 sample in a 30 day period | No detectable total coliform bacteria per 100 ml |
| (b) more than 1 sample in a 30 day period | At least 90% of samples have no detectable total coliform bacteria per 100 ml and no sample has more than 10 total |

coliform bacteria per 100 ml

Schedule B

Frequency of Monitoring Samples for

Prescribed Water Supply Systems

(section 8)

Population Served by the Prescribed

| Water Supply System: | Number of Samples Per Month: |
|-----------------------------|--|
| less than 5 000 | 4 |
| 5 000 to 90 000 | 1 per 1 000 of population |
| more than 90 000 | 90 plus 1 per 10 000 of population in excess of 90 000 |

Schedule C

Operating Permit Fees

[en. B.C. Reg. 5/2007, App. 1, s. 3.]

(section 7)

1 The operating permit fee for a fiscal year is:

- (a) for 1 - 14 connections no charge
- (b) for 15 - 300 connections \$150
- (c) for 301 - 10 000 connections \$250
- (d) for 10 001 - 20 000 connections \$500
- (e) for more than 20 000 connections \$1 000

2 If an operating permit is issued for a period of less than 12 months, the fee is calculated using the following formula:

$$fee = \frac{n \times z}{12}$$

where

n is the number of calendar months of the fiscal year in which the permit will apply, and

z is the applicable fee under section 1.

Note: *this regulation repeals B.C. Reg. 230/92.*

[Provisions of the *Drinking Water Protection Act*, S.B.C. 2001, c. 9, relevant to the enactment of this regulation: sections 48 and 49]

Copyright (c) Queen's Printer, Victoria, British Columbia, Canada

**Guidelines
For Canadian Drinking Water
Quality**

Summary Table



Guidelines for Canadian Drinking Water Quality

Summary Table

Prepared by the

Federal-Provincial-Territorial Committee on
Drinking Water
of the
Federal-Provincial-Territorial Committee on
Health and the Environment

December 2010

Table of Contents

| | |
|---|----|
| Introduction | 3 |
| Membership of the Federal-Provincial-Territorial Committee on Drinking Water | 4 |
| New, revised, reaffirmed and upcoming guidelines | 5 |
| Table 1. New and revised guidelines | 5 |
| Table 2. Guidance documents | 6 |
| Table 3. Reaffirmed guidelines | 7 |
| Table 4. Upcoming documents | 7 |
| Guidelines for microbiological parameters | 8 |
| Bacteriological guidelines | 8 |
| Protozoa | 8 |
| Viruses | 9 |
| Turbidity | 9 |
| Guidelines for chemical and physical parameters | 9 |
| Table 5. Health-based and aesthetic guidelines for chemical/physical parameters | 10 |
| Table 6. Parameters without numerical guidelines | 13 |
| Table 7. Parameters that have been archived | 13 |
| Guidelines for radiological parameters | 14 |
| Table 8. Health based guidelines for radiological parameters | 15 |

Introduction

The *Guidelines for Canadian Drinking Water Quality* are published by Health Canada on behalf of the Federal-Provincial-Territorial Committee on Drinking Water (CDW). This summary table is updated regularly and published on Health Canada's website (www.healthcanada.gc.ca/waterquality). It supersedes all previous versions, as well as the published booklet of the *Sixth Edition of the Guidelines for Canadian Drinking Water Quality*.

These guidelines are based on current, published scientific research related to health effects, aesthetic effects, and operational considerations. Health-based guidelines are established on the basis of comprehensive review of the known health effects associated with each contaminant, on exposure levels and on the availability of treatment and analytical technologies. Aesthetic effects (e.g., taste, odour) are taken into account when these play a role in determining whether consumers will consider the water drinkable. Operational considerations are factored in when the presence of a substance may interfere with or impair a treatment process or technology (e.g., turbidity interfering with chlorination or UV disinfection) or adversely affect drinking water infrastructure (e.g., corrosion of pipes).

The Federal-Provincial-Territorial Committee on Drinking Water establishes the Guidelines for Canadian Drinking Water Quality specifically for contaminants that meet all of the following criteria:

1. exposure to the contaminant could lead to adverse health effects;
2. the contaminant is frequently detected or could be expected to be found in a large number of drinking water supplies throughout Canada; and
3. the contaminant is detected, or could be expected to be detected, at a level that is of possible health significance.

If a contaminant of interest does not meet all these criteria, the Federal-Provincial-Territorial Committee on Drinking Water may choose not to establish a numerical guideline or develop a Guideline Technical Document. In that case, a Guidance Document may be developed.

Guidance Documents undergo a process similar to Guideline Technical Documents, including public consultations through the Health Canada website. They are offered as information for drinking water authorities, and help provide guidance relating to contaminants, drinking water management issues or emergency situations. Consultation documents, Guideline Technical Documents and Guidance documents are available from the Health Canada website (www.healthcanada.gc.ca/waterquality).

In general, the highest priority guidelines are those dealing with microbiological contaminants, such as bacteria, protozoa and viruses. Any measure taken to reduce concentrations of chemical contaminants should not compromise the effectiveness of disinfection.

Inquiries can be directed to: water_eau@hc-sc.gc.ca

Membership of the Federal-Provincial-Territorial Committee on Drinking Water

Jurisdictional representatives

| | | |
|---------------------------|--|----------------------|
| Alberta | Department of Environment | Dr. Donald Reid |
| British Columbia | Ministry of Health Services | Mr. Barry Boettger |
| Manitoba | Department of Water Conservation | Ms. Kim Philip |
| New Brunswick | Department of Health and Wellness | Ms. Karen White |
| Newfoundland and Labrador | Department of Environment and Conservation | Mr. Haseen Khan |
| Northwest Territories | Stanton Territorial Health Authority | Mr. Duane Fleming |
| Nova Scotia | Department of Environment and Labour | Ms. Judy MacDonald |
| Nunavut Territory | Department of Health and Social Services | Mr. Peter Workman |
| Ontario | Ministry of the Environment | Dr. Satish Deshpande |
| Prince Edward Island | Department of Environment, Energy and Forestry | Mr. George Somers |
| Québec | Ministère du Développement durable, de l'Environnement et des Parcs | Ms. Caroline Robert |
| Saskatchewan | Department of the Environment | Mr. Sam Ferris |
| Yukon Territory | Department of Health and Social Services | Ms. Patricia Brooks |
| Canada | Department of Health | Dr. John Cooper |

Liaison officers

| | |
|--|-------------------|
| Federal-Provincial-Territorial Committee on Health and the Environment (CHE) | Mr. Peter Workman |
| Environment Canada/Canadian Council of Ministers of the Environment | Dr. Doug Spry |

Committee secretary

| | |
|--|-----------------|
| Health Canada (Water, Air and Climate Change Bureau, Safe Environments Directorate, Healthy Environments and Consumer Safety Branch) | Ms. Anne Vézina |
|--|-----------------|

New, revised, reaffirmed and upcoming guidelines

Guidelines for several chemical, physical and microbiological parameters are new or have been revised since the publication of the *Sixth Edition of the Guidelines for Canadian Drinking Water Quality* in 1996. These new and revised guidelines are presented in Table 1.

Table 1. New and revised guidelines

| Parameter | Guideline (mg/L) | Previous guideline (mg/L) | CHE approval |
|--|---------------------------------|---------------------------|--------------|
| <i>Microbiological parameters</i>^a | | | |
| Bacteriological | | 0 coliforms/100 mL | |
| <i>E. coli</i> | 0 per 100 mL | | 2006 |
| Total coliforms | 0 per 100 mL | | 2006 |
| Heterotrophic plate count | No numerical guideline required | | 2006 |
| Emerging pathogens | No numerical guideline required | | 2006 |
| Protozoa | No numerical guideline required | None | 2004 |
| Enteric viruses | No numerical guideline required | None | 2004 |
| Turbidity | 0.3/1.0/0.1 NTU ^b | 1.0 NTU | 2004 |
| <i>Chemical and physical parameters</i> | | | |
| Aluminum | 0.1/0.2 ^c | None | 1999 |
| Antimony | 0.006 | None | 1997 |
| Arsenic | 0.01 | 0.025 | 2006 |
| Benzene | 0.005 | 0.005 | 2009 |
| Bromate | 0.01 | None | 1999 |
| Chlorate | 1 | None | 2008 |
| Chlorine | No numerical guideline required | None | 2009 |
| Chlorite | 1 | None | 2008 |
| Cyanobacterial toxins—microcystin-LR | 0.0015 | None | 2002 |
| Fluoride | 1.5 | 1.5 | 1996 |
| Formaldehyde | No numerical guideline required | None | 1998 |
| Haloacetic Acids—Total (HAAs) | 0.08 | None | 2008 |
| 2-Methyl-4-chlorophenoxyacetic acid (MCPA) | 0.1 | None | 2010 |
| Methyl <i>tertiary</i> -butyl ether (MTBE) | 0.015 | None | 2006 |
| Trichloroethylene (TCE) | 0.005 | 0.05 | 2005 |
| Trihalomethanes—Total (THMs) ^d | 0.1 | 0.1 | 2006 |

Guidelines for Canadian Drinking Water Quality—Summary Table

| Parameter | Guideline (mg/L) | Previous guideline (mg/L) | CHE approval |
|---------------------------------------|------------------|---------------------------|--------------|
| Uranium | 0.02 | 0.1 | 2000 |
| <i>Radiological parameters</i> | | | |
| Cesium-137 (¹³⁷ Cs) | 10 Bq/L | 10 Bq/L | 2009 |
| Iodine-131 (¹³¹ I) | 6 Bq/L | 6 Bq/L | 2009 |
| Lead-210 (²¹⁰ Pb) | 0.2 Bq/L | 0.1 Bq/L | 2009 |
| Radium-226 (²²⁶ Ra) | 0.5 Bq/L | 0.6 Bq/L | 2009 |
| Strontium-90 (⁹⁰ Sr) | 5 Bq/L | 5 Bq/L | 2009 |
| Tritium (³ H) | 7000 Bq/L | 7000 Bq/L | 2009 |

^aRefer to section on Guidelines for microbiological parameters.

^bBased on conventional treatment/slow sand or diatomaceous earth filtration/membrane filtration.

^cThis is an operational guidance value, designed to apply only to drinking water treatment plants using aluminum-based coagulants. The operational guidance values of 0.1 mg/L applies to conventional treatment plants, and 0.2 mg/L applies to other types of treatment systems.

^dThe separate guideline for BDCM was rescinded based on new science. See addendum to the THM document.

In certain situations, the Federal-Provincial-Territorial Committee on Drinking Water may choose to develop guidance documents: for contaminants that do not meet the criteria for guideline development, and for specific issues for which operational or management guidance is warranted.

Table 2. Guidance documents

| Parameter or issue | CHE approval |
|-------------------------------------|--------------|
| Boil water advisories | 2009 |
| Chloral hydrate | 2008 |
| Corrosion Control | 2009 |
| Drinking water avoidance advisories | 2009 |
| Potassium from water softeners | 2008 |

The Federal-Provincial-Territorial Committee on Drinking Water has established a science-based process to systematically review older guidelines to assess the need to update them. Table 3 provides the list of parameters whose guidelines remain appropriate and have been reaffirmed as a result of this review. Health Canada and the FPT Committee on Drinking Water will continue to monitor research on these parameters and recommend any revision(s) to the guidelines that is deemed necessary.

Table 3. Reaffirmed guidelines (2005)

| | | | | |
|-----------------|--------------------|--------------|-------------------|-----------------------|
| Asbestos | Chloride | Diuron | Odour | 2,3,4,6- |
| Azinphos-methyl | Colour | Ethylbenzene | Paraquat | Tetrachlorophenol |
| Bendiocarb | Cyanazine | Gasoline | Pentachlorophenol | Toluene |
| Benzo(a)pyrene | Diazinon | Glyphosate | Phorate | 2,4,6-Trichlorophenol |
| Bromoxynil | Dicamba | Iron | Picloram | Trifluralin |
| Cadmium | 2,4-Dichlorophenol | Magnesium | Silver | Xylenes |
| Calcium | Diclofop-methyl | Malathion | Taste | Zinc |
| Carbaryl | Dimethoate | Methoxychlor | Temperature | |
| Carbofuran | Diquat | Metribuzin | Terbufos | |

Table 4 outlines documents which are being or have been developed and are awaiting approval through the Federal-Provincial-Territorial process.

Table 4. Upcoming documents (not yet finalized/approved)

| Parameter or subject | Document type (GTD or guidance) | Current status |
|-------------------------------|------------------------------------|-----------------------------|
| Ammonia | GTD | In preparation ^b |
| Carbon tetrachloride | GTD | In preparation ^a |
| Chromium | GTD | In preparation ^b |
| Dichloroethane, 1,2- | GTD | In preparation ^b |
| Dichloromethane | GTD | In preparation ^a |
| <i>E.coli</i> | GTD | In preparation ^b |
| Enteric viruses | GTD | In preparation ^a |
| Fluoride | GTD | In preparation ^a |
| Heterotrophic plate count | guidance | In preparation ^b |
| Nitrate/Nitrite | GTD | In preparation ^b |
| N-Nitrosodimethylamine (NDMA) | GTD | In preparation ^a |
| Protozoa | GTD | In preparation ^b |
| Selenium | GTD | In preparation ^b |
| Tetrachloroethylene | GTD | In preparation ^b |
| Total coliforms | GTD | In preparation ^b |
| Turbidity | GTD | In preparation ^b |
| Vinyl chloride | GTD | In preparation ^b |

^aFinal guideline technical document or guidance document in preparation for final approval/posting.

^bGuideline technical document or guidance document being prepared for public consultation.

Guidelines for microbiological parameters

Currently available detection methods do not allow for the routine analysis of all microorganisms that could be present in inadequately treated drinking water. Instead, microbiological quality is determined by testing drinking water for *Escherichia coli*, a bacterium that is always present in the intestines of humans and other animals and whose presence in drinking water would indicate faecal contamination of the water.

Bacteriological guidelines

Escherichia coli

The maximum acceptable concentration (MAC) of *Escherichia coli* in public, semi-public, and private drinking water systems is none detectable per 100 mL.

Testing for *E. coli* should be carried out in all drinking water systems. The number, frequency, and location of samples for *E. coli* testing will vary according to the type and size of the system and jurisdictional requirements.

Total coliforms

The MAC of total coliforms in water leaving a treatment plant in a public system and throughout semi-public and private supply systems is none detectable per 100 mL.

For distribution systems in public supplies where fewer than 10 samples are collected in a given sampling period, no sample should contain total coliform bacteria. In distribution systems where greater than 10 samples are collected in a given sampling period, no consecutive samples from the same site or not more than 10% of samples should show the presence of total coliform bacteria.

Testing for total coliforms should be carried out in all drinking water systems. The number, frequency, and location of samples for total coliform testing will vary according to the type and size of the system and jurisdictional requirements.

Heterotrophic plate count

No MAC is specified for heterotrophic plate count (HPC) bacteria in water supplied by public, semi-public, or private drinking water systems. Instead, increases in HPC concentrations above baseline levels are considered undesirable.

Emerging pathogens

No MAC for current or emerging bacterial waterborne pathogens has been established. Current bacterial waterborne pathogens include those that have been previously linked to gastrointestinal illness in human populations. Emerging bacterial waterborne pathogens include, but are not limited to, *Legionella*, *Mycobacterium avium* complex, *Aeromonas hydrophila*, and *Helicobacter pylori*.

Protozoa

Although *Giardia* and *Cryptosporidium* can be responsible for severe and, in some cases, fatal gastrointestinal illness, it is not possible to establish MACs for these protozoa in drinking water at this time. Routine methods available for the detection of cysts and oocysts suffer from low recovery rates and do not provide any information on their viability or human infectivity. Nevertheless, until better monitoring data and information on the viability and infectivity of cysts and oocysts present in drinking water are available, measures should be implemented to reduce the risk of illness as much as possible. If the presence of viable, human-infectious cysts or oocysts is known or suspected in source waters, or if

Giardia or *Cryptosporidium* has been responsible for past waterborne outbreaks in a community, a treatment and distribution regime and a watershed or wellhead protection plan (where feasible) or other measures known to reduce the risk of illness should be implemented. Treatment technologies in place should achieve at least a 3-log reduction in and/or inactivation of cysts and oocysts, unless source water quality requires a greater log reduction and/or inactivation.

Viruses

Although enteric viruses can be responsible for severe and, in some cases, fatal illnesses, it is not possible to establish MACs for enteric viruses in drinking water at this time. Treatment technologies and watershed or wellhead protection measures known to reduce the risk of waterborne outbreaks should be implemented and maintained if source water is subject to faecal contamination or if enteric viruses have been responsible for past waterborne outbreaks. Where treatment is required, treatment technologies should achieve at least a 4-log reduction and/or inactivation of viruses.

Turbidity

Waterworks systems that use a surface water source or a groundwater source under the direct influence of surface water should filter the source water to meet the following health-based turbidity limits, as defined for specific treatment technologies. Where possible, filtration systems should be designed and operated to reduce turbidity levels as low as possible, with a treated water turbidity target of less than 0.1 NTU at all times. Where this is not achievable, the treated water turbidity levels from individual filters:

1. For **chemically assisted filtration**, shall be less than or equal to **0.3 NTU** in at least 95% of the measurements made, or at least 95% of the time each calendar month, and shall not exceed 1.0 NTU at any time.
2. For **slow sand or diatomaceous earth filtration**, shall be less than or equal to **1.0 NTU** in at least 95% of the measurements made, or at least 95% of the time each calendar month, and shall not exceed 3.0 NTU at any time.
3. For **membrane filtration**, shall be less than or equal to **0.1 NTU** in at least 99% of the measurements made, or at least 99% of the time each calendar month, and shall not exceed 0.3 NTU at any time. If membrane filtration is the sole treatment technology employed, some form of virus inactivation* should follow the filtration process.

Guidelines for chemical and physical parameters

Table 5 provides the complete list of all current numerical Guidelines for chemical and physical parameters. Guidelines are either health-based and listed as Maximum Acceptable Concentrations (MAC), based on aesthetic considerations and listed as aesthetic objectives (AO) or established based on operational considerations and listed as Operational Guidance Values (OG). Parameters for which the health-based guideline was developed as an interim maximum acceptable concentration (IMAC) are identified with an asterisk (*) in the table below. The use of these 'interim' MACs was discontinued by the Federal-Provincial-Territorial Committee on Drinking Water in 2003. For more information on specific guidelines, please refer to the guideline technical document for the parameter of concern.

*Some form of virus inactivation is required for all technologies. The difference is that chemically assisted, slow sand and diatomaceous earth filters are credited with log virus reductions and membrane filters receive no credit.

Guidelines for Canadian Drinking Water Quality—Summary Table

Table 5. Health-based and aesthetic guidelines for chemical/physical parameters

| Parameter | MAC (mg/L) | AO [or OG] (mg/L) | Year of approval (or reaffirmation) |
|---|---------------|-------------------------|--|
| Aldicarb | 0.009 | | 1994 |
| Aldrin + dieldrin | 0.0007 | | 1994 |
| Aluminum ^a | | [0.1/0.2] | 1998 |
| *Antimony ^b | 0.006 | | 1997 |
| Arsenic | 0.01 | | 2006 |
| *Atrazine + metabolites | 0.005 | | 1993 |
| Azinphos-methyl | 0.02 | | 1989 (2005) |
| Barium | 1 | | 1990 |
| Bendiocarb | 0.04 | | 1990 (2005) |
| Benzene | 0.005 | | 2009 |
| Benzo[a]pyrene | 0.00001 | | 1988 (2005) |
| *Boron | 5 | | 1990 |
| *Bromate | 0.01 | | 1998 |
| *Bromoxynil | 0.005 | | 1989 (2005) |
| Cadmium | 0.005 | | 1986 (2005) |
| Carbaryl | 0.09 | | 1991 (2005) |
| Carbofuran | 0.09 | | 1991 (2005) |
| Carbon tetrachloride | 0.005 | | 1986 |
| Chloramines—total | 3 | | 1995 |
| Chlorate | 1 | | 2008 |
| Chloride | | ≤250 | 1979 (2005) |
| Chlorite | 1 | | 2008 |
| Chlorpyrifos | 0.09 | | 1986 |
| Chromium | 0.05 | | 1986 |
| Colour ^d | | ≤15 TCU | 1979 (2005) |
| Copper ^b | | ≤1.0 | 1992 |
| *Cyanazine | 0.01 | | 1986 (2005) |
| Cyanide | 0.2 | | 1991 |
| Cyanobacterial toxins—Microcystin-LR ^c | 0.0015 | | 2002 |
| Diazinon | 0.02 | | 1986 (2005) |
| Dicamba | 0.12 | | 1987 (2005) |
| 1,2-Dichlorobenzene ^e | 0.2 | ≤0.003 | 1987 |
| 1,4-Dichlorobenzene ^e | 0.005 | ≤0.001 | 1987 |
| *1,2-Dichloroethane | 0.005 | | 1987 |

Guidelines for Canadian Drinking Water Quality—Summary Table

| Parameter | MAC (mg/L) | AO [or OG] (mg/L) | Year of approval (or reaffirmation) |
|--|---------------|-------------------------|--|
| 1,1-Dichloroethylene | 0.014 | | 1994 |
| Dichloromethane | 0.05 | | 1987 |
| 2,4-Dichlorophenol, | 0.9 | ≤0.0003 | 1987 (2005) |
| *2,4-Dichlorophenoxyacetic acid (2,4 -D) | 0.1 | | 1991 |
| Diclofop-methyl | 0.009 | | 1987 (2005) |
| *Dimethoate | 0.02 | | 1986 (2005) |
| Dinoseb | 0.01 | | 1991 |
| Diquat | 0.07 | | 1986 (2005) |
| Diuron | 0.15 | | 1987 (2005) |
| Ethylbenzene | | ≤0.0024 | 1986 (2005) |
| Fluoride | 1.5 | | 1996 |
| *Glyphosate | 0.28 | | 1987 (2005) |
| Haloacetic Acids—Total (HAAs) | 0.08 | | 2008 |
| Iron | | ≤0.3 | 1978 (2005) |
| Lead ^b | 0.01 | | 1992 |
| Malathion | 0.19 | | 1986 (2005) |
| Manganese | | ≤0.05 | 1987 |
| Mercury | 0.001 | | 1986 |
| Methoxychlor | 0.9 | | 1986 (2005) |
| 2-Methyl-4-chlorophenoxyacetic acid (MCPA) | 0.1 | | 2010 |
| Methyl tertiary-butyl ether (MTBE) | | 0.015 | 2006 |
| *Metolachlor | 0.05 | | 1986 |
| Metribuzin | 0.08 | | 1986 (2005) |
| Monochlorobenzene | 0.08 | ≤0.03 | 1987 |
| Nitrate ^f | 45 | | 1987 |
| Nitritotriacetic acid (NTA) | 0.4 | | 1990 |
| Odour | | Inoffensive | 1979 (2005) |
| *Paraquat (as dichloride) ^g | 0.01 | | 1986 (2005) |
| Parathion | 0.05 | | 1986 |
| Pentachlorophenol | 0.06 | ≤0.030 | 1987 (2005) |
| pH ^h | | 6.5–8.5 | 1995 |
| Phorate | 0.002 | | 1986 (2005) |
| *Picloram | 0.19 | | 1988 (2005) |
| Selenium | 0.01 | | 1992 |
| *Simazine | 0.01 | | 1986 |

Guidelines for Canadian Drinking Water Quality—Summary Table

| Parameter | MAC (mg/L) | AO [or OG] (mg/L) | Year of approval (or reaffirmation) |
|---|---------------|-------------------------|--|
| Sodium ⁱ | | ≤200 | 1992 |
| Sulphate ^j | | ≤500 | 1994 |
| Sulphide (as H ₂ S) | | ≤0.05 | 1992 |
| Taste | | Inoffensive | 1979 (2005) |
| Temperature | | ≤15°C | 1979 (2005) |
| *Terbufos | 0.001 | | 1987 (2005) |
| Tetrachloroethylene | 0.03 | | 1995 |
| 2,3,4,6-Tetrachlorophenol | 0.1 | ≤0.001 | 1987 (2005) |
| Toluene | | ≤0.024 | 1986 (2005) |
| Total dissolved solids (TDS) | | ≤500 | 1991 |
| Trichloroethylene | 0.005 | | 2005 |
| 2,4,6-Trichlorophenol | 0.005 | ≤0.002 | 1987 (2005) |
| *Trifluralin | 0.045 | | 1989 (2005) |
| Trihalomethanes-total (THMs) ^k | 0.1 | | 2006 |
| Turbidity ^l | | | 2004 |
| *Uranium | 0.02 | | 1999 |
| Vinyl chloride | 0.002 | | 1992 |
| Xylenes—total | | ≤0.3 | 1986 (2005) |
| Zinc ^b | | ≤5.0 | 1979 (2005) |

^aThis is an operational guidance value, designed to apply only to drinking water treatment plants using aluminum-based coagulants. The operational guidance values of 0.1 mg/L applies to conventional treatment plants, and 0.2 mg/L applies to other types of treatment systems.

^bFaucets should be thoroughly flushed before water is taken for consumption or analysis.

^cThe guideline is considered protective of human health against exposure to all microcystins that may be present.

^dTCU = true colour unit.

^eIn cases where total dichlorobenzenes are measured and concentrations exceed the most stringent value (0.005 mg/L), the concentrations of the individual isomers should be established.

^fEquivalent to 10 mg/L as nitrate–nitrogen. Where nitrate and nitrite are determined separately, levels of nitrite should not exceed 3.2 mg/L.

^gEquivalent to 0.007 mg/L for paraquat ion.

^hNo units.

ⁱIt is recommended that sodium be included in routine monitoring programmes, as levels may be of interest to authorities who wish to prescribe sodium-restricted diets for their patients.

^jThere may be a laxative effect in some individuals when sulphate levels exceed 500 mg/L.

^kExpressed as a running annual average. The guideline is based on the risk associated with chloroform, the trihalomethane most often present and in greatest concentration in drinking water.

^lRefer to section on Guidelines for microbiological parameters for information related to various treatment processes.

Parameters without guidelines

Some chemical and physical parameters for which a Guideline Technical Document is available have been identified as not requiring a numerical guideline, because currently available data indicate that it poses no health risk or aesthetic problem at the levels generally found in drinking water in Canada.

Table 6. Parameters without numerical guidelines

| | |
|-----------------------|-----------|
| Ammonia | Asbestos |
| Calcium | Chlorine |
| Formaldehyde | Gasoline |
| Hardness ^a | Magnesium |
| Radon | Silver |

^aPublic acceptance of hardness varies considerably. Generally, hardness levels between 80 and 100 mg/L (as CaCO₃) are considered acceptable; levels greater than 200 mg/L are considered poor but can be tolerated; those in excess of 500 mg/L are normally considered unacceptable. Where water is softened by sodium ion exchange, it is recommended that a separate, unsoftened supply be retained for culinary and drinking purposes.

Archived parameters

The Federal-Provincial-Territorial Committee on Drinking Water has established a science-based process to systematically review older guidelines and archive older guidelines which are no longer required. Guidelines are archived for parameters which are no longer found in Canadian drinking water supplies at levels that could pose a risk to human health, including pesticides which are no longer registered for use in Canada, and for mixtures of contaminants that are addressed individually. Table 7 provides the list of parameters whose guidelines have been archived as a result of this review.

Table 7. Parameters that have been archived^a

| | |
|--|--|
| Chlordane (total isomers) ^b | Polychlorinated biphenyls (PCBs) |
| Dichlorodiphenyltrichloroethane (DDT) + metabolites ^b | Polycyclic aromatic hydrocarbons (PAH) ^c |
| Endrin ^b | Resin acids |
| Heptachlor + heptachlor epoxide ^b | Tannin |
| Lignin ^b | Temephos ^d |
| Lindane ^b | Total organic carbon (TOC) |
| Methyl-parathion ^b | Toxaphene ^b |
| Mirex | Triallate ^d |
| Pesticides (total) | 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) ^d |
| Phenols (total) | 2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) ^b |
| Phthalic acid esters (PAE) | |

^aPublished in the 1978 version of the *Supporting Documentation* for these parameters (available upon request).

^bIn 1978 'Pesticides' Supporting Documentation.

^cOther than benzo[a]pyrene.

^dNo documentation available.

Guidelines for radiological parameters

Natural sources of radiation are responsible for the large majority of radiation exposure (>98%), excluding medical exposure. Guidelines for radiological parameters focus on routine operational conditions of existing and new water supplies and does not apply in the event of contamination during an emergency involving a large release of radionuclides into the environment. They have been developed taking into account new studies and approaches, including dosimetric information released by the International Commission on Radiological Protection (ICRP) in 1996 (ICRP, 1996). Maximum acceptable concentrations (MACs) in drinking water have been established for the natural and artificial radionuclides that are most commonly detected in Canadian water supplies, using internationally accepted equations and principles and based solely on health considerations. They are calculated using a reference dose level of 0.1 mSv for 1 year's consumption of drinking water, assuming a consumption of 2 L/day at the MAC.

To facilitate the monitoring of radionuclides in drinking water, the reference level of dose is expressed as an activity concentration, which can be derived for each radionuclide from published radiological data. The National Radiological Protection Board has calculated dose conversion factors (DCFs) for radionuclides based on metabolic and dosimetric models for adults and children. Each DCF provides an estimate of the 50-year committed effective dose resulting from a single intake of 1 Bq[†] of a given radionuclide.

The MACs of radionuclides in public water supplies are derived from adult DCFs, assuming a daily water intake of 2 L, or 730 L/year, and a maximum committed effective dose of 0.1 mSv, or 10% of the International Commission on Radiological Protection limit on public exposure:

$$\text{MAC (Bq/L)} = \frac{1 \times 10^{-4} \text{ (Sv/year)}}{730 \text{ (L/year)} \times \text{DCF (Sv/Bq)}}$$

The radiological effects of two or more radionuclides in the same drinking water source are assumed to be additive. Thus, the following summation formula should be satisfied in order to demonstrate compliance with the guidelines:

$$\sum_i \frac{C_i}{\text{MAC}_i} \leq 1$$

where C_i and MAC_i are the observed and maximum acceptable concentrations, respectively, for each contributing radionuclide. Only those radionuclides that are detected with at least 95% confidence should be included in the summation. Detection limits of undetected radionuclides should not be substituted for the concentrations C_i . Otherwise, a situation could arise where a sample fails the summation criterion even though no radionuclides are present.

Water samples may be initially analysed for the presence of radioactivity using techniques for gross alpha and gross beta determinations rather than measurements of individual radionuclides. Compliance with the guidelines may be inferred if the measurements are less than 0.5 Bq/L for gross alpha

[†]Becquerel (Bq) is the unit of activity of a radioactive substance, or the rate at which transformations occur in the substance. One becquerel is equal to one transformation per second and approximately equal to 27 picocuries (pCi).

activity and less than 1 Bq/L for gross beta activity. Alpha emissions are generally associated with naturally occurring radionuclides, whereas beta emissions are generally associated with artificial radionuclides. Although facilitating routine examination of large numbers of samples, these procedures do not allow for confirmation of the identities of the contributing radionuclides. These measurements are generally suitable either as a preliminary screening procedure to determine if further radioisotope-specific analysis is necessary or, if radionuclide analyses have been carried out previously, for detecting changes in the radiological characteristics of the drinking water source. The sampling and analyses for individual radionuclides should be carried out often enough to accurately characterize the annual exposure. If the source of the radioactivity is known or expected to be changing rapidly with time, then the sampling frequency should reflect this factor. If there is no reason to expect concentrations to vary with time, then sampling may be carried out seasonally, semi-annually or annually. If measured concentrations are consistent and well below the MACs, this would be an argument for reducing the sampling frequency. In contrast, the sampling frequency should be maintained, or even increased, if concentrations are approaching individual MACs or if the sum of ratios of the observed concentration to the MAC for each contributing radionuclide approaches 1.

Table 8. Health based guidelines for radiological parameters

| <i>Radiological parameters</i> | |
|----------------------------------|-----------|
| Cesium-137 (¹³⁷ Cs) | 10 Bq/L |
| Iodine-131 (¹³¹ I) | 6 Bq/L |
| Lead-210 (²¹⁰ Pb) | 0.2 Bq/L |
| Radium-226 (²²⁶ Ra) | 0.5 Bq/L |
| Strontium-90 (⁹⁰ Sr) | 5 Bq/L |
| Tritium (³ H) | 7000 Bq/L |

APPENDIX 'D'

B.C. Centre for Disease Control

**Drinking Water and Those with Weakened
Immune Systems**



Drinking Water and Those with Weakened Immune Systems

Some people with very weak immune systems may be at higher risk of water-borne infections. This file provides information about how to help prevent water-borne infections.

People who have significantly weakened immune systems and who are at higher risk of certain water-borne diseases include:

- People with HIV infection who have a CD4+ count of < 100 cells/mm³.
- People with hematological malignancies (lymphoma or leukemia) who are being actively treated or have been in remission and off treatment for less than 1 year.
- Hematopoietic stem cell transplant recipients.
- People born with diseases that severely affect their immune systems.

Some people with weakened immune systems, such as those with certain types of cancers or taking certain medications, may not be at higher risk of severe water-borne diseases. These people do not need to take extra precautions with their drinking water.

Ask your doctor or specialist how weak your immune system is, and whether you need to take extra precautions.

Diseases from drinking water

Drinking water can contain different organisms, including bacteria, viruses and parasites, which can cause disease. These organisms can exist in the source water such as lake water and survive through treatment, or they can enter the water supply in the distribution system. Well water can be contaminated if the well is not built properly or if it draws on water from the surface of the

ground, such as shallow wells or wells drilled in fractured rock. Surface water, such as rivers, lakes and streams, can also contain disease-causing organisms from animal feces.

If you have a weak immune system, you should not drink water from surface sources or wells potentially contaminated by surface water (for example, dug wells), unless the water has been treated to remove or inactivate at least 99.9% of parasites (protozoa), 99.99% of viruses and 100% of harmful bacteria.

Most community water systems in B.C. have effective treatment, such as disinfection or chlorination, against bacteria and viruses. However, in many cases, treatment may not provide a 99.9% reduction in infectious parasites. Furthermore, some water systems and many private supplies have no treatment at all. If the water you drink has not been disinfected, please refer to HealthLink BC File [#49b How to Disinfect Drinking Water](#).

To further treat drinking water that has been disinfected, consider the methods listed below.

Options for water treatment

Boiling: If your water supply is disinfected you need only bring the water to a full boil to inactivate any *Cryptosporidium* parasites - a major concern for immunocompromised people, as there is no medical treatment for this parasite.

If the water is not yet disinfected, it's recommended you bring water to a full boil for at least one minute as the best way to kill or inactivate bacteria, viruses and parasites.

At elevations over 2,000 meters [6,500 feet], you should boil water for at least two minutes to disinfect it. In this situation, you should not drink or use tap water to brush your teeth, rinse your mouth, mix drinks or make ice cubes without boiling it first.

If you are preparing infant formula, please see HealthLink BC File [#69b Formula Feeding Your Baby: Safely Preparing and Storing Formula](#). Please note that boiling water will get rid of viruses, bacteria and parasites but not chemicals which may be found in the water. For more information, please contact the environmental health officer or drinking water officer at your nearest public health unit.

Filters: If you plan to install a drinking water filter in your home, you will need a system labeled as "Absolute" 1 micron or smaller, and labeled as meeting ANSI/NSF International Standard #53 for removal of parasites. These are *not* suitable for removing bacteria and viruses and should *not* be used *unless* the water supply is at least disinfected first.

Jug-type filters, which sit in a jug and allow water to trickle through, and some tap-mounted and built-in devices are not an appropriate solution. The jug filter models are *not* effective in removing many disease-causing organisms.

Reverse Osmosis (RO): RO is effective against all disease-causing organisms and many chemical contaminants. Unless it has a high capacity, it will only produce small amounts of water and waste a large volume. Speak to a water treatment specialist to see if this is the best option for you.

Ultraviolet (UV) Treatment: UV light will kill many disease-causing organisms, and it is effective against almost all parasites. UV will not kill some bacterial spores and some viruses, so it should *not* be used *unless* the water supply is at least disinfected. UV

treatment units should meet NSF Standard #55A.

Bottled water

If you do not want to drink water from the tap, you may also choose to buy bottled water that has been treated adequately. Most bottled water in B.C. has had RO treatment, but not all has been treated. You should check with the water bottler to find out what treatment it has had. You can still use tap water for cooking as long as you boil it. You can use bottled water treated by reverse osmosis for drinking, brushing teeth, making ice cubes and for recipes where water is used but not boiled such as cold soups or salad dressings.

For more information, including the level of treatment in your local water system, please contact your drinking water purveyor or supplier or the local environmental health officer or drinking water officer. Please also see the following HealthLink BC Files.

[#49a Water-borne Diseases in BC](#)

[#49b How to Disinfect Drinking Water](#)

For more HealthLink BC File topics, visit www.HealthLinkBC.ca/healthfiles/index.stm or your local public health unit.

Click on www.HealthLinkBC.ca or call **8-1-1** for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

Translation services are available in more than 130 languages on request.