Appendix 6
2006 Surface Water Quality Data
Vangorda Creek Drainage

Table 2 Surface Water Total Metal Parameters

| STATION | DATE | AG-T mg/L | AL-T mg/L | AS-T mg/L | BA-T mg/L | BE-T mg/L | BI-T mg/L | B-T mg/L | CA-T mg/L | CD-T mg/L | CN-T mg/L | CO-T mg/L | CR-T mg/L | CU-T mg/L | FE-T mg/L | HG-T mg/L | K-T mg/L | LI-T mg/L | MG-T mg/L | MN-T mg/L | MO-T mg/L | NA-T mg/L | NI-T mg/L | PB-T mg/L | P-T mg/L | SB-T mg/L | SE-T mg/L | SI-T mg/L | SN-T mg/L | SR-T mg/L | TE-T mg/L | TH-T mg/L | TI-T mg/L | TL-T mg/L | U-T mg/L | V-T mg/L | ZN-T mg/L | ZR-T mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LCD | 08-Jun-06 | < 0.00025 | 0.048 | < 0.001 | 0.031 | < 0.001 | < 0.001 | < 0.05 | 80.4 | 0.067 | | 0.33 | < 0.001 | 0.003 | 0.45 | < 0.02 | 1.7 | 0.033 | 77.4 | 33.5 | < 0.0005 | 1.27 | 0.25 | 0.001 | < 0.15 | < 0.001 | 0.002 | 2.2 | < 0.001 | 0.25 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | < 0.0005 | < 0.001 | 87 | < 0.01 |
| LCD | 18-Sep-06 | 0.0004 | 0.52 | 0.002 | 0.022 | < 0.001 | < 0.001 | < 0.05 | 207 | 0.231 | | 1.63 | < 0.001 | 0.022 | 1.9 | < 0.02 | 3.3 | 0.043 | 361 | 187 | 0.0079 | 4.79 | 1.1 | 0.009 | < 0.15 | < 0.001 | 0.007 | 5.6 | < 0.001 | 0.88 | < 0.001 | < 0.0005 | 0.001 | 0.0006 | 0.0041 | < 0.001 | 492 | < 0.01 |
| MOOSESP | 07-Feb-06 | < 0.00025 | 0.015 | < 0.001 | 0.048 | < 0.001 | | < 0.05 | 182 | < 0.0002 | | < 0.001 | < 0.001 | 0.004 | < 0.05 | 0.00022 | 1.9 | | 91.1 | < 0.001 | 0.0018 | 6.94 | 0.002 | 0.001 | < 0.15 | 0.004 | | 4.7 | < 0.001 | 0.59 | | | < 0.001 | | | < 0.001 | 0.008 | < 0.01 |
| MOOSESP | 13-Feb-06 | < 0.00025 | 0.005 | 0.001 | 0.038 | < 0.001 | < 0.001 | < 0.05 | 211 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 2.4 | 0.005 | 99.9 | < 0.001 | 0.0018 | 7.61 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 5.6 | < 0.001 | 0.62 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.017 | < 0.001 | 0.006 | < 0.01 |
| MOOSESP | 17-May-06 | < 0.00025 | < 0.005 | 0.001 | 0.043 | < 0.001 | < 0.001 | < 0.05 | 192 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 2.5 | 0.004 | 84.3 | 0.01 | 0.0017 | 6.72 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.2 | < 0.001 | 0.55 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.014 | < 0.001 | < 0.005 | < 0.01 |
| MOOSESP | 05-Jun-06 | < 0.01 | 0.08 | < 0.03 | 0.025 | < 0.003 | | < 0.01 | 192 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 2.2 | | 92.6 | < 0.003 | < 0.02 | 7.1 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.43 | < 0.03 | 0.5 | | | < 0.005 | | | < 0.01 | 0.006 | < 0.02 |
| MOOSESP | 19-Jun-06 | < 0.00025 | 0.023 | 0.001 | 0.044 | < 0.001 | < 0.001 | < 0.05 | 181 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.09 | < 0.00002 | 2.3 | 0.004 | 85.5 | 0.013 | 0.002 | 7.03 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.3 | < 0.001 | 0.51 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.017 | < 0.001 | 0.009 | < 0.01 |
| MOOSESP | 10-Jul-06 | < 0.01 | 0.08 | < 0.03 | 0.044 | < 0.003 | | < 0.01 | 194 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.02 | | 2 | | 81.1 | < 0.003 | < 0.02 | 6.2 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.31 | < 0.03 | 0.48 | | | < 0.005 | | | < 0.01 | 0.005 | < 0.02 |
| MOOSESP | 18-Jul-06 | < 0.00025 | 0.011 | < 0.001 | 0.03 | < 0.001 | < 0.001 | < 0.05 | 176 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.08 | < 0.00002 | 2.1 | 0.017 | 103 | < 0.001 | 0.0022 | 7.86 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.4 | < 0.001 | 0.52 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.013 | < 0.001 | 0.005 | < 0.01 |
| MOOSESP | 08-Aug-06 | < 0.01 | 0.07 | < 0.03 | 0.046 | < 0.003 | | < 0.01 | 211 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.03 | | 1.8 | | 91.7 | < 0.003 | < 0.02 | 6.8 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.44 | < 0.03 | 0.53 | | | < 0.005 | | | < 0.01 | 0.005 | < 0.02 |
| MOOSESP | 22-Aug-06 | < 0.00025 | < 0.005 | 0.001 | 0.05 | < 0.001 | < 0.001 | < 0.05 | 209 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.12 | < 0.00002 | 2.6 | 0.006 | 105 | 0.007 | 0.0019 | 8.28 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.4 | < 0.001 | 0.64 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.017 | < 0.001 | 0.007 | < 0.01 |
| MOOSESP | 11-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.044 | < 0.001 | < 0.001 | < 0.05 | 189 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.06 | < 0.00002 | 2.2 | 0.005 | 105 | < 0.001 | 0.0018 | 7.9 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.7 | < 0.001 | 0.59 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.015 | < 0.001 | 0.006 | < 0.01 |
| MOOSESP | 26-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.045 | < 0.001 | | < 0.05 | 191 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.14 | | 2.3 | | 93 | < 0.001 | 0.0012 | 7.08 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | | 5.2 | < 0.001 | 0.57 | | | < 0.001 | | | 0.015 | 0.011 | < 0.01 |
| MOOSESP | 16-Oct-06 | < 0.00025 | < 0.005 | < 0.001 | 0.047 | < 0.001 | < 0.001 | < 0.05 | 203 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 2.3 | 0.005 | 105 | 0.001 | 0.0016 | 8.05 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.6 | < 0.001 | 0.59 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.017 | < 0.001 | < 0.005 | < 0.01 |
| MOOSESP | 23-Oct-06 | < 0.01 | 0.09 | < 0.03 | 0.048 | < 0.003 | | < 0.01 | 205 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 2.3 | | 101 | < 0.003 | < 0.02 | 7.6 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.15 | < 0.03 | 0.56 | | | < 0.005 | | | < 0.01 | 0.007 | < 0.02 |
| | average | 0.00325 | 0.031 | 0.010 | 0.042 | 0.00162 | 0.001 | 0.04 | 195 | 0.00322 | | 0.007 | 0.004 | 0.007 | 0.06 | 0.007538 | 2.2 | 0.007 | 95.2 | 0.004 | 0.00738 | 7.32 | 0.007 | 0.010 | 0.15 | 0.016 | 0.001 | 4.88 | 0.010 | 0.56 | 0.001 | 0.0005 | 0.002 | 0.0001 | 0.016 | 0.005 | 0.006538 | 0.013 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.025 | < 0.001 | 0.001 | < 0.01 | 176 | < 0.0002 | | 0.001 | 0.001 | 0.001 | < 0.01 | < 0.00002 | 1.8 | 0.004 | 81.1 | < 0.001 | < 0.02 | 6.2 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.15 | < 0.001 | 0.48 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.013 | < 0.001 | < 0.005 | < 0.01 |
| | maximum | 0.01 | 0.09 | 0.03 | 0.05 | 0.003 | 0.001 | 0.05 | 211 | < 0.01 | | 0.02 | 0.01 | 0.02 | 0.14 | 0.00022 | 2.6 | 0.017 | 105 | 0.013 | 0.02 | 8.28 | < 0.02 | 0.03 | < 0.15 | 0.05 | 0.002 | 5.7 | 0.03 | 0.64 | < 0.001 | < 0.0005 | 0.005 | < 0.0001 | 0.017 | 0.015 | 0.011 | < 0.02 |
| | N > DL | 0 | 8 | 4 | 13 | 0 | 0 | 0 | 13 | 0 | | 0 | 0 | 3 | 7 | 1 | 13 | 7 | 13 | 4 | 9 | 13 | 1 | 2 | 0 | 1 | 1 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 7 | 1 | 11 | 0 |
| | median | 0.00025 | 0.011 | 0.001 | 0.044 | 0.001 | 0.001 | 0.05 | 192 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.05 | 0.00012 | 2.3 | 0.005 | 93 | 0.003 | 0.0019 | 7.1 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.7 | 0.001 | 0.56 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.017 | 0.001 | 0.006 | 0.01 |
| V1 | 20-Mar-06 | < 0.00025 | 0.99 | 0.001 | 0.12 | < 0.001 | < 0.001 | 0.12 | 18.7 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 0.6 | 0.002 | 2.89 | < 0.001 | 0.0007 | 2.27 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.2 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0012 | < 0.001 | 0.038 | < 0.01 |
| V1 | 05-Jun-06 | < 0.00025 | 0.099 | < 0.001 | 0.013 | < 0.001 | < 0.001 | < 0.05 | 4.31 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.02 | 0.4 | < 0.001 | 0.64 | 0.005 | < 0.0005 | 0.87 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 2.4 | < 0.001 | 0.022 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | < 0.0005 | < 0.001 | < 0.005 | < 0.01 |
| V1 | 06-Sep-06 | < 0.00025 | 0.024 | < 0.001 | 0.025 | < 0.001 | < 0.001 | < 0.05 | 9.48 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 0.3 | < 0.001 | 1.4 | < 0.001 | < 0.0005 | 1.79 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.2 | < 0.001 | 0.052 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | < 0.0005 | < 0.001 | < 0.005 | < 0.01 |
| | average | 0.00025 | 0.284 | 0.001 | 0.046 | 0.001 | 0.001 | 0.07 | 10.49 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.07 | 0.01001 | 0.4 | 0.001 | 1.58 | 0.002 | 0.00055 | 1.68 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4 | 0.001 | 0.059 | 0.001 | 0.0005 | 0.0015 | 0.0001 | 0.00068 | 0.001 | 0.013 | 0.01 |
| | minimum | < 0.00025 | 0.024 | < 0.001 | 0.013 | < 0.001 | < 0.001 | < 0.05 | 4.31 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.05 | < 0.00002 | 0.3 | < 0.001 | 0.64 | < 0.001 | < 0.0005 | 0.87 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 2.4 | < 0.001 | 0.022 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | < 0.0005 | < 0.001 | < 0.005 | < 0.01 |
| | maximum | < 0.00025 | 0.99 | < 0.001 | 0.12 | < 0.001 | < 0.001 | 0.12 | 18.7 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.02 | 0.6 | 0.002 | 2.89 | 0.005 | 0.0007 | 2.27 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.2 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.0012 | < 0.001 | 0.038 | < 0.01 |
| | N > DL | 0 | 4 | 1 | 4 | 0 | 0 | 1 | 4 | 0 | | 0 | 0 | 0 | 1 | 0 | 4 | 1 | 4 | 1 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 |
| | median | 0.00025 | 0.0615 | 0.001 | 0.025 | 0.001 | 0.001 | 0.05 | 9.48 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.05 | 0.01001 | 0.35 | 0.001 | 1.4 | 0.001 | 0.0005 | 1.79 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.2 | 0.001 | 0.052 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.0005 | 0.001 | 0.005 | 0.01 |
| V2 | 23-Jan-06 | < 0.00025 | 0.036 | 0.001 | 0.097 | < 0.001 | < 0.001 | < 0.05 | 291 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.16 | < 0.00002 | 2.5 | 0.006 | 166 | 0.005 | 0.0015 | 11.1 | 0.002 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 7.4 | < 0.001 | 1.09 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.024 | < 0.001 | 0.014 | < 0.01 |
| V2 | 07-Feb-06 | < 0.00025 | 0.006 | < 0.001 | 0.081 | < 0.001 | | < 0.05 | 170 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | < 0.00002 | 1.9 | | 71.6 | < 0.001 | 0.0019 | 7.13 | 0.002 | < 0.001 | < 0.15 | < 0.001 | | 5.2 | < 0.001 | 0.62 | | | < 0.001 | | | < 0.001 | < 0.005 | < 0.01 |
| V2 | 17-May-06 | < 0.00025 | 0.035 | 0.001 | 0.065 | < 0.001 | < 0.001 | < 0.05 | 208 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | 0.001 | 0.11 | < 0.00002 | 2.9 | 0.005 | 120 | 0.011 | 0.0014 | 7.41 | 0.004 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 4.8 | < 0.001 | 0.71 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.017 | < 0.001 | 0.025 | < 0.01 |
| V2 | 05-Jun-06 | < 0.01 | 0.1 | < 0.03 | 0.054 | < 0.003 | | < 0.01 | 219 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.01 | | 2.3 | | 114 | < 0.003 | < 0.02 | 8.4 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.94 | 0.04 | 0.63 | | | < 0.005 | | | < 0.01 | 0.014 | < 0.02 |
| V2 | 19-Jun-06 | < 0.00025 | 0.011 | < 0.001 | 0.093 | < 0.001 | < 0.001 | < 0.05 | 242 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | 0.001 | 0.19 | < 0.02 | 2.5 | 0.005 | 122 | 0.001 | 0.0015 | 9.15 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.2 | < 0.001 | 0.79 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.019 | < 0.001 | 0.013 | < 0.01 |
| V2 | 10-Jul-06 | < 0.01 | 0.09 | < 0.03 | 0.081 | < 0.003 | | < 0.01 | 271 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.02 | | 2.3 | | 125 | < 0.003 | < 0.02 | 8.3 | 0.02 | < 0.03 | < 0.15 | < 0.05 | | 5.04 | < 0.03 | 0.74 | | | < 0.005 | | | < 0.01 | 0.018 | < 0.02 |
| V2 | 18-Jul-06 | < 0.00025 | 0.015 | < 0.001 | 0.088 | < 0.001 | < 0.001 | < 0.05 | 249 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.09 | < 0.02 | 2.5 | 0.019 | 142 | 0.003 | 0.0016 | 9.56 | 0.005 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.6 | < 0.001 | 0.86 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.019 | < 0.001 | 0.027 | < 0.01 |
| V2 | 08-Aug-06 | < 0.01 | 0.1 | < 0.03 | 0.085 | < 0.003 | | < 0.01 | 277 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.03 | | 2.3 | | 147 | < 0.003 | < 0.02 | 8.8 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.93 | < 0.03 | 0.82 | | | < 0.005 | | | < 0.01 | 0.023 | < 0.02 |
| V2 | 22-Aug-06 | < 0.00025 | 0.013 | < 0.001 | 0.09 | < 0.001 | < 0.001 | < 0.05 | 263 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | 0.001 | 0.08 | < 0.00002 | 2.6 | 0.005 | 153 | 0.001 | 0.0015 | 10.2 | 0.005 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.8 | < 0.001 | 0.9 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.02 | < 0.001 | 0.018 | < 0.01 |
| V2 | 11-Sep-06 | < 0.00025 | 0.022 | < 0.001 | 0.092 | < 0.001 | < 0.001 | < 0.05 | 245 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.09 | < 0.00002 | 2.4 | 0.006 | 156 | < 0.001 | 0.0013 | 10 | 0.005 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 6.1 | < 0.001 | 0.88 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.021 | < 0.001 | 0.022 | < 0.01 |
| V2 | 26-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.094 | < 0.001 | | < 0.05 | 259 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | | 2.7 | | 143 | < 0.001 | 0.0011 | 9.89 | 0.002 | < 0.001 | < 0.15 | < 0.001 | | 5.8 | < 0.001 | 0.88 | | | < 0.001 | | | 0.024 | 0.022 | < 0.01 |
| V2 | 16-Oct-06 | < 0.00025 | 0.011 | < 0.001 | 0.098 | < 0.001 | < 0.001 | < 0.05 | 267 | < 0.0002 | 0.0056 | < 0.001 | < 0.001 | 0.001 | 0.08 | < 0.02 | 2.6 | 0.005 | 142 | 0.001 | 0.0014 | 10.1 | 0.004 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 4.9 | < 0.001 | 0.86 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.023 | < 0.001 | 0.021 | < 0.01 |
| V2 | 23-Oct-06 | < 0.01 | 0.12 | < 0.03 | 0.093 | < 0.003 | | < 0.01 | 249 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 2.5 | | 136 | < 0.003 | < 0.02 | 9.5 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.43 | < 0.03 | 0.76 | | | < 0.005 | | | < 0.01 | 0.018 | < 0.02 |
| V2 | 13-Nov-06 | < 0.00025 | 0.026 | < 0.001 | 0.097 | < 0.001 | < 0.001 | < 0.05 | 245 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.17 | < 0.00002 | 2 | 0.003 | 131 | 0.019 | 0.0016 | 10 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 5.5 | < 0.001 | 0.83 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.021 | < 0.001 | 0.074 | < 0.01 |
| V2 | 21-Nov-06 | < 0.01 | < 0.05 | < 0.03 | 0.1 | < 0.003 | | < 0.01 | 245 | < 0.01 | < 0.005 | < 0.02 | < 0.01 | < 0.02 | 0.04 | | 4.3 | | 123 | < 0.003 | < 0.02 | 11.4 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.5 | < 0.03 | 0.79 | | | < 0.005 | | | < 0.01 | 0.01 | < 0.02 |
| V2 | 05-Dec-06 | < 0.01 | < 0.05 | < 0.03 | 0.097 | < 0.003 | | < 0.01 | 267 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.07 | | 2.3 | | 140 | < 0.003 | < 0.02 | 10.2 | < 0.02 | < 0.03 | < 0.15 | < 0.05 | | 4.78 | < 0.03 | 0.85 | | | < 0.005 | | | < 0.01 | 0.013 | < 0.02 |
| V2 | 14-Dec-06 | < 0.00025 | 0.078 | < 0.001 | 0.096 | < 0.001 | < 0.001 | < 0.05 | 285 | < 0.0002 | 0.0084 | < 0.001 | < 0.001 | 0.003 | 0.27 | < 0.00002 | 2.3 | 0.003 | 126 | 0.033 | 0.0015 | 9.9 | 0.003 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 5.5 | < 0.001 | 0.84 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.025 | < 0.001 | 0.12 | < 0.01 |
| | average | 0.0037 | 0.045 | 0.011 | 0.088 | 0.002 | 0.001 | 0.04 | 250 | 0.00366 | 0.006 | 0.008 | 0.004 | 0.008 | 0.09 | 0.006014 | 2.5 | 0.006 | 133 | 0.006 | 0.00802 | 9.47 | 0.009 | 0.011 | 0.15 | 0.018 | 0.001 | 5.32 | 0.012 | 0.81 | 0.001 | 0.0005 | 0.003 | 0.0001 | 0.021 | 0.00553 | 0.027 | 0.014 |
| | minimum | < 0.00025 | 0.005 | < 0.001 | 0.054 | < 0.001 | < 0.001 | < 0.01 | 170 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | 0.001 | < 0.01 | < 0.00002 | 1.9 | 0.003 | 71.6 | < 0.001 | 0.0011 | 7.13 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.43 | < 0.001 | 0.62 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.017 | < 0.001 | < 0.005 | < 0.01 |
| | maximum | < 0.01 | 0.12 | 0.03 | 0.1 | < 0.003 | < 0.001 | < 0.05 | 291 | < 0.01 | 0.0084 | < 0.02 | < 0.01 | < 0.02 | 0.27 | < 0.02 | 4.3 | 0.019 | 166 | 0.033 | < 0.02 | 11.4 | 0.02 | < 0.03 | < 0.15 | < 0.05 | 0.001 | 7.4 | 0.04 | 1.09 | < 0.001 | < 0.0005 | < 0.005 | < 0.0001 | 0.025 | 0.024 | 0.12 | < 0.02 |
| | N > DL | 0 | 14 | 2 | 17 | 0 | 0 | 0 | 17 | 0 | 2 | 0 | 0 | 10 | 14 | 0 | 17 | 9 | 17 | 8 | 11 | 17 | 12 | 3 | 0 | 0 | 2 | 17 | 1 | 17 | 0 | 0 | 2 | 0 | 9 | 1 | 16 | 0 |
| | median | 0.00025 | 0.035 | 0.001 | 0.093 | 0.001 | 0.001 | 0.05 | 249 | 0.0002 | 0.005 | 0.001 | 0.001 | 0.001 | 0.08 | 0.00002 | 2.5 | 0.005 | 136 | 0.003 | 0.0016 | 9.89 | 0.005 | 0.002 | 0.15 | 0.001 | 0.001 | 5.2 | 0.001 | 0.83 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.021 | 0.001 | 0.018 | 0.01 |
| V2A | 25-Apr-06 | < 0.00025 | 0.016 | 0.001 | 0.1 | < 0.001 | < 0.001 | < 0.05 | 157 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.07 | < 0.00002 | 2.2 | 0.003 | 58.2 | 0.022 | 0.0017 | 6.32 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.1 | < 0.001 | 0.54 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0098 | < 0.001 | 0.11 | < 0.01 |
| V2A | 17-May-06 | < 0.00025 | 0.048 | 0.002 | 0.077 | < 0.001 | < 0.001 | < 0.05 | 120 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.15 | < 0.00002 | 2.3 | 0.003 | 43.7 | 0.022 | 0.0013 | 4.85 | 0.005 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 4.9 | < 0.001 | 0.43 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0076 | < 0.001 | 0.061 | < 0.01 |
| V2A | 05-Jun-06 | < 0.01 | 0.1 | < 0.03 | 0.035 | < 0.003 | | < 0.01 | 206 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.04 | | 3.3 | | 121 | 0.005 | < 0.02 | 8.2 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 4.28 | < 0.03 | 0.64 | | | < 0.005 | | | < 0.01 | 0.36 | < 0.02 |
| V2A | 19-Jun-06 | < 0.00025 | 0.015 | 0.002 | 0.064 | < 0.001 | < 0.001 | < 0.05 | 226 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.16 | < 0.02 | 3.5 | 0.008 | 122 | 0.006 | 0.0021 | 8.78 | 0.039 | 0.001 | < 0.15 | < 0.001 | 0.001 | 4.6 | < 0.001 | 0.77 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.026 | < 0.001 | 0.27 | < 0.01 |
| V2A | 10-Jul-06 | < 0.01 | 0.4 | < 0.03 | 0.069 | < 0.003 | | < 0.01 | 233 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.52 | | 3 | | 116 | 0.015 | < 0.02 | 7.6 | 0.07 | < 0.03 | < 0.15 | < 0.05 | | 4.62 | 0.05 | 0.7 | | | 0.006 | | | < 0.01 | 0.33 | < 0.02 |
| V2A | 18-Jul-06 | < 0.00025 | 0.022 | 0.001 | 0.055 | < 0.001 | < 0.001 | < 0.05 | 221 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.09 | < 0.02 | 3.4 | 0.034 | 152 | 0.005 | 0.0021 | 9 | 0.052 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5 | < 0.001 | 0.8 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.023 | < 0.001 | 0.27 | < 0.01 |
| V2A | 08-Aug-06 | < 0.01 | 0.09 | < 0.03 | 0.054 | < 0.003 | | < 0.01 | 244 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.03 | | 3.5 | | 145 | < 0.003 | < 0.02 | 8.1 | 0.07 | < 0.03 | < 0.15 | < 0.05 | | 4.05 | < 0.03 | 0.77 | | | < 0.005 | | | < 0.01 | 0.27 | < 0.02 |
| V2A | 22-Aug-06 | < 0.00025 | 0.01 | 0.001 | 0.055 | < 0.001 | < 0.001 | < 0.05 | 242 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.11 | < 0.00002 | 3.9 | 0.01 | 155 | 0.002 | 0.0022 | 8.83 | 0.053 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.9 | < 0.001 | 0.89 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.024 | < 0.001 | 0.2 | < 0.01 |
| V2A | 11-Sep-06 | < 0.00025 | 0.01 | 0.001 | 0.059 | < 0.001 | < 0.001 | < 0.05 | 230 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.16 | < 0.00002 | 3.5 | 0.012 | 156 | 0.002 | 0.0019 | 8.99 | 0.051 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.3 | < 0.001 | 0.87 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.026 | < 0.001 | 0.19 | < 0.01 |
| V2A | 26-Sep-06 | < 0.00025 | < 0.005 | 0.001 | 0.062 | < 0.001 | | < 0.05 | 220 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | | 3.5 | | 129 | < 0.001 | 0.0013 | 8.23 | 0.046 | < 0.001 | < 0.15 | < 0.001 | | 4.7 | < 0.001 | 0.8 | | | < 0.001 | | | 0.027 | 0.17 | < 0.01 |
| V2A | 16-Oct-06 | < 0.00025 | 0.006 | < 0.001 | 0.068 | < 0.001 | < 0.001 | < 0.05 | 215 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.09 | < 0.02 | 3.1 | 0.008 | 123 | < 0.001 | 0.0017 | 8.6 | 0.039 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.1 | < 0.001 | 0.75 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.025 | < 0.001 | 0.15 | < 0.01 |
| V2A | 23-Oct-06 | < 0.01 | 0.1 | < 0.03 | 0.07 | < 0.003 | | < 0.01 | 212 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 3.1 | | 120 | < 0.003 | < 0.02 | 8.6 | 0.03 | < 0.03 | < 0.15 | < 0.05 | | 3.83 | < 0.03 | 0.7 | | | < 0.005 | | | < 0.01 | 0.13 | < 0.02 |
| | average | 0.0035 | 0.069 | 0.011 | 0.064 | 0.002 | 0.001 | 0.04 | 210.5 | 0.00347 | | 0.00733 | 0.004 | 0.0075 | 0.12 | 0.008583 | 3.2 | 0.011 | 120 | 0.007 | 0.00786 | 8.01 | 0.043 | 0.011 | 0.15 | 0.017 | 0.001 | 4.62 | 0.012 | 0.72 | 0.001 | 0.0005 | 0.002 | 0.0001 | 0.0202 | 0.006 | 0.209 | 0.01 |

Appendix 6
2006 Surface Water Quality Data
Vangorda Creek Drainage

Table 2 Surface Water Total Metal Parameters

| STATION | DATE | AG-T mg/L | AL-T mg/L | AS-T mg/L | BA-T mg/L | BE-T mg/L | BI-T mg/L | B-T mg/L | CA-T mg/L | CD-T mg/L | CN-T mg/L | CO-T mg/L | CR-T mg/L | CU-T mg/L | FE-T mg/L | HG-T mg/L | K-T mg/L | LI-T mg/L | MG-T mg/L | MN-T mg/L | MO-T mg/L | NA-T mg/L | NI-T mg/L | PB-T mg/L | P-T mg/L | SB-T mg/L | SE-T mg/L | SI-T mg/L | SN-T mg/L | SR-T mg/L | TE-T mg/L | TH-T mg/L | TI-T mg/L | TL-T mg/L | U-T mg/L | V-T mg/L | ZN-T mg/L | ZR-T mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.035 | < 0.001 | < 0.001 | < 0.01 | 120 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.01 | < 0.00002 | 2.2 | 0.003 | 43.7 | < 0.001 | 0.0013 | 4.85 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.83 | < 0.001 | 0.43 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0076 | < 0.001 | 0.061 | < 0.01 |
| | maximum | 0.01 | 0.4 | 0.03 | 0.1 | < 0.003 | < 0.001 | < 0.05 | 244 | < 0.01 | | < 0.02 | < 0.01 | 0.02 | 0.52 | < 0.02 | 3.9 | 0.034 | 156 | 0.022 | < 0.02 | 9 | 0.07 | 0.03 | < 0.15 | < 0.05 | 0.001 | 5.3 | 0.05 | 0.89 | < 0.001 | < 0.0005 | 0.006 | < 0.0001 | 0.026 | 0.027 | 0.36 | < 0.02 |
| | N > DL | 0 | 11 | 7 | 12 | 0 | 0 | 0 | 12 | 0 | | 0 | 0 | 6 | 10 | 0 | 12 | 7 | 12 | 8 | 8 | 12 | 12 | 2 | 0 | 0 | 1 | 12 | 1 | 12 | 0 | 0 | 3 | 0 | 7 | 1 | 12 | 0 |
| | median | 0.00025 | 0.019 | 0.0015 | 0.063 | 0.001 | 0.001 | 0.05 | 220.5 | 0.0002 | | 0.001 | 0.001 | 0.0015 | 0.09 | 0.00002 | 3.35 | 0.008 | 122.5 | 0.004 | 0.0021 | 8.415 | 0.0485 | 0.001 | 0.15 | 0.001 | 0.001 | 4.66 | 0.001 | 0.76 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.024 | 0.001 | 0.195 | 0.01 |
| V4 | 29-May-06 | < 0.00025 | 0.054 | < 0.001 | 0.04 | < 0.001 | < 0.001 | < 0.05 | 40 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.24 | < 0.00002 | 0.8 | 0.002 | 13.1 | 0.017 | 0.0008 | 1.39 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.2 | < 0.001 | 0.14 | < 0.001 | < 0.0005 | 0.002 | < 0.0001 | 0.0033 | < 0.001 | < 0.005 | < 0.01 |
| V4 | 01-Aug-06 | < 0.00025 | 0.016 | < 0.001 | 0.07 | < 0.001 | < 0.001 | < 0.05 | 71.3 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.25 | < 0.00002 | 0.9 | 0.004 | 27.1 | 0.022 | 0.001 | 2.77 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.6 | < 0.001 | 0.3 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0072 | < 0.001 | < 0.005 | < 0.01 |
| V4 | 26-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.069 | < 0.001 | < 0.001 | < 0.05 | 72.7 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.15 | < 0.02 | 1 | 0.004 | 28.9 | 0.038 | < 0.0005 | 3 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.3 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0076 | < 0.001 | < 0.005 | < 0.01 |
| | average | 0.00025 | 0.025 | 0.001 | 0.060 | 0.001 | 0.001 | 0.05 | 61.3 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.21 | 0.00668 | 0.9 | 0.003 | 23.0 | 0.026 | 0.00077 | 2.39 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.0 | 0.001 | 0.25 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.00603 | 0.001 | < 0.005 | < 0.01 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.04 | < 0.001 | < 0.001 | < 0.05 | 40 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.15 | < 0.00002 | 0.8 | 0.002 | 13.1 | 0.017 | < 0.0005 | 1.39 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.2 | < 0.001 | 0.14 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0033 | < 0.001 | < 0.005 | < 0.01 |
| | maximum | < 0.00025 | 0.054 | < 0.001 | 0.07 | < 0.001 | < 0.001 | < 0.05 | 72.7 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.25 | < 0.02 | 1 | 0.004 | 28.9 | 0.038 | 0.001 | 3 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.6 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | 0.002 | < 0.0001 | 0.0076 | < 0.001 | < 0.005 | < 0.01 |
| | N > DL | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | | 0 | 0 | 1 | 3 | 0 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 |
| | median | 0.00025 | 0.011 | 0.001 | 0.044 | 0.001 | 0.001 | 0.05 | 192 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.05 | 0.00002 | 2.3 | 0.005 | 93 | 0.003 | 0.0019 | 7.1 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.7 | 0.001 | 0.56 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.017 | 0.001 | 0.006 | 0.01 |
| V5 | 24-Jan-06 | < 0.00025 | 0.024 | < 0.001 | 0.079 | < 0.001 | < 0.001 | < 0.05 | 92 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.13 | < 0.00002 | 1.1 | 0.006 | 42 | 0.013 | 0.0018 | 4.92 | 0.001 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 5.6 | < 0.001 | 0.36 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.005 | < 0.001 | 0.011 | < 0.01 |
| V5 | 13-Feb-06 | < 0.00025 | 0.04 | < 0.001 | 0.088 | < 0.001 | < 0.001 | < 0.05 | 94.9 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.12 | < 0.00002 | 1.4 | 0.006 | 43.4 | 0.018 | 0.002 | 5.2 | 0.001 | < 0.001 | < 0.15 | < 0.001 | 0.003 | 5.7 | < 0.001 | 0.38 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0052 | < 0.001 | 0.013 | < 0.01 |
| V5 | 17-May-06 | < 0.00025 | 2.69 | 0.003 | 0.12 | < 0.001 | < 0.001 | < 0.05 | 32.6 | 0.0002 | | 0.002 | 0.007 | 0.01 | 4.47 | < 0.00002 | 2 | 0.006 | 13.3 | 0.16 | 0.0006 | 1.63 | 0.012 | 0.007 | < 0.15 | < 0.001 | < 0.001 | 6.7 | < 0.001 | 0.13 | < 0.001 | 0.001 | 0.06 | < 0.0001 | 0.0014 | 0.006 | 0.032 | < 0.01 |
| V5 | 19-Jun-06 | < 0.00025 | 1.18 | 0.002 | 0.07 | < 0.001 | < 0.001 | < 0.05 | 37.2 | < 0.0002 | | 0.001 | 0.004 | 0.005 | 1.98 | < 0.02 | 0.9 | 0.004 | 13.8 | 0.059 | 0.0008 | 2.36 | 0.005 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 5.8 | < 0.001 | 0.13 | < 0.001 | 0.0005 | 0.03 | < 0.0001 | 0.0018 | 0.003 | 0.011 | < 0.01 |
| V5 | 17-Jul-06 | < 0.00025 | 1.45 | 0.002 | 0.074 | < 0.001 | < 0.001 | < 0.05 | 45 | < 0.0002 | | 0.001 | 0.003 | 0.004 | 2.29 | < 0.02 | 1 | 0.017 | 18.8 | 0.06 | 0.0009 | 2.88 | 0.005 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 6.7 | < 0.001 | 0.17 | < 0.001 | < 0.0005 | 0.032 | < 0.0001 | 0.0019 | 0.003 | 0.012 | < 0.001 |
| V5 | 21-Aug-06 | < 0.00025 | 6.95 | 0.005 | 0.19 | < 0.001 | < 0.001 | < 0.05 | 58 | 0.0003 | | 0.005 | 0.016 | 0.018 | 11 | < 0.00002 | 2.2 | 0.015 | 26 | 0.19 | 0.0012 | 3.4 | 0.02 | 0.01 | 0.2 | < 0.001 | < 0.001 | 14.8 | < 0.001 | 0.24 | < 0.001 | 0.0029 | 0.16 | 0.0001 | 0.0032 | 0.015 | 0.046 | < 0.01 |
| V5 | 11-Sep-06 | < 0.00025 | 0.57 | 0.001 | 0.064 | < 0.001 | < 0.001 | < 0.05 | 50.9 | < 0.0002 | | < 0.001 | 0.001 | < 0.001 | 0.96 | < 0.00002 | 0.8 | 0.004 | 22.4 | 0.029 | 0.0009 | 3.06 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.8 | < 0.001 | 0.2 | < 0.001 | < 0.0005 | 0.013 | < 0.0001 | 0.0024 | 0.001 | 0.007 | < 0.01 |
| V5 | 16-Oct-06 | < 0.00025 | 0.1 | < 0.001 | 0.071 | < 0.001 | < 0.001 | < 0.05 | 70.5 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.23 | < 0.02 | 1 | 0.005 | 30.9 | 0.013 | 0.0013 | 3.9 | 0.001 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 4.5 | < 0.001 | 0.28 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.004 | < 0.001 | < 0.005 | < 0.01 |
| V5 | 14-Nov-06 | < 0.00025 | 0.12 | < 0.001 | 0.08 | < 0.001 | < 0.001 | < 0.05 | 81.3 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.28 | < 0.00002 | 1 | 0.004 | 36.2 | 0.018 | 0.0017 | 4.39 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 5.4 | < 0.001 | 0.33 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.0047 | < 0.001 | 0.009 | < 0.01 |
| V5 | 13-Dec-06 | < 0.00025 | 0.062 | < 0.001 | 0.085 | < 0.001 | < 0.001 | < 0.05 | 87.7 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.15 | < 0.00002 | 1.3 | 0.005 | 37.2 | 0.014 | 0.0016 | 4.53 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 5.5 | < 0.001 | 0.34 | < 0.001 | < 0.0005 | 0.002 | < 0.0001 | 0.0059 | < 0.001 | < 0.005 | < 0.01 |
| | average | 0.00025 | 1.319 | 0.002 | 0.092 | 0.001 | 0.001 | 0.05 | 65.0 | 0.00021 | | 0.002 | 0.004 | 0.004 | 2.16 | 0.006014 | 1.3 | 0.007 | 28.4 | 0.057 | 0.00128 | 3.63 | 0.005 | 0.003 | 0.16 | 0.001 | 0.001 | 6.7 | 0.001 | 0.26 | 0.001 | 0.00079 | 0.0305 | 0.0001 | 0.00355 | 0.003 | 0.0151 | 0.01 |
| | minimum | < 0.00025 | 0.024 | < 0.001 | 0.064 | < 0.001 | < 0.001 | < 0.05 | 32.6 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.12 | < 0.00002 | 0.8 | 0.004 | 13.3 | 0.013 | 0.0006 | 1.63 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.5 | < 0.001 | 0.13 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0014 | < 0.001 | < 0.005 | < 0.001 |
| | maximum | < 0.00025 | 6.95 | 0.005 | 0.19 | < 0.001 | < 0.001 | < 0.05 | 94.9 | 0.0003 | | 0.005 | 0.016 | 0.018 | 11 | < 0.02 | 2.2 | 0.017 | 43.4 | 0.19 | 0.002 | 5.2 | 0.02 | 0.01 | 0.2 | < 0.001 | 0.003 | 14.8 | < 0.001 | 0.38 | < 0.001 | 0.0029 | 0.16 | 0.0001 | 0.0059 | 0.015 | 0.046 | < 0.001 |
| | N > DL | 0 | 10 | 5 | 10 | 0 | 0 | 0 | 10 | 2 | | 4 | 5 | 5 | 10 | 0 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 4 | 1 | 0 | 5 | 10 | 0 | 10 | 0 | 3 | 8 | 1 | 10 | 5 | 8 | 0 |
| | median | 0.00025 | 0.345 | 0.001 | 0.0795 | 0.001 | 0.001 | 0.05 | 64.25 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.62 | 0.00002 | 1.05 | 0.0055 | 28.45 | 0.0235 | 0.00125 | 3.65 | 0.0025 | 0.001 | 0.15 | 0.001 | 0.001 | 5.75 | 0.001 | 0.26 | 0.001 | 0.0005 | 0.008 | 0.0001 | 0.0036 | 0.001 | 0.011 | 0.01 |
| V6A | 05-Jun-06 | < 0.00025 | 0.19 | 0.001 | 0.02 | < 0.001 | < 0.001 | < 0.05 | 14 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.26 | < 0.02 | 0.4 | < 0.001 | 2.94 | 0.015 | < 0.0005 | 1.25 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.5 | < 0.001 | 0.053 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.001 | < 0.001 | 0.026 | < 0.01 |
| V6A | 06-Sep-06 | < 0.00025 | 0.042 | < 0.001 | 0.025 | < 0.001 | < 0.001 | < 0.05 | 22.4 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.00002 | 0.3 | < 0.001 | 4.59 | 0.007 | < 0.0005 | 1.68 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.8 | < 0.001 | 0.097 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0014 | < 0.001 | 0.013 | < 0.01 |
| | average | 0.00025 | 0.091 | 0.001 | 0.023 | 0.001 | 0.001 | 0.05 | 19.6 | 0.00021 | | 0.001 | 0.001 | 0.001 | 0.18 | 0.01334 | 0.3 | 0.001 | 4.04 | 0.010 | < 0.0005 | 1.54 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.4 | 0.001 | 0.082 | 0.001 | 0.0005 | 0.002 | 0.0001 | 0.00127 | 0.001 | 0.017 | 0.01 |
| | minimum | < 0.00025 | 0.042 | < 0.001 | 0.02 | < 0.001 | < 0.001 | < 0.05 | 14 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.00002 | 0.3 | < 0.001 | 2.94 | 0.007 | < 0.0005 | 1.25 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.5 | < 0.001 | 0.053 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.001 | < 0.001 | 0.013 | < 0.01 |
| | maximum | < 0.00025 | 0.19 | 0.001 | 0.025 | < 0.001 | < 0.001 | < 0.05 | 22.4 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.26 | < 0.02 | 0.4 | < 0.001 | 4.59 | 0.015 | < 0.0005 | 1.68 | < 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.8 | < 0.001 | 0.097 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.0014 | < 0.001 | 0.026 | < 0.01 |
| | N > DL | 0 | 3 | 1 | 3 | 0 | 0 | 0 | 3 | 0 | | 0 | 0 | 1 | 3 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 1 | 0 | 3 | 0 | 3 | 0 |
| | median | 0.00025 | 0.042 | 0.001 | 0.025 | 0.001 | 0.001 | 0.05 | 22.4 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.14 | 0.02 | 0.3 | 0.001 | 4.59 | 0.007 | 0.0005 | 1.68 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4.8 | 0.001 | 0.097 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.0014 | 0.001 | 0.013 | 0.01 |
| V8 | 24-Jan-06 | < 0.00025 | 0.012 | < 0.001 | 0.073 | < 0.001 | < 0.001 | < 0.05 | 87.6 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.00002 | 1.1 | 0.006 | 39.9 | 0.029 | 0.0011 | 4.89 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.6 | < 0.001 | 0.36 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0067 | < 0.001 | 0.015 | < 0.01 |
| V8 | 13-Feb-06 | < 0.00025 | 0.017 | < 0.001 | 0.078 | < 0.001 | < 0.001 | < 0.05 | 87.2 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | 0.07 | < 0.00002 | 1.4 | 0.006 | 39.5 | 0.028 | 0.0011 | 5.01 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 5.4 | < 0.001 | 0.36 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0071 | < 0.001 | 0.017 | < 0.01 |
| V8 | 24-Mar-06 | < 0.00025 | < 0.005 | < 0.001 | 0.082 | < 0.001 | < 0.001 | < 0.05 | 91.6 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 1.4 | 0.006 | 42 | 0.035 | 0.0012 | 5.16 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 5 | < 0.001 | 0.37 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0081 | < 0.001 | 0.019 | < 0.01 |
| V8 | 24-Apr-06 | < 0.00025 | < 0.005 | < 0.001 | 0.065 | < 0.001 | < 0.001 | < 0.05 | 82.1 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 1.3 | 0.005 | 36.6 | 0.029 | 0.0012 | 4.45 | 0.003 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 4.1 | < 0.001 | 0.35 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0067 | < 0.001 | 0.013 | < 0.01 |
| V8 | 17-May-06 | < 0.00025 | 0.9 | 0.002 | 0.067 | < 0.001 | < 0.001 | < 0.05 | 34.8 | < 0.0002 | 0.0162 | 0.001 | 0.002 | 0.006 | 1.71 | < 0.00002 | 1.6 | 0.003 | 13.7 | 0.098 | 0.0006 | 1.67 | 0.006 | 0.005 | < 0.15 | < 0.001 | < 0.001 | 4.4 | < 0.001 | 0.13 | < 0.001 | < 0.0005 | 0.022 | < 0.0001 | 0.002 | 0.002 | 0.022 | < 0.01 |
| V8 | 19-Jun-06 | < 0.00025 | 0.5 | < 0.001 | 0.045 | < 0.001 | < 0.001 | < 0.05 | 29.9 | < 0.0002 | | < 0.001 | 0.002 | 0.003 | 0.82 | < 0.02 | 0.8 | 0.003 | 10.6 | 0.03 | < 0.0005 | 1.97 | 0.002 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 4.6 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | 0.014 | < 0.0001 | 0.0018 | 0.001 | 0.011 | < 0.01 |
| V8 | 17-Jul-06 | < 0.00025 | 0.39 | < 0.001 | 0.042 | < 0.001 | < 0.001 | < 0.05 | 34.7 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | 0.002 | 0.64 | < 0.02 | 0.7 | 0.01 | 13.8 | 0.018 | 0.0005 | 2.34 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.9 | < 0.001 | 0.13 | < 0.001 | < 0.0005 | 0.008 | < 0.0001 | 0.0017 | < 0.001 | 0.01 | < 0.01 |
| V8 | 21-Aug-06 | < 0.00025 | 0.1 | < 0.05 | 0.084 | < 0.001 | < 0.001 | < 0.001 | 76.1 | < 0.002 | < 0.005 | 0.007 | < 0.005 | 0.006 | 0.049 | < 0.00002 | 0.8 | 0.004 | 36.6 | 0.014 | 0.02 | 4.3 | < 0.02 | 0.04 | 0.07 | 0.05 | < 0.05 | 4.5 | 0.02 | 0.328 | < 0.001 | < 0.0005 | < 0.002 | < 0.0001 | 0.0022 | < 0.005 | 0.028 | < 0.01 |
| V8 | 11-Sep-06 | < 0.00025 | 0.13 | < 0.001 | 0.042 | < 0.001 | < 0.001 | < 0.05 | 38.8 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | 0.25 | < 0.00002 | 0.6 | 0.003 | 16.8 | 0.011 | 0.0005 | 2.7 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.9 | < 0.001 | 0.15 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.0021 | < 0.001 | 0.01 | < 0.01 |
| V8 | 16-Oct-06 | < 0.00025 | 0.22 | < 0.001 | 0.056 | < 0.001 | < 0.001 | < 0.05 | 53.3 | < 0.0002 | 0.0054 | < 0.001 | < 0.001 | 0.001 | 0.42 | < 0.02 | 0.9 | 0.004 | 23.5 | 0.024 | 0.0007 | 3.42 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.3 | < 0.001 | 0.21 | < 0.001 | < 0.0005 | 0.006 | < 0.0001 | 0.0038 | < 0.001 | 0.011 | < 0.01 |
| V8 | 14-Nov-06 | < 0.00025 | 0.026 | < 0.001 | 0.068 | < 0.001 | < 0.001 | < 0.05 | 69.2 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | 0.12 | < 0.00002 | 0.9 | 0.004 | 33.7 | 0.016 | 0.001 | 4.09 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | 0.004 | < 0.0001 | 0.0057 | < 0.001 | 0.013 | < 0.01 |
| V8 | 13-Dec-06 | < 0.00025 | 0.018 | < 0.001 | 0.073 | < 0.001 | < 0.001 | < 0.05 | 77.3 | < 0.0002 | 0.0053 | < 0.001 | < 0.001 | < 0.001 | 0.08 | < 0.00002 | 1.1 | 0.005 | 32.8 | 0.017 | 0.0009 | 4.28 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.1 | < 0.001 | 0.31 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0071 | < 0.001 | 0.028 | < 0.01 |
| | average | 0.00025 | 0.194 | 0.005 | 0.065 | 0.001 | 0.001 | 0.046 | 63.6 | 0.00035 | 0.006 | 0.002 | 0.0015 | 0.002 | 0.367 | 0.005015 | 1.1 | 0.005 | 28.3 | 0.029 | 0.00244 | 3.69 | 0.004 | 0.005 | 0.14 | 0.005 | 0.005 | 4.8 | 0.003 | 0.26 | 0.001 | 0.0005 | 0.00533 | 0.0001 | 0.00458 | 0.00142 | 0.016 | 0.01 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.042 | < 0.001 | < 0.001 | < 0.001 | 29.9 | < 0.0002 | < 0.005 | < 0.001 | < 0.001 | < 0.001 | 0.049 | < 0.00002 | 0.6 | 0.003 | 10.6 | 0.011 | 0.0005 | 1.67 | 0.001 | < 0.001 | 0.07 | < 0.001 | < 0.001 | 4.1 | 0.001 | 0.11 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0017 | < 0.001 | 0.01 | < 0.01 |
| | maximum | < 0.00025 | 0.9 | 0.05 | 0.084 | < 0.001 | < 0.001 | 0.05 | 91.6 | < 0.002 | 0.0162 | 0.007 | < 0.005 | 0.006 | 1.71 | < 0.02 | 1.6 | 0.01 | 42 | 0.098 | 0.02 | 5.16 | < 0.02 | 0.04 | < 0.15 | 0.05 | < 0.05 | 5.6 | 0.02 | 0.37 | < 0.001 | < 0.0005 | 0.022 | < 0.0001 | 0.0081 | 0.005 | 0.028 | < 0.01 |
| | N > DL | 0 | 10 | 1 | 12 | 0 | 0 | 0 | 12 | 0 | 3 | 2 | 2 | 5 | 10 | 0 | 12 | 12 | 12 | 12 | 11 | 12 | 11 | 3 | 1 | 1 | 3 | 12 | 1 | 12 | 0 | 0 | 6 | 0 | 12 | 2 | 12 | 0 |
| | median | 0.00025 | 0.063 | 0.001 | 0.0675 | 0.001 | 0.001 | 0.05 | 72.65 | 0.0002 | 0.005 | 0.001 | 0.001 | 0.001 | 0.13 | 0.00002 | 1 | 0.0045 | 33.25 | 0.026 | 0.00095 | 4.185 | 0.002 | 0.001 | 0.15 | 0.001 | 0.001 | 4.9 | 0.001 | 0.315 | 0.001 | 0.0005 | 0.0025 | 0.0001 | 0.00475 | 0.001 | 0.014 | 0.01 |
| V14 | 08-Jun-06 | < 0.00025 | 0.017 | < 0.001 | 0.034 | < 0.001 | < 0.001 | < 0.05 | 309 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.1 | < 0.02 | 5.4 | 0.026 | 289 | 0.003 | < 0.0005 | 9.83 | 0.003 | 0.003 | < 0.15 | < 0.001 | 0.002 | 4.3 | < 0.001 | 1.11 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.022 | < 0.001 | 0.012 | < 0.01 |
| V14 | 18-Sep-06 | < 0.00025 | 0.16 | < 0.001 | 0.044 | < 0.001 | < 0.001 | < 0.05 | 248 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.35 | < 0.02 | 1.5 | 0.003 | 78.7 | 0.009 | 0.0017 | 8.94 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.7 | < 0.001 | 0.76 | < 0.001 | < 0.0005 | 0.005 | < 0.0001 | 0.015 | < 0.001 | 0.013 | < 0.01 |
| V15 | 23-Jan-06 | < 0.00025 | 0.042 | < 0.001 | 0.061 | < 0.001 | < 0.001 | < 0.05 | 397 | 0.0004 | | < 0.001 | < 0.001 | 0.002 | 0.17 | < 0.00002 | 4.9 | 0.02 | 301 | 0.015 | 0.001 | 13.4 | 0.03 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 8 | < 0.001 | 1.42 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.033 | < 0.001 | 0.097 | < 0.01 |
| V15 | 07-Feb-06 | < 0.00025 | 0.11 | 0.001 | 0.061 | < 0.001 | | < 0.05 | 334 | 0.0004 | | < 0.001 | < 0.001 | 0.003 | 0.28 | < 0.00002 | 4.1 | | 245 | 0.01 | 0.0011 | 11.4 | 0.024 | 0.005 | < 0.15 | < 0.001 | | 6.2 | < 0.001 | 1.26 | | | 0.005 | | | < 0.001 | 0.081 | < 0.01 |
| V15 | 13-Feb-06 | < 0.00025 | 0.013 | < 0.001 | 0.054 | < 0.001 | < 0.001 | < 0.05 | 387 | 0.0005 | | < 0.001 | < 0.001 | 0.002 | < 0.05 | < 0.00002 | 5.1 | 0.019 | 308 | 0.011 | < 0.0005 | 12.7 | 0.031 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 7 | < 0.001 | 1.29 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.034 | < 0.001 | 0.16 | < 0.01 |
| V15 | 07-Mar-06 | < 0.01 | 0.13 | < 0.03 | 0.032 | < 0.003 | | 0.01 | 354 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.02 | | 4.7 | | 277 | < 0.003 | < 0.02 | 12.3 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 6.01 | < 0.03 | 1.06 | | | < 0.005 | | | | < 0.01 | 0.14 | < 0.02 |
| V15 | 24-Mar-06 | < 0.00025 | < 0.005 | < 0.001 | 0.049 | < 0.001 | < 0.001 | < 0.05 | 382 | 0.0006 | | < 0.001 | < 0.001 | 0.002 | < 0.05 | < 0.00002 | 4.9 | 0.017 | 289 | 0.003 | 0.0006 | 11.5 | 0.036 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 6.6 | < 0.001 | 1.19 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.033 | < 0.001 | 0.16 | < 0.01 |
| V15 | 08-Apr-06 | < 0.01 | 0.11 | < 0.03 | 0.027 | < 0.003 | | < 0.01 | 386 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 4.8 | | 308 | < 0.003 | < 0.02 | 12.2 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 5.32 | 0.05 | 1.1 | | | < 0.005 | | | | < 0.01 | 0.21 | < 0.02 |
| V15 | 25-Apr-06 | < 0.00025 | < 0.005 | < 0.001 | 0.047 | < 0.001 | < 0.001 | < 0.05 | 329 | 0.0006 | | < 0.001 | < 0.001 | 0.002 | < 0.05 | < 0.00002 | 4.6 | 0.017 | 246 | 0.004 | 0.0005 | 11.1 | 0.038 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.9 | < 0.001 | 1.26 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.03 | < 0.001 | 0.2 | < 0.01 |
| V15 | 17-May-06 | < 0.00025 | < 0.005 | < 0.001 | 0.037 | < 0.001 | < 0.001 | < 0.05 | 291 | 0.0003 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | < 0.00002 | 4.3 | 0.015 | 222 | 0.007 | 0.0007 | 9.79 | 0.022 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 6 | < 0.001 | 1.02 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.022 | < 0.001 | 0.12 | < 0.01 |
| V15 | 05-Jun-06 | < 0.01 | 0.11 | < 0.03 | 0.024 | < 0.003 | | < 0.01 | 344 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 4.6 | | 252 | < 0.003 | < 0.02 | 11.7 | 0.05 | < 0.03 | < 0.15 | < 0.05 | | 6.06 | < 0.03 | 1.01 | | | < 0.005 | | | | < 0.01 | 0.24 | < 0.02 |
| V15 | 19-Jun-06 | < 0.00025 | 0.02 | < 0.001 | 0.054 | < 0.001 | < 0.001 | < 0.05 | 373 | 0.0006 | | < 0.001 | 0.001 | 0.002 | 0.16 | < 0.02 | 5 | 0.018 | 281 | 0.002 | 0.0008 | 12.1 | 0.036 | 0.001 | < 0.15 | < 0.001 | 0.001 | 6.4 | < 0.001 | 1.27 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.031 | < 0.001 | 0.22 | < 0.01 |

Appendix 6
2006 Surface Water Quality Data
Vangorda Creek Drainage

Table 2 Surface Water Total Metal Parameters

| STATION | DATE | AG-T mg/L | AL-T mg/L | AS-T mg/L | BA-T mg/L | BE-T mg/L | BI-T mg/L | B-T mg/L | CA-T mg/L | CD-T mg/L | CN-T mg/L | CO-T mg/L | CR-T mg/L | CU-T mg/L | FE-T mg/L | HG-T mg/L | K-T mg/L | LI-T mg/L | MG-T mg/L | MN-T mg/L | MO-T mg/L | NA-T mg/L | NI-T mg/L | PB-T mg/L | P-T mg/L | SB-T mg/L | SE-T mg/L | SI-T mg/L | SN-T mg/L | SR-T mg/L | TE-T mg/L | TH-T mg/L | TI-T mg/L | TL-T mg/L | U-T mg/L | V-T mg/L | ZN-T mg/L | ZR-T mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| V15 | 10-Jul-06 | < 0.01 | 0.14 | < 0.03 | 0.05 | < 0.003 | | < 0.01 | 385 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 4.3 | | 305 | < 0.003 | < 0.02 | 11.3 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 6.39 | 0.05 | 1.14 | | | < 0.005 | | | < 0.01 | 0.26 | < 0.02 |
| V15 | 18-Jul-06 | < 0.00025 | 0.028 | < 0.001 | 0.052 | < 0.001 | < 0.001 | < 0.05 | 365 | 0.0007 | | < 0.001 | < 0.001 | 0.002 | 0.08 | < 0.02 | 4.9 | 0.071 | 315 | < 0.001 | 0.0009 | 14.2 | 0.045 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 7.6 | < 0.001 | 1.35 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.03 | < 0.001 | 0.28 | < 0.01 |
| V15 | 08-Aug-06 | < 0.01 | 0.12 | < 0.03 | 0.049 | < 0.003 | | < 0.01 | 403 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | 0.03 | | 4.8 | | 287 | < 0.003 | < 0.02 | 12.4 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 6.11 | < 0.03 | 1.19 | | | < 0.005 | | | < 0.01 | 0.38 | < 0.02 |
| V15 | 22-Aug-06 | < 0.00025 | 0.012 | < 0.001 | 0.051 | < 0.001 | < 0.001 | < 0.05 | 361 | 0.0007 | | < 0.001 | < 0.001 | 0.002 | 0.1 | < 0.00002 | 5.1 | 0.018 | 307 | < 0.001 | 0.0007 | 13.2 | 0.044 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 6.9 | < 0.001 | 1.35 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.031 | < 0.001 | 0.36 | < 0.01 |
| V15 | 11-Sep-06 | < 0.00025 | 0.018 | < 0.001 | 0.048 | < 0.001 | < 0.001 | < 0.05 | 298 | 0.0007 | | < 0.001 | < 0.001 | < 0.001 | 0.07 | < 0.00002 | 4.5 | 0.02 | 277 | 0.001 | 0.0006 | 12.5 | 0.046 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 7.1 | < 0.001 | 1.23 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.031 | < 0.001 | 0.41 | < 0.01 |
| V15 | 26-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.047 | < 0.001 | | < 0.05 | 334 | 0.0008 | | < 0.001 | < 0.001 | 0.002 | 0.14 | | 4.7 | | 285 | < 0.001 | < 0.0005 | 11.5 | 0.048 | < 0.001 | < 0.15 | < 0.001 | | 6.7 | < 0.001 | 1.19 | | | < 0.001 | | | 0.031 | 0.48 | < 0.01 |
| V15 | 16-Oct-06 | < 0.00025 | 0.023 | < 0.001 | 0.05 | < 0.001 | < 0.001 | < 0.05 | 365 | 0.0009 | | < 0.001 | < 0.001 | 0.003 | 0.25 | < 0.02 | 5.2 | 0.02 | 297 | < 0.001 | 0.0006 | 13 | 0.057 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 6.4 | < 0.001 | 1.3 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.033 | < 0.001 | 0.54 | < 0.01 |
| V15 | 23-Oct-06 | < 0.01 | 0.15 | < 0.03 | 0.048 | < 0.003 | | < 0.01 | 339 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 4.9 | | 281 | < 0.003 | < 0.02 | 11.9 | 0.05 | < 0.03 | < 0.15 | < 0.05 | | 5.31 | < 0.03 | 1.13 | | | < 0.005 | | | < 0.01 | 0.56 | < 0.02 |
| V15 | 13-Nov-06 | < 0.00025 | 0.008 | < 0.001 | 0.052 | < 0.001 | < 0.001 | < 0.05 | 362 | 0.0009 | | < 0.001 | < 0.001 | 0.002 | 0.16 | < 0.00002 | 4.8 | 0.018 | 313 | 0.001 | 0.0006 | 13.7 | 0.064 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 7.2 | < 0.001 | 1.35 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.034 | < 0.001 | 0.68 | < 0.01 |
| V15 | 21-Nov-06 | < 0.01 | < 0.05 | < 0.03 | 0.05 | < 0.003 | | < 0.01 | 349 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 6.9 | | 294 | < 0.003 | < 0.02 | 13.8 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 5.5 | < 0.03 | 1.18 | | | < 0.005 | | | < 0.01 | 0.72 | < 0.02 |
| V15 | 05-Dec-06 | < 0.01 | < 0.05 | < 0.03 | 0.049 | < 0.003 | | < 0.01 | 343 | < 0.01 | | < 0.02 | < 0.01 | < 0.02 | < 0.01 | | 5.3 | | 290 | < 0.003 | < 0.02 | 14.6 | 0.06 | < 0.03 | < 0.15 | < 0.05 | | 5.52 | < 0.03 | 1.2 | | | < 0.005 | | | < 0.01 | 0.69 | < 0.02 |
| V15 | 14-Dec-06 | < 0.00025 | < 0.005 | < 0.001 | 0.047 | < 0.001 | < 0.001 | < 0.05 | 391 | 0.0007 | | < 0.001 | < 0.001 | 0.002 | 0.14 | < 0.00002 | 5 | 0.017 | 290 | 0.002 | < 0.0005 | 12.2 | 0.056 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 6.5 | < 0.001 | 1.24 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.037 | < 0.001 | 0.59 | < 0.01 |
| | average | 0.0038 | 0.053 | 0.012 | 0.047 | 0.002 | 0.001 | 0.04 | 358 | 0.00404 | | 0.008 | 0.004 | 0.009 | 0.08 | 0.004631 | 4.9 | 0.023 | 285 | 0.004 | 0.00771 | 12.4 | 0.047 | 0.012 | 0.15 | 0.019 | 0.001 | 6.4 | 0.013 | 1.22 | 0.001 | 0.0005 | 0.003 | 0.0001 | 0.032 | 0.006 | 0.344 | 0.014 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.024 | < 0.001 | < 0.001 | < 0.01 | 291 | < 0.01 | | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.00002 | 4.1 | 0.015 | 222 | < 0.001 | < 0.0005 | 9.79 | 0.022 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.31 | < 0.001 | 1.01 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.022 | < 0.001 | 0.081 | < 0.01 |
| | maximum | 0.01 | 0.15 | 0.03 | 0.061 | < 0.003 | < 0.001 | < 0.05 | 403 | 0.01 | | < 0.02 | < 0.01 | 0.02 | 0.28 | < 0.02 | 6.9 | 0.071 | 315 | 0.015 | 0.02 | 14.6 | 0.064 | 0.03 | < 0.15 | < 0.05 | 0.002 | 8 | 0.05 | 1.42 | < 0.001 | < 0.0005 | 0.005 | < 0.0001 | 0.037 | 0.031 | 0.72 | < 0.02 |
| | N > DL | 0 | 15 | 1 | 22 | 0 | 0 | 1 | 22 | 14 | | 0 | 1 | 13 | 12 | 0 | 22 | 12 | 22 | 10 | 11 | 22 | 22 | 3 | 0 | 0 | 7 | 22 | 2 | 22 | 0 | 0 | 2 | 0 | 12 | 1 | 22 | 0 |
| | median | 0.00025 | 0.0255 | 0.001 | 0.049 | 0.001 | 0.001 | 0.05 | 361.5 | 0.00075 | | 0.001 | 0.001 | 0.002 | 0.05 | 0.00002 | 4.85 | 0.018 | 289.5 | 0.003 | 0.00085 | 12.25 | 0.049 | 0.001 | 0.15 | 0.001 | 0.001 | 6.395 | 0.001 | 1.215 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.032 | 0.001 | 0.27 | 0.01 |
| V16 | 08-Jun-06 | < 0.00025 | 1.62 | 0.004 | 0.067 | < 0.001 | < 0.001 | < 0.05 | 222 | 0.0002 | | 0.003 | 0.003 | 0.01 | 2.84 | < 0.02 | 1.7 | 0.013 | 68.3 | 0.17 | 0.0014 | 8.34 | 0.01 | 0.02 | 0.4 | < 0.001 | 0.001 | 7.5 | < 0.001 | 0.66 | < 0.001 | 0.0009 | 0.027 | < 0.0001 | 0.012 | 0.005 | 0.021 | < 0.01 |
| V16 | 18-Sep-06 | < 0.00025 | 0.012 | < 0.001 | 0.036 | < 0.001 | < 0.001 | < 0.05 | 348 | 0.0003 | | < 0.001 | < 0.001 | 0.002 | 0.09 | < 0.02 | 5.6 | 0.011 | 338 | 0.005 | 0.0006 | 12.5 | 0.003 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 5.1 | < 0.001 | 1.26 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.04 | < 0.001 | 0.013 | < 0.01 |
| V17A | 08-Jun-06 | < 0.00025 | 0.084 | 0.001 | 0.014 | < 0.001 | < 0.001 | < 0.05 | 9.35 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.15 | < 0.02 | 0.3 | 0.001 | 1.76 | 0.01 | < 0.0005 | 1.26 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.8 | < 0.001 | 0.037 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0006 | < 0.001 | 0.008 | < 0.01 |
| V17A | 18-Sep-06 | < 0.00025 | 0.036 | 0.001 | 0.018 | < 0.001 | < 0.001 | < 0.05 | 14.8 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | 0.18 | < 0.02 | 0.3 | < 0.001 | 2.53 | 0.011 | < 0.0005 | 1.58 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.5 | < 0.001 | 0.058 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0007 | < 0.001 | 0.009 | < 0.01 |
| V19 | 08-Jun-06 | < 0.00025 | 0.016 | < 0.001 | 0.036 | < 0.001 | < 0.001 | < 0.05 | 17.1 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.02 | 0.5 | 0.003 | 5.65 | < 0.001 | < 0.0005 | 1.64 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.4 | < 0.001 | 0.077 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | < 0.0005 | < 0.001 | < 0.005 | < 0.01 |
| V19 | 18-Sep-06 | < 0.00025 | 0.063 | < 0.001 | 0.062 | < 0.001 | < 0.001 | < 0.05 | 32.7 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | 0.14 | < 0.02 | 0.4 | 0.002 | 10.6 | 0.002 | < 0.0005 | 2.48 | 0.001 | 0.004 | < 0.15 | < 0.001 | < 0.001 | 6.9 | < 0.001 | 0.16 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0008 | < 0.001 | 0.006 | < 0.01 |
| V20 | 08-Jun-06 | < 0.00025 | 0.051 | < 0.001 | 0.03 | < 0.001 | < 0.001 | < 0.05 | 19.3 | < 0.0002 | | 0.002 | < 0.001 | 0.005 | 0.13 | < 0.02 | 0.5 | 0.005 | 5.64 | 0.016 | < 0.0005 | 1.6 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.8 | < 0.001 | 0.085 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | < 0.0005 | < 0.001 | 0.013 | < 0.01 |
| V22 | 20-Mar-06 | < 0.00025 | 0.92 | 0.003 | 0.094 | < 0.001 | < 0.001 | 0.11 | 226 | 0.05 | | 0.29 | < 0.001 | 0.017 | 0.72 | < 0.00002 | 3.8 | 0.033 | 66.8 | 15.6 | 0.0013 | 10.5 | 0.39 | 0.004 | < 0.15 | 0.001 | 0.001 | 4.8 | < 0.001 | 1.93 | < 0.001 | < 0.0005 | < 0.001 | 0.0021 | 0.0045 | < 0.001 | 56.2 | < 0.01 |
| V22 | 05-Jun-06 | 0.0003 | 0.49 | 0.01 | 0.21 | < 0.001 | < 0.001 | < 0.05 | 90.9 | 0.081 | | 0.24 | < 0.001 | 0.57 | 12.7 | 0.02 | 1.4 | 0.017 | 36.1 | 14 | < 0.0005 | 2.35 | 0.23 | 0.23 | < 0.15 | 0.001 | 0.001 | 2.4 | < 0.001 | 0.55 | < 0.001 | 0.0017 | 0.006 | 0.0015 | 0.001 | < 0.001 | 54.2 | < 0.01 |
| V22 | 06-Sep-06 | < 0.00025 | 0.029 | < 0.001 | 0.023 | < 0.001 | < 0.001 | < 0.05 | 138 | 0.089 | | 0.35 | < 0.001 | 0.049 | 1.14 | < 0.00002 | 2 | 0.027 | 67 | 22.2 | 0.0014 | 3.68 | 0.32 | 0.032 | < 0.15 | < 0.001 | 0.002 | 3.1 | < 0.001 | 0.87 | < 0.001 | < 0.0005 | < 0.001 | 0.0026 | < 0.0005 | < 0.001 | 69.7 | < 0.01 |
| V22 | 05-Dec-06 | < 0.00025 | 0.014 | < 0.001 | 0.037 | < 0.001 | < 0.001 | < 0.05 | 121 | 0.047 | | 0.17 | < 0.001 | 0.01 | 0.43 | < 0.00002 | 3 | 0.021 | 43.8 | 12.4 | 0.001 | 5 | 0.21 | 0.008 | < 0.15 | < 0.001 | < 0.001 | 5.9 | < 0.001 | 0.84 | < 0.001 | < 0.0005 | < 0.001 | 0.0016 | 0.0011 | < 0.001 | 41.7 | < 0.01 |
| | average | 0.00026 | 0.296 | 0.003 | 0.077 | 0.001 | 0.001 | 0.06 | 143 | 0.071 | | 0.28 | 0.001 | 0.139 | 3.23 | 0.008012 | 2.4 | 0.025 | 56.1 | 17.3 | 0.00112 | 5.04 | 0.29 | 0.061 | 0.15 | 0.001 | 0.0014 | 3.9 | 0.001 | 1.01 | 0.001 | 0.00074 | 0.002 | 0.00208 | 0.00152 | 0.001 | 58.3 | 0.001 |
| | minimum | < 0.00025 | 0.014 | < 0.001 | 0.023 | < 0.001 | < 0.001 | 0.05 | 90.9 | 0.047 | | 0.17 | < 0.001 | 0.01 | 0.43 | < 0.00002 | 1.4 | 0.017 | 36.1 | 12.4 | < 0.0005 | 2.35 | 0.21 | 0.004 | < 0.15 | < 0.001 | < 0.001 | 2.4 | < 0.001 | 0.55 | < 0.001 | < 0.0005 | < 0.001 | 0.0015 | < 0.0005 | < 0.001 | 41.7 | < 0.001 |
| | maximum | 0.0003 | 0.92 | 0.01 | 0.21 | < 0.001 | < 0.001 | 0.11 | 226 | 0.089 | | 0.35 | < 0.001 | 0.57 | 12.7 | 0.02 | 3.8 | 0.033 | 67 | 22.2 | 0.0014 | 10.5 | 0.39 | 0.23 | < 0.15 | 0.001 | 0.002 | 5.9 | < 0.001 | 1.93 | < 0.001 | 0.0017 | 0.006 | 0.0026 | 0.0045 | < 0.001 | 69.7 | < 0.001 |
| | N > DL | 1 | 5 | 2 | 5 | 0 | 0 | 1 | 5 | 5 | | 5 | 0 | 5 | 5 | 1 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 0 | 2 | 4 | 5 | 0 | 5 | 0 | 1 | 1 | 5 | 3 | 0 | 5 | 0 |
| | median | 0.00025 | 0.029 | 0.001 | 0.037 | 0.001 | 0.001 | 0.05 | 138 | 0.081 | | 0.29 | 0.001 | 0.049 | 1.14 | 0.00002 | 2 | 0.027 | 66.8 | 15.6 | 0.0013 | 3.68 | 0.32 | 0.032 | 0.15 | 0.001 | 0.001 | 3.1 | 0.001 | 0.87 | 0.001 | 0.0005 | 0.001 | 0.0021 | 0.001 | 0.001 | 56.2 | 0.01 |
| V23 | 20-Mar-06 | < 0.00025 | 0.93 | 0.002 | 0.12 | < 0.001 | < 0.001 | 0.11 | 112 | 0.0018 | | 0.015 | < 0.001 | 0.001 | 0.05 | < 0.00002 | 3.3 | 0.024 | 60.9 | 0.34 | 0.003 | 10.9 | 0.14 | 0.001 | < 0.15 | 0.005 | 0.002 | 4.1 | < 0.001 | 0.71 | < 0.001 | < 0.0005 | < 0.001 | 0.001 | 0.0068 | < 0.001 | 5.04 | < 0.01 |
| V23 | 05-Jun-06 | 0.0026 | 0.065 | 0.001 | 0.029 | < 0.001 | < 0.001 | < 0.05 | 52.4 | 0.0018 | | 0.004 | < 0.001 | 0.002 | 0.29 | < 0.02 | 1.5 | 0.01 | 30.5 | 0.077 | 0.0011 | 4.68 | 0.084 | 0.013 | < 0.15 | 0.002 | < 0.001 | 1.6 | < 0.001 | 0.34 | < 0.001 | < 0.0005 | 0.002 | 0.0005 | 0.0041 | < 0.001 | 3.4 | < 0.01 |
| V23 | 06-Sep-06 | < 0.00025 | 0.079 | 0.001 | 0.04 | < 0.001 | < 0.001 | < 0.05 | 96.9 | 0.0009 | | 0.006 | < 0.001 | 0.002 | 0.36 | < 0.00002 | 2.6 | 0.021 | 61.2 | 0.097 | 0.0025 | 9.44 | 0.12 | 0.013 | < 0.15 | 0.004 | < 0.001 | 3 | 0.012 | 0.68 | < 0.001 | < 0.0005 | 0.002 | 0.0009 | 0.004 | < 0.001 | 2.44 | < 0.01 |
| V23 | 05-Dec-06 | < 0.00025 | 0.047 | < 0.001 | 0.044 | < 0.001 | < 0.001 | < 0.05 | 106 | 0.0012 | | 0.007 | < 0.001 | 0.002 | 0.13 | < 0.00002 | 3.1 | 0.022 | 64.1 | 0.14 | 0.0024 | 10.3 | 0.16 | 0.002 | < 0.15 | 0.004 | 0.001 | 3.4 | < 0.001 | 0.74 | < 0.001 | < 0.0005 | 0.002 | 0.0009 | 0.0062 | < 0.001 | 5.38 | < 0.01 |
| | average | 0.00072 | 0.24 | 0.001 | 0.055 | 0.001 | 0.001 | 0.06 | 92.8 | 0.00132 | | 0.008 | 0.001 | 0.002 | 0.238 | 0.008012 | 2.6 | 0.020 | 55.6 | 0.150 | 0.0023 | 8.95 | 0.125 | 0.008 | 0.15 | 0.0038 | 0.0012 | 3.0 | 0.005 | 0.63 | 0.001 | 0.0005 | 0.002 | 0.00084 | 0.00502 | 0.001 | 3.74 | 0.01 |
| | minimum | < 0.00025 | 0.047 | 0.001 | 0.029 | < 0.001 | < 0.001 | < 0.05 | 52.4 | 0.0009 | | 0.004 | < 0.001 | 0.001 | 0.05 | < 0.00002 | 1.5 | 0.01 | 30.5 | 0.077 | 0.0011 | 4.68 | 0.084 | 0.001 | < 0.15 | 0.002 | < 0.001 | 1.6 | < 0.001 | 0.34 | < 0.001 | < 0.0005 | < 0.001 | 0.0005 | 0.004 | < 0.001 | 2.44 | < 0.01 |
| | maximum | 0.0026 | 0.93 | 0.002 | 0.12 | < 0.001 | < 0.001 | 0.11 | 112 | 0.0018 | | 0.015 | < 0.001 | 0.002 | 0.36 | < 0.02 | 3.3 | 0.024 | 64.1 | 0.34 | 0.003 | 10.9 | 0.16 | 0.013 | < 0.15 | 0.005 | 0.002 | 4.1 | 0.012 | 0.74 | < 0.001 | < 0.0005 | 0.002 | 0.001 | 0.0068 | < 0.001 | 5.38 | < 0.01 |
| | N > DL | 1 | 5 | 4 | 5 | 0 | 0 | 1 | 5 | 5 | | 5 | 0 | 5 | 5 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 2 | 5 | 2 | 5 | 0 | 0 | 4 | 5 | 5 | 0 | 5 | 0 |
| | median | 0.00025 | 0.079 | 0.001 | 0.04 | 0.001 | 0.001 | 0.05 | 96.9 | 0.0012 | | 0.006 | 0.001 | 0.002 | 0.29 | 0.00002 | 2.6 | 0.021 | 61.2 | 0.097 | 0.0025 | 9.44 | 0.12 | 0.013 | 0.15 | 0.004 | 0.001 | 3 | 0.001 | 0.68 | 0.001 | 0.0005 | 0.002 | 0.0009 | 0.0041 | 0.001 | 3.4 | 0.01 |
| V25BSP | 17-May-06 | < 0.00025 | 0.47 | < 0.001 | 0.022 | < 0.001 | < 0.001 | < 0.05 | 46.1 | 0.0003 | < 0.005 | 0.004 | < 0.001 | 0.007 | 0.73 | < 0.00002 | 1.8 | 0.003 | 9.74 | 0.11 | < 0.0005 | 1.8 | 0.003 | 0.004 | < 0.15 | < 0.001 | < 0.001 | 2.6 | < 0.001 | 0.15 | < 0.001 | < 0.0005 | 0.014 | < 0.0001 | 0.0019 | < 0.001 | 0.076 | < 0.01 |
| V25BSP | 19-Jun-06 | < 0.00025 | 0.079 | < 0.001 | 0.016 | < 0.001 | < 0.001 | < 0.05 | 51.5 | < 0.0002 | 0.005 | 0.002 | 0.001 | 0.004 | 0.19 | < 0.02 | 1.1 | 0.003 | 10.1 | 0.049 | < 0.0005 | 2.74 | 0.001 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.3 | < 0.001 | 0.17 | < 0.001 | < 0.0005 | 0.002 | 0.0001 | 0.0008 | < 0.001 | 0.031 | < 0.01 |
| V25BSP | 17-Jul-06 | < 0.00025 | 0.095 | < 0.001 | 0.019 | < 0.001 | < 0.001 | < 0.05 | 64.6 | 0.0002 | < 0.005 | 0.004 | < 0.001 | 0.006 | 0.15 | < 0.02 | 1.1 | 0.016 | 14.6 | 0.061 | < 0.0005 | 3.5 | 0.002 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.5 | < 0.001 | 0.23 | < 0.001 | < 0.0005 | 0.004 | 0.0001 | 0.0007 | < 0.001 | 0.046 | < 0.01 |
| V25BSP | 22-Aug-06 | < 0.00025 | 0.039 | < 0.001 | 0.024 | < 0.001 | < 0.001 | < 0.05 | 102 | 0.0003 | < 0.005 | 0.006 | < 0.001 | 0.008 | < 0.05 | < 0.00002 | 1.4 | 0.006 | 20.6 | 0.058 | 0.0007 | 4.67 | 0.002 | 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.1 | < 0.001 | 0.37 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0013 | < 0.001 | 0.078 | < 0.01 |
| V25BSP | 11-Sep-06 | < 0.00025 | 0.046 | < 0.001 | 0.022 | < 0.001 | < 0.001 | < 0.05 | 105 | 0.0003 | < 0.005 | 0.007 | < 0.001 | 0.006 | 0.06 | < 0.00002 | 1.2 | 0.006 | 24.2 | 0.069 | 0.0006 | 4.9 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 5.3 | < 0.001 | 0.4 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0013 | < 0.001 | 0.085 | < 0.01 |
| V25BSP | 16-Oct-06 | < 0.00025 | 0.048 | < 0.001 | 0.022 | < 0.001 | < 0.001 | < 0.05 | 117 | 0.0004 | 0.006 | 0.012 | < 0.001 | 0.009 | 0.07 | < 0.02 | 1.3 | 0.005 | 26.1 | 0.093 | 0.0006 | 5.52 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.7 | < 0.001 | 0.41 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0019 | < 0.001 | 0.14 | < 0.01 |
| | average | 0.00025 | 0.130 | 0.001 | 0.021 | 0.001 | 0.001 | 0.05 | 81.0 | 0.00028 | 0.005 | 0.006 | 0.001 | 0.00667 | 0.21 | 0.01001 | 1.3 | 0.007 | 17.6 | 0.073 | 0.00057 | 3.9 | 0.002 | 0.0015 | 0.15 | 0.001 | 0.001 | 4.6 | 0.001 | 0.29 | 0.001 | 0.0005 | 0.00383 | 0.0001 | 0.00132 | 0.001 | 0.076 | 0.01 |
| | minimum | < 0.00025 | 0.039 | < 0.001 | 0.016 | < 0.001 | < 0.001 | < 0.05 | 46.1 | < 0.0002 | < 0.005 | 0.002 | < 0.001 | 0.004 | < 0.05 | < 0.00002 | 1.1 | 0.003 | 9.74 | 0.049 | < 0.0005 | 1.8 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 2.6 | < 0.001 | 0.15 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0007 | < 0.001 | 0.031 | < 0.01 |
| | maximum | < 0.00025 | 0.47 | < 0.001 | 0.024 | < 0.001 | < 0.001 | < 0.05 | 117 | 0.0004 | 0.006 | 0.012 | 0.001 | 0.009 | 0.73 | < 0.02 | 1.8 | 0.016 | 26.1 | 0.11 | 0.0007 | 5.52 | 0.003 | 0.004 | < 0.15 | < 0.001 | < 0.001 | 5.5 | < 0.001 | 0.41 | < 0.001 | < 0.0005 | 0.014 | 0.0001 | 0.0019 | < 0.001 | 0.14 | < 0.01 |
| | N > DL | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 5 | 2 | 6 | 1 | 6 | 5 | 0 | 6 | 6 | 6 | 6 | 3 | 6 | 6 | 4 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 3 | 2 | 6 | 0 | 6 | 0 |
| | median | 0.00025 | 0.0635 | 0.001 | 0.022 | 0.001 | 0.001 | 0.05 | 83.3 | 0.0003 | 0.005 | 0.005 | 0.001 | 0.0065 | 0.11 | 0.01001 | 1.25 | 0.0055 | 17.6 | 0.065 | 0.00055 | 4.085 | 0.002 | 0.001 | 0.15 | 0.001 | 0.001 | 4.9 | 0.001 | 0.3 | 0.001 | 0.0005 | 0.0015 | 0.0001 | 0.0013 | 0.001 | 0.077 | 0.01 |
| V27 | 29-May-06 | < 0.00025 | 0.083 | < 0.001 | 0.019 | < 0.001 | < 0.001 | < 0.05 | 14.9 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.16 | < 0.00002 | 0.8 | < 0.001 | 4.37 | 0.023 | < 0.0005 | 1.22 | < 0.001 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 2.8 | < 0.001 | 0.052 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0009 | < 0.001 | 0.022 | < 0.01 |
| V27 | 01-Aug-06 | < 0.00025 | 0.021 | < 0.001 | 0.032 | < 0.001 | < 0.001 | < 0.05 | 28.2 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.06 | < 0.00002 | 0.6 | 0.002 | 9.46 | 0.004 | < 0.0005 | 2.14 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.5 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0014 | < 0.001 | 0.018 | < 0.01 |
| V27 | 26-Sep-06 | < 0.00025 | < 0.005 | < 0.001 | 0.029 | < 0.001 | < 0.001 | < 0.05 | 24.2 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.02 | 0.5 | 0.001 | 8.2 | 0.003 | < 0.0005 | 2.05 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4 | < 0.001 | 0.093 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0013 | < 0.001 | 0.023 | < 0.01 |
| | average | 0.00025 | 0.036 | 0.001 | 0.027 | 0.001 | 0.001 | 0.05 | 22.4 | 0.0002 | | 0.001 | 0.001 | 0.00167 | 0.09 | 0.00668 | 0.6 | 0.001 | 7.34 | 0.01 | 0.0005 | 1.80 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 3.8 | 0.001 | 0.085 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.0012 | 0.001 | 0.021 | 0.01 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.019 | < 0.001 | < 0.001 | < 0.05 | 14.9 | < 0.0002 | | 0.001 | 0.001 | 0.001 | 0.05 | < 0.00002 | 0.5 | < 0.001 | 4.37 | 0.003 | < 0.0005 | 1.22 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 2.8 | < 0.001 | 0.052 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0009 | < 0.001 | 0.018 | < 0.01 |
| | maximum | < 0.00025 | 0.083 | < 0.001 | 0.032 | < 0.001 | < 0.001 | < 0.05 | 28.2 | < 0.0002 | | 0.001 | 0.001 | 0.002 | 0.16 | < 0.02 | 0.8 | 0.002 | 9.46 | 0.023 | < 0.0005 | 2.14 | < 0.001 | 0.002 | < 0.15 | < 0.001 | < 0.001 | 4.5 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0014 | < 0.001 | 0.023 | < 0.01 |
| | N > DL | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | | 0 | 0 | 2 | 2 | 0 | 3 | 2 | 3 | 3 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 1 | 0 | 3 | 0 | 3 | 0 |
| | median | 0.00025 | 0.021 | 0.001 | 0.029 | 0.001 | 0.001 | 0.05 | 24.2 | 0.0002 | | 0.001 | 0.001 | 0.002 | 0.06 | 0.00002 | 0.6 | 0.001 | 8.2 | 0.004 | 0.0005 | 2.05 | 0.001 | 0.001 | 0.15 | 0.001 | 0.001 | 4 | 0.001 | 0.093 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.0013 | 0.001 | 0.022 | 0.01 |
| VGMAIN | 13-Feb-06 | < 0.00025 | 0.009 | < 0.001 | 0.073 | < 0.001 | < 0.001 | < 0.05 | 79.4 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 1.2 | 0.005 | 34.1 | 0.009 | 0.0008 | 4.32 | 0.002 | < 0.001 | < 0.15 | < 0.001 | 0.002 | 5.2 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0073 | < 0.001 | 0.018 | < 0.01 |
| VGMAIN | 24-Mar-06 | < 0.00025 | < 0.005 | < 0.001 | 0.07 | < 0.001 | < 0.001 | < 0.05 | 81.3 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 1.2 | 0.005 | 33.8 | 0.011 | 0.0007 | 4.18 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.7 | < 0.001 | 0.31 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.008 | < 0.001 | 0.023 | < 0.01 |

Appendix 6
2006 Surface Water Quality Data
Vangorda Creek Drainage

Table 2 Surface Water Total Metal Parameters

| STATION | DATE | AG-T mg/L | AL-T mg/L | AS-T mg/L | BA-T mg/L | BE-T mg/L | BI-T mg/L | B-T mg/L | CA-T mg/L | CD-T mg/L | CN-T mg/L | CO-T mg/L | CR-T mg/L | CU-T mg/L | FE-T mg/L | HG-T mg/L | K-T mg/L | LI-T mg/L | MG-T mg/L | MN-T mg/L | MO-T mg/L | NA-T mg/L | NI-T mg/L | PB-T mg/L | P-T mg/L | SB-T mg/L | SE-T mg/L | SI-T mg/L | SN-T mg/L | SR-T mg/L | TE-T mg/L | TH-T mg/L | TI-T mg/L | TL-T mg/L | U-T mg/L | V-T mg/L | ZN-T mg/L | ZR-T mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VGMAIN | 24-Apr-06 | < 0.00025 | < 0.005 | < 0.001 | 0.062 | < 0.001 | < 0.001 | < 0.05 | 77.5 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 1.1 | 0.004 | 32.6 | 0.014 | 0.0008 | 3.8 | 0.005 | < 0.001 | < 0.15 | < 0.001 | 0.001 | 4 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0075 | < 0.001 | 0.024 | < 0.01 |
| VGMAIN | 17-May-06 | < 0.00025 | 0.12 | 0.001 | 0.04 | < 0.001 | < 0.001 | < 0.05 | 35.1 | < 0.0002 | | < 0.001 | < 0.001 | 0.003 | 0.4 | < 0.00002 | 1.4 | 0.002 | 13.1 | 0.066 | < 0.0005 | 1.59 | 0.003 | 0.003 | < 0.15 | < 0.001 | < 0.001 | 3.3 | < 0.001 | 0.13 | < 0.001 | < 0.0005 | 0.003 | < 0.0001 | 0.0023 | < 0.001 | 0.02 | < 0.01 |
| VGMAIN | 19-Jun-06 | < 0.00025 | 0.058 | < 0.001 | 0.033 | < 0.001 | < 0.001 | < 0.05 | 28.3 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.16 | < 0.02 | 0.7 | 0.002 | 9.32 | 0.012 | < 0.0005 | 1.88 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.1 | < 0.001 | 0.1 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0019 | < 0.001 | 0.012 | < 0.01 |
| VGMAIN | 18-Jul-06 | < 0.00025 | 0.06 | < 0.001 | 0.032 | < 0.001 | < 0.001 | < 0.05 | 29.1 | < 0.0002 | | < 0.001 | < 0.001 | 0.002 | 0.17 | < 0.02 | 0.6 | 0.008 | 11.2 | 0.015 | < 0.0005 | 2.1 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.5 | < 0.001 | 0.11 | < 0.001 | < 0.0005 | 0.001 | < 0.0001 | 0.0016 | < 0.001 | 0.015 | < 0.01 |
| VGMAIN | 21-Aug-06 | < 0.00025 | 0.013 | < 0.001 | 0.04 | < 0.001 | < 0.001 | < 0.05 | 36.9 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | < 0.00002 | 0.7 | 0.003 | 14.2 | 0.004 | < 0.0005 | 2.59 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.6 | < 0.001 | 0.14 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0022 | < 0.001 | 0.011 | < 0.01 |
| VGMAIN | 11-Sep-06 | < 0.00025 | 0.012 | < 0.001 | 0.032 | < 0.001 | < 0.001 | < 0.05 | 29.7 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 0.5 | 0.002 | 12 | 0.004 | < 0.0005 | 2.24 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.3 | < 0.001 | 0.12 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0018 | < 0.001 | 0.01 | < 0.01 |
| VGMAIN | 16-Oct-06 | < 0.00025 | 0.007 | < 0.001 | 0.044 | < 0.001 | < 0.001 | < 0.05 | 46.7 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.02 | 0.7 | 0.003 | 19.6 | 0.005 | 0.0005 | 3.01 | 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4 | < 0.001 | 0.18 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0037 | < 0.001 | 0.019 | < 0.01 |
| VGMAIN | 14-Nov-06 | 0.0003 | 0.019 | < 0.001 | 0.062 | < 0.001 | < 0.001 | < 0.05 | 64.5 | 0.0004 | | 0.001 | < 0.001 | < 0.001 | 0.08 | < 0.00002 | 0.8 | 0.004 | 29.8 | 0.074 | 0.001 | 3.83 | 0.003 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.7 | < 0.001 | 0.28 | < 0.001 | < 0.0005 | < 0.001 | 0.0003 | 0.0063 | < 0.001 | 0.025 | < 0.01 |
| VGMAIN | 13-Dec-06 | < 0.00025 | < 0.005 | < 0.001 | 0.07 | < 0.001 | < 0.001 | < 0.05 | 69.4 | < 0.0002 | | < 0.001 | < 0.001 | 0.001 | < 0.05 | < 0.00002 | 1 | 0.004 | 27.3 | 0.007 | 0.0006 | 3.75 | 0.002 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 4.8 | < 0.001 | 0.27 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0078 | < 0.001 | 0.018 | < 0.01 |
| | average | 0.00025 | 0.028 | 0.001 | 0.051 | 0.001 | 0.001 | 0.05 | 52.5 | 0.00022 | | 0.001 | 0.001 | 0.001 | 0.105 | 0.005469 | 0.9 | 0.004 | 21.5 | 0.020 | 0.00063 | 3.03 | 0.002 | 0.001 | 0.15 | 0.001 | 0.00109 | 4.4 | 0.001 | 0.21 | 0.001 | 0.0005 | 0.00118 | 0.00012 | 0.00458 | 0.001 | 0.018 | 0.01 |
| | minimum | < 0.00025 | < 0.005 | < 0.001 | 0.032 | < 0.001 | < 0.001 | < 0.05 | 28.3 | < 0.0002 | | < 0.001 | < 0.001 | < 0.001 | < 0.05 | < 0.00002 | 0.5 | 0.002 | 9.32 | 0.004 | < 0.0005 | 1.59 | < 0.001 | < 0.001 | < 0.15 | < 0.001 | < 0.001 | 3.3 | < 0.001 | 0.1 | < 0.001 | < 0.0005 | < 0.001 | < 0.0001 | 0.0016 | < 0.001 | 0.01 | < 0.01 |
| | maximum | 0.0003 | 0.12 | 0.001 | 0.073 | < 0.001 | < 0.001 | < 0.05 | 81.3 | 0.0004 | | 0.001 | < 0.001 | 0.003 | 0.4 | < 0.02 | 1.4 | 0.008 | 34.1 | 0.074 | 0.001 | 4.32 | 0.005 | 0.003 | < 0.15 | < 0.001 | 0.002 | 5.2 | < 0.001 | 0.32 | < 0.001 | < 0.0005 | 0.003 | 0.0003 | 0.008 | < 0.001 | 0.025 | < 0.01 |
| | N > DL | 1 | 8 | 1 | 11 | 0 | 0 | 0 | 11 | 1 | | 1 | 0 | 5 | 4 | 0 | 11 | 11 | 11 | 11 | 6 | 11 | 8 | 1 | 0 | 0 | 2 | 11 | 0 | 11 | 0 | 0 | 3 | 1 | 11 | 0 | 11 | 0 |
| | median | 0.00025 | 0.012 | 0.001 | 0.044 | 0.001 | 0.001 | 0.05 | 46.7 | 0.0002 | | 0.001 | 0.001 | 0.001 | 0.05 | 0.00002 | 0.8 | 0.004 | 19.6 | 0.011 | 0.0005 | 3.01 | 0.002 | 0.001 | 0.15 | 0.001 | 0.001 | 4.5 | 0.001 | 0.18 | 0.001 | 0.0005 | 0.001 | 0.0001 | 0.0037 | 0.001 | 0.018 | 0.01 |

Statistics only generated where there are more than 2 values in a data set

| | |
|---|---|
| average | average of values, including values less than detection limit as set to DL value |
| | if it is the DL value will be shown without the < symbol |
| minimum | lowest value and will be least DL value if these are present in the data set |
| maximum | highest vale |
| N > DL | number of values measured that are above detection limits |
| median | the median value of the data set - if it is a DL value will be shown without the < symbol |

NOTE:
Detection Limit values used as the DL value in statistics contrasts with conversion to 0 for charts