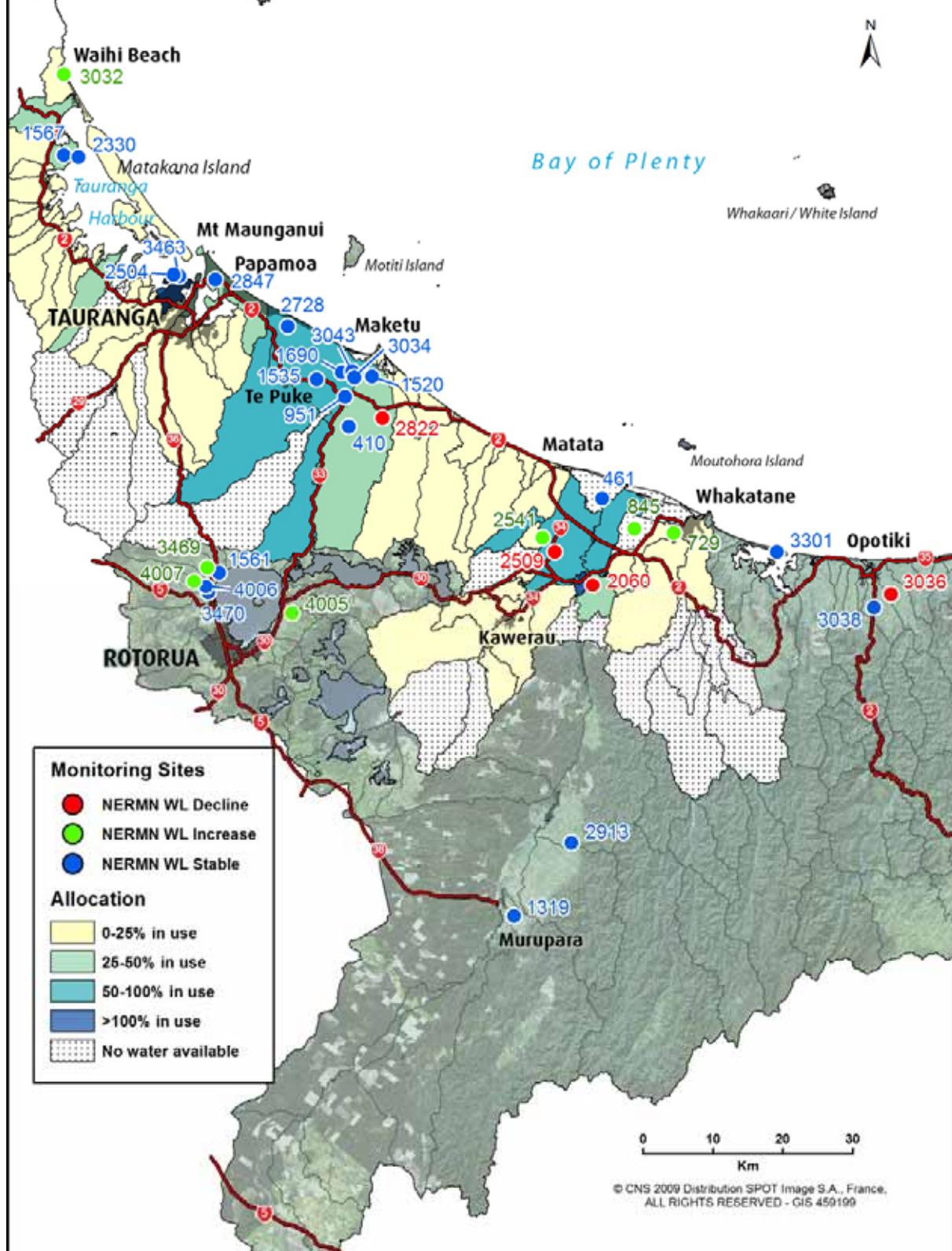


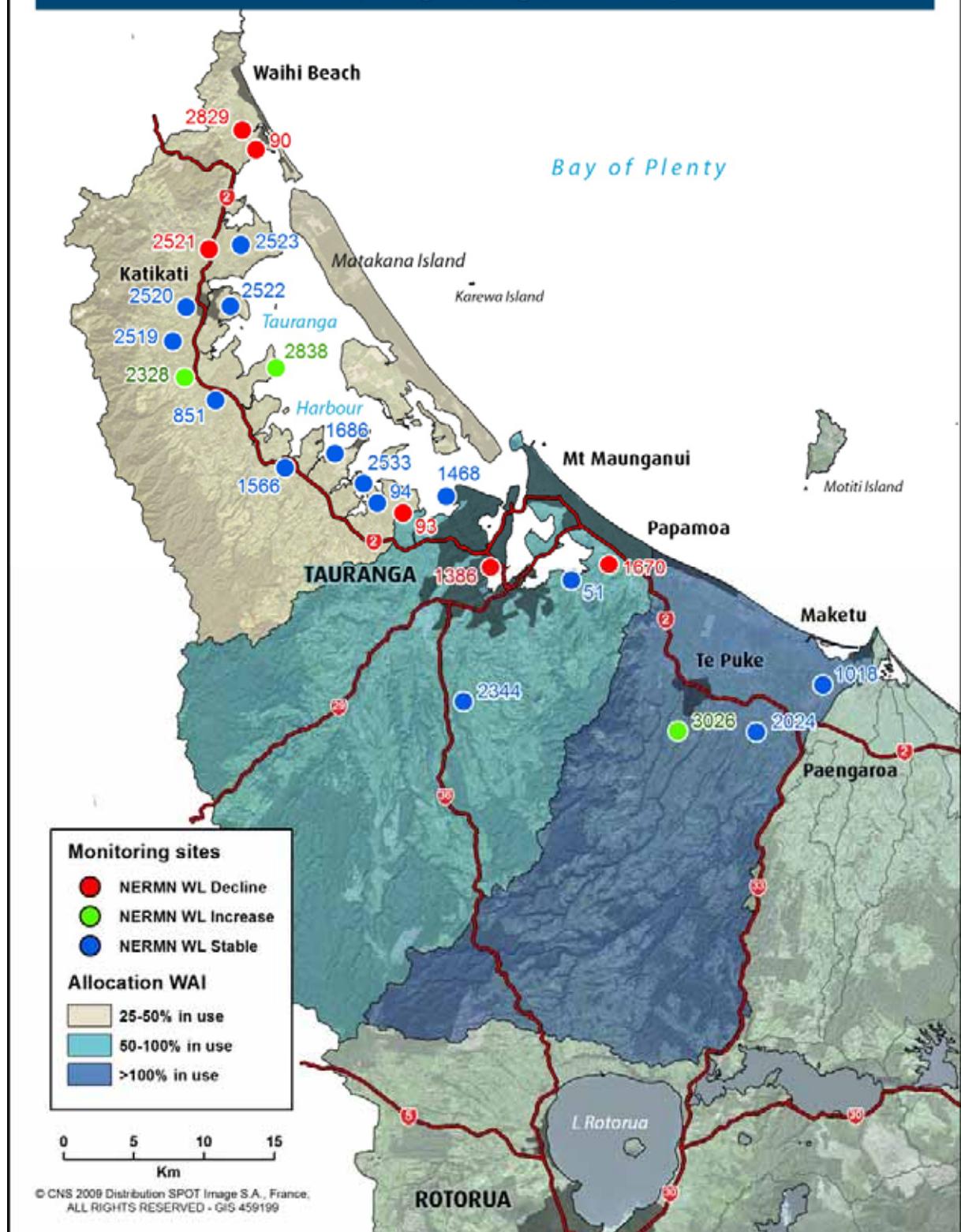
Map 10: NERMN groundwater level monitoring and allocation



Map 10

NERMN groundwater level monitoring and allocation

Map 11: NERMN groundwater level monitoring and allocation Waiteariki/Aongatete Ignimbrite aquifer



Map 11

NERMN groundwater level monitoring and allocation Waiteariki/
Aongatete Ignimbrite aquifer

Appendix 2 – Table of monitoring bores

Table A2 All NERMN monitoring bores – table key

| Monitoring type | Symbol |
|--|--------|
| NERMN current telemetered groundwater level bores | ▲ |
| NERMN current telemetered groundwater level and groundwater quality bore | ▲ |
| NERMN current combined groundwater level and groundwater quality bores | ● |
| NERMN current groundwater level bores | ● |
| NERMN current groundwater quality bores | ● |
| NERMN discontinued telemetered groundwater level bores | ■ |
| NERMN discontinued groundwater level bores | ■ |
| NERMN discontinued groundwater quality bores | ■ |
| NERMN current water quality spring | ★ |

Table A2: All NERMN monitoring bores

| Map Area | Bore number | Easting | Northing | Bore depth (m) | Static water level | Temp °C | Casing depth (m) | Reduced level of collar (m) | Groundwater Catchment or Zone | Aquifer | Bore use | Monitoring type |
|-----------------------|-------------|---------|----------|----------------|--------------------|---------|------------------|-----------------------------|-------------------------------|---------------------------|------------------------|-----------------|
| Map 3 WBOP | | | | | | | | | | | | |
| | 66 | 2771800 | 6392300 | 618.7 | 5.5 | 34 | 199.9 | 16.20 | WAI 1 zone | Aongatete | Irrigation | ■ |
| | 68 | 2766700 | 6402600 | 275.8 | 25 | 22 | 57 | 37.30 | Tahawai WAI 1 zone | Aongatete | Irrigation | ■ |
| | 90 | 2771660 | 6412750 | 329.2 | 25.9 | - | 249.9 | 23.00 | WAI 1 zone | Aongatete | Irrigation | ● |
| | 93 | 2782075 | 6386903 | 460.2 | 18.3 | - | 350.5 | 26.051 | WAI 1 zone | Aongatete | Irrigation | ● |
| | 94 | 2780290 | 6387570 | 164.6 | 17.4 | 24 | 130.1 | 22.866 | WAI 1 zone | Waiteariki | Irrigation/domestic | ● ■ |
| | 851 | 2768709 | 6394915 | 97.5 | 15.2 | 19 | 75.3 | 20.05 | WAI 1 zone | Waiteariki | Irrigation | ■ ■ |
| | 1393 | 2768559 | 6404732 | 326.2 | 33.5 | 41 | 247.5 | 55.20 | WAI 1 zone | Aongatete | Irrigation/domestic | ■ |
| | 1566 | 2773663 | 6390116 | 163.1 | 0 | - | 85 | 41.166 | WAI 1 zone | Waiteariki/Aongatete | Irrigation | ● |
| | 1686 | 2777207 | 6391142 | 182.9 | 5.18 | 26 | 111.6 | 7.16 | WAI 1 zone | Waiteariki | Irrigation | ● ■ |
| | 2303 | 2770212 | 6399012 | 262 | -0.3 | 34 | 144.8 | 7.40 | WAI 1 zone | Waiteariki | Irrigation | ● |
| | 2328 | 2766513 | 6396560 | 454.2 | 0 | - | 246.89 | 21.237 | WAI 1 zone | Aongatete | Irrigation | ▲ |
| | 2330 | 2772801 | 6405433 | 118.87 | 33.53 | 18 | 65.53 | 31.843 | Ongare/Tanners Point | Tauranga Group sediments | Irrigation | ● |
| | 2343 | 2775286 | 6390637 | 153.9 | 17.07 | 18 | 98.45 | 27.569 | WAI 1 zone | Waiteariki | Irrigation | ■ |
| | 2344 | 2786366 | 6373411 | 123.4 | 15.83 | 17 | 39.32 | 180.614 | WAI 2 zone | Waiteariki | Irrigation | ● |
| | 2519 | 2765671 | 6399135 | 452 | 0 | - | - | 50.406 | WAI 1 zone? | Waiteariki/Aongatete? | Monitoring piezometers | ● |
| | 2520 | 2766607 | 6401560 | 353 | 0 | - | - | 41.599 | WAI 1 zone? | Waiteariki/Aongatete? | Monitoring piezometers | ● |
| | 2521 | 2768240 | 6405650 | 157.4 | 0 | - | - | 36.474 | WAI 1 zone? | Waiteariki/Aongatete? | Monitoring piezometers | ● |
| | 2522 | 2769751 | 6401633 | 245.6 | 0 | - | - | 9.537 | WAI 1 zone? | Waiteariki? | Monitoring piezometers | ● |
| | 2523 | 2770510 | 6405965 | 196 | 0 | - | - | 37.94 | Ongare/Tanners Point | Tauranga Group sediments? | Monitoring piezometers | ● |
| | 2533 | 2779255 | 6389007 | 247.5 | - | 43 | 97.5 | 1.598 | WAI 1 zone | Waiteariki/Aongatete | Irrigation | ▲ |
| | 2829 | 2770619 | 6414114 | 216.41 | 0 | 35 | - | 28.098 | WAI 1 zone | Aongatete | Irrigation | ● |
| | 2838 | 2772680 | 6396970 | 304.8 | - | - | - | 7.6 | WAI 1 zone | Waiteariki | Monitoring | ● |
| | 3032 | 2770671 | 6417295 | 6 | - | - | 6 | 4.02 | Waihi Beach | Tauranga Group sediments | Domestic | ● |
| Map 4 Tauranga | | | | | | | | | | | | |
| | 51 | 2794032 | 6382039 | 67 | 5.5 | 19 | 38.7 | 8.525 | WAI 2 zone | Waiteariki | Irrigation | ● ■ |
| | 1386 | 2788282 | 6382004 | 466.3 | 23.8 | - | 335.3 | 26.444 | WAI 2 zone | Aongatete | Commercial heating | ● |
| | 1468 | 2785141 | 6388082 | 420.6 | 25.9 | 44 | 234.6 | 15.159 | WAI 2 zone | Waiteariki /Aongatete | Domestic heating | ● |
| | 1670 | 2796717 | 6383190 | 103.6 | 15.2 | - | 84.4 | 23.23 | WAI 2 zone | Waiteariki | Irrigation | ● |
| | 2093 | 2791360 | 6389420 | 6 | 0 | 17 | - | 4.22 | Maungatawa area | Tauranga Group sediments | Monitoring bore | ■ |
| | 2342 | 2795869 | 6382168 | 194.5 | 29.87 | 22 | 78.33 | 23.036 | WAI 2 zone | Whitianga Group | Domestic | ● |
| | 2362 | 2791622 | 6384213 | 210.3 | 17.68 | 29 | 99.67 | 17.082 | WAI 2 zone | Waiteariki | Irrigation/domestic | ● |
| | 2393 | 2784480 | 6385120 | 146.3 | 29.26 | 28 | 128.02 | 30.23 | WAI 2 zone | Waiteariki | Irrigation | ■ |
| | 2504 | 2787187 | 6388486 | 140 | - | - | - | 2.763 | Otumoetai | Tauranga Group sediments | Monitoring | ▲ |
| | 2707 | 2807700 | 6379630 | 10 | 4.5 | 15 | 8 | 11.8 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation | ■ |

Table A2: All NERMN monitoring bores

| Map Area | Bore number | Easting | Northing | Bore depth (m) | Static water level | Temp °C | Casing depth (m) | Reduced level of collar (m) | Groundwater Catchment or Allocation Zone | Aquifer | Bore use | Monitoring type |
|----------------------|-------------|---------|----------|----------------|--------------------|---------|------------------|-----------------------------|--|-------------------------------|-----------------------|-----------------|
| Map 5 Te Puke | 2728 | 2802718 | 6381306 | 81 | 0 | 21 | 69 | 6.489 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation | [blue] [yellow] |
| | 2847 | 2792330 | 6387990 | 5.2 | 0 | 18 | 3.2 | 3.99 | Maungatawa area | Tauranga Group sediments | Investigation bore | [blue] [yellow] |
| | 3044 | 2785661 | 6383715 | 244 | - | 44 | - | 38.68 | WAI 2 zone | Waiteariki | Swimming pool | [yellow] |
| | 3272 | 2794282 | 6388233 | 375 | 9 | 39 | 300 | 5.57 | WAI 2 zone | Waiteariki | Heating domestic/pool | [yellow] |
| | 3463 | 2786350 | 6388650 | 274.32 | 2.1 | 44 | 225.55 | 3.23 | Otumoetai area | Tauranga Group sediments | Swimming Pool | [blue] |
| | 4364 | 2785622 | 6383676 | 177 | - | 37 | - | 28.17 | WAI 2 zone | Waiteariki | Commercial | [yellow] |
| | 4582 | 2793910 | 6382080 | 350 | 0 | 26 | - | 1.71 | WAI 2 zone | Aongatete | ? | [yellow] |
| Map 5 Te Puke | | | | | | | | | | | | |
| Map 6 Rotorua | 410 | 2811437 | 6366923 | 196.6 | 67.1 | 15 | 118 | 410 | Kaikokopu - Pokopoko -Wharere | Minden Rhyolite & other volc. | Irrigation | [green] |
| | 643 | 2819490 | 6371720 | 9 | 1 | 15 | 7 | 0.2 | Pukehina | Q1 non-marine sediments (TGS) | Agricultural | [yellow] |
| | 951 | 2811010 | 6371224 | 11.4 | 10.4 | 24 | 86.3 | 17.4 | Kaikokopu - Pokopoko -Wharere | Mamaku Plateau Formation | Irrigation | [green] |
| | 1018 | 2811953 | 6374592 | 359 | 3.35 | 33 | 359 | 5.991 | WAI 3 zone | Waiteariki | Irrigation | [blue] [yellow] |
| | 1520 | 2814775 | 6374119 | 74 | 21.2 | 21 | 50 | 29.42 | Kaikokopu - Pokopoko -Wharere | Q4 – Q8 sediments (TGS) | Irrigation | [green] |
| | 1535 | 2806837 | 6373680 | 32 | 0 | - | 19.81 | 9.023 | Lower Kaituna (Plains) | Tauranga Group sediments | Domestic | [blue] |
| | 1586 | 2804301 | 6373423 | 30.5 | 6 | 17 | 28 | 8.967 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation | [yellow] |
| | 1690 | 2810451 | 6374689 | 97.5 | 3 | 26 | 72.5 | 5.54 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation | [green] |
| | 2024 | 2807227 | 6371251 | 118.5 | 17.3 | - | 98 | 24.99 | WAI 3 zone | Waiteariki | Irrigation | [blue] |
| | 2591 | 2811500 | 6366400 | 68.5 | 26 | - | 65 | 59.42 | Kaikokopu - Pokopoko -Wharere | Mamaku Plateau Formation | Agricultural | [yellow] |
| | 2822 | 2816229 | 6368109 | 121.9 | 7.62 | 18 | 104.85 | 26.404 | Kaikokopu - Pokopoko -Wharere | Minden Rhyolite & other volc | Irrigation | [green] |
| | 3026 | 2801617 | 6371318 | 103.6 | 0 | - | - | 100.298 | WAI 3 zone | Waiteariki | Horticultural | [blue] |
| | 3034 | 2811950 | 6374614 | 8.5 | - | 18 | - | 6.194 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation | [green] |
| | 3043 | 2811922 | 6374862 | 10 | - | 18 | - | 3.748 | Lower Kaituna (Plains) | Tauranga Group sediments | Agricultural | [blue] |
| | 3045 | 2810600 | 6374200 | 5.48 | 4.5 | 15 | - | 8.31 | Lower Kaituna (Plains) | Tauranga Group sediments | Irrigation/domestic | [yellow] |
| | 3566 | 2817258 | 6365278 | 122 | 28 | - | 70 | 59.9 | Kaikokopu - Pokopoko -Wharere | Q4 – Q8 sediments (TGS) | Agricultural/domestic | [yellow] |
| | 4968 | 2816567 | 6365568 | 10 | 3.2 | - | - | 28.872 | Kaikokopu - Pokopoko -Wharere | Q1 non-marine sediments (TGS) | Irrigation/frost | [yellow] |
| Map 6 Rotorua | | | | | | | | | | | | |
| Map 7 Taupo | 1561 | 2792914 | 6346012 | 73.1 | 15 | 12 | 63 | 300.033 | Hamurana | Tauranga Group sediments | Irrigation | [green] |
| | 2118 | 2802240 | 6340950 | 24 | 4.5 | 12 | 19 | 294.55 | Rotorua | Tauranga Group sediments | Irrigation | [yellow] |
| | 3469 | 2791219 | 6346703 | 124.66 | 54 | - | 80.16 | 355.786 | Ngongotaha | Mamaku Plateau Formation | Irrigation | [blue] |
| | 3470 | 2791341 | 6343091 | - | - | 12 | - | 286.35 | Rotorua | Tauranga Group sediments | Irrigation/frost | [green] |
| | 4000 | 2802640 | 6343400 | 26 | 0 | 14 | - | 296.34 | Rotorua | Tauranga Group sediments | Irrigation | [yellow] |
| | 4001 | 2821500 | 6345100 | 55 | - | 40 | - | 315 | Rotoma | - | Swimming pool | [yellow] |
| | 4003 | 2802530 | 6343420 | 26 | 21.52 | - | - | 307.23 | Rotorua | Tauranga Group sediments | Domestic | [yellow] |

Table A2: All NERMN monitoring bores

| Map Area | Bore | Easting | Northing | Depth | Static water level (m) | Temp °C | Casing depth (m) | Reduced level of collar (m) | Groundwater catchment or Allocation Zone | Aquifer | Bore use | Monitoring type |
|-------------------------|------------|---------|----------|-------|------------------------|---------|------------------|-----------------------------|--|------------------------------------|---------------------------|-----------------|
| | 4005 | 2803318 | 6340128 | 180 | 21 | - | 167 | 335.546 | Rotorua | Tauranga Group sediments | Irrigation/domestic | ● |
| | 4006 | 2791006 | 6343963 | 85.3 | 18.3 | - | - | 305.214 | Rotorua | Tauranga Group sediments | Irrigation | ● |
| | 4007 | 2789325 | 6344683 | - | - | 12 | - | 345.581 | Ngongotaha | Pokai & older volcanics | Domestic/lifestyle block | ● |
| Map 7 Rangitāiki | | | | | | | | | | | | |
| | 1 | 2854063 | 6352640 | 12.1 | - | 16 | 9.1 | 4.73 | Kope Orini 1 | Q1 non-marine sediments (TGS) | Agricultural | ■ |
| | 49 | 2846400 | 6344300 | 36.2 | 0 | - | 36.2 | 13.37 | Ngakauroa Stream | Q2 – Q4 non-marine sediments (TGS) | Irrigation | ■ |
| | Spring 198 | 2838752 | 6352574 | 28.5 | | | | | Tumarau | Matahina and older volc. | Municipal | ★ |
| | 461 | 2847653 | 6356639 | 12.5 | 0.92 | - | 9.24 | -0.271 | Old Rangitāiki Canal | Q1 marine sediments (TGS) | Irrigation | ▲ |
| | 466 | 2849382 | 6351270 | 16.8 | 2.5 | 16 | 12.81 | 3.3 | Reids Central Canal | Q1 marine sediments (TGS) | Irrigation | ■ |
| | 490 | 2840440 | 6357180 | 73 | - | 14 | 57.13 | 6.19 | Awakaponga | Q2 – Q4 non-marine sediments (TGS) | Irrigation | ■ |
| | 729 | 2857889 | 6351701 | 12.8 | - | - | 9.8 | 2.57 | Te Rāhu 2 | Q1 marine sediments (TGS) | Irrigation | ● |
| | 845 | 2852293 | 6352320 | 173 | 0 | 28 | 161.6 | 4.077 | Kope Orini 1 | Q6 – Q8 sediments (TGS) | Irrigation | ● |
| | 925 | 2844517 | 6350358 | 32 | -0.5 | 19 | 26.1 | 2.9 | Awaiti Canal | Q2 – Q4 non-marine sediments (TGS) | Irrigation | ■ |
| | 1605 | 2845160 | 6340930 | 61 | 7.8 | 16 | 51 | 20.616 | Ngakauroa Stream | Matahina and older volcanic | Irrigation | ■ |
| | 2060 | 2846350 | 6344147 | 61.3 | 0 | - | 55.6 | 13.61 | Ngakauroa Stream | Q2 – Q4 non-marine sediments (TGS) | Domestic/agriculture | ▲ |
| | 2076 | 2854600 | 6356700 | - | - | 19 | - | 6.09 | Kope Orini 2 | Tauranga Group sediments | Monitoring | ■ |
| | 2509 | 2840923 | 6348991 | 319.5 | 0 | 18 | 295 | 10.082 | Awaiti Canal | Matahina and older volcanic | Bottled drinking water | ● |
| | 2541 | 2839118 | 6350971 | 199 | -18 | - | 160 | 8.159 | Awaiti Canal | Q6-Q8 sediments (TGS) | Irrigation/frost/agricult | ▲ |
| Map 8 Galatea | | | | | | | | | | | | |
| | 196 | 2838400 | 6305100 | 19 | 1 | 14 | 13 | 166.76 | Galatea | Tauranga Group sediments | Irrigation | ■ |
| | 1319 | 2835070 | 6296819 | 51.8 | 0 | 15 | 39.6 | 198.36 | Murupara | Tauranga Group sediments | Agricultural | ● ■ |
| | 2913 | 2843300 | 6307300 | 22 | 9.5 | 12 | 20 | 208.48 | Galatea | Tauranga Group sediments | Agricultural | ■ ■ |
| Map 9 Ōpōtiki | | | | | | | | | | | | |
| | 3036 | 2888968 | 6342791 | 30 | - | 15 | - | 11.02 | Opotiki | Tauranga Group sediments | Horticultural | ● |
| | 3038 | 2886554 | 6340885 | 12 | 1.5 | 18 | - | 9.44 | Opotiki | Tauranga Group sediments | ? | ● |
| | 3039 | 2885700 | 6339700 | 30 | - | 14 | - | 13.11 | Opotiki | Tauranga Group sediments | ? | ■ |
| | 3301 | 2872660 | 6348980 | 12 | 0.8 | 15 | 6 | 10.58 | Ohope | Tauranga Group sediments | Irrigation | ■ ■ |
| | 4002 | 2886200 | 6346600 | 60 | - | 16 | - | 2.27 | Opotiki | Tauranga Group sediments | | ■ |

Appendix 3 – Groundwater quality tables

- Table A3-1 Median values – Health Related
 Table A3-2 Median values – Aesthetic Values
 Table A3-3 Median values – Trace Elements
 Table A3-4 Median values – Nutrients
 Table A3-5 Median values – Major Ions
 Table A3-6 Ion Balance (red figures are outliers)
 Table A3-7 Maximum values – Health Related
 Table A3-8 Maximum values – Aesthetic Values
 Table A3-9 Maximum values – Nutrients

| Abbreviation | Parameter Category Name | Abbreviation | Parameter Category Name |
|------------------|-------------------------------------|--------------------|---------------------------|
| Al | Aluminium | Mg | Magnesium |
| As | Arsenic | Mn | Manganese |
| B | Boron | Mo | Molybedenum |
| Ba | Barium | Na | Sodium |
| Br | Bromide | NH ₄ -N | Ammoniacal nitrogen |
| Ca | Calcium | Ni | Nickel |
| Cd | Cadmium | NNN | Nitrate-nitrite-nitrogen |
| Cl | Chloride | NO ₂ -N | Nitrite |
| Co | Cobalt | NO ₃ -N | Nitrate |
| Cond (mS/m) | Electrical conductivity | Pb | Lead |
| Cr | Chromium | pH | pH |
| Cs | Cesium | PO ₄ -P | Phosphate |
| Cu | Copper | Rb | Rubidium |
| DO | Dissolved oxygen | Sb | Antimony |
| DRP | Dissolved reactive phosphorus | Se | Selenium |
| E.coli | <i>Escherichia coli</i> | SiDR | Silica Dissolved Reactive |
| F | Fluoride | SiO ₂ | Silica |
| FC/Ent | <i>Faecal coliforms/Enterococci</i> | Sn | Tin |
| Fe | Iron | SO ₄ | Sulphate |
| Fe S/D | Iron soluble/dissolved | Sr | Strontium |
| Fe T/TR | Iron total/total recoverable | Temp | Temperature °C |
| HCO ₃ | Bicarbonate | Ti | Titanium |
| Hg | Mercury | TP | Total phosphorus |
| K | Potassium | U | Uranium |
| La | Lanthanum | V | Vanadium |
| Li | Lithium | Zn | Zinc |

Table A3-1: Median Values - Health Related (DWSNZ - Maximum Acceptable Value) (g/m³)

| Map Area | Bore No | Sample size | As | B | Cd | Hg | Pb | Sb | Ba | Cr | Cu | F | Mn | U | Mo | NO ₂ -N | NO ₃ -N | ENT cfu/100mL | FC cfu/100mL | |
|----------------|---------|-------------|----------|--------|----------|----------|----------|----------|---------|----------|----------|---------|---------|----------|----------|--------------------|--------------------|---------------|--------------|--|
| DWSNZ | | | 0.01 | 1.40 | 0.004 | 0.007 | 0.01 | 0.02 | 0.7 | 0.05 | 2 | 1.5 | 0.4 | 0.02 | 0.07 | 3 | 11.3 | 1 in 100ml | 1 in 100ml | |
| Map 3 WBOP | | | | | | | | | | | | | | | | | | | | |
| | 66 | 6 | 0.02015 | 0.7965 | 0.000015 | 0.00007 | 0.000655 | | | 0.0001 | 0.000555 | 0.35 | 0.026 | | | | 0.0225 | | | |
| | 68 | 13 | 0.0030 | 0.0170 | 0.000025 | | 0.00005 | | | 0.0007 | 0.0003 | 0.11 | 0.0003 | | | 0.0004 | | | | |
| | 94 | 6 | 0.0042 | 0.0099 | 0.00005 | 0.00001 | 0.00014 | | | 0.00076 | 0.33 | 0.0084 | | | | | 0.679 | | | |
| | 851 | 10 | 0.0005 | 0.011 | 0.00002 | 0.00107 | 0.00007 | | | 0.000175 | 0.00025 | 0.09 | 0.136 | | | 0.0002 | 0.002 | 0.001 | | |
| | 1393 | 15 | 0.0095 | 0.0545 | 0.000025 | 0.000065 | 0.00035 | 0.00035 | 0.02565 | 0.00067 | 0.0009 | 0.365 | 0.0039 | 0.000086 | 0.0016 | 0.001 | 0.022 | | | |
| | 1686 | 16 | 0.019 | 0.494 | 0.00006 | 0.00017 | 0.00017 | 0.0001 | 0.103 | 0.00025 | 0.00075 | 0.62 | 0.045 | 0.000115 | 0.0097 | 0.001 | 0.001 | | | |
| | 2303 | 18 | 0.03995 | 0.084 | 0.000025 | 0.00048 | 0.0001 | 0.0001 | 0.04605 | 0.00025 | 0.00045 | 0.45 | 0.06 | 0.00004 | 0.00085 | 0.001 | 0.001 | 0.001 | | |
| | 2330 | 16 | 0.001 | 0.016 | 0.000025 | 0.00062 | 0.0004 | 0.0001 | 0.0931 | 0.00145 | 0.0011 | 0.06 | 0.01135 | 0.000027 | 0.0001 | 0.001 | 0.066 | | | |
| | 2343 | 13 | 0.0005 | 0.013 | 0.000025 | 0.000025 | 0.0002 | 0.0001 | 0.05425 | 0.00025 | 0.00025 | 0.055 | 0.00085 | 0.00001 | 0.0001 | 0.001 | 0.066 | | | |
| | 2829 | 17 | 0.013 | 0.121 | 0.000025 | 0.00057 | 0.000875 | 0.00015 | 0.0114 | 0.00025 | 0.0007 | 0.17 | 0.0137 | 0.000107 | 0.0016 | 0.001 | 0.149 | | | |
| Map 4 Tauranga | | | | | | | | | | | | | | | | | | | | |
| | 51 | 6 | 0.000555 | 0.0105 | 1.25E-05 | 0.00001 | 0.00262 | | | 0.0001 | 0.0035 | 0.21 | 0.0047 | | | | 0.108 | | | |
| | 2093 | 7 | 0.022 | 0.056 | 0.00002 | | 0.00092 | | | 0.0001 | 0.000525 | 0.065 | 0.003 | | | 0.0013 | 0.0025 | 1.58 | 0.5 | |
| | 2342 | 18 | 0.0005 | 0.02 | 0.000025 | 0.000085 | 0.0002 | 0.0001 | 0.0422 | 0.00025 | 0.00025 | 0.075 | 0.00074 | 6.85E-05 | 0.0001 | 0.001 | 0.1095 | | | |
| | 2344 | 18 | 0.0005 | 0.012 | 0.000025 | 0.00004 | 0.000075 | 0.0001 | 0.0514 | 0.00025 | 0.000375 | 0.07 | 0.004 | 0.00001 | 0.0001 | 0.001 | 0.175 | | | |
| | 2362 | 17 | 0.004 | 0.078 | 0.000025 | 2.45E-05 | 0.00005 | 0.0001 | 0.06 | 0.00025 | 0.00025 | 0.21 | 0.551 | 0.00001 | 0.00046 | 0.001 | 0.019 | | | |
| | 2393 | 8 | 0.0038 | 0.145 | 1.25E-05 | 0.00001 | 0.00034 | | | 0.0001 | 0.0003 | 0.23 | 0.00025 | | | 0.0015 | 0.001 | 0.15 | | |
| | 2707 | 17 | 0.0005 | 0.029 | 0.000025 | 0.000105 | 0.00005 | 0.0001 | 0.02625 | 0.00025 | 0.00025 | 0.03 | 0.03075 | 0.000108 | 0.0001 | 0.009 | 1.02 | | | |
| | 2728 | 15 | 0.01 | 0.099 | 0.000025 | 0.00262 | 0.0001 | 0.0001 | 0.294 | 0.00025 | 0.00025 | 0.06 | 0.26 | 0.00001 | 0.00155 | 0.001 | 0.02 | | | |
| | 2847 | 16 | 0.002 | 0.056 | 0.000025 | 0.00004 | 0.0002 | 0.0001 | 0.03925 | 0.00025 | 0.00025 | 0.06 | 0.0947 | 0.000049 | 0.0001 | 0.011 | 0.02 | 0.5 | 0.5 | |
| | 3044 | 24 | 0.024 | 7.62 | 0.000025 | 0.00004 | 0.00005 | 0.000175 | 0.1375 | 0.00025 | 0.00028 | 1.3 | 0.231 | 0.00001 | 0.0038 | 0.001 | 0.001 | | | |
| | 3272 | 6 | 0.0005 | 0.68 | 5.25E-05 | 0.00004 | | 0.0005 | 0.00055 | 0.112 | 0.0025 | 0.0012 | 0.07 | 9.21 | 0.000055 | 0.0022 | 0.005 | 0.525 | | |
| | 4364 | 34 | 0.0067 | 2.85 | 0.000025 | | | 0.00005 | 0.0001 | 0.104 | 0.00025 | 0.00025 | 0.45 | 0.4975 | 0.00001 | 0.0025 | 0.001 | 0.01 | | |
| | 4582 | 6 | 0.0005 | 0.02 | 0.000025 | | | 0.0002 | 0.0001 | 0.098 | 0.00025 | 0.00025 | 0.1 | 0.00545 | 0.000048 | 0.0001 | 0.001 | 0.104 | | |
| Map 5 Te Puke | | | | | | | | | | | | | | | | | | | | |
| | 410 | 13 | 0.003 | 0.0415 | 0.000235 | 0.00004 | 0.0005 | 0.0001 | 0.28 | 0.00025 | 0.00045 | 0.27 | 4.9 | 0.00049 | 0.00105 | 0.001 | 0.009 | | | |
| | 643 | 11 | 0.0272 | 0.148 | 0.000045 | 0.000125 | 0.00028 | | | 0.000175 | 0.0076 | 0.33 | 10.965 | | 0.0012 | 0.001 | 0.078 | 18 | 3.5 | |
| | 951 | 16 | 0.01 | 0.183 | 0.000025 | 0.00009 | 0.00005 | 0.0001 | 0.0697 | 0.00025 | 0.00025 | 0.26 | 1.71 | 0.00001 | 0.0006 | 0.001 | 0.001 | | | |
| | 1018 | 11 | 0.0005 | 0.5015 | 0.00002 | 0.000215 | 0.00005 | | | 0.00025 | 0.00025 | 0.35 | 0.255 | | 0.0007 | 0.001 | 0.0055 | | | |
| | 1520 | 17 | 0.00165 | 0.2315 | 0.000025 | 0.000085 | 0.00015 | 0.0001 | 0.209 | 0.00025 | 0.000425 | 0.13 | 0.00025 | 0.00059 | 0.0004 | 0.001 | 1.93 | | | |
| | 1586 | 14 | 0.0005 | 0.02 | 0.000025 | 0.000065 | 0.00005 | 0.0001 | 0.0742 | 0.00025 | 0.00025 | 0.135 | 0.13 | 0.00001 | 0.0001 | 0.001 | 0.257 | 0.5 | 0.5 | |
| | 1690 | 17 | 0.0005 | 0.213 | 0.000025 | 0.00009 | 0.00005 | 0.0001 | 0.04255 | 0.00025 | 0.00025 | 0.3 | 0.601 | 0.00001 | 0.0005 | 0.001 | 0.029 | | | |
| | 2591 | 15 | 0.0170 | 0.030 | 0.000025 | | 0.00005 | | | 0.00025 | 0.0003 | 0.13 | 0.001 | | | | 0.0005 | | | |
| | 2822 | 17 | 0.004 | 0.214 | 0.000025 | 0.00177 | 0.00005 | 0.0001 | 0.2 | 0.00025 | 0.00025 | 0.395 | 0.9505 | 0.000039 | 0.0002 | 0.001 | 0.0085 | | | |
| | 3034 | 18 | 0.0005 | 0.095 | 0.000025 | 0.00017 | 0.00005 | 0.0001 | 0.095 | 0.00025 | 0.00025 | 0.14 | 0.025 | 0.00001 | 0.00015 | 0.001 | 6.05 | 1 | 0.5 | |
| | 3045 | 43 | 0.0005 | 0.009 | 0.000025 | 0.00001 | 0.0003 | 0.0001 | 0.1285 | 0.00025 | 0.00028 | 0.12 | 0.01285 | 0.000032 | 0.0001 | 0.001 | 0.48 | 0.5 | 1 | |
| | 3566 | 12 | 0.004 | 0.016 | 0.00002 | | | | | | | | | | | | | | | |

Table A3-2: Median Values - Aesthetic Value (DWSNZ - Guideline Values) (g/m³)

| Map Area | Bore No | Sample size | Temp | pH @25°C | pH | AI | Hardness | Cu | Fe S/D | Fe T/TR | Mn | Na | Zn | Cl | SO ₄ |
|-----------------------|---------|-------------|------------|-----------|-----------|---------|----------|----------|--------|---------|---------|-------|---------|--------|-----------------|
| DWSNZ | | | Geothermal | 7.0 - 8.5 | 7.0 - 8.5 | 0.1 | 200 | 1.0000 | 0.20 | 0.20 | 0.040 | 200.0 | 1.50 | 250.00 | 250.0 |
| Map 3 WBOP | | | | | | | | | | | | | | | |
| Map 3 WBOP | 66 | 6 | 32.05 | 7.35 | 7.05 | 0.00725 | 11.8 | 0.000555 | 0.005 | 0.0465 | 0.026 | 64.3 | 0.299 | 35 | 2 |
| | 68 | 13 | 21.5 | 7.6 | 7.4 | 0.0015 | 74.42 | 0.00025 | 0.01 | 0.0255 | 0.00025 | 22.30 | 0.0621 | 8.8 | 1.8 |
| | 94 | 6 | 25 | 7.3 | 7.0 | 0.0019 | 28 | 0.00076 | | 0.035 | 0.0084 | 31 | 0.024 | 16.4 | 2.65 |
| | 851 | 10 | 19.75 | 6.8 | 6.5 | 0.00225 | 40.3 | 0.00025 | 4.915 | 4.72 | 0.136 | 14.9 | 0.0427 | 10.5 | 2.17 |
| | 1393 | 15 | 26.9 | 7.9 | 7.75 | 0.027 | 1.4 | 0.0009 | 0.01 | 0.039 | 0.0039 | 34.9 | 0.035 | 9.45 | 1.54 |
| | 1686 | 16 | 27.15 | 7.66 | 7.415 | 0.4045 | 8.2 | 0.00075 | 0.3 | 0.74 | 0.045 | 73 | 0.0296 | 56.15 | 5 |
| | 2303 | 18 | 35.2 | 7.5 | 7.38 | 0.098 | 4.7 | 0.00045 | 0.095 | 0.052 | 0.06 | 106.5 | 0.0034 | 13 | 0.395 |
| | 2330 | 16 | 18.4 | 6.55 | 6.29 | 0.0041 | 25.7 | 0.0011 | 0.14 | 0.0345 | 0.01135 | 21 | 0.273 | 23.5 | 5 |
| | 2343 | 13 | 18.9 | 6.7 | 6.4 | 0.00195 | 18.5 | 0.00025 | 0.01 | 0.03 | 0.00085 | 13 | 0.303 | 10.25 | 2.25 |
| | 2829 | 17 | 31.2 | 8.4 | 8.25 | 0.073 | 1.8 | 0.0007 | 0.27 | 0.18 | 0.0137 | 49.9 | 0.0185 | 18.95 | 4 |
| Map 4 Tauranga | | | | | | | | | | | | | | | |
| Map 4 Tauranga | 51 | 6 | 19.8 | 6.65 | 6.45 | 0.0063 | 40.95 | 0.0035 | 0.07 | 0.58 | 0.0047 | 22 | 0.01 | 16.8 | 3.9 |
| | 2093 | 7 | 18.1 | 6.5 | 6.6 | 0.0015 | 75.9 | 0.000525 | 0.025 | 0.93 | 0.003 | 233 | 0.0027 | 310 | 32 |
| | 2342 | 18 | 22 | 7 | 6.83 | 0.0015 | 45.2 | 0.00025 | 0.01 | 0.035 | 0.00074 | 19.2 | 0.022 | 20.45 | 4.8 |
| | 2344 | 18 | 17.05 | 6.2 | 5.935 | 0.0175 | 12.6 | 0.000375 | 0.025 | 0.255 | 0.004 | 9.3 | 0.016 | 6.9 | 2.7 |
| | 2362 | 17 | 30.8 | 7 | 6.8 | 0.0015 | 30.3 | 0.00025 | 0.265 | 1.06 | 0.551 | 28.8 | 0.245 | 16.7 | 3.4 |
| | 2393 | 8 | 28.9 | 7.2 | 7.1 | 0.0015 | 32.7 | 0.0003 | 0.025 | 0.025 | 0.00025 | 33 | 0.0955 | 19.65 | 2.5 |
| | 2707 | 17 | 16.1 | 7.75 | 7.6 | 0.0015 | 268.85 | 0.00025 | 0.01 | 0.071 | 0.03075 | 95 | 0.0113 | 184 | 54.4 |
| | 2728 | 15 | 20 | 6.7 | 6.9 | 0.0015 | 53.7 | 0.00025 | 7.73 | 2.05 | 0.26 | 75.1 | 0.0815 | 84.3 | 9.8 |
| | 2847 | 16 | 20.25 | 5.85 | 6.15 | 0.242 | 28.4 | 0.00025 | 4.525 | 12.55 | 0.0947 | 17.8 | 0.335 | 19.3 | 19.5 |
| | 3044 | 24 | 42 | 7.5 | 7.57 | 0.003 | 55.6 | 0.00028 | 0.34 | 0.58 | 0.231 | 344.5 | 0.00565 | 580 | 0.25 |
| | 3272 | 6 | 32.5 | 6.8 | | 0.007 | 3913.9 | 0.0012 | 12 | | 9.21 | 4460 | 0.04 | 9790 | 995 |
| | 4364 | 34 | 36.65 | 7.3 | 7.48 | 0.0015 | 52.2 | 0.00025 | 0.45 | 0.585 | 0.4975 | 149 | 0.003 | 197 | 0.25 |
| | 4582 | 6 | 21.9 | 6.75 | | 0.0015 | 41.3 | 0.00025 | 0.08 | | 0.00545 | 23.5 | 0.399 | 22.3 | 3.4 |
| Map 5 Te Puke | | | | | | | | | | | | | | | |
| Map 5 Te Puke | 410 | 13 | 15.5 | 6.8 | 6.665 | 0.0015 | 32.1 | 0.00045 | 0.5 | 0.081 | 4.9 | 24 | 0.3635 | 10.2 | 6.6 |
| | 643 | 11 | 16.2 | 6.6 | 6.6 | 0.008 | 80.7 | 0.0076 | 8.755 | 6.13 | 10.965 | 59.25 | 0.003 | 28.1 | 14.4 |
| | 951 | 16 | 24.75 | 6.9 | 7 | 0.0015 | 109.4 | 0.00025 | 1.7 | 2.935 | 1.71 | 65 | 0.0081 | 22.25 | 0.25 |
| | 1018 | 11 | 32.4 | 6.7 | 6.5 | 0.0015 | 89.6 | 0.00025 | 1.8 | 3.305 | 0.255 | 105 | 0.149 | 40.55 | 0.9 |
| | 1520 | 17 | 22.8 | 6.7 | 6.5 | 0.0015 | 44.45 | 0.000425 | 0.01 | 0.0525 | 0.00025 | 62.9 | 0.0252 | 29.7 | 2.6 |
| | 1586 | 14 | 17.3 | 6.3 | 6.5 | 0.0015 | 16.7 | 0.00025 | 0.01 | 0.225 | 0.13 | 12.7 | 0.062 | 9.55 | 4.8 |
| | 1690 | 17 | 25 | 6.9 | 6.705 | 0.0015 | 75.8 | 0.00025 | 5.45 | 2.94 | 0.601 | 59 | 0.0115 | 19.6 | 0.25 |
| | 2591 | 15 | 18.3 | 7.3 | 7.175 | | 157.38 | | | 2.93 | | 31.9 | | 14.9 | 3.9 |
| | 2822 | 17 | 18.1 | 6.6 | 6.52 | 0.0015 | 51.4 | 0.00025 | 4.6 | 3.78 | 0.9505 | 49.85 | 0.046 | 21 | 0.56 |
| | 3034 | 18 | 17.3 | 6.25 | 5.79 | 0.0085 | 11.4 | 0.00025 | 0.01 | 0.115 | 0.025 | 31.6 | 0.009 | 18.9 | 19.3 |
| | 3045 | 43 | 15.7 | 6.3 | 6.455 | 0.0015 | 54.75 | 0.0028 | 0.036 | 0.04 | 0.01285 | 23 | 0.045 | 35 | 8.7 |
| | 3566 | 12 | 16.3 | 6.65 | 6.935 | 0.0093 | 15.7 | 0.000375 | 0.0365 | | 0.0012 | 15.2 | 0.024 | 8.4 | 1.85 |
| | 4968 | 10 | 16.2 | 6.45 | 6.195 | 0.006 | 20.65 | 0.00025 | 0.01 | | 0.00082 | 16.75 | 0.018 | 14.55 | 8.4 |
| Map 6 Rotorua | | | | | | | | | | | | | | | |
| Map 6 Rotorua | 1561 | 18 | 13.65 | 6.6 | 6.25 | 0.0015 | 15.5 | 0.0008 | 0.025 | 0.08 | 0.003 | 9.7 | 0.091 | 4.95 | 1.3 |
| | 2118 | 9 | 14.2 | 6.5 | 6.61 | 0.0015 | 26 | 0.00025 | 0.01 | | 0.00355 | 11.8 | 0.008 | 7.2 | 9.9 |
| | 3470 | 12 | 13.3 | 6.7 | 7.09 | 0.0015 | 12 | 0.00025 | 9.1 | | 1.25 | 13 | 0.0094 | 4.2 | 0.25 |
| | 4000 | 8 | 15.4 | 6.35 | 6.25 | 0.00415 | 28.4 | 0.0047 | 0.025 | 0.045 | 0.00245 | 10.3 | 0.4615 | 9.4 | 8.9 |
| | 4001 | 13 | 39.2 | 5.8 | 5.6 | 0.004 | 68.2 | 0.00025 | 9.79 | 10.53 | 2.92 | 229 | 0.0125 | 315.5 | 40.4 |
| | 4003 | 5 | 14.5 | 6.75 | 7.4 | 0.0015 | 22.6 | 0.000425 | 0.01 | | 0.0031 | 9.7 | 0.03 | 3.6 | 11.2 |
| | 4007 | 40 | 12.9 | 6.59 | 6.485 | 0.0015 | 15.9 | 0.000 | | | | | | | |

Table A3-3: Median Values – Trace Elements (g/m^3)

| Table A3-3: Median Values – Trace Elements (g/m ³) | | | | | | | | | | | | | | | | | | | |
|--|---------|-------------|-----------------|------------|--------|----------------|----------|----------|----------|---------|----------|---------|---------|----------|---------|----------|---------|--------|--|
| | | | Field Variables | | Silica | Trace elements | | | | | | | | | | | | | |
| Map Area | Bore No | Sample size | DO | Cond. mS/m | Si | SiDR | Co | Cs | La | Li | Ni | Rb | Se | Sn | Sr | Ti | V | Br | |
| Map 3 WBOP | | | | | | | | | | | | | | | | | | | |
| Map 3 WBOP | 66 | 6 | 1.05 | 36.2 | | | | | | | | | 0.0005 | | | | | | |
| | 68 | 13 | 6 | 14.8 | | | 0.0001 | 0.0001 | 0.00005 | 0.0216 | 0.00025 | 0.0085 | 0.0005 | 0.00025 | 0.0358 | 0.000025 | 0.014 | 0.025 | |
| | 94 | 6 | 3.45 | 19.8 | | | | | | | | | | | | | | | |
| | 851 | 10 | 3.25 | 16.35 | 80 | 85.3 | 0.0001 | | | 0.0057 | 0.0005 | | | 0.0005 | | | | | |
| | 1393 | 15 | 1.25 | 16.5 | 104 | 116.5 | 0.0001 | 0.0002 | 0.00005 | 0.0412 | 0.00025 | 0.0081 | 0.0005 | 0.00025 | 0.0024 | 0.000025 | 0.023 | 0.025 | |
| | 1686 | 16 | 0.49 | 37.15 | 97 | 99.6 | 0.0001 | 0.000295 | 0.00005 | 0.094 | 0.00025 | 0.0089 | 0.0005 | 0.00025 | 0.01175 | 0.000025 | 0.0018 | 0.1175 | |
| | 2303 | 18 | 0.655 | 48.5 | 114 | 31.5 | 0.0001 | 0.0027 | 0.00005 | 0.1225 | 0.00025 | 0.03 | 0.0005 | 0.00025 | 0.011 | 0.000025 | 0.00075 | 0.025 | |
| | 2330 | 16 | 2.57 | 17.4 | 85 | 85.9 | 0.0001 | 0.000375 | 0.00005 | 0.0051 | 0.0005 | 0.0206 | 0.0005 | 0.00025 | 0.06005 | 0.000025 | 0.00175 | 0.1 | |
| | 2343 | 13 | 7.65 | 10.6 | 66 | 66.9 | 0.0001 | 0.0002 | 0.00005 | 0.0082 | 0.000375 | 0.0101 | 0.0005 | 0.00025 | 0.0384 | 0.000025 | 0.002 | 0.025 | |
| | 2829 | 17 | 5.98 | 23.4 | 67 | 73.85 | 0.0001 | 0.00012 | 0.000215 | 0.011 | 0.0005 | 0.00405 | 0.0005 | 0.00025 | 0.0022 | 0.000025 | 0.04 | 0.095 | |
| Map 4 Tauranga | | | | | | | | | | | | | | | | | | | |
| Map 4 Tauranga | 51 | 6 | 4.35 | 19.25 | | | | | | | | | 0.0005 | | | | | | |
| | 2093 | 7 | 1.4 | 119.8 | 40.05 | | 0.0001 | | | 0.0035 | 0.0005 | | 0.0005 | | | | | | |
| | 2342 | 18 | 7.47 | 19.59 | 86 | 91.5 | 0.0001 | 0.00005 | 0.00005 | 0.0136 | 0.00025 | 0.011 | 0.0005 | 0.00025 | 0.05685 | 0.000025 | 0.008 | 0.07 | |
| | 2344 | 18 | 8.13 | 8.58 | 85 | 89.4 | 0.0001 | 0.00046 | 0.00005 | 0.0074 | 0.00025 | 0.0174 | 0.0005 | 0.00025 | 0.025 | 0.000025 | 0.0005 | 0.025 | |
| | 2362 | 17 | 2.81 | 21 | 108 | 115 | 0.0001 | 0.0039 | 0.00005 | 0.03885 | 0.00025 | 0.019 | 0.0005 | 0.00025 | 0.0529 | 0.000025 | 0.0005 | 0.075 | |
| | 2393 | 8 | 3.85 | 22.8 | 96.95 | | 0.0001 | | | 0.0528 | 0.0005 | | 0.0005 | | | | | | |
| | 2707 | 17 | 4.1 | 103.85 | 34.3 | 36.2 | 0.0001 | 0.00005 | 0.00005 | 0.0052 | 0.00025 | 0.01145 | 0.0005 | 0.00025 | 0.6695 | 0.000025 | 0.0005 | 1.7 | |
| | 2728 | 15 | 0.88 | 55.5 | 89 | 43.2 | 0.0002 | 0.00185 | 0.000085 | 0.0079 | 0.00025 | 0.02625 | 0.0005 | 0.00025 | 0.174 | 5.35E-05 | 0.0005 | 0.21 | |
| | 2847 | 16 | 0.3 | 17.48 | 41 | 44.9 | 0.0002 | 0.00017 | 0.00038 | 0.00067 | 0.0005 | 0.00935 | 0.0005 | 0.00025 | 0.0298 | 0.000025 | 0.003 | 0.05 | |
| | 3044 | 24 | 0.765 | 198.1 | 86.95 | 82.8 | 0.0001 | 0.0082 | 0.00005 | 0.533 | 0.00025 | 0.0706 | 0.0005 | 0.00075 | 0.069 | 0.00018 | 0.0005 | 1.49 | |
| | 3272 | 6 | | 2750 | 70.05 | 94 | 0.001 | 0.238 | 0.00005 | 1.26 | 0.0025 | 0.468 | 0.00875 | 0.001375 | 6.595 | 0.000138 | 0.00275 | 28 | |
| | 4364 | 34 | 0.815 | 85.8 | 82 | 67.2 | 0.0001 | 0.0077 | 0.00005 | 0.2475 | 0.00025 | 0.04635 | 0.0005 | 0.00025 | 0.077 | 0.00016 | 0.0005 | 0.61 | |
| | 4582 | 6 | | 20.35 | 107 | | 0.0001 | 0.000395 | 0.000075 | 0.0144 | 0.00025 | 0.01475 | 0.0005 | 0.00025 | 0.06615 | 0.000025 | 0.0023 | 0.09 | |
| Map 5 Te Puke | | | | | | | | | | | | | | | | | | | |
| Map 5 Te Puke | 410 | 13 | 4.66 | 20.5 | 76.5 | 76.3 | 0.000895 | 0.0002 | 0.00028 | 0.02865 | 0.00025 | 0.0193 | 0.0005 | 0.00025 | 0.0424 | 0.000025 | 0.0005 | 0.06 | |
| | 643 | 11 | 0.4 | 43.5 | 73.1 | 73 | 0.0008 | | | 0.163 | 0.0005 | | 0.0005 | | | | | | |
| | 951 | 16 | 0.7 | 49.8 | 94.1 | 91.4 | 0.0001 | 0.000175 | 0.00005 | 0.13 | 0.00025 | 0.0138 | 0.0005 | 0.00025 | 0.1355 | 0.000025 | 0.00075 | 0.12 | |
| | 1018 | 11 | 0.8 | 63.7 | 135 | 139 | 0.0001 | | | 0.2215 | 0.000375 | | 0.0005 | | | | | | |
| | 1520 | 17 | 5.225 | 38.1 | 97 | 55.95 | 0.0001 | 0.0015 | 0.00005 | 0.04605 | 0.00025 | 0.0254 | 0.0005 | 0.00025 | 0.08985 | 0.000025 | 0.0049 | 0.1 | |
| | 1586 | 14 | 0.95 | 10.75 | 89.3 | 90.7 | 0.0001 | 0.00015 | 0.00005 | 0.0031 | 0.00025 | 0.0132 | 0.0005 | 0.00025 | 0.036 | 0.000025 | 0.0005 | 0.0475 | |
| | 1690 | 17 | 0.295 | 42.2 | 97.5 | 58 | 0.0001 | 0.000075 | 0.00005 | 0.1005 | 0.00025 | 0.02325 | 0.0005 | 0.00025 | 0.15 | 0.000025 | 0.0005 | 0.08 | |
| | 2591 | 15 | 7.7 | 28.8 | | | | | | | | | | | | | | | |
| | 2822 | 17 | 5.24 | 34.5 | 90.1 | 91.2 | 0.0006 | 0.00072 | 0.00005 | 0.195 | 0.00025 | 0.014 | 0.0005 | 0.00025 | 0.062 | 0.000025 | 0.0005 | 0.09 | |
| | 3034 | 18 | 5.1 | 22.3 | 75.4 | 49.9 | 0.0001 | 0.00047 | 0.00011 | 0.0056 | 0.00025 | 0.019 | 0.0005 | 0.00025 | 0.0383 | 0.0001 | 0.00075 | 0.09 | |
| | 3045 | 43 | 4.6 | 26 | 83.3 | 83.4 | 0.0001 | 0.0005 | 0.0002 | 0.0064 | 0.0005 | 0.02585 | 0.0005 | 0.00025 | 0.104 | 0.000025 | 0.00105 | 0.06 | |
| | 3566 | 12 | 9.63 | 10 | 83 | 84.6 | 0.0001 | 0.00005 | 0.00005 | 0.013 | 0.00025 | 0.00057 | 0.0005 | 0.00025 | 0.0122 | 0.000025 | 0.0027 | 0.025 | |
| | 4968 | 10 | 9.585 | 18.125 | 88.4 | 88.2 | 0.0001 | 0.00019 | 0.00005 | 0.0076 | 0.00025 | 0.01395 | 0.0005 | 0.00025 | 0.07265 | 0.000025 | 0.0016 | 0.07 | |
| Map 6 Rotorua | | | | | | | | | | | | | | | | | | | |
| Map 6 Rotorua | 1561 | 18 | 7.54 | 8.7 | 69.9 | 39.55 | 0.0001 | 0.00059 | 0.00005 | 0.013 | 0.00025 | 0.00635 | 0.0005 | 0.00025 | 0.02 | 0.000025 | 0.0005 | 0.025 | |
| | 2118 | 9 | 8.46 | 12.385 | 78 | 44.35 | 0.0001 | 0.00195 | 0.00005 | 0.0216 | 0.00025 | 0.0079 | 0.0005 | 0.00025 | 0.0354 | 0.000025 | 0.0005 | 0.025 | |
| | 3470 | 12 | 0.725 | 9.9 | 40 | 22.4 | 0.0001 | 0.00305 | 0.0001 | 0.0227 | 0.00025 | 0.0096 | 0.0005 | 0.00025 | 0.0765 | 0.000025 | 0.0005 | 0.05 | |
| | 4000 | 8 | 8.8 | 13.2 | 82.6 | | 0.0001 | | | 0.0038 | 0.0005 | | 0.0005 | | | | | | |
| | 4001 | 13 | 1 | 141 | 170.5 | 87.5 | 0.00059 | 0.0328 | 0.00005 | 1.605 | 0.00025 | 0.11 | 0.0005 | 0.00025 | 0.101 | 0.000025 | 0.002 | 1.155 | |
| | 4003 | 5 | | 10.78 | 83.8 | 84.1 | 0.0001 | 0.00005 | 0.00005 | 0.0046 | 0.0048 | 0.0078 | 0.0005 | 0.00025 | 0.043 | 0.000025 | 0.0005 | 0.025 | |
| | 4007 | 40 | 8.45 | 8.6 | 66.5 | 41.1 | 0.0001 | 0.00038 | 0.00005 | 0.0118 | 0.00025 | 0.0061 | 0.0005 | 0.00025 | 0.02465 | 0.000025 | 0.0005 | 0.025 | |
| Map 7 Rangitāiki | | | | | | | | | | | | | | | | | | | |
| Map 7 Rangitāiki | 1 | 42 | 1.5 | 38.15 | 70.4 | 38.5 | 0.0001 | 0.00015 | 0.00015 | 0.01275 | 0.00085 | 0.0163 | 0.0005 | 0.00025 | 0.11 | 0.000025 | 0.0005 | 0.025 | |
| | 49 | 7 | 0.275 | 88.55 | | | | | | | | | 0.0005 | | | | | | |
| | 466 | 14 | 1.05 | 49.85</td | | | | | | | | | | | | | | | |

Table A3-4: Median Values – Nutrients (g/m³)

| Map Area | Bore No | Sample size | DRP | NH ₄ -N | NNN | NO ₂ -N | NO ₃ -N | PO ₄ -P | TP |
|--|------------|-------------|------|--------------------|------|--------------------|--------------------|--------------------|------|
| DWSNZ 2005 (revised 2008) | | | | 1.50 | | | 11.30 | | |
| ANZECC TV for direct toxicity to an aquatic organism | | | | 0.90 | | | 7.20 | | |
| Anthropogenic nitrate levels* | | | | | | | 3.50 | | |
| Possible anthropogenic effect* | | | | | | | 1.6 | | |
| Map 3 WBOP | | | | | | | | | |
| | 66 | 6 | 0.12 | 0.14 | 0.01 | | 0.02 | 0.11 | 0.12 |
| | 68 | 13 | 0.11 | 0.005 | 0.06 | 0.001 | 0.05 | 0.14 | 0.11 |
| | 94 | 6 | 0.11 | 0.01 | 0.38 | | 0.68 | 0.14 | 0.11 |
| | 851 | 10 | 0.13 | 0.03 | 0.00 | 0.00 | 0.00 | 0.05 | 0.13 |
| | 1393 | 15 | 0.16 | 0.01 | 0.01 | 0.00 | 0.02 | 0.08 | 0.17 |
| | 1686 | 16 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.20 | 0.22 |
| | 2303 | 18 | 2.70 | 0.50 | 0.00 | 0.00 | 0.00 | 3.70 | 2.60 |
| | 2330 | 16 | 0.02 | 0.01 | 0.08 | 0.00 | 0.07 | 0.05 | 0.02 |
| | 2343 | 13 | 0.06 | 0.01 | 0.09 | 0.00 | 0.07 | | 0.06 |
| | 2829 | 17 | 0.22 | 0.01 | 0.16 | 0.00 | 0.15 | 0.17 | 0.22 |
| Map 4 Tauranga | | | | | | | | | |
| | 51 | 6 | 0.17 | 0.01 | 0.13 | 0.00 | 0.11 | 0.89 | 0.18 |
| | 2093 | 7 | 0.03 | 0.09 | 2.58 | 0.00 | 1.58 | 0.05 | 0.04 |
| | 2342 | 18 | 0.08 | 0.01 | 0.11 | 0.00 | 0.11 | 0.09 | 0.08 |
| | 2344 | 18 | 0.02 | 0.01 | 0.20 | 0.00 | 0.18 | 0.05 | 0.02 |
| | 2362 | 17 | 0.21 | 0.13 | 0.02 | 0.00 | 0.02 | 0.22 | 0.29 |
| | 2393 | 8 | 0.09 | 0.01 | 0.21 | 0.00 | 0.15 | 0.11 | 0.10 |
| | 2707 | 17 | 0.02 | 0.01 | 4.11 | 0.01 | 1.02 | 0.05 | 0.02 |
| | 2728 | 15 | 0.02 | 0.49 | 0.00 | 0.00 | 0.02 | 0.05 | 0.03 |
| | 2847 | 16 | 0.02 | 1.40 | 0.00 | 0.01 | 0.02 | 0.05 | 0.03 |
| | 3044 | 24 | 0.09 | 0.21 | 0.00 | 0.00 | 0.00 | 0.05 | 0.10 |
| | 3272 | 6 | 0.01 | 1.06 | 0.02 | 0.01 | 0.53 | | 0.05 |
| | 4364 | 34 | 0.14 | 0.02 | 0.00 | 0.00 | 0.01 | 0.09 | 0.14 |
| | 4582 | 6 | 0.11 | 0.04 | 0.07 | 0.00 | 0.10 | | 0.16 |
| Map 5 Te Puke | | | | | | | | | |
| | 410 | 13 | 0.01 | 0.07 | 0.01 | 0.00 | 0.01 | 0.06 | 0.01 |
| | 643 | 11 | 0.41 | 0.11 | 0.01 | 0.00 | 0.08 | 0.05 | 0.42 |
| | 951 | 16 | 0.09 | 0.16 | 0.00 | 0.00 | 0.00 | 0.05 | 0.32 |
| | 1018 | 11 | 0.14 | 0.11 | 0.01 | 0.00 | 0.01 | 0.05 | 0.19 |
| | 1520 | 17 | 0.09 | 0.01 | 2.12 | 0.00 | 1.93 | 0.07 | 0.09 |
| | 1586 | 14 | 0.03 | 0.02 | 1.72 | 0.00 | 0.26 | 0.05 | 0.04 |
| | 1690 | 17 | 0.06 | 0.21 | 0.01 | 0.00 | 0.03 | 0.05 | 0.20 |
| | 2591 | 15 | 0.06 | 0.04 | 0.05 | | 0.00 | | 0.10 |
| | 2822 | 17 | 0.14 | 0.03 | 0.01 | 0.00 | 0.01 | 0.05 | 0.24 |
| | 3034 | 18 | 0.14 | 0.01 | 7.20 | 0.00 | 6.05 | 0.22 | 0.16 |
| | 3045 | 43 | 0.02 | 0.01 | 0.38 | 0.00 | 0.48 | 0.02 | 0.03 |
| | 3566 | 12 | 0.23 | 0.01 | 0.08 | 0.00 | 4.18 | | 0.24 |
| | 4968 | 10 | 0.16 | 0.01 | 8.30 | 0.00 | 6.08 | | 0.16 |
| Map 6 Rotorua | | | | | | | | | |
| | 1561 | 18 | 0.08 | 0.01 | 0.60 | 0.00 | 0.53 | 0.22 | 0.09 |
| | 2118 | 9 | 0.15 | 0.01 | 2.31 | 0.00 | 2.27 | | 0.15 |
| | 3470 | 12 | 0.37 | 0.98 | 0.01 | 0.00 | 0.00 | | 0.67 |
| | 4000 | 8 | 0.05 | 0.01 | 2.90 | 0.00 | 3.16 | 1.70 | 0.03 |
| | 4001 | 13 | 0.22 | 0.38 | 0.01 | 0.01 | 0.03 | 0.62 | 0.24 |
| | 4003 | 5 | 0.04 | 0.02 | 2.22 | 0.00 | 3.13 | | 0.04 |
| | 4007 | 40 | 0.08 | 0.01 | 1.45 | 0.00 | 1.50 | 0.09 | 0.08 |
| Map 7 Rangitāiki | | | | | | | | | |
| | 1 | 42 | 0.17 | 1.00 | 0.04 | 0.00 | 0.03 | 0.08 | 0.48 |
| | 49 | 7 | 0.31 | 1.92 | 0.02 | | 0.36 | 0.05 | 1.33 |
| | 466 | 14 | 0.03 | 3.50 | 0.00 | 0.00 | 0.01 | 0.24 | 1.08 |
| | 490 | 16 | 0.10 | 0.09 | 0.01 | 0.00 | 0.01 | 0.38 | 0.22 |
| | 845 | 19 | 0.55 | 0.47 | 0.00 | 0.00 | 0.00 | 0.30 | 0.61 |
| | 925 | 12 | 0.22 | 0.61 | 0.01 | 0.01 | 0.01 | 0.05 | 0.27 |
| | 1605 | 11 | 0.12 | 0.01 | 0.12 | 0.00 | 0.10 | 0.11 | 0.13 |
| | 2076 | 15 | 0.08 | 0.01 | 0.51 | 0.00 | 1.89 | 0.21 | 0.07 |
| | 2509 | 46 | 0.11 | 0.01 | 0.19 | 0.00 | 0.18 | 0.10 | 0.11 |
| | Spring 198 | 12 | 0.07 | 0.01 | 0.63 | 0.00 | 0.64 | | 0.07 |
| Map 8 Galatea | | | | | | | | | |
| | 196 | 15 | 0.30 | 0.11 | 0.00 | 0.00 | 0.00 | 0.16 | 0.50 |
| | 1319 | 15 | 1.32 | 0.53 | 0.06 | 0.00 | 0.03 | 0.65 | 1.43 |
| | 2913 | 12 | 0.07 | 0.01 | 0.39 | 0.00 | 0.23 | 0.07 | 0.08 |
| Map 9 Ōpōtiki | | | | | | | | | |
| | 3036 | 17 | 0.11 | 0.12 | 0.01 | 0.00 | 0.00 | 0.05 | 0.18 |
| | 3039 | 15 | 0.02 | 0.01 | 0.50 | 0.00 | 0.54 | 0.05 | 0.02 |
| | 3301 | 38 | 0.13 | 0.01 | 2.02 | 0.01 | 2.40 | 0.11 | 0.12 |
| | 4002 | 15 | 0.02 | 0.07 | 0.00 | 0.00 | 0.01 | 0.05 | 0.09 |

Table A3-5: Median Values - Major Ions

| Map Area | Bore No | Sample size | Cations (g/m ³) | | | | Anions (g/m ³) | | |
|----------------------------|---------|-------------|-----------------------------|--------|-------|-------|----------------------------|-------|-----------------|
| | | | Ca | Mg | K | Na | HCO ₃ | Cl | SO ₄ |
| Map 3 WBOP | | | | | | | | | |
| | 66 | 6 | 2.9 | 1.1 | 5.4 | 64.3 | 128.283 | 35 | 2 |
| | 851 | 10 | 6.59 | 5.75 | 4.14 | 14.9 | 79.727 | 10.5 | 2.17 |
| | 1393 | 15 | 0.34 | 0.13 | 2.7 | 34.9 | 83.082 | 9.45 | 1.54 |
| | 1686 | 16 | 1.215 | 1.27 | 3.74 | 73 | 114.68 | 56.15 | 5 |
| | 2303 | 18 | 1.03 | 0.6235 | 12.2 | 106.5 | 284.26 | 13 | 0.395 |
| | 2330 | 16 | 5.96 | 2.5 | 5.5 | 21 | 51.972 | 23.5 | 5 |
| | 2343 | 13 | 4.605 | 1.63 | 3 | 13 | 42.7 | 10.25 | 2.25 |
| | 2829 | 17 | 0.28 | 0.309 | 3.7 | 49.9 | 102.48 | 18.95 | 4 |
| Map 4 Tauranga | | | | | | | | | |
| | 51 | 6 | 8.615 | 4.585 | 3.6 | 22 | 82.045 | 16.8 | 3.9 |
| | 2093 | 7 | 25 | 2.94 | 7.7 | 233 | 92.72 | 310 | 32 |
| | 2342 | 18 | 8.5 | 6 | 4.1 | 19.2 | 74.603 | 20.45 | 4.8 |
| | 2344 | 18 | 2.73 | 1.43 | 4.98 | 9.3 | 34.099 | 6.9 | 2.7 |
| | 2362 | 17 | 6.78 | 3.2 | 5.085 | 28.8 | 94.306 | 16.7 | 3.4 |
| | 2393 | 8 | 5.24 | 4.5 | 5.2 | 33 | 100.101 | 19.65 | 2.5 |
| | 2707 | 17 | 81.55 | 14.8 | 6.07 | 95 | 157.38 | 184 | 54.4 |
| | 2728 | 15 | 14 | 4.5 | 10.8 | 75.1 | 148.84 | 84.3 | 9.8 |
| | 2847 | 16 | 7.155 | 2.53 | 5.565 | 17.8 | 57.645 | 19.3 | 19.5 |
| | 3044 | 24 | 12.2 | 7.175 | 13 | 344.5 | 275.11 | 580 | 0.25 |
| | 3272 | 6 | 546 | 616 | 267 | 4460 | 104.615 | 9790 | 995 |
| | 4364 | 34 | 9.6 | 7 | 6.8 | 149 | 136 | 197 | 0.25 |
| | 4582 | 6 | 8.45 | 4.92 | 4.1 | 23.5 | 83.387 | 22.3 | 3.4 |
| Map 5 Te Puke | | | | | | | | | |
| | 410 | 13 | 7.55 | 3.2 | 3.5 | 24 | 101.26 | 10.2 | 6.6 |
| | 643 | 11 | 15.9 | 10.22 | 5.68 | 59.25 | 234.85 | 28.1 | 14.4 |
| | 951 | 16 | 28.6 | 10.1 | 3 | 65 | 294.63 | 22.25 | 0.25 |
| | 1018 | 11 | 16.2 | 11.5 | 8.8 | 105 | 346.48 | 40.55 | 0.9 |
| | 1520 | 17 | 8.38 | 6.58 | 7.6 | 62.9 | 179.34 | 29.7 | 2.6 |
| | 1586 | 14 | 3.17 | 2.08 | 3.7 | 12.7 | 35.563 | 9.55 | 4.8 |
| | 1690 | 17 | 17 | 8.045 | 6.815 | 59 | 236.68 | 19.6 | 0.25 |
| | 2591 | 15 | 11.5 | 10.7 | 4.2 | 31.9 | 157.38 | 14.9 | 3.9 |
| | 2822 | 17 | 8.06 | 7.705 | 4.19 | 49.85 | 180.56 | 21 | 0.56 |
| | 3034 | 18 | 3.595 | 1.68 | 6.7 | 31.6 | 45.262 | 18.9 | 19.3 |
| | 3045 | 43 | 13 | 5.8 | 9.3 | 23 | 67 | 35 | 8.7 |
| | 3566 | 12 | 4.01 | 1.465 | 0.515 | 15.2 | 44.896 | 8.4 | 1.85 |
| | 4968 | 10 | 7.54 | 3 | 5.4 | 16.75 | 27.511 | 14.55 | 8.4 |
| Map 6 Rotorua | | | | | | | | | |
| | 1561 | 18 | 3.145 | 2 | 2.66 | 9.7 | 39.894 | 4.95 | 1.3 |
| | 2118 | 9 | 6.42 | 2.4 | 2.95 | 11.8 | 34.038 | 7.2 | 9.9 |
| | 3470 | 12 | 2.285 | 1.5 | 1.9 | 13 | 50.691 | 4.2 | 0.25 |
| | 4000 | 8 | 7.19 | 2.25 | 5.8 | 10.3 | 30.866 | 9.4 | 8.9 |
| | 4001 | 13 | 14.3 | 7.9 | 21.1 | 229 | 188.49 | 315.5 | 40.4 |
| | 4003 | 5 | 5.43 | 2.2 | 4.22 | 9.7 | 31.476 | 3.6 | 11.2 |
| | 4007 | 40 | 3.2 | 1.9 | 1.7 | 9.97 | 31.842 | 5.3 | 1.4 |
| Map 7 Rangitāiki | | | | | | | | | |
| | 1 | 42 | 27 | 11 | 3.8 | 30.6 | 157 | 22 | 29 |
| | 49 | 7 | 105 | 11.4 | 9.7 | 93 | 537.41 | 36.4 | 0.35 |
| | 466 | 14 | 69 | 5.12 | 3.8 | 24.5 | 309.88 | 10.85 | 0.25 |
| | 490 | 16 | 2.84 | 2.05 | 1.805 | 15 | 50.142 | 7.65 | 1.7 |
| | 845 | 19 | 23 | 10.1 | 4.9 | 100 | 384.3 | 16.7 | 0.25 |
| | 925 | 12 | 24.415 | 9.54 | 3.8 | 83.65 | 358.741 | 45.45 | 0.27 |
| | 1605 | 11 | 2.56 | 1.58 | 2.9 | 11.4 | 35.38 | 8 | 3.2 |
| | 2076 | 15 | 4.14 | 1.44 | 3.36 | 12.85 | 33.001 | 9.2 | 8.5 |
| | 2509 | 46 | 2.8 | 1.51 | 2.8 | 11.7 | 35 | 6.7 | 3.4 |

Table A3-5: Median Values - Major Ions

| Map Area | Bore No | Sample size | Cations (g/m ³) | | | | Anions (g/m ³) | | |
|------------------|------------|-------------|-----------------------------|-------|-------|-------|----------------------------|-------|-----------------|
| | | | Ca | Mg | K | Na | HCO ₃ | Cl | SO ₄ |
| | Spring 198 | 12 | 3.63 | 1.5 | 3.455 | 11.6 | 30.378 | 8.8 | 8.1 |
| Map 8 Galatea | | | | | | | | | |
| | 196 | 15 | 8.17 | 4.61 | 2.6 | 11.15 | 60.756 | 5.7 | 2.65 |
| | 1319 | 15 | 13.95 | 6.675 | 3.72 | 23.05 | 126.88 | 9.5 | 0.25 |
| | 2913 | 12 | 7.77 | 3.4 | 2.39 | 8.45 | 49.593 | 6.35 | 4.8 |
| Map 9 Ōpōtiki | | | | | | | | | |
| | 3036 | 17 | 14 | 6.93 | 2.265 | 15.3 | 111.02 | 12 | 0.945 |
| | 3039 | 15 | 9.285 | 2.51 | 1.18 | 6.025 | 41.968 | 5.7 | 6.9 |
| | 3301 | 38 | 17.7 | 10.8 | 3.6 | 31 | 97 | 39.5 | 10.6 |
| | 4002 | 15 | 44.45 | 13 | 7.8 | 102.5 | 126.88 | 188.5 | 26.3 |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|------|---------------|------|------|------|--------------|----------------|------------------|------------|--------|
| 1 | 1993 | 1.65 | 0.08 | 1.05 | 1.40 | 4.18 | 0.52 | 0.33 | 3.24 | 4.09 | 0.09 | 8.36 | 0.01 | 1.07 |
| 1 | 1994 | 1.55 | 0.09 | 0.95 | 1.30 | 3.89 | 0.42 | 0.33 | 3.12 | 3.88 | 0.01 | 7.77 | 0.00 | 0.12 |
| 1 | 1997 | 1.21 | 0.16 | 0.81 | 2.82 | 4.99 | 0.71 | 0.38 | 4.38 | 5.47 | -0.48 | 9.99 | -0.05 | -4.79 |
| 1 | 1997 | 1.62 | 0.11 | 1.04 | 1.30 | 4.07 | 0.68 | 0.54 | 2.74 | 3.96 | 0.11 | 8.13 | 0.01 | 1.36 |
| 1 | 1997 | 1.44 | 0.10 | 0.97 | 1.36 | 3.87 | 0.73 | 0.60 | 2.67 | 4.01 | -0.14 | 7.73 | -0.02 | -1.82 |
| 1 | 1998 | 1.45 | 0.09 | 0.90 | 1.21 | 3.65 | 0.75 | 0.62 | 2.62 | 3.99 | -0.34 | 7.30 | -0.05 | -4.71 |
| 1 | 1998 | 1.58 | 0.10 | 0.95 | 1.33 | 3.96 | 0.73 | 0.58 | 2.61 | 3.92 | 0.04 | 7.92 | 0.01 | 0.50 |
| 1 | 1998 | 1.65 | 0.10 | 1.01 | 1.44 | 4.19 | 0.76 | 0.60 | 2.64 | 4.00 | 0.19 | 8.38 | 0.02 | 2.24 |
| 1 | 1998 | 1.55 | 0.09 | 0.95 | 1.39 | 3.98 | 0.68 | 0.62 | 2.57 | 3.87 | 0.11 | 7.96 | 0.01 | 1.32 |
| 1 | 1998 | 1.60 | 0.10 | 0.94 | 1.39 | 4.02 | 0.68 | 0.62 | 2.61 | 3.91 | 0.12 | 8.05 | 0.01 | 1.45 |
| 1 | 1999 | 0.94 | 0.10 | 0.58 | 1.00 | 2.62 | 0.47 | 0.41 | 1.67 | 2.55 | 0.07 | 5.23 | 0.01 | 1.27 |
| 1 | 1999 | 1.45 | 0.10 | 0.94 | 1.39 | 3.88 | 0.62 | 0.62 | 2.59 | 3.83 | 0.04 | 7.75 | 0.01 | 0.54 |
| 1 | 1999 | 1.40 | 0.10 | 0.91 | 1.39 | 3.80 | 0.59 | 0.60 | 2.57 | 3.77 | 0.03 | 7.60 | 0.00 | 0.40 |
| 1 | 2000 | 1.30 | 0.09 | 0.86 | 1.35 | 3.59 | 0.56 | 0.60 | 2.47 | 3.64 | -0.05 | 7.19 | -0.01 | -0.68 |
| 1 | 2000 | 1.25 | 0.09 | 0.83 | 1.30 | 3.47 | 0.56 | 0.56 | 2.47 | 3.60 | -0.13 | 6.95 | -0.02 | -1.84 |
| 1 | 2000 | 1.20 | 0.09 | 0.82 | 1.30 | 3.42 | 0.56 | 0.60 | 2.52 | 3.69 | -0.27 | 6.83 | -0.04 | -3.93 |
| 1 | 2002 | 1.24 | 0.10 | 0.79 | 1.29 | 3.42 | 0.67 | 0.73 | 2.32 | 3.72 | -0.30 | 6.83 | -0.04 | -4.44 |
| 1 | 2003 | 1.25 | 0.10 | 0.75 | 1.17 | 3.27 | 0.56 | 0.69 | 2.08 | 3.33 | -0.05 | 6.54 | -0.01 | -0.83 |
| 1 | 2004 | 1.23 | 0.10 | 0.77 | 1.27 | 3.37 | 0.62 | 0.78 | 2.14 | 3.54 | -0.16 | 6.75 | -0.02 | -2.42 |
| 1 | 2006 | 0.67 | 0.26 | 0.44 | 1.14 | 2.50 | 0.72 | 1.33 | 0.48 | 2.53 | -0.03 | 5.00 | -0.01 | -0.69 |
| 1 | 2007 | 0.65 | 0.26 | 0.43 | 0.99 | 2.33 | 0.85 | 1.12 | 0.40 | 2.38 | -0.05 | 4.65 | -0.01 | -1.08 |
| 1 | 2009 | 0.65 | 0.29 | 0.44 | 0.74 | 2.12 | 0.59 | 1.04 | 0.36 | 1.99 | 0.13 | 4.25 | 0.03 | 3.05 |
| 68 | 1991 | 0.25 | 0.08 | 0.20 | 0.91 | 1.44 | 0.36 | 0.04 | 1.30 | 1.70 | -0.26 | 2.87 | -0.09 | -9.08 |
| 68 | 1992 | 0.21 | 0.04 | 0.16 | 1.05 | 1.46 | 0.24 | 0.04 | 1.22 | 1.50 | -0.04 | 2.92 | -0.01 | -1.29 |
| 68 | 1993 | 0.24 | 0.06 | 0.20 | 0.98 | 1.48 | 0.24 | 0.04 | 1.22 | 1.50 | -0.02 | 2.95 | -0.01 | -0.78 |
| 68 | 1994 | 0.33 | 0.05 | 0.19 | 0.96 | 1.52 | 0.21 | 0.04 | 1.25 | 1.50 | 0.02 | 3.05 | 0.01 | 0.80 |
| 68 | 1996 | 0.31 | 0.05 | 0.02 | 0.90 | 1.28 | 0.20 | 0.03 | 1.29 | 1.53 | -0.25 | 2.55 | -0.10 | -9.86 |
| 68 | 1997 | 0.25 | 0.05 | 0.19 | 0.92 | 1.41 | 0.24 | 0.04 | 1.20 | 1.47 | -0.07 | 2.81 | -0.02 | -2.44 |
| 68 | 1998 | 0.27 | 0.05 | 0.18 | 0.96 | 1.46 | 0.28 | 0.01 | 1.20 | 1.48 | -0.03 | 2.92 | -0.01 | -0.88 |
| 68 | 2002 | 0.25 | 0.05 | 0.19 | 0.98 | 1.48 | 0.26 | 0.04 | 1.24 | 1.54 | -0.06 | 2.95 | -0.02 | -2.07 |
| 68 | 2004 | 0.26 | 0.05 | 0.21 | 1.00 | 1.51 | 0.25 | 0.05 | 1.24 | 1.54 | -0.03 | 3.02 | -0.01 | -0.90 |
| 68 | 2005 | 0.25 | 0.05 | 0.20 | 1.00 | 1.49 | 0.27 | 0.06 | 1.21 | 1.53 | -0.04 | 2.99 | -0.01 | -1.34 |
| 68 | 2006 | 0.27 | 0.05 | 0.20 | 1.00 | 1.52 | 0.25 | 0.05 | 1.20 | 1.49 | 0.03 | 3.04 | 0.01 | 0.85 |
| 68 | 2007 | 0.25 | 0.05 | 0.19 | 0.94 | 1.42 | 0.25 | 0.04 | 1.22 | 1.51 | -0.08 | 2.85 | -0.03 | -2.95 |
| 196 | 1991 | 0.33 | 0.07 | 0.31 | 0.41 | 1.12 | 0.16 | 0.10 | 1.00 | 1.26 | -0.14 | 2.24 | -0.06 | -6.46 |
| 196 | 1993 | 0.20 | 0.03 | 0.47 | 0.44 | 1.15 | 0.13 | 0.05 | 0.94 | 1.12 | 0.03 | 2.30 | 0.01 | 1.40 |
| 196 | 1994 | 0.35 | 0.05 | 0.32 | 0.39 | 1.11 | 0.11 | 0.06 | 0.95 | 1.12 | -0.01 | 2.22 | -0.01 | -0.62 |
| 196 | 1996 | 0.32 | 0.05 | 0.33 | 0.41 | 1.11 | 0.12 | 0.06 | 1.00 | 1.18 | -0.06 | 2.23 | -0.03 | -2.85 |
| 196 | 1997 | 0.31 | 0.05 | 0.33 | 0.43 | 1.12 | 0.14 | 0.06 | 0.98 | 1.19 | -0.07 | 2.24 | -0.03 | 2.99 |
| 196 | 1998 | 0.38 | 0.05 | 0.39 | 0.49 | 1.31 | 0.16 | 0.02 | 0.98 | 1.16 | 0.15 | 2.62 | 0.06 | 5.79 |
| 196 | 2004 | 0.61 | 0.09 | 0.48 | 0.65 | 1.84 | 0.22 | 0.02 | 1.66 | 1.90 | -0.06 | 3.68 | -0.02 | -1.76 |
| 196 | 2005 | 0.44 | 0.07 | 0.39 | 0.68 | 1.58 | 0.23 | 0.08 | 1.38 | 1.69 | -0.10 | 3.17 | -0.03 | -3.25 |
| 196 | 2006 | 0.61 | 0.11 | 0.45 | 0.63 | 1.79 | 0.27 | 0.06 | 1.78 | 2.11 | -0.33 | 3.57 | -0.09 | -9.11 |
| 196 | 2008 | 0.47 | 0.07 | 0.37 | 0.52 | 1.44 | 0.19 | 0.03 | 1.38 | 1.60 | -0.16 | 2.87 | -0.06 | -5.73 |
| 196 | 2009 | 0.50 | 0.07 | 0.40 | 0.52 | 1.50 | 0.20 | 0.04 | 1.17 | 1.41 | 0.09 | 3.00 | 0.03 | 3.06 |
| 410 | 1997 | 0.37 | 0.09 | 0.28 | 1.06 | 1.80 | 0.28 | 0.14 | 1.64 | 2.06 | -0.26 | 3.60 | -0.07 | -7.15 |
| 410 | 1998 | 0.38 | 0.08 | 0.28 | 1.04 | 1.79 | 0.29 | 0.08 | 1.70 | 2.07 | -0.28 | 3.58 | -0.08 | -7.83 |
| 410 | 2002 | 0.37 | 0.09 | 0.28 | 1.10 | 1.85 | 0.32 | 0.14 | 1.68 | 2.14 | -0.29 | 3.70 | -0.08 | -7.80 |
| 410 | 2004 | 0.41 | 0.19 | 0.33 | 0.86 | 1.78 | 0.30 | 0.14 | 1.70 | 2.14 | -0.35 | 3.57 | -0.10 | -9.88 |
| 410 | 2005 | 0.34 | 0.09 | 0.22 | 1.08 | 1.73 | 0.27 | 0.10 | 1.63 | 2.00 | -0.27 | 3.46 | -0.08 | -7.80 |
| 410 | 2006 | 0.39 | 0.09 | 0.27 | 1.12 | 1.87 | 0.31 | 0.14 | 1.65 | 2.09 | -0.22 | 3.74 | -0.06 | -5.91 |
| 410 | 2008 | 0.38 | 0.09 | 0.26 | 1.09 | 1.82 | 0.31 | 0.14 | 1.72 | 2.18 | -0.36 | 3.64 | -0.10 | -9.86 |
| 410 | 2009 | 0.38 | 0.09 | 0.26 | 1.04 | 1.77 | 0.28 | 0.13 | 1.61 | 2.02 | -0.25 | 3.54 | -0.07 | -7.16 |
| 410 | 2010 | 0.35 | 0.08 | 0.24 | 1.04 | 1.72 | 0.28 | 0.15 | 1.66 | 2.09 | -0.37 | 3.43 | -0.11 | -10.85 |
| 410 | 2011 | 0.38 | 0.08 | 0.26 | 1.00 | 1.72 | 0.29 | 0.14 | 1.66 | 2.09 | -0.37 | 3.45 | -0.11 | -10.59 |
| 466 | 1991 | 3.54 | 0.12 | 0.39 | 1.00 | 5.06 | 0.35 | 0.04 | 5.22 | 5.60 | -0.54 | 10.12 | -0.05 | -5.35 |
| 466 | 1992 | 3.93 | 0.16 | 0.43 | 1.21 | 5.74 | 0.27 | 0.00 | 5.08 | 5.35 | 0.39 | 11.48 | 0.03 | 3.36 |
| 466 | 1993 | 4.38 | 0.12 | 0.44 | 1.43 | 6.36 | 0.31 | 0.01 | 5.04 | 5.35 | 1.01 | 12.72 | 0.08 | 7.92 |
| 466 | 1994 | 3.24 | 0.09 | 0.41 | 1.09 | 4.84 | 0.27 | 0.00 | 4.86 | 5.13 | -0.29 | 9.67 | -0.03 | -3.03 |
| 466 | 1996 | 3.59 | 0.09 | 0.42 | 1.07 | 5.17 | 0.29 | 0.01 | 5.16 | 5.45 | -0.28 | 10.34 | -0.03 | -2.70 |
| 466 | 1997 | 3.37 | 0.09 | 0.41 | 1.05 | 4.93 | 0.28 | 0.00 | 5.02 | 5.30 | -0.37 | 9.86 | -0.04 | -3.71 |
| 466 | 1998 | 3.16 | 0.09 | 0.41 | 1.05 | 4.72 | 0.29 | 0.01 | 4.98 | 5.28 | -0.57 | 9.43 | -0.06 | -5.99 |
| 466 | 2002 | 3.12 | 0.10 | 0.36 | 0.97 | 4.56 | 0.32 | 0.01 | 5.22 | 5.55 | -0.99 | 9.12 | -0.11 | -10.83 |
| 466 | 2004 | 3.41 | 0.10 | 0.45 | 1.15 | 5.11 | 0.30 | 0.01 | 5.08 | 5.39 | -0.28 | 10.22 | -0.03 | -2.70 |
| 466 | 2006 | 3.66 | 0.10 | 0.44 | 1.06 | 5.26 | 0.33 | 0.01 | 5.42 | 5.75 | -0.49 | 10.52 | -0.05 | -4.69 |
| 466 | 2007 | 3.41 | 0.10 | 0.43 | 1.11 | 5.04 | 0.33 | 0.01 | 5.06 | 5.39 | -0.35 | 10.09 | -0.03 | -3.43 |
| 466 | 2008 | 3.44 | 0.10 | 0.42 | 1.13 | 5.10 | 0.31 | 0.01 | 5.08 | 5.39 | -0.30 | 10.19 | -0.03 | -2.93 |
| 466 | 2009 | 3.69 | 0.09 | 0.44 | 1.04 | 5.27 | 0.31 | 0.01 | 5.24 | 5.55 | -0.28 | 10.53 | -0.03 | -2.70 |
| 490 | 1992 | 0.15 | 0.04 | 0.16 | 0.67 | 1.02 | 0.15 | 0.02 | 0.96 | 1.13 | -0.10 | 2.05 | -0.05 | -5.02 |
| 490 | 1993 | 0.16 | 0.04 | 0.18 | 0.80 | 1.18 | 0.23 | 0.01 | 0.88 | 1.12 | 0.07 | 2.37 | 0.03 | 2.79 |
| 490 | 1994 | 0.21 | 0.04 | 0.17 | 0.63 | 1.05 | 0.18 | 0.02 | 0.87 | 1.08 | -0.02 | 2.11 | -0.01 | -1.09 |
| 490 | 1997 | 0.16 | 0.04 | 0.19 | 0.63 | 1.01 | 0.21 | 0.03 | 0.82 | 1.06 | -0.05 | 2.02 | -0.02 | -2.36 |
| 490 | 2002 | 0.14 | 0.05 | 0.17 | 0.65 | 1.01 | 0.22 | 0.04 | 0.82 | 1.08 | -0.07 | 2.01 | -0.04 | -3.70 |
| 490 | 2004 | 0.14 | 0.05 | 0.17 | 0.67 | 1.03 | 0.25 | 0.04 | 0.78 | 1.08 | -0.05 | 2.05 | -0.02 | -2.34 |
| 490 | 2005 | 0.14 | 0.05 | 0.17 | 0.66 | 1.01 | 0.31 | 0.06 | 0.82 | 1.19 | -0.18 | 2.03 | -0.09 | -8.68 |
| 490 | 2006 | 0.14 | 0.05 | 0.17 | 0.64 | 1.00 | 0.24 | 0.04 | 0.80 | 1.07 | -0.08 | 1.99 | -0.04 | -3.84 |
| 490 | 2007 | 0.14 | 0.05 | 0.17 | 0.69 | 1.05 | 0.22 | 0.04 | 0.80 | 1.05 | 0.00 | 2.10 | 0.00 | -0.01 |
| 490 | 2008 | 0.14 | 0.05 | 0.17 | 0.69 | 1.05 | 0.22 | 0.04 | 0.80 | 1.05 | -0.05 | 2.02 | | |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|------|---------------|------|------|------|--------------|----------------|------------------|------------|--------|
| 643 | 1993 | 0.69 | 0.14 | 0.75 | 2.75 | 4.33 | 0.79 | 0.21 | 3.80 | 4.80 | -0.46 | 8.67 | -0.05 | -5.35 |
| 643 | 1994 | 0.71 | 0.13 | 0.64 | 2.61 | 4.09 | 0.56 | 0.13 | 3.54 | 4.23 | -0.14 | 8.19 | -0.02 | -1.67 |
| 643 | 1996 | 0.69 | 0.14 | 0.76 | 2.48 | 4.06 | 0.67 | 0.22 | 3.82 | 4.71 | -0.64 | 8.13 | -0.08 | -7.89 |
| 643 | 1997 | 0.93 | 0.16 | 1.00 | 2.86 | 4.96 | 0.96 | 0.71 | 4.06 | 5.73 | -0.78 | 9.91 | -0.08 | -7.86 |
| 643 | 1998 | 0.84 | 0.15 | 0.92 | 2.54 | 4.46 | 0.91 | 0.54 | 3.92 | 5.37 | -0.91 | 8.92 | -0.10 | -10.21 |
| 643 | 2004 | 0.74 | 0.14 | 0.65 | 2.41 | 3.95 | 0.91 | 0.18 | 3.32 | 4.42 | -0.46 | 7.90 | -0.06 | -5.88 |
| 845 | 1991 | 1.20 | 0.13 | 0.91 | 4.70 | 6.93 | 0.49 | 0.02 | 6.92 | 7.43 | -0.50 | 13.87 | -0.04 | -3.60 |
| 845 | 1992 | 1.34 | 0.11 | 0.91 | 5.55 | 7.92 | 0.45 | 0.00 | 6.34 | 6.79 | 1.12 | 15.83 | 0.07 | 7.10 |
| 845 | 1994 | 1.40 | 0.13 | 0.86 | 4.48 | 6.87 | 0.42 | 0.00 | 6.38 | 6.80 | 0.07 | 13.74 | 0.00 | 0.49 |
| 845 | 1997 | 1.13 | 0.13 | 0.85 | 3.93 | 6.03 | 0.49 | 0.01 | 6.32 | 6.82 | -0.79 | 12.07 | -0.07 | -6.54 |
| 845 | 1998 | 1.13 | 0.12 | 0.83 | 4.00 | 6.08 | 0.48 | 0.01 | 6.30 | 6.79 | -0.71 | 12.15 | -0.06 | -5.88 |
| 845 | 2002 | 1.06 | 0.14 | 0.78 | 4.35 | 6.33 | 0.55 | 0.01 | 4.58 | 5.13 | 1.19 | 12.66 | 0.09 | 9.43 |
| 845 | 2004 | 1.11 | 0.13 | 0.82 | 4.57 | 6.63 | 0.47 | 0.01 | 6.28 | 6.75 | -0.12 | 13.26 | -0.01 | -0.90 |
| 845 | 2005 | 1.03 | 0.12 | 0.76 | 4.44 | 6.35 | 0.51 | 0.02 | 6.22 | 6.74 | -0.39 | 12.71 | -0.03 | -3.08 |
| 845 | 2006 | 1.10 | 0.12 | 0.77 | 4.21 | 6.20 | 0.47 | 0.01 | 6.18 | 6.66 | -0.46 | 12.39 | -0.04 | -3.71 |
| 845 | 2007 | 1.21 | 0.12 | 0.86 | 5.57 | 7.76 | 0.47 | 0.01 | 6.42 | 6.89 | 0.86 | 15.51 | 0.06 | 5.57 |
| 845 | 2008 | 1.15 | 0.13 | 0.77 | 4.35 | 6.40 | 0.48 | 0.01 | 6.24 | 6.72 | -0.32 | 12.80 | -0.03 | -2.53 |
| 845 | 2009 | 1.15 | 0.12 | 0.81 | 4.35 | 6.43 | 0.45 | 0.01 | 6.16 | 6.62 | -0.19 | 12.86 | -0.01 | -1.49 |
| 845 | 2010 | 1.05 | 0.12 | 0.77 | 4.31 | 6.24 | 0.45 | 0.01 | 6.14 | 6.60 | -0.36 | 12.47 | -0.03 | -2.89 |
| 845 | 2012 | 1.15 | 0.13 | 0.88 | 4.61 | 6.76 | 0.47 | 0.01 | 7.50 | 7.98 | -1.21 | 13.53 | -0.09 | -8.97 |
| 851 | 1991 | 0.32 | 0.14 | 0.48 | 0.65 | 1.59 | 0.32 | 0.04 | 1.54 | 1.91 | -0.31 | 3.19 | -0.10 | -9.75 |
| 851 | 1992 | 0.32 | 0.11 | 0.47 | 0.79 | 1.69 | 0.29 | 0.04 | 1.46 | 1.80 | -0.10 | 3.39 | -0.03 | -3.05 |
| 851 | 1993 | 0.37 | 0.11 | 0.49 | 0.71 | 1.69 | 0.28 | 0.04 | 1.28 | 1.60 | 0.08 | 3.38 | 0.02 | 2.50 |
| 851 | 1994 | 0.39 | 0.10 | 0.47 | 0.43 | 1.39 | 0.28 | 0.05 | 1.30 | 1.64 | -0.25 | 2.78 | -0.09 | -8.89 |
| 851 | 1996 | 0.30 | 0.09 | 0.44 | 0.57 | 1.40 | 0.27 | 0.05 | 1.34 | 1.65 | -0.25 | 2.80 | -0.09 | -8.92 |
| 851 | 1997 | 0.32 | 0.10 | 0.48 | 0.60 | 1.50 | 0.30 | 0.06 | 1.38 | 1.73 | -0.24 | 2.99 | -0.08 | -7.86 |
| 851 | 1998 | 0.33 | 0.10 | 0.47 | 0.65 | 1.55 | 0.30 | 0.01 | 1.28 | 1.59 | -0.03 | 3.11 | -0.01 | -1.08 |
| 851 | 2004 | 0.34 | 0.11 | 0.51 | 0.65 | 1.60 | 0.32 | 0.06 | 1.24 | 1.62 | -0.02 | 3.21 | -0.01 | -0.54 |
| 925 | 1993 | 1.35 | 2.84 | 0.85 | 2.81 | 7.85 | 1.47 | 0.01 | 5.80 | 7.28 | 0.57 | 15.69 | 0.04 | 3.62 |
| 925 | 1994 | 1.30 | 0.10 | 0.77 | 3.74 | 5.90 | 0.90 | 0.00 | 5.72 | 6.62 | -0.72 | 11.80 | -0.06 | -6.11 |
| 925 | 2004 | 1.29 | 0.10 | 0.82 | 4.00 | 6.21 | 1.30 | 0.01 | 6.04 | 7.35 | -1.13 | 12.43 | -0.09 | -9.12 |
| 925 | 2009 | 1.30 | 0.10 | 0.82 | 3.83 | 6.05 | 1.30 | 0.01 | 5.96 | 7.26 | -1.22 | 12.09 | -0.10 | -10.07 |
| 951 | 1991 | 1.55 | 0.11 | 0.82 | 2.78 | 5.26 | 0.60 | 0.02 | 4.84 | 5.46 | -0.20 | 10.52 | -0.02 | -1.87 |
| 951 | 1993 | 1.57 | 0.06 | 0.87 | 2.72 | 5.22 | 0.58 | 0.01 | 4.68 | 5.26 | -0.04 | 10.45 | 0.00 | -0.36 |
| 951 | 1994 | 1.55 | 0.06 | 0.83 | 2.74 | 5.18 | 0.51 | 0.00 | 4.74 | 5.25 | -0.07 | 10.36 | -0.01 | -0.63 |
| 951 | 1996 | 1.35 | 0.06 | 0.79 | 2.56 | 4.76 | 0.56 | 0.05 | 4.78 | 5.39 | -0.62 | 9.53 | -0.07 | -6.55 |
| 951 | 1997 | 1.39 | 0.06 | 0.79 | 2.52 | 4.77 | 0.61 | 0.00 | 4.58 | 5.19 | -0.42 | 9.53 | -0.04 | -4.45 |
| 951 | 1998 | 1.41 | 0.07 | 0.89 | 2.62 | 4.99 | 0.63 | 0.01 | 4.58 | 5.22 | -0.23 | 9.98 | -0.02 | -2.28 |
| 951 | 2002 | 1.44 | 0.07 | 0.88 | 2.94 | 5.33 | 0.69 | 0.01 | 4.86 | 5.55 | -0.22 | 10.67 | -0.02 | -2.06 |
| 951 | 2004 | 1.33 | 0.07 | 0.80 | 3.03 | 5.23 | 0.63 | 0.01 | 4.56 | 5.19 | 0.04 | 10.46 | 0.00 | 0.36 |
| 951 | 2005 | 0.80 | 0.14 | 1.26 | 3.85 | 6.05 | 1.34 | 0.09 | 5.12 | 6.55 | -0.50 | 12.10 | -0.04 | -4.15 |
| 951 | 2006 | 0.89 | 0.15 | 1.24 | 3.87 | 6.15 | 1.42 | 0.13 | 5.02 | 6.57 | -0.42 | 12.30 | -0.03 | -3.41 |
| 951 | 2008 | 1.45 | 0.08 | 0.79 | 2.87 | 5.18 | 0.68 | 0.01 | 4.86 | 5.54 | -0.36 | 10.37 | -0.03 | -3.44 |
| 951 | 2010 | 1.70 | 0.08 | 0.89 | 2.83 | 5.49 | 0.68 | 0.01 | 5.48 | 6.16 | -0.67 | 10.98 | -0.06 | -6.09 |
| 951 | 2011 | 1.45 | 0.08 | 0.75 | 2.83 | 5.10 | 0.68 | 0.01 | 5.06 | 5.74 | -0.64 | 10.21 | -0.06 | -6.25 |
| 1018 | 1991 | 0.60 | 0.36 | 0.79 | 5.00 | 6.75 | 1.22 | 0.04 | 5.92 | 7.17 | -0.43 | 13.50 | -0.03 | -3.15 |
| 1018 | 1992 | 0.14 | 0.29 | 0.83 | 4.77 | 6.03 | 1.17 | 0.00 | 5.74 | 6.91 | -0.88 | 12.06 | -0.07 | -7.32 |
| 1018 | 1993 | 0.79 | 0.27 | 0.93 | 4.66 | 6.65 | 1.11 | 0.01 | 5.68 | 6.80 | -0.16 | 13.30 | -0.01 | -1.18 |
| 1018 | 1994 | 0.97 | 0.24 | 0.91 | 4.57 | 6.68 | 0.79 | 0.00 | 5.66 | 6.45 | 0.23 | 13.36 | 0.02 | 1.72 |
| 1018 | 1996 | 0.80 | 0.21 | 0.95 | 3.98 | 5.94 | 1.05 | 0.02 | 5.70 | 6.77 | -0.83 | 11.89 | -0.07 | -6.94 |
| 1018 | 1997 | 0.81 | 0.21 | 0.97 | 3.77 | 5.76 | 1.11 | 0.02 | 5.50 | 6.63 | -0.87 | 11.52 | -0.08 | -7.52 |
| 1018 | 1998 | 0.85 | 0.23 | 1.07 | 4.44 | 6.58 | 1.18 | 0.01 | 5.64 | 6.83 | -0.24 | 13.17 | -0.02 | -1.82 |
| 1018 | 2004 | 0.81 | 0.22 | 1.00 | 4.61 | 6.64 | 1.16 | 0.02 | 5.68 | 6.86 | -0.21 | 13.29 | -0.02 | -1.59 |
| 1018 | 2005 | 0.81 | 0.22 | 1.02 | 4.57 | 6.62 | 1.28 | 0.09 | 5.48 | 6.85 | -0.23 | 13.23 | -0.02 | -1.77 |
| 1319 | 1991 | 0.70 | 0.14 | 0.50 | 0.96 | 2.30 | 0.03 | 0.02 | 2.20 | 2.25 | 0.06 | 4.60 | 0.01 | 1.20 |
| 1319 | 1993 | 0.39 | 0.10 | 0.69 | 1.19 | 2.37 | 0.28 | 0.01 | 2.04 | 2.33 | 0.04 | 4.73 | 0.01 | 0.83 |
| 1319 | 1994 | 0.73 | 0.09 | 0.52 | 0.96 | 2.29 | 0.19 | 0.00 | 2.08 | 2.28 | 0.02 | 4.58 | 0.00 | 0.35 |
| 1319 | 1996 | 0.72 | 0.09 | 0.53 | 0.95 | 2.30 | 0.28 | 0.01 | 2.16 | 2.45 | -0.15 | 4.59 | -0.03 | -3.31 |
| 1319 | 1997 | 0.61 | 0.09 | 0.52 | 0.91 | 2.13 | 0.26 | 0.00 | 2.00 | 2.26 | -0.13 | 4.26 | -0.03 | -3.02 |
| 1319 | 1998 | 0.70 | 0.09 | 0.59 | 1.08 | 2.45 | 0.28 | 0.01 | 2.04 | 2.33 | 0.13 | 4.91 | 0.03 | 2.59 |
| 1319 | 2003 | 0.69 | 0.10 | 0.56 | 0.99 | 2.34 | 0.31 | 0.01 | 2.27 | 2.58 | -0.24 | 4.68 | -0.05 | -5.15 |
| 1319 | 2004 | 0.68 | 0.10 | 0.57 | 1.03 | 2.38 | 0.27 | 0.01 | 2.06 | 2.33 | 0.05 | 4.76 | 0.01 | 1.07 |
| 1319 | 2005 | 0.68 | 0.10 | 0.56 | 1.02 | 2.36 | 0.32 | 0.04 | 2.08 | 2.43 | -0.07 | 4.72 | -0.02 | -1.59 |
| 1319 | 2006 | 0.69 | 0.09 | 0.55 | 1.00 | 2.34 | 0.28 | 0.01 | 2.08 | 2.36 | -0.02 | 4.68 | -0.01 | -0.53 |
| 1319 | 2008 | 0.75 | 0.10 | 0.55 | 1.09 | 2.49 | 0.27 | 0.01 | 2.24 | 2.51 | -0.03 | 4.97 | -0.01 | -0.51 |
| 1319 | 2009 | 0.70 | 0.09 | 0.54 | 1.00 | 2.34 | 0.25 | 0.00 | 2.06 | 2.31 | 0.03 | 4.67 | 0.01 | 0.65 |
| 1393 | 1991 | 0.01 | 0.11 | 0.01 | 1.48 | 1.61 | 0.21 | 0.07 | 1.34 | 1.62 | 0.00 | 3.23 | 0.00 | -0.15 |
| 1393 | 1992 | 0.01 | 0.06 | 0.01 | 1.65 | 1.73 | 0.24 | 0.03 | 1.32 | 1.59 | 0.14 | 3.45 | 0.04 | 4.03 |
| 1393 | 1993 | 0.12 | 0.07 | 0.06 | 1.40 | 1.66 | 0.25 | 0.05 | 1.29 | 1.58 | 0.08 | 3.31 | 0.02 | 2.34 |
| 1393 | 1994 | 0.03 | 0.07 | 0.01 | 1.44 | 1.54 | 0.11 | 0.02 | 1.29 | 1.42 | 0.13 | 3.09 | 0.04 | 4.06 |
| 1393 | 1996 | 0.01 | 0.06 | 0.01 | 1.41 | 1.49 | 0.22 | 0.03 | 1.37 | 1.62 | -0.12 | 2.99 | -0.04 | -4.16 |
| 1393 | 1997 | 0.00 | 0.06 | 0.00 | 1.52 | 1.59 | 0.26 | 0.03 | 1.40 | 1.69 | -0.10 | 3.18 | -0.03 | -3.21 |
| 1393 | 1998 | 0.01 | 0.06 | 0.01 | 1.59 | 1.66 | 0.29 | 0.02 | 1.36 | 1.67 | -0.01 | 3.32 | 0.00 | -0.23 |
| 1393 | 2004 | 0.01 | 0.07 | 0.01 | 1.58 | 1.68 | 0.28 | 0.01 | 1.44 | 1.73 | -0.04 | 3.36 | -0.01 | -1.32 |
| 1393 | 2005 | 0.02 | 0.08 | 0.01 | 1.64 | 1.75 | 0.32 | 0.05 | 1.48 | 1.84 | -0.09 | 3.49 | -0.03 | -2.69 |
| 1393 | 2006 | 0.02 | 0.08 | 0.01 | 1.77 | 1.89 | 0.28 | 0.04 | 1.47 | 1.78 | 0.10 | 3.77 | 0.03 | 2.69 |
| 1393 | 2007 | 0.02 | 0.09 | 0.01 | 1.84 | 1.96 | 0.30 | 0.03 | 1.53 | 1.86 | 0.09 | 3.91 | 0.02 | 2.40 |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|------|---------------|------|------|------|--------------|----------------|------------------|------------|--------|
| 1520 | 1992 | 0.38 | 0.18 | 0.47 | 2.11 | 3.14 | 0.69 | 0.03 | 2.30 | 3.01 | 0.13 | 6.28 | 0.02 | 2.02 |
| 1520 | 1993 | 0.50 | 0.20 | 0.63 | 2.54 | 3.87 | 0.85 | 0.04 | 2.94 | 3.83 | 0.04 | 7.73 | 0.00 | 0.46 |
| 1520 | 1994 | 0.40 | 0.17 | 0.37 | 1.78 | 2.72 | 0.48 | 0.05 | 1.85 | 2.38 | 0.35 | 5.45 | 0.06 | 6.34 |
| 1520 | 1996 | 0.31 | 0.18 | 0.40 | 1.65 | 2.54 | 0.70 | 0.06 | 1.81 | 2.57 | -0.03 | 5.08 | -0.01 | -0.66 |
| 1520 | 1997 | 0.37 | 0.19 | 0.50 | 1.69 | 2.75 | 0.76 | 0.07 | 2.06 | 2.89 | -0.14 | 5.49 | -0.03 | -2.54 |
| 1520 | 1998 | 0.56 | 0.24 | 0.68 | 2.82 | 4.30 | 0.91 | 0.04 | 3.40 | 4.35 | -0.05 | 8.59 | -0.01 | -0.59 |
| 1520 | 2004 | 0.42 | 0.22 | 0.56 | 3.19 | 4.38 | 0.90 | 0.05 | 3.32 | 4.27 | 0.11 | 8.77 | 0.01 | 1.25 |
| 1520 | 2005 | 0.42 | 0.20 | 0.56 | 3.07 | 4.25 | 0.93 | 0.12 | 3.16 | 4.21 | 0.04 | 8.50 | 0.00 | 0.47 |
| 1520 | 2006 | 0.54 | 0.22 | 0.68 | 3.44 | 4.88 | 0.98 | 0.05 | 3.96 | 4.99 | -0.11 | 9.76 | -0.01 | -1.12 |
| 1520 | 2007 | 0.43 | 0.19 | 0.59 | 2.90 | 4.11 | 0.84 | 0.06 | 2.94 | 3.83 | 0.28 | 8.22 | 0.03 | 3.37 |
| 1520 | 2008 | 0.40 | 0.19 | 0.49 | 2.83 | 3.91 | 0.82 | 0.06 | 2.74 | 3.62 | 0.29 | 7.83 | 0.04 | 3.74 |
| 1520 | 2009 | 0.60 | 0.21 | 0.76 | 3.22 | 4.79 | 0.96 | 0.05 | 3.63 | 4.64 | 0.15 | 9.57 | 0.02 | 1.58 |
| 1520 | 2010 | 0.39 | 0.18 | 0.53 | 2.65 | 3.75 | 0.85 | 0.06 | 2.96 | 3.87 | -0.11 | 7.51 | -0.02 | -1.53 |
| 1520 | 2011 | 0.42 | 0.16 | 0.52 | 2.44 | 3.53 | 0.82 | 0.07 | 2.78 | 3.67 | -0.14 | 7.06 | -0.02 | -1.93 |
| 1520 | 2012 | 0.42 | 0.19 | 0.60 | 3.09 | 4.31 | 0.87 | 0.06 | 3.62 | 4.56 | -0.25 | 8.62 | -0.03 | -2.91 |
| 1561 | 1991 | 0.15 | 0.10 | 0.13 | 0.41 | 0.80 | 0.21 | 0.08 | 0.68 | 0.97 | -0.17 | 1.60 | -0.11 | -10.93 |
| 1561 | 1992 | 0.14 | 0.07 | 0.15 | 0.38 | 0.75 | 0.04 | 0.03 | 0.70 | 0.77 | -0.02 | 1.49 | -0.01 | -1.49 |
| 1561 | 1993 | 0.10 | 0.07 | 0.16 | 0.39 | 0.72 | 0.16 | 0.02 | 0.62 | 0.80 | -0.08 | 1.45 | -0.05 | -5.23 |
| 1561 | 1994 | 0.18 | 0.06 | 0.15 | 0.38 | 0.78 | 0.10 | 0.02 | 0.66 | 0.78 | 0.00 | 1.56 | 0.00 | 0.11 |
| 1561 | 1996 | 0.15 | 0.06 | 0.16 | 0.40 | 0.77 | 0.14 | 0.03 | 0.63 | 0.80 | -0.04 | 1.54 | -0.02 | -2.28 |
| 1561 | 1997 | 0.15 | 0.07 | 0.16 | 0.42 | 0.80 | 0.13 | 0.03 | 0.62 | 0.78 | 0.02 | 1.60 | 0.01 | 1.05 |
| 1561 | 1998 | 0.15 | 0.07 | 0.17 | 0.43 | 0.81 | 0.14 | 0.01 | 0.65 | 0.81 | 0.00 | 1.62 | 0.00 | 0.19 |
| 1561 | 2003 | 0.16 | 0.07 | 0.16 | 0.43 | 0.82 | 0.16 | 0.03 | 0.65 | 0.84 | -0.01 | 1.65 | -0.01 | -0.81 |
| 1561 | 2004 | 0.16 | 0.07 | 0.18 | 0.47 | 0.87 | 0.14 | 0.03 | 0.70 | 0.87 | 0.01 | 1.75 | 0.00 | 0.43 |
| 1561 | 2005 | 0.14 | 0.06 | 0.16 | 0.41 | 0.78 | 0.15 | 0.03 | 0.64 | 0.81 | -0.04 | 1.55 | -0.02 | -2.34 |
| 1561 | 2006 | 0.16 | 0.07 | 0.17 | 0.42 | 0.81 | 0.17 | 0.02 | 0.66 | 0.86 | -0.05 | 1.63 | -0.03 | -2.84 |
| 1561 | 2008 | 0.17 | 0.07 | 0.16 | 0.43 | 0.84 | 0.14 | 0.03 | 0.68 | 0.85 | -0.01 | 1.68 | -0.01 | -0.70 |
| 1561 | 2009 | 0.17 | 0.07 | 0.17 | 0.43 | 0.84 | 0.13 | 0.03 | 0.65 | 0.81 | 0.02 | 1.67 | 0.01 | 1.47 |
| 1561 | 2010 | 0.16 | 0.07 | 0.16 | 0.42 | 0.81 | 0.13 | 0.03 | 0.68 | 0.84 | -0.03 | 1.61 | -0.02 | -1.96 |
| 1561 | 2011 | 0.16 | 0.07 | 0.17 | 0.42 | 0.82 | 0.13 | 0.03 | 0.64 | 0.80 | 0.02 | 1.64 | 0.01 | 1.22 |
| 1561 | 2012 | 0.16 | 0.07 | 0.18 | 0.45 | 0.87 | 0.14 | 0.02 | 0.85 | 1.01 | -0.14 | 1.74 | -0.08 | -7.81 |
| 1586 | 1991 | 0.15 | 0.11 | 0.15 | 0.48 | 0.89 | 0.23 | 0.13 | 0.56 | 0.92 | -0.03 | 1.79 | -0.02 | -1.55 |
| 1586 | 1992 | 0.15 | 0.09 | 0.15 | 0.55 | 0.94 | 0.24 | 0.02 | 0.58 | 0.85 | 0.10 | 1.88 | 0.05 | 5.14 |
| 1586 | 1993 | 0.15 | 0.07 | 0.15 | 0.52 | 0.89 | 0.24 | 0.12 | 0.62 | 0.98 | -0.09 | 1.78 | -0.05 | -4.95 |
| 1586 | 1994 | 0.21 | 0.09 | 0.16 | 0.54 | 1.01 | 0.21 | 0.11 | 0.70 | 1.01 | -0.01 | 2.01 | 0.00 | -0.26 |
| 1586 | 1996 | 0.15 | 0.09 | 0.16 | 0.50 | 0.90 | 0.20 | 0.10 | 0.62 | 0.92 | -0.02 | 1.80 | -0.01 | -0.88 |
| 1586 | 1997 | 0.16 | 0.09 | 0.17 | 0.54 | 0.95 | 0.26 | 0.13 | 0.54 | 0.93 | 0.02 | 1.90 | 0.01 | 1.00 |
| 1586 | 1998 | 0.16 | 0.09 | 0.18 | 0.58 | 1.01 | 0.28 | 0.08 | 0.59 | 0.95 | 0.07 | 2.03 | 0.03 | 3.35 |
| 1586 | 2002 | 0.15 | 0.09 | 0.16 | 0.53 | 0.93 | 0.29 | 0.10 | 0.59 | 0.98 | -0.05 | 1.86 | -0.03 | -2.65 |
| 1586 | 2004 | 0.23 | 0.14 | 0.23 | 0.84 | 1.44 | 0.67 | 0.10 | 0.47 | 1.23 | 0.21 | 2.88 | 0.07 | 7.22 |
| 1586 | 2005 | 0.19 | 0.13 | 0.18 | 0.77 | 1.27 | 0.48 | 0.11 | 0.53 | 1.13 | 0.15 | 2.54 | 0.06 | 5.72 |
| 1586 | 2007 | 0.20 | 0.13 | 0.19 | 0.75 | 1.26 | 0.47 | 0.07 | 0.51 | 1.06 | 0.21 | 2.53 | 0.08 | 8.22 |
| 1586 | 2008 | 0.20 | 0.12 | 0.18 | 0.74 | 1.24 | 0.45 | 0.08 | 0.48 | 1.01 | 0.22 | 2.48 | 0.09 | 9.07 |
| 1605 | 1991 | 0.12 | 0.10 | 0.11 | 0.43 | 0.77 | 0.28 | 0.05 | 0.58 | 0.91 | -0.14 | 1.54 | -0.09 | -8.86 |
| 1605 | 1992 | 0.13 | 0.02 | 0.13 | 0.49 | 0.77 | 0.21 | 0.06 | 0.58 | 0.85 | -0.08 | 1.54 | -0.05 | -5.21 |
| 1605 | 1993 | 0.14 | 0.08 | 0.15 | 0.62 | 0.99 | 0.24 | 0.04 | 0.57 | 0.85 | 0.13 | 1.97 | 0.07 | 6.83 |
| 1605 | 1994 | 0.17 | 0.07 | 0.13 | 0.49 | 0.87 | 0.21 | 0.07 | 0.60 | 0.88 | -0.02 | 1.73 | -0.01 | -1.02 |
| 1605 | 1997 | 0.12 | 0.07 | 0.13 | 0.51 | 0.84 | 0.22 | 0.07 | 0.56 | 0.85 | -0.01 | 1.67 | -0.01 | -0.74 |
| 1605 | 1998 | 0.12 | 0.07 | 0.12 | 0.49 | 0.79 | 0.22 | 0.04 | 0.55 | 0.82 | -0.02 | 1.59 | -0.01 | -1.37 |
| 1605 | 2004 | 0.13 | 0.08 | 0.14 | 0.54 | 0.88 | 0.24 | 0.07 | 0.58 | 0.88 | 0.00 | 1.76 | 0.00 | -0.23 |
| 1605 | 2006 | 0.14 | 0.09 | 0.14 | 0.55 | 0.92 | 0.23 | 0.07 | 0.58 | 0.87 | 0.05 | 1.84 | 0.03 | 2.67 |
| 1686 | 1991 | 0.06 | 0.15 | 0.10 | 3.31 | 3.62 | 1.57 | 0.13 | 1.96 | 3.66 | -0.04 | 7.24 | -0.01 | -0.52 |
| 1686 | 1993 | 0.14 | 0.20 | 0.17 | 3.88 | 4.41 | 1.79 | 0.09 | 1.85 | 3.73 | 0.67 | 8.81 | 0.08 | 7.62 |
| 1686 | 1996 | 0.06 | 0.10 | 0.11 | 3.01 | 3.27 | 1.53 | 0.09 | 1.92 | 3.53 | -0.26 | 6.54 | -0.04 | -4.01 |
| 1686 | 1997 | 0.06 | 0.10 | 0.11 | 3.15 | 3.42 | 1.59 | 0.10 | 1.86 | 3.55 | -0.13 | 6.85 | -0.02 | -1.86 |
| 1686 | 2002 | 0.06 | 0.10 | 0.11 | 3.59 | 3.86 | 1.62 | 0.11 | 1.88 | 3.60 | 0.26 | 7.72 | 0.03 | 3.34 |
| 1686 | 2004 | 0.06 | 0.10 | 0.12 | 3.24 | 3.53 | 1.57 | 0.11 | 1.82 | 3.51 | 0.02 | 7.05 | 0.00 | 0.31 |
| 1686 | 2005 | 0.06 | 0.09 | 0.11 | 3.14 | 3.41 | 1.59 | 0.15 | 1.23 | 2.97 | 0.43 | 6.81 | 0.06 | 6.34 |
| 1686 | 2006 | 0.06 | 0.09 | 0.10 | 3.15 | 3.41 | 2.15 | 0.11 | 1.84 | 4.10 | -0.70 | 6.81 | -0.10 | -10.21 |
| 1686 | 2007 | 0.06 | 0.10 | 0.10 | 3.09 | 3.35 | 1.63 | 0.11 | 1.81 | 3.55 | -0.20 | 6.69 | -0.03 | -3.05 |
| 1686 | 2008 | 0.06 | 0.09 | 0.10 | 3.18 | 3.42 | 1.38 | 0.11 | 1.89 | 3.38 | 0.04 | 6.85 | 0.01 | 0.64 |
| 1686 | 2010 | 0.05 | 0.08 | 0.09 | 2.83 | 3.05 | 1.30 | 0.09 | 1.90 | 3.28 | -0.23 | 6.10 | -0.04 | -3.78 |
| 1686 | 2011 | 0.05 | 0.09 | 0.10 | 3.13 | 3.38 | 1.66 | 0.10 | 1.84 | 3.60 | -0.23 | 6.75 | -0.03 | -3.37 |
| 1686 | 2012 | 0.06 | 0.09 | 0.10 | 3.31 | 3.57 | 1.58 | 0.10 | 2.14 | 3.82 | -0.26 | 7.13 | -0.04 | -3.62 |
| 1690 | 1991 | 0.90 | 0.23 | 0.73 | 2.57 | 4.42 | 0.61 | 0.02 | 4.18 | 4.80 | -0.38 | 8.85 | -0.04 | -4.27 |
| 1690 | 1992 | 0.87 | 0.15 | 0.66 | 2.76 | 4.43 | 0.46 | 0.01 | 3.94 | 4.41 | 0.02 | 8.87 | 0.00 | 0.26 |
| 1690 | 1993 | 0.95 | 0.27 | 0.75 | 2.71 | 4.69 | 0.53 | 0.01 | 3.96 | 4.50 | 0.19 | 9.38 | 0.02 | 2.03 |
| 1690 | 1994 | 1.05 | 0.15 | 0.72 | 2.57 | 4.48 | 0.39 | 0.00 | 3.98 | 4.37 | 0.11 | 8.97 | 0.01 | 1.21 |
| 1690 | 1996 | 0.84 | 0.16 | 0.68 | 2.34 | 4.01 | 0.50 | 0.02 | 4.06 | 4.57 | -0.56 | 8.02 | -0.07 | -7.02 |
| 1690 | 1997 | 0.84 | 0.16 | 0.67 | 2.34 | 4.01 | 0.52 | 0.00 | 3.84 | 4.36 | -0.35 | 8.01 | -0.04 | -4.40 |
| 1690 | 1998 | 0.83 | 0.16 | 0.69 | 2.48 | 4.16 | 0.55 | 0.01 | 3.80 | 4.36 | -0.20 | 8.32 | -0.02 | -2.43 |
| 1690 | 2004 | 0.85 | 0.17 | 0.67 | 2.68 | 4.38 | 0.55 | 0.01 | 3.86 | 4.41 | -0.03 | 8.76 | 0.00 | -0.37 |
| 1690 | 2005 | 0.80 | 0.17 | 0.62 | 2.48 | 4.07 | 0.74 | 0.02 | 3.94 | 4.70 | -0.63 | 8.15 | -0.08 | -7.67 |
| 1690 | 2007 | 0.90 | 0.19 | 0.67 | 2.79 | 4.55 | 0.57 | 0.01 | 3.78 | 4.35 | 0.19 | 9.09 | 0.02 | 2.12 |
| 1690 | 2008 | 0.85 | 0.19 | 0.53 | 2.61 | 4.18 | 0.56 | 0.01 | 3.78 | 4.35 | -0.17 | 8.36 | -0.02 | -1.99 |
| 1690 | 2009 | 0.85 | 0.18 | 0.56 | 2.57 | 4.15 | 0.54 | 0.01 | 3.78 | 4.32 | -0.17 | 8.30 | -0.02 | -2.07 |
| 1690 | 2010 | 0.77 | 0.18 | 0.53 | 2.48 | 3.96 | 0.55 | 0.01 | 3.88 | 4.44 | -0.48 | 7.92 | -0.06 | -6 |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|-------|---------------|-------|------|------|--------------|----------------|------------------|------------|-------|
| 2076 | 1993 | 0.47 | 0.07 | 0.39 | 0.67 | 1.61 | 0.50 | 0.17 | 0.66 | 1.34 | 0.27 | 3.21 | 0.08 | 8.37 |
| 2076 | 1997 | 0.20 | 0.09 | 0.11 | 0.47 | 0.88 | 0.23 | 0.13 | 0.50 | 0.87 | 0.01 | 1.75 | 0.01 | 0.69 |
| 2076 | 1998 | 0.19 | 0.08 | 0.11 | 0.47 | 0.85 | 0.22 | 0.12 | 0.52 | 0.86 | -0.02 | 1.69 | -0.01 | -1.06 |
| 2076 | 2004 | 0.19 | 0.09 | 0.12 | 0.55 | 0.95 | 0.26 | 0.16 | 0.54 | 0.96 | -0.01 | 1.91 | 0.00 | -0.28 |
| 2076 | 2006 | 0.20 | 0.09 | 0.12 | 0.54 | 0.95 | 0.26 | 0.19 | 0.51 | 0.95 | 0.00 | 1.90 | 0.00 | -0.15 |
| 2076 | 2007 | 0.21 | 0.08 | 0.12 | 0.55 | 0.97 | 0.26 | 0.19 | 0.52 | 0.96 | 0.01 | 1.94 | 0.00 | 0.46 |
| 2076 | 2008 | 0.22 | 0.09 | 0.12 | 0.57 | 0.99 | 0.25 | 0.19 | 0.52 | 0.97 | 0.02 | 1.98 | 0.01 | 1.16 |
| 2076 | 2009 | 0.20 | 0.08 | 0.12 | 0.57 | 0.96 | 0.25 | 0.18 | 0.49 | 0.92 | 0.04 | 1.93 | 0.02 | 2.11 |
| 2093 | 1991 | 2.10 | 0.43 | 0.59 | 10.13 | 13.26 | 11.40 | 0.52 | 1.02 | 12.94 | 0.32 | 26.52 | 0.01 | 1.22 |
| 2093 | 1996 | 0.84 | 0.19 | 0.17 | 9.61 | 10.82 | 7.31 | 0.73 | 2.18 | 10.22 | 0.60 | 21.63 | 0.03 | 2.76 |
| 2093 | 1997 | 0.62 | 0.16 | 0.11 | 8.44 | 9.33 | 6.49 | 1.46 | 1.52 | 9.46 | -0.14 | 18.65 | -0.01 | -0.74 |
| 2093 | 1998 | 1.57 | 0.24 | 0.24 | 13.88 | 15.93 | 14.02 | 0.67 | 1.61 | 16.30 | -0.36 | 31.86 | -0.01 | -1.14 |
| 2303 | 1991 | 0.04 | 0.56 | 0.04 | 5.13 | 5.78 | 0.34 | 0.02 | 5.42 | 5.78 | 0.00 | 11.56 | 0.00 | 0.01 |
| 2303 | 1992 | 0.03 | 0.40 | 0.02 | 6.48 | 6.94 | 0.38 | 0.02 | 5.06 | 5.46 | 1.48 | 13.87 | 0.11 | 10.67 |
| 2303 | 1993 | 0.04 | 0.47 | 0.03 | 4.77 | 5.31 | 0.38 | 0.01 | 4.86 | 5.25 | 0.06 | 10.63 | 0.01 | 0.61 |
| 2303 | 1994 | 0.09 | 0.39 | 0.03 | 4.96 | 5.48 | 0.37 | 0.00 | 5.10 | 5.47 | 0.01 | 10.95 | 0.00 | 0.06 |
| 2303 | 1996 | 0.07 | 0.25 | 0.06 | 3.88 | 4.26 | 0.30 | 0.01 | 4.36 | 4.67 | -0.41 | 8.52 | -0.05 | -4.82 |
| 2303 | 1997 | 0.05 | 0.22 | 0.05 | 3.44 | 3.77 | 0.34 | 0.00 | 4.12 | 4.46 | -0.69 | 7.53 | -0.09 | -9.19 |
| 2303 | 1998 | 0.05 | 0.24 | 0.05 | 3.94 | 4.28 | 0.34 | 0.08 | 4.20 | 4.62 | -0.34 | 8.56 | -0.04 | -3.94 |
| 2303 | 2004 | 0.99 | 0.23 | 0.01 | 1.12 | 2.35 | 0.66 | 0.15 | 1.54 | 2.35 | 0.01 | 4.70 | 0.00 | 0.13 |
| 2303 | 2005 | 0.05 | 0.36 | 0.04 | 4.70 | 5.15 | 0.46 | 0.02 | 4.40 | 4.88 | 0.27 | 10.30 | 0.03 | 2.64 |
| 2303 | 2006 | 0.05 | 0.41 | 0.03 | 5.13 | 5.63 | 0.39 | 0.02 | 5.08 | 5.48 | 0.15 | 11.26 | 0.01 | 1.29 |
| 2303 | 2007 | 0.05 | 0.34 | 0.04 | 4.74 | 5.17 | 0.39 | 0.01 | 4.88 | 5.27 | -0.10 | 10.35 | -0.01 | -0.92 |
| 2303 | 2008 | 0.07 | 0.26 | 0.06 | 4.31 | 4.69 | 0.37 | 0.01 | 4.22 | 4.59 | 0.10 | 9.38 | 0.01 | 1.05 |
| 2303 | 2009 | 0.08 | 0.32 | 0.05 | 4.78 | 5.24 | 0.56 | 0.08 | 4.74 | 5.38 | -0.15 | 10.48 | -0.01 | -1.39 |
| 2303 | 2010 | 0.16 | 0.23 | 0.09 | 3.65 | 4.13 | 0.34 | 0.01 | 3.90 | 4.25 | -0.12 | 8.26 | -0.01 | -1.42 |
| 2303 | 2011 | 0.09 | 0.30 | 0.06 | 4.57 | 5.02 | 0.36 | 0.01 | 4.58 | 4.95 | 0.08 | 10.04 | 0.01 | 0.76 |
| 2303 | 2012 | 0.24 | 0.20 | 0.11 | 3.65 | 4.21 | 0.38 | 0.01 | 4.54 | 4.93 | -0.72 | 8.41 | -0.09 | -8.56 |
| 2330 | 1991 | 0.30 | 0.19 | 0.19 | 0.83 | 1.51 | 0.62 | 0.10 | 0.90 | 1.62 | -0.11 | 3.02 | -0.04 | -3.74 |
| 2330 | 1992 | 0.25 | 0.14 | 0.18 | 0.97 | 1.54 | 0.65 | 0.02 | 0.86 | 1.53 | 0.02 | 3.09 | 0.01 | 0.51 |
| 2330 | 1993 | 0.37 | 0.14 | 0.19 | 0.91 | 1.61 | 0.69 | 0.12 | 0.92 | 1.73 | -0.12 | 3.22 | -0.04 | -3.83 |
| 2330 | 1994 | 0.61 | 0.14 | 0.20 | 0.87 | 1.81 | 0.39 | 0.08 | 1.06 | 1.53 | 0.28 | 3.62 | 0.08 | 7.78 |
| 2330 | 1996 | 0.28 | 0.13 | 0.21 | 0.83 | 1.46 | 0.61 | 0.10 | 0.82 | 1.53 | -0.07 | 2.92 | -0.02 | -2.49 |
| 2330 | 1997 | 0.28 | 0.14 | 0.21 | 0.87 | 1.51 | 0.67 | 0.12 | 0.78 | 1.56 | -0.06 | 3.01 | -0.02 | -1.94 |
| 2330 | 1998 | 0.30 | 0.14 | 0.22 | 0.91 | 1.57 | 0.66 | 0.08 | 0.78 | 1.52 | 0.04 | 3.14 | 0.01 | 1.42 |
| 2330 | 2002 | 0.29 | 0.14 | 0.22 | 0.95 | 1.60 | 0.72 | 0.11 | 0.88 | 1.71 | -0.11 | 3.20 | -0.03 | -3.44 |
| 2330 | 2004 | 0.28 | 0.03 | 0.13 | 0.32 | 0.77 | 0.30 | 0.04 | 0.46 | 0.79 | -0.03 | 1.53 | -0.02 | -1.71 |
| 2330 | 2005 | 1.19 | 0.19 | 0.02 | 0.96 | 2.35 | 0.76 | 0.16 | 1.65 | 2.57 | -0.21 | 4.71 | -0.05 | -4.56 |
| 2330 | 2006 | 0.30 | 0.15 | 0.22 | 0.92 | 1.59 | 0.67 | 0.10 | 0.84 | 1.62 | -0.02 | 3.18 | -0.01 | -0.78 |
| 2330 | 2007 | 0.30 | 0.14 | 0.22 | 0.90 | 1.56 | 0.70 | 0.11 | 0.84 | 1.65 | -0.09 | 3.12 | -0.03 | -2.83 |
| 2330 | 2008 | 0.29 | 0.14 | 0.21 | 0.91 | 1.55 | 0.71 | 0.10 | 0.87 | 1.68 | -0.12 | 3.11 | -0.04 | -4.01 |
| 2330 | 2011 | 0.28 | 0.14 | 0.22 | 0.91 | 1.56 | 0.65 | 0.11 | 0.82 | 1.58 | -0.02 | 3.12 | -0.01 | -0.80 |
| 2342 | 1991 | 0.45 | 0.16 | 0.49 | 0.83 | 1.94 | 0.54 | 0.09 | 1.30 | 1.93 | 0.00 | 3.87 | 0.00 | 0.12 |
| 2342 | 1992 | 0.45 | 0.10 | 0.50 | 0.87 | 1.92 | 0.54 | 0.02 | 1.22 | 1.78 | 0.14 | 3.85 | 0.04 | 3.71 |
| 2342 | 1993 | 0.37 | 0.11 | 0.53 | 0.92 | 1.94 | 0.58 | 0.10 | 1.25 | 1.93 | 0.01 | 3.87 | 0.00 | 0.25 |
| 2342 | 1994 | 0.49 | 0.10 | 0.49 | 0.82 | 1.91 | 0.59 | 0.11 | 1.25 | 1.95 | -0.05 | 3.81 | -0.01 | -1.23 |
| 2342 | 1996 | 0.41 | 0.10 | 0.48 | 0.77 | 1.76 | 0.56 | 0.11 | 1.25 | 1.92 | -0.15 | 3.52 | -0.04 | -4.38 |
| 2342 | 1997 | 0.44 | 0.10 | 0.51 | 0.85 | 1.90 | 0.56 | 0.10 | 1.22 | 1.88 | 0.02 | 3.79 | 0.01 | 0.55 |
| 2342 | 1998 | 0.42 | 0.11 | 0.48 | 0.86 | 1.87 | 0.58 | 0.06 | 1.21 | 1.86 | 0.01 | 3.74 | 0.00 | 0.34 |
| 2342 | 2002 | 0.40 | 0.10 | 0.43 | 0.78 | 1.71 | 0.64 | 0.10 | 1.22 | 1.96 | -0.24 | 3.43 | -0.07 | -7.13 |
| 2342 | 2004 | 0.41 | 0.11 | 0.49 | 0.84 | 1.85 | 0.58 | 0.10 | 1.23 | 1.90 | -0.05 | 3.71 | -0.01 | -1.40 |
| 2342 | 2005 | 0.41 | 0.11 | 0.48 | 0.82 | 1.83 | 0.62 | 0.13 | 1.23 | 1.97 | -0.15 | 3.65 | -0.04 | -4.03 |
| 2342 | 2006 | 0.43 | 0.11 | 0.50 | 0.87 | 1.91 | 0.60 | 0.10 | 1.23 | 1.93 | -0.02 | 3.82 | -0.01 | -0.52 |
| 2342 | 2007 | 0.44 | 0.11 | 0.52 | 0.87 | 1.94 | 0.57 | 0.10 | 1.21 | 1.87 | 0.07 | 3.87 | 0.02 | 1.77 |
| 2342 | 2008 | 0.42 | 0.11 | 0.46 | 0.87 | 1.86 | 0.59 | 0.10 | 1.22 | 1.91 | -0.05 | 3.72 | -0.01 | -1.39 |
| 2342 | 2009 | 0.42 | 0.10 | 0.49 | 0.83 | 1.84 | 0.56 | 0.09 | 1.22 | 1.87 | -0.03 | 3.69 | -0.01 | -0.79 |
| 2342 | 2010 | 0.38 | 0.10 | 0.44 | 0.80 | 1.73 | 0.56 | 0.10 | 1.22 | 1.88 | -0.15 | 3.45 | -0.04 | -4.44 |
| 2342 | 2011 | 0.42 | 0.09 | 0.46 | 0.76 | 1.73 | 0.56 | 0.10 | 1.22 | 1.88 | -0.15 | 3.46 | -0.04 | -4.48 |
| 2342 | 2012 | 0.40 | 0.10 | 0.48 | 0.84 | 1.83 | 0.59 | 0.13 | 1.45 | 2.18 | -0.35 | 3.65 | -0.10 | -9.64 |
| 2343 | 1991 | 0.22 | 0.11 | 0.13 | 0.57 | 1.03 | 0.25 | 0.04 | 0.74 | 1.02 | 0.01 | 2.06 | 0.00 | 0.31 |
| 2343 | 1992 | 0.23 | 0.08 | 0.13 | 0.68 | 1.12 | 0.29 | 0.03 | 0.70 | 1.02 | 0.10 | 2.24 | 0.05 | 4.59 |
| 2343 | 1993 | 0.24 | 0.07 | 0.12 | 0.62 | 1.06 | 0.27 | 0.05 | 0.90 | 1.22 | -0.16 | 2.13 | -0.07 | -7.47 |
| 2343 | 1996 | 0.22 | 0.08 | 0.13 | 0.51 | 0.94 | 0.23 | 0.04 | 0.71 | 0.99 | -0.04 | 1.89 | -0.02 | -2.37 |
| 2343 | 1997 | 0.23 | 0.08 | 0.14 | 0.56 | 1.01 | 0.28 | 0.05 | 0.66 | 0.98 | 0.03 | 2.02 | 0.01 | 1.50 |
| 2343 | 1998 | 0.22 | 0.08 | 0.14 | 0.56 | 1.01 | 0.30 | 0.04 | 0.67 | 1.01 | -0.01 | 2.01 | 0.00 | -0.38 |
| 2343 | 2002 | 0.23 | 0.08 | 0.14 | 0.57 | 1.02 | 0.30 | 0.05 | 0.70 | 1.05 | -0.03 | 2.03 | -0.02 | -1.59 |
| 2343 | 2004 | 0.23 | 0.08 | 0.14 | 0.59 | 1.04 | 0.31 | 0.06 | 0.69 | 1.06 | -0.02 | 2.09 | -0.01 | -0.79 |
| 2343 | 2006 | 0.23 | 0.08 | 0.13 | 0.54 | 0.98 | 0.30 | 0.04 | 0.69 | 1.03 | -0.05 | 1.95 | -0.03 | -2.51 |
| 2343 | 2007 | 0.23 | 0.08 | 0.15 | 0.57 | 1.03 | 0.29 | 0.05 | 0.70 | 1.04 | -0.01 | 2.06 | -0.01 | -0.58 |
| 2344 | 1991 | 0.14 | 0.17 | 0.11 | 0.48 | 0.90 | 0.21 | 0.10 | 0.60 | 0.90 | -0.01 | 1.80 | 0.00 | -0.30 |
| 2344 | 1993 | 0.14 | 0.14 | 0.10 | 0.44 | 0.82 | 0.17 | 0.04 | 0.56 | 0.76 | 0.05 | 1.64 | 0.03 | 3.34 |
| 2344 | 1994 | 0.18 | 0.12 | 0.12 | 0.37 | 0.79 | 0.11 | 0.03 | 0.60 | 0.74 | 0.05 | 1.58 | 0.03 | 3.27 |
| 2344 | 1996 | 0.13 | 0.11 | 0.12 | 0.38 | 0.75 | 0.17 | 0.05 | 0.56 | 0.79 | -0.04 | 1.49 | -0.03 | -2.76 |
| 2344 | 1997 | 0.14 | 0.13 | 0.13 | 0.42 | 0.82 | 0.20 | 0.06 | 0.54 | 0.80 | 0.02 | 1.63 | 0.01 | 1.04 |
| 2344 | 1998 | 0.14 | 0.13 | 0.13 | 0.43 | 0.83 | 0.20 | 0.02 | 0.55 | 0.77 | 0.06 | 1.65 | 0.03 | 3.46 |
| 2344 | 2002 | 0.13 | 0.13 | 0.12 | 0.41 | 0.79 | 0.19 | 0.06 | 0.56 | 0.81 | -0.02 | 1.59 | -0.01 | -1.02 |
| 2344 | 2004 | 0.13 | 0.13 | 0.12 | 0.40 | 0.78 | 0.20 | 0.05 | 0.54 | 0.79 | -0.01</td | | | |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|-------|---------------|-------|------|------|--------------|----------------|------------------|------------|--------|
| 2344 | 2008 | 0.13 | 0.13 | 0.12 | 0.40 | 0.78 | 0.21 | 0.06 | 0.65 | 0.92 | -0.14 | 1.55 | -0.09 | -9.11 |
| 2344 | 2009 | 0.13 | 0.12 | 0.12 | 0.40 | 0.77 | 0.17 | 0.06 | 0.53 | 0.76 | 0.01 | 1.54 | 0.00 | 0.49 |
| 2344 | 2010 | 0.13 | 0.13 | 0.12 | 0.41 | 0.79 | 0.17 | 0.06 | 0.48 | 0.72 | 0.07 | 1.58 | 0.05 | 4.57 |
| 2344 | 2011 | 0.13 | 0.12 | 0.12 | 0.40 | 0.77 | 0.17 | 0.06 | 0.54 | 0.77 | 0.00 | 1.55 | 0.00 | 0.10 |
| 2344 | 2012 | 0.13 | 0.13 | 0.12 | 0.45 | 0.83 | 0.18 | 0.06 | 0.65 | 0.88 | -0.05 | 1.67 | -0.03 | -2.84 |
| 2362 | 1993 | 0.35 | 0.13 | 0.26 | 1.26 | 1.99 | 0.45 | 0.06 | 1.55 | 2.06 | -0.06 | 3.99 | -0.02 | -1.54 |
| 2362 | 1994 | 0.43 | 0.13 | 0.26 | 1.22 | 2.04 | 0.39 | 0.07 | 1.58 | 2.04 | 0.00 | 4.08 | 0.00 | -0.07 |
| 2362 | 1996 | 0.32 | 0.13 | 0.26 | 1.20 | 1.90 | 0.43 | 0.09 | 1.59 | 2.11 | -0.20 | 3.81 | -0.05 | -5.33 |
| 2362 | 1997 | 0.34 | 0.13 | 0.28 | 1.27 | 2.02 | 0.46 | 0.07 | 1.54 | 2.07 | -0.05 | 4.04 | -0.01 | -1.24 |
| 2362 | 1998 | 0.35 | 0.14 | 0.29 | 1.30 | 2.08 | 0.47 | 0.08 | 1.55 | 2.11 | -0.03 | 4.16 | -0.01 | -0.61 |
| 2362 | 2002 | 0.31 | 0.13 | 0.23 | 1.16 | 1.83 | 0.54 | 0.07 | 1.54 | 2.14 | -0.32 | 3.65 | -0.09 | -8.69 |
| 2362 | 2004 | 0.33 | 0.14 | 0.27 | 1.37 | 2.11 | 0.48 | 0.06 | 1.70 | 2.24 | -0.13 | 4.22 | -0.03 | -3.10 |
| 2362 | 2005 | 0.33 | 0.13 | 0.27 | 1.16 | 1.89 | 0.61 | 0.10 | 1.51 | 2.22 | -0.34 | 3.77 | -0.09 | -8.91 |
| 2362 | 2006 | 0.34 | 0.13 | 0.28 | 1.25 | 1.99 | 0.48 | 0.07 | 1.52 | 2.07 | -0.07 | 3.99 | -0.02 | -1.83 |
| 2362 | 2008 | 0.34 | 0.13 | 0.26 | 1.26 | 1.99 | 0.48 | 0.08 | 1.50 | 2.06 | -0.07 | 3.98 | -0.02 | -1.73 |
| 2362 | 2009 | 0.33 | 0.13 | 0.27 | 1.26 | 1.99 | 0.45 | 0.06 | 1.53 | 2.05 | -0.06 | 3.99 | -0.01 | -1.43 |
| 2362 | 2010 | 0.32 | 0.13 | 0.26 | 1.35 | 2.07 | 0.45 | 0.06 | 1.44 | 1.95 | 0.12 | 4.13 | 0.03 | 2.84 |
| 2362 | 2011 | 0.33 | 0.12 | 0.25 | 1.17 | 1.87 | 0.56 | 0.08 | 1.52 | 2.16 | -0.29 | 3.74 | -0.08 | -7.83 |
| 2362 | 2012 | 0.34 | 0.13 | 0.29 | 1.26 | 2.02 | 0.46 | 0.05 | 1.85 | 2.36 | -0.34 | 4.04 | -0.09 | -8.52 |
| 2393 | 1991 | 0.23 | 0.19 | 0.35 | 1.52 | 2.30 | 0.54 | 0.02 | 1.70 | 2.26 | 0.03 | 4.59 | 0.01 | 0.66 |
| 2393 | 1992 | 0.06 | 0.15 | 0.36 | 1.30 | 1.87 | 0.57 | 0.00 | 1.68 | 2.25 | -0.37 | 3.75 | -0.10 | -10.00 |
| 2393 | 1993 | 0.28 | 0.14 | 0.39 | 1.43 | 2.24 | 0.54 | 0.05 | 1.62 | 2.21 | 0.02 | 4.47 | 0.01 | 0.55 |
| 2393 | 1994 | 0.34 | 0.13 | 0.37 | 1.44 | 2.27 | 0.45 | 0.05 | 1.64 | 2.14 | 0.13 | 4.54 | 0.03 | 2.94 |
| 2393 | 1996 | 0.26 | 0.13 | 0.36 | 1.34 | 2.08 | 0.50 | 0.06 | 1.64 | 2.20 | -0.12 | 4.17 | -0.03 | -2.79 |
| 2393 | 1997 | 0.27 | 0.13 | 0.38 | 1.46 | 2.24 | 0.65 | 0.06 | 1.58 | 2.29 | -0.04 | 4.49 | -0.01 | -0.96 |
| 2393 | 1998 | 0.26 | 0.13 | 0.39 | 1.47 | 2.26 | 0.61 | 0.06 | 1.60 | 2.27 | -0.01 | 4.52 | 0.00 | -0.17 |
| 2509 | 1991 | 0.14 | 0.09 | 0.12 | 0.40 | 0.76 | 0.21 | 0.07 | 0.56 | 0.85 | -0.09 | 1.52 | -0.06 | -5.75 |
| 2509 | 1992 | 0.14 | 0.07 | 0.12 | 0.47 | 0.80 | 0.14 | 0.04 | 0.68 | 0.85 | -0.05 | 1.60 | -0.03 | -3.25 |
| 2509 | 1993 | 0.22 | 0.08 | 0.14 | 0.56 | 1.00 | 0.18 | 0.05 | 0.56 | 0.79 | 0.21 | 1.99 | 0.11 | 10.62 |
| 2509 | 1994 | 0.18 | 0.07 | 0.12 | 0.45 | 0.82 | 0.17 | 0.07 | 0.55 | 0.80 | 0.02 | 1.64 | 0.01 | 1.35 |
| 2509 | 1997 | 0.13 | 0.07 | 0.12 | 0.49 | 0.81 | 0.19 | 0.07 | 0.56 | 0.82 | 0.00 | 1.63 | 0.00 | -0.25 |
| 2509 | 1997 | 0.16 | 0.08 | 0.14 | 0.49 | 0.87 | 0.18 | 0.11 | 0.57 | 0.86 | 0.00 | 1.74 | 0.00 | 0.24 |
| 2509 | 1997 | 0.14 | 0.07 | 0.12 | 0.50 | 0.83 | 0.19 | 0.07 | 0.57 | 0.83 | 0.00 | 1.66 | 0.00 | 0.21 |
| 2509 | 1998 | 0.14 | 0.07 | 0.12 | 0.47 | 0.79 | 0.19 | 0.04 | 0.56 | 0.79 | 0.00 | 1.58 | 0.00 | -0.21 |
| 2509 | 1998 | 0.14 | 0.07 | 0.13 | 0.49 | 0.84 | 0.18 | 0.06 | 0.59 | 0.83 | 0.01 | 1.68 | 0.01 | 0.62 |
| 2509 | 1998 | 0.15 | 0.07 | 0.14 | 0.52 | 0.89 | 0.19 | 0.07 | 0.57 | 0.84 | 0.05 | 1.78 | 0.03 | 2.88 |
| 2509 | 1998 | 0.15 | 0.07 | 0.13 | 0.53 | 0.88 | 0.18 | 0.07 | 0.59 | 0.84 | 0.04 | 1.77 | 0.02 | 2.39 |
| 2509 | 1998 | 0.15 | 0.07 | 0.13 | 0.53 | 0.89 | 0.19 | 0.07 | 0.57 | 0.84 | 0.05 | 1.78 | 0.03 | 2.83 |
| 2509 | 1999 | 0.14 | 0.08 | 0.13 | 0.53 | 0.88 | 0.19 | 0.07 | 0.57 | 0.83 | 0.04 | 1.75 | 0.03 | 2.53 |
| 2509 | 1999 | 0.14 | 0.08 | 0.13 | 0.52 | 0.88 | 0.19 | 0.07 | 0.57 | 0.83 | 0.04 | 1.75 | 0.02 | 2.31 |
| 2509 | 2000 | 0.14 | 0.07 | 0.13 | 0.51 | 0.85 | 0.19 | 0.07 | 0.57 | 0.83 | 0.02 | 1.70 | 0.01 | 1.09 |
| 2509 | 2000 | 0.13 | 0.07 | 0.12 | 0.50 | 0.83 | 0.19 | 0.07 | 0.57 | 0.83 | 0.00 | 1.66 | 0.00 | -0.25 |
| 2509 | 2000 | 0.14 | 0.08 | 0.12 | 0.50 | 0.85 | 0.19 | 0.07 | 0.59 | 0.85 | 0.00 | 1.69 | 0.00 | -0.28 |
| 2509 | 2002 | 0.14 | 0.07 | 0.13 | 0.51 | 0.85 | 0.20 | 0.07 | 0.56 | 0.84 | 0.02 | 1.71 | 0.01 | 1.07 |
| 2509 | 2004 | 0.13 | 0.06 | 0.12 | 0.52 | 0.83 | 0.21 | 0.07 | 0.56 | 0.84 | -0.01 | 1.66 | -0.01 | -0.64 |
| 2509 | 2006 | 0.14 | 0.07 | 0.12 | 0.47 | 0.80 | 0.20 | 0.07 | 0.57 | 0.83 | -0.03 | 1.61 | -0.02 | -1.92 |
| 2509 | 2008 | 0.13 | 0.07 | 0.22 | 0.48 | 0.90 | 0.19 | 0.07 | 0.57 | 0.83 | 0.07 | 1.81 | 0.04 | 4.14 |
| 2509 | 2009 | 0.13 | 0.07 | 0.13 | 0.54 | 0.87 | 0.19 | 0.07 | 0.58 | 0.84 | 0.03 | 1.75 | 0.02 | 1.84 |
| 2509 | 2010 | 0.12 | 0.07 | 0.11 | 0.49 | 0.79 | 0.18 | 0.07 | 0.58 | 0.82 | -0.03 | 1.58 | -0.02 | -2.18 |
| 2509 | 2011 | 0.13 | 0.07 | 0.12 | 0.52 | 0.84 | 0.18 | 0.06 | 0.56 | 0.81 | 0.03 | 1.68 | 0.02 | 1.82 |
| 2509 | 2012 | 0.13 | 0.07 | 0.12 | 0.51 | 0.83 | 0.17 | 0.07 | 0.67 | 0.92 | -0.08 | 1.67 | -0.05 | -4.84 |
| 2707 | 1991 | 3.54 | 0.13 | 0.82 | 1.09 | 5.58 | 1.25 | 0.52 | 2.92 | 4.69 | 0.90 | 11.17 | 0.08 | 8.03 |
| 2707 | 1993 | 3.98 | 0.10 | 1.20 | 1.19 | 6.47 | 3.74 | 0.65 | 2.44 | 6.84 | -0.37 | 12.93 | -0.03 | -2.85 |
| 2707 | 1994 | 4.29 | 0.11 | 1.23 | 1.30 | 6.94 | 2.48 | 0.69 | 2.58 | 5.75 | 1.19 | 13.89 | 0.09 | 8.60 |
| 2707 | 1996 | 4.02 | 0.13 | 1.07 | 2.68 | 7.90 | 4.54 | 0.75 | 2.36 | 7.65 | 0.26 | 15.81 | 0.02 | 1.62 |
| 2707 | 1997 | 3.53 | 0.14 | 1.04 | 3.12 | 7.83 | 5.19 | 1.33 | 1.88 | 8.40 | -0.57 | 15.66 | -0.04 | -3.65 |
| 2707 | 1998 | 5.34 | 0.18 | 1.89 | 5.00 | 12.41 | 8.63 | 1.44 | 2.30 | 12.37 | 0.04 | 24.82 | 0.00 | 0.18 |
| 2707 | 2002 | 4.12 | 0.19 | 1.70 | 8.70 | 14.71 | 10.46 | 1.27 | 2.36 | 14.10 | 0.61 | 29.42 | 0.02 | 2.07 |
| 2707 | 2004 | 6.19 | 0.26 | 2.77 | 10.96 | 20.18 | 15.51 | 1.41 | 2.93 | 19.86 | 0.32 | 40.36 | 0.01 | 0.79 |
| 2707 | 2006 | 2.54 | 0.15 | 1.15 | 6.74 | 10.58 | 6.91 | 0.99 | 2.46 | 10.36 | 0.22 | 21.17 | 0.01 | 1.05 |
| 2707 | 2007 | 6.29 | 0.23 | 2.70 | 11.05 | 20.27 | 15.57 | 1.39 | 2.84 | 19.80 | 0.47 | 40.54 | 0.01 | 1.15 |
| 2707 | 2008 | 4.34 | 0.22 | 2.06 | 10.00 | 16.63 | 12.41 | 1.29 | 2.98 | 16.68 | -0.06 | 33.25 | 0.00 | -0.17 |
| 2707 | 2009 | 1.50 | 0.16 | 1.07 | 3.26 | 5.99 | 3.67 | 0.81 | 1.19 | 5.66 | 0.33 | 11.98 | 0.03 | 2.72 |
| 2728 | 1991 | 1.90 | 0.31 | 0.71 | 2.78 | 5.69 | 1.68 | 0.19 | 4.14 | 6.01 | -0.32 | 11.39 | -0.03 | -2.78 |
| 2728 | 1992 | 0.05 | 0.15 | 0.02 | 1.20 | 1.43 | 0.64 | 0.01 | 0.86 | 1.51 | -0.08 | 2.85 | -0.03 | -2.90 |
| 2728 | 1993 | 1.26 | 0.29 | 0.67 | 3.78 | 6.00 | 2.38 | 0.33 | 3.54 | 6.25 | -0.25 | 12.00 | -0.02 | -2.07 |
| 2728 | 1994 | 0.45 | 0.30 | 0.33 | 4.83 | 5.91 | 2.45 | 0.54 | 2.18 | 5.17 | 0.74 | 11.83 | 0.06 | 6.24 |
| 2728 | 1996 | 0.32 | 0.30 | 0.24 | 3.92 | 4.78 | 3.24 | 0.50 | 1.98 | 5.72 | -0.94 | 9.56 | -0.10 | -9.85 |
| 2728 | 1998 | 0.26 | 0.28 | 0.16 | 3.47 | 4.16 | 2.82 | 0.01 | 1.68 | 4.51 | -0.35 | 8.32 | -0.04 | -4.24 |
| 2728 | 2004 | 1.46 | 0.27 | 0.66 | 3.27 | 5.66 | 1.70 | 0.20 | 3.76 | 5.67 | 0.00 | 11.32 | 0.00 | -0.02 |
| 2728 | 2005 | 1.57 | 0.24 | 0.66 | 2.69 | 5.16 | 1.65 | 0.26 | 3.98 | 5.88 | -0.73 | 10.32 | -0.07 | -7.03 |
| 2728 | 2006 | 1.68 | 0.25 | 0.68 | 2.84 | 5.45 | 1.65 | 0.20 | 3.92 | 5.77 | -0.32 | 10.91 | -0.03 | -2.91 |
| 2728 | 2007 | 1.77 | 0.25 | 0.75 | 2.85 | 5.63 | 1.39 | 0.17 | 4.06 | 5.62 | 0.00 | 11.25 | 0.00 | 0.03 |
| 2728 | 2008 | 0.70 | 0.28 | 0.37 | 3.83 | 5.18 | 2.43 | 0.44 | 2.50 | 5.36 | -0.18 | 10.36 | -0.02 | -1.78 |
| 2728 | 2009 | 0.22 | 0.26 | 0.08 | 2.65 | 3.22 | 2.48 | 0.10 | 1.20 | 3.78 | -0.57 | 6.43 | -0.09 | -8.80 |
| 2822 | 1991 | 0.36 | 0.14 | 0.64 | 2.00 | 3.15 | 0.64 | 0.08 | 2.76 | 3.49 | -0.34 | 6.30 | -0.05 | -5.32 |
| 2822 | 1992 | 0.37 | 0.09 | 0.59 | 2.29 | 3.35 | 0.47 | 0.02 | 2.78 | | | | | |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|------|---------------|------|------|------|--------------|----------------|------------------|------------|-------|
| 2822 | 1997 | 0.38 | 0.10 | 0.61 | 2.07 | 3.16 | 0.54 | 0.01 | 2.92 | 3.48 | -0.31 | 6.33 | -0.05 | -4.93 |
| 2822 | 1998 | 0.38 | 0.10 | 0.61 | 2.02 | 3.11 | 0.56 | 0.01 | 3.02 | 3.59 | -0.48 | 6.21 | -0.08 | -7.76 |
| 2822 | 2002 | 0.40 | 0.11 | 0.66 | 2.16 | 3.33 | 0.62 | 0.01 | 2.92 | 3.54 | -0.21 | 6.67 | -0.03 | -3.14 |
| 2822 | 2004 | 0.40 | 0.11 | 0.64 | 2.21 | 3.35 | 0.60 | 0.01 | 2.90 | 3.50 | -0.15 | 6.70 | -0.02 | -2.23 |
| 2822 | 2005 | 0.41 | 0.11 | 0.66 | 2.18 | 3.37 | 0.65 | 0.04 | 2.94 | 3.64 | -0.27 | 6.74 | -0.04 | -3.98 |
| 2822 | 2006 | 0.40 | 0.11 | 0.63 | 2.15 | 3.30 | 0.66 | 0.01 | 3.06 | 3.74 | -0.44 | 6.59 | -0.07 | -6.67 |
| 2822 | 2008 | 0.42 | 0.11 | 0.62 | 2.22 | 3.37 | 0.62 | 0.01 | 2.94 | 3.56 | -0.20 | 6.73 | -0.03 | -2.94 |
| 2822 | 2009 | 0.42 | 0.11 | 0.67 | 2.26 | 3.46 | 0.59 | 0.01 | 3.02 | 3.63 | -0.16 | 6.93 | -0.02 | -2.35 |
| 2822 | 2010 | 0.37 | 0.10 | 0.58 | 2.17 | 3.23 | 0.62 | 0.01 | 2.96 | 3.58 | -0.36 | 6.46 | -0.06 | -5.53 |
| 2822 | 2011 | 0.41 | 0.10 | 0.63 | 2.09 | 3.23 | 0.59 | 0.01 | 3.12 | 3.72 | -0.50 | 6.46 | -0.08 | -7.69 |
| 2829 | 1991 | 0.01 | 0.12 | 0.02 | 2.17 | 2.32 | 0.46 | 0.07 | 1.74 | 2.27 | 0.05 | 4.64 | 0.01 | 0.98 |
| 2829 | 1992 | 0.01 | 0.25 | 0.02 | 2.60 | 2.87 | 0.51 | 0.06 | 1.72 | 2.29 | 0.59 | 5.74 | 0.10 | 10.19 |
| 2829 | 1993 | 0.15 | 0.09 | 0.03 | 2.21 | 2.48 | 0.53 | 0.08 | 1.70 | 2.32 | 0.16 | 4.97 | 0.03 | 3.28 |
| 2829 | 1994 | 0.02 | 0.09 | 0.02 | 2.04 | 2.18 | 0.28 | 0.05 | 1.70 | 2.03 | 0.15 | 4.36 | 0.04 | 3.51 |
| 2829 | 1996 | 0.01 | 0.10 | 0.03 | 1.98 | 2.12 | 0.46 | 0.07 | 1.71 | 2.24 | -0.12 | 4.24 | -0.03 | -2.80 |
| 2829 | 1997 | 0.01 | 0.09 | 0.01 | 1.96 | 2.07 | 0.52 | 0.08 | 1.66 | 2.26 | -0.19 | 4.15 | -0.05 | -4.54 |
| 2829 | 1998 | 0.01 | 0.09 | 0.02 | 2.07 | 2.20 | 0.57 | 0.10 | 1.63 | 2.31 | -0.11 | 4.40 | -0.02 | -2.42 |
| 2829 | 2004 | 0.02 | 0.11 | 0.04 | 2.17 | 2.35 | 0.58 | 0.09 | 1.66 | 2.33 | 0.02 | 4.69 | 0.00 | 0.46 |
| 2829 | 2005 | 0.02 | 0.09 | 0.03 | 2.07 | 2.21 | 0.61 | 0.13 | 1.67 | 2.41 | -0.21 | 4.41 | -0.05 | -4.73 |
| 2829 | 2006 | 0.01 | 0.09 | 0.02 | 2.21 | 2.34 | 0.54 | 0.09 | 1.66 | 2.29 | 0.05 | 4.68 | 0.01 | 1.13 |
| 2829 | 2007 | 0.01 | 0.10 | 0.03 | 2.20 | 2.34 | 0.56 | 0.09 | 1.68 | 2.33 | 0.01 | 4.69 | 0.00 | 0.31 |
| 2829 | 2008 | 0.01 | 0.10 | 0.03 | 2.13 | 2.27 | 0.56 | 0.08 | 1.70 | 2.34 | -0.07 | 4.54 | -0.02 | -1.61 |
| 2829 | 2010 | 0.01 | 0.09 | 0.02 | 2.31 | 2.43 | 0.52 | 0.07 | 1.68 | 2.27 | 0.16 | 4.86 | 0.03 | 3.28 |
| 2829 | 2011 | 0.01 | 0.09 | 0.03 | 2.13 | 2.27 | 0.54 | 0.08 | 1.65 | 2.27 | -0.01 | 4.53 | 0.00 | -0.15 |
| 2829 | 2012 | 0.01 | 0.10 | 0.03 | 2.22 | 2.36 | 0.54 | 0.07 | 2.00 | 2.61 | -0.25 | 4.72 | -0.05 | -5.35 |
| 2847 | 1992 | 1.42 | 0.26 | 0.76 | 2.00 | 4.43 | 1.89 | 0.95 | 0.98 | 3.82 | 0.61 | 8.86 | 0.07 | 6.89 |
| 2847 | 1993 | 1.43 | 0.34 | 0.77 | 1.48 | 4.01 | 1.84 | 1.91 | 0.91 | 4.65 | -0.64 | 8.02 | -0.08 | -7.97 |
| 2847 | 1994 | 0.28 | 0.12 | 0.12 | 0.53 | 1.05 | 0.28 | 0.48 | 0.45 | 1.21 | -0.16 | 2.10 | -0.08 | -7.78 |
| 2847 | 1996 | 1.69 | 0.36 | 0.90 | 1.91 | 4.85 | 2.27 | 2.67 | 0.67 | 5.60 | -0.75 | 9.70 | -0.08 | -7.78 |
| 2847 | 1997 | 1.64 | 0.36 | 0.87 | 2.07 | 4.94 | 2.48 | 2.17 | 0.98 | 5.63 | -0.69 | 9.88 | -0.07 | -6.98 |
| 2847 | 1998 | 0.33 | 0.15 | 0.20 | 0.85 | 1.52 | 0.37 | 0.33 | 1.01 | 1.71 | -0.19 | 3.05 | -0.06 | -6.12 |
| 2847 | 2004 | 0.30 | 0.14 | 0.17 | 0.70 | 1.32 | 0.25 | 0.07 | 1.16 | 1.47 | -0.15 | 2.64 | -0.06 | -5.83 |
| 2847 | 2004 | 0.45 | 0.10 | 0.47 | 1.10 | 2.12 | 0.58 | 0.10 | 1.47 | 2.15 | -0.03 | 4.24 | -0.01 | -0.65 |
| 2847 | 2006 | 0.39 | 0.12 | 0.21 | 0.59 | 1.32 | 0.19 | 0.05 | 1.16 | 1.41 | -0.09 | 2.63 | -0.03 | -3.44 |
| 2847 | 2007 | 0.29 | 0.10 | 0.17 | 0.47 | 1.03 | 0.29 | 0.32 | 0.51 | 1.12 | -0.09 | 2.07 | -0.04 | -4.14 |
| 2847 | 2008 | 0.30 | 0.09 | 0.16 | 0.43 | 0.98 | 0.28 | 0.48 | 0.39 | 1.15 | -0.18 | 1.96 | -0.09 | -8.93 |
| 2847 | 2009 | 0.20 | 0.05 | 0.09 | 0.30 | 0.64 | 0.18 | 0.21 | 0.33 | 0.72 | -0.08 | 1.28 | -0.06 | -5.88 |
| 2913 | 1991 | 0.37 | 0.07 | 0.27 | 0.34 | 1.05 | 0.25 | 0.10 | 0.82 | 1.17 | -0.12 | 2.10 | -0.06 | -5.80 |
| 2913 | 1993 | 0.26 | 0.08 | 0.26 | 0.34 | 0.94 | 0.16 | 0.07 | 0.79 | 1.02 | -0.08 | 1.88 | -0.04 | -4.19 |
| 2913 | 1994 | 0.43 | 0.05 | 0.28 | 0.30 | 1.06 | 0.13 | 0.09 | 0.88 | 1.10 | -0.03 | 2.13 | -0.02 | -1.55 |
| 2913 | 1996 | 0.38 | 0.06 | 0.26 | 0.33 | 1.02 | 0.14 | 0.09 | 0.79 | 1.03 | 0.00 | 2.04 | 0.00 | -0.18 |
| 2913 | 1997 | 0.38 | 0.06 | 0.28 | 0.35 | 1.07 | 0.17 | 0.11 | 0.80 | 1.08 | -0.01 | 2.15 | 0.00 | -0.38 |
| 2913 | 1998 | 0.40 | 0.06 | 0.27 | 0.38 | 1.11 | 0.19 | 0.06 | 0.81 | 1.06 | 0.05 | 2.22 | 0.02 | 2.22 |
| 2913 | 2004 | 0.39 | 0.06 | 0.28 | 0.37 | 1.10 | 0.17 | 0.11 | 0.78 | 1.06 | 0.04 | 2.19 | 0.02 | 1.81 |
| 2913 | 2005 | 0.41 | 0.06 | 0.29 | 0.43 | 1.20 | 0.21 | 0.14 | 0.83 | 1.18 | 0.02 | 2.41 | 0.01 | 0.89 |
| 2913 | 2006 | 0.44 | 0.06 | 0.30 | 0.39 | 1.20 | 0.19 | 0.11 | 0.85 | 1.15 | 0.05 | 2.40 | 0.02 | 1.96 |
| 3034 | 1991 | 0.05 | 0.18 | 0.01 | 2.91 | 3.16 | 0.85 | 0.25 | 1.92 | 3.02 | 0.14 | 6.31 | 0.02 | 2.16 |
| 3034 | 1993 | 0.08 | 0.19 | 0.03 | 3.13 | 3.43 | 0.59 | 0.42 | 1.85 | 2.85 | 0.58 | 6.86 | 0.08 | 8.40 |
| 3034 | 1994 | 0.32 | 0.31 | 0.12 | 3.74 | 4.50 | 0.59 | 0.25 | 3.04 | 3.88 | 0.62 | 9.00 | 0.07 | 6.89 |
| 3034 | 1997 | 0.13 | 0.16 | 0.08 | 1.77 | 2.14 | 0.38 | 0.44 | 1.00 | 1.81 | 0.33 | 4.29 | 0.08 | 7.76 |
| 3034 | 1998 | 0.15 | 0.19 | 0.11 | 2.07 | 2.52 | 0.47 | 0.65 | 1.07 | 2.18 | 0.34 | 5.05 | 0.07 | 6.73 |
| 3034 | 2004 | 0.21 | 0.15 | 0.17 | 1.31 | 1.84 | 0.55 | 0.47 | 0.71 | 1.74 | 0.10 | 3.69 | 0.03 | 2.84 |
| 3034 | 2005 | 0.21 | 0.16 | 0.15 | 1.37 | 1.89 | 0.90 | 0.50 | 0.56 | 1.95 | -0.06 | 3.79 | -0.02 | -1.57 |
| 3034 | 2006 | 0.26 | 0.14 | 0.19 | 1.10 | 1.68 | 0.62 | 0.64 | 0.54 | 1.80 | -0.12 | 3.36 | -0.04 | -3.63 |
| 3034 | 2008 | 0.28 | 0.18 | 0.18 | 1.17 | 1.82 | 0.68 | 0.65 | 0.30 | 1.62 | 0.20 | 3.64 | 0.05 | 5.41 |
| 3036 | 1991 | 0.70 | 0.09 | 0.52 | 0.65 | 1.96 | 0.27 | 0.04 | 1.82 | 2.13 | -0.17 | 3.92 | -0.04 | -4.27 |
| 3036 | 1993 | 0.70 | 0.57 | 0.50 | 0.54 | 2.31 | 0.35 | 0.02 | 1.57 | 1.94 | 0.36 | 4.61 | 0.08 | 7.87 |
| 3036 | 1994 | 0.66 | 0.06 | 0.47 | 0.62 | 1.82 | 0.26 | 0.01 | 1.60 | 1.86 | -0.05 | 3.63 | -0.01 | -1.32 |
| 3036 | 1996 | 0.59 | 0.06 | 0.44 | 0.60 | 1.69 | 0.32 | 0.03 | 1.60 | 1.95 | -0.26 | 3.38 | -0.08 | -7.60 |
| 3036 | 1998 | 0.48 | 0.04 | 0.31 | 0.47 | 1.31 | 0.35 | 0.06 | 1.08 | 1.49 | -0.19 | 2.62 | -0.07 | -7.15 |
| 3036 | 2003 | 0.70 | 0.05 | 0.57 | 0.65 | 1.98 | 0.36 | 0.02 | 1.77 | 2.16 | -0.18 | 3.95 | -0.05 | -4.64 |
| 3036 | 2004 | 0.72 | 0.06 | 0.57 | 0.57 | 1.92 | 0.41 | 0.04 | 1.54 | 1.98 | -0.06 | 3.83 | -0.02 | -1.67 |
| 3036 | 2005 | 0.64 | 0.05 | 0.54 | 0.71 | 1.95 | 0.41 | 0.07 | 1.64 | 2.13 | -0.18 | 3.89 | -0.05 | -4.61 |
| 3036 | 2006 | 0.77 | 0.06 | 0.62 | 0.72 | 2.16 | 0.34 | 0.02 | 1.87 | 2.23 | -0.07 | 4.31 | -0.02 | -1.60 |
| 3036 | 2007 | 0.84 | 0.06 | 0.70 | 0.82 | 2.43 | 0.67 | 0.01 | 1.93 | 2.61 | -0.19 | 4.86 | -0.04 | -3.83 |
| 3036 | 2008 | 0.80 | 0.06 | 0.60 | 0.74 | 2.20 | 0.34 | 0.01 | 1.92 | 2.28 | -0.08 | 4.39 | -0.02 | -1.78 |
| 3036 | 2009 | 0.80 | 0.06 | 0.64 | 0.78 | 2.28 | 0.31 | 0.02 | 1.97 | 2.30 | -0.02 | 4.56 | 0.00 | -0.38 |
| 3036 | 2010 | 0.72 | 0.05 | 0.58 | 0.68 | 2.03 | 0.32 | 0.01 | 1.88 | 2.20 | -0.17 | 4.06 | -0.04 | -4.22 |
| 3036 | 2011 | 0.72 | 0.05 | 0.58 | 0.68 | 2.04 | 0.30 | 0.02 | 1.88 | 2.20 | -0.16 | 4.08 | -0.04 | -3.96 |
| 3039 | 1991 | 0.49 | 0.06 | 0.21 | 0.24 | 1.01 | 0.16 | 0.08 | 0.74 | 0.99 | 0.02 | 2.01 | 0.01 | 1.02 |
| 3039 | 1994 | 0.39 | 0.03 | 0.17 | 0.20 | 0.79 | 0.11 | 0.12 | 0.62 | 0.85 | -0.06 | 1.59 | -0.04 | -3.66 |
| 3039 | 1996 | 0.46 | 0.03 | 0.21 | 0.24 | 0.94 | 0.12 | 0.13 | 0.69 | 0.94 | 0.00 | 1.89 | 0.00 | 0.06 |
| 3039 | 1997 | 0.51 | 0.03 | 0.23 | 0.27 | 1.04 | 0.16 | 0.16 | 0.70 | 1.03 | 0.01 | 2.07 | 0.01 | 0.50 |
| 3039 | 1998 | 0.43 | 0.02 | 0.19 | 0.25 | 0.90 | 0.14 | 0.12 | 0.62 | 0.88 | 0.02 | 1.80 | 0.01 | 0.99 |
| 3039 | 2003 | 0.44 | 0.03 | 0.19 | 0.25 | 0.92 | 0.19 | 0.17 | 0.73 | 1.10 | -0.18 | 1.83 | -0.10 | -9.79 |
| 3039 | 2004 | 0.53 | 0.03 | 0.24 | 0.30 | 1.10 | 0.17 | 0.20 | 0.84 | 1.21 | -0.11 | 2.20 | -0.05 | -4.99 |
| 3039 | 2005 | 0.50 | 0.03 | 0.23 | 0.29 | 1.04 | 0.19 | 0.21 | 0.69 | 1.09 | -0.04 | 2.09 | -0.02 | -2. |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|-------|------|-------|--------|---------------|--------|-------|------|--------------|----------------|------------------|------------|-------|
| 3044 | 1991 | 0.75 | 0.49 | 0.60 | 16.96 | 18.80 | 16.64 | 0.11 | 4.52 | 21.27 | -2.47 | 37.60 | -0.07 | -6.58 |
| 3044 | 1993 | 0.62 | 0.38 | 0.61 | 10.27 | 11.88 | 6.67 | 0.01 | 3.02 | 9.69 | 2.18 | 23.75 | 0.09 | 9.19 |
| 3044 | 1996 | 0.42 | 0.21 | 0.43 | 10.22 | 11.28 | 8.26 | 0.01 | 2.34 | 10.62 | 0.66 | 22.56 | 0.03 | 2.95 |
| 3044 | 1997 | 0.75 | 0.32 | 0.62 | 18.14 | 19.83 | 16.50 | 0.01 | 4.66 | 21.17 | -1.34 | 39.66 | -0.03 | -3.37 |
| 3044 | 1998 | 0.61 | 0.26 | 0.55 | 13.44 | 14.86 | 12.72 | 0.01 | 3.80 | 16.53 | -1.67 | 29.72 | -0.06 | -5.62 |
| 3044 | 2004 | 0.54 | 0.26 | 0.56 | 11.31 | 12.66 | 9.76 | 0.03 | 3.06 | 12.85 | -0.19 | 25.32 | -0.01 | -0.74 |
| 3044 | 2005 | 0.74 | 0.34 | 0.60 | 17.49 | 19.17 | 18.42 | 0.05 | 4.50 | 22.97 | -3.80 | 38.34 | -0.10 | -9.91 |
| 3044 | 2006 | 0.70 | 0.30 | 0.59 | 19.31 | 20.90 | 14.70 | 0.02 | 4.10 | 18.82 | 2.09 | 41.80 | 0.05 | 4.99 |
| 3044 | 2007 | 0.77 | 0.35 | 0.54 | 20.84 | 22.50 | 18.33 | 0.01 | 5.04 | 23.38 | -0.89 | 44.99 | -0.02 | -1.97 |
| 3044 | 2008 | 0.39 | 0.25 | 0.30 | 15.22 | 16.17 | 11.28 | 0.01 | 3.70 | 14.99 | 1.17 | 32.34 | 0.04 | 3.63 |
| 3044 | 2009 | 1.00 | 0.45 | 0.58 | 31.10 | 33.13 | 28.21 | 0.01 | 7.60 | 35.81 | -2.68 | 66.25 | -0.04 | -4.05 |
| 3044 | 2010 | 0.99 | 0.48 | 0.53 | 31.32 | 33.32 | 29.05 | 0.01 | 7.46 | 36.52 | -3.20 | 66.63 | -0.05 | -4.80 |
| 3044 | 2011 | 1.05 | 0.50 | 0.61 | 33.49 | 35.65 | 30.46 | 0.01 | 7.50 | 37.97 | -2.31 | 71.30 | -0.03 | -3.25 |
| 3044 | 2012 | 1.00 | 0.47 | 0.55 | 33.06 | 35.08 | 30.18 | 0.01 | 8.94 | 39.13 | -4.05 | 70.16 | -0.06 | -5.77 |
| 3045 | 1992 | 0.12 | 0.25 | 0.44 | 0.91 | 1.73 | 0.97 | 0.00 | 1.10 | 2.07 | -0.34 | 3.46 | -0.10 | -9.96 |
| 3045 | 1993 | 0.61 | 0.24 | 0.44 | 0.93 | 2.22 | 0.79 | 0.10 | 1.06 | 1.95 | 0.27 | 4.44 | 0.06 | 6.13 |
| 3045 | 1996 | 0.60 | 0.21 | 0.43 | 0.90 | 2.15 | 0.90 | 0.07 | 1.18 | 2.16 | -0.01 | 4.29 | 0.00 | -0.20 |
| 3045 | 1997 | 0.67 | 0.24 | 0.49 | 0.97 | 2.37 | 1.13 | 0.11 | 1.14 | 2.39 | -0.02 | 4.74 | 0.00 | -0.37 |
| 3045 | 1997 | 0.73 | 0.25 | 0.53 | 0.98 | 2.49 | 1.16 | 0.07 | 1.20 | 2.42 | 0.07 | 4.98 | 0.01 | 1.36 |
| 3045 | 1997 | 0.71 | 0.24 | 0.53 | 1.00 | 2.48 | 1.18 | 0.13 | 1.15 | 2.46 | 0.03 | 4.97 | 0.01 | 0.51 |
| 3045 | 1998 | 0.65 | 0.24 | 0.51 | 1.02 | 2.42 | 1.16 | 0.08 | 1.09 | 2.34 | 0.08 | 4.83 | 0.02 | 1.62 |
| 3045 | 1998 | 0.69 | 0.25 | 0.51 | 1.04 | 2.49 | 1.13 | 0.16 | 1.08 | 2.37 | 0.12 | 4.98 | 0.02 | 2.39 |
| 3045 | 1998 | 0.70 | 0.24 | 0.51 | 1.09 | 2.54 | 1.16 | 0.18 | 1.08 | 2.42 | 0.12 | 5.07 | 0.02 | 2.31 |
| 3045 | 1998 | 0.73 | 0.24 | 0.51 | 1.04 | 2.52 | 1.10 | 0.17 | 1.10 | 2.37 | 0.15 | 5.05 | 0.03 | 2.97 |
| 3045 | 1998 | 0.75 | 0.24 | 0.51 | 1.04 | 2.54 | 1.16 | 0.19 | 1.13 | 2.47 | 0.07 | 5.09 | 0.01 | 1.38 |
| 3045 | 1999 | 0.65 | 0.25 | 0.49 | 1.09 | 2.48 | 1.07 | 0.18 | 1.10 | 2.35 | 0.12 | 4.95 | 0.03 | 2.51 |
| 3045 | 1999 | 0.60 | 0.24 | 0.48 | 1.09 | 2.40 | 1.04 | 0.19 | 1.10 | 2.33 | 0.08 | 4.81 | 0.02 | 1.60 |
| 3045 | 2000 | 0.61 | 0.24 | 0.46 | 1.04 | 2.36 | 1.02 | 0.19 | 1.10 | 2.31 | 0.05 | 4.71 | 0.01 | 1.05 |
| 3045 | 2000 | 0.57 | 0.23 | 0.45 | 1.00 | 2.25 | 0.99 | 0.20 | 1.10 | 2.29 | -0.04 | 4.50 | -0.01 | -0.78 |
| 3045 | 2000 | 0.56 | 0.23 | 0.40 | 1.04 | 2.24 | 0.93 | 0.25 | 1.18 | 2.36 | -0.12 | 4.48 | -0.03 | -2.72 |
| 3045 | 2002 | 0.60 | 0.24 | 0.43 | 0.95 | 2.21 | 1.00 | 0.39 | 1.10 | 2.49 | -0.28 | 4.42 | -0.06 | -6.30 |
| 3045 | 2003 | 0.62 | 0.23 | 0.46 | 1.00 | 2.31 | 0.85 | 0.36 | 1.00 | 2.21 | 0.10 | 4.62 | 0.02 | 2.16 |
| 3045 | 2004 | 0.59 | 0.23 | 0.44 | 0.96 | 2.23 | 0.89 | 0.40 | 1.07 | 2.36 | -0.13 | 4.46 | -0.03 | -2.96 |
| 3045 | 2006 | 0.66 | 0.22 | 0.44 | 0.90 | 2.22 | 0.91 | 0.55 | 0.97 | 2.43 | -0.21 | 4.44 | -0.05 | -4.78 |
| 3045 | 2007 | 0.72 | 0.24 | 0.50 | 0.96 | 2.41 | 0.89 | 0.59 | 1.00 | 2.47 | -0.06 | 4.82 | -0.01 | -1.24 |
| 3045 | 2008 | 0.70 | 0.24 | 0.53 | 1.04 | 2.51 | 0.87 | 0.54 | 1.03 | 2.44 | 0.07 | 5.02 | 0.01 | 1.37 |
| 3045 | 2009 | 0.65 | 0.22 | 0.49 | 1.00 | 2.36 | 0.87 | 0.54 | 0.98 | 2.40 | -0.03 | 4.72 | -0.01 | -0.72 |
| 3272 | 1997 | 27.25 | 6.83 | 50.69 | 194.00 | 278.76 | 276.14 | 20.72 | 1.62 | 298.48 | -19.71 | 557.53 | -0.04 | -3.54 |
| 3272 | 1998 | 0.45 | 0.10 | 0.04 | 2.85 | 3.45 | 2.78 | 0.04 | 0.85 | 3.68 | -0.23 | 6.90 | -0.03 | -3.32 |
| 3272 | 2004 | 27.59 | 7.39 | 51.59 | 217.92 | 304.50 | 298.99 | 22.28 | 1.95 | 323.21 | -18.71 | 609.01 | -0.03 | -3.07 |
| 3272 | 2006 | 28.89 | 7.06 | 55.54 | 234.89 | 326.38 | 287.70 | 21.24 | 1.80 | 310.75 | 15.64 | 652.76 | 0.02 | 2.40 |
| 3272 | 2008 | 25.45 | 6.14 | 41.97 | 173.99 | 247.54 | 234.11 | 18.11 | 1.75 | 253.98 | -6.44 | 495.09 | -0.01 | -1.30 |
| 3301 | 1996 | 0.99 | 0.10 | 1.00 | 1.36 | 3.45 | 1.45 | 0.25 | 1.64 | 3.34 | 0.12 | 6.91 | 0.02 | 1.70 |
| 3301 | 1997 | 1.00 | 0.09 | 1.05 | 1.30 | 3.44 | 1.53 | 0.26 | 1.54 | 3.33 | 0.12 | 6.89 | 0.02 | 1.67 |
| 3301 | 1997 | 1.06 | 0.10 | 1.07 | 1.39 | 3.63 | 1.69 | 0.30 | 1.66 | 3.66 | -0.03 | 7.26 | 0.00 | -0.36 |
| 3301 | 1997 | 0.97 | 0.09 | 1.05 | 1.37 | 3.48 | 1.33 | 0.24 | 1.60 | 3.16 | 0.33 | 6.97 | 0.05 | 4.69 |
| 3301 | 1998 | 0.90 | 0.09 | 0.93 | 1.24 | 3.16 | 1.27 | 0.21 | 1.64 | 3.12 | 0.04 | 6.32 | 0.01 | 0.62 |
| 3301 | 1998 | 0.96 | 0.10 | 1.01 | 1.35 | 3.43 | 1.21 | 0.24 | 1.66 | 3.10 | 0.32 | 6.85 | 0.05 | 4.71 |
| 3301 | 1998 | 1.03 | 0.10 | 1.05 | 1.44 | 3.61 | 1.33 | 0.25 | 1.64 | 3.22 | 0.39 | 7.21 | 0.05 | 5.40 |
| 3301 | 1998 | 0.96 | 0.09 | 1.01 | 1.44 | 3.51 | 1.33 | 0.25 | 1.62 | 3.20 | 0.31 | 7.01 | 0.04 | 4.38 |
| 3301 | 1998 | 0.97 | 0.09 | 0.95 | 1.39 | 3.41 | 1.18 | 0.28 | 1.64 | 3.10 | 0.30 | 6.82 | 0.04 | 4.47 |
| 3301 | 1999 | 0.91 | 0.09 | 0.91 | 1.44 | 3.35 | 1.13 | 0.27 | 1.69 | 3.08 | 0.27 | 6.70 | 0.04 | 3.97 |
| 3301 | 1999 | 0.90 | 0.10 | 0.89 | 1.44 | 3.32 | 1.13 | 0.29 | 1.66 | 3.07 | 0.25 | 6.64 | 0.04 | 3.78 |
| 3301 | 1999 | 0.90 | 0.10 | 0.90 | 1.39 | 3.29 | 1.13 | 0.26 | 1.64 | 3.03 | 0.26 | 6.57 | 0.04 | 3.98 |
| 3301 | 2000 | 0.85 | 0.09 | 0.82 | 1.35 | 3.11 | 1.04 | 0.22 | 1.61 | 2.87 | 0.24 | 6.22 | 0.04 | 3.84 |
| 3301 | 2000 | 0.75 | 0.08 | 0.76 | 1.30 | 2.89 | 1.07 | 0.21 | 1.54 | 2.82 | 0.07 | 5.78 | 0.01 | 1.24 |
| 3301 | 2000 | 0.81 | 0.09 | 0.73 | 1.30 | 2.94 | 1.10 | 0.20 | 1.56 | 2.86 | 0.08 | 5.89 | 0.01 | 1.42 |
| 3301 | 2002 | 0.65 | 0.09 | 0.66 | 1.14 | 2.54 | 1.07 | 0.19 | 1.48 | 2.74 | -0.20 | 5.08 | -0.04 | -3.85 |
| 3301 | 2003 | 0.71 | 0.09 | 0.71 | 1.13 | 2.64 | 0.90 | 0.17 | 1.46 | 2.53 | 0.11 | 5.27 | 0.02 | 2.02 |
| 3301 | 2004 | 0.69 | 0.08 | 0.71 | 1.19 | 2.68 | 0.98 | 0.17 | 1.46 | 2.61 | 0.06 | 5.35 | 0.01 | 1.17 |
| 3301 | 2006 | 0.66 | 0.08 | 0.62 | 1.07 | 2.43 | 0.90 | 0.14 | 1.42 | 2.46 | -0.03 | 4.87 | -0.01 | -0.58 |
| 3301 | 2007 | 0.68 | 0.07 | 0.64 | 1.07 | 2.47 | 0.89 | 0.13 | 1.41 | 2.43 | 0.04 | 4.94 | 0.01 | 0.77 |
| 3301 | 2008 | 0.70 | 0.08 | 0.69 | 1.13 | 2.60 | 0.87 | 0.13 | 1.44 | 2.45 | 0.15 | 5.20 | 0.03 | 2.86 |
| 3301 | 2009 | 0.65 | 0.08 | 0.67 | 1.13 | 2.52 | 0.79 | 0.13 | 1.48 | 2.40 | 0.12 | 5.04 | 0.02 | 2.44 |
| 3301 | 2010 | 0.61 | 0.08 | 0.57 | 1.09 | 2.35 | 0.90 | 0.13 | 1.40 | 2.43 | -0.09 | 4.69 | -0.02 | -1.87 |
| 3470 | 1997 | 0.11 | 0.05 | 0.13 | 0.52 | 0.82 | 0.10 | 0.00 | 0.82 | 0.93 | -0.11 | 1.63 | -0.07 | -6.76 |
| 3470 | 2003 | 0.11 | 0.05 | 0.13 | 0.54 | 0.83 | 0.13 | 0.01 | 0.86 | 0.99 | -0.16 | 1.66 | -0.10 | -9.73 |
| 3470 | 2003 | 0.11 | 0.07 | 0.11 | 0.32 | 0.61 | 0.15 | 0.03 | 0.43 | 0.61 | 0.00 | 1.23 | 0.00 | -0.02 |
| 3470 | 2004 | 0.12 | 0.05 | 0.14 | 0.52 | 0.83 | 0.11 | 0.01 | 0.80 | 0.92 | -0.08 | 1.66 | -0.05 | -5.04 |
| 3470 | 2005 | 0.09 | 0.05 | 0.10 | 0.59 | 0.83 | 0.12 | 0.01 | 0.81 | 0.94 | -0.11 | 1.65 | -0.07 | -6.53 |
| 3470 | 2006 | 0.12 | 0.04 | 0.11 | 0.66 | 0.93 | 0.14 | 0.01 | 0.96 | 1.10 | -0.17 | 1.86 | -0.09 | -9.38 |
| 3470 | 2008 | 0.11 | 0.05 | 0.12 | 0.57 | 0.85 | 0.13 | 0.01 | 0.84 | 0.98 | -0.12 | 1.70 | -0.07 | -7.30 |
| 3470 | 2009 | 0.12 | 0.05 | 0.12 | 0.57 | 0.85 | 0.10 | 0.01 | 0.91 | 1.02 | -0.16 | 1.71 | -0.10 | -9.58 |
| 3470 | 2010 | 0.08 | 0.05 | 0.09 | 0.57 | 0.79 | 0.11 | 0.01 | 0.82 | 0.94 | -0.15 | 1.58 | -0.09 | -9.38 |
| 3566 | 2004 | 0.19 | 0.01 | 0.13 | 0.68 | 1.01 | 0.24 | 0.04 | 0.77 | 1.04 | -0.03 | 2.01 | -0.02 | -1.69 |
| 3566 | 2005 | 0.20 | 0.01 | 0.12 | 0.67 | 1.01 | 0.22 | 0.03 | 0.75 | 1.00 | 0.01 | 2.01 | 0.00 | 0.41 |
| 3566 | | | | | | | | | | | | | | |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|-------|---------------|-------|------|------|--------------|----------------|------------------|------------|-------|
| 3566 | 2009 | 0.19 | 0.01 | 0.12 | 0.65 | 0.97 | 0.22 | 0.03 | 0.73 | 0.98 | -0.01 | 1.94 | -0.01 | -0.60 |
| 3566 | 2010 | 0.18 | 0.01 | 0.11 | 0.64 | 0.93 | 0.22 | 0.03 | 0.74 | 0.99 | -0.05 | 1.87 | -0.03 | -2.85 |
| 3566 | 2011 | 0.17 | 0.01 | 0.10 | 0.62 | 0.91 | 0.23 | 0.04 | 0.70 | 0.97 | -0.06 | 1.82 | -0.03 | -3.13 |
| 3566 | 2012 | 0.18 | 0.01 | 0.12 | 0.65 | 0.97 | 0.25 | 0.02 | 0.86 | 1.13 | -0.16 | 1.93 | -0.08 | -8.46 |
| 4000 | 1991 | 0.32 | 0.17 | 0.16 | 0.43 | 1.08 | 0.43 | 0.04 | 0.50 | 0.97 | 0.12 | 2.17 | 0.05 | 5.40 |
| 4000 | 1992 | 0.08 | 0.16 | 0.19 | 0.48 | 0.90 | 0.26 | 0.19 | 0.46 | 0.90 | 0.00 | 1.80 | 0.00 | -0.10 |
| 4000 | 1996 | 0.38 | 0.13 | 0.19 | 0.45 | 1.15 | 0.27 | 0.20 | 0.51 | 0.99 | 0.16 | 2.29 | 0.07 | 7.06 |
| 4000 | 1997 | 0.36 | 0.13 | 0.18 | 0.43 | 1.11 | 0.28 | 0.21 | 0.46 | 0.95 | 0.16 | 2.21 | 0.07 | 7.01 |
| 4000 | 1998 | 0.39 | 0.15 | 0.20 | 0.49 | 1.24 | 0.32 | 0.15 | 0.51 | 0.98 | 0.25 | 2.47 | 0.10 | 10.18 |
| 4001 | 1996 | 0.71 | 0.50 | 0.64 | 10.22 | 12.07 | 8.15 | 0.81 | 3.14 | 12.10 | -0.03 | 24.15 | 0.00 | -0.13 |
| 4001 | 1997 | 0.72 | 0.52 | 0.65 | 9.83 | 11.72 | 9.08 | 0.84 | 3.06 | 12.98 | -1.26 | 23.44 | -0.05 | -5.38 |
| 4001 | 2003 | 0.71 | 0.54 | 0.64 | 10.79 | 12.68 | 10.61 | 1.00 | 3.08 | 14.68 | -2.00 | 25.37 | -0.08 | -7.87 |
| 4001 | 2004 | 0.74 | 0.57 | 0.72 | 11.27 | 13.29 | 9.11 | 0.85 | 3.22 | 13.18 | 0.12 | 26.58 | 0.00 | 0.44 |
| 4001 | 2006 | 0.76 | 0.54 | 0.77 | 10.44 | 12.51 | 8.72 | 0.84 | 2.98 | 12.54 | -0.03 | 25.01 | 0.00 | -0.12 |
| 4001 | 2009 | 0.70 | 0.49 | 0.65 | 9.57 | 11.40 | 8.74 | 0.90 | 2.94 | 12.58 | -1.18 | 22.81 | -0.05 | -5.16 |
| 4002 | 1991 | 2.20 | 0.24 | 1.07 | 4.31 | 7.81 | 5.32 | 0.52 | 2.08 | 7.92 | -0.11 | 15.62 | -0.01 | -0.69 |
| 4002 | 1993 | 6.10 | 7.70 | 1.88 | 1.62 | 17.30 | 16.16 | 1.37 | 2.64 | 20.16 | -2.87 | 34.59 | -0.08 | -8.30 |
| 4002 | 1996 | 0.88 | 0.10 | 0.49 | 2.46 | 3.94 | 2.14 | 0.22 | 1.91 | 4.27 | -0.33 | 7.88 | -0.04 | -4.22 |
| 4002 | 1997 | 2.35 | 0.21 | 1.08 | 4.61 | 8.25 | 5.98 | 0.65 | 2.00 | 8.63 | -0.38 | 16.49 | -0.02 | -2.32 |
| 4002 | 1998 | 2.43 | 0.20 | 1.19 | 5.00 | 8.82 | 6.54 | 0.69 | 2.12 | 9.35 | -0.53 | 17.63 | -0.03 | -3.02 |
| 4002 | 2004 | 1.05 | 0.12 | 0.50 | 3.55 | 5.22 | 3.67 | 0.01 | 0.94 | 4.61 | 0.61 | 10.44 | 0.06 | 5.81 |
| 4002 | 2005 | 0.25 | 0.07 | 0.08 | 2.45 | 2.85 | 2.99 | 0.02 | 0.17 | 3.18 | -0.33 | 5.70 | -0.06 | -5.74 |
| 4002 | 2006 | 2.24 | 0.19 | 1.09 | 4.87 | 8.38 | 6.04 | 0.65 | 1.94 | 8.63 | -0.24 | 16.77 | -0.01 | -1.44 |
| 4002 | 2007 | 2.90 | 0.23 | 1.46 | 6.00 | 10.58 | 7.05 | 0.87 | 2.20 | 10.12 | 0.47 | 21.17 | 0.02 | 2.21 |
| 4002 | 2008 | 3.69 | 0.31 | 1.48 | 7.83 | 13.31 | 10.44 | 1.00 | 2.48 | 13.92 | -0.60 | 26.62 | -0.02 | -2.27 |
| 4002 | 2009 | 1.95 | 0.19 | 0.91 | 4.78 | 7.82 | 4.80 | 0.48 | 2.19 | 7.46 | 0.36 | 15.65 | 0.02 | 2.31 |
| 4003 | 2003 | 0.30 | 0.11 | 0.19 | 0.43 | 1.02 | 0.15 | 0.26 | 0.48 | 0.88 | 0.13 | 2.04 | 0.07 | 6.59 |
| 4003 | 2004 | 0.27 | 0.11 | 0.18 | 0.42 | 0.98 | 0.12 | 0.23 | 0.50 | 0.85 | 0.13 | 1.95 | 0.06 | 6.43 |
| 4003 | 2006 | 0.27 | 0.11 | 0.16 | 0.41 | 0.94 | 0.10 | 0.21 | 0.53 | 0.84 | 0.11 | 1.89 | 0.06 | 5.66 |
| 4003 | 2008 | 0.27 | 0.11 | 0.18 | 0.42 | 0.98 | 0.10 | 0.23 | 0.53 | 0.86 | 0.12 | 1.96 | 0.06 | 5.99 |
| 4007 | 1996 | 0.14 | 0.03 | 0.14 | 0.40 | 0.72 | 0.14 | 0.03 | 0.54 | 0.71 | 0.01 | 1.43 | 0.00 | 0.50 |
| 4007 | 1997 | 0.16 | 0.04 | 0.16 | 0.44 | 0.80 | 0.14 | 0.03 | 0.52 | 0.69 | 0.11 | 1.60 | 0.07 | 6.93 |
| 4007 | 1997 | 0.18 | 0.05 | 0.16 | 0.41 | 0.80 | 0.14 | 0.03 | 0.51 | 0.68 | 0.11 | 1.59 | 0.07 | 7.18 |
| 4007 | 1997 | 0.15 | 0.04 | 0.16 | 0.43 | 0.78 | 0.15 | 0.03 | 0.51 | 0.68 | 0.09 | 1.55 | 0.06 | 5.92 |
| 4007 | 1998 | 0.17 | 0.05 | 0.16 | 0.42 | 0.79 | 0.19 | 0.01 | 0.49 | 0.69 | 0.10 | 1.59 | 0.06 | 6.48 |
| 4007 | 1998 | 0.18 | 0.05 | 0.16 | 0.43 | 0.82 | 0.15 | 0.03 | 0.51 | 0.69 | 0.13 | 1.64 | 0.08 | 8.04 |
| 4007 | 1998 | 0.18 | 0.04 | 0.17 | 0.46 | 0.85 | 0.17 | 0.02 | 0.51 | 0.71 | 0.15 | 1.71 | 0.09 | 8.65 |
| 4007 | 1998 | 0.16 | 0.04 | 0.16 | 0.45 | 0.81 | 0.17 | 0.03 | 0.51 | 0.71 | 0.10 | 1.62 | 0.06 | 6.04 |
| 4007 | 1998 | 0.17 | 0.04 | 0.16 | 0.45 | 0.82 | 0.15 | 0.03 | 0.52 | 0.70 | 0.11 | 1.63 | 0.07 | 7.00 |
| 4007 | 1999 | 0.16 | 0.04 | 0.16 | 0.45 | 0.81 | 0.14 | 0.03 | 0.52 | 0.69 | 0.12 | 1.62 | 0.07 | 7.22 |
| 4007 | 1999 | 0.16 | 0.05 | 0.16 | 0.44 | 0.81 | 0.14 | 0.03 | 0.51 | 0.68 | 0.13 | 1.62 | 0.08 | 7.92 |
| 4007 | 1999 | 0.16 | 0.05 | 0.16 | 0.44 | 0.81 | 0.15 | 0.03 | 0.51 | 0.68 | 0.13 | 1.62 | 0.08 | 7.83 |
| 4007 | 2000 | 0.16 | 0.04 | 0.16 | 0.43 | 0.79 | 0.15 | 0.03 | 0.51 | 0.69 | 0.10 | 1.58 | 0.07 | 6.59 |
| 4007 | 2000 | 0.15 | 0.04 | 0.15 | 0.43 | 0.77 | 0.15 | 0.03 | 0.52 | 0.70 | 0.07 | 1.55 | 0.05 | 4.52 |
| 4007 | 2000 | 0.14 | 0.04 | 0.15 | 0.43 | 0.77 | 0.15 | 0.03 | 0.52 | 0.71 | 0.06 | 1.53 | 0.04 | 4.03 |
| 4007 | 2002 | 0.15 | 0.05 | 0.15 | 0.42 | 0.78 | 0.17 | 0.03 | 0.52 | 0.72 | 0.06 | 1.55 | 0.04 | 3.55 |
| 4007 | 2004 | 0.15 | 0.04 | 0.16 | 0.47 | 0.81 | 0.16 | 0.02 | 0.56 | 0.74 | 0.07 | 1.62 | 0.04 | 4.23 |
| 4007 | 2006 | 0.17 | 0.05 | 0.16 | 0.43 | 0.81 | 0.16 | 0.03 | 0.52 | 0.72 | 0.09 | 1.61 | 0.06 | 5.67 |
| 4007 | 2008 | 0.16 | 0.04 | 0.15 | 0.43 | 0.79 | 0.15 | 0.03 | 0.63 | 0.82 | -0.03 | 1.58 | -0.02 | -1.60 |
| 4007 | 2009 | 0.16 | 0.04 | 0.16 | 0.43 | 0.79 | 0.15 | 0.03 | 0.54 | 0.73 | 0.07 | 1.59 | 0.04 | 4.37 |
| 4007 | 2010 | 0.15 | 0.04 | 0.14 | 0.42 | 0.76 | 0.14 | 0.03 | 0.54 | 0.71 | 0.04 | 1.51 | 0.03 | 2.77 |
| 4007 | 2011 | 0.15 | 0.04 | 0.14 | 0.44 | 0.78 | 0.14 | 0.03 | 0.54 | 0.72 | 0.06 | 1.56 | 0.04 | 4.08 |
| 4007 | 2012 | 0.15 | 0.04 | 0.15 | 0.43 | 0.77 | 0.12 | 0.03 | 0.69 | 0.83 | -0.06 | 1.54 | -0.04 | -4.21 |
| 4364 | 1996 | 0.43 | 0.16 | 0.51 | 6.05 | 7.15 | 4.54 | 0.01 | 2.28 | 6.83 | 0.32 | 14.29 | 0.02 | 2.21 |
| 4364 | 1997 | 0.46 | 0.17 | 0.57 | 6.48 | 7.67 | 5.61 | 0.00 | 2.18 | 7.80 | -0.13 | 15.34 | -0.01 | -0.83 |
| 4364 | 1997 | 0.48 | 0.18 | 0.61 | 6.39 | 7.66 | 5.58 | 0.01 | 2.23 | 7.82 | -0.16 | 15.32 | -0.01 | -1.05 |
| 4364 | 1998 | 0.49 | 0.16 | 0.56 | 5.79 | 6.99 | 5.70 | 0.01 | 2.18 | 7.89 | -0.89 | 13.99 | -0.06 | -6.39 |
| 4364 | 1998 | 0.52 | 0.19 | 0.63 | 6.96 | 8.30 | 5.50 | 0.01 | 2.20 | 7.70 | 0.60 | 16.60 | 0.04 | 3.59 |
| 4364 | 1998 | 0.51 | 0.17 | 0.62 | 6.79 | 8.09 | 5.87 | 0.01 | 2.20 | 8.07 | 0.02 | 16.18 | 0.00 | 0.14 |
| 4364 | 1998 | 0.51 | 0.18 | 0.61 | 6.92 | 8.22 | 5.61 | 0.01 | 2.23 | 7.85 | 0.37 | 16.43 | 0.02 | 2.24 |
| 4364 | 1998 | 0.53 | 0.18 | 0.62 | 6.92 | 8.24 | 5.64 | 0.01 | 2.23 | 7.88 | 0.37 | 16.48 | 0.02 | 2.22 |
| 4364 | 1999 | 0.51 | 0.17 | 0.63 | 6.92 | 8.22 | 5.50 | 0.01 | 2.23 | 7.73 | 0.49 | 16.45 | 0.03 | 2.98 |
| 4364 | 1999 | 0.48 | 0.18 | 0.59 | 7.05 | 8.30 | 5.75 | 0.00 | 2.25 | 8.00 | 0.30 | 16.60 | 0.02 | 1.80 |
| 4364 | 1999 | 0.48 | 0.18 | 0.58 | 6.79 | 8.03 | 5.53 | 0.01 | 2.23 | 7.76 | 0.27 | 16.07 | 0.02 | 1.68 |
| 4364 | 2000 | 0.48 | 0.18 | 0.60 | 6.44 | 7.69 | 5.42 | 0.00 | 2.20 | 7.62 | 0.08 | 15.39 | 0.01 | 0.50 |
| 4364 | 2000 | 0.46 | 0.16 | 0.56 | 6.92 | 8.10 | 5.78 | 0.00 | 2.25 | 8.03 | 0.07 | 16.21 | 0.00 | 0.45 |
| 4364 | 2000 | 0.44 | 0.18 | 0.57 | 6.61 | 7.80 | 5.56 | 0.00 | 2.28 | 7.84 | -0.04 | 15.60 | 0.00 | -0.26 |
| 4364 | 2003 | 0.47 | 0.19 | 0.56 | 6.22 | 7.45 | 5.53 | 0.00 | 2.20 | 7.73 | -0.29 | 14.89 | -0.02 | -1.92 |
| 4364 | 2004 | 0.47 | 0.18 | 0.57 | 6.66 | 7.88 | 5.70 | 0.01 | 2.22 | 7.92 | -0.04 | 15.75 | 0.00 | -0.29 |
| 4364 | 2006 | 0.47 | 0.17 | 0.55 | 6.13 | 7.32 | 5.56 | 0.01 | 2.10 | 7.66 | -0.34 | 14.65 | -0.02 | -2.30 |
| 4364 | 2007 | 0.48 | 0.17 | 0.59 | 6.13 | 7.38 | 5.25 | 0.01 | 1.96 | 7.21 | 0.17 | 14.75 | 0.01 | 1.14 |
| 4364 | 2008 | 0.50 | 0.17 | 0.61 | 6.52 | 7.80 | 5.36 | 0.01 | 2.16 | 7.52 | 0.28 | 15.61 | 0.02 | 1.79 |
| 4364 | 2009 | 0.47 | 0.17 | 0.58 | 6.09 | 7.30 | 5.08 | 0.01 | 2.20 | 7.28 | 0.02 | 14.60 | 0.00 | 0.13 |
| 4364 | 2010 | 0.45 | 0.17 | 0.53 | 5.92 | 7.06 | 5.16 | 0.02 | 2.18 | 7.36 | -0.30 | 14.12 | -0.02 | -2.11 |
| 4364 | 2011 | 0.46 | 0.16 | 0.55 | 5.92 | 7.09 | 5.19 | 0.01 | 2.16 | 7.35 | -0.26 | 14.18 | -0.02 | -1.85 |
| 4364 | 2012 | 0.49 | 0.17 | 0.57 | 5.57 | 6.79 | 4.68 | 0.01 | 2.40 | 7.09 | -0.30 | 13.59 | -0.02 | -2.19 |
| 4582 | 1997 | 0.41 | 0.09 | 0.43 | 1.04 | 1.97 | 0. | | | | | | | |

Table A3-6: Ion Balance of Bore Samples with Complete Major Ions (milliequivalents)

| Bore No | Collect Date | Ca | K | Mg | Na | Total Cations | Cl | SO4 | HCO3 | Total anions | Cations-anions | Cations + anions | Difference | % |
|---------|--------------|------|------|------|-------|---------------|------|------|-------|--------------|----------------|------------------|------------|-------|
| 4582 | 2008 | 0.42 | 0.10 | 0.38 | 1.00 | 1.91 | 0.59 | 0.05 | 1.46 | 2.10 | -0.19 | 3.82 | -0.05 | -5.03 |
| 4968 | 2002 | 0.20 | 0.01 | 0.12 | 0.66 | 0.99 | 0.23 | 0.03 | 0.88 | 1.15 | -0.16 | 1.97 | -0.08 | -8.12 |
| 4968 | 2007 | 0.21 | 0.01 | 0.13 | 0.68 | 1.03 | 0.28 | 0.04 | 0.72 | 1.04 | -0.01 | 2.06 | -0.01 | -0.65 |
| 4968 | 2008 | 0.29 | 0.13 | 0.20 | 0.70 | 1.31 | 0.39 | 0.14 | 0.53 | 1.07 | 0.24 | 2.62 | 0.09 | 9.09 |
| 4968 | 2012 | 0.26 | 0.12 | 0.21 | 0.72 | 1.31 | 0.32 | 0.23 | 0.48 | 1.02 | 0.29 | 2.62 | 0.11 | 10.93 |
| 2118 | 1997 | 0.31 | 0.07 | 0.19 | 0.49 | 1.06 | 0.14 | 0.20 | 0.58 | 0.91 | 0.15 | 2.12 | 0.07 | 6.96 |
| 2118 | 1998 | 0.32 | 0.07 | 0.19 | 0.50 | 1.08 | 0.14 | 0.15 | 0.60 | 0.89 | 0.19 | 2.16 | 0.09 | 8.91 |
| 2118 | 2003 | 0.31 | 0.07 | 0.18 | 0.49 | 1.07 | 0.21 | 0.26 | 0.54 | 1.00 | 0.06 | 2.13 | 0.03 | 2.96 |
| 2118 | 2004 | 0.32 | 0.08 | 0.20 | 0.50 | 1.09 | 0.18 | 0.23 | 0.56 | 0.96 | 0.13 | 2.19 | 0.06 | 5.90 |
| 2118 | 2005 | 0.30 | 0.07 | 0.18 | 0.51 | 1.07 | 0.19 | 0.26 | 0.56 | 1.01 | 0.06 | 2.14 | 0.03 | 2.66 |
| 2118 | 2006 | 0.36 | 0.08 | 0.21 | 0.52 | 1.17 | 0.20 | 0.21 | 0.57 | 0.98 | 0.20 | 2.35 | 0.08 | 8.35 |
| 2118 | 2009 | 0.41 | 0.08 | 0.24 | 0.52 | 1.26 | 0.25 | 0.21 | 0.54 | 0.99 | 0.27 | 2.52 | 0.11 | 10.60 |
| SP198 | 1997 | 0.18 | 0.09 | 0.12 | 0.49 | 0.88 | 0.25 | 0.17 | 0.46 | 0.88 | 0.00 | 1.76 | 0.00 | -0.03 |
| SP198 | 1998 | 0.17 | 0.08 | 0.11 | 0.48 | 0.84 | 0.23 | 0.15 | 0.46 | 0.84 | 0.00 | 1.68 | 0.00 | 0.16 |
| SP198 | 2002 | 0.17 | 0.09 | 0.12 | 0.50 | 0.88 | 0.26 | 0.19 | 0.51 | 0.96 | -0.08 | 1.76 | -0.04 | -4.44 |
| SP198 | 2004 | 0.18 | 0.09 | 0.13 | 0.52 | 0.91 | 0.25 | 0.17 | 0.52 | 0.94 | -0.02 | 1.83 | -0.01 | -1.29 |
| SP198 | 2005 | 0.18 | 0.09 | 0.13 | 0.51 | 0.90 | 0.26 | 0.20 | 0.49 | 0.95 | -0.05 | 1.80 | -0.03 | -3.02 |
| SP198 | 2006 | 0.19 | 0.09 | 0.13 | 0.50 | 0.91 | 0.25 | 0.16 | 0.48 | 0.90 | 0.00 | 1.81 | 0.00 | 0.20 |
| SP198 | 2007 | 0.19 | 0.09 | 0.13 | 0.54 | 0.95 | 0.26 | 0.17 | 0.50 | 0.93 | 0.02 | 1.90 | 0.01 | 1.27 |
| SP198 | 2008 | 0.19 | 0.09 | 0.12 | 0.57 | 0.97 | 0.24 | 0.18 | 0.54 | 0.96 | 0.00 | 1.94 | 0.00 | 0.17 |
| SP198 | 2009 | 0.18 | 0.08 | 0.12 | 0.48 | 0.87 | 0.24 | 0.17 | 0.48 | 0.89 | -0.02 | 1.74 | -0.01 | -0.99 |
| SP198 | 2010 | 0.17 | 0.08 | 0.11 | 0.50 | 0.87 | 0.24 | 0.20 | 0.50 | 0.94 | -0.07 | 1.75 | -0.04 | -3.88 |
| SP198 | 2012 | 0.18 | 0.09 | 0.13 | 0.52 | 0.93 | 0.25 | 0.15 | 0.60 | 1.00 | -0.08 | 1.85 | -0.04 | -4.09 |
| 49 | 1991 | 5.24 | 0.28 | 1.32 | 4.05 | 10.88 | 1.10 | 0.02 | 10.24 | 11.36 | -0.48 | 21.77 | -0.02 | -2.18 |
| 49 | 1994 | 4.54 | 0.21 | 0.85 | 3.87 | 9.47 | 0.87 | 0.00 | 8.98 | 9.85 | -0.39 | 18.93 | -0.02 | -2.05 |
| 2591 | 1991 | 0.65 | 0.26 | 0.91 | 1.35 | 3.16 | 0.53 | 0.08 | 2.58 | 3.19 | -0.03 | 6.32 | -0.01 | -0.51 |
| 2591 | 1992 | 0.36 | 0.08 | 0.77 | 1.39 | 2.60 | 0.37 | 0.05 | 2.68 | 3.10 | -0.51 | 5.19 | -0.10 | -9.75 |
| 2591 | 1993 | 0.57 | 0.11 | 0.88 | 1.53 | 3.09 | 0.42 | 0.08 | 2.52 | 3.02 | 0.07 | 6.18 | 0.01 | 1.10 |
| 66 | 1991 | 0.14 | 0.14 | 0.09 | 1.39 | 1.76 | 0.41 | 0.04 | 1.40 | 1.86 | -0.10 | 3.52 | -0.03 | -2.72 |
| 66 | 1992 | 0.14 | 0.10 | 0.09 | 1.85 | 2.19 | 0.42 | 0.04 | 1.28 | 1.73 | 0.45 | 4.37 | 0.10 | 10.33 |
| 66 | 1993 | 0.12 | 0.11 | 0.06 | 2.80 | 3.09 | 1.15 | 0.07 | 1.97 | 3.18 | -0.09 | 6.18 | -0.01 | -1.38 |
| 66 | 1994 | 0.26 | 0.16 | 0.09 | 3.13 | 3.65 | 0.99 | 0.08 | 2.24 | 3.31 | 0.34 | 7.29 | 0.05 | 4.65 |
| 66 | 1996 | 0.44 | 0.68 | 0.14 | 12.61 | 13.86 | 4.63 | 0.02 | 8.38 | 13.03 | 0.84 | 27.73 | 0.03 | 3.02 |
| 94 | 1991 | 0.29 | 0.08 | 0.42 | 1.39 | 2.19 | 0.39 | 0.06 | 1.66 | 2.12 | 0.07 | 4.38 | 0.02 | 1.68 |
| 94 | 1993 | 0.21 | 0.08 | 0.40 | 1.30 | 2.00 | 0.46 | 0.05 | 1.59 | 2.10 | -0.09 | 4.00 | -0.02 | -2.35 |
| 94 | 1994 | 0.31 | 0.06 | 0.19 | 1.57 | 2.13 | 0.62 | 0.07 | 1.45 | 2.14 | -0.01 | 4.25 | 0.00 | -0.30 |
| 51 | 1992 | 0.41 | 0.10 | 0.35 | 1.16 | 2.02 | 0.47 | 0.25 | 1.34 | 2.07 | -0.04 | 4.05 | -0.01 | -1.07 |
| 51 | 1993 | 0.45 | 0.09 | 0.39 | 0.96 | 1.89 | 0.45 | 0.06 | 1.33 | 1.84 | 0.05 | 3.79 | 0.01 | 1.33 |
| 51 | 1994 | 0.49 | 0.09 | 0.38 | 0.96 | 1.92 | 0.51 | 0.08 | 1.35 | 1.94 | -0.02 | 3.84 | 0.00 | -0.44 |
| 51 | 1996 | 0.41 | 0.09 | 0.38 | 0.94 | 1.81 | 0.48 | 0.09 | 1.34 | 1.91 | -0.10 | 3.62 | -0.03 | -2.67 |

Table A3-7: Maximum Values - Health Related (DWSNZ - Maximum Acceptable Value) (g/m³)

| Map Area | Bore No | Sample size | As | B | Cd | Hg | Pb | Sb | Ba | Cr | Cu | F | Mn | U | Mo | NO2 | NO3 | ENT cfu/100mL | FC cfu/100mL | |
|-----------------------|---------|-------------|---------|-------|----------|---------|---------|----------|--------|---------|---------|--------|--------|----------|---------|--------|--------|---------------|--------------|--|
| DWSNZ | | | 0.01 | 1.40 | 0.004 | 0.007 | 0.01 | 0.02 | 0.7 | 0.05 | 2 | 1.5 | 0.4 | 0.02 | 0.07 | 3 | 11.3 | 1 in 100ml | 1 in 100ml | |
| Map 3 WBOP | | | | | | | | | | | | | | | | | | | | |
| | 66 | 6 | 0.0328 | 1.56 | 0.00002 | 0.00007 | 0.00072 | | | 0.0001 | 0.0006 | 0.67 | 0.03 | | | | 0.045 | | | |
| | 68 | 13 | 0.003 | 0.02 | 0.00016 | 0.00009 | 0.0002 | 0.0001 | 0.0366 | 0.006 | 0.0003 | 0.35 | 0.0005 | 0.00008 | 0.0004 | 0.001 | 0.179 | | | |
| | 94 | 6 | 0.0042 | 0.01 | 0.00005 | 0.00001 | 0.00014 | | | | 0.00025 | 0.0004 | 0.35 | 0.16 | | | | 0.693 | | |
| | 851 | 10 | 0.0005 | 0.01 | 0.00025 | 0.0021 | 0.0001 | | | 0.0486 | 0.0017 | 0.016 | 0.46 | 0.0079 | 0.00009 | 0.0023 | 0.001 | 0.053 | | |
| | 1393 | 15 | 0.013 | 0.08 | 0.00071 | 0.00009 | 0.0006 | 0.0004 | | | 0.00025 | 0.0004 | 0.35 | 0.16 | | | | | | |
| | 1686 | 16 | 0.02 | 0.62 | 0.0028 | 0.0003 | 0.0023 | 0.0001 | 0.13 | 0.00025 | 0.059 | 0.74 | 0.083 | 0.00012 | 0.0104 | 0.001 | 0.004 | | | |
| | 2303 | 18 | 0.074 | 0.16 | 0.0005 | 0.00092 | 0.0003 | 0.0001 | 0.049 | 0.0005 | 0.0017 | 0.72 | 0.093 | 0.000076 | 0.0009 | 0.004 | 0.011 | | | |
| | 2330 | 16 | 0.003 | 0.03 | 0.00025 | 0.00004 | 0.0031 | 0.0001 | 0.098 | 0.0031 | 0.0021 | 0.11 | 0.027 | 0.00003 | 0.0001 | 0.001 | 0.086 | | | |
| | 2343 | 13 | 0.0006 | 0.04 | 0.0012 | 0.00004 | 0.00038 | 0.0001 | 0.0721 | 0.00025 | 0.0111 | 0.35 | 0.004 | 0.00001 | 0.0001 | 0.009 | 0.11 | | | |
| | 2829 | 17 | 0.016 | 0.16 | 0.00006 | 0.0011 | 0.0011 | 0.0002 | 0.0572 | 0.00052 | 0.001 | 0.35 | 0.023 | 0.00012 | 0.0024 | 0.001 | 0.457 | | | |
| Map 4 Tauranga | | | | | | | | | | | | | | | | | | | | |
| | 2093 | 7 | 0.024 | 0.09 | 0.0013 | 0.00074 | 0.0018 | 0.0035 | 0.027 | 0.00025 | 0.0035 | 0.79 | 0.0375 | 0.00001 | 0.0013 | 0.003 | 3.14 | 5 | 3 | |
| | 2342 | 18 | 0.001 | 0.03 | 0.000081 | 0.00013 | 0.0008 | 0.0001 | 0.0457 | 0.0006 | 0.012 | 0.35 | 0.0072 | 0.00008 | 0.0001 | 0.001 | 0.266 | | | |
| | 2344 | 18 | 0.0005 | 0.02 | 0.00005 | 0.00004 | 0.00065 | 0.0001 | 0.057 | 0.00025 | 0.0007 | 0.35 | 0.04 | 0.00001 | 0.0001 | 0.001 | 0.25 | | | |
| | 2362 | 17 | 0.005 | 0.09 | 0.000025 | 0.00004 | 0.0002 | 0.0001 | 0.0623 | 0.00025 | 0.0006 | 0.35 | 0.66 | 0.00001 | 0.0007 | 0.001 | 0.208 | | | |
| | 2393 | 8 | 0.004 | 0.15 | 0.00002 | 0.00001 | 0.0005 | | | 0.0001 | 0.0005 | 0.35 | 0.005 | | | 0.0015 | 0.001 | 0.2 | | |
| | 2707 | 17 | 0.002 | 0.06 | 0.0021 | 0.00017 | 0.0008 | 0.0001 | 0.082 | 0.00025 | 0.0006 | 0.35 | 0.0955 | 0.00015 | 0.00022 | 0.015 | 9.9 | 11 | 0.5 | |
| | 2728 | 15 | 0.018 | 0.13 | 0.0016 | 0.00004 | 0.0006 | 0.0001 | 0.36 | 0.00025 | 0.00025 | 0.23 | 0.538 | 0.00001 | 0.0018 | 0.001 | 0.02 | | | |
| | 2847 | 16 | 0.0071 | 0.08 | 0.0002 | 0.00025 | 0.00068 | 0.0001 | 0.0528 | 0.0009 | 0.0008 | 0.35 | 0.29 | 0.00008 | 0.0001 | 0.021 | 1.34 | 10 | 39 | |
| | 3044 | 24 | 0.074 | 30.00 | 0.000125 | 0.00053 | 0.005 | 0.0005 | 0.18 | 0.00125 | 0.0025 | 3 | 0.54 | 0.00005 | 0.0099 | 0.001 | 0.155 | | | |
| | 3272 | 6 | 0.005 | 0.92 | 0.00008 | 0.00004 | 0.0006 | 0.0001 | 0.114 | 0.0025 | 0.0005 | 0.09 | 10.8 | 0.0001 | 0.0027 | 0.009 | 1.02 | | | |
| | 4364 | 34 | 0.033 | 13.80 | 0.000025 | | 0.00025 | 0.000175 | 0.143 | 0.0015 | 0.0015 | 0.54 | 0.57 | 0.00001 | 0.004 | 0.001 | 0.07 | | | |
| | 4582 | 6 | 0.001 | 0.02 | 0.00008 | | 0.0003 | 0.0001 | 0.102 | 0.00025 | 0.00025 | 0.13 | 0.0276 | 0.000056 | 0.0002 | 0.001 | 0.123 | | | |
| Map 5 Te Puke | | | | | | | | | | | | | | | | | | | | |
| | 410 | 13 | 0.004 | 0.08 | 0.00039 | 0.00004 | 0.0023 | 0.0001 | 0.287 | 0.00025 | 0.0029 | 0.33 | 6.17 | 0.00051 | 0.0012 | 0.002 | 0.09 | | | |
| | 643 | 11 | 0.039 | 0.16 | 0.00007 | 0.00021 | 0.0006 | | | 0.00025 | 0.14 | 0.41 | 15.4 | | 0.0012 | 0.001 | 0.96 | 27 | 91 | |
| | 951 | 16 | 0.012 | 0.80 | 0.000025 | 0.00014 | 0.00005 | 0.0001 | 0.0884 | 0.00025 | 0.00025 | 0.35 | 2.01 | 0.00001 | 0.0012 | 0.011 | 0.034 | | | |
| | 1018 | 11 | 0.0006 | 0.58 | 0.000025 | 0.00039 | 0.0004 | 0 | 0 | 0.0005 | 0.00096 | 0.41 | 0.295 | | 0.0007 | 0.001 | 6.848 | | | |
| | 1520 | 17 | 0.003 | 0.27 | 0.000025 | 0.00013 | 0.0004 | 0.0001 | 0.241 | 0.00025 | 0.0012 | 0.35 | 0.0048 | 0.00088 | 0.00043 | 0.001 | 2.38 | | | |
| | 1586 | 14 | 0.0012 | 0.05 | 0.00007 | 0.00009 | 0.0002 | 0.0001 | 0.079 | 0.0011 | 0.001 | 0.35 | 0.247 | 0.00001 | 0.0006 | 0.001 | 0.458 | 0.5 | 33 | |
| | 1690 | 17 | 0.002 | 0.24 | 0.00005 | 0.00014 | 0.0012 | 0.0001 | 0.0496 | 0.0005 | 0.0127 | 0.37 | 0.727 | 0.00001 | 0.0009 | 0.001 | 0.448 | | | |
| | 2591 | 13 | | | | | | | | | | | 0.35 | | | | 0.0005 | | | |
| | 2822 | 17 | 0.0063 | 0.34 | 0.000025 | 0.0035 | 0.0001 | 0.0001 | 0.205 | 0.00025 | 0.0031 | 0.44 | 1.1 | 0.00004 | 0.0003 | 0.008 | 0.245 | | | |
| | 3034 | 18 | 0.00054 | 0.21 | 0.00014 | 0.0003 | 0.00022 | 0.0001 | 0.14 | 0.00025 | 0.0021 | 3.5 | 0.325 | 0.00001 | 0.0005 | 0.001 | 7.81 | 100 | 3 | |
| | 3045 | 43 | 0.0025 | 0.02 | 0.000025 | 0.00016 | 0.0007 | 0.000175 | 0.144 | 0.0015 | 0.011 | 0.35 | 0.12 | 0.000049 | 0.0001 | 0.001 | 3.65 | 46 | 174 | |
| | 3566 | 12 | 0.005 | 0.06 | 0.000083 | 0.00005 | 0.0001 | 0.0004 | 0.0772 | 0.00025 | 7.5 | 0.22 | 0.035 | 0.00003 | 0.0004 | 0.001 | 11.5 | 11 | 0.5 | |
| | 4968 | 10 | 0.005 | 0.08 | 0.00013 | 0.00004 | 0.0008 | 0.0004 | 0.0965 | 0.00025 | 0.0035 | | | | | | | | | |

Table A3-8: Maximum Values - Aesthetic Value (DWSNZ - Guideline Values) (g/m³)

| Map Area | Bore No | Sample size | Temp | pH @25C | pH | AI | Hardness | Cu | Fe S/D | Fe T/TR | Mn | Na | Zn | Cl | SO4 |
|-------------------------|---------|-------------|------------|-----------|-----------|------|----------|--------|--------|---------|--------|--------|------|----------|--------|
| DWSNZ | | | Geothermal | 7.0 - 8.5 | 7.0 - 8.5 | 0.1 | 200 | 1.0000 | 0.20 | 0.20 | 0.040 | 200.0 | 1.50 | 250.00 | 250.0 |
| Map 3 WBOP | | | | | | | | | | | | | | | |
| | 66 | 6 | 39.7 | 7.7 | 7.3 | 0.01 | 28.90 | 0.0006 | 0.01 | 0.40 | 0.030 | 290.0 | 0.46 | 164.00 | 3.9 |
| | 68 | 13 | 22.3 | 7.9 | 7.5 | 0.01 | 26.00 | 0.0003 | 0.03 | 1.00 | 0.001 | 24.2 | 0.23 | 12.80 | 2.9 |
| | 94 | 6 | 27 | 8.2 | 7.2 | 0.02 | 35.90 | 0.0008 | | 0.50 | 0.008 | 36.0 | 0.02 | 23.00 | 3.2 |
| | 851 | 10 | 20.5 | 6.9 | 6.8 | 0.00 | 43.30 | 0.0004 | 7.32 | 6.80 | 0.160 | 18.1 | 0.07 | 11.50 | 3.0 |
| | 1393 | 15 | 29.3 | 8.1 | 7.8 | 0.14 | 21.90 | 0.0016 | 0.04 | 2.00 | 0.008 | 42.3 | 0.09 | 11.20 | 3.5 |
| | 1686 | 16 | 28.3 | 7.9 | 7.48 | 0.65 | 133.60 | 0.0590 | 0.74 | 3.40 | 0.083 | 89.3 | 0.11 | 76.20 | 7.4 |
| | 2303 | 18 | 37.5 | 8 | 7.4 | 0.18 | 20.60 | 0.0017 | 0.13 | 0.80 | 0.093 | 148.9 | 0.06 | 20.00 | 4.0 |
| | 2330 | 16 | 23 | 8.8 | 6.28 | 0.01 | 60.80 | 0.0021 | 0.68 | | 0.027 | 25.8 | 1.20 | 26.80 | 7.6 |
| | 2343 | 13 | 23.2 | 7.7 | 6.5 | 0.01 | 20.80 | 0.0111 | 0.07 | 1.20 | 0.004 | 15.6 | 0.45 | 12.80 | 3.3 |
| | 2829 | 17 | 32.2 | 8.8 | 8.48 | 0.10 | 9.00 | 0.0010 | 0.59 | 2.20 | 0.023 | 59.7 | 0.03 | 21.80 | 6.4 |
| Map 4 Tauranga | | | | | | | | | | | | | | | |
| | 2093 | 7 | 22.5 | 8 | 7.09 | 0.01 | 135.00 | 0.0035 | 0.10 | 2.20 | 0.038 | 319.0 | 1.34 | 497.00 | 70.0 |
| | 2342 | 18 | 22.5 | 7.5 | 7.2 | 0.05 | 49.60 | 0.0120 | 0.03 | 0.20 | 0.007 | 21.2 | 0.12 | 22.80 | 6.4 |
| | 2344 | 18 | 20.4 | 6.5 | 6.54 | 0.34 | 63.00 | 0.0007 | 0.13 | 0.90 | 0.040 | 11.0 | 2.60 | 78.00 | 4.6 |
| | 2362 | 17 | 32.4 | 7.5 | 7 | 0.00 | 34.80 | 0.0006 | 0.47 | 1.56 | 0.660 | 31.5 | 0.54 | 38.30 | 4.9 |
| | 2393 | 8 | 29.5 | 7.5 | 7.1 | 0.00 | 35.60 | 0.0005 | 0.03 | 0.80 | 0.005 | 35.0 | 0.16 | 22.90 | 3.0 |
| | 2707 | 17 | 16.6 | 7.9 | 7.7 | 0.01 | 514.90 | 0.0006 | 0.05 | 0.80 | 0.096 | 274.0 | 0.06 | 794.00 | 92.1 |
| | 2728 | 15 | 22 | 7.3 | 6.91 | 0.01 | 126.50 | 0.0003 | 26.00 | | 0.538 | 88.0 | 2.40 | 111.00 | 23.1 |
| | 2847 | 16 | 22.8 | 6.2 | 6.4 | 0.53 | 129.80 | 0.0008 | 12.70 | 17.30 | 0.290 | 47.5 | 1.14 | 88.00 | 128.0 |
| | 3044 | 24 | 50 | 7.9 | 7.67 | 0.02 | 79.30 | 0.0025 | 0.55 | 0.70 | 0.540 | 770.0 | 0.03 | 1080.00 | 5.4 |
| | 3272 | 6 | 36 | 8.1 | | 0.02 | 4240.40 | 0.0050 | 15.10 | 0.00 | 10.800 | 5400.0 | 0.20 | 10600.00 | 1070.0 |
| | 4364 | 34 | 42.8 | 7.9 | 7.83 | 0.01 | 64.80 | 0.0015 | 0.65 | 0.71 | 0.570 | 444.0 | 0.10 | 521.00 | 1.0 |
| | 4582 | 6 | 26.7 | 6.9 | | 0.00 | 42.40 | 0.0003 | 1.30 | | 0.028 | 23.9 | 1.20 | 27.50 | 6.8 |
| Map 5 Te Puke | | | | | | | | | | | | | | | |
| | 410 | 13 | 15.9 | 7.2 | 7.01 | 0.01 | 37.20 | 0.0029 | 3.37 | 0.08 | 6.170 | 26.0 | 4.25 | 11.20 | 7.2 |
| | 643 | 11 | 16.7 | 6.8 | 6.7 | 0.01 | 128.60 | 0.1400 | 10.80 | 7.82 | 15.400 | 65.7 | 0.04 | 37.20 | 44.9 |
| | 951 | 16 | 54.7 | 7.5 | 7.2 | 0.01 | 242.20 | 0.0003 | 21.00 | 5.50 | 2.010 | 150.0 | 0.06 | 50.40 | 6.3 |
| | 1018 | 11 | 34.1 | 6.9 | 6.5 | 0.01 | 96.60 | 0.0010 | 3.99 | 4.10 | 0.295 | 115.0 | 0.20 | 45.50 | 4.3 |
| | 1520 | 17 | 23.7 | 7.2 | 6.9 | 0.01 | 68.10 | 0.0012 | 0.04 | 0.50 | 0.005 | 79.0 | 0.14 | 34.90 | 5.7 |
| | 1586 | 14 | 17.8 | 6.6 | 6.5 | 0.01 | 23.30 | 0.0010 | 0.03 | 0.40 | 0.247 | 19.2 | 0.27 | 23.60 | 6.4 |
| | 1690 | 17 | 27.1 | 7.5 | 7.2 | 0.00 | 88.60 | 0.0127 | 19.70 | 3.30 | 0.727 | 64.1 | 0.07 | 26.30 | 0.9 |
| | 2591 | 13 | 18.3 | 7.7 | 7.65 | 0.00 | 78.00 | 0.0000 | | 7.70 | | 35.1 | | 18.70 | 4.0 |
| | 2822 | 17 | 18.5 | 7.1 | 7.1 | 0.01 | 57.70 | 0.0031 | 7.10 | 4.16 | 1.100 | 52.7 | 0.18 | 23.50 | 4.0 |
| | 3034 | 18 | 22.4 | 6.9 | 6.6 | 0.05 | 23.40 | 0.0021 | 2.75 | 0.26 | 0.325 | 86.0 | 0.22 | 31.80 | 31.0 |
| | 3045 | 43 | 16.5 | 6.6 | 6.92 | 0.18 | 63.20 | 0.0110 | 0.08 | 0.14 | 0.120 | 2322.8 | 0.07 | 74.10 | 28.1 |
| | 3566 | 12 | 17 | 7.2 | 7.24 | 0.03 | 44.40 | 7.5000 | 0.06 | | 0.035 | 19.2 | 0.09 | 19.50 | 10.9 |
| | 4968 | 10 | 17.1 | 7.3 | 6.28 | 0.01 | 42.40 | 0.0035 | 1.03 | | 0.017 | 25.9 | 1.17 | 21.60 | 11.1 |
| Map 6 Rotorua | | | | | | | | | | | | | | | |
| | 1561 | 18 | 16.1 | 6.9 | 6.88 | 0.00 | 17.90 | 0.0016 | 0.16 | | 0.015 | 10.7 | 0.15 | 6.10 | 1.6 |
| | 2118 | 9 | 15.5 | 6.7 | 6.61 | 0.00 | 35.50 | 0.0025 | 0.03 | | 0.011 | 13.6 | 0.02 | 8.80 | 12.6 |
| | 3470 | 12 | 14.2 | 6.8 | 7.9 | 0.00 | 13.20 | 0.0155 | 12.10 | | 1.640 | 15.2 | 0.03 | 5.30 | 1.6 |
| | 4000 | 8 | 16 | 6.7 | 6.3 | 0.01 | 34.30 | 0.0059 | 0.03 | 0.20 | 0.004 | 12.6 | 0.76 | 15.10 | 10.1 |
| | 4001 | 13 | 40.8 | 6.3 | 5.61 | 0.01 | 77.40 | 0.0005 | 11.10 | 35.90 | 3.430 | 259.0 | 0.03 | 606.00 | 47.9 |
| | 4003 | 5 | 15 | 7 | 7.4 | 0.00 | 24.90 | 0.0013 | 0.04 | | 0.007 | 10.5 | 0.14 | 5.20 | 12.4 |
| | 4007 | 40 | 13.6 | 7 | 7.06 | 0.01 | 19.40 | 0.0015 | 0.10 | 0.01 | 0.010 | 10.7 | 0.06 | 6.70 | 1.7 |
| Map 7 Rangitāiki | | | | | | | | | | | | | | | |
| | 1 | 42 | 20 | 7.6 | 7.93 | 0.03 | 170.50 | 0.0015 | 6.70 | 4.00 | 0.270 | 2728.9 | 0.08 | 69.10 | 64.1 |
| | 49 | 7 | 16.1 | 7.1 | 6.9 | 0.34 | 717.10 | 0.0038 | 0.08 | 10.28 | 0.335 | 250.0 | 0.04 | 41.30 | 1.0 |
| | 466 | 14 | 17.5 | 7.5 | 7.25 | 0.01 | 242.00 | 0.0003 | 6.80 | 6.44 | 0.390 | 32.8 | 0.03 | | |

Table A3-9: Maximum Values – Nutrients (g/m³)

| Map Area | Bore No | Sample size | DRP | NH ₄ -N | NNN | NO ₂ -N | NO ₃ -N | PO ₄ -P | TP |
|--|---------|-------------|-------|--------------------|-------|--------------------|--------------------|--------------------|------|
| DWSNZ 2005 (revised 2008) | | | | 1.5 | | | 11.30 | | |
| ANZECC TV for direct toxicity to an aquatic organism | | | | 0.90 | | | 7.20 | | |
| Map 3 WBOP | | | | | | | | | |
| | 66 | 6 | 0.14 | 0.28 | 0.03 | 0.00 | 0.05 | 0.11 | 0.14 |
| | 68 | 13 | 0.15 | 0.16 | 0.07 | 0.00 | 0.18 | 0.14 | 0.13 |
| | 94 | 6 | 0.13 | 0.03 | 0.56 | 0.00 | 0.69 | 0.17 | 0.29 |
| | 851 | 10 | 0.16 | 0.05 | 0.02 | 0.00 | 0.00 | 0.05 | 0.14 |
| | 1393 | 15 | 0.37 | 0.04 | 0.08 | 0.00 | 0.05 | 0.11 | 0.39 |
| | 1686 | 16 | 0.26 | 0.03 | 0.02 | 0.00 | 0.00 | 0.22 | 0.23 |
| | 2303 | 18 | 3.22 | 0.57 | 0.33 | 0.00 | 0.01 | 3.70 | 3.21 |
| | 2330 | 16 | 0.18 | 0.04 | 0.30 | 0.00 | 0.09 | | 0.03 |
| | 2343 | 13 | 0.08 | 0.02 | 0.09 | 0.01 | 0.11 | | 0.09 |
| | 2829 | 17 | 0.28 | 0.02 | 2.60 | 0.00 | 0.46 | 0.21 | 0.31 |
| Map 4 Tauranga | | | | | | | | | |
| | 51 | 6 | 0.19 | 0.02 | 0.13 | 0.00 | 0.15 | 0.89 | 0.12 |
| | 2093 | 7 | 0.40 | 2.12 | 4.86 | 0.00 | 3.14 | 0.38 | 0.41 |
| | 2342 | 18 | 0.11 | 0.03 | 0.12 | 0.00 | 0.27 | 0.13 | 0.08 |
| | 2344 | 18 | 0.05 | 0.02 | 0.22 | 0.00 | 0.25 | 0.05 | 0.29 |
| | 2362 | 17 | 0.28 | 0.17 | 0.02 | 0.00 | 0.21 | 0.25 | 0.52 |
| | 2393 | 8 | 0.12 | 0.01 | 0.22 | 0.00 | 0.20 | 0.11 | 0.12 |
| | 2707 | 17 | 0.02 | 0.03 | 9.90 | 0.02 | 9.90 | 0.05 | 0.04 |
| | 2728 | 15 | 0.03 | 1.07 | 0.02 | 0.00 | 0.02 | | 0.04 |
| | 2847 | 16 | 0.20 | 4.78 | 0.13 | 0.02 | 1.34 | 0.05 | 0.18 |
| | 3044 | 24 | 0.13 | 0.49 | 0.01 | 0.00 | 0.16 | 0.05 | 0.17 |
| | 3272 | 6 | 0.09 | 1.33 | 1.02 | 0.01 | 1.02 | | 0.11 |
| | 4364 | 34 | 0.15 | 0.17 | 0.01 | 0.00 | 0.07 | 0.11 | 0.15 |
| | 4582 | 6 | 0.17 | 0.05 | 0.12 | 0.00 | 0.12 | | 0.20 |
| Map 5 Te Puke | | | | | | | | | |
| | 410 | 13 | 0.03 | 0.12 | 0.07 | 0.00 | 0.09 | 0.06 | 0.03 |
| | 643 | 11 | 0.50 | 1.30 | 0.05 | 0.00 | 0.96 | 0.05 | 0.52 |
| | 951 | 16 | 0.30 | 0.31 | 0.02 | 0.01 | 0.03 | 0.05 | 0.35 |
| | 1018 | 11 | 0.21 | 0.15 | 0.04 | 0.00 | 6.85 | 0.05 | 0.22 |
| | 1520 | 17 | 0.17 | 0.02 | 2.67 | 0.00 | 2.38 | 0.08 | 0.16 |
| | 1586 | 14 | 0.10 | 0.15 | 3.40 | 0.00 | 0.46 | 0.05 | 0.06 |
| | 1690 | 17 | 0.20 | 0.34 | 0.02 | 0.00 | 0.45 | 0.05 | 0.23 |
| | 2591 | 13 | 0.06 | 0.06 | 0.05 | | 0.00 | | 0.12 |
| | 2822 | 17 | 0.27 | 0.05 | 0.02 | 0.01 | 0.25 | 0.05 | 0.26 |
| | 3034 | 18 | 0.22 | 0.07 | 13.30 | 0.00 | 7.81 | 0.23 | 0.22 |
| | 3045 | 43 | 0.06 | 0.03 | 2.09 | 0.00 | 3.65 | 0.05 | 0.09 |
| | 3566 | 12 | 0.26 | 0.02 | 11.50 | 0.00 | 11.50 | | 0.26 |
| | 4968 | 10 | 0.25 | 0.03 | 10.60 | 0.00 | 9.04 | | 0.25 |
| Map 6 Rotorua | | | | | | | | | |
| | 1561 | 18 | 0.10 | 0.02 | 0.64 | | 0.65 | | 0.10 |
| | 2118 | 9 | 0.16 | 0.03 | 5.28 | 0.00 | 2.30 | | 0.18 |
| | 3470 | 12 | 0.87 | 2.89 | 0.55 | 0.01 | 0.55 | | 0.95 |
| | 4000 | 8 | 0.06 | 0.02 | 3.53 | 0.00 | 4.31 | 3.30 | 0.04 |
| | 4001 | 13 | 0.25 | 0.42 | 0.04 | 0.01 | 0.94 | 1.20 | 0.27 |
| | 4003 | 5 | 0.06 | 0.03 | 3.13 | 0.00 | 3.13 | | 0.05 |
| | 4007 | 40 | 0.24 | 1.50 | 2.28 | 0.01 | 2.70 | 0.10 | 0.55 |
| Map 7 Rangitāiki | | | | | | | | | |
| | 1 | 42 | 0.39 | 1.25 | 6.44 | 0.03 | 3.60 | 0.18 | 0.63 |
| | 49 | 7 | 0.91 | 4.50 | 0.49 | | 0.70 | 0.05 | 3.48 |
| | 466 | 14 | 0.42 | 4.10 | 0.02 | 0.00 | 0.21 | 0.44 | 1.20 |
| | 490 | 16 | 0.17 | 0.11 | 0.04 | 0.00 | 0.08 | 0.38 | 0.67 |
| | 845 | 19 | 0.65 | 0.49 | 0.00 | | 0.00 | | 0.64 |
| | 925 | 12 | 0.29 | 0.90 | 0.05 | 0.02 | 0.05 | 0.05 | 0.28 |
| | 1605 | 11 | 0.14 | 0.01 | 0.15 | 0.00 | 0.13 | 0.17 | 0.14 |
| | 2076 | 15 | 0.40 | 0.05 | 3.14 | 0.00 | 3.14 | 0.38 | 0.41 |
| | 2509 | 46 | 0.13 | 0.02 | 0.21 | 0.00 | 0.21 | 0.19 | 0.21 |
| | SP198 | 12 | 0.106 | 0.031 | 0.705 | 0.008 | 0.836 | | 0.09 |
| Map 8 Galatea | | | | | | | | | |
| | 196 | 15 | 0.82 | 0.45 | 0.04 | 0.00 | 0.02 | 0.27 | 2.34 |
| | 1319 | 15 | 1.50 | 0.65 | 0.15 | 0.00 | 0.10 | 1.20 | 1.60 |
| | 2913 | 12 | 0.10 | 0.05 | 0.75 | 0.00 | 0.39 | 0.10 | 0.10 |
| Map 9 Ōpōtiki | | | | | | | | | |
| | 3036 | 17 | 0.75 | 0.28 | 2.82 | 0.00 | 0.01 | 0.05 | 0.78 |
| | 3039 | 15 | 0.04 | 0.06 | 0.90 | 0.00 | 0.79 | 0.05 | 0.03 |
| | 3301 | 38 | 0.14 | 0.08 | 3.91 | 0.01 | 4.60 | 0.11 | 0.18 |
| | 4002 | 15 | 0.09 | 0.13 | 3.42 | 0.00 | 0.05 | 0.05 | 0.11 |

Appendix 4 – Individual bore information sheets

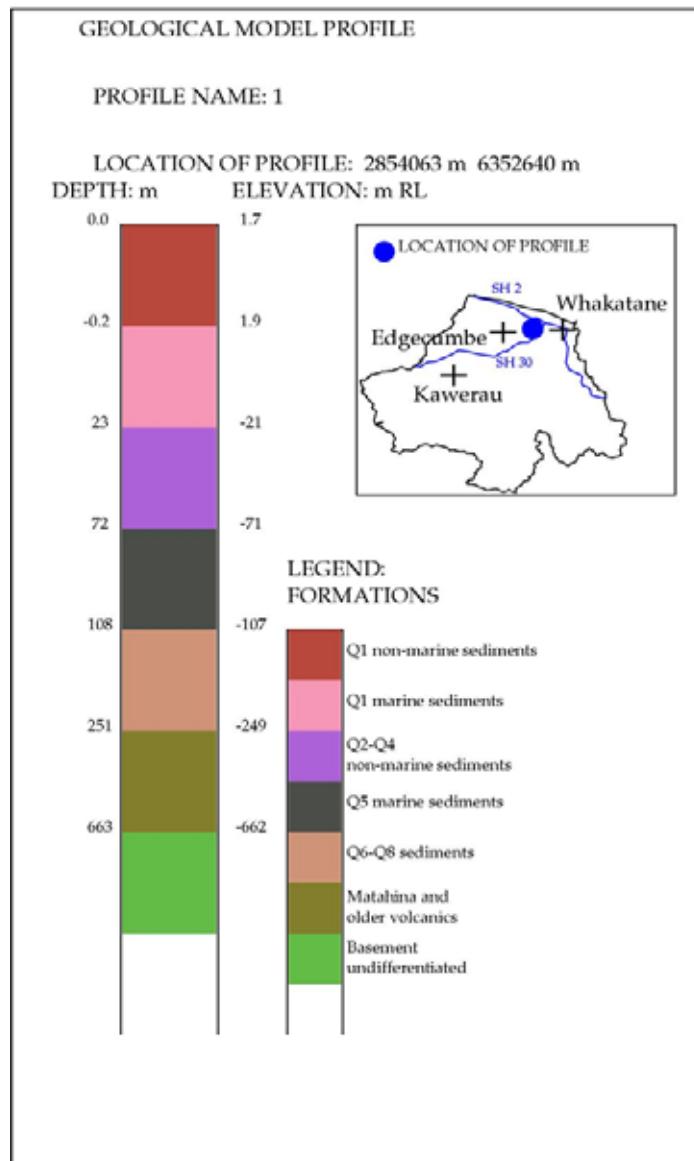
All bore information sheets are presented in numerical order and have:

- An information table
- Geological profile from Earth Beneath Our Feet (where available)
- Water level graphs (all have raw and edited data)
- Groundwater quality graphs (3)

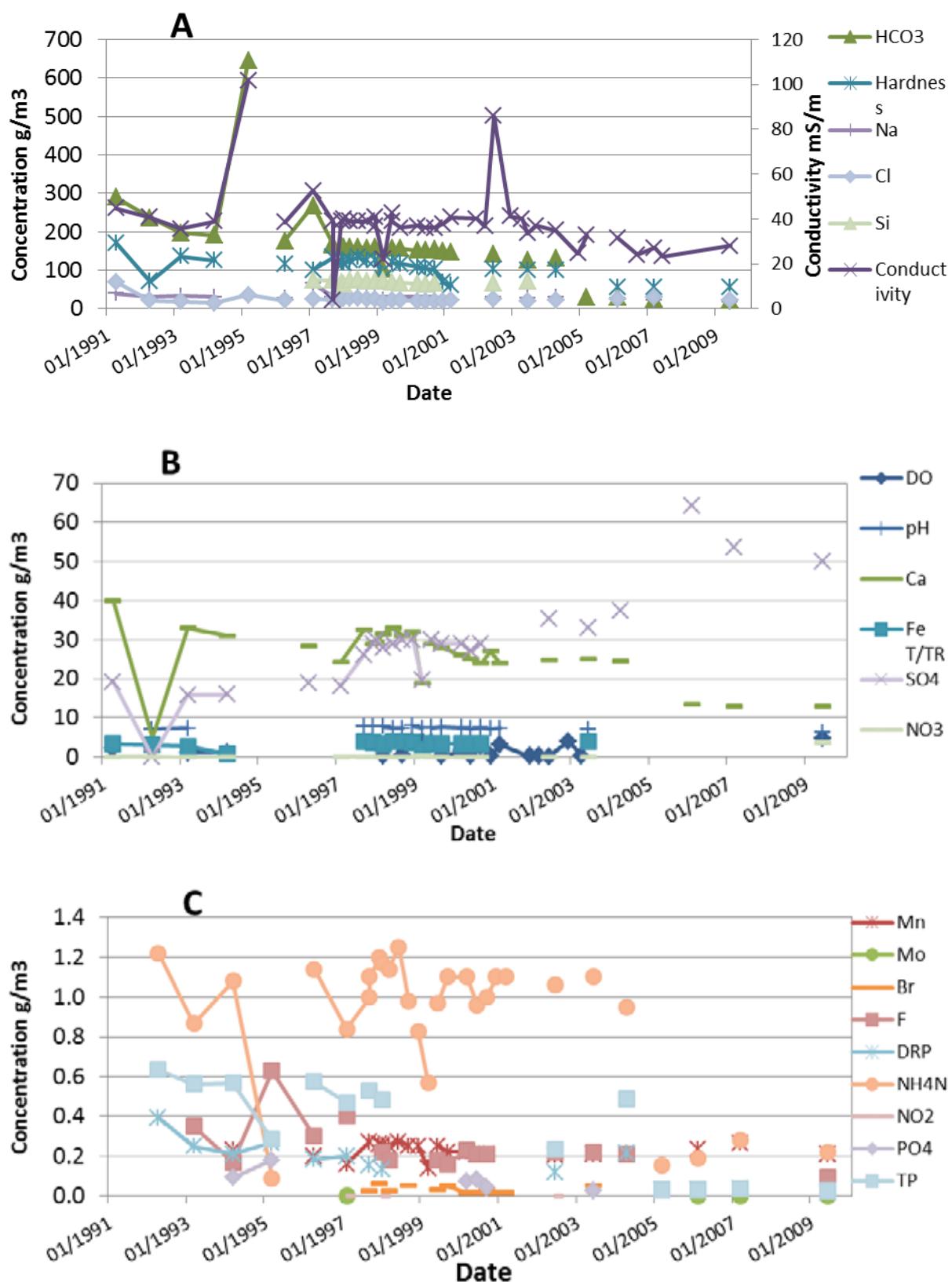
Earth Beneath Our Feet provides a generic representation of the stratigraphic groundwater systems. The elevations are not to scale and may be +/- several metres. The drillers bore log information is maintained in the Regional Council Wells Database.

| Bore 1 Information | | | |
|--------------------------|----------------------|-------------------------|---------------------------|
| Monitoring type | Water quality | Depth (m) | 12.1 |
| Name | Van Beek | Casing Depth (m) | 9.1 |
| Bore use | Dairy Shed Water | Screen/open hole | Screened |
| Easting | 285 4063 | Temperature | 10.6°C |
| Northing | 635 2640 | Catchment | Kope Orini 1 |
| Bore log | Complete | Aquifer | Tauranga Group sediment |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180046 |

Bore 1 geological profile (EBOF)

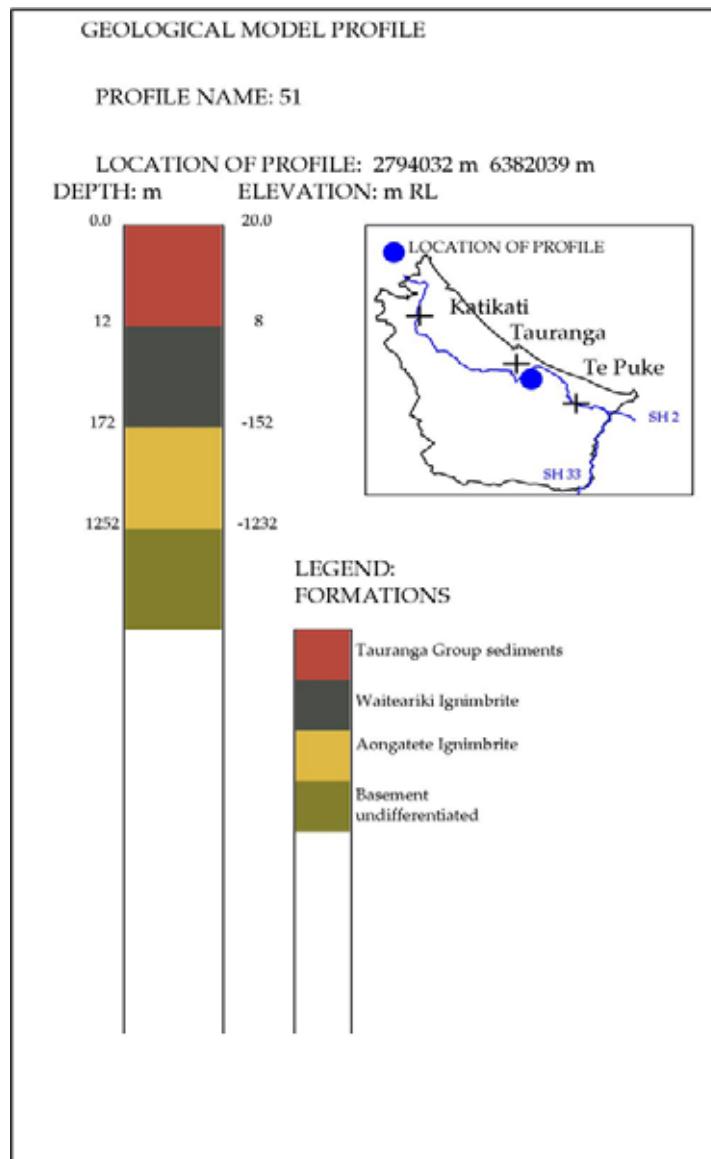


Bore 1 water quality graphs

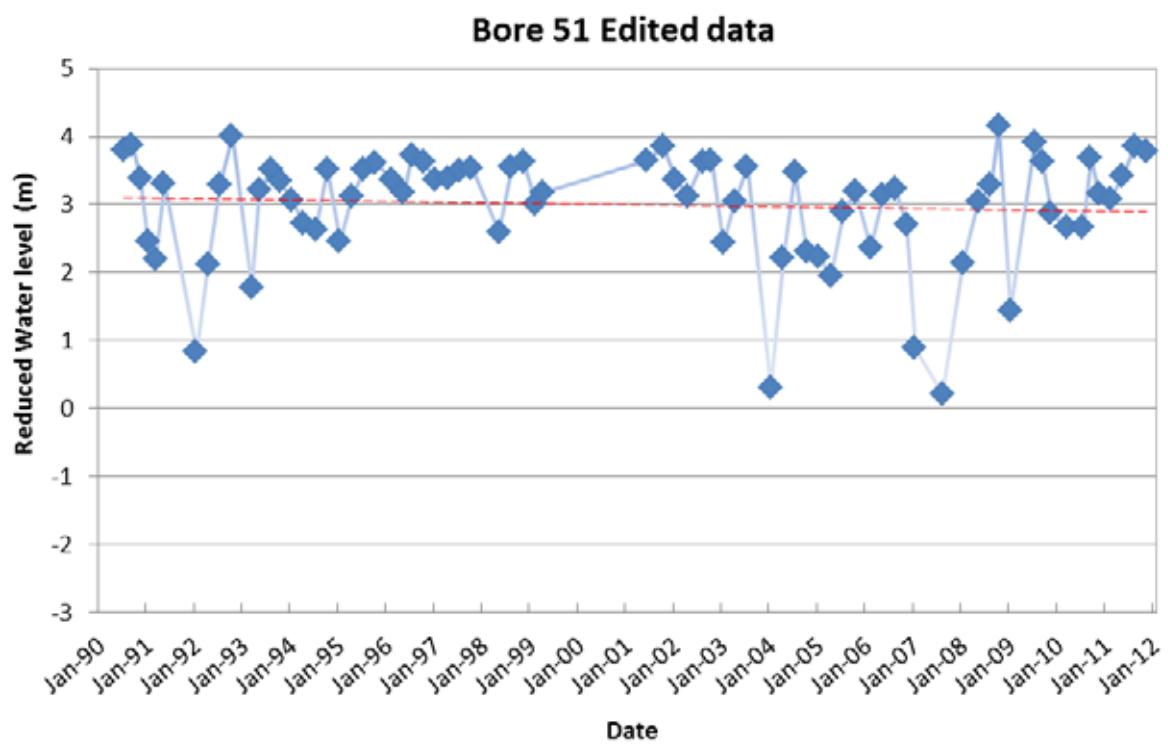
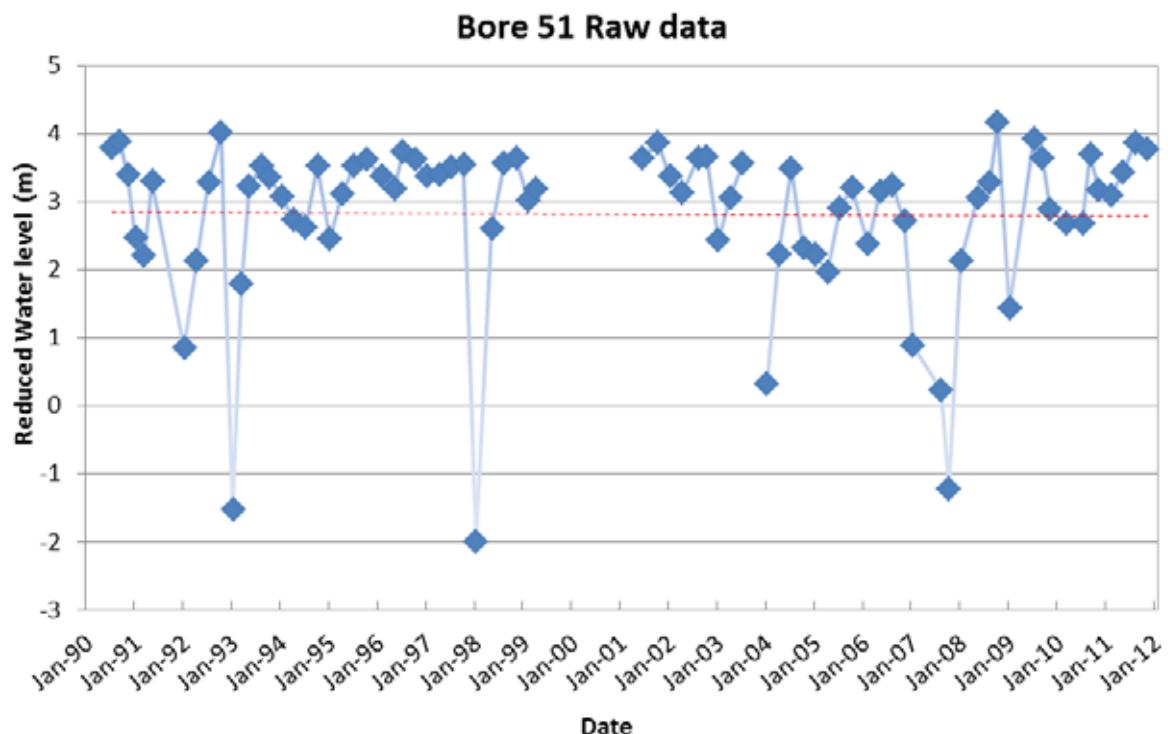


| Bore 51 Information | | | |
|--------------------------|-----------------------------|-------------------------|---------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 67 |
| Name | Ngāpeke Orchard | Casing Depth (m) | 38.7 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 279 4032 | Temperature | 19°C |
| Northing | 638 2039 | Catchment | WAI 2 zone |
| Bore log | Complete | Aquifer | Waiteariki |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1990 to 1996 | LabStar: BOP180038 |

Bore 51 geological profile (EBOF)

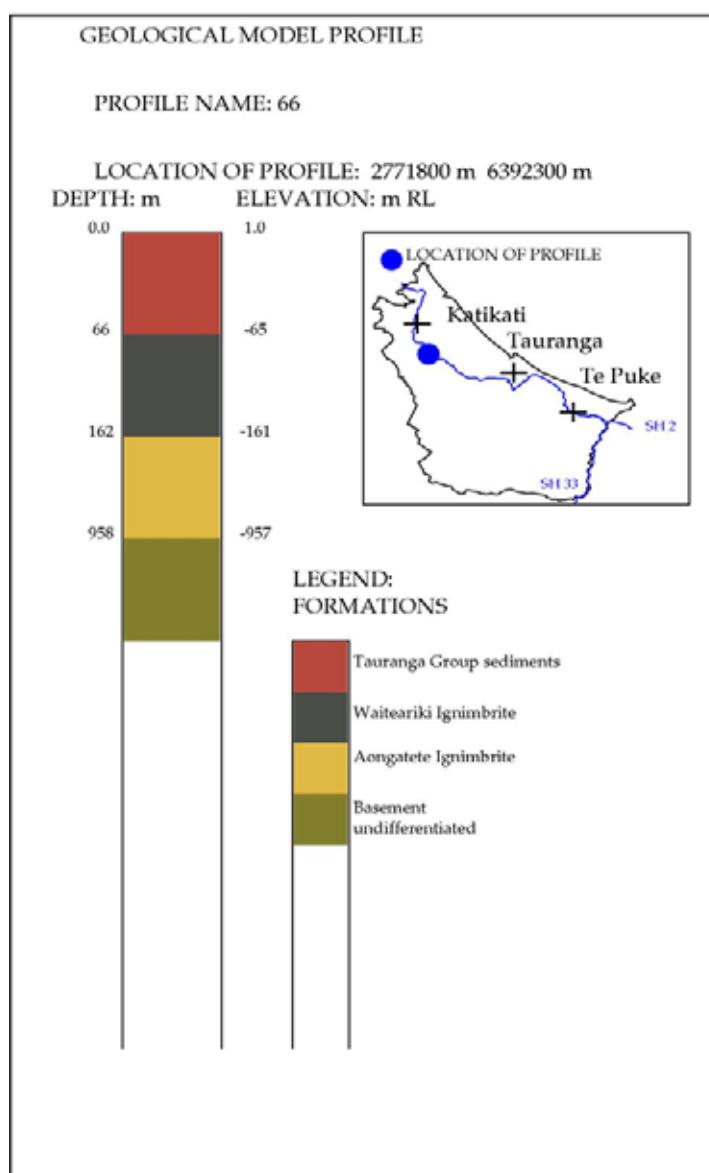


Bore 51 water level graphs

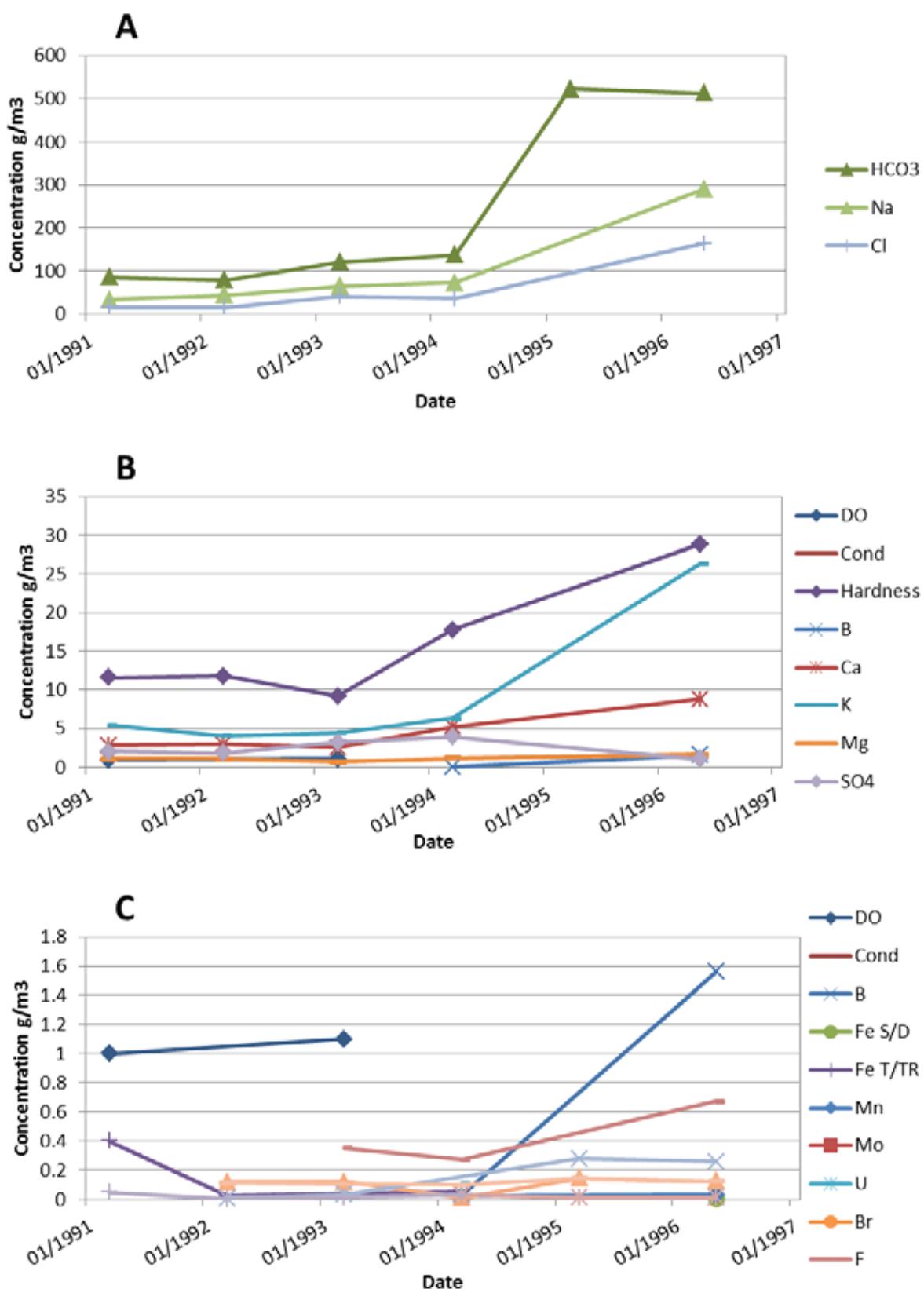


| Bore 66 Information | | | |
|--------------------------|----------------------|-------------------------|---------------------------|
| Monitoring type | Water quality | Depth (m) | 618.7 |
| Name | Ferrer Family Trust | Casing Depth (m) | 199.9 |
| Bore use | Irrigation | Screen/open hole | Unknown |
| Easting | 277 1800 | Temperature | 34°C |
| Northing | 639 2300 | Catchment | WAI1 (zone) |
| Bore log | Partial | Aquifer | Aongatete (WAI) |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 1996 | LabStar: BOP180021 |

Bore 66 geological profile (EBOF)

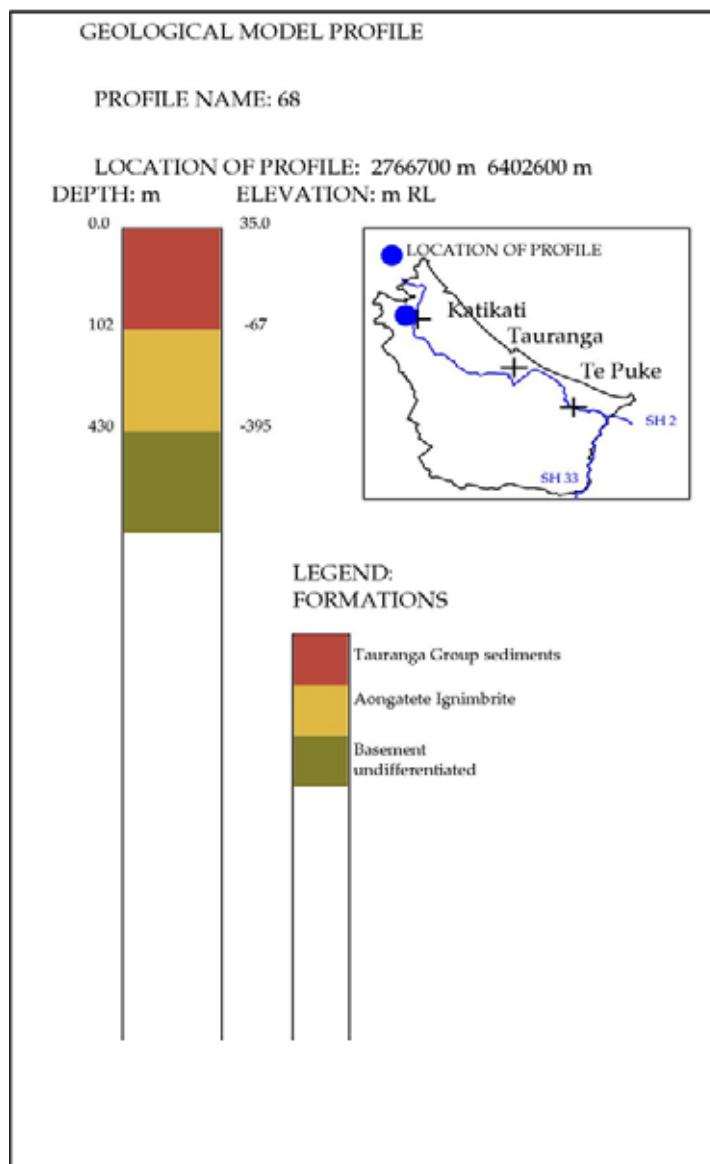


Bore 66 water quality graphs

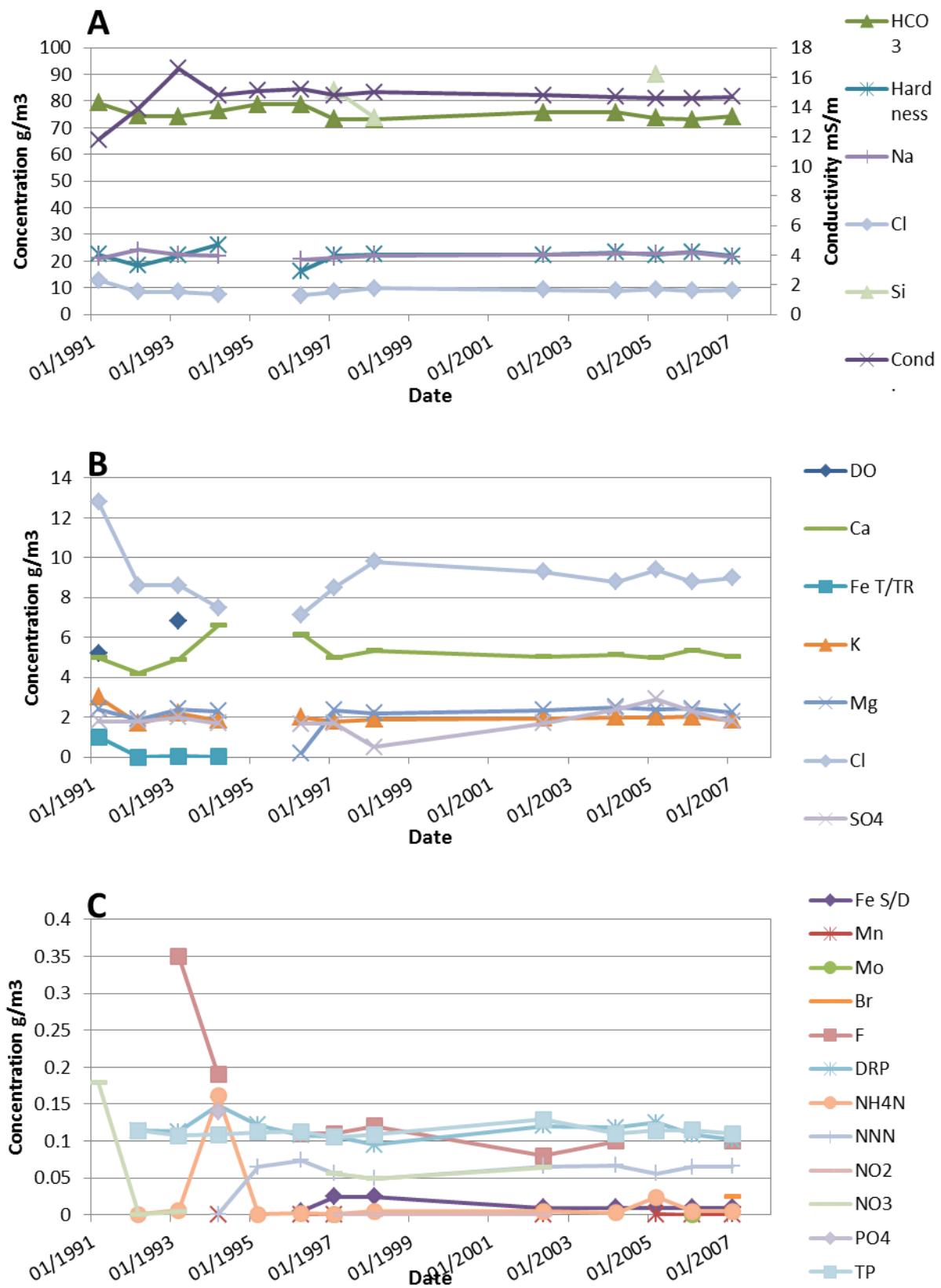


| Bore 68 Information | | | |
|---------------------|---------------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 275.8 |
| Name | Hacking | Casing Depth (m) | 57 |
| Bore use | Irrigation/domestic | Screen/open hole | Unknown |
| Easting | 276 8559 | Temperature | 22°C |
| Northing | 640 4732 | Catchment | WAI1 (zone) |
| Bore log | Partial | Aquifer | Aongatete (WAI) |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2008 | LabStar: BOP180018 |

Bore 68 geological profile (EBOF)

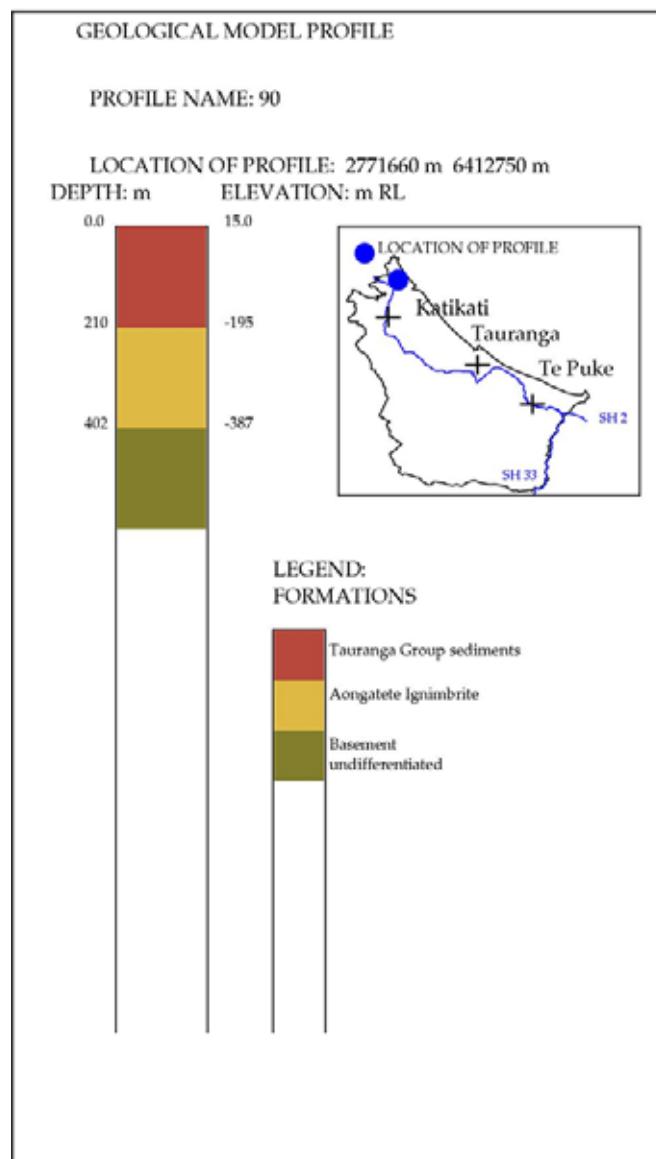


Bore 68 water quality graphs

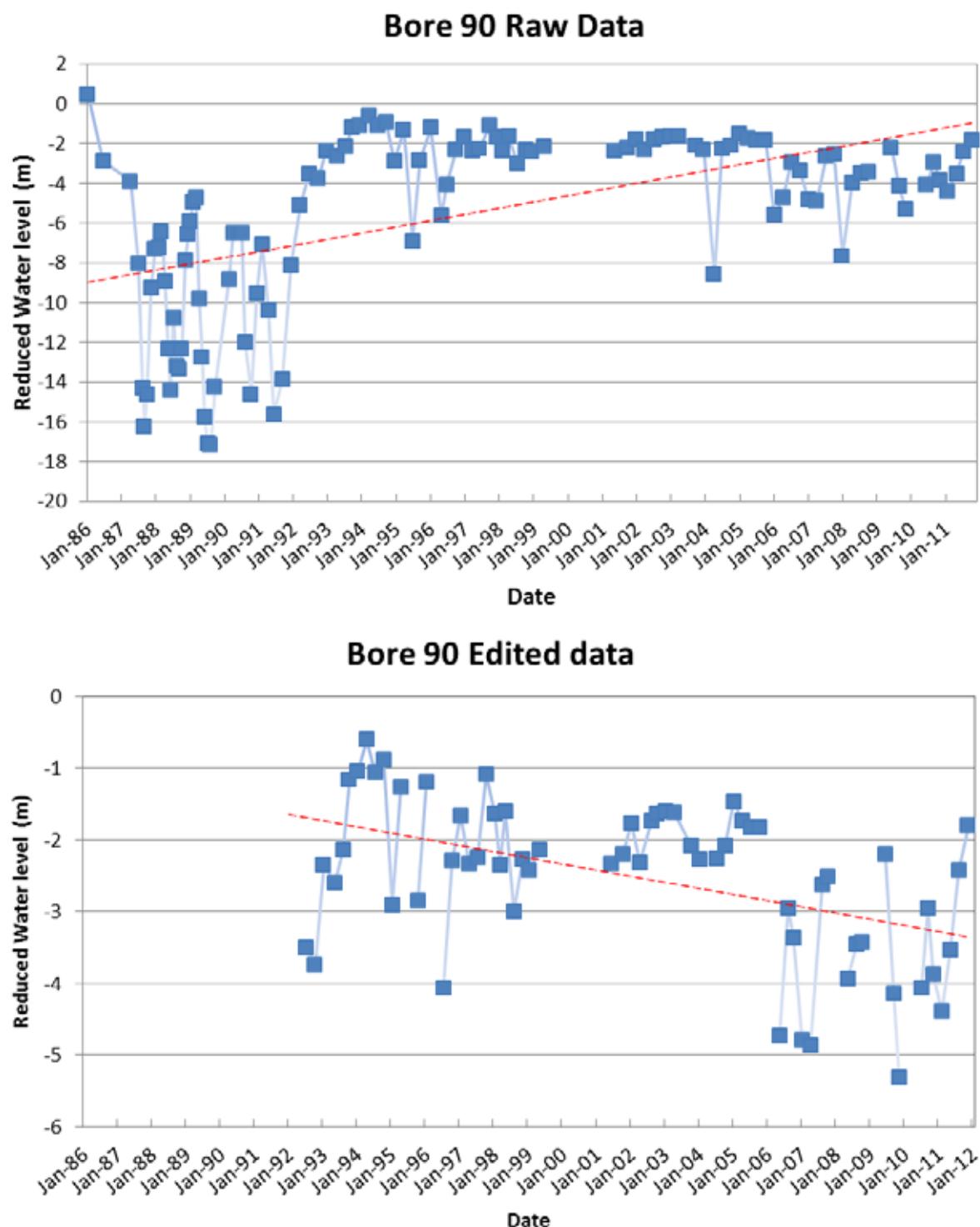


| Bore 90 Information | | | |
|---------------------|---------------|------------------|-----------------|
| Monitoring type | Water level | Depth (m) | 329.2 |
| Name | Stevenson | Casing Depth (m) | 250 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 277 1660 | Temperature | Geothermal |
| Northing | 641 2750 | Catchment | Katikati |
| Bore log | Complete | Aquifer | Aongatete (WAI) |
| Monitoring period | Water level | 1986 – 2011 | |
| | Water quality | – | |

Bore 90 geological profile (EBOF)

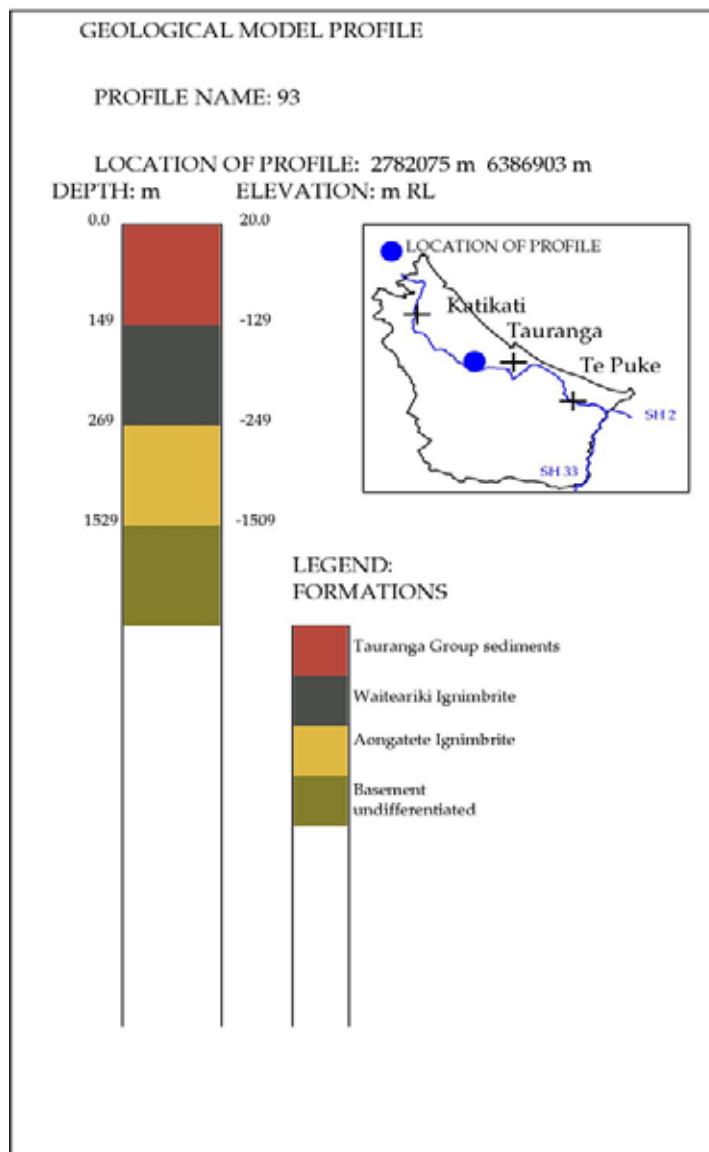


Bore 90 water level graphs



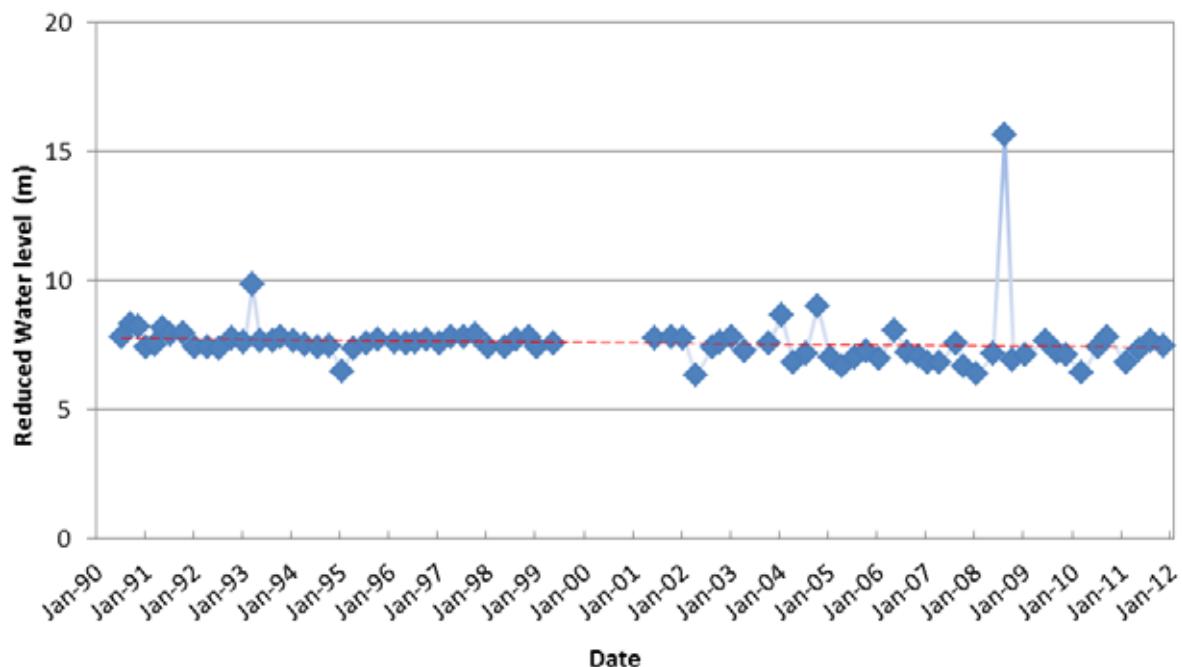
| Bore 93 Information | | | |
|--------------------------|----------------------|-------------------------|-----------------|
| Monitoring type | Water level | Depth (m) | 460.2 |
| Name | Lowes | Casing Depth (m) | 350.5 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 278 2075 | Temperature | Unknown |
| Northing | 638 6903 | Catchment | Wairoa |
| Bore log | Complete | Aquifer | Aongatete (WAI) |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | - | |

Bore 93 geological profile (EBOF)

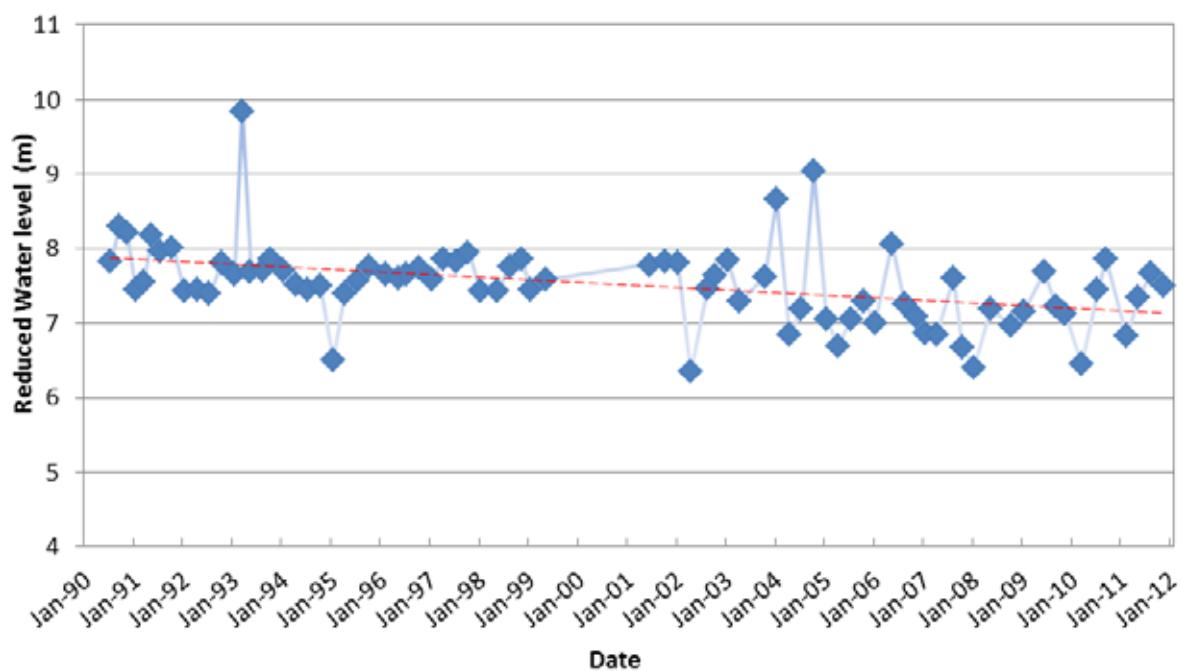


Bore 93 water level graphs

Bore 93 Raw data

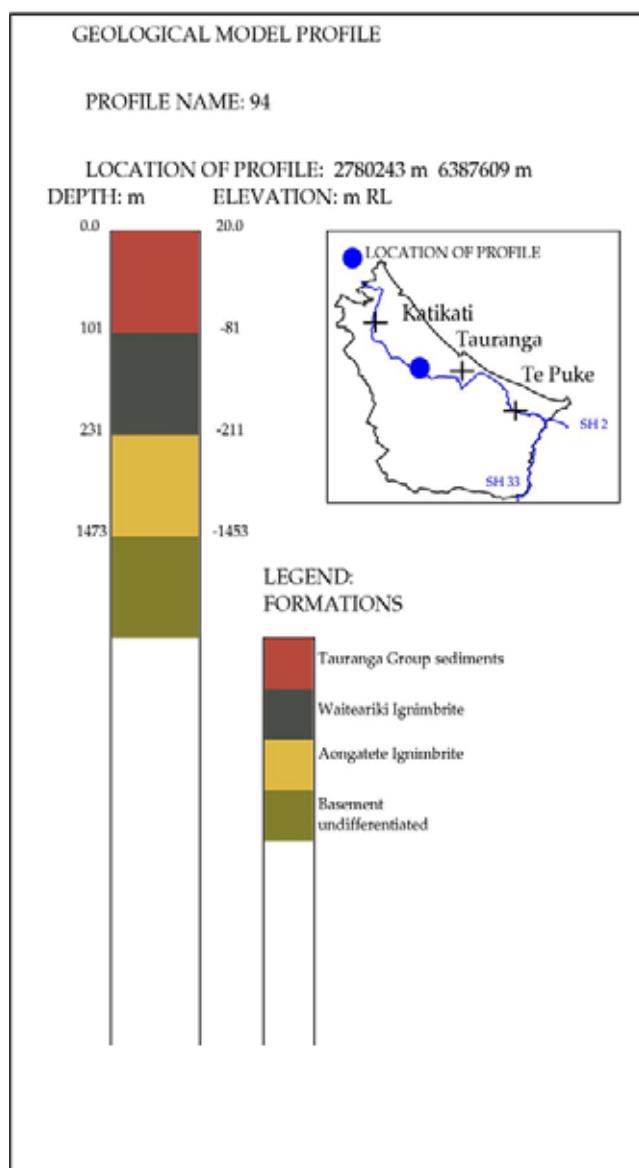


Bore 93 Edited data



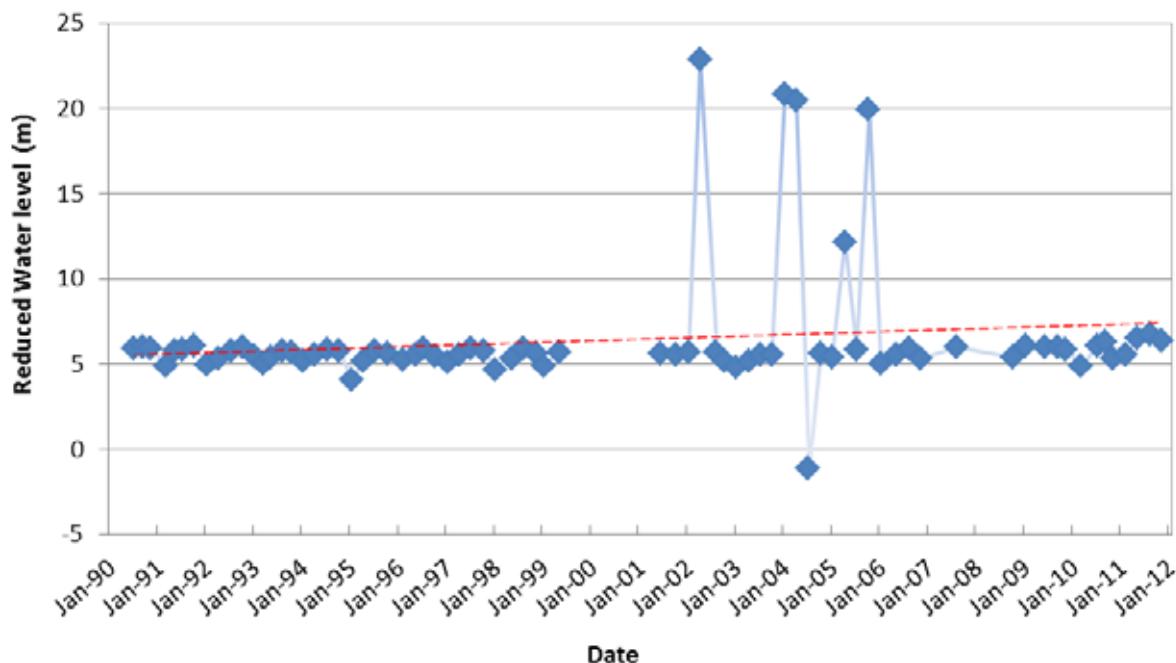
| Bore 94 Information | | | |
|--------------------------|----------------------|-------------------------|---------------------------|
| Monitoring type | Water level | Depth (m) | 164.6 |
| Name | Cain | Casing Depth (m) | 130.1 |
| Bore use | Irrigation/Domestic | Screen/open hole | |
| Easting | 278 0243 | Temperature | 24.3 |
| Northing | 638 7609 | Catchment | Oturu |
| Bore log | Complete | Aquifer | Waiteariki (WAI) |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1991 to 1995 | LabStar: BOP180023 |

Bore 94 geological profile (EBOF)

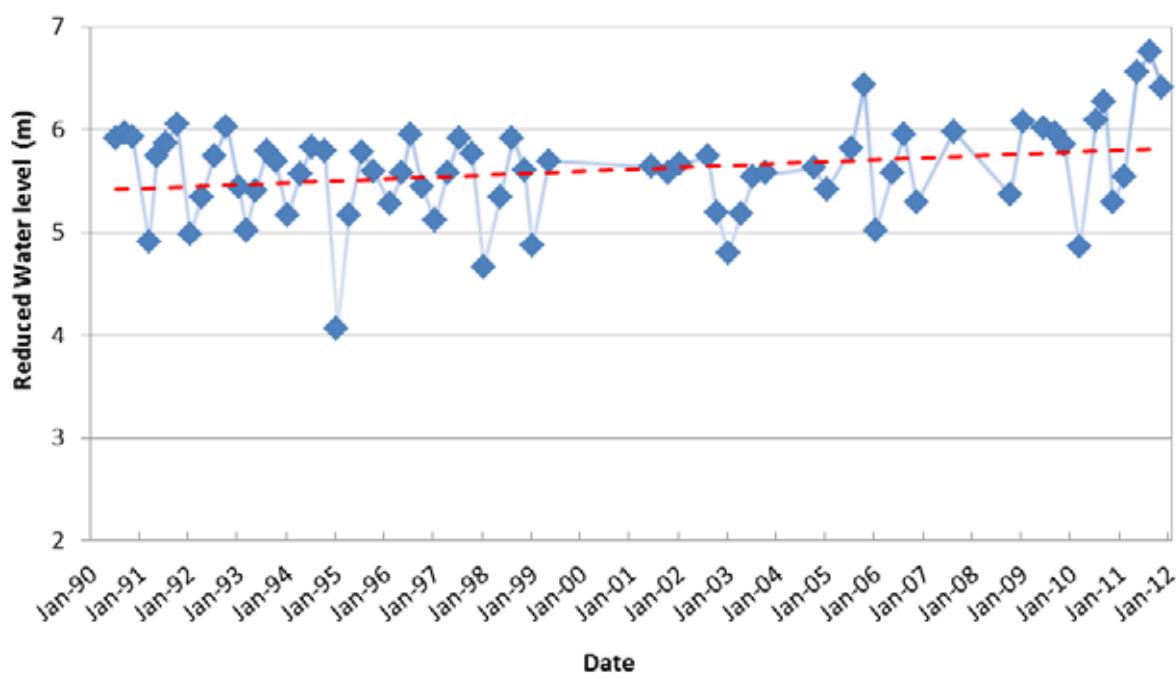


Bore 94 water level graphs

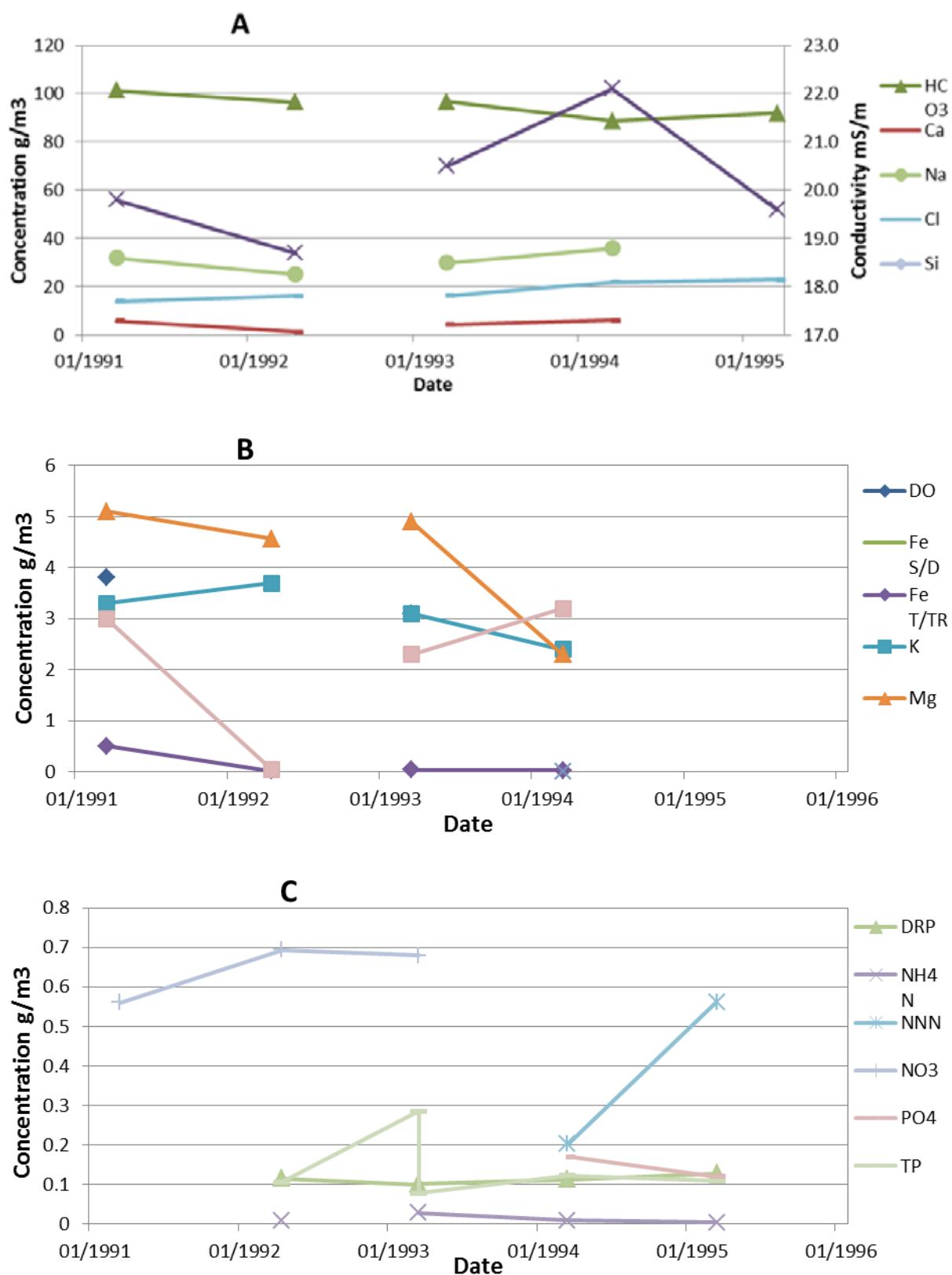
Bore 94 Raw data



Bore 94 Edited data



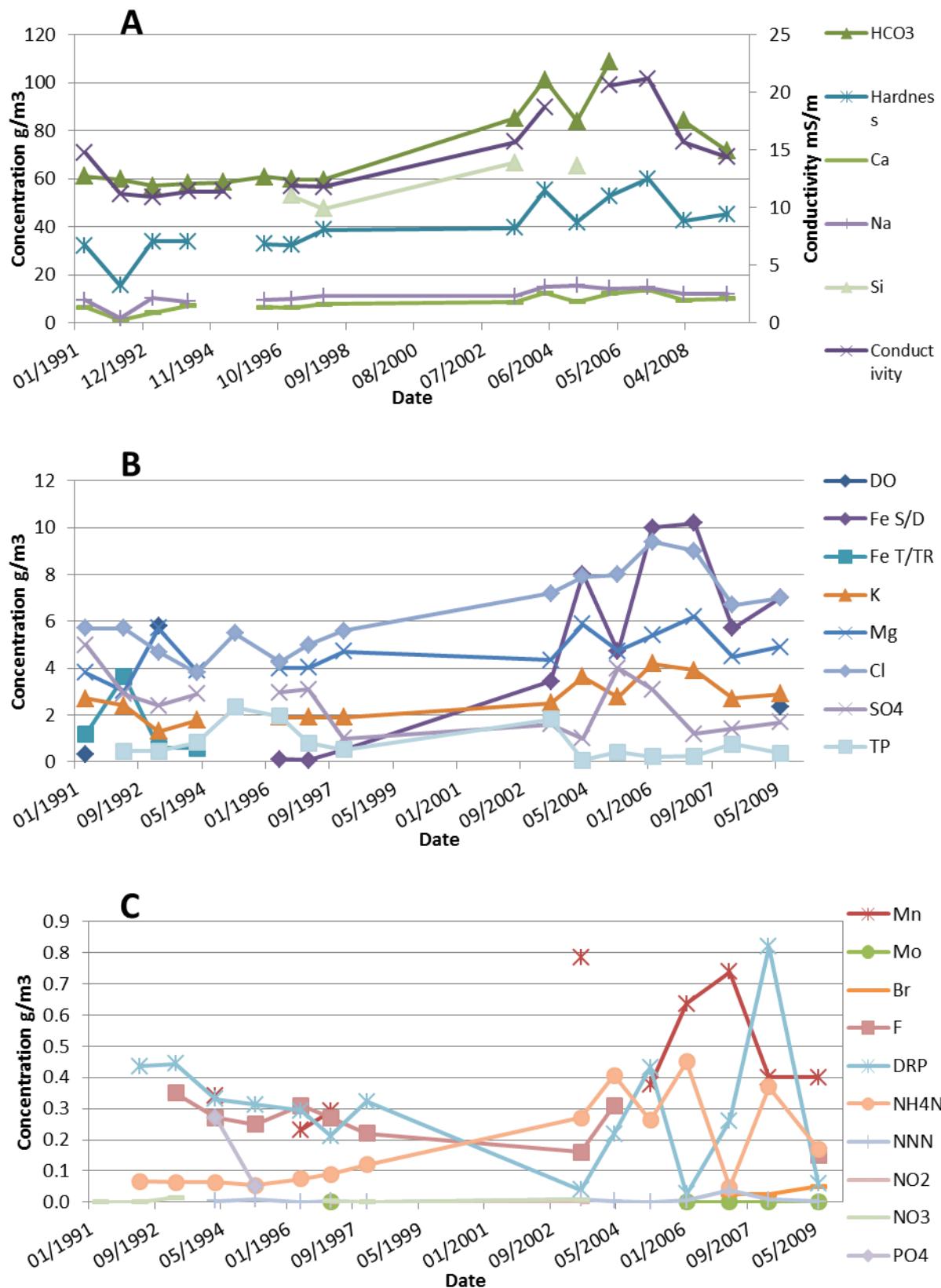
Bore 94 water quality graphs



| Bore 196 Information | | | |
|--------------------------|----------------------|-------------------------|---------------------------|
| Monitoring type | Water quality | Depth (m) | 19 |
| Name | Taylor | Casing Depth (m) | 13 |
| Bore use | Irrigation | Screen/open hole | Unknown |
| Easting | 283 8400 | Temperature | 14.6°C |
| Northing | 630 5100 | Catchment | Galatea |
| Bore log | Complete | Aquifer | Unknown |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180033 |

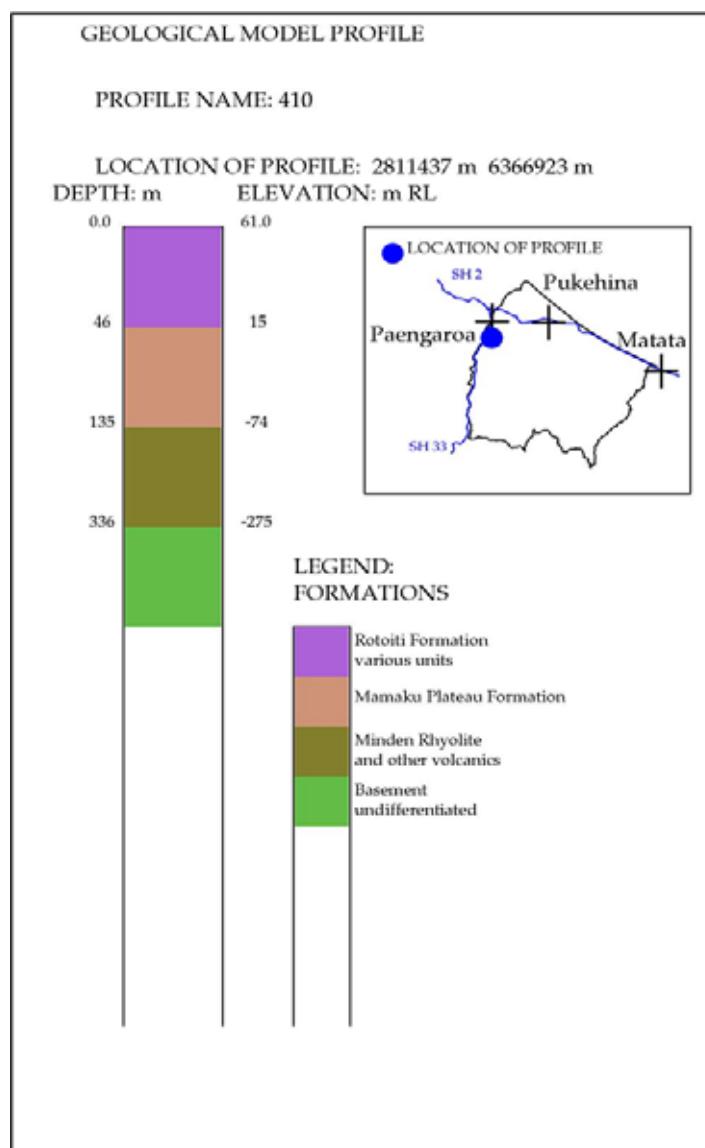
The Earth Beneath our Feet model is not currently available for this region.

Bore 196 water quality graphs

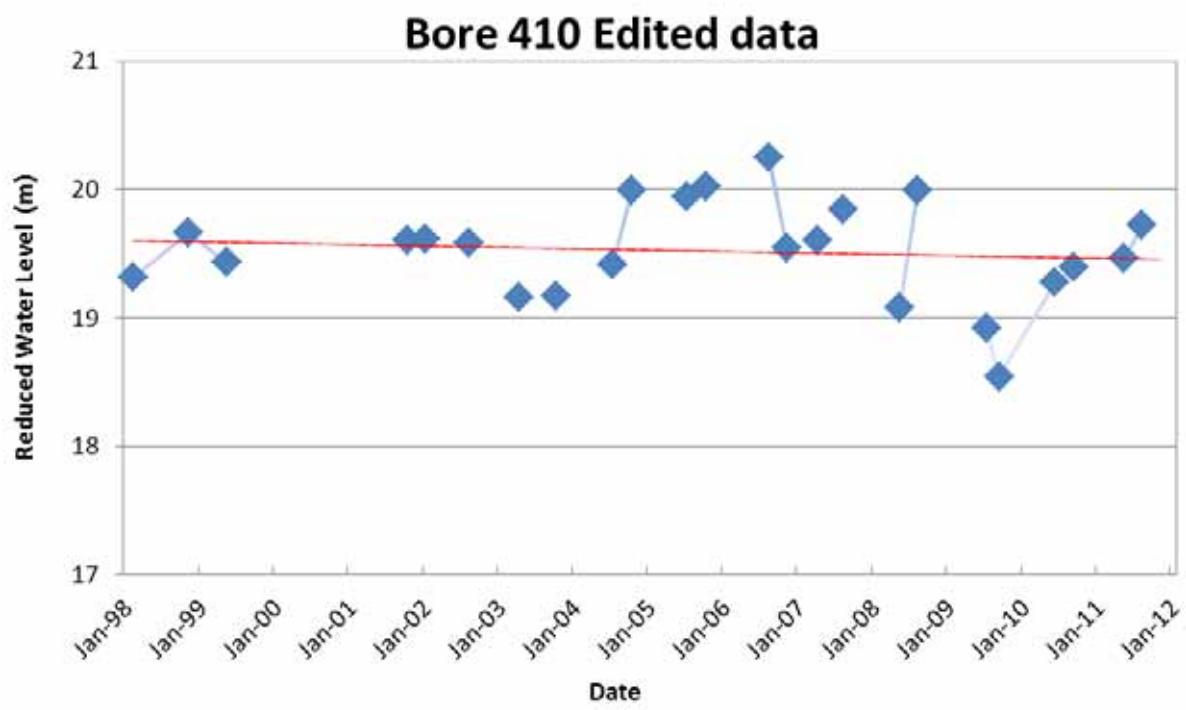
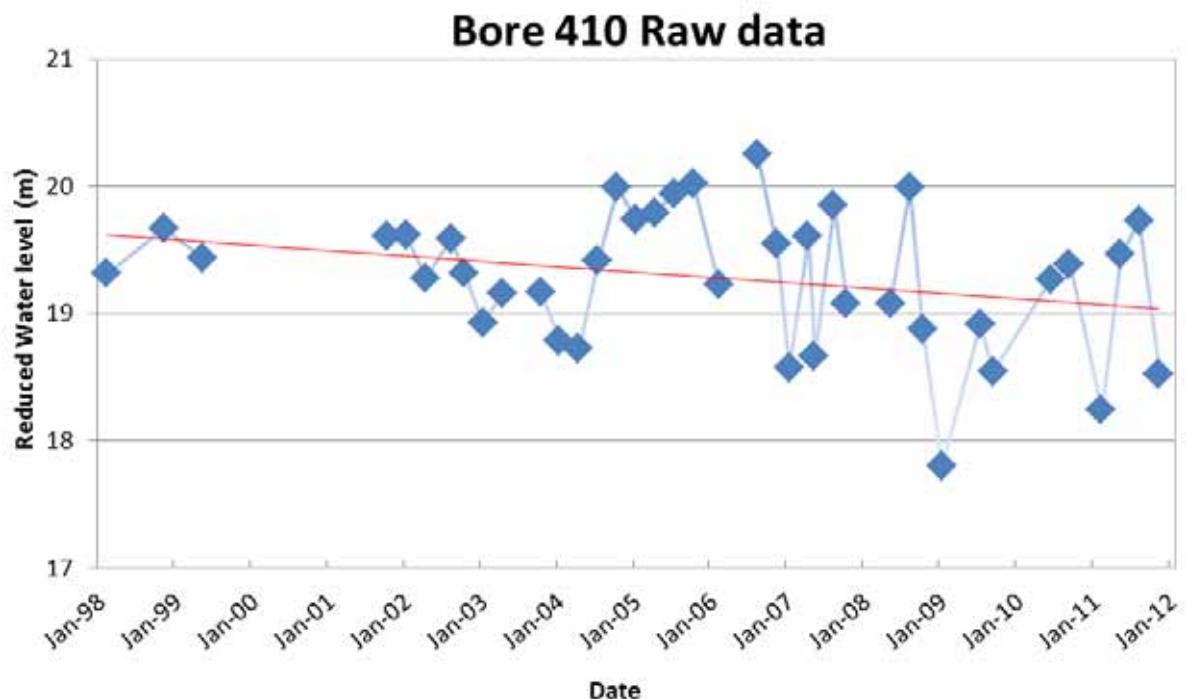


| Bore 410 Information | | | |
|--------------------------|-----------------------------|-------------------------|-------------------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 196.6 |
| Name | Bowyer | Casing Depth (m) | 118 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 281 1437 | Temperature | 15.3°C |
| Northing | 636 6923 | Catchment | Kaikokopu-Pokopoko-Wharere |
| Bore log | Complete | Aquifer | Minden Rhyolite and other volcanics |
| Monitoring period | Water level | 1998 to 2011 | |
| | Water quality | 1994 to 2011 | LabStar: BOP180051 |

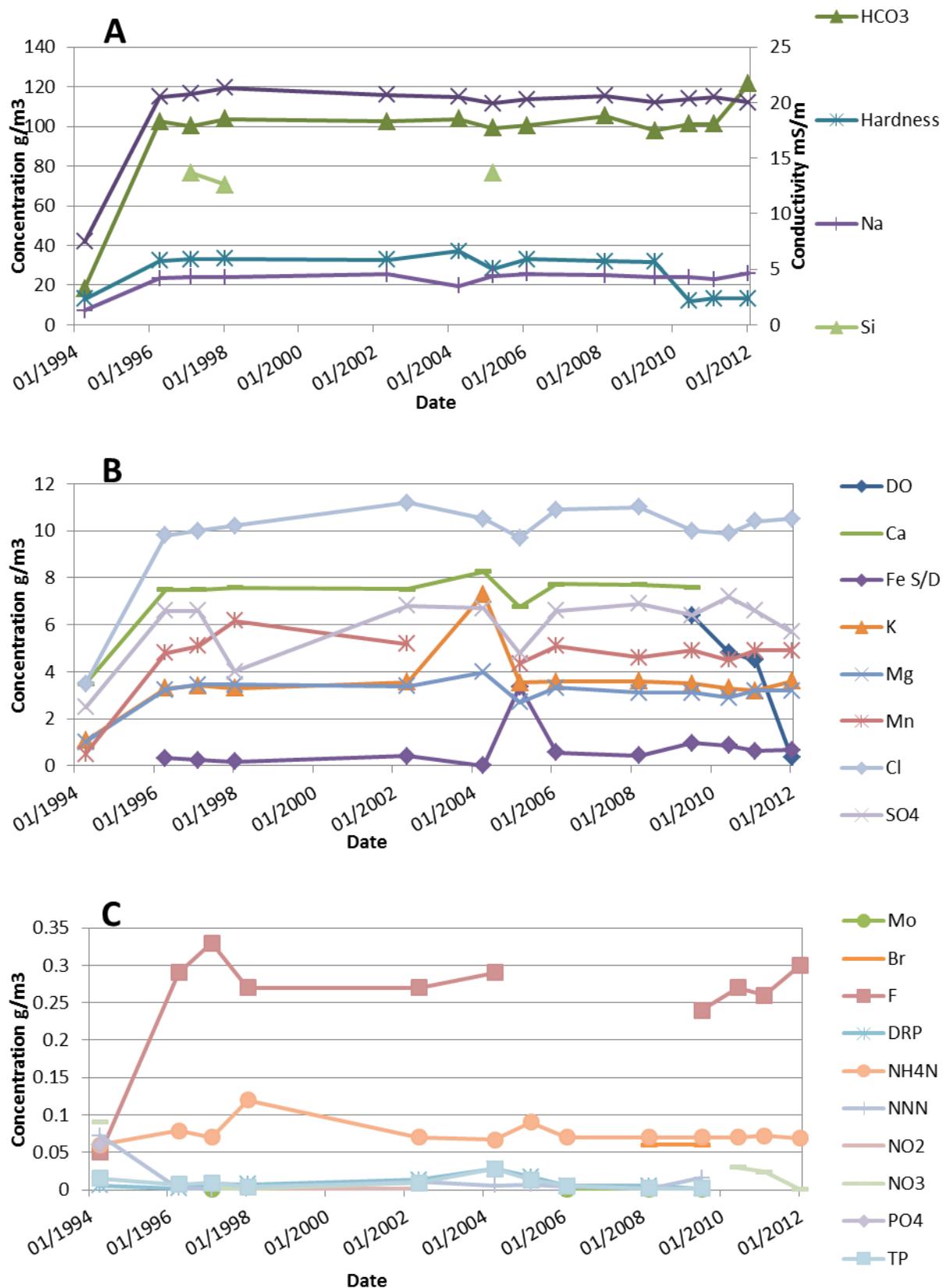
Bore 410 geological profile (EBOF)



Bore 410 water level graphs

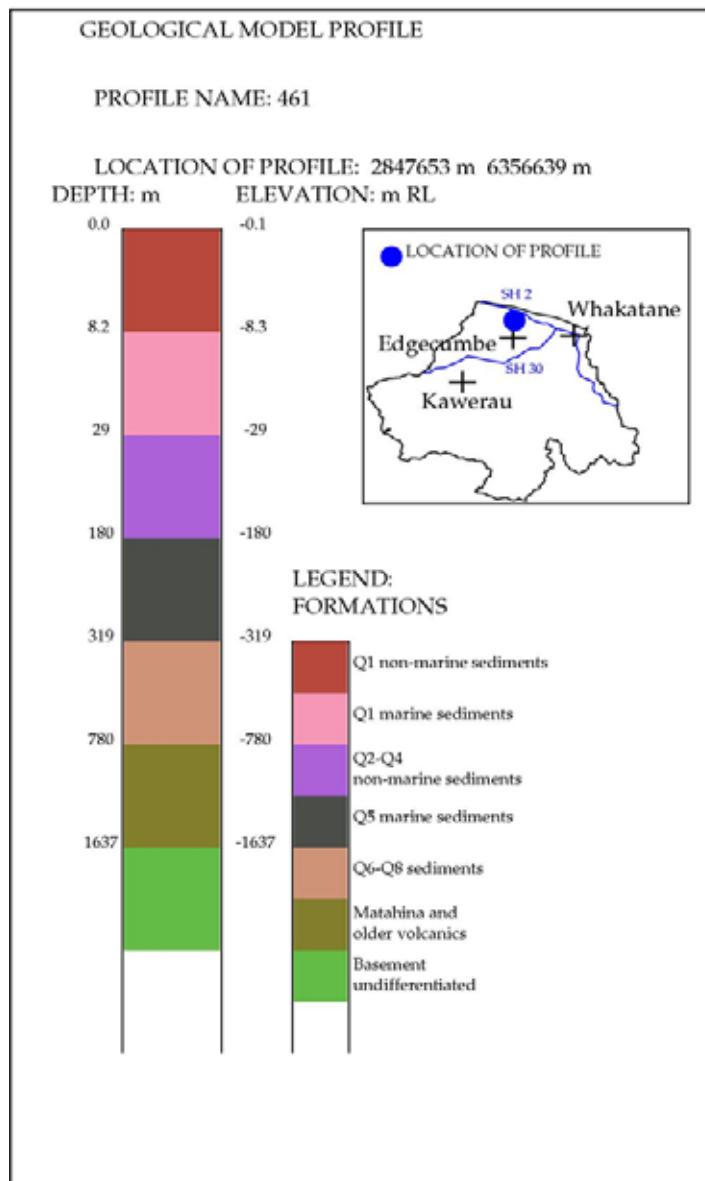


Bore 410 water quality graphs

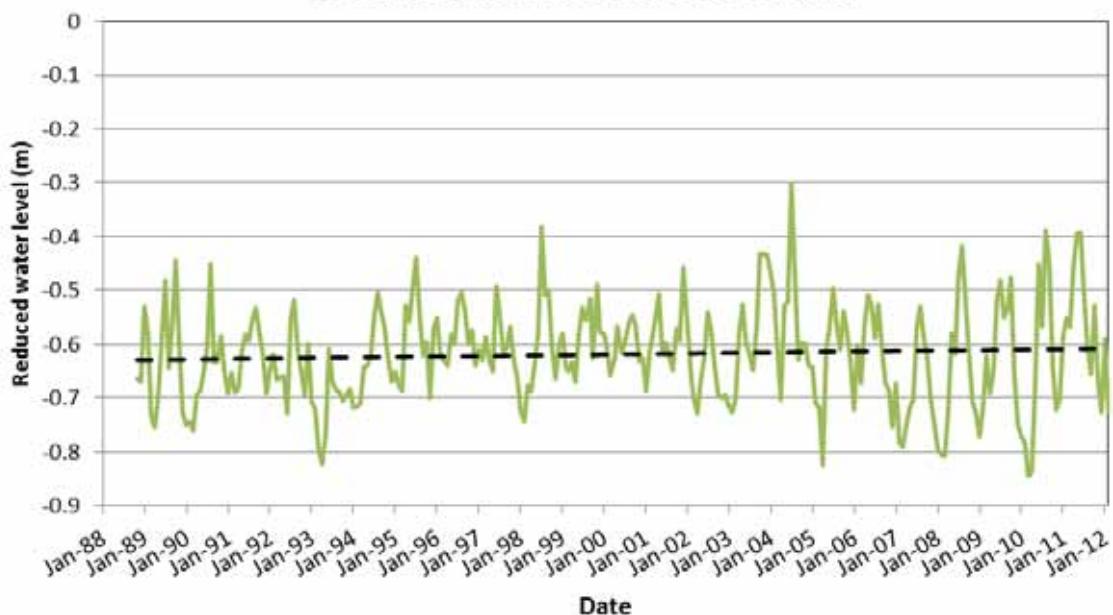


| Bore 461 Information | | | |
|----------------------|-------------------------|------------------|--------------------|
| Monitoring type | Telemetered Water level | Depth (m) | 12.5 |
| Name | Byford | Casing Depth (m) | 9.24 |
| Bore use | Irrigation | Screen/open hole | screened |
| Easting | 284 7653 | Temperature | Unknown |
| Northing | 635 6639 | Catchment | |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1988 to 2011 | |
| | Water quality | - | |

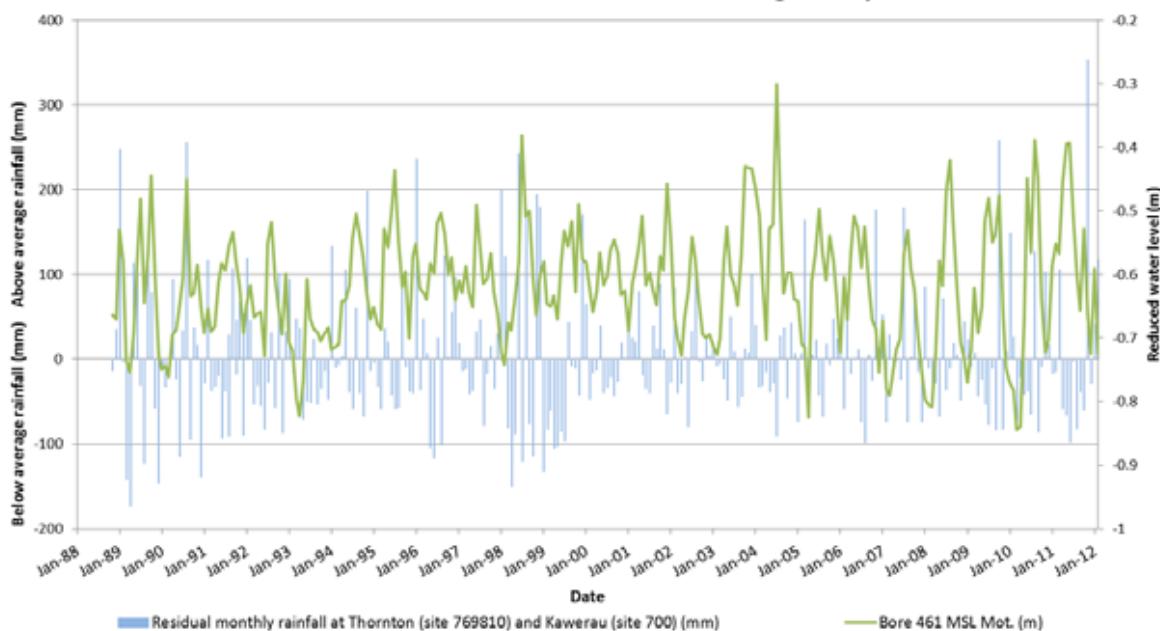
Bore 461 geological profile (EBOF)



Bore 461 telemetered water level data

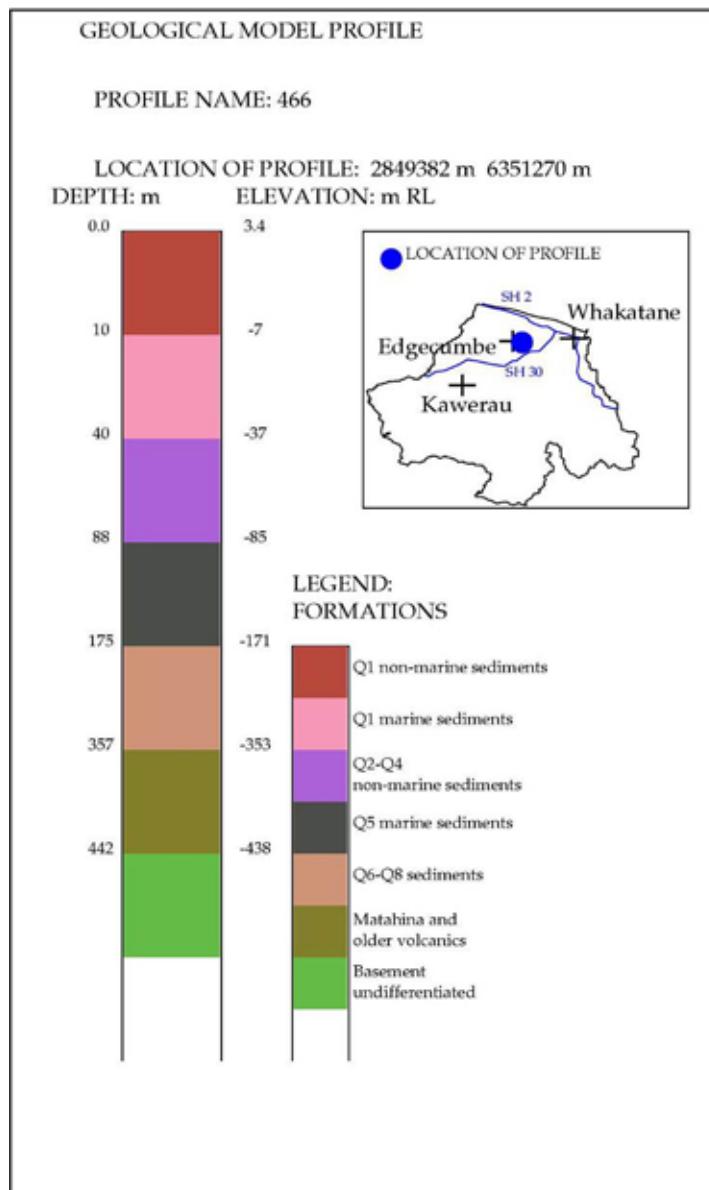


Bore 461 water level and rainfall - Tauranga Group

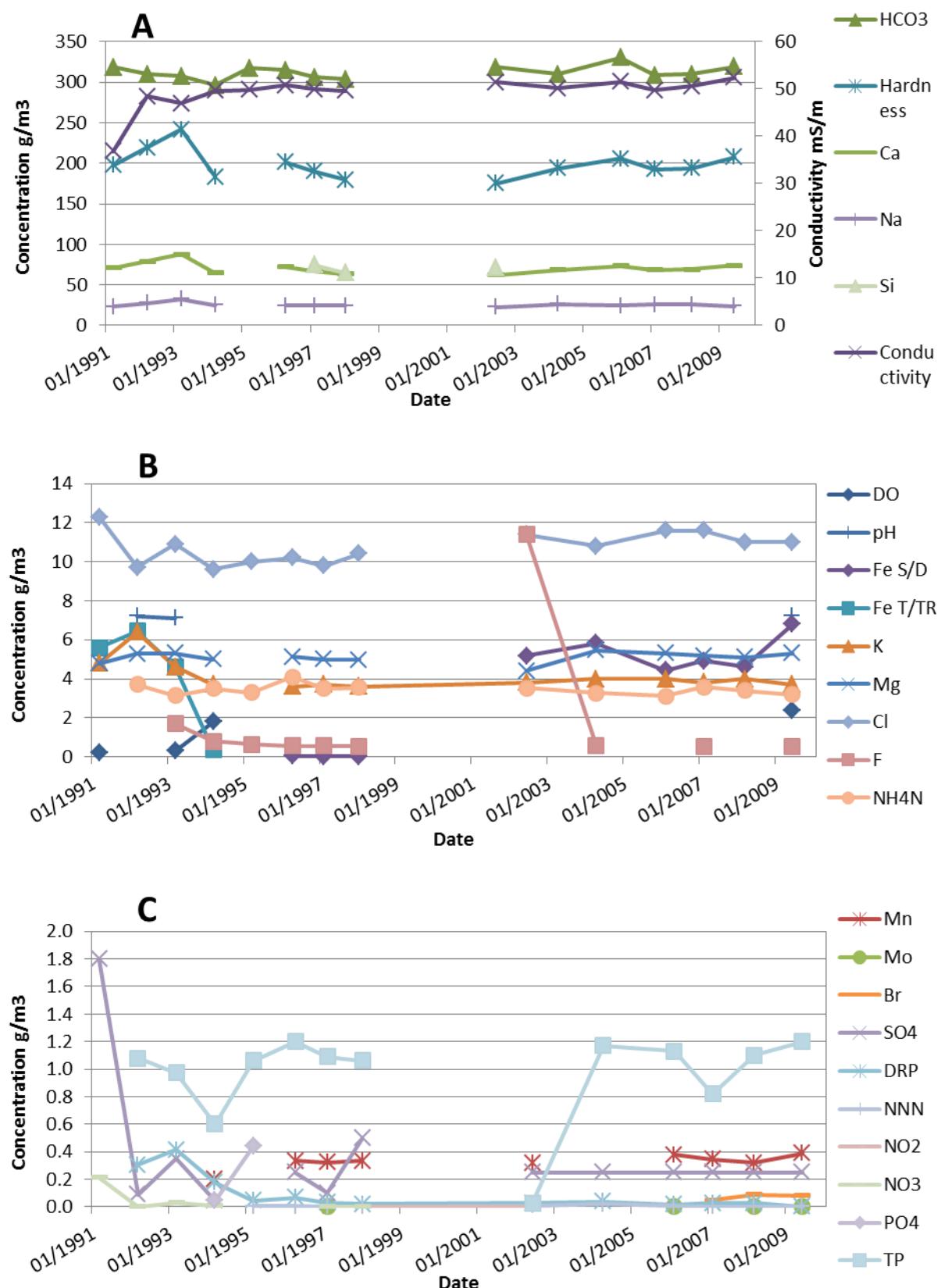


| Bore 466 Information | | | |
|----------------------|---------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 16 .8 |
| Name | Rogers | Casing Depth (m) | 12.81 |
| Bore use | Irrigation | Screen/open hole | Screened |
| Easting | 284 9382 | Temperature | 16.8°C |
| Northing | 635 1270 | Catchment | |
| Bore log | Complete | Aquifer | Tauranga sediment |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180006 |

Bore 466 geological profile (EBOF)

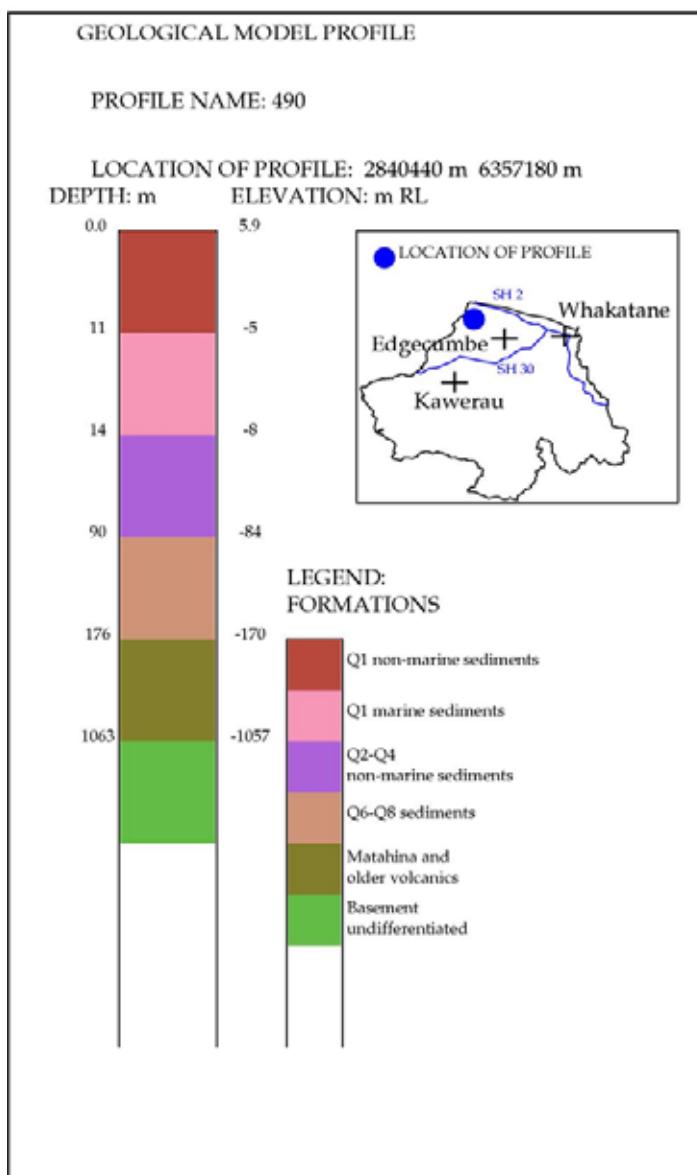


Bore 466 water quality graphs

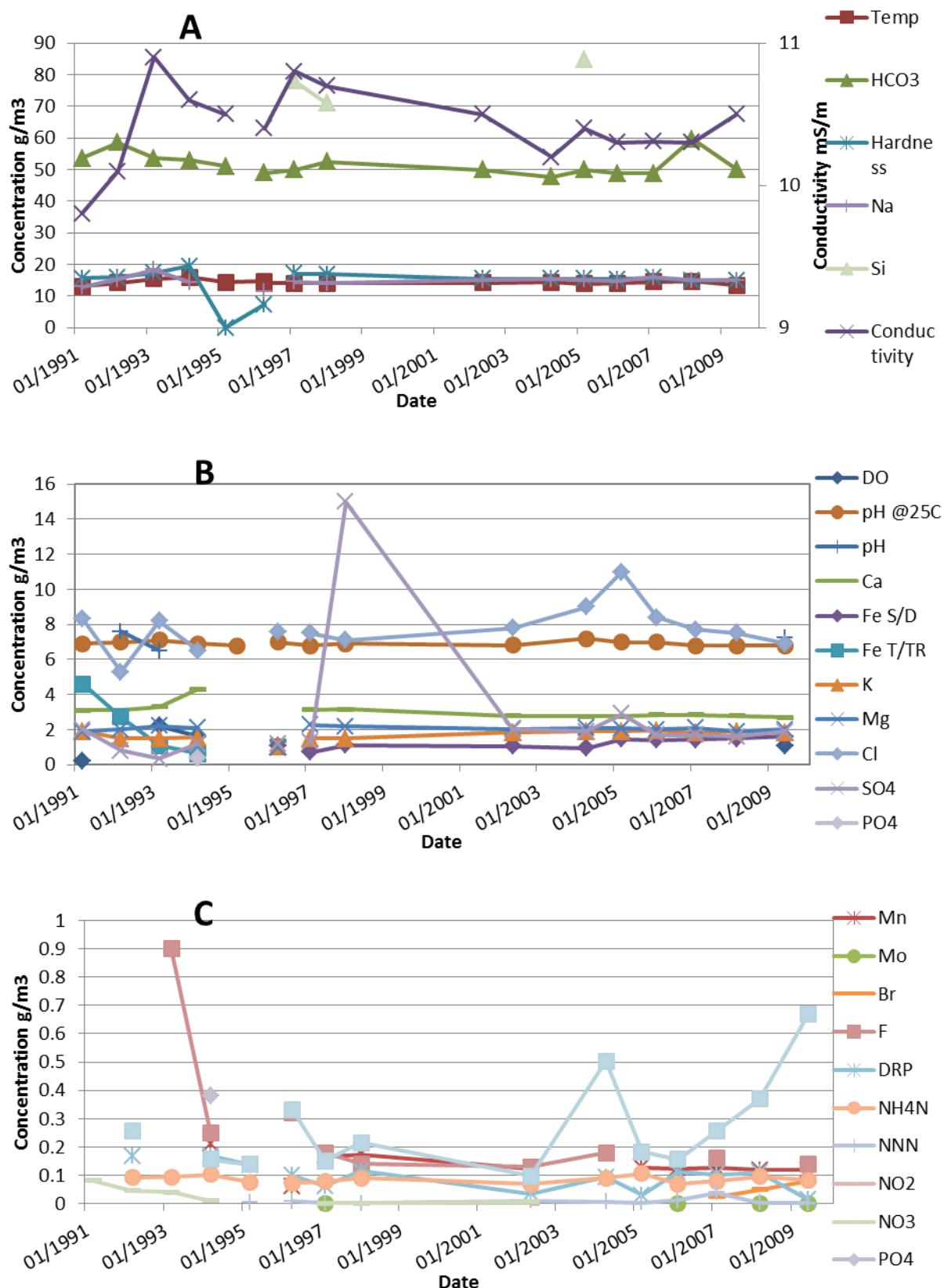


| Bore 490 Information | | | |
|----------------------|---------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 73 |
| Name | Muller | Casing Depth (m) | 57.13 |
| Bore use | Irrigation | Screen/open hole | |
| Easting | 284 0440 | Temperature | 14°C |
| Northing | 635 7180 | Catchment | |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180003 |

Bore 490 geological profile (EF)

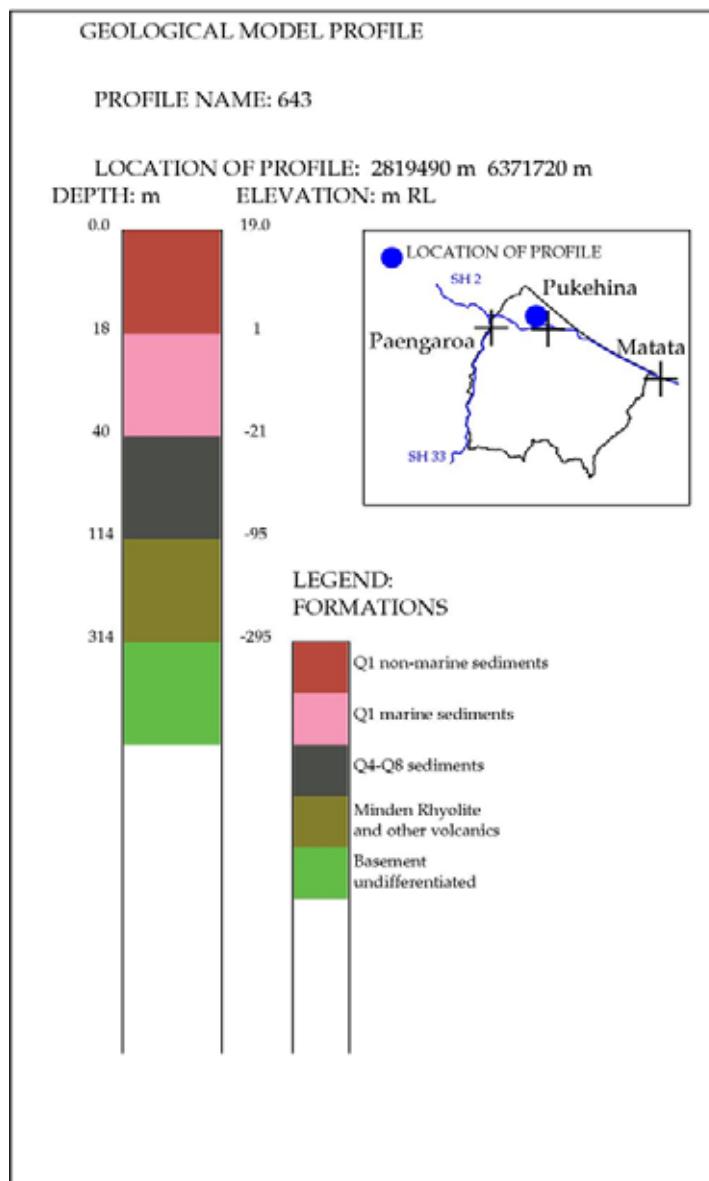


Bore 490 water quality graphs

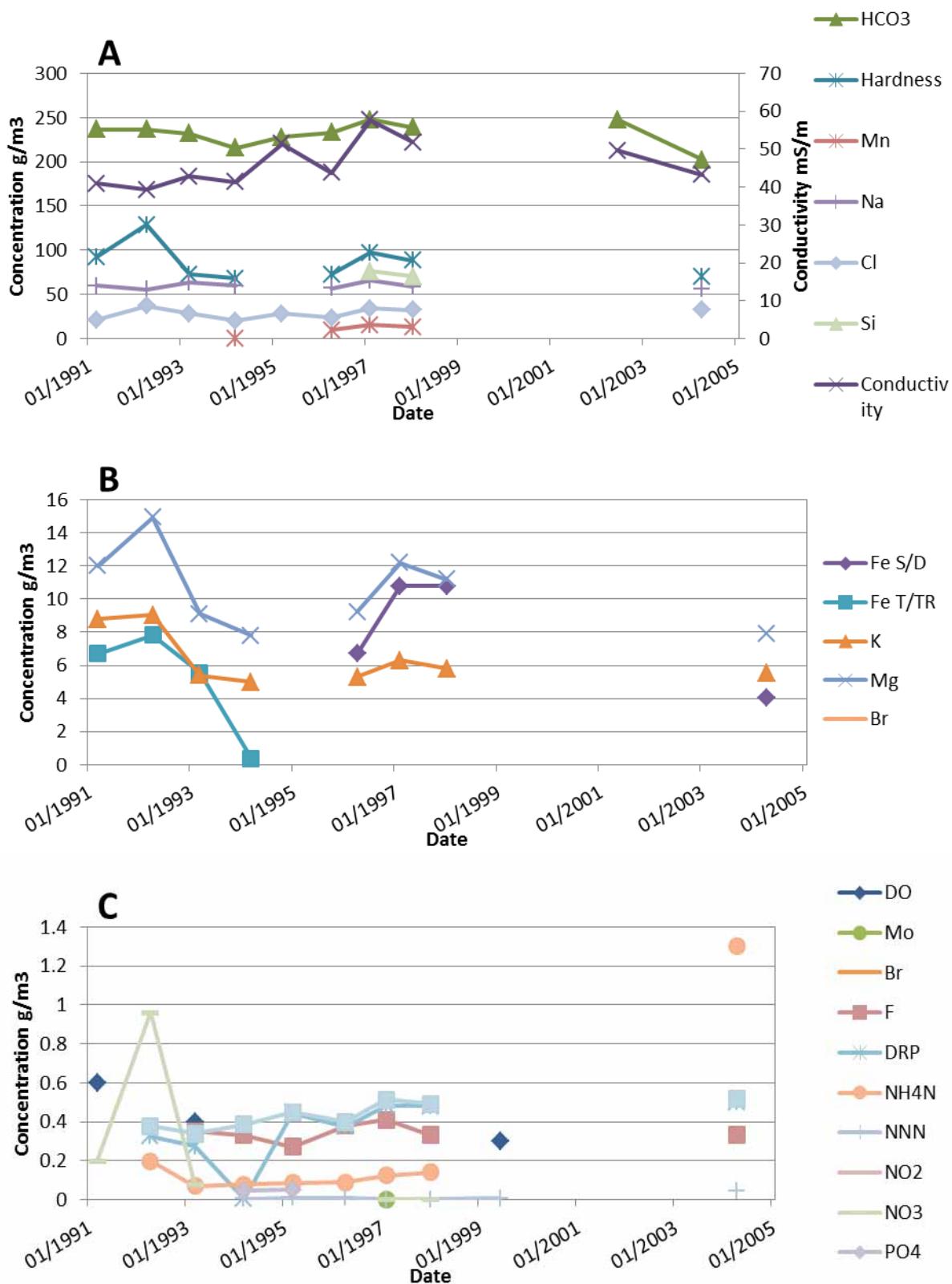


| Bore 643 Information | | | |
|----------------------|---------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 9 |
| Name | Watts | Casing Depth (m) | 7 |
| Bore use | Irrigation | Screen/open hole | screened |
| Easting | 2819490 | Temperature | 15°C |
| Northing | 6371720 | Catchment | Pukehina |
| Bore log | partial | Aquifer | Tauranga sediments |
| Monitoring period | Water level | - | |
| | Water quality | 1991 to 2004 | LabStar: BOP180008 |

Bore 643 geological profile (EBOF)

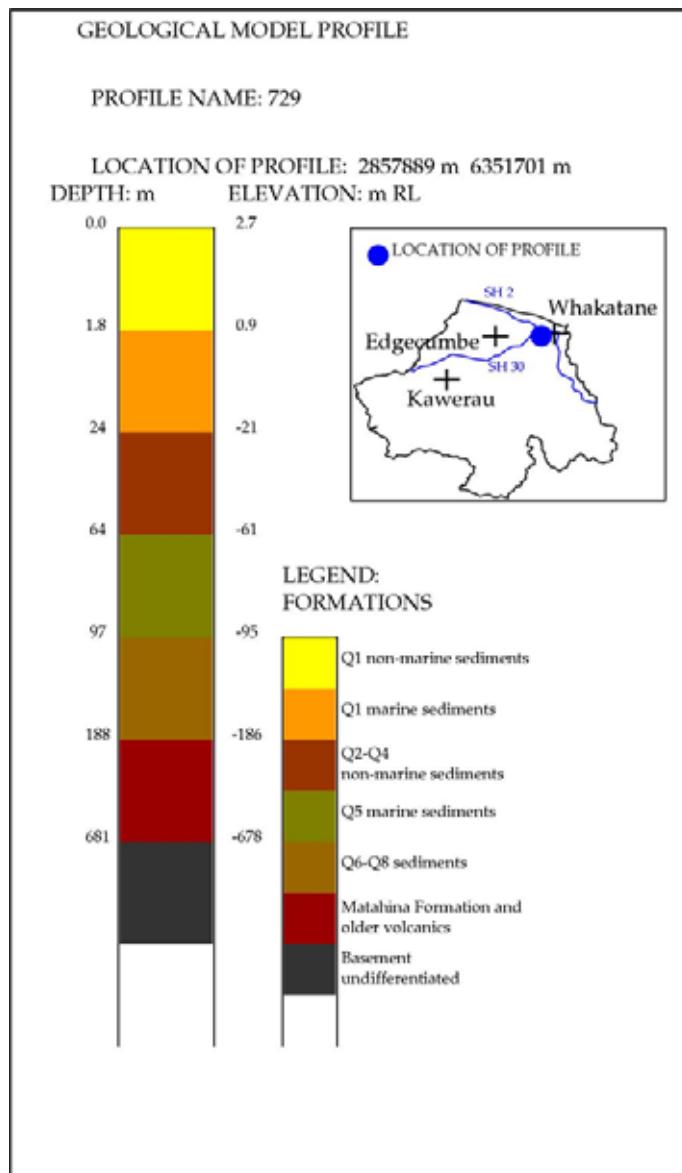


Bore 643 water quality graphs

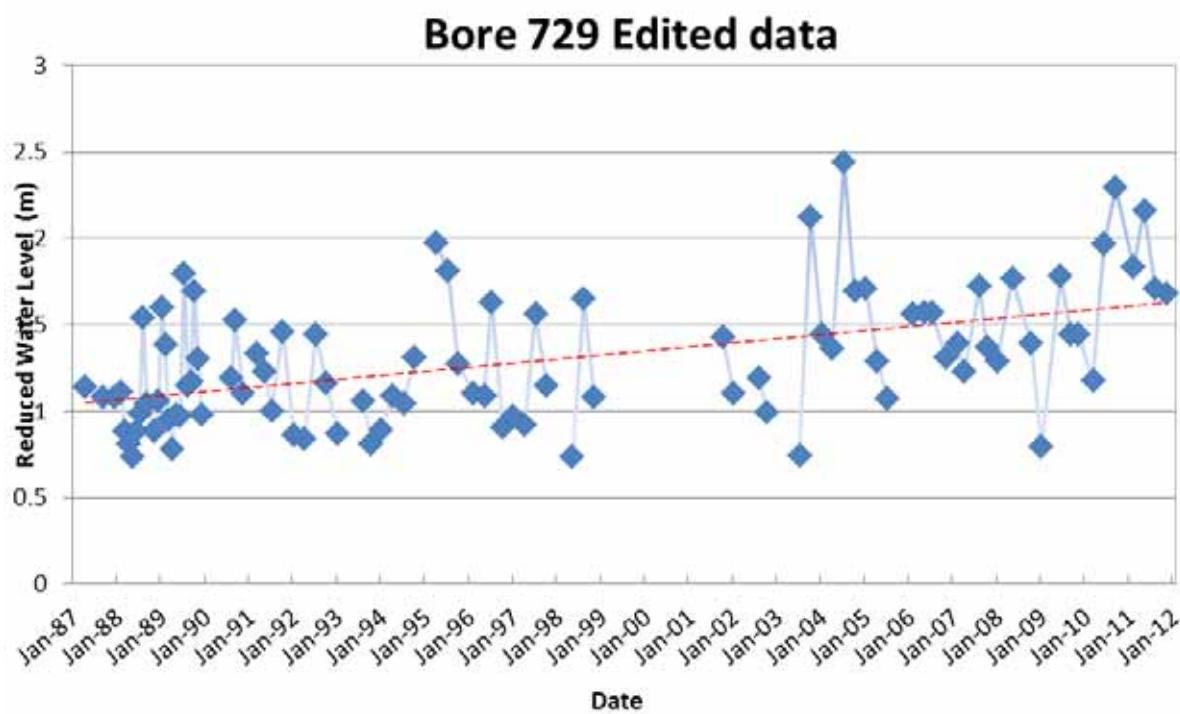
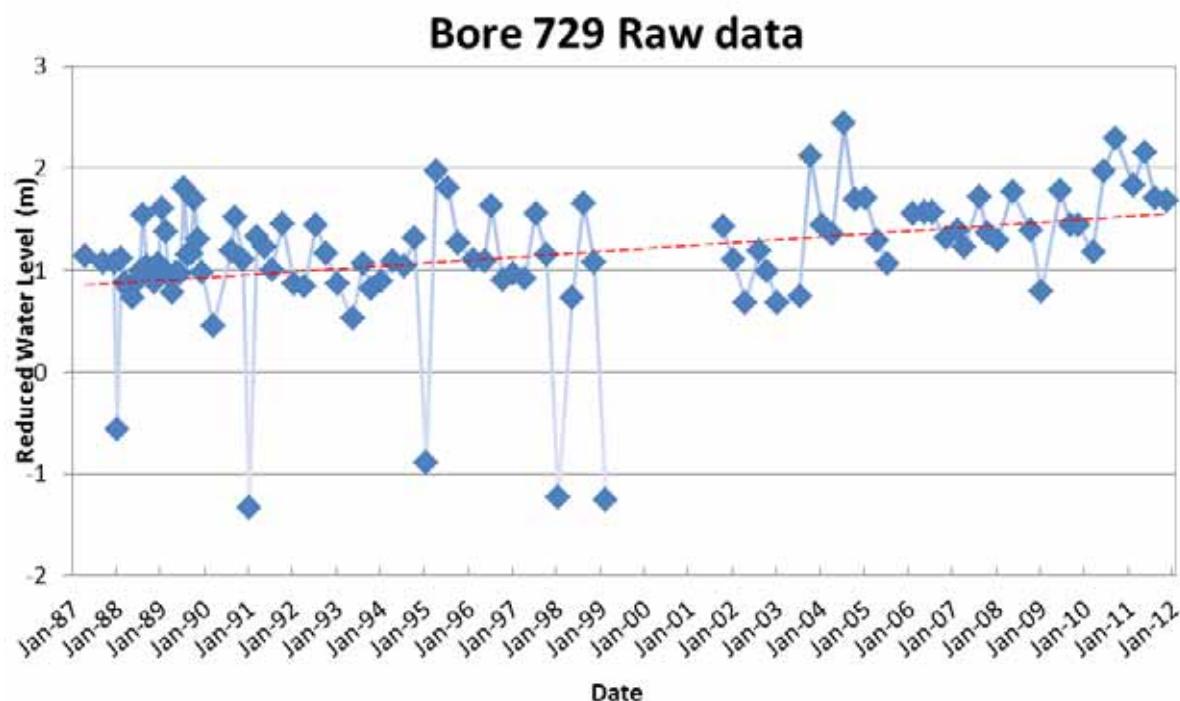


| Bore 729 Information | | | |
|--------------------------|----------------------|-------------------------|--------------------|
| Monitoring type | Water level | Depth (m) | 12.8 |
| Name. | Schlepers | Casing Depth (m) | 9.8 |
| Bore use | Irrigation | Screen/open hole | Screened |
| Easting | 285 7889 | Temperature | Unknown |
| Northing | 635 1701 | Catchment | Whakatane |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1987 to 2011 | |
| | Water quality | | |

Bore 729 geological profile (EBOF)

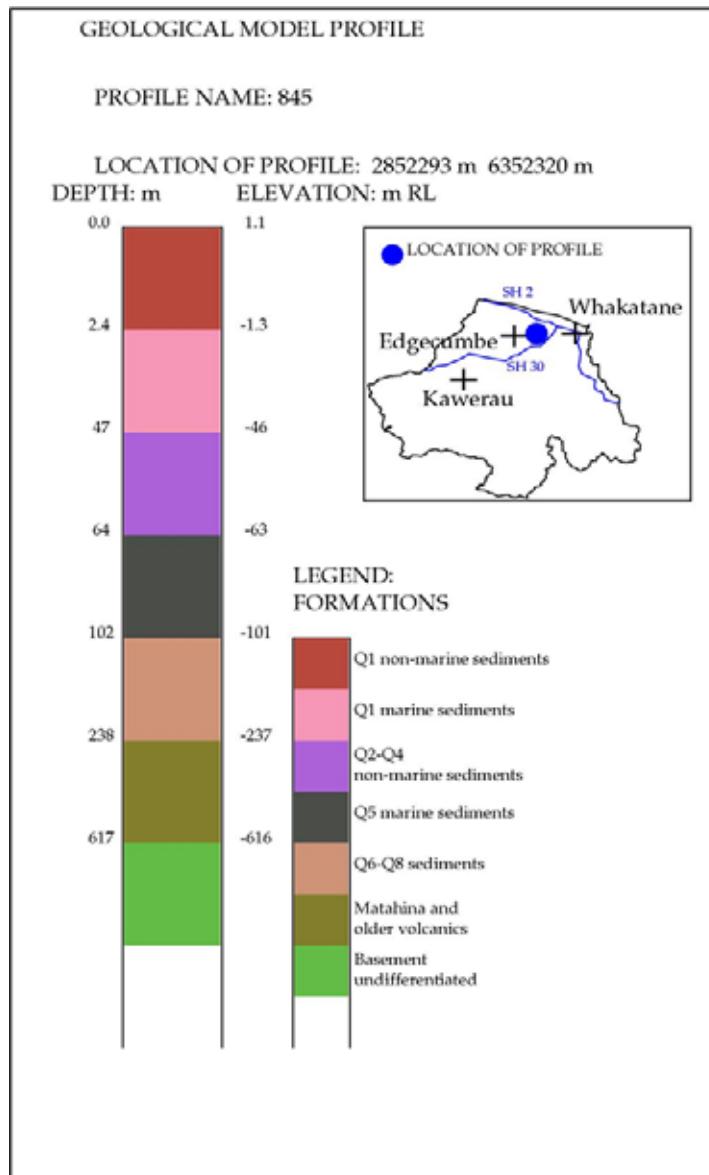


Bore 729 water level graphs



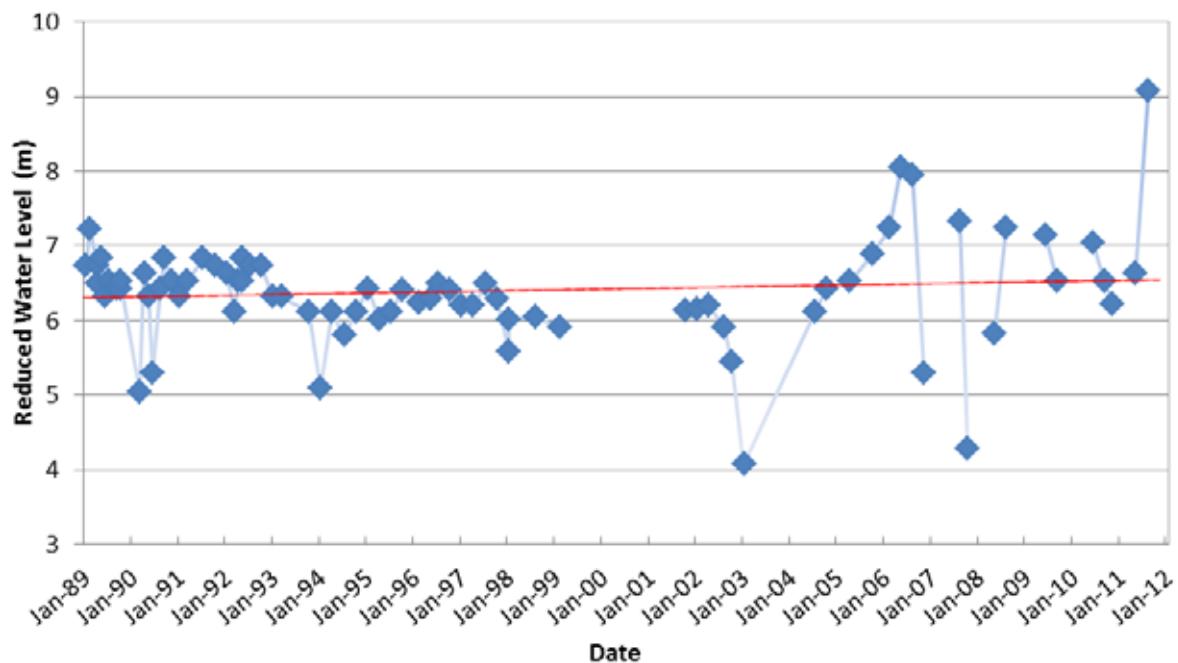
| Bore 845 Information | | | |
|--------------------------|----------------------|-------------------------|--------------------|
| Monitoring type | Water level | Depth (m) | 173 |
| Name | Bonner | Casing Depth (m) | 161.6 |
| Bore use | Irrigation | Screen/open hole | From 161 to 173 |
| Easting | 285 2293 | Temperature | 28.1°C |
| Northing | 635 2320 | Catchment | Awakeri |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1989 to 2011 | |
| | Water quality | | |

Bore 845 geological profile (EBOF)

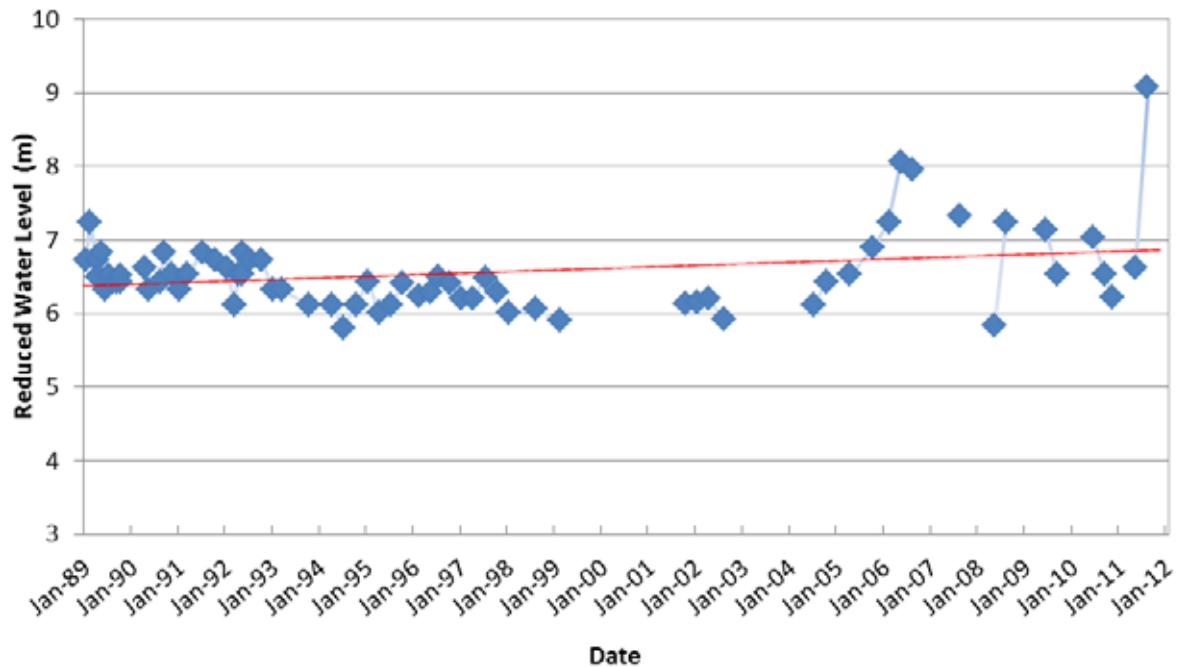


Bore 845 water level graphs

Bore 845 - Raw data

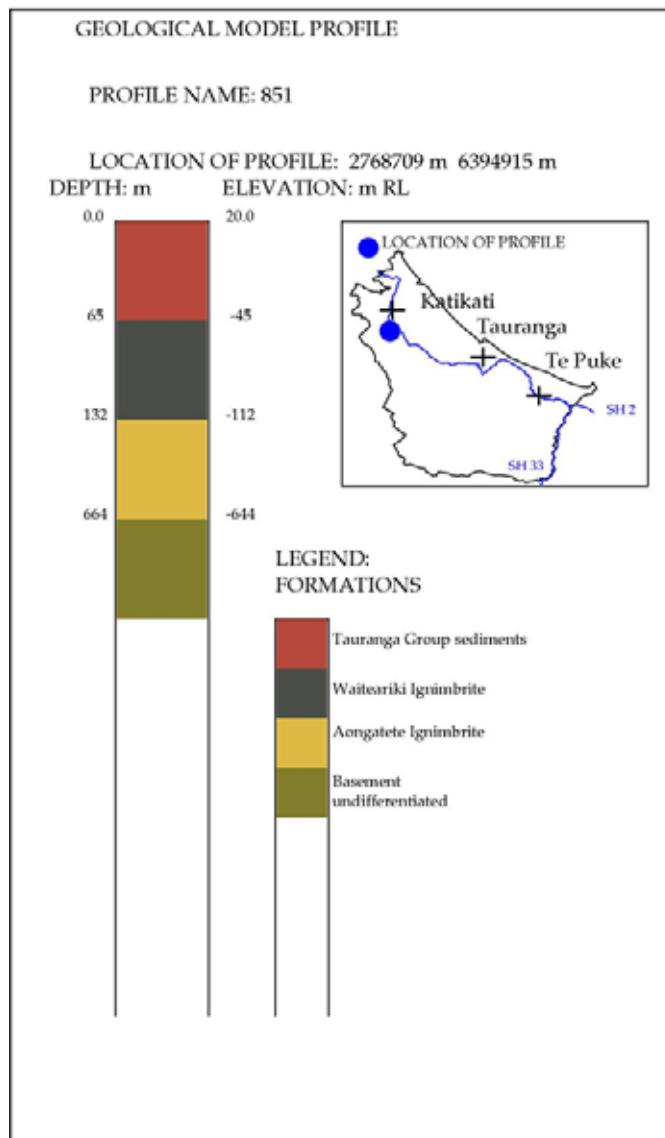


Bore 845 - Edited data



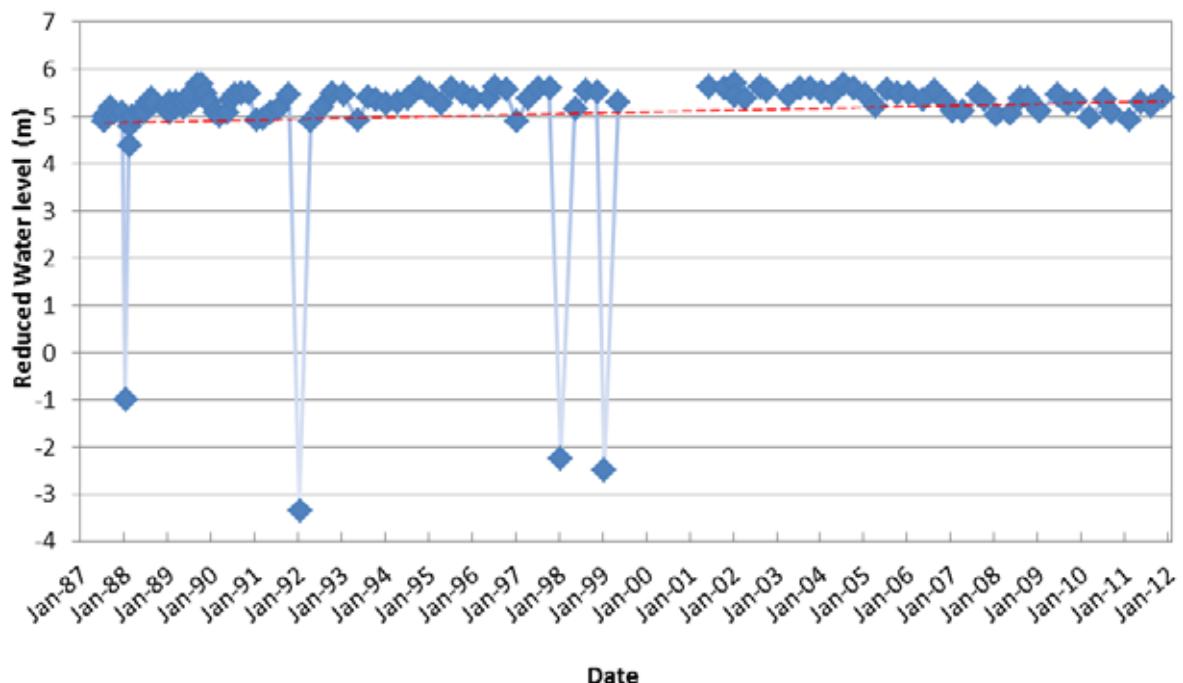
| Bore 851 Information | | | |
|--------------------------|-------------------------------|-------------------------|--------------------|
| Monitoring type | Water level and Water quality | Depth (m) | 97.5 |
| Name | Cook | Casing Depth (m) | 75.3 |
| Bore use | Irrigation | Screen/open hole | screened |
| Easting | 2768709 | Temperature | 19.6°C |
| Northing | 6394915 | Catchment | Aongatete |
| Bore log | Complete | Aquifer | Waiteariki (WAI) |
| Monitoring period | Water level | 1987 to 2011 | |
| | Water quality | 1991 to 2004 | LabStar: BOP180020 |

Bore 851 geological profile (EBOF)

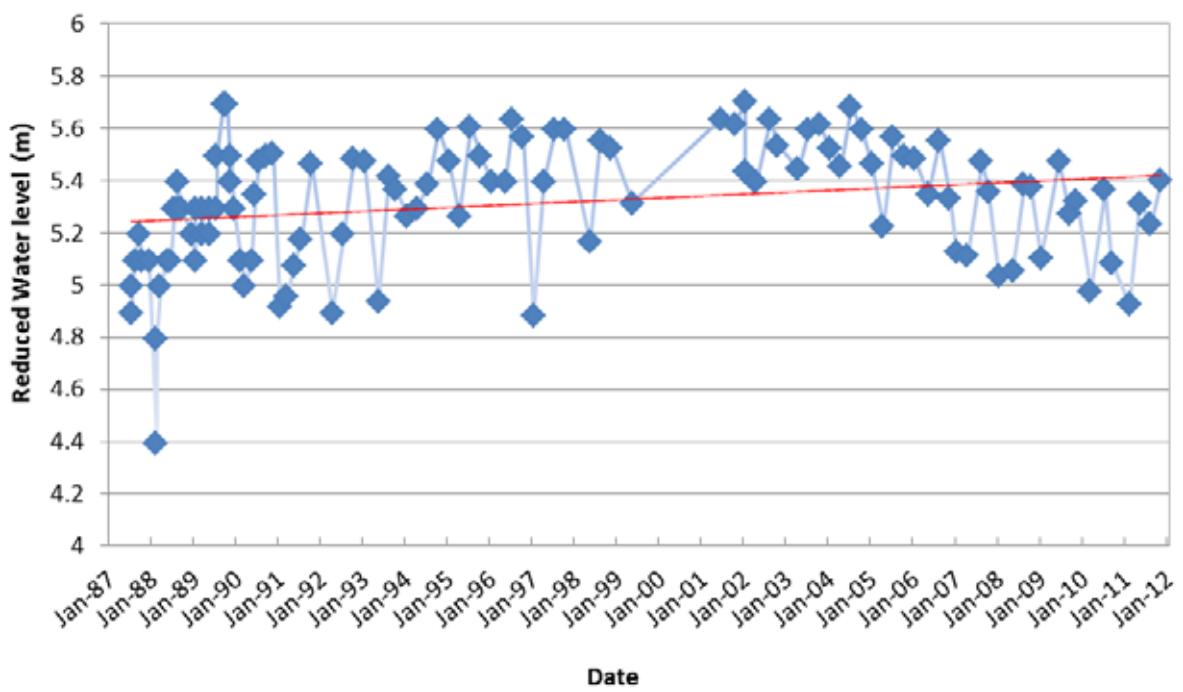


Bore 851 water level graphs

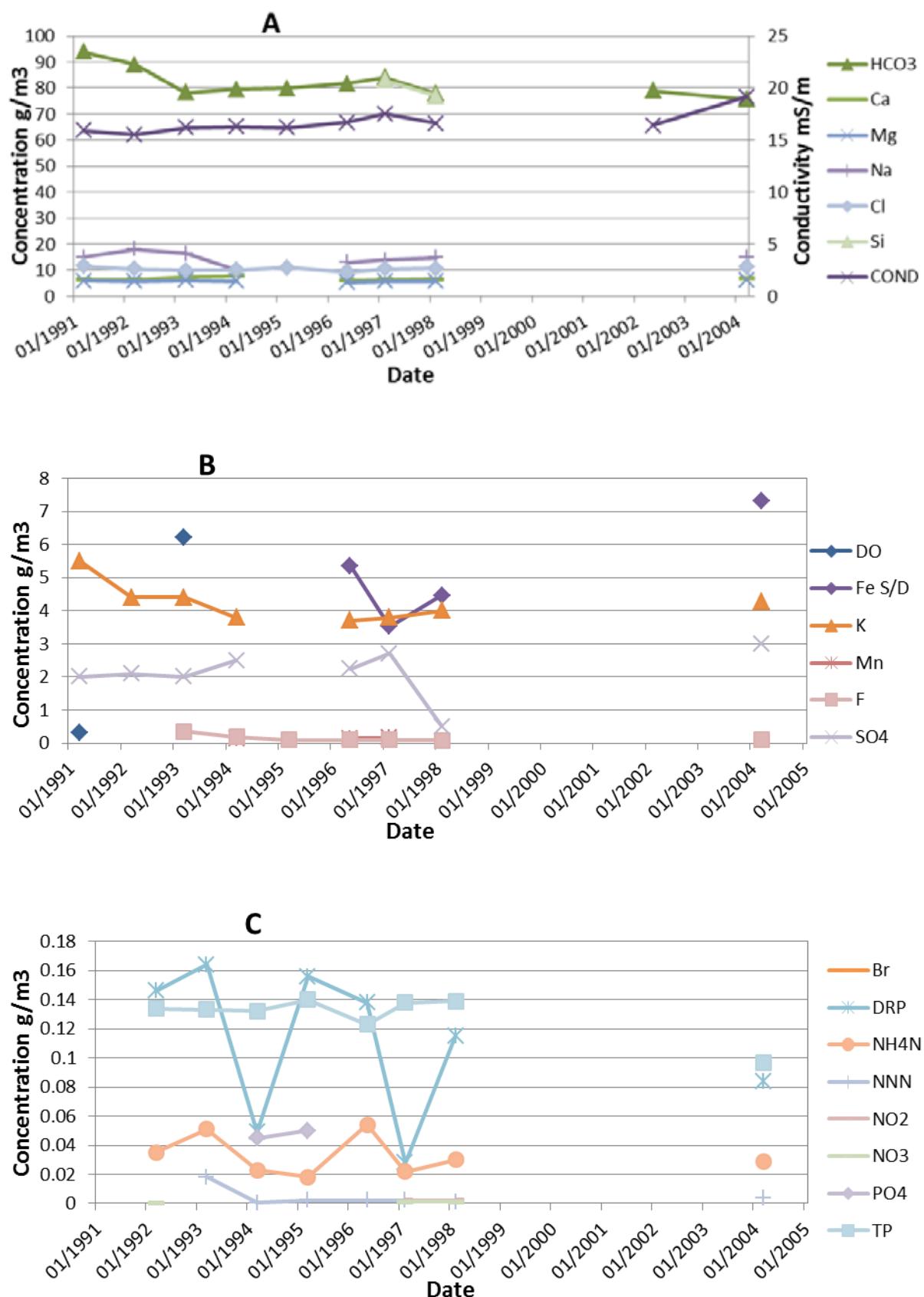
Bore 851 Raw data



Bore 851 Edited data

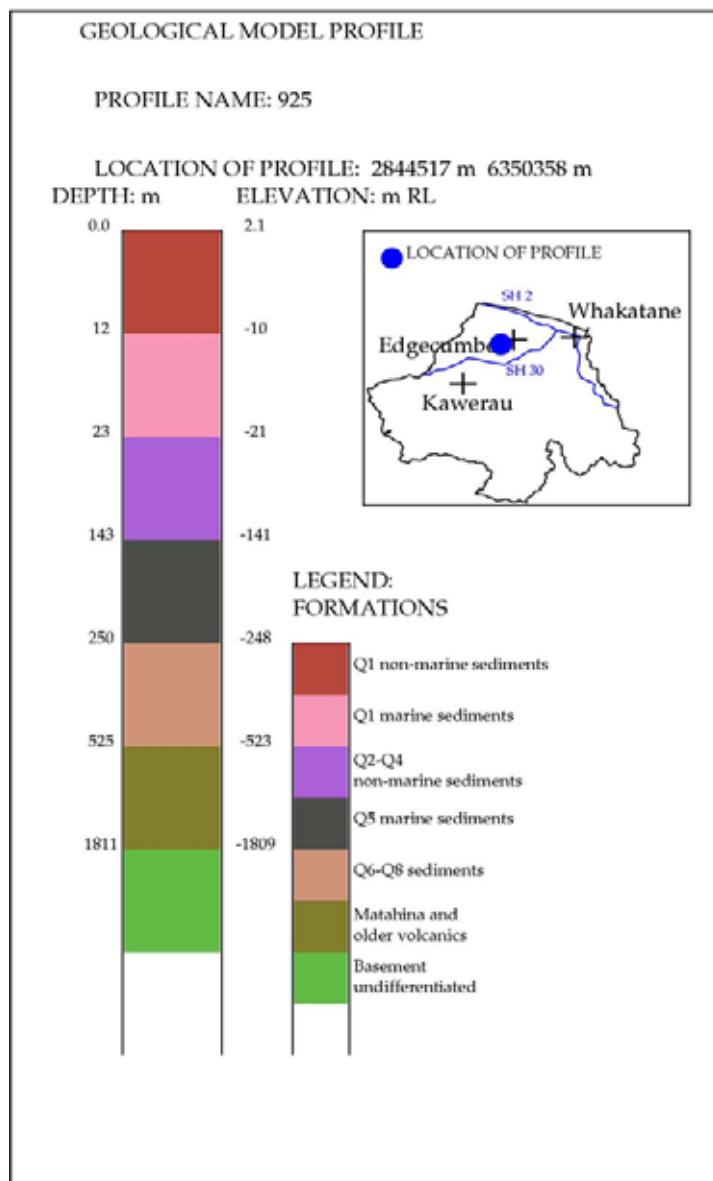


Bore 851 water quality graphs

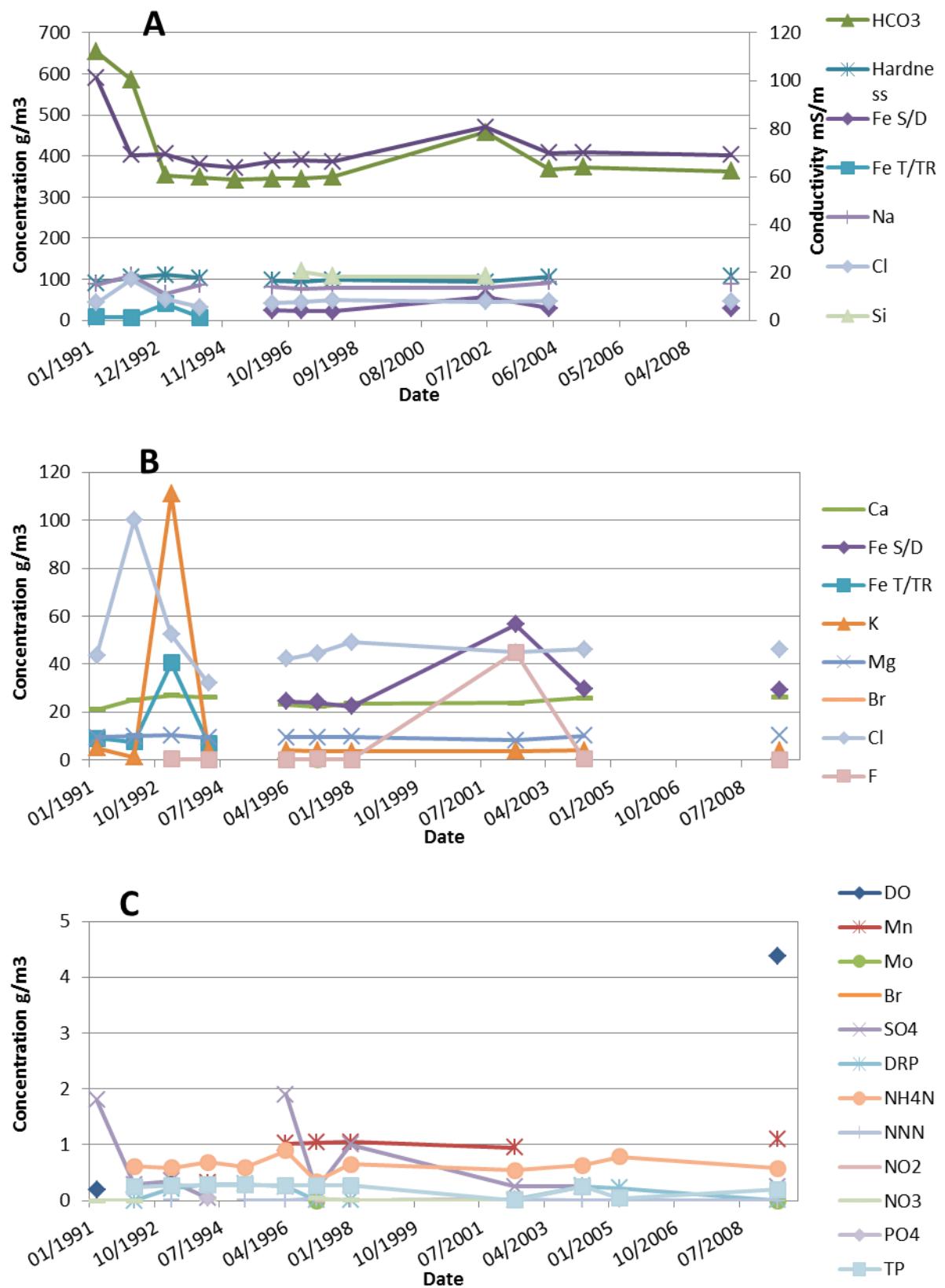


| Bore 925 Information | | | |
|----------------------|---------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 32 |
| Name | Mayes | Casing Depth (m) | 26.1 |
| Bore use | Irrigation | Screen/open hole | Screened |
| Easting | 284 4517 | Temperature | 19.6°C |
| Northing | 635 0358 | Catchment | Awaiti Canal |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180014 |

Bore 925 geological profile (EBOF)

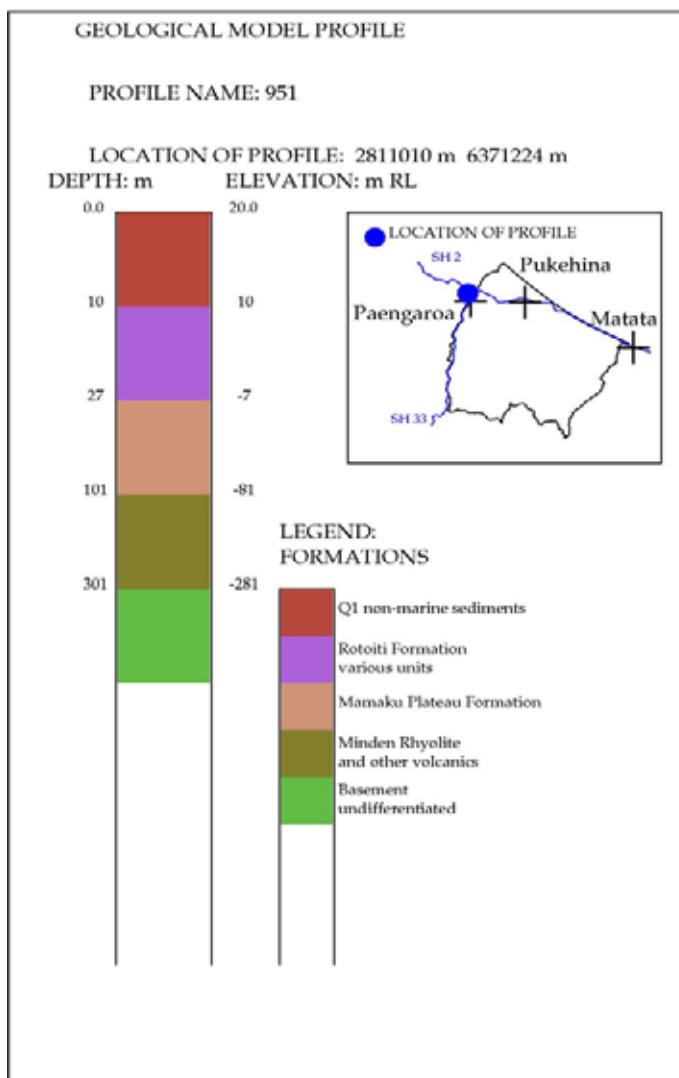


Bore 925 water quality graphs

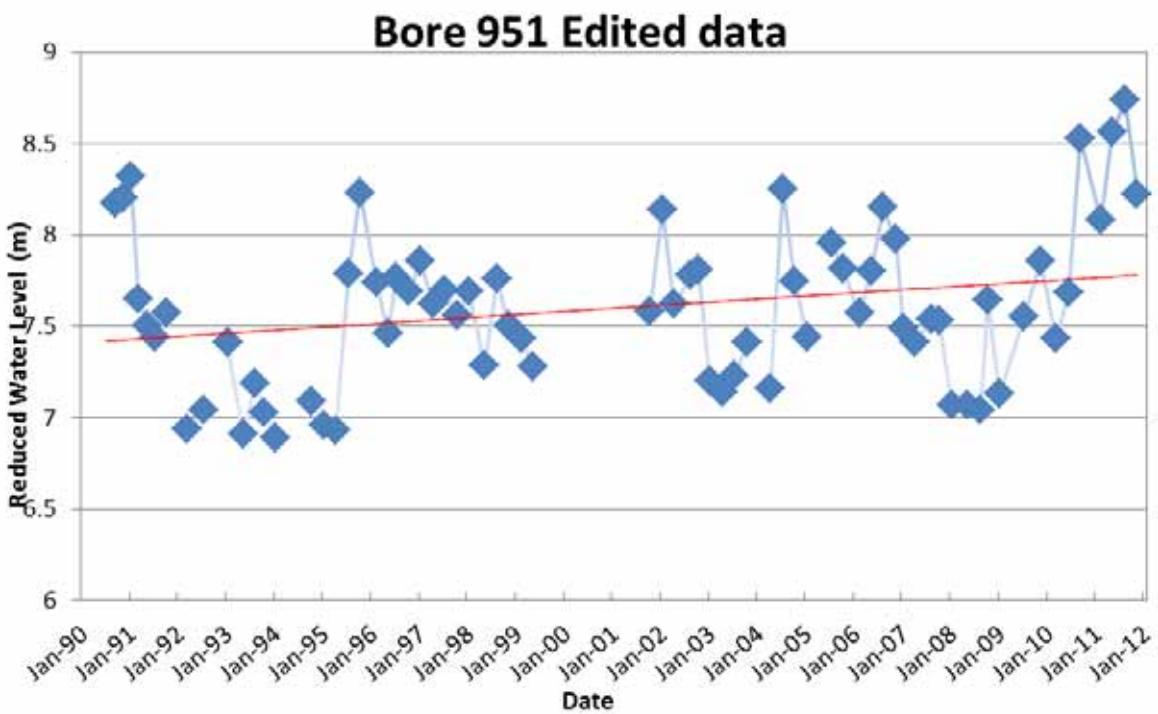
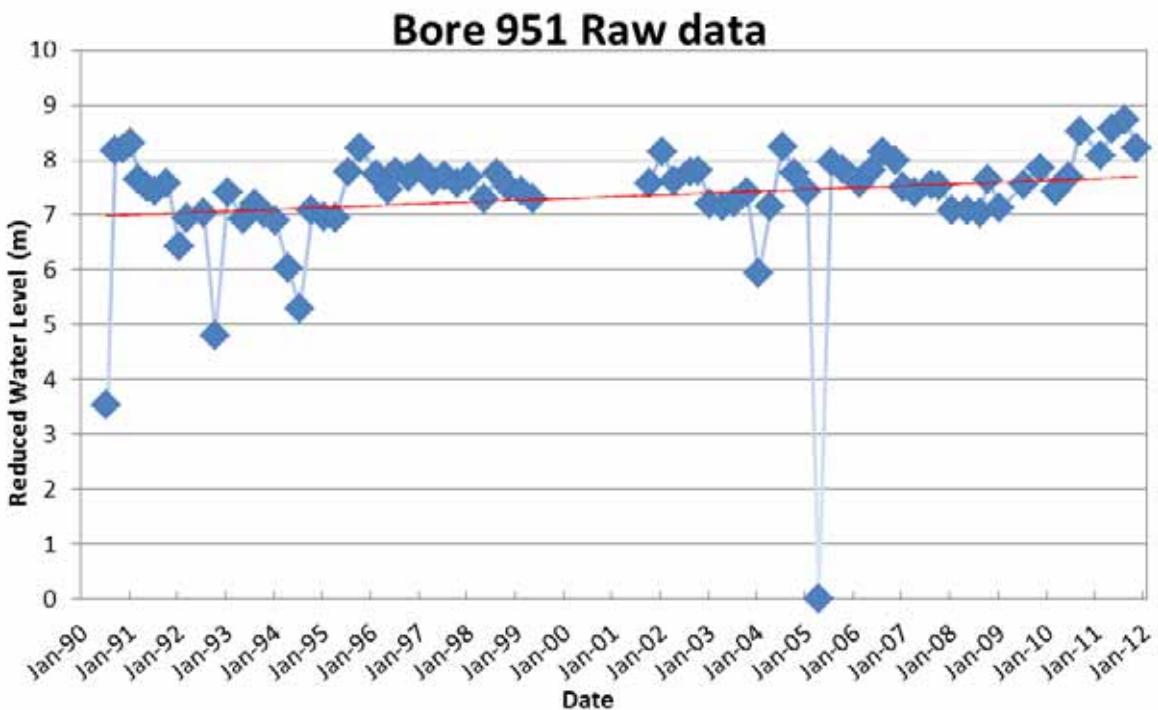


| Bore 951 Information | | | |
|--------------------------|-------------------------------|-------------------------|-------------------------------|
| Monitoring type | Water level and Water quality | Depth (m) | 114 |
| Name | Paengaroa North K Trust | Casing Depth (m) | 86.3 |
| Bore use | Irrigation | Screen/open hole | From 86 to 114 |
| Easting | 281 1010 | Temperature | 24.8°C |
| Northing | 637 1224 | Catchment | Kaikokopu-Pokopoko-Wharere |
| Bore log | Complete | Aquifer | Mamaku Plateau Formation |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1991 to 2011 | LabStar No.: BOP180035 |

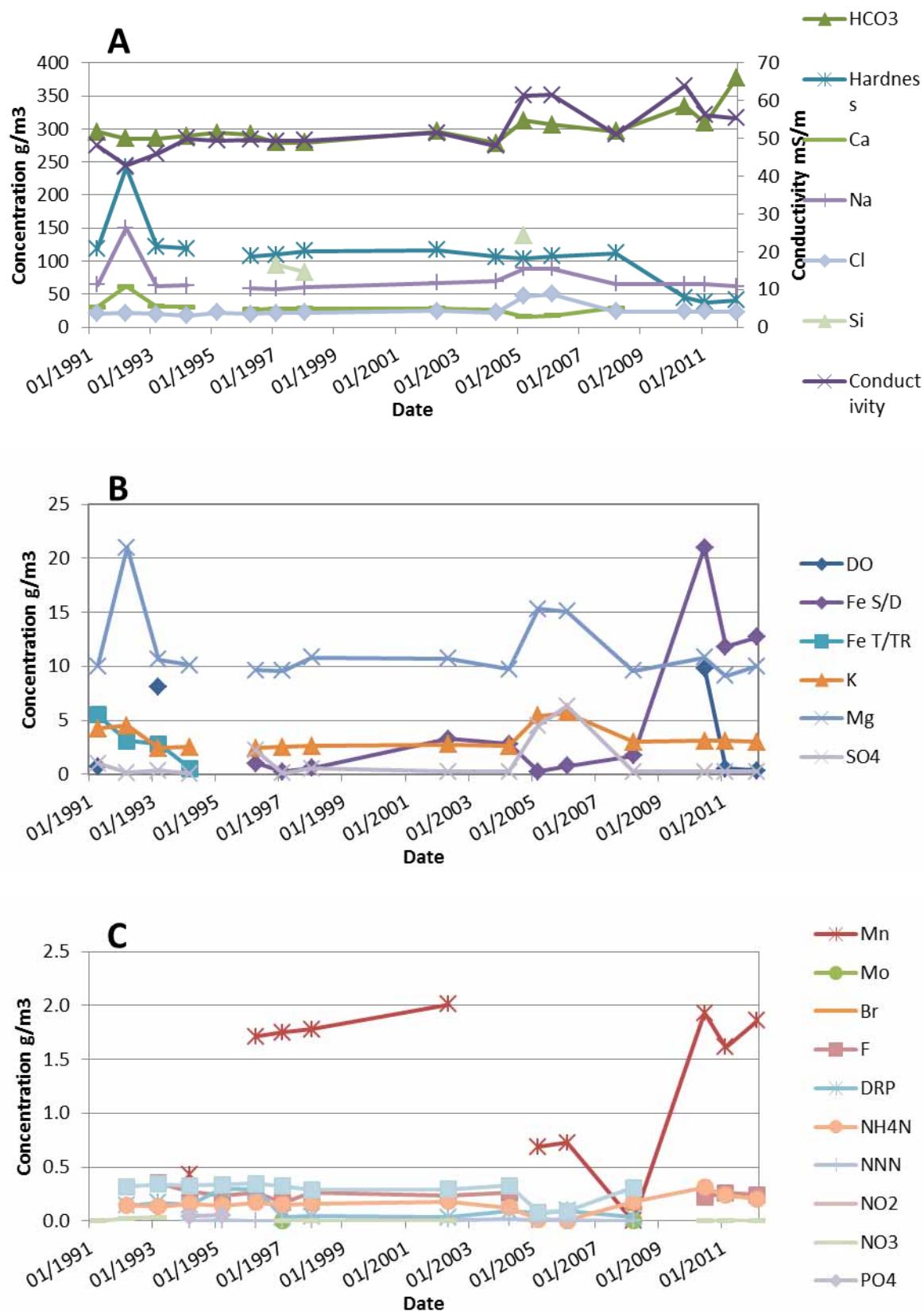
Bore 951 geological profile (EBOF)



Bore 951 water level graphs

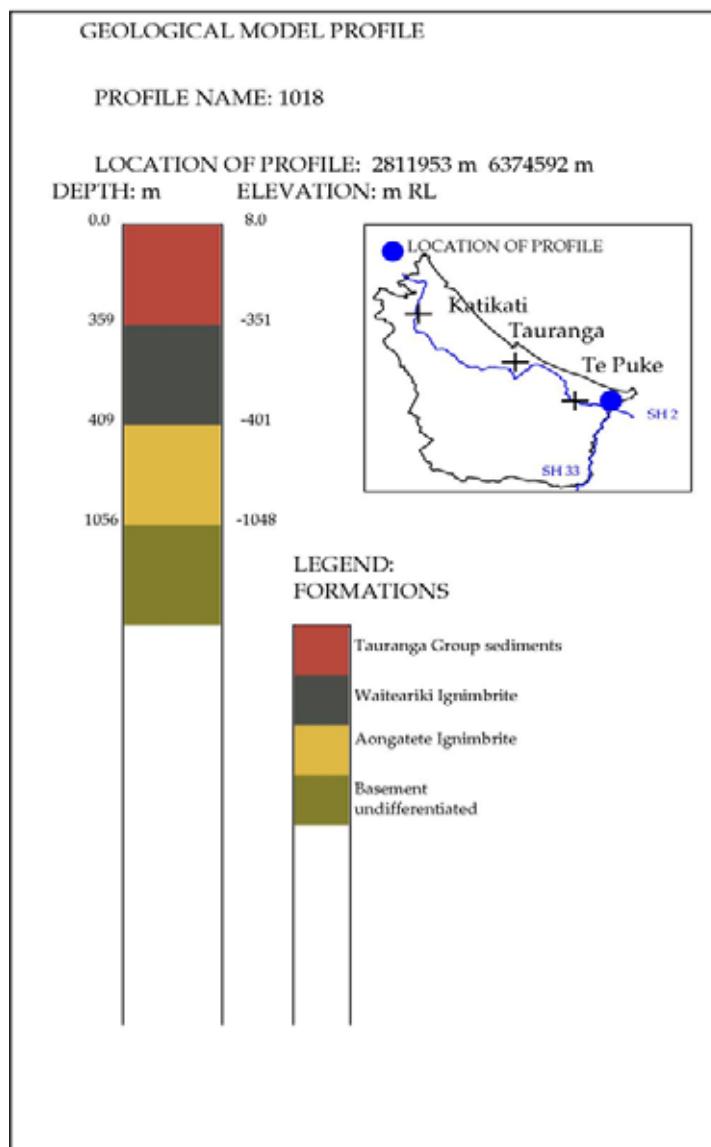


Bore 951 water quality graphs



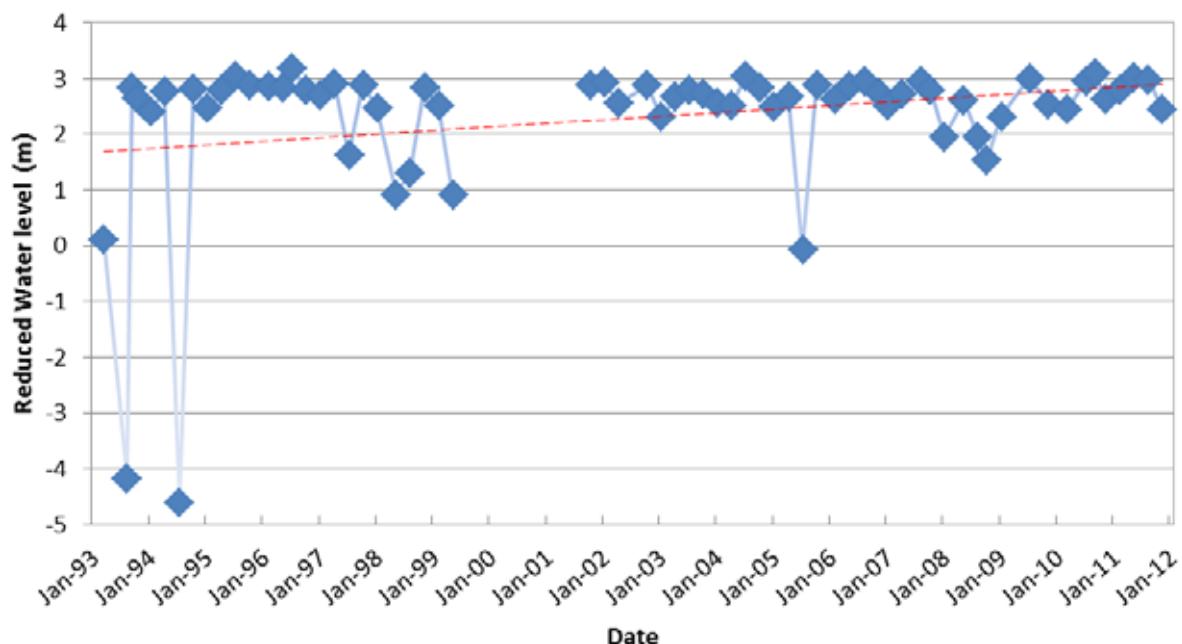
| Bore 1018 Information | | | |
|--------------------------|-----------------------------|-------------------------|---------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 359 |
| Name | Brown | Casing Depth (m) | 359 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 281 1953 | Temperature | 33°C |
| Northing | 637 4592 | Catchment | Lower Kaituna |
| Bore log | Partial | Aquifer | Waiteariki |
| Monitoring period | Water level | 1993 to 2011 | |
| | Water quality | 1991 to 2005 | LabStar: BOP180044 |

Bore 1018 geological profile (EBOF)

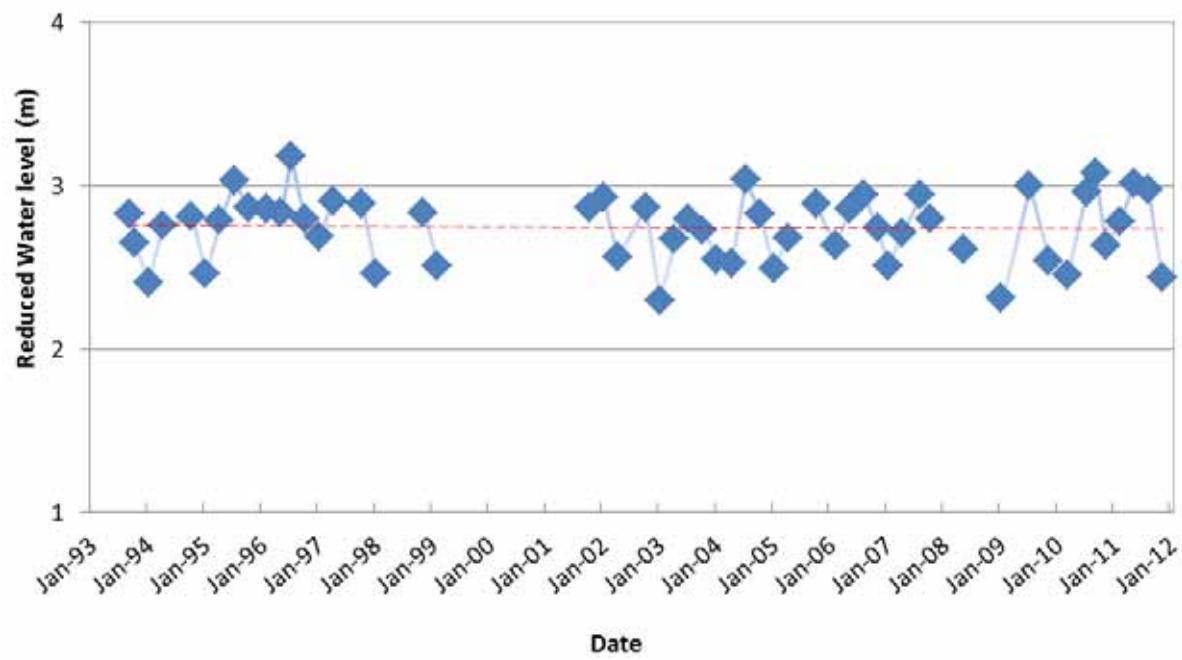


Bore 1018 water level graphs

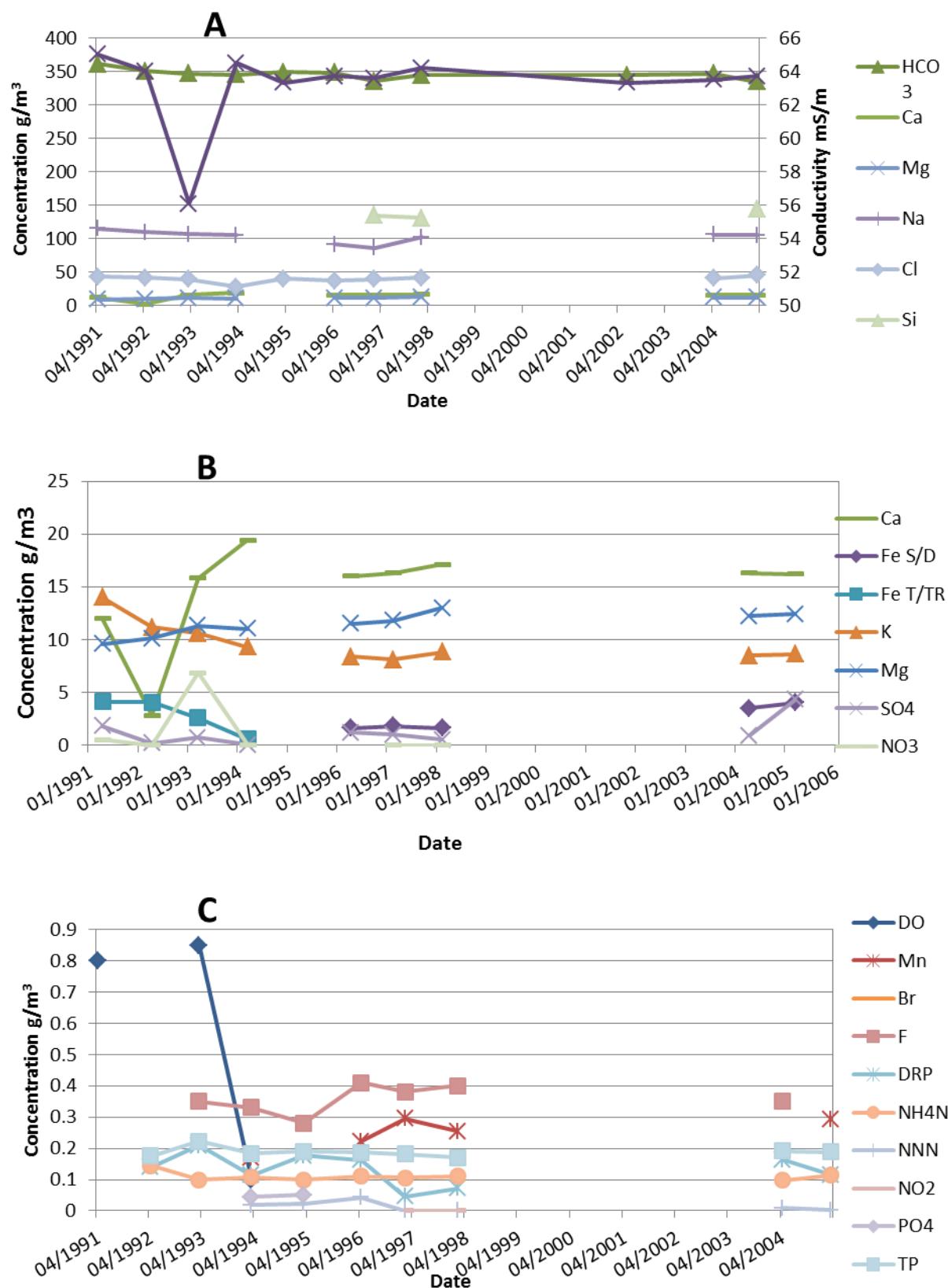
Bore 1018 Raw data



Bore 1018 Edited data



Bore 1018 water quality graphs

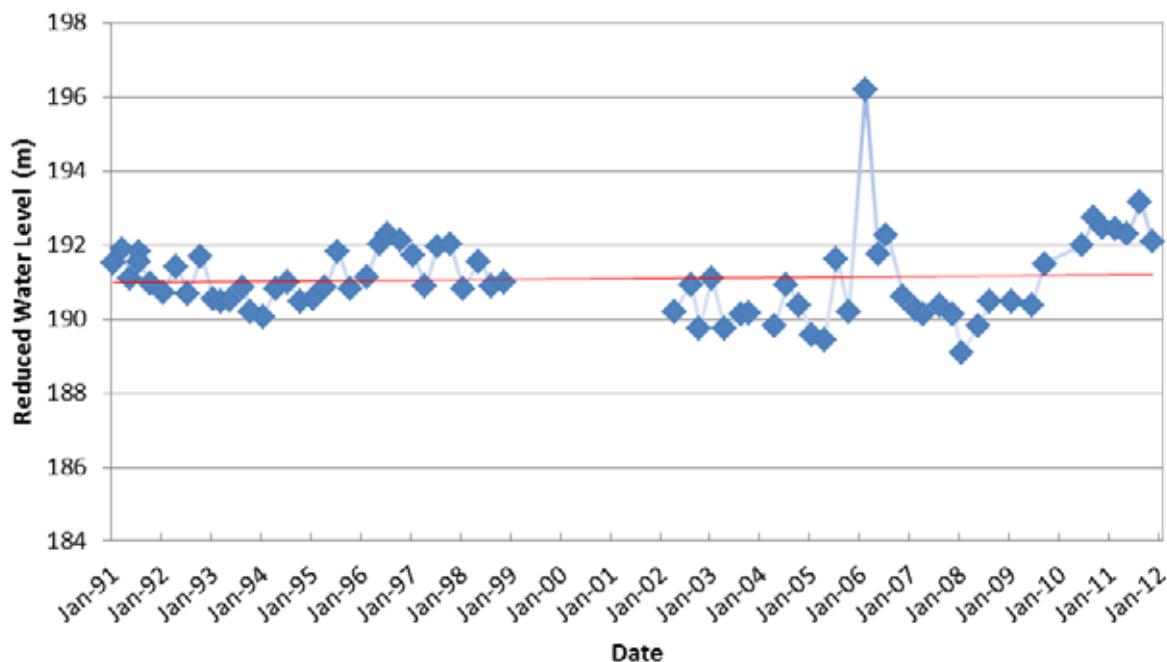


| Bore 1319 Information | | | |
|--------------------------|-------------------------------|-------------------------|------------------------------|
| Monitoring type | Water level and Water quality | Depth (m) | 51.8 |
| Name | Ngāti Manawa Tribal Lands | Casing Depth (m) | 39.6 |
| Bore use | Agricultural | Screen/open hole | Unknown |
| Easting | 283 5070 | Temperature | 15.6°C |
| Northing | 629 6819 | Catchment | Galatea |
| Bore log | Complete | Aquifer | Unknown |
| Monitoring period | Water level | 1991 to 2011 | |
| | Water quality | 1991 to 2009 | LabStar: BOP180034 |

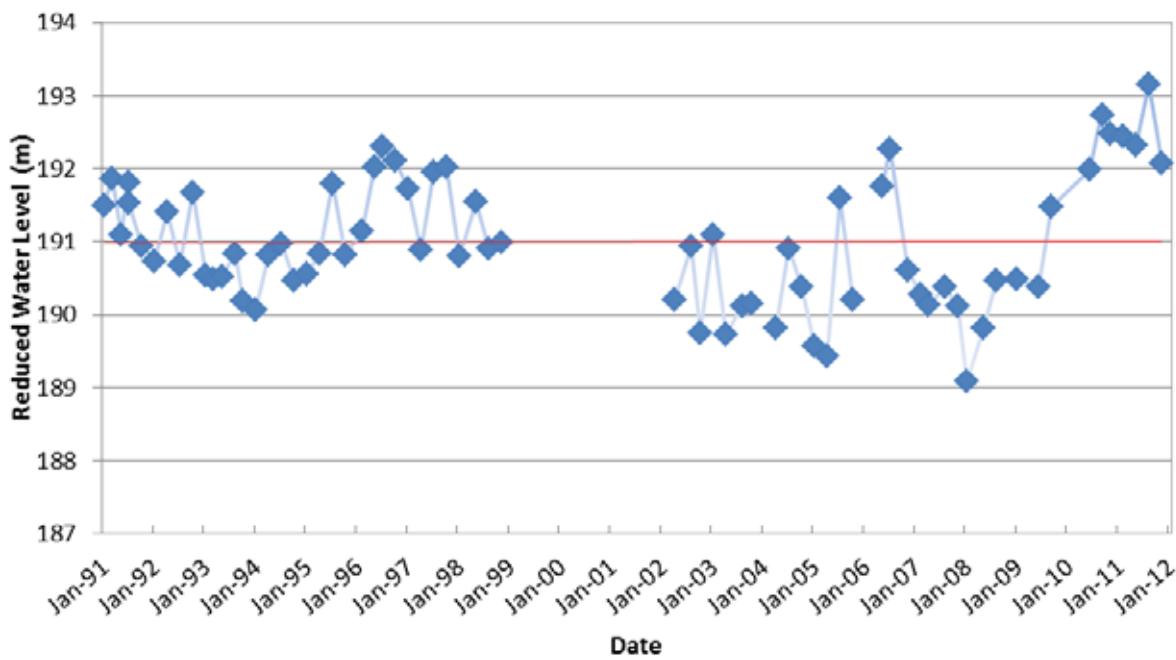
The Earth Beneath our Feet model is not currently available for this region.

Bore 1319 water level graphs

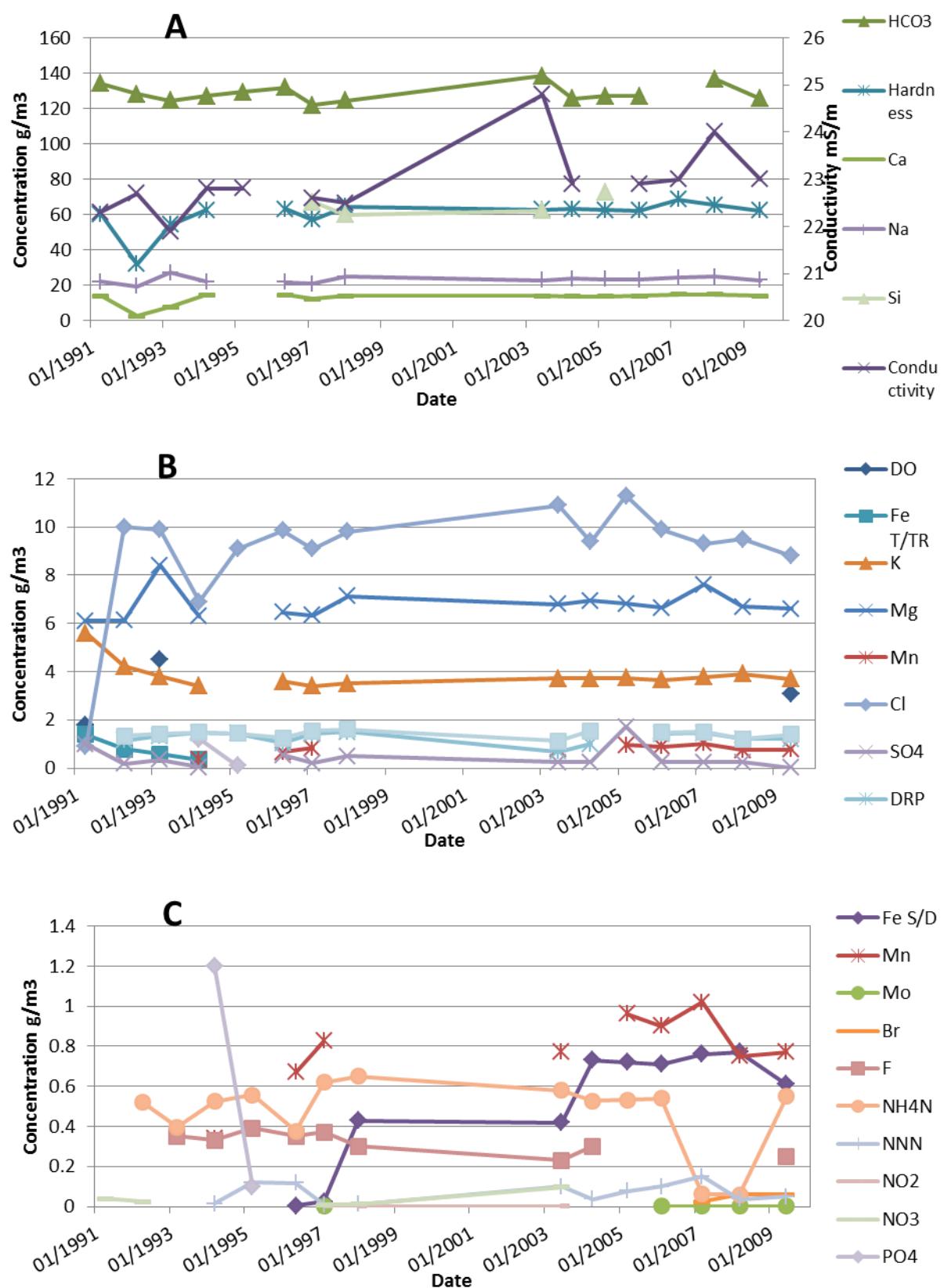
Bore 1319 Raw data



Bore 1319 Edited data

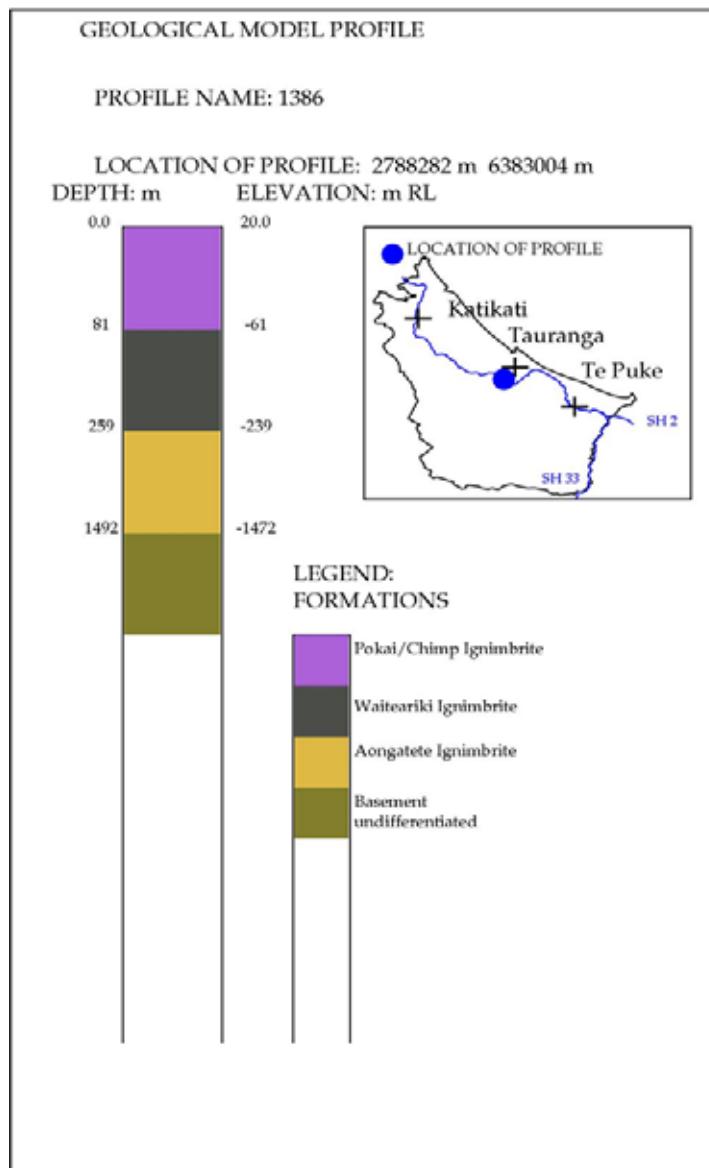


Bore 1319 water quality



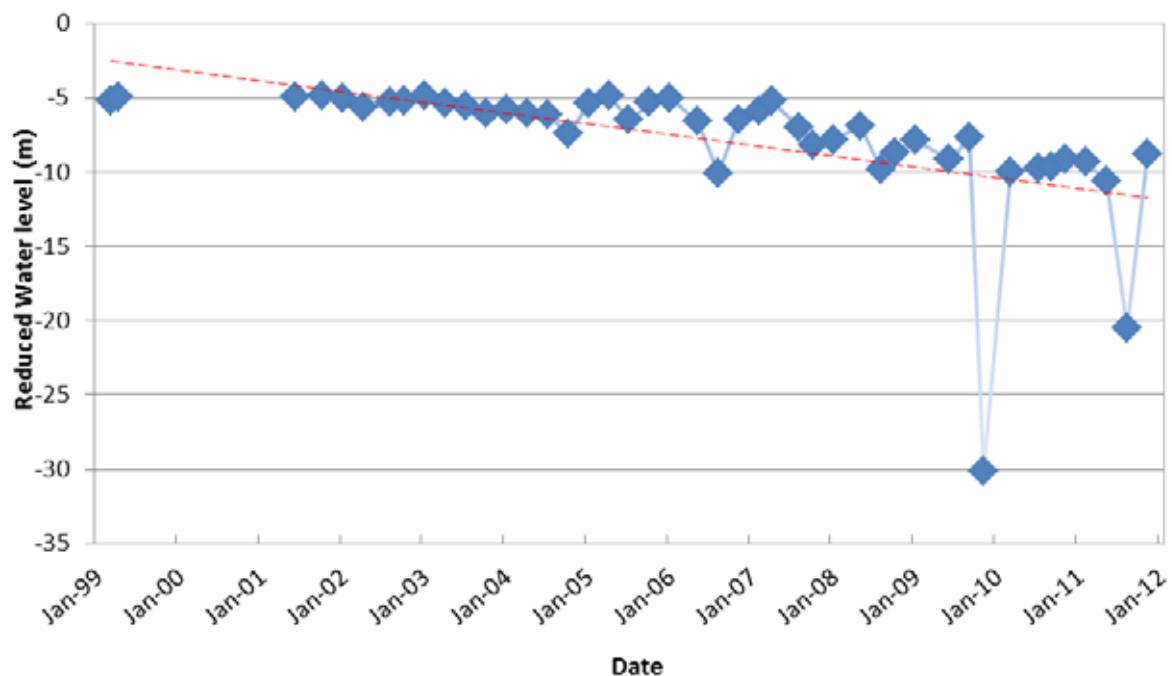
| Bore 1386 Information | | | |
|-----------------------|--------------------|------------------|--------------|
| Monitoring type | Water level | Depth (m) | 466.3 |
| Name | STBJ Investments | Casing Depth (m) | 335.3 |
| Bore use | Commercial heating | Screen/open hole | Open hole |
| Easting | 278 8282 | Temperature | Geothermal |
| Northing | 638 3004 | Catchment | WAI 2 (zone) |
| Bore log | Complete | Aquifer | Aongatete |
| Monitoring period | Water level | 1999 to 2011 | |
| | Water quality | - | |

Bore 1386 geological profile (EBOF)

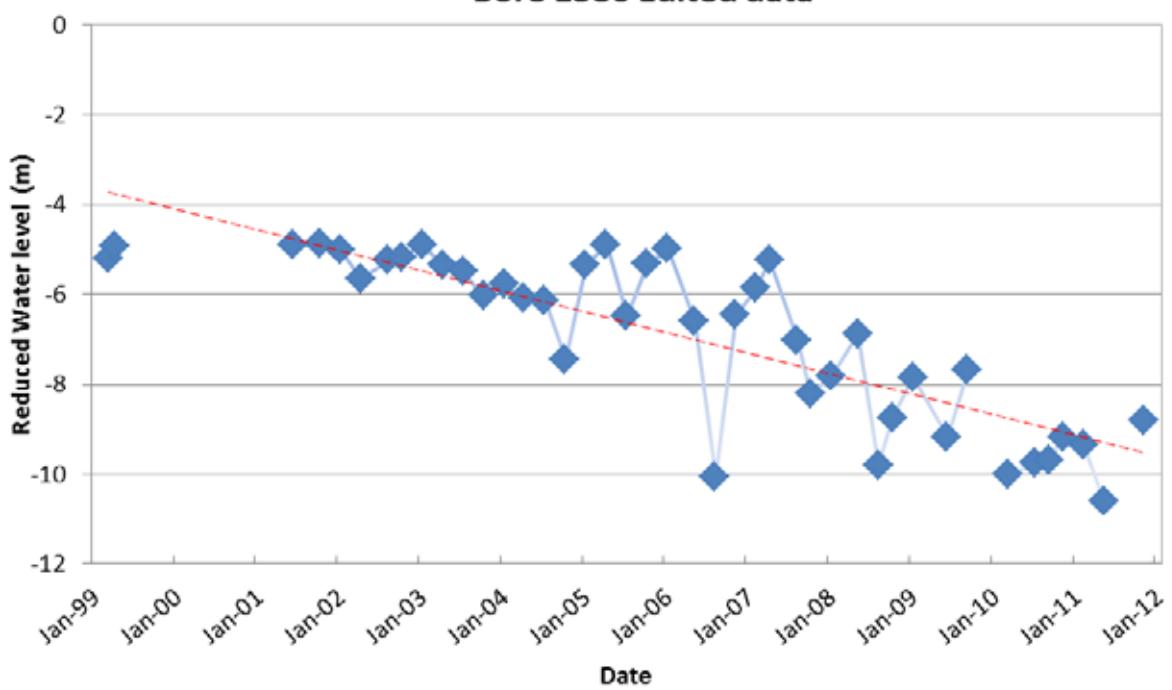


Bore 1386 water level graphs

Bore 1386 Raw data

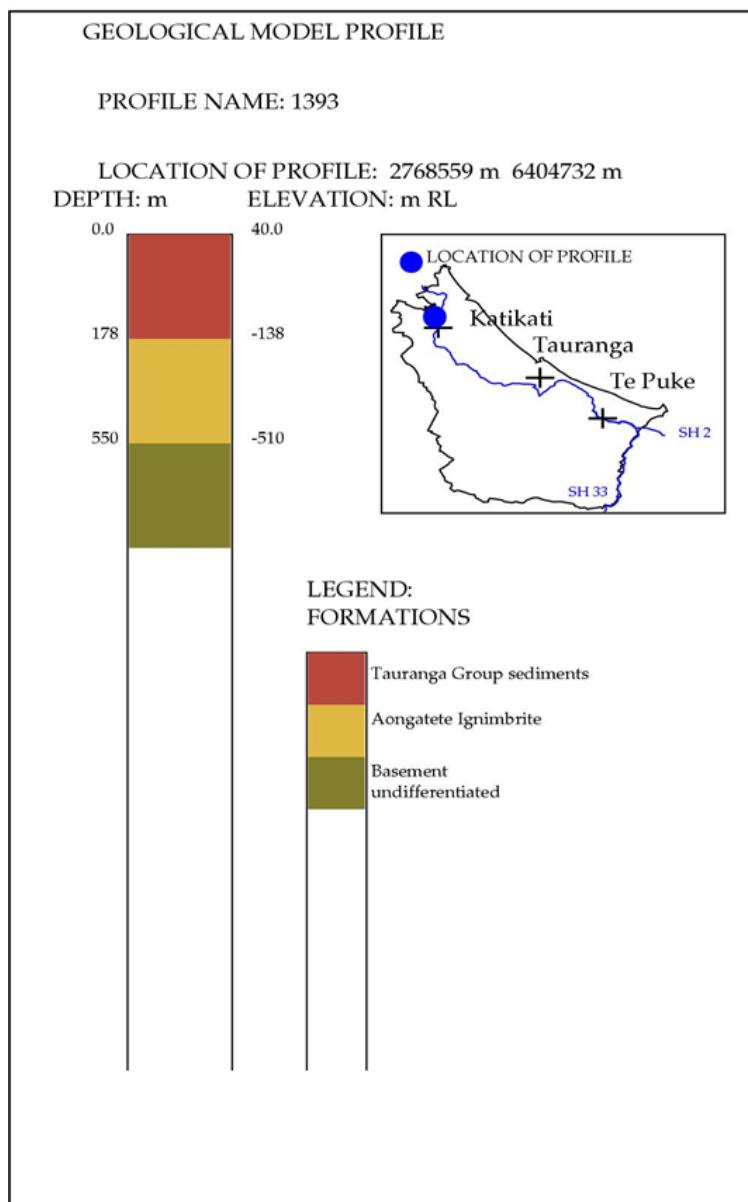


Bore 1386 Edited data

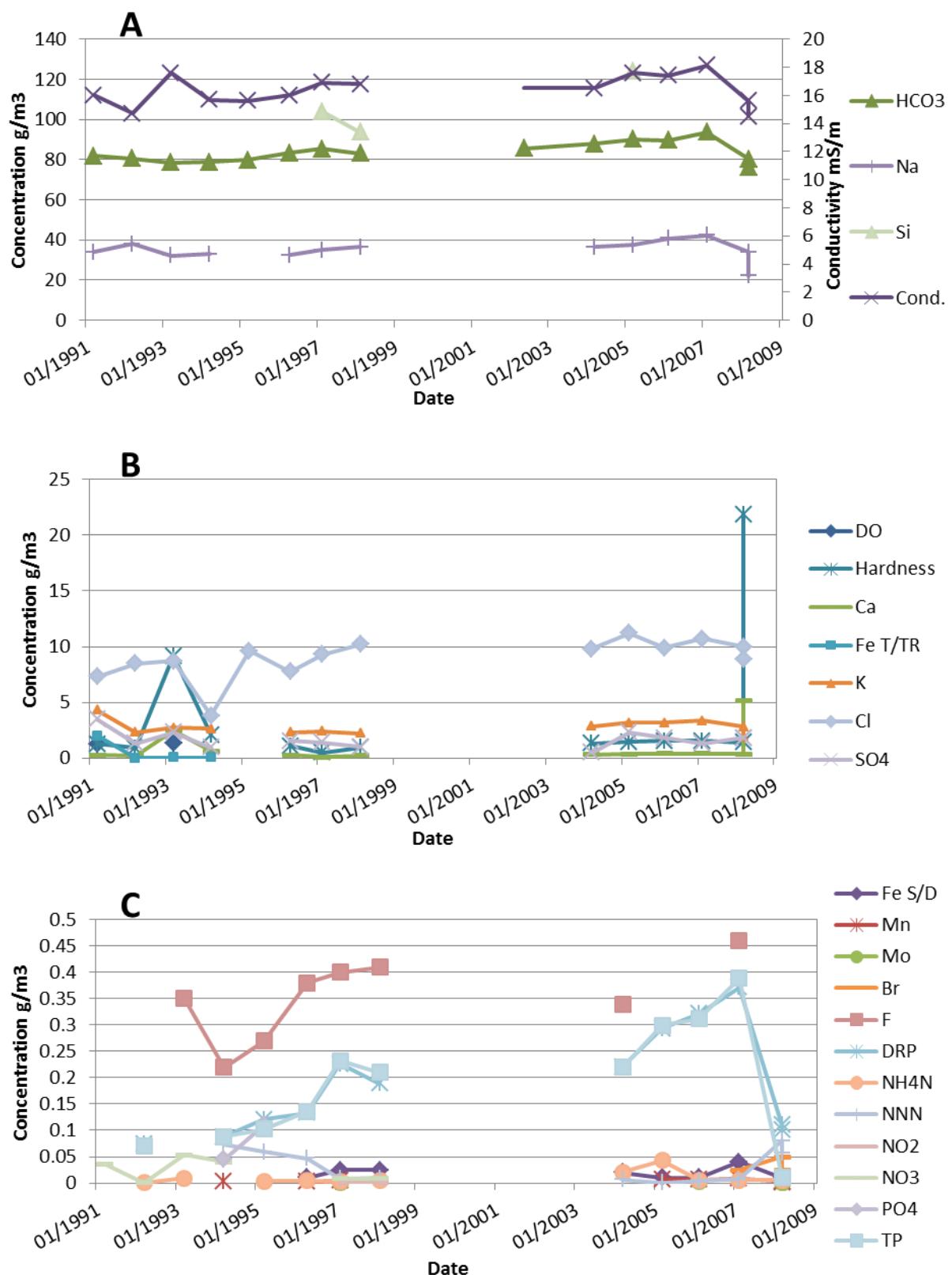


| Bore 1393 Information | | | |
|-----------------------|---------------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 326.2 |
| Name | Babington | Casing Depth (m) | 247.5 |
| Bore use | Irrigation/domestic | Screen/open hole | Unknown |
| Easting | 276 8559 | Temperature | 41°C |
| Northing | 640 4732 | Catchment | WAI 1 zone |
| Bore log | Complete | Aquifer | Aongatete (WAI) |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2008 | LabStar: BOP180017 |

Bore 1393 geological profile (EBOF)

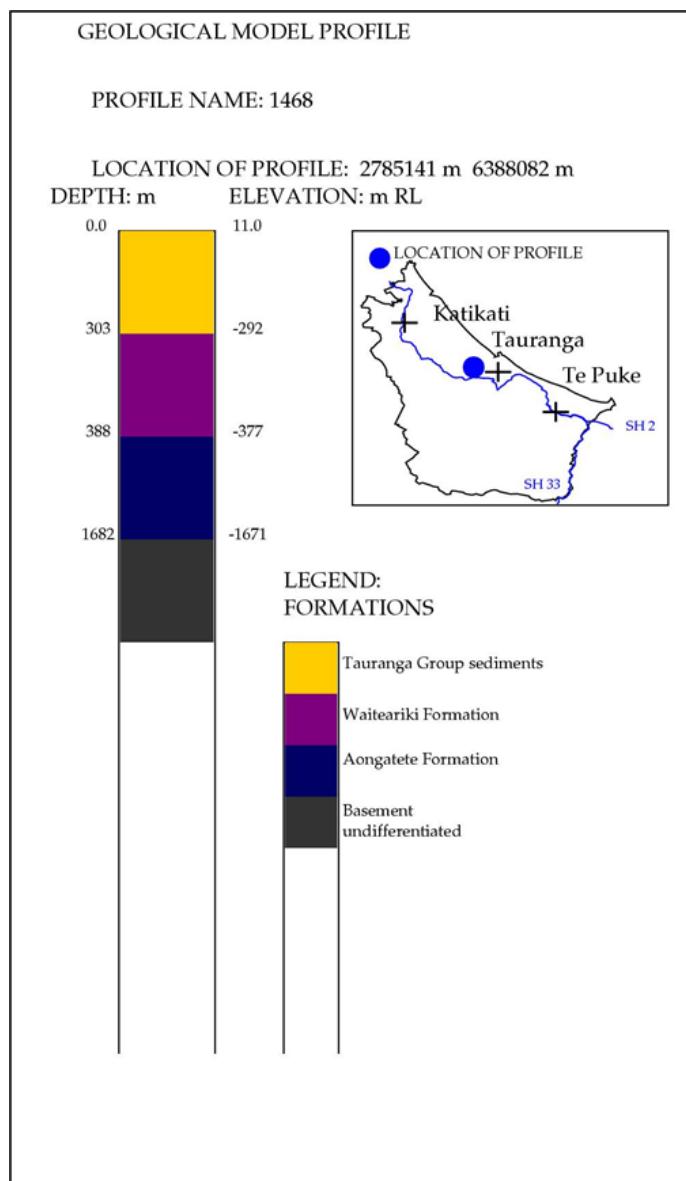


Bore 1393 water quality



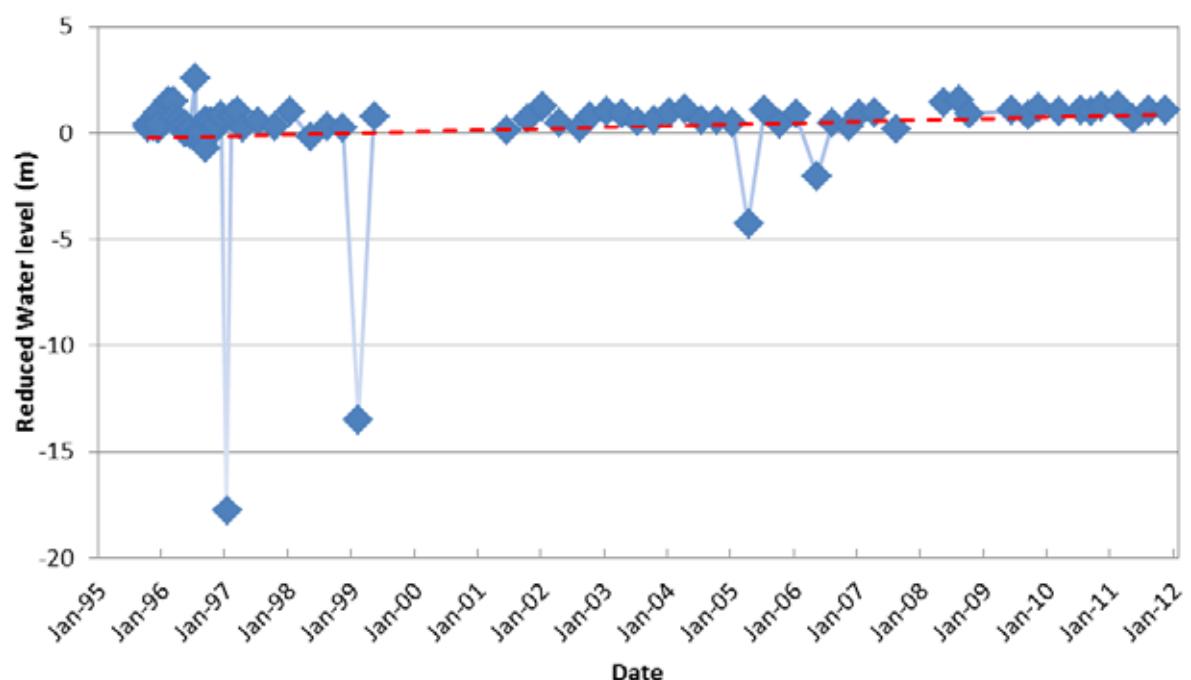
| Bore 1468 Information | | | |
|-----------------------|------------------|------------------|----------------------------|
| Monitoring type | Water level | Depth (m) | 420.6 |
| Name | Haddad | Casing Depth (m) | 234.6 |
| Bore use | Domestic heating | Screen/open hole | Open hole |
| Easting | 278 5141 | Temperature | 44.5 |
| Northing | 638 8082 | Catchment | Otumoetai |
| Bore log | Complete | Aquifer | Aongatete/Waiteariki (WAI) |
| Monitoring period | Water level | 1995 to 2011 | |
| | Water quality | - | |

Bore 1468 geological profile (EBOF)

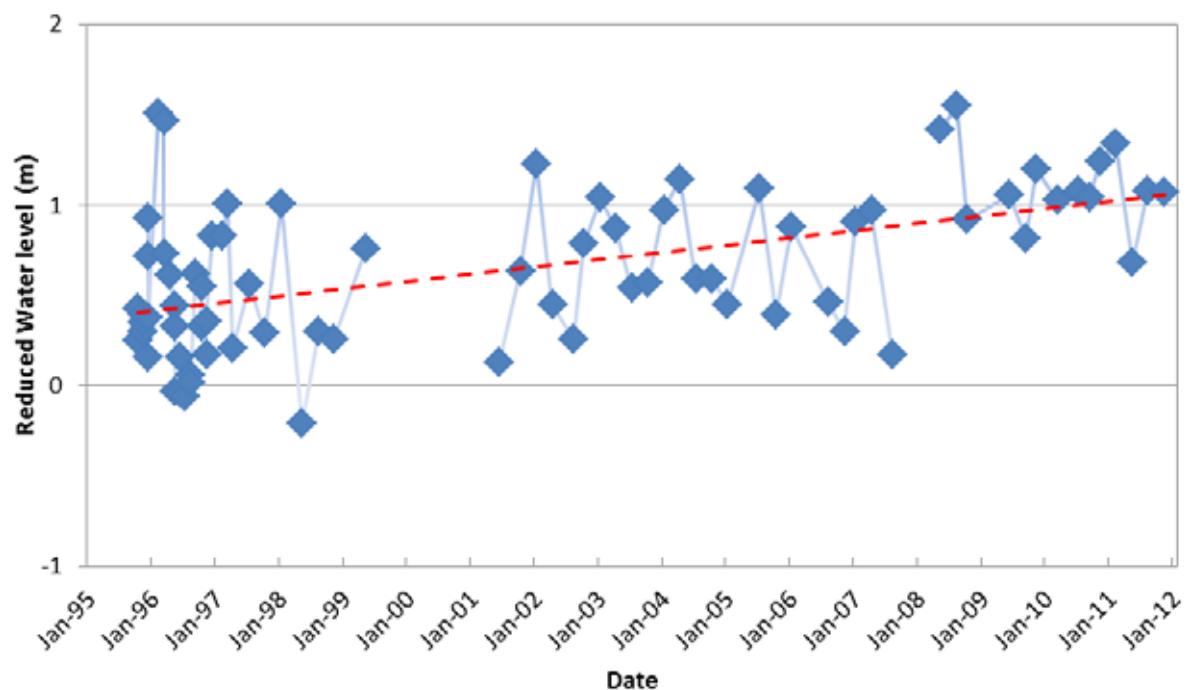


Bore 1468 water level graphs

Bore 1468 Raw data

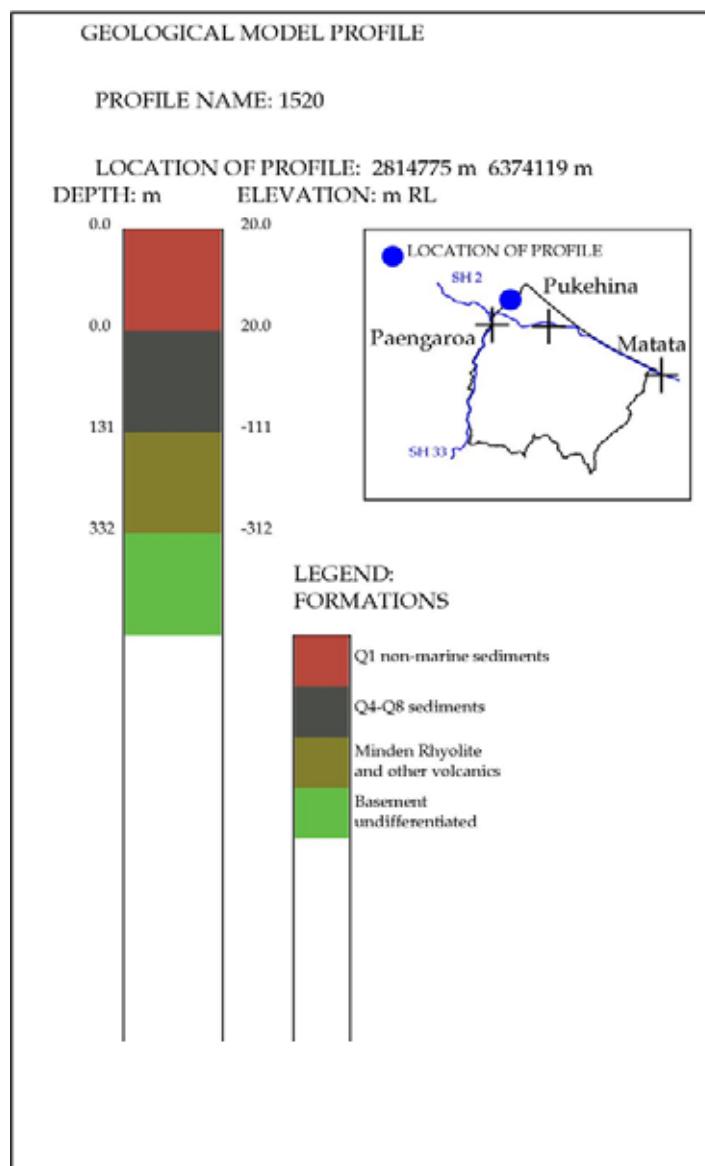


Bore 1468 Edited data

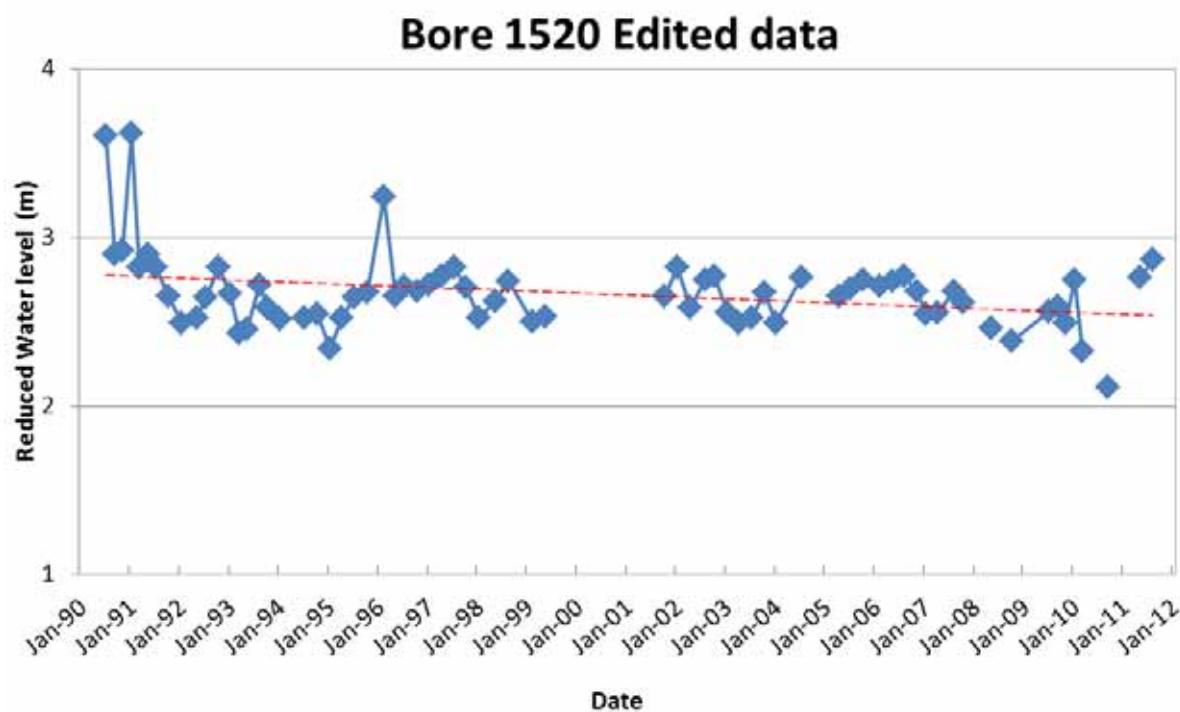
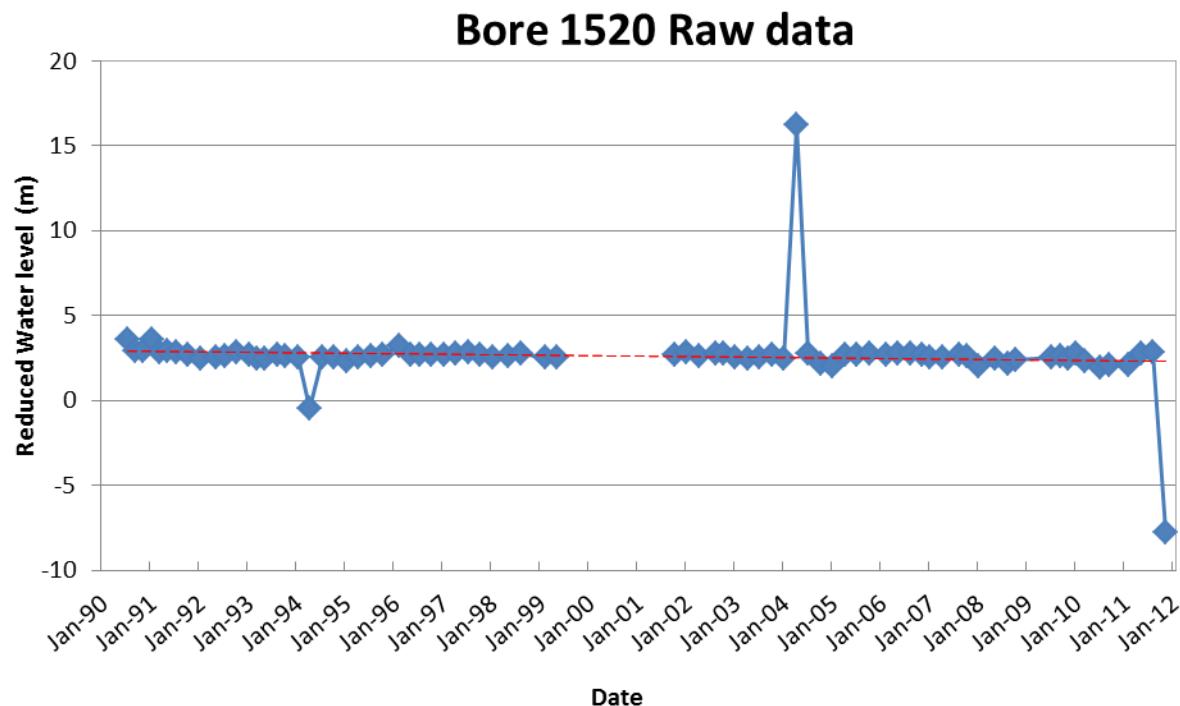


| Bore 1520 Information | | | |
|--------------------------|-----------------------------|-------------------------|---------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 74 |
| Name | Tapsell | Casing Depth (m) | 50 |
| Bore use | Unknown | Screen/open hole | Screened |
| Easting | 281 4775 | Temperature | 21.9°C |
| Northing | 637 4119 | Catchment | Kaikokopu |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1991 to 2011 | LabStar: BOP180036 |

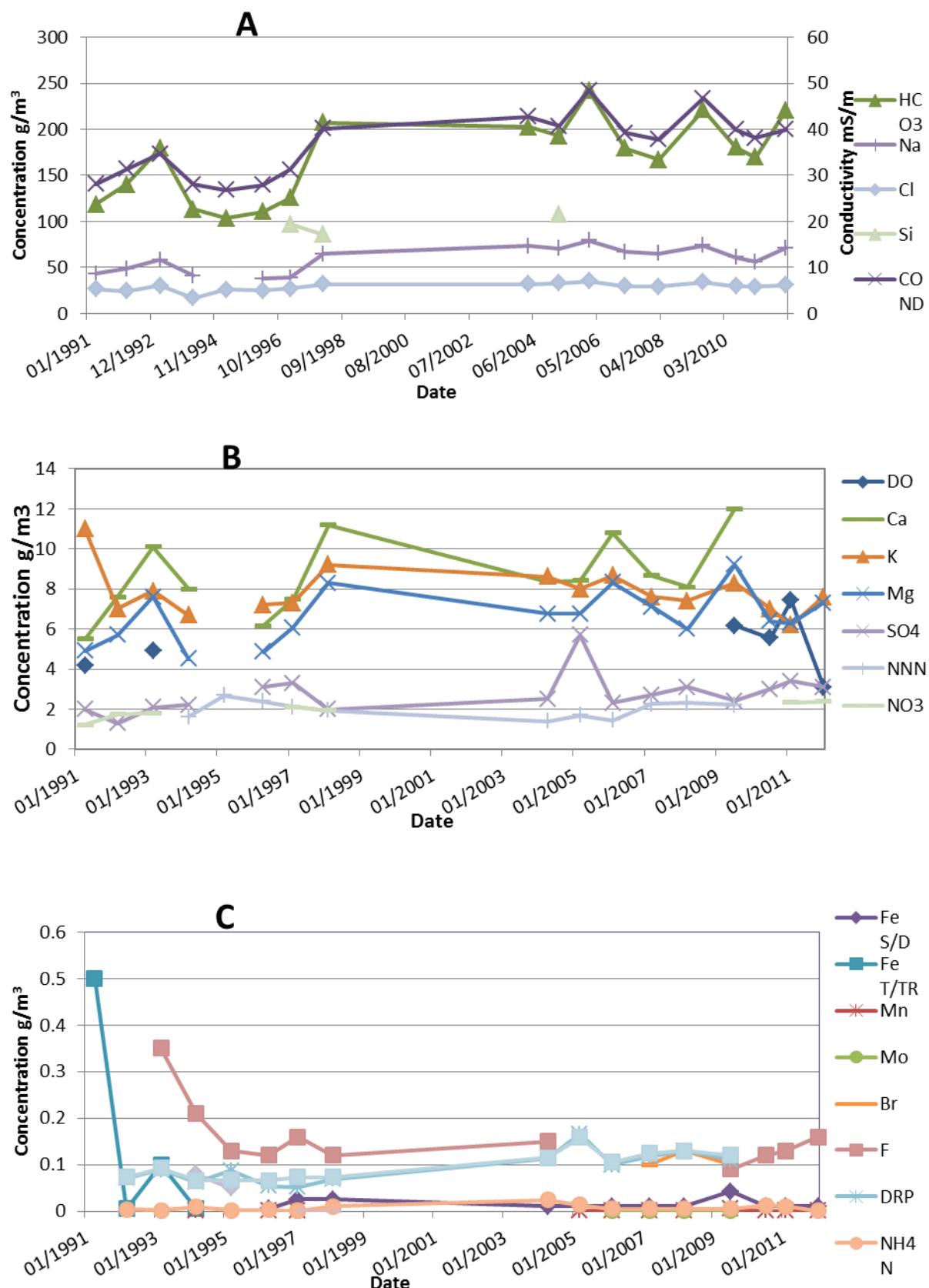
Bore 1520 geological profile (EBOF)



Bore 1520 water level graphs

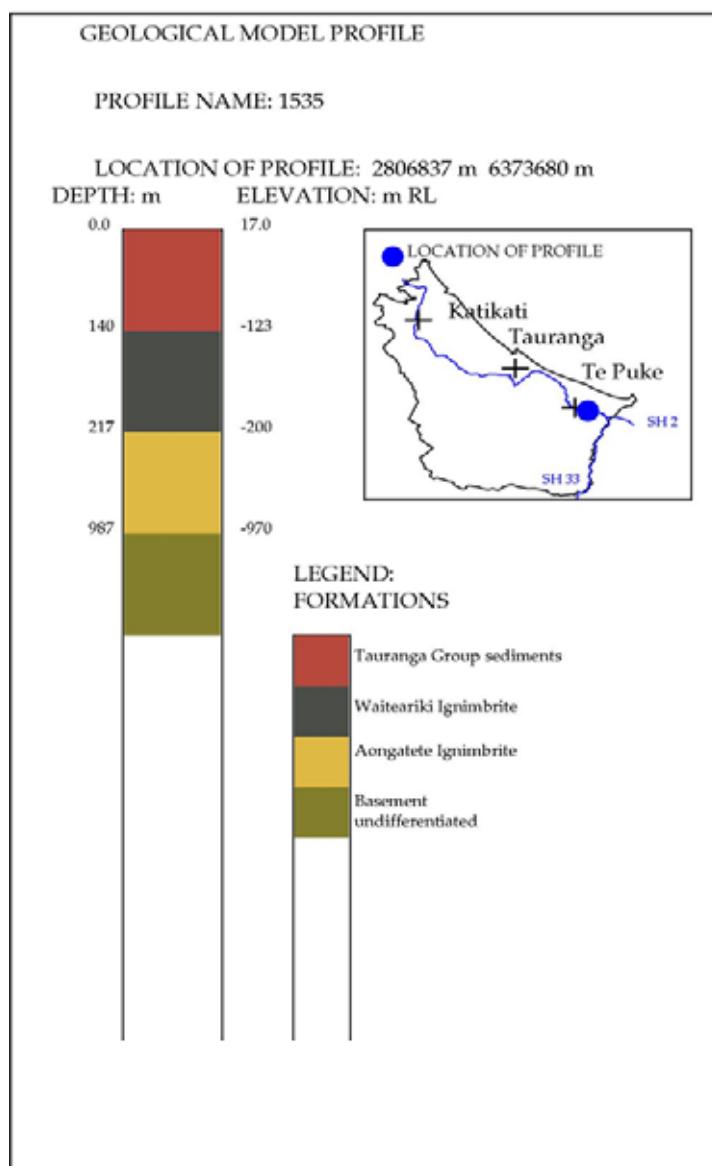


Bore 1520 water quality



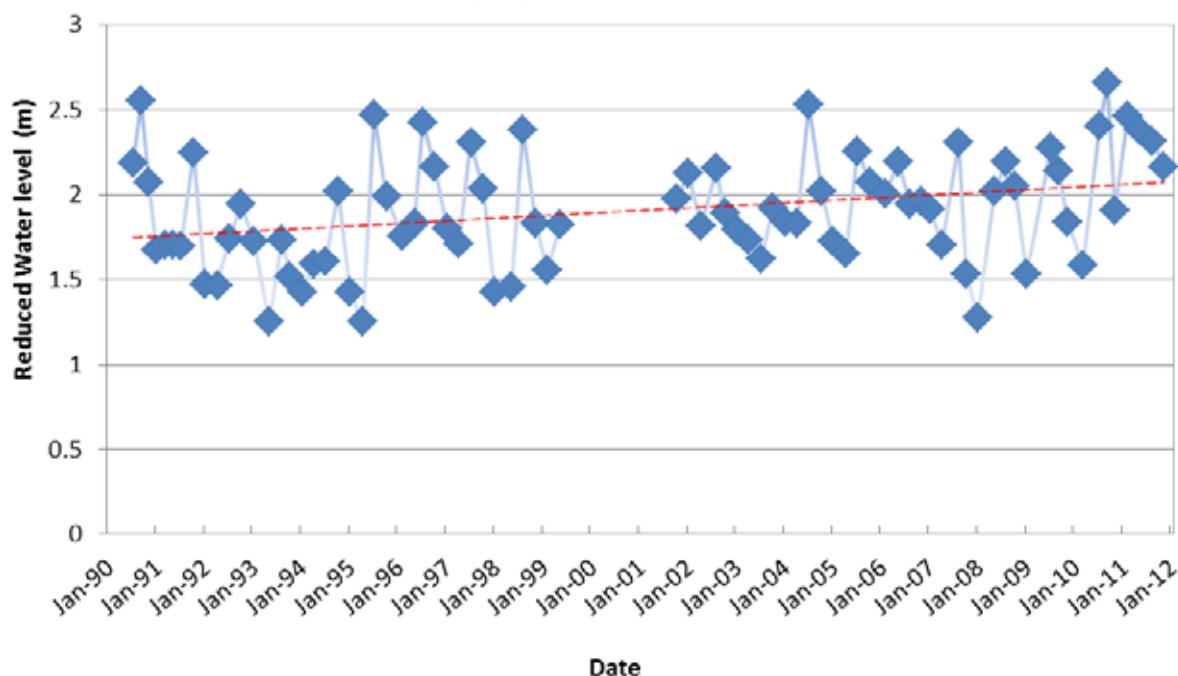
| Bore 1535 Information | | | |
|-----------------------|----------------------------------|------------------|--------------------|
| Monitoring type | Water level | Depth (m) | 32 |
| Name | Tuhurangi Marae Ladies Committee | Casing Depth (m) | 19.81 |
| Bore use | Unknown | Screen/open hole | Screened |
| Easting | 280 6837 | Temperature | Unknown |
| Northing | 637 3680 | Catchment | Lower Kaituna |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | - | |

Bore 1535 geological profile (EBOF)

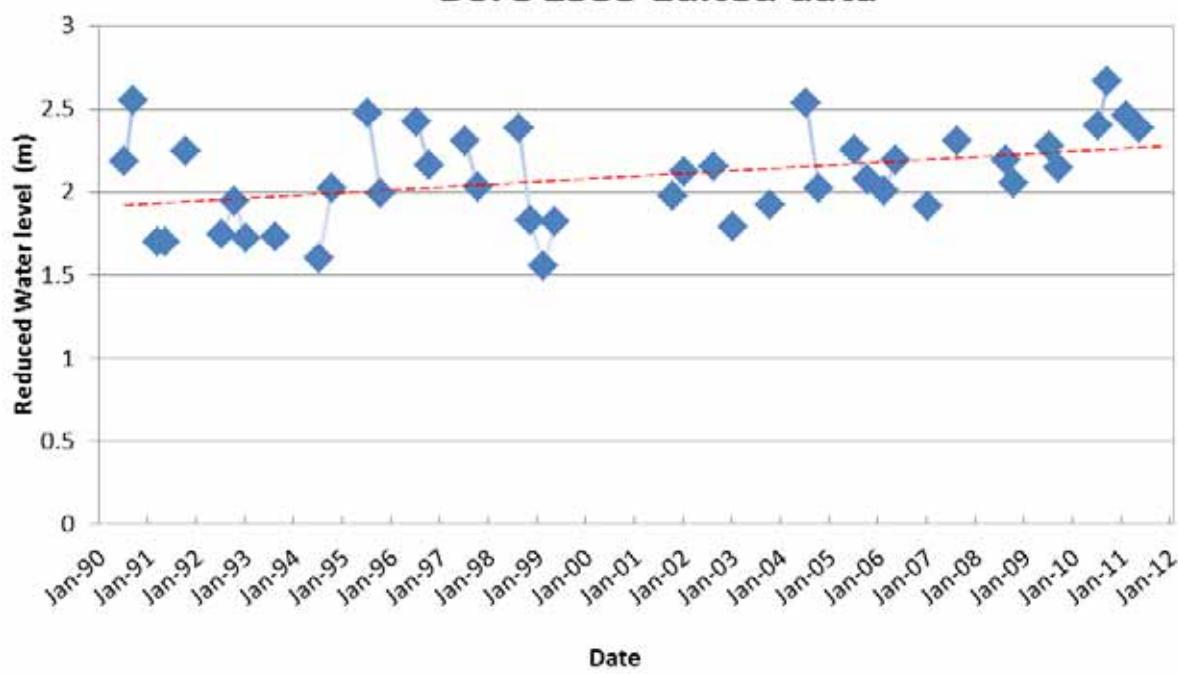


Bore 1535 water level graphs

Bore 1535 Raw data

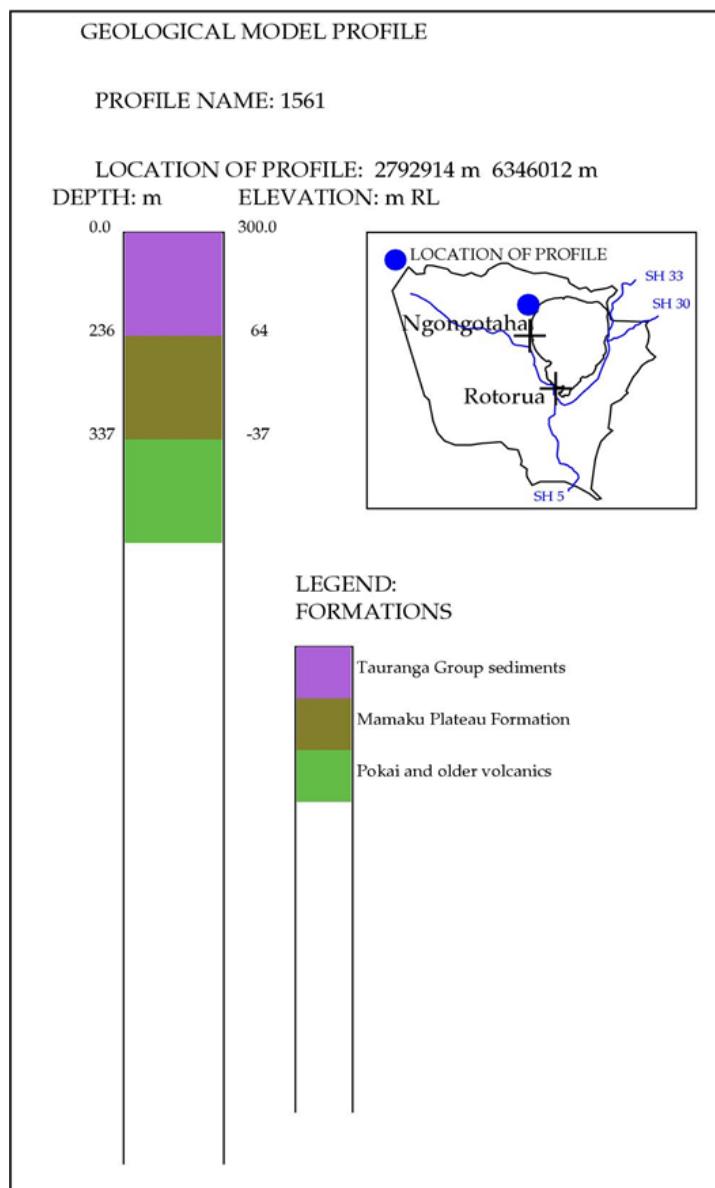


Bore 1535 Edited data

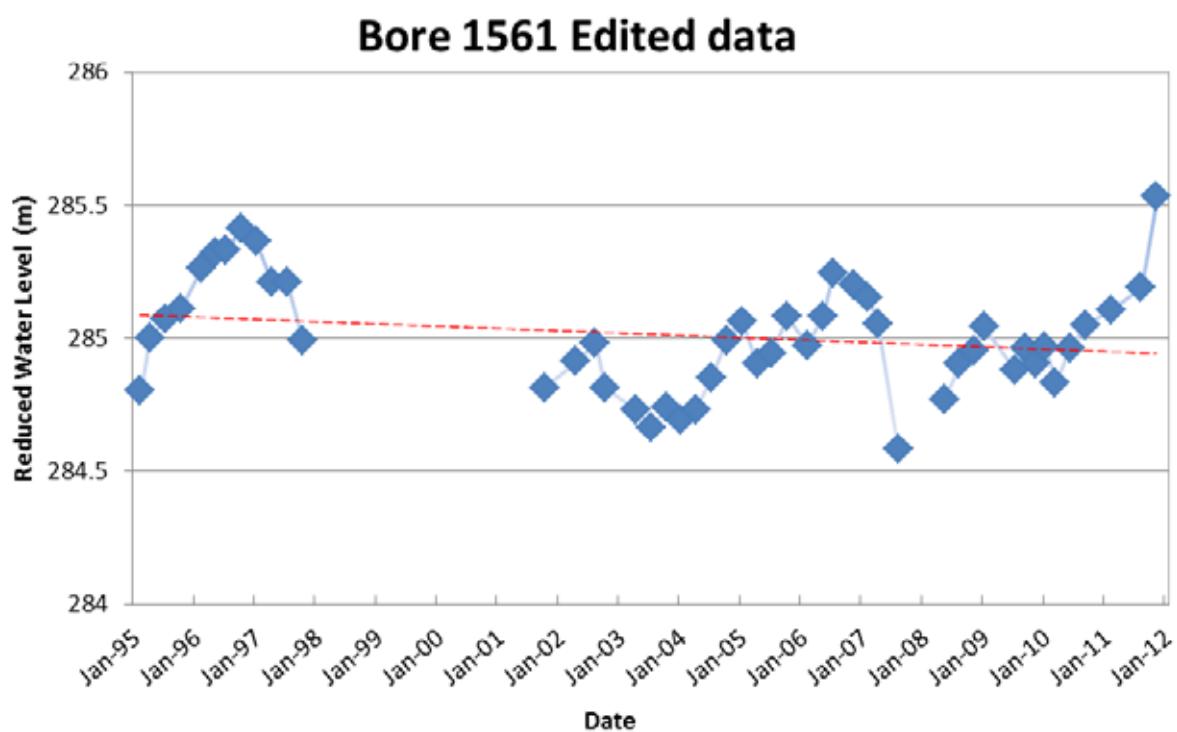
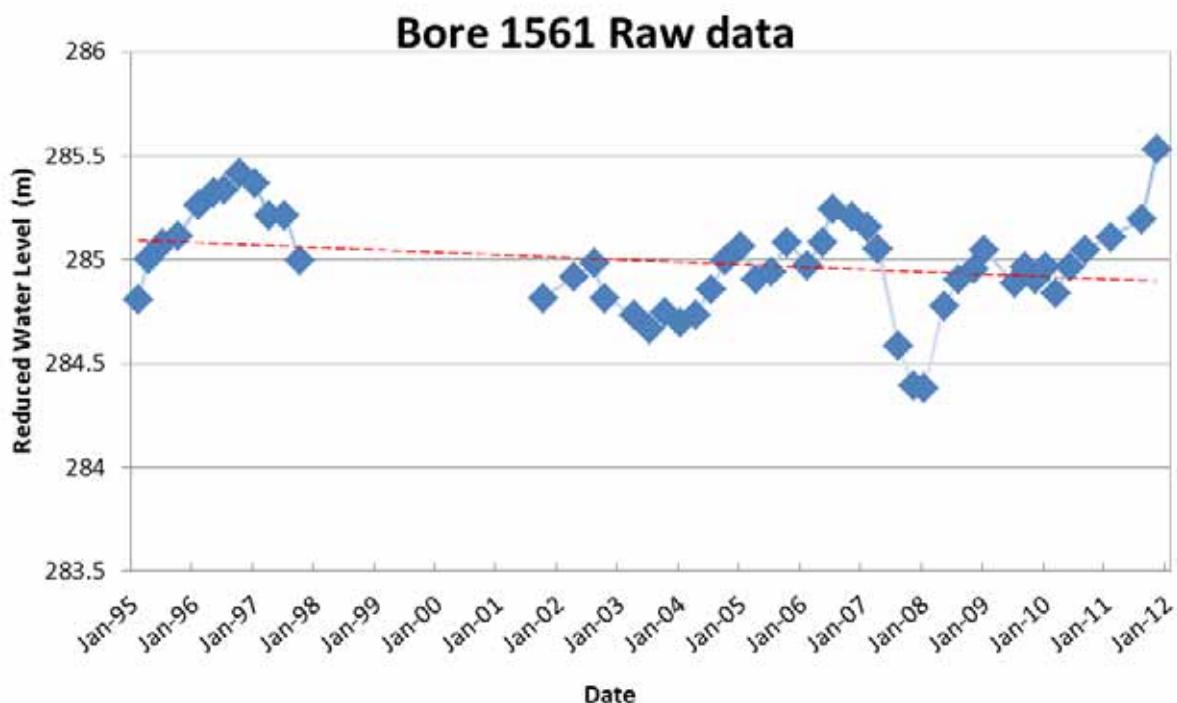


| Bore 1561 Information | | | |
|-----------------------|-----------------------------|------------------|-----------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 73.1 |
| Name | Dunroamin Nursery | Casing Depth (m) | 63 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 279 2914 | Temperature | 12.8 |
| Northing | 634 6012 | Catchment | Awahou Point (Lake Rotorua) |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1995 - 2011 | |
| | Water quality | 1991 - 2011 | LabStar: BOP180049 |

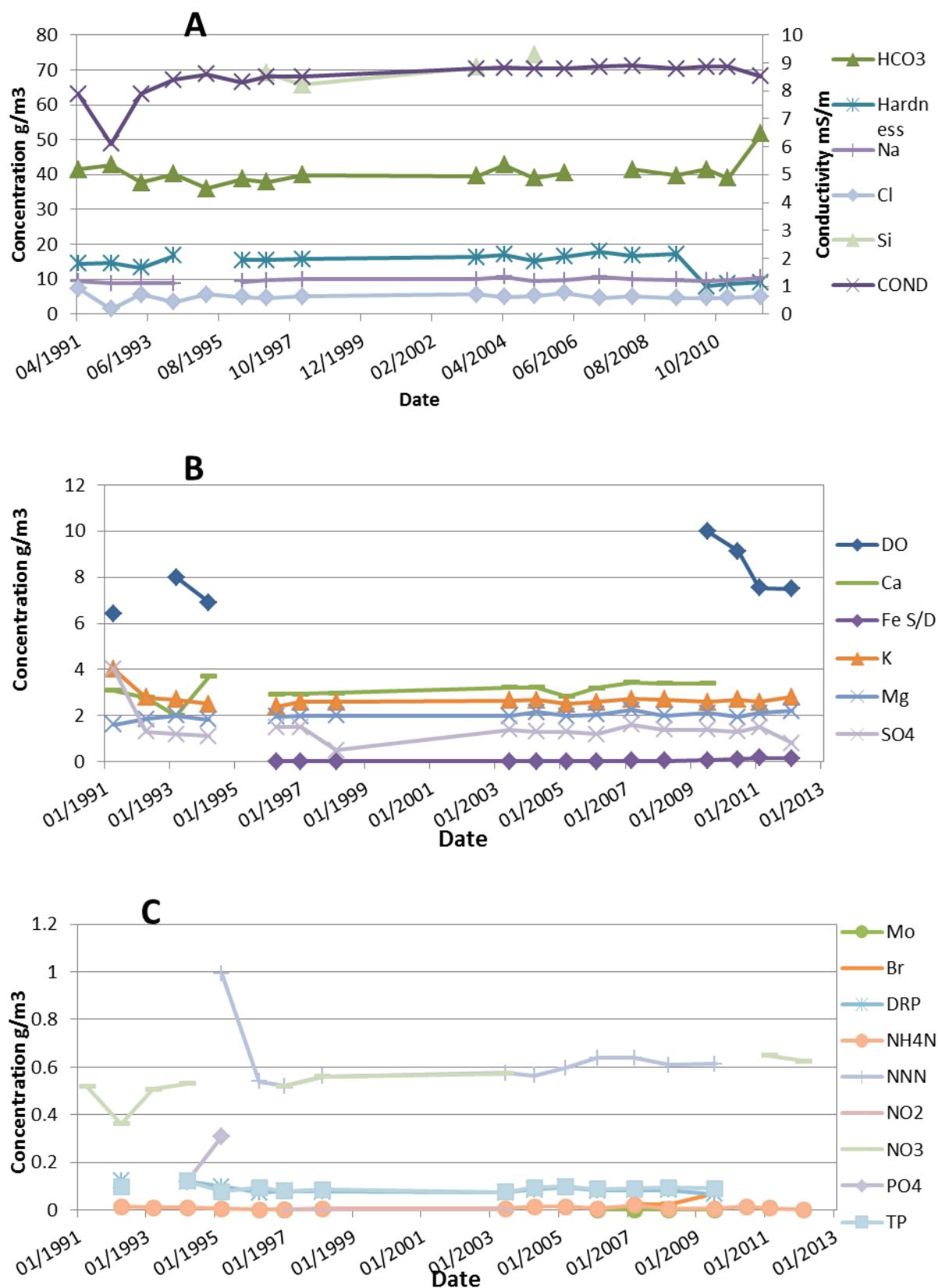
Bore 1561 geological profile (EBOF)



Bore 1561 water level graphs

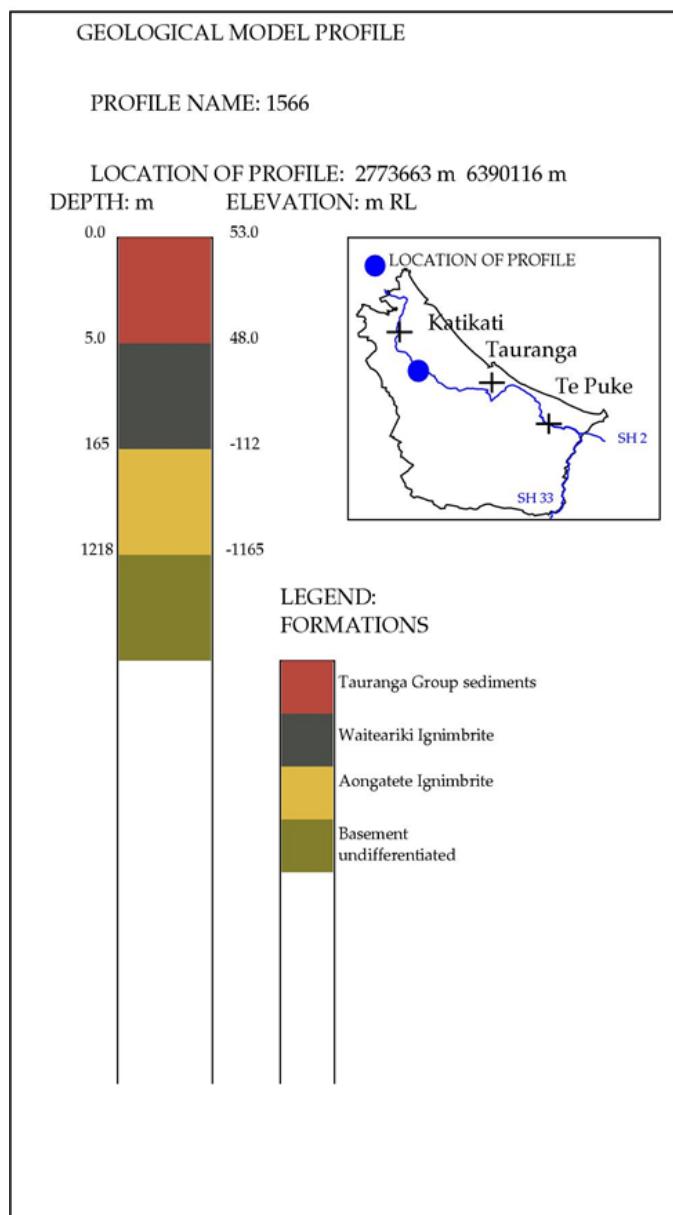


Bore 1561 water quality graphs

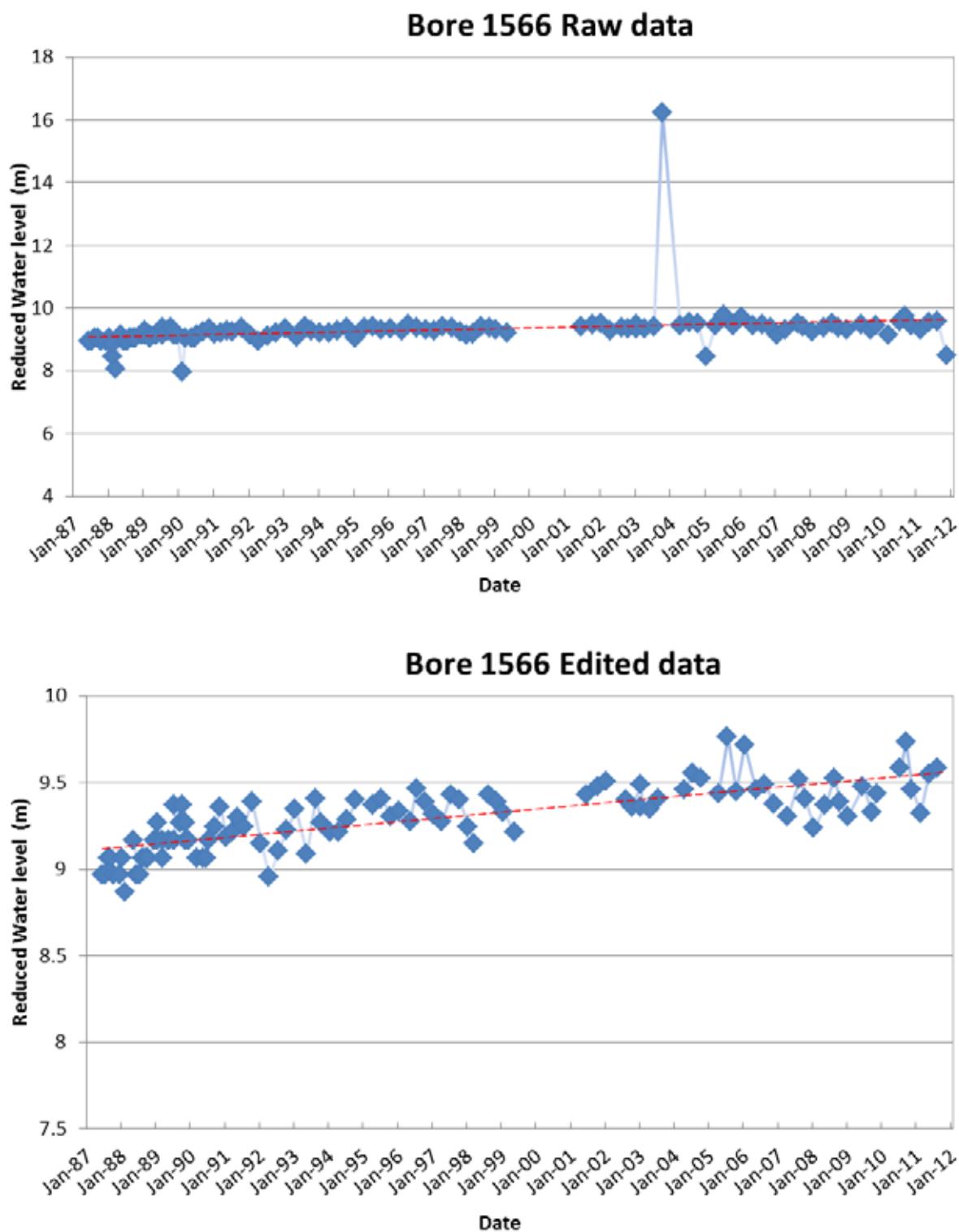


| Bore 1566 Information | | | |
|-----------------------|-------------------|------------------|----------------------------|
| Monitoring type | Water level | Depth (m) | 163.1 |
| Name | Turntable Orchard | Casing Depth (m) | 85 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 2773663 | Temperature | Unknown |
| Northing | 6390116 | Catchment | Apata |
| Bore log | Complete | Aquifer | Waiteariki/Aongatete (WAI) |
| Monitoring period | Water level | 1987 to 2011 | |
| | Water quality | | |

Bore 1566 geological profile (EBOF)

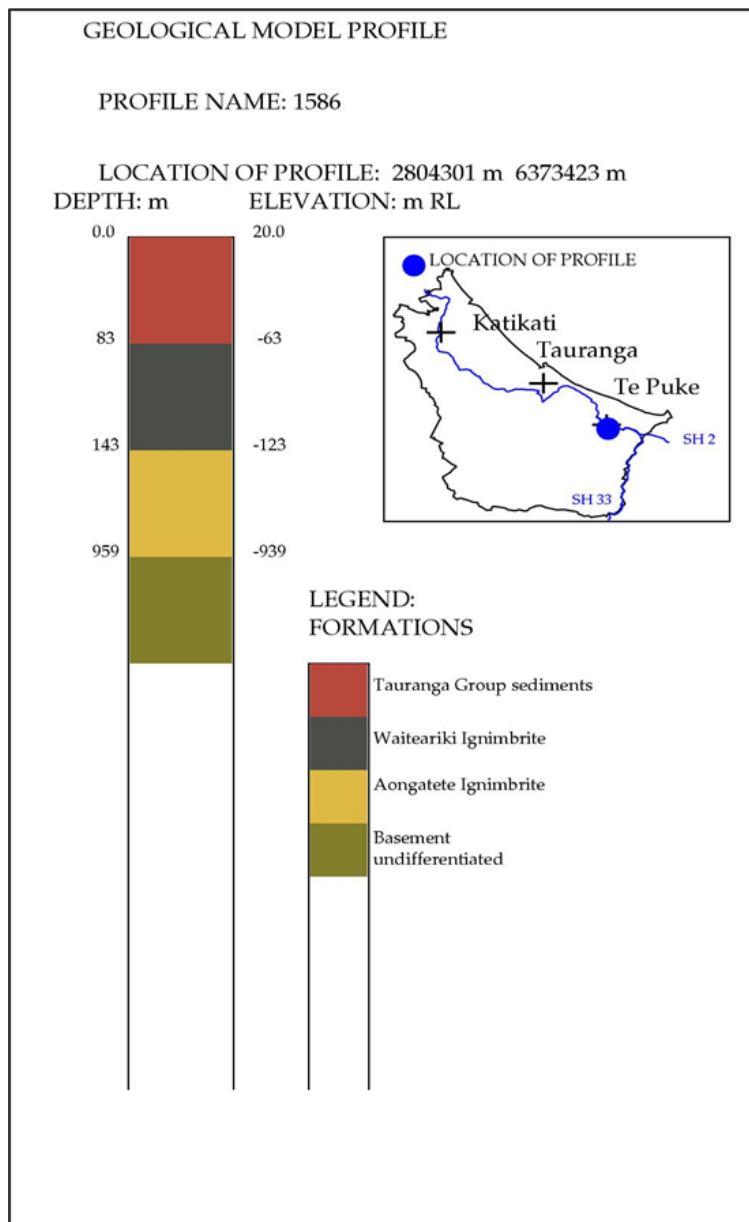


Bore 1566 water level graphs

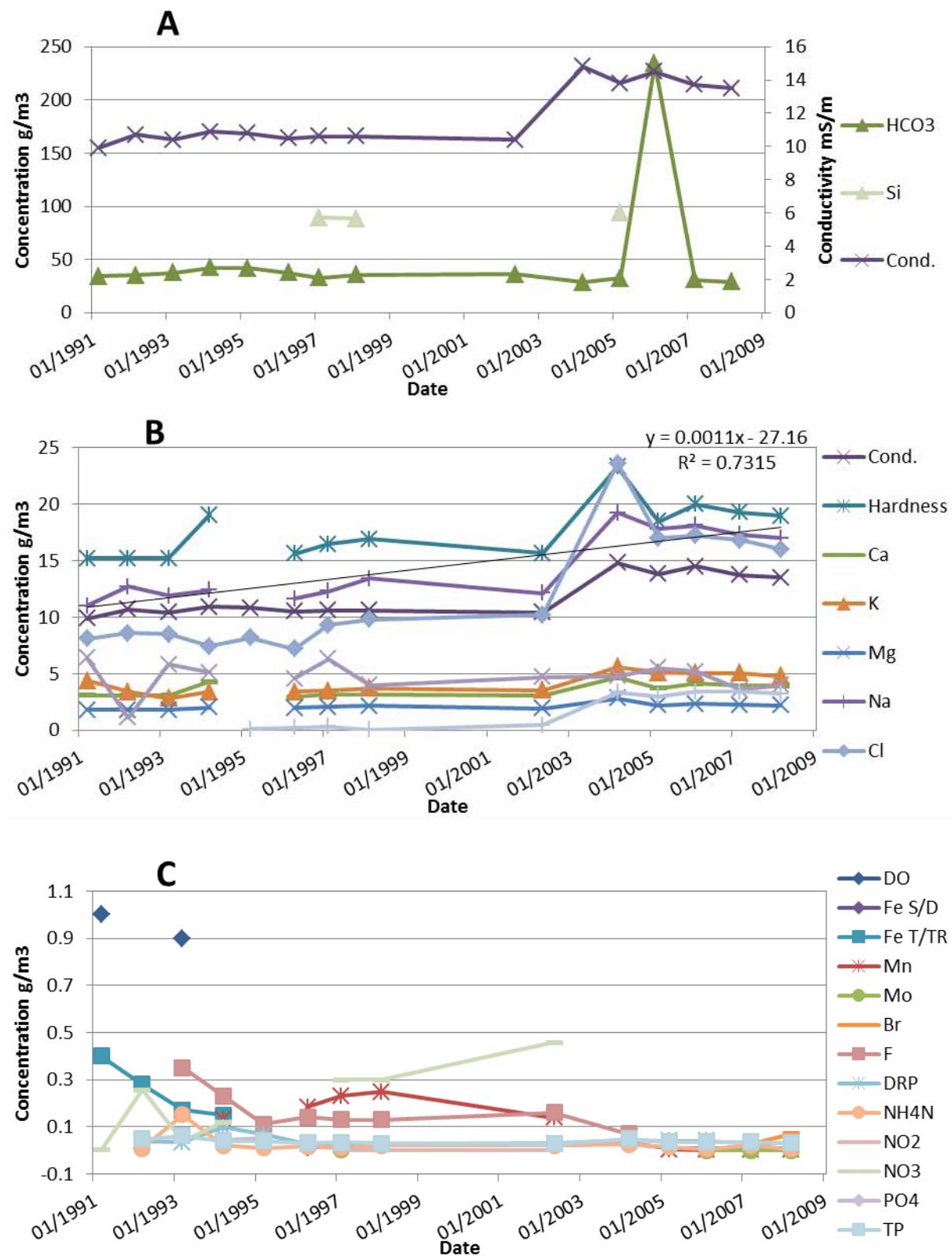


| Bore 1586 Information | | | |
|-----------------------|---------------|------------------|------------------------|
| Monitoring type | Water quality | Depth (m) | 30.5 |
| Name | Yates | Casing Depth (m) | 28 |
| Bore use | Irrigation | Screen/open hole | From 27 to 30 |
| Easting | 280 4301 | Temperature | 17°C |
| Northing | 637 3423 | Catchment | Lower Kaituna (Plains) |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | | |
| | Water quality | 1994 to 2011 | LabStar: BOP180011 |

Bore 1586 geological profile (EBOF)

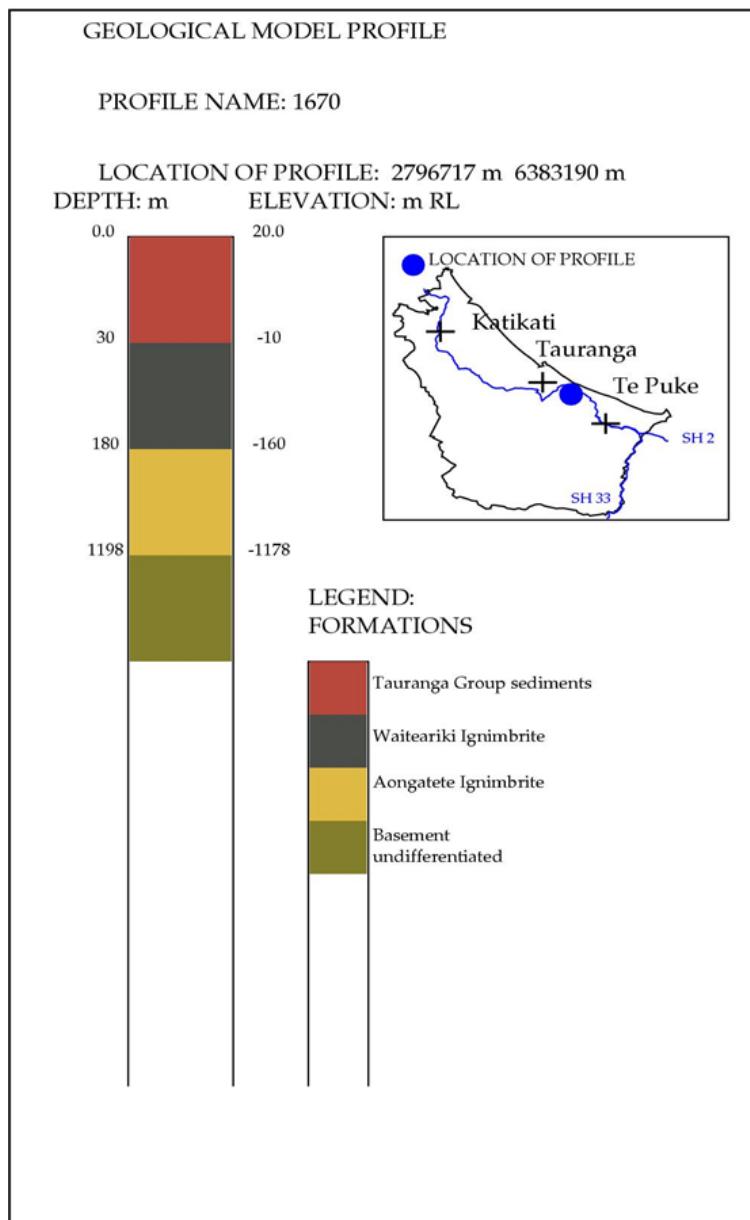


Bore 1586 water quality graphs

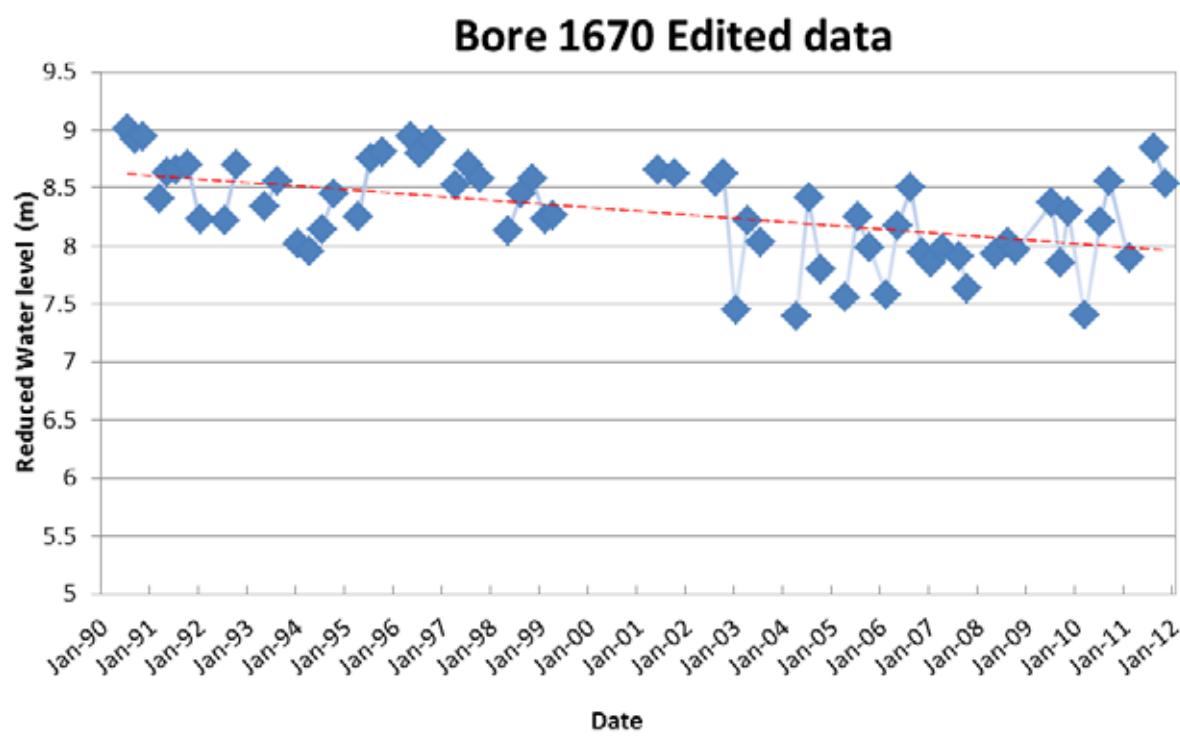
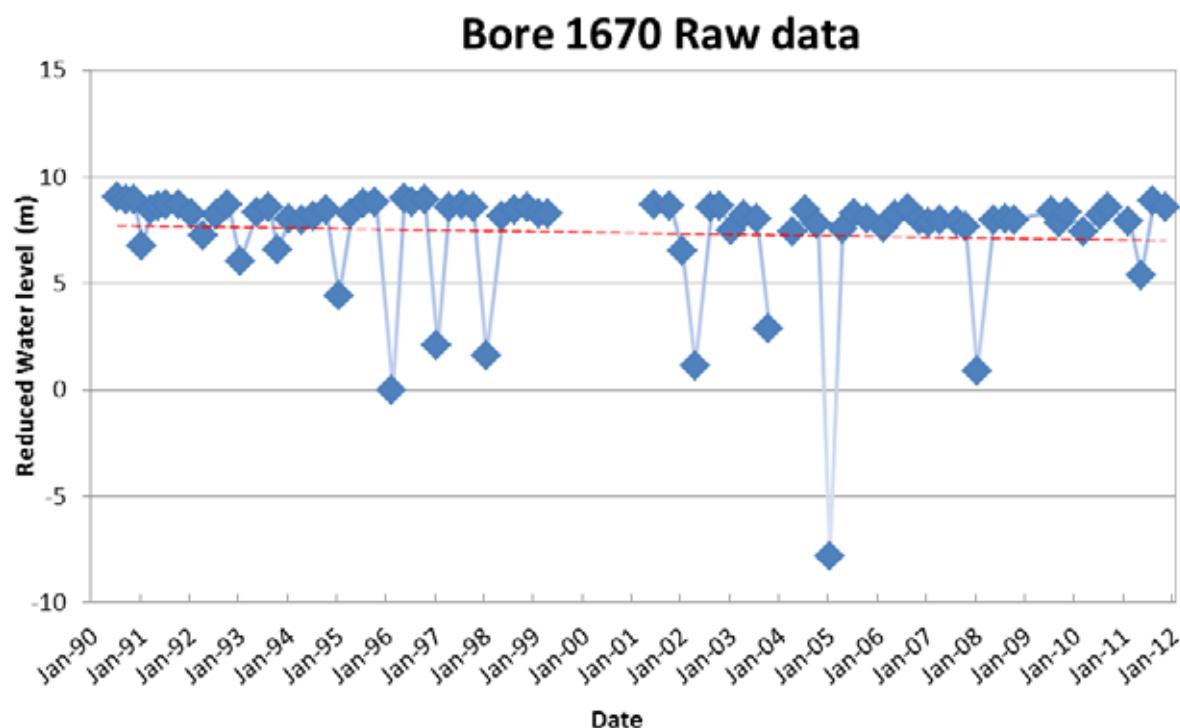


| Bore 1670 Information | | | |
|-----------------------|---------------------|------------------|------------------|
| Monitoring type | Water level | Depth (m) | 103.6 |
| Name | Te Hua Whenua Trust | Casing Depth (m) | 84.4 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 279 6717 | Temperature | Unknown |
| Northing | 638 3190 | Catchment | WAI 2 zone |
| Bore log | Partial | Aquifer | Waiteariki (WAI) |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | | |

Bore 1670 geological profile (EBOF)

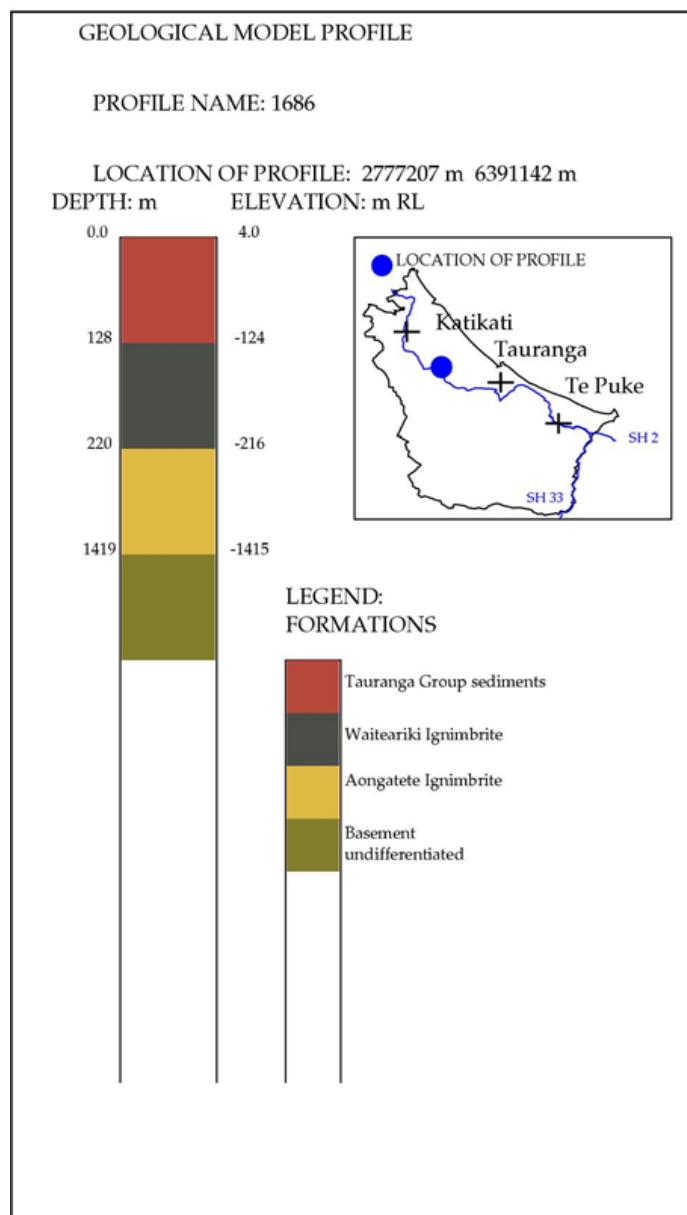


Bore 1670 water level graphs

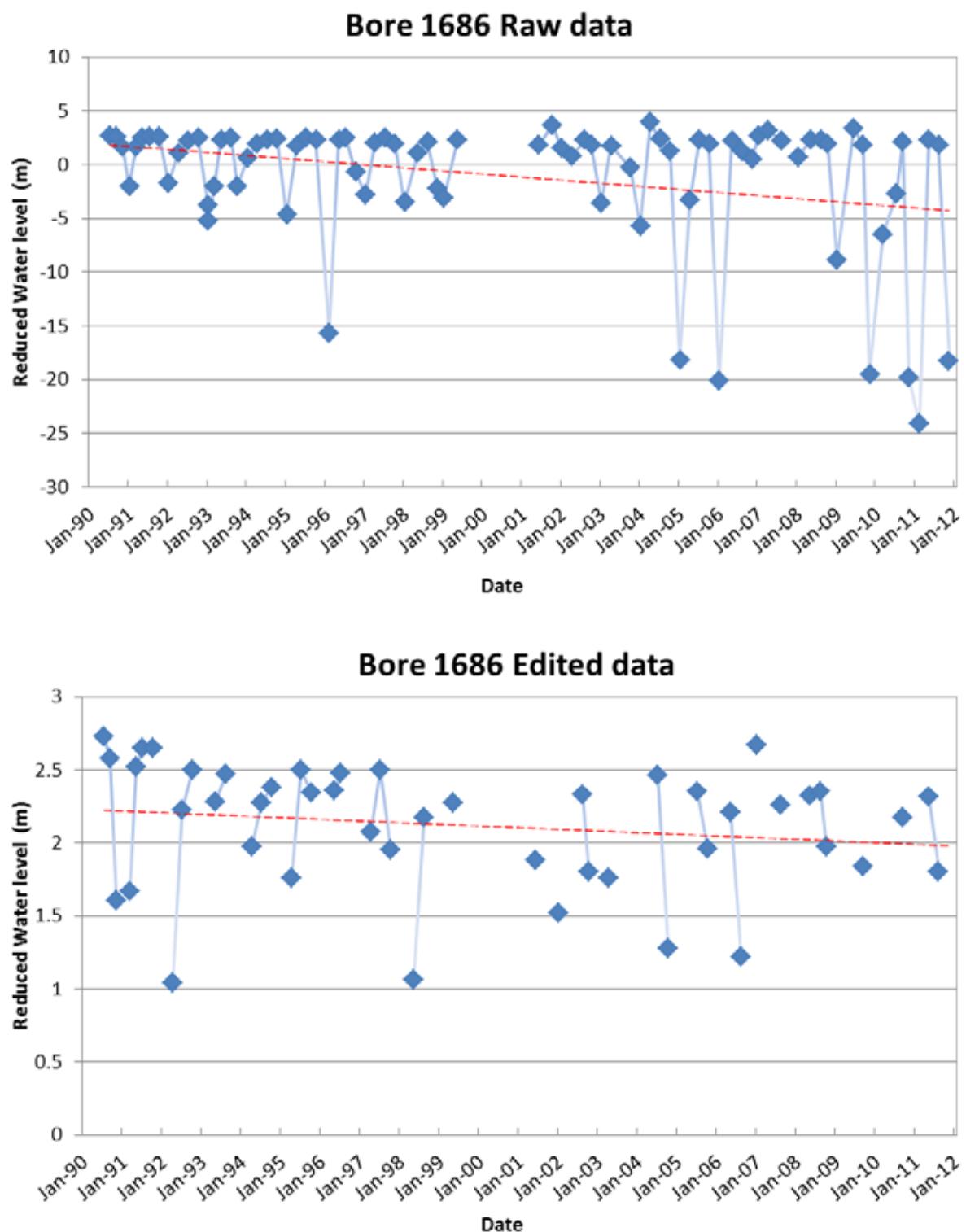


| Bore 1686 Information | | | |
|--------------------------|-----------------------------|-------------------------|---------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 182.9 |
| Name | Western Bay Golf Club | Casing Depth (m) | 111.6 |
| Bore use | Irrigation | Screen/open hole | |
| Easting | 277 7207 | Temperature | 26.7 |
| Northing | 639 1142 | Catchment | Waipapa |
| Bore log | Complete | Aquifer | Waiteariki (WAI) |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1991 to 2011 | LabStar: BOP180027 |

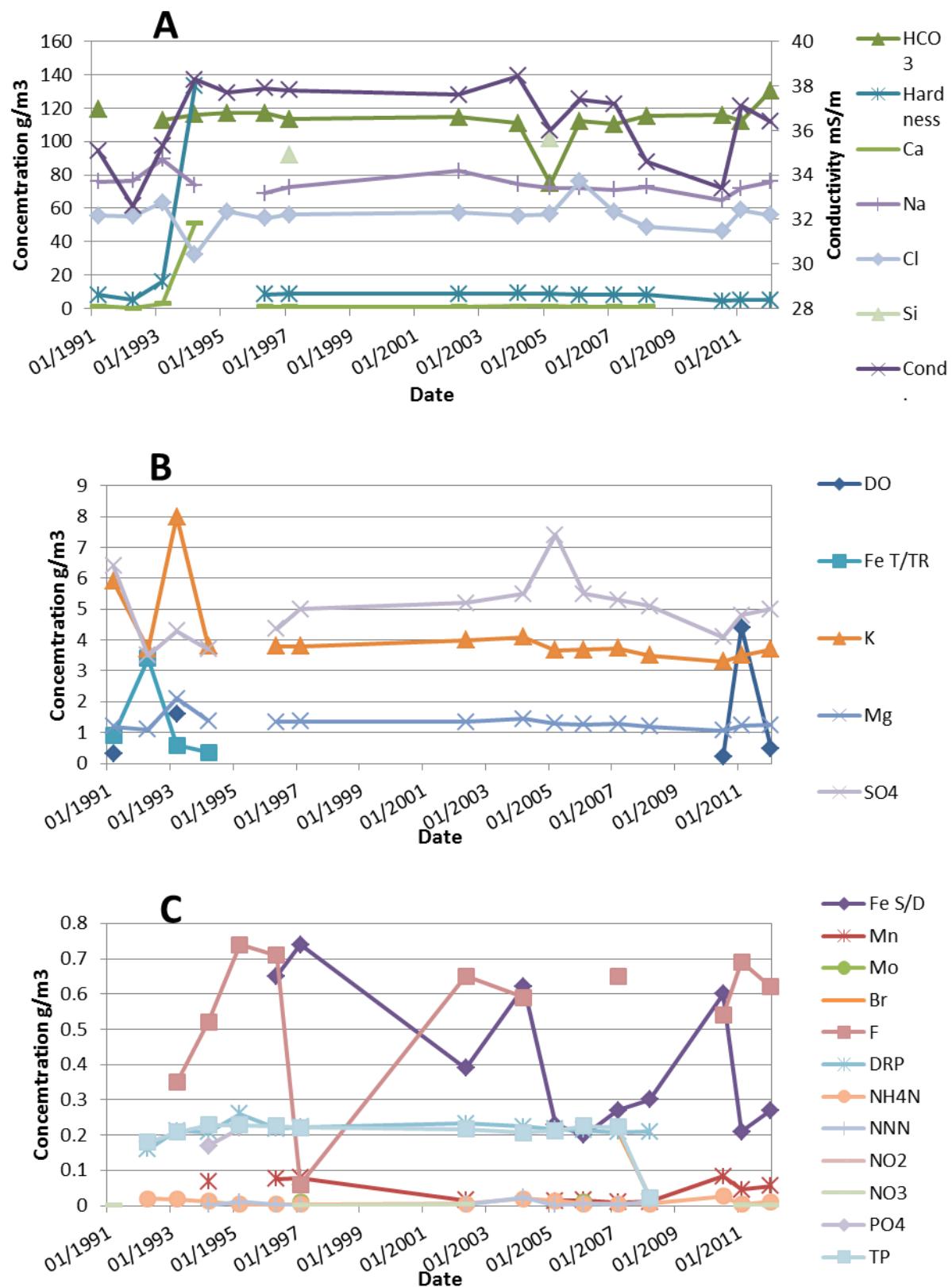
Bore 1686 geological profile (EBOF)



Bore 1686 water level graphs

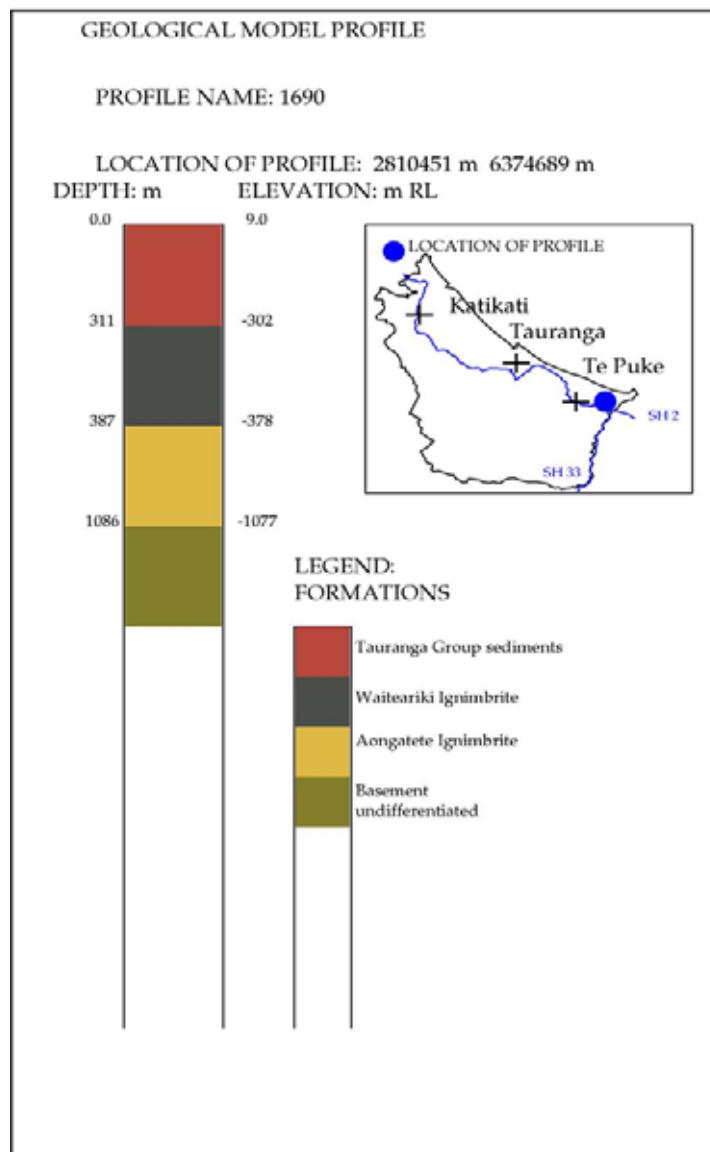


Bore 1686 water quality graphs



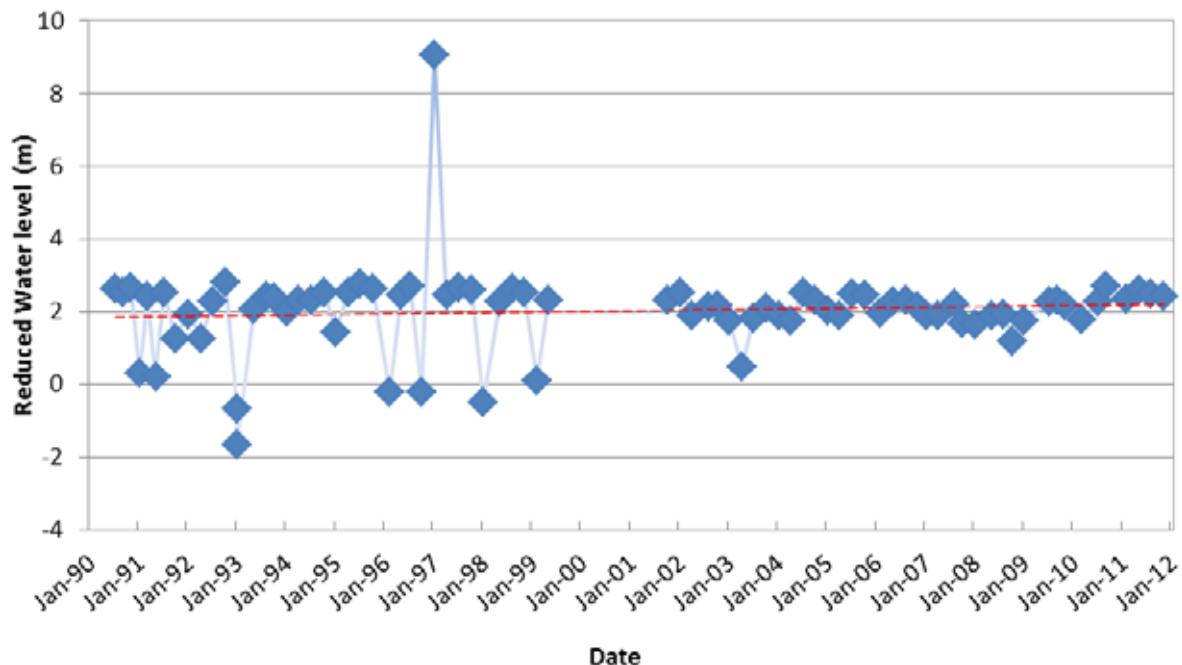
| Bore 1690 Information | | | |
|--------------------------|-----------------------------|-------------------------|---------------------------|
| Monitoring type | Water level & Water quality | Depth (m) | 97.5 |
| Name | Mangatarata orchards | Casing Depth (m) | 72.5 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 281 0451 | Temperature | 26.5°C |
| Northing | 637 4681 | Catchment | Lower Kaituna |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1990 to 2011 | |
| | Water quality | 1991 to 2011 | LabStar: BOP180013 |

Bore 1690 geological profile (EBOF)

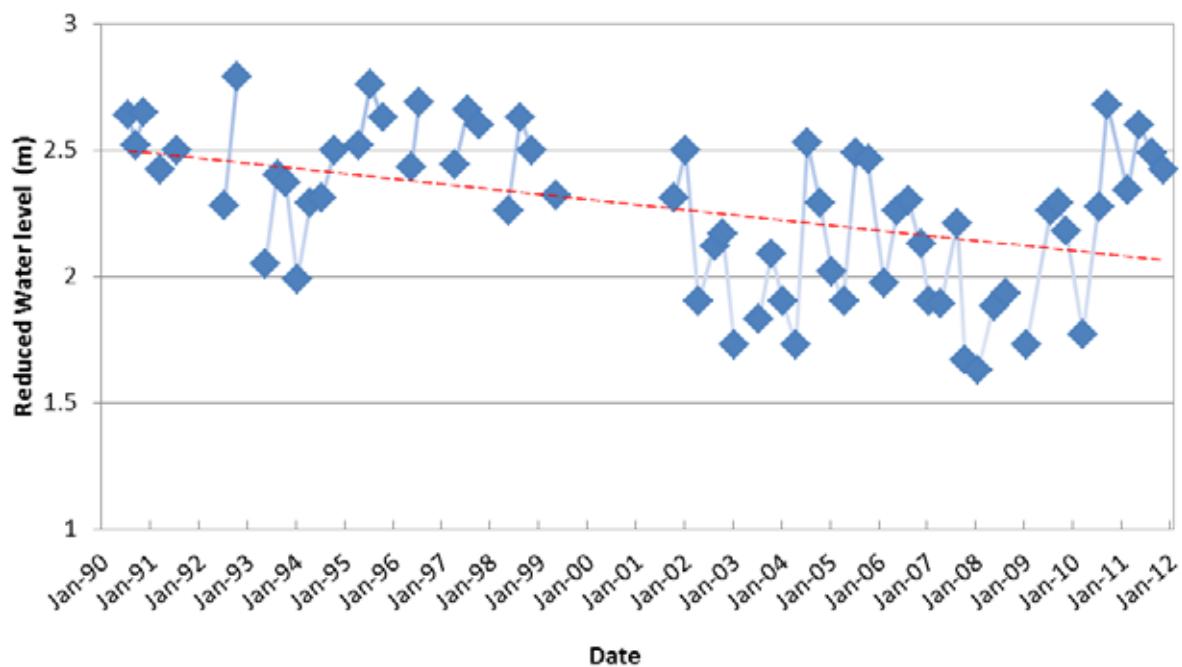


Bore 1690 water level graphs

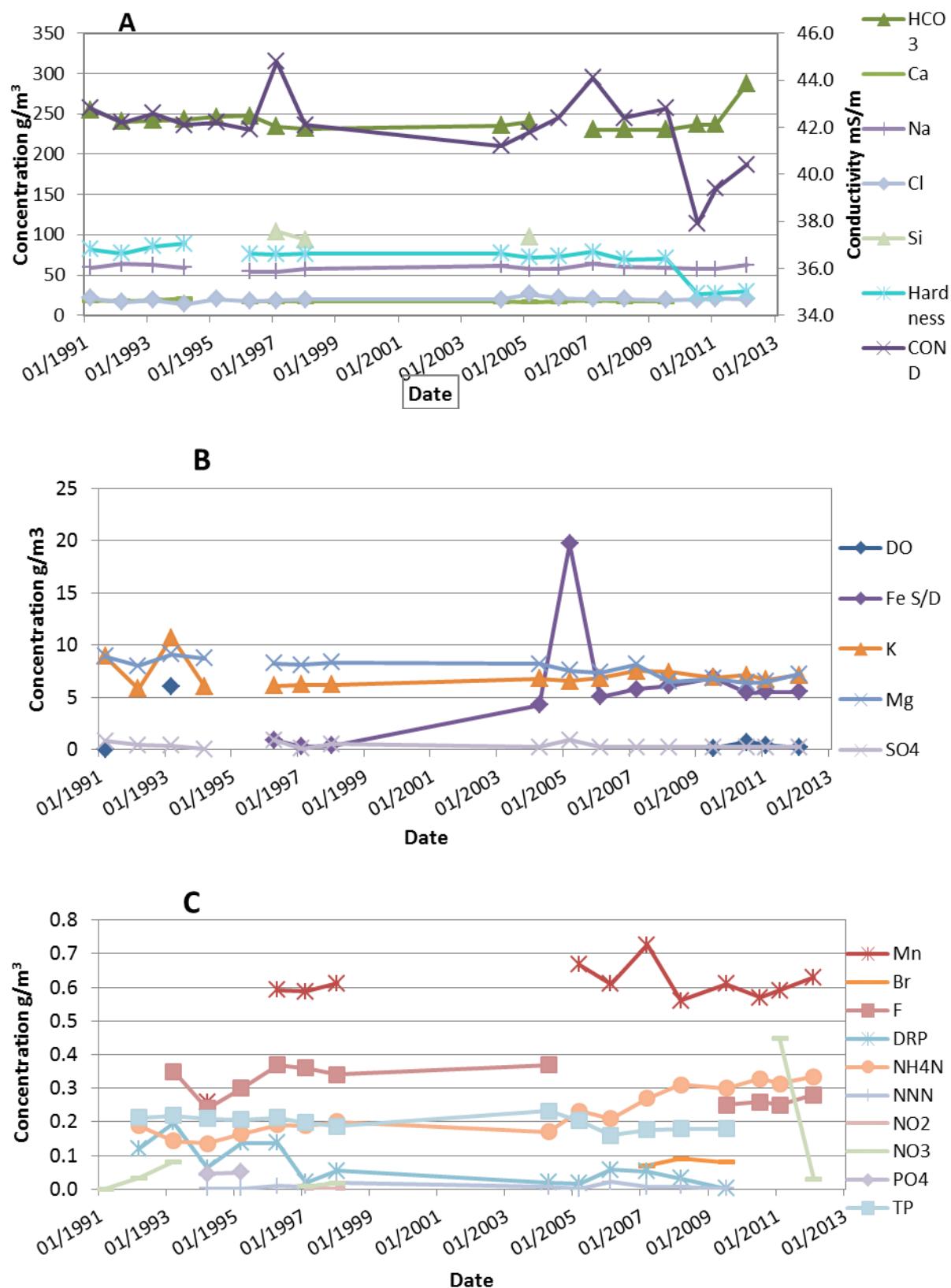
Bore 1690 Raw data



Bore 1690 Edited data

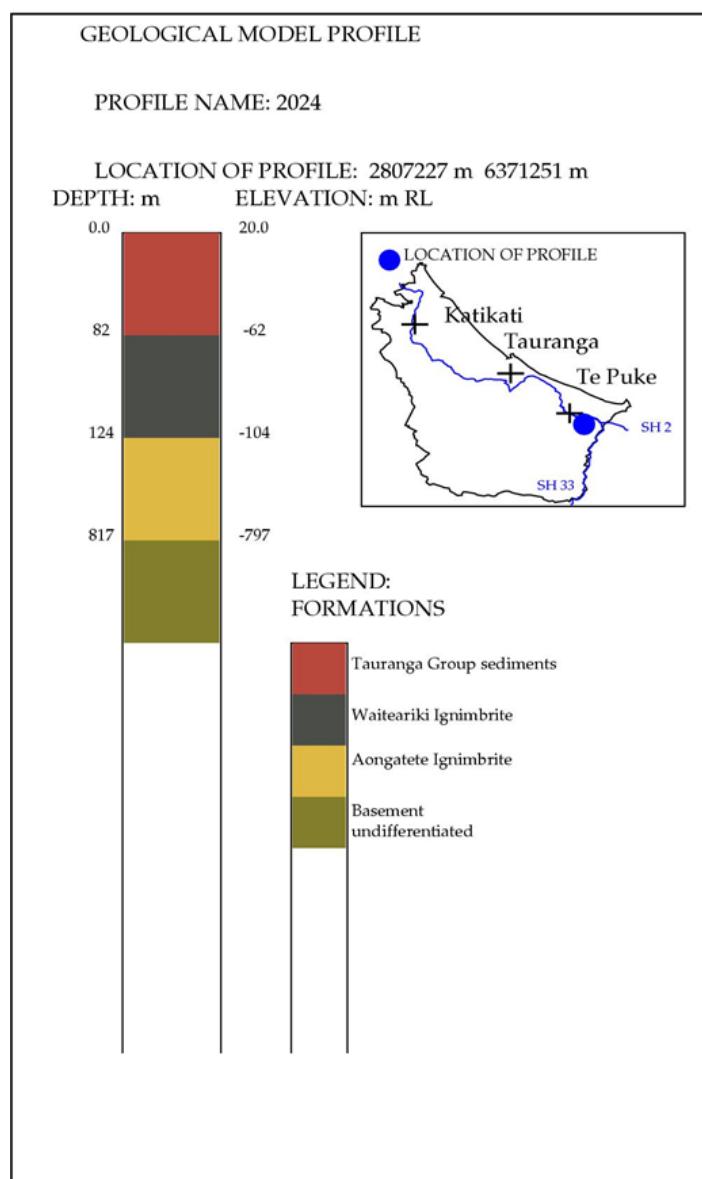


Bore 1690 water quality graphs



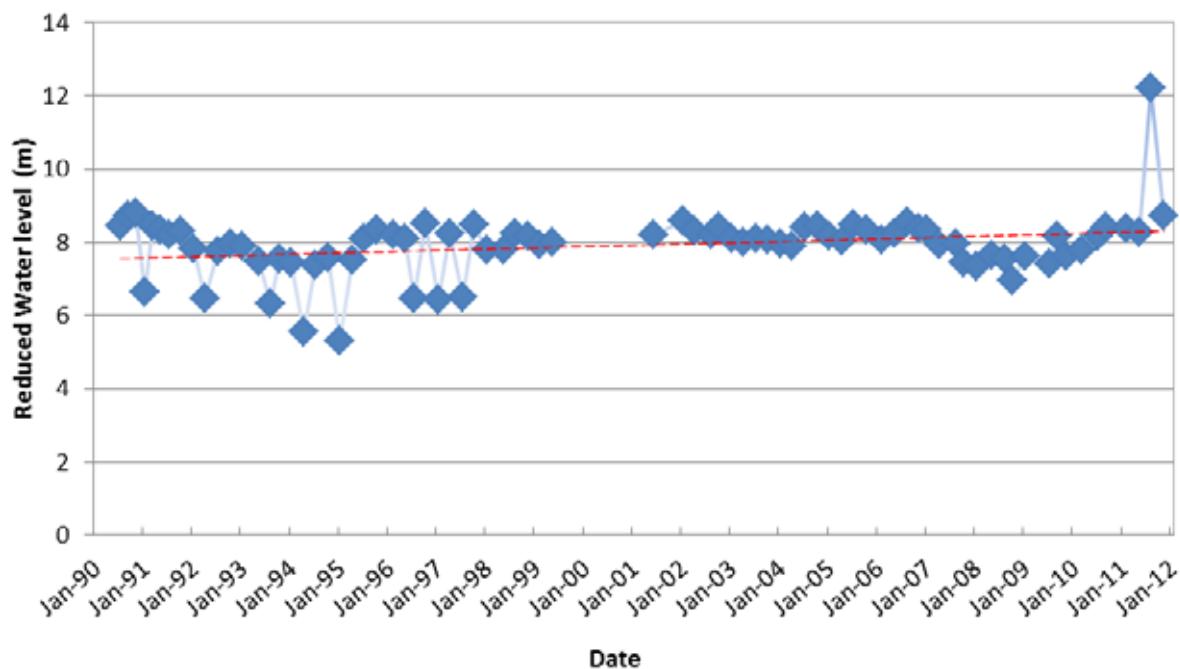
| Bore 2024 Information | | | |
|-----------------------|---------------|------------------|---------------|
| Monitoring type | Water level | Depth (m) | 118.5 |
| Name | Eleos | Casing Depth (m) | 98 |
| Bore use | Irrigation | Screen/open hole | Open hole |
| Easting | 280 7227 | Temperature | Unknown |
| Northing | 637 1251 | Catchment | Lower Kaituna |
| Bore log | Complete | Aquifer | Waiteariki |
| Monitoring period | Water | 1990 to 2011 | |
| | Water quality | - | |

Bore 2024 geological profile (EBOF)

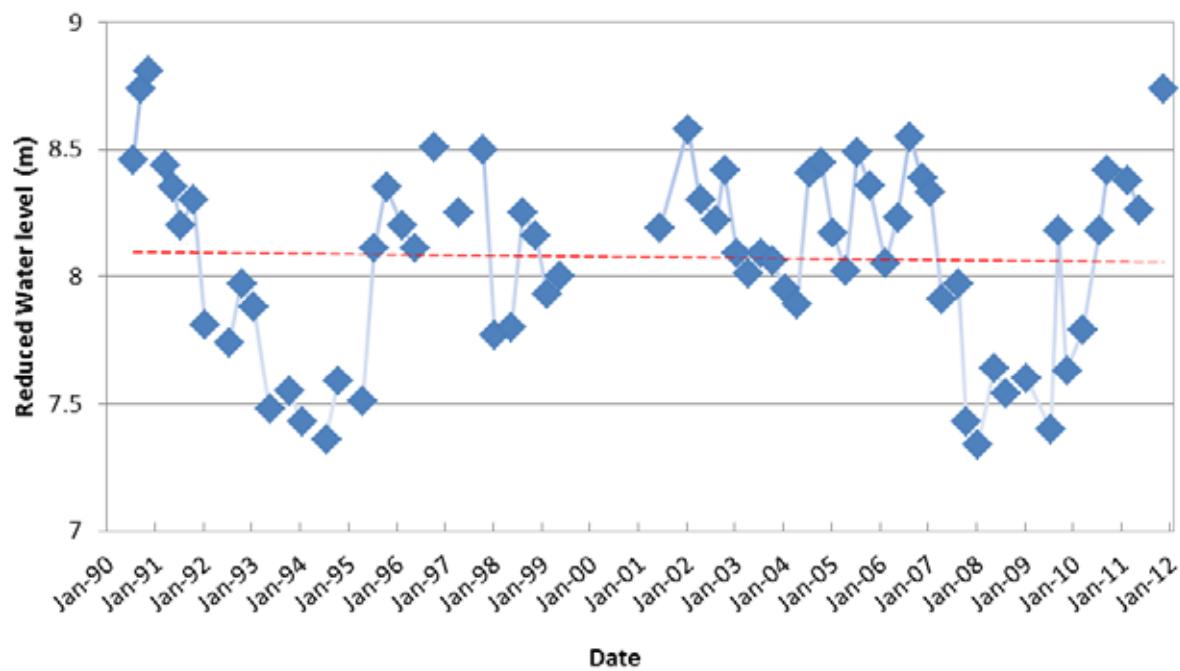


Bore 2024 water level graphs

Bore 2024 Raw data

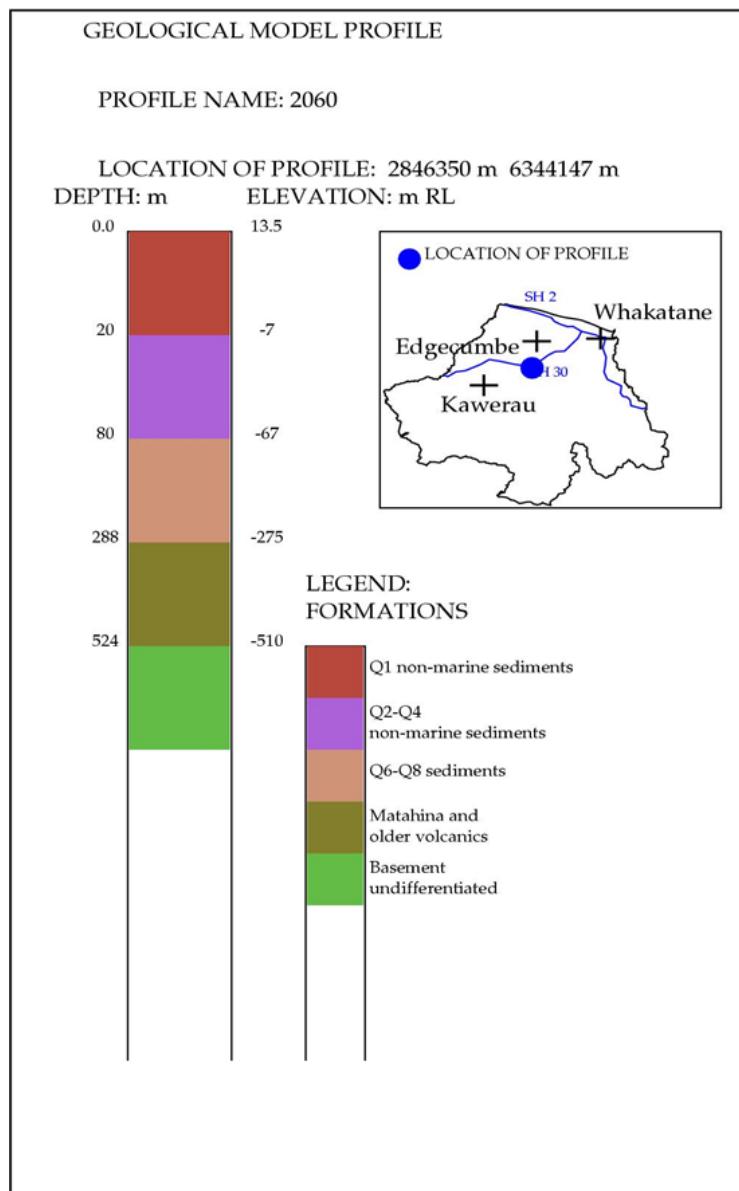


Bore 2024 Edited data

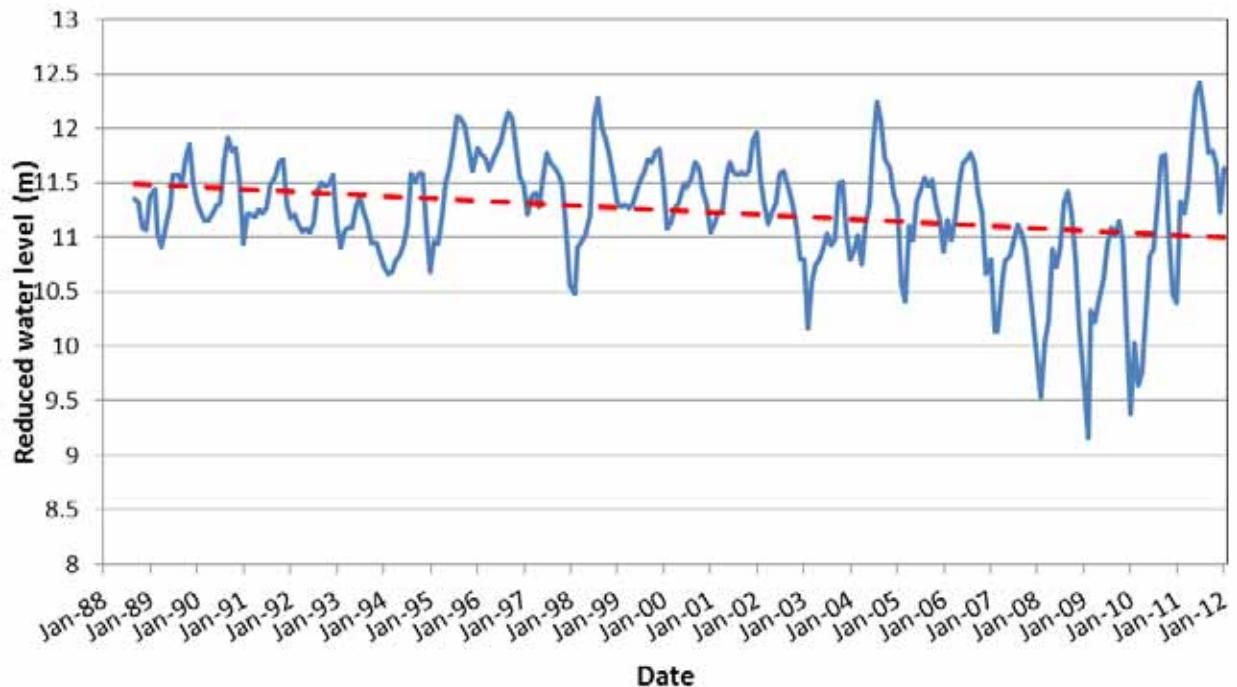


| Bore 2060 Information | | | |
|-----------------------|-------------------------|------------------|--------------------|
| Monitoring type | Telemetered Water level | Depth (m) | 61.3 |
| Name | Signal | Casing Depth (m) | 55.6 |
| Bore use | Unknown | Screen/open hole | From 61.3 to 55.6 |
| Easting | 284 6350 | Temperature | Unknown |
| Northing | 634 4147 | Catchment | Ngakauroa Stream |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | 1988 to 2011 | |
| | Water quality | | |

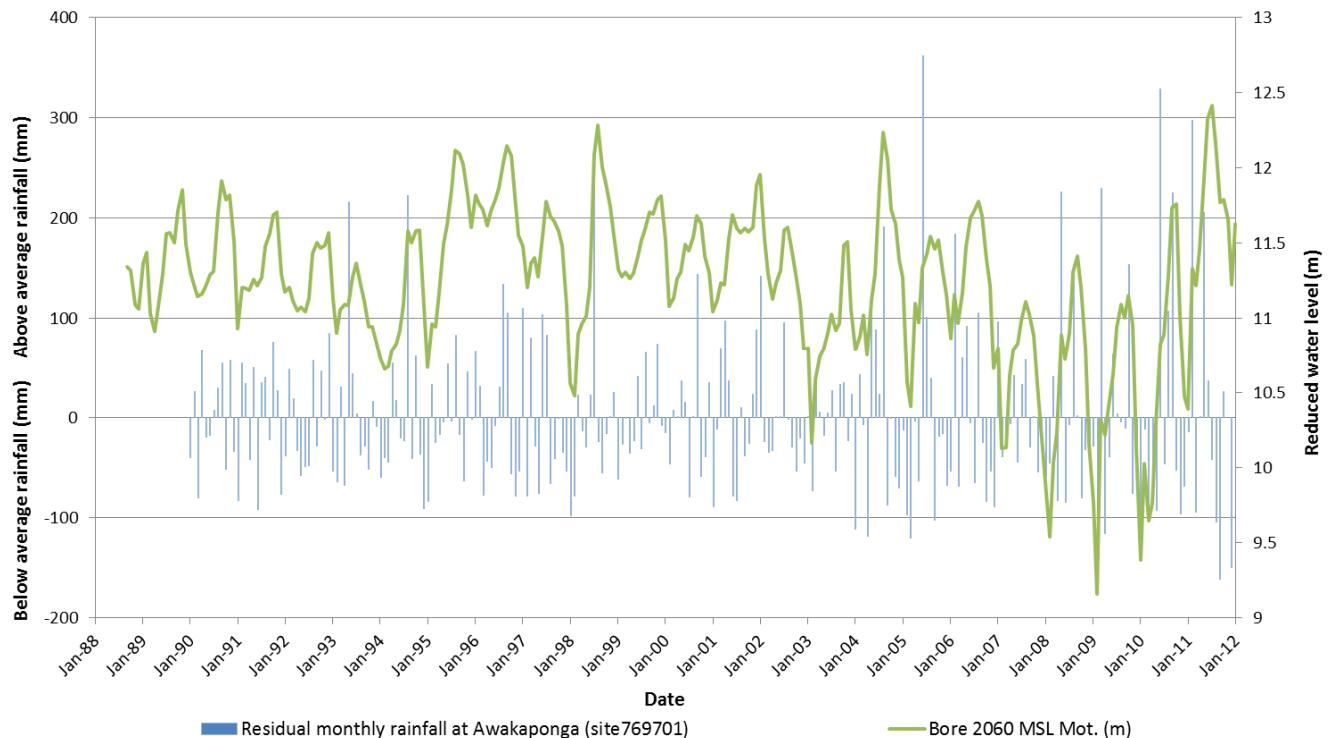
Bore 2060 geological profile (EBOF)



Bore 2060 raw telemetered data

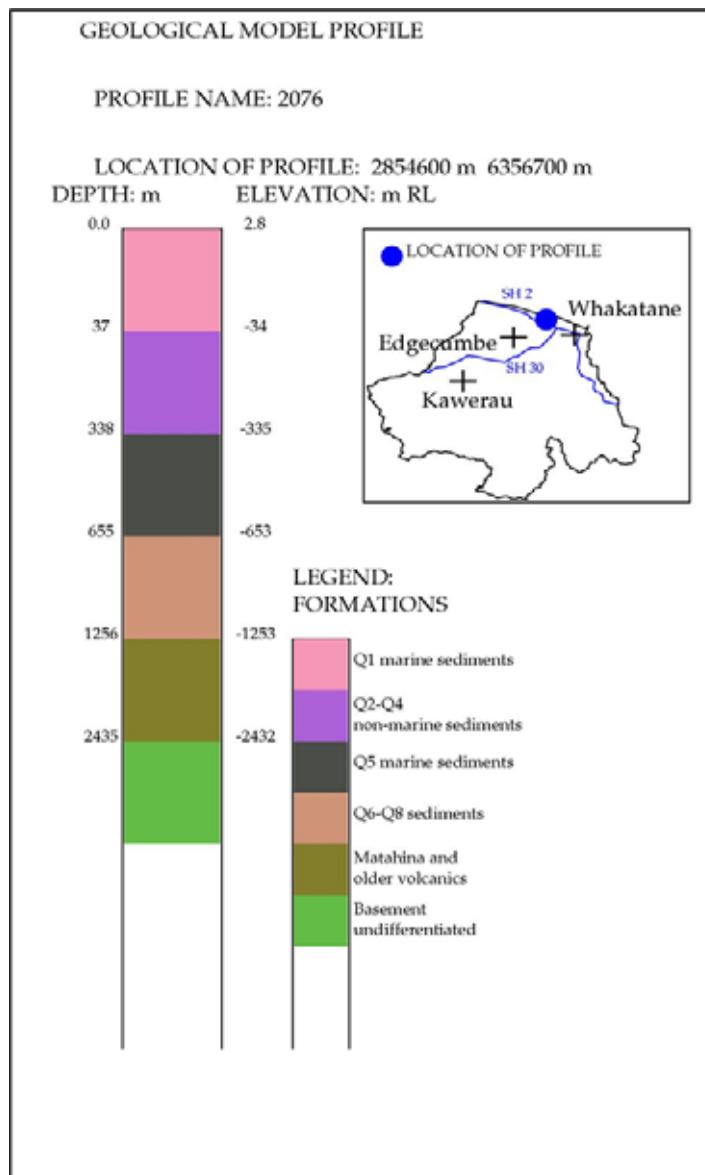


Bore 2060 water level and rainfall - Tauranga Group

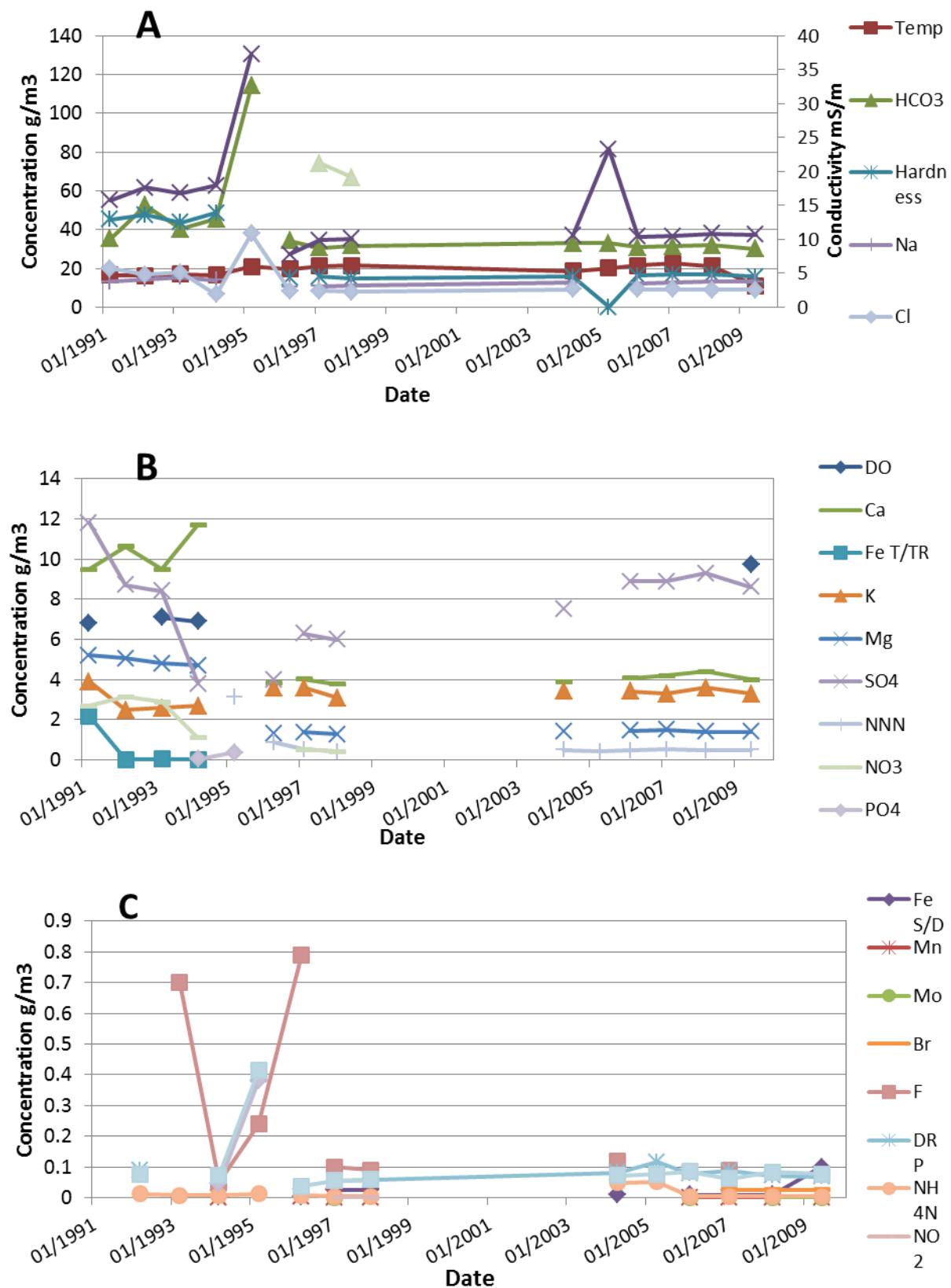


| Bore 2076 Information | | | |
|-----------------------|-------------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | Unknown |
| Name | Whakatane airport | Casing Depth (m) | Unknown |
| Bore use | Unknown | Screen/open hole | Unknown |
| Easting | 285 4600 | Temperature | 19.6°C |
| Northing | 635 6700 | Catchment | Kope Orini 2 |
| Bore log | - | Aquifer | Unknown |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2009 | LabStar: BOP180001 |

Bore 2076 geological profile (EBOF)

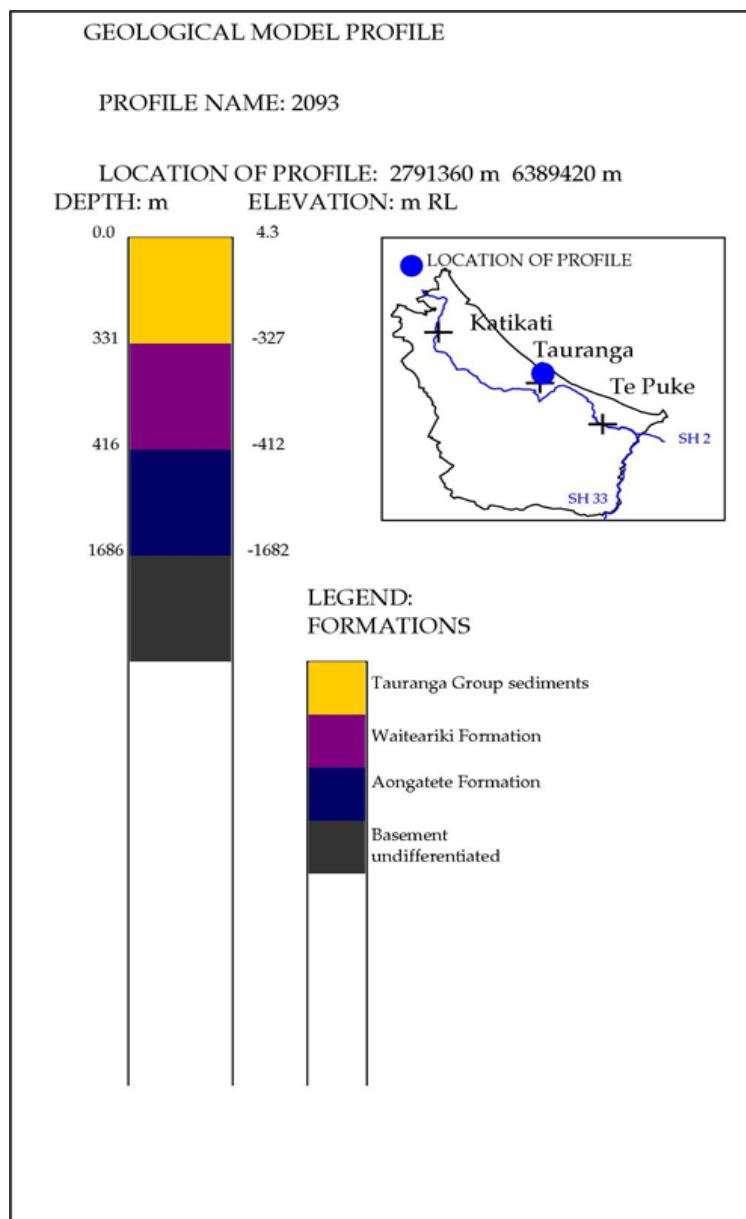


Bore 2076 water quality

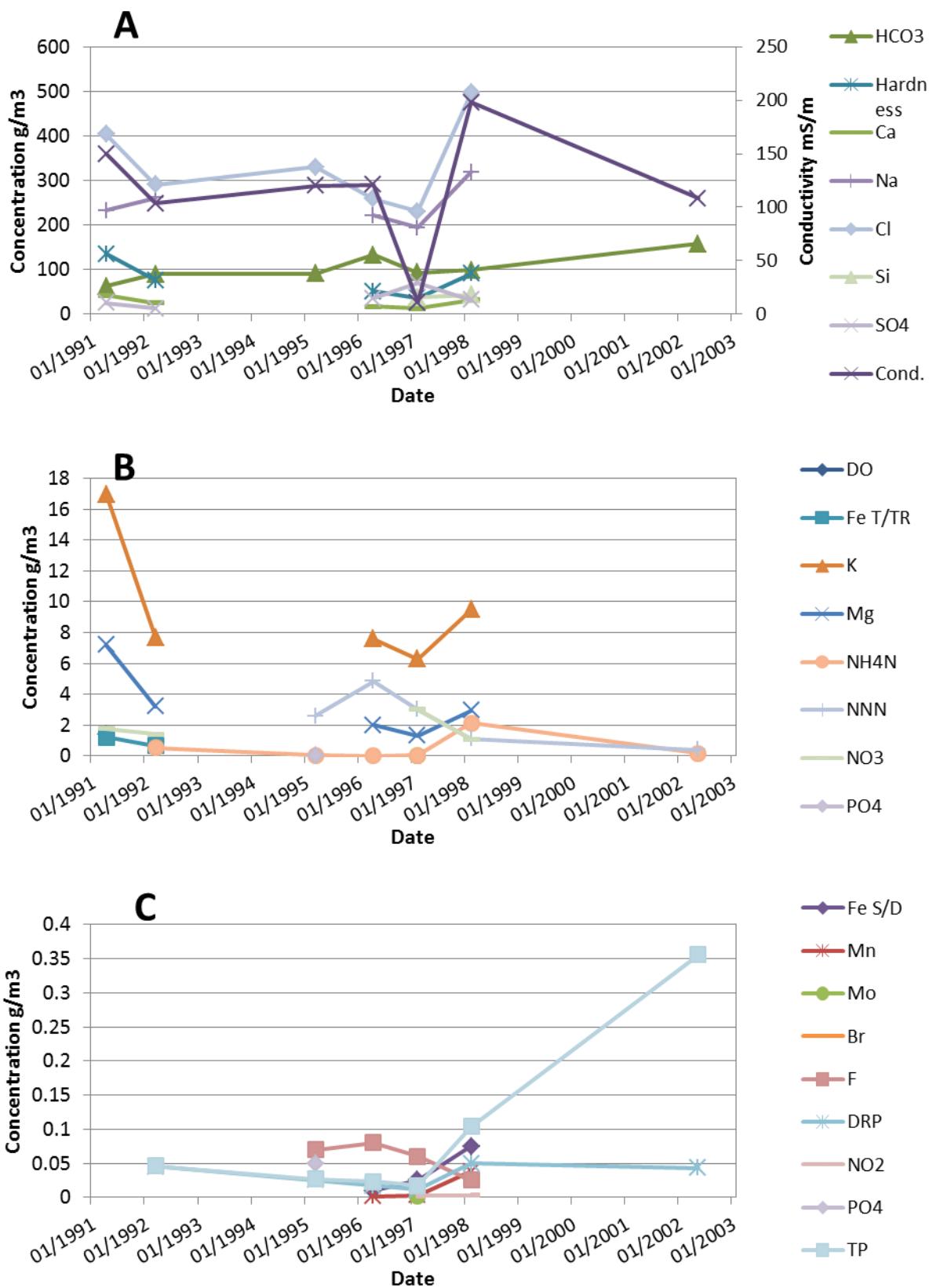


| Bore 2093 Information | | | |
|-----------------------|---------------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 6 |
| Name | Dominion Salt Works | Casing Depth (m) | Unknown |
| Bore use | Monitoring | Screen/open hole | Unknown |
| Easting | 279 1360 | Temperature | 17.4°C |
| Northing | 638 9420 | Catchment | Maungatawa Area |
| Bore log | - | Aquifer | Tauranga sediments |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2002 | LabStar: BOP180040 |

Bore 2093 geological profile (EBOF)

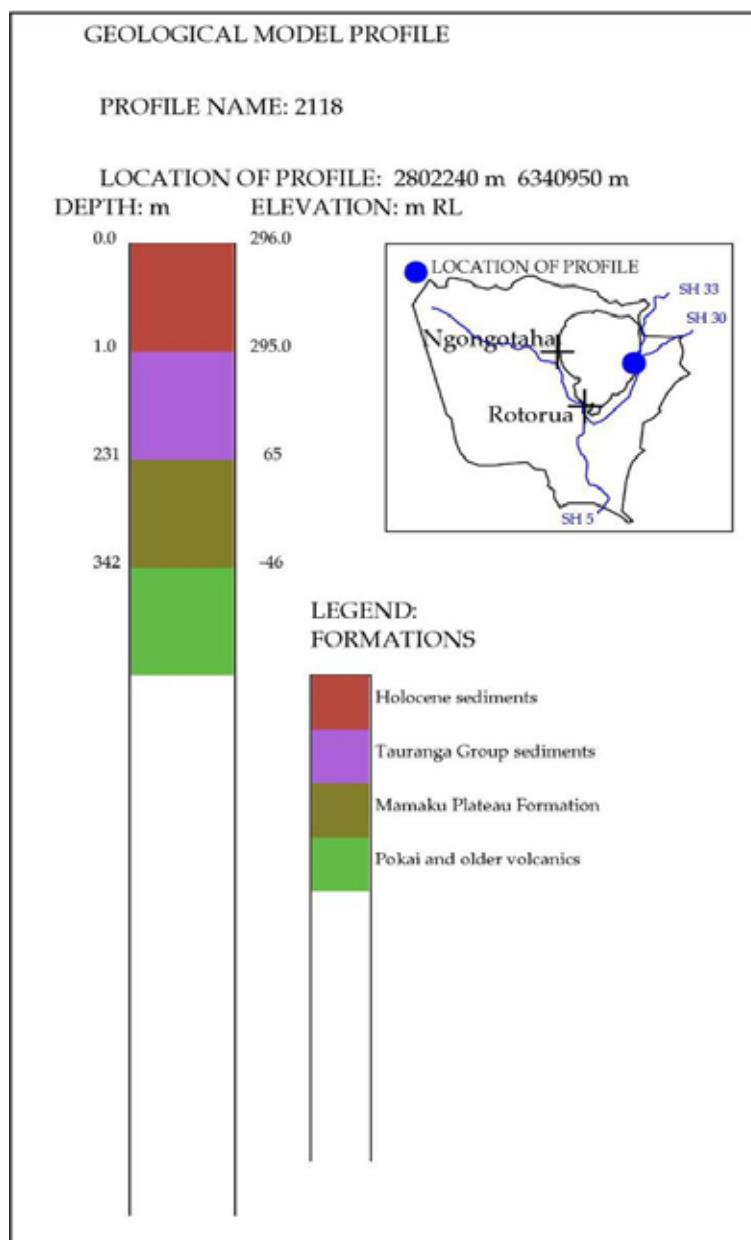


Bore 2093 water quality graphs

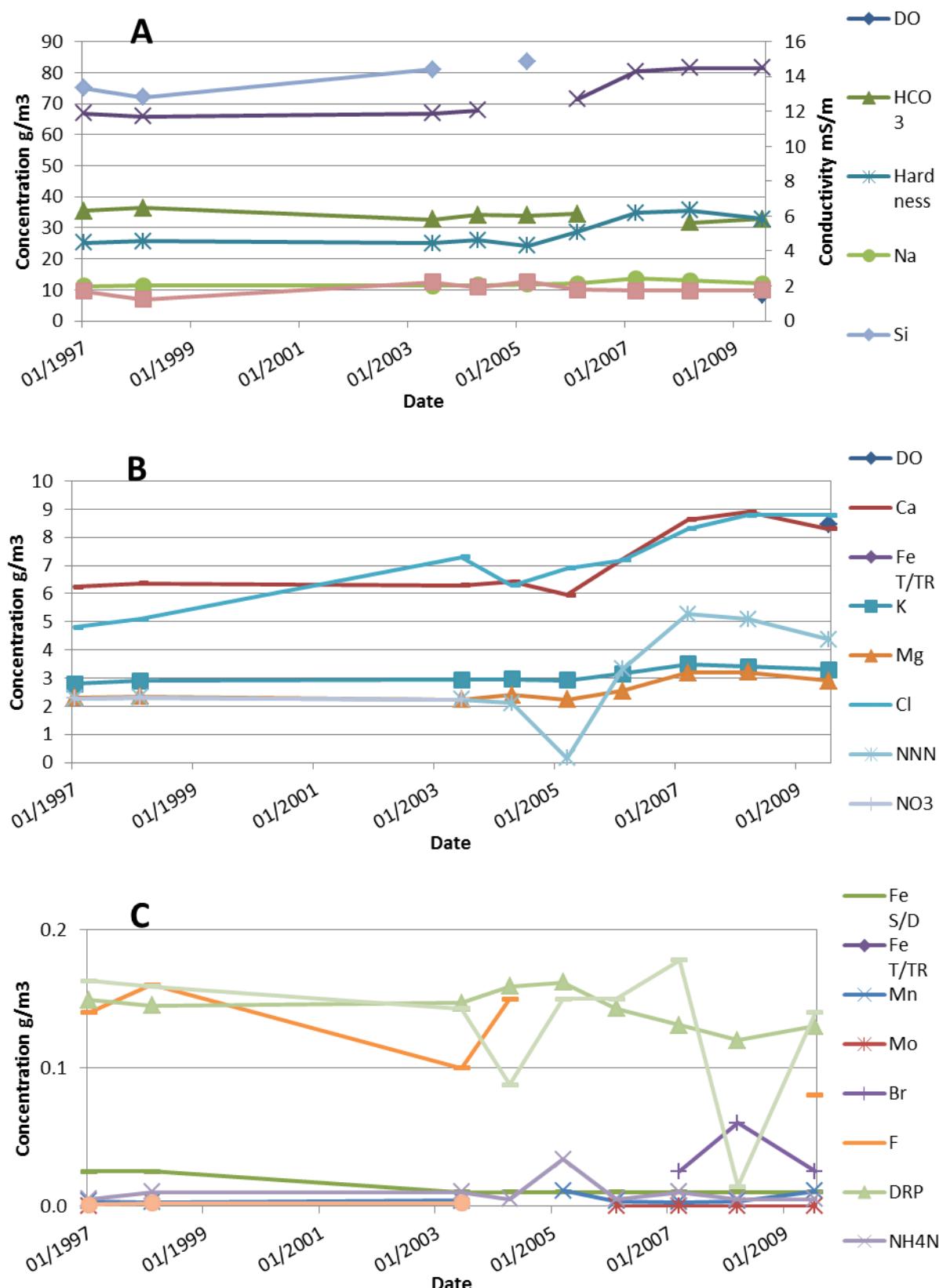


| Bore 2118 Information | | | |
|--------------------------|----------------------|-------------------------|---------------------------|
| Monitoring type | Water quality | Depth (m) | 24 |
| Name | Te Ngae Nursery | Casing Depth (m) | 19 |
| Bore use | Irrigation | Screen/open hole | From 19 to 22 |
| Easting | 280 2240 | Temperature | 12°C |
| Northing | 634 0950 | Catchment | Rotokawa Area |
| Bore log | Complete | Aquifer | Tauranga sediments |
| Monitoring period | Water level | | |
| | Water quality | 1997 to 2009 | LabStar: BOP180065 |

Bore 2118 geological profile (EBOF)



Bore 2118 water quality graphs



| Bore 2303 Information | | | |
|-----------------------|---------------|------------------|--------------------|
| Monitoring type | Water quality | Depth (m) | 262 |
| Name | Harris | Casing Depth (m) | 144.8 |
| Bore use | Irrigation | Screen/open hole | Unknown |
| Easting | 277 0212 | Temperature | 34°C |
| Northing | 639 9012 | Catchment | WAI1 (zone) |
| Bore log | Complete | Aquifer | Waiteariki (WAI) |
| Monitoring period | Water level | | |
| | Water quality | 1991 to 2011 | LabStar: BOP180019 |

Bore 2303 geological profile (EBOF)

