

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 8-Oct-66  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 52            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 26            | Antimony (Sb)       |               |
| Sodium (Na)                        | 680           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 9             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 571           | Boron (B)           |               |
| Sulphate (SO4)                     | 856           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 260           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) |               | Copper (Cu)         |               |
| Total Iron (Fe)                    | 2.3           | Lead (Pb)           |               |
| Manganese (Mn)                     |               | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.65          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3000          | Selenium (Se)       |               |
| Sum of Ions                        | 2454          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 235           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 468           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 19-Jun-70   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 54            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 25            | Antimony (Sb)       |               |
| Sodium (Na)                        | 660           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 7             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 562           | Boron (B)           |               |
| Sulphate (SO4)                     | 850           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 270           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) |               | Copper (Cu)         |               |
| Total Iron (Fe)                    | 2.5           | Lead (Pb)           |               |
| Manganese (Mn)                     |               | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.7           | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3200          | Selenium (Se)       |               |
| Sum of Ions                        | 2428          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 236           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 461           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 20-Dec-77   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 27            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 11            | Antimony (Sb)       |               |
| Sodium (Na)                        | 697           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 9             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 397           | Boron (B)           |               |
| Sulphate (SO4)                     | 806           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 310           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.32          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 15.5          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 2.9           | Lead (Pb)           |               |
| Manganese (Mn)                     | <0.01         | Molybdenum (Mo)     |               |
| pH (pH units)                      | 9.08          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3025          | Selenium (Se)       |               |
| Sum of Ions                        | 2273          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 112.6         | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 409           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 22-Nov-79   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 47            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 59            | Antimony (Sb)       |               |
| Sodium (Na)                        | 663           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 556           | Boron (B)           |               |
| Sulphate (SO4)                     | 854           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 269           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.14          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 3.4           | Copper (Cu)         |               |
| Total Iron (Fe)                    | 2.8           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.06          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.72          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3105          | Selenium (Se)       |               |
| Sum of Ions                        | 2455          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 359.4         | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 455           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 20-Oct-82   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 53            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 26            | Antimony (Sb)       |               |
| Sodium (Na)                        | 657           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.7           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 536           | Boron (B)           |               |
| Sulphate (SO4)                     | 779           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 262           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.02         | Copper (Cu)         |               |
| Total Iron (Fe)                    | 2.1           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.09          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.94          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 2910          | Selenium (Se)       |               |
| Sum of Ions                        | 2318          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 239.1         | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 439           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 18-Oct-83   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 56            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 18            | Antimony (Sb)       |               |
| Sodium (Na)                        | 650           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 5.1           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 533           | Boron (B)           |               |
| Sulphate (SO4)                     | 861           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 262           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.28          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.02         | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.8           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.09          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.34          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3010          | Selenium (Se)       |               |
| Sum of Ions                        | 2385          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 212           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 437           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 29-Oct-84   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 51            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 24            | Antimony (Sb)       |               |
| Sodium (Na)                        | 664           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.6           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 542           | Boron (B)           |               |
| Sulphate (SO4)                     | 824           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 267           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) |               | Copper (Cu)         |               |
| Total Iron (Fe)                    |               | Lead (Pb)           |               |
| Manganese (Mn)                     |               | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.27          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3100          | Selenium (Se)       |               |
| Sum of Ions                        | 2377          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 223           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 444           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 1-Oct-85  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 52            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 28            | Antimony (Sb)       |               |
| Sodium (Na)                        | 668           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.5           | Barium (Ba)         |               |
| Carbonate (CO3)                    | 43            | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 476           | Boron (B)           |               |
| Sulphate (SO4)                     | 860           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 244           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.36          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.02          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.8           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.01          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.33          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3380          | Selenium (Se)       |               |
| Sum of Ions                        | 2376          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 242           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 462           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise



**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 8-Oct-86  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| Major Ions                         |               | Metals              |               |
| Calcium (Ca)                       | 55            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 21            | Antimony (Sb)       |               |
| Sodium (Na)                        | 638           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 5             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 548           | Boron (B)           |               |
| Sulphate (SO4)                     | 870           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 248           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.28          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.02          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.5           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.04          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.99          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3140          | Selenium (Se)       |               |
| Sum of Ions                        | 2385          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 222           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 449           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 1-Oct-87  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 50            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 27            | Antimony (Sb)       |               |
| Sodium (Na)                        | 664           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.6           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 519           | Boron (B)           |               |
| Sulphate (SO4)                     | 873           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 260           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.04          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.4           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.06          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.93          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3140          | Selenium (Se)       |               |
| Sum of Ions                        | 2398          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 239           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 445           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 3-Oct-88  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 56            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 24            | Antimony (Sb)       |               |
| Sodium (Na)                        | 654           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 5             | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 543           | Boron (B)           |               |
| Sulphate (SO4)                     | 853           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 268           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.02          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.6           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.04          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.28          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3400          | Selenium (Se)       |               |
| Sum of Ions                        | 2403          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 239           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 436           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 1-Oct-92  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 53            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 26            | Antimony (Sb)       |               |
| Sodium (Na)                        | 639           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.5           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 532           | Boron (B)           |               |
| Sulphate (SO4)                     | 838           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 265           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.31          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.4           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.34          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.14          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3180          | Selenium (Se)       |               |
| Sum of Ions                        | 2358          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 236           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 425           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 5-Nov-93  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 54            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 27            | Antimony (Sb)       |               |
| Sodium (Na)                        | 677           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.3           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 552           | Boron (B)           |               |
| Sulphate (SO4)                     | 870           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 264           | Chromium (Cr)       |               |
| Fluoride (F)                       | 0.32          | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.04         | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.9           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.044         | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.81          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3170          | Selenium (Se)       |               |
| Sum of Ions                        | 2448          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 227           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 450           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 1-Oct-98  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 48            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 26            | Antimony (Sb)       |               |
| Sodium (Na)                        | 664           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 5.6           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 549           | Boron (B)           |               |
| Sulphate (SO4)                     | 842           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 268           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) |               | Copper (Cu)         |               |
| Total Iron (Fe)                    |               | Lead (Pb)           |               |
| Manganese (Mn)                     |               | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.93          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3160          | Selenium (Se)       |               |
| Sum of Ions                        | 2403          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 246           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 453           | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 7-Oct-02  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 56            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 29            | Antimony (Sb)       |               |
| Sodium (Na)                        | 666           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 4.6           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 550           | Boron (B)           |               |
| Sulphate (SO4)                     | 876           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 260           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.1          | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.1           | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.035         | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.22          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3180          | Selenium (Se)       |               |
| Sum of Ions                        | 2442          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 258.9         | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        |               | Titanium (Ti)       |               |
| Dissolved Organic Carbon (DOC)     |               | Uranium (U) (µg/L)  |               |
| Turbidity (NTU)                    |               | Vanadium (V)        |               |
| Perchlorate                        |               | Zinc (Zn)           |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 3-Dec-04  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 35            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 25            | Antimony (Sb)       |               |
| Sodium (Na)                        | 672           | As (arsenic) (µg/L) |               |
| Potassium (K)                      | 5.3           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 551           | Boron (B)           |               |
| Sulphate (SO4)                     | 790           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 260           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 9.2           | Copper (Cu)         |               |
| Total Iron (Fe)                    | 0.53          | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.035         | Molybdenum (Mo)     |               |
| pH (pH units)                      | 8.2           | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3120          | Selenium (Se)       |               |
| Sum of Ions                        | 2348          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 190           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        |               | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise



**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 3-Feb-05  | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 54            | Aluminum (Al)       |               |
| Magnesium (Mg)                     | 26            | Antimony (Sb)       |               |
| Sodium (Na)                        | 661           | As (arsenic) (µg/L) | 0.012         |
| Potassium (K)                      | 4.7           | Barium (Ba)         |               |
| Carbonate (CO3)                    |               | Beryllium (Be)      |               |
| Bicarbonate (HCO3)                 | 554           | Boron (B)           |               |
| Sulphate (SO4)                     | 850           | Cadmium (Cd)        |               |
| Chloride (Cl)                      | 268           | Chromium (Cr)       |               |
| Fluoride (F)                       |               | Cobalt (Co)         |               |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.04         | Copper (Cu)         |               |
| Total Iron (Fe)                    | 1.16          | Lead (Pb)           |               |
| Manganese (Mn)                     | 0.04          | Molybdenum (Mo)     |               |
| pH (pH units)                      | 7.76          | Nickel (Ni)         |               |
| Conductivity (uS/cm)               | 3010          | Selenium (Se)       |               |
| Sum of Ions                        | 2418          | Silver (Ag)         |               |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      |               |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 242           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 454           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        |               |
| Turbidity (NTU)                    |               | Zinc (Zn)           |               |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 15-Sep-05   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 50            | Aluminum (Al)       | < 0.005       |
| Magnesium (Mg)                     | 24            | Antimony (Sb)       |               |
| Sodium (Na)                        | 666           | As (arsenic) (µg/L) | 0.0086        |
| Potassium (K)                      | 5.4           | Barium (Ba)         | 0.01          |
| Carbonate (CO3)                    |               | Beryllium (Be)      | < 0.001       |
| Bicarbonate (HCO3)                 | 571           | Boron (B)           | 1.1           |
| Sulphate (SO4)                     | 830           | Cadmium (Cd)        | < 0.001       |
| Chloride (Cl)                      | 262           | Chromium (Cr)       | < 0.001       |
| Fluoride (F)                       |               | Cobalt (Co)         | < 0.001       |
| Nitrate - Nitrate (NO3, NO2 + NO3) | 0.04          | Copper (Cu)         | < 0.001       |
| Total Iron (Fe)                    | 1.44          | Lead (Pb)           | < 0.002       |
| Manganese (Mn)                     | 0.043         | Molybdenum (Mo)     | 0.01          |
| pH (pH units)                      | 8.26          | Nickel (Ni)         | < 0.001       |
| Conductivity (uS/cm)               | 3120          | Selenium (Se)       | 0.0001        |
| Sum of Ions                        | 2408          | Silver (Ag)         | < 0.001       |
| Total Dissolved Solids (TDS)       |               | Strontium (Sr)      | 0.53          |
| Error in Balance (%)               |               | Thallium (Tl)       |               |
| Hardness (as CaCO3)                | 223           | Tin (Sn)            |               |
| Total Alkalinity (as CaCO3)        | 468           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  |               |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        | < 0.001       |
| Turbidity (NTU)                    |               | Zinc (Zn)           | < 0.005       |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         | 0.655         |                     |               |

All values in mg/L, unless indicated otherwise

**Water Security Agency**

|                          |   |                             |                      |
|--------------------------|---|-----------------------------|----------------------|
| <b>Land Location:</b>    | SW-12-14-35-08W3                                  | <b>NTS Map:</b>             | 73B/03               |
| <b>UTM Coordinates:</b>  | Z13 359340 E 5763744 N                            | <b>RM No.:</b>              | 345                  |
| <b>Ground Elevation:</b> |   | <b>Source:</b>              |                      |
| <b>Date Sampled:</b>     | 17-Nov-05   | <b>Time Sampled:</b>        |                      |
| <b>Sample Location:</b>  |   | <b>Sampled by:</b>          |                      |
| <b>Well name:</b>        | SWA Vanscoy                                       | <b>Contractor:</b>          |                      |
| <b>Well owner:</b>       | Water Security Agency                             |                             |                      |
| <b>Address:</b>          | 111 Fairford Street East<br>Moose Jaw, SK S6H 7X9 | <b>Tel:</b>                 |                      |
| <b>Sample Depth:</b>     | 89  | <b>Date Drilled:</b>        |                      |
| <b>Depth to Water:</b>   |   | <b>Pump Setting:</b>        |                      |
| <b>Well Diameter:</b>    |   | <b>Pumping Rate:</b>        |                      |
| <b>WWRD #</b>            | 32362   | <b>Construction method:</b> |                      |
| <b>Analysis No.:</b>     |   | <b>Formation:</b>           | Empress Group        |
| <b>Laboratory:</b>       |   | <b>Aquifer name:</b>        | Tyner Valley aquifer |

| Constituent                        | Concentration | Constituent         | Concentration |
|------------------------------------|---------------|---------------------|---------------|
| <b>Major Ions</b>                  |               | <b>Metals</b>       |               |
| Calcium (Ca)                       | 50            | Aluminum (Al)       | < 0.0005      |
| Magnesium (Mg)                     | 24            | Antimony (Sb)       | < 0.0002      |
| Sodium (Na)                        | 658           | As (arsenic) (µg/L) | 0.0088        |
| Potassium (K)                      | 5.5           | Barium (Ba)         | 0.01          |
| Carbonate (CO3)                    | <1            | Beryllium (Be)      | < 0.0001      |
| Bicarbonate (HCO3)                 | 576           | Boron (B)           | 0.8           |
| Sulphate (SO4)                     | 820           | Cadmium (Cd)        | < 0.0005      |
| Chloride (Cl)                      | 264           | Chromium (Cr)       | < 0.005       |
| Fluoride (F)                       | 0.3           | Cobalt (Co)         | 0.0003        |
| Nitrate - Nitrate (NO3, NO2 + NO3) | <0.04         | Copper (Cu)         | < 0.0002      |
| Total Iron (Fe)                    | 1.5           | Lead (Pb)           | < 0.0001      |
| Manganese (Mn)                     | 0.036         | Molybdenum (Mo)     | 0.0096        |
| pH (pH units)                      | 8.2           | Nickel (Ni)         | 0.0009        |
| Conductivity (uS/cm)               | 3170          | Selenium (Se)       | < 0.0001      |
| Sum of Ions                        | 2398          | Silver (Ag)         | < 0.0001      |
| Total Dissolved Solids (TDS)       | 2160          | Strontium (Sr)      | 0.54          |
| Error in Balance (%)               |               | Thallium (Tl)       | < 0.0002      |
| Hardness (as CaCO3)                | 223           | Tin (Sn)            | < 0.0001      |
| Total Alkalinity (as CaCO3)        | 472           | Titanium (Ti)       |               |
|                                    |               | Uranium (U) (µg/L)  | < 0.0001      |
| Dissolved Organic Carbon (DOC)     |               | Vanadium (V)        | 0.0002        |
| Turbidity (NTU)                    | 6             | Zinc (Zn)           | < 0.005       |
| Perchlorate                        |               |                     |               |
| Iodine (I)                         |               |                     |               |

All values in mg/L, unless indicated otherwise