

**SPECIAL AREAS 2, 3 AND 4, AND M.D. OF ACADIA**  
**Appendix B**

**MAPS AND FIGURES ON CD-ROM**

**A) Database**

**B) ArcView Files**

**C) Query**

**D) Maps and Figures**

**1) General**

- Index Map
- Surface Casing Types used in Drilled Water Wells
- Location of Water Wells
- Depth of Existing Water Wells
- Depth to Base of Groundwater Protection
- Generalized Cross-Section (for terminology only)
- Geologic Column
- Cross-Section A - A'
- Cross-Section B - B'
- Cross-Section C - C'
- Cross-Section D - D'
- Cross-Section E - E'
- Cross-Section F - F'
- Cross-Section G - G'
- Bedrock Topography
- Bedrock Geology
- E-Log showing Base of Foremost Formation
- Risk of Groundwater Contamination
- Relative Permeability
- Water Wells Recommended for Field Verification

**2) Surficial Aquifers**

**a) Surficial Deposits**

- Thickness of Surficial Deposits
- Water Wells Completed in Surficial Deposits
- Non-Pumping Water-Level Surface in Surficial Deposits Based on Water Wells Less than 20 Metres Deep
- Apparent Yield for Water Wells Completed in Sand and Gravel Aquifer(s)
- Total Dissolved Solids in Groundwater from Surficial Deposits
- Sulfate in Groundwater from Surficial Deposits
- Fluoride in Groundwater from Surficial Deposits
- Nitrate + Nitrite (as N) in Groundwater from Surficial Deposits
- Chloride in Groundwater from Surficial Deposits
- Piper Diagram - Surficial Deposits
- Amount of Sand and Gravel in Surficial Deposits
- Thickness of Sand and Gravel Deposits
- Thickness of Upper Surficial Deposits (not all drill holes fully penetrate surficial deposits)
- Apparent Yield for Water Wells Completed through Upper Sand and Gravel Aquifer
- Depth to Top of Lower Surficial Deposits
- Structure-Contour Map - Top of Lower Surficial Deposits
- Thickness of Lower Surficial Deposits (not all drill holes fully penetrate surficial deposits)
- Non-Pumping Water-Level Surface in Lower Surficial Deposits
- Apparent Yield for Water Wells Completed through Lower Sand and Gravel Aquifer

**b) First Sand and Gravel**

- Thickness of First Sand and Gravel
- First Sand and Gravel - Saturation Thickness

### 3) Bedrock Aquifers

#### a) General

- Non-Pumping Water-Level Surface in Upper Bedrock Aquifer(s)
- Apparent Yield for Water Wells Completed in Upper Bedrock Aquifer(s)
- Total Dissolved Solids in Groundwater from Upper Bedrock Aquifer(s)
- Sulfate in Groundwater from Upper Bedrock Aquifer(s)
- Chloride in Groundwater from Upper Bedrock Aquifer(s)
- Fluoride in Groundwater from Upper Bedrock Aquifer(s)
- Total Hardness of Groundwater from Upper Bedrock Aquifer(s)
- Piper Diagram - Bedrock Aquifers
- Recharge/Discharge Areas between Surficial Deposits and Upper Bedrock Aquifer(s)

#### b) Paskapoo Formation

- Depth to Top of Paskapoo Formation
- Structure-Contour Map - Paskapoo Formation

#### c) Upper Scollard Formation

- Depth to Top of Upper Scollard Formation
- Structure-Contour Map - Upper Scollard Formation

#### d) Lower Scollard Formation

- Depth to Top of Lower Scollard Formation
- Structure-Contour Map - Lower Scollard Formation

#### e) Upper Horseshoe Canyon Formation

- Depth to Top of Upper Horseshoe Canyon Formation
- Structure-Contour Map - Upper Horseshoe Canyon Formation
- Non-Pumping Water-Level Surface - Upper Horseshoe Canyon Aquifer
- Apparent Yield for Water Wells Completed through Upper Horseshoe Canyon Aquifer
- Total Dissolved Solids in Groundwater from Upper Horseshoe Canyon Aquifer
- Sulfate in Groundwater from Upper Horseshoe Canyon Aquifer
- Chloride in Groundwater from Upper Horseshoe Canyon Aquifer
- Piper Diagram - Upper Horseshoe Canyon Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Upper Horseshoe Canyon Aquifer

#### f) Middle Horseshoe Canyon Formation

- Depth to Top of Middle Horseshoe Canyon Formation
- Structure-Contour Map - Middle Horseshoe Canyon Formation
- Non-Pumping Water-Level Surface - Middle Horseshoe Canyon Aquifer
- Apparent Yield for Water Wells Completed through Middle Horseshoe Canyon Aquifer
- Total Dissolved Solids in Groundwater from Middle Horseshoe Canyon Aquifer
- Sulfate in Groundwater from Middle Horseshoe Canyon Aquifer
- Chloride in Groundwater from Middle Horseshoe Canyon Aquifer
- Piper Diagram - Middle Horseshoe Canyon Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Middle Horseshoe Canyon Aquifer

#### g) Lower Horseshoe Canyon Formation

- Depth to Top of Lower Horseshoe Canyon Formation
- Structure-Contour Map - Lower Horseshoe Canyon Formation
- Non-Pumping Water-Level Surface - Lower Horseshoe Canyon Aquifer
- Apparent Yield for Water Wells Completed through Lower Horseshoe Canyon Aquifer
- Total Dissolved Solids in Groundwater from Lower Horseshoe Canyon Aquifer
- Sulfate in Groundwater from Lower Horseshoe Canyon Aquifer
- Chloride in Groundwater from Lower Horseshoe Canyon Aquifer
- Piper Diagram - Lower Horseshoe Canyon Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Lower Horseshoe Canyon Aquifer

**h) Bearpaw Formation**

- Depth to Top of Bearpaw Formation
- Structure-Contour Map - Bearpaw Formation
- Non-Pumping Water-Level Surface - Bearpaw Aquifer
- Apparent Yield for Water Wells Completed through Bearpaw Aquifer
- Total Dissolved Solids in Groundwater from Bearpaw Aquifer
- Sulfate in Groundwater from Bearpaw Aquifer
- Chloride in Groundwater from Bearpaw Aquifer
- Piper Diagram - Bearpaw Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Bearpaw Aquifer

**i) Oldman Formation**

- Depth to Top of Oldman Formation
- Structure-Contour Map - Oldman Formation
- Non-Pumping Water-Level Surface - Oldman Aquifer
- Apparent Yield for Water Wells Completed through Oldman Aquifer
- Total Dissolved Solids in Groundwater from Oldman Aquifer
- Sulfate in Groundwater from Oldman Aquifer
- Chloride in Groundwater from Oldman Aquifer
- Piper Diagram - Oldman Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Oldman Aquifer

**j) Birch Lake Member**

- Depth to Top of Birch Lake Member
- Structure-Contour Map - Birch Lake Member
- Non-Pumping Water-Level Surface - Birch Lake Aquifer
- Apparent Yield for Water Wells Completed through Birch Lake Aquifer
- Total Dissolved Solids in Groundwater from Birch Lake Aquifer
- Sulfate in Groundwater from Birch Lake Aquifer
- Chloride in Groundwater from Birch Lake Aquifer
- Piper Diagram - Birch Lake Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Birch Lake Aquifer

**k) Ribstone Creek Member**

- Depth to Top of Ribstone Creek Member
- Structure-Contour Map - Top of Ribstone Creek Member

**l) Victoria Member**

- Depth to Top of Victoria Member
- Structure-Contour Map - Top of Victoria Member

**m) Brosseau Member**

- Depth to Top of Brosseau Member
- Structure-Contour Map - Top of Brosseau Member

**n) Lea Park Formation**

- Depth to Top of Lea Park Formation
- Structure-Contour Map - Top of Lea Park Formation

**4) Hydrographs and Observation Water Wells**

- Hydrographs Cited in Text
- Hydrographs in Bigstone Area
- Hydrograph in Buffalo Area
- Hydrographs in Cavendish Area
- Hydrograph in Cessford Area
- Hydrographs in Hand Hills Area
- Hydrographs in Kirkpatrick Area
- Hydrographs in Monitor Area
- Hydrograph in Sheerness Area
- Hydrograph in Sibbald Area
- Hydrographs in Sounding Creek Area
- Water-Level Lowering in the Oldman Formation