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# Data Set 14-Quaternary Geology of Ontario-Seamless Coverage Instructions for using this CD

This CD contains all the data for viewing the quaternary map in AutoCAD, ArcView or ArcExplorer. The directory structure on this CD is:

ROOT	<b>FOLDERS</b> ArcExplorer	SUBFOLDERS
	AutoCAD	
	GIS_Data	Base Quaternary

Legend.rtf
Legend.txt
Licence.rtf
Licence.txt
Metadata.rtf
Metadata.txt
Metadata-township-layer.htm
Readme.rtf
Readme.txt

## Note: this product built and tested using ArcView 3.1

The ArcExplorer folder contains the ArcExplorer software. Updated Software for this free viewer should be downloaded from <a href="http://www.esri.com/software/arcexplorer/">http://www.esri.com/software/arcexplorer/</a>

The 'AutoCAD' folder contains four individual zipped files containing AutoCAD drawings in both Microstation DGN and DXF AutoCAD v12 format. The seamless coverage has been broken down in four areas because of the large file sizes. Map projection for these files is in Lambert Conic Conformal. Further projection specifications and layer listings for the CAD files (layer.rft & txt) are also found in this directory

The 'GIS\_Data' folder and its' subfolders contain all the quaternary and base map

files necessary for viewing the map in ArcView 3.1 and ArcExplorer. See Section C (Step by Step Procedure for Opening ArcView project 'quaternary\_II.apr')

A complete listing of all files included in this CD can be found in the Appendix.

## A. Projection Details

This GIS map was compiled in Lambert Conic Conformal Projection and Reprojected to Decimal Degrees or Lat/Long Projection using ArView 3.1 Reprojector Extension. North American Datum 1927. In April 2004, the datum was changed to NAD 83 (re-projected using the NTV2 grid with ArcGIS).

Projecting MNDM Decimal Degrees or Lat/Long Projection to Other Projections

- 1) Tested using ArcView 3.1 Under file load the "projector extension".
- 2) Load Data or Themes to be re-projected into a view
- 3) Under view properties, set Map units to Decimal Degrees and Distance Units to Kilometers
- 4) Run projector and select output units in kilometers
- 5) ArcView will prompt you for your new projection parameters

Copy of Original Data will be reprojected and saved to folder and name of your choice

The standard Projection that most other MNDM digital data is sold in is Lambert Conic Conformal. The parameters to convert decimal degree data to this projection are as follows:

- Select Projection Properties as Custom,
- ProjectionType as Lambert Conformal Conic;
- Spheriod-Clarke 1866:
- Central Meridian is -92;
- Reference Latitude is 0:
- Standard Parallel 1 is 49; Standard Parallel 2 is 77;
- False Easting is1000000:
- False Northing is 0

## B. AutoCAD

To view the any of the Quaternary Geology files in AutoCAD, open the respective zipped file in the 'AutoCAD' folder and extract the dgn or dxf to read within a CAD software package.

### C. Arcview

ArcView creates separate files for each 'theme' on a map. Each theme has a

feature geometry file (.shp), a database file (.dbf) and a lookup index file (.shx). Other files used by ArcView include the legend property files (.avl) All these files are linked together by a 'project file' quaternary\_II.apr).

A project file houses a directory of, and the path to, all of the files that comprise a map. You can view the map from the CD by simply double clicking on quaternary\_ll.apr' or you can copy the 'GIS\_data' folder to any directory on your hard drive. The project file has been formatted to read all associated files on the initial startup of the project file. If you save the project to your hard drive, avoid moving the files from their existing folder. Otherwise ArcView will ask you to locate the Shp and Dbf file for each of the 9 themes when opening the project.

Step by Step Procedure for Opening ArcView project quaternary\_II.apr' Note: this product built and tested using ArcView 3.1 only

- Copy the 'GIS\_Data' folder from the CD to a directory on your hard drive. Because the files were copied from a CD, they will all be write protected. To remove this, select all the files in each folder and subfolder, right click to select the 'Properties' dialog box, clear the 'Read-only' check box and click the Apply box.
- 2. Locate the Quaternary\_II apr file within the GIS\_DATA folder on your hardrive and doubleclick. This will open the ArcView 3.1 project and load the all quaternary and basemap themes with correct symbolization. If you are using ArcView 3.2 the ARP file will need to be rebuilt. Load the themes from the quaternary and base map folders into ArcView 3.2 and save the project in the GIS\_DATA folder.
- 3. Themes can also be opened individually through Arcview. The themes are linked to their corresponding avl (legend property files). If a theme loads without proper symbolization, double click on the theme in the Table of Contents (TOC) portion of the 'View' Window in Arcview. The legend editor will open. At the top of the dialogue box, select 'load' and browse to the "quaternary" subfolder which contains the '.avl' files for each theme (see Appendix for list). All legend files are labeled the same as the theme they represent. Once the appropriate legend file has been selected, the theme will be re-symbolized when you select the "Apply" button in the legend properties dialogue box.
- 4. All ArcView themes have a corresponding '.dbf' file. These files store all the attributes related to that theme. These attributes can be viewed and queried in Arcview or opened directly in other programs such as Excel and Access.

## D. ArcExplorer

If you do not own a copy of Arcview but would like to view and query this GIS data set, we have provided a copy of ArcExplorer, a lightweight GIS data explorer developed and distributed at no cost by ESRI. Updated Software for this free viewer should be downloaded from <a href="http://www.esri.com/software/arcexplorer/">http://www.esri.com/software/arcexplorer/</a>

ArcExplorer can work on its own with local data sets or as a client to Internet data and map servers. It is a complete data explorer, allowing users to display and query a wide variety of standard data sources.

To install, double click the ae2setup.exe file, in the ArcExplorer folder. Follow the instructions for the installation procedure. Once in ArcExplorer, select 'Open' from the 'File' pull down menu and browse to the 'Quaternary.aep' in the 'GIS\_Data' folder. All themes available in ArcView are present within this file. It is important to note that ArcExplorer is simply a GIS viewer and does not contain the full functionality of ArcView. For information or support on ArcExplorer, please visit their web site at 'www.esri.com'.

Any comments or questions can be directed to:

Jim Boyd james.boyd@ndm.gov.on.ca

**Appendix** 

Miscellaneous Files (root directory)

Legend.txt & rtf Licence.txt & rtf Metadata.txt & rtf Readme.txt & rtf (this file)

ArcExplorer software (.exe) (ArcExplorer folder) ae2setup.exe

AutoCAD Drawing Files (.dgn &.dxf)

These files have been compressed on the CD for file management purposes

Quatnrth.zip
Quatwest.zip
Quateast.zip
Quatsth.zip
AutoCAD\_Layers.txt & rtf

```
Table Files (.dbf) (GIS_Data\quaternary folder)
Dunes II
Lines II
Hummocky_II
Geology_II
Table Files (.dbf) (GIS_Data\base folder)
Drainage_II
Lakes II
Lat_long_ll
Prov_bound_II
Townships_areas_II
Legend Material Files (.avl) (GIS_Data\Quaternary folder)
Dunes II
Lines_II
Hummocky II
Geology II
Legend Material Files (.avl) (GIS_Data\base folder)
Drainage II
Lakes II
Lat_long_ll
Prov_bound_II
Townships_areas_II
Map Files (.shp) (GIS_Data\quaternary folder)
Dunes II
Lines_II
Hummocky_II
Geology_II
Map Files (.shp) (GIS_Data\base folder)
Drainage_II
Lakes II
Lat_long_ll
Prov bound II
Townships_areas_II
```

## Index Files (.shx) (GIS\_Data\quaternary folder)

Dunes\_II Lines\_II Hummocky\_II Geology\_II

Index Files (.shx) (GIS\_Data\base folder)

Drainage\_II Lakes\_II Lat\_long\_II Prov\_bound\_II Townships\_areas\_II

ArcView Project Files (.apr) (GIS\_Data folder) Quaternary\_II

ArcExplorer Project file (.aep) (GIS\_Data folder)
Quaternary ArcExplorer version 1.1

Nov. 2005