

## NWT Open Report 2015-011

### Geology of the Smoky Lake area, southern Slave Province, parts of NTS 85 P/3 & 6 (a digital re-release of EGS 1993-05 in ESRI® and Adobe® formats)

Bedrock geological mapping was conducted throughout the Northwest Territories during the late 1980s to late 1990s and was jointly implemented by the Government of Northwest Territories (GNWT) and the Federal Government. Many of these areas were mapped at 1:50,000 scale and the principal products resulting from each of these mapping projects are scanned monochrome tif images of variable legibility. These are currently distributed by the Northwest Territories Geological Survey (NTGS).

Significant technological advancements in map production and data delivery have been developed since the original publications were released. In an effort to support and stimulate mineral exploration, the mapping products are being re-released in modern formats that are compatible with current industry standards.

Full-colour digital representations of the original maps are produced in Adobe pdf format, and are suitable for enhanced visualization and conventional printing as hard-copy maps. In addition, all principal components of the maps are produced and presented in a Geographic Information System (GIS), including fully attributed linear and polygon elements. Georeferenced point data, including geochemical analyses of rock samples and field-based structural measurements, form an integral component of the new databases. Significant effort has been devoted to replicating the original publications with geological interpretation of assumed contacts and features required in GIS maps not found in the original maps.

Geochemical data generated during these mapping programs was generally not incorporated in the original publications, and are unavailable from GNWT archives or any other public source associated with the GNWT and Federal mapping program. However, some of the original project leaders have retained copies of all the historical data and have provided the geochemical dataset as a major enhancement to the revised mapping products.

## CONTENTS

\	- Contains a text and PDF readme file and MXD file. The MXD file will open the geodatabase compilation with pre-set colours and symbols
	Note: To correctly display the structural symbols, you will need to copy the True Type Fonts (.ttf) in the “StructuralSymbols” folder to your windows/fonts folder.
\LayerFiles	- Contains LYR files that will symbolize the appropriate layer with the symbols consistent across map sheets.
\PDF_Plot_Files	- Contains a full-colour digital representation of the original map produced in Adobe pdf format and is suitable for enhanced visualization and conventional printing as hard-copy maps.
\FileGeodatabase-NAD83Z12	- Contains all the principal components of the map in ESRI’s File Geodatabase (projected into UTM Zone 12, NAD 83), including fully attributed linear, polygon and point elements, including geochemical analyses of rock samples and field-based structural measurements.  Note: Any changes to these files through Windows Explorer will adversely affect the database.
\Shapefiles-NAD83Z12	- Contains editable ESRI’s ShapeFiles exported from the File Geodatabase.
\Spreadsheets	- Contains geochemical and structural data generated during the mapping program in Excel spreadsheets (.xlsx).
\StructuralSymbols	- Contains the True Type Fonts (.ttf) that are used for structural symbols to be copied to your windows/fonts folder.

## **PROJECTION**

NAD\_1983\_UTM\_Zone\_12N  
WKID: 26912 Authority: EPSG

Projection: Transverse\_Mercator  
False\_Easting: 500000.0  
False\_Northing: 0.0  
Central\_Meridian: -111.0  
Scale\_Factor: 0.9996  
Latitude\_Of\_Origin: 0.0  
Linear Unit: Meter (1.0)

Geographic Coordinate System: GCS\_North\_American\_1983  
Angular Unit: Degree (0.0174532925199433)  
Prime Meridian: Greenwich (0.0)  
Datum: D\_North\_American\_1983  
Spheroid: GRS\_1980  
Semimajor Axis: 6378137.0  
Semiminor Axis: 6356752.314140356  
Inverse Flattening: 298.257222101

## **REFERENCES**

Stubley, M. and Bégin, N., 1993. Geology of the Smoky Lake area, southern Slave Province, parts of NTS 85 P/3, 6. NWT Geology Division - NAP, EGS Open File 1993-05, scale 1:50 000 map with notes.

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The Northwest Territories Geological Survey welcomes corrections or additional information from users. See documentation accompanying the digital data. This publication is available for free download through Gateway (<http://gateway.nwtgeoscience.ca/>).

## **OPERATIONAL REQUIREMENTS**

Contains files produced using the following software:

ESRI® ArcGIS™ 10.2.2 (shapefiles, file geodatabase, MXD file)  
Microsoft Excel 2010 (.xlsx)

All PDF Files may be viewed using Adobe Reader. The most recent version of Adobe Reader and the correct version for your system may be downloaded from <http://www.adobe.com>.

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