

The following materials are being open-filed October 1, 2012

**International Falls Drill Core Descriptions and Chemistry, Koochiching County, Minnesota
Project 378**

This data release consists of the final report for Project 378 and related digital files. The Project 378 drill cores are located within an accessible Archean greenstone terrane near International Falls, Minnesota. The Quetico fault system is prominent in this area. Besides low-grade gold mineralization, the chemical data and logging identified thin sphalerite-bearing intervals and abundant tourmaline (see Figure 1 in P378 Report, for drill core locations).

Data includes laboratory analyses of 231 analyses including 217 drill core samples, duplicates, and standards, by ALS Chemex. The samples were selected from 13 drill cores that had been drilled during the 1980's, primarily by exploration companies searching for gold and base metals. Drill core and related exploration data are currently available at the Minnesota Department of Natural Resources Drill Core Library in Hibbing, Minnesota.

Sampling was guided by re-logging of the core and also by the use of a hand-held X-Ray Fluorescence (XRF) analyzer instrument. The hand-held XRF targets a circular area of 0.76 cm^2 , providing semi-quantitative chemical data at a scale between chemistry lab analyses (over feet) and microprobe (over microns) chemistry. The scale is ideal for smaller features, and is amenable to creating comparative traverses across veins and lithologic contacts; and comparative chemistry, with and without, small features such as sulfide blebs.

Zinc is present in small amounts in some drill cores in this area. It has been reported elsewhere that zinc may interfere with the XRF gold analysis and cause the gold content to be over-estimated. Therefore, we emphasize that these XRF analyses are semi-quantitative and are used as a tool to refine the logging and sample selection for traditional chemical analyses and fire assays.

This data release supercedes previous data releases for Project 378, including September 2010 and March 2011 data releases for this project.

Files consist of the following:

FILE	DESCRIPTION
P378_Readme.pdf	This document; summary and synopsis of report and digital files; where-to-go shortcuts
P378_Report.pdf	Project Report
P378_Logging.xlsx	Spreadsheet with core logging lithologic information
P378_XRF_IFalls.xlsx	Spreadsheets with semi-quantitative XRF analyses, lithology information
P378_Chem_Stat.xlsx	Spreadsheet with laboratory analyses from ALS Chemex
P378_Chem_Shape_AB6.xls	Spreadsheet with laboratory analyses from ALS Chemex, UTM's and dummy formatting record. This record for easier shapefile creation
P378_COA_RE11023552.pdf	Original ALS Chemex Laboratory results for 2 nd analytical shipment
P378_COA_RE10075765.pdf	Original ALS Chemex Laboratory results for 1 st analytical shipment
P378_QCDOC_RE10075765.pdf	Original ALS Chemex Laboratory internal quality control results for 1 st analytical shipment
P378_QCDOC_RE11023552.pdf	Original ALS Chemex Laboratory internal quality control results for 1 st analytical shipment
P378_COA_RE11023552.csv	Original ALS Chemex Laboratory results for 2 nd analytical shipment – csv file
P378_COA_RE10075765.csv	Original ALS Chemex Laboratory results for 1 st analytical shipment – csv file
P378_QCDOC_RE10075765.csv	Original ALS Chemex Laboratory internal quality control results for 1 st analytical shipment – csv file
P378_QCDOC_RE11023552.csv	Original ALS Chemex Laboratory internal quality – csv file
DNR_blind_standards.xlsx	Standards and analyses of standards sent to ALS Chemex
Pilot_database_Kooch_01Apr (2).xlsx	Compiled existing geochemistry data for Koochiching County, Mn
XRF_standard_DGPM-1 (USGS).xlsx	Published metal values for USGS standard DGPM-1
ALS Minerals-Service-Schedule-USD.pdf	Chemistry Lab analytical descriptions –metadata
2010-02e-Lithium-Technical-Note.pdf	Chemistry lab description of Li analyses - metadata
2011-03e-Quality-Technical-Note.pdf	Chemistry lab description of internal quality control - metadata
Method Descriptions-ME-ICP41.pdf	Chemistry lab description of package methodology - metadata

Method Descriptions-ME-ICP61.pdf metadata	Chemistry lab description of package methodology - metadata
Method Descriptions-ME-MS81.pdf metadata	Chemistry lab description of package methodology - metadata
Method Descriptions-Sample-PREP-31.pdf	Chemistry lab description of sample prep metadata
Method Descriptions-Sulfur-Methods.pdf	Chemistry lab description of S analyses - metadata
Method-Descriptions-ME-ICP06.pdf	Chemistry lab description of package methodology – metadata
P378_exploration_drill_holes_metadata.pdf	Metadata for drill core samples and drill core locations

=====

For further information, contact Project Leader Mr. Barry Frey at (218)231-8450; e-mail: Barry.Frey@state.mn.us .