

## Tables

1. (A, B, C) Results for reference materials using mining plus analysis by X5000 pXRF. All elements are in weight %.
2. Results for reference materials using 3-beam soil analysis by X5000 pXRF. All values in ppm except for K<sub>2</sub>O, CaO, TiO<sub>2</sub>, MnO, and Fe<sub>2</sub>O<sub>3</sub>.
3. Comparisons between pXRF data and data from conventional analytical methods for silicate samples, in %. Data for light elements. A) MgO; B) Al<sub>2</sub>O<sub>3</sub>; C) SiO<sub>2</sub>; D) P<sub>2</sub>O<sub>5</sub>; and E) S. Mode for analysis by pXRF is provided on y-axes of diagrams.
4. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in % for major and minor elements. A) K<sub>2</sub>O; B) CaO; C) TiO<sub>2</sub>; D) MnO; E) Fe<sub>2</sub>O<sub>3</sub> (all data); and F) data with <15 % Fe<sub>2</sub>O<sub>3</sub>. Mode for analysis by pXRF is provided on y-axes of diagrams.
5. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in ppm for trace transition elements. A) V; B) Cr; C) Co; D) Co with outliers removed from the dataset; and E) Ni. Mode for analysis by pXRF is provided on y-axes of diagrams.
6. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in ppm for base metals. A) Cu (all data); B) Cu for samples with <400 ppm Cu; C) Zn (all data); D) Zn for samples with <250 ppm Zn. E) Pb (all data); and F) Pb for samples with <300 ppm Pb. Mode for analysis by pXRF is provided on y-axes of diagrams.
7. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in ppm for low field strength elements (LFSE). A) Rb (all data); B) Rb with outliers removed; C) Sr; D) Ba (all data); and E) Ba for samples with <900 ppm Ba. Mode for analysis by pXRF is provided on y-axes of diagrams.
8. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in ppm for high field strength elements (HFSE). A) Zr (all data); B) Zr for samples with <300 ppm Zr; C) Nb (all data); D) Nb for samples with <10 ppm Nb; E) Th; and F) U. Mode for analysis by pXRF is provided on y-axes of diagrams.
9. Comparisons between pXRF data and data from conventional analytical methods for silicate samples. Data in ppm for other metals and metalloids. A) As (all data); B) As for samples with <700 ppm As; C) Mo; D) Sn; and E) Sb. Mode for analysis by pXRF is provided on y-axes of diagrams.