

Figure F1. Lithology patterns and symbols used for visual core description of sedimentary intervals, Expedition 368X.

Figure F2. Lithology pattern and symbols used for visual core description of igneous intervals, Expedition 368X.

Figure F3. pXRF measurements versus published measurements of rock Standard BHVO-2 (e.g., Wei et al., 2014) used to test the accuracy and reproducibility of discrete powder pXRF data during Expedition 368X. Accuracy and reproducibility are good for most elements, but large discrepancies were observed for elements with values  $<10 \mu\text{g/g}$ . P, Cr, and V are also less consistent than published standard measurements, generally underreport-

ing for pXRF measurements. A, B = repeated tests on the same standard vial, C–E = three separate BHVO-2 sample vials.

Figure F4. pXRF quarter-core wedges or core pieces versus powders of the same material, Hole U1503A. A. Sediment (56R-3, 12–14 cm). Three cut surfaces of the wedge sample were measured (one side in duplicate). Black dashed line with arrows = range of measurements with large differences between methods. B. Basalt (80R-3, 55–57 cm). A duplicate measure of the powdered basalt is also plotted.

Figure F5. Calcareous nannofossil and planktonic foraminiferal events and scaled ages used during Expedition 368X (Gradstein et al., 2012). (This figure is also available in an [oversized format](#).)