

Figure F1. IODP sample naming conventions.

Figure F2. Core and analytical flow. TCON = thermal conductivity, PWB = bayonet P-wave velocity, TOR = Torvane, PEN = penetrometer, PWC = caliper P-wave velocity, ICP-AES = inductively coupled plasma-atomic emission spectroscopy, ORP = oxidation-reduction potential, CHNS = carbon, hydrogen, nitrogen, and sulfur elemental analysis.

Figure F3. Core reference frame used in orientation measurements. A. Primary orientation of each core piece is up and down along the core axis. B. Coordinates in both archive (left) and working (right) section halves.

Figure F4. Section, bin, and piece lengths used for hard rock curation and scientific purposes.

Figure F5. Example of a visual core description (VCD).

Figure F6. VCD legend for sediment and sedimentary and igneous lithologies.

Figure F7. VCD legend for sediment and sedimentary rock.

Figure F8. VCD legend for igneous rock.

Figure F9. Sedimentary and volcanoclastic sediment and rock classification conventions. Principal names are required for all intervals. Prefixes are optional or required as shown. Suffixes are optional and may be used with any combination of prefixes and principal names. First-order divisions are based on the percentages of volcanic, siliciclastic, and biogenic components. Volcanoclastic sediments and rocks (>75% volcanic grains and clasts; orange) are named using the grain size classification of Fisher and Schmincke (1984). Tuffaceous and siliciclastic sediments and rocks (<75% volcanic grains and clasts; green) are named using the grain size classification of Wentworth (1922). Sediments and rocks containing >5% biogenic components in combination with silt and clay (blue) are classified as pelagic/hemipelagic and mud/ooze sediments and sedimentary rocks (after Taylor, Fujioka, et al., 1990). Closely intercalated intervals may be grouped as domains to avoid repetitive entry at the small-scale level.

Figure F10. Visual representations of sorting and rounding classifications.

Figure F11. Ternary diagram of volcanoclastic grain size terms and their associated pyroclastic sediment and rock types modified from Fisher and Schmincke (1984). Top labels = unconsolidated, bottom labels = consolidated.

Figure F12. Modified Shepard diagram for classification of biogenic sediments and sedimentary rocks.

Figure F13. Form used to record by hand matrix and clast characteristics for volcanoclastic sedimentary rocks.

Figure F14. Visual examples used to illustrate terms indicating intensity of bioturbation and fabric modification in sediments and sedimentary rocks. The scheme is similar to those of Expedition 317 Scientists (2011) and Droser and Bottjer (1986).

Figure F15. Visual description of coring disturbances in semilithified and lithified rocks in Sections 350-U1437B-43X-1A, 50–128 cm (left), and 350-U1437D-12R-6A, 34–112 cm (right) (from Tamura et al., 2015).

Figure F16. Classification of plutonic rocks using the quartz-alkali feldspar-plagioclase (QAP) diagram for leucocratic rocks (Le Maitre et al., 2002).

Figure F17. Classification of melanocratic plutonic rocks using plagioclase-clinopyroxene-orthopyroxene and olivine-pyroxenes-plagioclase triangular plots (Le Maitre et al., 2002).

Figure F18. Descriptive shape classification of vesicles (adapted from the Wentworth [1922] classification scheme for sediment grains).

Figure F19. Sketch of the ideal sampling protocol for headspace gas, interstitial water, and microbiological analyses. Whenever core recovery was low or the intersected lithologies so required, the sampling scheme was adapted accordingly. WR = whole round, IW = interstitial water, HS = head space, MBIO = microbiology.

Figure F20. Logbook table of contents for shipboard ORP measurement in IW samples.

Figure F21. Wireline tool strings.