

INDEX TO VOLUME 136

This index provides coverage for both the *Initial Reports* and *Scientific Results* portions of Volume 136 of the *Proceedings of the Ocean Drilling Program*. References to page numbers in the *Initial Reports* are preceded by "A" with a colon (A:), and to those in the *Scientific Results* (this book), by "B" with a colon (B:).

The index was prepared by DBA, Inc., under subcontract to the Ocean Drilling Program. The index contains two hierarchies of entries: (1) a main entry, defined as a keyword or concept followed by a reference to the page on which that word or concept appears, and (2) a subentry, defined as an elaboration on the main entry followed by a page reference.

The index is presented in two parts: (1) a Subject Index and (2) a Taxonomic Index. Both parts cover text figures and tables but not core-description forms ("barrel sheets"), core photographs, or smear-slide data; these are given in the *Initial Reports*. Also excluded from the index are bibliographic references, names of individuals, and routine front and back matter.

The Subject Index follows a standard format. Geographic, geologic, and other terms are referenced only if they are subjects of discussion. This index also includes broad fossil groups such as nannofossils and radiolarians. A site chapter in the *Initial Reports* is considered the principal reference for that site and is indicated on the first line of the site's listing in the index. Such a reference to Site 842, for example, is given as "Site 842, A:37-63."

The Taxonomic Index is an index relating to significant findings and/or substantive discussions, not of species names *per se*. This index covers three varieties of information: (1) individual genera and species that have been erected or emended formally, (2) biostratigraphic zones, and (3) fossils depicted in illustrations. A taxonomic entry consisting of both genus and species is listed alphabetically by genus and also by species. Biostratigraphic zones are listed alphabetically by genus; zones with letter prefixes are listed under "zones."

For further information, including available electronic formats, contact the Chief Production Editor, Ocean Drilling Program, 1000 Discovery Drive, College Station, Texas 77845-9547, U.S.A.

SUBJECT INDEX

- AACT. *See* aluminum activation clay tool
- absolute age. *See* radiometric age
- abyssal hills, sources of basalts, B:116
- age
 vs. depth, B:48
 See also radiometric age
- age of crust, vs. carbon dioxide in basalts, B:144
- age spectra, argon isotope incremental heating, B:121
- Alika Slide, glasses, B:61
- alkalinity
 interstitial waters, A:47, 71
- Alpha filter, geochemical logs, B:153–156
- alteration
 basalts, A:79–80
 basement, B:119–132
 vein minerals, B:123–127
- alteration, low-temperature, basalts, B:133–146
- alumina. *See* titanium oxide/alumina ratio
- aluminum, tetrahedral, vs. interlayer potassium, B:134
 content in phyllosilicates, B:135
 geochemical logs, B:155
- aluminum activation clay tool, Site 843, B:153–154
- aluminum oxide, vs. loss on ignition, B:140
- Americas path, geomagnetic poles, B:48–50
- ammonium
 interstitial waters, A:55, 71
 vs. depth, A:56
- anisotropy, maximum, vs. depth, A:77
- argon isotopes, radiometric age, B:119–132
- ARM. *See* remanent magnetization, anhysteretic
- assimilation, oceanic crust, B:116
- augite
 sediments, B:66–68
 vs. depth, B:68
- authigenesis, smectite, B:69–70
- barium/niobium ratio, vs. lanthanum/niobium ratio, B:113–114
- basalts
 alteration, B:133–146
 cores, A:7, 77–82
 geochronology, B:120–123
 isotopes, B:125
 magnetic properties, B:147–149
 paleomagnetism, B:45–63
 petrology, B:107–118
 recovery, A:81
 remanent magnetization, A:69
- basement, age, vs. carbon dioxide of basalts, B:144
- bathymetry, Hawaiian Arch, A:28, 32
- biostratigraphy
 ichthyoliths, B:27–43
 radiolarians, B:3–25
 Site 842, A:41–42
 Site 843, A:68
- bioturbation
 cores, A:68
 distribution, B:90
 volcaniclastics, B:87–88
- brecciation, lava, A:83
- Brunhes/Matuyama boundary
 magnetostratigraphy, B:47–48
 polarity stratigraphy, A:69
- Brunhes Chron, Site 842, A:43–44
- bulk mineralogy, sediments, B:66–69
- calcite
 sediments, B:66–68
 veins, B:123, 134–135
- calcium
 interstitial waters, A:55, 71
 vs. depth, A:56; B:78–79, 82–83
 See also magnesium/calcium ratio
- calcium carbonate, geochemical logs, B:157
- calcium oxide
 vs. loss on ignition, B:140
 vs. magnesium oxide, B:111
- californium-252 neutron source, geochemical logs, B:153–155
- caliper logs, vs. depth, A:88–91
- carbon dioxide
 vs. crustal age, B:144
 vs. loss on ignition, B:141
- carbon isotopes, vein carbonates, B:139, 143
- carbonate sediments, veins, B:124–125
- celadonite
 alteration products, A:79; B:124–125
 veins, B:124
- cerium
 chondrite-normalized, B:112
 sediments, B:82
- chert
 lithologic units, A:40
 reflectivity, B:99–104
- chert, red, cores, A:68
- chloride, interstitial waters, A:47, 69
- Clark Slide, glasses, B:61
- clay
 magnetic properties, B:45–46
 volcaniclastics, B:87–88
 volcanic sand, B:55–59
- clay, brown, cores, A:67–68
- clay, red, ichthyoliths, B:27–43
- clay, silty, ashy, radiolarian, lithologic units, A:39
- clay, zeolitic, cores, A:67–68
- clay mineralogy
 alteration products, B:134–135
 sediments, B:66, 68–69
 veins, B:124
 vs. depth, B:68
- clay minerals, alteration, A:79–80
- claystone, lithologic units, A:40
- clinoptilolite
 sediments, B:66–68
 vs. depth, B:68
- CNT. *See* compensated neutron tool
- coercivity, basalts, B:149
- compensated neutron tool, Site 843, B:153–154
- compressional wave velocity
 basalts, A:74–75
 chert, B:100–101
 vs. confining pressure, B:101
 vs. depth, A:76
 vs. porosity, B:101
- compressional wave velocity, vs. density, B:102
- cooling units, basalt, B:50
- core, homogeneity, A:5
- cores, analysis, A:7
- Cretaceous
 basalts, B:116–117
 biostratigraphy, A:7, 41–42
 carbonate sediments, B:126
 lithologic units, A:40
 nannofossils, A:68
 paleomagnetism, B:45–63
- radiolarians, B:3–25
 See also Santonian
- CRM. *See* remanent magnetization, chemical crust
 age and alteration, B:119–132
 age vs. carbon dioxide of basalts, B:144
- crust, oceanic
 geochemistry, B:116
 physical properties, B:161–164
- crystallization, fractional, basalts, B:111–113
- data processing, on-board, logging operations, A:85
- debris flows, glasses, B:61
- demagnetization, alternating-field
 basalts, A:69
 cores, A:49–54
 normalized orthogonal diagrams, B:46, 49
 sediments, A:68–69
 stratigraphic plot, B:47, 50
- density
 vs. compressional wave velocity, B:102
 vs. depth, A:78
- density, bulk
 sediments, A:71, 74
 vs. depth, A:59, 76
- density logs, vs. depth, A:88–91
- density, natural gamma-ray logs, Site 843, A:93–94, 97
- diagenesis, silica, B:82–83
- dissolution, radiolarians, B:69–70
- earthquakes
 recording, A:3–4
 sources, A:5
- East Pacific Rise, lava, B:111–113
- echo sounding, site surveys, A:33
- electron micrographs, back-scattered, digital images, B:100
- electron microscopy, scanning, volcaniclastics, B:86–87
- elemental yields, reconstruction from recorder spectral data, B:154
- Eocene
 lithologic units, A:40
 radiolarians, B:3–25
- euporium, chondrite-normalized, B:112
- euporium anomaly, vs. zirconium/neodymium ratio, B:115
- Federation of Digital Seismographic Networks, history, A:4
- fossils, calcareous, volcaniclastics, B:87
- fossils, siliceous, volcaniclastics, B:87
- fractures, alteration, A:79–80
- gamma-ray logs, vs. depth, A:88–91
- gamma-ray spectrometry tool, Site 843, B:153–154
- Gauss Chron, magnetostratigraphy, A:43–44; B:47–48
- geochemical logs
 Ocean Seismographic Network, B:153–157
 Site 843, A:99
- geochemical tool string
 schematic drawing, B:154
 Site 843, B:153–154
 See also aluminum activation clay tool; compensated neutron tool; gamma-ray spec-

geochemical tool string (cont.)

SUBJECT INDEX

- trometry tool; natural gamma-ray tool
 geochemistry
 basalts, B:107–118
 interstitial waters, B:77–83
 volcanic sand, B:55, 57, 59
 geochemistry, inorganic
 Site 842, A:46–48, 55–56
 Site 843, A:69, 71
 geochronology
 basalts, B:120–123
 See also radiometric age
 geomagnetic poles, virtual, reversals, B:48–49
 geophysics, underway, Hawaiian Arch, A:27–34
 GEOSCOPE, seismic networks, A:4
 glass
 shapes and sizes of fragments, B:57
 volcaniclastics, B:87
 volcanic sand, B:55–59
 glass, basaltic, reflective index, B:92
 glass, volcanic, sediments, B:69
 glass shards, reflective index, B:89
 Global Digital Seismographic Network, history, A:4
 Global Seismographic Network, history, A:4
 GLT. *See* geochemical tool string
 Graefenberg Array, history, A:4
 grain-size analysis, volcaniclastics, B:87–88
 GST. *See* gamma-ray spectrometry tool
- hafnium, chondrite-normalized, B:112
 Hawaii, glasses, B:61
 Hawaiian Arch
 basalts, B:133–146
 crust, B:119–132
 geochemical logs, B:153–157
 ichthyoliths, B:27–43
 Ocean Seismographic Network, A:3–8
 paleomagnetism, B:45–63
 radiolarians, B:3–25
 rock magnetism, B:147–149
 sediments, B:65–76
 seismic properties, B:99–103
 volcaniclastics, B:85–95
 volcanic sand, B:53–63
 Hawaiian Deep, sediment thickness, A:27
 Hawaiian Ridge, sediment thickness, A:27
 heavy minerals/light minerals ratio, volcaniclastics, B:91
 High-Gain Long-Period Network, history, A:3
 hotspots, exploration, A:7
 hydroclasts, glasses, B:62
 hydrothermal processes, vein minerals, B:123–127
 hydrovolcanics, sources, B:88
- ichthyoliths
 biostratigraphy, A:41–42; B:27–43
 igneous petrology, Site 843, A:77–82
 illite, vs. depth, B:69
 impedance, acoustic, chert, B:101–102
 inclusions, carbonates, Site 843, B:100
 index properties, Site 842, A:56–57
 interstitial waters
 geochemistry, A:46–48, 55–56, 69, 71; B:77–83
 IRM. *See* remanent magnetization, isothermal iron
 content in phyllosilicates, B:135
 vs. depth, B:80–83
 iron, ferric/iron, ferrous, ratio, vs. loss on ignition, B:141
 iron oxide
 vs. loss on ignition, B:140
 See also manganese oxide/iron oxide ratio
 iron oxide/iron oxide + magnesium oxide ratio, vs. titanium oxide, B:143
- Jaramillo Subchron, Site 842, A:43–44
- Kalman filtering, geochemical logs, B:154–155
 kaolinite + chlorite, vs. depth, B:69
- laminations, cores, A:68
 Lanai, glasses, B:61
 landslides, volcanic sand, B:53–63
 lanthanum/niobium ratio, vs. barium/niobium ratio, B:113
 lanthanum/samarium ratio, basalts, B:117
 lanthanum/ytterbium ratio, vs. titanium oxide/alumina ratio, B:83
- lava
 basalts, A:80
 geochemistry, B:110–111
 lava, post-erosional, geochemistry, B:116–117
 lava, post-shield, geochemistry, B:116–117
 lava, shield, geochemistry, B:116–117
 lead-206/lead-204 ratio, vs. strontium-87/strontium-86 ratio, B:114
- lead isotopes
 basalts, B:110, 112–114
 See also lead-206/lead-204 ratio
 Leg 136, drilling results, A:3–8
 limestone, cores, A:68
 lithium, vs. depth, B:78–79, 82–83
 lithologic units
 Site 842, A:39–41
 Unit I, A:39
 Unit II, A:40
 Unit III, A:40
 lithostratigraphy
 Pliocene–Pleistocene, B:54–55
 Site 842, A:39–41
 Site 843, A:67–68
- magma, basaltic, partition coefficients, B:114
 magnesium
 content in phyllosilicates, B:135
 interstitial waters, A:55, 71
 vs. depth, A:56; B:78–79, 82–83
 magnesium/calcium molar ratio, vs. depth, B:78–79, 82–83
 magnesium/calcium ratio, vs. depth, A:56
 magnesium oxide
 variation diagrams, A:86
 vs. calcium oxide, B:111
 vs. loss on ignition, B:140
 vs. potassium/titanium ratio, B:145
 vs. potassium oxide, B:111, 145
 vs. silica, B:61
 vs. titanium oxide, B:60, 111
 See also iron oxide/iron oxide + magnesium oxide ratio
 magnetic anomalies, basalts, B:149
 magnetic declination, vs. depth, A:44–54, 70, 72–73
 magnetic inclination, vs. depth, A:44–54, 70, 73–74; B:49–50
 magnetic intensity
 sediments, A:69
 vs. depth, A:44–54, 70, 73–74
 magnetic polarity, vs. age, B:47
 magnetic properties, basalts, B:147–149
 magnetic reversals, paleolatitude, B:47–50
 magnetic susceptibility
 sediments, A:69
 vs. depth, A:43–54
 magnetic susceptibility, volume, vs. depth, A:74–75
 magnetization, post-formation, basalts, B:149
 magnetostratigraphy
 Cenozoic, A:69
- Cretaceous, B:45–63
 Site 842, A:43–44
 major elements
 basalts, A:78; B:109–111
 glass, B:57–59
 vs. depth, B:80–83
 manganese, vs. depth, B:80–83
 manganese oxide, vs. loss on ignition, B:141
 manganese oxide/iron oxide ratio, sediments, B:82
 mantle, depletion, B:116–117
 mantle, oceanic, structure, A:5
 maps, landslides, B:54
 Matuyama Chron
 magnetostratigraphy, B:47–48
 Site 842, A:43–44
 Mauna Loa, glasses, B:61
 microfabric, sediments, B:65–76
 mid-ocean-ridge basalts, geochemistry, B:111–115
 mineral composition, sediments, B:65–66, 68
 Miocene, lithologic units, A:39–40
 modal composition
 basalts, B:111
 volcaniclastics, B:87
 MORB. *See* mid-ocean-ridge basalts
 mudstone, silicified, cores, A:7
- nannofossils
 Albian–Cenomanian, A:7
 neodymium isotopes, B:127
 nannofossils, calcareous, biostratigraphy, A:41, 68
 natural gamma-ray logs, Site 843, B:156
 natural gamma-ray tool, Site 843, B:153–154
 neodymium. *See* samarium/neodymium ratio; zirconium/neodymium ratio
 neodymium isotopes
 alteration phases, B:125–127
 basalts, B:110, 112–114
 vs. samarium/neodymium ratio, B:122
 vs. strontium isotopes, B:114
 NGT. *See* natural gamma-ray tool
 niobium. *See* barium/niobium ratio; lanthanum/niobium ratio;
 yttrium/niobium ratio; zirconium/niobium ratio
 nitrate
 interstitial waters, A:55, 71
 vs. depth, A:56
 nodules
 chert, A:68
 claystone, A:40
 NRM. *See* remanent magnetization, natural
- Ocean Seismographic Network
 geochemical logs, B:153–157
 objectives, A:3–8
 ODP Borehole Seal, testing, A:7
 Olduvai Subchron, magnetostratigraphy, B:47–48
 Oligocene, lithologic units, A:40
 olivine
 compositional histogram, B:61
 volcaniclastics, B:87
 volcanic sand, B:55
 opal-CT
 claystone cement, A:40
 geochemistry, A:55
 sediments, B:66–68
 OSN. *See* Ocean Seismographic Network
 oxidation, magnetization, B:149
 oxide percentages, geochemical logs, B:155–156
 oxygen isotopes
 basalts, B:110, 114–115
 vein carbonates, B:139, 143
 oxyhydroxides, iron, veins, B:135

- P*-waves. *See* compressional wave velocity
- Pacific Ocean, Central
crust, B:119–132
paleomagnetism, B:45–63
- Pacific Ocean, drilling, A:3–99
- Pacific Ocean, equatorial N, radiolarians, B:3–25
- Pacific Ocean N, chert, B:99–104
- paleocirculation, hydrothermal fluids, B:129–131
- paleolatitude, basement rocks, B:48–50
- paleomagnetism
basalts, B:45–63
Site 842, A:42–54
Site 843, A:68–69
- partition coefficients, basaltic magma, B:114
- Pb isotopes. *See* lead-206/lead-204 ratio; lead isotopes
- petrography
basalts, B:109–110
volcanic sand, B:55
- petrology, basalts, B:107–118
- pH
interstitial waters, A:47, 71
- phillipsite
sediments, B:66–68
volcaniclastics, B:87
vs. depth, B:68
- phosphate
interstitial waters, A:55, 71
vs. depth, A:56; B:80–83
- phosphorus. *See also* potassium/phosphorus ratio
- photoelectric factor, geochemical logs, B:154–155
- phyllosilicates
alteration products, B:134–135
geochemistry, B:126–127
- physical properties
crust, B:161–164
Site 842, A:56–59
Site 843, A:71, 74–76
- pillow basalt, margin, photograph, A:82
- plagioclase
basalts, A:77–78
sediments, B:66–68
volcaniclastics, B:87
volcanic sand, B:55
vs. depth, B:68
- Pleistocene, volcanic sand, B:53–63
- Pliocene
lithologic units, A:39
volcanic sand, B:53–63
- polarity stratigraphy. *See* magnetostratigraphy
- pores, electron micrographs, B:100
- pore water. *See* interstitial waters
- porosity
compressional wave velocity, B:101
vs. depth, A:60; B:70
- potassium
content in phyllosilicates, B:135
geochemical logs, B:154–155
interstitial waters, A:55–56, 71
- potassium, interlayer, vs. tetrahedral aluminum, B:134
- potassium oxide
basalts, B:117
variation diagrams, A:86
vs. loss on ignition, B:111, 141
vs. magnesium oxide, B:111, 145
vs. silica, B:60
vs. titanium oxide, A:87; B:145
- potassium/phosphorus ratio, basalts, B:117
- potassium/titanium ratio
basalts, B:117
vs. magnesium oxide, B:145
- pressure, confining, vs. compressional wave velocity, B:101
- pyroxene, volcaniclastics, B:87
- quartz
electron micrographs, B:100
sediments, B:66–68
vs. depth, B:68
- Quaternary
biostratigraphy, A:41
lithologic units, A:39
radiolarians, A:68; B:3–25
- radioactivity, geochemical logs, B:154–155
- radiolarians
biostratigraphy, A:41–68; B:3–25
volcanic sand, B:55
- radiometric age
crust, B:119–132
See also geochronology
- rare earths
chondrite normalization, B:112
vs. depth, B:80–83
- reflective index, basaltic glasses, B:88
- reflectivity, chert, B:99–104
- remanent magnetization, vs. age, B:148
- remanent magnetization, anhysteretic, alteration, B:45–46
- remanent magnetization, chemical, basalts, B:147–149
- remanent magnetization, isothermal, basalts, B:46
- remanent magnetization, isothermal, saturation, alteration, B:45–46
- remanent magnetization, natural
basalts, B:46
sediments, A:68–69
Site 842, A:42
vs. depth, A:43
vs. VRM acquisition coefficient, B:148
- remanent magnetization, viscous, basalts, B:148
- resistivity–sonic–natural gamma-ray logs, A:95–96, 98
- resistivity logs, vs. depth, A:88–91
- reworking
ichthyoliths, B:30
radiolarians, B:7–8
- rock magnetism, basalts, B:147–149
- rubidium/strontium isochron, basalts and calcite veins, B:123
- salinity, interstitial waters, A:47, 69
- samarium. *See* lanthanum/samarium ratio
- samarium/neodymium isochron, vs. neodymium isotopes, B:122
- sand, distribution, B:55–56
- sand, volcanic, Pliocene–Pleistocene, B:53–63
- Santonian, lithologic units, A:40
- saponite, alteration products, A:79; B:134–135
- saponite, aluminum, alteration products, B:134–135
- seamounts, origin of basalts, B:116
- secondary minerals, alteration, B:139–144
- sedimentation
deep sea, B:30
volcaniclastics, B:85–95
- sedimentation rates
magnetic polarity, A:44
magnetostratigraphy, B:47–48, 50
- sedimentation rates, interval-average, vs. depth, A:55
- sediment budget, turbidity currents, B:61
- sediments
geochemistry, B:77–83
volcaniclastics, B:85–95
X-ray mineralogy, B:65–76
- seismic networks
history and objectives, A:3–4
potential global coverage, A:4
- seismic profiles, drill sites, A:29, 31, 34
- seismic properties, chert, B:99–104
- seismic reflection data, traveltimes, B:100
- seismograms, synthetic, normal-incidence, calculated for an Earth model, B:103
- seismometers, boreholes, B:161–164
- shear strength, sediments, A:57–58
- shear strength, vane, vs. depth, A:61
- sheet silicates. *See* phyllosilicates
- silica
diagenesis, B:82–83
interstitial waters, A:55–56, 71
vs. depth, B:78–79, 82–83
vs. loss on ignition, B:140
vs. magnesium oxide, B:61
vs. sodium oxide + potassium oxide, B:60
- silica, biogenic, sources, B:71–72
- silt, clayey, radiolarian, ashy, lithologic units, A:39
- SIRM. *See* remanent magnetization, isothermal, saturation
- Site 842, A:37–63
biostratigraphy, A:41–42; B:5
coring summary, A:39
inorganic geochemistry, A:46–48, 55–56
lithostratigraphy, A:39–41
operations, A:38–39
paleomagnetism, A:42–46
physical properties, A:56–59
site description, A:37–63
site survey, A:27–34
volcanic sand, B:53–63
- Site 843, A:65–99
biostratigraphy, A:68; B:6
coring summary, A:66
crust, B:119–132
geochemical logs, B:153–157
igneous petrology, A:76–82
inorganic geochemistry, A:69–70
lithostratigraphy, A:67–68
operations, A:66–67
paleomagnetism, A:68–69
physical properties, A:71, 74–76
rock magnetism, B:147–149
site description, A:65–99
site survey, A:27–34
well logging, A:82–88
- site surveys, underway geophysics, A:27–34
- smear slide data, volcaniclastics, B:86–87
- smectite
alteration products, B:134–135
veins, B:124
vs. depth, B:69
See also saponite
- sodium oxide
vs. loss on ignition, B:140
vs. silica, B:60
- sonar imagery, site surveys, A:30
- South Hawaiian Seamount province, sources of basalts, B:116
- South Kauai Slide, glasses, B:61
- sponge spicules, volcanic sand, B:55
- stable isotopes
vein carbonates, B:139, 143
See also carbon isotopes; oxygen isotopes
- strontium-87/strontium-86 ratio
vs. lead-206/lead-204 ratio, B:114
vs. neodymium isotopes, B:114
- strontium isotopes
alteration phases, B:125–127
basalts, B:110, 112–114
vs. rubidium/strontium isochron, B:123
See also strontium-87/strontium-86 ratio
- sulfate, interstitial waters, A:47–48, 55, 71
- sulfur, glass, B:57

tantalum

tantalum, chondrite-normalized, B:112
 taxonomy, radiolarians, B:10–14
 temperature tool logs, vs. depth, A:92
 Tertiary, biostratigraphy, A:41–42
 textures, aphyric, basalts, A:80
 thermal conductivity
 basalts, A:75–76
 sediments, A:58–59
 vs. depth, A:63, 79–80
 thin-section data, volcanoclastics, B:86–87
 tholeiite, geochemistry, B:110–111
 thorium, geochemical logs, B:154–155
 titanium
 chondrite-normalized, B:112
 See also potassium/titanium ratio
 titanium oxide
 vs. iron oxide/iron oxide + magnesium oxide
 ratio, B:143
 vs. loss on ignition, B:141
 vs. magnesium oxide, B:60, 111
 vs. potassium oxide, A:87; B:145
 titanium oxide/alumina ratio, vs. lanthanum/ytter-
 bium ratio, B:83
 trace elements
 basalts, B:109–111, 125–126
 transport
 hydrothermal fluids, B:129–131
 volcanoclastics, B:88–89
 turbidites
 Pliocene–Pleistocene, B:53–63

TAXONOMIC INDEX

reworking, B:7–8
 volcanoclastics, B:87–88
 turbidity currents
 reworking, B:7–8
 volcanic sand, B:59, 61–62
 underway geophysics, Hawaiian Arch, A:27–34
 uranium, geochemical logs, B:154–155
 veins
 alteration, A:79–80
 calcite, B:123, 135
 velocity, sonic
 sediments, A:58
 vs. depth, A:61–62, 78–79
 velocity logs, vs. depth, A:88–91
 vesicularity
 basalts, A:78
 glasses, B:62
 VGP. See geomagnetic poles, virtual
 volatiles, as indicators of alteration, B:139
 volcanic ash
 alteration, A:39–40
 location of layers and relative abundances, A:40
 magnetic properties, B:45–46
 vs. depth, B:86
 volcanic fragments, length and width, B:90
 volcanoclastics
 grain size vs. modal abundance, B:89
 sedimentation, B:85–95

volcanogenic debris, composition, B:71
 VRM. See remanent magnetization, viscous
 water content
 vs. depth, A:60
 vs. loss on ignition, B:141
 well logging, Site 843, A:82–88
 World Wide Standard Seismograph Network, his-
 tory, A:3
 X-ray diffraction data, sediments, B:65–76
 ytterbium. See lanthanum/ytterbium ratio
 yttrium/niobium ratio
 basalts, B:117
 vs. zirconium/niobium ratio, B:112
 zeolites
 clay, A:40
 sediments, B:66–68
 volcanoclastics, B:87
 See also clinoptilolite; phillipsite
 zirconium/neodymium ratio, vs. europium anom-
 ally, B:115
 zirconium/niobium ratio
 basalts, B:117
 vs. yttrium/niobium ratio, B:112
 zonation. See individual zones in Taxonomic
 Index

TAXONOMIC INDEX

acalles, *Podocyrtris* (*Lampterium*), Site 842, B:7–
 8, 13, 23–24
Acanthocircus sp., Site 842, B:14
acquilonium, *Stylacantarium*
 Site 842, B:5, 11
 Site 843, B:5, 17
Acrosphaera flammabunda, Site 842, B:10
Acrosphaera lapaccea, Site 843, B:17
Acrosphaera murrayana, Site 843, B:17
acuminatum, *Eucyrtidium*
 Site 842, B:12
 Site 843, B:22
Alievium murphyi, Site 842, A:41; B:9
alpha, *Theocotylissa*, Site 842, B:7–8, 23
Amphirhopalum ypsilon
 Site 842, A:41; B:18
 Site 843, A:68
Amphirhopalum ypsilon Interval Zone, Site 842,
 B:3–25
Amphirhopalum ypsilon Zone, Site 842, A:41
angelinum, *Axoprunum*
 Site 842, B:5, 11
 Site 843, A:68; B:6, 17
angulare, *Anthocyrtdium*, Site 842, A:41
angulata, *Giraffospyris*, Site 843, B:22
anomalum, *Eucyrtidium*, Site 842, B:12
Anthocyrtdium angulare, Site 842, A:41
Anthocyrtdium angulare Interval Zone, Site 842,
 B:5
Anthocyrtdium sp. aff. *A. zanguebaricum*, Site
 842, B:12
Anthocyrtdium spp., Site 842, A:41
anthophorus, *Reinhardtites*, Site 842, A:41

aquilonaris, *Botryostrobus*, Site 842, B:12
Archaeodictyomitra sliteri, Site 842, B:9, 13, 25
Archaeodictyomitra sp., Site 842, B:13, 25
Archaeodictyomitra sp. aff. *A. sliteri*, Site 842,
 B:13
Arcosphaera spinosa, Site 843, A:68
astericus, *Heliodiscus*, Site 842, B:18
Asymmetrical peaks narrow depression, Site 842,
 B:36
Asymmetrical peak wide depression, Site 842,
 B:36
auritus, *Botryostrobus*, Site 842, B:12
australis, *Botryostrobus*, Site 842, B:12
Axoprunum angelinum
 Site 842, B:5, 11
 Site 843, B:17
Axoprunum stauraxonium
 Site 842, A:41
 Site 843, A:68; B:6, 17
bacca, *Lithopera*
 Site 842, A:41
 Site 843, A:68
barnesae, *Watzneuria*
 Site 842, A:41
 Site 843, A:68
Bekoma, Site 842, B:9
biforaminis, *Flabellites*, Site 843, A:68
Biscutum sp., Site 843, A:68
Botryostrobus auritus/australis (Ehrenberg)
 group, Site 842, B:12
Botryostrobus sp. aff. *B. acquilonaris*, Site 842,
 B:12

Buccinosphaera invaginata
 Site 842, B:5
 Site 843, B:68
Buccinosphaera invaginata Range Zone, Site 842,
 B:5
Buccinosphaera invaginata Zone, Site 842, A:41
Buryella tetradica, Site 842, B:7, 23
cabrilloensis, *Cycladophora*, Site 842, B:12
Calcidiscus leptoporus, Site 842, A:41
Calcidiscus macintyreii, Site 842, A:41
Calocyclus hispida, Site 842, B:7, 23
Carpocanistrum spp., Site 842, B:11
 cf. *Triangle bowed inline*, Site 842, B:32
 cf. *Triangle pointed margin ends*, Site 842, B:39
Circodiscus microporus, Site 842, B:11
circularis, *Saturnalis*, Site 843, B:18
circumtexta, *Peripyramis*, Site 842, A:41
Clathrocanium sp., Site 842, B:12
Clathrocyclas, Site 842, B:4
Collosphaera macrophora, Site 843, B:17
Collosphaera orthoconus
 Site 842, B:5
 Site 843, B:6
Collosphaera spp., Site 843, B:17
Collosphaera tuberosa, Site 842, B:5
Collosphaera tuberosa Interval Zone, Site 842,
 B:3–25
Collosphaera tuberosa Zone, Site 842, A:41; B:5
conica, *Cycladophora*, Site 842, B:12, 21
Cornutella sp., Site 843, A:68
Cryptocarpium sp., Site 842, B:13, 23
Curved triangle pointed margin, Site 842, B:42

- cyathina*, *Siphonosphaera*
Site 842, B:11
Site 843, B:17
- Cycladophora*(?) sp., Site 842, B:12
- Cycladophora* sp. aff. *C. conica*, Site 842, B:12, 21
- Cycladophora* sp. cf. *C. cabrilloensis*, Site 842, B:12
- decoratus*, *Microrhabdulus*, Site 843, A:68
- densicostata*, *Dictyomitra*, Site 842, A:41; B:9
- dianae*, *Theocorythium*, Site 842, B:12
- Dictyocoryne profunda*
Site 842, A:41
Site 843, B:18
- Dictyocoryne* sp. aff. *D. truncatum*, Site 842, B:11
- Dictyocoryne truncatum*
Site 842, A:41; B:18
Site 843, A:68
- Dictyomitra densicostata*, Site 842, A:41; B:9
- Dictyophimus hirundo*, Site 843, A:68
- Didymocyrtis tetrathalamus*, Site 842, A:41
- Didymocyrtis tetrathalamus tetrathalamus*, Site 842, B:11
- Effelithus turriseiffelii*, Site 843, A:68
- elegans*, *Euchitonia*, Site 842, A:41, 68
- Elliptical with line across*, Site 842, B:36
- ellipticum*, *Spongobranchium*
Site 842, B:11, 18
Site 843, B:18
- embergeri*, *Parhabdololithus*, Site 843, A:68
- Eprolithus floralis*, Site 842, A:41
- Euchitonia elegans*
Site 842, A:41
Site 843, A:68
- Euchitonia furcata*, Site 842, A:41
- euclidis*, *Hymeniastrum*, Site 842, B:11
- Eucyrtidium anomalum*, Site 842, B:12
- Eucyrtidium hexagonatum*, Site 843, A:68
- Eucyrtidium* sp. aff. *E. acuminatum*
Site 842, B:12
Site 843, B:22
- ficus*, *Theocotylyssa*, Site 842, B:8
- Five peaks flared base*, Site 842, B:31, 35
- Flabellites biforaminiis*, Site 843, A:68
- flammabunda*, *Acrosphaera*, Site 842, B:10
- Flexed triangle shallow inbase*, Site 842, B:37
- floralis*, *Eprolithus*, Site 842, A:41
- fornicata*, *Tholospyris*, Site 842, B:11
- furcata*, *Euchitonia*, Site 842, A:41
- Gephyrocapsa* spp., Site 842, A:41
- giganteus*, *Stylatractus*, Site 842, B:11
- Giraffospyris angulata*, Site 843, B:22
- Giraffospyris lata*, Site 842, B:7–8, 23
- Heliodiscus astericus*, Site 842, B:18
- Hexacoentium laevigatum*
Site 842, A:41
Site 843, A:68
- hexagonatum*, *Eucyrtidium*, Site 843, A:68
- hirundo*, *Dictyophimus*, Site 843, A:68
- hispidia*, *Calocyclus*, Site 842, B:7, 23
- Hymeniastrum* sp. aff. *H. euclidis*, Site 842, B:11
- invaginata*, *Buccinosphaera*
Site 842, B:5
Site 843, A:68
- Kite-shaped elongate prominence*, Site 842, B:34
- Kite-shaped irregular network*, Site 842, B:34
- Kite-shaped longitudinal line*, Site 842, B:34
- lacunosa*, *Pseudoemiliania*, Site 842, A:41
- laevigatum*, *Hexacoentium*
Site 842, A:41
Site 843, A:68
- Lamprocyclus maritilis*, Site 843, A:68
- Lamprocyclus maritilis* sp. aff. *L. m. polypora*, Site 843, B:21
- Lamprocyrtis neoheteroporos*, Site 842, A:41
- Lamprocyrtis nigriniae*
Site 842, A:41
Site 843, A:68
- lapacea*, *Acrosphaera*, Site 843, B:17
- lata*, *Giraffospyris*, Site 842, B:7–8, 23
- leptoporus*, *Calcidiscus*, Site 842, A:41
- Liriospyris reticulata*
Site 842, A:41; B:20
Site 843, B:3–25
- Lithocampe* spp., Site 843, A:68
- Lithopera bacca*
Site 842, A:41
Site 843, A:68
- Lychnocanoma* sp., Site 842, B:3–25
- macintyreii*, *Calcidiscus*, Site 842, A:41
- macrophora*, *Collosphaera*, Site 843, B:17
- Maniviteella pemmatoidea*
Site 842, A:41
Site 843, A:68
- Many peaks transverse lines*, Site 842, B:35
- maritilis*, *Lamprocyclus*, Site 843, A:68; B:21
- mclaughlini*, *Novixitus*, Site 842, B:10
- microporus*, *Circodiscus*, Site 842, B:11
- Microrhabdulus decoratus*, Site 843, A:68
- murphyi*, *Alievium*, Site 842, A:41; B:9
- murrayana*, *Acrosphaera*, Site 843, B:17
- murrayi*, *Ommatodiscus*, Site 842, B:11
- neoheteroporos*, *Lamprocyrtis*, Site 842, A:41
- nigriniae*, *Lamprocyrtis*
Site 842, A:41
Site 843, A:68
- Novixitus mclaughlini*, Site 842, B:10
- Novixitus* sp., Site 842, B:14
- octacantha*, *Tetrapyle*, Site 843, B:19
- Ogee lanceolate*, Site 842, B:36
- Ommatartus tetrathalamus*
Site 842, A:41
Site 843, A:68
- Ommatodiscus murrayi*, Site 842, B:11
- orthoconus*, *Collosphaera*
Site 842, B:5
Site 843, B:6
- Otosphaera polymorpha*
Site 842, B:11
Site 843, B:17
- papalis*, *Podocyrtis (Podocyrtis)*, Site 842, B:7, 13, 23
- Parhabdololithus embergeri*, Site 843, A:68
- pectinata*, *Stichopera*, Site 842, B:12
- pemmatoidea*, *Maniviteella*
Site 842, A:41
Site 843, A:68
- pentalcolaensis*, *Pseudodictyomitra*, Site 842, B:14
- pentalactis*, *Sethophormis*, Site 842, B:11
- Peripyraxis circumtexta*, Site 842, A:41
- Peripyraxis* sp., Site 843, A:68
- Phormocyrtis striata exquisita*, Site 842, B:7
- Phormocyrtis striata striata*, Site 842, B:7, 23
- Phormospyris stabilis*, Site 843, A:68
- Plain and lined lanceolate*, Site 842, B:35
- Podocyrtis (Lampterium) acalles*, Site 842, B:7–8, 13, 23–24
- Podocyrtis (Lampterium) sinuosa*, Site 842, B:7, 23
- Podocyrtis (Lampterium) sp. aff. P. (L.) acalles*, Site 842, B:13, 23
- Podocyrtis (Podocyrtis)*, Site 842, B:8
- Podocyrtis (Podocyrtis) papalis*, Site 842, B:7, 13, 23
- Podocyrtis (Podocyrtis) sp. aff. P. (P.) papalis*, Site 842, B:13
- Polygonal cavity*, Site 842, B:34
- Polygonal cavity long rays*, Site 842, B:34
- polymorpha*, *Otosphaera*
Site 842, B:11
Site 843, B:17
- polypora*, *Lamprocyclus*, Site 843, B:21
- polysiphonia*, *Siphonosphaera*, Site 843, B:17
- praetextum praetextum*, *Pterocanium*, Site 843, B:20
- Prediscosphaera* spp., Site 842, A:41
- profunda*, *Dictyocoryne*
Site 842, A:41
Site 843, B:18
- Pseudodictyomitra pseudomacrocephala*, Site 842, B:9–10, 25
- Pseudodictyomitra* sp. aff. *P. pentalcolaensis*, Site 842, B:14
- Pseudoemiliania lacunosa*, Site 842, A:41
- pseudomacrocephala*, *Pseudodictyomitra*, Site 842, B:9–10, 25
- Pterocanium praetextum praetextum*, Site 843, B:20
- puella*, *Spongocore*, Site 843, A:68
- quadribrachiatus quadribrachiatus*, *Stylotrochus*, Site 842, B:7–8, 23
- Rectangular irregularly sawtoothed*, Site 842, B:36–37
- Rectangular triangular toothed*, Site 842, B:36
- Reinhardtites anthophorus*, Site 842, A:41
- reticulata*, *Liriospyris*
Site 842, A:41; B:20
Site 843, B:3–25
- Rhopalocanium* sp., Site 842, B:13, 24
- Rucinolithus* sp., Site 843, A:68
- Saturnalis circularis*, Site 843, B:18
- Sethophormis pentalactis*, Site 842, B:11
- Sethophormis* sp. aff. *S. pentalactis*, Site 842, B:11
- Short kite-shaped*, Site 842, B:31
- sibogae*, *Umbilicosphaera*, Site 842, A:41
- sinuosa*, *Podocyrtis (Lampterium)*, Site 842, B:7, 23
- Siphonosphaera cyathina*
Site 842, B:11
Site 843, B:17
- Siphonosphaera polysiphonia*, Site 843, B:17
- Skewed with transverse lines*, Site 842, B:35
- sliteri*, *Archaeodictyomitra*, Site 842, B:9, 13, 25
- Small triangle crenate margin*, Site 812, B:30, 38
- Small triangle long striations*, Site 812, B:29
- spinosa*, *Arcosphaera*, Site 843, A:68
- Spongaster tetras*, Site 843, A:68
- Spongaster tetras tetras*, Site 842, A:41; B:19
- Spongobranchium ellipticum*, Site 842, B:11, 18
- Spongobranchium* sp. aff. *S. ellipticum*
Site 842, B:11
Site 843, B:18
- Spongocore puella*, Site 843, A:68
- stabilis*, *Phormospyris*, Site 843, A:68
- stauraxonium*, *Axoprimum*
Site 842, A:41
Site 843, B:17
- Stichopera pectinata* group, Site 842, B:12

- Stippled triangle*, Site 842, B:29
straussi, *Tessarastrum*, Site 842, B:11
striata exquisita, *Phormocyrtis*, Site 842, B:7
striata striata, *Phormocyrtis*, Site 842, B:7, 23
Stylocontarium acquilonium
 Site 842, B:5, 11
 Site 843, B:5, 17
Stylatractus giganteus, Site 842, B:11
Stylatractus sp., Site 842, B:11
Stylatractus universus, Site 842, B:5
Stylatractus universus Zone, Site 842, B:5
Stylodictya validispina
 Site 842, A:41; B:11
 Site 843, A:68
Stylotrichus quadribrachiatum quadribrachiatum,
 Site 842, B:7–8, 23
- Tanged triangle*, Site 842, B:38
Tessarastrum straussi, Site 842, B:11
tesseractis, *Xiphosphaera*, Site 842, B:11
tetradica, *Buryella*, Site 842, B:7, 23
Tetrapyle octacantha, Site 843, B:19
tetras, *Spongaster*, Site 843, A:68
tetras tetras, *Spongaster*, Site 842, A:41; B:19
tetrathalamus, *Didymocyrtis*, Site 842, A:41
tetrathalamus, *Ommatartus*
 Site 842, A:41
 Site 843, A:68
tetrathalamus tetrathalamus, *Didymocyrtis*, Site
 842, B:11
Theocalyptra, Site 842, B:4
- Theocorythium trachelium*
 Site 842, A:41
 Site 843, A:68
Theocorythium trachelium sp. aff. *T.t. diana*, Site
 842, B:12
Theocorythium trachelium trachelium, Site 843,
 B:22
Theocotylissa alpha, Site 842, B:7–8, 23
Theocotylissa ficus, Site 842, B:8
Theopilium tricostatum, Site 842, B:11
Tholospyrus fornicata, Site 842, B:11
Three equal peaks flared base, Site 812, B:30, 35
Thyrsochyrtis (Pentalacorys) triacantha, Site 842,
 B:8, 24
trachelium, *Theocorythium*
 Site 842, A:41
 Site 843, A:68
trachelium trachelium, *Theocorythium*, Site 843,
 B:22
triacantha, *Thyrsochyrtis (Pentalacorys)*, Site 842,
 B:8, 24
Triangle inward angle, Site 842, B:39
Triangle pointed margin ends, Site 842, B:32
Triangle sinuous inline, Site 842, B:43
Triangle with base angle, Site 842, B:37
Triangle with canals, Site 842, B:40
tricostatum, *Theopilium*, Site 842, B:11
truncatum, *Dictyocoryne*
 Site 842, A:41; B:11, 18
 Site 843, A:68
tuberosa, *Collosphaera*, Site 842, B:5
- turrisseiffelii*, *Effelithus*, Site 843, A:68
Two triangles, Site 842, B:29, 32, 36
- Umbilicosphaera sibogae*, Site 842, A:41
universus, *Stylatractus*, Site 842, B:5
 Unnamed form A, Site 842, B:32, 41
 Unnamed form B, Site 842, B:32
 Unnamed form C, Site 842, B:32
 Unnamed form D, Site 842, B:33
 Unnamed form E, Site 842, B:33
- validispina*, *Stylodictya*
 Site 842, A:41; B:11
 Site 843, A:68
- Watzneuria barnesae*
 Site 842, A:41
 Site 843, A:68
- Xiphosphaera tesseractis*, Site 842, B:11
Xitus(?) sp., Site 842, B:14
- ypsilon*, *Amphirhopalum*
 Site 842, A:41; B:18
 Site 843, A:68
- zanguebaricum*, *Anthocyrtidium*, Site 842, B:12
 zones (with letter prefixes)
 CC10, Site 843, A:68
 CC15, Site 842, A:41
 NN19, Site 842, A:41