

	Lithologic classes	Prefix (optional)	Principal name (required)	Suffix (optional): "with"
25-100% volcanic particles	> 75% volcanic grains and clasts: Volcanic		Ash Tuff Lapilli-ash Lapilli-tuff Lapilli Lapillistone Ash breccia Tuff breccia Agglomerate Volcanic breccia-agglomerate Volcanic breccia	Alternating ⁵ Ash or tuff Ash and shells Ash pods Crystals Lapilli-ash or lapilli-tuff Lapilli or lapillistone Ash breccia or tuff breccia
	25-75% volcanic grains and clasts: Tuffaceous	Anhydritic Bioclastic Biogenic Calcareous Carbonate-cemented Dolomitic Micritic Nodular Organic-rich Diatom Foraminifer Radiolarian Nannofossil Diatom-rich Foraminifera-rich Radiolarian-rich Nannofossil-rich Clast-supported Matrix-supported Matrix-supported, carbonate-cemented Clast-supported, carbonate-cemented Crystal ¹ Lithic ¹ Crystal, lithic ¹ Clayey ² Silty ² Sandy ² Gravelly ³ Gravelly muddy ³ Muddy ³ Muddy sandy ³ Sandy ³ Granule grade ⁴ Pebble grade ⁴ Cobble grade ⁴	Tuffaceous Clay or claystone Silt or siltstone Mud or mudstone Calcareous mud or mudstone Sand or sandstone Calcareous mud or mudstone Granule Pebble Cobble Conglomerate Breccia Breccia-conglomerate Anhydrite Gypsum Limestone Micrite Dolostone Ooze or marl Chalk Chert	Pumice lapilli Scoria lapilli Lithic lapilli Accretionary lapilli Diatoms Foraminifera Radiolarians Nannofossils Organic matter Plant fragments Shells or shell fragments Macrofossils Glauconite Clay or claystone Silt or siltstone Mud or mudstone Calcareous mud or mudstone Sand or sandstone Calcareous mud or mudstone Granule Pebble Cobble Conglomerate Breccia Breccia-conglomerate Tuffaceous clay or claystone Tuffaceous silt or siltstone Tuffaceous mud or mudstone Tuffaceous calcareous mud or mudstone Tuffaceous sand or sandstone Tuffaceous calcareous mud or mudstone Tuffaceous conglomerate Tuffaceous breccia Tuffaceous breccia-conglomerate Tuffaceous limestone Tuffaceous micrite Tuffaceous dolostone Tuffaceous ooze or marl Tuffaceous chalk Tuffaceous chert
	< 25% volcanic grains and clasts: Nonvolcanic siliciclastic [siliciclastic > chemical & biogenic]		Clay or claystone Silt or siltstone Mud or mudstone Calcareous mud or mudstone Sand or sandstone Calcareous sand or sandstone Granule Pebble Cobble Conglomerate Breccia Breccia-conglomerate	Tuffaceous clay or claystone Tuffaceous silt or siltstone Tuffaceous mud or mudstone Tuffaceous calcareous mud or mudstone Tuffaceous sand or sandstone Tuffaceous calcareous mud or mudstone Tuffaceous conglomerate Tuffaceous breccia Tuffaceous breccia-conglomerate Tuffaceous limestone Tuffaceous micrite Tuffaceous dolostone Tuffaceous ooze or marl Tuffaceous chalk Tuffaceous chert
0-25% volcanic particles ("nonvolcanic")	< 25% volcanic grains and clasts: Nonvolcanic chemical & biogenic [siliciclastic < chemical & biogenic]		Anhydrite Gypsum Limestone Micrite Dolostone Ooze or marl Chalk Chert	Anhydrite Anhydrite nodules Gypsum Gypsum nodules Limestone Micrite Dolostone Ooze or marl Organic-rich ooze Chalk Chert

¹ Use in combination with principal "volcanic" lithologies

² Use in combination with principal lithologies "clay", "silt" and "sand"

³ Use in combination with principal lithologies "mud / mudstone" and "sand / sandstone"

⁴ Use in combination with principal lithologies "conglomerate", "breccia" and "breccia-conglomerate"

⁵ Use in combination with any principal lithology and suffix [e.g. "Mud" (principal name) alternating with "ash" (suffix)]