

Table 1. Summary of the Principal Features of the Seismostratigraphic Units in the Peniche Basin

Seismic Units	Age of Base	Two-Way Traveltime Thickness (s)	Average Velocity (s)	Internal Character, Geometry, and Terminations	Probable Lithology (Groupe Galice, 1979; Maldonado, 1979)	Units beneath Iberia Abyssal Plain (Wilson et al., 2001)
C4	Middle Pliocene	0–0.3	1.8	Transparent to low-amplitude internal reflections; locally wavy; wavy base on the deeper margin; sparse baselap	Interbedded sand- to clay-rich turbidites, hemipelagites and pelagites	1
C3	Early–middle Miocene	0–0.4	2.0	Moderate- to high-amplitude subparallel reflections; wavy toward the west; local downlap	Interbedded sand- to clay-rich turbidites, hemipelagites and pelagites.	2
C2	Middle Eocene	0–0.4	2.5	Low- to moderate-amplitude internal reflections, subparallel to wavy, locally transparent; comprises the lower part of a prograding wedge in sector 2; west-prograding clinoforms on the deeper margin; downlap on its base	Interbedded sand- to clay-rich countourites, turbidites, hemipelagites and pelagites.	3
K3-C1	Cenomanian–Turonian boundary	0–0.8	2.8	Low- to moderate-amplitude internal reflections, subparallel to wavy; wedge-shaped unit thickening toward the west; downlap is observed	Sandy to clayey turbidites, pelagic oozes and local debris-flow deposits	4
K2	Latest Aptian–Albian	0–0.5	3.1	Moderate- to local high-amplitude westerly tilted clinoforms, mounded at places; wedge-shaped seismic unit thickening toward the west; downlap visible on its base	Pelagic oozes, local debris-flow deposits and turbidites; serpentinite breccia with peridotite blocks and claystone drilled in Leg 149 (Site 899)	5
K1	Berriasian–early Valanginian	0–1.8	3.5	Low- to moderate-amplitude internal reflections; localized growth onto basin-margin structures; fills half graben and graben blocks close to the continental slope; onlap onto its base	Syn- and posttrift clayey and sandy turbidites; higher sand rates related to active fault structures and to submarine canyons; carbonate levels may be present in the association	6
J3	Early Oxfordian	0–0.8	4.5	Moderate- to high-amplitude parallel reflections showing localized growth onto basin-margin structures; it underlies synrift units in sector 2 and comprises an intermediate package showing growth in sector 1; baselap is visible; chaotic to low-continuity, irregular reflections observed in sector 1	Prefrift siliciclastic (fluvial or deltaic?) and carbonate material in sector 2; marine siliciclastics (turbidites) in the deeper areas of sectors 1 and 2; sandstones, clays, and carbonate beds of transitional to deltaic or fluvial environments in the Porto Basin	