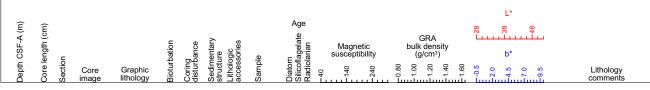
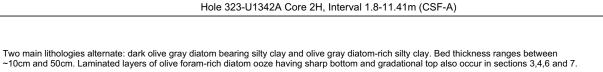
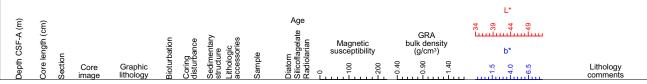


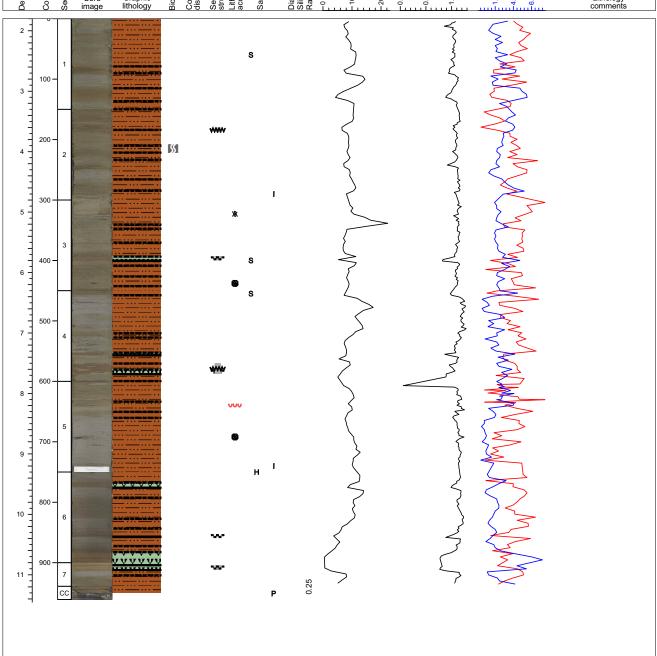
Major lithology is diatom-bearing silty clay (olive gray 10Y 4/1). In the top of Section 1 (0-9cm) diatom-rich foraminifera ooze (olive 5Y 4/4) occured. In the depth from 9 to 23 cm foraminifera-rich nannofossil diatom ooze (very dark grayish brown 5Y 3/2) occured.





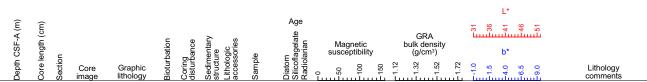


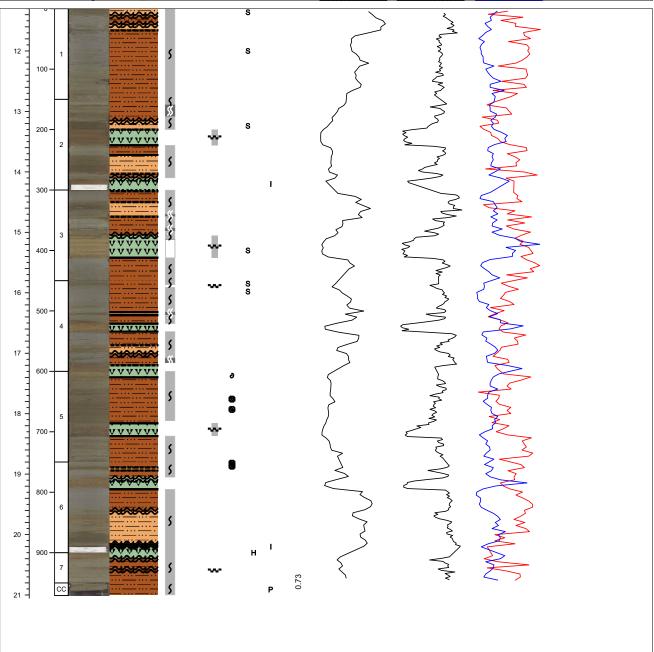




Hole 323-U1342A Core 3H, Interval 11.3-21.01m (CSF-A)

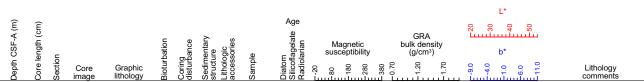
Major lithologies: olive diatom-rich clayey silt, very dark gray silty clay, and olive laminated nannofossil-bearing foraminifer-rich diatom ooze. Diatom ooze generally has a gradational top boundary and sharp lower boundary, while other units have gradational or undulating boundaries that are mottled and bioturbated. Several clasts and a mollusc shell are present in the lower sections. Laminations occur in the diatom ooze with distinct whitish pennate diatom mats visible. Pennate diatoms are aligned perpendicular to the core length and are visible at lithologic boundaries. Foraminifera occur scattered throughout all lithologies. Bioturbation is slight to moderate with many chondrites burrows. Laminated intervals generally display no bioturbation. Disturbance is minimal.

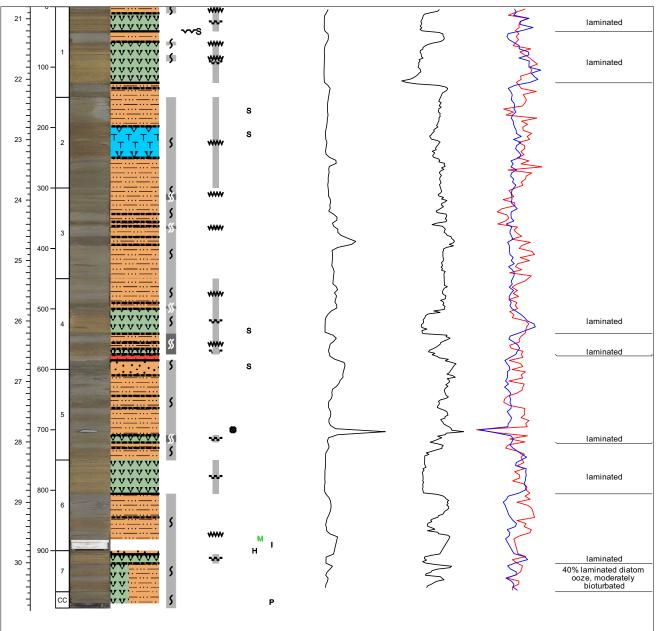




Hole 323-U1342A Core 4H, Interval 20.8-30.75m (CSF-A)

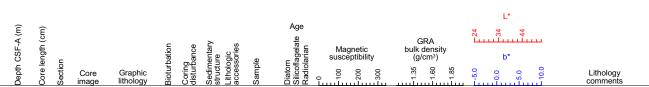
Major lithologies are laminated diatom ooze, and clayey silt that is diatom rich or diatom and foraminier rich. Colors range from olive grey to dark grey. There are gradational boundaries between the lithologies, but laminated intervals typically have sharp bottom contacts and gradational top contacts. There is one grey fine-ash layer and one 3 cm rounded clast. There is slight to moderate bioturbation, including in some of the laminated intervals. There are no visible coring disturbances.

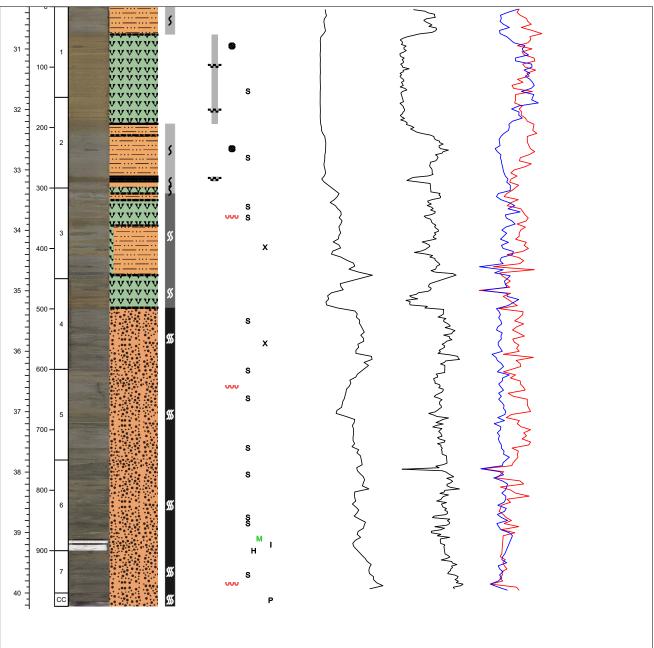




Hole 323-U1342A Core 5H, Interval 30.3-40.22m (CSF-A)

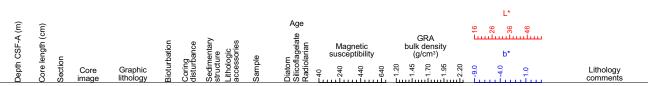
Main lithologies are laminated olive diatom ooze and grey to dark grey clayey silt through 48 cm in section 4, and then a very dark grey sandy silt. There are gradational contacts between lithologies except at the base of laminated sections, which have a sharp contact with the underlying sediment. There are several thin ash layers, which are grey or black. There are two pebble-sized clasts. Bioturbation is absent in the laminated intervals, slight in the upper two sections, and moderate to strong for the remainder of the core. It is not clear if the chaotic variations returned and color on the scale of 1 cm to several cm in the unit spanning sections 4-CC are due to bioturbation or soft-sediment deformation. Sometimes the origin of a mottle of contrasting color/texture/composition can be deduced as from a bioturbated ash, or from an adjacent unit, but sometimes not.

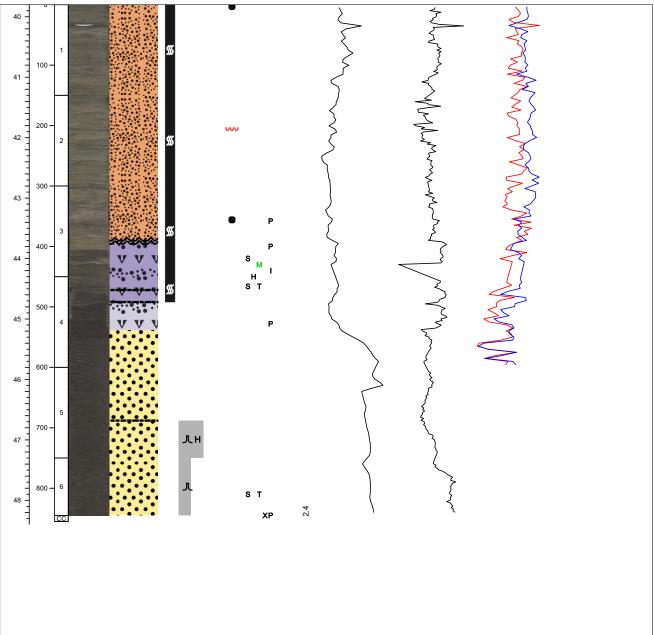


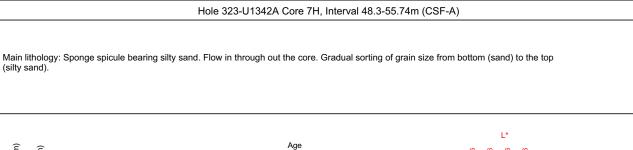


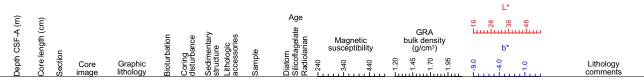
Hole 323-U1342A Core 6H, Interval 39.8-48.35m (CSF-A)

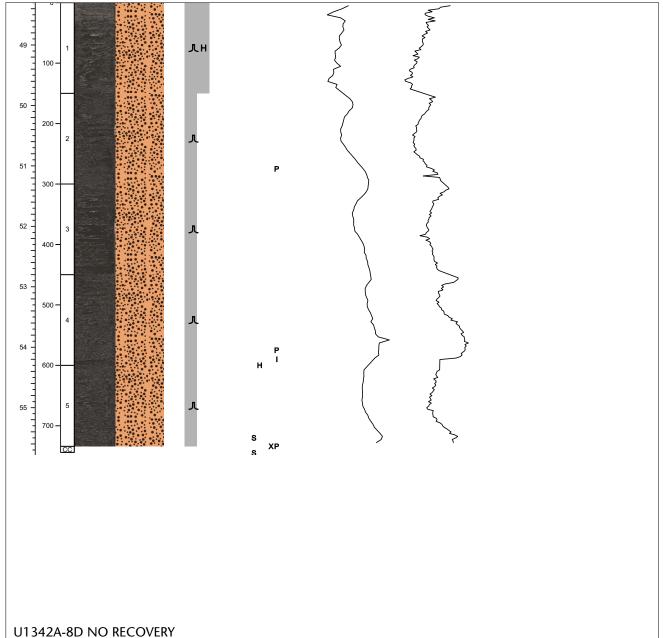
Main lithology is a very-dark-greenish-grey diatom-rich sandy silt, which has a wavy contact to a black diatom sandy silt in section 3. The final unit is a black diatom silty sand in section 4. Below 88 cm in section 4 is a soupy black sand that is not in place; it is the result of flow in. There is a thin, bioturbated black ash layer in section 2 and two clasts, a well-rounded pebble in section 1 and a subangular pebble in section 3. All of the sediment but the diatom silty sand is heavily bioturbated. The diatom-rich sandy silt has a chaotic appearance, with mottling of finer and coarser textures on a cm to several-cm scale. The flow-in is a homogeneous black sand with no significant biogenic components.









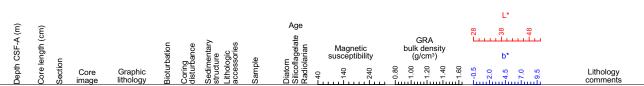


8

Core Photo

Hole 323-U1342A Core 9X, Interval 52.3-52.76m (CSF-A)

Main lithology is a porphyritic and vesicular basaltic (possibly a basaltic andesite) with a very-fine-grained to apharitic very-dark-grey (3/N) groundmass. Phenocrysts are mostly plagioclase laths up to 6 mm (~20%) and mafic minerals (pyroxene) to 2 mm (2%). Most phenocrysts are in glomeroporphyritic aggregates. Groundmass has very fine grained plagioclase laths. Vesicles are ovoid to irregular in shape and are up to 15 mm but average of 2-3 mm. They have a coating of a pale blue-grey mineral. The last piece, 43-50 cm, has a fine-grained vein approximately 4-10 mm in width (variable along its length). Minerals are <1 mm and even-grained. The vein is slightly lighter in color than the surrounding rock.





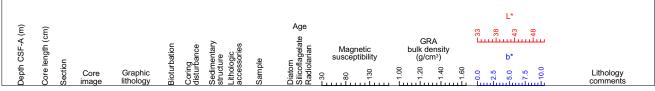
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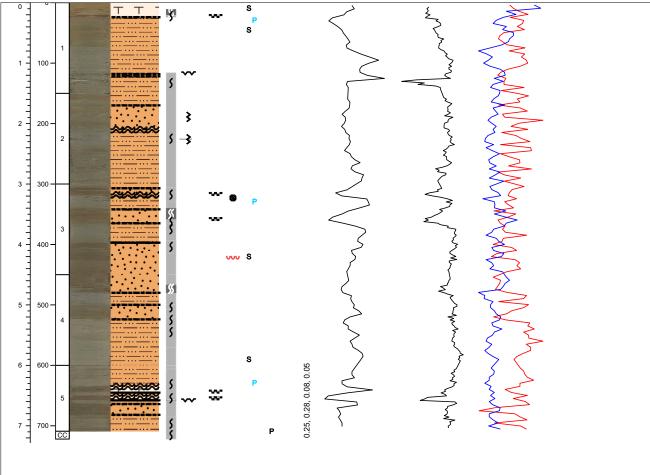
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Core Photo

Hole 323-U1342C Core 1H, Interval 0.0-7.22m (CSF-A)

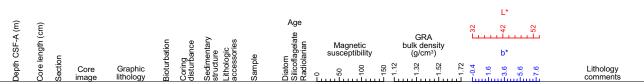
Major lithologies: dark greenish gray nannofossil- and diatom-bearing, foraminifer-rich clayey silt and dark olive gray foraminifer- and diatom-rich silt. Secondary lithology: olive diatom-bearing foraminifer-ooze. The major lithologies are mainly separated by gradational boundaries and alternate with several intervals of laminated foraminifer ooze. Foraminifera also occur as isolated mottles within the silt and clayey silt units. A thin ash layer is present in section 3. Bioturbation is absent to moderate with many instances of chondrites present. Drilling disturbance is minimal.

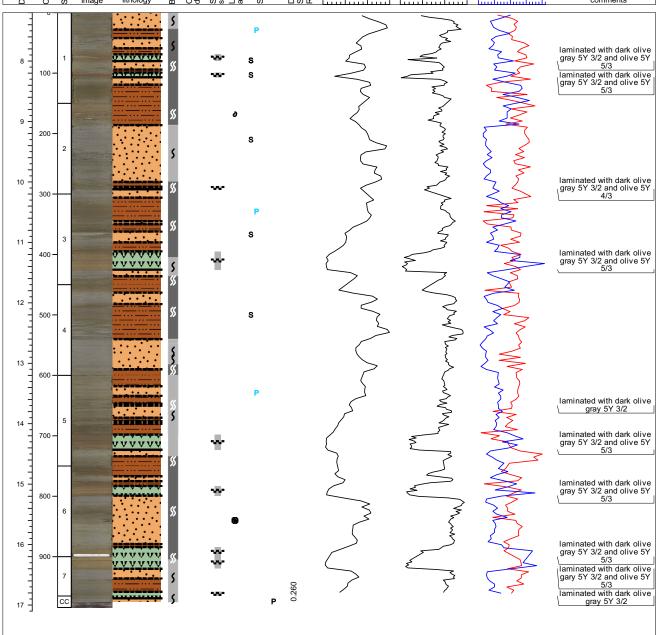




Hole 323-U1342C Core 2H, Interval 7.2-17.04m (CSF-A)

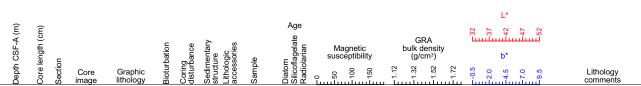
Major lithology: laminated nannofossil-rich diatom ooze (5Y 4/3); diatom-bearing silty clay (olive gray 5Y 4/2); and silty clay (10Y 4/2). They occured alternately toward decreasing depth. The boundary between silty clay and laminated diatom ooze was usually sharp. That between laminated diatom ooze and diatom-bearing silty clay was gradational. That between diatom-bearing silty clay and silty clay was gradational and highly bioturbated. The dark olive gray laminae was silicoflagelate-rich diatom ooze. Basaltic pebble occured in Section 6.

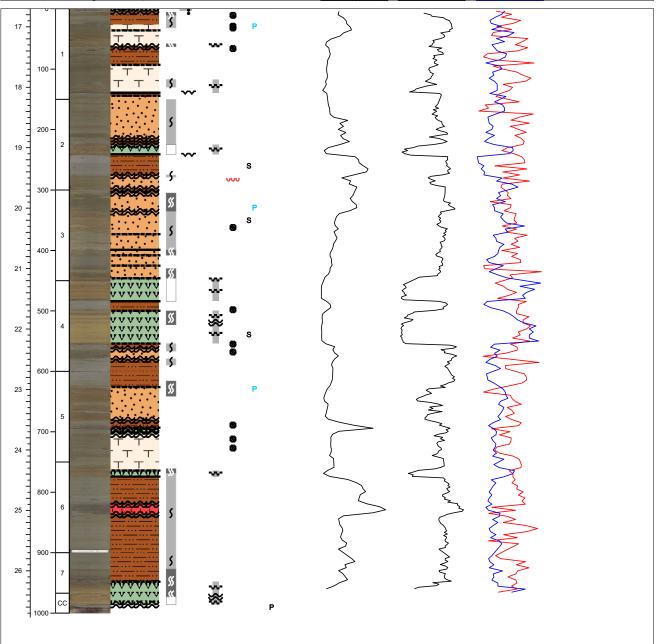




Hole 323-U1342C Core 3H, Interval 16.7-26.7m (CSF-A)

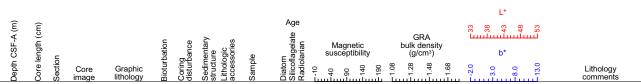
The main lithologies are laminated olive grey foraminifer-rich diatom ooze, very dark greenish grey silty clay and dark greenish grey foraminifer and diatom-rich silt. There is minor dark olive grey diatom-rich foraminifer ooze. Bioturbation is moderate to slight in all but the laminated intervals. There are ash layers in sections 5 and 6 and smaller mottles of ashy sediment in other sections. There is no drilling disturbance.

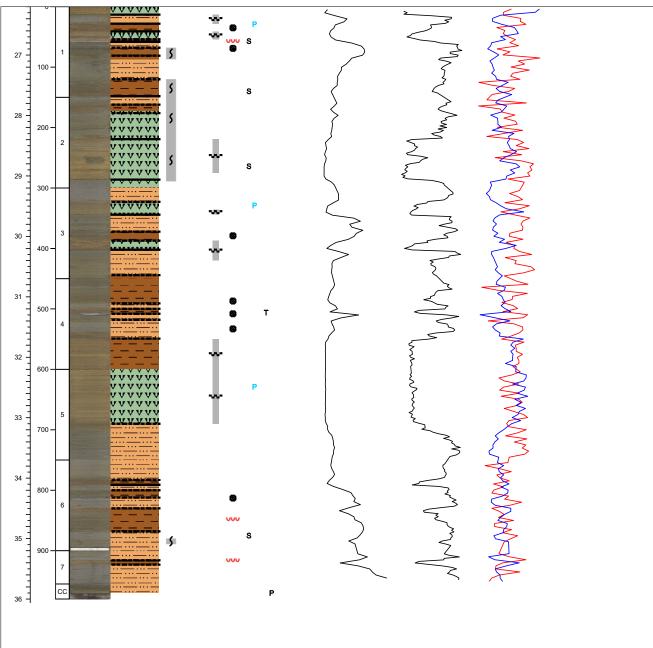




Hole 323-U1342C Core 4H, Interval 26.2-36.0m (CSF-A)

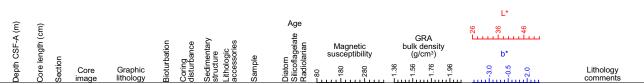
Main lithologies are olive foraminifer-bearing diatom ooze and very dark greenish grey foraminifer and diatom-bearing clayey silt. Secondary lithology is dark olive gray foraminifer and diatom-rich clay. All lithologies alternate through the core. There are laminated intervals in sections 1, 2, 3, 4 and 5 and a small cross-laminated interval in section 2. There are a number of dark ash layers through the core. Bioturbation is generally slight but the core is often mottled. There are skolithos burrows in sections 2 and 6. Gravel or pebble-sized clasts occur in sections 1, 3, 4 and 6. There is no drilling disturbance.

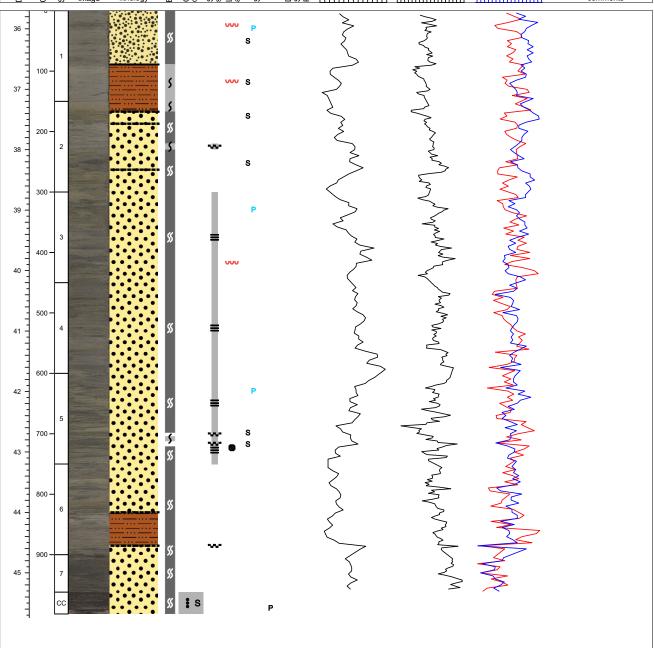


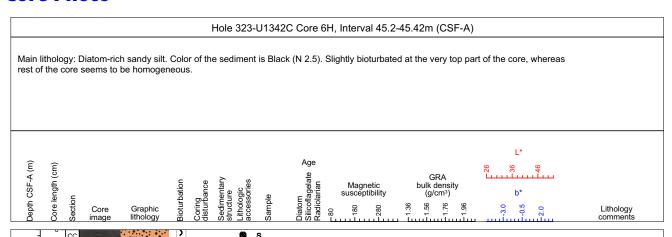


Hole 323-U1342C Core 5H, Interval 35.7-45.68m (CSF-A)

Main lithology is diatom bearing sand; secondary lithologies are diatom-rich silty sand, diatom-bearing silty clay and sponge spicule-bearing diatom-rich sand. There are laminated intervals in Sections 5 and 6 and much of the core is mottled with faint thin bedding. Bioturbation is mostly slight to moderate and characterised by large skolithos burrows. There are a few ashy patches and a clast in Section 5. There is no major drilling disturbance.



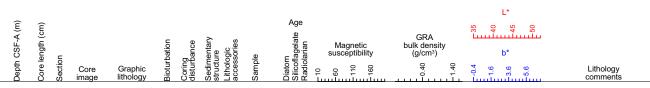


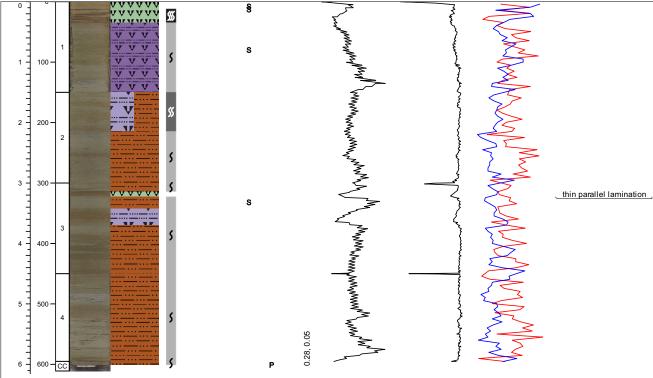




Hole 323-U1342D Core 1H, Interval 0.0-6.11 m (CSF-A)

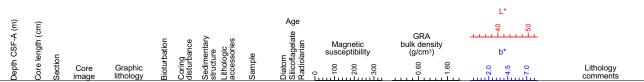
Major lithologies: Soupy to soft, dark gray to dark greenish gray diatom-rich silty clay and foraminifer- and nannofossil-rich diatom silty clay, olive foraminifer-rich diatom ooze, and dark olive gray foraminifer- and nannofossil-rich diatom ooze; both gradational and sharp boundaries between different colours; thinly and parallel- laminated interval in upper section 3; absent to strong bioturbation; slight disturbance during core splitting in lower section 4

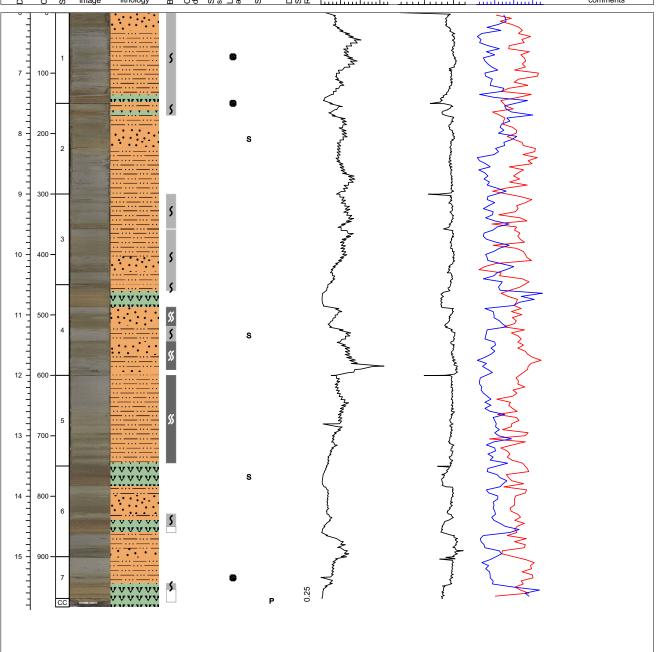




Hole 323-U1342D Core 2H, Interval 6.0-15.83 m (CSF-A)

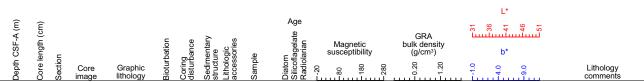
Major lithologies: dark olive gray diatom-bearing foraminifer-rich silt and very dark greenish gray diatom-bearing clayey silt. Secondary lithology: finely laminated olive foraminifer-bearing diatom ooze. Most boundaries are gradational. Clayey silt layers occasionally fine upwards. Clasts occur sporadically in silt layers. Foraminifera are visible throughout the core and occur most frequently in mottles. Bioturbation is slight to moderate throughout with chondrites being the major trace fossil found. Drilling disturbance is minimal.

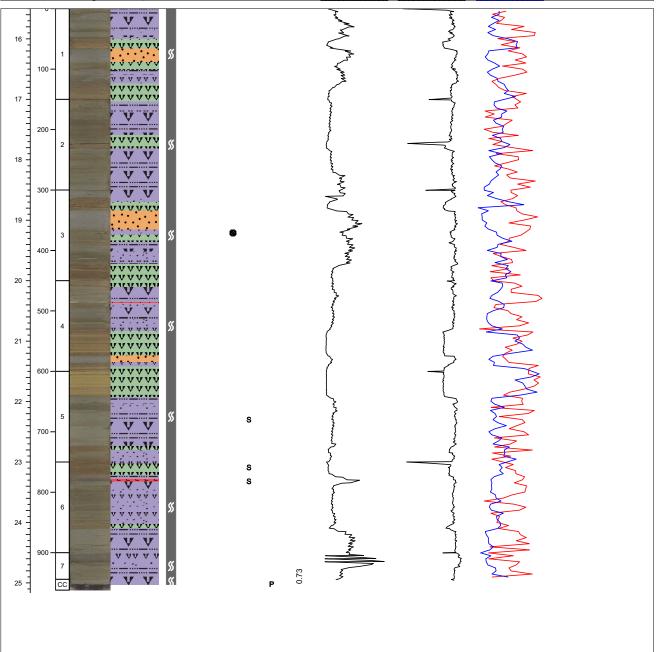






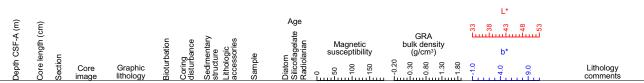
Major lithology: foraminifera-rich diatom ooze (olive 5Y 4/3; 5Y 4/4); foraminifera-bearing diatom clayey silt (dark greenish gray 10Y 4/1). They occured alternately. Dark graynish brown (2.5y 4/2) ash occured in Section 6 (28-33cm). Bioturbation is moderate.

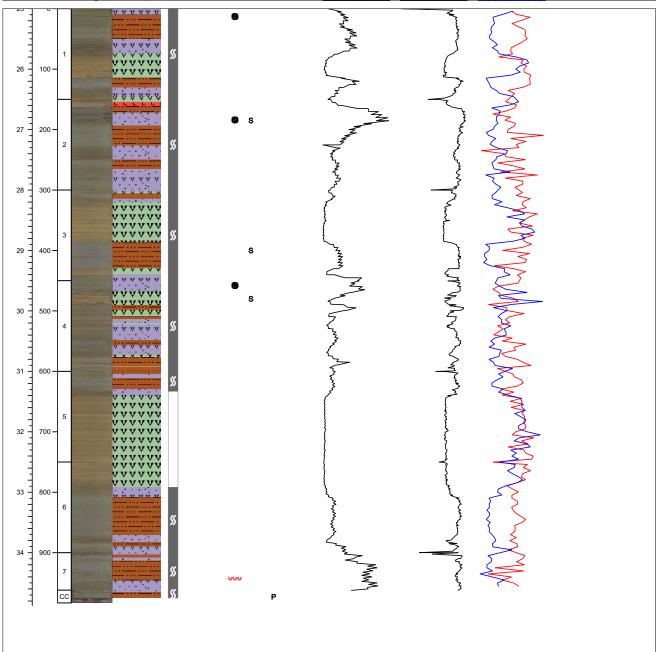






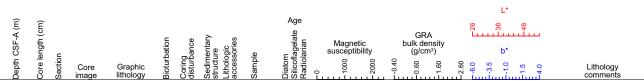
Major lithology: foraminifera-rich diaom ooze (olive 5Y 4/4 laminated with 5Y 4/3; 5Y 5/3); diatom silt (olive gray 5Y 4/2); and diatom-rich silty clay (dark grenish gray 10Y 4/1). They occured alternately. Grayish brown ash layer occured in Section 2 (4-12cm). 2 pebbles occured in Section 2 (34cm).

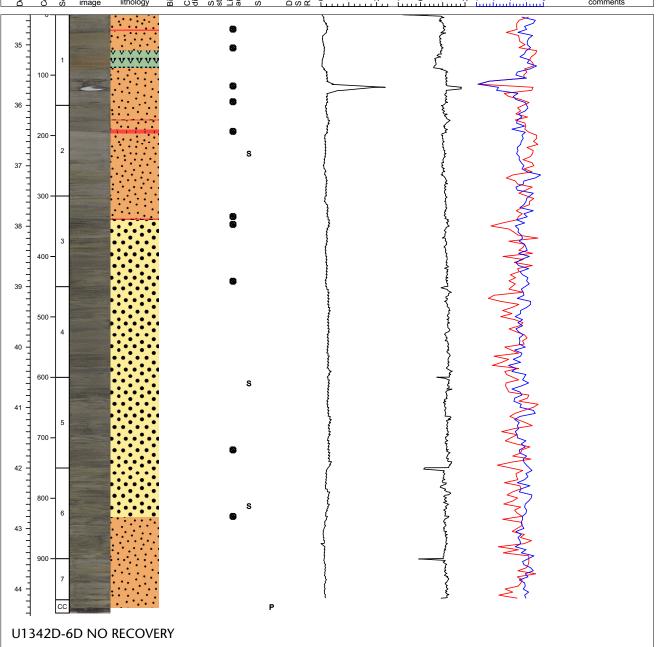


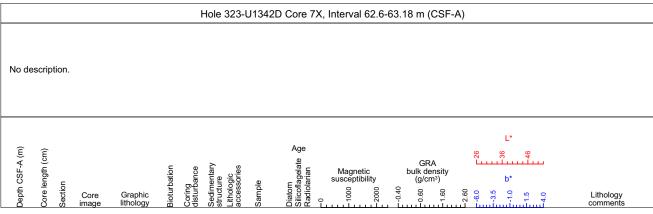


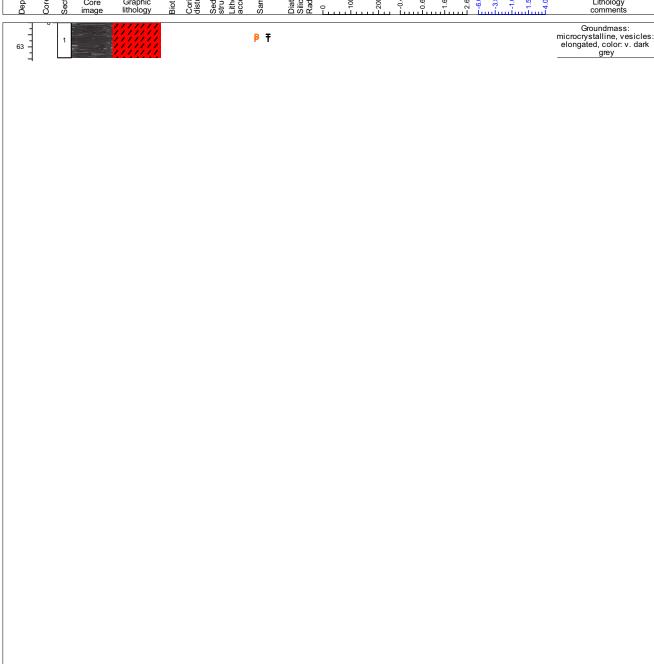
Hole 323-U1342D Core 5H, Interval 34.5-44.4 m (CSF-A)

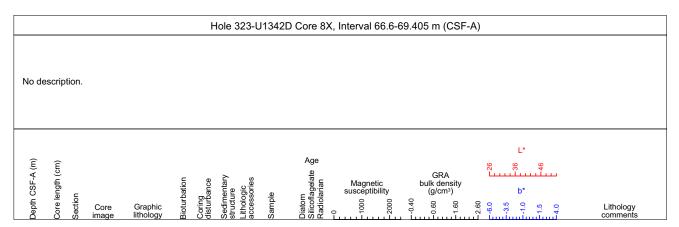
Two main lithologies alternate in the upper 2 sections of the core: dark olive gray diatom-rich silt and very dark gray diatom bearing silt. Sections 3 to 6 are dominated by a mottled dark olive gray fine-ash clayey sand. A laminated light olive foram-rich diatom ooze layer occurs near the top of section 1. Several pebble-size clasts were observed throughout the core and a large, cobble-size subrounded basalt clast was observed at the bottom of section 1.

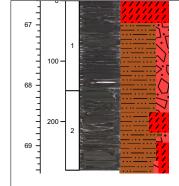










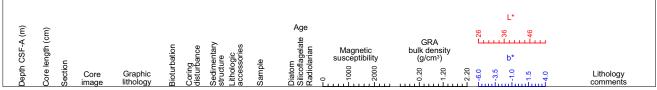


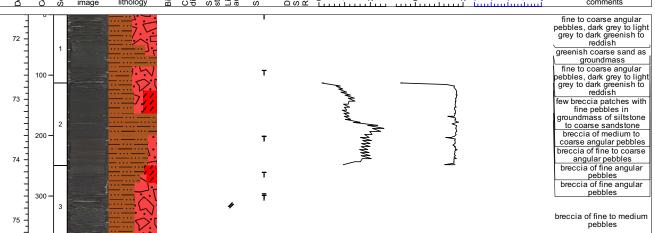
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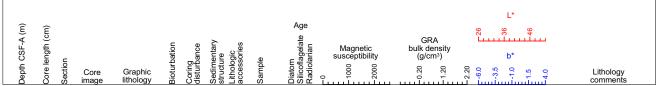
Mostly greenish black to volcaniclastic, poorly sorted coarse sandstone to breccia; in section 2 black to dark grey well-sorted volcaniclastic siltstone to coarse sandstone, with thin bedding and dewatering structures in middle of section 2; several sharp grain size changes

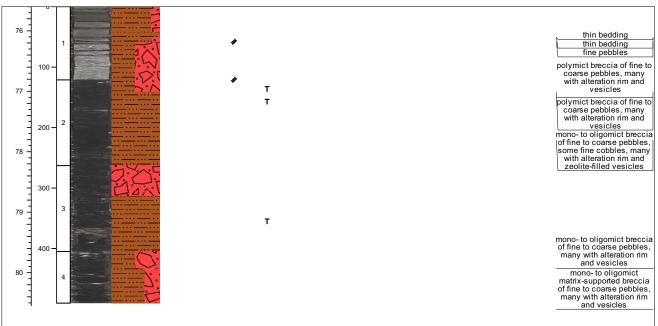




Hole 323-U1342D Core 10X, Interval 75.6-80.505 m (CSF-A)

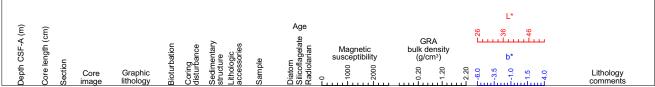
Mostly volcaniclastic, black to greenish black fine sandstone to breccia, moderately to very poorly sorted; breccia consists of lithic fine to coarse pebbles, often with alteration rims and vesicles, polymict in section 1, mono-to oligomict in sections 2 through 4; well-sorted and thinly laminated to bedded siltstone to sandstone layers in sections 1, 2 and 3; change from grain-supported to matrix-supported texture in section 4; bimodal grain size distribution (pebbles in silty groundmass) in section 4

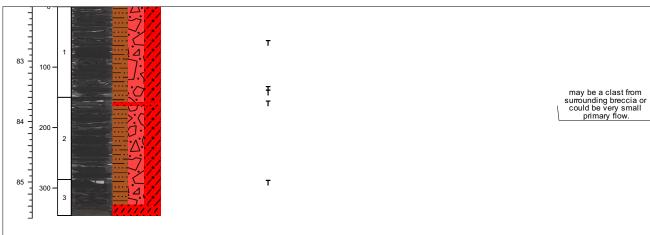




Hole 323-U1342D Core 11X, Interval 82.1-85.555 m (CSF-A)

Major lithology: Volcaniclastic breccia. Secondary lithologies: vesiculated basalt and volcaniclastic sandstone. Boundaries are undefined between lithologies because the core is in pieces. The breccia is clast-supported and composed of relatively unaltered, poorly sorted vesiculated basalt clasts. Many have alteration halos around them. Clasts range in size from mm-scale to greater than 5 cm. Vesicles tend to be elongate and oriented parallel to bedding. The smallest vesicles are spheroidal. Some vesicles have a pale blue mineral coating with others are filled with white crystals (CaCO3) or pyrite. The groundmass is glassy to very fine grained. No vesicles are visible. Sketches of clasts with alteration on paper description sheets. The basalt may be a large clast within the breccia. The sandstone is divided into a well-sorted fine sandstone above a poorly sorted very fine to very coarse sandstone. Clasts are subangular, red lithic fragments (scoria?). there are some coaqrse sand sized basalt



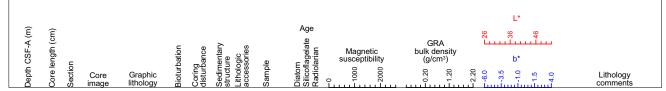


clast-supported
laminated

Core Photo

Hole 323-U1342D Core 12X, Interval 87.9-89.87 m (CSF-A)

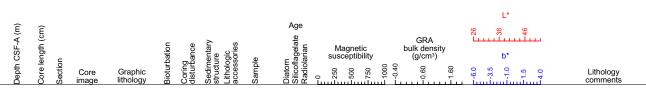
Major lithologies: Volcaniclastic breccia (5/N; 3/N) and volcaniclastic sandstone (5/N; 3/N; 10R 5/1; 10R 2.5/1). Lithologic differences are mainly due to varying grain size and angularity of clasts. Laminations occur in pieces 12X-1-#4 and #5 and 12X-2 #1, #2, and #3. Soft sediment deformation is apparent throughout section 2. A fault occurs in 12X-2 piece 1 exhibiting a 3 cm offset.

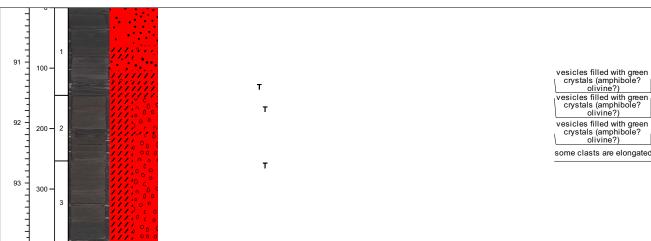


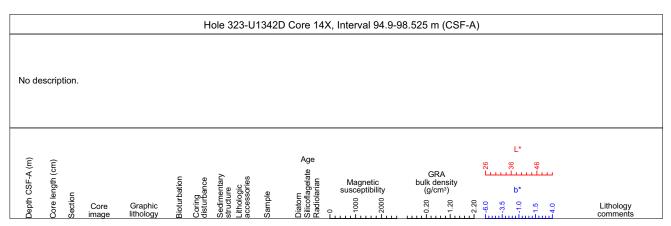


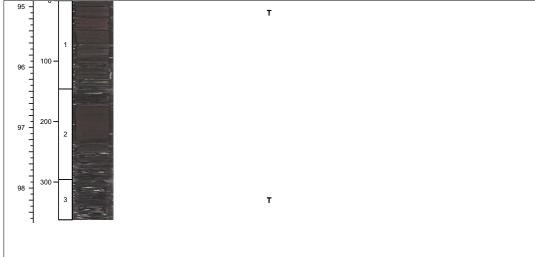
Hole 323-U1342D Core 13X, Interval 90.1-94.915 m (CSF-A)

Major lithologies: Basalt (5/N), volcaniclastic breccia (10B 2.5/1; 10R 2.5/2) and Sandstone (10B 2.5/1; 10R 2.5/2). Basalts are relatively unaltered with vesicles filled with green minerals, perhaps olivine or an amphibole. Sandstones are often medium to thickly bedded with alternating beds of different colored or textured clasts.



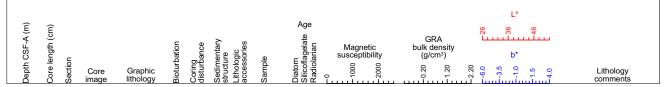


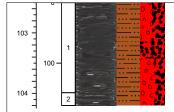




Hole 323-U1342D Core 15X, Interval 102.5-104.2 m (CSF-A)

Mostly volcaniclastic, black to very dark greenish grey coarse sandstone to breccia; moderately to very poorly sorted; mostly grain-supported, only in middle of section 1 matrix-supported; variable amounts of clay-sized black groundmass, whitish and greenish crystals (feldspar, chlorite/epidote/pyroxene) of medium to coarse sand size, greyish to reddish to purple scoria or basalt as fine to coarse pebbles; large angular interclast (basalt cobble) in



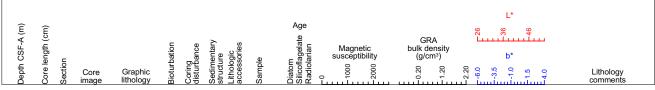


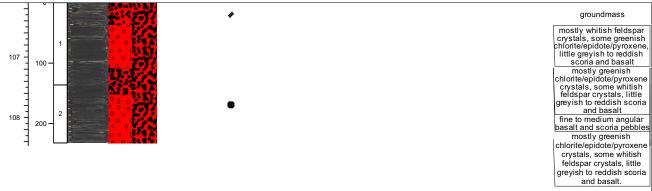
groundmass

groundmass
fine to coarse pebbles,
whitish to light grey and
reddish scoria clasts
most whitish and greenish
crystals (feldspar and
chlorite/epidote/pyroxene)
of medium to coarse sand
size
intraclast (angular cobble)
within volcaniclastic
breccia

Hole 323-U1342D Core 16X, Interval 106.1-108.42 m (CSF-A)

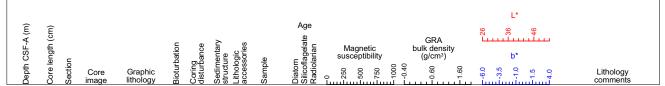
Well-sorted volcaniclastic bluish black coarse sandstone with black clay-sized groundmass and variable proportions of whitish feldspar crystals, greenish chlorite/epidote/pyroxene crystals, and greyish to reddish scoria and basalt lithoclasts in upper and lower section 1 and upper section 2; poorly sorted volcaniclastic coarse sandstone to breccia with similar composition, but more fine to coarse angular basalt and scoria interclasts

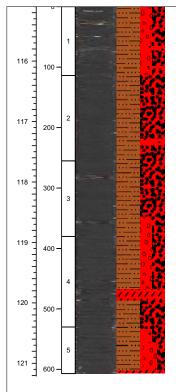




Hole 323-U1342D Core 17X, Interval 115.1-121.17 m (CSF-A)

Mostly volcaniclastic coarse sandstone to breccia, moderately to poorly sorted, and volcaniclastic sandstone, well-sorted; sand-sized grains mostly whitish feldspar and greenish chlorite/epidote/pyroxene, fine to coasre pebbles mostly greyish to reddish basalt and scoria intraclasts; layers of well-sorted volcaniclastic fine sandstone in sections 1 and 2, interbedded with coarse sandstone in section 5; large basaltic intraclasts (cobble-sized) in sections 4 and 5, porphyric texture with dark microcrystalline groundmass and green roundish crystals of olivine/pyroxene







mostly whitish feldspar crystals and greenish chlorite/epidote crystals, angular fine to coarse pebbles of greyish to reddish scoria and basalt

mostly greenish chlorite/epidote crystals, greyish and reddish scoria and basalt grains, little whitish feldspar

mostly whitish feldspar crystals and greenish chlorite/epidote crystals, angular fine pebbles of greyish to reddish scoria and basalt

large angular intraclasts
with porphyric texture
mostly greenish
chlorite/epidote crystals,
greyish and reddish
scoria and basalt grains,
little whitish feldspar
lithic basalt and scoria
grains, whitish feldspar
and greenish
chlorite/epidote/pyroxene
crystals

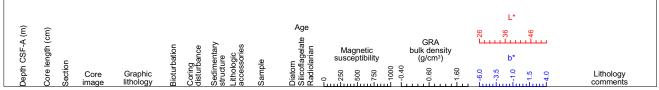
interbedded

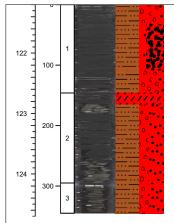
angular fine pebbles of greyish to reddish scoria and basalt, mostly greyish and reddish scoria and basalt grains, little whitish feldspar and greenish chlorite/epidote crystals

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Hole 323-U1342D Core 18X, Interval 121.2-124.65 m (CSF-A)

Mostly voclaniclastic sandstone to breccia, poorly sorted; some volcaniclastic coarse sandstone in section 1, moderately sorted; greyish to reddish lithic grains are basalt and scoria fine to coarse pebbles, sand-sixed grains are whitish feldspar crystals and greenish chlorite/epidote/pyroxene crystals; large angular basalty intraclast in section 2, porphyric texture, green roundish olivine/pyroxene crystals

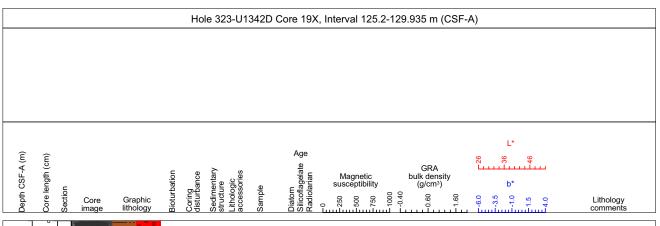


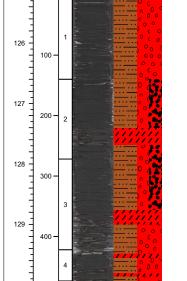


lithic basalt and scoria pebbles
whitish feldspar and greenish chlorite/epidote/pyroxene crystals
lithic basalt and scoria pebbles
mostly whitish feldspar and greenish chlorite/epidote/pyroxene crystals, less lithic basalt and scoria grains large anglar basaltic intraclast

lithic basalt and scoria grains

whitish feldspar and greenish chlorite/epidote/pyroxene crystals





mostly greyish to reddish lithic basalt and scoria grains

mostly greenish chlorite/epidote/pyroxene crystals, greyish lithic basalt and scoria grains, some whitish fldspar crystals, some red scoria grains