

THIN SECTION LABEL ID: **379-U1532A-10H-CC-PAL-FORAM-TS02**

Thin section no.: 2

Observer: C.S.

Thin section summary: the thin section is an epoxy grain mount, created as a test of best manner of observation of foram residues. for IODP379, smear slides were used preferentially over grain mounts. Descriptive aspects: of the lithic (polycrystalline) fragments, one is graphic granite. Clay aggregates appear as brown rounded "grains" in plane light: these are clumps that held together during the seiving and washing process of foram prep. Note bene that the embedding compound includes silicate grains.

Plane-polarized: 47996301



Cross-polarized: 47996321



Lithology: felsic granite

THIN SECTION LABEL ID: **379-U1532A-11H-CC-PAL-FORAM-TS03**

Thin section no.: 3

Observer: C.S.

Thin section summary: the thin section is an epoxy grain mount, created as a test of best manner of observation of foram residues. Note bene that the embedding compound includes silicate grains that did not originate from the grain scatter sample. For IODP379, only three grain mounts were made; smear slides were used preferentially. Descriptive aspects: the vast majority of lithic (polycrystalline) fragments are of plutonic origin. Clay aggregates appear as brown rounded "grains" in plane light: these are clumps that held together during the sieving and washing process of foram prep.

Plane-polarized: 47996351



Cross-polarized: 47996371



Lithology: felsic granite

THIN SECTION LABEL ID: **379-U1532A-11H-CC-PAL-TS01**

Thin section no.: 1

Observer: C.S.

Thin section summary: biotite muscovite granite, thin section made from an isolated clast that was found in the core catcher interval. Section is thick yet polished out in the center; shipboard prep was discontinued.

Plane-polarized: 47996261



Cross-polarized: 47996281



Lithology: felsic granite

THIN SECTION LABEL ID: **379-U1532B-7H-CC-PAL-FORAM-TS04**

Thin section no.: 4

Observer: C.S.

Thin section summary: the section contains only few polycrystalline grains, of plutonic origin. the thin section is an epoxy grain mount, created as a test of best manner of observation of foram residues. The grain scatter method was not adopted.

Plane-polarized: 47996391



Cross-polarized: 47996411



Lithology: felsic granite

THIN SECTION LABEL ID: **379-U1532C-11F-1-W 2/5-TSB-TS09**

Thin section no.: 9

Observer: BR, DR

Thin section summary: Carbonate concretion fall-in

Plane-polarized: 48090361



Cross-polarized: 48090401



Lithology: silty clay

Biogenic Fragment Comment: diatom fragments throughout

THIN SECTION LABEL ID: **379-U1532C-33X-2-W 38/40-TSB-TS06**

Thin section no.: 6

Observer: C.S.

Thin section summary: orthoquartzite pebble-- of high interest because there are few/no sedimentary rocks known from the prospective source region in West Antarctica.

Plane-polarized: 48007381



Cross-polarized: 48007401



Lithology: carbonaceous orthoquartzite

THIN SECTION LABEL ID: **379-U1532C-33X-2-W 50/51-TSB-TS07**

Thin section no.: 7

Observer: BR, DR

Thin section summary: Thin section sampled from biscuit within dark gray thinly laminated silty clay and thin black lamina. Variable grain-size can be observed within the matrix but black lamina appear discontinuous occasionally faulted and composed of primarily clay from birefringence under cross-polarized light. Some fracturing? is apparent between planar black lamina.

Plane-polarized: 48003381



Cross-polarized: 48003401



Lithology: silty clay

THIN SECTION LABEL ID: **379-U1532D-2R-4-W 135/138-TSB-TS08**

Thin section no.: 8

Observer: BR, DR

Thin section summary: Examples of soft sediment clasts and thin clay-rich bifurcating laminations. Mud contains dispersed grains and granules. Sediment appears highly bioturbated, also included is a subrounded granite pebble, a-axis 6.3 mm. (Note granite pebble is at the top of the thin section). Duplicate thin sections produced

Plane-polarized: 48019521



Cross-polarized: 48019541



Lithology: silty clay

THIN SECTION LABEL ID: **379-U1532G-8R-5-W 92/95-TSB-TS10**

Thin section no.: 10

Observer: BR, DR

Thin section summary: Soft sediment clast draped by laminations. Duplicate thin sections produced

Plane-polarized: 48218991



Cross-polarized: 48219011



Lithology: silty clay

Biogenic Fragment Comment: Burrows with pyrite coating

THIN SECTION LABEL ID: **379-U1532G-14R-7-W 25/28-TSB-TS11**

Thin section no.: 11

Observer: BR, DR

Thin section summary: Example of normally graded interval of silt to clay

Plane-polarized: 48090641



Cross-polarized: 48090661



Lithology: silty clay

Biogenic Fragment Comment: Black mottling/debris, possibly pyrite

THIN SECTION LABEL ID: **379-U1532G-15R-5-W 3/4-TSB-TS12**

Thin section no.: 12

Observer: BR, DR

Thin section summary: Faulted lamination, may be due to drilling disturbance?

Plane-polarized: 48218911



Cross-polarized: 48218931



Lithology: silty clay

THIN SECTION LABEL ID: **379-U1532G-18R-2-W 73/75-TSB-TS13**

Thin section no.: 13

Observer: BR, DR

Thin section summary: Soft sediment clast draped by thinly laminated greenish gray silty clay

Plane-polarized: 48270781



Cross-polarized: 48270801



Lithology: silty clay

Biogenic Fragment Comment: Occasional burrows with pyrite coating

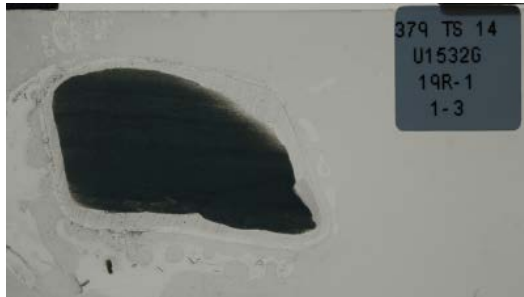
THIN SECTION LABEL ID: **379-U1532G-19R-1-W 1/3-TSB-TS14**

Thin section no.: 14

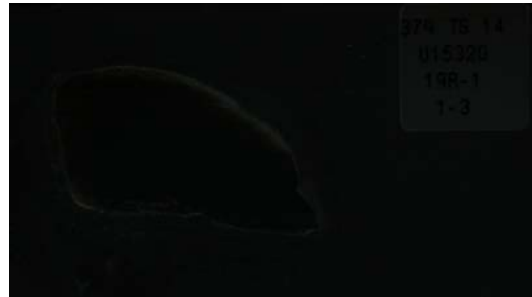
Observer: C.S.

Thin section summary: thin section of a fragment of core material that occurred as fall-in at the top of a core.

Plane-polarized: 48270821



Cross-polarized: 48270841



Lithology: clay-rich siltstone

THIN SECTION LABEL ID: **379-U1532G-25R-5-W 142/145-TSB-TS15**

Thin section no.: 15

Observer: BR, DR

Thin section summary: Thinly laminated with black mottling

Plane-polarized: 48218951



Cross-polarized: 48218971



Lithology: silty clay

Biogenic Fragment Comment: Mottling may be related to burrowing?

THIN SECTION LABEL ID: **379-U1532G-34R-5-W 46/49-TSB-TS16**

Thin section no.: 16

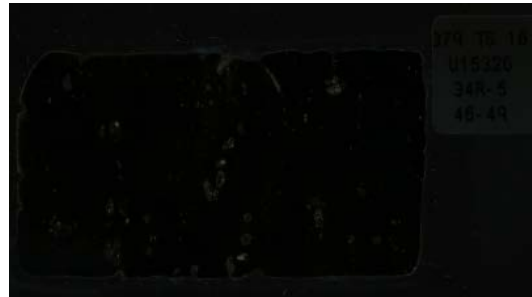
Observer: BR, DR

Thin section summary: Dispersed and clusters of sand grains and occasional lenses of fine silt

Plane-polarized: 48270861



Cross-polarized: 48270881



Lithology: clay

Biogenic Fragment Comment: Bioturbated

THIN SECTION LABEL ID: **379-U1532G-46R-2-W 70/73-TSB-TS17A**

Thin section no.: 17a

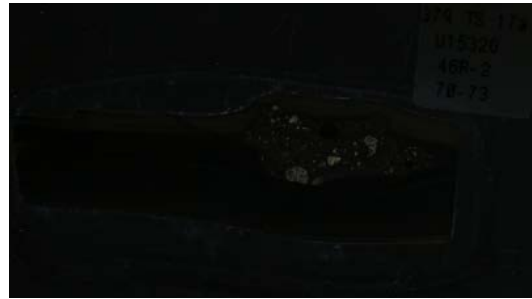
Observer: BR, DR

Thin section summary: Soft sediment clast draped by thin laminations

Plane-polarized: 48507871



Cross-polarized: 48507891



Lithology: silty clay

THIN SECTION LABEL ID: **379-U1532G-46R-2-W 70/73-TSB-TS17B**

Thin section no.: 17b

Observer: BR, DR

Thin section summary: Soft sediment clast draped by thin laminations

Plane-polarized: 48507911



Cross-polarized: 48507931



Lithology: silty clay