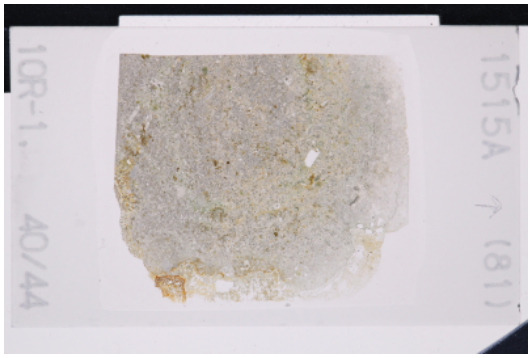
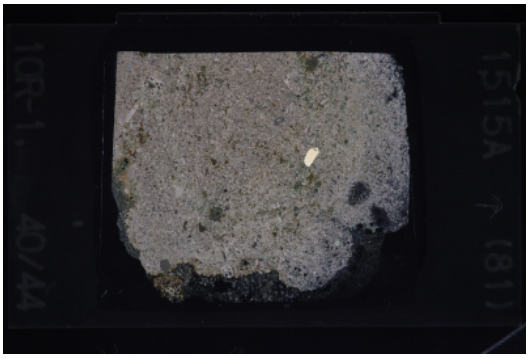
THIN SECTION LABEL ID	**369-U1515A-10R-1-W 40/44-TSB-TS81**	Thin section no.:	81
Observer:	CW	Unit/subunit:	Unit I-b

Thin section summary: This limestone is classified as a foraminifer rich packestone with chert. The rock has been silicified during diagenesis with microcrystalline silica replacing micrite in about 10% of the sample. Components comprise abundant foraminfera and quartz, common glauconite and shell fragments, rare diatoms and radiolarians with trace amount of cephalopods and plagioclase feldspar. Components are either supported in a micritic matrix or in a microcrystalline chert cement (chert).

Plane-polarized: 44791021



Cross-polarized: 44791091



Sediments and Sedimentary Rock

Complete Lithology Name: foraminifer-rich packstone with chert

Remarks:

GRAIN SIZE	Gravel	Sand	Silt	Clay
Percent	0	60	20	30

COMPOSITION	Siliciclastic	Calcareous	Biosiliceous
Mineral grains (%)	5	90	5
Cement (%)	0	0	0

Mineral grain	Abundance
Quartz	A
Plagioclase feldspar	T
Glauconite	C
Calcite	D

Biogenic material	Abundance
Foraminifers	A
Radiolarians	R
Diatoms	R
Shell fragments	C
Cephalopods	T

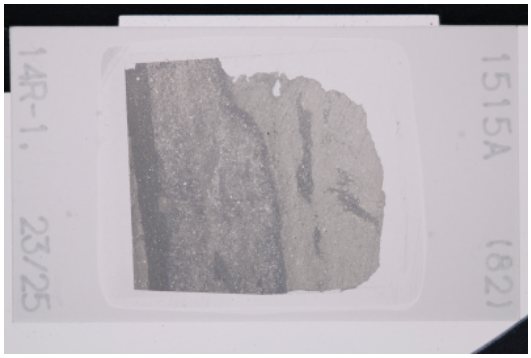
D=dominant, A=abundant, C=common, R=rare, T=trace

THIN SECTION LABEL ID **369-U1515A-14R-1-W 23/25-TSB-TS82** Thin section no.: 82

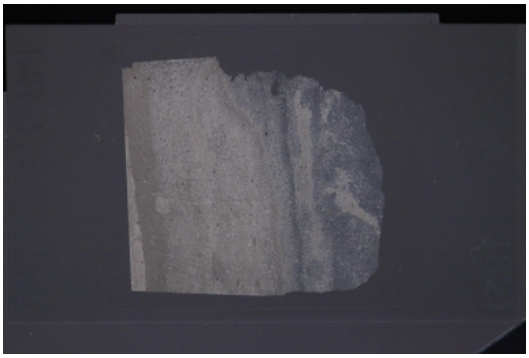
Observer: CW Unit/subunit: Unit I-b

Thin section summary: This limestone is classified as a silicified limestone. The rock has been silicified during diagenesis with microcrystalline silica replacing micrite in at least half the sample. Parallel laminations are visible within the less silicified portion. Mixed fossil assemblage of the same age but from different environments (based on paleontologic observation) suggests that the lighter shade (and small lighter patches visible megascopically) or more silicified portions are probably intraclasts. They show less preserved spicules and less variety of fossils with more foraminifera chambers that are completely filled with silica. From core observations, this is unlikely to be a breccia owing to the lack of individual clasts between 23 and 25 in core 14R-1. Components in this silicified wackestone include common foraminifera, common radiolarians, sponge spicules. shell fragments and quartz with rare diatoms and glauconite. Components are supported in a micritic matrix that has been partially cemented by microcrystalline quartz.

Plane-polarized: 44773041



Cross-polarized: 44773061



Sediments and Sedimentary Rock

Complete Lithology Name: silicified wackestone

Remarks:

GRAIN SIZE	Gravel	Sand	Silt	Clay
Percent		20	20	60

COMPOSITION	Siliciclastic	Calcareous	Biosiliceous
Mineral grains (%)	5	80	15
Cement (%)	50	0	0

MINERAL GRAIN ROUNDNESS	MINERAL GRAIN SORTING
subangular	moderate

Mineral grain	Abundance
Quartz	C
Glauconite	R
Calcite	D

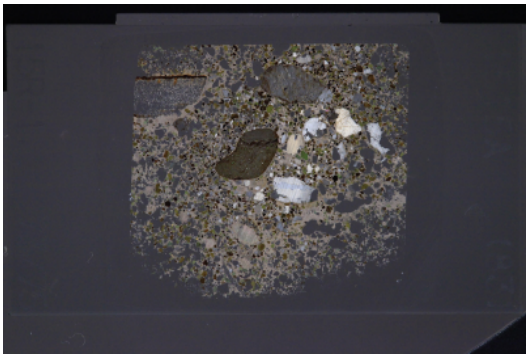
Biogenic material	Abundance
Foraminifers	A
Radiolarians	C
Diatoms	R
Shell fragments	C
Sponge spicules	C

D=dominant, A=abundant, C=common, R=rare, T=trace

THIN SECTION LABEL ID	**369-U1515A-15R-1-W 73/75-TSB-TS83**	Thin section no.:	83
Observer:	CW	Unit/subunit:	Unit I-b
Thin section summary:	This sandstone is classified as a rounded, poorly sorted arkose with glauconite. Grains comprise abundant plagioclase feldspar, common glauconite, rare lithic fragments (siltstone and sandstone), quartz and foraminifera with traces of zircon and epidote (or biotite). Grains are supported in the sparitic cement. Many of the feldspar grains exhibit a microperthic texture.		

Plane-polarized: 44773101

Cross-polarized: 44773081



Sediments and Sedimentary Rock

Complete Lithology Name: arkose with glauconite

Remarks:

GRAIN SIZE	Gravel	Sand	Silt	Clay
Percent	10	50	40	

COMPOSITION	Siliciclastic	Calcareous	Biosiliceous
Mineral grains (%)	90	10	0
Cement (%)	0	100	0

MINERAL GRAIN ROUNDNESS	MINERAL GRAIN SORTING
rounded	very poor

Mineral grain	Abundance
Quartz	R
Plagioclase feldspar	A

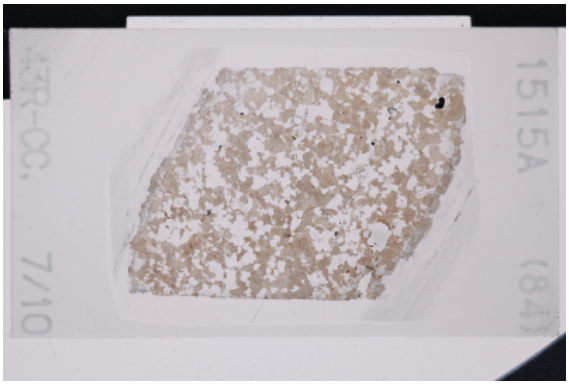
D=dominant, A=abundant, C=common, R=rare, T=trace

THIN SECTION LABEL ID: **369-U1515A-43R-CC-W 7/10-TSB-TS84** Thin section no.: 84

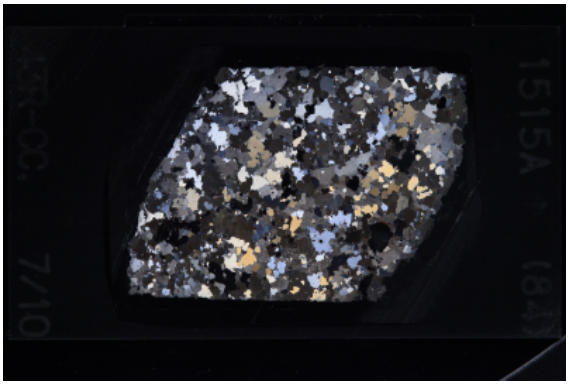
Observer: CW Unit/subunit: Unit II-b

Thin section summary: This igneous rock is a coarse grained granite fragment, possibly a clast. It is comprised of abundant alkali feldspar (microcline) and quartz with traces of zircon. The granite is phanerocrystalline (crystals visible to the naked eye), equigranular (crystals approximately the same size) and microperthitic (intergrowth of K and Na rich feldspar).

Plane-polarized: 44811101



Cross-polarized: 44811121



Igneous Petrology

Lithology:	Granite	**Avg. grain size:**	Coarse grained
Texture:	phanerocrystalline	**Max grain size:**	4 mm

THIN SECTION LABEL ID	**369-U1515A-46R-2-W 84/86-TSB-TS85**	Thin section no.:	85
Observer:	CW	Unit/subunit:	Unit II-c
Thin section summary:	This sedimentary rock is classified as a subangular, poorly sorted sandstone with feldspar consisting of abundant quartz, common plagioclase feldspar, rare microcline feldspar and muscovite mica with traces of haematite. Grains are bound by a calcite cement.		

Plane-polarized: 44811141

Cross-polarized: 44811161

Sediments and Sedimentary Rock

Complete Lithology Name: sandstone with feldspar

Remarks:

GRAIN SIZE	Gravel	Sand	Silt	Clay
Percent	0	50	20	30

COMPOSITION	Siliciclastic	Calcareous	Biosiliceous
Mineral grains (%)	100	0	0
Cement (%)	0	100	0

MINERAL GRAIN ROUNDNESS	MINERAL GRAIN SORTING
subangular	poor

Mineral grain	Abundance
Quartz	A
Plagioclase feldspar	C
Microcline feldspar	R
Muscovite mica	R
Calcite	D
Hematite	R

D=dominant, A=abundant, C=common, R=rare, T=trace