

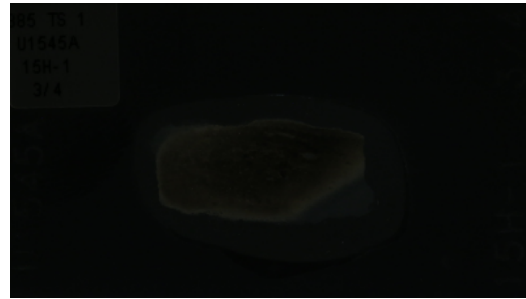
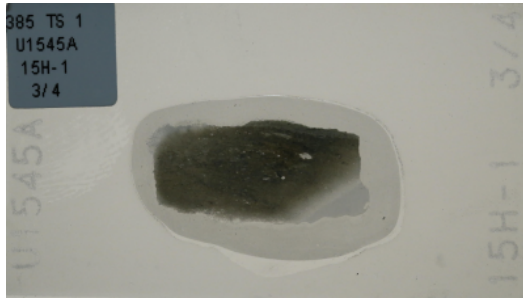
THIN SECTION LABEL ID: **385-U1545A-15H-1-W 3/4-TSB-TS 1**

Thin section no.: 1

Observer: km

Plane-polarized: 53679771

Cross-polarized: 53679841



### Sediments and Sedimentary Rock

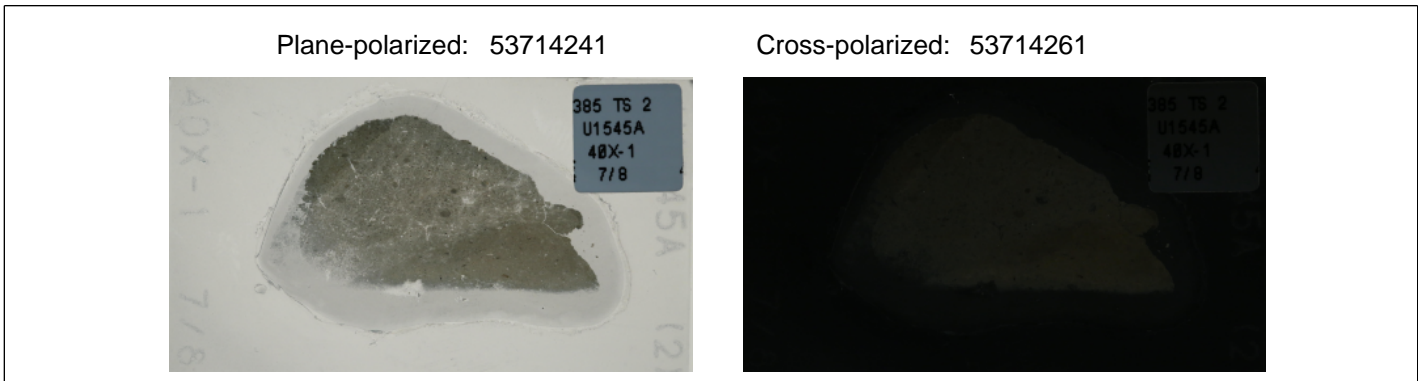
Lithology: micrite

TEXTURE	Percent	CONSTITUENT	Percent
Sand		Siliciclastic Grains/Mineral	10
Silt		Authigenic Minerals	49
Clay		Biogenic Grains	41
Total Texture		Total Constituent	100

### Framework grain abundance

Component	%	Component	%	Component	%
Quartz		Ferromagnesium minerals		Vitric Grains	
Feldspar		Opaque Minerals		Foraminifera	
Plagioclase		Zeolite		Radiolarians	
Rock Fragments		Pyrite	1	Diatoms	40
Igneous Volcanic Fragments		Quartz (Authigenic)		Organic Debris	1
Sedimentary Fragments		Calcite		Plant Debris	
Matrix (Silt and Clay)	10	Dolomite	48	Fish Remains	
Biotite		Porosity		Other	
Clay Minerals					

THIN SECTION LABEL ID: **385-U1545A-40X-1-W 7/8-TSB-HS** Thin section no.: 2  
 Observer: km



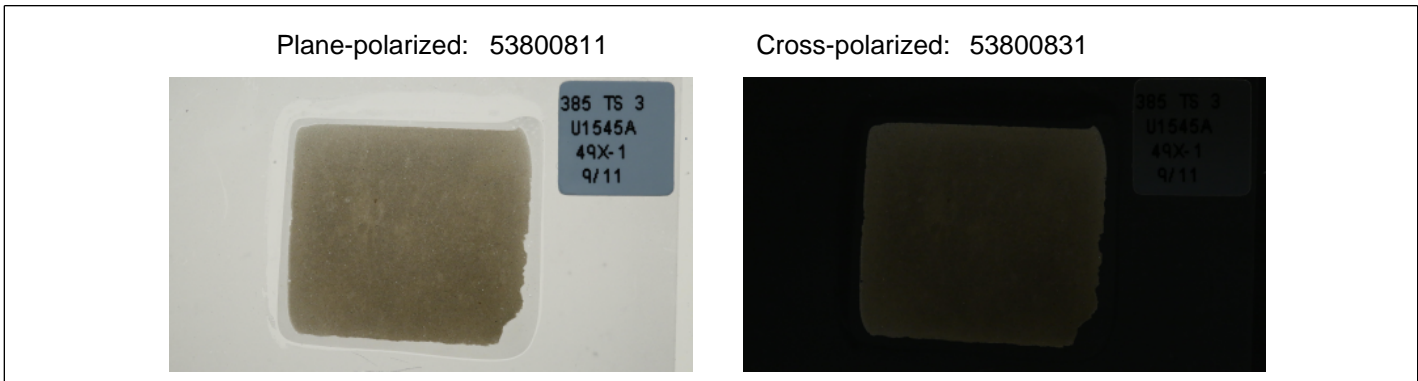
**Sediments and Sedimentary Rock**  
 Lithology: micrite

TEXTURE	Percent	CONSTITUENT	Percent
Sand		Siliciclastic Grains/Mineral	6
Silt		Authigenic Minerals	73
Clay		Biogenic Grains	21
Total Texture		Total Constituent	100

**Framework grain abundance**

Component	%	Component	%	Component	%
Quartz		Ferromagnesium minerals		Vitric Grains	
Feldspar	1	Opaque Minerals		Foraminifera	
Plagioclase		Zeolite		Radiolarians	
Rock Fragments		Pyrite	2	Diatoms	20
Igneous Volcanic Fragments		Quartz (Authigenic)		Organic Debris	1
Sedimentary Fragments		Calcite		Plant Debris	
Matrix (Silt and Clay)		Dolomite	71	Fish Remains	
Biotite		Porosity		Other	
Clay Minerals	5				

THIN SECTION LABEL ID: **385-U1545A-49X-1-W 9/11-TSB-TS 3** Thin section no.: 3  
 Observer: km



**Sediments and Sedimentary Rock**  
 Lithology: micrite

TEXTURE	Percent	CONSTITUENT	Percent
Sand		Siliciclastic Grains/Mineral	11
Silt		Authigenic Minerals	77
Clay		Biogenic Grains	12
Total Texture		Total Constituent	100

**Framework grain abundance**

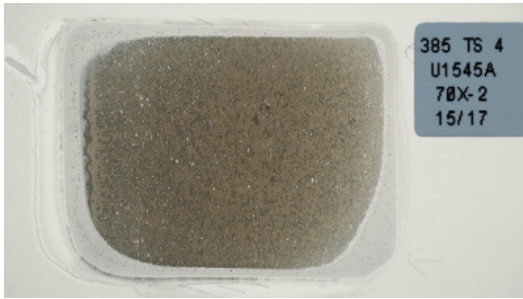
Component	%	Component	%	Component	%
Quartz		Ferromagnesium minerals		Vitric Grains	
Feldspar	1	Opaque Minerals		Foraminifera	
Plagioclase		Zeolite		Radiolarians	1
Rock Fragments		Pyrite	2	Diatoms	10
Igneous Volcanic Fragments		Quartz (Authigenic)		Organic Debris	1
Sedimentary Fragments		Calcite		Plant Debris	
Matrix (Silt and Clay)		Dolomite	75	Fish Remains	
Biotite		Porosity		Other	
Clay Minerals	10				

THIN SECTION LABEL ID: **385-U1545A-70X-2-W 15/17-TSB-TS 4**

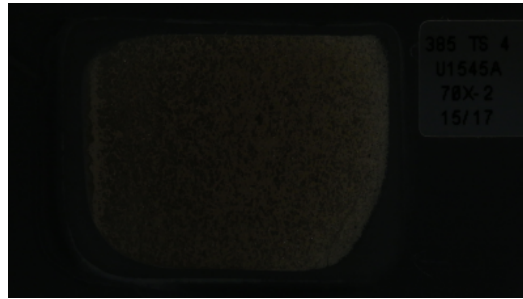
Thin section no.: 4

Observer: km

Plane-polarized: 53849831



Cross-polarized: 53849871

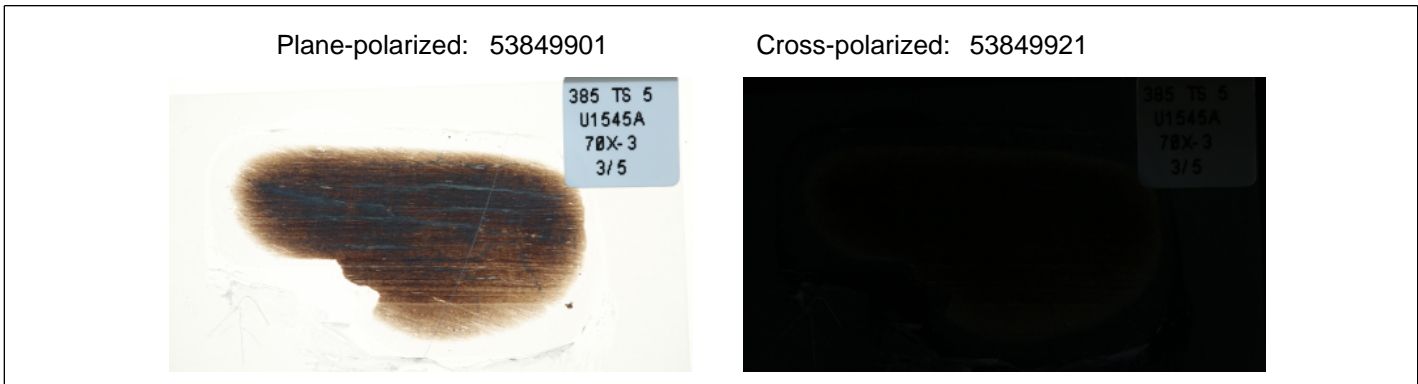


### Sediments and Sedimentary Rock

Lithology: micrite

TEXTURE	Percent	CONSTITUENT	Percent
Sand		Siliciclastic Grains/Mineral	
Silt		Authigenic Minerals	78
Clay		Biogenic Grains	2
Total Texture		Total Constituent	80

THIN SECTION LABEL ID: **385-U1545A-70X-3-W 3/5-TSB-TS 5** Thin section no.: 5  
 Observer: km



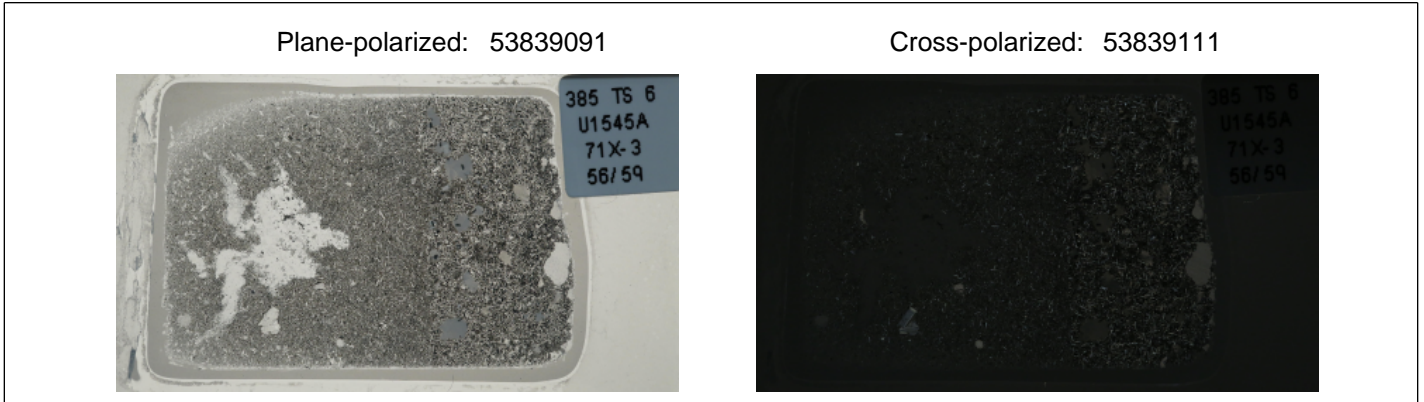
**Sediments and Sedimentary Rock**  
 Lithology: siliceous claystone

TEXTURE	Percent	CONSTITUENT	Percent
Sand		Siliciclastic Grains/Mineral	82
Silt		Authigenic Minerals	8
Clay		Biogenic Grains	10
Total Texture		Total Constituent	100

**Framework grain abundance**

Component	%	Component	%	Component	%
Quartz	1	Ferromagnesium minerals		Vitric Grains	
Feldspar	1	Opaque Minerals		Foraminifera	
Plagioclase		Zeolite		Radiolarians	
Rock Fragments		Pyrite	8	Diatoms	
Igneous Volcanic Fragments		Quartz (Authigenic)		Organic Debris	10
Sedimentary Fragments		Calcite		Plant Debris	
Matrix (Silt and Clay)		Dolomite		Fish Remains	
Biotite		Porosity		Other	
Clay Minerals	80				

THIN SECTION LABEL ID: **385-U1545A-71X-3-W 56/59-TSB-TS 6** Thin section no.: 6  
 Observer: Wei Xie  
 Thin section summary: Domain 1: 0-1 cm, LITHOLOGY: aphyric basalt GROUNDMASS: fine-grained, felty GRAIN SIZE DISTRIBUTION: equigranular TEXTURE: aphyric PHENOCRYSTS: zero VESICLES: highly vesicular ALTERATION: moderately altered VEINS: absent Domain 2: 1-3 cm, LITHOLOGY: plagioclase phyric basalt GROUNDMASS: fine-grained, felty GRAIN SIZE DISTRIBUTION: bimodal TEXTURE: porphyritic PHENOCRYSTS: 1% plagioclase VESICLES: sparsely vesicular ALTERATION: moderately altered VEINS: absent



### Igneous Petrology

**Lithology:** amygdaloidal aphyric basalt sill      **Groundmass grain size (avg.):** fine-grained [NMJ05]  
**Texture:** aphyric      **Grain size distribution:** equigranular

Groundmass	Original (%)	Present (%)	Replaced (%)	Size min. (mm)	Size max. (mm)	Shape	Habit	Comments
Plagioclase				0.1	0.5	euhedral	elongate	50 vol. %
Clinopyroxene						subhedral	subequant	
Fe-Ti oxide						euhedral	equant	
Glass				N/A	N/A	N/A	N/A	Not well preserved

Vesicle	Original (%)	Empty (%)	Filled (%)	Size min. (mm)	Size max. (mm)	Shape	Density	Comments
	20	0	20	0.5	2	subrounded	highly	inequigranular

### Igneous Petrology

**Lithology:** plagioclase phyric basalt sill      **Groundmass grain size (avg.):** fine-grained [NMJ05]  
**Texture:** porphyritic      **Grain size distribution:** Bimodal

Phenocrysts	Original (%)	Present (%)	Replaced (%)	Size min. (mm)	Size max. (mm)	Shape	Habit	Comments
Plagioclase	1	1	0	1	2	euhedral	elongate	

<b>Groundmass</b>	Original (%)	Present (%)	Replaced (%)	Size min. (mm)	Size max. (mm)	Shape	Habit	Comments
Plagioclase				0.5	1	euhedral	elongate	40 vol. %
Clinopyroxene						subhedral	subequant	
Fe-Ti oxide						euhedral	equant	
Glass				N/A	N/A	N/A	N/A	Not well preserved

<b>Vesicle</b>	Original (%)	Empty (%)	Filled (%)	Size min. (mm)	Size max. (mm)	Shape	Density	Comments
	3	0	3	0.1	0.5	rounded	sparsely	equigranular

## Alteration

**Alteration intensity:** moderately altered     
**Texture of Alteration** patchy     
**Recrystallization extent:** weak [recryst]