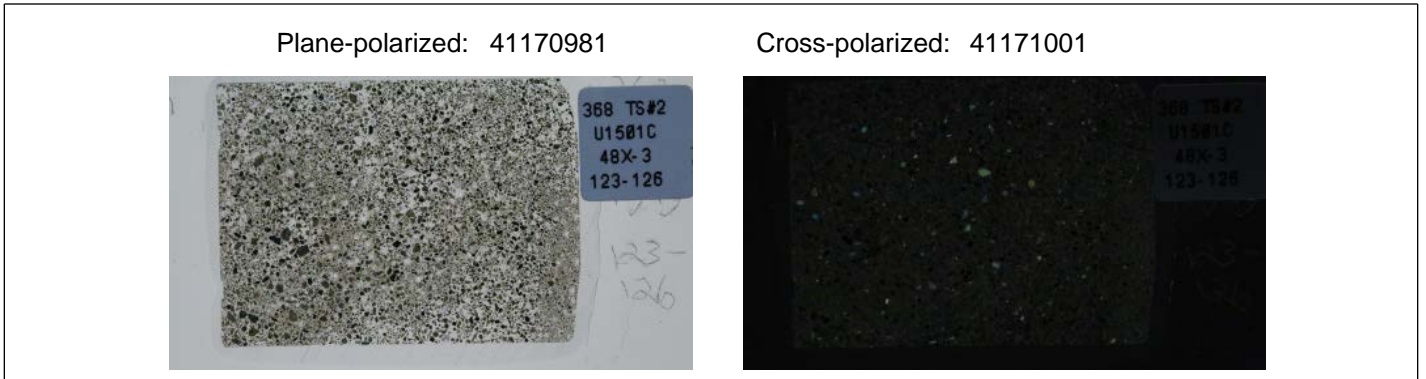




THIN SECTION LABEL ID: **368-U1501C-48X-3-W 123/126-TSB-TS2** Thin section no.: 2  
 Observer: SMS/Wan Unit/subunit: IIA  
 Thin section summary: Glauconite sandstone. Abundant sand-sized quartz and glauconite grains in clay matrix. Glauconite is abundant, and quartz common. Rare ferromagnesian minerals, organic matter and Fe-Ti-oxides are present. Traces of foraminifers.



### Sediments and Sedimentary Rock

Sample domain name: \_\_\_\_\_ Domain rel. abundance: \_\_\_\_\_  
 Lithology: nanofossil rich clay with sand

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	70	Detrital carbonate			
Silt texture	20	Biogenic carbonate			
Clay texture	10	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar		Mica	
Clay minerals	C	Glauconite	A
Lithic grains		Foraminifera	Tr
Chert		Undifferentiated calcareous bioclasts	



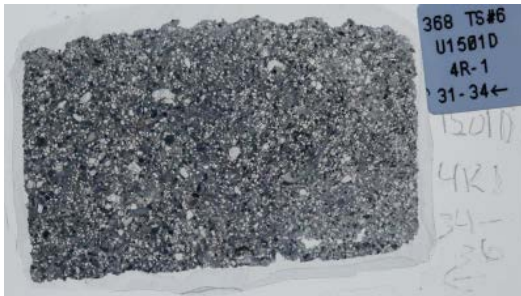




THIN SECTION LABEL ID: **368-U1501D-4R-1-W 31/34-TSB-TS6** Thin section no.: 6  
 Observer: SMS/Wan Unit/subunit: IIC  
 Thin section summary: Heterolithic, clast-supported, densely packed sandstone with quartz, feldspar, calcareous fragments and glauconite, hornblende (altered), rock fragments set into a matrix of calcite rich clay. Traces of opaques and secondary chlorite.

Plane-polarized: 41175801

Cross-polarized: 41175821



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: sandstone with calcite

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	85	Mineral grains	
Sand texture	50	Detrital carbonate	15		
Silt texture	20	Biogenic carbonate			
Clay texture	30	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	C
Feldspar	C	Mica	C
Clay minerals	Tr	Glauconite	C
Lithic grains	R	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	C



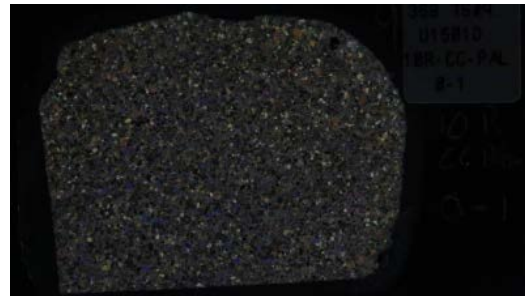




THIN SECTION LABEL ID: **368-U1501D-10R-CC-PAL(0-1)-TSB-TS9** Thin section no.: 9  
 Observer: SMS Unit/subunit: IID  
 Thin section summary: Matrix-supported sandstone with matrix of calcite and claystone. Angular quartz and feldspar minerals and rounded sedimentary lithics . Feldspar commonly altered and pseudomorphed. Secondary zeolite in pseudomorphs. Rare pyrite.

Plane-polarized: 41327771

Cross-polarized: 41327791



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: sandstone with calcite

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	50	Detrital carbonate			
Silt texture	20	Biogenic carbonate			
Clay texture	30	Biogenic silica			

### Framework grain abundance

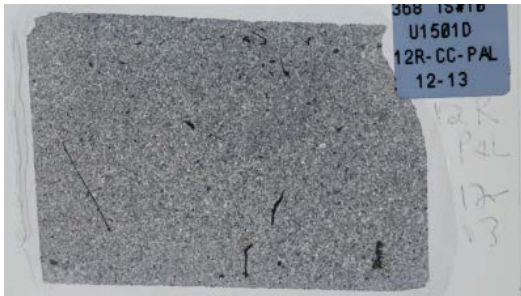
D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	C	Mica	
Clay minerals	A	Glauconite	
Lithic grains	C	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

THIN SECTION LABEL ID: **368-U1501D-12R-CC-PAL(12-13)-TSB-TS10** Thin section no.: 10  
 Observer: SMS Unit/subunit: IIE  
 Thin section summary: Sandstone with calcite. Densely packed coarse silt and fine sand-sized grains of quartz, feldspar and sedimentary lithics in calcite and clay matrix. Feldspar commonly altered. Rare pyrite and secondary chlorite. Traces of glauconite and mica.

Plane-polarized: 41327811

Cross-polarized: 41327831



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: sandstone

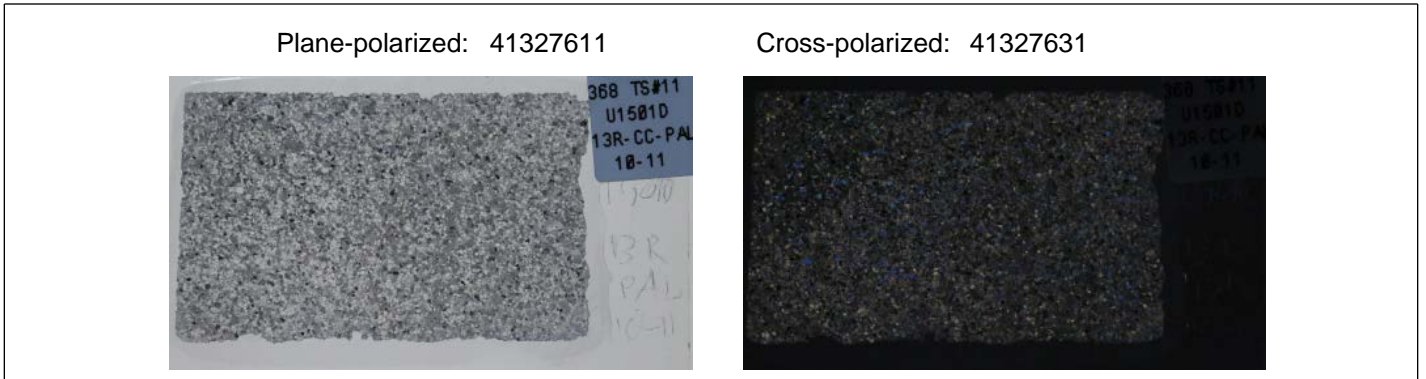
TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	20	Detrital carbonate			
Silt texture	40	Biogenic carbonate			
Clay texture	40	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	C	Mica	Tr
Clay minerals	A	Glauconite	Tr
Lithic grains	A	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

THIN SECTION LABEL ID: **368-U1501D-13R-CC-PAL(10-11)-TSB-TS11** Thin section no.: 11  
 Observer: SMS Unit/subunit: IIE  
 Thin section summary: Coarse siltstone composed of very densely packed, angular quartz, feldspar and sedimentary lithics (shale or claystone fragments) cemented with claystone. Rare pyrite. Feldspar mostly completely altered. Pyrite present.



### Sediments and Sedimentary Rock

Sample domain name:      Domain rel. abundance:

Lithology:      siltstone

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	10	Detrital carbonate			
Silt texture	80	Biogenic carbonate			
Clay texture	10	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	C	Mica	
Clay minerals	A	Glauconite	
Lithic grains	C	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

THIN SECTION LABEL ID: **368-U1501D-16R-1-W 38/41-TSB-TS13** Thin section no.: 13  
 Observer: SMS Unit/subunit: IIF  
 Thin section summary: Matrix-supported clay-rich siltstone with sand. Abundant quartz and common heavily altered feldspar. Heavily bioturbated and minerals are partly disintegrated. Disseminated pyrite.

Plane-polarized: 41362981

Cross-polarized: 41363001



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: clay rich siltstone with sand

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	10	Detrital carbonate			
Silt texture	30	Biogenic carbonate			
Clay texture	60	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	R	Mica	
Clay minerals	A	Glauconite	
Lithic grains	R	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

THIN SECTION LABEL ID: **368-U1501D-16R-1-W 90/93-TSB-TS14** Thin section no.: 14  
 Observer: SMS Unit/subunit: IIF  
 Thin section summary: Matrix-supported clay-rich siltstone with sand. Abundant quartz and common heavily altered feldspar. Heavily bioturbated and minerals are partly disintegrated. Disseminated pyrite and larger opaques.

Plane-polarized: 41363021

Cross-polarized: 41363041



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: clay rich siltstone with sand

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	20	Detrital carbonate			
Silt texture	40	Biogenic carbonate			
Clay texture	40	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

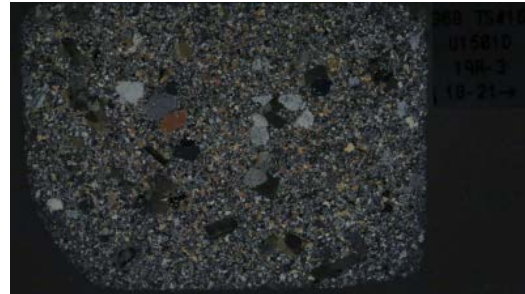
Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	R	Mica	
Clay minerals	A	Glauconite	
Lithic grains	R	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	



THIN SECTION LABEL ID: **368-U1501D-19R-3-W 18/21-TSB-TS16** Thin section no.: 16  
 Observer: SMS Unit/subunit: IIIA  
 Thin section summary: Granite, recrystallized. Dominated by angular feldspar and quartz grains with larger, euhedral alkali-feldspar. Small amounts of mica (biotite), amphibole, and Fe-Ti oxides. Euhedral apatite inclusion. Fairly fresh with incipient chloritization.

Plane-polarized: 41327691

Cross-polarized: 41327711



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: gravel

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	100	Detrital carbonate			
Silt texture		Biogenic carbonate			
Clay texture		Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	A	Mica	C
Clay minerals		Glauconite	
Lithic grains		Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

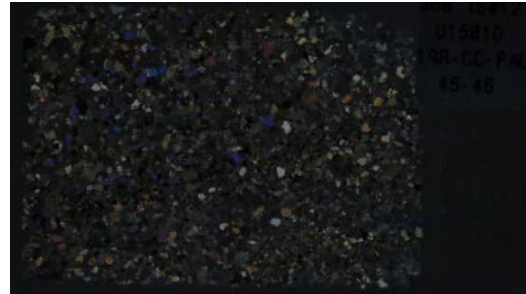




THIN SECTION LABEL ID: **368-U1501D-19R-CC-PAL(45-46)-TSB-TS12** Thin section no.: 12  
 Observer: SMS Unit/subunit: IIIA  
 Thin section summary: Clast-supported coarse-grained sandstone composed of abundant quartz, feldspar and lithic fragments. Lithics are rounded mostly sedimentary (shale); some metamorphic fractions (quartzite). Rare mica, amphibole and opaques. Traces of glauconite.

Plane-polarized: 41327651

Cross-polarized: 41327671



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: sandstone

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	90	Detrital carbonate			
Silt texture		Biogenic carbonate			
Clay texture	10	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

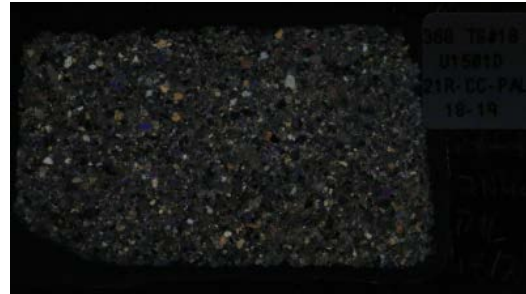
Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	C	Mica	R
Clay minerals	C	Glauconite	Tr
Lithic grains	A	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	



THIN SECTION LABEL ID: **368-U1501D-21R-CC-PAL-TSB-TS18** Thin section no.: 18  
 Observer: SMS Unit/subunit: IIIA  
 Thin section summary: Clast-supported coarse-grained sandstone composed of abundant quartz, feldspar and lithic fragments. Lithics are rounded mostly sedimentary (shale); some igneous and metamorphic grains. Traces of mica, amphibole and opaques, and glauconite.

Plane-polarized: 41327731

Cross-polarized: 41327751



### Sediments and Sedimentary Rock

Sample domain name:

Domain rel. abundance:

Lithology: sandstone

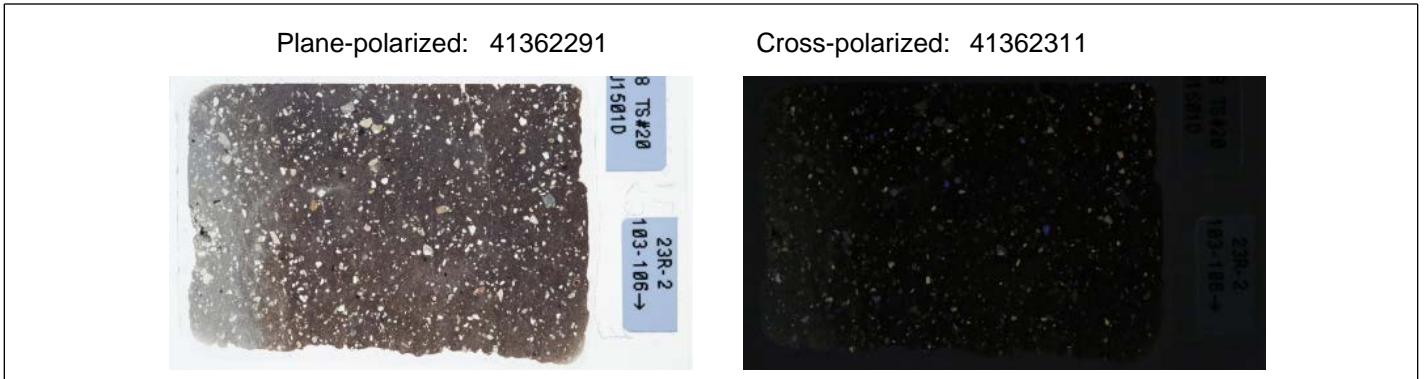
TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	90	Detrital carbonate			
Silt texture		Biogenic carbonate			
Clay texture	10	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	C	Mica	Tr
Clay minerals	C	Glauconite	Tr
Lithic grains	A	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	

THIN SECTION LABEL ID: **368-U1501D-23R-2-W 103/106-TSB-TS20** Thin section no.: 20  
 Observer: SMS Unit/subunit: IIIA  
 Thin section summary: Matrix-supported siltstone. Abundant angular quartz grains and rounded lithics (mostly sedimentary shale, with some igneous and volcanic fragments) set into a matrix of much finer well-sorted and densely quartz grains. Angular pyrite present.



### Sediments and Sedimentary Rock

Sample domain name:      Domain rel. abundance:

Lithology:      siltstone

TEXTURE	Percent	CONSTITUENT	Percent	GRAIN ROUNDNESS	
Gravel texture		Siliciclastics	100	Mineral grains	
Sand texture	10	Detrital carbonate			
Silt texture	85	Biogenic carbonate			
Clay texture	5	Biogenic silica			

### Framework grain abundance

D=dominant; A=abundant; C=common; R=rare; Tr=trace

Component	Rel. abundance	Component	Rel. abundance
Quartz	A	Calcite (allogenic)	
Feldspar	R	Mica	
Clay minerals	C	Glauconite	
Lithic grains	A	Foraminifera	
Chert		Undifferentiated calcareous bioclasts	