

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 2019
(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

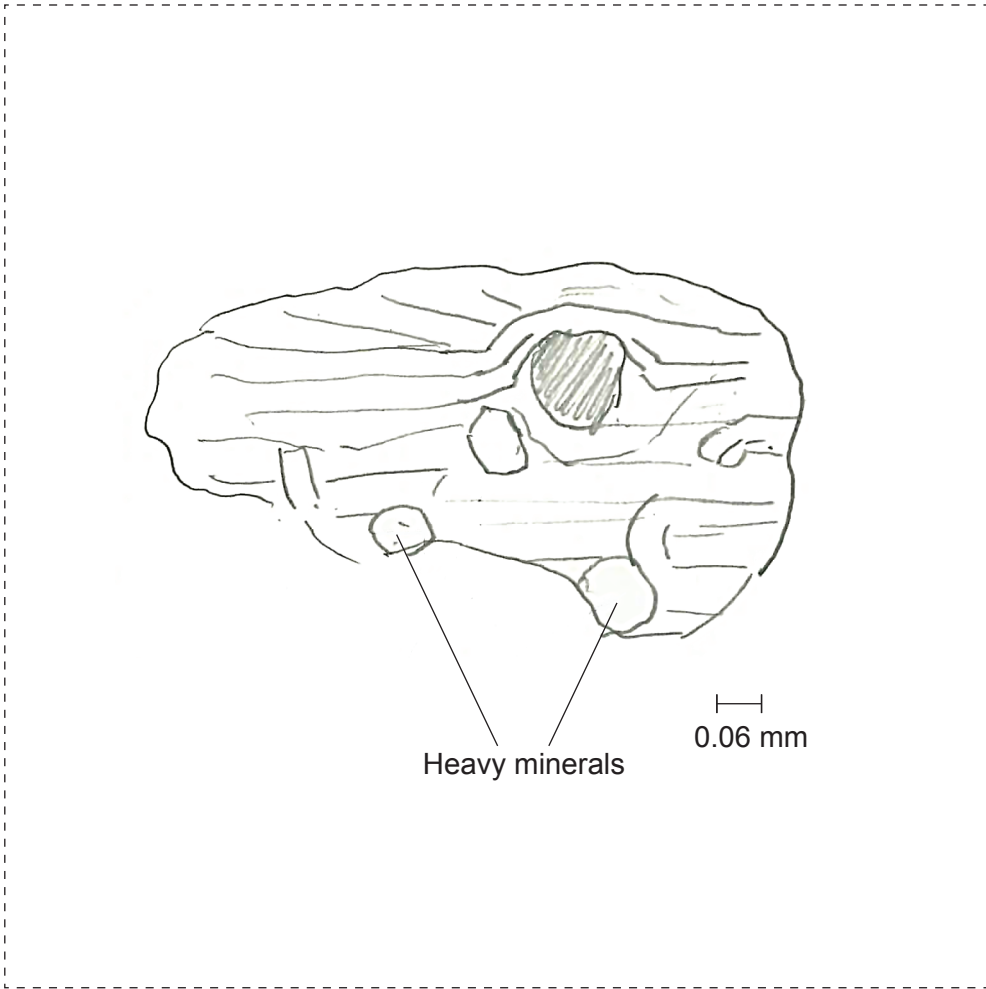


Image file name: _____

Rock type: Clast of dense mineral ?

Object: Granules in sand

Comments: Clast is overall composed of dense minerals.

Microscope image for this sample is
"358-C0024G-18X-05_64-70_TSS_Li_56.JPG" and
"358-C0024G-18X-05_64-70_TSS_Li_57.JPG" in
Supplementary Materials

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

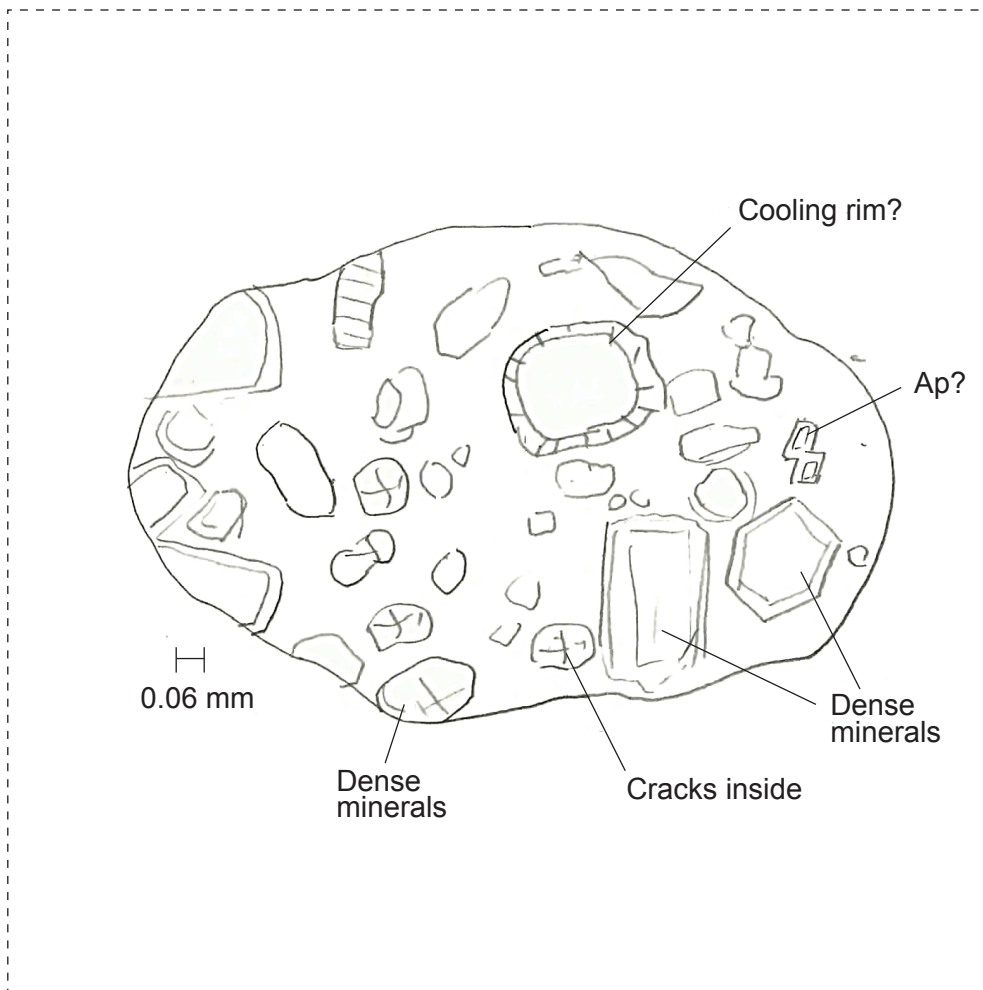


Image file name: _____

Rock type: Basalt (volcanic rock)

Object: Granules in sand

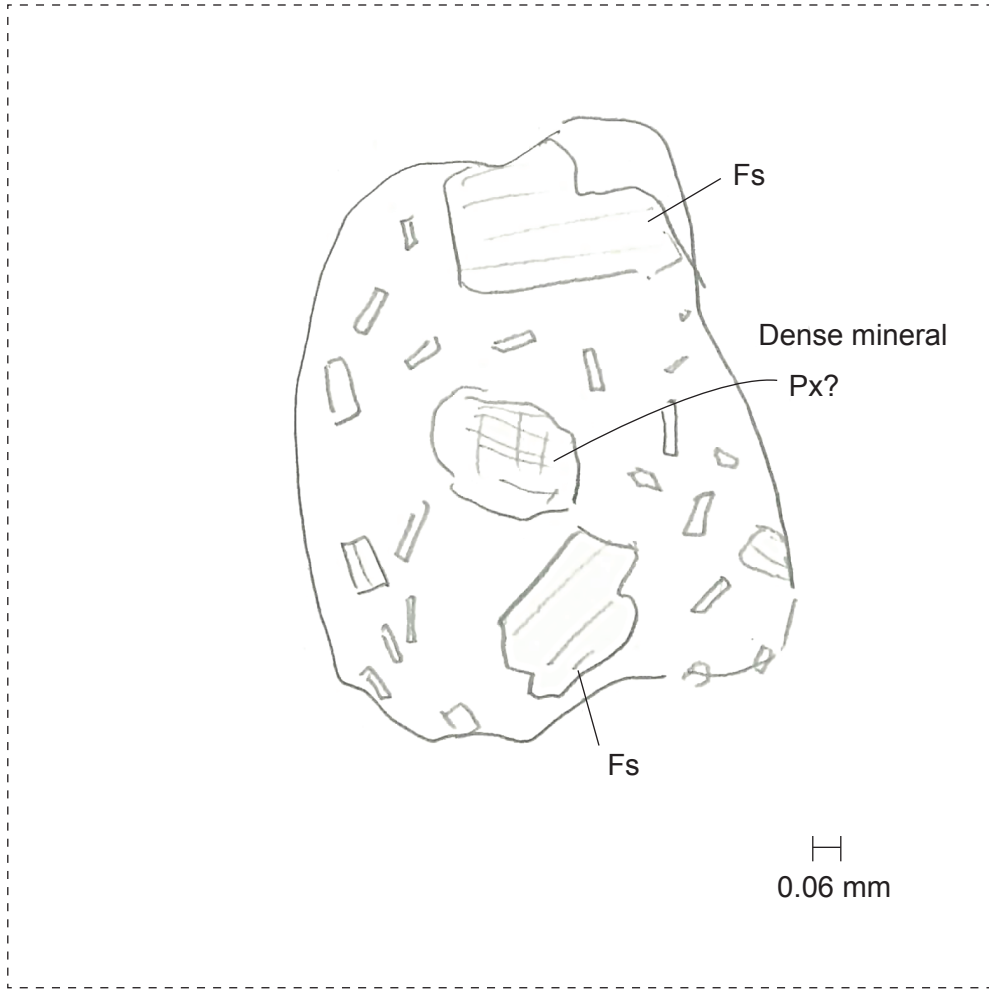
- Comments:
- Composed of heavy minerals, opaque grains
 - Black-brown matrix
 - Crystals are fractured inside
 - Some have outer rims (rounded)

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_58.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_59.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

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(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Basalt

Object: Granules in sand

Comments: Composed of feldspar, opaque grain (pyrite?)
Heavy mineral (fractured inside due to cooling?)
(pyroxene?)
Black-brown matrix

Microscope image for this sample is
"358-C0024G-18X-05_64-70_TSS_Li_52.JPG" and
"358-C0024G-18X-05_64-70_TSS_Li_53.JPG" in
Supplementary Materials.

Observation Sheet (SEM / Microscope)

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(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW):

Sample comment:

Object: Granules in sand

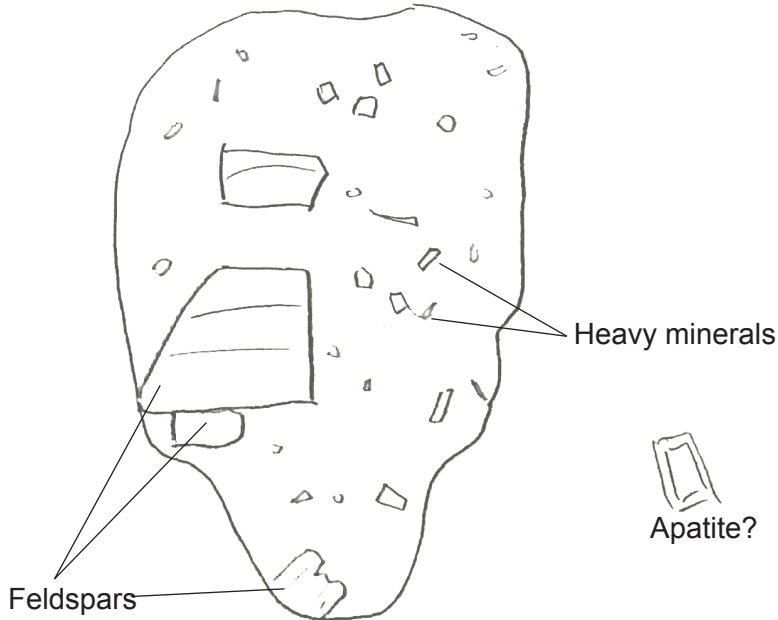


Image file name:

Rock type: Basalt

Comments:

Composed of feldspars, some heavy minerals,
(randomly oriented crystals)

Dark black matrix

Needle-shaped minerals are also feldspar/zeolite.

Microscope image for this sample is

"358-C0024G-18X-05_64-70_TSS_Li_50.JPG" and

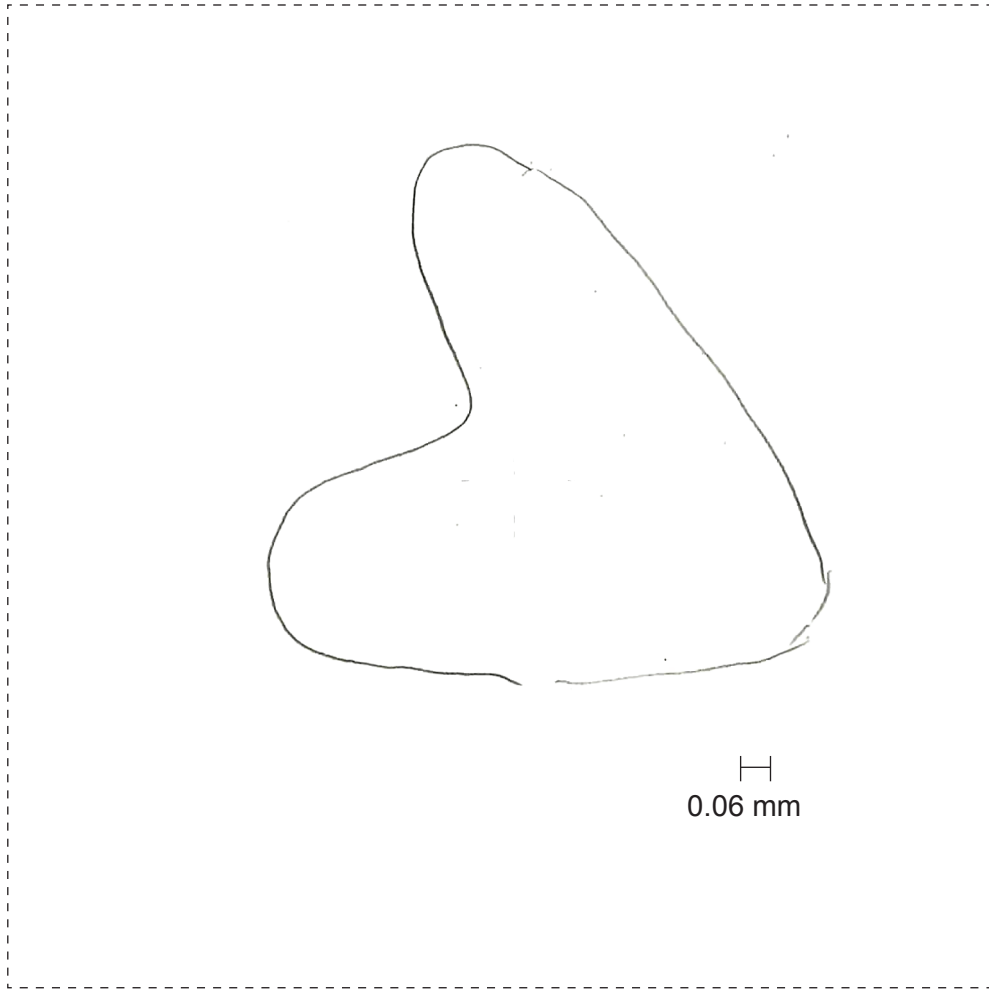
"358-C0024G-18X-05_64-70_TSS_Li_51.JPG" in

Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Siltstone

Object: Granules in sand

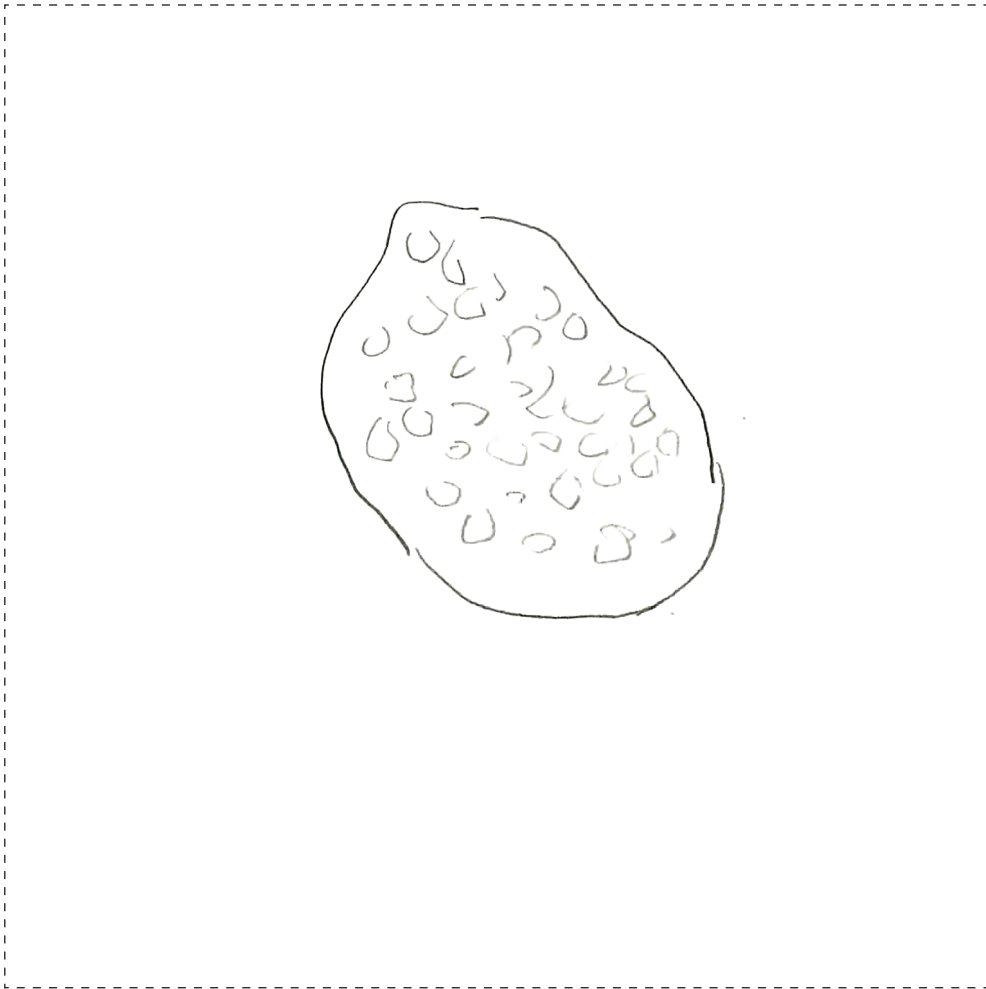
Comments: Composed of quartz, clay minerals, pyrite, organic material, mudstone lithics, few mica.

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_30.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_31.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Sandstone

Object: Granules in sand

Comments:

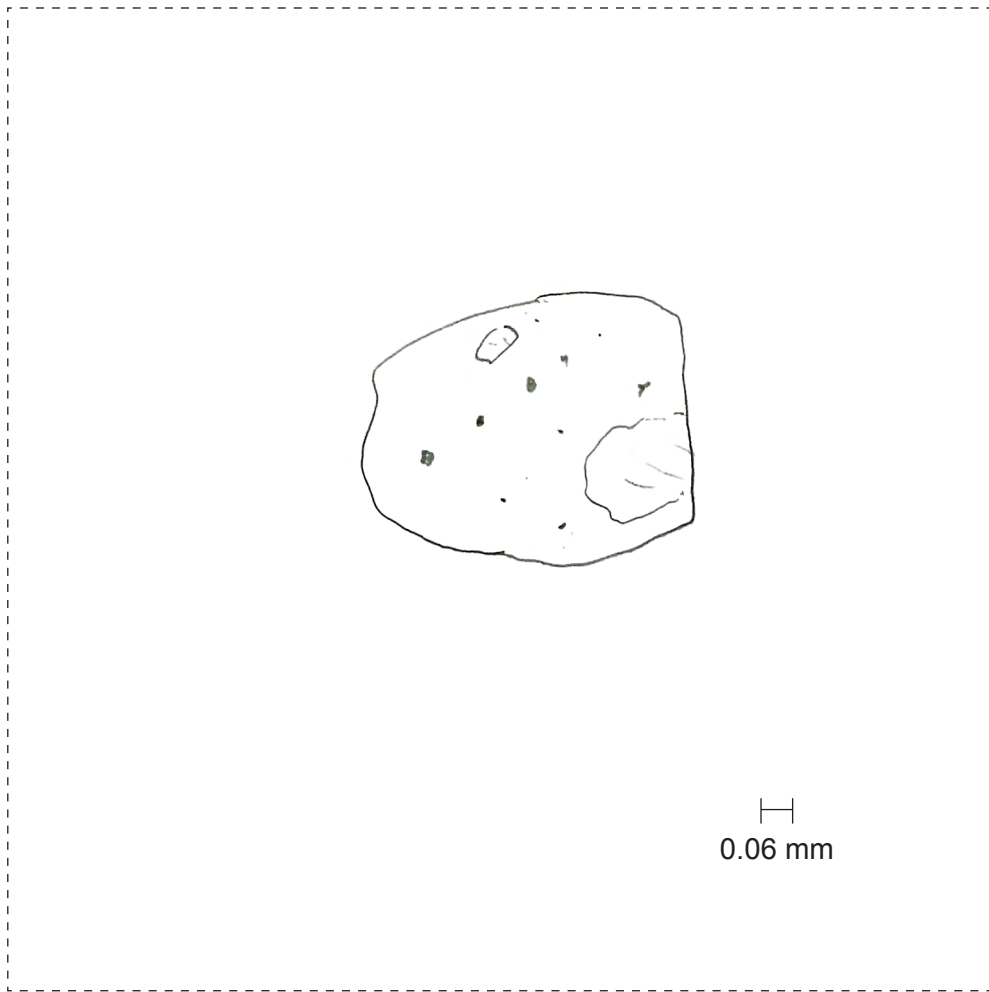
Composed of grains of quartz, opaque grain (pyrite), feldspar, mica, clay mineral.

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_29.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Mudstone

Object: Granules in sand

Comments: Composed of clay minerals, mudstone lithics, opaque grains (pyrite).

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_27.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_28.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

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(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

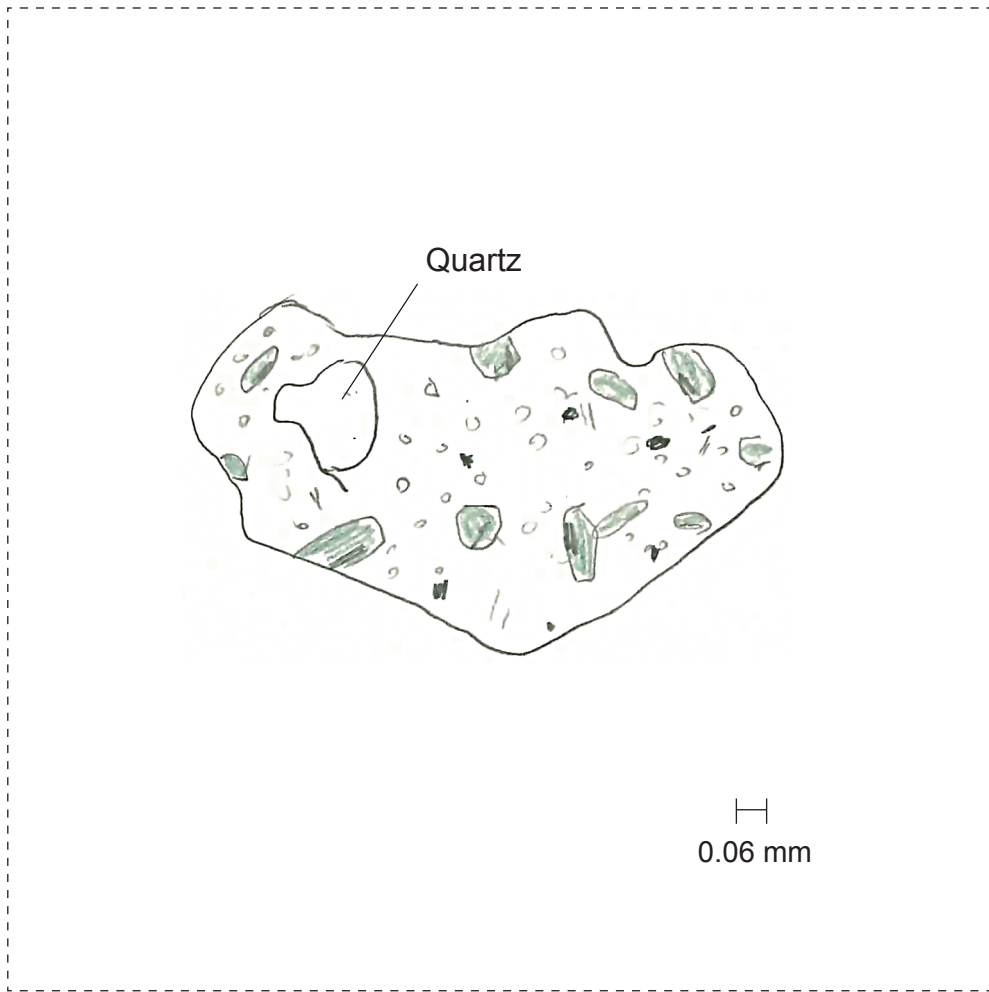


Image file name: _____

Rock type: Mudstone

Comments: (poorly sorted)

Composed of grains of chlorite, opaque grains (pyrite?), quartz, feldspar, lithics (mudstone etc), clay minerals

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_23.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_24.JPG" in Supplementary Materials.

Object: Granules in sand

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19

(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW):

Sample comment:



0.06 mm

Image file name:

Rock type: Sandstone

Comments:

Composed of grains of quartz, feldspar, polycrystalline quartz, mica (pyrite coated), organic material + pyrite, mudstone lithics, cut by quartz vein.

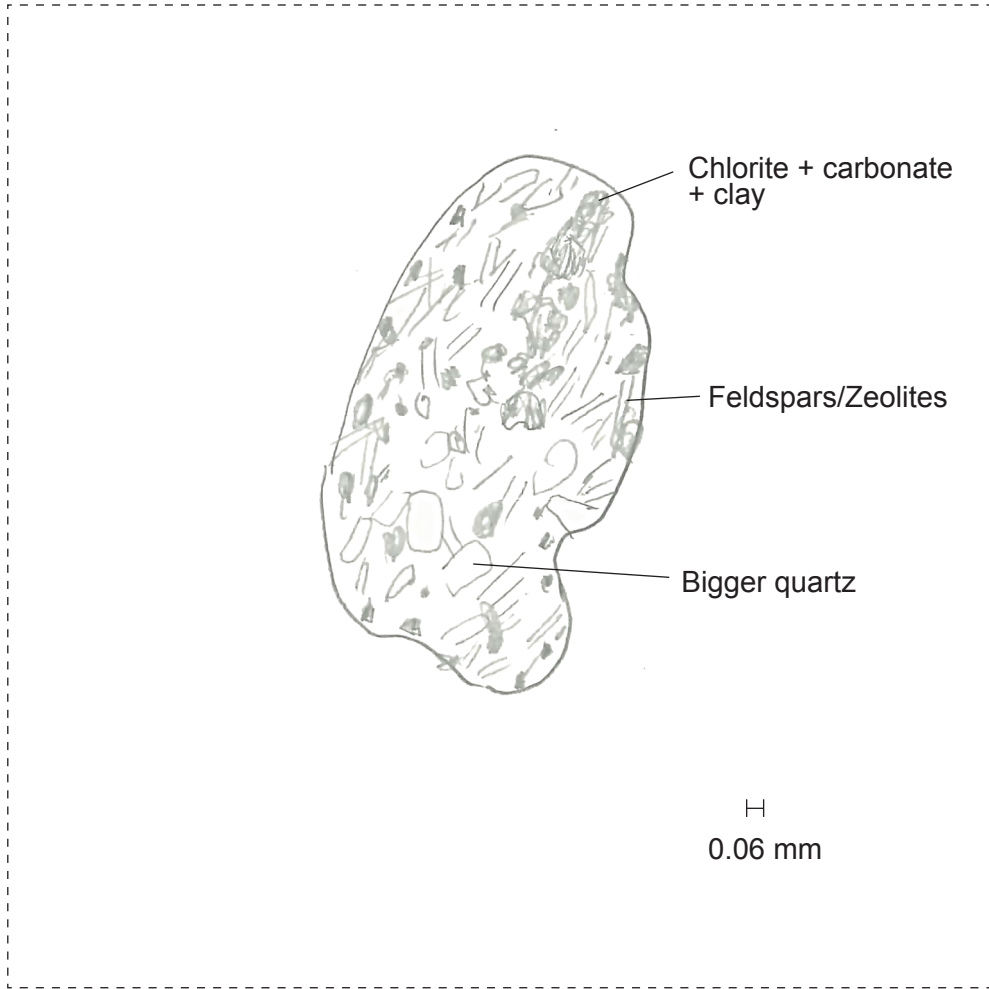
Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_21.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_22.JPG" in Supplementary Materials.

Object: Granules in sand

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Volcanic rock

Object: Granules in sand

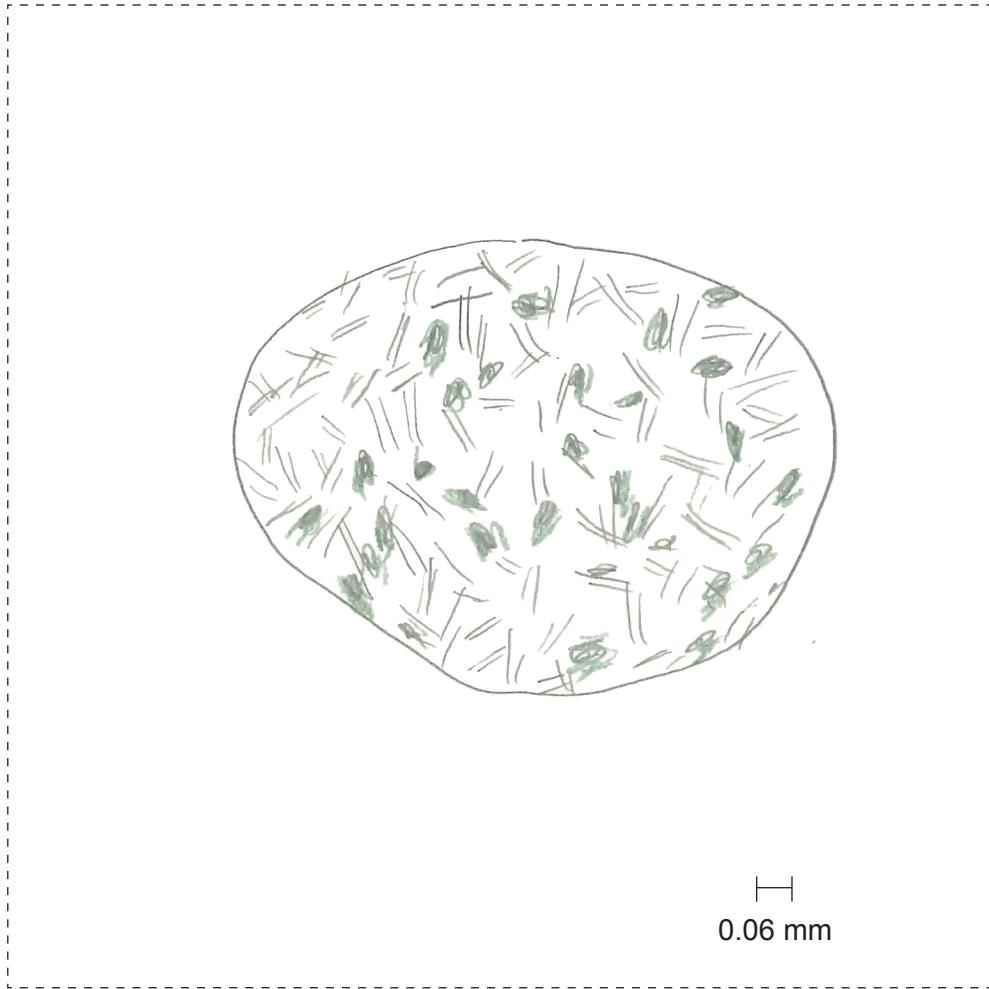
Comments: Composed of needle-shaped crystal (feldspar/zeolite), quartz, carbonates (polycrystalline, clay minerals),
 ↙
 (larger crystals)

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_19.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_20.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Volcanic rock

Object: Granules in sand

Comments: Composed of randomly oriented needle-shaped feldspar/zeolites, polycrystalline minerals (carbonate?), few quartz grains. + clay minerals

Chlorite and opaque grains (pyrite?) are also abundant.

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_17.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_18.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

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Date: 17 / 7 / 19
(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

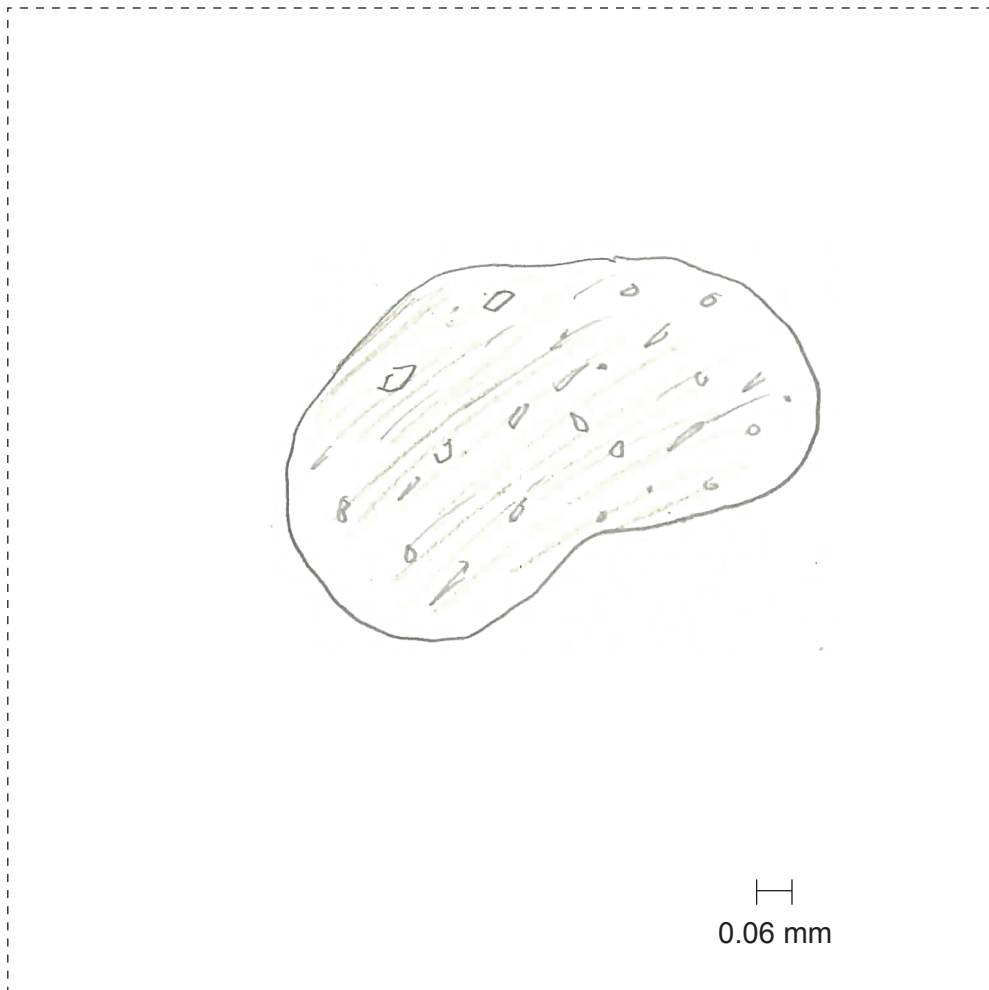


Image file name: _____

Rock type: Mudstone

Comments: Composed of aligned clay minerals, quartz, polycrystalline quartz, microfossil (few foram) mudstone clasts, opaque grains (organics?)

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_15.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_16.JPG" in Supplementary Materials.

Object: Granules in sand

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Object: Granules in sand

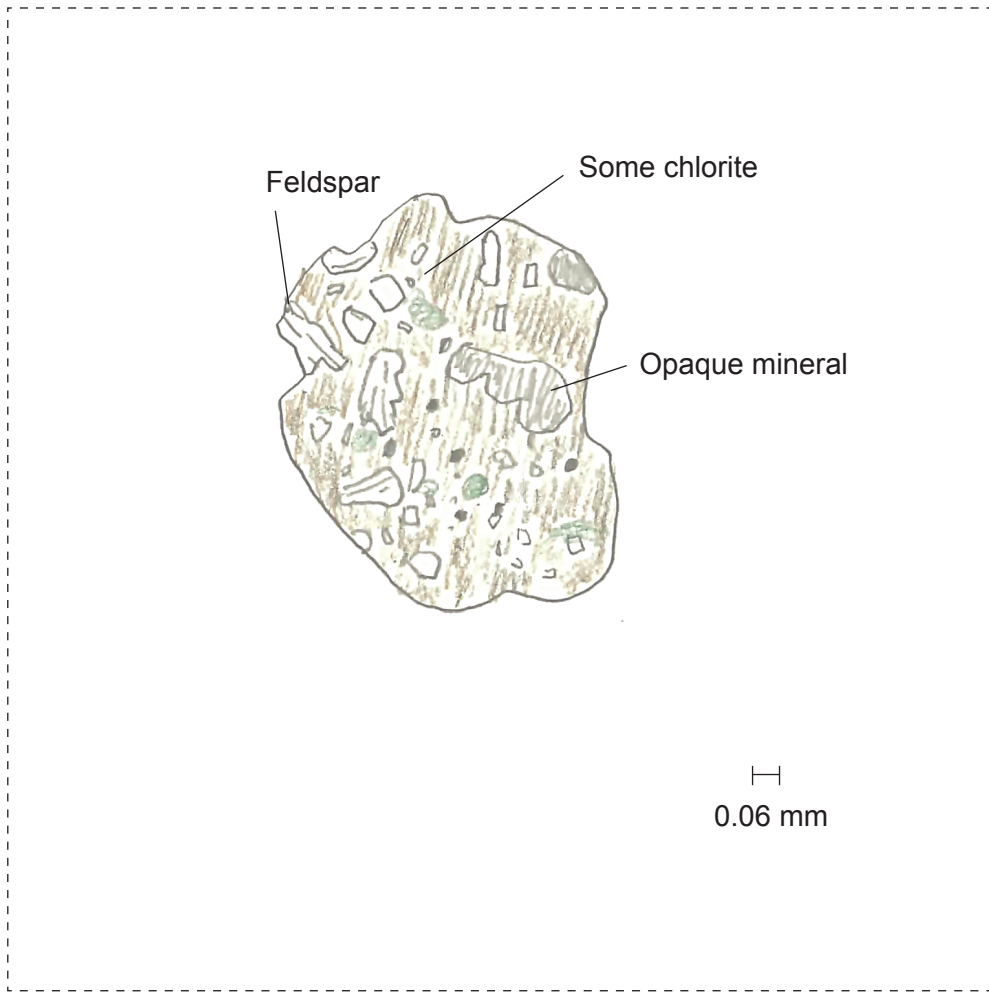


Image file name: _____

Rock type: Basalt

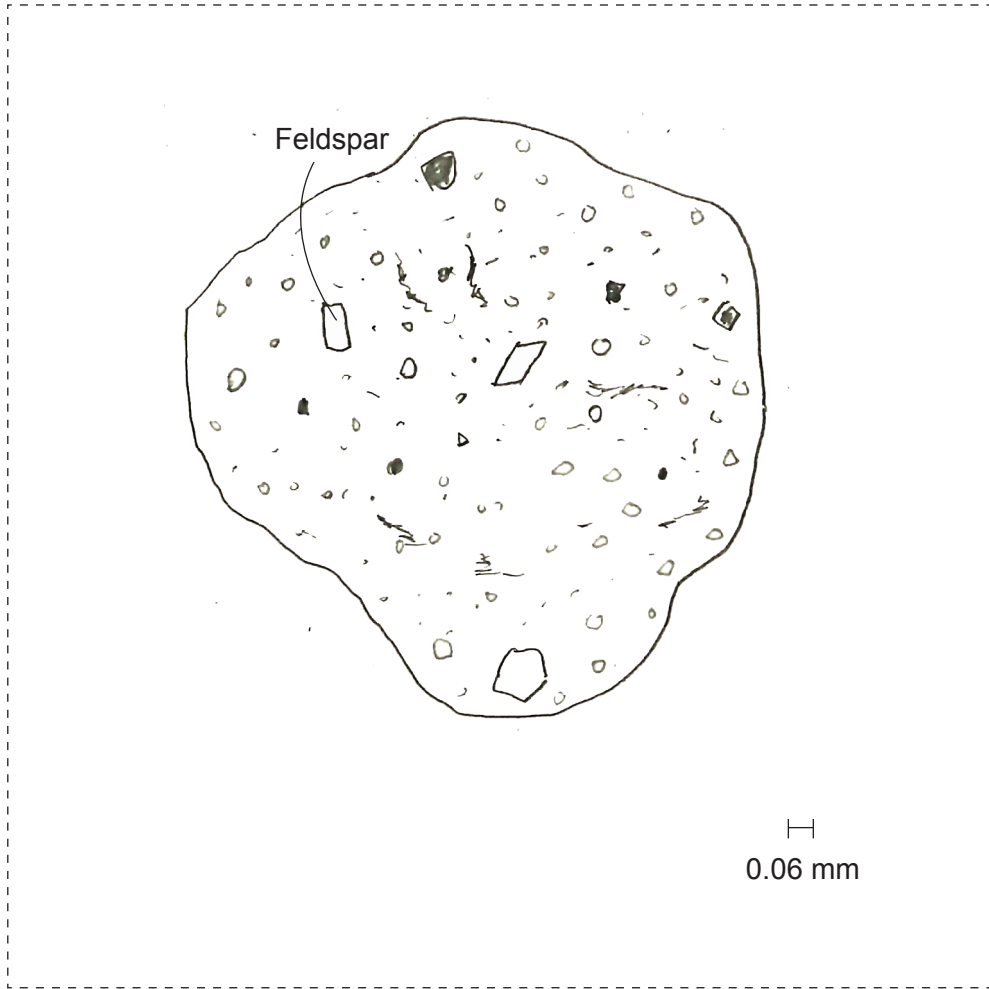
Comments: _____ (rectangular + needle-shaped)
Composed of feldspar crystals, opaque minerals,
chlorite, and fine grained minerals (~ clay).

Microscope image for this sample is
"358-C0024G-18X-05_64-70_TSS_Li_13.JPG" and
"358-C0024G-18X-05_64-70_TSS_Li_14.JPG" in
Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Mudstone (clay-silt)

Object: Granules in sand

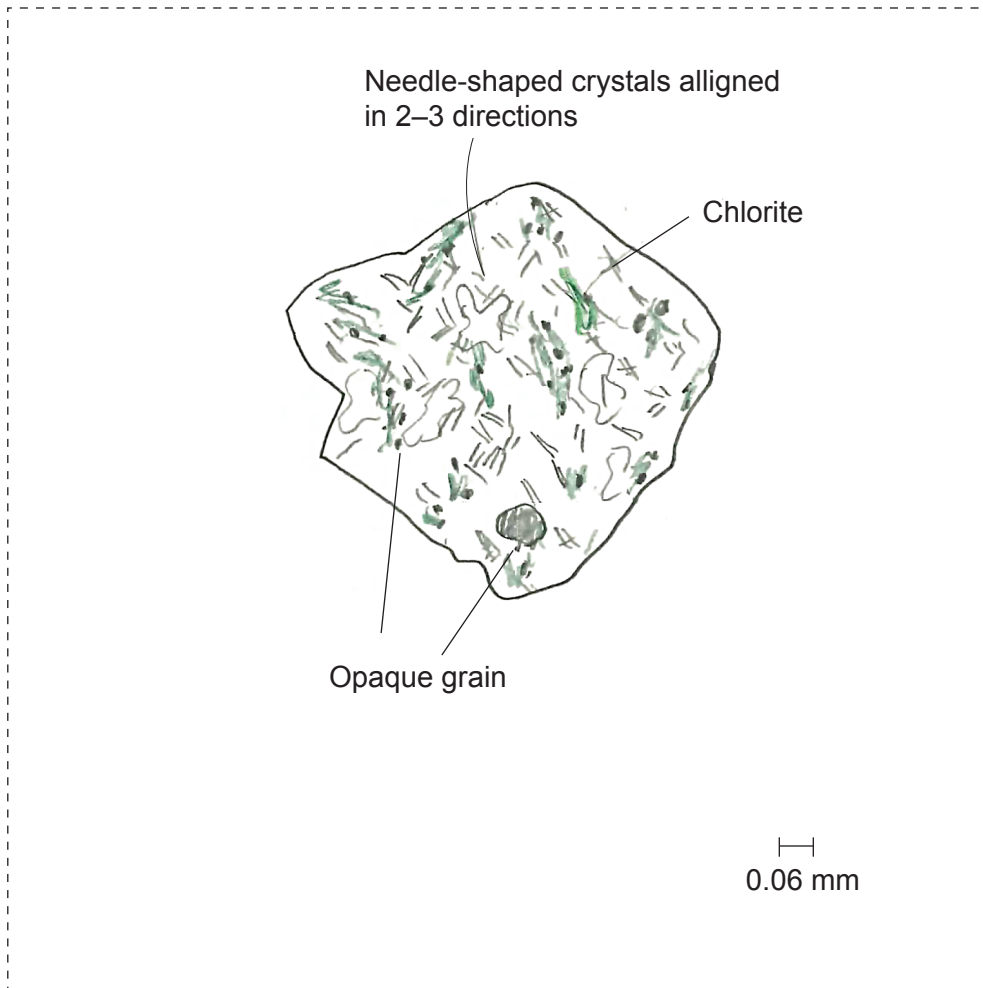
Comments: Composed of quartz, feldspar, and opaque grains
+ Needle-shaped grains (clay minerals?) (some organic also)

Microscope image for this sample is
"358-C0024G-18X-05_64-70_TSS_Li_11.JPG" and
"358-C0024G-18X-05_64-70_TSS_Li_12.JPG" in
Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW):

Sample comment:

Image file name:

Rock type: Volcanic rock

Comments: Composed of chlorite, needle-shaped crystals (zeolite? feldspar?) and surrounding smaller-grained quartz and feldspar.

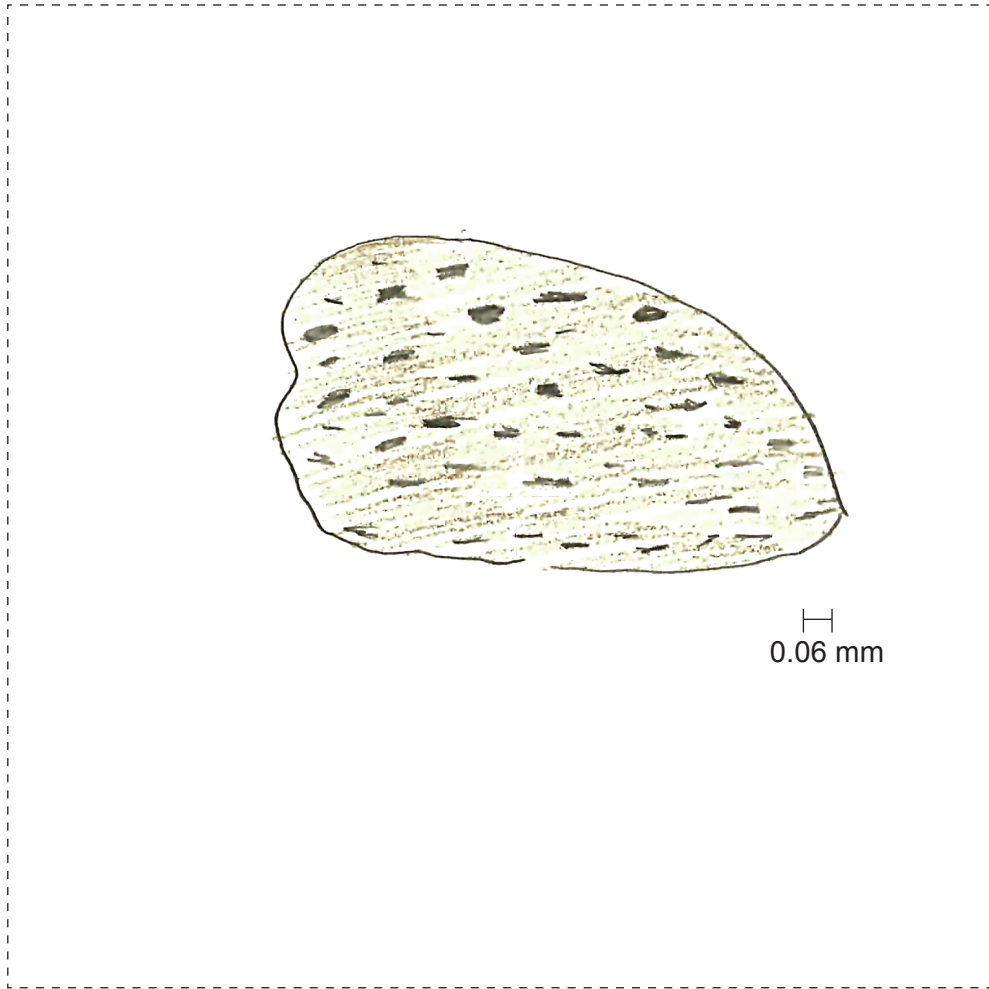
Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_7.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_8.JPG" in Supplementary Materials.

Object: Granules in sand

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)



Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Mudstone (clay-silt)

Object: Granules in sand

Comments: Mudstone clast composed of clay, elongated opaque grains (organics?), few quartz and mica grains.

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_5.JPG" and "358-C0024G-18X-05_64-70_TSS_Li_6.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
(d/m/y)

Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

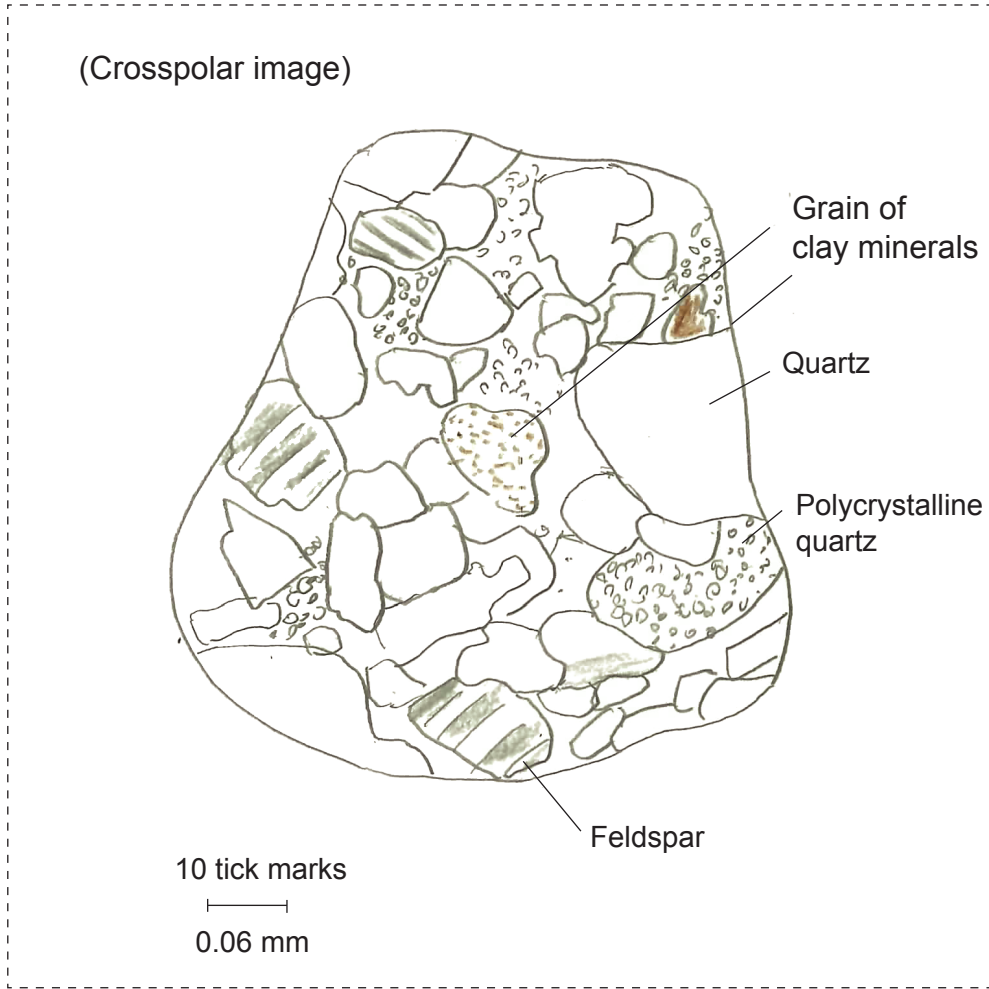


Image file name: _____

Rock type: Granite

Object: Granules in sand

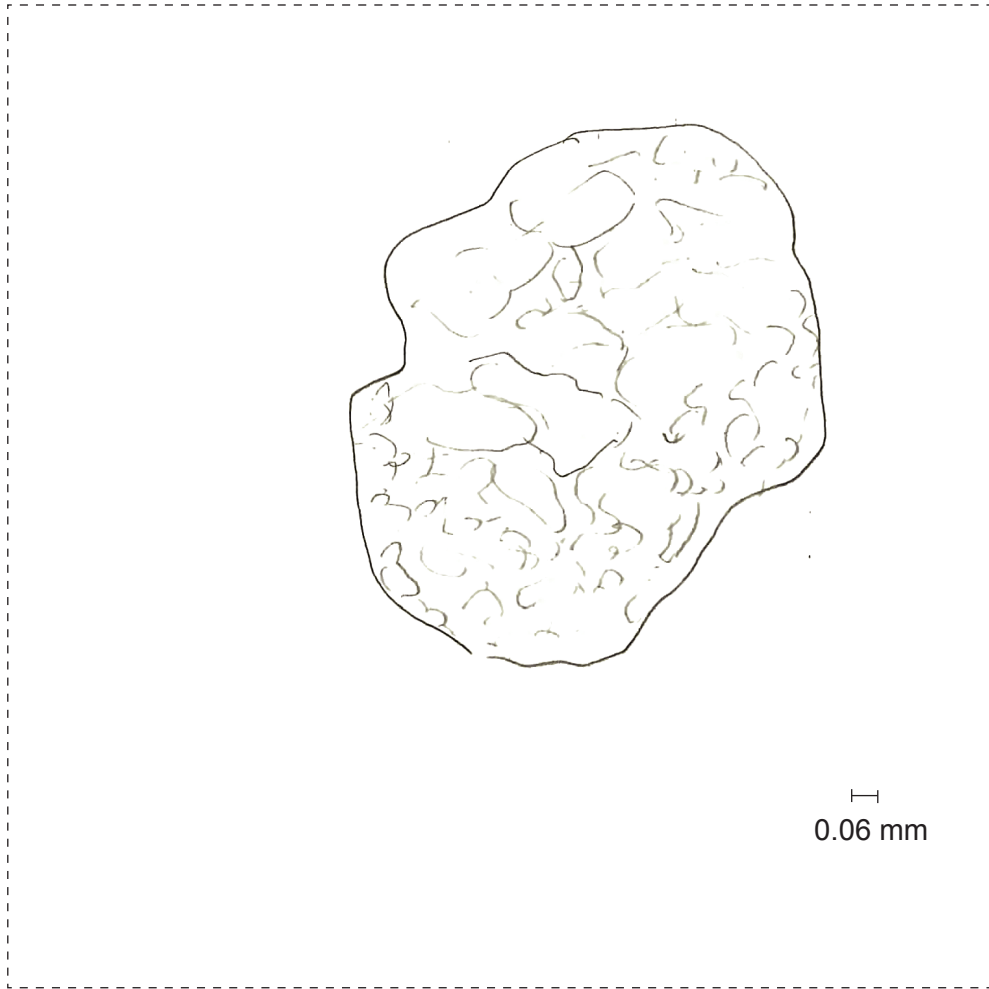
Comments: Composed of quartz (mostly), feldspar, polycrystalline quartz and clay mineral aggregates. (No color except for clay)

Microscope image for this sample is "358-C0024G-18X-05_64-70_TSS_Li_1.JPG" to "358-C0024G-18X-05_64-70_TSS_Li_4.JPG" in Supplementary Materials.

Observation Sheet (SEM / Microscope)

Observer: MH

Date: 17 / 7 / 19
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Expedition Number: 358

Site: C0024

Hole: G

Core: 18X

Section: 5W

Interval: 64-70

Misc # (SMW): _____

Sample comment: _____

Image file name: _____

Rock type: Quartzite

Object: Granules in sand

Comments: Composed of completely quartz.
Crystals have wavy contacts due to
pressure solution/dissolution. (puzzle like)

Microscope image for this sample is
"358-C0024G-18X-05_64-70_TSS_Li_38.JPG" and
"358-C0024G-18X-05_64-70_TSS_Li_39.JPG" in
Supplementary Materials.