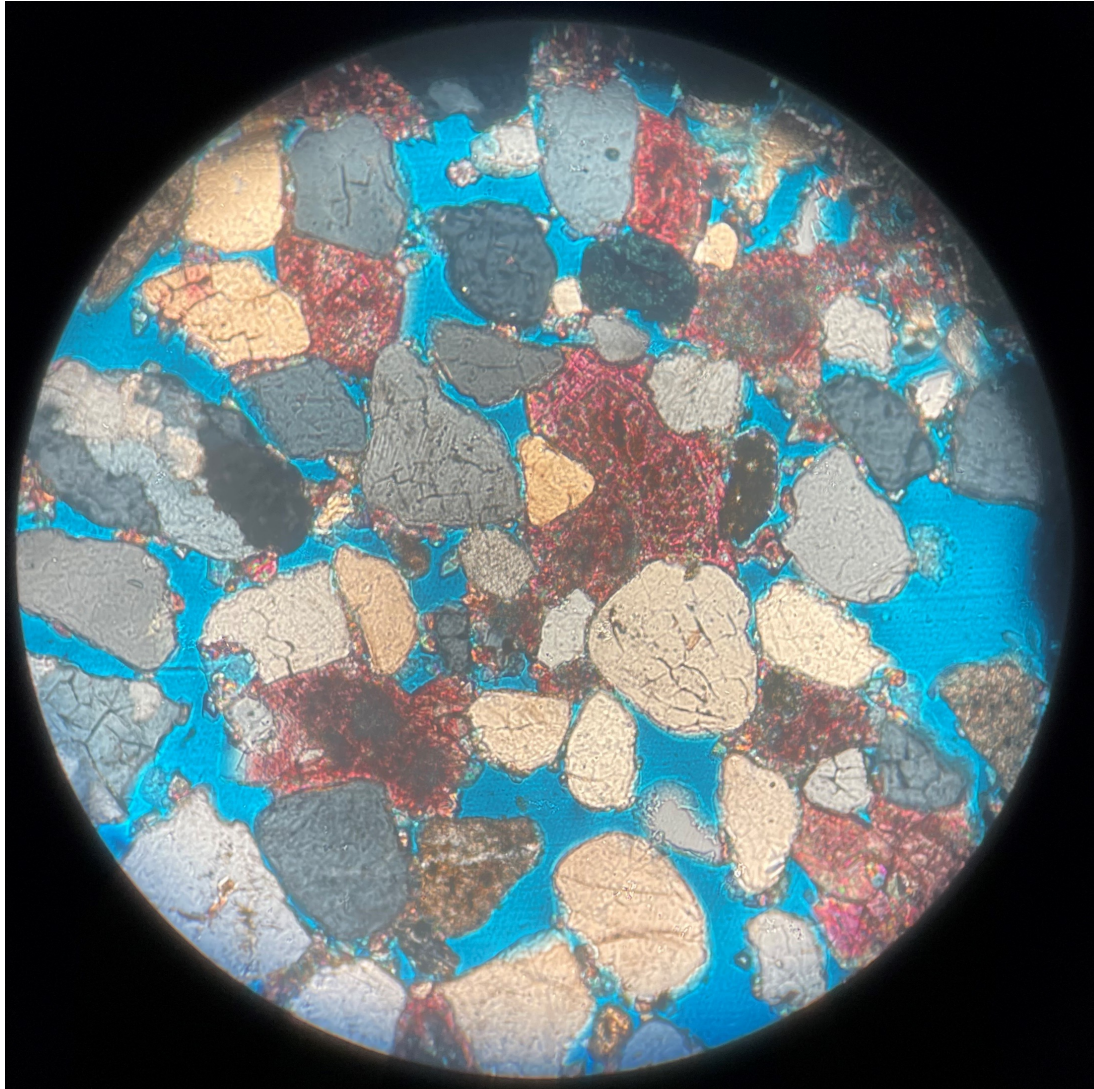


BB3

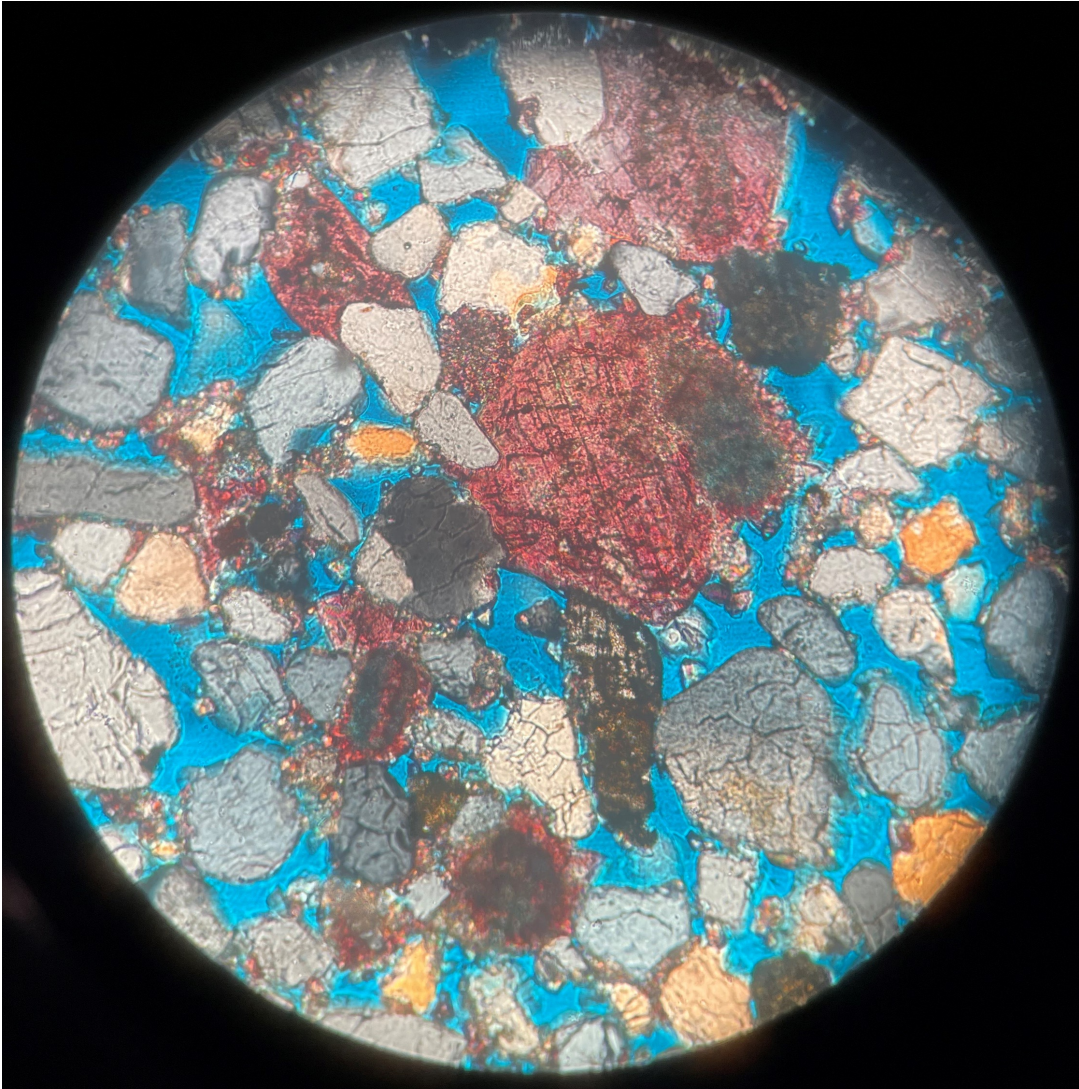


BB3:



XPL

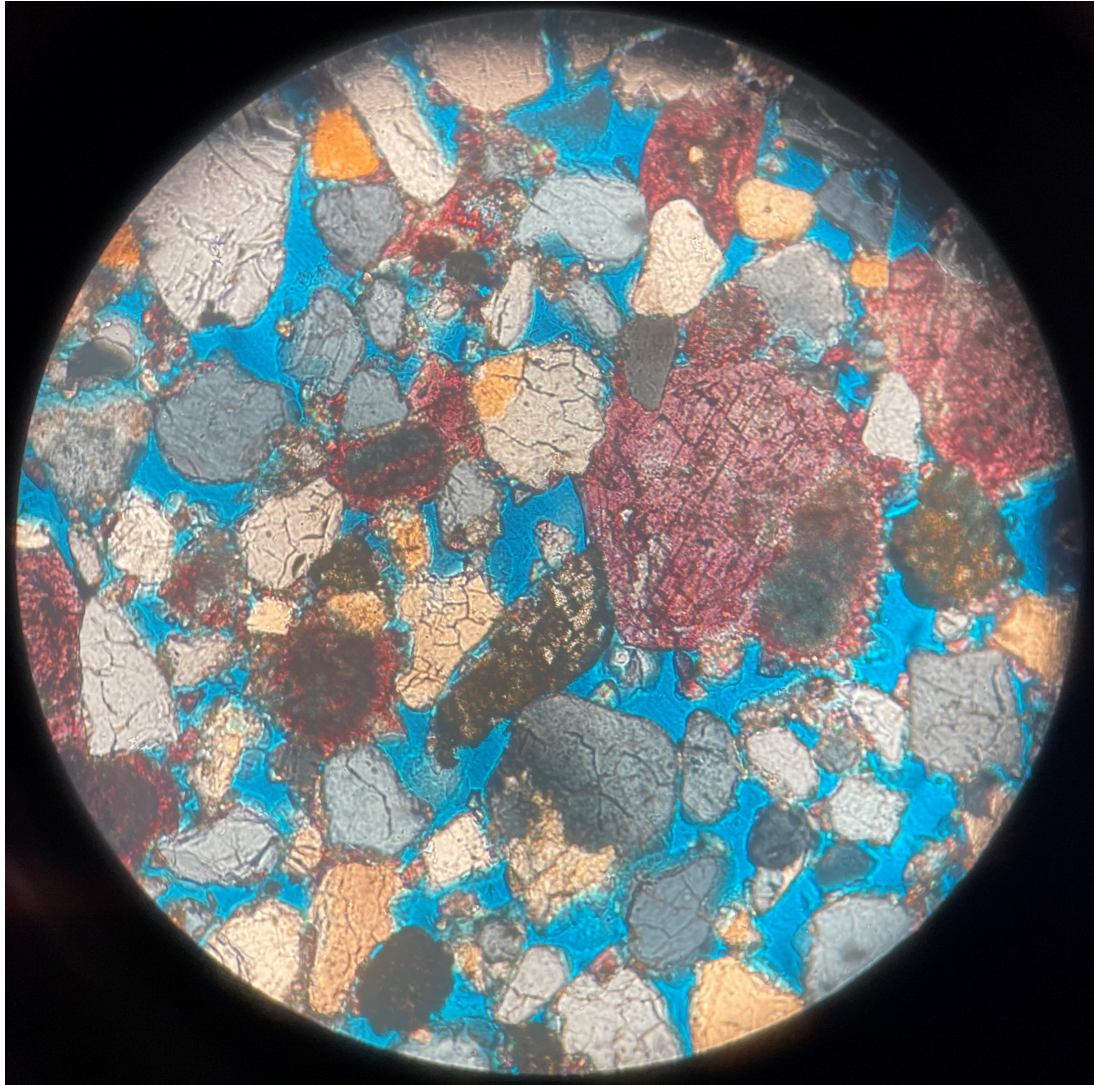
BB3:



XPL

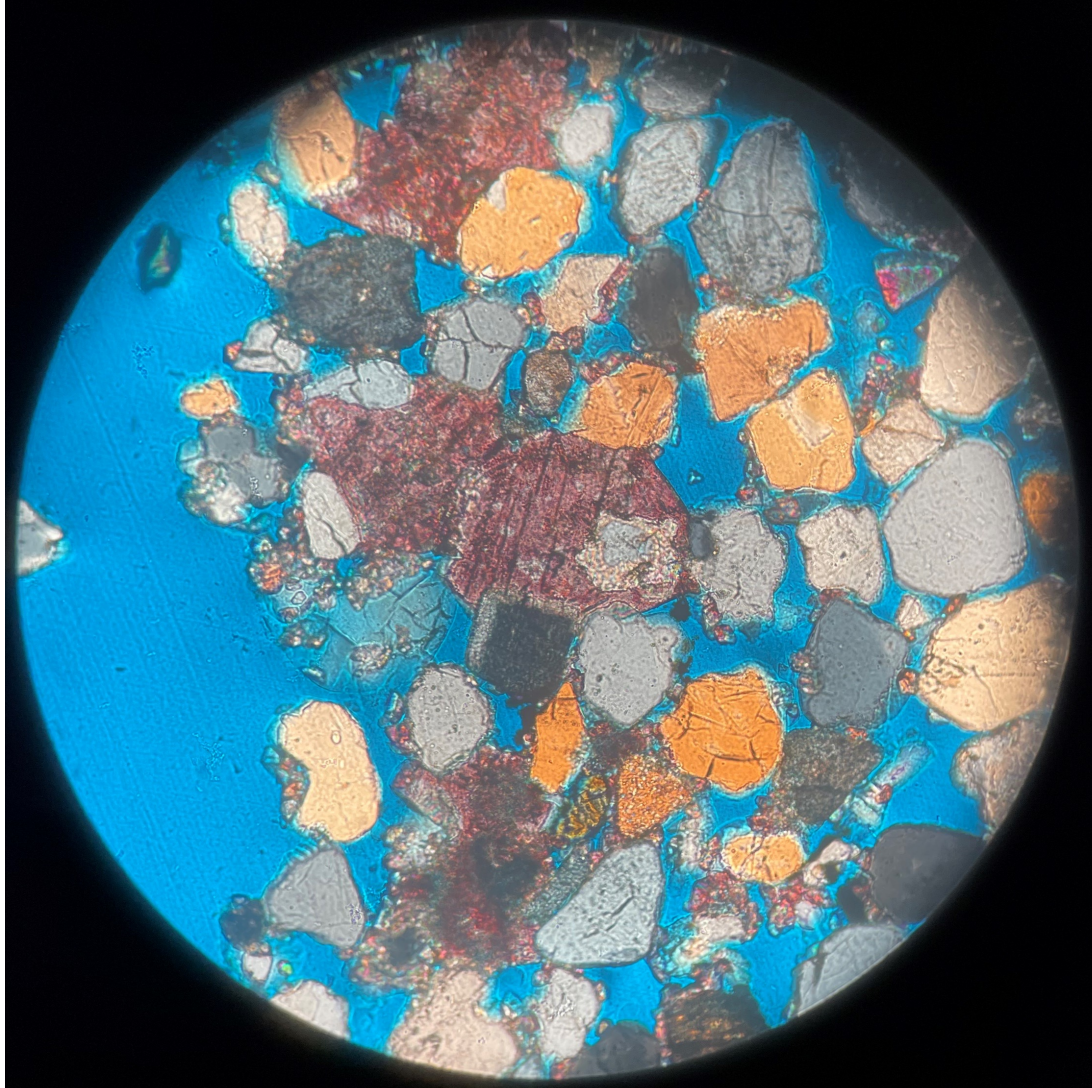
- “Mud” grains enclosed within calcite cement that also has “fractures” or “dissolution features”

BB3:



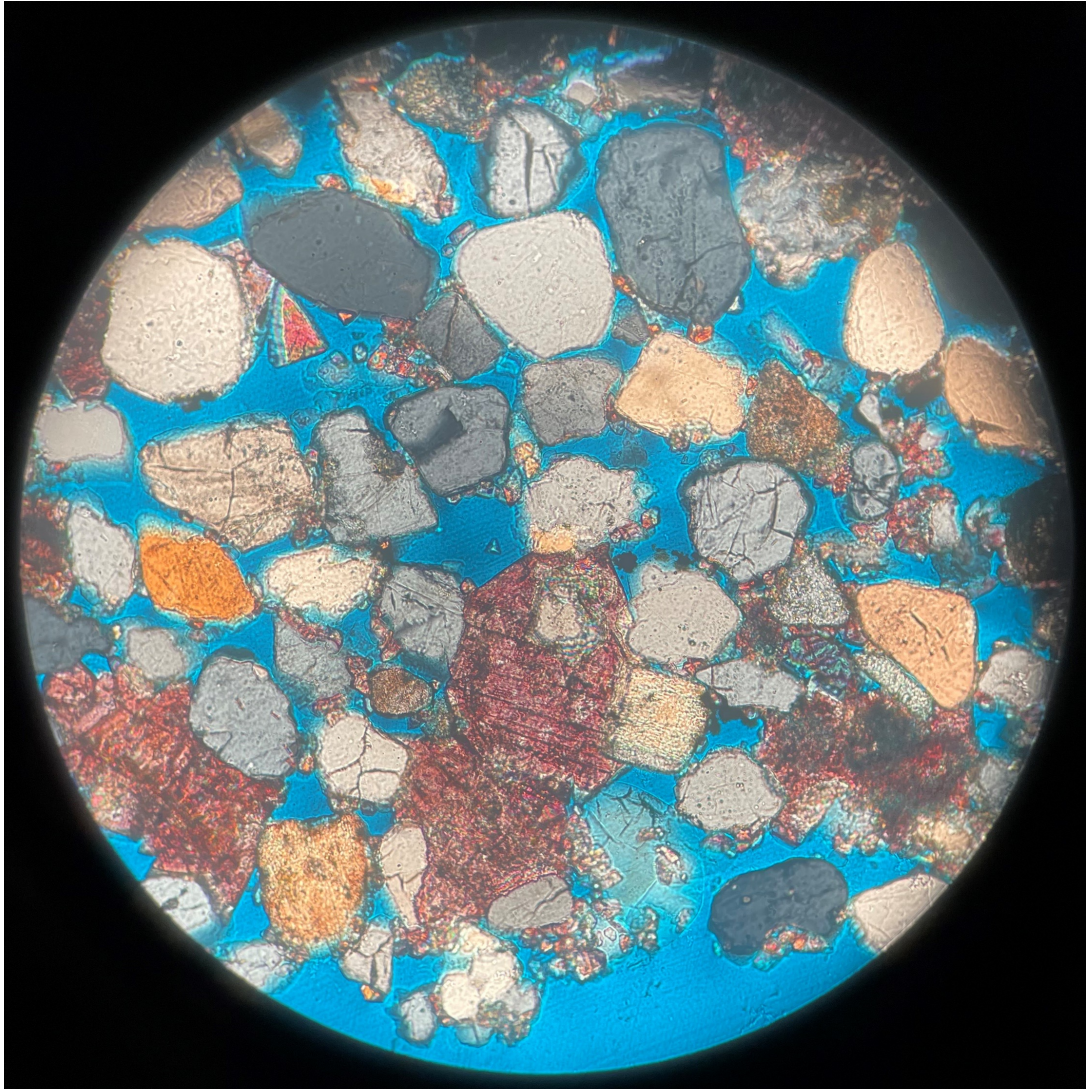
XPL

BB3:



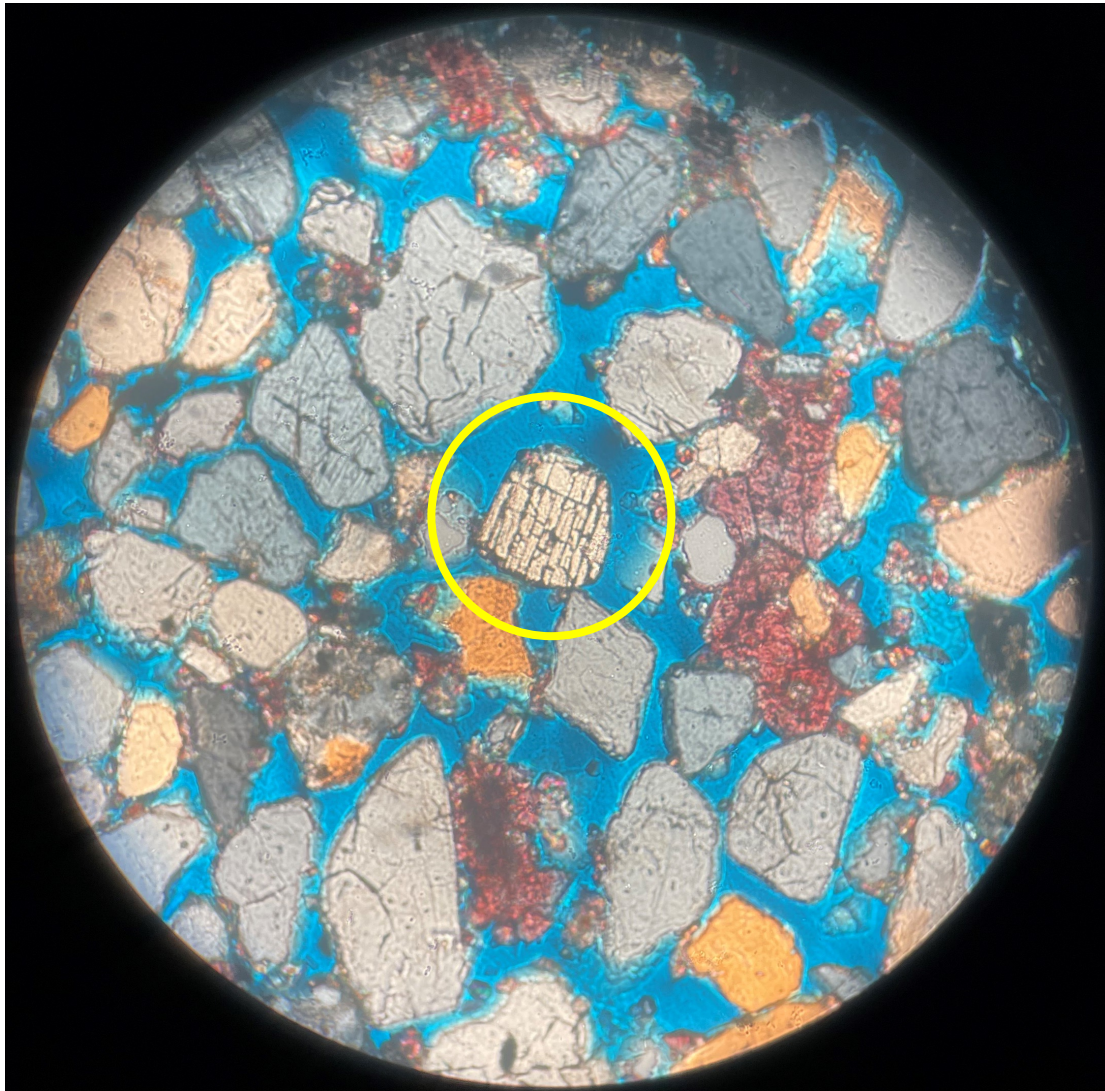
XPL

BB3:

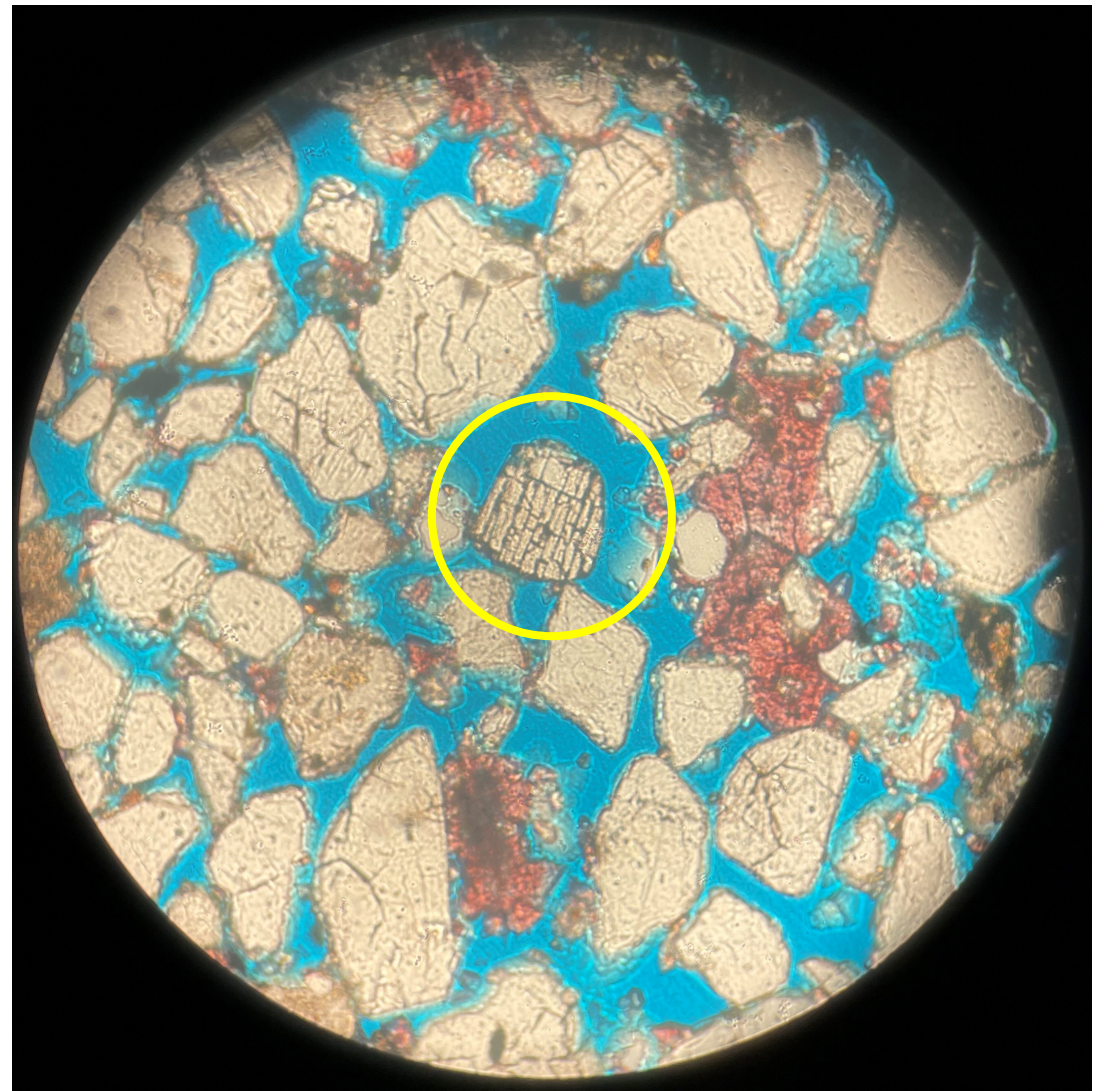


XPL

BB3: Unidentified grain

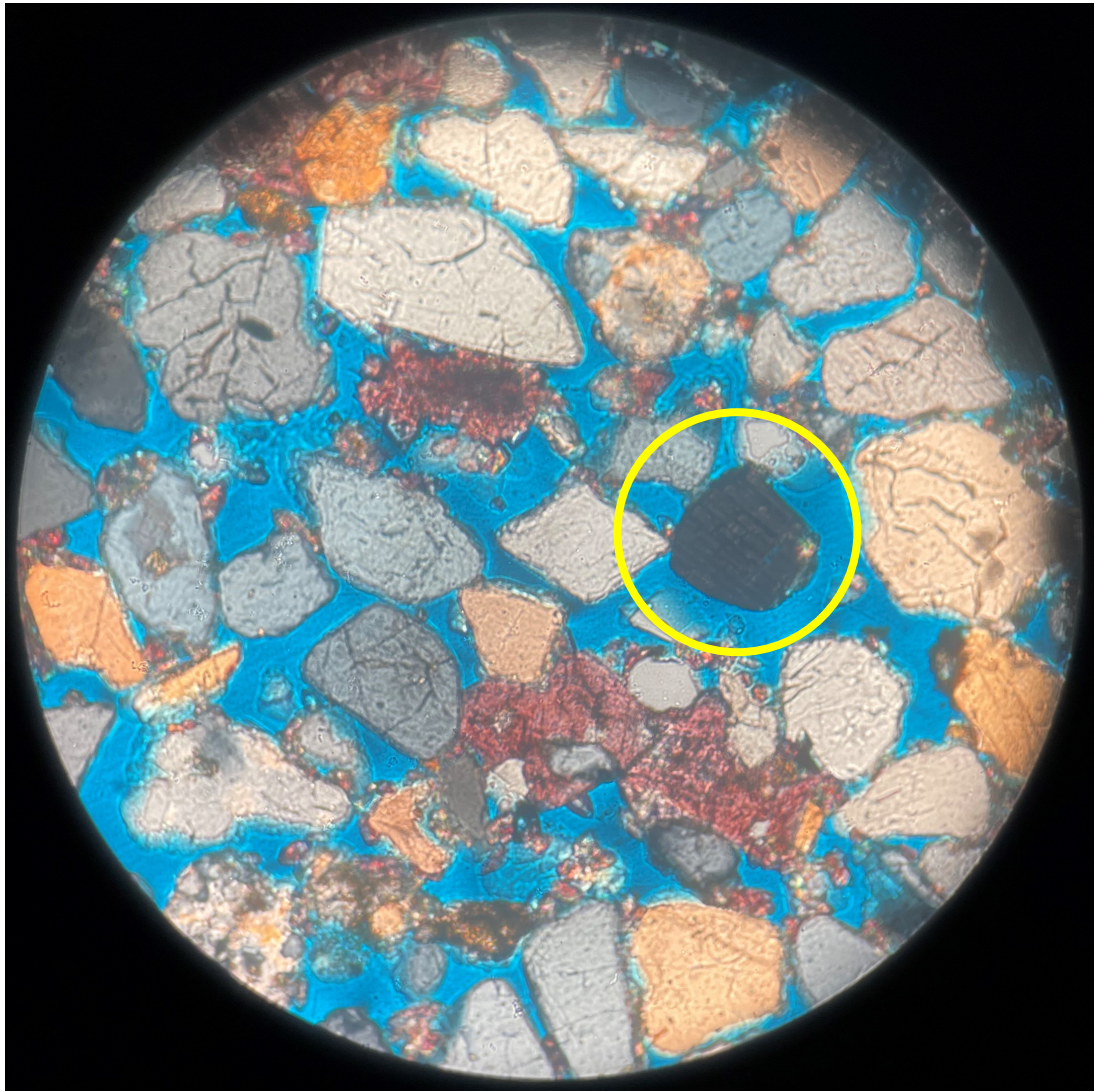


XPL

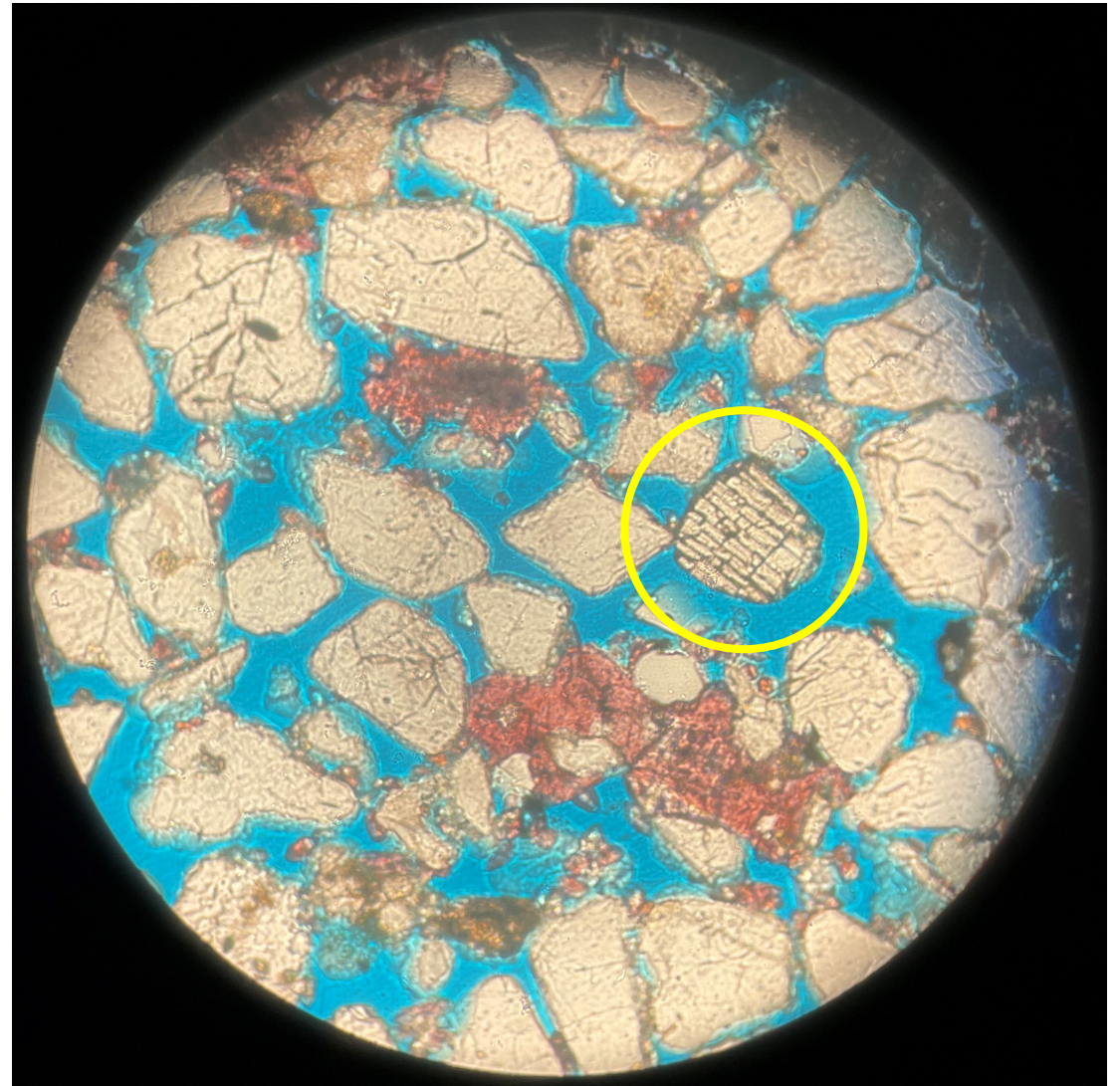


PPL

BB3



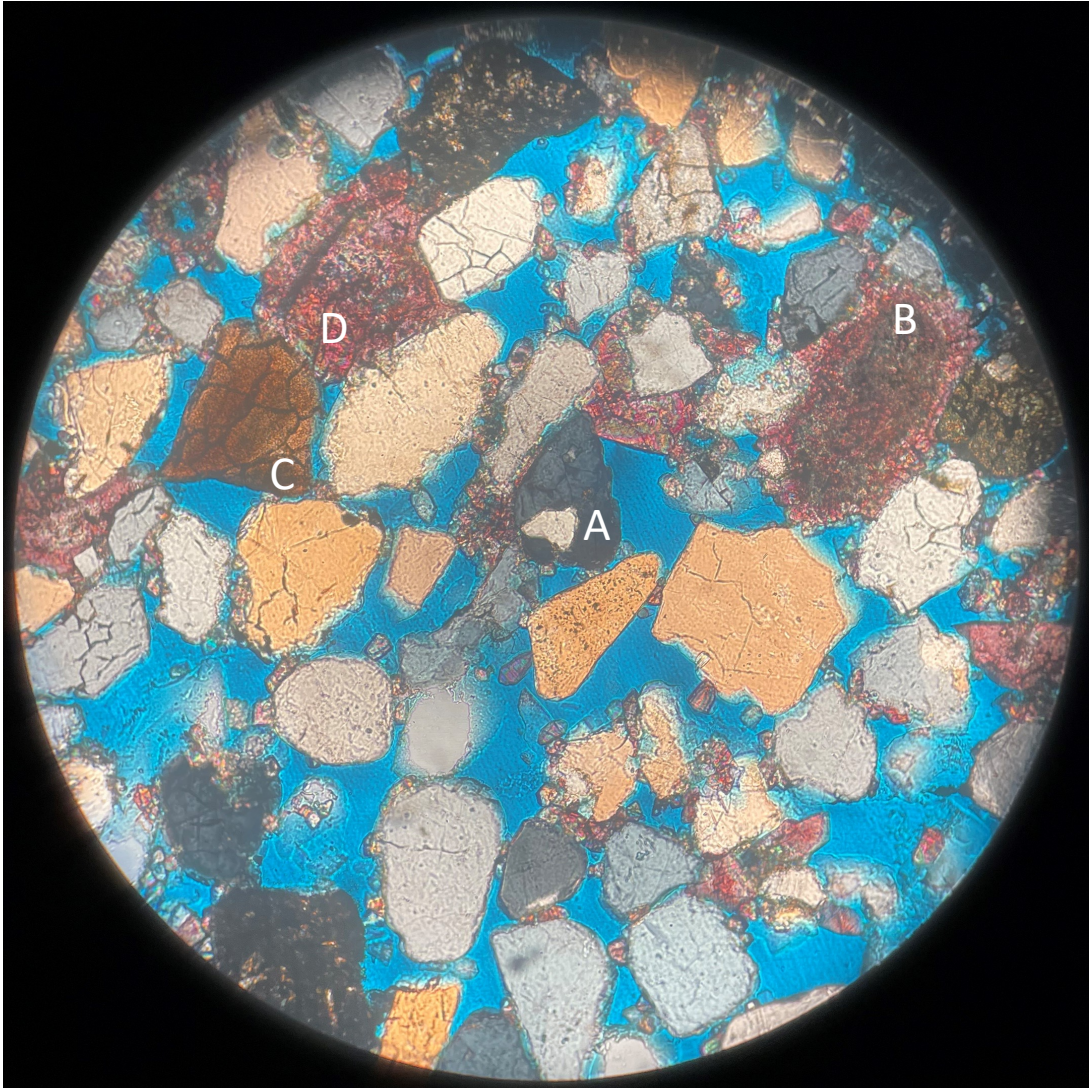
XPL



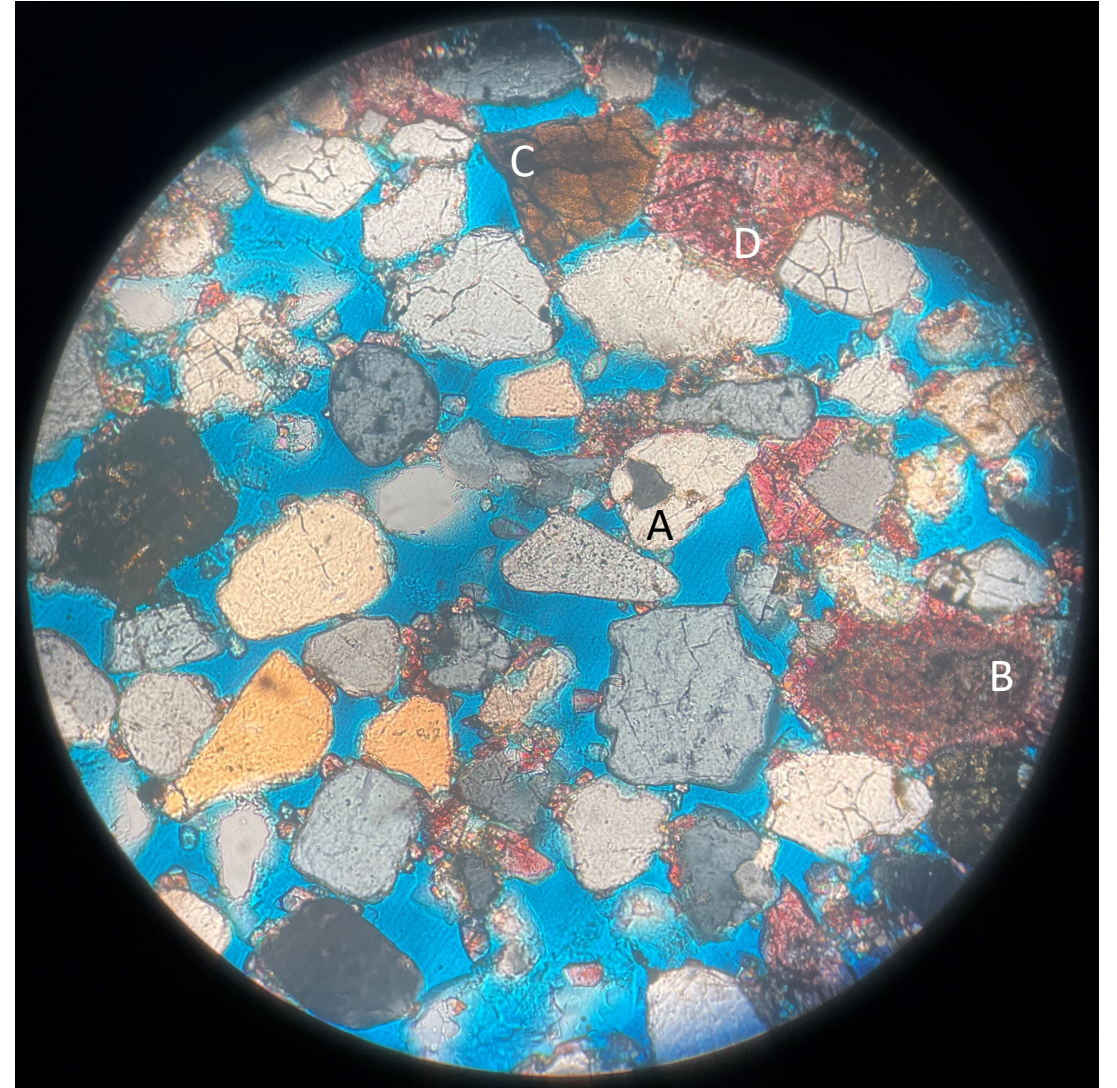
PPL

BB3

- A – Quartz grain with internal quartz grain – polycrystalline?
- B – Drusy calcite cements around an elongated clay ball or fecal pellet?
- C – High relief, fractured grain with undulatory extinction?
- D – Syntaxial calcite cement that abuts adjacent grains

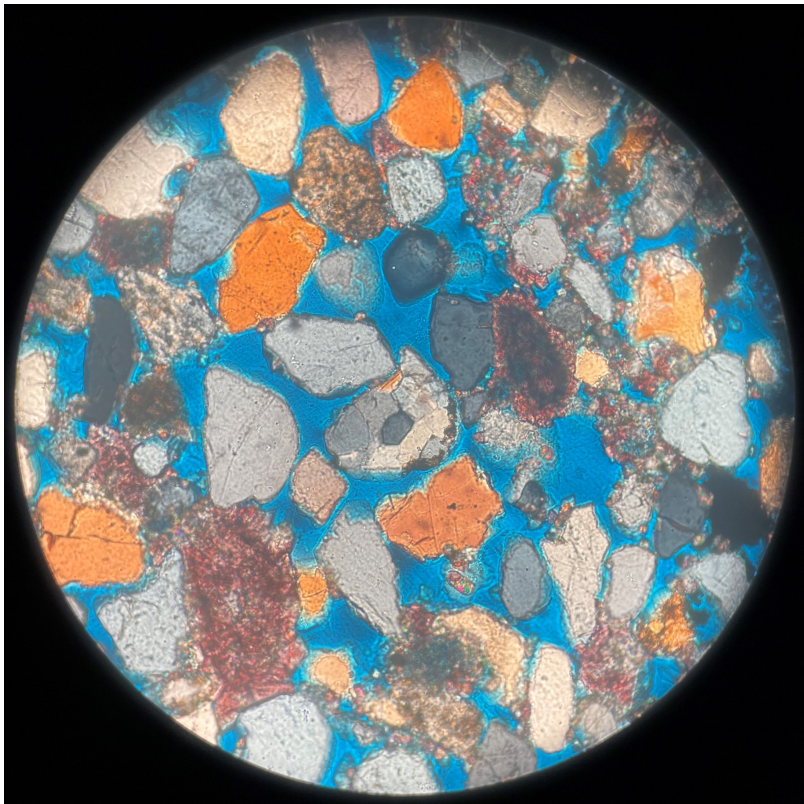


XPL

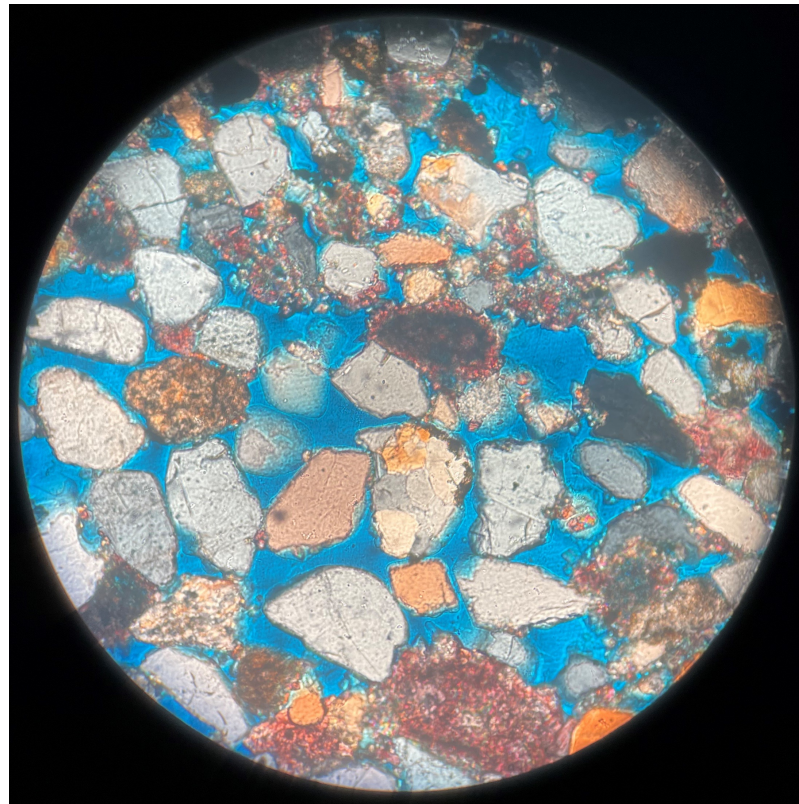


XPL

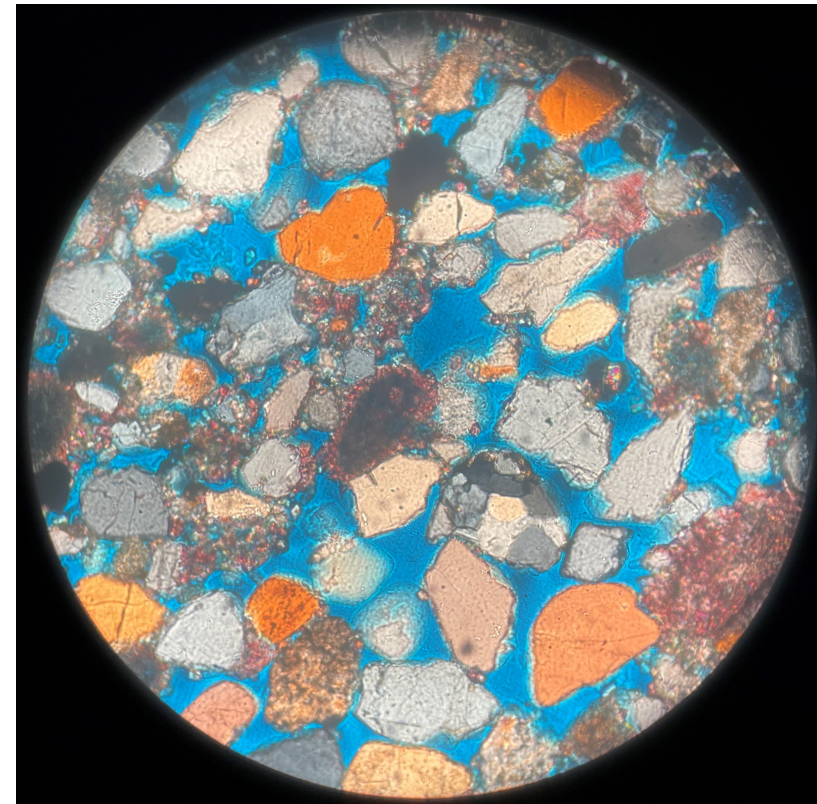
BB3



XPL



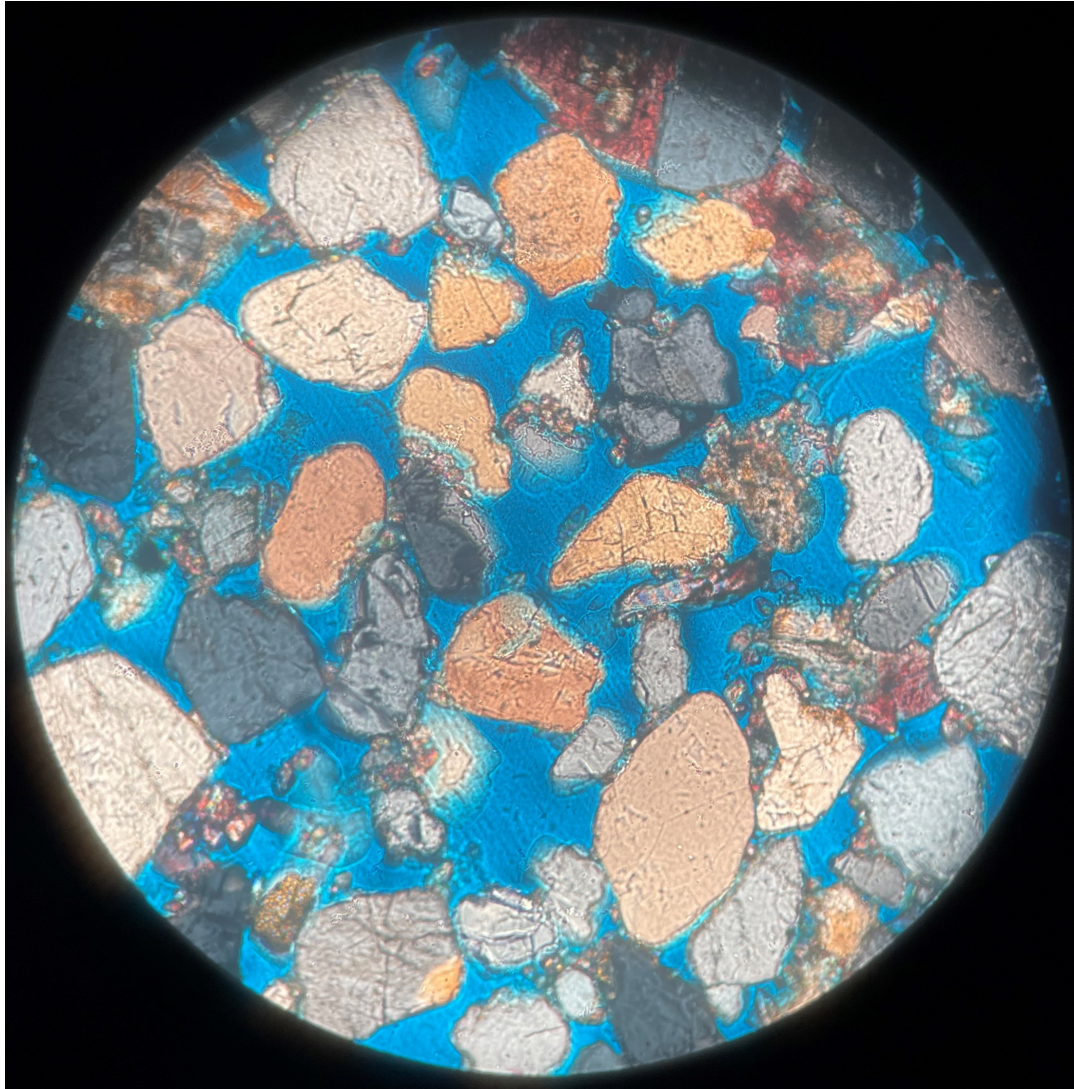
XPL



XPL



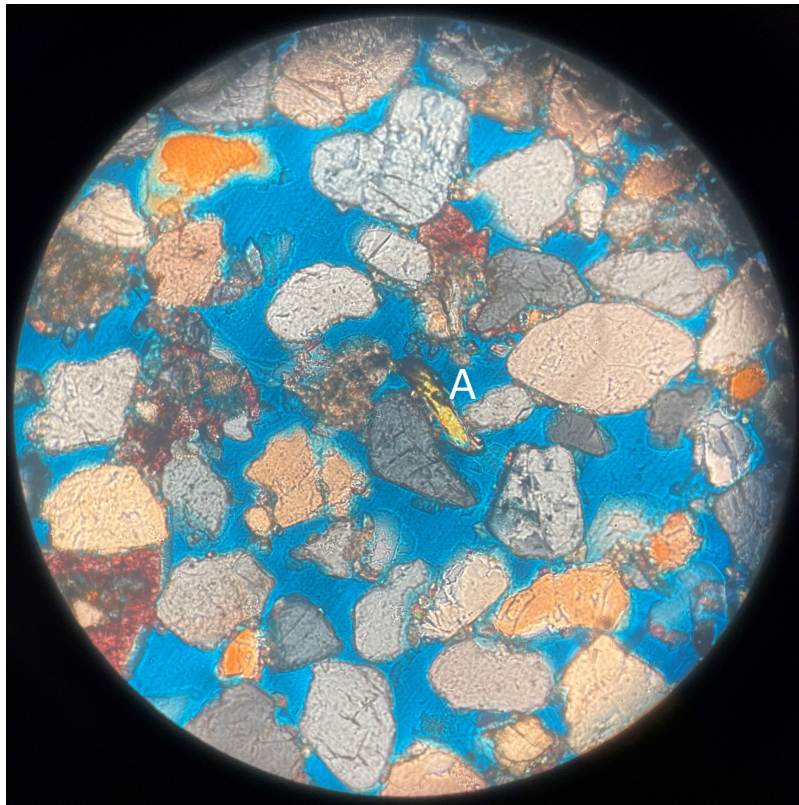
BB3



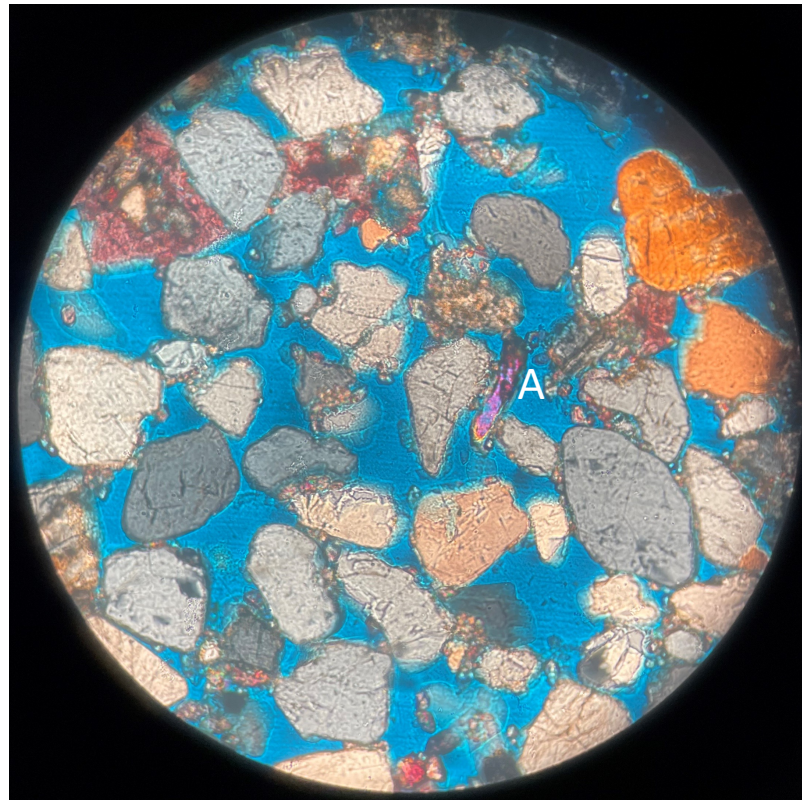
XPL

BB3

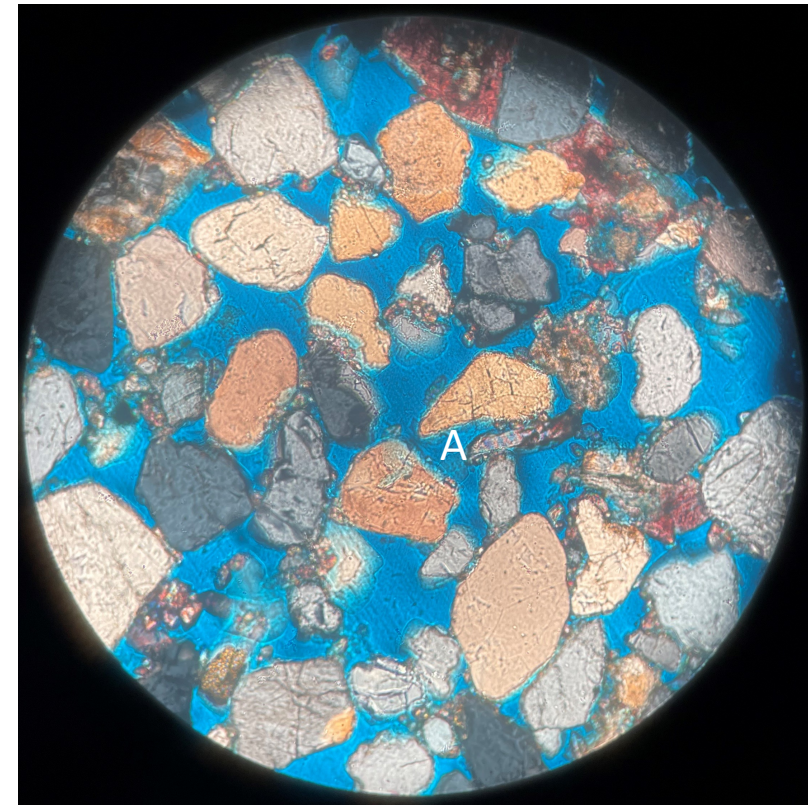
A – Mica? Zircon?



XPL

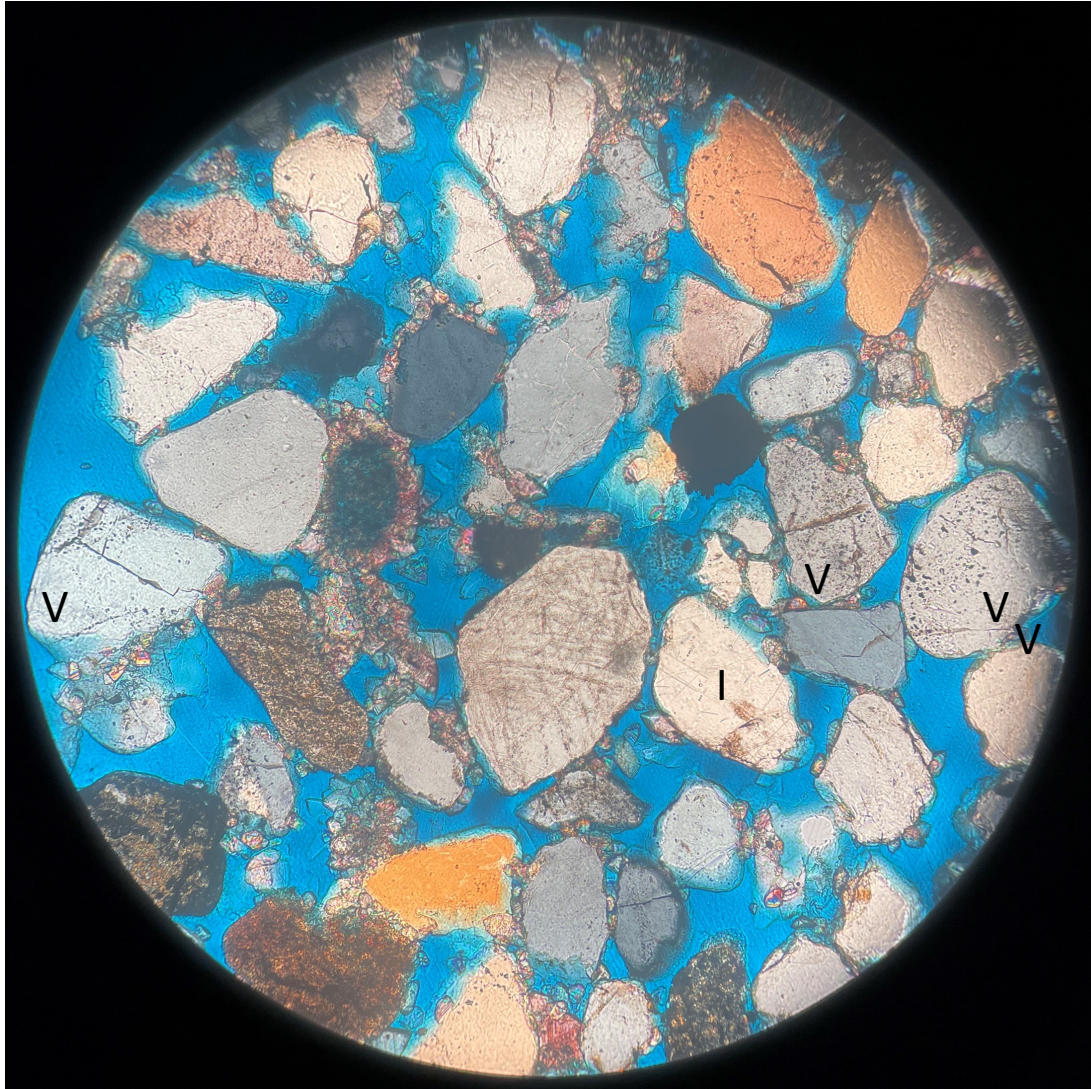


XPL



XPL

BB3

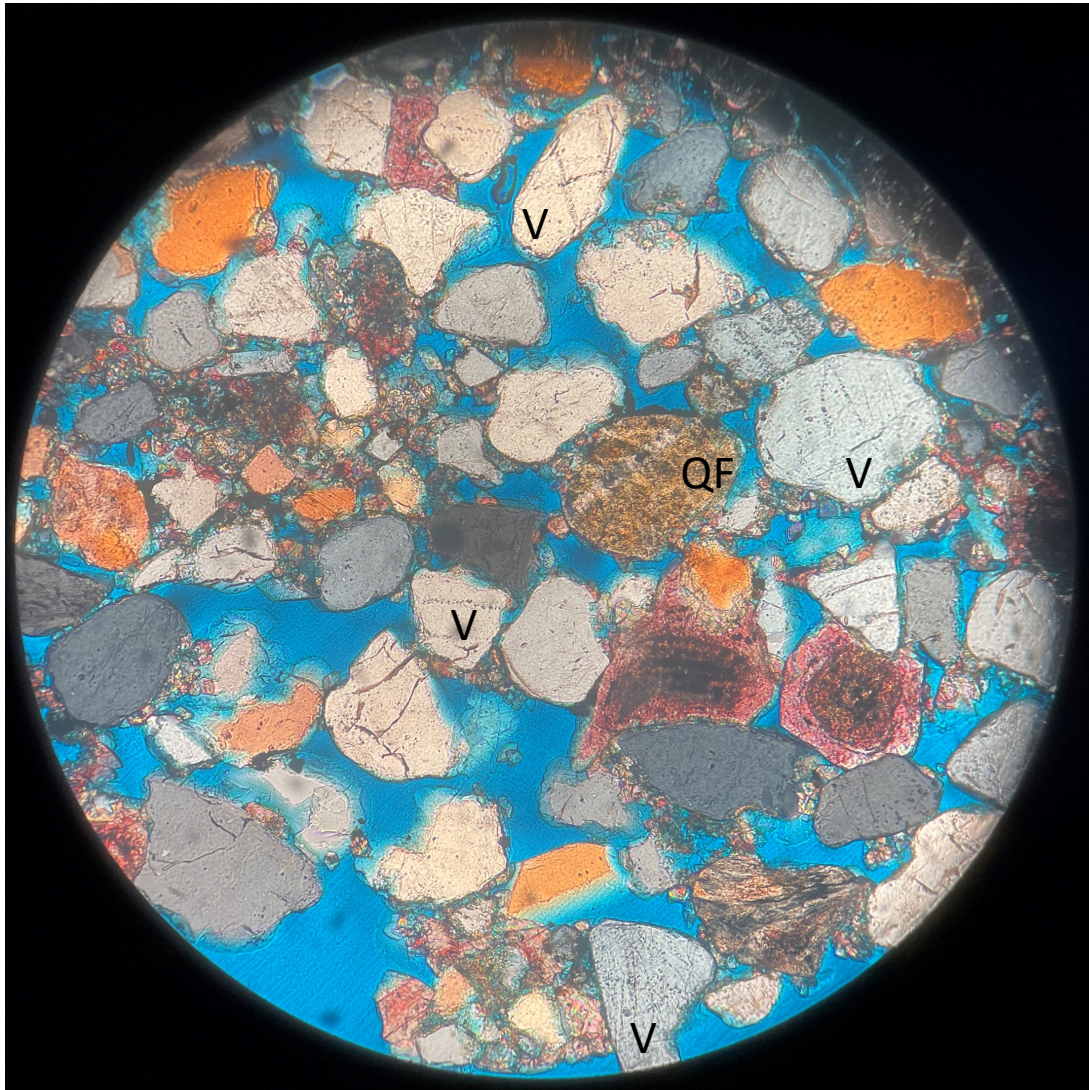


I – quartz grain with needle-like inclusions
V – quartz grain with vacuoles (?)

XPL



BB3

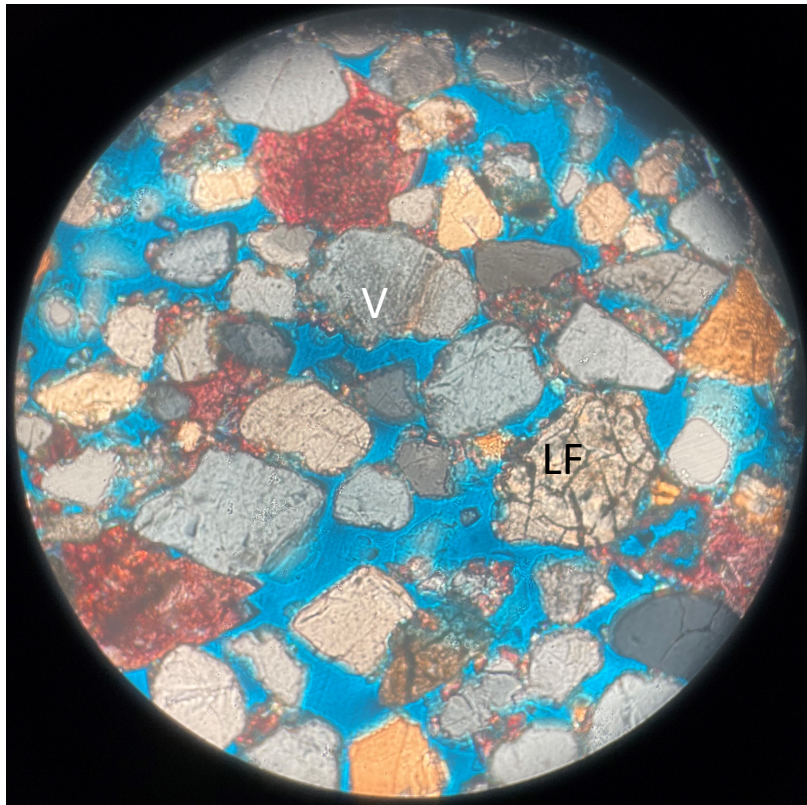


QF – Chalcedony-filled fracture?
V – quartz grain with vacuoles (?)

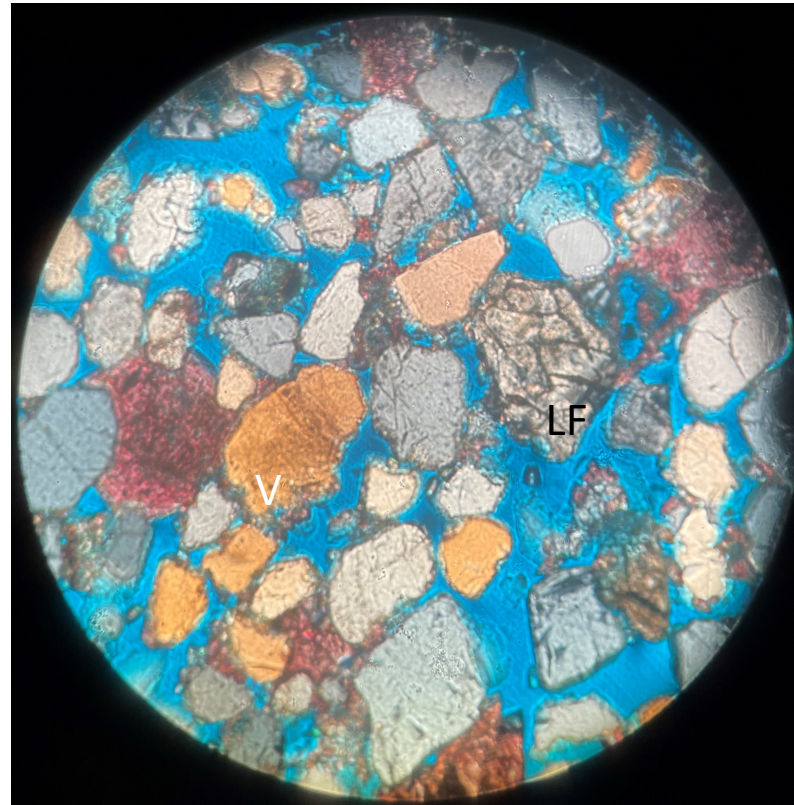
XPL

BB3

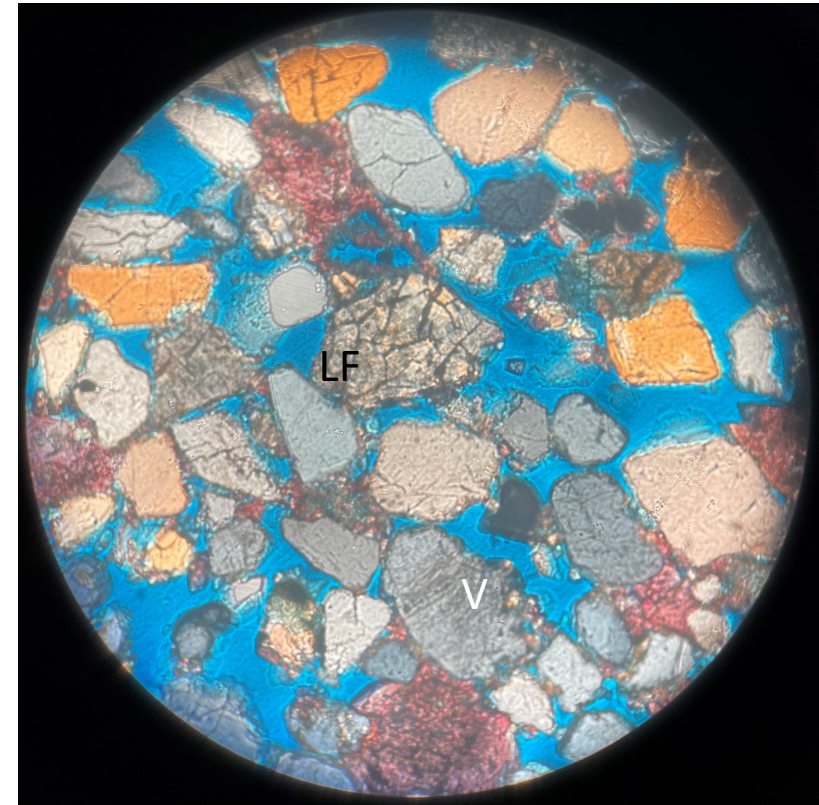
LF – lithic fragment
V – quartz grain with vacuoles (?)



XPL



XPL



XPL

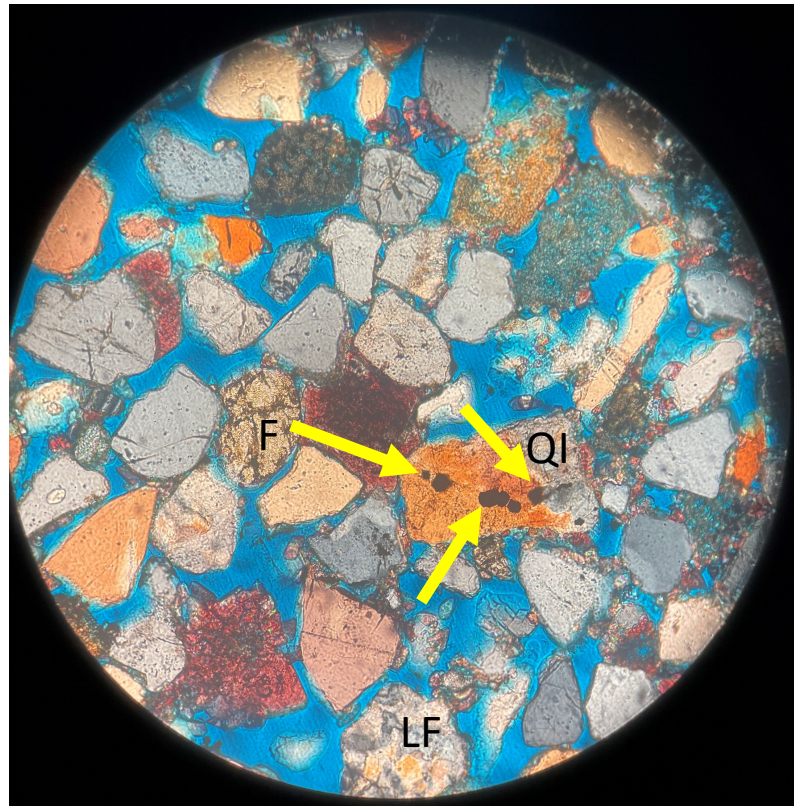
BB3

QI – Quartz grain with inclusions that are opaque in both XPL and PPL.

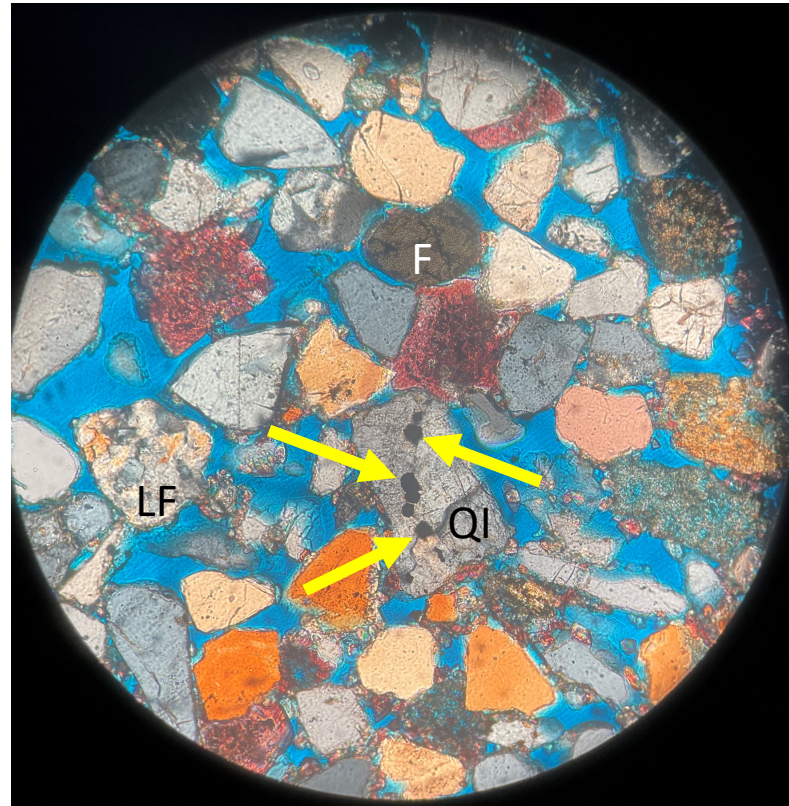
Yellow arrows point to inclusions

F – feldspar

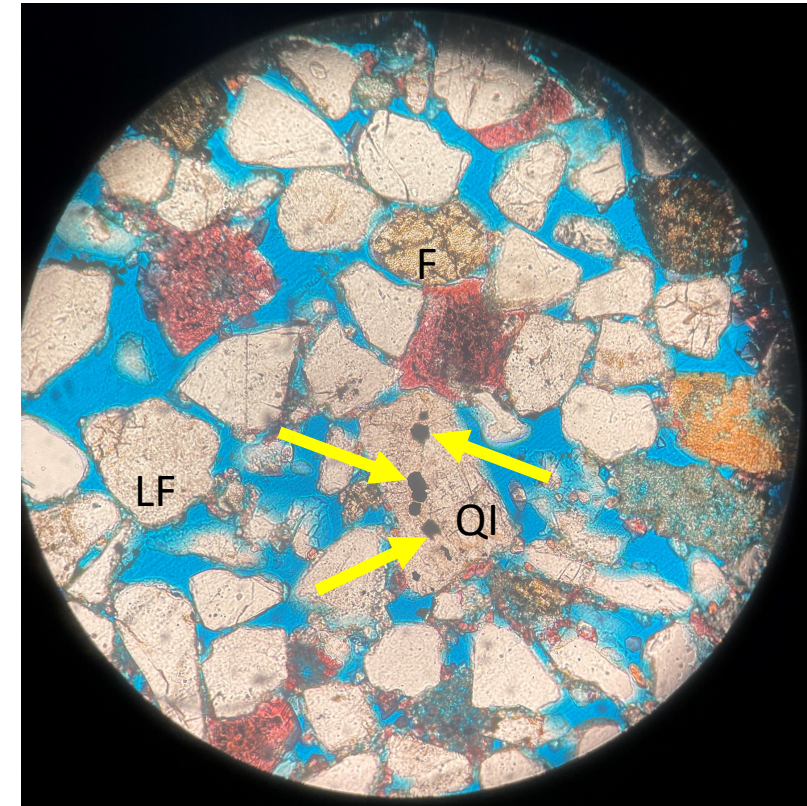
LF – lithic fragment



XPL

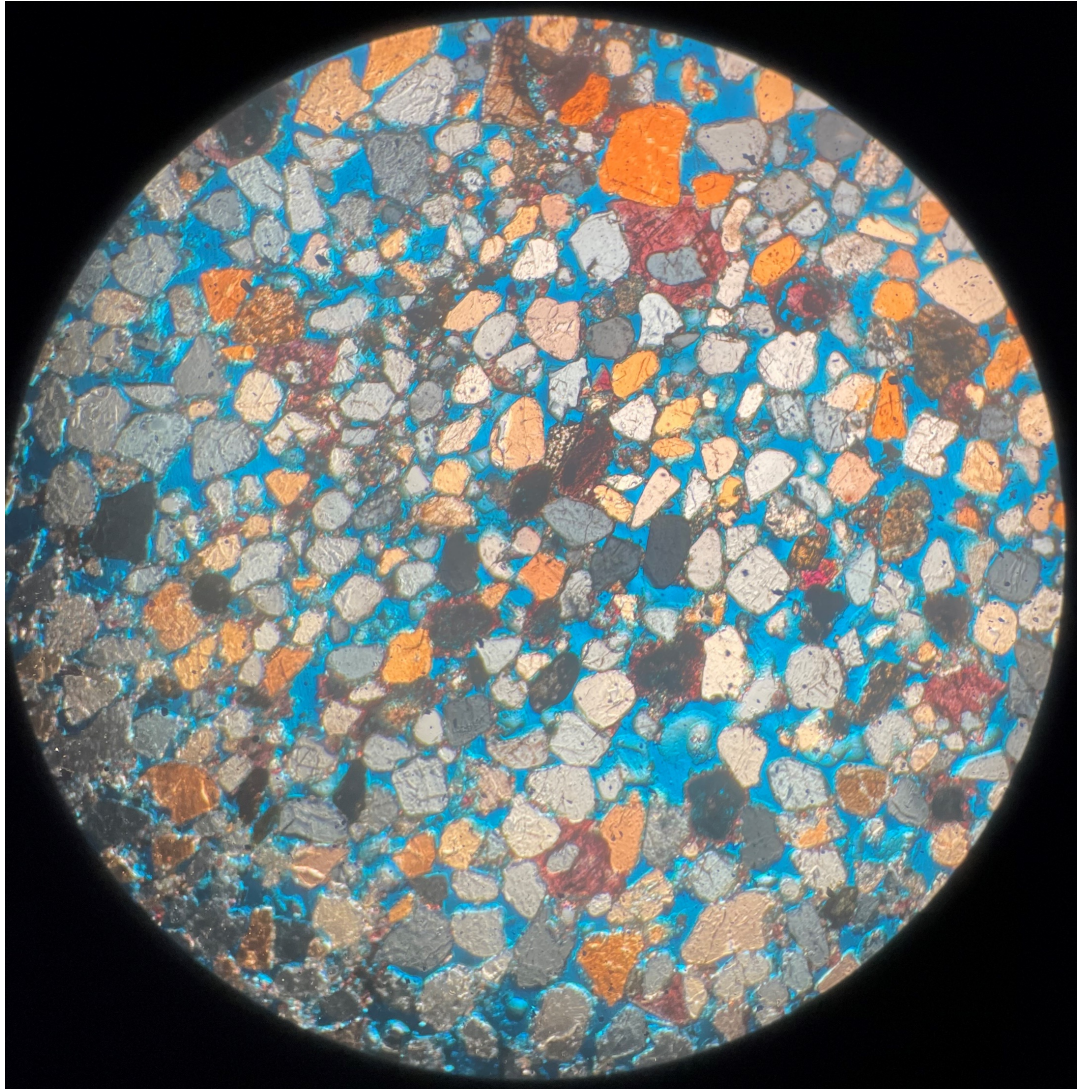


XPL



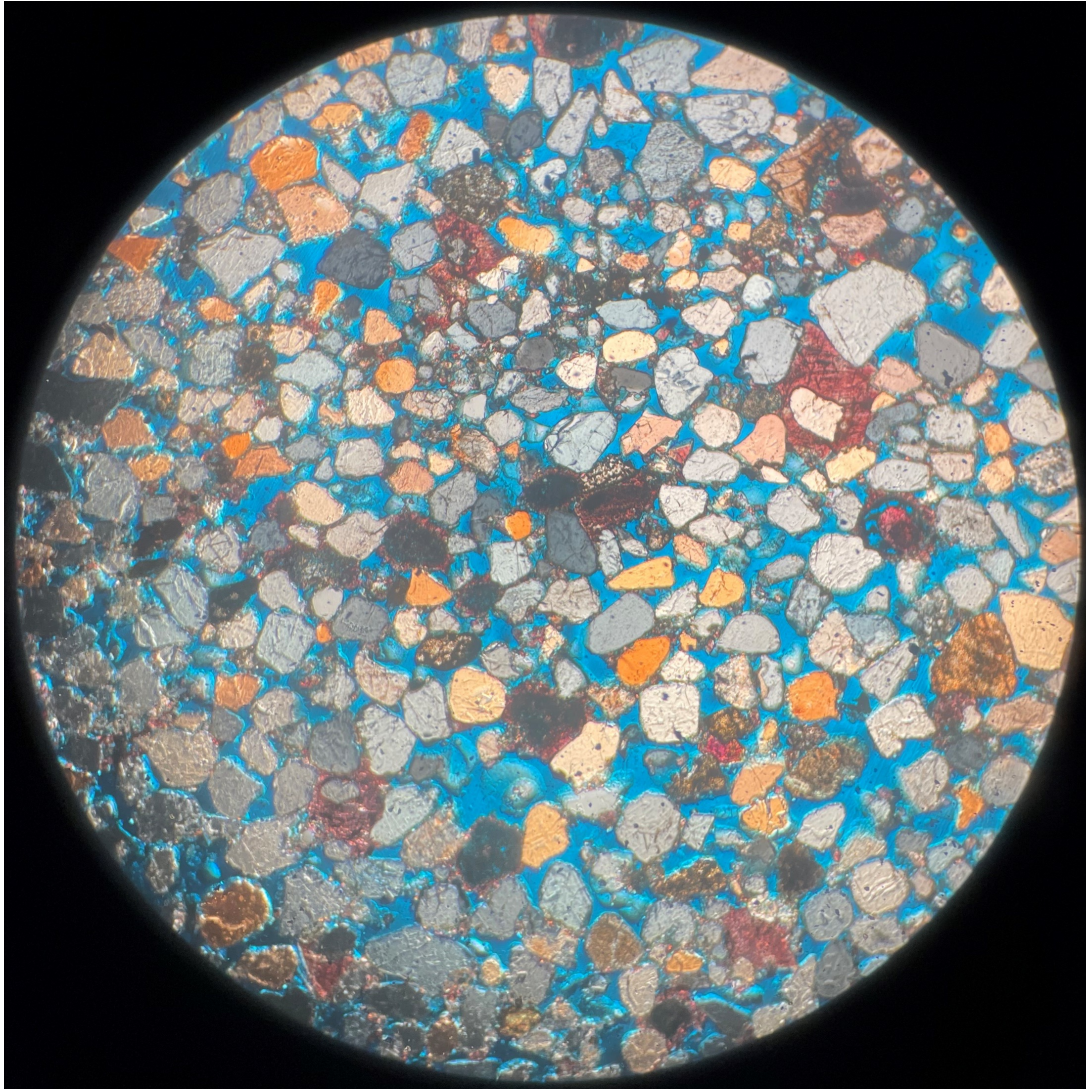
PPL

BB3



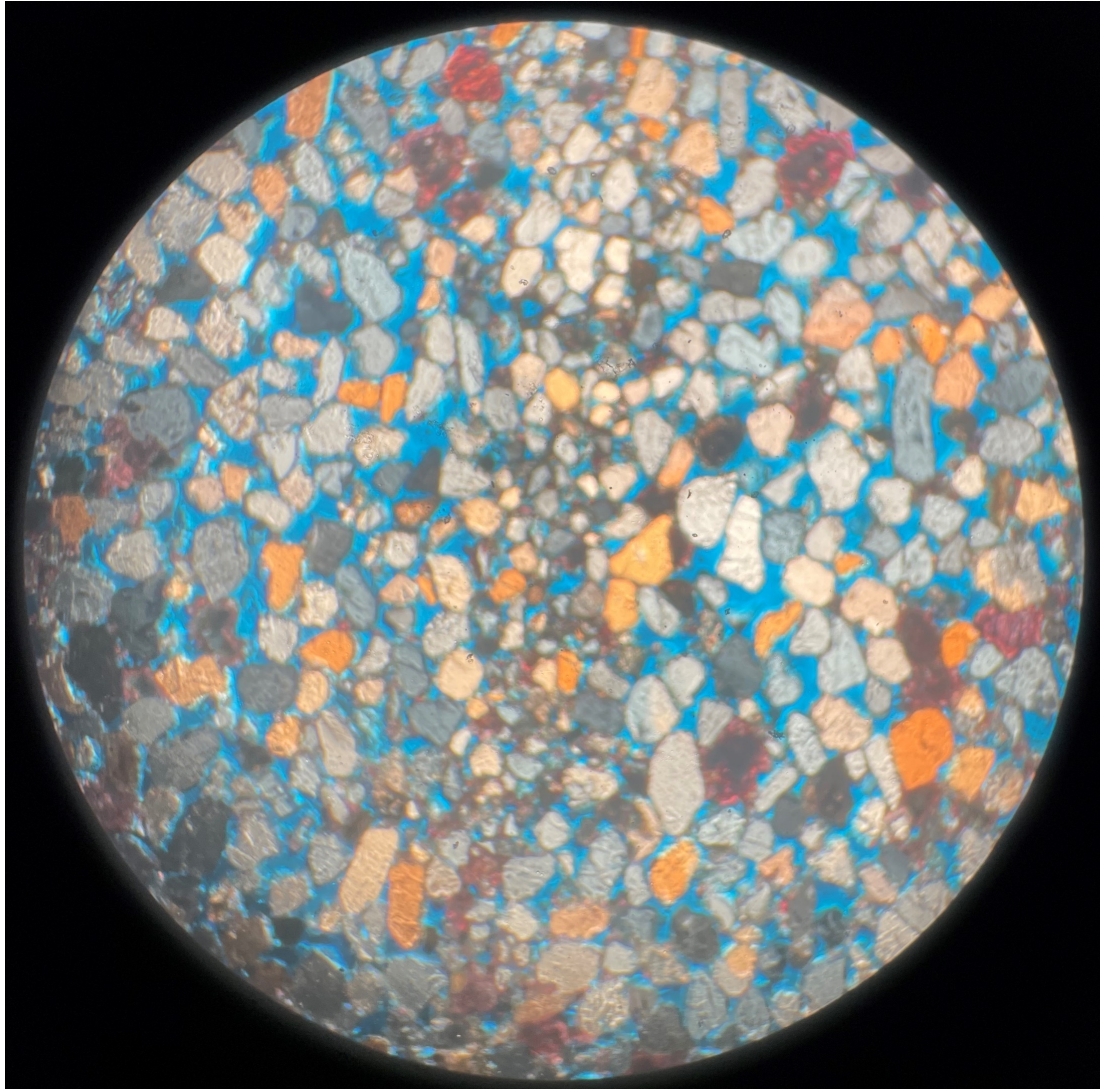
XPL

BB3



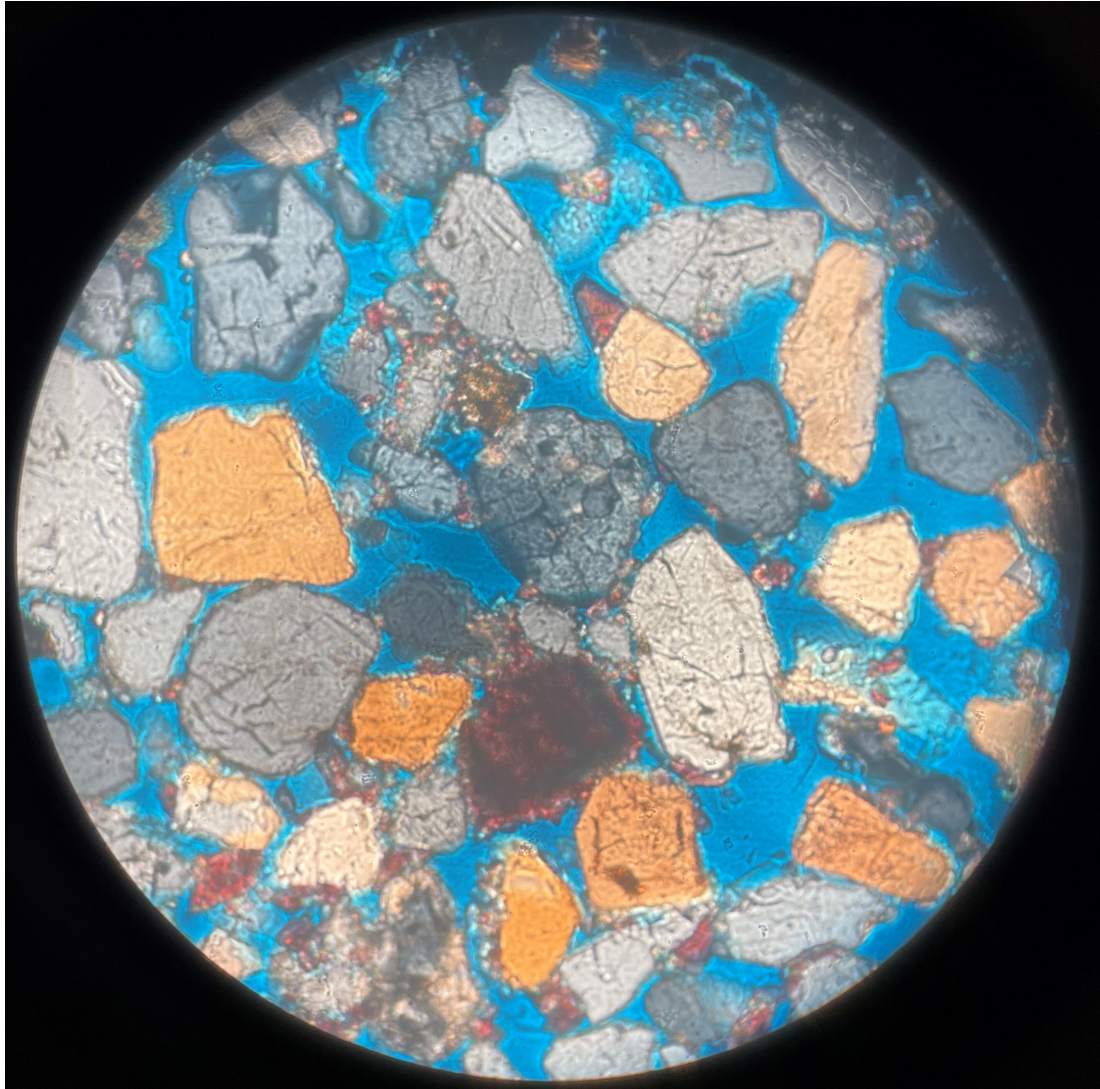
XPL

BB3



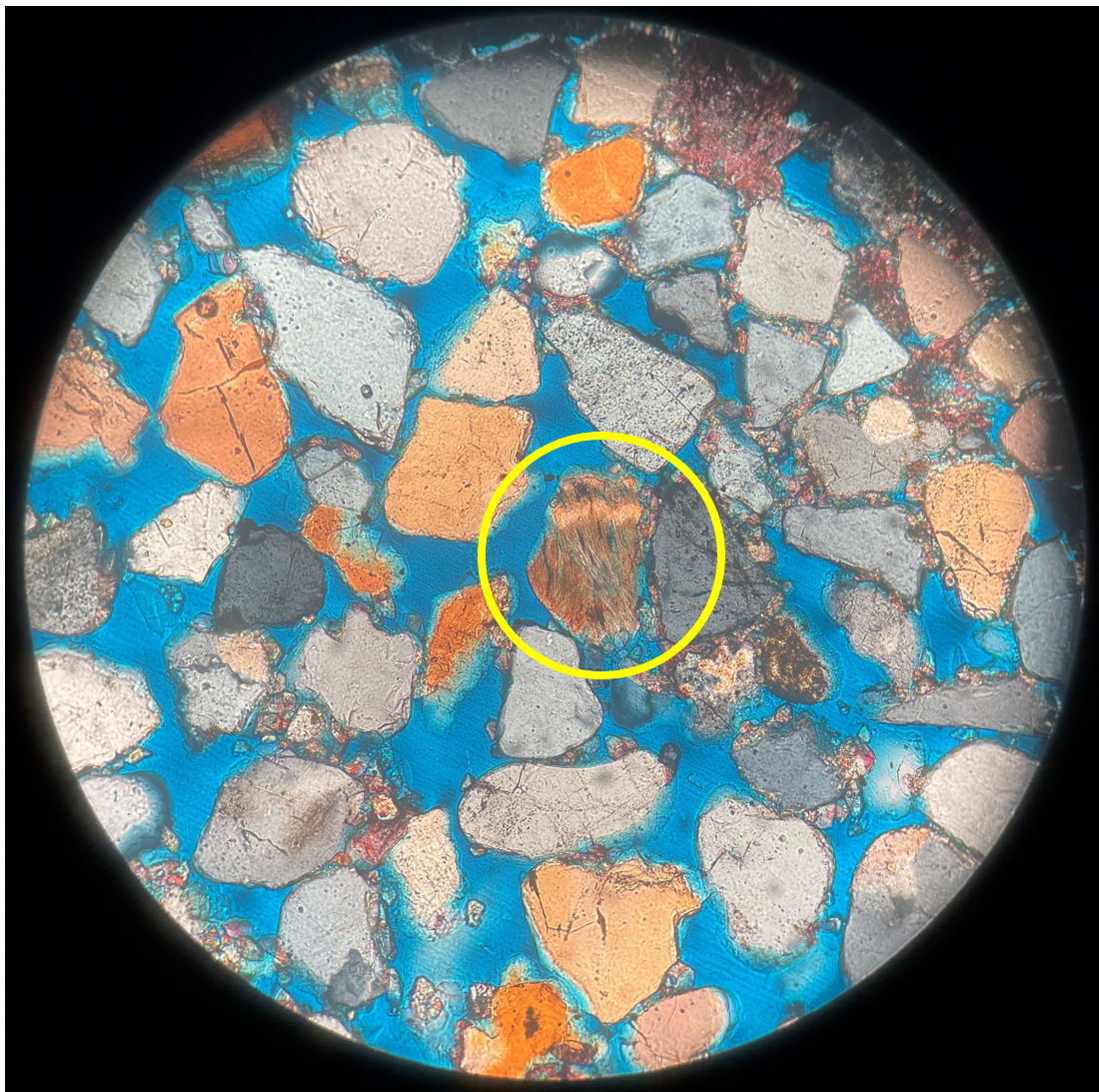
XPL

BB3

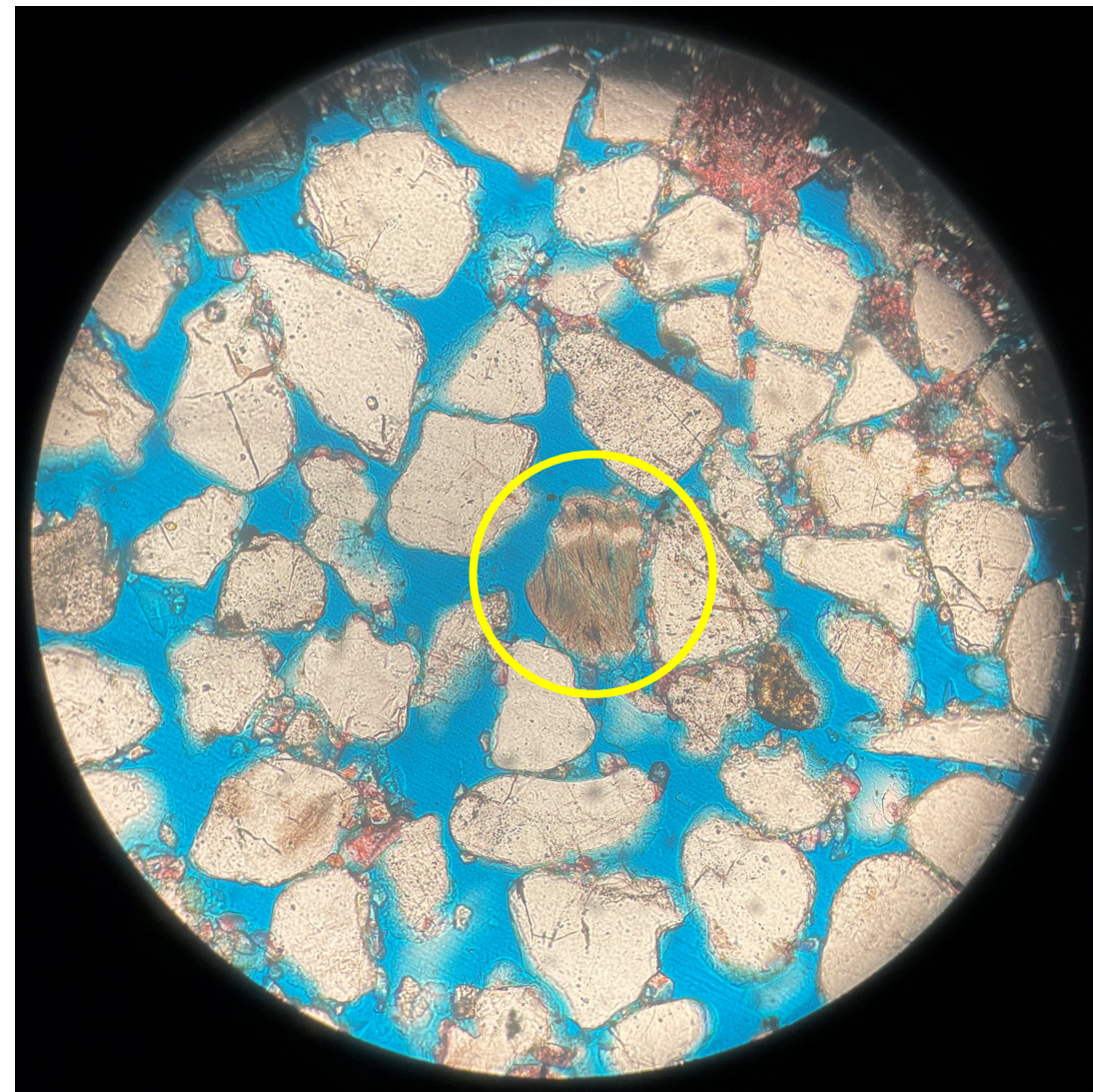


XPL

BB3: Unidentified grain

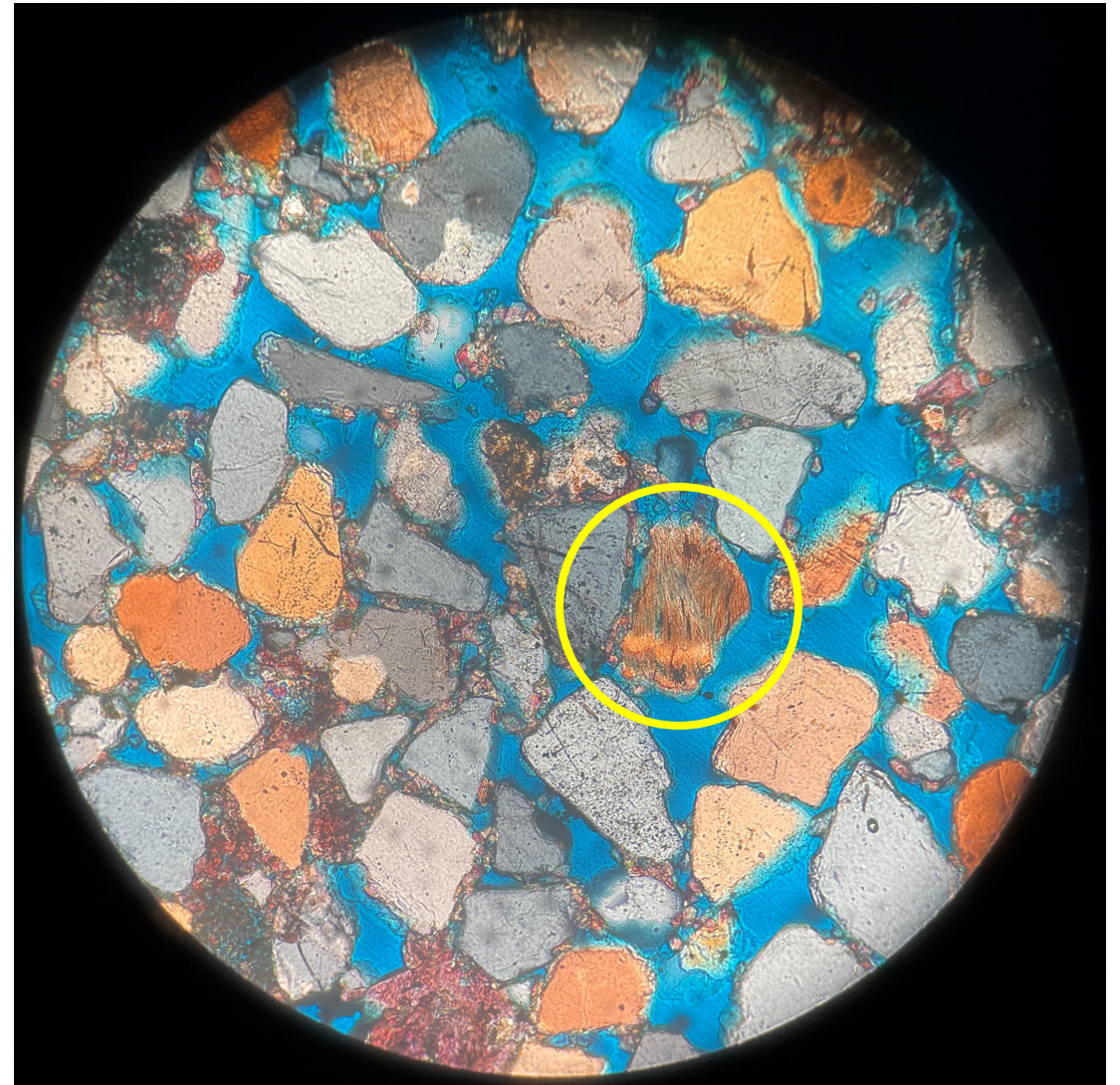
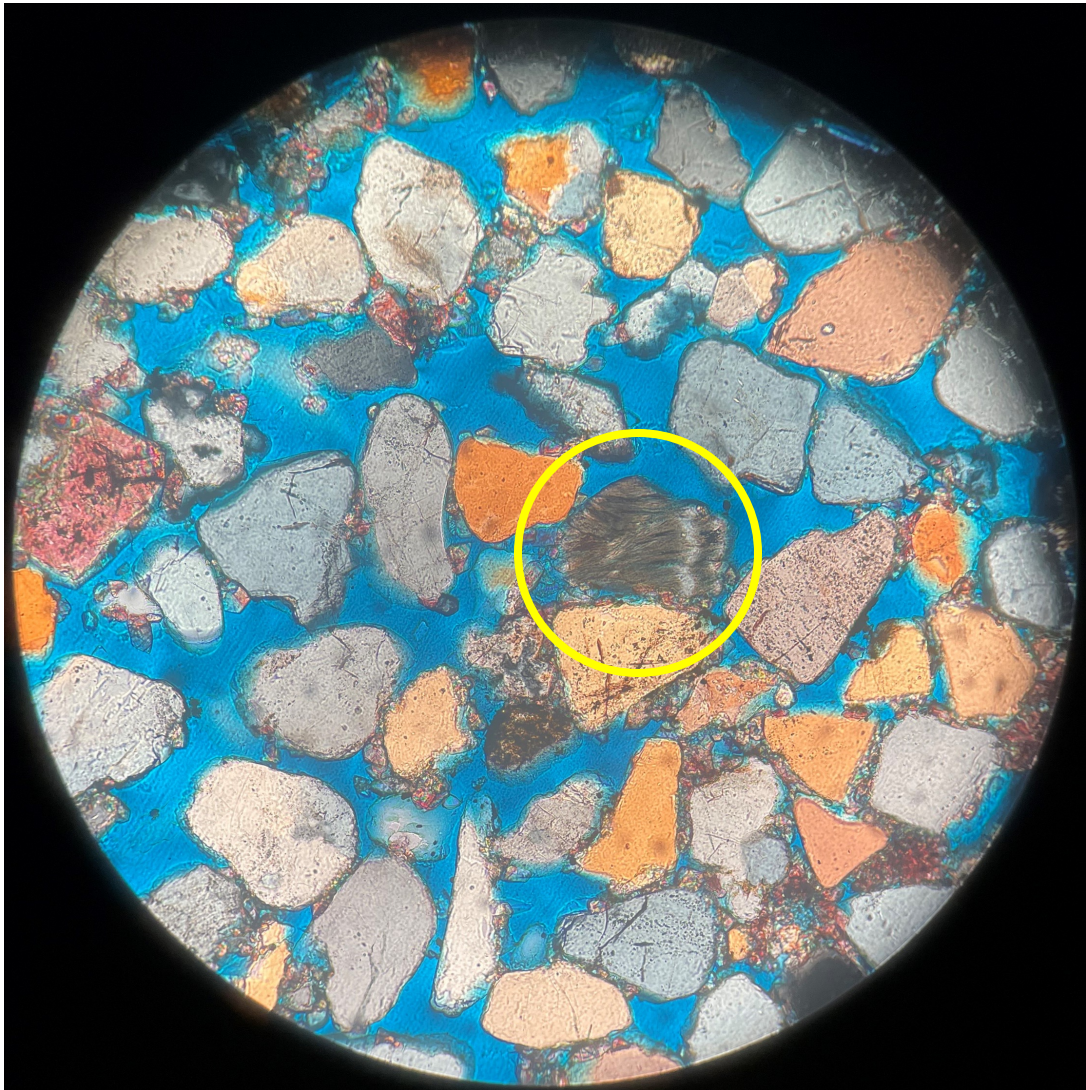


XPL

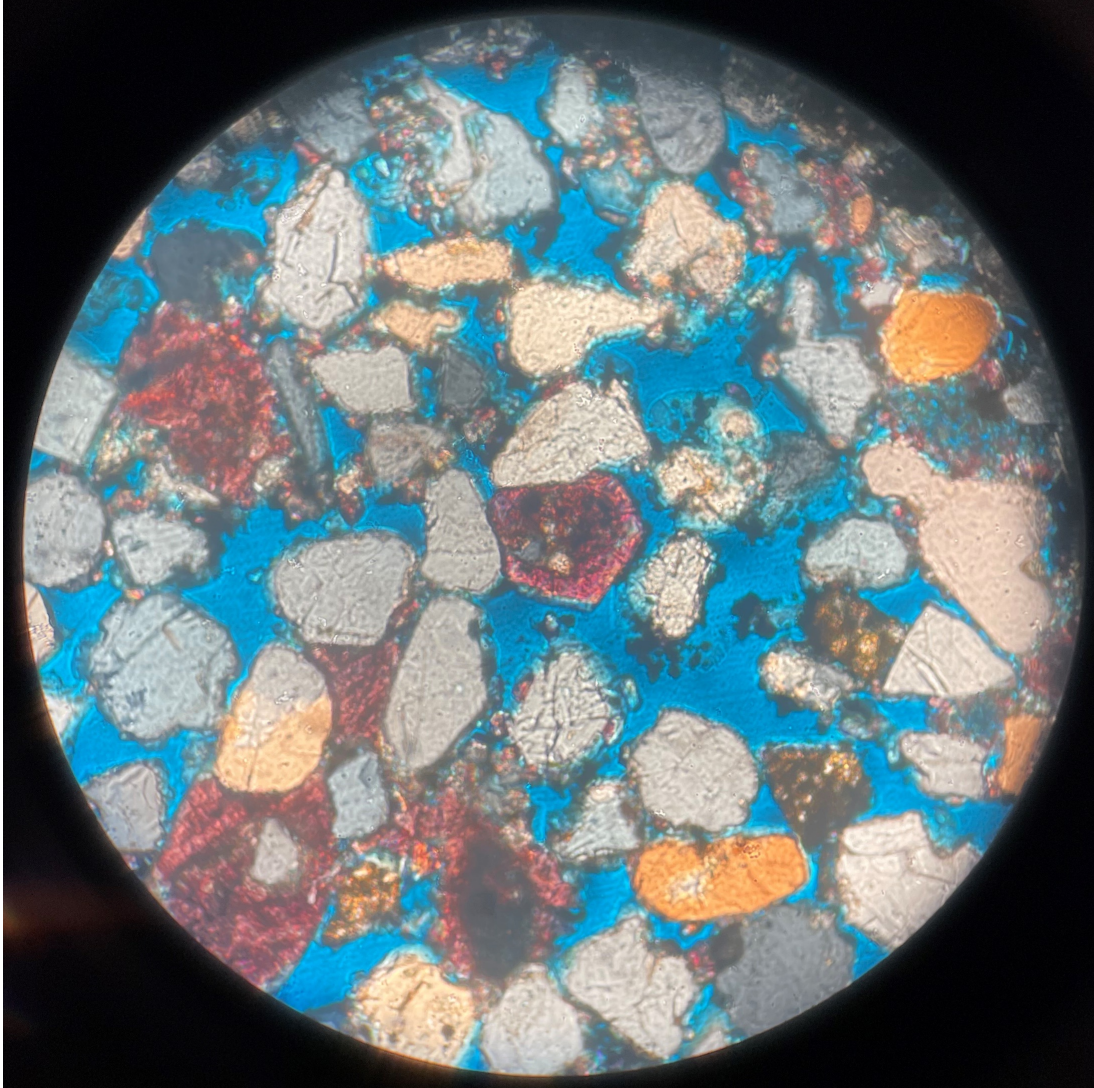


PPL

BB3: Unidentified grain - XPL

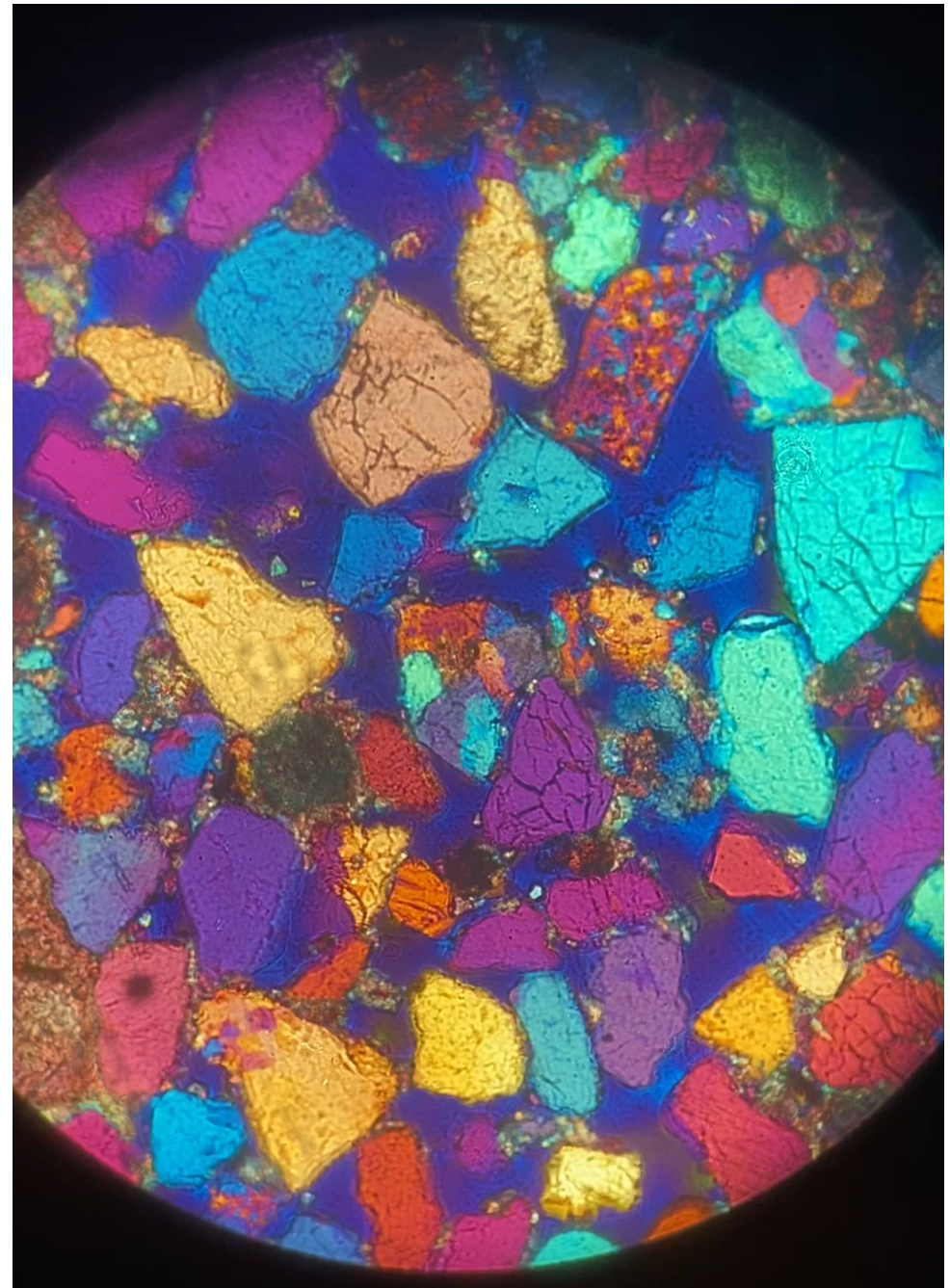


BB3



BB3

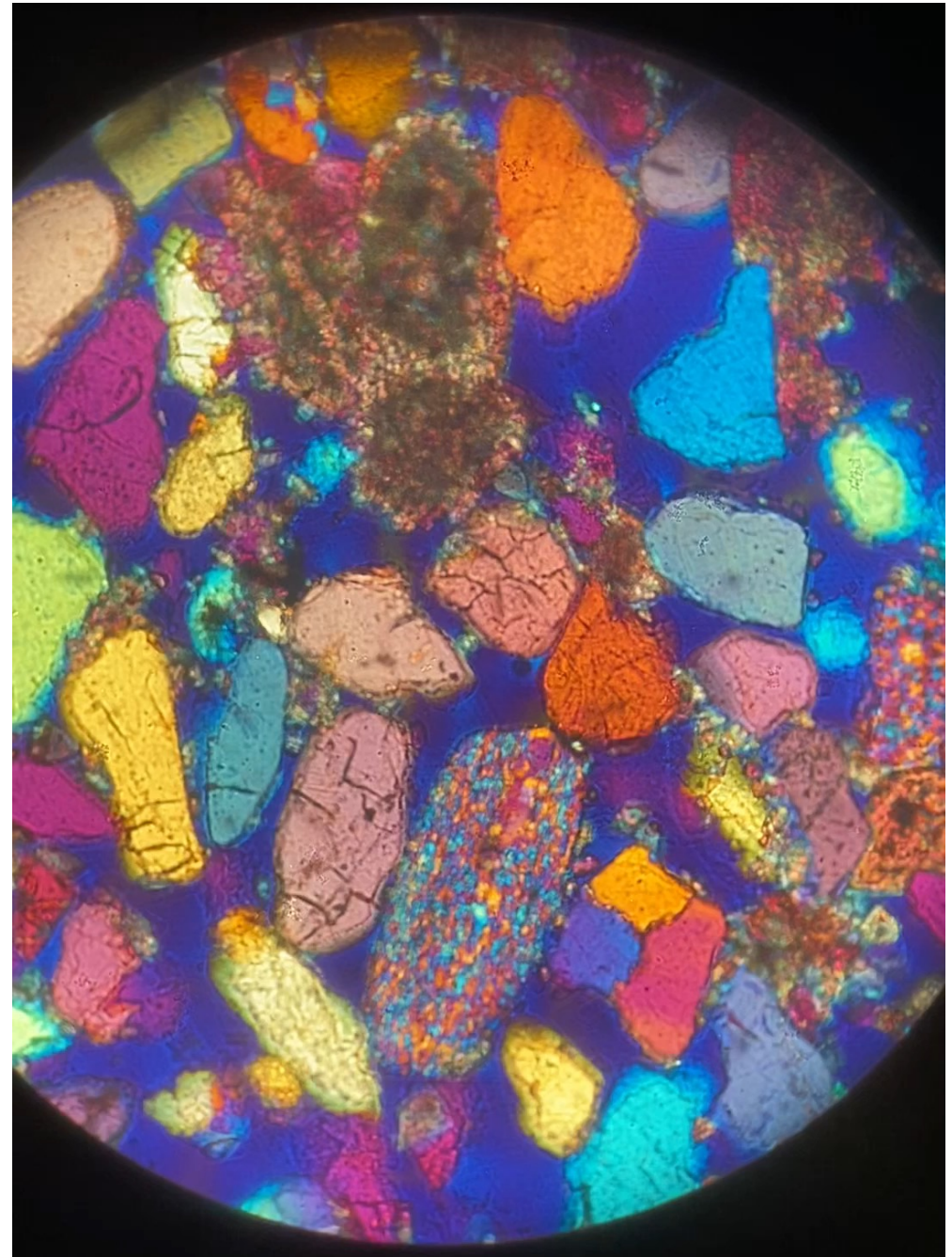
- Not yet convinced fractured grains are quartz
 - Not all exhibit undulatory extinction
 - Higher relief than more obvious quartz grains
- Numerous grains with variable extinction that seem to be bound together prior to deposition – igneous origin?



XPL; 40x

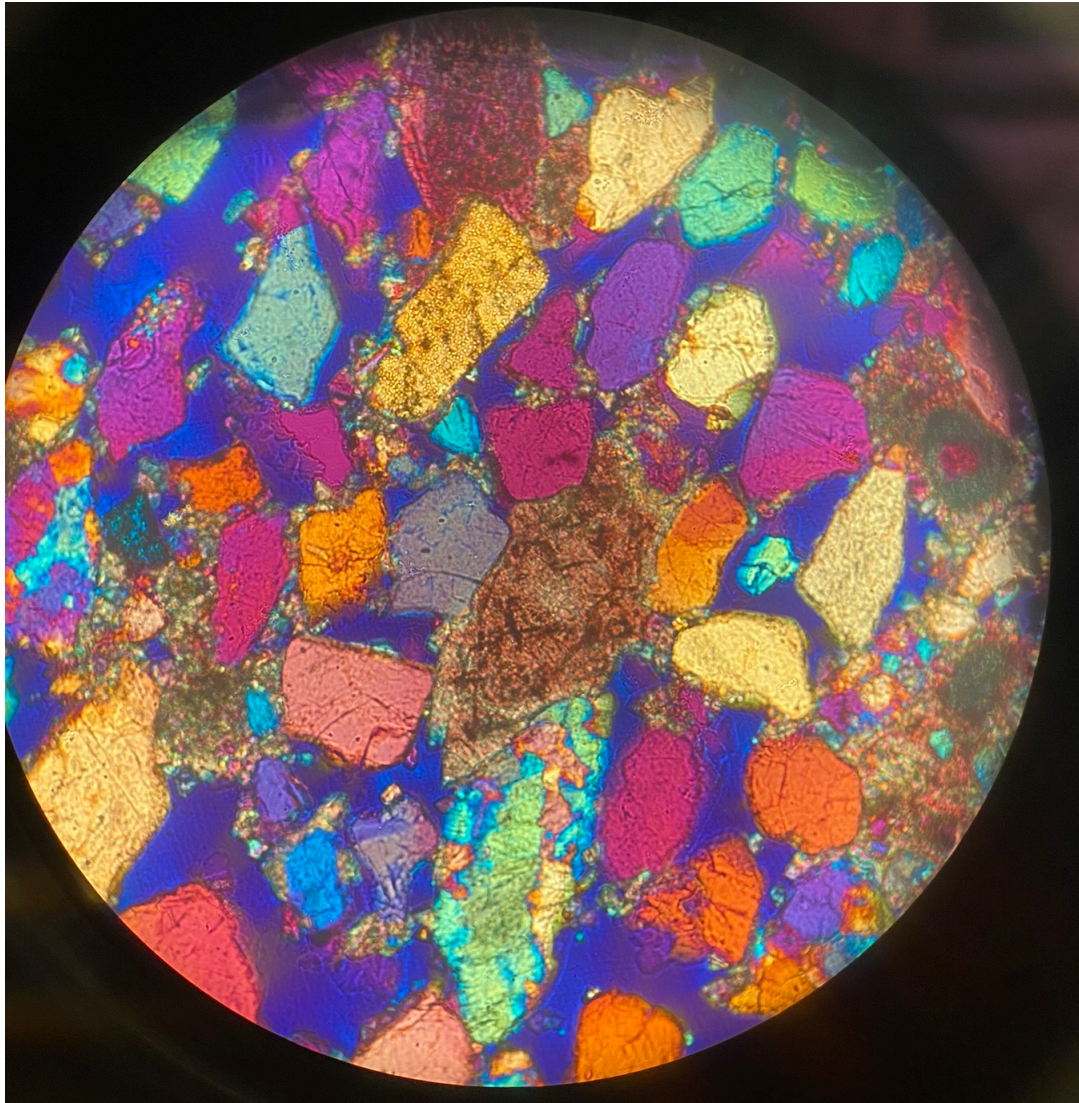
BB3

- Lithic fragments
- Quartz
- Other grains

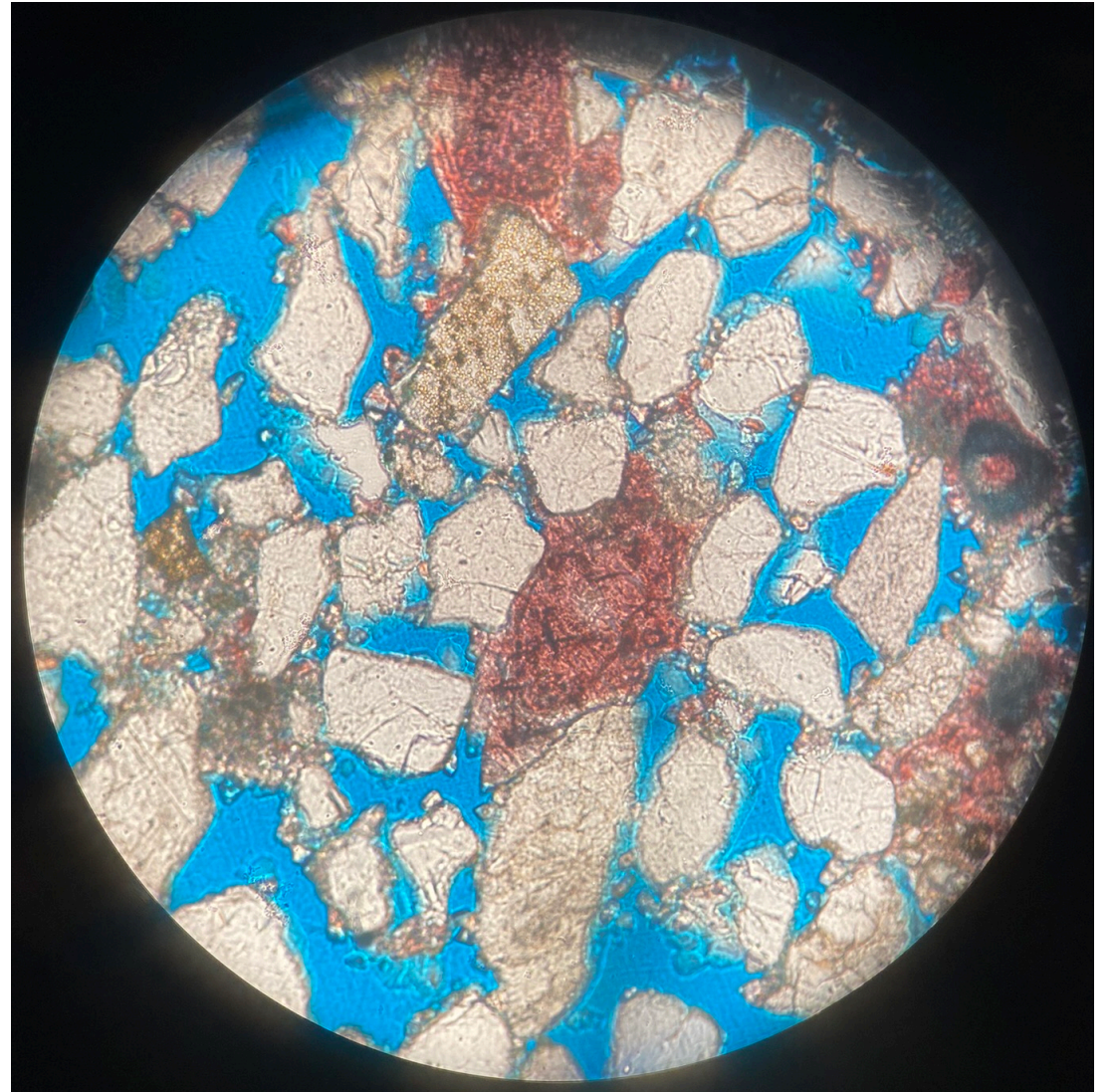


XPL; 40x

BB3



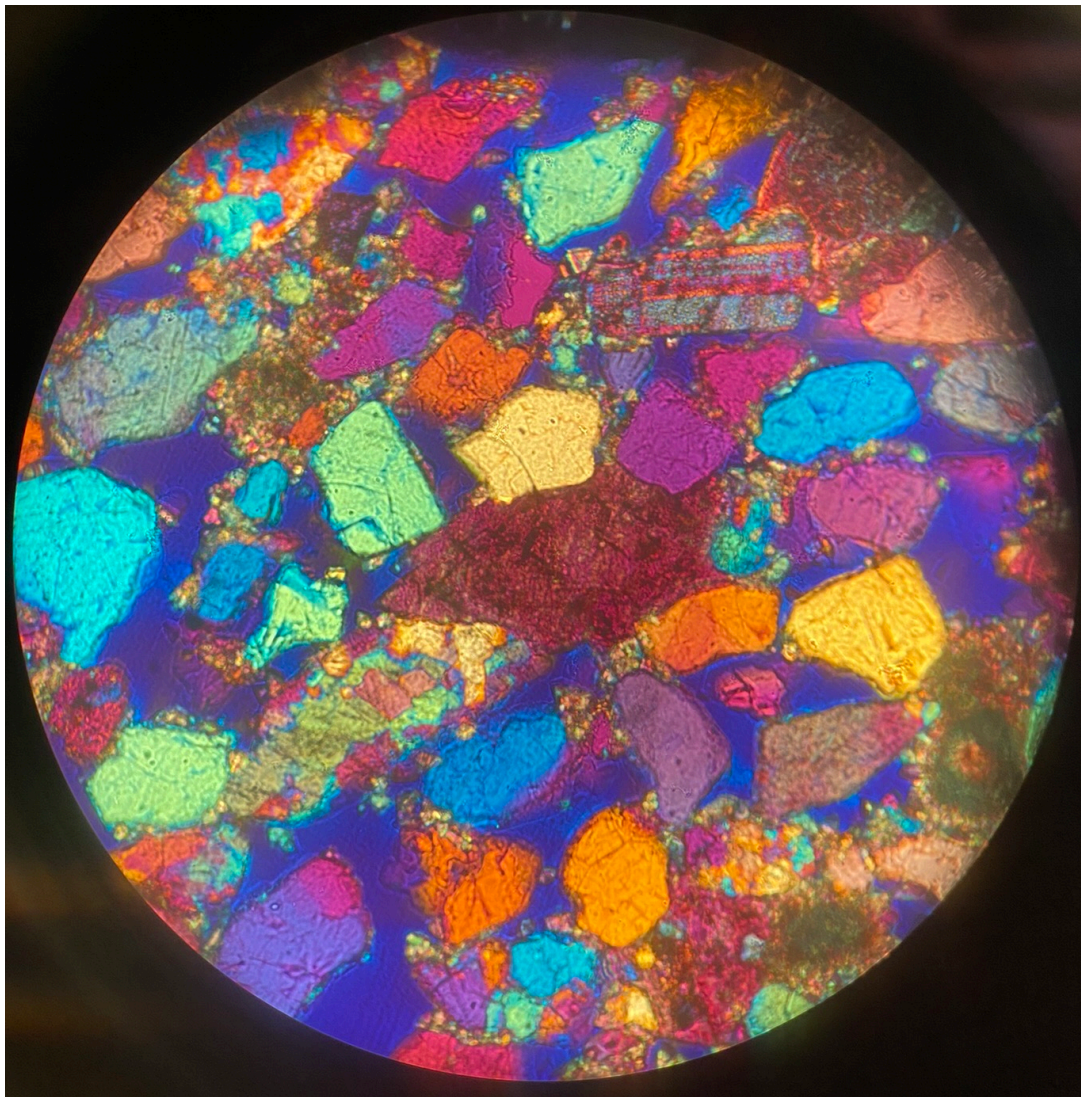
XPL



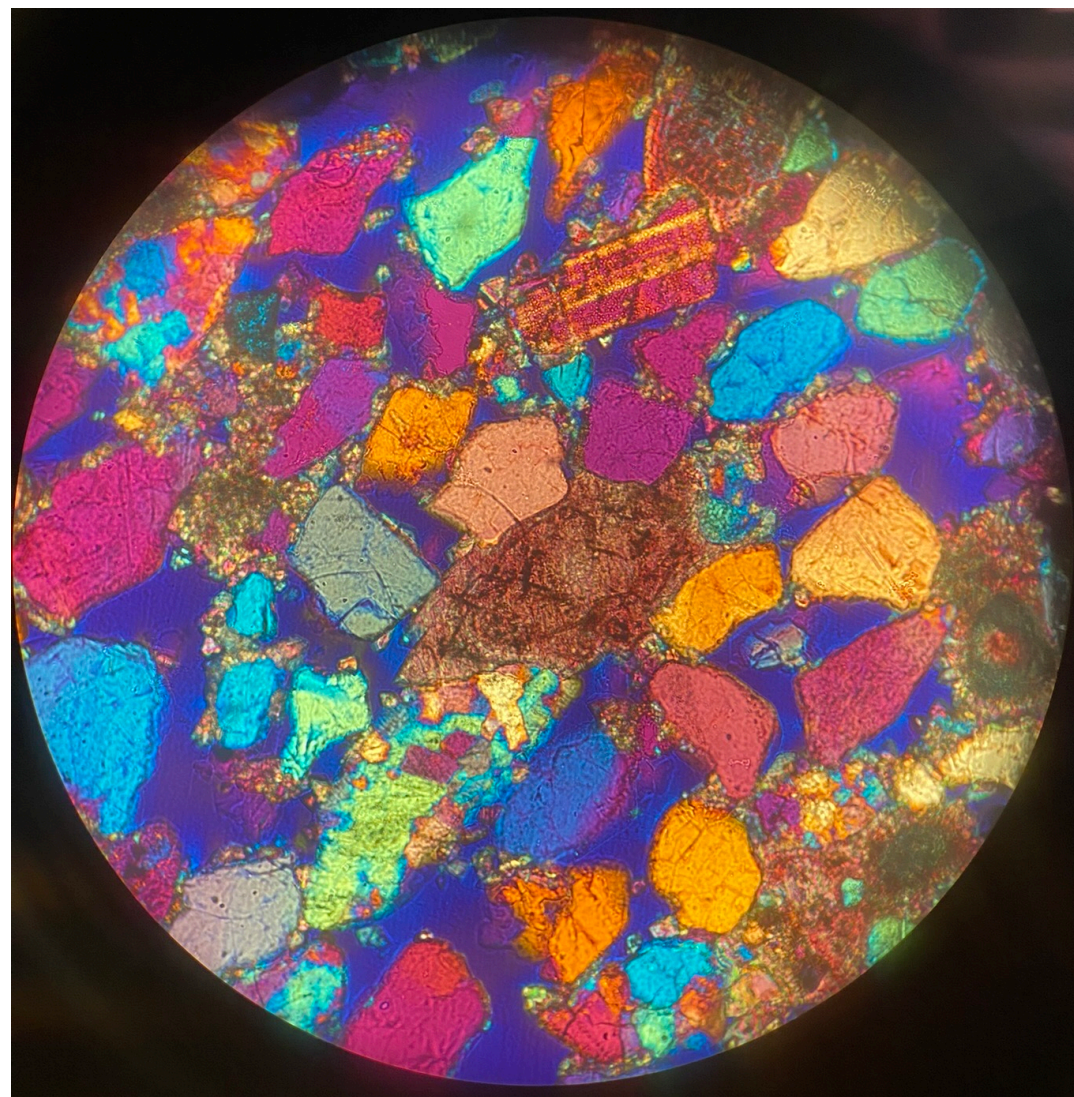
PPL

BB3

Central grain remains in optical continuity with its cement
Plagioclase feldspar apparent with twinning
Mud clast with drusy calcite cement
Lithic fragments



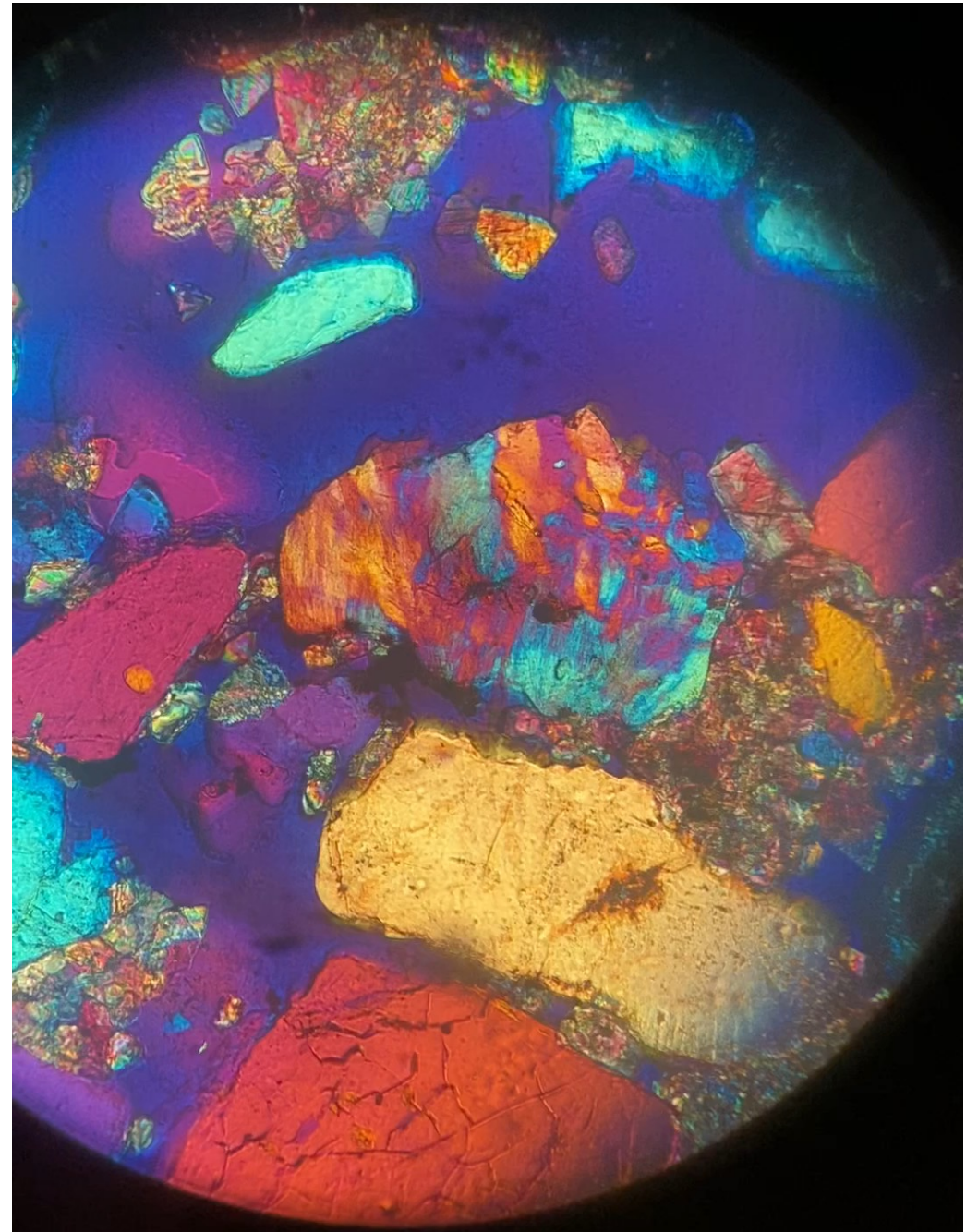
XPL



XPL

BB3

- Unidentified feathery mineral grain



XPL; 200x