



Geological map of the upper crust of the northern Semail ophiolite (Oman)

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Geospatial PDF, including additional layers. Datum: WGS 84, Projection: UTM Zone 40N, grid in km.

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- Previous**
- Boninitic Alley
 - Transitional Alley
 - Felsic Alley
 - Tholeiitic Alley
 - Depleted-Lasail
 - Lasail
 - Trans. Geotimes–Lasail
 - Felsic Geotimes
 - Geotimes
- This study**
- Lava samples
- Boninitic Alley
 - Transitional Alley
 - Felsic Alley
 - Tholeiitic Alley
 - Depleted-Lasail
 - Lasail
 - Trans. Geotimes–Lasail
 - Felsic Geotimes
 - Geotimes
- Volcanic glass samples
- ▼ Boninitic Alley
 - ▼ Transitional Alley
 - ▼ Felsic Alley
 - ▼ Tholeiitic Alley
 - ▼ Felsic Geotimes
- Dyke/sill samples
- ◆ Boninitic Alley
 - ◆ Tholeiitic Alley
 - ◆ Geotimes
- Intrusive samples
- Phase 2
 - Phase 1
- Structures
- Thrust fault
 - Fault (undifferentiated)
 - Syn-magmatic fault
- Other
- Field observation
 - Sedimentary bedding dip
 - VMS deposit
 - Umber
 - De- or re-magnetized zone

- Adapted from regional maps**
- Supra-ophiolitic sediments
- Undifferentiated post-obduction sediments and non-ophiolitic units
 - Sh n.a.* Suhlayah Formation
Umber, chert, limestone
 - Zb Zabyat Formation
Conglomerate (mainly volcanic clasts)
- *Not applicable: bedrock not inferred (see Section 3 of text)
- Semail extrusives
- Sa Salahi (V3)
Alkali basalt
 - bA Boninitic Alley
Boninite series
 - D2 Alley Dyke Swarm
Swarm of Alley feeder dykes
 - uA Undifferentiated Boninitic & Tholeiitic Alley
 - fA Felsic Alley
Andesite, dacite, rhyolite
 - tA Tholeiitic Alley
Basalt, andesite, dacite, rhyolite
 - dL Depleted Lasail
Low-Ti Basalt/ Boninite
 - La Lasail
Primitive Basalt
 - fG Felsic Geotimes
Andesite
 - Gt Geotimes
Basalt, Basaltic-andesite, andesite
- Upper-crustal intrusions
- D Dolerite stock or sill
 - T Tonalite/Trondhjemite/Diorite
 - G Gabbro/gabbronorite
 - U Ultramafic intrusion
 - SS Sheeted sill complex
 - SD Sheeted dyke complex
- Lower Crust
- LC Undifferentiated lower crustal intrusions and cumulates
- Mantle
- P Undifferentiated peridotite
- Batinah complex
- BC Melange and thrust sheets of Triassic volcanic and sedimentary rocks
- Focus of this study**
- Simplified from regional maps**
- Previous regional map groupings**
- SE3
 - SE2
 - SE1

