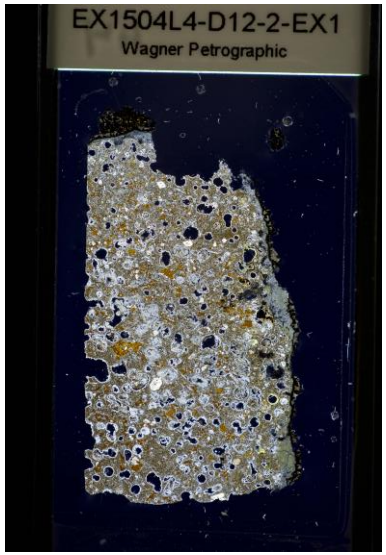
| General Information | | | |
|---|---|---|---|
| Sample Name (IGSN) | EX1504L4-D12-2 | | |
| Describer | Kevin Konrad | | |
| Sample Location | Abyssal Ridge | | |
| Lithology prefix | olivine-clinopyroxene | | |
| General Lithology | basalt | | |
| Texture 1 | heavily altered | | |
| Texture 2 | vesicular | | |
| Whole Rock Original (%) | 100 | Check [ Ph + Vs + Gm = 100% ] | OK |
| Whole Rock Present (%) | 5 | Check [ Or = Pr + Rf ] | OK |
| Whole Rock Replaced (%) | 95 | Check [ Or = Pr + Rf ] | OK |
| Total Groundmass Original (%) | 100 | Check [ Gp + Gl + Ms = 100% ] | OK |
| Total Groundmass Present (%) | 5 | Check [ Or = Pr + Rf ] | OK |
| Total Groundmass Replaced (%) | 95 | Check [ Or = Pr + Rf ] | OK |
| Whole Rock Summary | A altered basalt with some iddingsite and clinopyroxene grains (ankaramite). Sample has some yellowish (palagonite?) alteration around the rim followed by a Mn crust. Sample is vesicular with mixed 100% and 0% filled vesicles. | | |
| Thin Section Summary | A heavily altered ankaramite. All olivine phenocrysts are recrystallized to iddingsite. Clinopyroxene are mostly replaced but some fresher grains exist. The sample is highly vesicular with partial to complete alteration infill. The groundmass is pervasively altered with some altered plagioclases. | | |

## Whole Rock

## Transmitted Light

| PHENOCRYSTS [Ph] | OL | PLAG | OPX | CPX | SPINEL | OTHER | VESICLES [Vs] | GRNDM [Gm] |
|---|---|---|---|---|---|---|---|---|
| Original (%) [ Or ] | 10 | | | 5 | | | 40 | 45 |
| Present (%) [ Pr ] | 0 | | | 2 | | | 10 | 2 |
| Replaced / Filled (%) [ Rf ] | 10 | | | 3 | | | 30 | 43 |
| Check [ Or = Pr + Rf ] | OK | OK | OK | OK | OK | OK | OK | OK |
| Minimum Size (mm) | 0.4 | | | 0.2 | | | 0.2 | |
| Maximum Size (mm) | 1.2 | | | 0.4 | | | 0.8 | |
| Modal Size (mm) | 1 | | | 0.2 | | | 0.4 | |
| Shape | anhedral | | | subhedral | | | rounded | |
| Habit | | | | | | | | |
| Zonation Type | | | | | | | | |
| Zonation Extent | | | | | | | | |
| Exsolution Type | | | | | | | | |
| Special Features | | | | | | | | |
| Comments | Iddingsite | | | | | | Not sure what is infilling the vesicles. Possible microcrystic calcite | |

## Cross Polarized




| GROUNDMASS [Gp] | OL | PLAG | OPX | CPX | SPINEL | OTHER | GLASS [Gl] | MSTASIS [Ms] |
|---|---|---|---|---|---|---|---|---|
| Original (%) [ Or ] | 15 | 10 | | | | | | 75 |
| Present (%) [ Pr ] | 0 | 5 | | | | | | 0 |
| Replaced / Filled (%) [ Rf ] | 15 | 5 | | | | | | 75 |
| Check [ Or = Pr + Rf ] | OK | OK | OK | OK | OK | OK | OK | OK |
| Minimum Size (mm) | 0.05 | 0.1 | | | | | | |
| Maximum Size (mm) | 0.1 | 0.2 | | | | | | |
| Modal Size (mm) | 0.1 | 0.1 | | | | | | |
| Shape | anhedral | subhedral | | | | | | |
| Habit | | | | | | | | |
| Comments | | | | | | | | Very altered |