| | | General Information | | | | |
|-------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--|--|--|
| Sample Name (IGSN) | | EX1708-D18-1 | | | | |
| Describer | | Kevin Konrad | | | | |
| Sample Location | | Schumann Seamount | | | | |
| Lithology prefix | | Plagioclase-Clinopyroxene | | | | |
| General Lithology | | Basalt | | | | |
| Texture 1 | | Vesicular | | | | |
| Texture 2 | | Altered | | | | |
| Whole Rock Original (%) | 100 | Check [Ph + Vs + Gm = 100%] | ОК | | | |
| Whole Rock Present (%) | 0 | Check [Or = Pr + Rf] | WRONG BY 100% | | | |
| Whole Rock Replaced (%) | 0 | Check [Or = Pr + Rf] | WRONG BY 100% | | | |
| Total Groundmass Original (%) | 100 | Check [Gp + Gl + Ms = 100%] | ОК | | | |
| Total Groundmass Present (%) | 0 | Check [Or = Pr + Rf] | WRONG BY 100% | | | |
| Total Groundmass Replaced (%) | 0 | Check [Or = Pr + Rf] | WRONG BY 100% | | | |
| Whole Rock Summary | finer grain | basalt (plagioclase, clinopyroxene, maybe olivine) wit ned and contain higher density of vesicles. The pheno le is relatively fresh with alteration only found around | crysts are large (up to 1cm diameter). | | | |

Thin Section Summary

EX1708 — D18 — 1

Oppu Sample (NOT)

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Whole Rock

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Transmitted Light

A plagioclase and clinopyroxene phyric basalt with alternating layers of more or less oxidation. The more altered layers follow pre-existing weaknesses where water was able to penetrate as evident by the abundant palagonite and Fe-oxide recrystallization. Plagioclase phenocrysts range in diameter continually from 0.25 to ~7mm. Clinopyroxene grains are smaller and range from 0.25 to 0.5 mm in diameter. The groundmass consists of variably altered mesostasis of plagioclase, clinopyroxene, spinel and glass. The sample is vesicular with palagonite rims on all vesicles/voids.

| PHENOCRYSTS [Ph] | OL | PLAG | ОРХ | СРХ | SPINEL | OTHER | VESICLES [Vs] | GRNDM [Gm] |
|------------------------------|----|----------------------------------------------------------|-----|-----------|--------|-------|--------------------------------------------------|------------|
| Original (%) [Or] | | 20 | | 8 | | | 10 | |
| Present (%) [Pr] | | 18 | | 8 | | | 7 | |
| Replaced / Filled (%) [Rf] | | 2 | | 0 | | | 3 | |
| Check [Or = Pr + Rf] | ОК | ОК | ОК | ОК | OK | OK | OK | OK |
| Minimum Size (mm) | | 0.25 | | 0.25 | | | 0.1 | |
| Maximum Size (mm) | | 7 | | 0.75 | | | 0.75 | |
| Modal Size (mm) | | 1.5 | | 0.5 | | | 0.4 | |
| Shape | | Subhedral | | Subhedral | | | Subrounded | |
| Habit | | | | | | | | |
| Zonation Type | | Twinning-Sector | | | | | | |
| Zonation Extent | | Common | | | | | | |
| Exsolution Type | | | | | | | | |
| Special Features | | | | | | | | |
| Comments | | Spongy textures common towards rims of large phenocrysts | | | | | Palagonite rims on all. Alteration halos common. | |

| GROUNDMASS [Gp] | OL | PLAG | OPX | CPX | SPINEL | OTHER | GLASS [GI] | MSTASIS [Ms] |
|------------------------------|----|-----------|-----|-----------------|-----------|-------|------------|--------------------------------------------------|
| Original (%) [Or] | | 20 | | 10 | 10 | | | 60 |
| Present (%) [Pr] | | 15 | | 5 | 10 | | | 0 |
| Replaced / Filled (%) [Rf] | | 5 | | 5 | 0 | | | 60 |
| Check [Or = Pr + Rf] | ОК | ОК | OK | OK | OK | OK | OK | ОК |
| Minimum Size (mm) | | 0.01 | | 0.05 | 0.01 | | | |
| Maximum Size (mm) | | 0.25 | | 0.1 | 0.05 | | | |
| Modal Size (mm) | | 0.1 | | 0.075 | 0.02 | | | |
| Shape | | Subhedral | | Anhedral | Subhedral | | | |
| Habit | | Laths | | | | | | |
| Comments | | | | Talc alteration | | | | Mixed altered glass and other secondary minerals |

