

| General Information | | | |
|-------------------------------|--|-------------------------------|----|
| Sample Name (IGSN) | EX1603-D2-1 | | |
| Describer | Kevin Konrad | | |
| Sample Location | Hohonu Moana | | |
| Lithology prefix | | | |
| General Lithology | basalt | | |
| Texture 1 | cryptocrystalline | | |
| Texture 2 | altered | | |
| Whole Rock Original (%) | 100 | Check [Ph + Vs + Gm = 100%] | OK |
| Whole Rock Present (%) | 60 | Check [Or = Pr + Rf] | OK |
| Whole Rock Replaced (%) | 40 | Check [Or = Pr + Rf] | OK |
| Total Groundmass Original (%) | 100 | Check [Gp + Gl + Ms = 100%] | OK |
| Total Groundmass Present (%) | 60 | Check [Or = Pr + Rf] | OK |
| Total Groundmass Replaced (%) | 40 | Check [Or = Pr + Rf] | OK |
| Whole Rock Summary | Either a chunk of fine substrate or fine ash. Some areas appear like phosphorite but it's difficult to tell with the hand sample. Varies from white to brown in color. | | |
| Thin Section Summary | Likely a lithified ash bed but could potentially be sediment/substrate. Contains a dark very fine grained mesostasis groundmass with some microcrystic biotite and plagioclase. Difficult to distinguish how much of the mesostasis is altered or not. | | |



| PHENOCRYSTS [Ph] | OL | PLAG | OPX | CPX | SPINEL | OTHER | VESICLES [Vs] | GRNDM [Gm] |
|------------------------------|----|------|-----|-----|--------|-------|---------------|--|
| Original (%) [Or] | | | | | | | | 100 |
| Present (%) [Pr] | | | | | | | | 80 |
| Replaced / Filled (%) [Rf] | | | | | | | | 20 |
| Check [Or = Pr + Rf] | OK | OK | OK | OK | OK | OK | OK | OK |
| Minimum Size (mm) | | | | | | | | |
| Maximum Size (mm) | | | | | | | | |
| Modal Size (mm) | | | | | | | | |
| Shape | | | | | | | | |
| Habit | | | | | | | | |
| Zonation Type | | | | | | | | |
| Zonation Extent | | | | | | | | |
| Exsolution Type | | | | | | | | |
| Special Features | | | | | | | | |
| Comments | | | | | | | | Could be mostly unaltered, hard to tell do to the very fine grained nature |



| GROUNDMASS [Gp] | OL | PLAG | OPX | CPX | SPINEL | OTHER | GLASS [Gl] | MSTASIS [Ms] |
|------------------------------|----|-----------|-----|-----|--------|----------------|------------|---------------------------------|
| Original (%) [Or] | | 10 | | | | 3 | | 87 |
| Present (%) [Pr] | | 10 | | | | 3 | | 80 |
| Replaced / Filled (%) [Rf] | | 0 | | | | 0 | | 7 |
| Check [Or = Pr + Rf] | OK | OK | OK | OK | OK | OK | OK | OK |
| Minimum Size (mm) | | 0.01 | | | | 0.01 | | |
| Maximum Size (mm) | | 0.015 | | | | 0.02 | | |
| Modal Size (mm) | | 0.01 | | | | 0.01 | | |
| Shape | | subhedral | | | | subhedral | | |
| Habit | | | | | | | | |
| Comments | | | | | | Biotite grains | | Seems altered but I'm uncertain |