General Information			
Sample Name (IGSN)	EX1603-D4-2		
Describer	Kevin Konrad		
Sample Location	Hohonu Moana		
Lithology prefix	olivine		
General Lithology	basalt		
Texture 1	highly altered		
Texture 2	fine grained		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	20	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	80	Check [Or = Pr + Rf]	OK
Total Groundmass Original (%)	100	Check [Gp + Gl + Ms = 100%]	OK
Total Groundmass Present (%)	20	Check [Or = Pr + Rf]	OK
Total Groundmass Replaced (%)	80	Check [Or = Pr + Rf]	OK
Whole Rock Summary	A olivine basalt with a altered glassy rind that degrades into a hyaloclastite like crust with some Mn crust and potentially phosphorite. Sample varies in alteration with some fresher locations in the core of the rock (not representated by the thin section).		
Thin Section Summary	A altered basalt with olivine phenocrysts, which are 100% recrystallized to iddingsite. Thin section captures more of the rim of the sample, with the interior of the sample being less altered. Groundmass consists of plagioclase and occasional iddingsite within a Fe oxyhydroxide and clay rich mesostasis. Sample is vesicular with spherulitic alteration products pervasive throughout.		

Whole Rock

Transmitted Light

PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]	10						20	70
Present (%) [Pr]	0						0	20
Replaced / Filled (%) [Rf]	10						20	50
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.25						0.2	
Maximum Size (mm)	0.5						0.6	
Modal Size (mm)	0.3						0.2	
Shape	anhedral						rounded	
Habit	altered							
Zonation Type								
Zonation Extent								
Exsolution Type								
Special Features								
Comments	Completely recrystallized to iddingsite						Completely infilled with a serpentine like alteration product (unidentified)	Mostly Fe oxyhydroxide alteration with some potential clay

Cross Polarized

GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]		20						80
Present (%) [Pr]		18						0
Replaced / Filled (%) [Rf]		2						80
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)		0.01						
Maximum Size (mm)		0.06						
Modal Size (mm)		0.05						
Shape		subhedral						
Habit								
Comments								Mostly Fe oxyhydroxide alteration with some potential clay