

General Information			
Sample Name (IGSN)	EX1504L2-D2-4		
Describer	Kevin Konrad		
Sample Location	North French Frigate Shoals Seamount		
Lithology prefix	Olivine		
General Lithology	Basalt		
Texture 1	Vesicular		
Texture 2	Porphyritic		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	90	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	10	Check [Or = Pr + Rf]	OK
Total Groundmass Original (%)	100	Check [Gp + Gl + Ms = 100%]	OK
Total Groundmass Present (%)	90	Check [Or = Pr + Rf]	OK
Total Groundmass Replaced (%)	10	Check [Or = Pr + Rf]	OK
Whole Rock Summary	A fine grained basalt with a thick Mn crust. Sample is vesicular with most vesicles containing alteration infill. Some areas of the rock appear slightly different, either clasts or less altered zones.		
Thin Section Summary	An olivine-basalt with coarse, fairly fresh olivine phenocrysts. Sample contains circular vesicles with occasional zeolite infill. Groundmass is primarily glass with clinopyroxene and olivine crystals.		



PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]	25						30	45
Present (%) [Pr]	20						20	41
Replaced / Filled (%) [Rf]	5						10	5
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.25						0.1	
Maximum Size (mm)	2						0.5	
Modal Size (mm)	1.5						0.3	
Shape	Sub-euhedral						Circular	
Habit								
Zonation Type								
Zonation Extent								
Exsolution Type								
Special Features								
Comments	Some iddingsite replacement. Spinel inclusions present.						Some zeolite infill.	



GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]	10			30			60	
Present (%) [Pr]	9			30			30	
Replaced / Filled (%) [Rf]	1			0			30	
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.001			0.01				
Maximum Size (mm)	0.005			0.03				
Modal Size (mm)	0.003			0.02				
Shape	subhedral			lath				
Habit								
Comments	Quite fresh			Some may be plagioclase with sericite alteration			Difficult to assess how altered the glass is.	