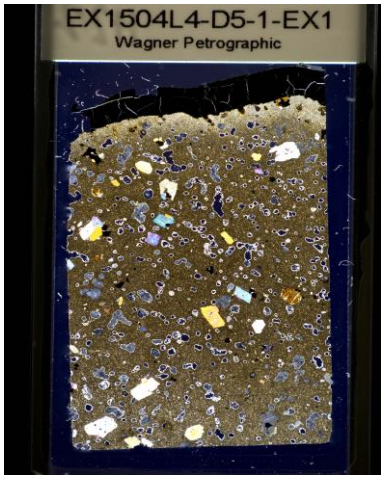
General Information			
Sample Name (IGSN)	EX1504L4-D5-1		
Describer	Kevin Konrad		
Sample Location	Johnston Seamounts-Deep Twin Ridge		
Lithology prefix	Olivine-pyroxene-spinel		
General Lithology	Basalt		
Texture 1	vesicular		
Texture 2	porphyritic		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	80	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	20	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	A vesicular ankaramite with a think interbedded Mn-Phosphorite crust. Vesicles have zeolite infilling throughout. All olivine appears recrystallized to iddingsite.		
Thin Section Summary	A basalt (ankaramite) with olivine, titan-augite and spinel phenocrysts. Phenocrysts are mostly fresh with only one olivine recrystalized to iddingsite. Groundmass is clinopyroxene with somewhat altered glass. May be fresher than appears. Vesicles are common with zeolite infill.		

Whole Rock

Transmitted Light

PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]	5			5	3		20	67
Present (%) [Pr]	2			5	3		10	40
Replaced / Filled (%) [Rf]	3			0	0		10	27
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.8			0.8	0.2		0.2	
Maximum Size (mm)	1.6			2	0.6		0.6	
Modal Size (mm)	1			1	0.5		0.2	
Shape	subhedral			subhedral	subhedral		rounded	
Habit								
Zonation Type				sector				
Zonation Extent				rare				
Exsolution Type								
Special Features								
Comments	One fully iddingsite, other fresh enough			Blueish extinction indicate titan-augite (silica understaturated)	Not sure what type of spinel.		Zeolite infill	

Cross Polarized



GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]				10			90	
Present (%) [Pr]				3			0	
Replaced / Filled (%) [Rf]				7			90	
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)				0.02				
Maximum Size (mm)				0.1				
Modal Size (mm)				0.1				
Shape				subhedral				
Habit								
Comments								