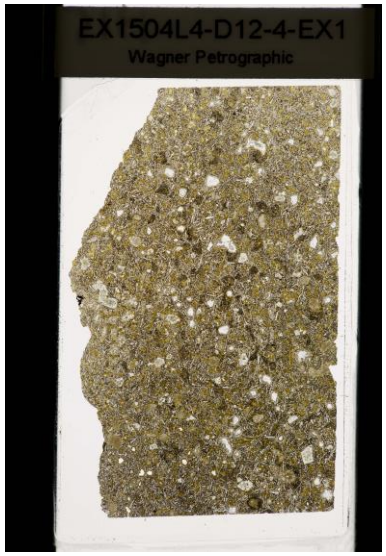
General Information			
Sample Name (IGSN)	EX1504L4-D12-4		
Describer	Kevin Konrad		
Sample Location	Abyssal Ridge		
Lithology prefix	olivine-clinopyroxene		
General Lithology	basalt		
Texture 1	vesicular		
Texture 2	altered		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	15	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	85	Check [Or = Pr + Rf]	OK
Total Groundmass Original (%)	100	Check [Gp + Gl + Ms = 100%]	OK
Total Groundmass Present (%)	15	Check [Or = Pr + Rf]	OK
Total Groundmass Replaced (%)	85	Check [Or = Pr + Rf]	OK
Whole Rock Summary	A fine grained basalt with a highly vesicular rim and a less vesicular core. The core contains calcite filled vesicles. Some altered olivine are found throughout although it doesn't appear to be iddingsite. Some clinopyroxene phenocrysts are also observed. Sample contains a thin Mn coat.		
Thin Section Summary	A altered and vesicular ankaramite. The olivine are completely recrystallized to brownish clay. The clinopyroxene phenocrysts are fairly fresh. Vesicles are infilled with palagonite and calcite. The groundmass is composed of coarse plagioclase laths and a brownish mesostatsis.		

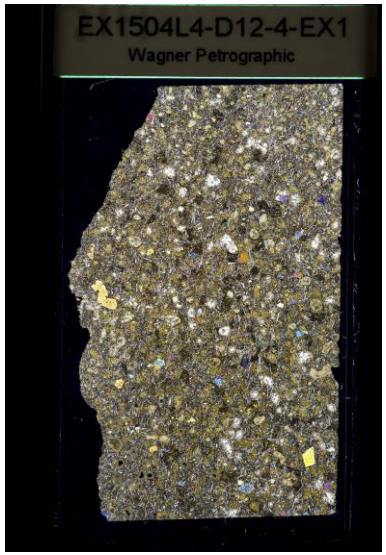
Whole Rock

Transmitted Light



PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]	15			15			10	60
Present (%) [Pr]	0			12			0	9
Replaced / Filled (%) [Rf]	15			3			10	51
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.1			0.1			0.1	
Maximum Size (mm)	2			0.6			0.4	
Modal Size (mm)	1			0.2			0.2	
Shape	anhedral			anhedral			rounded	
Habit								
Zonation Type								
Zonation Extent								
Exsolution Type								
Special Features								
Comments	All altered			Appear to be titan-augite (blueish extinction)			calcite filled	

Cross Polarized



GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]	5	15		10				70
Present (%) [Pr]	0	10		8				0
Replaced / Filled (%) [Rf]	5	5		2				70
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.05	0.1		0.1				
Maximum Size (mm)	0.1	0.2		0.2				
Modal Size (mm)	0.1	0.1		0.1				
Shape	anhedral	subhedral		subhedral				
Habit								
Comments								Very altered