General Information

Field	Value		
Sample Name (IGSN)	EX1706-D14-1		
Describer	Kevin Konrad		
Sample Location	Southeast Guyot Ridge		
Lithology prefix	olivine		
General Lithology	basalt		
Texture 1	completely altered		
Texture 2	vesicular		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	0	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	100	Check [Or = Pr + Rf]	OK
Total Groundmass Original (%)	100	Check [Gp + Gl + Ms = 100%]	OK
Total Groundmass Present (%)	0	Check [Or = Pr + Rf]	OK
Total Groundmass Replaced (%)	100	Check [Or = Pr + Rf]	OK

Whole Rock Summary: A heavily altered volcanic breccia with phosphorite cement. The clasts are typically reddish Fe-oxide altered glassy basalts. One relatively fresher clast is preserved and appears vesicular and aphyric. Much of the samples appear recrystallized to a talc like appearance with some FeMn grains scattered throughout. Sample contains a thin Mn coat

Thin Section Summary: The thin section is of a heavily altered olivine basalt clast. The olivine are 100% recrystallized to iddingsite and are commonly disaggregated. The sample is vesicular, with palagonite rims and zeolite infill. The mesostasis is composed entirely of altered glass.

Whole Rock

Transmitted Light

Cross Polarized

PHENOCRYSTS [Ph]

PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]	20						30	
Present (%) [Pr]	0						10	
Replaced / Filled (%) [Rf]	20						20	
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.25						0.25	
Maximum Size (mm)	1						0.75	
Modal Size (mm)	0.5						0.5	
Shape	anhedral						subrounded	
Habit								
Zonation Type								
Zonation Extent								
Exsolution Type								
Special Features								
Comments	Disaggregated shards of iddingsite.						Palagonite rims common, zeolite infill also common.	
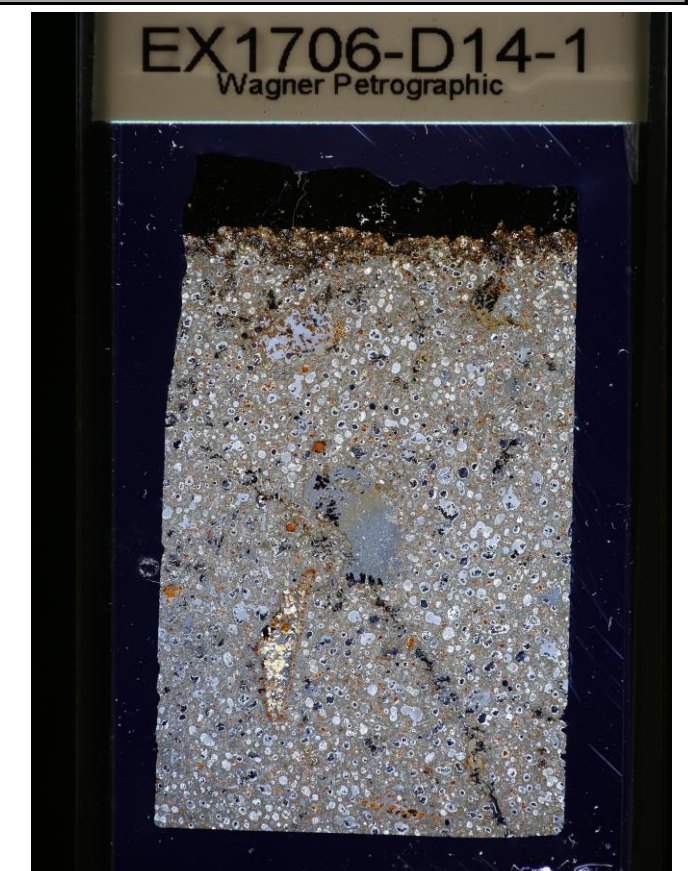
GROUNDMASS [Gp]

GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]							100	
Present (%) [Pr]							0	
Replaced / Filled (%) [Rf]							100	
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)								
Maximum Size (mm)								
Modal Size (mm)								
Shape								
Habit								
Comments							Altered glass	