

General Information			
Sample Name (IGSN)	EX1504L2-D7-4		
Describer	Kevin Konrad		
Sample Location	Pioneer Bank Ridge		
Lithology prefix	Olivine		
General Lithology	Basalt		
Texture 1	Vesicular		
Texture 2			
Whole Rock Original (%)	100	Check [ Ph + Vs + Gm = 100% ]	OK
Whole Rock Present (%)	60	Check [ Or = Pr + Rf ]	OK
Whole Rock Replaced (%)	40	Check [ Or = Pr + Rf ]	OK
Total Groundmass Original (%)	100	Check [ Gp + Gl + Ms = 100% ]	OK
Total Groundmass Present (%)	80	Check [ Or = Pr + Rf ]	OK
Total Groundmass Replaced (%)	20	Check [ Or = Pr + Rf ]	OK
Whole Rock Summary	A fine grained basalt with a partly-altered glassy rind. Contains iddingsite grains throughout. It's coated with a phosphorite rim and a thin Mn coat.		
Thin Section Summary	A olivine-basalt with plagioclase and glass. The glass is relatively fresh but becomes increasing more crystalline and altered into the thin section. Vesicles are elongated and may be fractures. Vesicles are partly to completely infilled. Groundmass is primarily glass with some plagioclase. Olivine grades from groundmass size to phenocrystic.		



PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [ Or ]	15						30	55
Present (%) [ Pr ]	10						20	44
Replaced / Filled (%) [ Rf ]	5						10	11
Check [ Or = Pr + Rf ]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.1						0.1	
Maximum Size (mm)	0.75						1.25	
Modal Size (mm)	0.5						0.4	
Shape	an-euhedral						Varied	
Habit								
Zonation Type								
Zonation Extent								
Exsolution Type								
Special Features								
Comments	Clean olivine within glassy sections but 100% recrystallized in the coarser sections						Varies from circular to elongated. Elongated vesicles may be fractures.	



GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [ Or ]	5	15		10			70	
Present (%) [ Pr ]	3	15		10			35	
Replaced / Filled (%) [ Rf ]	2	0		0			35	
Check [ Or = Pr + Rf ]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)	0.025	0.3		0.05				
Maximum Size (mm)	0.2	0.5		0.1				
Modal Size (mm)	0.05	0.4		0.075				
Shape	anhedral	Euhedral		subhedral				
Habit		lath						
Comments							Fresh glass grades into highly altered mesostasis.	