

General Information			
Sample Name (IGSN)	EX1605L1-D1-1		
Describer	Kevin Konrad		
Sample Location	Santa Rosa North		
Lithology prefix	plagioclase-clinopyroxene		
General Lithology	basalt		
Texture 1	vesicular		
Texture 2	altered		
Whole Rock Original (%)	100	Check [Ph + Vs + Gm = 100%]	OK
Whole Rock Present (%)	50	Check [Or = Pr + Rf]	OK
Whole Rock Replaced (%)	50	Check [Or = Pr + Rf]	OK
Total Groundmass Original (%)	100	Check [Gp + Gl + Ms = 100%]	OK
Total Groundmass Present (%)	20	Check [Or = Pr + Rf]	OK
Total Groundmass Replaced (%)	80	Check [Or = Pr + Rf]	OK
Whole Rock Summary	A relative fresh basalt with a glass-rich rind. Sample contains plagioclase and clinopyroxene phenocrysts. The vesicles are typically unfilled but alteration halos are occasionally found.		
Thin Section Summary	A plagioclase and clinopyroxene phyric basalt, with two phenocryst phases displaying a continual range in grain size from ~50um to ~800 um. The plagioclase display sector zoning, albite twinning and commonly spongy textures. The groundmass consists of a Fe-hydroxide altered mesostasis and some of the finer plagioclase and clinopyroxene. Vesicles are rounded and range up ~500 um in diameter. Most vesicles containing a rim of palagonite alteration.		



PHENOCRYSTS [Ph]	OL	PLAG	OPX	CPX	SPINEL	OTHER	VESICLES [Vs]	GRNDM [Gm]
Original (%) [Or]		30		15			10	45
Present (%) [Pr]		20		10			9	9
Replaced / Filled (%) [Rf]		10		5			1	36
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)		0.1		0.1			0.1	
Maximum Size (mm)		0.6		0.5			0.5	
Modal Size (mm)		0.3		0.2			0.2	
Shape		subhedral		subhedral			rounded	
Habit								
Zonation Type		sector, albite						
Zonation Extent		pervasive						
Exsolution Type		spongy						
Special Features								
Comments		Difficult to determine what is a phenocryst versus microcryst		Commonly form glomerocrystic clusters with the plagioclase.			Rimmed by palagonite	



GROUNDMASS [Gp]	OL	PLAG	OPX	CPX	SPINEL	OTHER	GLASS [Gl]	MSTASIS [Ms]
Original (%) [Or]		20		10				70
Present (%) [Pr]		10		9				0
Replaced / Filled (%) [Rf]		10		1				70
Check [Or = Pr + Rf]	OK	OK	OK	OK	OK	OK	OK	OK
Minimum Size (mm)		0.05		0.05				
Maximum Size (mm)		0.1		0.1				
Modal Size (mm)		0.075		0.075				
Shape								
Habit								
Comments								Greyish Fe-hydroxide alteration. Likely very glass rich originally.