

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
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10	Diffuse, tabular, alteration	Thick	090	20	180	9					
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90	Vein 89cm		270	10	180	21					
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94	89-97cm vein		090	75	224	000					
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98	98 vein										
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108	107 vein		270	74	062	00					
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112	110- layering between 107 vesicles		090	31	180	18					
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134	vein		090	33	156	00					
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Diffusive vein, 1cm thick.

@ 89cm
Very thin vein (<1mm).
Fracture filled, irregular

@ 89-97cm
Thin, irregular, fracture - filling veins

@ 98-109
Very wavy/irregular, thin vein
fracture filled.

@ 110: layering (magmatic/secondary?)
defined by vesicles.

fracture - fill, slightly wavy.
Thin < 1mm

Slight Breccia

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
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Moderate
biscuiting.

@49-54
Fracture-filled vein, ^{wavy} heterogeneous fill
2mm thick. Fill looks like cemented
clasts. Vein has a thin rind along its
margins.

@63-77
Averaged over a very irregular
vein, filling an irregular fracture?
The vein is thin, < 1mm, orange fill.

102-109, < 1mm, wavy, fracture fill
veins

49
vein 270 70 167 00

54

63

vein
irregular
vein 90 78

no clear
2nd apparent dip.

77

vein @ 102-108
270 67 180 5

103

vein @ 103-107
30 140 14 7

108

vein @ 108-110
270 5 180

110

Expedition 375 - Hikurangi

375-U1526A-6R-2-A | SHLF9525011

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
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@ 2-3 cm - calcite veins, fracture-fill vein
 @ 5 cm, bed (w/ vein network)

@ 52 cm - lith boundary, some reaction

Expedition 375 - Hikurangi

375-U1526A-6R-3-A | SHLF9525041

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
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@61-63, diffusive win, anastomosing

@68 $\frac{1}{2}$ lith boundary
 ↑ prob mudstone in here

@84-85, 2mm^{variable} fine grained, gray, thin orange rind; planar



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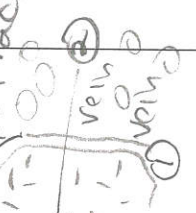
Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
								20-21 - core to fine, gradational beddy (lost at top) measured at lost beddy ✓		
								82-83 - shaly contact w/ basalt below (may be outboard clust) (270, 4; 000, 5) ✓		
								87-88, thin fracture vein (090, 7; 000, 0), wavy to planar, filled fracture filled (270, 4; 000, 5) ✓		
								91-92 " " (090, 4; 180, 8) ✓		
								93-94 " " (090, 25; 180, 1) ✓		
								94-95 " " (090, 25; 180, 3) ✓		
								117-118, (090, 14; 180, 4) ✓ thin fracture - filled vein		
								118-119, thin fracture filled vein, wavy planar (note, fractured on vein surface) (270, 8; 000, 5) ✓		
								121-121, fracture vein, planar, wavy planar (090, 8; 180, 11) ✓		

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
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11-13, vein at east edge (270, 8; 180, 28) ✓

20-25, vein at edge of clast (270, 76; 314, 10) ✓
 22, X-cutting vein (090, 8; 180, 18) matrix fract ✓
 24-25, vein through matrix (090, 2; 180, 22) med. conf. ✓
 (circled 1 and 2) ✓

40-43, vein cuts through matrix (270, 77; 295, 10) ✓



Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
								(note planar contact w/ clast above) - planar fabric between 8 - show contact w/ layer or clast of siltstone (270, 2; 180, 2)		
								13-16, bedded laminated sediments, silt → clay (090, 13; 180, 21)		
								31-36, zone (or clast) of variably bedded siltstone; no consistent planar fabric (is it clast or matrix)		
								71, shell fragment aligned w/ bedding? (270, 2; 000, 8)		

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Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
								7-11, zone of irregular discontinuous veins w/ no reliable orientations - some circurgranular		
								18-20, planar "clast" boundary (270, 43; 180-56)		
								32, fracture filling vein wavy (090, 37; 080, 17)		
								42, note polished surface of fracture - glass! (270, 7; 000, 53)		
								87-90, fracture filling vein (270, 41; core face only)		
								100-101, fracture filling vein (090, 5; 000, 0)		
								121-122, irregular wavy bedding (090, 5; 000, 8)		

CM Scale

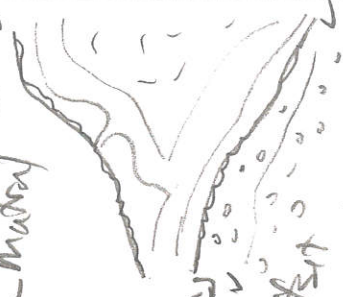
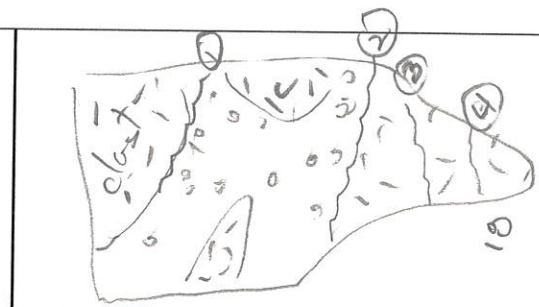
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Single volcanic clast!
 - glassy fracture
 & exterior
 - somewhat porphyritic?



9R-1

Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
								8-18, vein-rich volcanoclastic unit	MW & JM	4/24/18
								① 8-9, (090, 20; 180, 54) along clast edge ② 13-15, along clast edge (090, 17; 000, 7) ③ 15-16 cuts across clast (270, 30; 000, 35) ④ 17-18 cuts across clast (270, 00; 000, 15)		
								29-35 very subtle, <u>irregular</u> vein w/ distinctive dark green core, rimmed by white mineral - sparse, clast		
								57-60, fringe of pink carbonate on clast, banded, has vein adjacent to clast edge		
								60-75 bizarre clast (angular) with concentric bands of light & dark rimmed by circumgranular veins		
								73-74 vein cuts through clast material (090, 17; 180, 16)		
								89-93 fault offsets white layer (090, 37; 000, 20). 1.9 cm offset		



Summary:

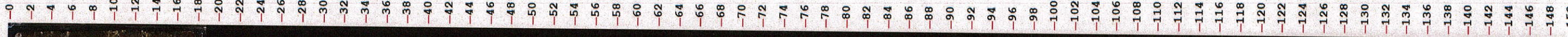
Coarse volcanoclast w/ large clasts of volcanics
 - interesting veins...
 - relatively fresh (bluish)

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GR-2

CM Scale



Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
								Summary: <u>Volcaniclastic rock w/ various coarse volcanic clasts, - highly altered - few veins, lots of cement.</u>		

Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
		AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			

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33-64 highly brecciated & cemented units, w/ distinct angular clasts (some dark red, light red)
 - well cemented and cohesive
 - few veins, subvertical, diffuse

Remainder of core mostly volcanic cobbles, some 'filled' vesicles
 - distinct red bands within some cobbles
 - some volcanic "flow banding"

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107-108 cm, vein, structure dil, irregular, < 1 mm thick, white dil.

vein 20 9 000 26

Mostly bisected

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
0-152	vein		090	89	169	00			6-14 cm, vein, irregular fracture filled ≤ 2 mm thick. White/orange fill.	HS & AF	24/4
	vein		270	75	185	00			20-24 cm, vein, irregular, fracture filled 2 mm thick. Heterogeneous, grey fill.		
	vein		090	59	027	00			41-48 cm, vein, irregular, fracture fill thin, < 1 mm. Fill looks oxidised.		
	vein		270	77	000	50			49-63 cm, vein, irregular, fracture fill 1 mm, orange fill.		
	vein		090	87	180	18			82-90 cm, vein, irregular, fracture fill mm, white, vuggy.		
	vein		090	82	012	00			112-131 cm, vein, irregular, filled by fine grained orange materials and basaltic clasts up to few mm long. Highly irregular, low conf. measurement ≤ 4 mm thick.		

Slight brecciated

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0-9 Network of cracks filled by fine grained brown/orange material. Subvertical network consisting ~~mostly~~ of irregular cement.

12-21 cm: orange vein, irregular, fracture fill, ≤ 2 mm thick. Very irregular, orientation confidence low.

vein
230 52 140 55

Expedition 375 - Hikurangi

375-U1526A-12R-1-A | SHLF9527591

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
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@ 11-14 cm, wavy frac, looks like some fill on back side, could be ss:
 @ 14-16 cm, wavy vein

Expedition 375 - Hikurangi

375-U1526A-13R-1-A | SHLF9527781

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
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@ 35 to 41
wiggly, 1mm, white fill

@ 42 to 44, wiggly, 1mm, white fill

182 0

180 32

090 83

270 19

via

via

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
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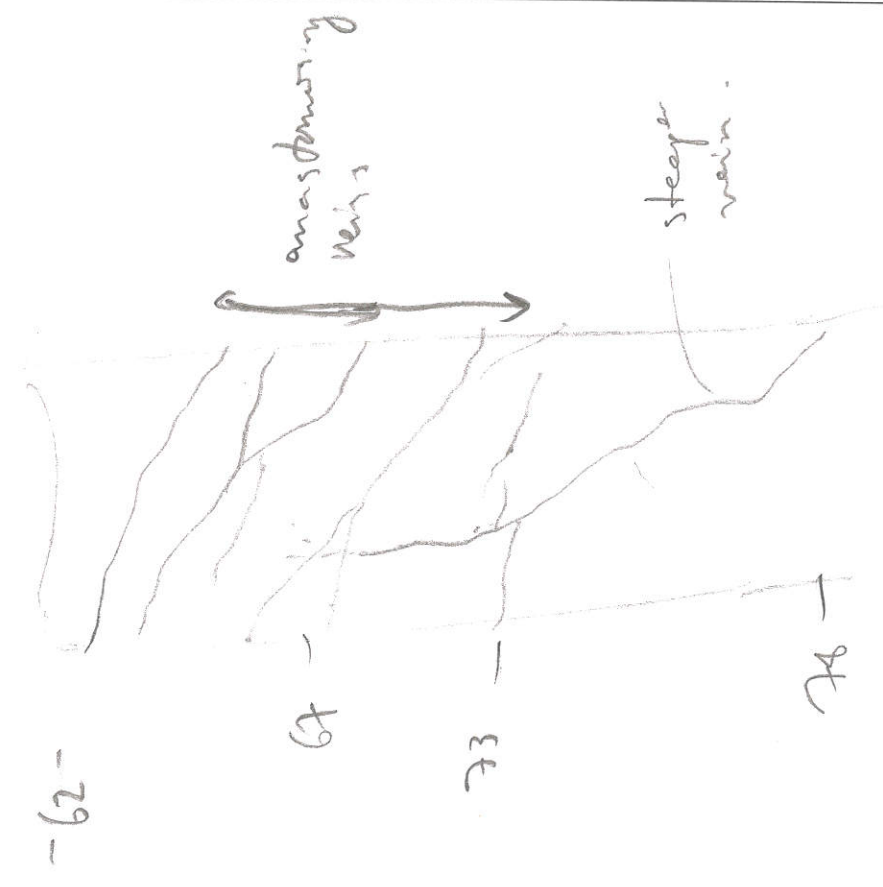


no
strand was

Moderate
birefringence

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary	Observer	Date
			AZIM	DIP/PLG	AZIM	DIP/PLG	AZIM	DIP/PLG			
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@ 62-73 cm, set of subparallel to anastomosing, grey, fractured filled veins. Ranging in thickness from <1mm to ~2mm.



67-78 cm: thin, wavy, <1mm thick vein. Filled with grey/white material. Very irregular, conf. 1.

78-106 cm: <1mm thick, wavy, fractured filled veins - few in a set of subparallel veins. 107-112 cm: another set of veins, ~1mm thick, milkier/white than set above. 106-112 cm: irregular, white vein, ~1mm fracture etc.

Expedition 375 - Hikurangi

375-U1526A-14R-CC-A |

CM Scale	Feature	Thick	Core-face orientation		2nd app. orientation		Core orientation		Summary:	Observer:	Date:
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CM Scale