## Cross Section E0 to E50 January 7, 2009 Bear Trail Debris Flow Maggie Valley, Haywood County, NC

3750ft	<b>F3</b> - CV3 colluvium, medium to dark brown ML with clay and       ————————————————————————————————————	c – cobbles CBEB – Rock classification from the Unified I Classification System (Williamson , 1984) CDS – Completely Decomposed State from Rock Classification System (Williamson , 1988 CQ – Crater Quality from the Unified Rock C System (Williamson , 1984) Folder Classification (Compositional Leonard
	<b>E5</b> - 0-0.7 It- CV3 colluvium, sandy ML with roots <b>E6</b> $0 > 1.7$ ft CV3 conducting and c of PDS schirt at the provide root fill dropped down from group surface	Foi/CL – Foilation/Compositional Layering Frac - Fracture
	1 7ft up to 0.7ft long	ft – feet
	<b>E7</b> - 0-1ft CV3 colluvium, black organic MI	g – gravel PDS – Partially Decomposed State from the
	1-1.25 ft CV7 colluvium, brown clavev ML	Classification System (Williamson , 1984)
	E8 - rooty, most likely CV3	STS – Stained State from the Unified Rock C
	E9/F6 - 0-1.5ft: CV3 dark brown organic SM grading to 1.5-3 ft CV7 yellow brown and E4-Residual soil	System (Williamson , 1984)
	micaceous organic SM with g and c of STS-PDS schistose metagraywacke up to 0.5 ft long.	Reference:
	3-3.5: CV8 colluvium, yellow brown micaceous silty sandy GM.	
3650ft	S.5. ft (hand auger refusal): CDS bedrock	Williamson, D.A., 1984, Unified rock classifica
	<b>E10</b> -100ty, most likely CV3 Quartz, mica, kyanite s <b>E12</b> (~12 ft east) - 0-3 2ft: CV3 Colluvium medium brown SP-SM with a of schist and charcoal (sampled) Soil Fol/CL: 30/4 8	30/66 XXI, no. 3, p. 345-354.
	sampled from 1.8-2.5ft Frac: 255/62	
	3.2-3.7ft : CV4 colluvium, yellow brown with abundant clasts. Mottled at contact with soil below. Frac: 50/90	
	3.7-4.6ft: CV5 lighter brown with g clasts and hair-like roots.	
	4.6-4.9ft : CV6 dark brown A-horizon 0.3ft thick with 0.3-0.4ft STS schist clasts. CV5/CV6 soil contact slopes	
	with hillside at dip of 47 degrees. Contains charcoal (sampled).	of upper Bench Lab No 160342
	4.9-5.6ft: CV6 colluvium, base of A-horizon, very dark brown carbon rich or burned layer with STS-CDS clasts.	<b>3</b> -Upper Bench
	Contains charcoal (sampled).	<sup>14</sup> E15-Lower Bench Lab No 160340
	s.6->8.511:CV7 colluvium yellow brown micaceous silly coarse sand with g, c, and b up to 0.411 long of 515	E16/L16
2550f+	<b>9ft Slope dist above E13</b> . 0-2ft CV7 Matrix supported SM with g. >2ft clast suported. Overall: matrix supported with rocky. clast	ock E17
322011	supported horizons of medium brown to yellow brown with a few dark mottles, micaceous SM with g and c of subangular schist	ace E18/M10 Due East is OC
	fragments up to 0.5ft long. Soil sampled	<sup>755</sup> Estimated Pre-failure Base of Fil
	E13 - Residuum of brown, micaceous, sandy ML with g of PDS clasts of schist	drock surface Estimated Pre-failure Ground Su
	E14 - F1-fill E15 Soil campled Colluvium matrix supported CV6 medium dark brown SM shanging to CV7 vellow brown at denth micascours SM	<sup>8/60</sup> £19/K10
	$\mu$ = 15 - Soli sampled. Colluvium, matrix supported, CVO medium-dark brown SW, changing to CV7 yellow-brown at depth micaceous SW, w/ $\alpha$ and $c$ of subangular-angular PDS-CDS muscovite biotite schist fragments up to 0.7ft long: some black wood fragments	E20/J10
	<b>E16/L16 to E17</b> - 0-12ft slope distance: F1 excavation waste/fill, grav brown to black mottled soil with large woody debris, some rotten:	E21/19
	and STS g to b sized clasts.	E22/H10
	12-13ft: CV3 colluvium, dark brown/black soil with roots and leaves laying parallel to slope at ~35-50 degrees	E23/G6-Water f
	>13ft: CV7 mixed zone of compact, yellow brown and dark brown/black colluvium	Frac: 340/68 running
	E18/M10-0.2 ft of D1 debris, medium brown SM over >2ft thick CV7 yellow brown colluvium	F24
3450ft	E19 (10 ft SD upslope) Bedrock surface 255/55	
5 15010	E19/K10-0.3 ft thick D1 medium to dark brown SM/ML debris over	E26-Entering shallow seconda
	0.7ft CV8 yellow brown silty sandy GM with c of STS-PDS schist and metagraywacke covering lower part of OC	stream channel
	E19 (3 ft east) - 0.2-0.3 ft thick D1 medium to dark brown SM/ML debris over	
	Bedrock of STS, Crater Quality, metagraywacke w/ quartz veins and sub-parallel Fol/CL: 51/68.	
	Fol/CL:68/75	
	Frac: 340/68	
	Bedrock surface: 288/60	
	E20/J10-1-2 ft thick D1 debris	
	E21/I9-2-3TT TNICK D1 debris	
3350ft		

100ft

200ft

300ft

0ft



ABBREVIATIONS

b – boulders

rom spring here

house \12ft x 8ft x 5ft boulder E27 **E46** edge of house debris, large downed E25 E26 E47 edge of porch, potential E28 edge of cut behind house muddy debris E50 Tree Muddy debris 0.5-2 ft thick on east side of house, no debris material

400ft

500ft Appendix A

600ft