

5/10/08 UNIT DESCRIPTIONS WFZ BC seg, Hansen Canyon North TRENCH

additional data see notes

Hansen Can Main fault (North Trench)

South Trench

Unit Number	Location hor./vert. (m)	Matrix grain size	% gravel	Largest clast (mm)	Sorting	Dry color	Dry <sup>a</sup> consistence	Wet <sup>b</sup> consistence	Lower <sup>c</sup> boundary	Soil <sup>d</sup> development	Genesis	Comments			
												<0.2cm	0.2-2cm	2-4cm	>4cm
1 pebbly debris flow	16.5/7.9	silt loam (sl. sandy)	60%	80; 20-40 common	massive matrix sup.	7.5 yr 4/2 wet 7.5 yr 3/2 moist	lo + so	ss; ps	a-c; s-w	A-horiz. upper 5cm (Same color as unit)	Mudflow (fire-related?)	40%	40%	40%	20%
2	15.50/7.68	loam - silty loam	75%	120-140; 50-70 ave	v. poor clast matrix	7.5 yr 4/4 dry 7.5 yr 3/3 moist	so	so-ss; ps	a, i (tectonic)	none	fault-scarp colluvium	25%	20%	30%	50% -clast supported near stream -matrix sup. near stream
3a pebbly debris flow	19.60/7.32	loam-silt loam	50%	200-240; 50-80 ave	poor clast supported	10 yr 5/3 dry 10 yr 4/4 moist	so	ss; ps-p	c; s	A horizon on 3	debris flow - longan-rich soil	50%	25%	25%	50%
3b	21.05/6.88	silt loam	70%	80-100; 30-60 ave	poor matrix sup.	10 yr 7/6 dry 10 yr 5/8 moist	so-sh	ss; p	c; s	none - carbon-rich matrix from source	debris flow	30%	10%	30%	30%
4	20.98/6.30	silt loam	50%	150-200 50-70 ave	poor matrix sup.	10 yr 7/6 dry 10 yr 5/6 moist	so-sh	so-ss; ps-p	NA	none - carbon-rich matrix from source	debris flow	50%	30%	30%	40%
1				500mm 20-40 common	poor/ massive matrix sup.				a-c/s-w	A-hz	Debris flow dep.	Collection of large boulders exposed in S trench - suspended in pebble-rich matrix			
2				240 40-60 ave.	poor/ no bedding matrix sup.				a-c/s-w	-	colluvium (scarp)	pebble & rubble rich, sandy matrix			
3a				300/80-100 common	poor matrix sup.				a-g/s-w	A-hz. on 3	Debris flow - carbon-rich soil	Some very large clasts (boulders); collection of cobbles 100-200mm localized in frontal (m-mark 14-15.5 [hz])			
3b				200/50-80	poor matrix sup.				c/s-w	-	Debris flow dep.	v. rubble rich - sandy matrix			
4				230/30-50	poor mostly matrix v. weak bedding				ne	-	Debris flow dep.	very pebble rich, very few cobbles; sandy matrix			

Hansen Canyon North Trench, Unit/Soil Descriptions

<sup>a</sup> dry consistence: lo—loose, so—soft, sh—slightly hard, h—hard, vh—very hard, eh—extremely hard  
<sup>b</sup> wet consistence: so—nonsticky, ss—slightly sticky, s—sticky, vs—very sticky; po—nonplastic, ps—slightly plastic, p—plastic, vp—very plastic  
<sup>c</sup> lower boundary: distinctness; a—abrupt (1 mm-2.5 cm), c—clear (2.5-6 cm), g—gradual (6-12.5 cm), d—diffuse (>12.5 cm); topography; s—smooth, w—wavy, i—irregular  
<sup>d</sup> maximum soil development in unit at this location; roman numerals are stage of carbonate morphology