

**APPENDIX 2. General field observations, including: bedrock lithology, joints, slope angle, slope material, avalanche dimensions, debris volume, and morphological classification**



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AVALANCHE SITE	BEDROCK LITHOLOGY	JOINTS			SLOPE ANGLE		SLOPE MATERIAL	AVALANCHE DIMENSIONS			DEBRIS VOLUME (m <sup>3</sup> )	MORPHOLOGICAL CLASSIFICATION*
		Major	Secondary	Minor	Original	Residual		Length (m)	Width (m)	Depth (m)		
2a	Variably foliated augen granite	215°/73° SE	308°/81° SW	210°/84° NW	34°	34°	Colluviated bouldery diamicton	475	30	0.75	10 000	4
2b	Variably foliated augen granite	215°/73° SE	308°/81° SW	210°/84° NW	34°	34°	Colluviated bouldery diamicton	350	10	0.75	2 600	4
4a	Variably foliated augen granite	-	-	-	27°*		Colluviated bouldery diamicton				> 4 000	4
4b	Variably foliated augen granite	-	-	-	27°*	U: 50° L: 27°	Colluviated bouldery diamicton	225	10	0.75	1 600	4
6	Un - to weakly foliated biotite monzogranite	-	-	-	38°	42°	Colluviated bouldery diamicton	10	T: 4 B: 8	1.5	120	1
7	Un - to weakly foliated biotite monzogranite	-	-	-	T: 35°* B: 22°*	T: 35°* B: 22°*	Colluviated bouldery diamicton	150	T: 10 B: 25	0.5	1 800	4
9a	Granite-granodiorite	-	-	-	45°	40°	Colluviated bouldery diamicton	15	9	-	-	1
9b	Granite-granodiorite	-	-	-	32°	32°	Colluviated bouldery diamicton	85	6	1	500	2a
9c	Granite-granodiorite	-	-	-	38°	38°	Colluviated bouldery diamicton	73	12	0.75	650	2a
9d	Granite-granodiorite	-	-	-	41°	41°	Colluviated bouldery diamicton	73	12	0.75	650	2a

Appendix 2. (continued)

9e	Granite-granodiorite	-	-	-	-	34°	34°	Colluviated bouldery diamicton	35	12	0.75	310	2a
9f	Granite-granodiorite	-	-	-	-	35°	35°	Colluviated bouldery diamicton	75	10	0.75	560	2a
12	Medium grained diorite	-	-	-	-	-	45°	Colluviated bouldery diamicton	66	15	0.85	850	2a
13	Foliated diorite	332°/76° SW	204°/78° NW	313°/76° NE	-	-	45°	Colluviated bouldery diamicton	85	8	1	680	3
14	Foliated diorite	270°/30° S	-	-	-	-	44°	Colluviated bouldery diamicton	100	8	1	800	3
15	Coarse grained monzogranite	276°/50° SW	339°/86° NE	-	38°	38°	38°	Colluviated bouldery diamicton	16	10	1.5	243	1
16	Coarse grained monzogranite	327°/46° SW	233°/64° SE	289°/60° NE	44°	44°	44°	Colluviated bouldery diamicton	53	5	T: 1.5 B: 3.0	600	2a
17	Coarse grained leucomonzogranite	260°/58° S	306°/35° NE	-	36°	36°	36°	Colluviated bouldery diamicton	100	T: 7 B: 32	0.75	550	2a
18	Coarse grained leucomonzogranite	314°/55° NE	196°/71° NW (m)	270°/63° S	60°	60°	60°	Rock	70	T: 10 B: 18	0.5	400	Rockfall
19	Undivided metasedimentary	321°/60° NE	201°/73° NW (m)	-	T: 75° B: 45°	T: 75° B: 45°	T: 75° B: 45°	Colluviated bouldery diamicton + gus	95	T: 5 B: 30	1	1 700	2a
20	Undivided metasedimentary	240°/57° NW	325°/73° E (m)	316°/34° NE	44°	44°	44°	Colluviated bouldery diamicton	48	10	0.5	240	2a
21	Coarse-grained leucomonzogranite	302°/53° NE	277°/68° SW	246°/77° SE	T: 45° B: 42°	T: 45° B: 42°	T: 45° B: 42°	Colluviated fill and rock	110	T: 8 B: 15	1	1 300	3
23	Weakly foliated diorite	-	-	-	30°	30°	30°	Cobbly-bouldery diamicton/till	60	T: 1 B: 4	T: 1 B: 3	660	1
24	Well-foliated diorite	-	-	-	45°	45°	45°	Shattered rock	140	30	0.5	2 100	Rockfall

Appendix 2. (continued)

25	Coarse-grained bionite monzogranite	210°/82° SE	335°/88° NE	-	31°	31°	T: 31° B: 31°	600	T: 12 B: 14	T: 1 B: 3	24 000	4
27	Coarse grained leucomonzogranite	249°/73° NW	315°/72° SW	-	37°*	37°*	T: 37°* B: 37°*	325	12	1	3 900	3
28	Coarse grained leucomonzogranite	330°/76° SW	231°/45° SE	-	45°	45°	T: 45° B: 45°	200	30	0.75	4 500	Rockfall
31	Coarse grained monzogranite	306°/48° NE	236°/32° SE	-	T: 42° B: 45°	T: 42° B: 45°	T: 42° B: 45°	300	T: 30 B: 4	T: 1.5 B: 2.0	12 400	3
32	Coarse grained leucomonzogranite	206°/71° NW	240°/76° NW	-	55°*	55°*	T: 55°* B: 55°*	210	8	0.75	1 300	1/2a
33	Coarse grained leucomonzogranite	206°/77° NW	312°/63° SW (m)	277°/75° SW	40°	40°	T: 40° B: 40°	250	40	1.5	15 000	4
34	Highly porphyritic monzogranite	248°/72° NW	343°/87° NE (m)	-	38°*	38°*	T: 38°* B: 38°*	240	8	1	1 900	4
35	Coarse grained leucomonzogranite	290°/8° SW	-	-	55°*	55°*	T: 55°* B: 55°*	30	12	1	360	2a
36	Coarse grained leucomonzogranite	290°/8° SW	-	-	40°	40°	T: 40° B: 40°	37	10	0.5	180	2a
37	Strongly foliated diorite	-	-	-	40°	40°	T: 40° B: 40°	6	3	0.5	9	1
38	Strongly foliated diorite	327°/34° SW	277°/62° S (m)	278°/62° N	42°	40°	T: 42° B: 40°	12	4	0.75	36	1/2a
39	Strongly foliated diorite	269°/19° S	290°/60° S (m)	330°/43° NE	40°	40°	T: 40° B: 40°	12	4	0.5	24	2a
40	Strongly foliated diorite	311°/027° SW	327°/75° SW (m)	-	45°	40°	T: 45° B: 40°	70	12	0.75	640	2a

Appendix 2. (continued)

41	Metamorphic rock	-	-	-	-	45°	48°	Colluviated bouldery diamiction	12	T: 4 B: 8	T: 1 B: 3	200	1
42	Granite	323°/79° SW	192°/73° E	-	43°*	43°*	43°*	Fractured rock	110	8	0.25	220	2a
43	Coarse grained leucomonzogranite	309°/75° SW	192°/70° SE (m)	350°/34° W	45°*	45°*	45°*	Fractured rock	140	T: 20 B: 8	0.25	490	4
44	Coarse grained leucomonzogranite	298°/85° NE	202°/68° SE	230°/58° SE	49°*	49°*	49°*	Highly fractured rock	90	6	0.25	140	4
45	Nonfoliated monzogranite	228°/70° NW	219°/25° SE	-	54°	70°	70°	Jointed rock	50	16	4	3 200	Rockfall
46	Tonalite	281°/87° N	240°/48° NW	-	36°*	44°	44°	Shattered rock and colluviated till	190	T: 15 B: 25	T: 1.0 B: 0.25	2 000	3
47	Tonalite	-	-	-	-	45°	45°	Colluviated till/diamiction	30	10	0.75	220	1/2a
48	Tonalite	180°/48° E	191°/57° W (m)	136°/28° W	35°*	40°	40°	Till and shattered rock	140	T: 15 B: 3	T: 3 B: 2	4 700	2b
49	Metamorphic rock	-	-	-	37°*	T: 44° M: 48°	T: 44° M: 48°	Till and shattered rock	220	T: 20 M: 10	T: 4 M: 3	8 000	2b
50	Tonalite	-	-	-	T: 36°* B: 21°*	T: 45°	T: 45°	Till	70	22	4.5	6 930	2b
51	Tonalite	-	-	-	26° (avg.)	T: 45° B: 40°	T: 45° B: 40°	Till and colluviated diamiction	130	8	1.5	1 000	2b
52	Granite-granodiorite	205°/38° SE	-	-	43°*	45°	45°	Shattered rock	90	3	1.5	400	4
53a	Coarse grained monzogranite	320°/75° SW	-	347°/90°	40°	45°	45°	Shattered and weathered rock	90	T: 8 B: 10	1	1 600	2a
53h	Coarse grained monzogranite	320°/75° SW	-	347°/90°	40°	52°	52°	Shattered and weathered rock	90	T: 8 B: 10	1	1 600	2a
54	Metamorphic rock	-	-	-	-	-	-	Till and colluviated diamiction	-	-	-	-	3

- = no observation; m = also major joints; \* = calculated from orthophotograph; T = top; B = bottom; M = middle