

Location:	<i>C</i>	Site:	<i>A</i>	Date:	<i>2020-3-13</i>
Time:	<i>0950</i>	Observers:	<i>Erica Shumway</i>	Interval board SWE measurement	
Precip Rate	<i>(None)</i>	Very Light (0.5 cm/hr)	Light (1 cm/hr)	Moderate (5 cm/hr)	Heavy (10 cm/hr)
Precip Type	Rain	Snow	Graupel	Hail	Rain/Snow
Sky	Clear	<i>Few</i> (< 1/4 of sky)	<i>Scattered</i> (1/4-1/2 of sky)	Broken (> 1/2 of sky)	Overcast (complete cover)
Wind	Calm (0 mph)	<i>Light</i> (1 - 16 mph)	Moderate (17 - 25 mph)	Strong (26 - 38 mph)	Extreme (> 38 mph)
Tree Canopy	<i>No trees</i>	Sparse (5 - 20%)	Open (20 - 70%)	Closed (> 70%)	Ground Vegetation <i>Smooth</i> (< 5 cm)
Instrument	Y/N	SN	Instrument	Y/N	SN
Digital LWC	X		Snow Scope	Y	<i>Z08</i>
Stratigraphy pictures	Y		Lyte Probe	N	Weather
Standard ram	Y		SMP	N	
Powder Ram	Y		Force Ram	V	Pit
Slush Ram	N		Force Snow Scope	V	Hardness
HS Transects	V		Snow Scope Transects	N	
Pit Pictures	Y		SSA / NIR Box	Y	
Other			Misc		<i>WHS @ Skid</i>

Location (Regional Scale)	Date (MMYYMD)	Observers (first initial & last name):	Comments/Notes:														
Site (Study Plot)	Time (pit opened)	Temperature profile times	START	END													
Pit ID	Snow Depth (cm)	LWC	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:											
Am	142	6101	1201	1000	0412192	Garmin 655 ±7m											
Am 20250313	142	6101	1201	1000	13												
Density		LWC	Temperature	Stratigraphy													
Height above ground	Density profile A (kg/m ³)	Density profile B (kg/m ³)	Extra Density	Permittivity profile A (unitless)	Permittivity profile B (unitless)	Height above ground (cm)	T °C	Height above ground (cm)	Max	Min	Avg	Grain Size (mm)	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments	
top - bottom (cm)						(cm)		(cm)									
142 - 132	184	185	1.34	1.36	1.38	-4.5	143	-128	1	0.3	0.5	FLSF	F	D	SW 22 4.8 3.5 (173)		
132 - 122	216	217	1.32	1.30	1.38	-12	122	-124	0.8	0.1	0.3	FLSF	4F	D	127. Potentially buried SW (122)		
122 - 112	242	264	1.58	1.66	132	-10.5	138	-124	0.8	0.1	0.3	FLSF	D	D	127. Potentially buried SW (122)		
112 - 102	301	306	1.66	1.65	124	-9.5	102	-106	0.8	0.1	0.3	FLSF	IF	D	new snow buried SW (122)		
102 - 92	313	317	1.73	1.73	120	-6.5	102	-106	0.8	0.1	0.3	FLSF	IF	D	19.4 54.5 (281)		
92 - 82	339	327	1.64	1.70	110	-6	82	-94	1	0.3	0.5	FLSF	P	D	23.7.5 (311)		
82 - 72	286	283	1.55	1.53	106	-5.5	72	-84	1	0.3	0.5	FLSF	P	D	18.6 57.5 34.6 109.5 16 52 (311)		
72 - 62	311	315	1.62	1.62	100	-5.5	62	-74	1	0.3	0.5	FLSF	IF	D	29.80.5 (278)		
62 - 52	315	315	1.60	1.55	90	-5	52	-64	1	0.3	0.5	FLSF	IF	D	29.80.5 (278)		
52 - 42	234	263	1.47	1.52	84	-4.5	42	-54	1	0.3	0.5	FLSF	IF	D	29.80.5 (278)		
42 - 32	286	281	1.51	1.63	80	-4.5	32	-29	1	0.3	0.5	FLSF	IF	D	29.80.5 (278)		
32 - 22	259	259	1.45	1.51	70	-4	22	-19	1	0.3	0.5	FLSF	IF	D	29.80.5 (278)		
22 - 12	288	296	1.52	1.54	60	-3.5	12	-19	1	0	1	FLSF	IF	D	29.80.5 (278)		
12 - 02	280	268	1.57	1.48	40	-2.5	02	-30	-	-	-	FLSF	IF	D	29.80.5 (278)		
- -	-	-	-	-	30	-2	-	-	-	-	-	FLSF	IF	D	29.80.5 (278)		
- -	-	-	-	-	20	-1	-	-	-	-	-	FLSF	IF	D	29.80.5 (278)		
- -	-	-	-	-	10	-1.5	-	-	-	-	-	FLSF	IF	D	29.80.5 (278)		
- -	-	-	-	-	0	-1	-	-	-	-	-	FLSF	IF	D	29.80.5 (278)		

Ram Penetrometer Field Data Sheet

Location:	GPI					Tube weight	T	kg	
Site:	Am					Hammer weight	H	kg	
Associated pit/transect/point:	Am 20250313					Number of falls	n		
Date:	20250313					Fall height	f	cm	
Observer:	Eric Cuz Skinskey					Location of point	p	cm	
UTME:	UTMN:		Zone:		$RN = T + H + nfH/p$ kg				
Ram type:	STD		Ram mass: kg		$RR = 9.81 (T + H + nfH/p)$ N				
T	H	n	f	p	T	H	n	f	p
2	0	0	0	29	2	0.5	1	10	70
2	0.5	0	0	29					73
6	3	30			1	5	74		
7	5	31					75		
2	20	32			2	5	76		
3	20	33					77		
2	20	34			3	5	78		
3	20	35			2	10	79		
		36			1	10	80		
3	20	37			2	10	81		
2	30	38			2	15	82		
		39			1	15	83		
		40					84		
		41					85		
1	30	42					86		
2	30	43					87		
		44					88		
1	30	45			2	15	89		
1	40	46			1	15	90		
		47					138		
2	40	48			3	10	139		
1	40	49			2	20	140		
		50			1	20	141		
		51			2	20	142		
2	40	52			2	30	142.5		
3	40	53							
2	60	54							
1	60	55							
		57							
		58							
		59							
		60							
1	50	62							
1	30	63.5							
1	70	66							
1	10	67							
		68							
		69							

Notes:

Ram Penetrometer Field Data Sheet

Location:						Tube weight	T	kg	
Site:						Hammer weight	H	kg	
Associated pit/transect/point:						Number of falls	n		
Date:	Time: 1127					Fall height	f	cm	
Observer:						Location of point	p	cm	
UTME:	UTMN:	Zone:			$RN = T + H + nfH/p$ kg				
Ram type: Pow		Ram mass: kg			$RR = 9.81 (T + H + nfH/p)$ N				
T	H	n	f	p	T	H	n	f	p
0.1	0	0	0	4		3	25	42	
0.1	0.2	0	0	4.5					43
		1	1	6					44
				7					45
		3	1	8					46
		2	5	9					47
		1	5	10					48
		2	5	11					49
		1	10	12					50
		2	6	13					51
		1	10	14		5	25	52	
				15		6	25	53	
				16		7	25	54	
				17		6	25	55	
				18		5	25	56	
				19		4	25	57	
		2	10	20					58
		1	10	21		3	25	59	
		2	16	22					60
		1	16	23					61
				24					62
		2	15	25		1	25	63	
		2	20	26		2	20	64.5	
		1	20	27		1	20	65	
		2	20	28					66
		3	25	29					67
		2		30		2	20	68.5	
		2	25	31		1	20	69.5	
				32					70.5
		3	25	33					72
				34		1	15	73	
				35		1	15	74	
				36		1	15	75	
				37					
				38					
	4	25	39						
				40					
				41					

Notes:

Location:	C	Date:	20250313
Site:	Front KN	Time:	1117
Pit:	Front 20250313pm	Observers:	Emilia Skjerve
X-Coord	Y-Coord	Time	Force
0	30	1117	Depth
30	60	1127	Depth
60	90	1138	max
90	120	1140	manual
0	60	1141	digital
30	60	1144	Grnd
60	60	1000	Y/N
90	60	191	Comments
120	60	158	
0	90	158	
30	90	151	
60	90	1683	
90	90	71	
30	1147	75	
60	1148	81	
90	1149	80	
120	1150	76	
		64	
		65	
		79	
		79	
		78	
		78	

Location (regional scale)		Site (study plot)		Transects		Date	Time			
				A, B		20250313	Start	End		
Observer(s)		Wx Description								
Evelyn Skinner		Few Light No None								
09217 Transect A 0937				0714 Transect B 0724						
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)			
0	152	31	193	0	146	31	141			
1	154	32	188	1	147	32	144			
2	159	33	175	2	149	33	145			
3	167	34	171	3	148	34	147			
4	165	35	168	4	150	35	147			
5	161	36	171	5	148	36	150			
6	164	37	177	6	155	37	156			
7	169	38	182	7	151	38	156			
8	173	39	182	8	151	39	162			
9	176	40	180	9	153	40				
10	177	41	183	10	150	41				
11	185	42	178	11	146	42				
12	186	43		12	141	43				
13	188	44		13	149	44				
14	181	45		14	148	45				
15	177	46		15	148	46				
16	181	47		16	147	47				
17	177	48		17	146	48				
18	176	49		18	141	49				
19	180	50		19	138	50				
20	183	51		20	138	51				
21	181	52		21	137	52				
22	186	53		22	139	53				
23	187	54		23	138	54				
24	193	55		24	138	55				
25	197	56		25	140	56				
26	203	57		26	141	57				
27	205	58		27	140	58				
28	213	59		28	142	59				
29	210	60		29	140	60				
30	198			30	140					

Specific Surface Area . . . 7.5