Location:	C6		Site:	FEE HA	Date:	20260306
Time:	1535	Observers:	Eric Cus Skinner			

Precip Rate	None	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	Few (< 1/4 of sky)	Scattered (1/4-1/2 of sky)	Broken (> 1/2 of sky)	Overcast (complete cover)
Wind	Calm (0 mph)	Light (1 - 16 mph)	Moderate (17 - 25mph)	Strong (26 - 38 mph)	Extereme (> 38 mph)
Tree Canopy	No trees	Sparse (5 - 20%)	Open (20 - 70%)	Closed (> 70%)	

Interval board SWE measurement

	Depth (cm)	SWE (mm)	Density (kg/m3)	Evidence of melt resulting in SWE loss? (Y/N)
Sample A	2.2	3.5	159	Y
Sample B	2	3	150	
Sample C	2	3.5	175	
Ground condition	Frozen	Moist	Saturated	
Ground roughness	Smooth (< 5 cm)	Rough (5 - 20 cm)	Rugged (> 20 cm)	
Ground Vegetation	Bare	Grass	Shrub	Deadfall
Height of Ground Vegetation (cm)		10		

Instrument	Y/N	SN	Instrument	Y/N	SN
Digital LWC	N		Snow Scope	Y	388
Stratigraphy pictures	Y		Lyte Probe	N	
Standard ram	Y		SMP	N	
Powder Ram	Y		Force Ram	Y	
Slush Ram	N		Force Snow Scope	Y	151
HS Transects	Y		Snow Scope Transects	N	
Pit Pictures	Y		SSA / NIR Box	Y	101
Other					

Additional Comments

Weather

Pit — Perc columns pools in pit

Hardness

Misc — HS stake 98cm

Location (Regional Scale)	Date (YYYYMMD)	Observers (first initial & last name):			Comments/Notes:
6	20250306	EmcLS		Temperature profile times	
Site (Study Plot)	Time (pit opened)	SKinney		START: 1540	END: 1410
FEFHo	1525				

Pit ID (SITEYYYYMMDD)	Snow Depth (cm)	LWC Device & SN	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:
FEFHo20250306	105	101 250Kg/m³ 1608	0424431	4917565	12	Garmin 66s ~7m

Density

Height above ground top (cm) - bottom (cm)	Density profile A kg/m3	Density profile B kg/m3	Extra Density kg/m3
100.4 - 98.2	1.6	2.5	55
98.2 - 91.4	7.4	14.5	196
91.4 - 86.6	4.8	12	250
86.6 - 69.4	17.2	48	279
69.4 - 62.8	6.6	20	303
62.8 - 59.8	3	10	333
59.8 - 31	28.8	75.5	262
31 - 15	16	40	250
15 - 0	15	40.5	270
-			
105 - 95	146	156	
95 - 85	251	261	
85 - 75	258	242	
75 - 65	274	277	
65 - 55	280	279	
55 - 45	251	250	
45 - 35	262	259	
35 - 25	244	232	
25 - 15	264	248	
15 - 02	228	244	
-			5 →
-			
-			
-			

LWC

Permittivity profile A (unitless)	Permittivity profile B (unitless)
78.4	71
53.3	53.9
54.1	45.8
58.4	60.4
67.3	67.3
61.7	66.2
62.1	58.7
39.0	42.8
38.3	39.4
34.2	33.7
22.5	30.4
47.1	47.5

Temperature

Height above ground (cm)	T oC
107	-0.5
105	-0.5
100	-0.5
97	-0.5
94	-1
90	-1.5
80	-2
75	-2
70	-2
67	-2
65	-2
60	-2
50	-1.5
40	-1.5
37	-1.5
30	-1
20	-0.5
10	-0.5
0	-0.5

Stratigraphy

Height above ground top (cm)	-	bottom (cm)	Grain Size (mm) Max	Min	Avg	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
107	-	105	1	0.3	0.5	DFdc	F	M	PPgp FCSf PPsd /
105	-	97	0.8	0.3	0.5	DFdc	4F	M	FCSf /
97	-	94	1.5	0.5	1	MFcr	K	D	MFpc /
94	-	75	1	0.3	0.5	RGlr	4F	M	necks /
75	-	67	1.5	0.5	1	RGlr	1F	D	/
67	-	65	1.5	0.5	1	MFcr	P	D	MFpc /
65	-	37	1.5	0.8	1	FCxr	F	D	/
37	-	20	2.5	1	1.5	DHxr	F	D	/
20	-	0	6	1	2	DHxr	4F	D	/
	-								
	-								
	-								

Location:	CO	Date:	20250306								
Site:	CEPHQ	Time:	1629				Force	Depth	Depth		
Pit:	CEPHQ20250306	Observers:	Emilie Skinner				max	manual	digital	Grnd	
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	N	cm	cm	Y/N	Comments
0	30	1629	STD					104			
30	30	1631	Roll					75			
0	60	1640	Scope	308	177			106	105		Towards
30	"	1640	"	"	178			106	109		
60	"	1640	"	"	179			104	92		
90	"	1641	"	"	180			105	100		
120	"	1641	"	"	181			106	93		
0	90	1643	F Ram			1000	88	90			
30	"	1643	"			"	93	88			
60	"	1643	"			"	85	90			
90	"	1643	"			"	97	91			
120	"	1643	"			"	76	94			
0	120	1647	F Scope	151	1078		38	75	65		Towards
30	"	1647	"	"	1079		35	75	73		
60	"	1647	"	"	1080		19	75	72		
90	"	1648	"	"	1081		34	75	74		
120	"	1648	"	"	1082		30	75	73		

Ram Penetrometer Field Data Sheet

Location: CO

Site: FEFHQ

Associated pit/transect/point: FEFHQ 20250306

Date: 20250306 Time: 1629 / 1634

Observer: Gabe Skinner

UTME: UTMN: Zone: 13

Ram type: STD Row Ram mass: kg

Tube weight	T kg
Hammer weight	H kg
Number of falls	n
Fall height	f cm
Location of point	p cm
$RN = T + H + nfH/p$	kg
$RR = 9.81 (T + H + nfH/p)$	N

T	H	n	f	p
1	0	0	0	14
1	0.5	0	0	14
		10	5	15
		1	10	16
				29
		3	3	30
		1	5	31
				32
		2	5	33
				34
		3	5	35
		4	5	36
		3	10	37
		2	10	38
				39
		2	5	40
		5	2	41
		6	3	42
		4	5	43
		4	10	44
		3	10	45
		1	10	46
		1	10	75
		1	5	94
		2	5	95
		1	10	96
				97
				98
		1	5	99
				100
				101
				102
				103
		4	5	104

T	H	n	f	p
0.1	0	0	0	2
0.1	0.1	0	0	4
		1	5	5
		2	5	6
		2	10	7.5
		1	10	8
				9
				10
		2	10	11
		3	10	12
		4	20	13
		6	25	14
		7	25	15
		5	25	16
		2	25	17
		1	25	18
				19
				20
				21
				22
				23
				24
				25
				26
				27
		2	25	28
				29
		3	25	30
		4	25	31
				32
		3	25	33
				34
				35
		4	25	36
		5	25	37
				38
				39
		4	25	40

T	H	n	f	p
		2	25	41
		3	25	42
				43
		4	25	44
		4	25	45
		5	25	46
		2	25	47
		1	25	48
				49
				50
				51.5
		1	20	53
		1	10	54
				55
				56
				57
		2	10	58
				59
		1	20	60
				61
				62
				63.5
				64.5
				66
				67
				68
				69
				70
				71.5
		1	15	72
				73
				74
		2	15	75

Notes: