

Observers: CL

Center for Snow and Avalanche Studies

Profile # 1

Time: 0930 MST

Snowpack Profile

Date: 11/2/13

Location: GAAP

Elev. 11,060' Aspect: NE

Boot Pen: 48 cm  $\angle$ : 3 °

Air T: +5 °C Sky: 0

Precip: Nil Wind: Nil

Prior Pit: # -; - / - / -

Total Snowpack SWE: 102 mm H<sub>2</sub>O

Notes: HS # = 0.52 m;  $\rho = 196 \text{ kg/m}^3$

No dust observed

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes

Surf  
-7.2  
-8.8  
-9.3  
-4.5  
-1.9  
-1.1  
0.0

270											
260											
250											
240											
230											
220											
210											
200											
190											
180											
170											
160											
150											
140											
130											
120											
110											
100											
90											
80											
70											
60											
50											
40											
30											
20											
10											

7  
SWE  
14  
29  
59

-18 -16 -14 -12 -10 -8 -6 -4 -2 0

old MF patches

Incipient SH - small  
X-Fine particles  
stellars + DFs, X-soft band  
DFs + particles, no faceting  
lam MF ice, poly w/ facets  
chains small sups, some  
MF poly w/ facets on chain  
moist soil, green veg on bed

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CL, AT  
 Time: 0950 MST

Center for Snow and Avalanche Studies

Profile # 2

Location: SASP

Snowpack Profile

Date: 12/1/13

Air T: -1 °C Sky: 0

Elev. 11,000 Aspect: NE

Boot Pen: 42 cm  $\angle$ : 3 °

Total Snowpack SWE: 130 mm H<sub>2</sub>O

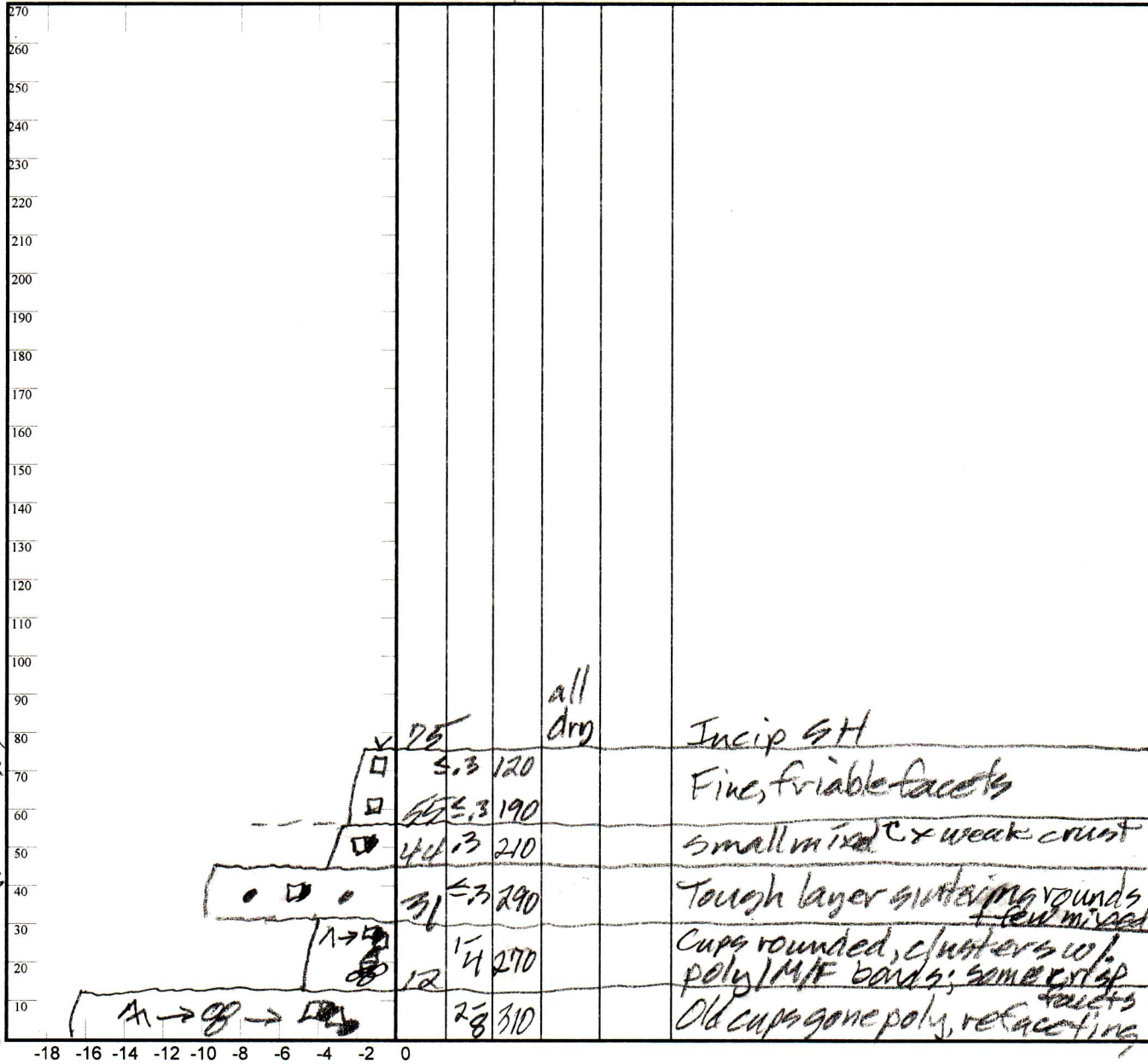
Precip: Nil Wind: LH

Prior Pit: # 1; 11/2/13

no dust observed

Notes: H<sub>2</sub>O = 0.15m;  $\rho = 240$  kg/m<sup>3</sup>;

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



SWE  
11.2

7  
SWE

-15.2  
-10.6  
-7.4  
-5.7  
-3.6  
-1.7  
-0.7  
-0.7

35  
24  
36  
53  
32

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm $\div$ m =	X X X 9.8 =							
B	mm $\div$ m =	X X X 9.8 =							

Notes:

Observers: CVAT

Center for Snow and Avalanche Studies

Profile # 3

Time: 1005

Snowpack Profile

Date: 12/2/13

Location: SB4P

Elev. 12,130

Aspect: NE

Boot Pen: 44 cm

$\angle$ : 3 °

Air T: 3 °C

Sky: 0

Precip: Nil

Wind: Lt/Med

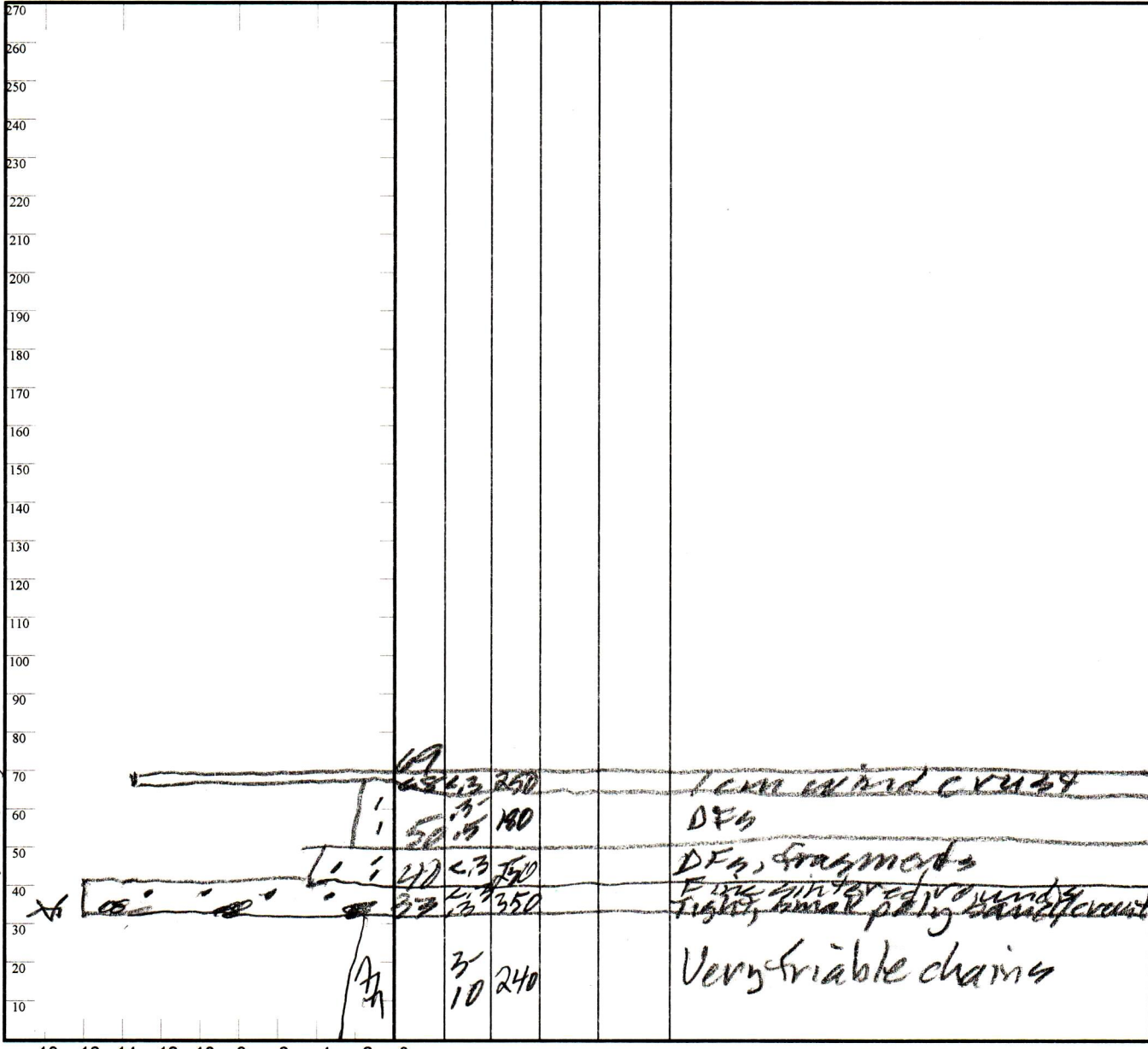
Prior Pit: # -; - / - / -

Total Snowpack SWE: 190 mm H<sub>2</sub>O

Notes: H<sub>ice</sub> = 0.70 m;  $\bar{\rho}$  = 271 Kg/m<sup>3</sup>; no

drift observed

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



surf  
-17.3  
-4.5  
-5.1  
-4.2  
-2.8  
-1.8  
0.6

4  
SWE  
39  
48  
103

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							
Notes:									

Observers: CLATS

Center for Snow and Avalanche Studies

Profile # 4

Time: 1000 MST

Snowpack Profile

Date: 1/6/14

Location: SASP

Elev. 11,040' Aspect: NE

Boot Pen: 32 cm  $\angle$ : 3°

Air T: -12°C Sky: 0

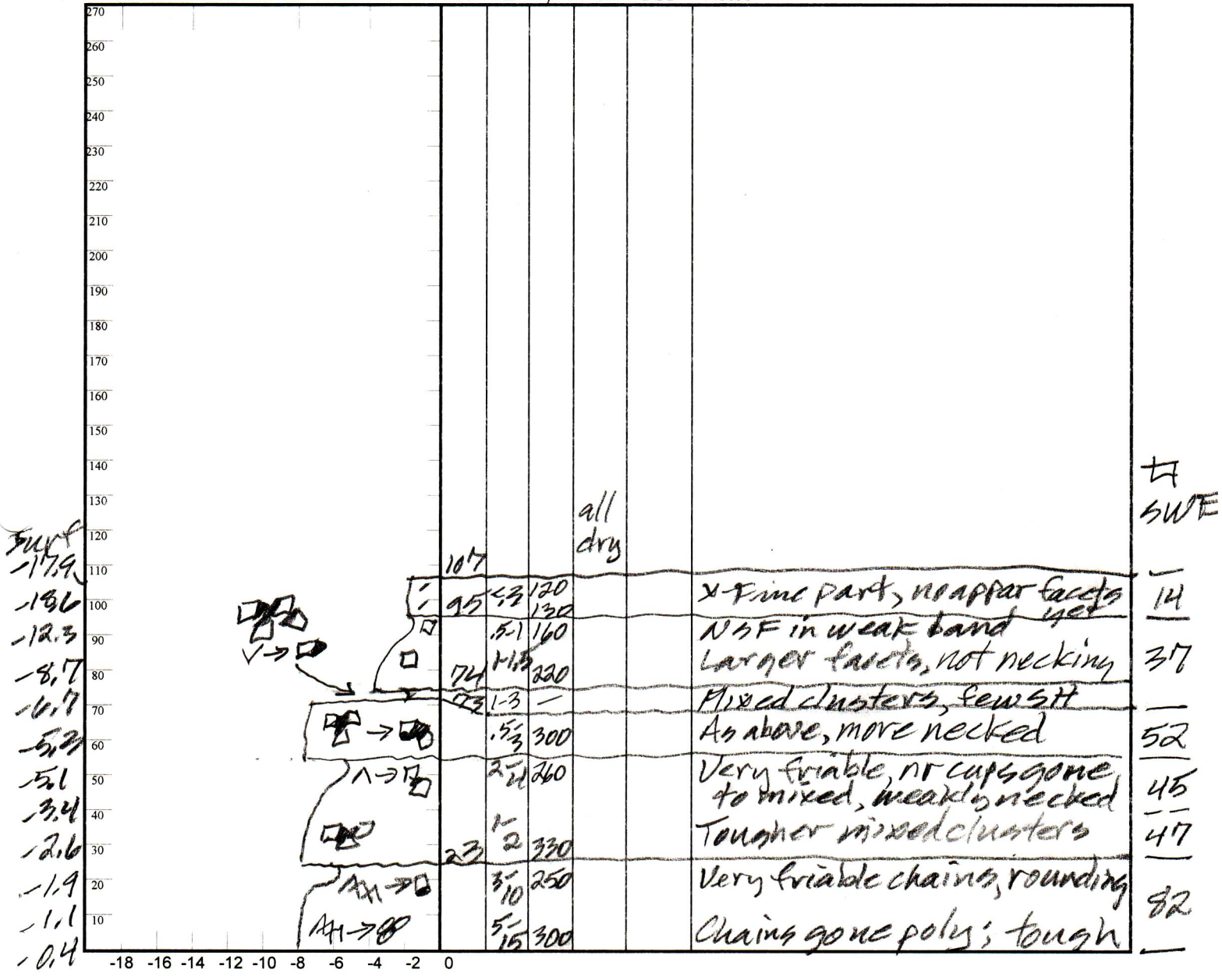
Precip: Nil Wind: Calm

Prior Pit: # 2; 12113

Total Snowpack SWE: 277 mm H<sub>2</sub>O  
no dust observed

Notes: H<sub>s</sub> = 1.06 m;  $\rho = 261$  kg/m<sup>3</sup>

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CAIJA Center for Snow and Avalanche Studies

Profile # 5

Time: 1045 MST

**Snowpack Profile**

Date: 11/2/14

Location: SBBP

Elev. 12,140 Aspect: NE Boot Pen: 0-10 cm  $\angle$ : 3°

Air T: -4 °C Sky: ☉

Precip: Nil Wind: Mod Prior Pit: # 3; 12, 2, 13

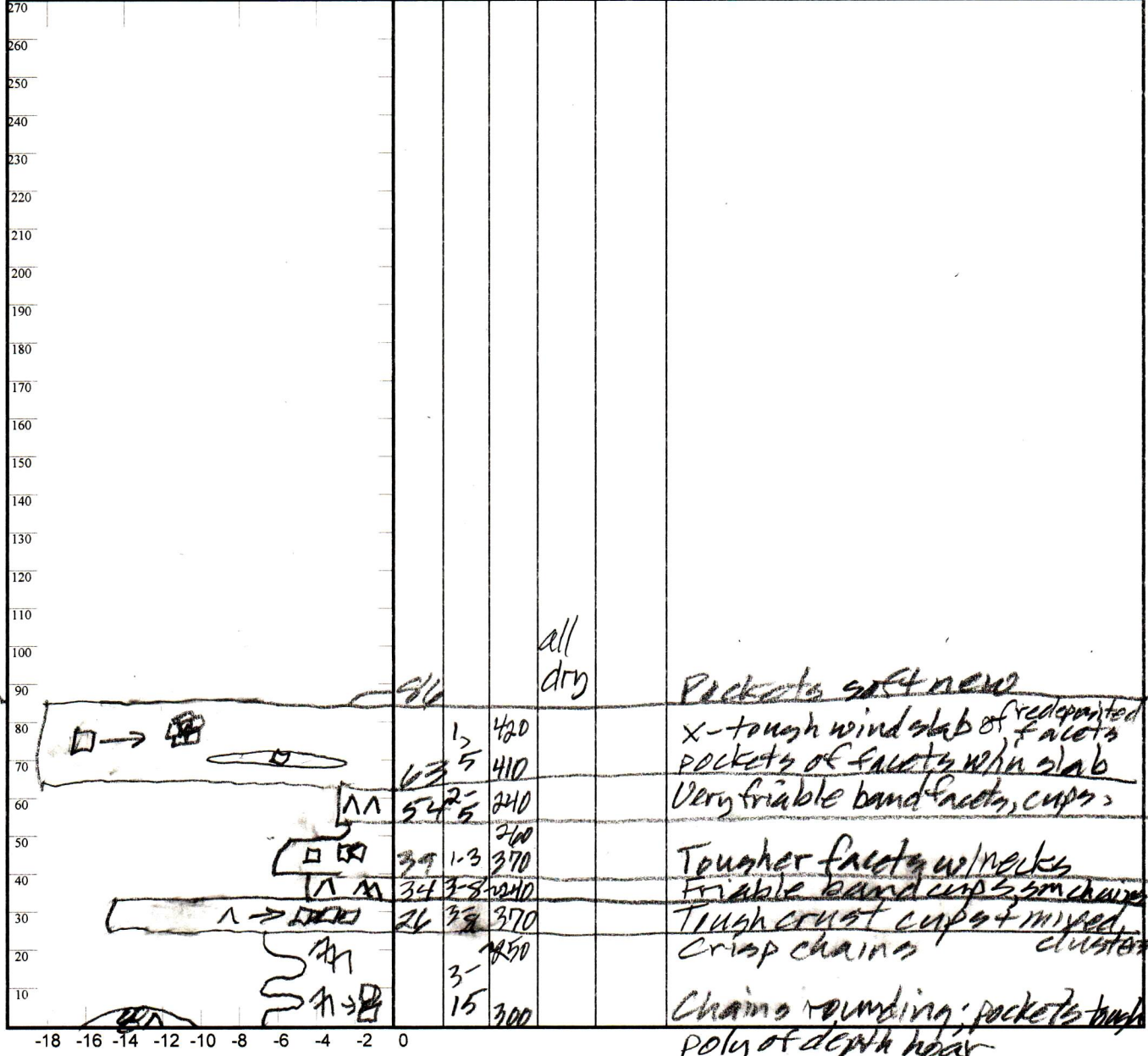
Total Snowpack SWE: 262 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 0.83 m;  $\rho$  = 316 kg/m<sup>3</sup>

no dust observed

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes

Surt  
-8.5  
-12.6  
-12.8  
-10.4  
-8.0  
-6.4  
-4.6  
-3.0  
-1.5  
-0.9



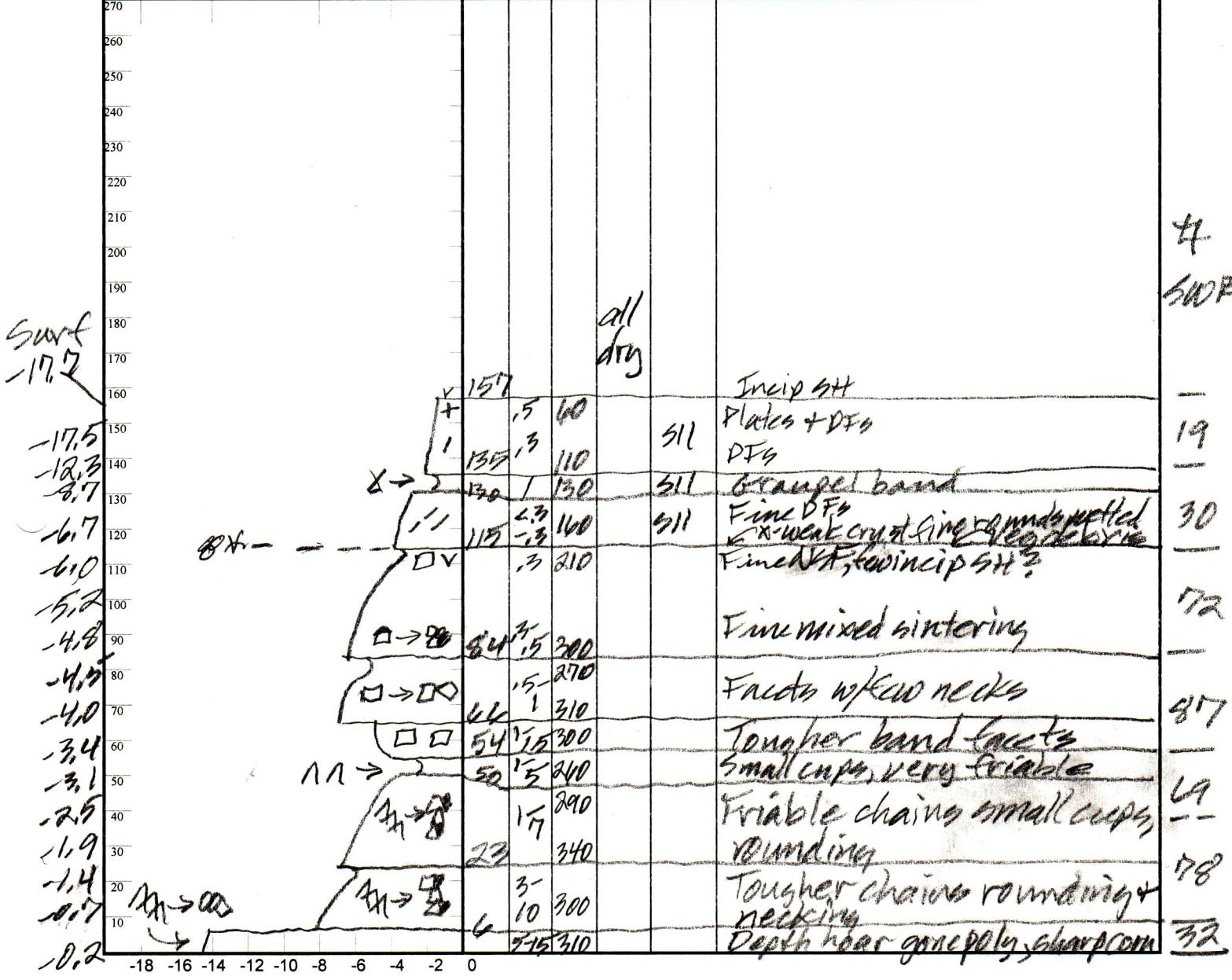
47  
35  
42  
48  
90

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CLTAT Center for Snow and Avalanche Studies Profile # 10  
 Time: 0950 Snowpack Profile Date: 2.2.14  
 Location: SNIP Elev. 11,060' Aspect: NE Boot Pen: 47 cm  $\angle$ : 3°  
 Air T: \_\_\_\_\_ °C Sky: 0 Precip: Nil Wind: lt Prior Pit: # 4; 1.6.14  
 Total Snowpack SWE: 307 mm H<sub>2</sub>O Notes: H<sub>97</sub> = 1.57 m;  $\rho$  = 247 kg/m<sup>3</sup>  
No dust observed

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	$309 \text{ mm} \div 123 \text{ m} = 2.02$	$0.656 \times 1.03 \times 302 \times 9.8 = 1755$							
B	$\text{mm} \div \text{m} =$	$\text{X} \times \text{X} \times 9.8 =$							

Notes:

Observers: CLYAT

Center for Snow and Avalanche Studies

Profile # 17

Time: 0900

Snowpack Profile

Date: 3, 3, 14

Location: SASP

Elev. 11,040' Aspect: NE

Boot Pen: 40 cm  $\angle$ : 3 °

Air T: -3 °C Sky: 0

Precip: Nil Wind: Nil

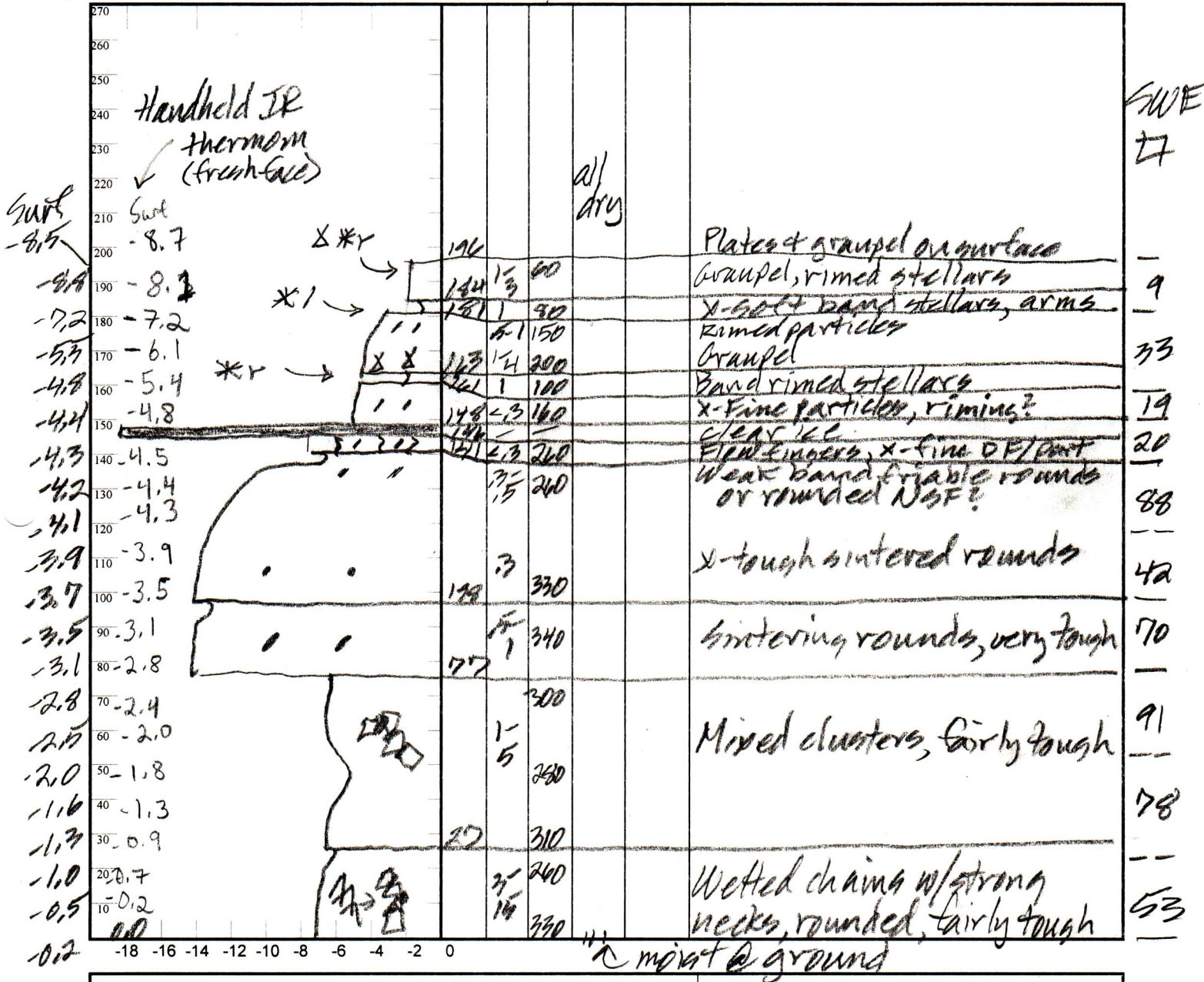
Prior Pit: # 6; 2, 2, 14

Total Snowpack SWE: 507 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.94 m;  $\rho$  = 259 Kg/m<sup>3</sup>

DI not visible; no new dust

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_2O_{Nor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes: Did temp profile using handheld IR thermometer set at emissivity = 0.98. Cut back to clean face in pit corner

Observers: CHAT

Center for Snow and Avalanche Studies

Profile # 6

Time: 0820 MST

Snowpack Profile

Date: 3/17/14

Location: SASP

Elev. 11,000' Aspect: NE

Boot Pen: 24 cm  $\angle$ : 3°

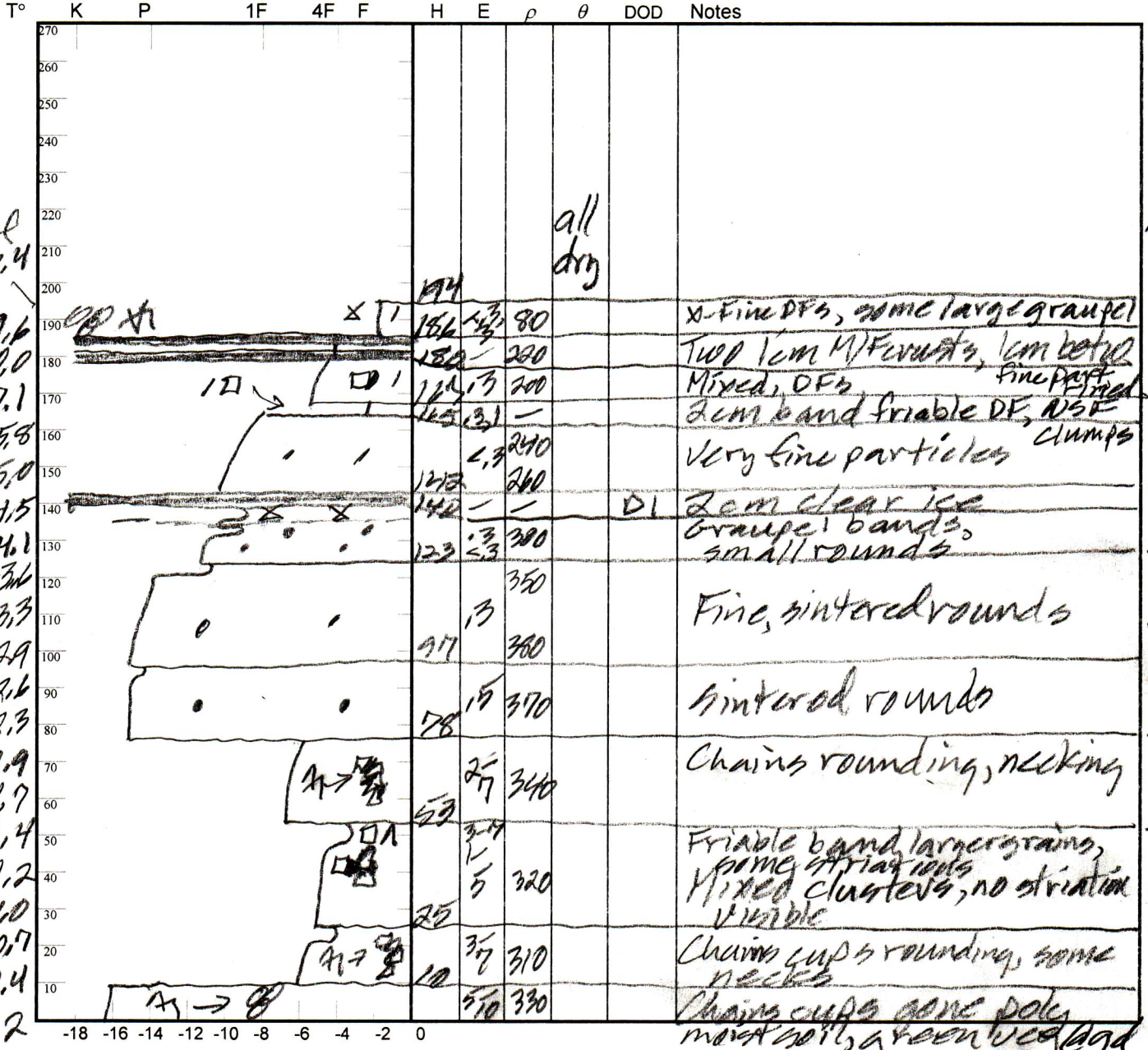
Air T: -3 °C

Sky: Partly Precip: Nil

Wind: Lt

Prior Pit: # 17; 3/3/14

Total Snowpack SWE: 582 mm H<sub>2</sub>O Notes: H<sub>sta</sub> = 1.94 m;  $\bar{\rho}$  = 300 kg/m<sup>3</sup>  
no dust layers visible



Handwritten notes on the right side of the graph, including "SWE" and various numbers (9, 39, 63, 69, 71, 93, 77, 93, 74) corresponding to different depths.

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:



Observers: CLPAT

Center for Snow and Avalanche Studies

Profile # 9

Time: 1000 MST

Snowpack Profile

Date: 3/19/14

Location: SESP

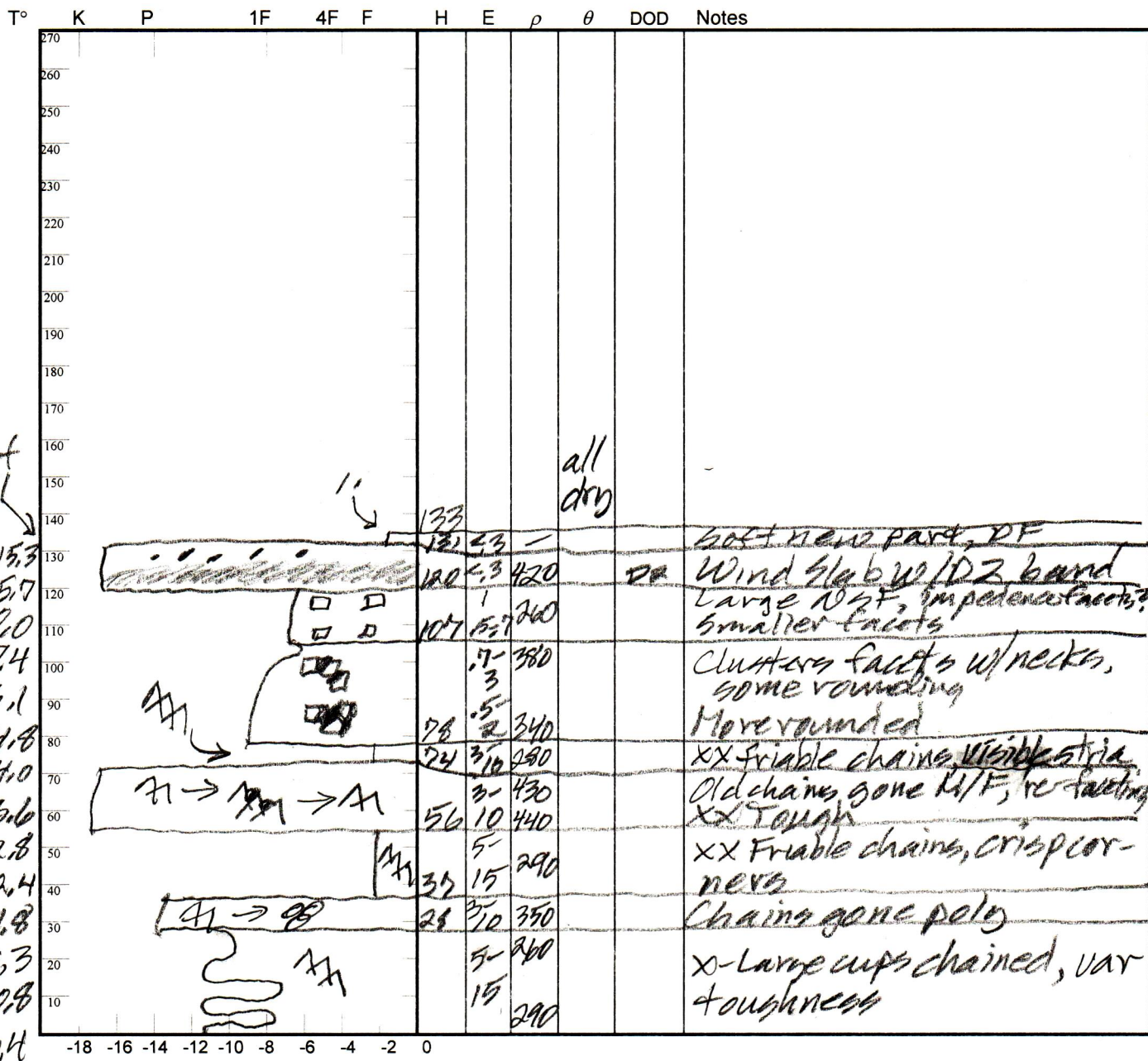
Elev. 12,180' Aspect: NE Boot Pen: 12 cm  $\angle$ : 3 °

Air T: 2 °C Sky: 0

Precip: Nil Wind: Nil Prior Pit: # 5; 1/7/14

Total Snowpack SWE: 425 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 1.30 m;  $\bar{\rho}$  = 329 kg/m<sup>3</sup>



Surf -15.1  
-15.3  
-15.7  
-10.0  
-7.4  
-6.1  
-4.8  
-4.0  
-3.6  
-2.8  
-2.4  
-1.8  
-1.3  
-0.8  
-0.4

H  
SWE  
—  
37  
32  
50  
33  
61  
47  
54  
63  
57

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CV, AT

Center for Snow and Avalanche Studies

Profile # 10

Time: 1010

Snowpack Profile

Date: 3/26/14

Location: SASP

Elev. 11,080' Aspect: NE

Boot Pen: 46 cm  $\angle$ : 3 °

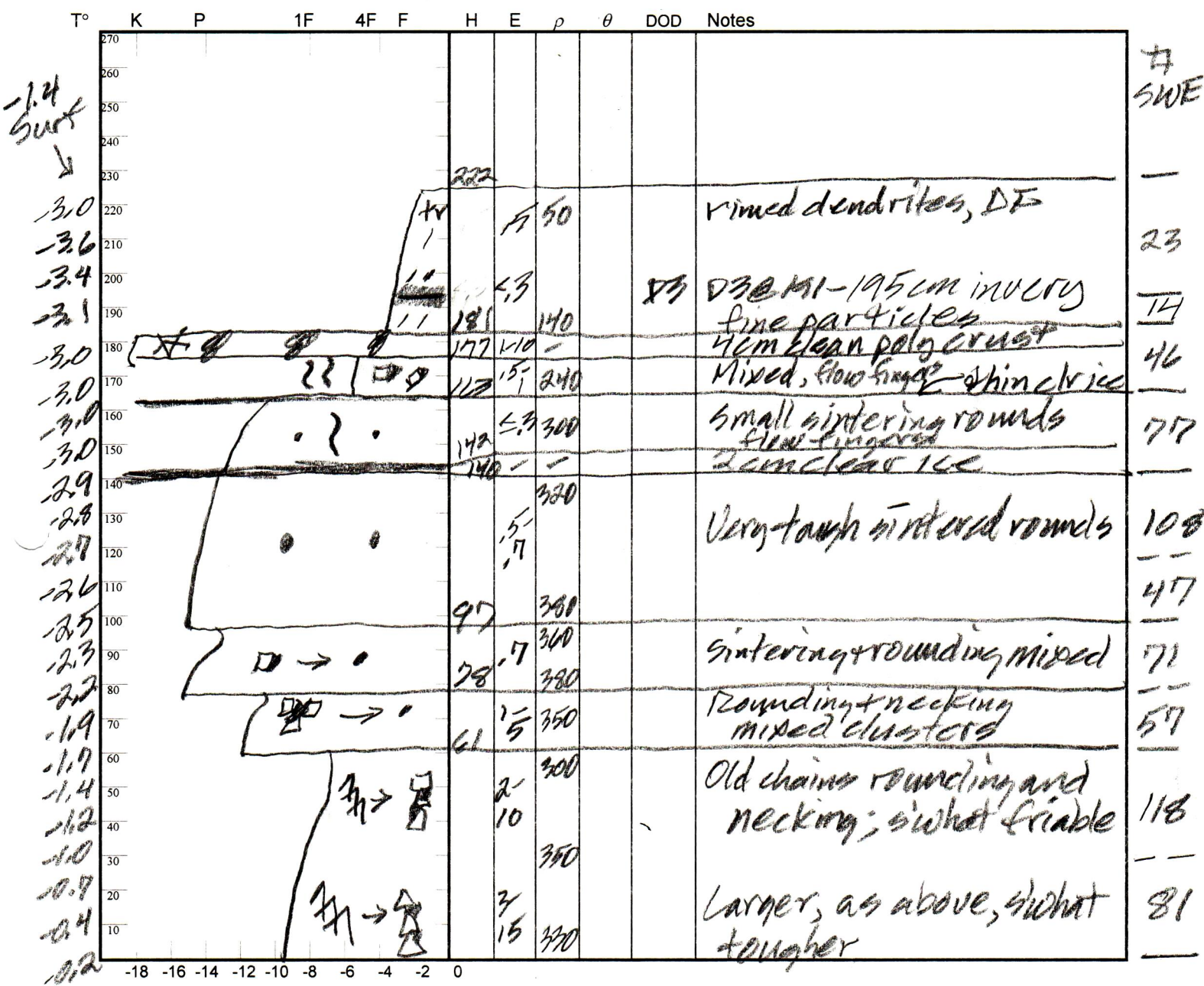
Air T: 4 °C Sky: ☉

Precip: Nil Wind: Nil

Prior Pit: # 8; 3/17/14

Total Snowpack SWE: 642 mm H<sub>2</sub>O

Notes: HS  $\sigma = 2.21m$ ;  $\bar{\rho} = 290kg/m^3$



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CVAT  
 Time: 0615 MAT  
 Location: SASP  
 Air T: +7°C Sky: 0  
 Total Snowpack SWE: 704 mm H<sub>2</sub>O

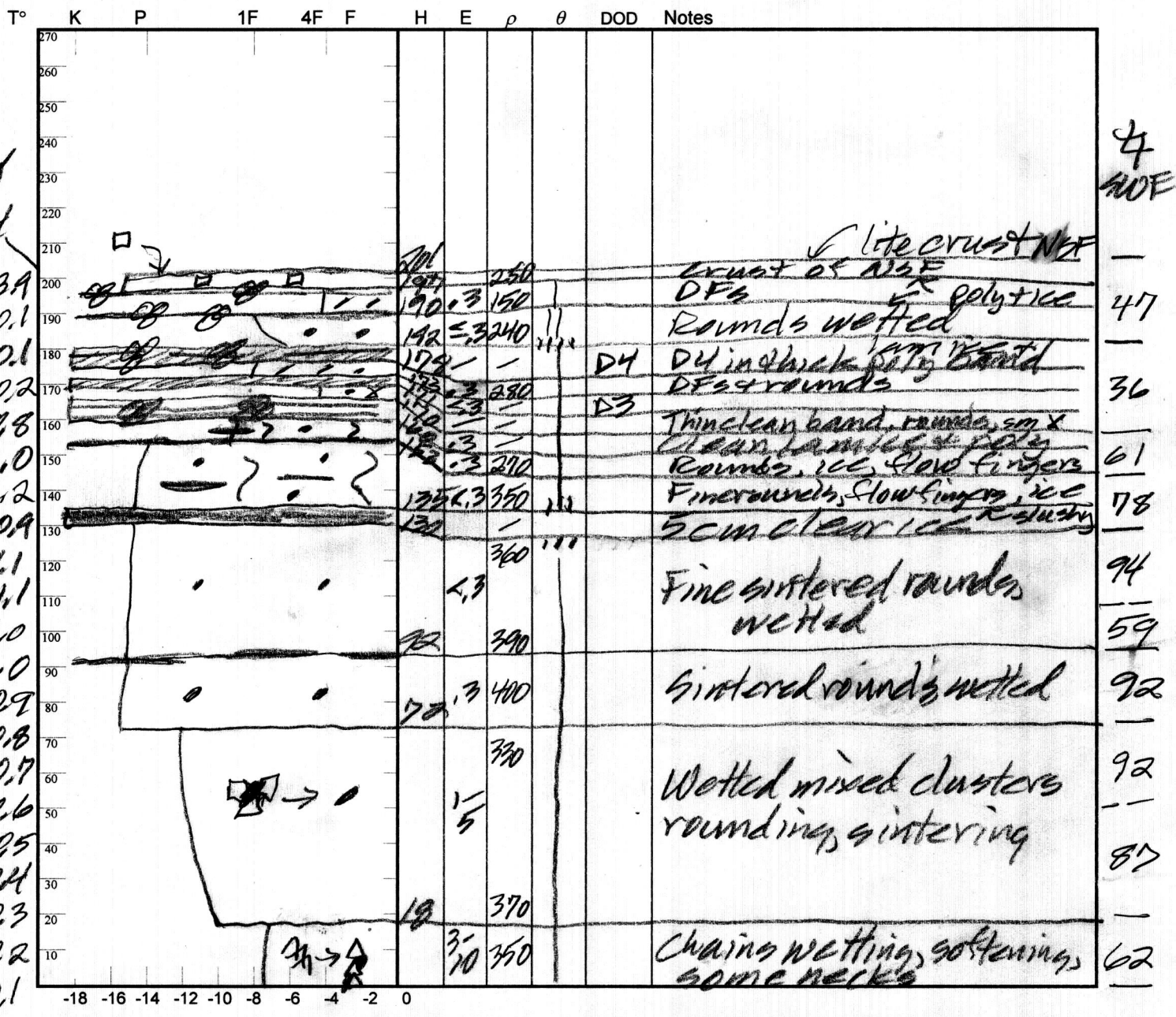
Center for Snow and Avalanche Studies

Profile # 11

Snowpack Profile

Date: 4/9/14

Elev. 11,060', Aspect: NE Boot Pen: 15 cm  $\angle$ : 3°  
 Precip: Nil Wind: Nil Prior Pit: # 10; 3 28/14  
 Notes: H<sub>2</sub>O = 2.01 m; SWE = 708 mm;  $\rho = 352 \text{ kg/m}^3$



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CL+AT

Center for Snow and Avalanche Studies

Profile # 12

Time: 0845

Snowpack Profile

Date: 4/10/14

Location: GBSP

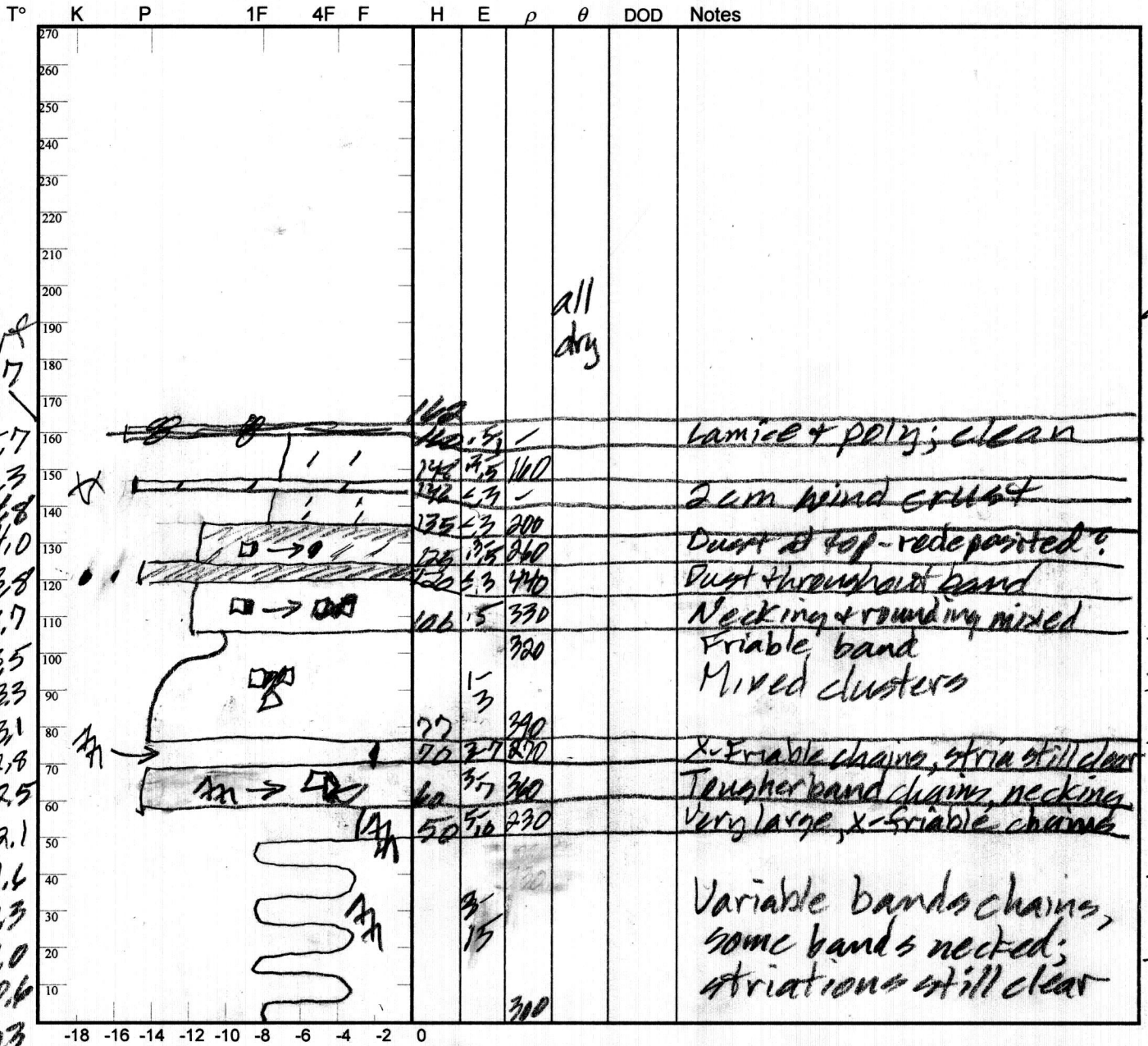
Elev. 12,100' Aspect NE Boot Pen: 12 cm  $\angle$ : 3 °

Air T: +1 °C Sky: ☉

Precip: Nil Wind: LT+Mnd Prior Pit: # 9; 3/19/14

Total Snowpack SWE: 504 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 1.44 m;  $\bar{\rho}$  = 307 kg/m<sup>3</sup>



7  
SWE  
—  
175  
—  
52  
—  
36  
—  
68  
—  
41  
—  
124  
—  
79  
—  
—  
—  
173  
—  
—  
66  
—

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	TWL	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							
Notes:									

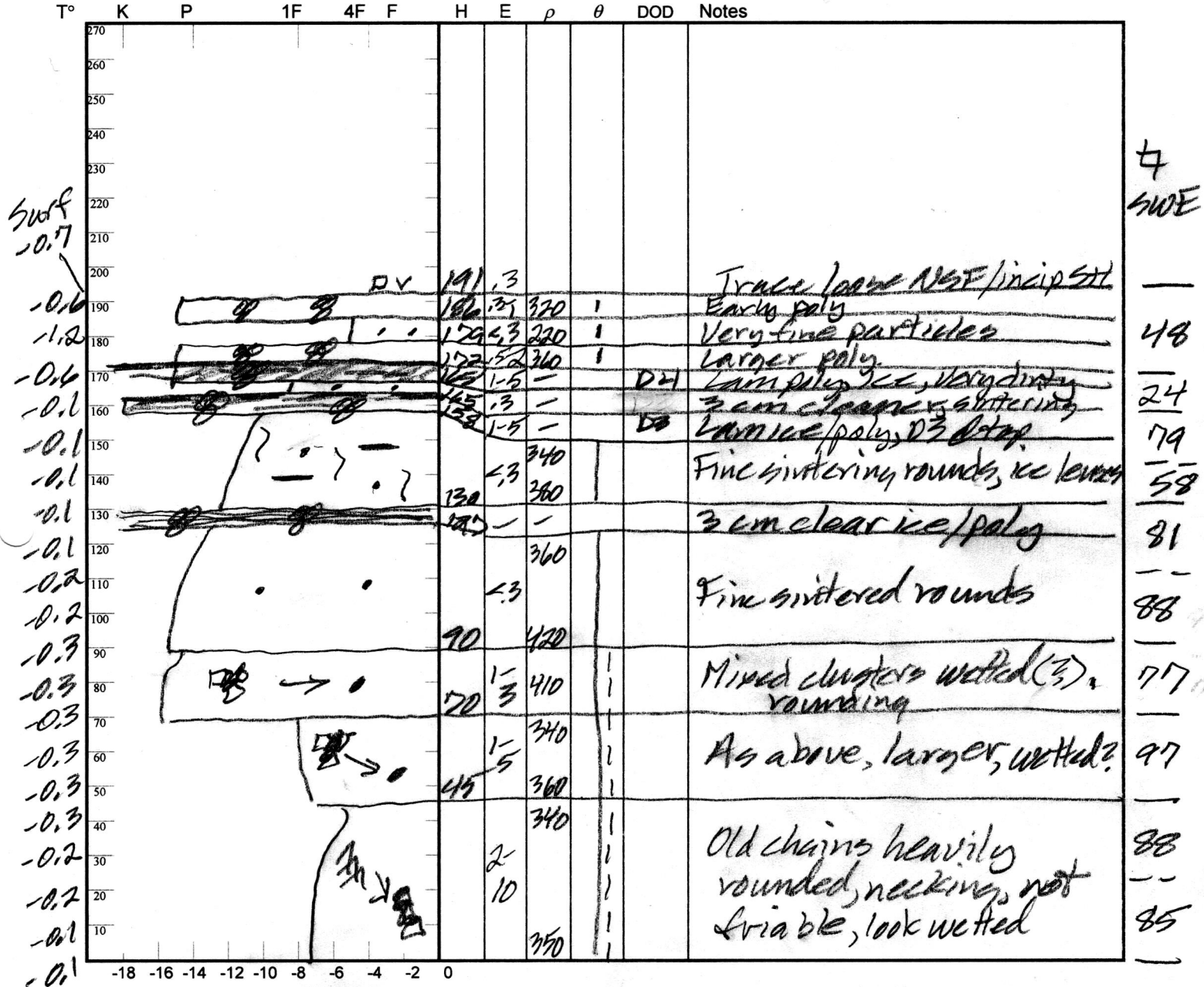
Observers: U+AT  
 Time: 0650 MST  
 Location: SASP  
 Air T: 0 °C Sky: 0  
 Total Snowpack SWE: 725 mm H<sub>2</sub>O

Center for Snow and Avalanche Studies

Profile # 13  
 Date: 4/16/12

Snowpack Profile

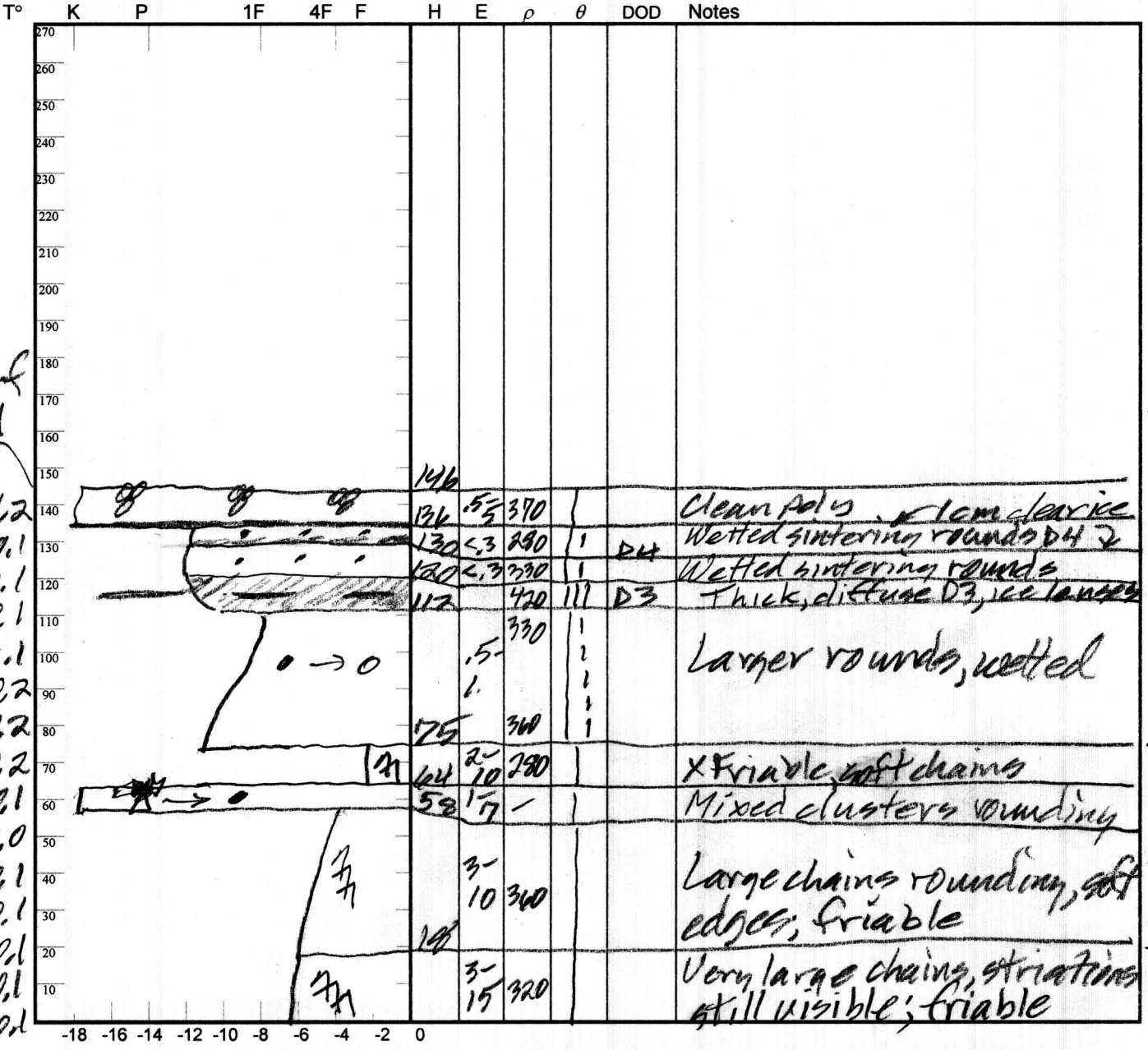
Elev. 11,060 Aspect: NE Boot Pen: 0 cm  $\angle$ : 3 °  
 Precip: Nil Wind: Nil Prior Pit: # 11; 41914  
 Notes: H<sub>2</sub>O = 1.93 m;  $\rho$  = 376 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CL+AT Center for Snow and Avalanche Studies Profile # 14  
 Time: 0835 MST Snowpack Profile Date: 4/22/14  
 Location: SASP Elev. 12,130' Aspect: NE Boot Pen: 1 cm  $\angle$ : 3°  
 Air T: 12 °C Sky: ☉ Precip: Nil Wind: Nil Prior Pit: # 12; 4/20/14  
 Total Snowpack SWE: 503 mm H<sub>2</sub>O Notes: H<sub>2</sub>O = 1.41 m;  $\bar{\rho} = 357$  kg/m<sup>3</sup>



7  
 SWE  
 —  
 59  
 —  
 87  
 —  
 69  
 —  
 77  
 —  
 18  
 —  
 72  
 —  
 60  
 —  
 61  
 —

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							
Notes:									

Observers: CL+AT

Center for Snow and Avalanche Studies

Profile # 15

Time: 0745

Snowpack Profile

Date: 4/22/14

Location: SASP

Elev. 11,060'

Aspect: NE

Boot Pen: 0 cm

$\angle$ : 3°

Air T: 12°C

Sky: 0

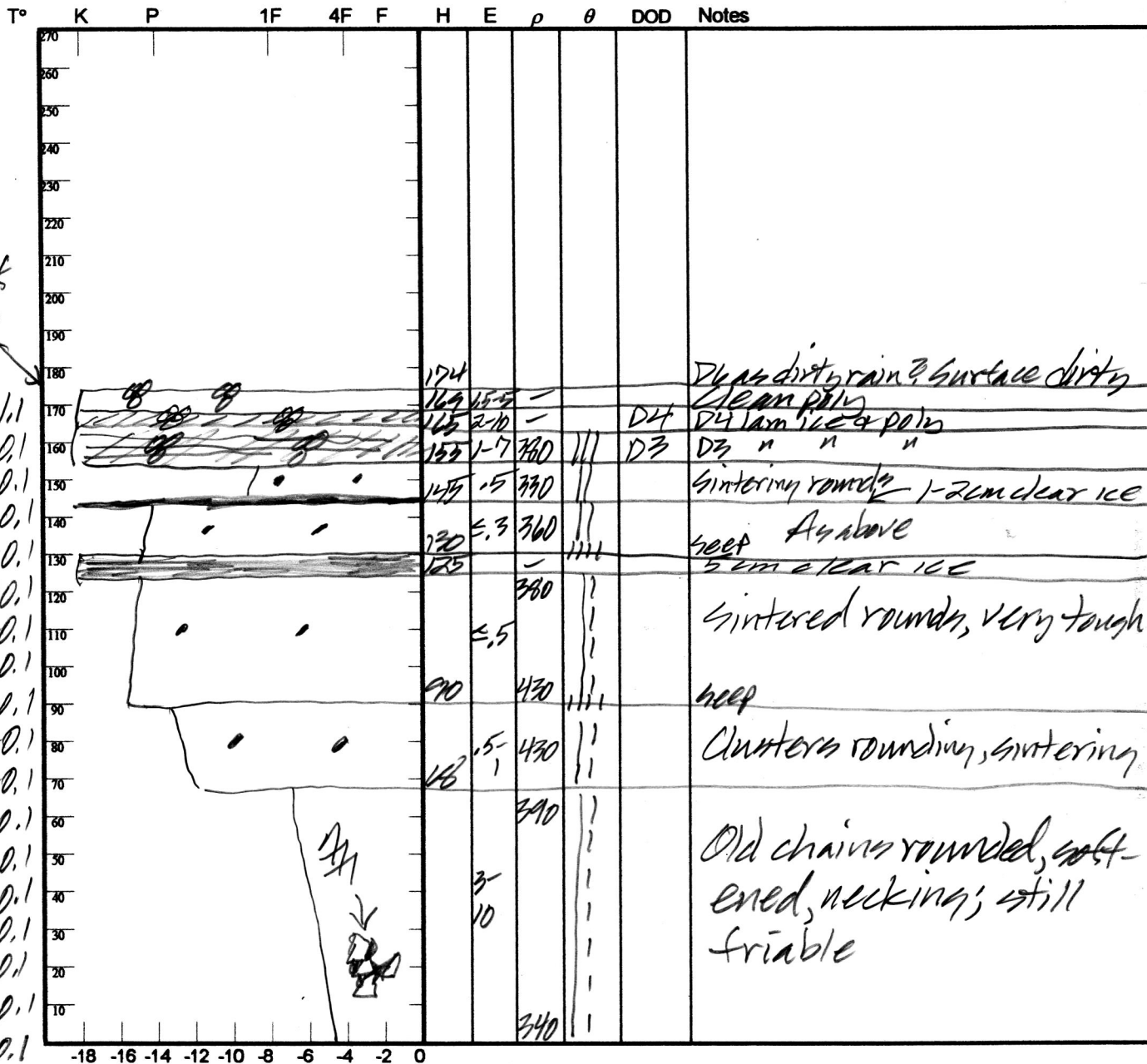
Precip: Nil

Wind: Nil

Prior Pit: # 13; 4/16/14

Total Snowpack SWE: 446 mm H<sub>2</sub>O

Notes: H<sub>0</sub>A = 1.73m;  $\rho = 386 \text{ kg/m}^3$



7  
SWE  
—  
173  
35  
80  
—  
93  
—  
107  
—  
37  
—  
99  
—  
88  
—  
56

Potential Slab					Weak Layer & Bed Surface					
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality	
A	mm ÷ m =	X X X 9.8 =								
B	mm ÷ m =	X X X 9.8 =								

Notes:

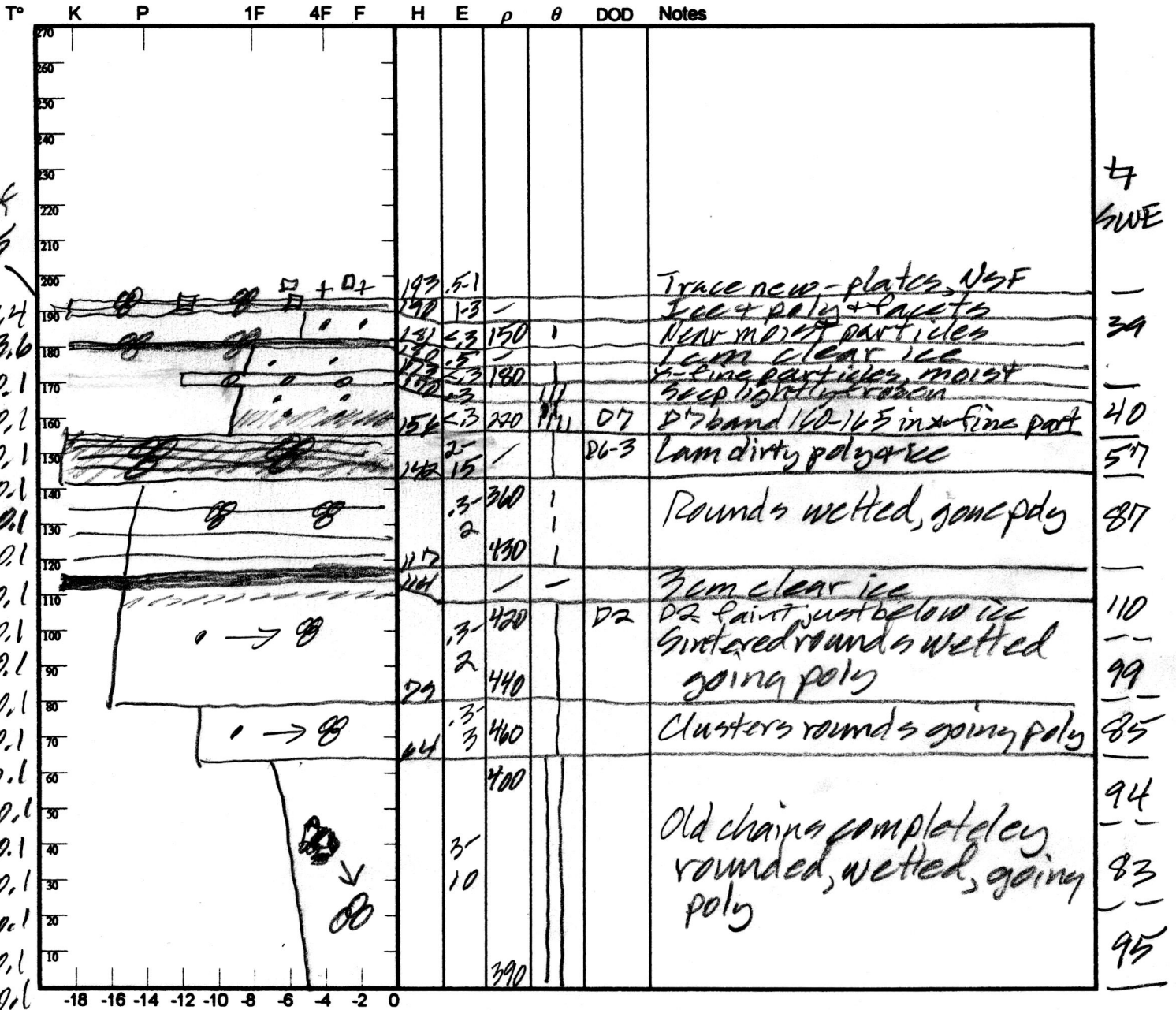
V. 11/20/03

Observers: UAT  
 Time: 0915 MST  
 Location: GASP  
 Air T: -5 °C Sky: 0  
 Total Snowpack SWE: 789 mm H<sub>2</sub>O

Center for Snow and Avalanche Studies

Profile # 16

Snowpack Profile  
 Elev. 11,000' Aspect: NE Boot Pen: 31 cm 3 °  
 Precip: Nil Wind: 14 Prior Pit: # 15; 418314  
 Notes: H<sub>2</sub>O = 1.94 m; ρ = 407 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = ρ <sub>kg</sub>	Sin ∠ x H <sub>Nor</sub> x ρ x 9.8 = τ <sub>Slab</sub>	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:



Observers: CL+MB

Center for Snow and Avalanche Studies

Profile # 117

Time: 0640 MST

Snowpack Profile

Date: 5/16/14

Location: SBSP

Elev. 1340'

Aspect: NE

Boot Pen: 0 cm  $\angle$ : 3°

Air T: 4 °C Sky: 0

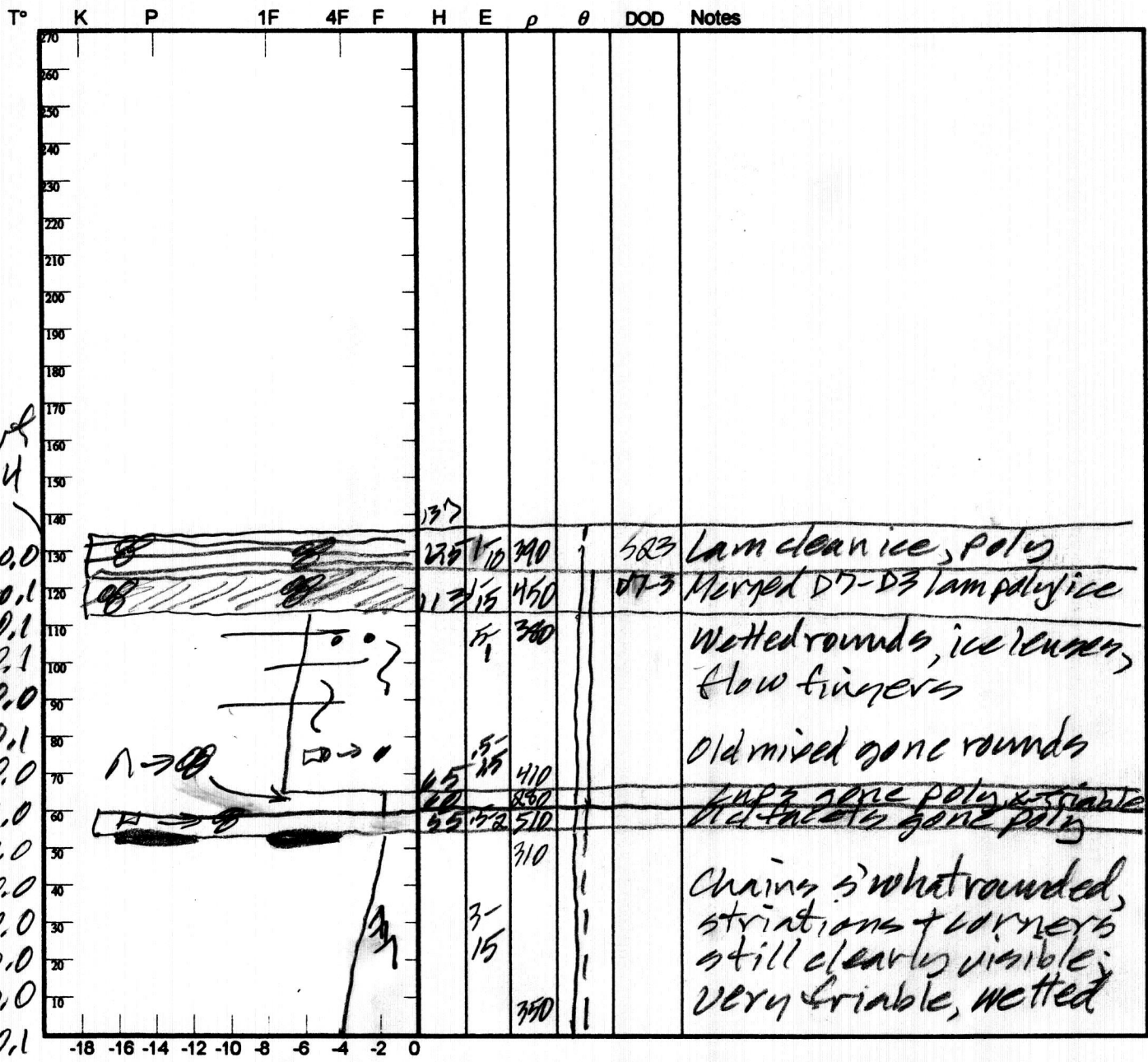
Precip: Nil

Wind: 4+

Prior Pit: # 14; 422/14

Total Snowpack SWE: 512 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.96 m<sub>3</sub> p = 376 kg/m<sup>3</sup>



Handwritten notes on the left side of the graph:  
 SWE -1.4  
 0.0  
 -0.1  
 -0.1  
 0.0  
 -0.1  
 0.0  
 0.0  
 0.0  
 0.0  
 0.0  
 0.0  
 0.0  
 0.0

Handwritten notes on the right side of the graph:  
 4  
 SWE  
 40  
 72  
 98  
 76  
 21  
 63  
 81  
 41

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = T_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: CLAT, JP

Center for Snow and Avalanche Studies

Profile # 16

Time: 0750 MST

Snowpack Profile

Date: 5.7.14

Location: SASP

Elev. 11,060'

Aspect: NE

Boot Pen: 0 cm

$\angle$ : 3°

Air T: +2 °C

Sky: 0

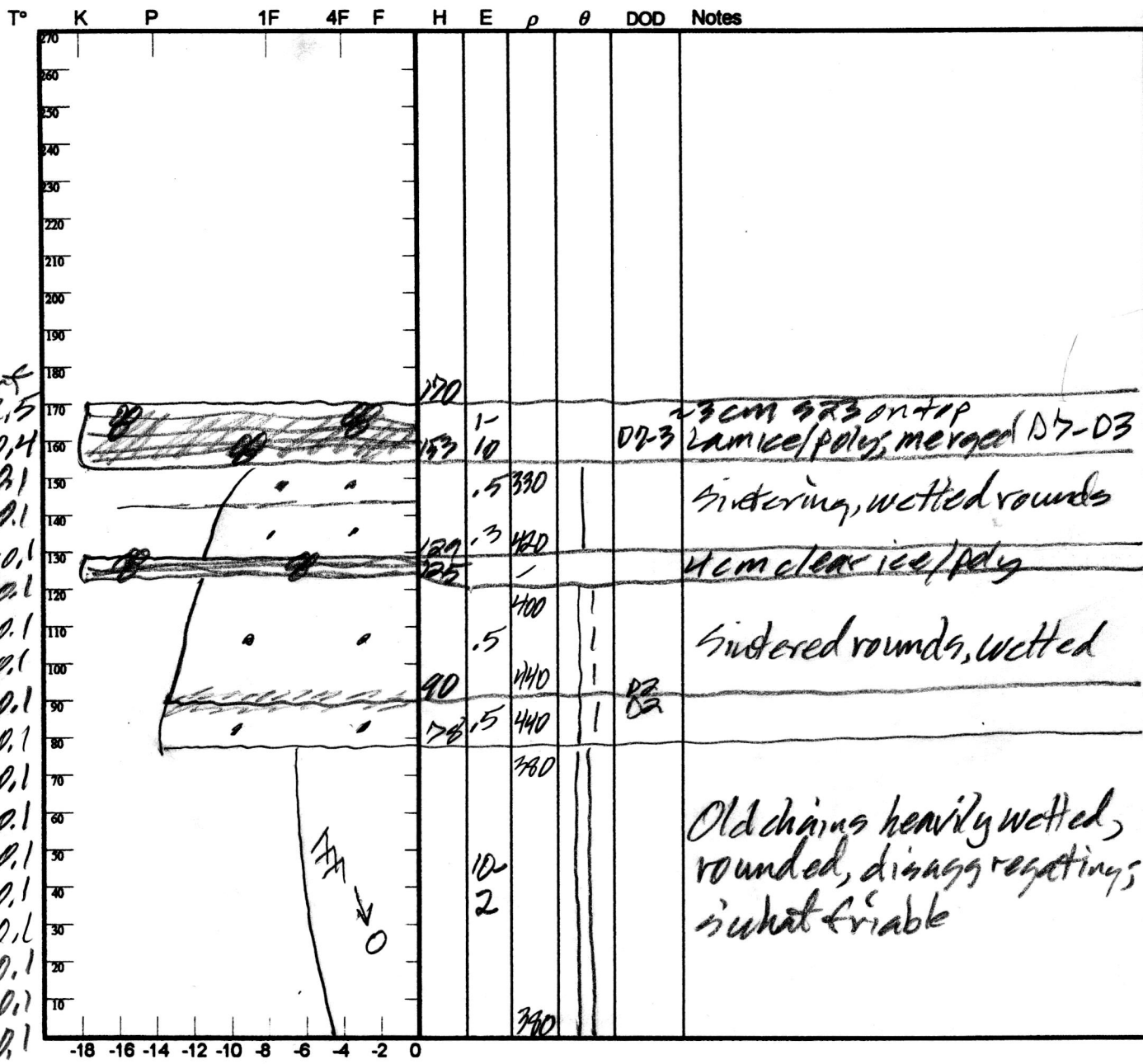
Precip: Nil

Wind: 14

Prior Pit: # 16; 5.1.14

Total Snowpack SWE: 1433 mm H<sub>2</sub>O

Notes: H<sub>50</sub> = 1.46 m;  $\bar{\rho}$  = 411 kg/m<sup>3</sup>



4  
90E  
67  
98  
101  
96  
71  
100  
83  
67

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:



Observers: AK, AT  
 Time: 0815 MST  
 Location: SBSP  
 Air T: +2.0 °C Sky: ☉  
 Total Snowpack SWE: 513 mm H<sub>2</sub>O

Center for Snow and Avalanche Studies

Profile # 20

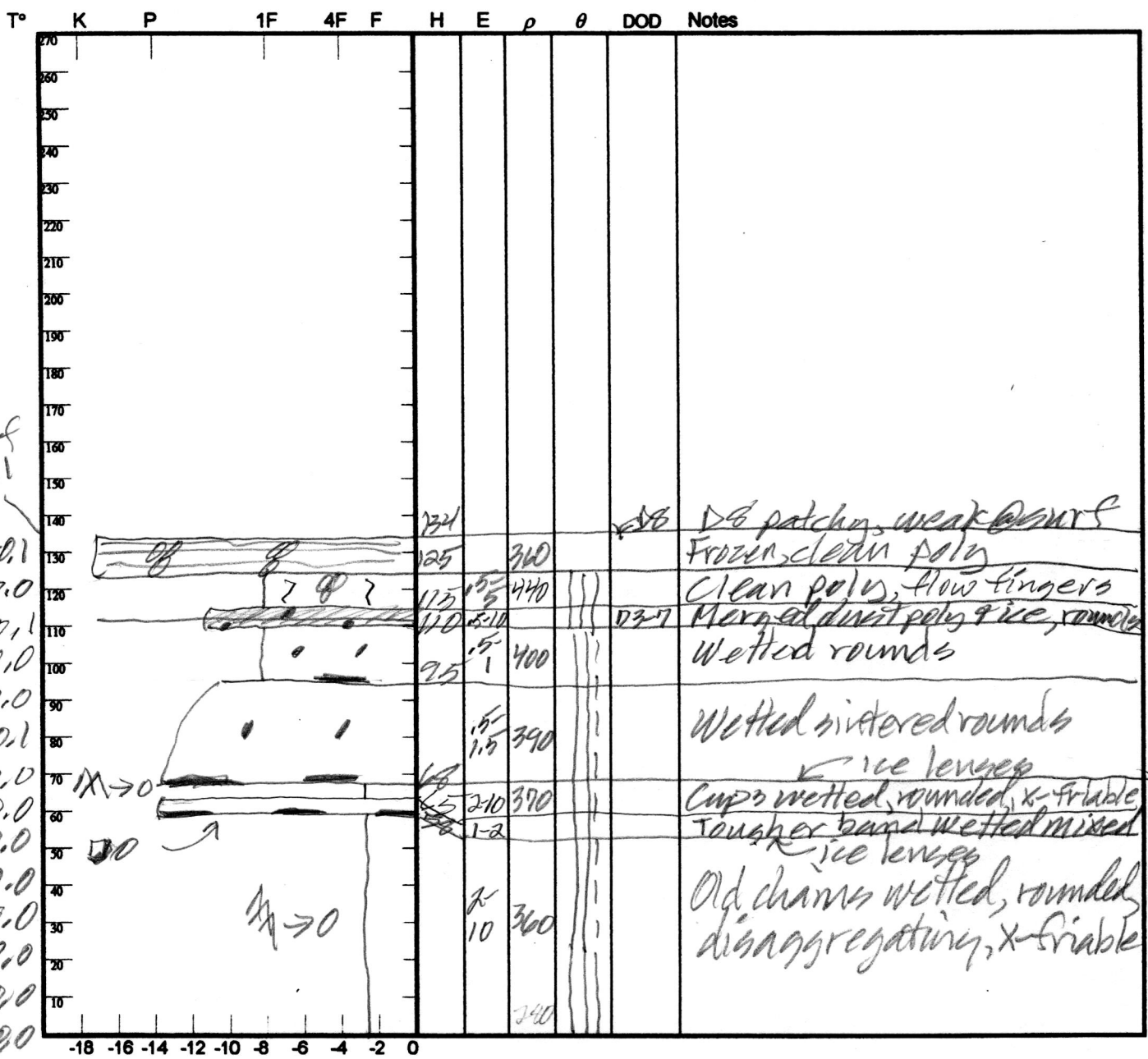
Snowpack Profile

Date: 5/21/14

Elev. 12,140' Aspect: NF Boot Pen: 2 cm 3 °

Precip: Nil + showers Wind: MOD Prior Pit: # 17; 5/16/14

Notes: H<sub>s</sub> = 1.33 m; ρ = 386 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = ρ <sub>kg</sub>	Sin ∠ x H <sub>Nor</sub> x ρ x 9.8 = τ <sub>slab</sub>	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	x x x 9.8 =							
B	mm ÷ m =	x x x 9.8 =							

Notes:

Observers: CUAT

Center for Snow and Avalanche Studies

Profile # 21

Time: 0945 MST

Snowpack Profile

Date: 5.21.14

Location: SASP

Elev. 11,060'

Aspect: NE

Boot Pen: 4 cm

$\angle$ : 3°

Air T: 13°C

Sky: 0

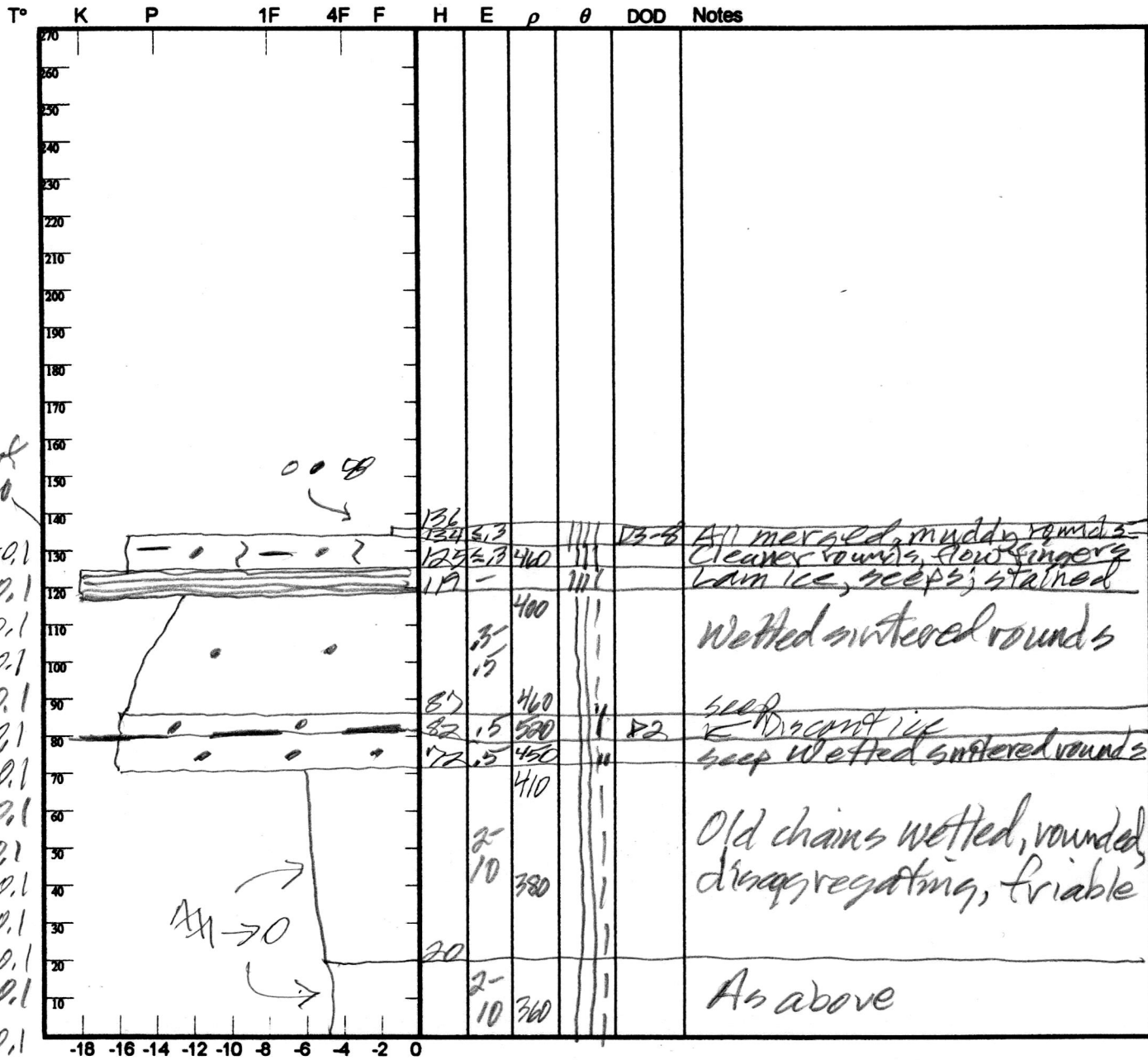
Precip: Nil

Wind: MOD

Prior Pit: # 19; 5.14.14

Total Snowpack SWE: 605 mm H<sub>2</sub>O

Notes: H<sub>54</sub> = 1.37 m;  $\bar{\rho}$  = 442 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

V. 11/20/03

Observers: CLTAT

Center for Snow and Avalanche Studies

Profile # 22

Time: 0815 MST

Snowpack Profile

Date: 5/28/14

Location: SBSP

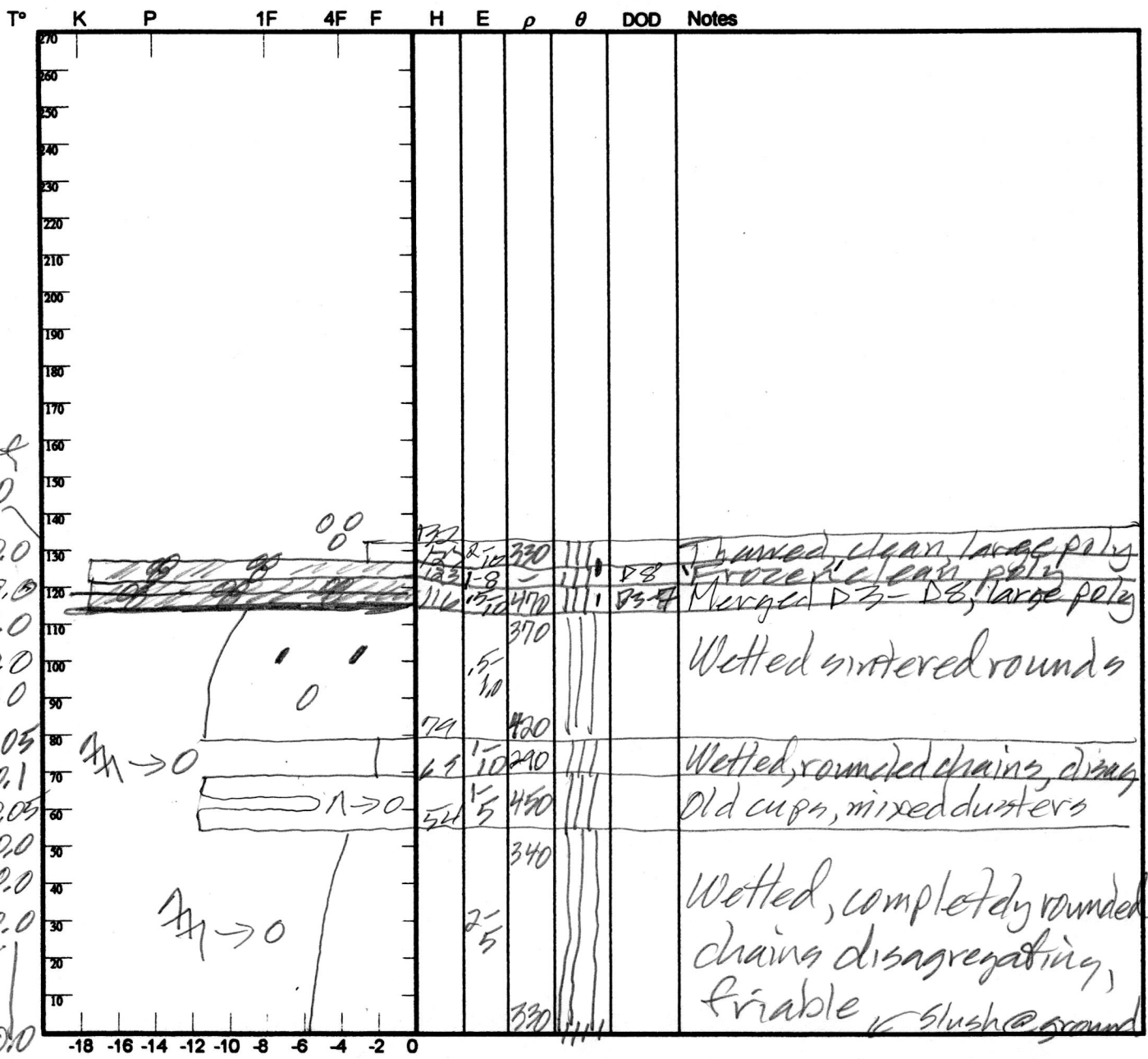
Elev. 12,180' Aspect: NE Boot Pen: 8 cm  $\angle$ : 3°

Air T: 16°C Sky: 0

Precip: Nil Wind: Nil Prior Pit: # 20; 5/21/14

Total Snowpack SWE: 520 mm H<sub>2</sub>O

Notes:  $H_s = 1.29$  m;  $\rho = 403$  kg/m<sup>3</sup>



$\uparrow$   
 SWE  
 26  
 29  
 107  
 71  
 97  
 97  
 93

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>WL</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

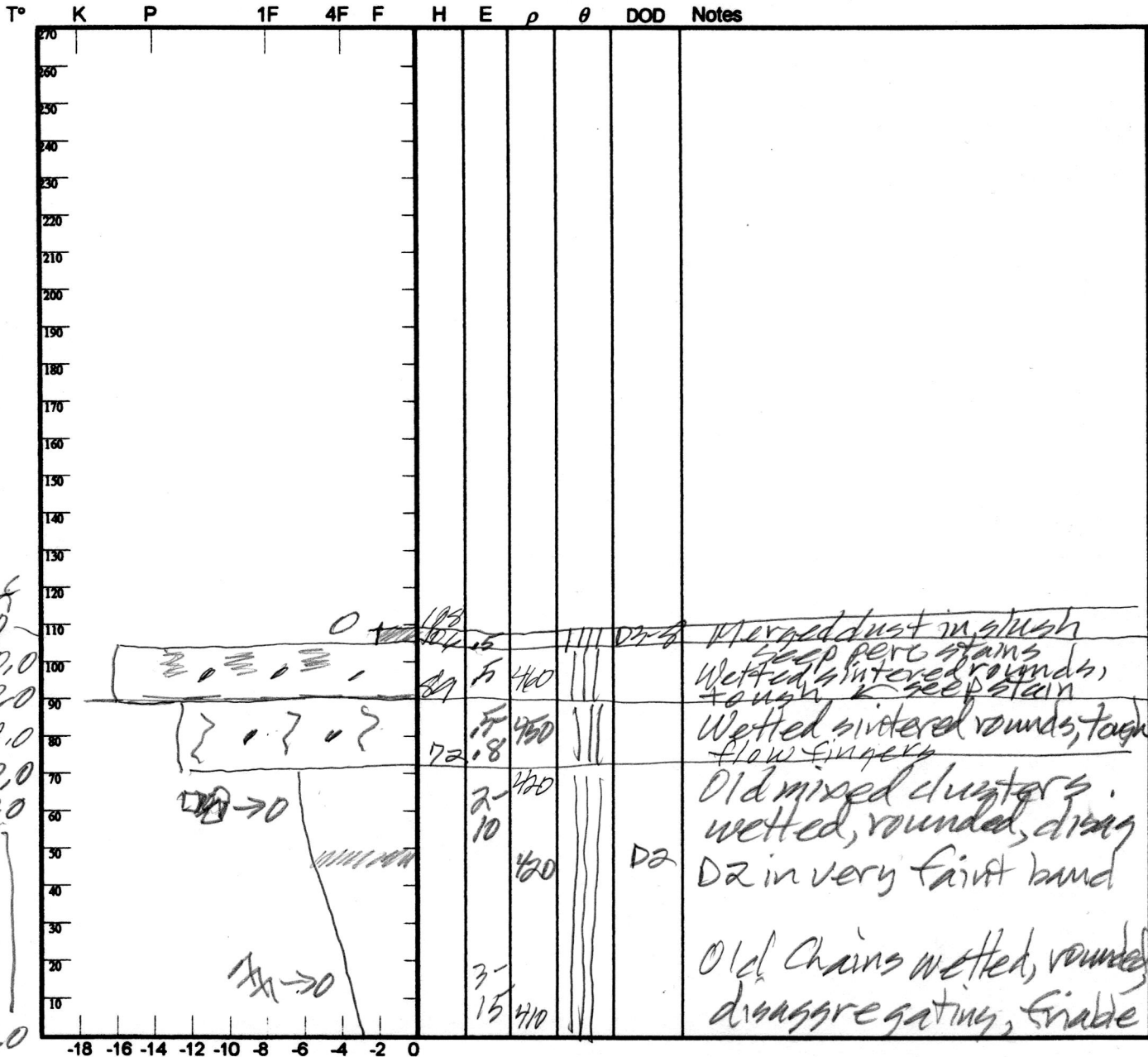
V. 11/20/03

Observers: CLAY  
 Time: 1005 MST  
 Location: GASP

Center for Snow and Avalanche Studies  
 Snowpack Profile

Profile # 23  
 Date: 5/28/14  
 Elev. 11,000' Aspect: NE Boot Pen: 1 cm 2:30  
 Air T: -16 °C Sky: 0 Precip: Nil Wind: Nil Prior Pit: # 21; 5/24/14

Total Snowpack SWE: 418 mm H<sub>2</sub>O Notes: H<sub>2</sub>O = 1.04 m; ρ = 460 kg/m<sup>3</sup>  
Collected "ALM" sample off surface, 1.3m x 0.9m



7  
SWE  
100  
117  
86  
116  
99

Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = ρ <sub>kg</sub>	Sin ∠ x H <sub>Nor</sub> x ρ x 9.8 = τ <sub>Slab</sub>	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes:

Observers: LL

Center for Snow and Avalanche Studies

Profile # 24

Time: 0915 MST

Snowpack Profile

Date: 6.5.14

Location: GASP

Elev. 1660' Aspect: NE

Boot Pen: 3 cm  $\angle$ : 3°

Air T: -12°C Sky: 0

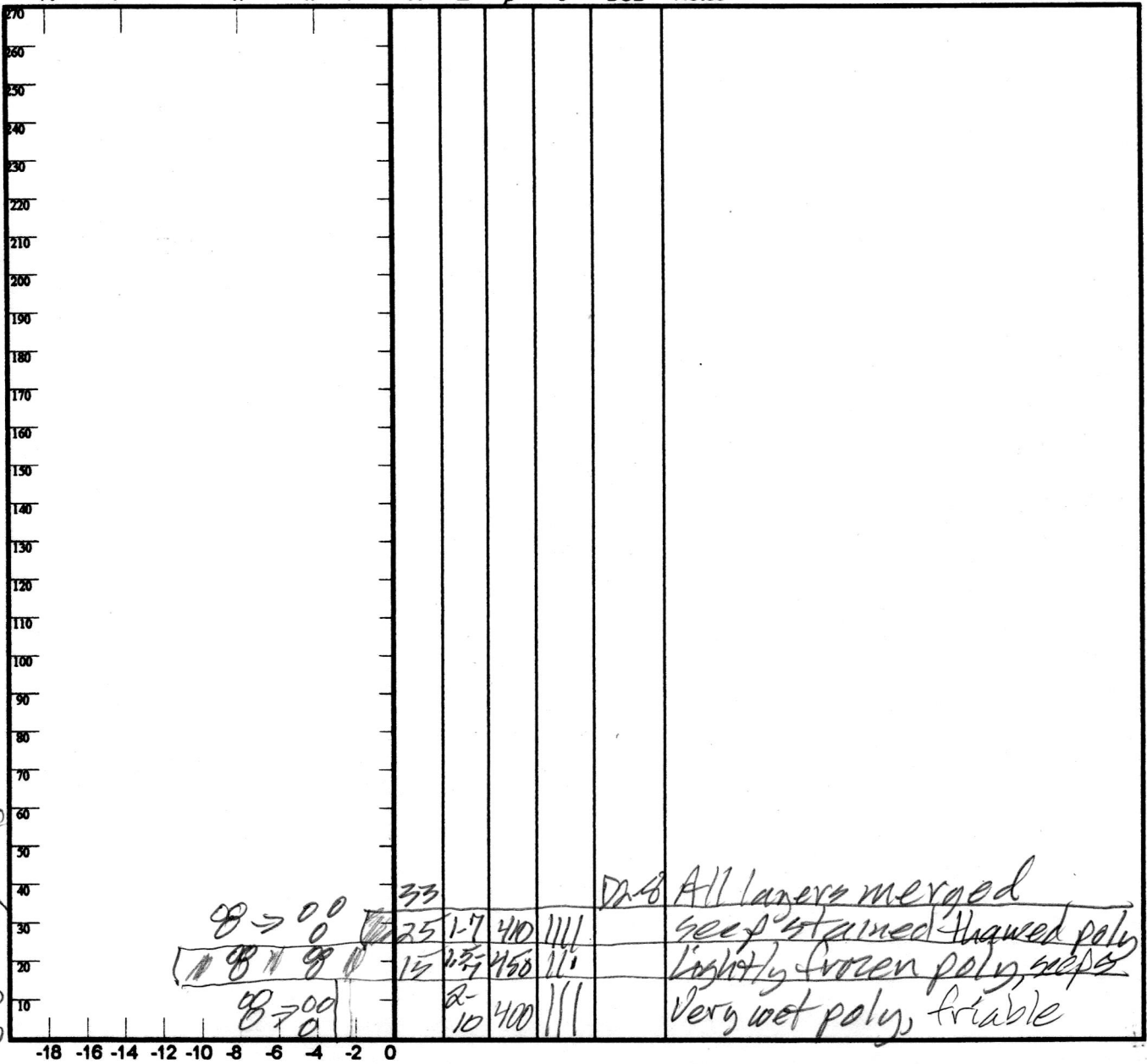
Precip: Nil Wind: LT

Prior Pit: # 23; 5128/14

Total Snowpack SWE: 126 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 0.32 m;  $\rho = 394$  kg/m<sup>3</sup>

T° K P 1F 4F F H E  $\rho$   $\theta$  DOD Notes



Surf  
0.0  
0.0  
-0.1  
0.0  
0.0

7  
SLOE

~~DR-8 All layers merged  
seep stained thawed poly  
lightly frozen poly, seeps  
Very wet poly, friable~~

69  
57

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2ONor} \div H_{Nor} = \rho_{kg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	F	E	T <sub>wl</sub>	S	C	RB	Shear Quality
A	mm ÷ m =	X X X 9.8 =							
B	mm ÷ m =	X X X 9.8 =							

Notes: