

Observers: MB+CL

Center for Snow and Avalanche Studies

Profile # 1

Time: 1320

Snowpack Profile

Date: 12/1/08

Location: SBSP

Elev. 12,200'

Aspect: NE

Boot Pen: 14 cm

∠: 3°

Air T: 0 °C

Sky: 0

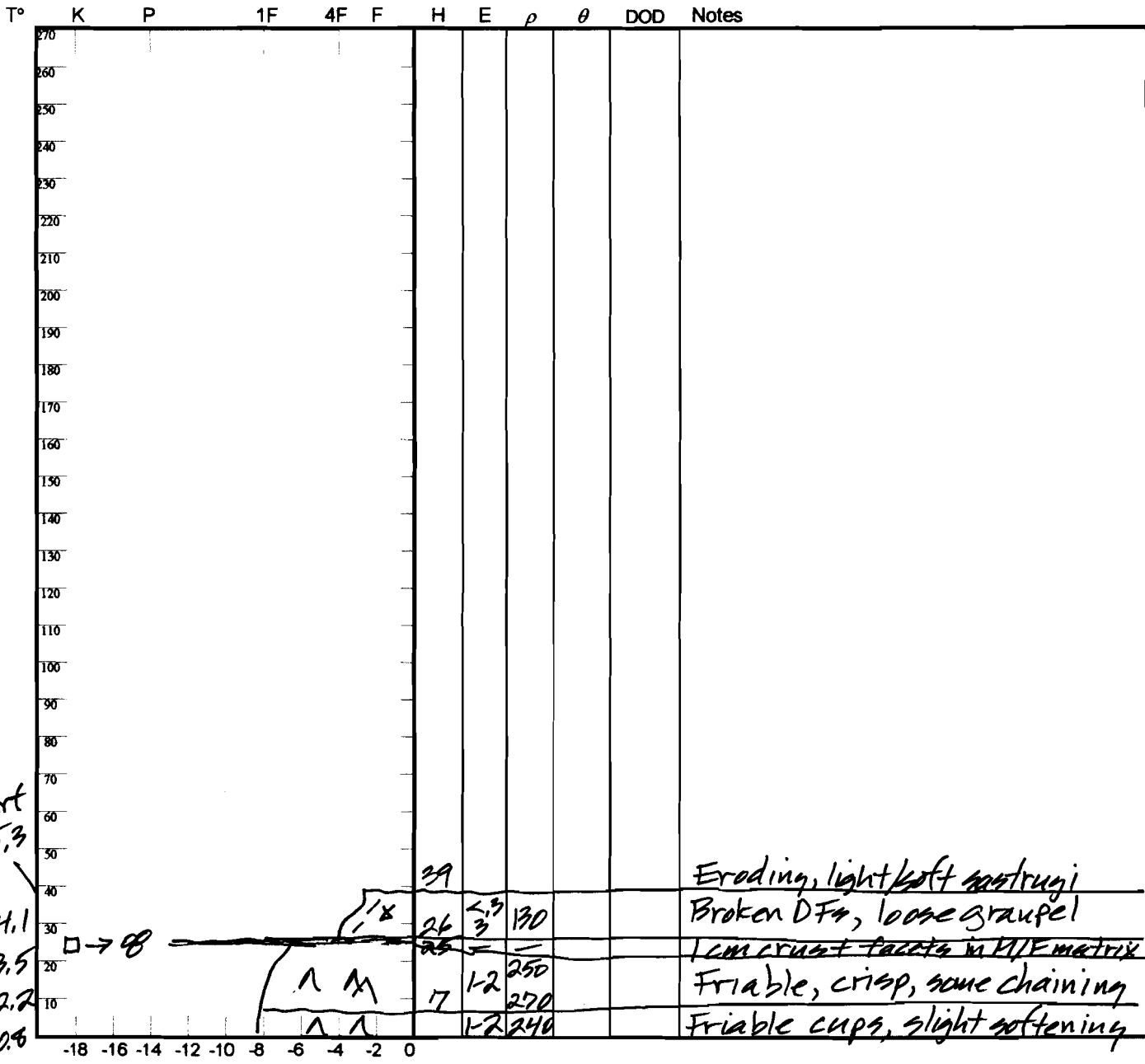
Precip: Nil

Wind: LM

Prior Pit: # -; - / - / -

Total Snowpack SWE: 164 mm H<sub>2</sub>O

Notes: HSI = 0.34 m; ρ = 188 kg/m<sup>3</sup>



Surt  
-5.3  
4.1  
-3.5  
-2.2  
-0.8

19  
45

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:

V. 11/20/03

Observers: CL

Center for Snow and Avalanche Studies

Profile # 2

Time: 1045

Snowpack Profile

Date: 12/2/08

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 50 cm

$\angle$ : 5°

Air T: +4 °C

Sky: ☁

Precip: Nil

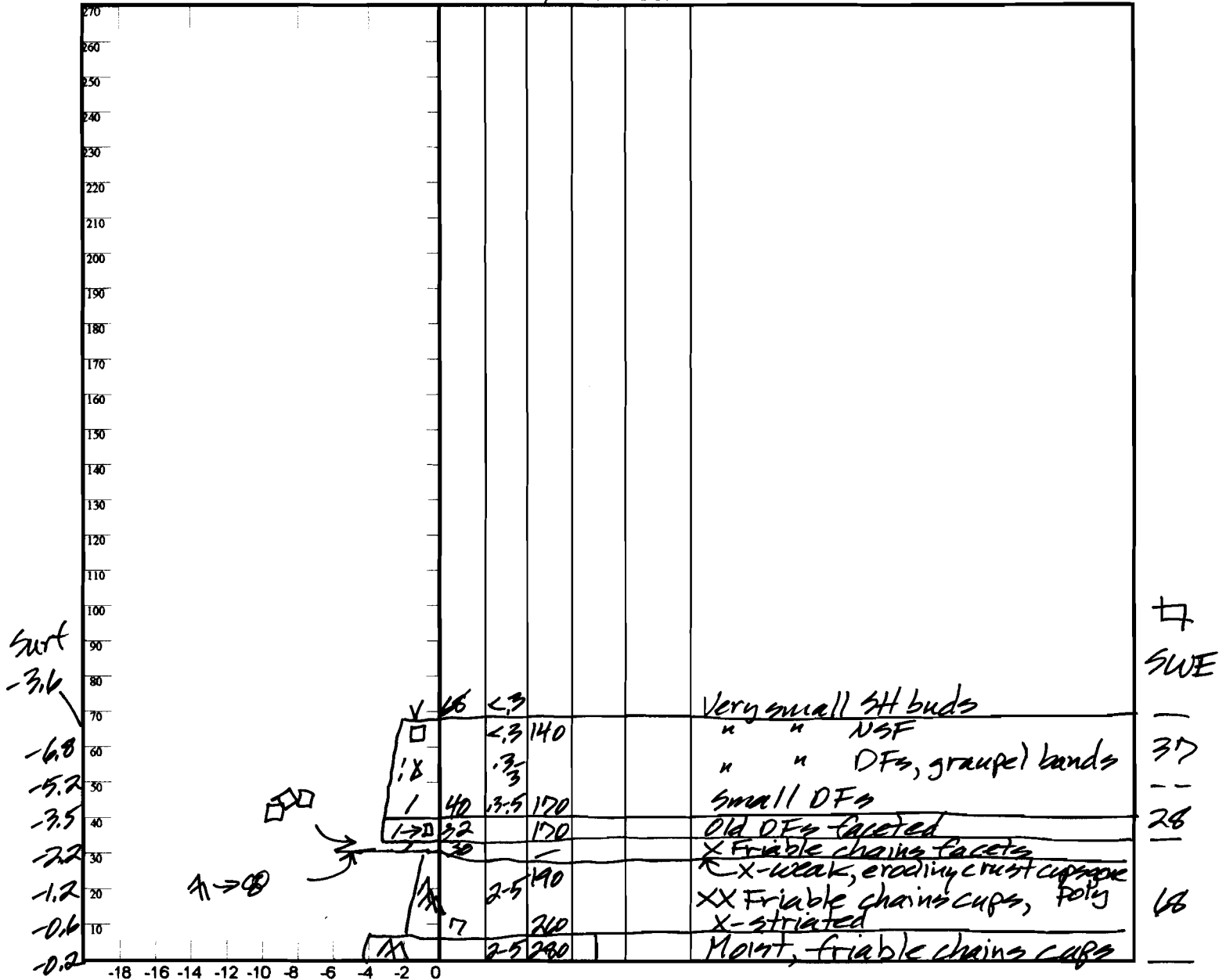
Wind: Lt-

Prior Pit: # -; - / - / -

Total Snowpack SWE: 133 mm H<sub>2</sub>O

Notes: HS  $t_s = 16$  cm;  $\bar{\rho} = 196$  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: CL+MB

Center for Snow and Avalanche Studies

Profile # 3

Time: 1100

Snowpack Profile

Date: 12/31/08

Location: SBSF

Elev. 12,200'

Aspect: NE

Boot Pen: < 1 cm

$\angle$ : 6°

Air T: -1 °C

Sky: 0

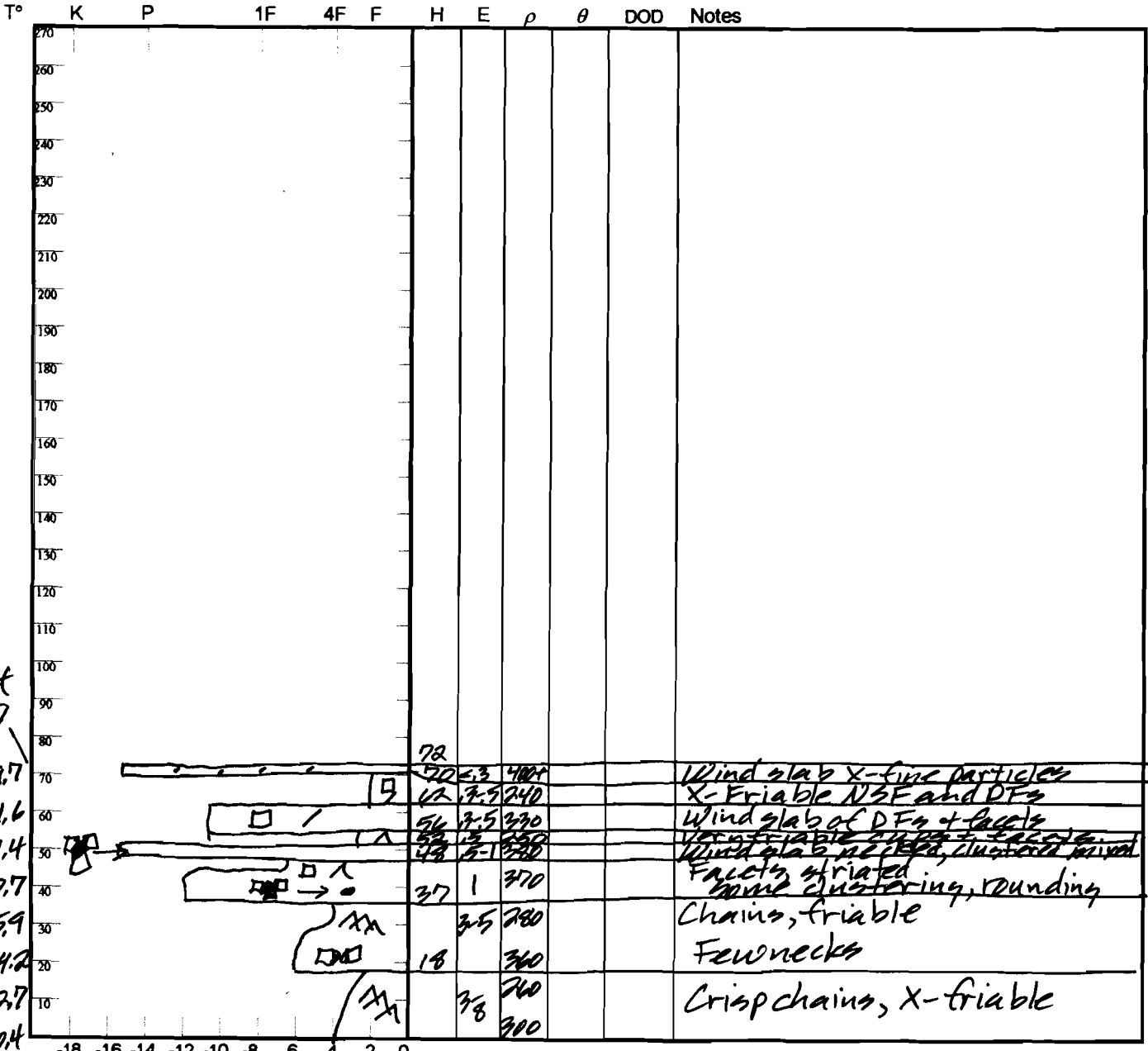
Precip: Nil

Wind: Lt

Prior Pit: # 1; 12/1/08

Total Snowpack SWE: 198 mm H<sub>2</sub>O

Notes: HS  $\eta = 0.74m$ ;  $\bar{\rho} = 268$  kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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:

V. 11/20/03

Observers: CL+AT

Center for Snow and Avalanche Studies

Profile # 4

Time: 1020

Snowpack Profile

Date: 11/1/09

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 33 cm

∠: 3 °

Air T: 0 °C

Sky: 0

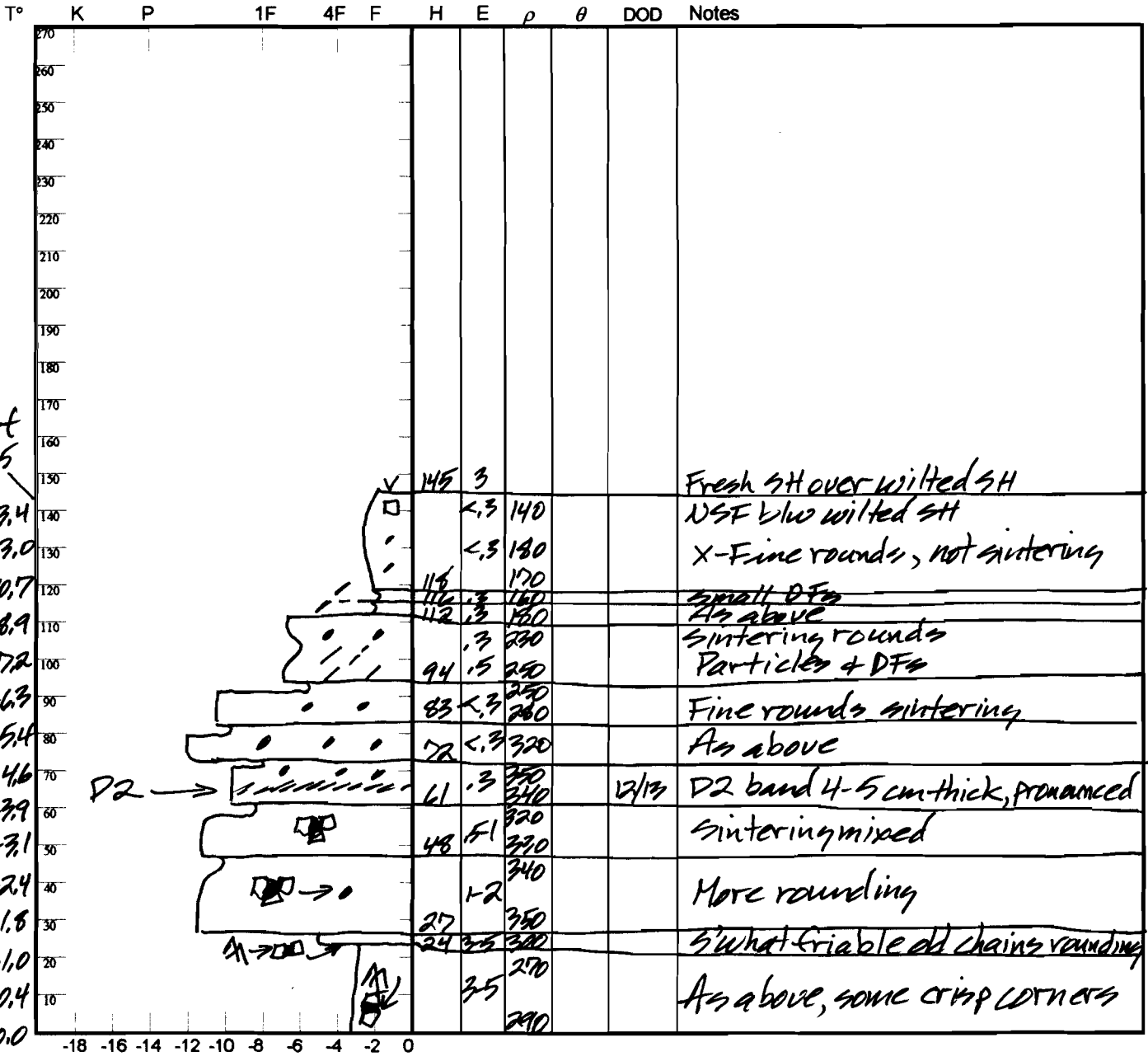
Precip: Nil

Wind: Nil

Prior Pit: # 2; 12/2/08

Total Snowpack SWE: 360 mm H<sub>2</sub>O

Notes: HS  $\eta = 1.42m$ ;  $\bar{\rho} = 268 kg/m^3$



7  
SWE  
48  
9  
74  
69  
37  
80  
63

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: CL+AT

Center for Snow and Avalanche Studies

Profile # 5

Time: 1315

Snowpack Profile

Date: 1/30/09

Location: SBCP

Elev. 12,200'

Aspect: NE

Boot Pen: 10 cm

∠: 2°

Air T: -3 °C

Sky: 0

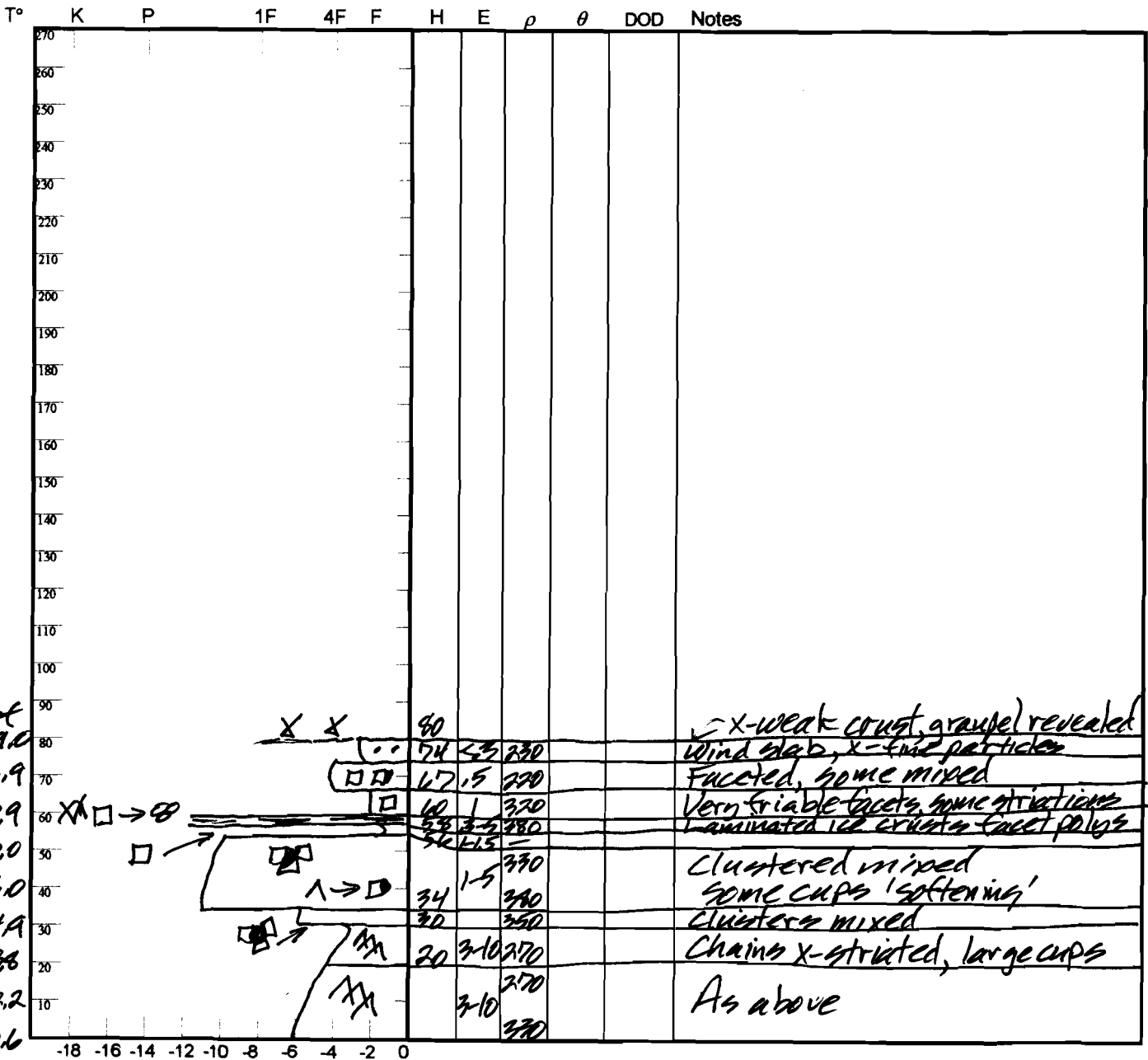
Precip: Nil

Wind: Nil

Prior Pit: # 3; 12/31/08

Total Snowpack SWE: 225 mm H<sub>2</sub>O

Notes: HS  $\eta = 0.78$  m;  $\bar{\rho} = 286$  kg/m<sup>3</sup>



$\eta$   
SWE  
42  
94  
89

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: CL+AT

Center for Snow and Avalanche Studies

Profile # 6

Time: 1015

Snowpack Profile

Date: 2/1/09

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 35 cm

$\angle$ : 2°

Air T: -6 °C

Sky: 0

Precip: Nil

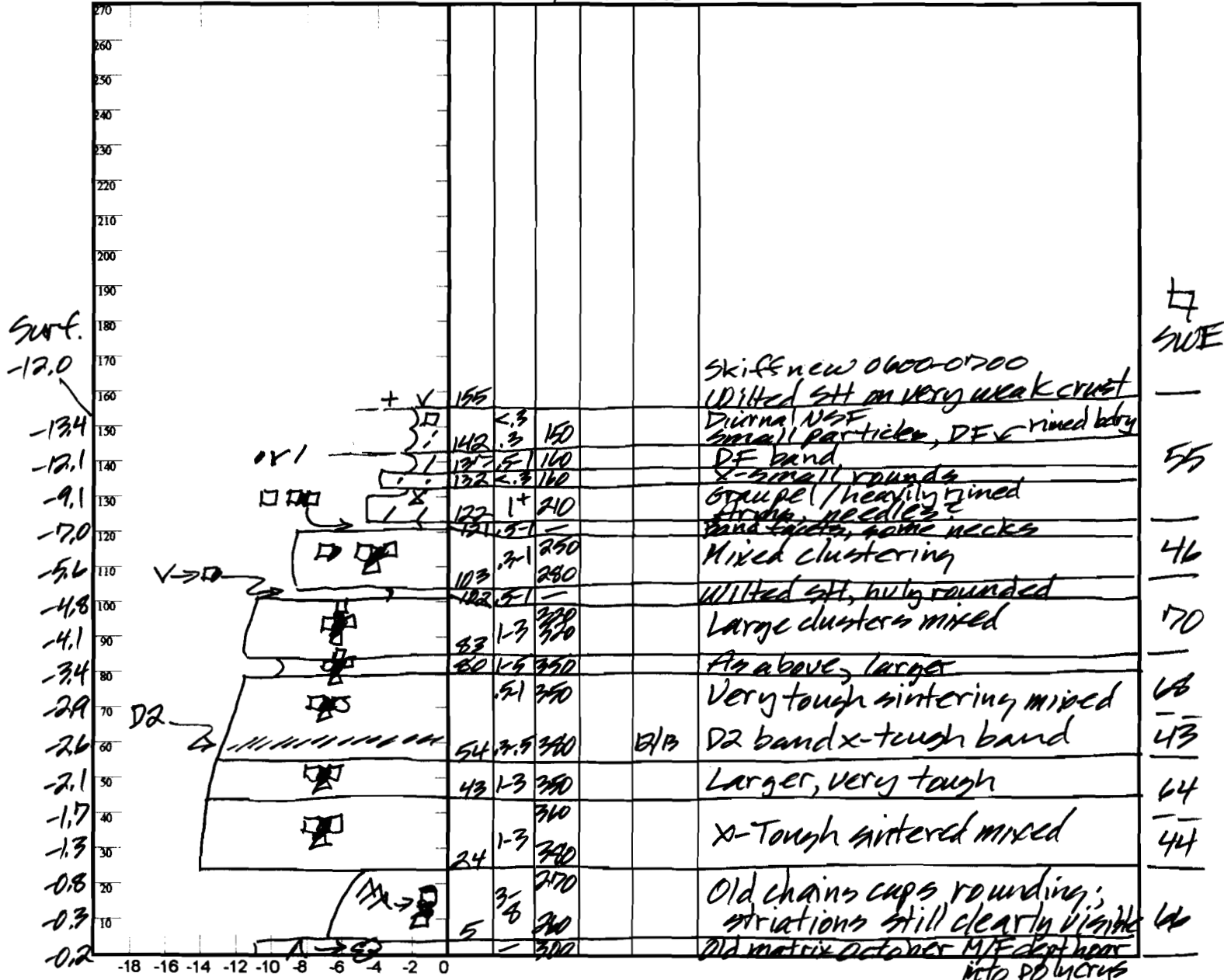
Wind: Nil

Prior Pit: # 4; 1/1/09

Total Snowpack SWE: 456 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.51 m;  $\bar{\rho}$  = 302 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 <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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, SE

Center for Snow and Avalanche Studies

Profile # 17

Time: 1030

Snowpack Profile

Date: 2/28/09

Location: SBSP

Elev. 12,200'

Aspect: NE

Boot Pen: 1 cm

$\angle$ : 3 °

Air T: -3 °C

Sky: 0

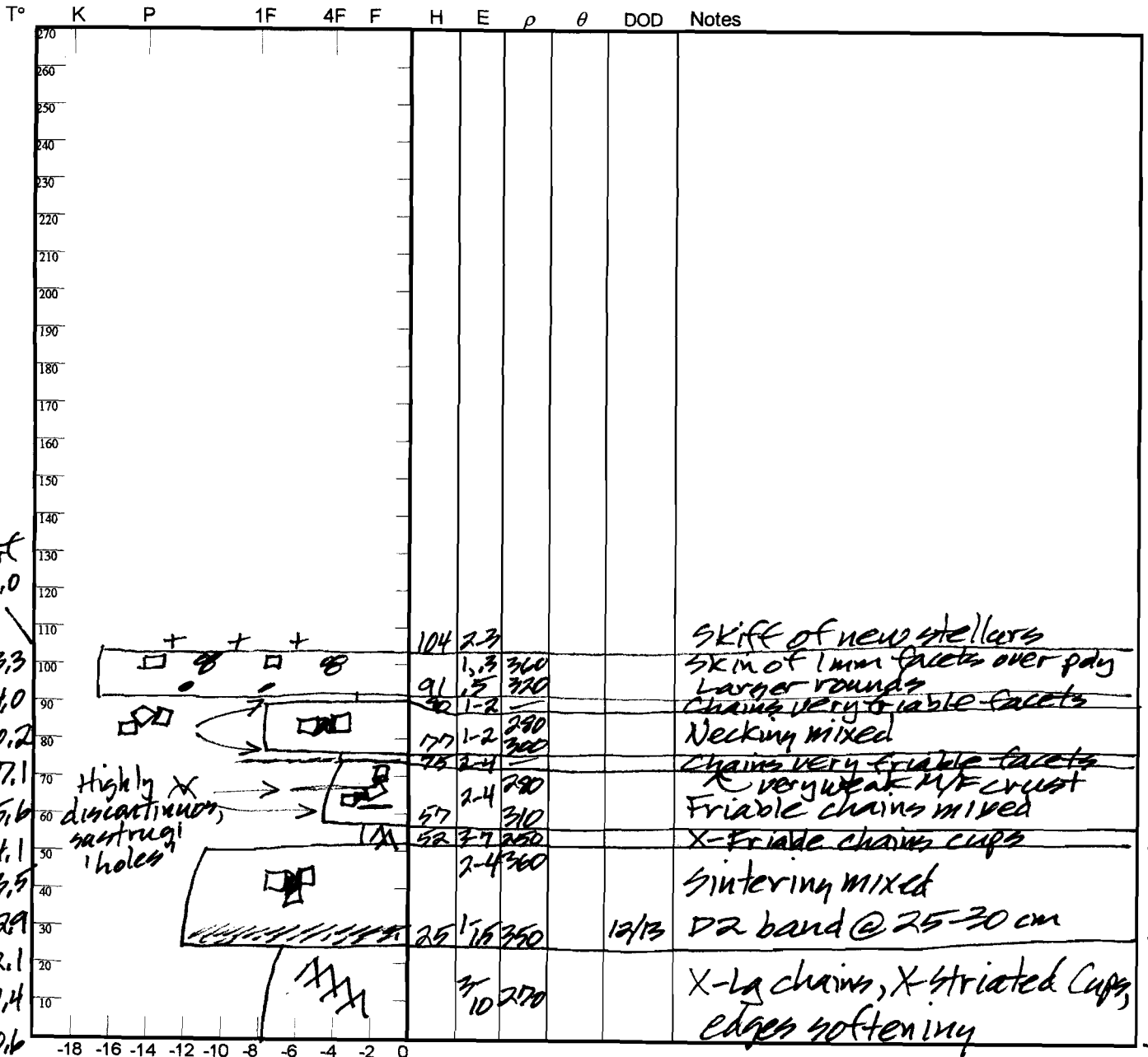
Precip: Nil

Wind: LF

Prior Pit: # 5; 1/30/09

Total Snowpack SWE: 329 mm H<sub>2</sub>O

Notes: Hs  $\bar{h}$  = 1.00m;  $\bar{\rho}$  = 329 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: CHAT

Center for Snow and Avalanche Studies

Profile # 8

Time: 1310

Snowpack Profile

Date: 2/28/09

Location: SASP

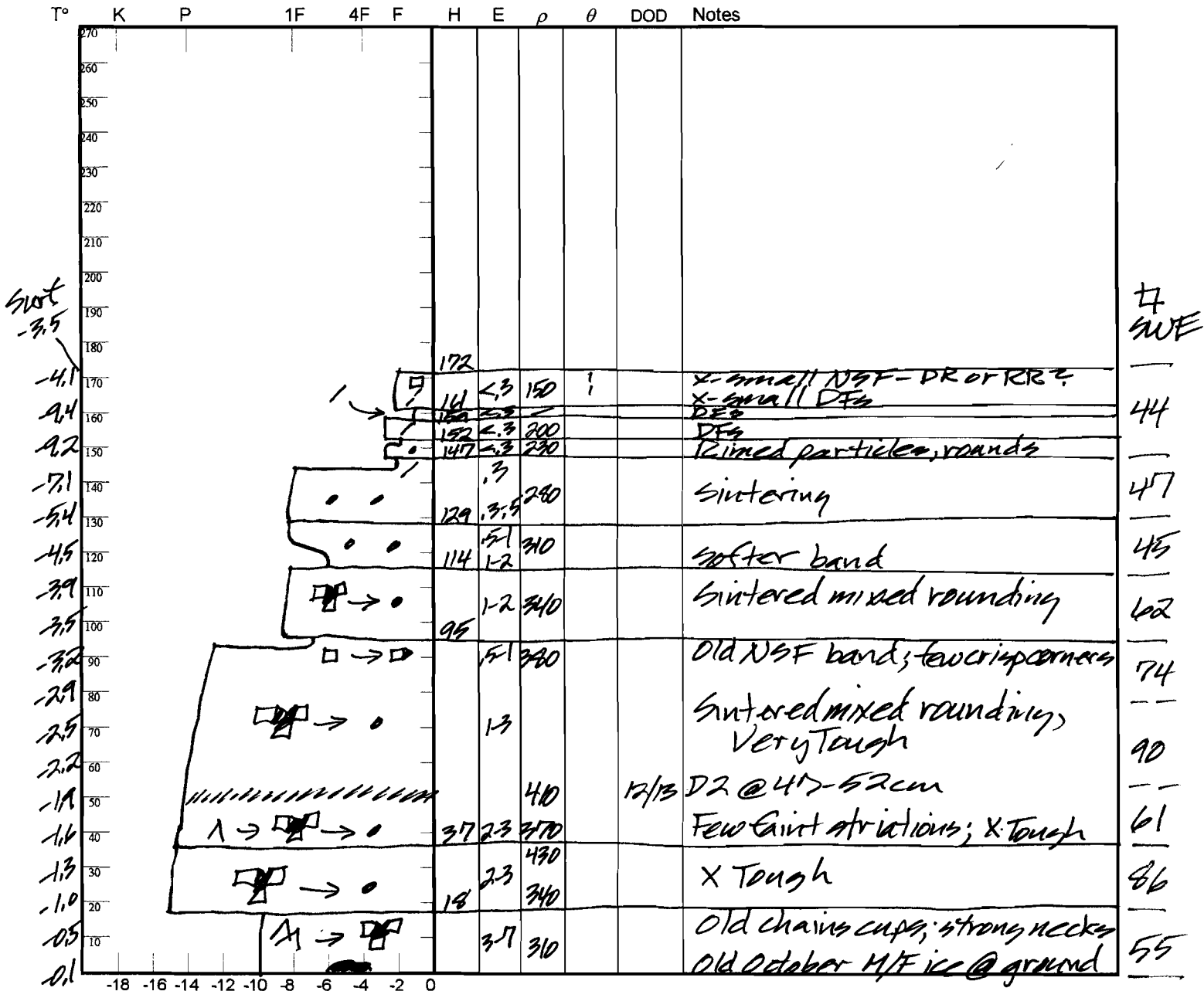
Elev. 14,050' Aspect: NE Boot Pen: 18 cm  $\angle$ : 3°

Air T: +3 °C Sky: 0

Precip: Nil Wind: Nil Prior Pit: # 6; 2/1/09

Total Snowpack SWE: 544 mm H<sub>2</sub>O

Notes: HS  $\eta = 1.73$  m;  $\bar{\rho} = 324$  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	TWL	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: CLAT

Center for Snow and Avalanche Studies

Profile # 9

Time: 0900 MST

Snowpack Profile

Date: 3/9/09

Location: SASP

Elev. 16050' Aspect: NE

Boot Pen: 16 cm  $\angle$ : 3°

Air T: -2 °C

Sky: ☉

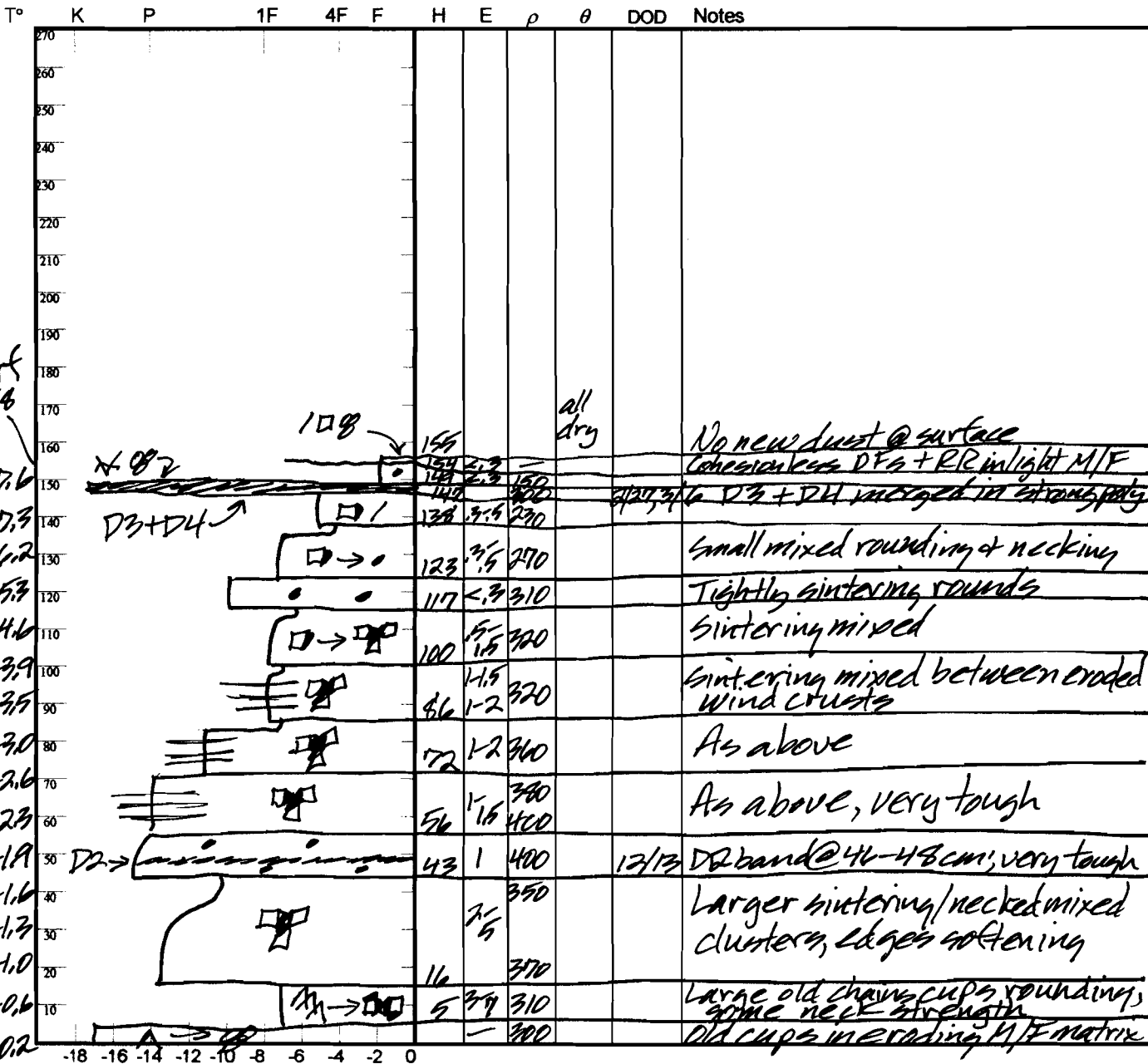
Precip: Nil → 51'

Wind: Lt

Prior Pit: # 8; 2/28/09

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

Notes: Hst = 1.58m;  $\bar{\rho}$  = 324 Kg/m<sup>3</sup>



7  
SWE  
8  
93  
94  
111  
103  
59

Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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 # 10

Time: 1015 MST

Snowpack Profile

Date: 3/16/09

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 12 cm

∠: 3°

Air T: +3 °C

Sky: 0

Precip: Nil

Wind: L4

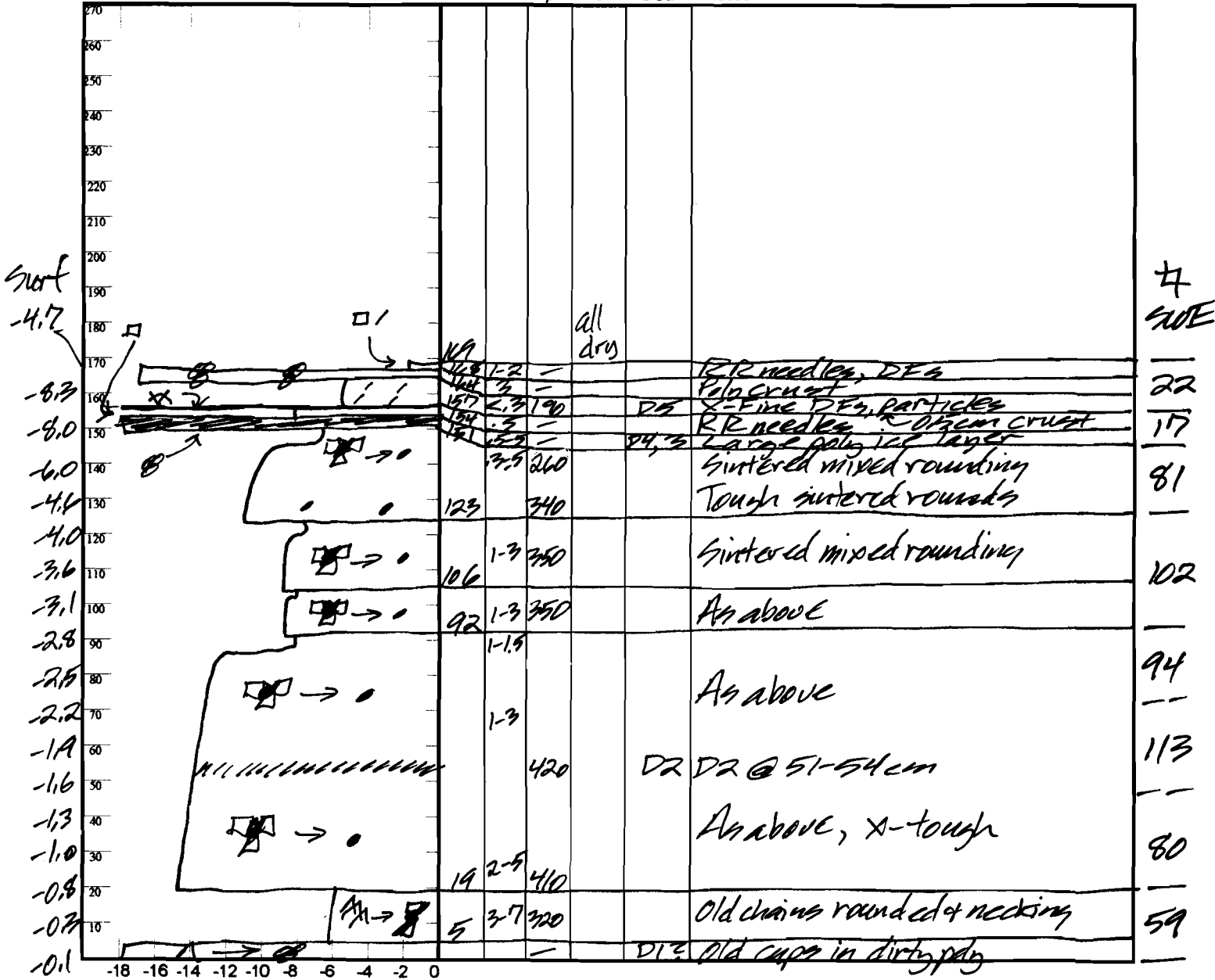
Prior Pit: # 9; 3/9/09

Total Snowpack SWE: 566 mm H<sub>2</sub>O

Notes: H<sub>st</sub> = 1.67 m; ρ = 340 kg/m<sup>3</sup>

D5 in gravimetric samples 1, 2, 3, and 4; D4 and D3 in sample 6

T° K P 1F 4F F H E ρ θ DOD Notes



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+AT

Center for Snow and Avalanche Studies

Profile # 11

Time: 0910 MST

Snowpack Profile

Date: 3/17/09

Location: SBSP

Elev. 12,200'

Aspect: NE

Boot Pen: 25 cm

$\angle$ : 3°

Air T: -1 °C

Sky: 0

Precip: Nil

Wind: Lt

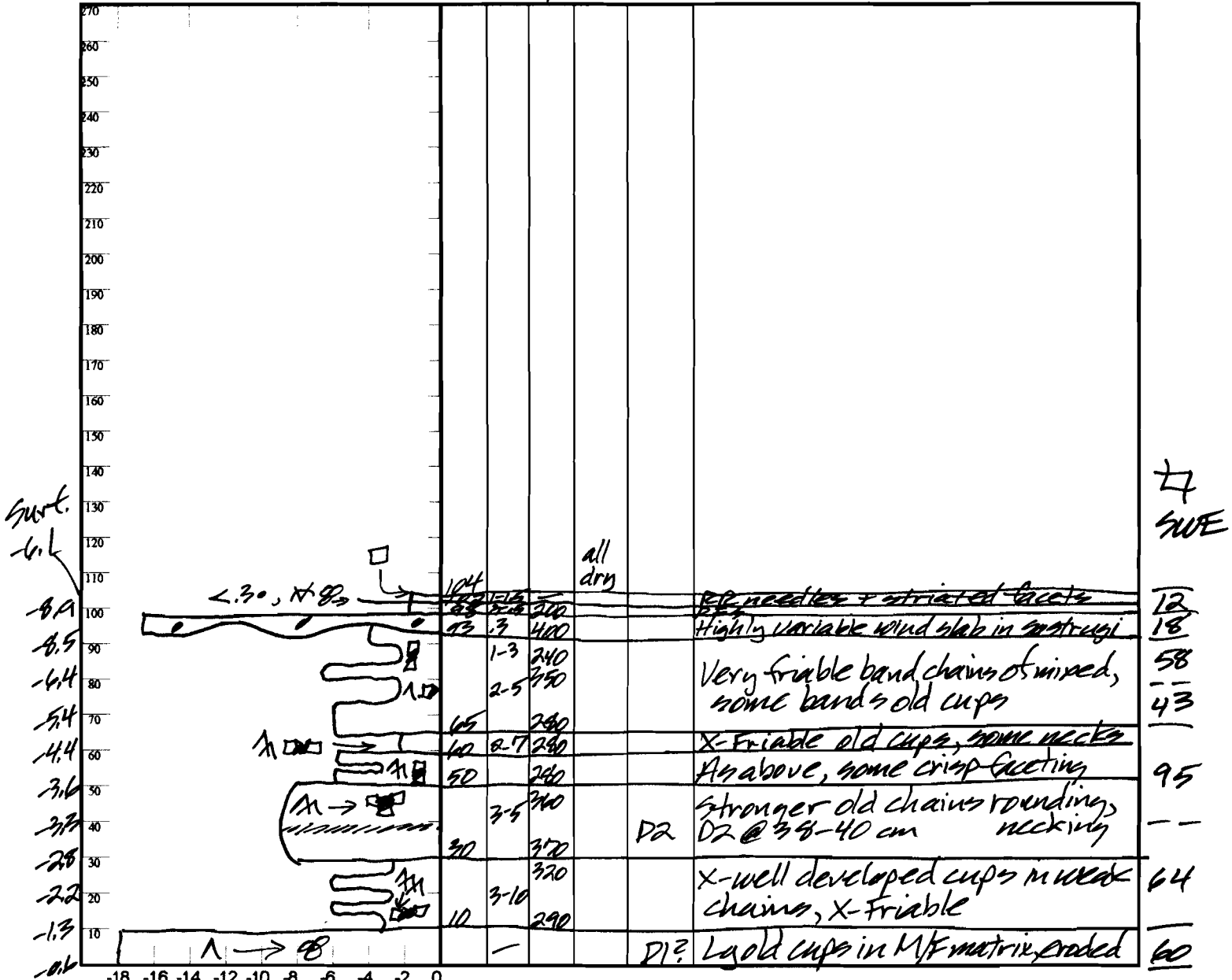
Prior Pit: # 7; 2/26/09

Total Snowpack SWE: 350 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.04 m;  $\bar{\rho}$  = 336 kg/m<sup>3</sup>

No apparent D5, D4, or D3

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



Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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: 1445 MST

Snowpack Profile

Date: 3/24/09

Location: SAEP

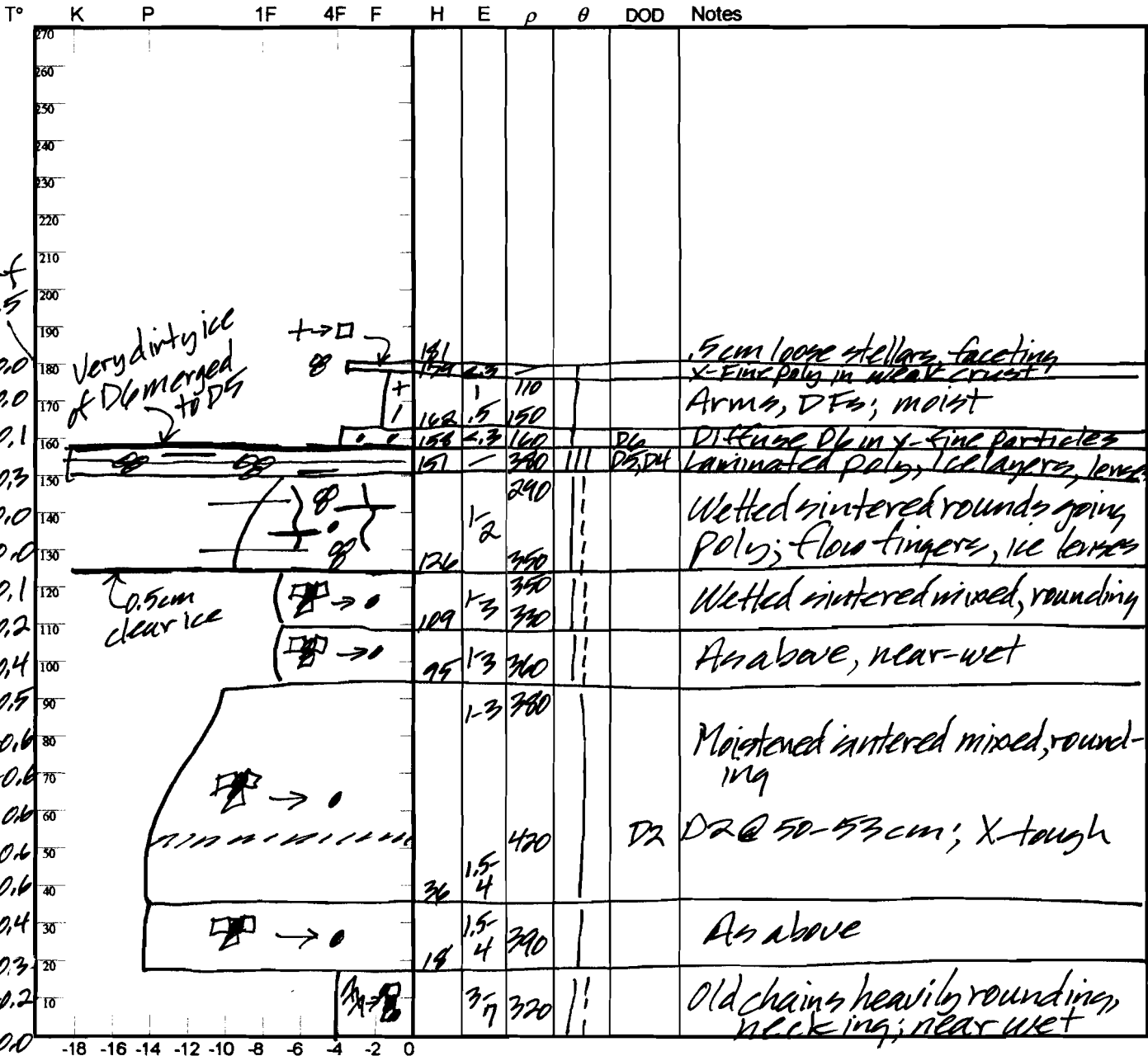
Elev. 11,050' Aspect: NE Boot Pen: 18 cm  $\angle$ : 3°

Air T: -4 °C Sky: ☉

Precip: 51 Wind: Nil Prior Pit: # 10; 3/16/09

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

Notes: HS  $\sigma = 1.90$  m;  $\bar{\rho} = 348$  kg/m<sup>3</sup>



Handwritten notes on the right side of the graph, including "4 SWE", "33", "87", "23", "105", "115", "92", "83", "88".

Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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: CL, EL, NR

Center for Snow and Avalanche Studies

Profile # 13

Time: 1100 MST

Snowpack Profile

Date: 3/28/09

Location: SBSP

Elev. 12,200'

Aspect: NE

Boot Pen: 16 cm

∠: 4°

Air T: -3 °C

Sky: 0

Precip: Nil

Wind: LT

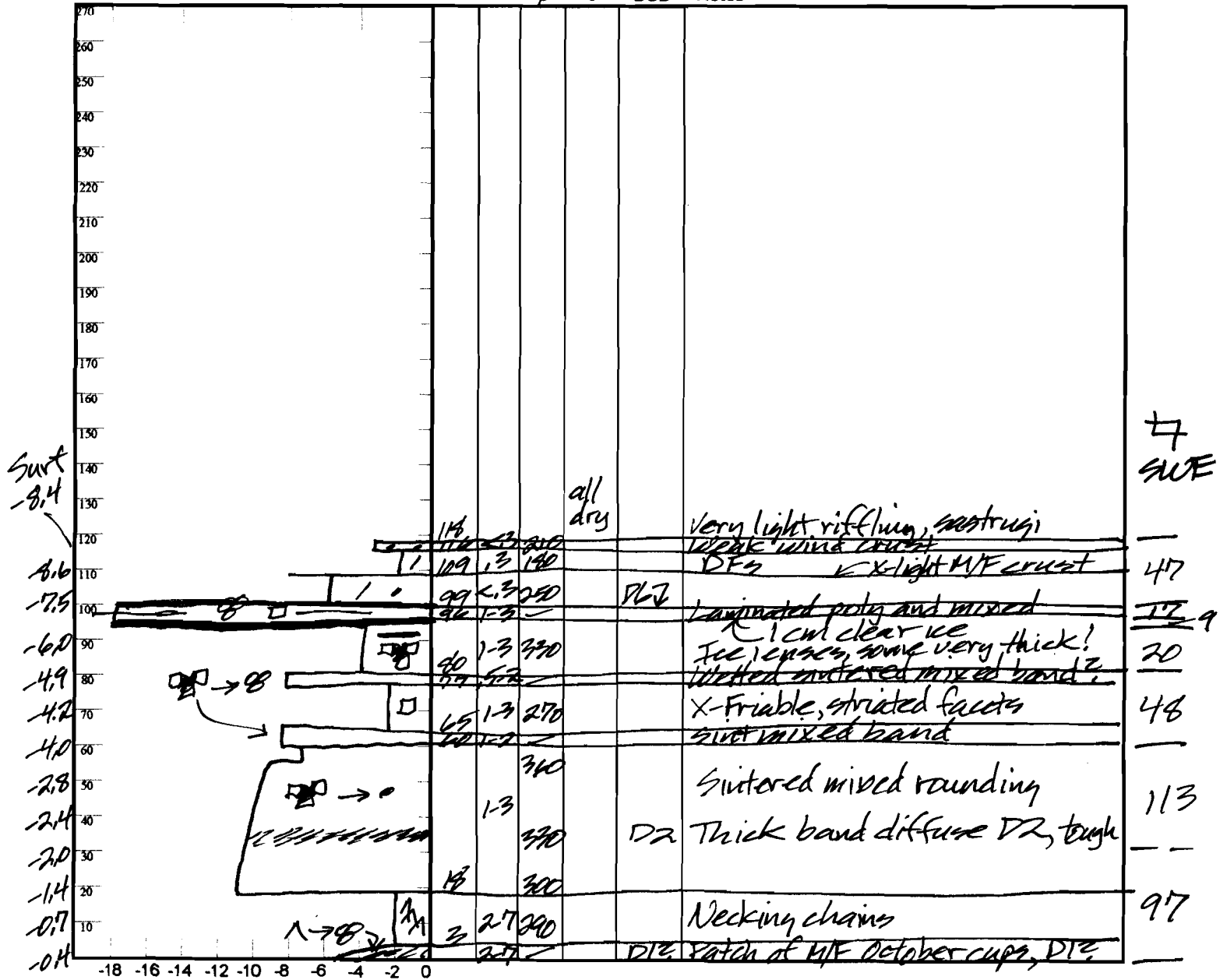
Prior Pit: # 11; 3/17/09

Total Snowpack SWE: 351 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 1.16m;  $\bar{\rho}$  = 303 kg/m<sup>3</sup>

Ratter made IR photos of pit face

T° K P 1F 4F F H E ρ θ DOD Notes



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: Actually post-holed deeply into pack outside pit plot, almost to ground.

Observers: CL+AT

Center for Snow and Avalanche Studies

Profile # 14

Time: 1030 MST

Snowpack Profile

Date: 3/30/09

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 27 cm

∠: 3°

Air T: -13°C

Sky: ⊕

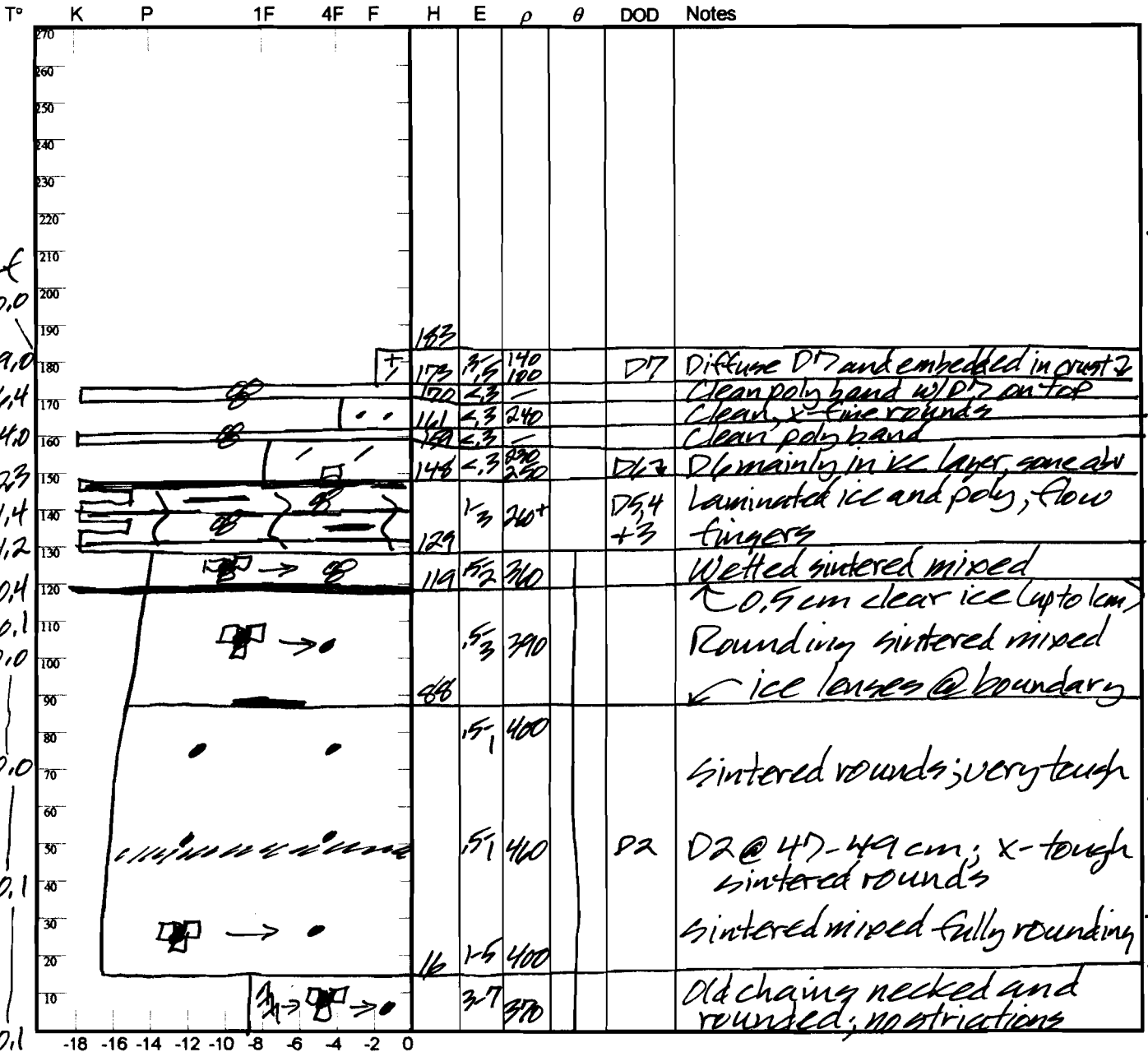
Precip: S23

Wind: Lt

Prior Pit: # 12; 3/24/09

Total Snowpack SWE: 627 mm H<sub>2</sub>O

Notes: H<sub>s</sub>t = 1.83 m; ρ = 343 kg/m<sup>3</sup>



Handwritten notes on the right side of the graph, including SWE values and layer identifiers: 4, SWE, 8, 54, 101, 9, 117, 110, 117, 69, 42.

Handwritten temperature notes on the left side of the graph: surf -10.0, -9.0, -6.4, -4.0, -2.9, -1.4, -1.2, -0.4, -0.1, 0.0, 0.0, -0.1, -0.1.

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:

V. 11/20/03

Observers: CHAT

Center for Snow and Avalanche Studies

Profile # 15

Time: 1010 MST

Snowpack Profile

Date: 4/6/09

Location: SBSP

Elev. 12,200'

Aspect: NE

Boot Pen: 21 cm

$\angle$ : 3°

Air T: -2 °C

Sky: 0

Precip: Nil

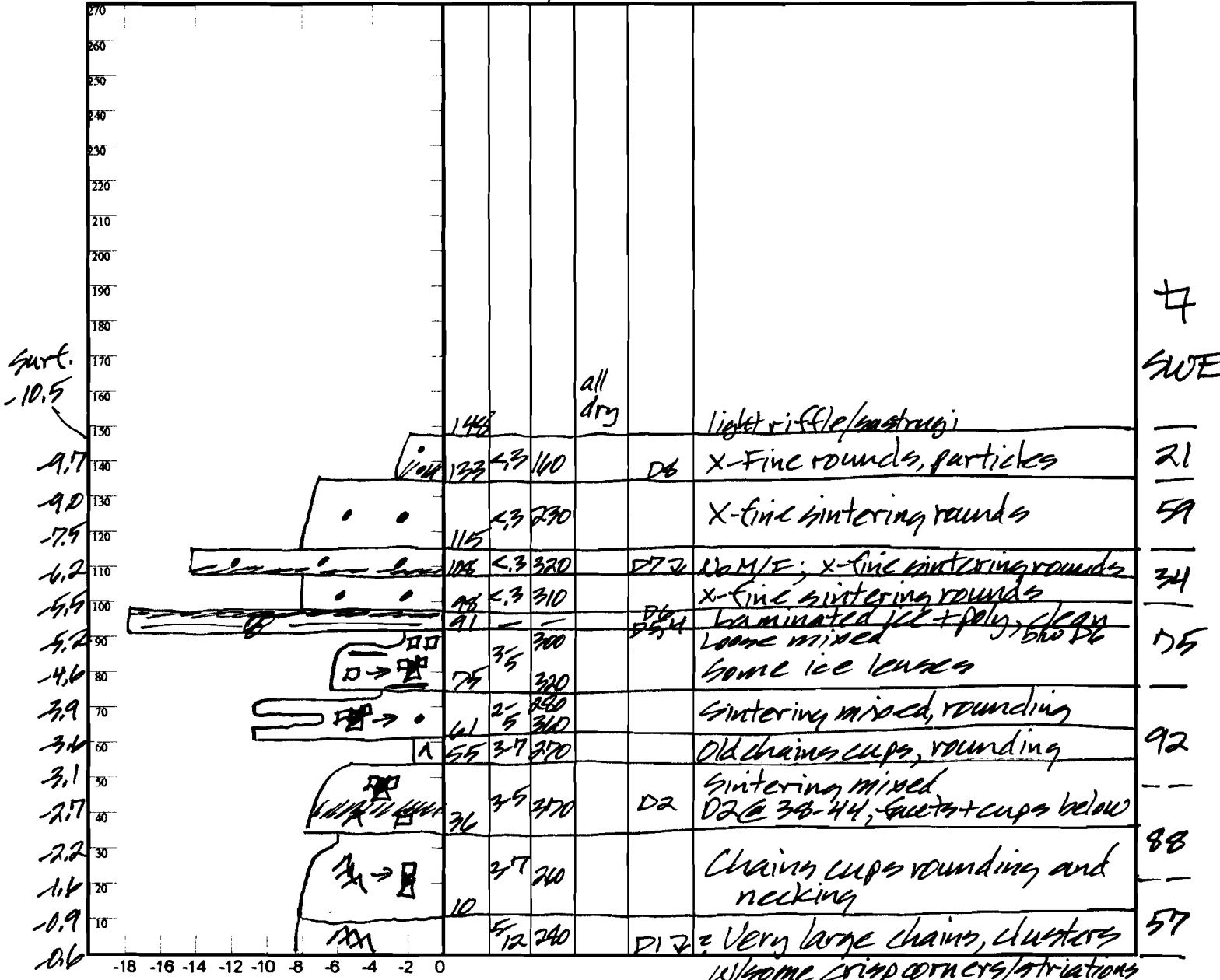
Wind: Nil

Prior Pit: # 13; 3/26/09

Total Snowpack SWE: 424 mm H<sub>2</sub>O

Notes: H<sub>st</sub> = 1.46;  $\bar{\rho}$  = 292 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 <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{kg}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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: CL+AT

Center for Snow and Avalanche Studies

Profile # 16

Time: 1030 MST

Snowpack Profile

Date: 4/7/09

Location: WASP

Elev. 11,050'

Aspect: NE

Boot Pen: 19 cm

$\angle$ : 3°

Air T: 17 °C

Sky: 0

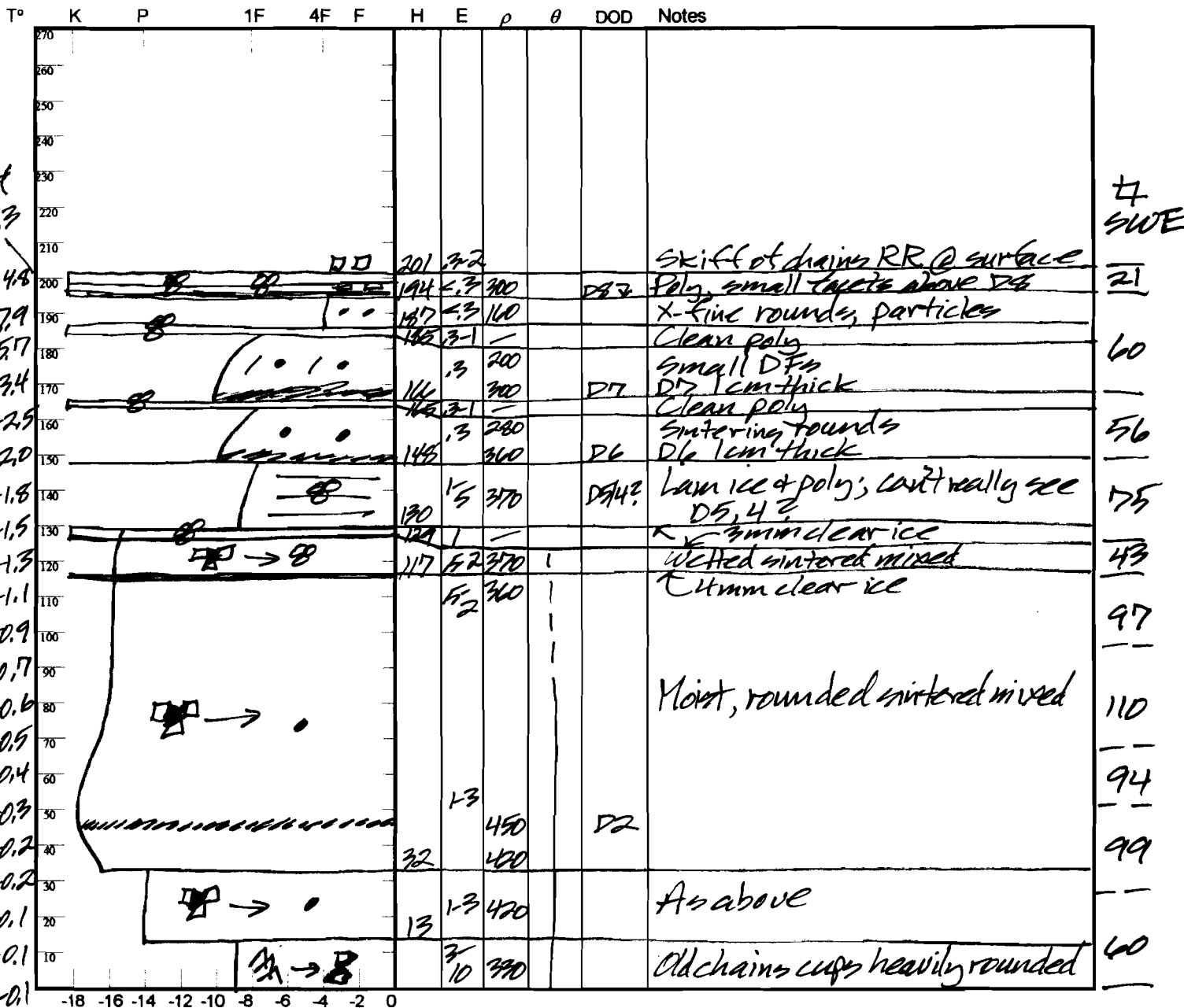
Precip: Nil

Wind: Nil

Prior Pit: # 14; 3/30/09

Total Snowpack SWE: 715 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 2.02 m;  $\rho$  = 354 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: CL, AT, TP, AB, MS Center for Snow and Avalanche Studies

Profile # 17

Time: 0920 MST

Snowpack Profile

Date: 4/15/09

Location: SASP

Elev. 11,050'

Aspect: NE

Boot Pen: 47 cm

$\angle$ : 3°

Air T: 0 °C

Sky: ⊕

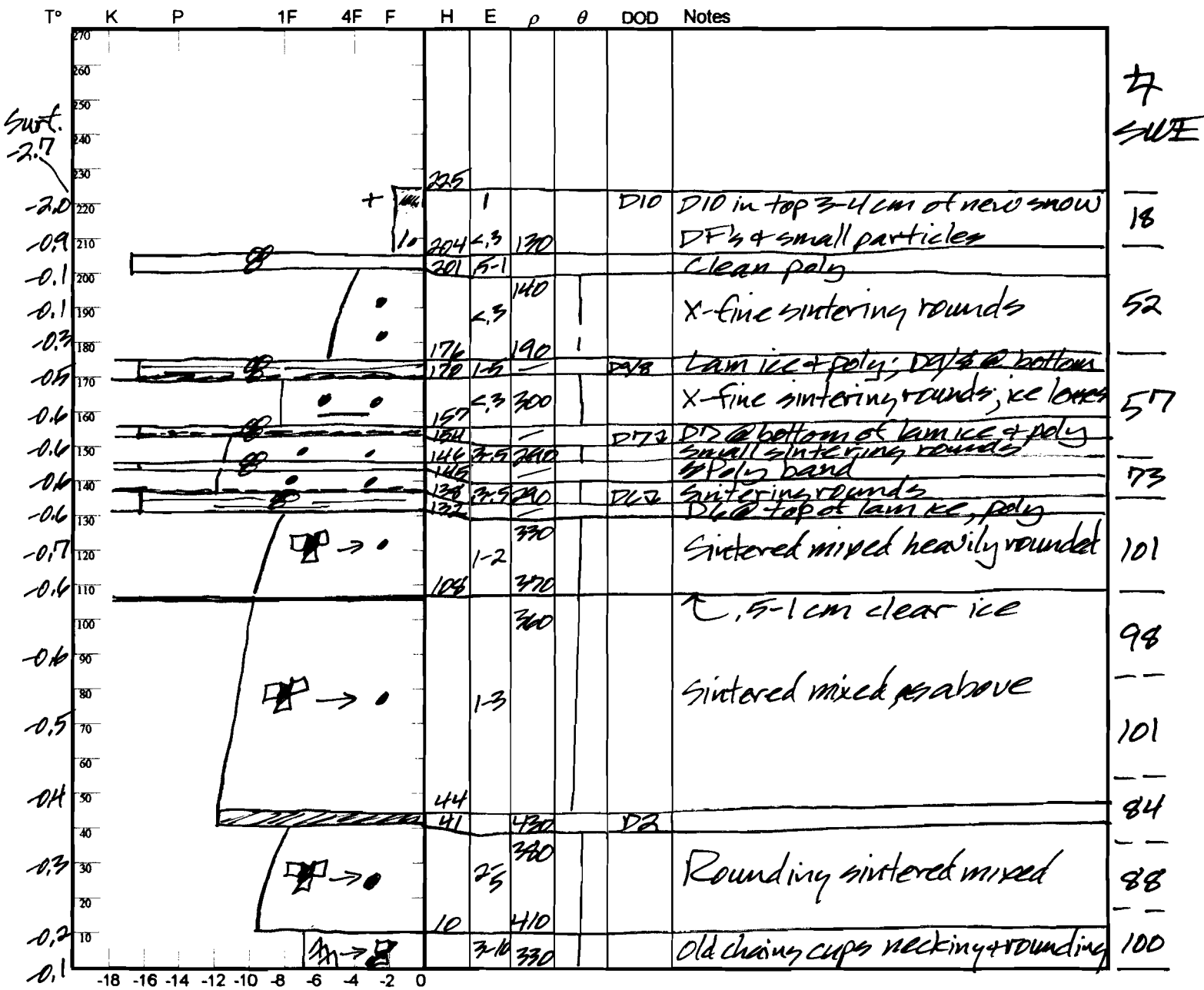
Precip: SI

Wind: Lt, var

Prior Pit: # 16; 4/7/09

Total Snowpack SWE: 772 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 8.25 m;  $\rho = 343$  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: U+AT

Center for Snow and Avalanche Studies

Profile # 18

Time: 1035

Snowpack Profile

Date: 4/22/09

Location: Camp Angel 48

Elev. 11,050'

Aspect: NE

Boot Pen: 15 cm

$\angle$ : 3 °

Air T: +11 °C

Sky: 0

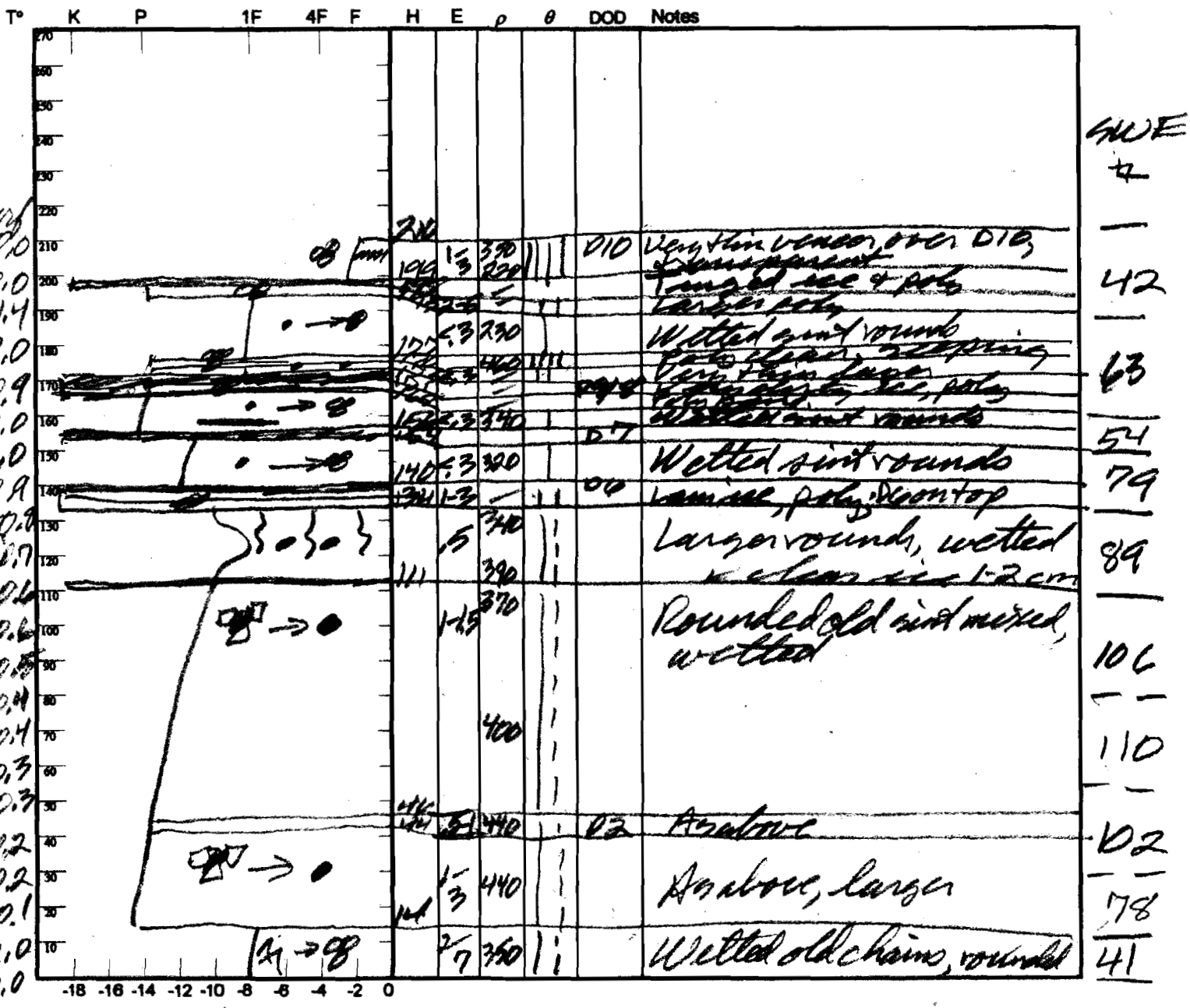
Precip: Nil

Wind: H-

Prior Pit: # 17; 4/15/09

Total Snowpack SWE: 764 mm H<sub>2</sub>O

Notes: H<sub>5</sub> = 2.08 m;  $\rho = 367$  kg/m<sup>3</sup>



Potential Slab				Weak Layer & Bed Surface						
Ref	$H_2O_{Nor} + H_{Nor} = \rho H$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$		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: CB

Center for Snow and Avalanche Studies

Profile # 19

Time: 1400

Snowpack Profile

Date: 4/24/09

Location: SBSP (Using HP's pt)

Elev. 17,800

Aspect: N/E

Boot Pen: 14 cm  $\angle$ : 5 °

Air T: 73 °C

Sky: CD

Precip: Nil

Wind: lt-Med

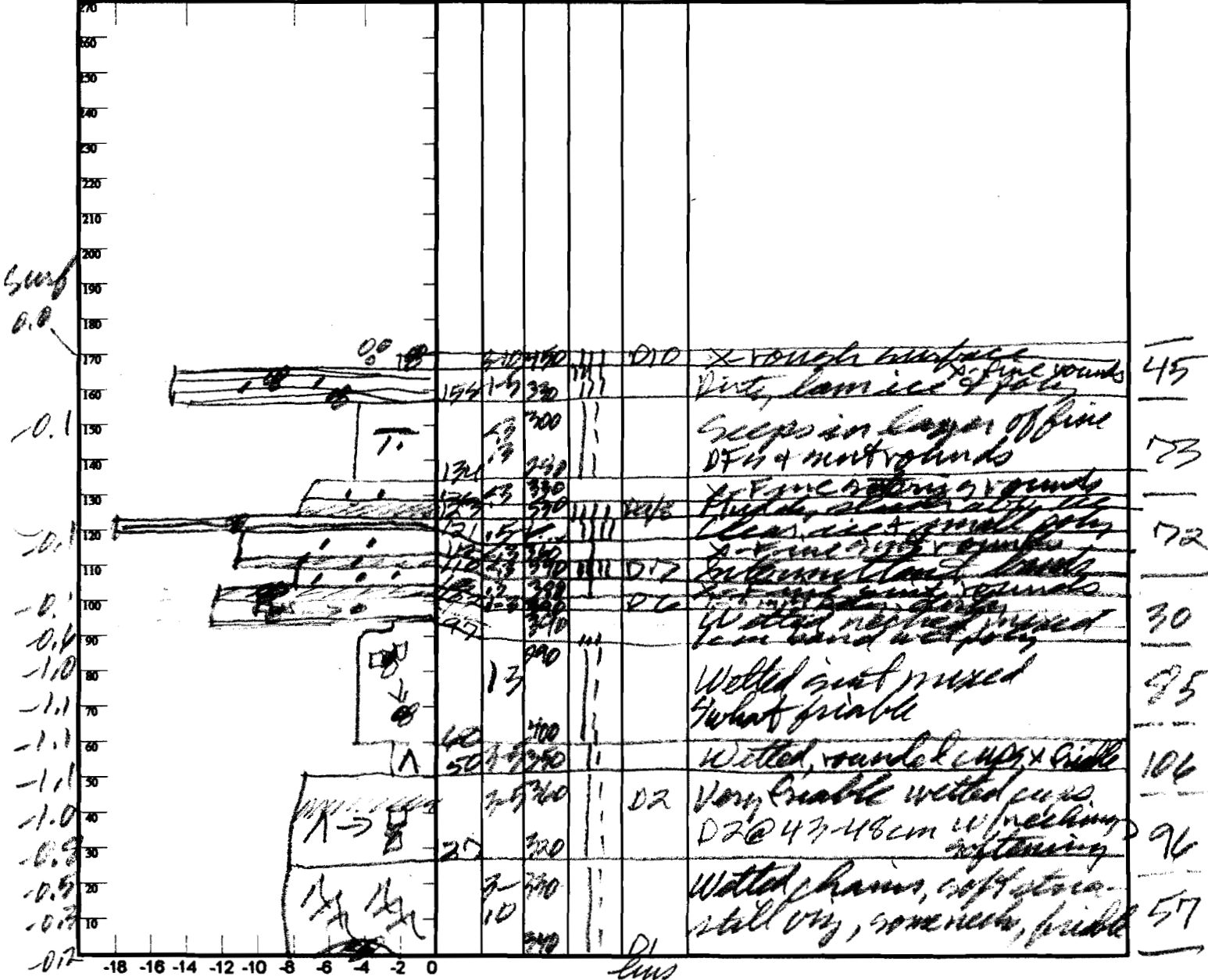
Prior Pit: # 15; 4/14/09

Total Snowpack SWE: 564 mm H<sub>2</sub>O

Notes: HSZ = 1163 ;  $\rho = 346$  Kg/m<sup>3</sup>

Heard plannet gun, HP's radar survey thwarted by wet snow.

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



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} + H_{Nor} = \rho_{eq}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	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: U & AT

Center for Snow and Avalanche Studies

Profile # 20

Time: 0745 MST

Snowpack Profile

Date: 4/29/09

Location: GASP

Elev. 11,050

Aspect: NE

Boot Pen: 1 cm

$\angle$ : 3 °

Air T: +6 °C

Sky: 0

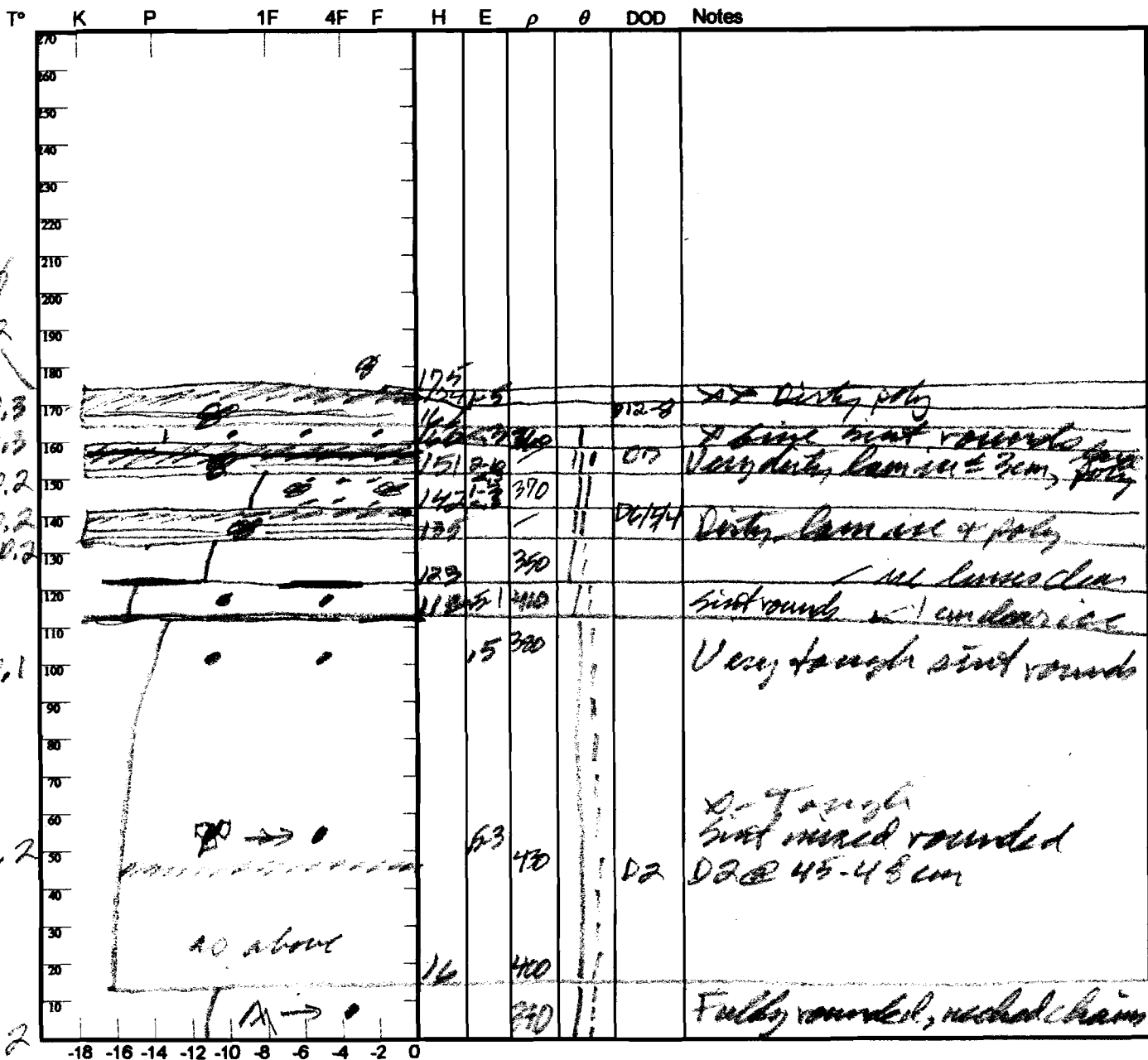
Precip: Nil

Wind: 0

Prior Pit: #      ;      /      /     

Total Snowpack SWE: 129 mm H<sub>2</sub>O

Notes: H<sub>s</sub> = 1.72 ;  $\bar{\rho}$  = 406 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = $\rho_{10}$	Sin $\angle$ x H <sub>Nor</sub> x $\rho$ x 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: CL+AT

Center for Snow and Avalanche Studies

Profile # 21

Time: 0905

Snowpack Profile

Date: 4/30/09

Location: SBSR

Elev. 18200'

Aspect: NE

Boot Pen 0-4 cm

$\alpha$ : 4°

Air T: 12 °C

Sky: 0

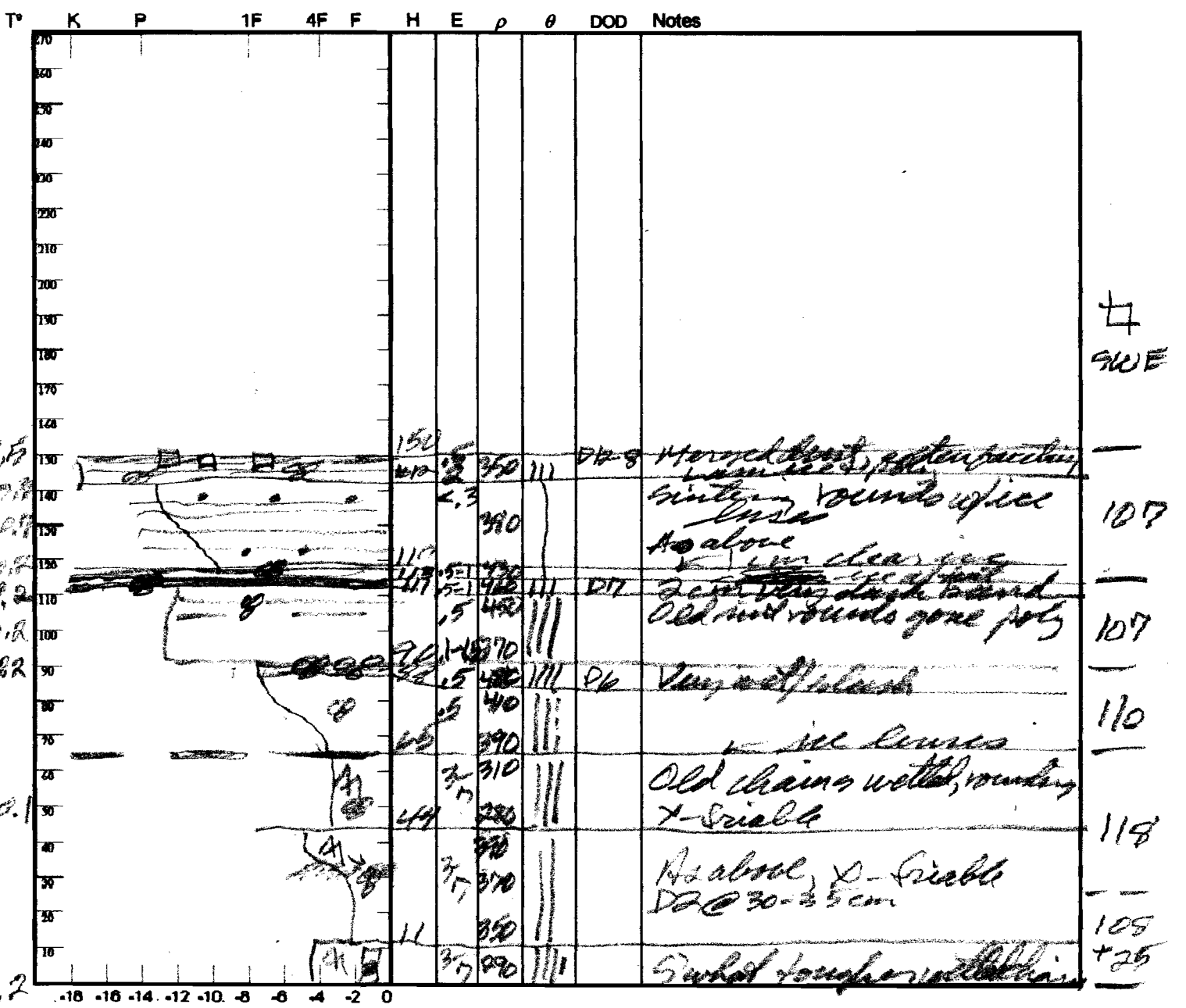
Precip: Nil

Wind: W

Prior Pit: # 19: 4/24/10

Total Snowpack SWE: 276 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.47;  $\rho$  = 391 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2}O_{Nor} \div H_{Nor} = \rho_{10}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = T_{Slab}$	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: CL+AT

Center for Snow and Avalanche Studies

Profile # 22

Time: 0945 MST

Snowpack Profile

Date: 5/6/09

Location: CHSP

Elev. 11,090' Aspect: NE Boot Pen: 57 cm 4 °

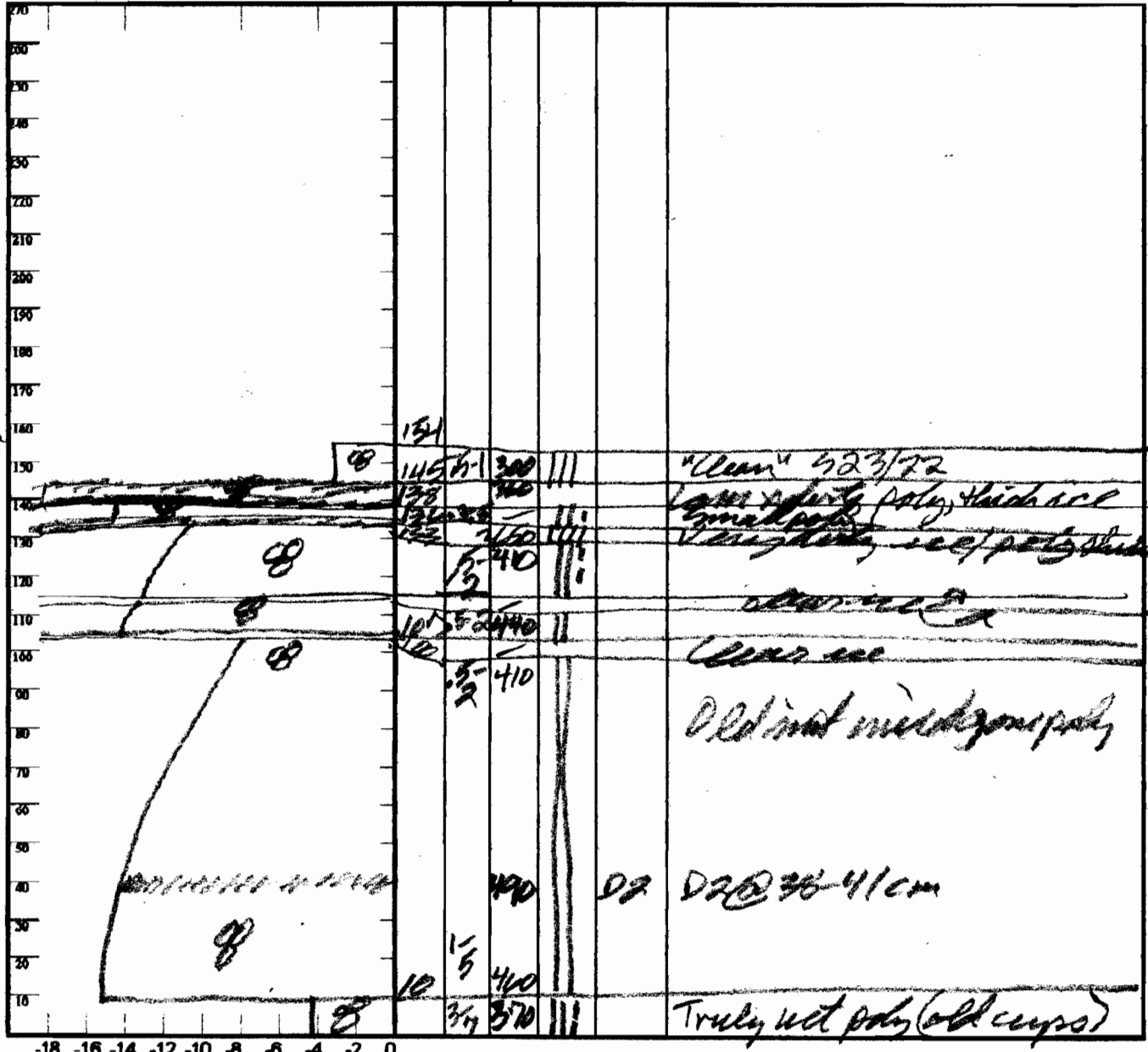
Air T: 11.0 °C Sky: 0

Precip: Nil Wind: LT Prior Pit: # 30; 4 29/10/09

Total Snowpack SWE: 698 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.53m ; ρ = 454 kg/m<sup>3</sup>

T° K P 1F 4F F H E ρ θ DOD Notes



Handwritten notes on the right side of the graph, including "SWE" and numerical values: 89, 80, 113, 124, 119, 97, 176.

Potential Slab			Weak Layer & Bed Surface						
Ref	H <sub>2</sub> O <sub>Nor</sub> ÷ H <sub>Nor</sub> = ρ <sub>ig</sub>	Sin ∠ × H <sub>Nor</sub> × ρ × 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: CLYAT

Center for Snow and Avalanche Studies

Profile # 23

Time: 0910 MST

Snowpack Profile

Date: 5/7/09

Location: SBS

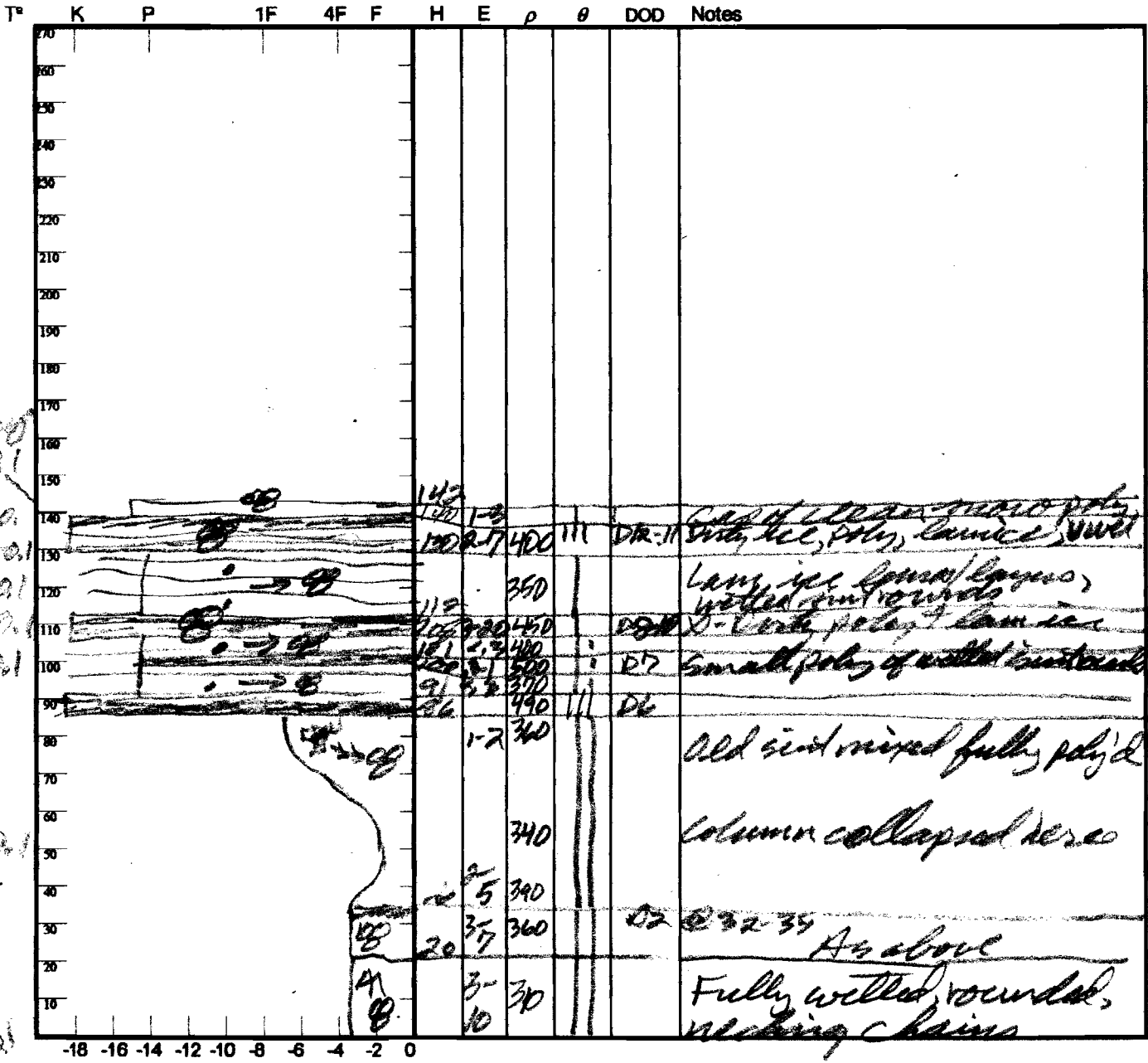
Elev. 1220 Aspect: NE Boot Pen: 2 cm 3 °

Air T: 14 °C Sky: 0

Precip: Nil Wind: lt-Med Prior Pit: # 21; 4/30/09

Total Snowpack SWE: 515 mm H<sub>2</sub>O

Notes: HS  $t = 141m$ ;  $\bar{\rho} = 294 kg/m^3$



Scop  
-0.1  
-0.1  
-0.1  
-0.1

4  
SWE

119

116

108

104

108

Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{10}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	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: CL, AT, AB, MS Center for Snow and Avalanche Studies

Profile # 24

Time: 1215 MST

Snowpack Profile

Date: 5.18.09

Location: SBCP

Elev. 1220

Aspect: NE

Boot Pen: 210 cm

$\alpha$ : 3°

Air T: 16 °C

Sky: 0

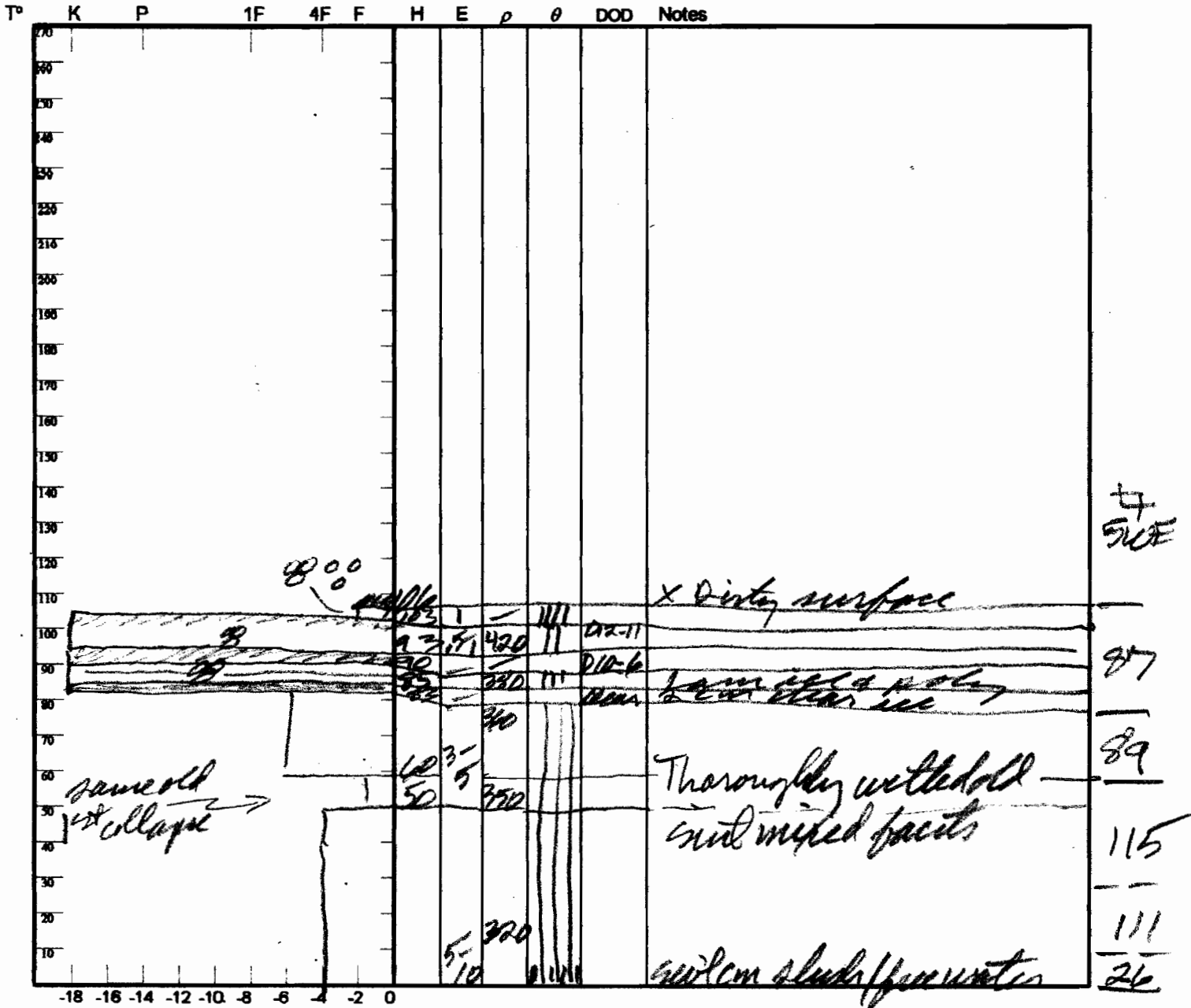
Precip: Nil

Wind: Light Mod

Prior Pit: # 23; 5.17.09

Total Snowpack SWE: 420 mm H<sub>2</sub>O

Notes: H<sub>2</sub>O = 1.02;  $\bar{\rho}$  = 420 kg/m<sup>3</sup>



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{wg}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = T_{Slab}$	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:

V. 11/2003



Observers: CL, AT, AB, MS Center for Snow and Avalanche Studies

Profile # 25

Time: 0835 MST

**Snowpack Profile**

Date: 5/13/09

Location: SAS

Elev. \_\_\_\_\_ Aspect: \_\_\_\_\_ Boot Pen: 1 cm  $\angle$ : \_\_\_\_\_°

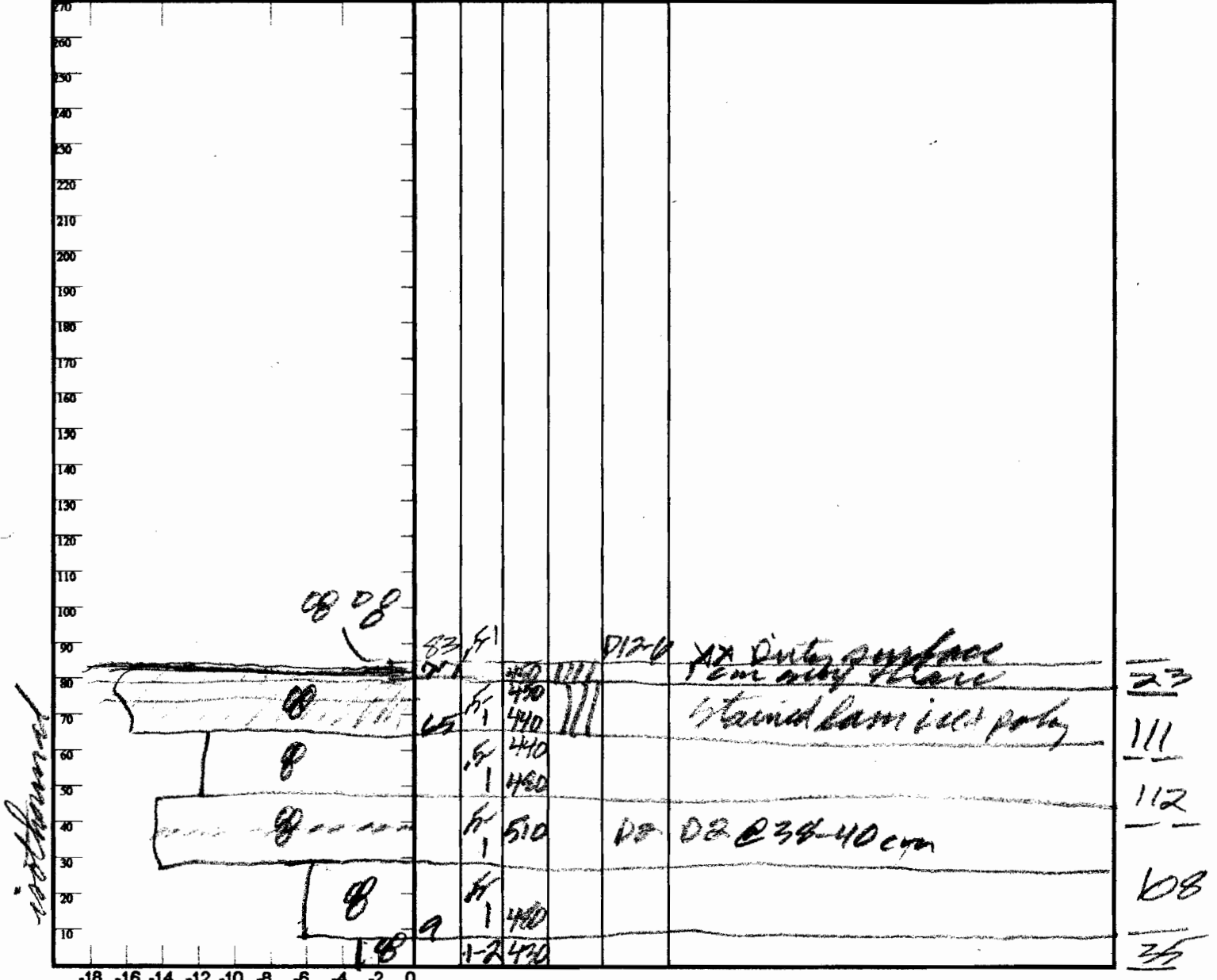
Air T: \_\_\_\_\_°C Sky: 0

Precip: Nil Wind: Nil Prior Pit: # \_\_\_\_\_; \_\_\_\_\_

Total Snowpack SWE: 371 mm H<sub>2</sub>O

Notes: HS  $\sigma = 0.82 \text{ m}$ ;  $\rho = 474 \text{ kg/m}^3$

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



Potential Slab			Weak Layer & Bed Surface						
Ref	$H_{2O_{Nor}} \div H_{Nor} = \rho_{10}$	$\sin \angle \times H_{Nor} \times \rho \times 9.8 = \tau_{Slab}$	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: CL, AT, AB, MS Center for Snow and Avalanche Studies

Profile # 26

Time: 1045

**Snowpack Profile**

Date: 5/18/09 *to record to record*

Location: GBS P

Elev. \_\_\_\_\_ Aspect: \_\_\_\_\_

Boot Pen: 150 cm

Air T: \_\_\_\_\_ °C

Sky: \_\_\_\_\_

Precip: \_\_\_\_\_

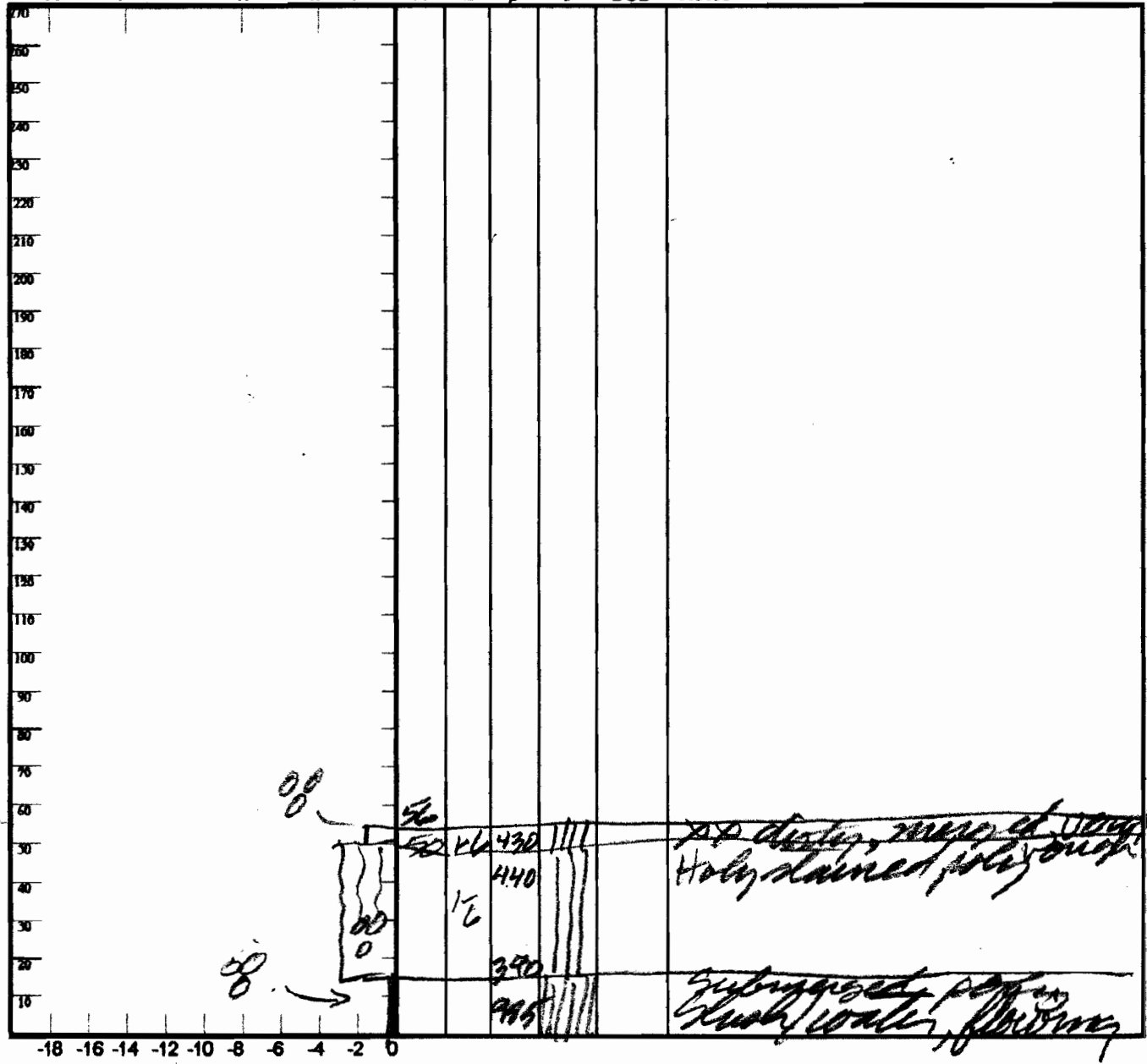
Wind: \_\_\_\_\_

Prior Pit: # 24; 5/12/09

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

Notes: AB+MS took albedo on pit spot  
earlier; from albedo/water log

T° K P 1F 4F F H E ρ θ DOD Notes



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: