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1996

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1997

- 1997/01 (ADAM)
- 27/7/97 SURF SURVEY: 136 → 147 (ANTHONY, MIKE TA)
- 97-07, 97-08, B8F, M88 (ANDY A)
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- 12/8/97 SURF. SURVEY: 186 → TC (ANTHONY, PHIL W)

1998

- 98.07.12 Andy surface GPS and tagging
- 98.07. Kate 1987-01 and 1998-01 (Now 199 Tumbling holder hole)
- 98.07.16 Andy surface survey B-8 to 101 and 103
- 98.07.19 Andy/Brian/Woolkey surface surveys CUCC 1993-01 → 103 ← 173
- 98.07.21 Andy GPS fixes on plateau
- 48.07.23 Andy/Kate surface survey 159 → TC.
- 98.07.23 Andy/Kate surface survey 1998-03 → Existing survey
- 98.07.23 Woolkey/Phil W. Eishöhle Platten Hall/Carthorn heater
- 98-07 Lost Rucksack höhle survey & description (p200)
- 98-07 Lardy Festeners höhle. Kate/Brian
- 98-07 VfHO Schneekulwanhalle (Eishöhle) survey
- 98-07-18 90, 91, 93, 94, 160 survey.
- Vad → 156, 199 & 197 survey + 1987 Linn 0/1 → 156 survey

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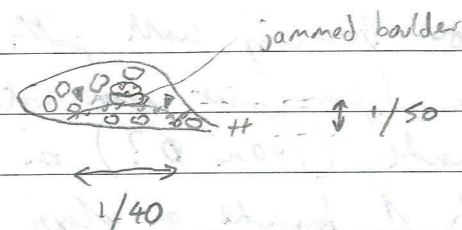
15/7/96

SKI-POLE HOHLE

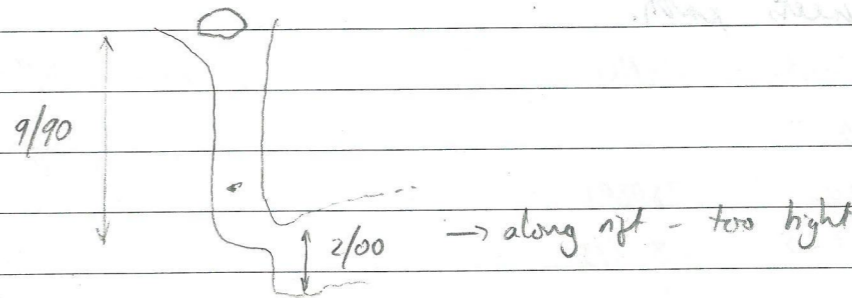
TEMP NO 9601

Nick, Brian, Tina

Plan



Elevation



Desc

Climb down shake hole to open shaft which drops straight down

Situated at top end of rift/gorge next to path to 161d

Walking to 161d: go into the very narrow gorge, then up the RH wall about 1/3 the way along. This gets you into the next gorge, then on bearing 031 (looking towards 161d end of path). Turn R up the rift. There are many holes along the rift - all choked or too tight. 96/01 is at the top end. (Marked with a bolt)

② 1996.07.15

Work - prospecting in slopes to West of Top Camp.

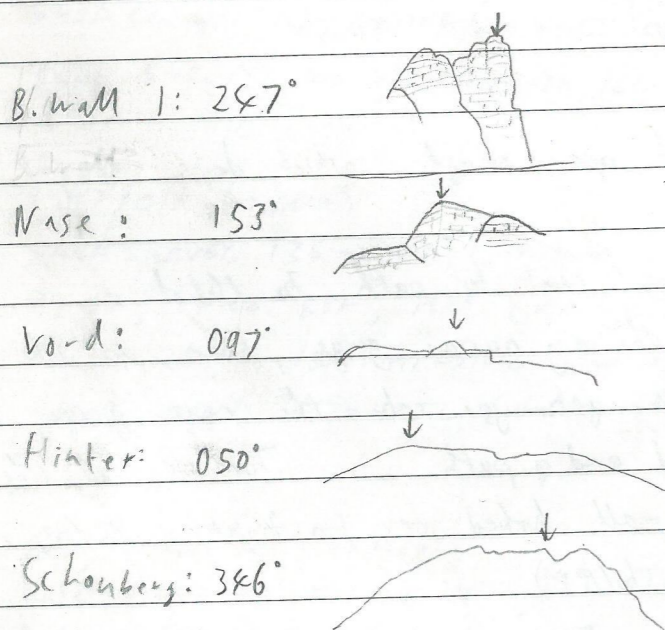
1623/90

How to get there: From <sup>(Top Camp)</sup> TC 95 follow Branning wall path on slope above. ~~about 80m~~ about 80m along (from point above waterhole) you meet edge of large patch of bunde (100m  $\phi$ ?) on raised limestone shelf. There is another patch of bunde on slopes to L. 90 is close to the corner of the big bunde patch, 21m from path. Follow joint through gap in bunde about 5m past where limestone step meets path.

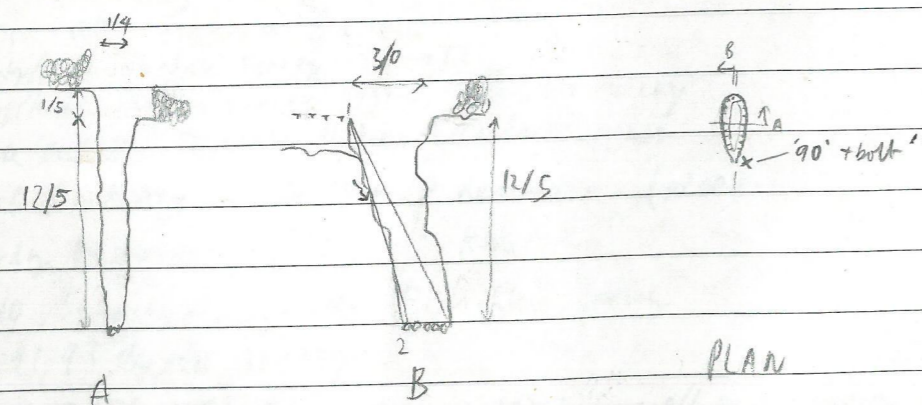
Instruments: Work's SanntoMCI Sighting compass, & Garmin GPS45 on WGS84 + Austria Grid.

Co-ords & Bearings:

UTM 33T 0410257 5280841 ALT 1623  $\pm$  72  
0410281 5280823 ALT 1638  $\pm$  73



Cave is <sup>damp</sup> a cherted rift.  
(Done) Needing ladder to descend.  
Small stream sink in floor  
formed on a joint.



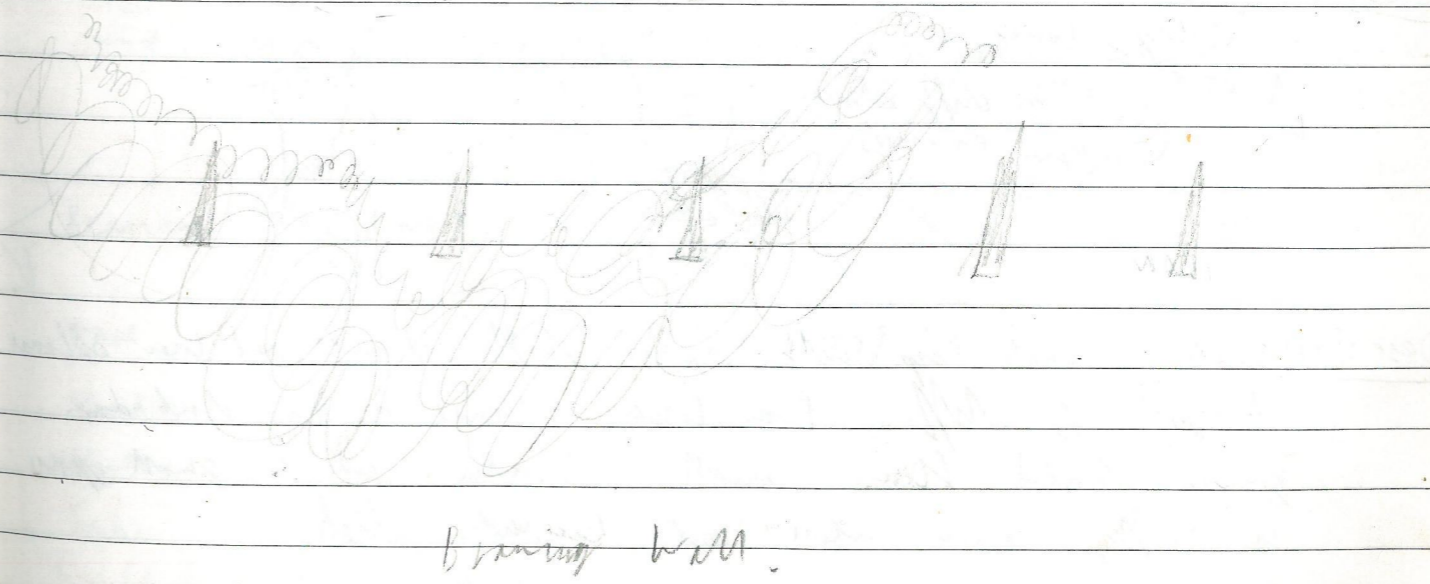
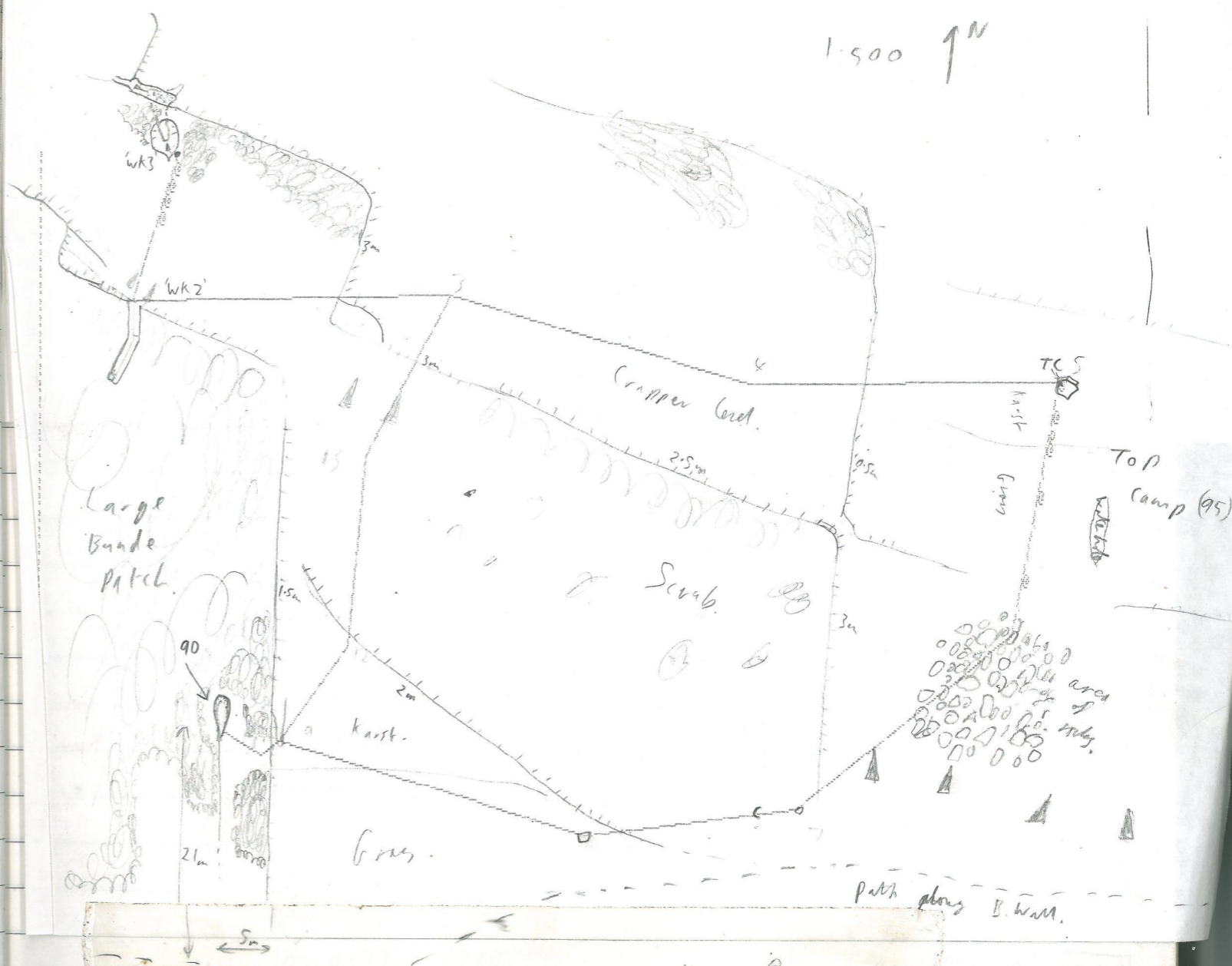
PLAN

ELV's

From to top cov. mts.  
Fake survey: 1 2 13 . 0 -65

TC (96)

⊗ = Bunde



Branning wall

1996 CUCC WK2 & WK3

Desc: [WK2] Small (1.1 x 0.9m) horiz cave about 7m long in cliff edge. Very small skylight let light in at far end. Marked '+'.  
(WK2 WK3) copper

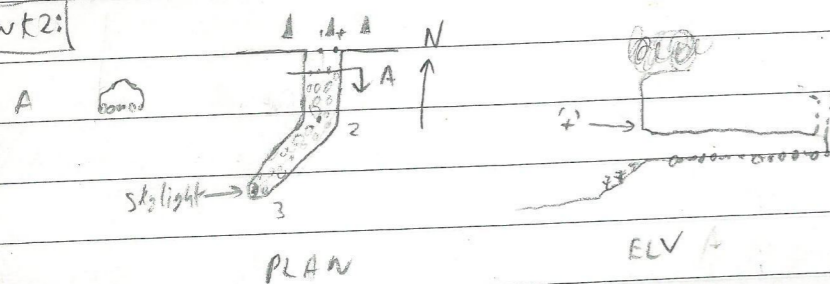
no Route: From T(95) walk W along copper shelf. After 60m climb 3m steep ahead. WK2 ( ) & WK3 ( ) are on this shelf. WK2 to left, WK3 to right. WK3 lower entrance is accessible from the level below.

Sunny WK2

From	To	Type	Comp	Chd	
+	1	1/25	290	+73	'+' = mark above entrance
1	2	3/1	198	+02	1 = floor, middle of entrance
2	3	4/0	225	00	2 = " " " " prompt @ corner
					3 = " " " " (end)

1996 CUCC [NOW 207]

WK2:

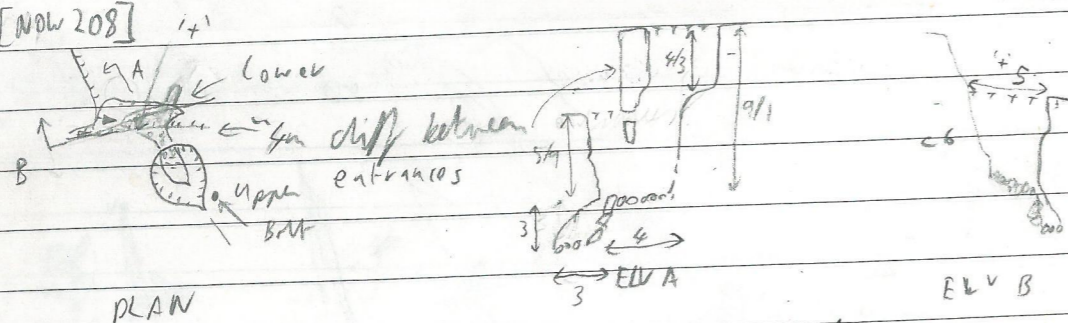


Fake Survey WK3

PWK3	2	3	030	0
	2	3	9/1	- DOWN
	3	4	3/5	020 -10

1996 CUCC

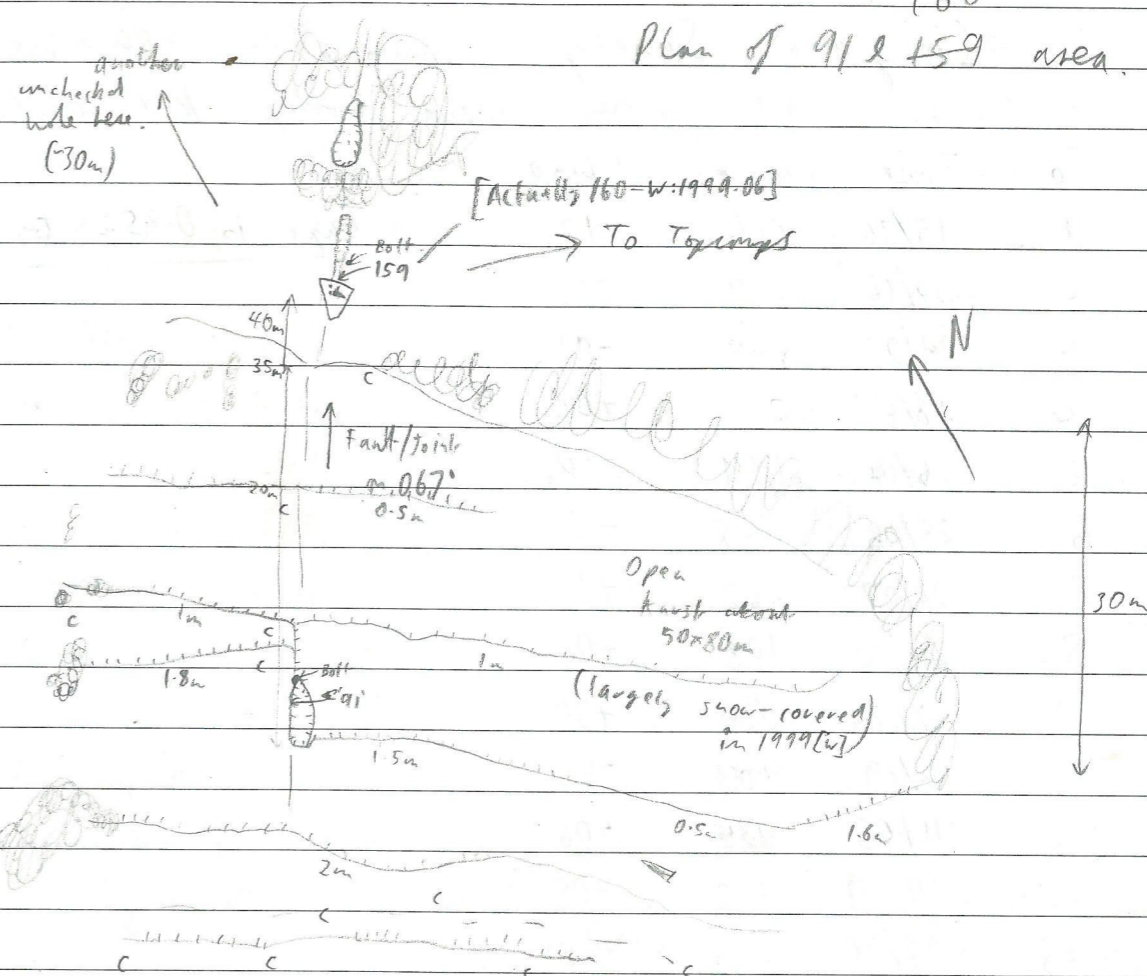
WK3 [NOW 208]



Desc: [WK3] Short 'through trip' with upper shaft entrance, and lower entrance at foot of cliff. From lower entrance a 6m climb down gives checked floor. A small continuation leads to small space in wifty corner where rocks have not filled.

UTM: 337 0410292 5280872

Plan of 91 & 159 area



'91' (originally thought to be so GPS marked as 'WK1')

UTM: 337	0410171	5280908
	337	0410155 5280976
	"	0410177 5280894
160		
+59:	UTM: 337	0410220 5280932 ALT 1677

Bearings (WK2 & WK3)

	WK2	WK3	
Nave	-	161	(view as for 90)
Vord	103	104	"
Hinter	052	054	"
Scha	346	346	"
Wildkgl.	-	007-011	"

Surface Survey Top Camp (45) → 90 → WK2 → WK3

Inst: Steve B. Notes: Working using Worker's MCI comp/diags.

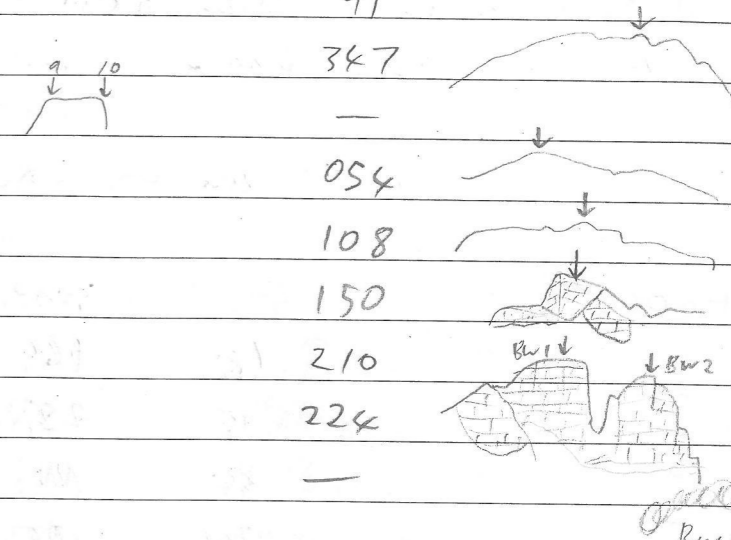
From	To	Tape	Comp	(Lino)
2	1	15/36	016	-12
3	2	30/16	269	+13
3	4	29/09	108	-01
5	4	28/61	270	+06
5	6	26/14	189	+10
7	6	28/06	048	-21
7	8	20/07	262	+11
9	8	29/70	108	+03
9	10	2/76	229	+30
10	11	4/19	303	-06
9	12	11/45	034	-06
13	12	19/39	185	+08
3	13	18/90	206	+18

Tape is 0.25m too long.

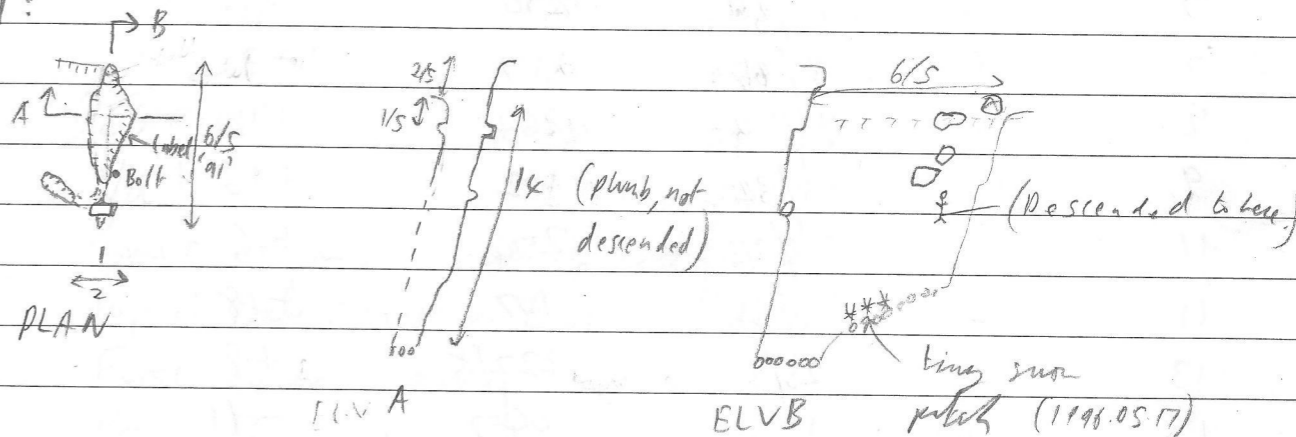
Sta	Desc	Ht.
1	Bolt at WK3 top entrance	0
2	'+' at WK2	1/2
3	Top of stick on crapper level	1/65
4	Point of karst	0/4
5	Top Camp 95 sta (free entrance)	0/6
6	Rock at foot of rock field.	0/3
7	Rock 5m below path	0/3
8	Rock 5m below path	0/2
9	Karst just (1.2m) in front of cliff	1/0
10	Broken bundle stump on top of cliff	0/2
11	Middle of '0' of '90' - bolt.	0/3
12	Tip of shrub top of step.	0/4
13	Bit of karst 6m from cliff.	0/4

Bearings:

159	159	91
Schoenberg	-	347
Kl. Wld kpl	009-010	-
Hinter SMK	059	054
Vad SMK	111	108
Wase	152	150
B. Wam 1	209	210
B. " 2	221	224
B. Zinken	232	-



91:

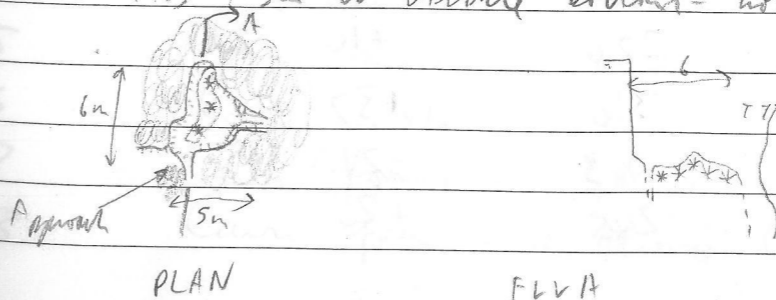


Desc: Choked shaft 14m deep on fault/joint trending 067°

Same fault/joint as 159<sup>160</sup>. Has fixed bolt, but no surface survey / tag.

Snow-filled hole to check, near 159.160

From 158<sup>160</sup> go 30m on 020° to corner of limestone surrounded by bunde. 5m to R (through gap) is 5m x 6m hole - 5m to top of snow plug (1496.0715) + 5m to visible bottom - not descended.



⑧ Surface Survey Vol 1 → 161d

14/7/96

Instruments: Matthew Hills (set 5 I think)  
Notes: Steve Bellmore

Tape is 28cm too long

FROM	TO	TAPE	COMPASS	CLIND
1	2	24/12	169	-6
3	2	25/15	254/5	+11
3	4	21/30	111	-27
5	4	20/20	276	+1
5	6	12/51	102	-12
7	6	29/69	274	+10
7	8	8/61	117	-9
9	8	29/49	264	+10
9	10	8/34	102	+16
11	10	27/76	274	+6
11	12	10/61	107	-18
13	12	25/21	222/5	+8
13	14	17/68	047	-11
15	14	12/19	318	+30
15	16	25/76	168	-10
17	16	6/78	339	-9
17	18	19/95	148	-9
19	18	29/18	320	+9
19	20	34/20	141	-4
21	20	14/05	350	0
21	22	18/12	140	-10
23	22	28/95	352	+7
23	24	6/10	226	+10
25	24	13/30	316	+37
25	26	21/86	063	-21
27	26	29/43	245	+2

FROM	TO	TAPE	COMPASS	CLIND
27	28	24/80	051	-4
29	28	18/30	264	+17
29	30	3/90	132	-23
31	30	16/60	220	+14
31	32	1/00	UP	UP
32	33	26/32	034	+7
34	33	11/17	304/5	+51
34	35	25/57	056	-8
36	35	27/75	254	+20
36	37	30/90	091	-12
38	37	15/55	238	+29
38	39	8/08	352	-6

STN	DESCRIPTION
1	Vol 1
2	Point on rock on L at head of gully
3	Top of rock pillar on L at head of gully
4	First cairn in gully
5	Rock on R of gully
6	2nd cairn in gully
7	Flower (!) on L of gully
8	3rd cairn at end of gully
9	Flake, end of gully
10	Cairn on skyline visible from end of gully
11	30cm offground on 1st shelf down
12	Cairn on 2nd shelf after climb down
13	Next cairn (after rock bridge)
14	Next cairn
15	Next cairn, on lip of large hole
16	Random sharp rock
17	Cairn before first roped climb
18	Cairn before 2nd climb (not roped)

- STN DESCRIPTION
- 19 30cm off ground, above 3rd climb/baverse
- 20 Tallest bit of boulder on L of shelf.
- 21 Cairn at end of first level of shelf.
- 22 Next cairn
- 23 Next cairn before short boulder bash
- 24 Random high point to get a straight leg thro the boulder.
- 25 Top of left wall of gully
- 26 Corner of rock 2ft R of cairn after end of gully
- 27 Random point in middle of boulder
- 28 2nd (smaller) cairn after short boulder bash (now chopped)
- 29 Cairn at start of major hatched boulder.
- 30 70cm above point of rock in corner of 'boulder passage'
- 31 Random point, mid boulder passage.
- 32 1m above pt 31
- 33 Bolt at top of last roped climb
- 34 Top of large boulder below climb.
- 35 Point on cliff ~ 4m above usual route
- 36 Point on cliff next to path up top of boulder slope
- 37 Cairn above 161d entrance
- 38 Rock close to entrance
- 39 Red dot on 161d entrance

164/189/190 area notes.

① NB. Website documentation has 189 and 190 swapped over. As both are numbered and tagged, documentation has been changed - have we given Austrians copies of old info?

164 and 189 are both on a very strong joint going 018°

189 also on a very visible joint on 102°

190 entrance 6m deep, 6.7m long (on 275°) 4.0m wide. Passage goes off at east end of south wall on 185° for 7.5m to lip of 2nd pitch. No Climo at Top Camp so couldn't do a real survey---

New Cave 9605.

Approach: follow new-looking fluorescent orange point dots north across plateau (from Top Camp area) for a long way. Route ends with recently cut boulder and shaft entrance. No evidence of previous descent.

Location: Schönberg 342½° Insts/book: Andy W Compass NRC#2  
Zinken 204½° (Suunto #439258)

MSK 101 - very rounded summit so exact point not obvious.

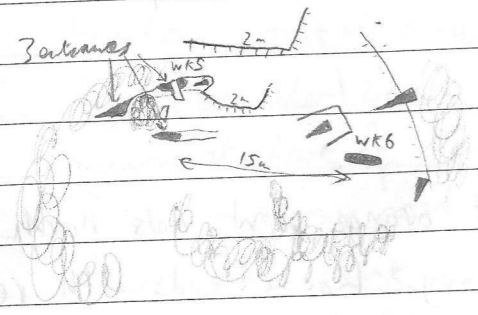
Loser Cross 213½

Cave is a N-S rift in a joint having very steeply - say 85° dip to west. Tog placed on rock on east side near centre. Stones rattle down shaft for some way

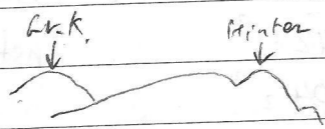
1996-07-21 Vord Wanderings

Worley, Tony, Roper, Peang, Dave Hovley. WK6 LWK 15  
All GPS readings are German Grid, Austria Datum.

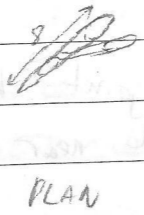
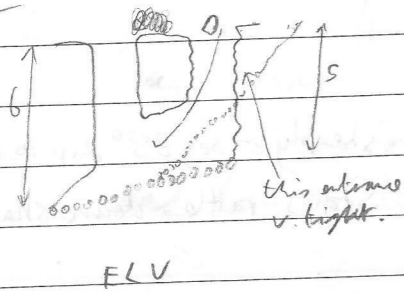
On return from 161d, whilst leading up gully towards Vd1, we  
Entered off Left climbing for top of Vord. 2 new holes  
AT GK 5411291 5282969 there is a pair of small  
caves



Grieb Kgl: 354°  
Hinte: 018

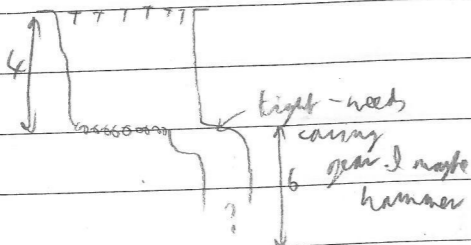


1996 CUC w K5



Cave is wiff. Entrance  
at either end. Tightest  
entrance holes in at an  
angle.

1996 CUC w K6



On blinning up towards Northwest summit we found  
139, marked '139 CUC 1983'. This is a large space diff  
in a limestone scarp. AT: GK 5411207 5282893 ALT 1877591

Bearings:

Hinte: 022°

Luskyl: 356

Hollweiser #: 147

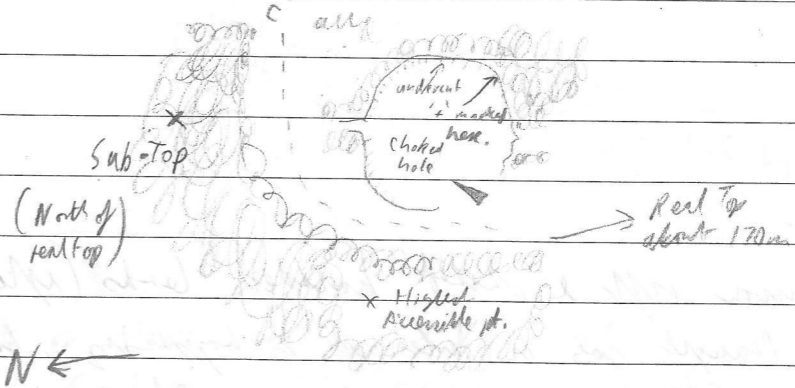
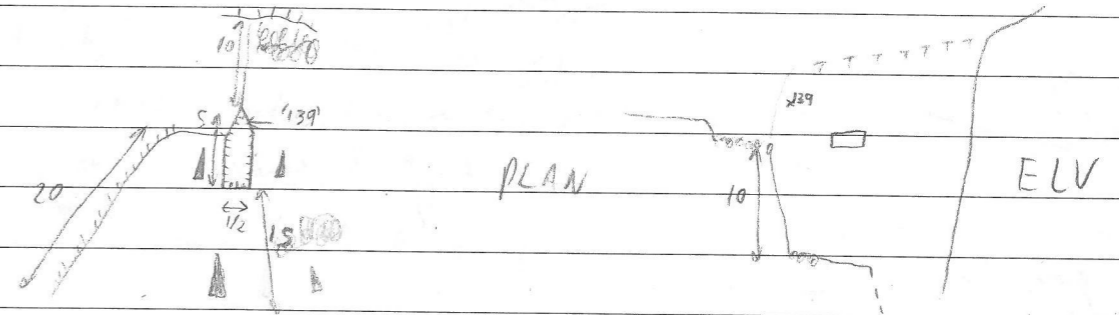
HOLLWEISER (Holl marked 157/5 on page 20)



This is about 70m or 070 from the Northern tip top of the Vord  
(Not the real top). Also here is a small hole, marked 'x'

From Summit: Go down 50m on E side to large shelf.

Walk along NE 130m to where shelf peters out. up slope L is  
139

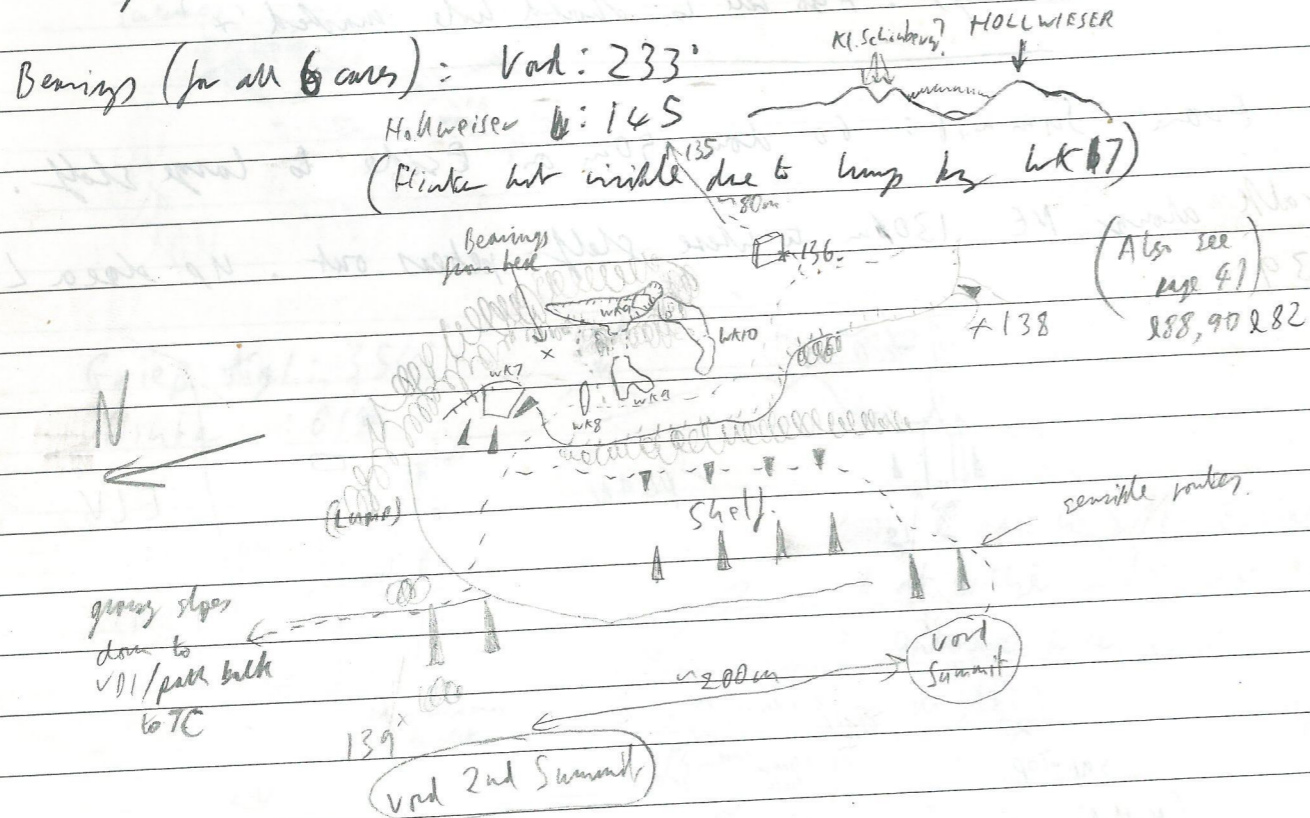


14 NB: WK7 now tagged 97-07  
 WK8/9/10 now tagged 97-08 - see p 41-43  
 ASD 15/8/97.

From here on (after summit of Vord) Tony, young I have  
 went back I work continued.

Taking previously described water (G 139) down E of Vord and  
 then along big shelf I found a series of holes  
 WK7, 8, 9, & 10.

WK8, 9 & 10 are probably all connected. WK7 is significant -  
 it goes to a pit and breathes. WK10 also breathes, but  
 draft is warm, so probably comes from 8 or 9.

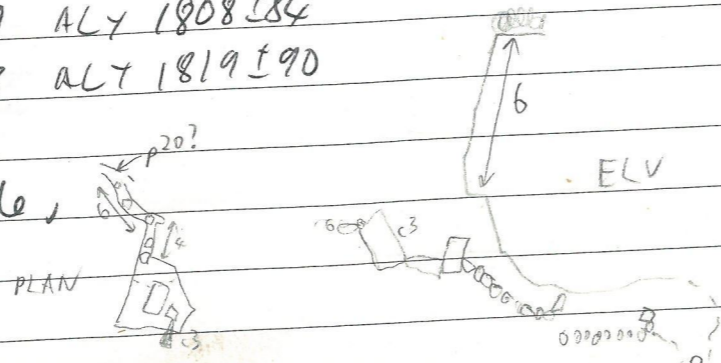


WK7 description:

Descent through narrow rift & steep knickles leads (after 10m)  
 to pit (20m?). Draft goes in when it is happening, but stops  
 & starts with period of about 30 seconds. Pitch not descended

- GK 5411262 5282819 ALT 1808 ± 84
- GK 5411211 5282858 ALT 1819 ± 90
- GK 5411215 5282860
- GK 5411267 5282834

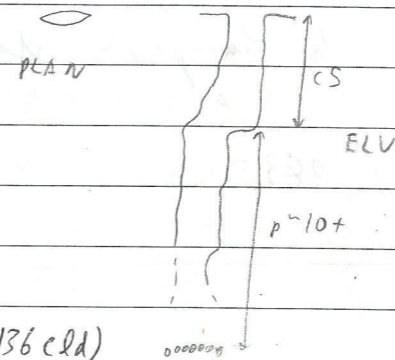
Entrance is in bottom of hole,



WK8:

2m x 0.8m shaft - 15m deep. No draft. Why descended  
 1st 5m.

~~Bearings~~

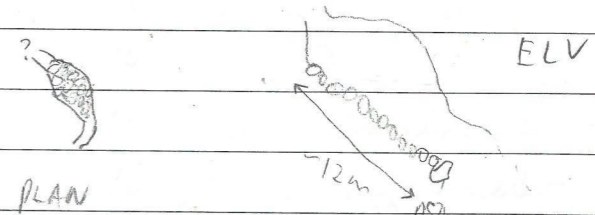


WK9: (136 old)

Shaft other side of 1m ridge, so not quite as obvious  
 as 7, 8 & 10. [This case and WK10 were connected to 136 in 1999 making  
 entrances b, c, d, w, 1999-11-01]

WK10: (136 b)

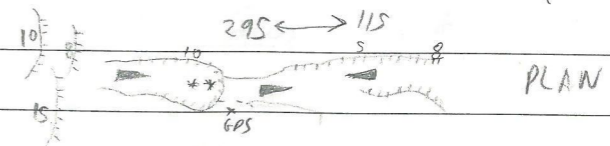
Slot entrance, leads 10m down sparsely boulder slope to p5.  
 Warm draft, maybe from WK9?



WK11:

At foot of slope from top of Vd, before flat area containing nipple  
 to South of Vd. GK 5411105 5282491 A 1661 ± 53  
 Big rift 115 ↔ 295 At WNW end (295) is big snow slope

- Bearings
- Nipple: 202
- Timed: 179
- Hollwieser PL: 138



- GK 5411087
- 5282470

ELV



Ford 162 on way back: GPS: GA 5411356 5282881, 1739±50

164 Surface Survey Connection - Wooley & Perry Reeves  
1996.07.23  
164surf.1, pt 0.93m above P164,

Connecting from new (1995) tag to old p164 stake of cairn  
which is a bolt = 164surf.0.

Summary

p164 → 164Tag 1.72 339 043.  
164surf.1

SURFACE Survey 161f → 161d.

26/7/96

Instruments: Anthony Day

Instrument Set 2

Tape & Notes: Ralph Harwood

Tape 20cm too short.

Calibration at 161d: A→B

214 214 213/5  
+08/5 +07/5 +07/5

B→A

033/5 033/5 033/5  
-09 -09 -08/5

From	To	TAPE	COMP.	CLINO	STN	DESCRIPTION
2	1	4/82	275	+33	1	CM on roof at 161f
2	3	13/47	193	+04	2	Point on boulder
4	3	24/71	018/5	+09	3	Top of flake high on wall
4	5	17/9	193	+03	4	Corner of large boulder
6	5	29/04	014/5	-01	5	Top of Bunde bush (4 way split)
6	7	20/06	207/5	+04/5	6	Top of small boulder by big boulder
8	7	14/03	056	-12/5	7	Pink flower in sloping kerst
8	9	20/36	211/5	+05	8	Top of small boulder
10	9	28/52	074	+12	9	Branch of Bunde bush
10	11	26/73	241	-15	10	Top of cairn on boulder
12	11	27/85	031	+03	11	Top of boulder on grassy slope
12	13	13/22	246	+26	12	Boulder below flowers
14	13	11/29	022/5	+17	13	Pocket in roof of overhang (peril mark)
14	15	19/98	220	+09	14	Top of cairn
16	15	21/21	046/5	+04	15	Bunde bush branch
16	17	27/87	232	-16	16	Top of huge boulder
18	17	18/69	029	+16	17	Top of cairn
18	19	27/00	278	-13	18	Top of boulder
20	19	23/84	016	+16	19	Square formation on rock wall (peril mark)
20	21	6/25	201/5	-06/5	20	Bit of Bunde
					21	Cairn on rock

Continued on 28/7/96

Instruments: Paul Hammond

Instrument set 3

Tape & Notes: Ralph Harwood

Tape is 31cm too long

Calibration at 161d: A → B 215/5 215/5 215

+08 +08 +08

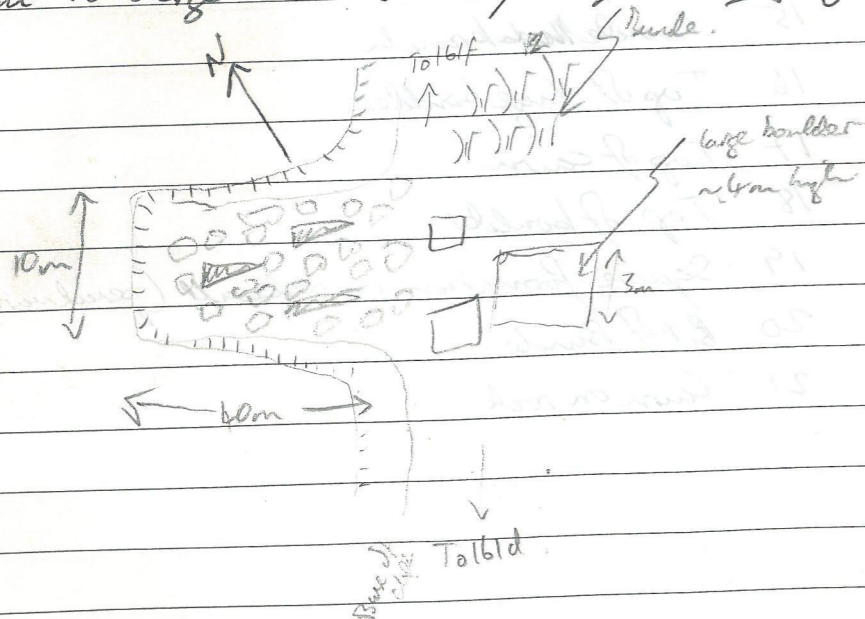
B → A 034 034/5 034/5

-08 -08 -08

FROM	TO	TAPE	COMP.	CLINO	STN.	DESCRIPTION
22	21	15/78	030/5	+03	22	Base of Bunde branch
22	23	25/65	220	-10/5	23	Top of Bunde branch Bunde bush
24	23	19/10	033	+20/5	24	Top of Bunde bush
24	25	24/40	209	-12	25	Bunde sketch by 161d
25	26	3/95	231/5	-10	26	Fixed point at 161d

How to get to 161e & 161f by Anthony

161e and f are located on the eastern slopes of the Hinder to the north and east of 161d and approx. 20m higher up the hill. From 161d head north up a short grassy climb to gain an easy grassy traverse along the hillside beside an undercut in the left hand wall. Continue traversing at this level as close to the cliff as gradient and Bunde will allow for a further 300m to a large boulder at the foot of a rocky gully as illustrated below.



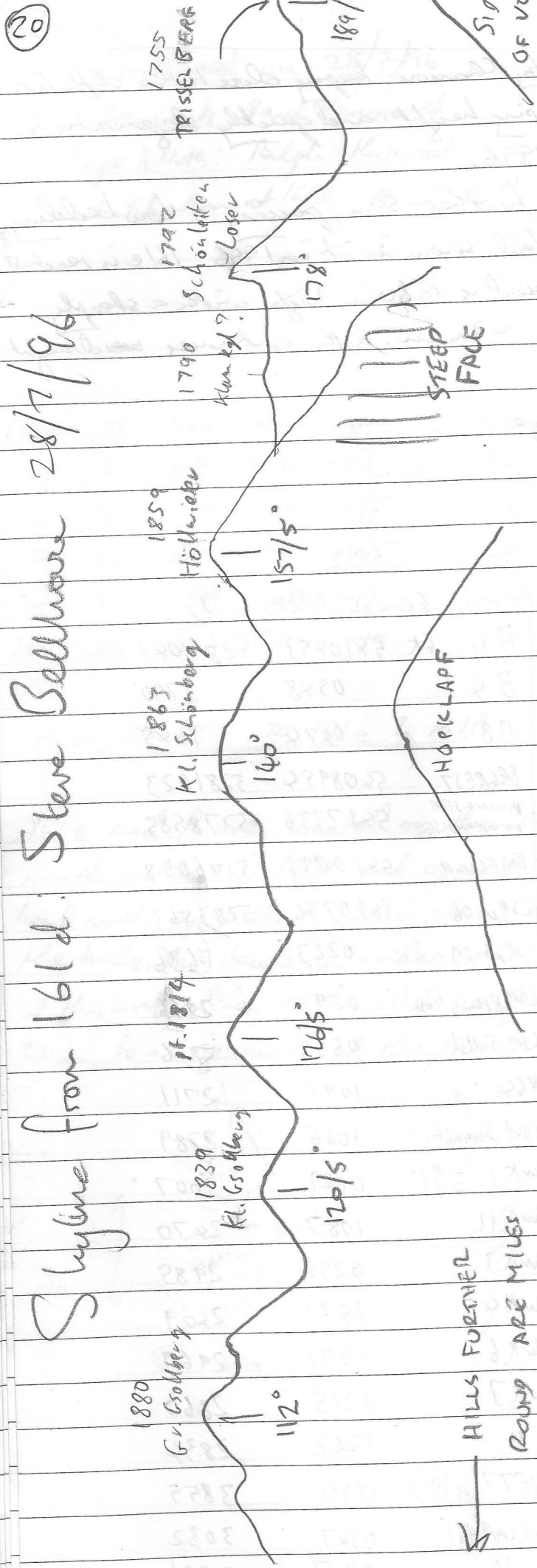
Continue N from here on a track made by Chanis keeping close to the cliff for a further 50m to 161f. Entrance is steeply height and quickly degenerates to a flat out crawl which was very icy in 1996.

Continuing along the cliff for a further 50m, passing a low bedding plane entrance which is choked and had snow in it in 1996, 161e is reached. This entrance was dry from the bottom and is ~40cm high with a steeply inclined rubble floor with a crevice ~2m in. Both entrances were draught throughout as strongly as 161d.

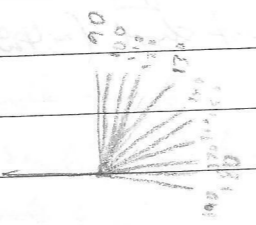
\* Entrance at top of short (~4m) grassy slope.

G-PS	Location	(Austrian Datum, German (GK) Grid)
139	GK 5411169	5282900 B11 GK 5410453 5283041
145	0784	3077 B4 0548 2750
158	0156	3041 B8 0274 3145
161a	1356	3203 BERGREST 5408954 5281023
"	1321	3205 DIVING SITE ON GRANDSEE 5417336 5278585
161d	1791	2931 BASECAMP 5410791 5276058
"	1729	2971 LSR pt 06 5410736 5283563
"	1738	3098 LSR pt 09 0223 1636
"	1804	2938 LSR Branny Nose 0296 2836
"	1711	2962 LSR Sattel 0555 2836
162	1364	2854 V64 1091 2711
163	1735	3070 Rock Summit. 1066 2789
1642189	0460	3090 WK1 = 91 0147 3007
185	1262	3173 WK11 1087 2470
195	1161	3786 WK3 0256 2985
36	0533	2782 WK4 1531 2409
78	0572	2052 WK6 1291 2969
80	0593	3082 WK7 1215 2860
90	0186	2943 " 1262 2834
96	1559	3540 RIFT? (by 195) 1254 3855
1611	1651	3621 Top Camp (96) 0347 3032
		" 0317 2981
		VDI 1404 3025

Skyline from 161 d. Steve Ballmore 28/7/96



POND  
ANGLISHIES SEE



GP) (continued).

Using the Mass Linn Pt as a reference:

Layer 0.7 at 3544.56 ; (52) 82237.16 1769.77

The GPS co-ord is. (54)10296 , (52)82836 , so the offset is +25123 , -599 (ignoring 2 leading digits).

Applying these to the GPS co-ords gives reasonable results. See GPS.SVX file.

Later processing in Excel uses linear expansion for scaling between GPS & GLK co-ords.

Surface wandering 1996.07.18

Top camp → 80, 161a, along back of hinter via  
some old '+' cases, back via 195, 194, 76, B8, 189/164

Workey, Andy Waddington, Ralph Hammond, Julian Todd

80, Videod.

Orange point. Small unuse by canyon E side, bigger one  
surfacing on E side

Bearings: 'Nipple': 135°

at 1835 on BW: 043°

Grieskogel: 007°

HSK: 043°

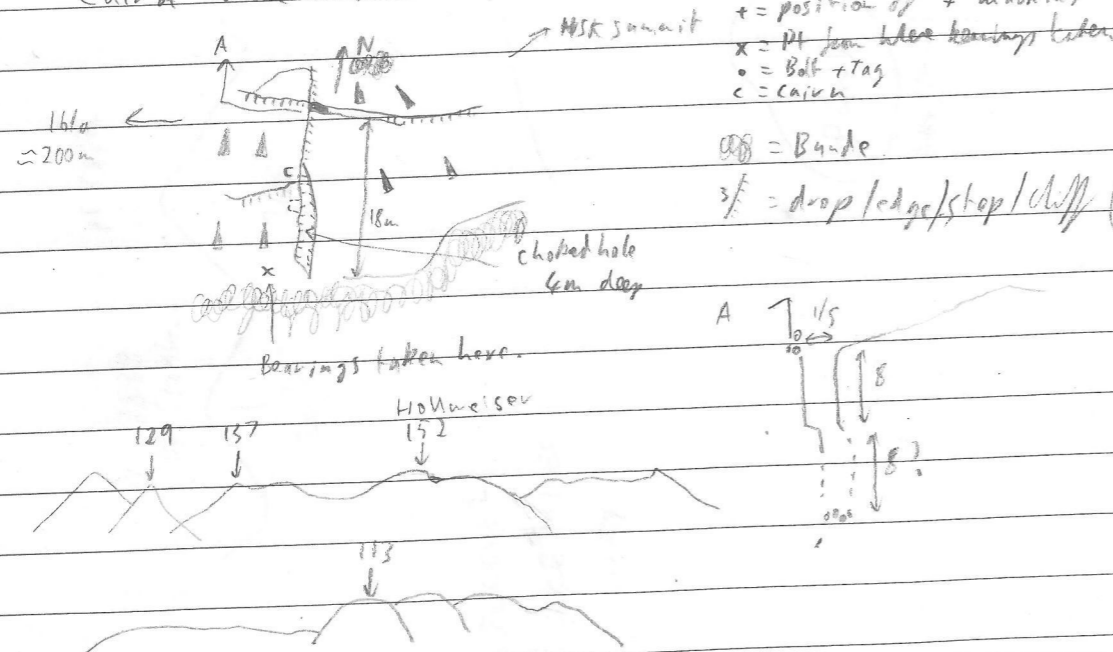
GPS UTM 33T 0411471 5281506  
ALT: 1720 ± 89

(Bearings all done with Workey's MCI compass)

'+' marked case on E side of HSK ridge between 161a & HSK  
summit. Reached by walking along ridge from 161a,  
through 100m bowl/gully of very shattered rock. It is on  
slopy just beyond that.

Shaft, maybe 10-20m deep at junction of 2 points/saults

Cairn above entrance, '+' on wall below cairn.



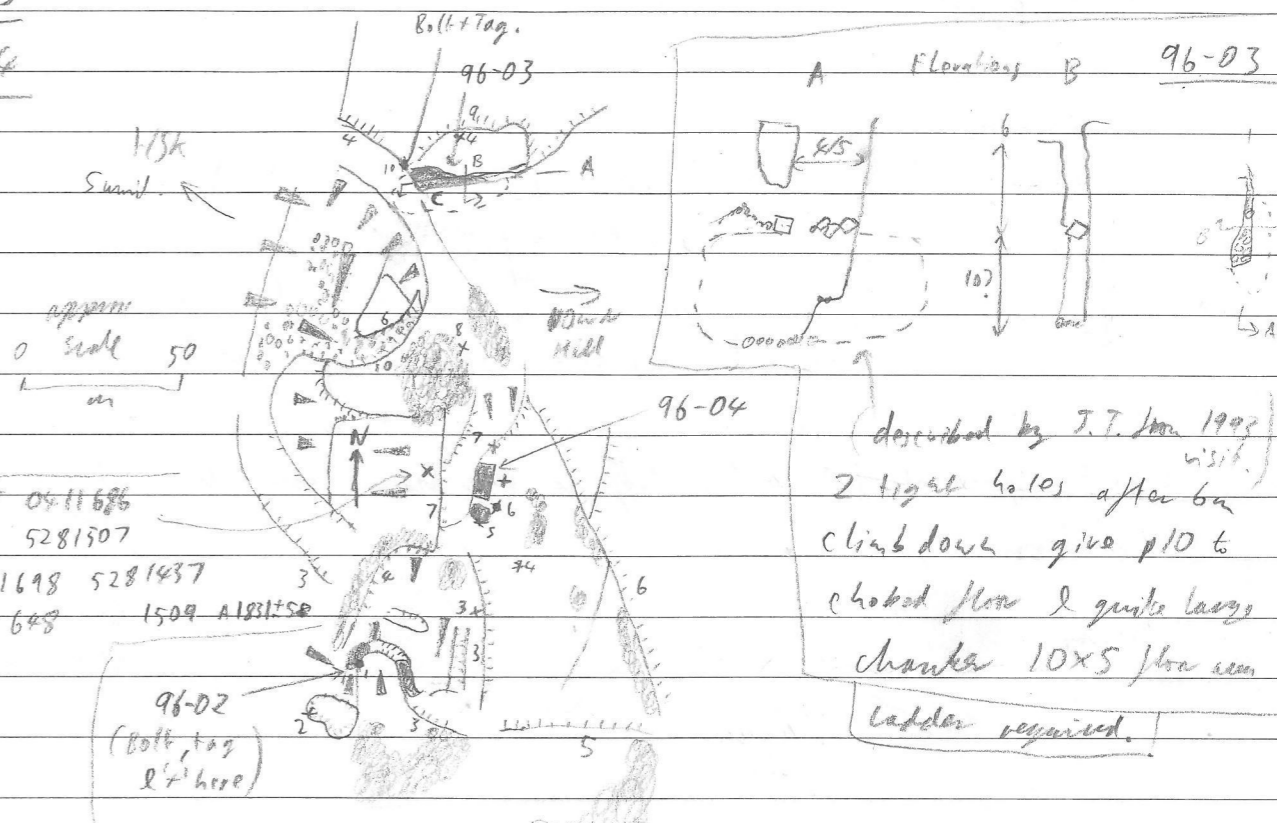
○B = Boulder  
3/ = drop/edge/stop/cliff (with Mt.)

ALL GPS readings are UTM, Austrian Datum,

96-02 Explored 1973 by Wook, Julian T, Spencer Parry, marked '+'

96-03

96-04

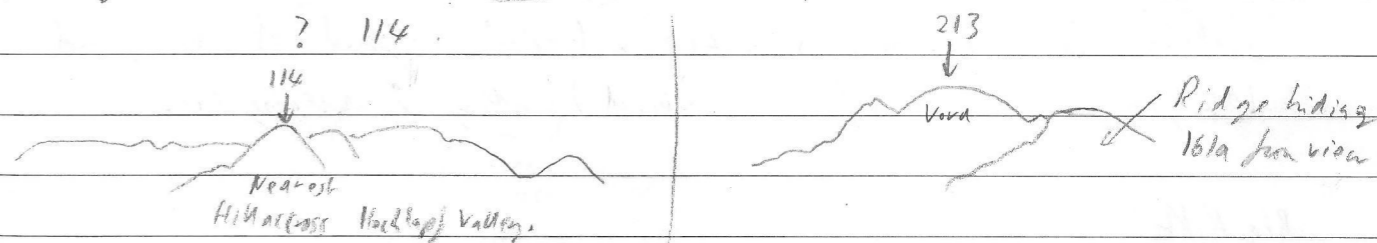


UTM 33T 0411686 5281507

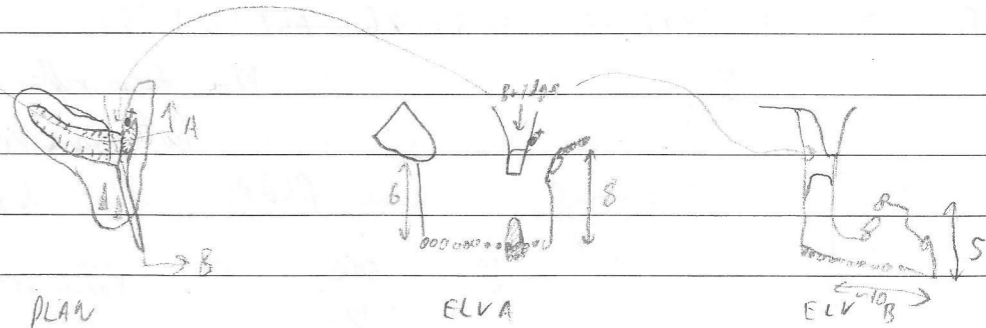
33T 0411698 5281437 648 1509 A181150

Bearings: Vordstak 213

? 114



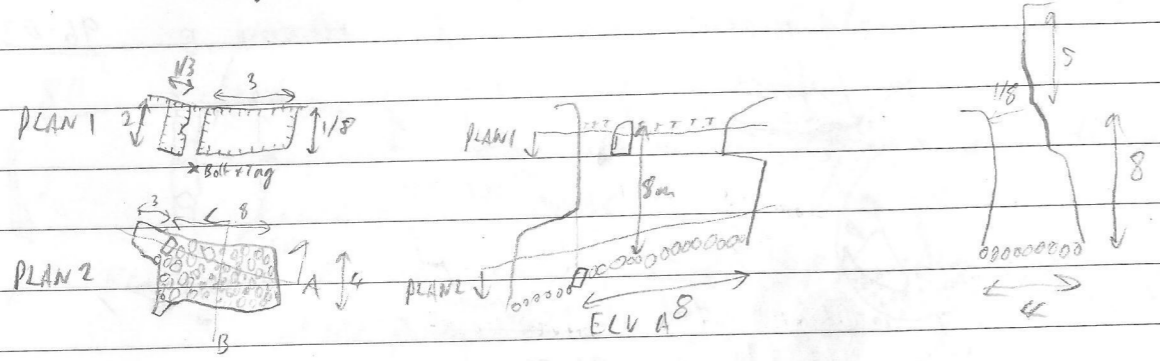
96-02



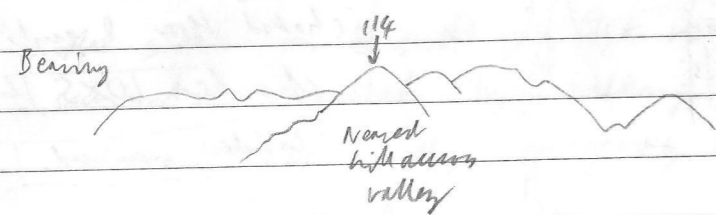
Case is exposed section of canyon formed on a bend.

Bridge of rock remains at one point, separating the 2 entrances  
at the bottom of the canyon ~10m of <sup>descending</sup> rift is accessible with a dink  
knick up part way along. All choked.

96-04 UTM 33T 0411698 5281437  
648 1509 ALT 1831±55  
Bolted & tagged



Large space at foot of 5m cliff in very broken area to E of HSK Summit.  
Location Map over page.

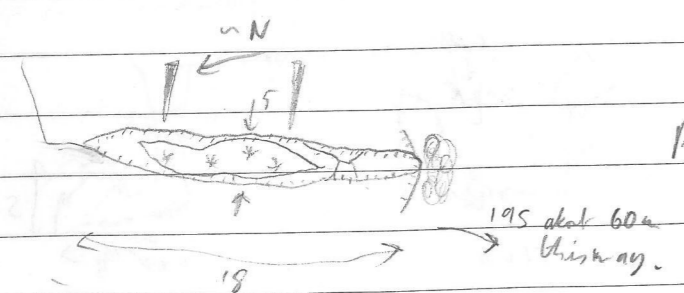


Next we ascended to summit of HSK then down plateau side, looking for 'Tantalus Schachte'. Failed to find it, but found 194, 195 & a big rift (unnumbered) worthy of investigation.

Big Rift

On open stabby slopes, W side of HSK.

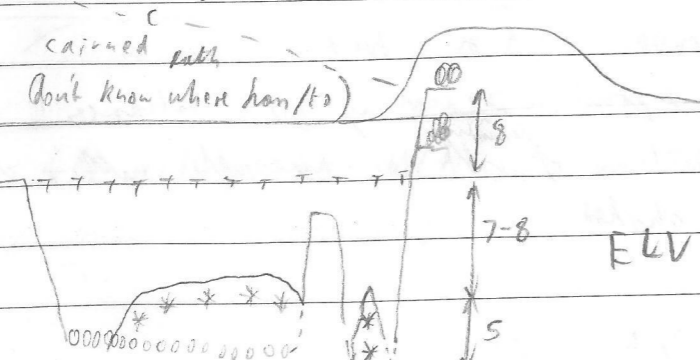
GPS: UTM: 33T 0411279 5281746 ALT 1781±41



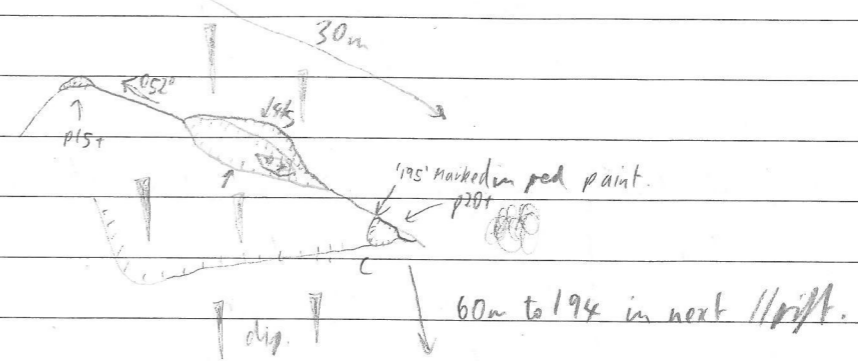
12m deep rift. Lots of snow in hollows. Probably choked.

PLAN Not descended, marked

Bearings:  
Gr. Kgd: 352°  
Sch: 325°  
2 inks: 230

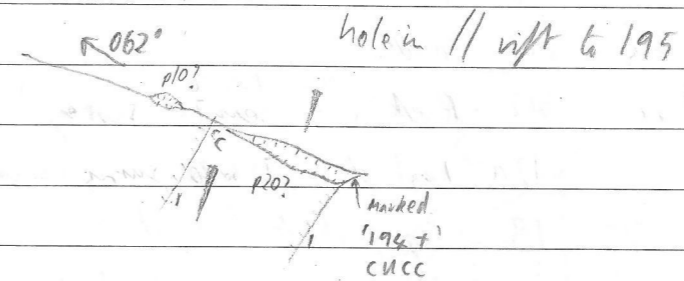


195 Shaft in point in large open area of hard on slopes of HSK  
GPS: UTM 33T 0411183 5281714  
240 1726 ALT 1827±54



Bearings:  
Gr. Kgd: 354°  
Sch: 327°  
B2: 232°

194



UTM 33T 0411160 5281710 ALT 1788±83

Returning to TC we passed Fishhole: 76a.  
This was connected to the (very) nearby laser pt. All comp/line was woolley's M1. Tape was ladder's yellow cog!

From	To	Tape	Cog	Line
2	1	4m/gal/15	219	-01 pt1=p76
2	3	3m/gal/10	023	+07 pt3=Laser pt. 0-6

GPS: (Laser pt) UTM 33T 0410772 5281449

(We also did 164 & 189 leg but this was superseded later this exp so not recorded here.)

Return also look in B8, 164, 189, B11 for GPSing

Braning Nose Laser pt's survey

1996-07-26

Tape/Inst: Wooley

Tape was 0/225 m too long  $\Rightarrow$  +calib tape - 0.225

Notes: Ody

Compass (w) = Wooley's MCI compass

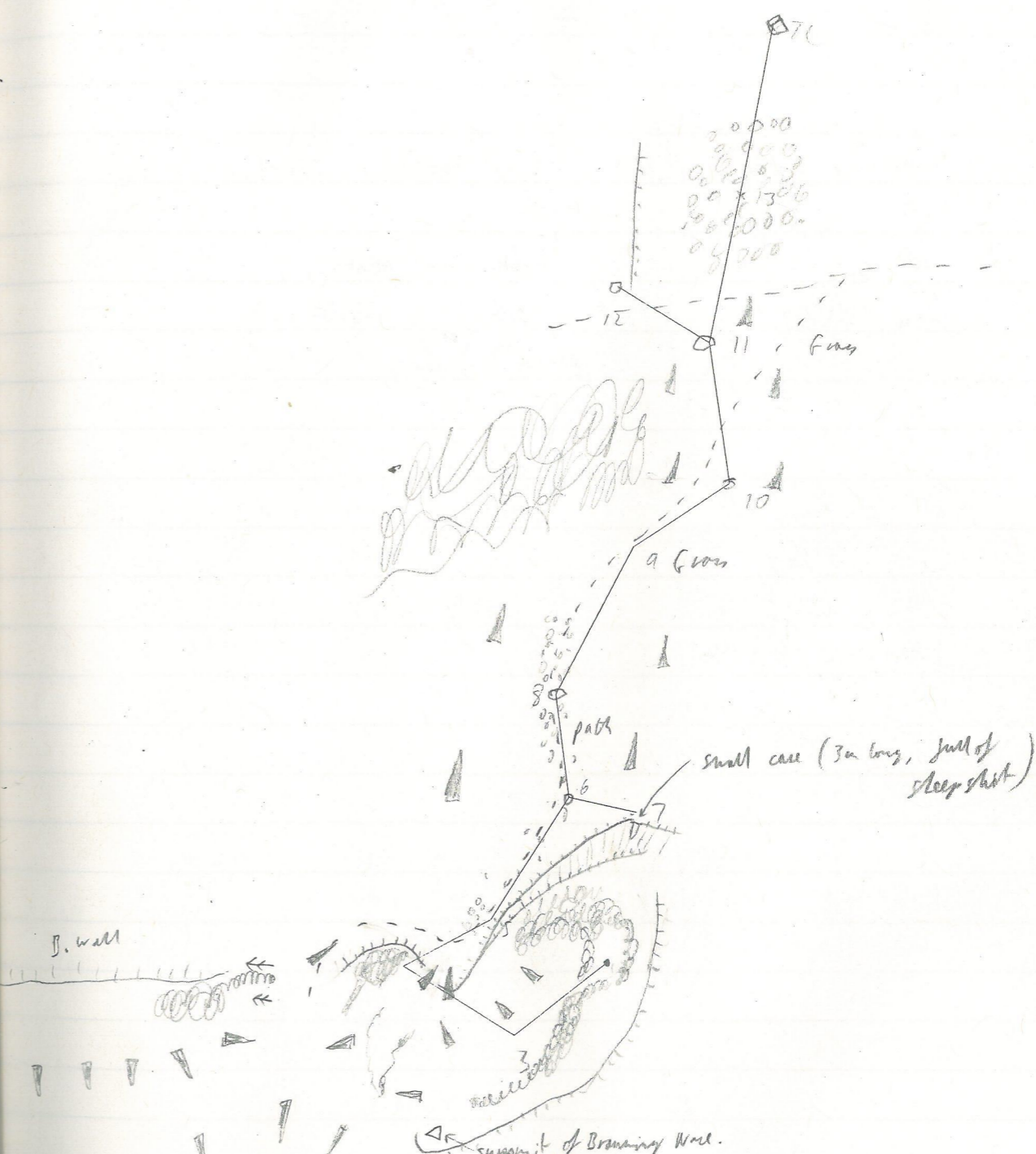
Other = set #1 = 112518

(Limo : set #1 = 232011

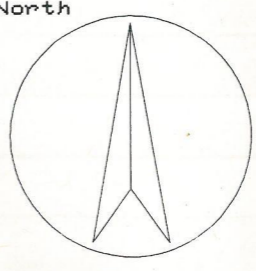
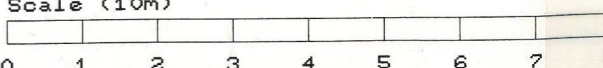
From B. Nose Laser point (0-7) to upper Top Camp fixed pt (TC)

From	To	Tape	Comp	Chis	
					1 = Laser pt hole
2	1	2/60	-	Down	2 = Vertically above 1
3	2	18/67 18/64	052/5	00	3 = Lead bundle stake (sawcut marks in 'V')
4	3	24/75	122(w)	+31/5	4 = Bundle spring
4	5	26/18	062(w)	-37/5	5 = Biro X on stone
6	5	28/37	213(w)	+34/5	6 = Rock tip (sketched '6')
6	7	11/54	103(w)	+18	7 = Spike on cliff by small case (Biro Mark)
8	6	20/52	173(w)	+35	8 = Rock
9	8	30/09	208(w)	+27	9 = Tip of stick (temp)
10	9	19/74	237(w)	+20	10 = Rock
11	10	27/70	172(w)	+34	11 = Rock
12	11	17/60	122(w)	+11	12 = Rock (on 'Near TC' survey)
[ 12	12a	20/05 or 20/10 ]			12a = Next pt. in 'TC to 90' survey (to confirm 12)
13	11	29/15	192(w)	+25/5	13 = Tip of stick (temp)
14	13	26/08	190(w)	+07/3	14 = Upper TC (TC95) fixed pt (green koulder)

{191



NASETOTC.SVX  
 Plan view  
 SCALE 1:1000  
 UP PAGE 000°

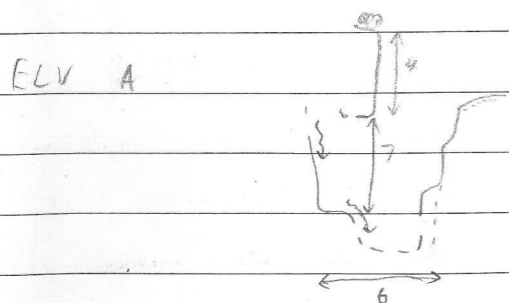
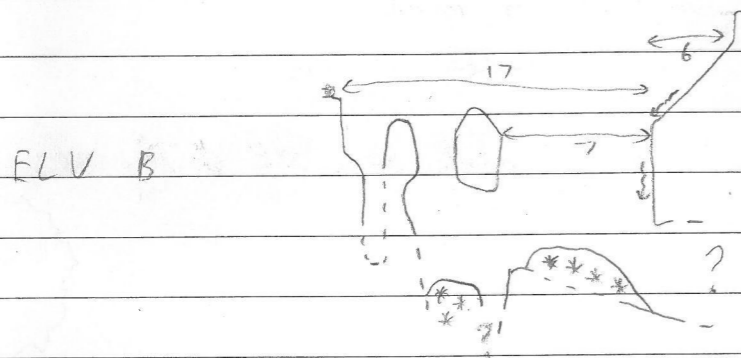
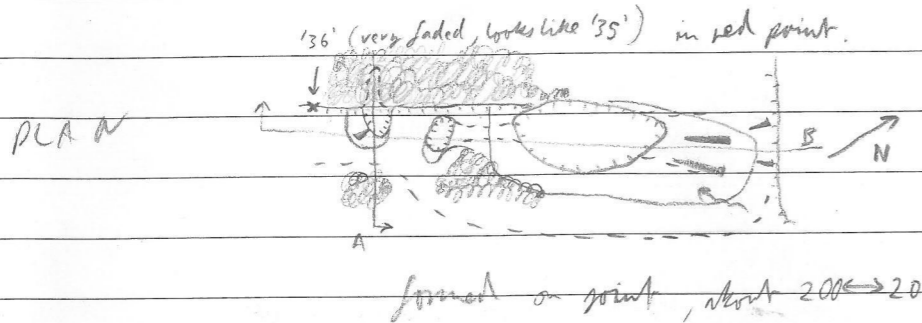
North  
  
 Scale (10m)  
  
 Survey 0.70HP PCL Printer Driver

More stuff on Schwarzmoos Sattel

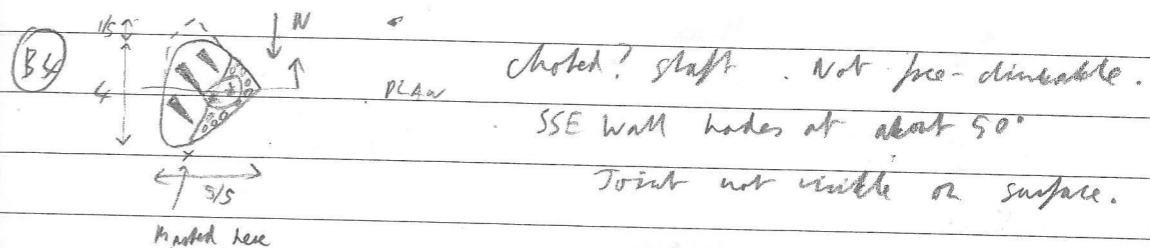
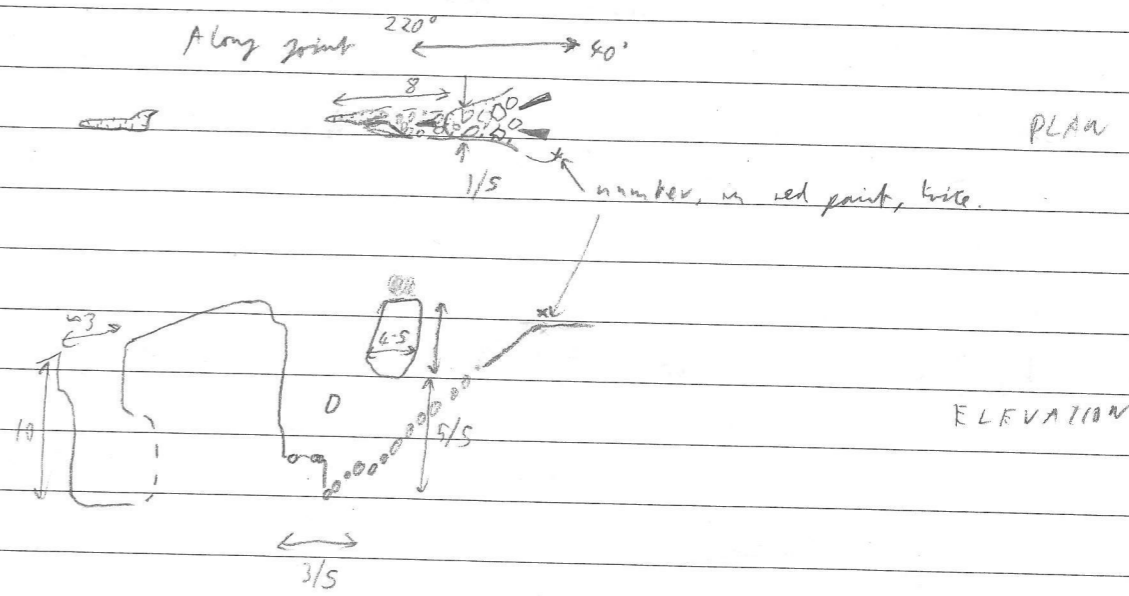
Worker

Found various things: 36, B4, 75, new one.  
(1) (2) (3) (4)

(1) (36) GK 5410544 5282820 ACT 1638 ± 94  
or 5410562 5282795 ACT 1743 ± 86



(75) 15m SW of B4, 30-40m S of 36.  
 Very hard to read number: 2 numbers: top extremely faded, lower faded & even. Lower looks like '175', but top only has 2 digits - could be '33' or '73', ∴ '1' in lower number must be run from '7' & number is actually '75'. - Needs tagging.

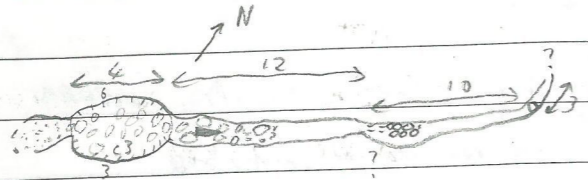


In grassy patch 30m SSE of 36.

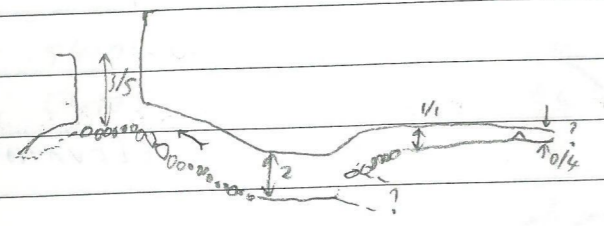
(CUE WK12) One 3m deep hole about 12m from Laser pt on Schwarzmoos Sattel (LSR 7). Way out in opposite corner. Difficult C3 to bottom. SW: small wavy hole to choked chamber about 2x3m. NE: clamber 6m down rocky slope then 6m along narrowing rift. Light possible way on down, even way along can be followed for 10m to ancient boulder blockage. Passes continues at least 3m to corner. Boulder not passed in shorts & gortex for fear of ripping! Drangefling - particularly on extreme slope.  
 No Markings.

LSRboll

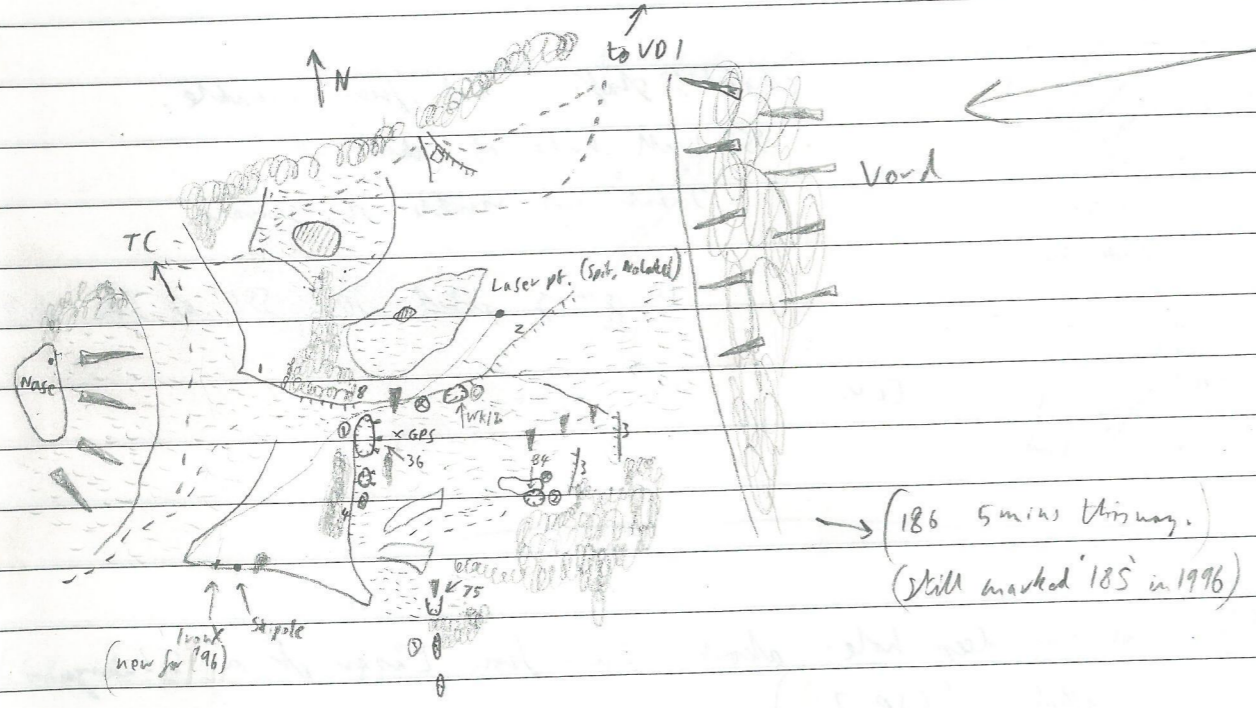
wk12



PLAN



Area Map



- 1 = 36
- 2 = 84
- 3 = 75
- 4 = wk12
- ⊗ = sinkhole
- ⊘ = Grass
- ⊙ = Bank
- 3f = 3m step
- ⊕ = water

Surface Survey on Sattel

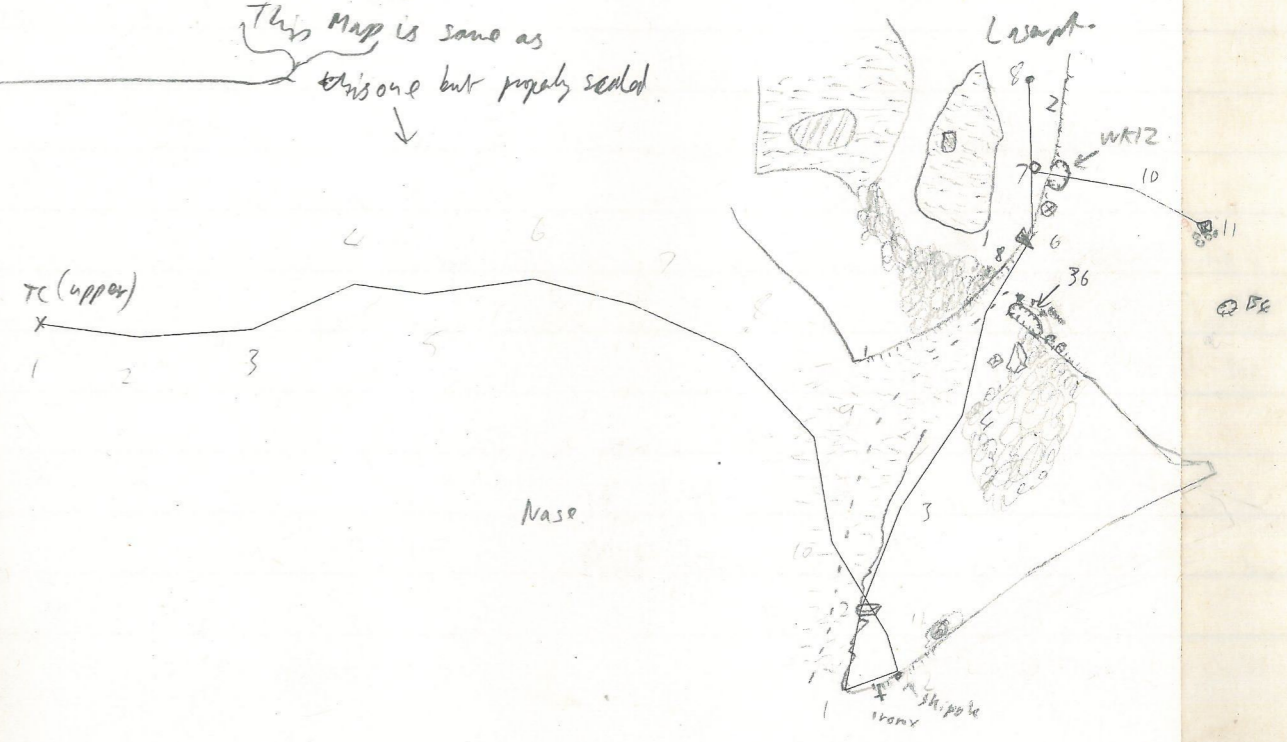
1996-07-26

Tape / Dist : Wootley  
Notes : OUY

Tape was 0/225m to log → \*calib tape - 0/225  
Compass = set #1 = 112518  
Cline = 11 = 232011

Same day as Nase survey, p26. Connects suspected Lata  
at 7 to existing Top Camp → Sattel Survey.

This map is same as  
this one but properly sealed.



TCTOCOL.SVX	<p>North</p>
Plan view	
SCALE 1:2000	
UP PAGE 040°	

Scale (10m)

Survey 0.69aHP PCL Printer Driver



From	To	Tape	Comp	Chino	
1	2	21/56	051	-03	1. Fixed pt edge of path on col.
3	2	29/11	241	+01/5	2. Tip of rock
3	4	28/89	073/5	-02	3. Tip of vertically placed rock
5	4	27/84	232	+03/5	4. Bunde Twig
6	5	23/67	251/5	-10/5	5. Rock with scratched X near 36.
6	7	17/53	039/5	+10	6. Corner of outcrop
7	8	24/41	038	+03	7. Tip of boulder (shallow spit)
8	9	0/50	-	DOWN	8. Above Laser pt.
7	10	27/13	139/5	-07/5	9. Laser pt # (spit)
11	10	21/20	338	-02	10. Rock point
					11. Peak nr. path up to Rosenhäutler höhle. (shallow spit hole by stick).

Same day (after walk over Vord)

From	To	Tape	Comp	Chino
1	2	4/62	061/5	+02

(062 with compass set #1: 112518)

1 = Cairn on Bunter's Bulge / Weisse Wanz

2 = Laser point 0/8 on Bunter's Bulge.

Tape error: 0

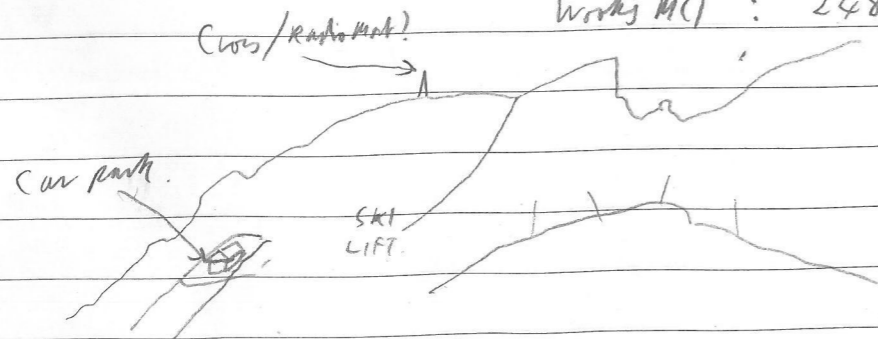
Compass # NPC2

(Chino set #1 (232011))

Calibration on radio mark (?): Comp 112518: 249/5°

Comp NPC(A2): 248°

Work's MC1: 248°



Surface Survey: 100 to Top Camp (inc B11, 164, 189, 190, B8 171)

1996-07-23

Tape/Notes: Oly Belts

Comp/Chino: Waddington

Chino: Black rubber core / yellow cord 726974

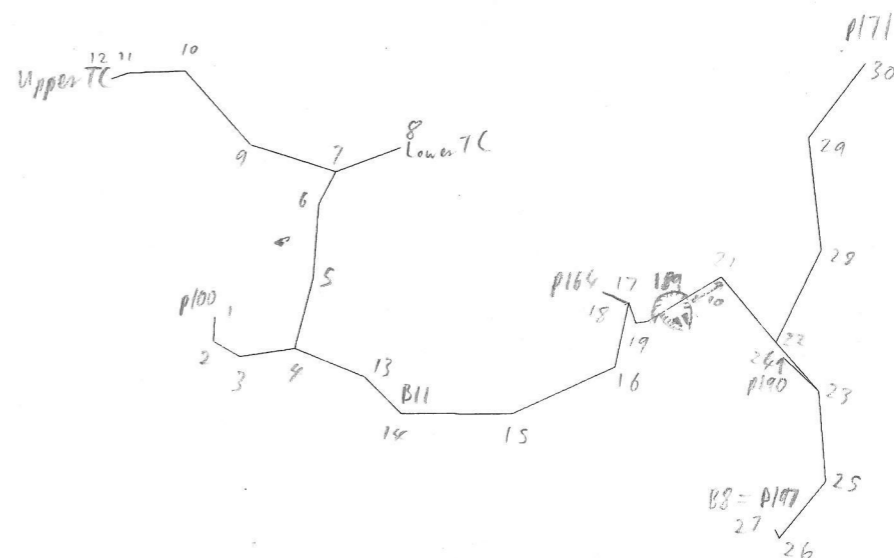
Comp: AERW'S (NPC#2)

From	To	T	C	C
2	1	6/46	283/5	-09
2	3	8/615	040	-19
3	4	15/61	002	-20/5
5	4	19/31	115	-0/5
5	6	19/74	284	-2/5
6	7	9/64	309/5	+05
8	7	18/34	169/5	+03
9	7	23/83	028	-03
10	9	27/28	059	-16/5
10	11	15/69	189	+18
12	11	4/975	351	-12/5
13	4	20/00	212/5	-0.75
13	14	14/24	055	-11.5
15	14	29/23	190	-0.5
15	16	29/85	346	-07
16	17	17/665	292/5	-03
17	18	0/105	020	+30
19	17	5/78	262	-05
19	20	3/30	003	-21
21	20	22/93	159/5	+01
21	22	22/67	061	+02
23	22	17/36	239	-05/5
23	24	13/87	234	-18
23	25	24/36	096	-07
26	25	19/47	319/5	+06

26	27	2/36	256	+0/5
28	22	27/38	126	-0/5
29	28	29/81	094	-0/5
29	30	24/87	317	-0/5

[ ] = fixed pt.

- |  |                      |
|--|----------------------|
| [1] Centre of middle O of 100'   | 26 - Tripod          |
| 2 Rock spike   | [27] - 'B8' Tag bolt |
| 3 Top of rock  | 28 - Rock            |
| 4 pencil X on rock pavement  | 29 Tripod            |
| 5 Top of rock lump.  | [30] - 171 tag bolt  |
| 6 High spot on pavement  |                      |
| 7 Washington's Tripod.   |                      |
| [8] Fixed pt - spit in pavement in low Top Camp                                |                      |
| 9 Rock corner  |                      |
| 10 " "   |                      |
| 11 Point on pavement   |                      |
| [12] Upper Top Camp fixed pt (rod mark on top pt of mossy boulder marked T.C.) |                      |
| 13 Tripod (case taken: sight compass from behind)                              |                      |
| [14] 'B11' name tag bolt   |                      |
| 15 Tripod.   |                      |
| 16 rocky pavement  |                      |
| [17] 164 tag bolt.   |                      |
| [18] Centre of 6 in '164'  |                      |
| 19 Tripod over random spit (1/05 ht)   |                      |
| [20] 189 tag bolt  |                      |
| 21 Tripod (10m from edge)  |                      |
| 22 Cairn (temporary)   |                      |
| 23 Tripod  |                      |
| [24] 190 tag bolt  |                      |
| 25 Cairn   |                      |



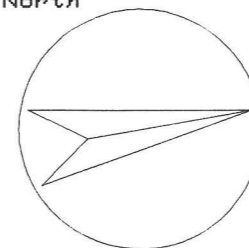
TCT0171.SVX

Plan view

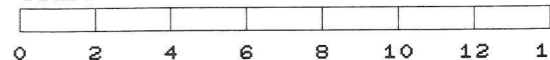
SCALE 1:2000

UP PAGE 280°

North



Scale (10m)



Survey 0.71HP PCL Printer Driver

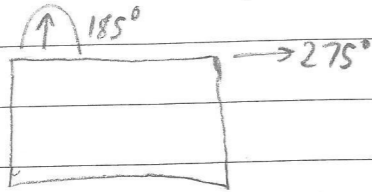
189: Next to 164. 190 further away are these right on web?

[No - since swapped in web does - W 1997.06]

189 in two joints one on 08 (also through 164)  
other on ~102

323° from 164 to 171

190 eat bar deep 6.7m long 40 wide



passage is 7.5m to top of 2nd patch

"Where the hell are we?"

Nase 179½ 179

Bw1 190½

Bw2 193½

B2 205½

Losar(!) 215½ to cross

New Cave (underconded) 9605 (see p 11)

knipped on E side of N-S rift. [Found by Watts & OI]

Schönberg 342½ long rear!

Zinken 204½

Losar + 213½

HSK 101

190 starts here

CUCC 1997 #1 Appears in the KH Survey book!  
 It is just below 161d, approx 20m South and 30m? lower

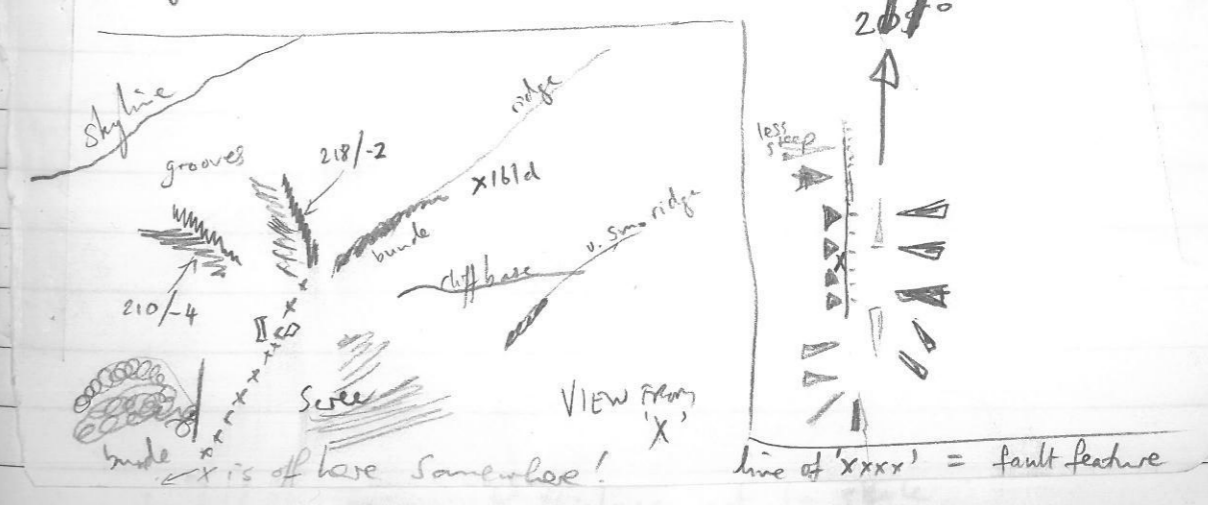
Surface Sketches <sup>dodgy</sup> from the Aufweis See side of the Schwarzmooosked ridge 30/7/97



Sketch from 100m S of Aufweis see (on 201)

Bearings from 'X'  
 161d 239/18  
 Aufweis See 175/23

Plan 30/7/97 ARC  
 The obvious trench seen down + left of 161d



SURFACE SURVEY 136 -> 147

Survey Name: Surface survey 136 - 147  
 People - Inst: Mike Richardson  
 Notes: Anthony Day  
 Pictures: What pictures  
 Tapes: Both  
 Date: 27/7/97  
 Instrument Set: 5  
 Calibration: None

From to Tape Compass Clino  
 \*equate 136 to 147.1 AP136  
 \*equate 136 to 147.16 AP147  
 \*begin 136 to 147

Stn	Dist	Mag	Cor
2	5.77	285	+32
2	28.55	171.5	-02
4	16.16	011.5	-01
4	27.92	156.5	+02
6	26.64	307.5	+32
6	16.12	162.5	-24.5
8	16.94	299	-01.5
8	29.86	118	-02
10	29.25	329	-18
10	9.22	188	+40.5
12	28.37	010	-34.5
12	5.33	160	+12
14	6.12	294.5	00
14	15.99	120.5	+23.5
16	5.22	172	+09

Stn	Desc	Height
1	Perm stn at 136	-
2	Point on nose of rock nr ent	1.50
3	Point on floor by Bunde bush	0.00
4	Top of pointy rock	1.00
5	Point on rock above snow filled gully	3.00
6	Point on skyline from pt 5	1.00
7	Point on ridge at hilltop	0.00
8	Point below cliff face	0.00
9	Point on cliff	2.50
10	Point on cliff over next lump	4.00
11	Point on rock above 161 path	2.00
12	Bit of Bunde by path	1.00
13	End of Bunde adj to path	0.00
14	Bunde by path	0.50
15	Rock nr 147 ent	2.00
16	Fixed point at 147	2.00

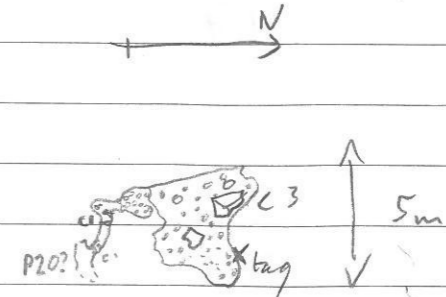
refer to p15 (TP 88, 90) 282

←1

97-07 was WK7 tagged 2/8/97

Andrew A

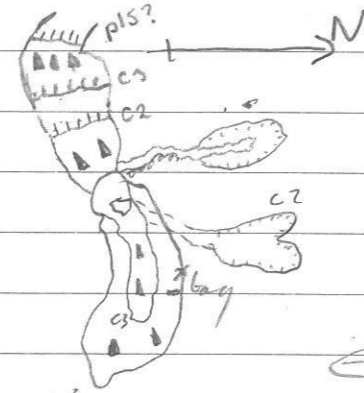
PLAN



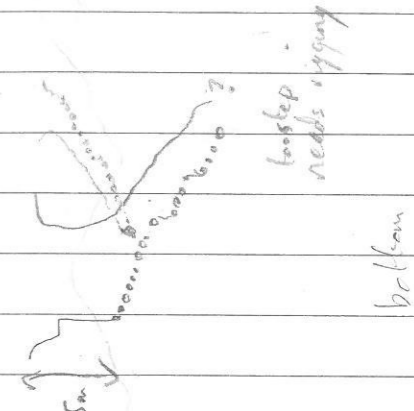
97-08 was WK9 - WK10

[136 b, c, d: work, 1999-10]

tagged 2/8/97



PLAN



ELEV

[GSCB: work 1999-07]

88F  
 1623/ This is an entrance marked by an unknown group but in a very interesting place.

It is an alcove with a pitch at the back, no spitz found so assumed to be undescended.



Bearings	Hill	A	B
		151	090/5

see next page

cave under cliff 1623/1 maybe Hase  
 rock no 2 (distance not to scale)

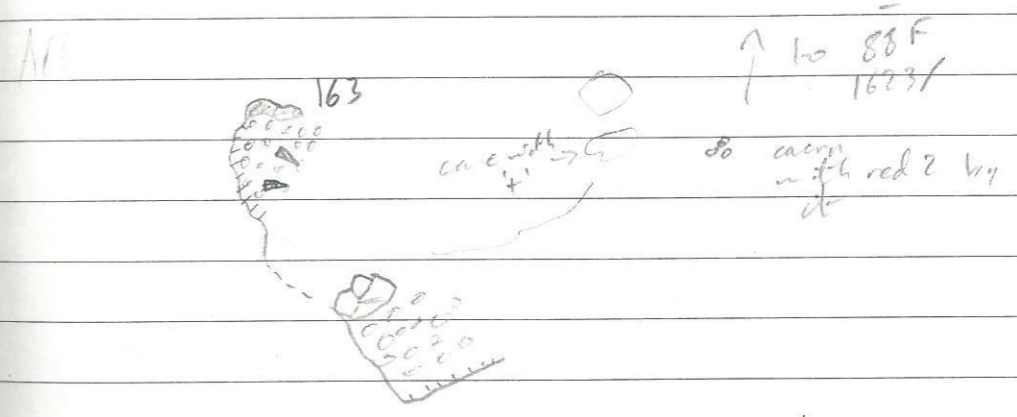
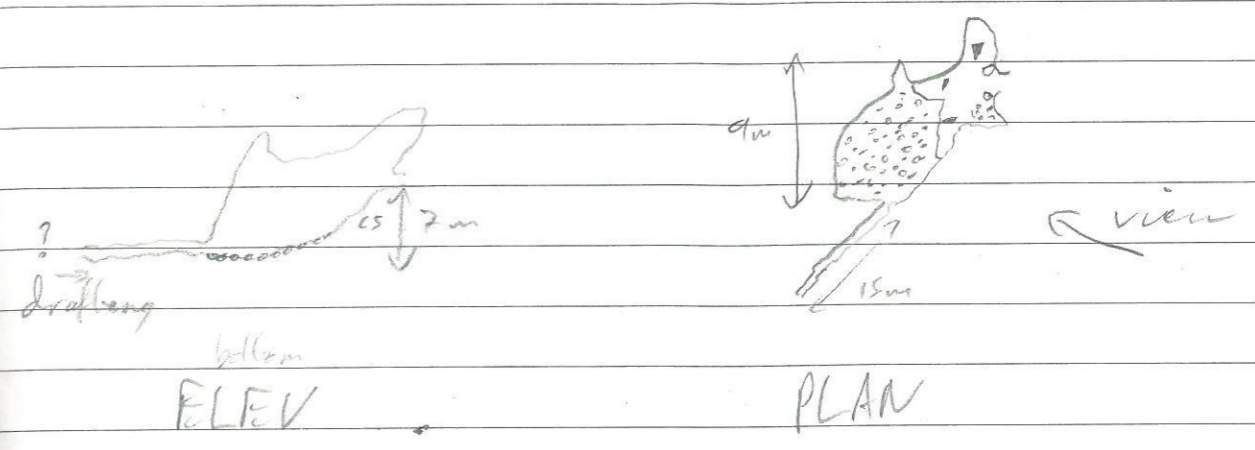
Bearings for 135      A      B  
 147      094



~~(Worked 10)~~  
~~(10/10/88)~~

1623/  
 unreachible      assumed to be H1988 discovered  
 by unknown group

Sketch of cave



All this was done the next day so is of dubious quality

Cave: Surface Survey  
 Survey Name: 180 to 161c via 191  
 Book Reference: KH97-(page number)  
 People - Inst: Phil Underwood  
 Notes: Anthony Day  
 Pictures: Anthony Day  
 Tape: Both

**SURFACE SURVEY**  
 180 → 191 → 161c

Date: 12/8/97  
 Instrument Set: 4  
 Calibration: At top camp  
 Drill hole - boulder 269 268.5 269  
 +07 +07 +07  
 Boulder - drill hole 089 089 089  
 -06 -06 -06.5

From to Tape Compass Clino  
 \*equate 180to161c.1 \P180  
 \*equate 180to161c.4 \P191  
 \*equate 180to161c.10 \P161c

\*begin 180to161c

2	1	12.88	332.5	-14.5
2	3	8.75	203	+03
4	3	27.37	016	+12
5	4	21.05	034	+09
6	6	29.70	202	-01
7	6	30.00	068	+06
7	8	24.35	222	-02
9	8	29.90	045.5	+08
9	10	6.72	231	+09
11	10	1.00	228	+23

\*end 180to161c

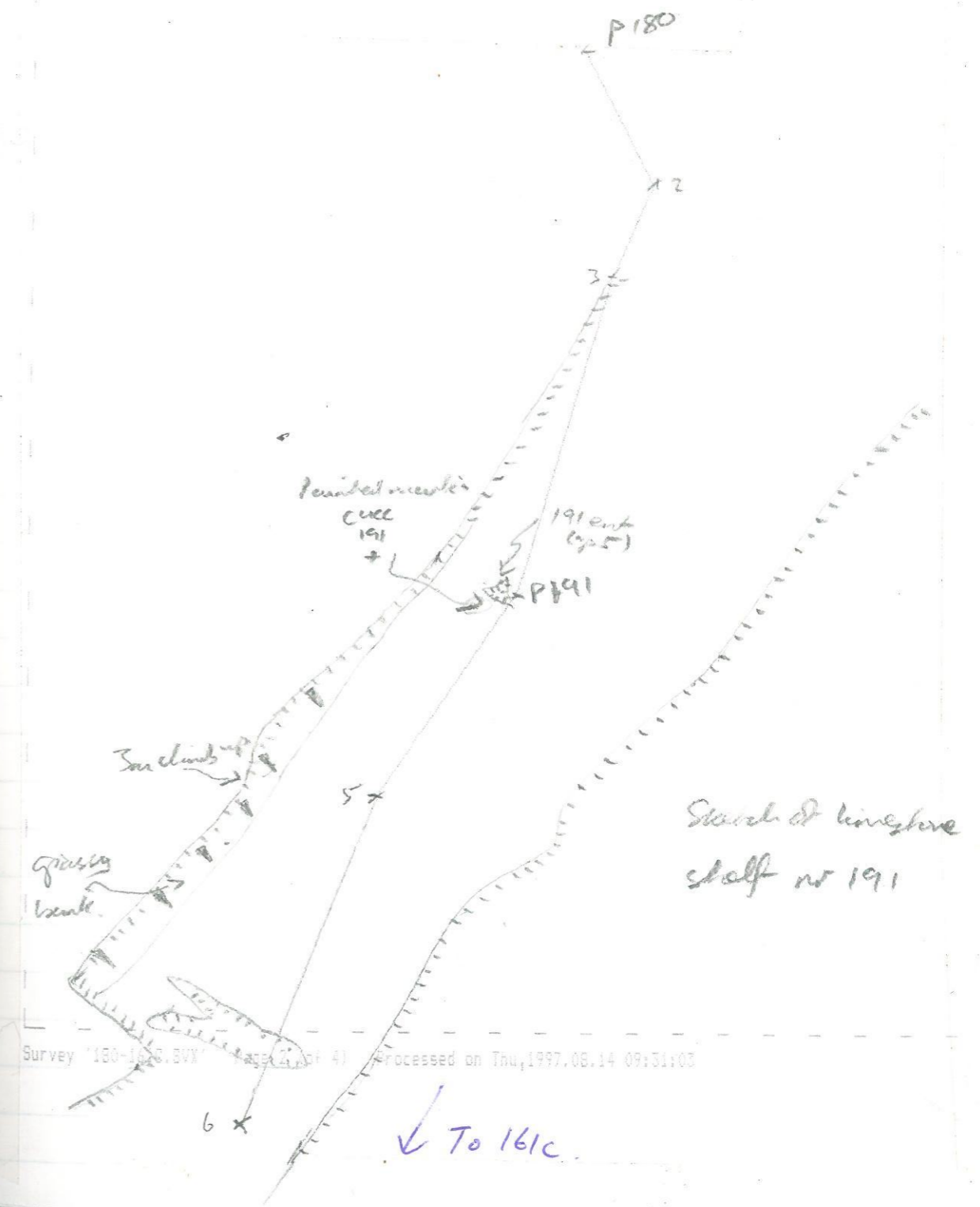
;spit had not yet been placed at stn 4 when this leg was measured

stn	desc	height
1	End of spit at entrance to 180 [P180]	-
2	spot on boulder	0.60
3	Pencil cross below scarp	1.50
4	End of spit at entrance to 191 [P191]	0
5	Top of boulder	0.90
6	Stone on top of heather	0
7	Point on top of ledge	0.30
8	Point on scarp, RHS	2.10
9	Point on rock at gully near 161c	-
10	Dot below painted bit at 161c	-
11	Dot on rock below entrance	-

I think that one of points 10 and 11 is the fixed point at 161c, but am not certain. AJD

Marking at 161c: VSS 2  
 88 FF  
 1623/161c  
 Paint splodge here is pt 10

pt 11 on rock below entrance:  
 this is pt 11 → o/c)



Revised description of where 191 is based on survey:  
 ~ 140m NE of 161c (previously described as 100m NNE)

SURFACE SURVEY

ROSENKAWALIERHÖHLE (186) → TOP CAMP.

: Dave: Surface survey  
 : Survey Name: 186 to top camp  
 : Book Reference: NotKH97-(page number)  
 : People - Inst: Phil Underwood  
     Notes: Anthony Day  
     Pictures: None  
     Tape: Both  
 : Date: 12/8/97  
 : Instrument Set: 4  
 : Calibration: At Top camp  
   Drill hole - Boulder: 269 268.5 269  
                           +07 +07 +07  
   Boulder - Drill hole: 089 089 089  
                           -06 -06 -06.5  
   Distance boulder to drill hole = 10.19

: From to Tape Compass Clino  
 \*equate 186toTC.1 \P186  
 \*equate 186toTC.22 \Topcamp  
 \*begin 186toTC

Station	Point	Dist	Mag	Cor
2	1	4.83	092	+16
2	3	11.80	329	+01
4	3	10.20	141	+32
4	5	11.49	311.5	-26
6	5	14.39	167	+22
6	7	12.54	349	-19
8	7	15.38	088	+40
8	9	30.00	334	-10
10	9	23.55	138	+02
10	11	13.88	330	+16
12	11	26.55	142	-04.5
12	13	29.55	311	-03
14	13	29.52	107	+03
14	15	26.40	270	+02
16	15	26.47	099	+03
16	17	28.95	321	-06
18	17	29.97	114	+06
18	19	20.55	283	-01
20	19	27.67	120	+11
20	21	23.90	321	-09
22	21	15.97	121	-03

\*end 186toTC

The...  
 To...  
 A...  
 B...

(m...)  
 G...  
 P...

Stn	Desc
1	Bolt at 186 ent (P186)
2	Bunde branch
3	Tall bunde branch
4	Top of rock edge
5	Prominent sprig of bunde
6	Nobble on rock face
7	Dead bunde branch at top of steep bit
8	Dead bunde branch at bottom of steep bit
9	Anthony's knee in the middle of a field
10	Point on top of rock below scarp
11	Top of prominent boulder on scarp
12	Edge of bunde bush
13	Anthony's knee (in a different place)
14	Blade of grass
15	Bunde bush on corner by TC path
16	Blade of grass by TC path
17	Anthony's knee (on rock by TC path)
18	Rock behind cairn
19	Cairn above TC path
20	Rock on TC
21	Rock in middle of TC
22	TC fixed point (on top of lichen covered boulder)

(W...)  
 (m...)  
 (m...)  
 (m...)  
 (m...)

(m...)  
 (m...)



# 1998 starts here!

Ardy's surface wandering 1998-07-12

GPS'ed Bill whilst trying to get the bolt out to put a tag on.  
Who tightened it with a spanner? muther! Same at B8

Bill	GK	5410428	5283023	FOM	9.3m	(~25 mins)
B8	GK	5410485	5283132	FOM	11.1	(10 mins)

Found 1623/101 and 101A. Drilled hole and bolted on a red reflector to 101 (needs a proper tag). Should really be called 101a and 101b. Existing numbers faded to oblivion.

101A (i.e. 101b) GK 5410503 5283483 FOM 9.2m (> 1/2 hour)

Bearings:

Grieskogel	012.5
Nase	194.5
VSK Nipple	154.5
MSK	074.5 (i.e. rounded top)
Lost Rucksack Cairn	319
Altimeter	1630m

Found 103 (about 35m away) to ~~W~~ WNW)

103 GK 5410472 5283506 FOM 8.7m (> 1/2 hour)

Bearings

VSK Nipple	153	added a bolt for a tag
MSK	075	just below the (faded)
Lost Rucksack Cairn	325	number.
Altimeter	1630m	

102 is supposed to be ~30m north of 103 - needs another search.  
found on next trip - actually ~15m south of 103

There are several caves hereabouts and a surface survey is needed.

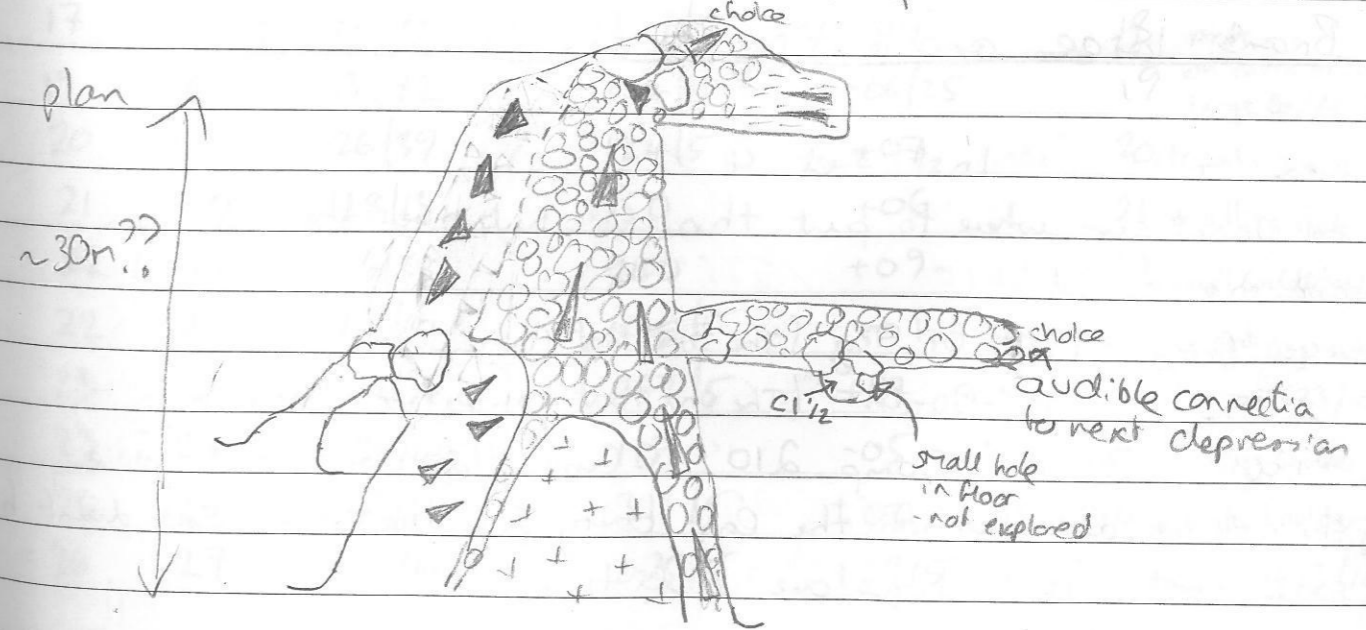
To ESE of 101A in same fault is a cave marked "+"  
North of 103 (~~further than 102~~) is 173  
West is the route to Lost Rucksack Cave (CUCC 1993-01)

GPS batteries died at this point.... :-c

Prospecting 12.7.98 - Kate, Brian, Tim, Carl

Tumbling Boulder Hole CUCC 1987/01 Now 1623/199

Follow CUCC path - until the intersection with the tourist path up the <sup>vorderer</sup> Schwarzmosekogel (1998 - cairn with binder branch in). Then follow VSK path to ISG (large riftly shaft with rock bridge in the middle. Turn right along ISG + continue in same direction over a lip to reach tumbling boulder hole after ~30m. The next depression in the same direction contains boulder chole which connects with TBH (by skating). Uphill + left of TBH is a small hole which connects to the climb up



Not yet marked. marked 1998-07-15 tag left of entrance  
marked "TBH CUCC 1987 01"

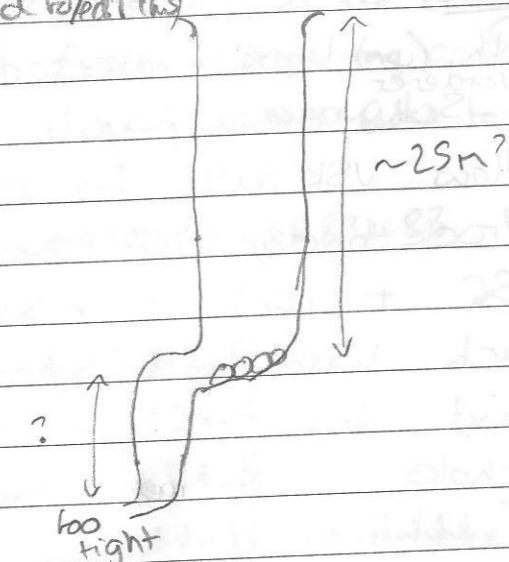
approx. along bearing 324° from VSK

A depression on the VSK path before 156 ~ 150m from CUCC path was climbed down into. 2 smallish holes at the bottom were found to be less than 10m

CUCC 1998/01 GPS: GK 541 0984 528 2945 \*

A small surface shaft ~ 2m diameter on VSK path ~ 50m from junction with CUCC path next to a cairn. Rigged a natural - descended. At bottom of shaft is a boulder floor with a short second pitch down to too tight rift.

(Brian might like to add to/del this)



\* from top of VSK 0.25km bearing 324° not marked (yet) marked 1998-07-15 tag "CUCC 1998 01"

Brian's large and inviting shaft on the surface:

WOOKEY:-

Inst set 4

I wasn't sure where to put this, but here's the info you asked me to get:

Survey from 1998 01 Tag (The one that Andy put in) To 1998-30-01 (The one that you put in)

Tape 3/11 m Comp 210 Clino -12

By the way we did this on the last carry from the cave and didn't have a spanner so both tags are still there

From 156 Tag to 156 Pitki head bolt Tape 1/4.1m Comp 1.01 Clino -12

1998-07-16 Surface survey B8 to 101 and 103

Insts: Andy W Notes: Andy W Pics: Andy W Tape: Andy W

point 0 is bolt of tag on CUCC-1976-B8

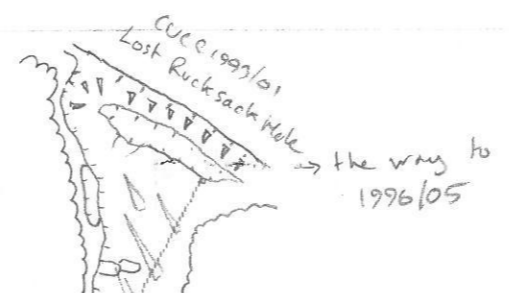
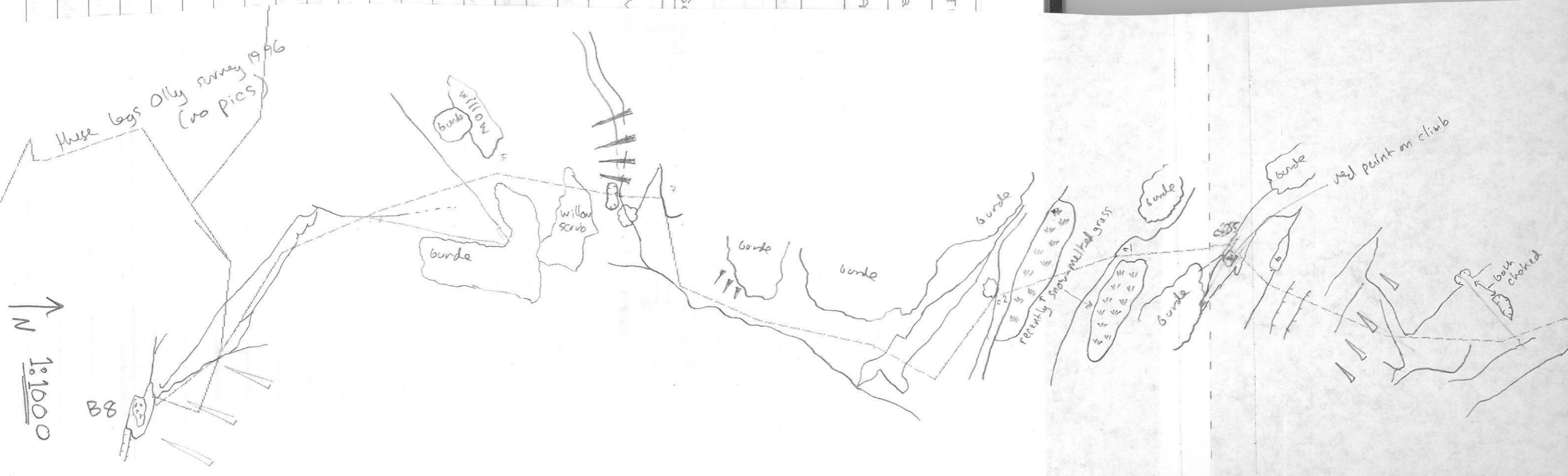
f	t	L	θ	φ	
0	1	11/10	022	+01/5	1 on floor
2	1	15/93	108	-05/75	2 cairn of scarp
2	3	29/35	299/5	-00/5	3 rock on scarp
4	3	25/52	155	-11/5	4 tripod above scarp
5	4	27/78	160/5	-06/5	5 larch tree decidive
6	5	29/65	192/5	-15/5	6 tripod above climb up
6	7	9/84	004	+10	7 1.5m up cliff
8	7	23/28	260	+12/5	8 floor above cliff
9	8	20/07	207/5	-08	9 tripod above cliff
9	10	27/15	014/5	-02/5	10 stick in grike
11	10	16/35	212/5	+06	11 tripod
11	12	25/05	303/5	-00/5	12 bundle top of climb
13	12	29/91	160	+12	13 floor
14	13	26/48	175	-05	14 tripod at top of red paint climb
14	15	13/90	049/5	-08	15 small scarp
16	15	30/26	206/5	+06/5	16 dead bundle on E wall of rift (choked)
17	16	26/36	183/5	+04/5	17 floor
17	18	28/98	337/5	-05	18 rocks
19	18	13/72	144/5	-06/25	19 on cairn built on large boulder red paint
20	19	26/39	124/5	+07	20 tripod
21	20	28/13	150	+06	21 middling rock
22	21	6/38	240	+09	22 small boulder, red paint
22	23	22/10	076/5	+01	23 tripod in juniper
23	24	10/36	067/5	-17	24 tag on 1623/103
23	25	26/40	127	-05	25 middling boulder
26	25	13/05	311/5	±00	26 pointy boulder
26	27	4/41	025/5	+02/5	27 tag on 1623/101

Calib: At TC +01/5 -00/5 to Col Rot Schinberg 351

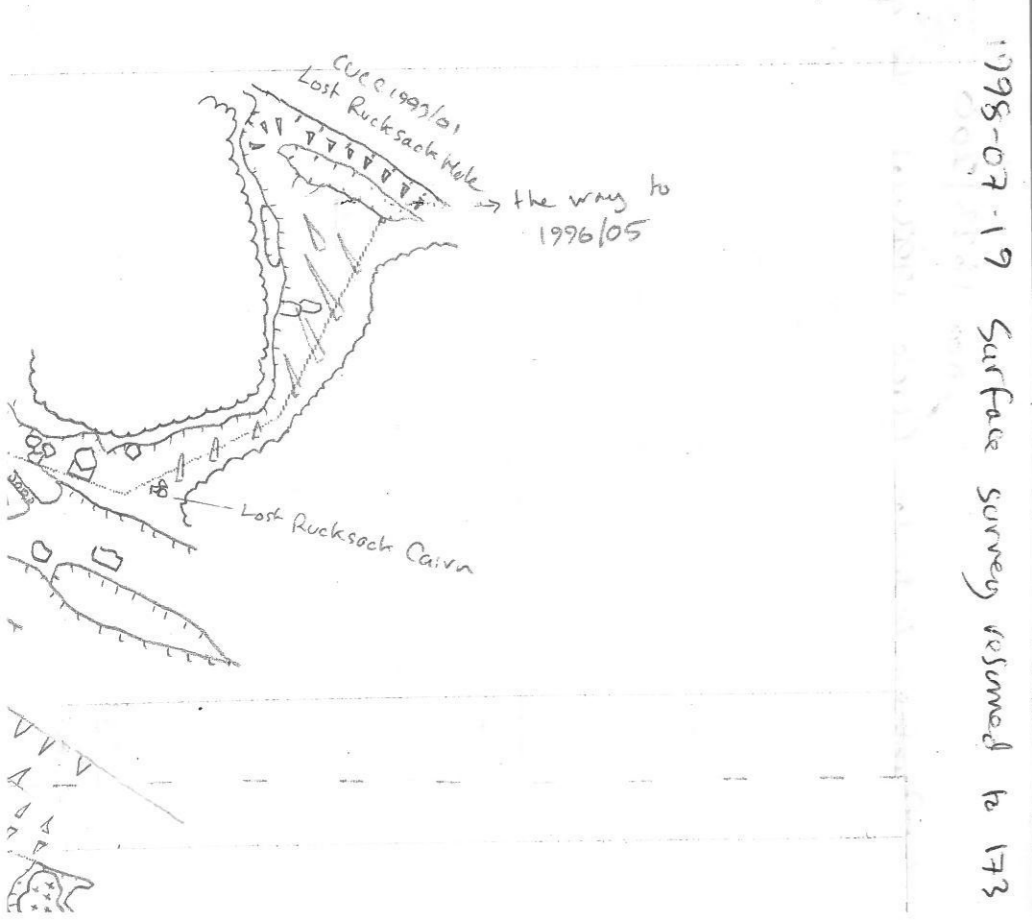
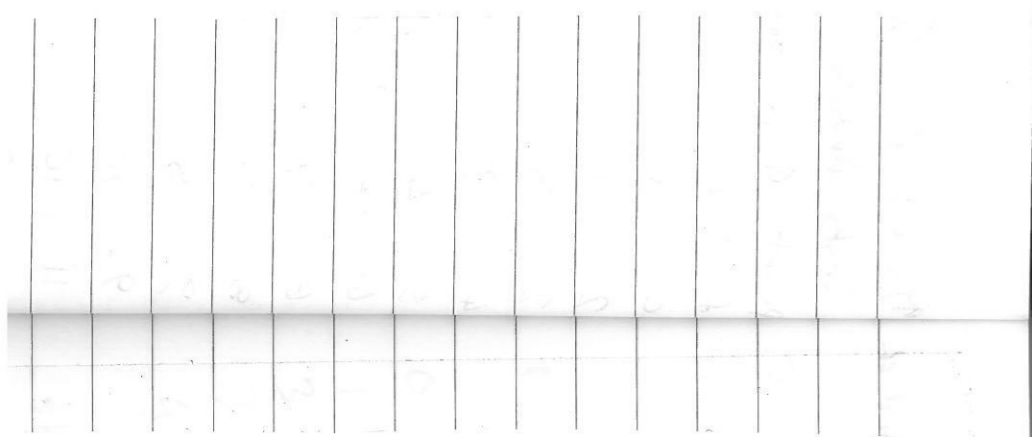
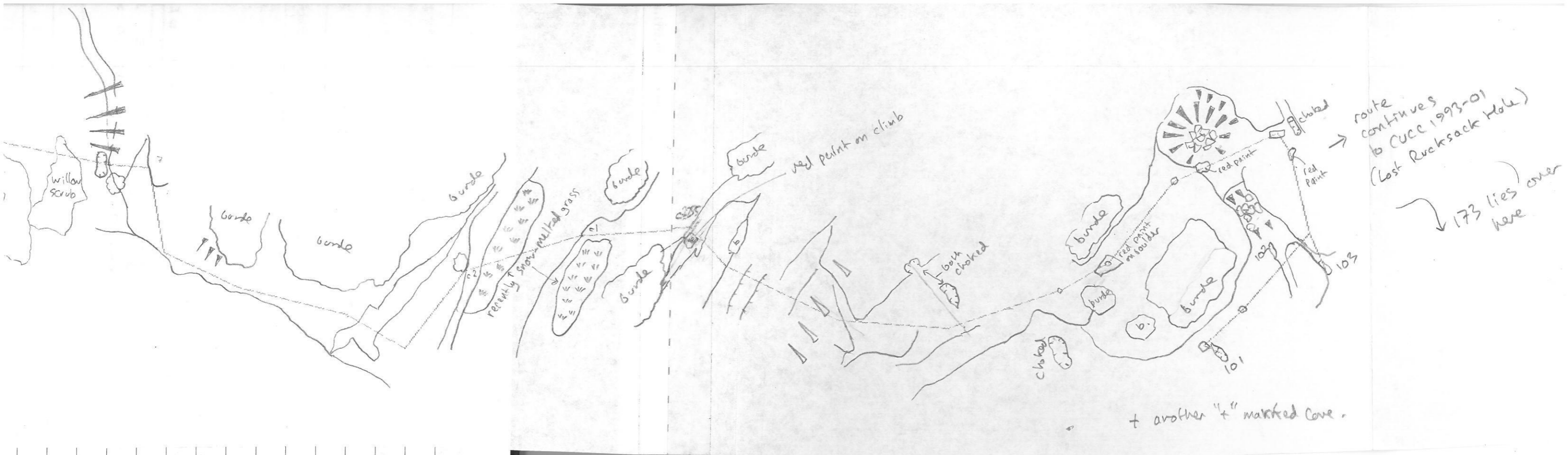
TCT
PIa
SCA
UP

Sum  
 S  
 0

1998.07.19 19:00:30



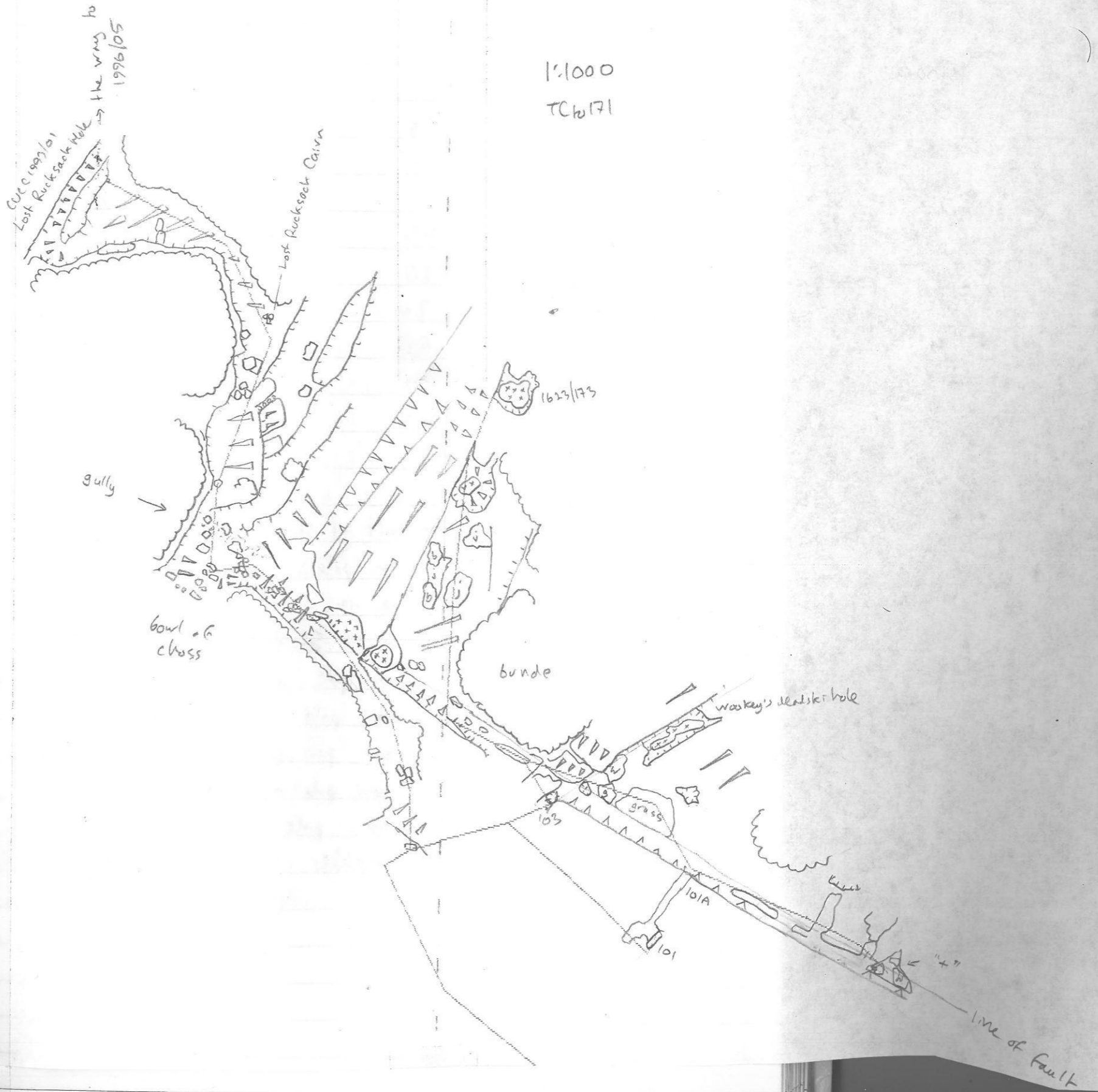
1998-07-19



1998-07-19 Surface survey resumed to 173, 101A and 1993-01 53

lost Rucksack Cave  
 area lies over  
 ↓

N 1:1000



new 1623/200

Survey from Lost Rucksack Hole (UCC 1993-01 to end of previous surface survey.

Instrs Brian, Notes (Pics Andy W. Tape both Calib +/- 8 i. zero clino.

F	T	L	θ	φ
1	0	29.35	295.	-11.
1	2	22.05	152.	-01.
3	2	30.50	022.	+12.
3	4	17.93	184.	-19.
5	4	10.70	260.	+29.
5	6	23.24	128.	-03.
7	6	19.80	321.	-09.
7	8	14.05	163.	±00.
9	8	11.61	359.	+03.

station	height	is
0	0	bolt of tag, NE end of Lost Rucksack Hole
1	1+	ski pole
2	1+	ski 12m from Lost Rucksack cairn
3	0	boulder at foot of cliff on right
4	1	ski pole inserted in boulders in class gully
5	1	ski pole on steep slope - E end greasy traverse
6	1.5	ski pole perched on edge of cliff,
7	1	ski pole by boulders on terrace
8	1	ski pole on terrace
9	0	boulder in previous survey (pencil cross)

survey from 173 to 103

Instrs Andy W for 1st leg, then Wookay (Notes/Pics Andy W Tape both

Calibs assume zero clino. set #4

F	T	L	θ	φ
0	18	13.13	203.5	+03.5
1	2	28.16	186.	-13.
3	2	22.66	002.	-01.5
3	4	18.40	114.5	+02.5
4	5	10.41	144.	-06.

station height

station	height	is
0	0	bolt for 173 tag
1	1	ski pole at NW corner of 4m hole (class + snow)
2	2.1	ski pole in patch of juniper
3	0.1	ski pole at foot of cliff
4	1	ski pole in narrow strip of azalea scrub
5	0	bolt of tag of 1623/103

# GPS Fixes

102 5410464 5283496 FOM 11.5 (10 mins)  
 5410453 5283535 FOM 12.5 (14 mins)

## CUCC 1993-01 (Lost Rucksack Hole)

fix to obvious Boulder ~4m NE of top.

5410385 5283643 FOM 9.1

next day 5410384 5283640 FOM 8.6 alt 1601.

CUCC 196-05 5410252 5284195 FOM 11.4 14 mins.

Interesting shafts at 5410372 5283884 (not averaged)

and 5410347 5283977 ( " )

v. large cave ent. at 5410274 5284134 ( " )

another hole on higher terrace 5410335 5283840 ( " )

all these are or near obvious route to 96-05

107 ent 5410808 5283307 FOM 12.8

Laser 0/5 5410875 5283360 FOM 19.0 22 mins

107 5410870 5283290 not averaged

148 5410713 5283210 " "

80 5410605 5283069 " "

A QM 5410738 5283197 " "

all on cairned route home from 107

The QM is a short (climbable) shaft to sizeable horizontal cor-  
 worth a look with a light. not marked or numbered, but should  
 be easy to find from 148 by subtracting those fixes.

## Surface survey from 159 back to TC 1998-07-23

Calib. at top camp +4.2 (-3.4 Col R of Schönborg 351  
 Insts: Kate J Notes (Pics: Andy W Tape: Kate)

f	t					
1	0	1.5	-	down		
2	1	17.37	032.18	-13.42.5		
3	2	29.48	294.00	-05.00.5		
4	3	29.70	320.00	-05.00.5		
4	5	33.33	076.00	-10.00.5		

### Station details

- 0 northerly (of 2 Y-hang) bolt at 1623/159 0.5 below surface.
- 1 point in space 1m above surface at N side of hole.
- 2 cairn 0.3m above karren to 2022 at top of hole.
- 3 burde 1.6m above surface (near end of hole)
- 4 cairn 0.6m above surface near that point
- 5 TC Pointy Boulder at upper TC

(129) ...

# GPS Fixes

102 5410464 5283496 FOM 11.5 (10 mins)  
 5410453 5283535 FOM 12.5 (14 mins)

## CUCC 1993-01 (Lost Rucksack Hole)

fix to obvious Boulder ~4m NE of top.

5410385 5283643 FOM 9.1

next day 5410384 5283640 FOM 8.6 alt 1601.

CUCC 1996-05 5410252 5284195 FOM 11.4 14 mins

Interesting shafts at 5410372 5283884 (not averaged)  
 and 5410347 5283977 ( " )

v. large cave ent. at 5410274 5284134 ( " )  
 another hole on higher terrace 5410335 5283840 ( " )

all these on or near obvious route to 96-05

107 ent 5410808 5283307 FOM 12.8

Laser 0/5 5410875 5283360 FOM 9.0 22 mins

107 5410870 5283290 not averaged

148 5410713 5283210 " "

80 5410605 5283069 " "

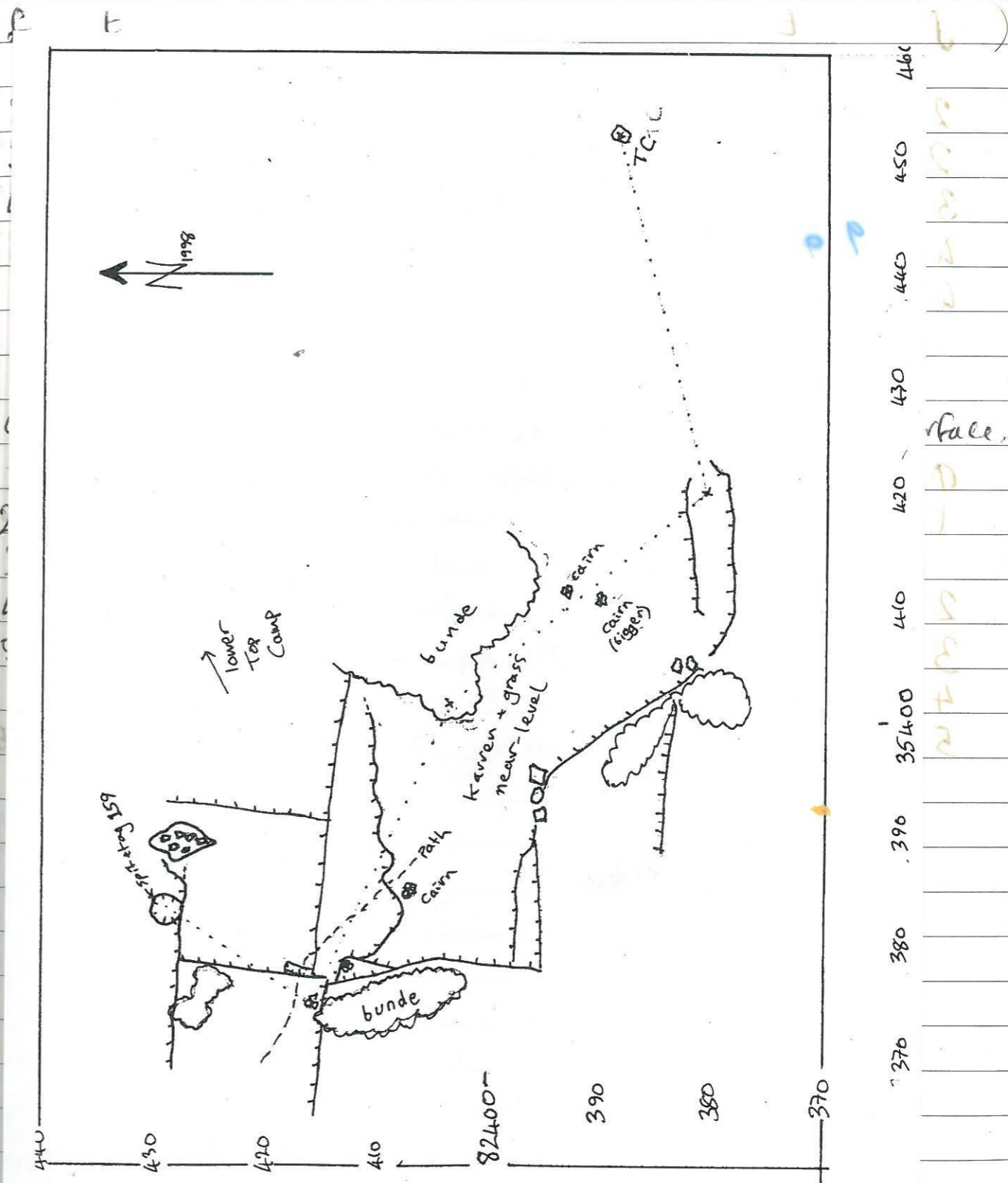
A QM 5410728 5283197 " "

all on cairned route home from 107

The QM is a short (climbable) shaft to sizeable horizontal area. worth a look with a light. not marked or numbered, but should be easy to find from 148 by subtracting those fixes.

Surface survey from 159 back to TC 1998-07-23

Calc: at top camp +42 / -34 Col R of Schöenberg 351  
Insts: Kate J Notes (Pics: Andy W Tape: Kate)





(Cards Lister's Hole) see p64

CUCE-1998-07 to existing Survey: 1998-07-23

Insts: Kate Book: Andy Tape: Kate

Calib: as per W. A. 2009/10

f	t				
2	0	7.54	313	-24	
2	1	3.60	000	-32	
3	2	23.66	092	+25	
4	3	27.91	172	-03	
4	5	22.08	320	+18	

Stations:

- 0 knob of rock at roof-level in cave entrance
- 1 tag - opposite side of doline from cave (because rock was white above cave)
- 2 unreasonably tall cairn
- 3 Boulder 1-3m
- 4 willow branch 0.2m
- 5 stick in grike - station 10 of B8-to-101 survey (p51)

Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)  
 Cave: Eishoehle, 1623/40  
 Survey Name: Schneevulkanhalle via Plastic Hell to Cardboard Heaven  
 Date: 1998.07.24 Z3  
 By: Insts: Phil U  
 Notes: Wookey  
 Pics: Wookey  
 Tape: Phil U  
 Instruments: Compass # ; Clino # Nick Williams Silva Prismatic Set  
 Calibration: none  
 ref.: 1998 KH survey book pp -

==== stations refindable to link to other surveys: =====

\*export Plastic.22

\*calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

from	to	tape	compass	clino	remarks
2	1	12.76	011	-16	
2	3	15.96	109	+21	
4	3	10.13	311	-24	
2	5	4.90	268	-27	
6	5	14.28	124	+11	
6	7	4.15	202	-02	
1	8	7.17	010	-17	read backsight scale - notes say 190
8	9	6.59	358	+11	
9	10	18.05	286	-23	
7	11	7.69	285	+69	
12	11	0.93	131	+0	
13	12	3.06	175	-15	
13	14	4.60	346	+12	
14	15	1.42	319	+12	
15	16	2.33	020	+35	
16	17	3.24	318	+24	
17	18	9.50	240	+45	
18	19	2.88	207	+08	
19	20	10.29	295	+25	
20	21	9.28	294	+48	
21	22	1.38	044	-42	

station details

name	L	R	U	D	E	description
:1	~2.5	~4	~5	1.5		1st traverse bolt
:2	~4	~4.5	~5	2.5		White mark on top of rock
:3	7	3.3	~8	1		Top of rock, pencil "3"
:4	2.2	0.2	~2	0.5		Bottom of Stal
:5	0.8	0.7	~4.5	0.4		Cairn
:6	1.5	0	~2	1.4		RH Wall
:7	1.5	0	2.8	1.8		RH Wall "7" in pencil
:8	2	3	3.5	1.5		Pebble in conglomerate now gone!
:9	4	0	2.5	1.5		Traverse bolt before hole (5th)
:10	1.2	4	4	0.2		"10" in pencil. left also zero
:11	0	0.5	~2	~2.5		bolt at pitch head
:12	0	0.4	~0.6	~2		LH Wall
:13	0	0.25	~2	1.2		LH Wall
:14	0.6	0.5	~2.5	0.5		Pencil on roof
:15	0	0.8	~2.2	1.7		Pencil LH Wall
:16	0.5	0	0.6	0.5		RH Wall
:17	1.6	0.4	~2	1.2		Pencil "X17" RH Wall
:18	1.7	0	~4	1.6		Bolt
:19	0	1.4	~8	1.4		Pencil "X19" LH Wall
:20	~6	3	1.4	0		X in ice!
:21	-	-	-	1.7		CM on wall 1.8m from edge

\*end Plastic

\*begin Plastic2

```

; Date: 1998.07.25
; By: Insts: Phil U.
; Notes: Julian H
; Pics: Julian H
; Tape: Phil U
; Instruments: Compass # ; Clino # unknown.
; Calibration: none
; ref.: 1998 KH survey book pp -
;      Na
; ===== stations refindable to link to other surveys: =====

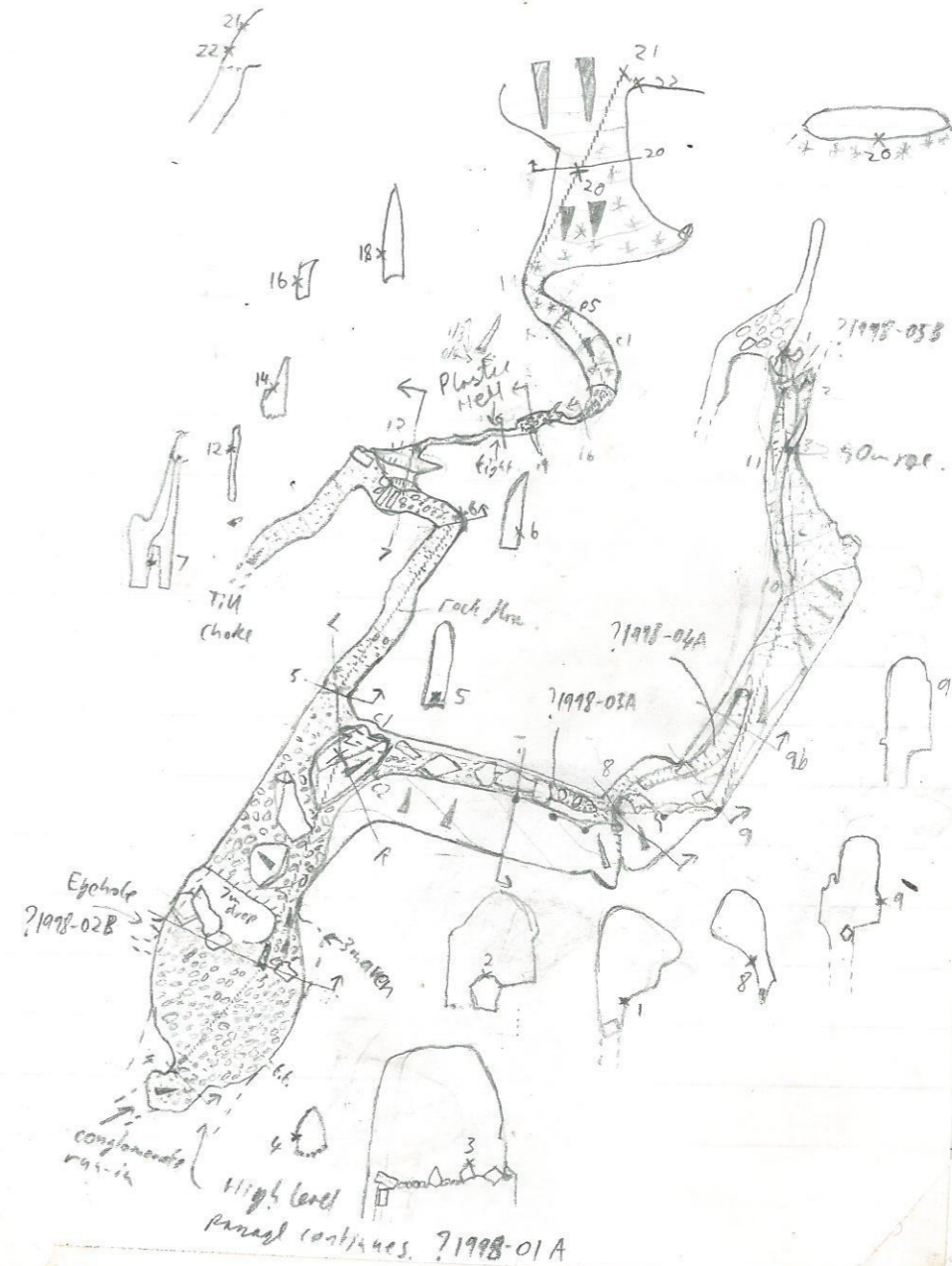
```

from	to	tape	compass	clino	remarks
2	1	16.8	268	-74	
3	2	15.85	265	-81	
4	3	8.33	264	-23	

; station details

name	L	R	U	D	E	description
1	0	2	-	1		CM on L hand wall
2	0.4	0	-	1		Rebelay bolt
3	0.8	0	0.5	-		Pitch head bolt

\*end Plastic2



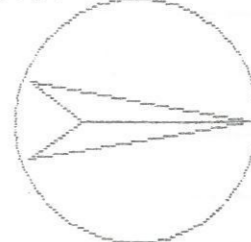
EISCUCC.SVX

Plan view

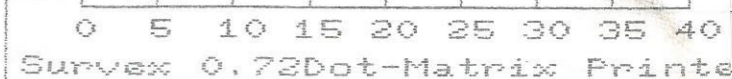
SCALE 1:500

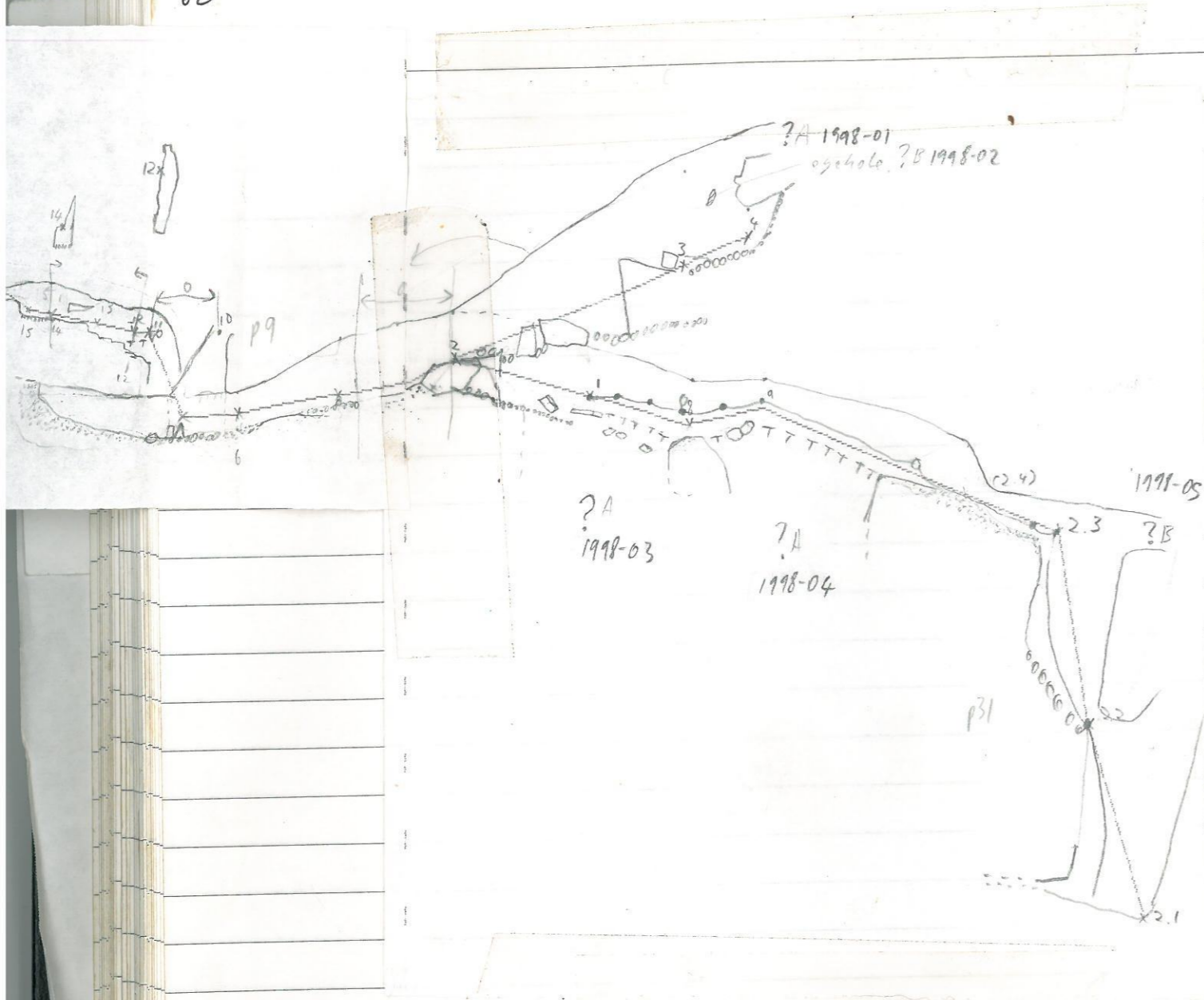
UP PAGE 270°

North

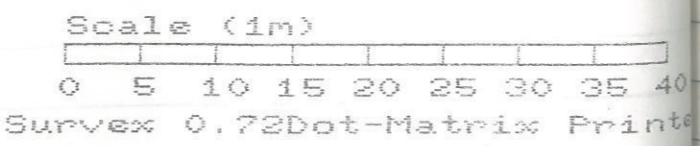


Scale (1m)





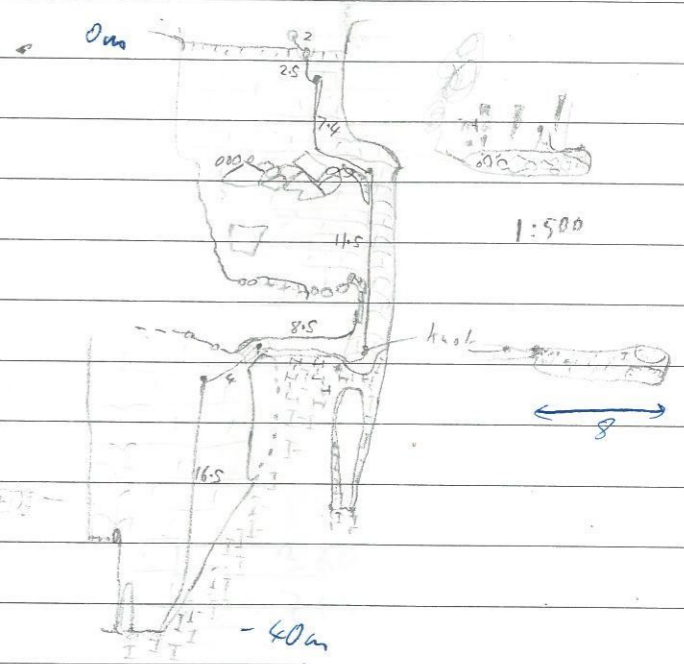
EISCUCC.SVX (extended)	Elevation on
Elevation	270° 090°
SCALE	1:500
VIEW	000°



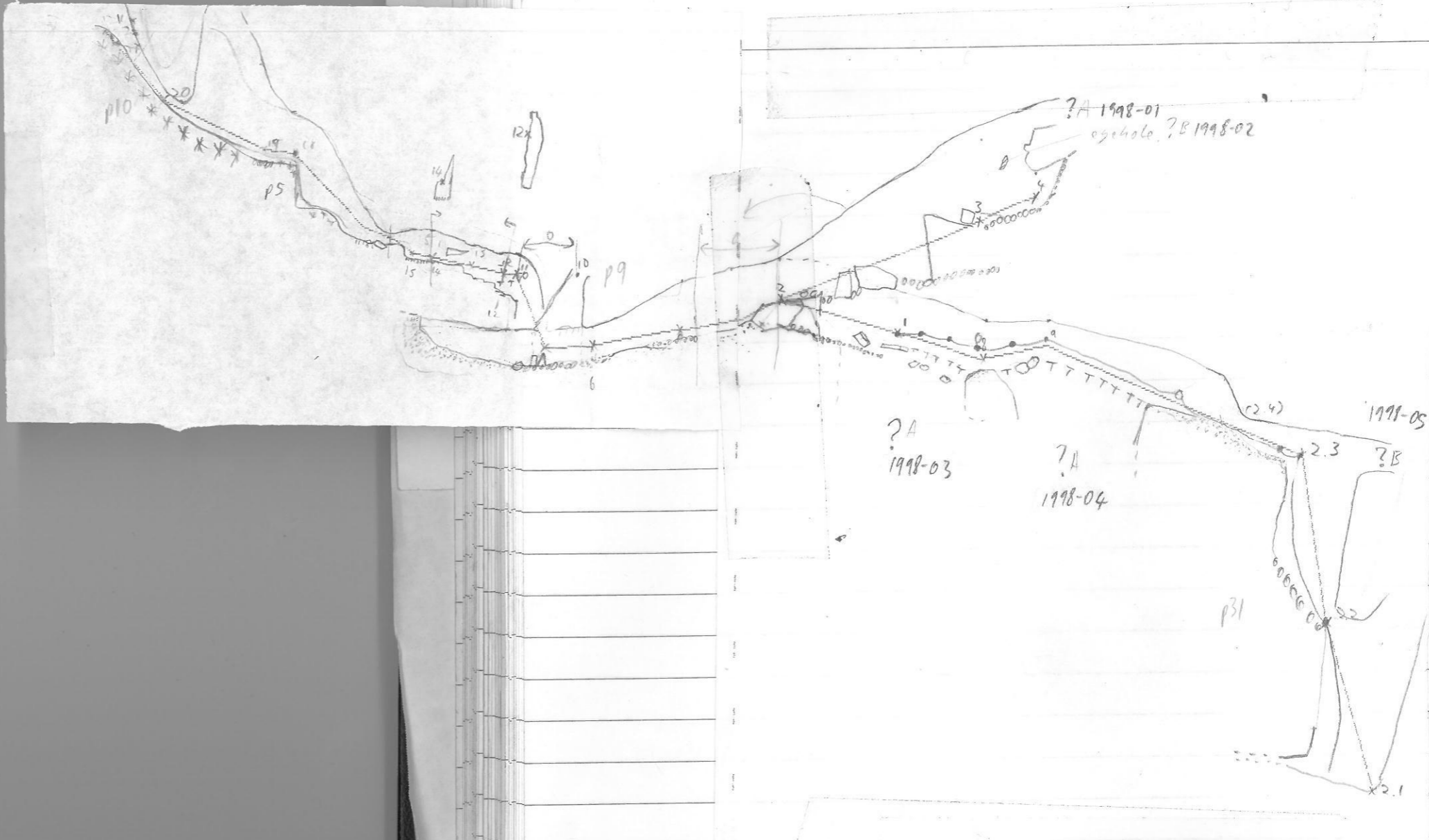
Lost Rucksack Hill 1998.07.  
p200

Classic plateau cave where the rift forms on a joint. Made more interesting by the snow plug. Rift is about 4m deep before becoming snow-choked. The cave breathes, suggesting how the entrance along the joint.

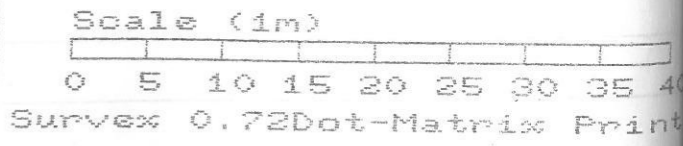
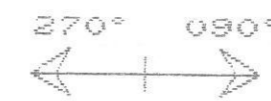
- Rigging:
- 1st piton: Thred (15)
  - 1m Thred
  - 3m Bolt, Ewall
  - 2nd piton: Bolt - 4m Ewall (22)
  - 3rd piton: -20m Bolt Ewall
  - 22m " "
  - on one rope of (60m)



Open shaft on joint. Descends p7 to choked rocks. A loose S end leads to shaft containing ice luma on N side. Bolt low on LH side gives descent of 13m to snow bridge. Further descent of 10m possible from low till snow and ice close in L choke. 10m of CUC rope is trapped in this choke. Transition off at snow-bridge level (slong on rope - very little real flow!) leads 6m to breathing hole. Bolt on RH side & another 3m down L wall out on RH side give descent of 19m to where rift is snow choked again. There is ledge about 6m up at N end. It is possible to get off at same point 6m down 2nd piton to examine rift below entrance shaft.



EISCUCC.SVX (extended)	Elevation on
Elevation '	
SCALE 1:500	270° 090°
VIEW 000°	



Feister Simulantenhöhle  
Lardy Festerers' hole

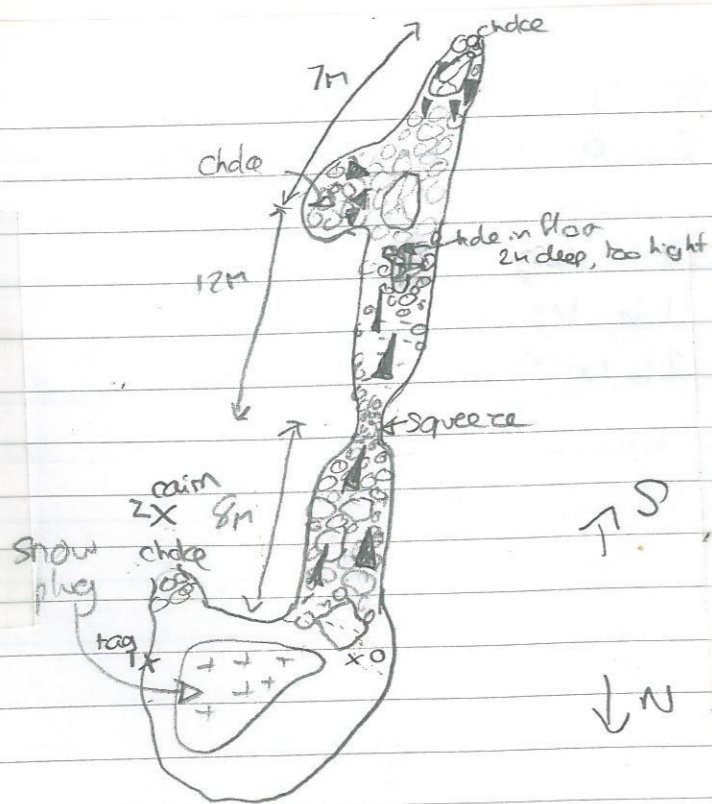
A horizontal entrance next  
to a snow plug leads to  
a boulder slope. A  
draughting squeeze leads 12m  
to muddy passage + a  
small chamber with boulder  
floor, a choked depression  
to the left + a choked uphill  
slope straight on. There is  
a hole in the floor just  
before the large boulder in the  
middle of the chamber, partly  
covered with boulders. The  
bottom can be seen 2m below.

Kate Janoszy

& Brian Outram

1998-03

Surface survey, p58



Schwarzmoos Kögel

Eishöhle

Schnee Vulkanhalle Survey

by VFHO - 1991

(Sopp, Robert, Peter)

ale Janoszy

Brian Outram

48\_03

W/ae survey p58



486.500

486.500

282.000

282.125

Surface Survey - Near Top Camp - to West - 90, 91, 93, 94, 160

\*begin 90to94

```

; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau
; Cave: Surface
; Survey Name: Caves Near Top Camp: 1623/90, 91, 93, 94, 160
; Date: 1998.07.18
; By: Insts: Brian O
; Notes: Wookey (2 wadders present in 2nd half)
; Pics: Wookey
; Tape: Brian
; Instruments: set 4 clino #145132, compass #741127

```

```

; Calibration: clino +8/-8
; ref.: 1998 surface survey book pp
; ===== stations refindable to link to other surveys: =====

```

```

;*export 0 ; tag at 1623/90
;*export 10 ; centre of 9 of 91
;*export 11 ; tag bolt of 1623/91
;*export 12 ; cairn probably refindable
;*export 14 ; tag of 1623/160
;*export 15 ; 1st rig bolt of 1623/160
;*export 18 ; tag bolt (middle of "9") of 1623/93
;*export 21 ; tag bolt (middle of "9") of 1623/94

```

0	1	19.02	168.	+07.
2	1	20.14	098.	+01.
2	3	25.96	285.	-08.
3	4	29.97	296.	-06.
5	4	26.48	126.	+08.
6	5	24.35	162.	+14.
6	7	22.42	019.	-01.
8	7	30.27	152.	+12.
8	9	11.41	346.	+05.
9	10	18.97	003.	-14.
10	11	2.60	098.	-45.
12	11	15.95	248.	+08.
12	13	18.87	079.	+03.
13	14	4.89	051.	-25.
14	15	0.15	-	up
15	16	3.75	282.	-27.
12	17	17.81	301.	00.
17	18	7.61	354.	-07.
17	19	14.22	330.	-01.
179	20	28.20	353.	-10.
20	21	17.06	319.	-10.

[W. 1999-11-01, confirmed by work/Brian  
 Measure at ends 1999-07-28 (93 to 94 is 50.60 - 0.22x2 = 33.4)]

;station details

```

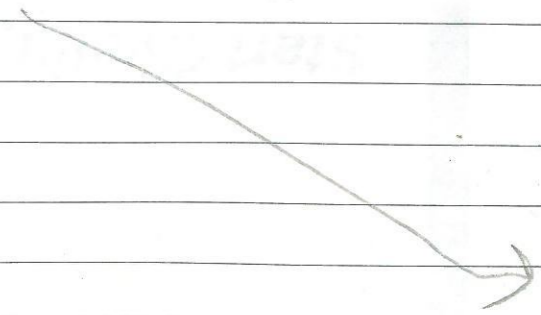
;0 0 p90 tag bolt
;1 0.5 point of rock
;2 1.0 ski pole
;3 0.4 tip of scree boulder
;4 1.0 ski pole
;5 1.0 ski pole
;6 0.4 top of rock near cairn
;7 2.0 top of rock bulge, "X"
;8 0.3 rock
;9 0.5 ski pole in crack
;10 -0.6 centre of "9" of 91
;11 0 tag bolt of 91
;12 0.3 cairn
;13 0.8 ski pole
;14 0 p159 tag p160 tag
;15 0.15 above tag
;16 - 1st rigging bolt (inside cave)
;17 0.3 rock on its edge
;18 0.3 tag of 1623/93
;19 1.0 ski pole
;20 1.0 ski pole in only bit of grass
;21 0 tag of 1623/94

```

\*end 90to94



\*begin 159toTC

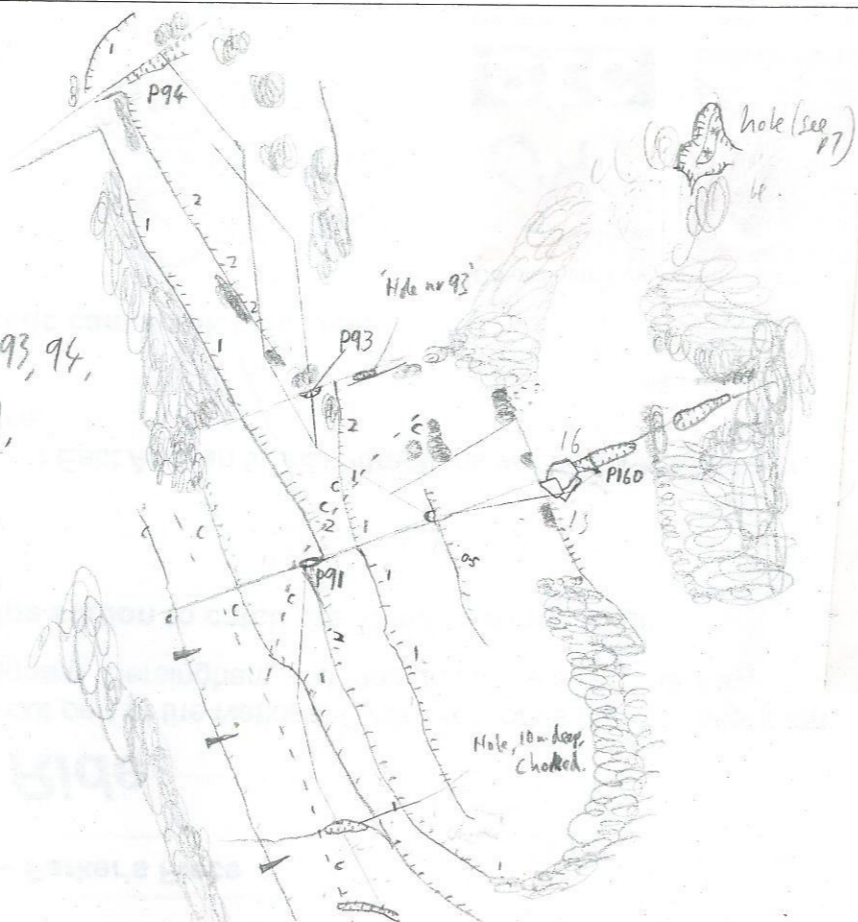
*picture on next page*



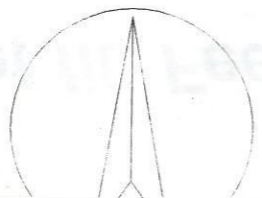
7 Caserit →

90, 91, 93, 94,  
160, 159,

- c = cairn
-  = bande/vegetation
- - - = path
-  = grass



1: 1000



Brannig Wall

aded it :-)

er group 1623)

connecting  
hand left l



Have fun. Get fit. Feel free.



### Start Cycling Fair

- Dr Bike cycle safety checks – get your bike checked
- Route planning service

Saturday 12 June – 9:30am to 4:30pm – Guildhall Street, beside

### Ride to Willer's Mill, Shepreth

A gentle ride, of around 20 to 25 miles, including a visit to Willer's Shepreth. You'll get £1 off for arriving by bike.

Sunday 13 June – Starts at 2pm at the Lensfield Road end of

### Free Cyclists' Breakfast

Arrive by bike on 'National Bike to Work Day' to claim your free breakfast by Hobbs Pavilion restaurant.

Wednesday 16 June – 8am to 9am – Parker's Piece

### Norfolk Sustrans Ride

Catch the train to Kings Lynn, and try out part of the National Cycle route – visiting Castle Rising, Sandringham, Dersingham and King

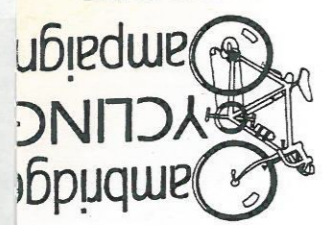
Sunday 20 June – Meet at Cambridge station to catch the 10

### Arrive By Bike!

Throughout the week, a large number of East Anglian tourist attractions reduced entry to people arriving by bike.

Contact us for details:

(01223) 504095 – or – <http://www.ccdc.cam.ac.uk/camcycle/>



01223 504095  
www.ccdc.cam.ac.uk/camcycle/



Registered Charity, Number 205071

official charity

ng tree or

Fakenham way.

sly provided

ary in

Word to 156 survey. File p156 also includes 1987 Laser → 156 survey.

```

> *.Survey.Surveys.Austria.P156.D
:1998.01.26 AERW fix bug in conversion from SU dataset
:1998.04.07 AERW added comments, refs, exports and actually included it :-)
:1998.07.19 AERW added 1843->p156 survey

```

\*begin 01to156

```

: Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)
: Cave: 1623/156
: Survey name: Plateau area, laser point 0/1 to 156 entrance
: Date: 1987
: By: Insts: Keith Millar
: Notes:
: Tape: Jenny
: Instruments: Compass # 949847; Clino # 240641
: Calibration: none
: ref.: photocopy of page (of 1987 logbook?) in AERW's archive

```

==== stations refindable to link to other surveys: =====

```

: *export 0 ; spit of laser point 0/1
: *export 4 ; random point at 1623/156 entrance

```

```

: *GRADE USE 5N
: *CALIBRATE COMPASS 0.0
: *CALIBRATE CLINO 0.0

```

0	1	1.62	-	UP	
1	2	30.0	180.	+16.0	; Across limestone pavement
3	2	19.67	357.	-19.0	
3	4	2.63	222.	-36.0	; To bolt at head of pitch

\*end 01to156

Not clear after 1998 Expo how close these are to connecting  
Needs a few joining legs from 156 tag → p156 and bolt 1  
98-01 → Laser print. [done end 1998 and 1999]

\*begin VordTol56

Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)  
 Cave: 1623/156, 199, 201  
 Survey name: Plateau area, laser point 0/1 to 156 entrance  
 Date: 1998  
 By: Insts: Brian Outram  
 Notes: Wookey  
 Pics: Wookey  
 Tape: both  
 Instruments: set #4  
 Calibration: none  
 ref.: 1998 notKH survey book pp

==== stations refindable to link to other surveys: =====

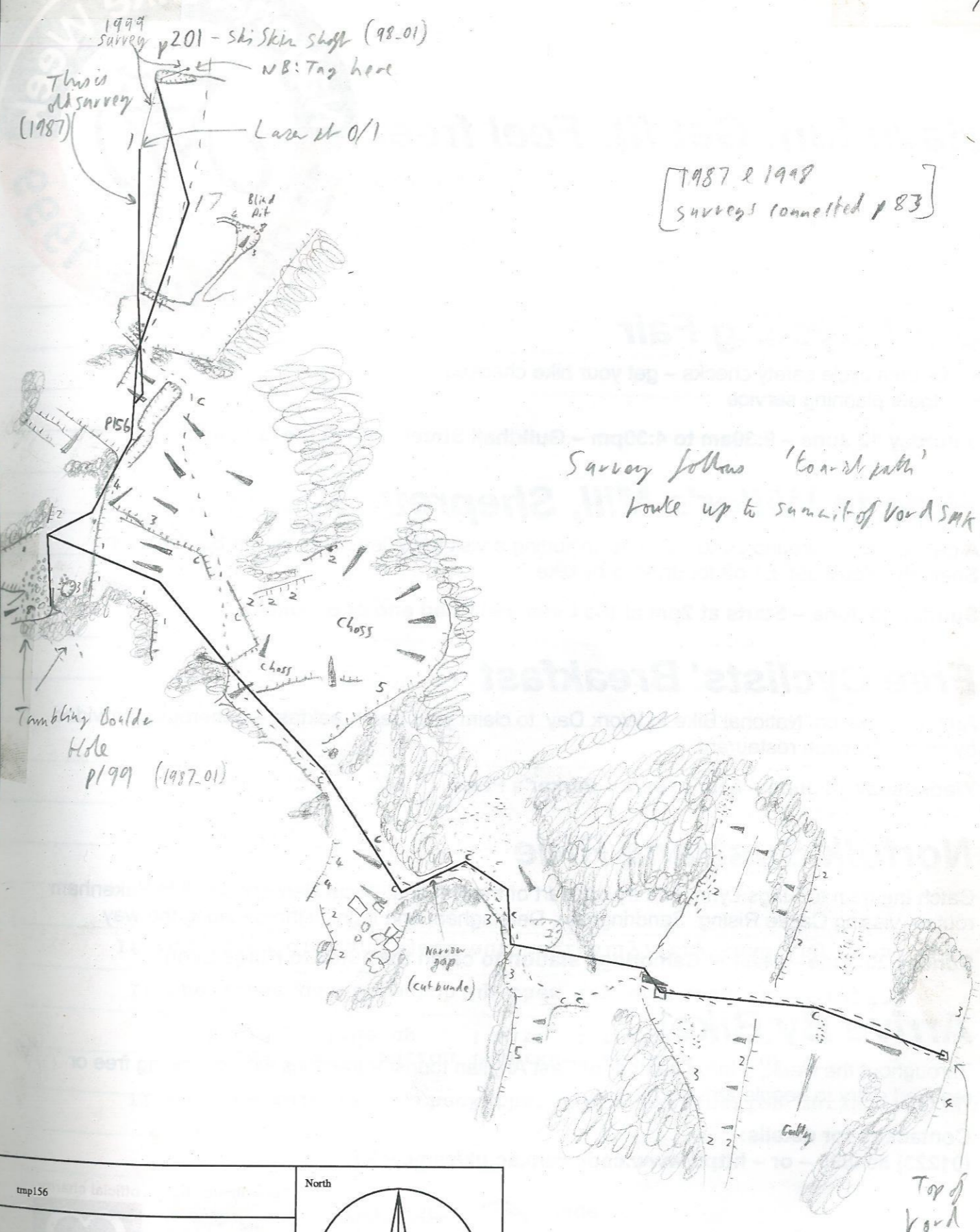
\*export 1 ; 0.5m off floor of stem of Green box at top of Vord  
 \*export 13 ; bolt of tag on CUCC 1987-01 (Tumbling Boulder Hole)  
 \*export 15 ; bolt of tag of 1623/156  
 \*export 19 ; bolt of spit for wrong tag on CUCC 1988-01

1	2	27.2	290.	-14.
2	3	30.02	276.	+02.
4	3	5.85	145.	-26.
4	5	27.67	280.	-17.
6	5	10.91	177.	+12.
6	7	10.29	303.	-17.
8	7	13.54	064.	+01.
8	9	28.82	327.	-15.
9	10	28.50	317.	-16.
11	10	21.49	140.	+11.
11	12	23.99	293.	-11.
12	13	13.81	178.	00.
14	12	9.72	244.	+03.
15	14	17.37	208.	+25.
16	15	17.43	184.	+09.
16	17	30.38	018.	-08.
17	18	24.71	345.	-14.
18	19	.34	-	down ; a bodge (book says 19 to 19 :-)

;station details

no.	height	desc.
1	0.5	stem of green box on Vord.
2	0.3	X on rock by tiny cairn
3	0.6	X on top of boulder 3m before step on path
4	1.0	top of ski pole
5	0.8	X on rock ledge
6	1.4	large cairn on boulder
7	1.0	ski pole
8	1.0	ski pole
9	1.0	ski pole 1m to NW of cairn
10	1.5	pencil mark (arrows) on point of cliff wall
11	1.0	ski pole
12	0.5	X (and rock) on boulder
13	1.5	tag of CUCC 1987-01
14	1.0	ski pole
15	0.	P156 tag
16	1.5	flake on corner cliff
17	1.0	ski pole
18	0.34	above spit for wrong tag
19	0.	spit for wrong tag of CUCC 1998-01

\*end VordTol56



tmp156

Plan view

Scale 1:1000

Up page 000

North

Scale (10m)

Surverx 0.91 PostScript Printer Driver

# EXPO 1999

## Starts Here 1

161

1999.07.29 SD created for Nordalpenschart surface survey

\*begin nordalpsurf

```

; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)
; Cave: Nordalpenschart, 1623/1999-01
; Survey Name: Surface from Vd1 to cave tag
; Date: 1999.07.28
; By: Insts: Brian Outram
; Notes: Earl Merson
; Pics:
; Tape:
; Instruments: Compass # ; Clino #
; Calibration:
; ref.: 1999 NotKH survey book pp -
    
```

\*\*\*\*\* stations refindable to link to other surveys: \*\*\*\*\*

\*export

\*calibrate tape -0.22 ; +ve if tape was too short, -ve if too long

\*data normal from to tape clino compass

from	to	tape	clino	compass	remarks
1	2	28.25	-06	193	
1	2	23.51	-02	348	
1	4	30.40	06	129	
1	4	26.45	-17	324	
1	6	30.10	04	137	
1	6	29.67	-10	327	
1	8	18.19	08	120	
1	8	21.30	30	238	
1	10	10.75	-40	331	

\*station details

name	L	R	U	D	E	description
1						VD1
2						top of rock on spur halfway between vd1 and path to 161
3						2m from path to 161d, rock on spur 40m from start of gully
4						midway along fallen bunda at end of small gully
5						top of small gully crack in 3 rocks at ground level
6						rock on spur over gully from 5
7						in bunde gully at top of sloping pavement
8						point in bunde on spur (top)
9						limestone ledge (top of skipole)
10						Nord Alpen Hole 0

\*end nordalpsurf



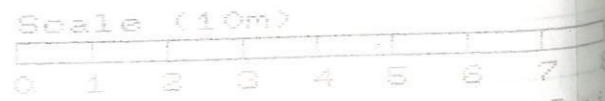
NORDALPS

Plan view

Scale 1:1000

Up page 000°

North



Survey: 0.91 Dot-Matrix Pri

; 1999.07.31 W & Brian Created

Kataster: 205

\*begin nordalp

; ===== stations refindable to link to other surveys: =====

\*export 1.0

; ===== links between surveys making up the Nordalp survey: =====

\*equets 1.13 2.13

\*begin 1

; Loch: NE flank of Vorderer Schwarzmooz Kgl, Loser Augst-Eck, Totes Gebirge, Austri

; Cave: 1623/99-01 Nordalpenschaht (also called nordalpenhoehle in docs)

; Survey name: Underground survey Entrance to lead of GAT pitch.

; Date: 1999.07.25

; By: Insts: Becka Lawson

; Tape: Becka

; Notes: Brian Outram

; Pics: Brian Outram

; Instruments: Compass Set# 2; Clino Set# 2 (Probably)

; Calibration: none

; ref.: NotKH survey book pp:

; ===== stations refindable to link to other surveys: =====

\*export 0 (moveably flake on surface)

\*data normal from to tape clino compass ignore all

0	1	4.62	down	-	1	carbide mark on LH wall				
1	2	1.17	-17	242	2	0	4.62	1	boit	
2	3	6.93	down	-	3	0	3	7	CM o	
3	4	1.30	-59	155	4	0	0.5	7	CM o	
5	3	6.82	-21	348	5	2	0	1	CM i	
4	6	4.47	down	-	6	0	1.5	4.5	CM o	
7	6	0.95	-20	030	7	0	1.5	2	0.5	CM L
8	7	5.01	+27	222	8	0.5	2.0	0.5	1.3	CM L
9	8	6.07	+64	228	9	0	2.0	3	0.5	CM L
9	10	2.27	-31	141	10	1	1	0	0.3	CM o
11	10	2.64	+19	011	11	6	2	1	0	CM o
12	11	2.79	-38	006	12	3.2	3.0	0.5	1	CM o
12	13	25.50	-03	205	13	0	6.0	0.5	1.2	CM o

\*end 1

\*begin 2

; Loch: NE flank of Vorderer Schwarzmooz Kgl, Loser Augst-Eck, Totes Gebirge, Austri

; Cave: 1623/99-01 Nordalpenschaht (also called nordalpenhoehle in docs)

; Survey name: Underground survey Gardner's Question Time.

; Date: 1999.07.29

; By: Insts: Mark Shinwell

; Tape: Mark Shinwell

; Notes: Earl Merson

; Pics: None (done in 1st survey)

; Instruments: Compass Set# 5; Clino Set# 5

; Calibration: as for surface survey Vd1->nordalpenhoehle

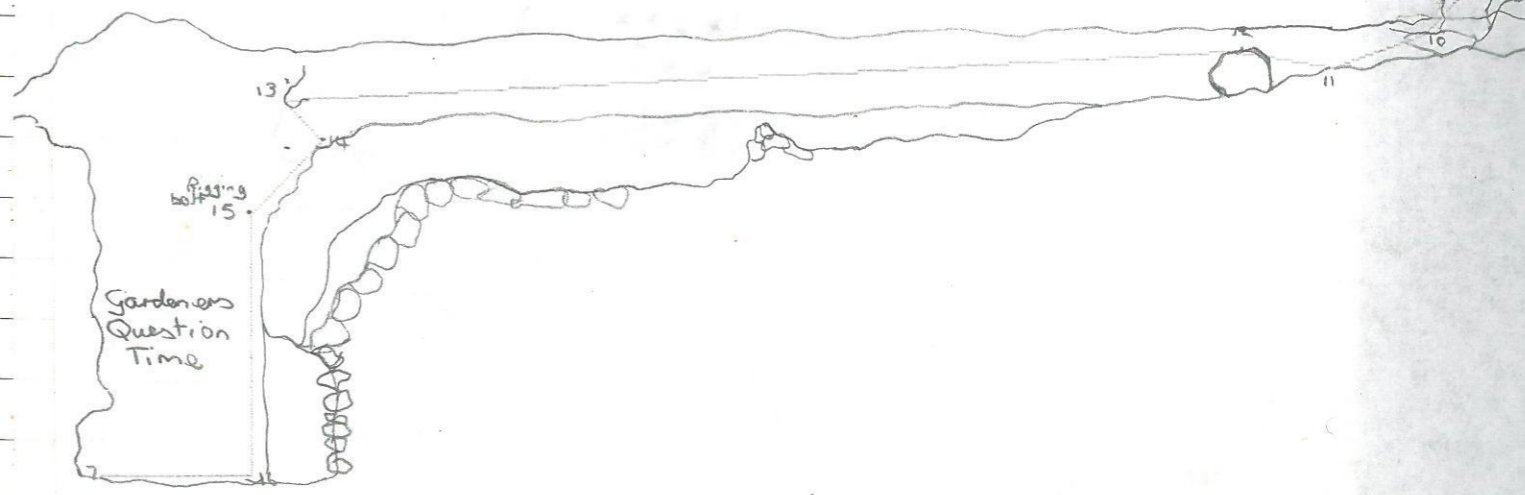
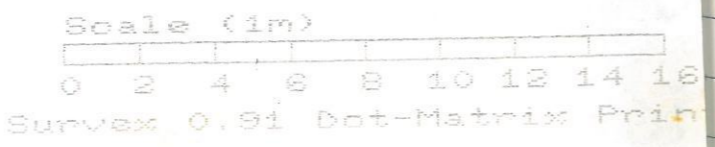
; ref.: NotKH survey book pp:

\*data normal from to tape clino compass

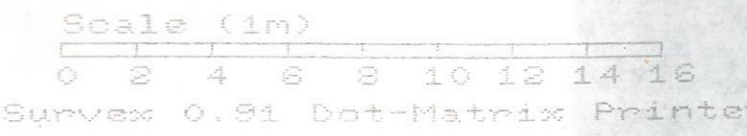
15	16	7.03	down	-						
16	17	5.50	0	242						no clino taken - approx horizontal
14	15	2.79	-45	210						
14	13	2.94	+22	132						



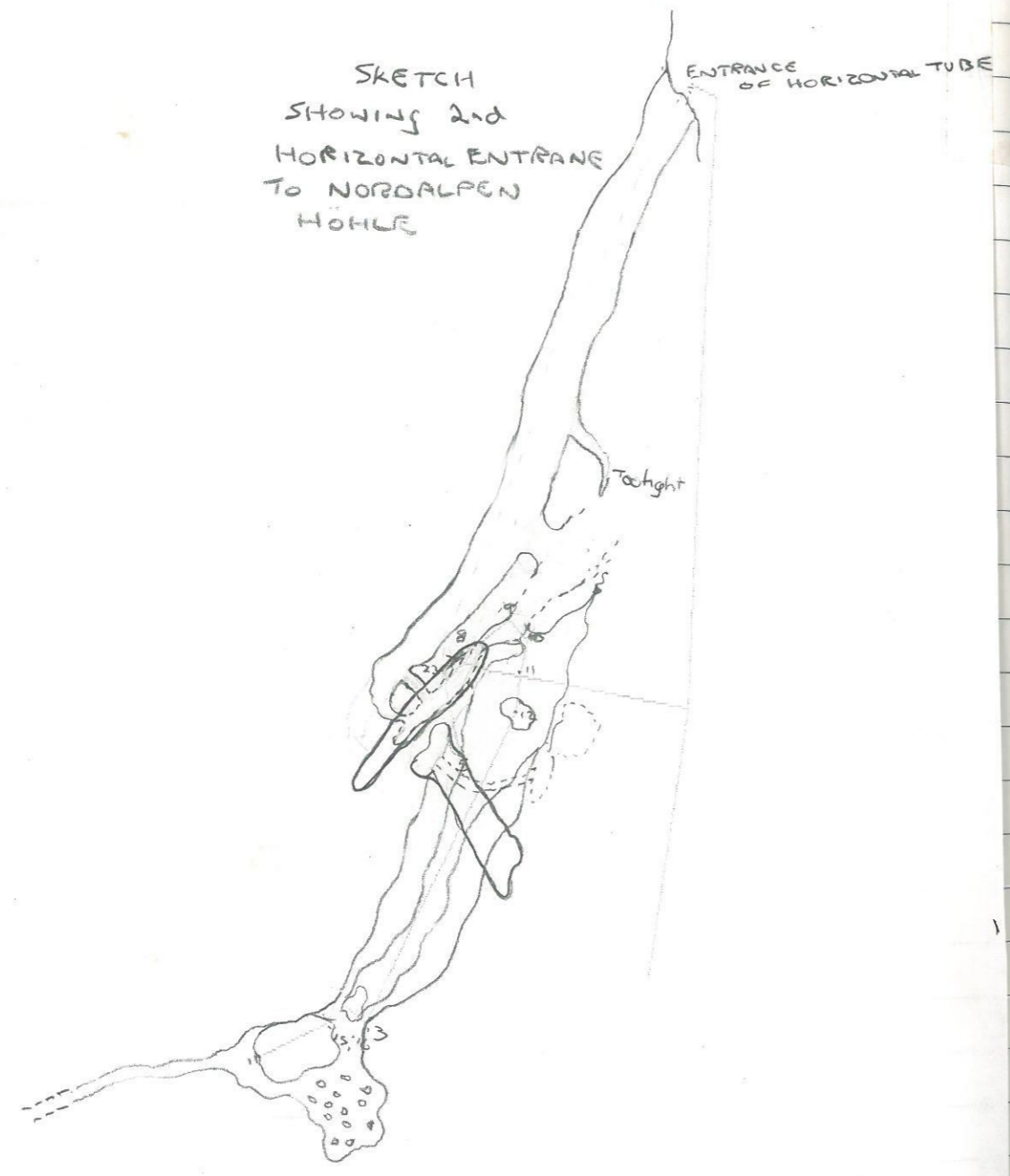
NORDALP	
Plan view	
Scale 1:200	
Up page 000°	



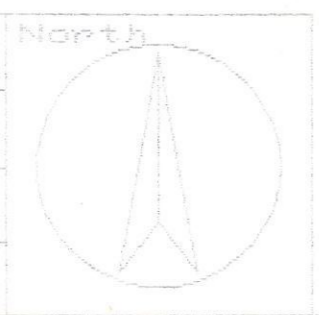
NORDALP	Elevation on
Elevation	199° 019°
Scale 1:200	← →
View 289°	



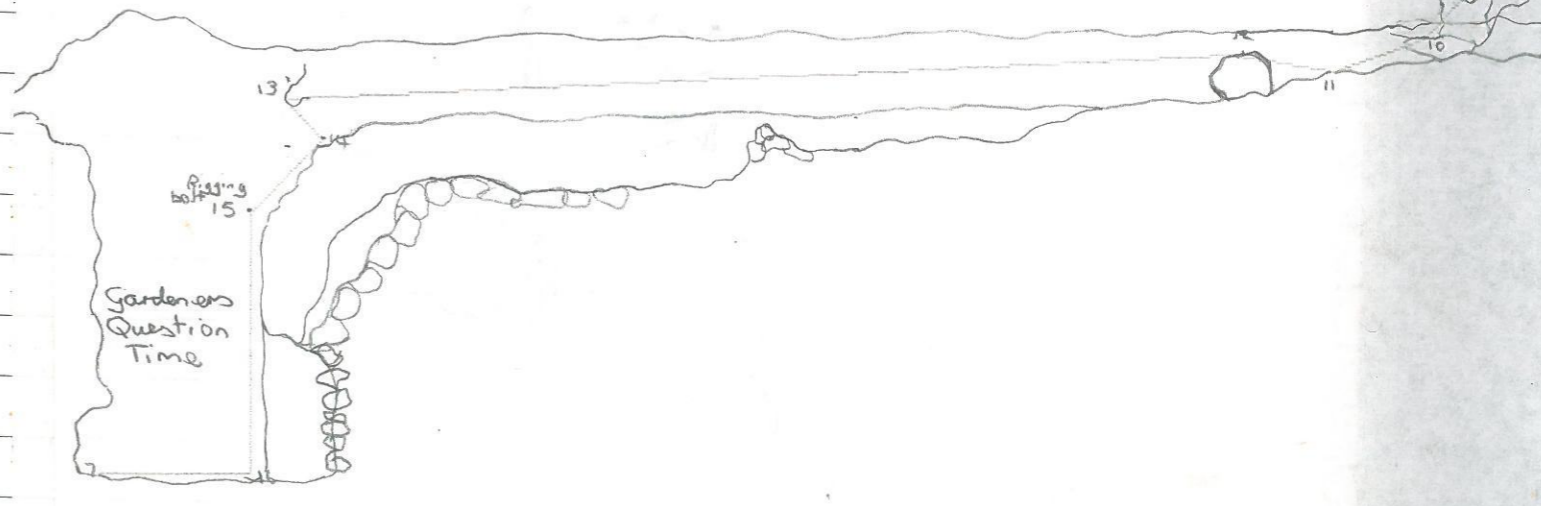
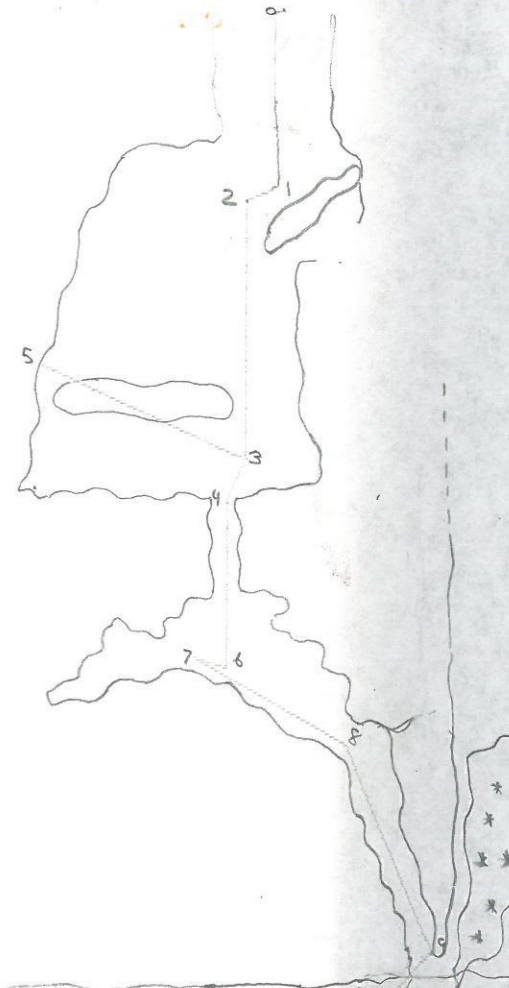
SKETCH  
SHOWING 2nd  
HORIZONTAL ENTRANCE  
TO NORDALPEN  
HÖHLE



NATMP
Plan view
Scale 1:500
Up page 000°



Scale (1m)  
0 5 10 15 20 25 30  
Survey 0.91 Dot-Matrix

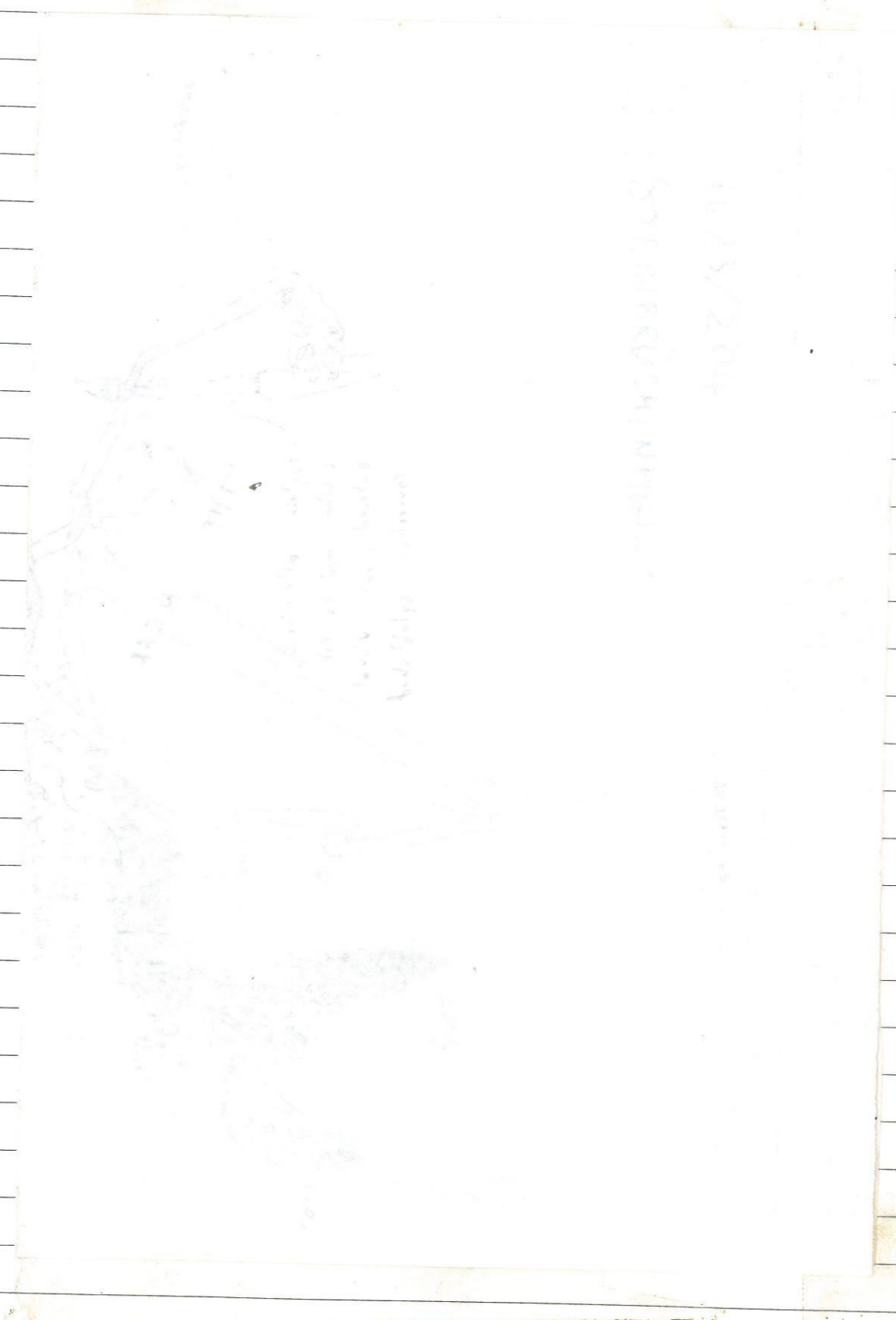
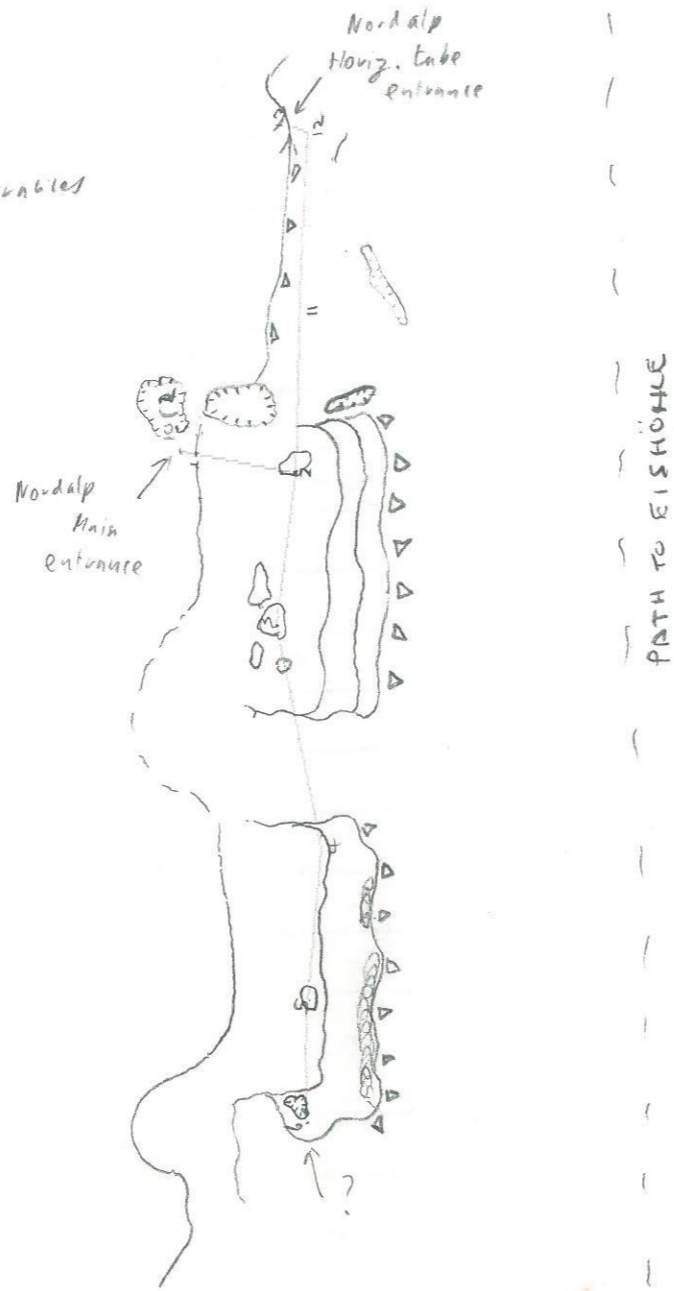


NORDALP
Elevation
Scale 1:200
View 289°

Elevation on
199° 019°

Scale (1m)  
0 2 4 6 8 10 12 14 16  
Survey 0.91 Dot-Matrix Printer

Surface between  
Nardalper schacht entrances  
to other hole?



NATMP	<p>North</p>
Plan view	
Scale 1:1000	
Up page 000°	

Scale (10m)

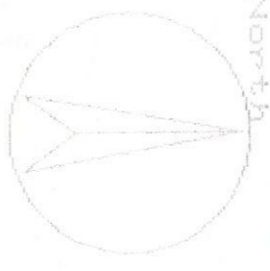
0 1 2 3 4 5 6 7

Surveyx 0.91 Dot-Matrix Pr

Surface between  
Nava alpen schacht entrance  
to other hole?

STEINBRK
Plan view
Scale 1:500
Up page 000°

North




Survey: 'STEINBRK' Page 1 (of 1) Processed on Sat, 1999.07.31 14:30:44

Scale (1m)

0 5 10 15 20 25 30 35 40

Survey: 0.94 Dot-Matrix Printer

North

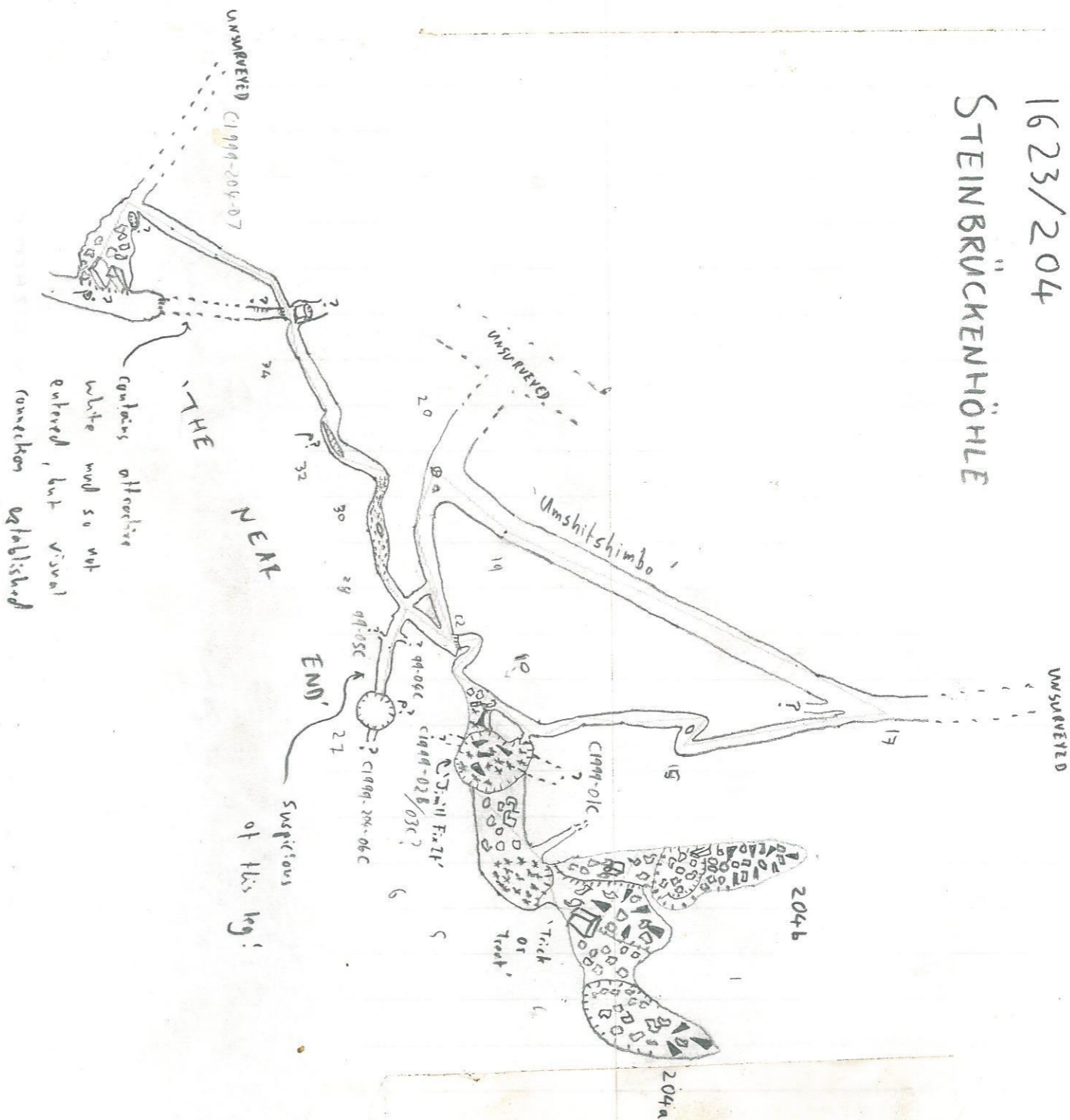


NATMP
Plan view
Scale 1:1000
Up page 000°

Survey 'NATMP' Page 1 (of 1) Processed on Tue, 1999.08.03 15:08:28

Supplied forms for 197, 198, 199, 200, 201 → Robert.

# 1623/204 STEINBRÜCKENHÖHLE



0 1 2 3 4 5 6 7

Survey: 0.91 Dot-Matrix Printer

NATMP
Plan view
Scale 1:1000
Up page 000°



# Tumbling Bolder Cave 1999

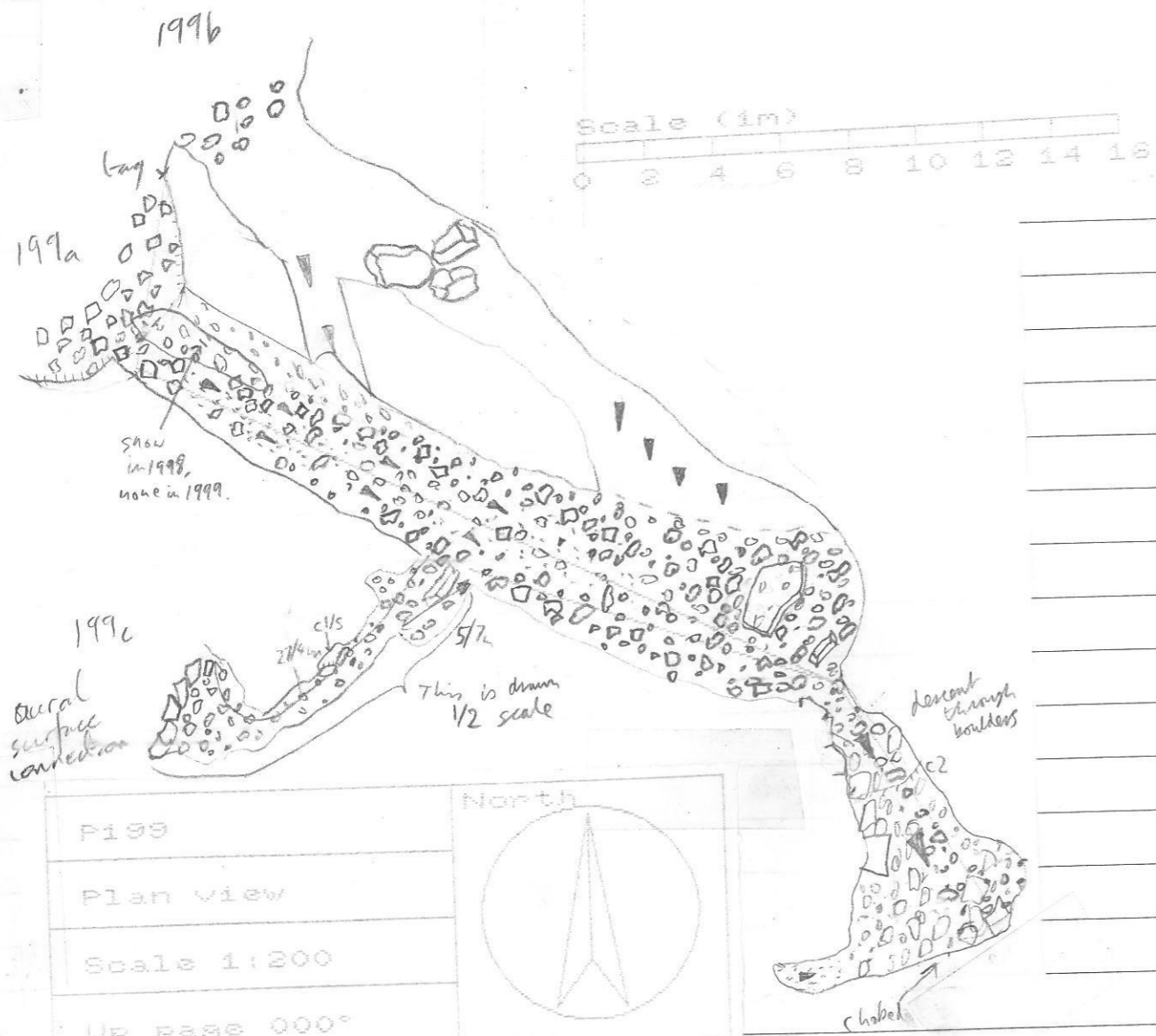
Locn: NW flank of Vorderer Schwarznock Kgl, Loser Augst-Eck, Totes Gebirge, Austria  
 Cave: 1623/199 Tumbling Boulder Hole / Sturzende Felsbrocken Höhle  
 Survey name: Underground survey  
 Date: 1999.07.30  
 By: Insts: AndyA  
 Tape: AndyA  
 Notes: AndyA  
 Pics: Wookey  
 Instruments: Compass Set# 1; Clino Set# 1 tape: open reel  
 Calibration: TC: down: 88.5, -07, up: 369.5, +6.5  
 ref.: NatKH survey book pp:

#calibrate tape 0

2	1	28.11	117	-36
2	3	10.86	146.5	-41
2	4	8.175	110.5	+46.5

length of side passage is 27m, and is 14m back from stn1  
 so here is some approx data

1	5	14	290	+36
---	---	----	-----	-----

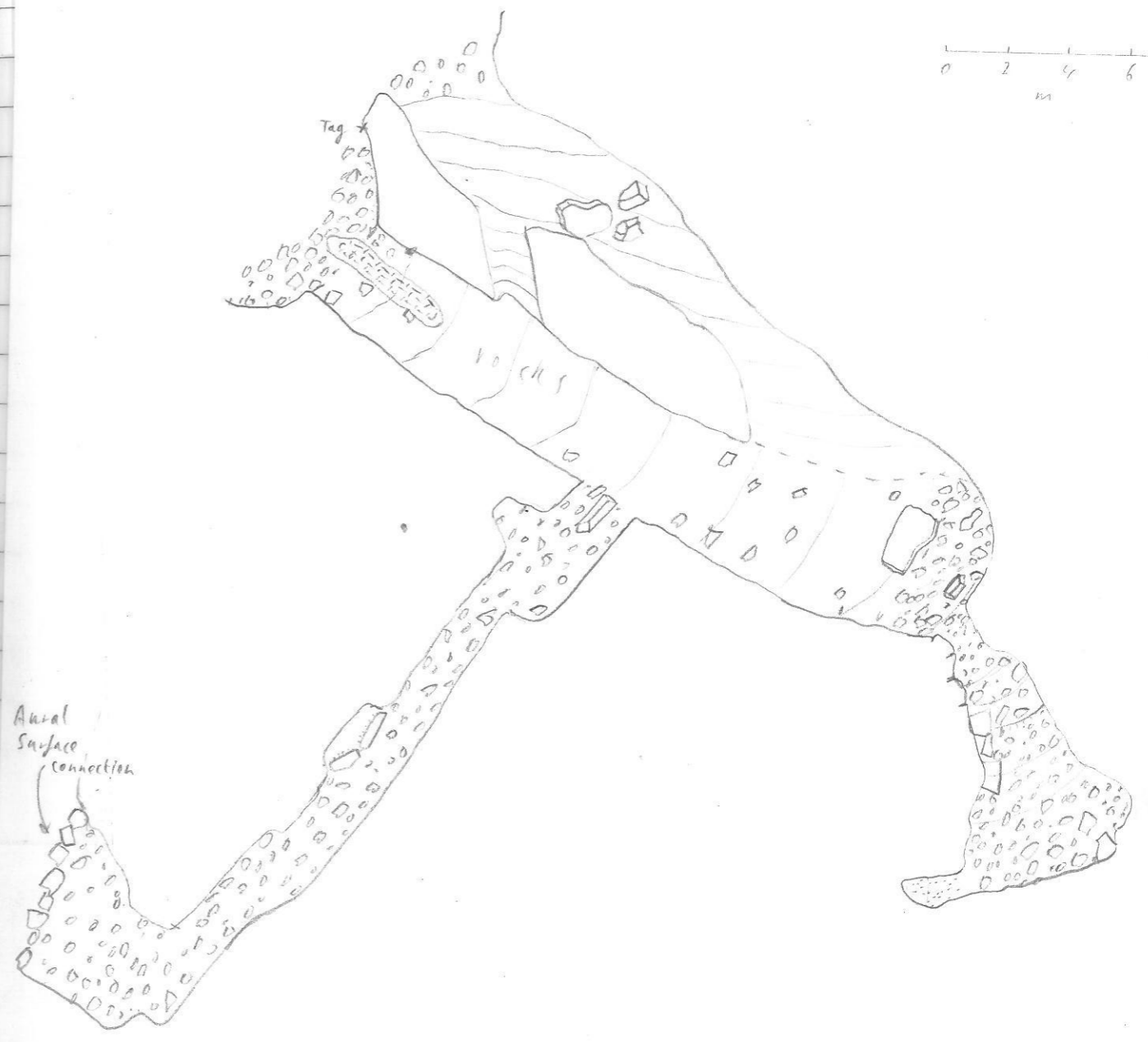


P199
Plan view
Scale 1:200
Up page 000°

North

1623/199 TBH

1:200



View 024°

# Timbling Bolder Cave 199

Locn: NW flank of Vorderer Schwarzsaukogel, Loser Augst-Eck, Totes Gebirge, Austria  
 Cave: 1523/199 Timbling Boulder Hole / Sturzende Felzbrocken Höhle  
 Survey name: Underground survey  
 Date: 1999.07.30  
 By:

Ins  
 Cal  
 ref

Scale:

2  
 1  
 2  
 ;len  
 50

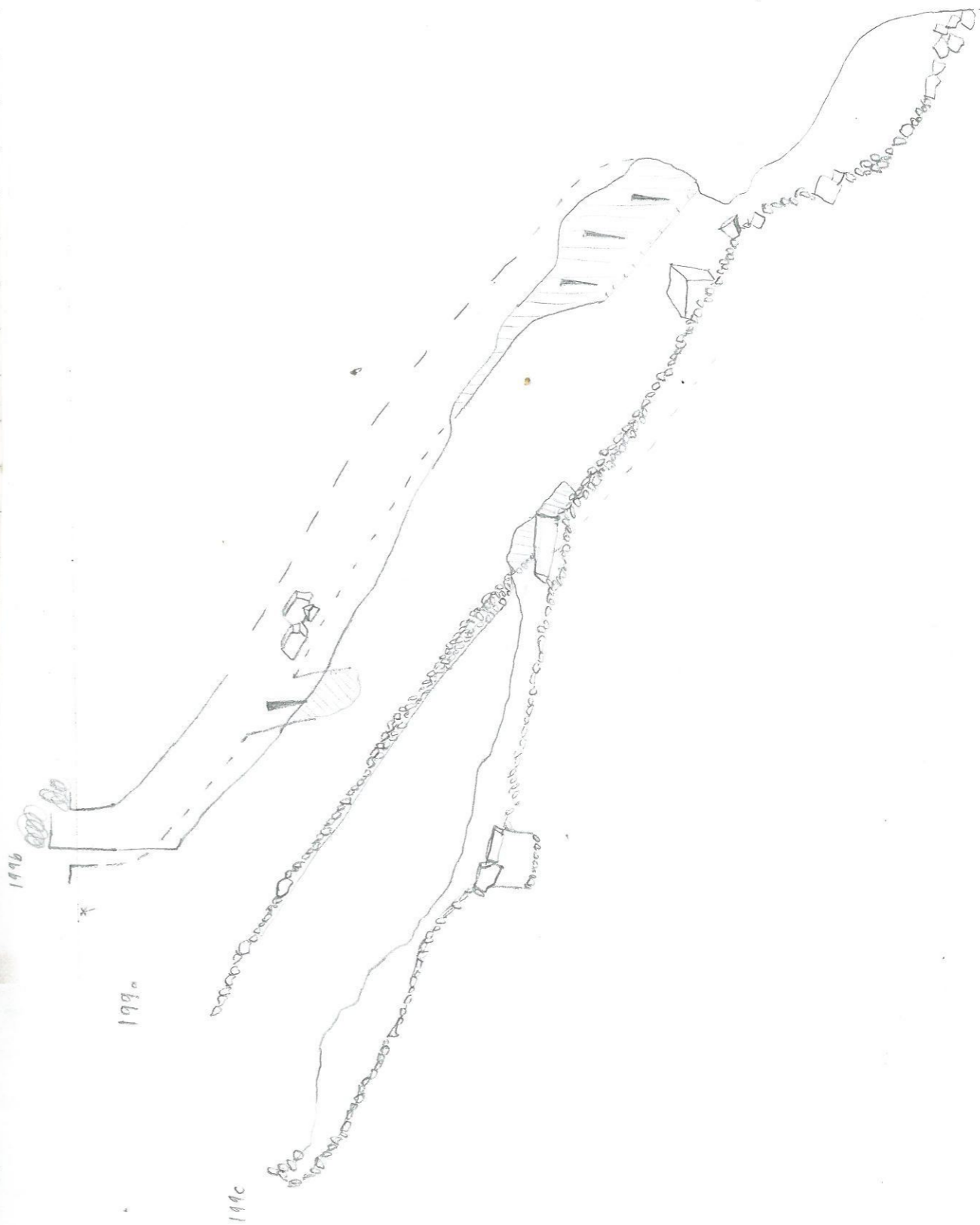
19

1

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 9

Scale 1:200

Up page 000°



View 024°

# Tumbling Bolder Cave 199

Locn: NW flank of Vorderer Schwarzscha Kgl, Loser Augst-Eck, Totes Gebirge, Austria  
 Cave: 1623/199 Tumbling Boulder Hole / Sturzense Felzbrocken hohle  
 Survey name: Underground survey  
 Date: 1999  
 By:

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2  
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 1

19

1

see  
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 com

Sea

Up page 000°

chapel

199a

199c

and  
 surface  
 connection

Scale (1m)

0 2 4 6 8 10 12 14 16

Survey 0.91 Dot-Matrix Printer

P199

Elevation of

Elevation

294° 114°

Scale 1:200



View 024°

# FALLENLASSEN STUCKSCHACHT

Created 1999.08.03

= Lost ski pole shaft. gka: 96WK08

Links between surveys in this file

begin 96WK08

Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)

Cave: 96WK08

Survey Name: Cave on 136 shelf

Date: 1999.08.03

By: Insts: AndyA

Notes: Wookey

Pics: Wookey

Tape: Paul

Instruments: Set 1, open reel tape

Calibration: Tape: 0 TC: down 98.5, -7, up: 269.5, +6.5 (notes say 369.5)

ref.:

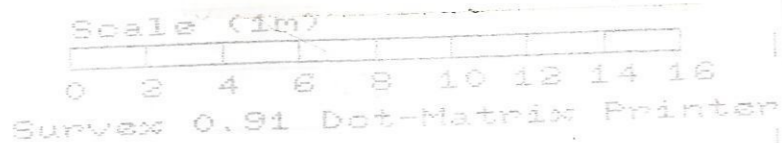
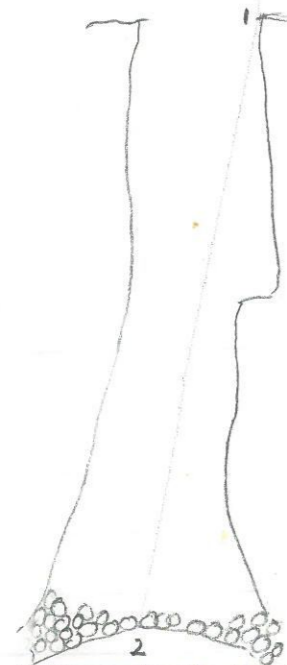
begin

units length feet

1 2 34 319.5 76.5

end

end 96WK08



NR136	Elevation c
Elevation	292° 112°
Scale 1:200	↔
View 022°	

Survey 'NR136' Page 1 (of 1) Processed on Tue, 1999.08.03 18:57:15

93-94 check on lodge, 1999 survey leg.

1999.07.28 Work 2 Brian

last set 5, Tape 22cm too long.

Measured dist from 93-94: 50.60 - 0.22 x 2 on bearing 338.

Also checked that pt 20 could not be seen from pt 17.

These infos confirm that leg 17-20 is really 19-20, as suspected in 1998 90-91-93-94 survey.

201 connection Survey 1999.07.25

Notes: Wookey, Inst: Wookey, Tape: Becka [updates p71]

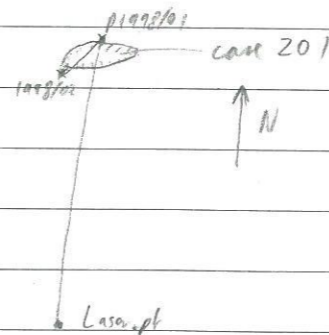
last set 3, Tape 22cm too long. (green tape holder)

From	To	Tape	Comp	Line
P1998/01	Laser-pt	21/58	184	+9 (This leg done 30cm above pt)
P1998/01	1998/02	2/875	212	-8

P1998/01 : Tag on cave 201

1998/02 : Bolt hole when emersion 1998-02 leg was placed.

Laser-pt : Laser pt 0/1



156 key connection 1999.07.28

Notes: Wookey, Inst: Tape: MarkS [updates p71]

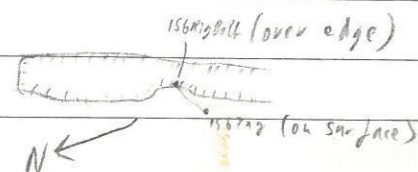
From	To	Tape	Comp	Line
156 Rig Bolt	1	0/30	-	UP
156 Tag	1	1/34	088	715

same initials as p58-89 135-135 survey.

156 Tag : Tag bolt for 156

1 : Handy point in space :-)

156 Rig Bolt : Top rigging bolt (start of 156 survey)



84 Steinbrücken hohle:  
Rainbow Connection

Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster 5-Op 105)  
 Cave: Steinbrückenhöhle  
 Survey Name:  
 Date: 1999.08.05  
 By: Insts: Duncan Collins  
 Notes: Erin Lynch  
 Pics: Erin Lynch  
 Tape: Both  
 Instruments: Compass set #4; Clino set #4  
 ref.: 1999 NotKH survey book pp -

===== stations refindable to link to other surveys: =====

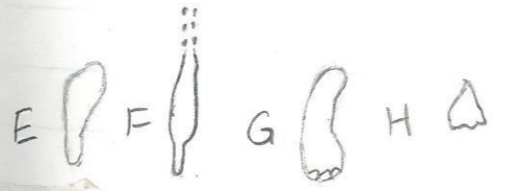
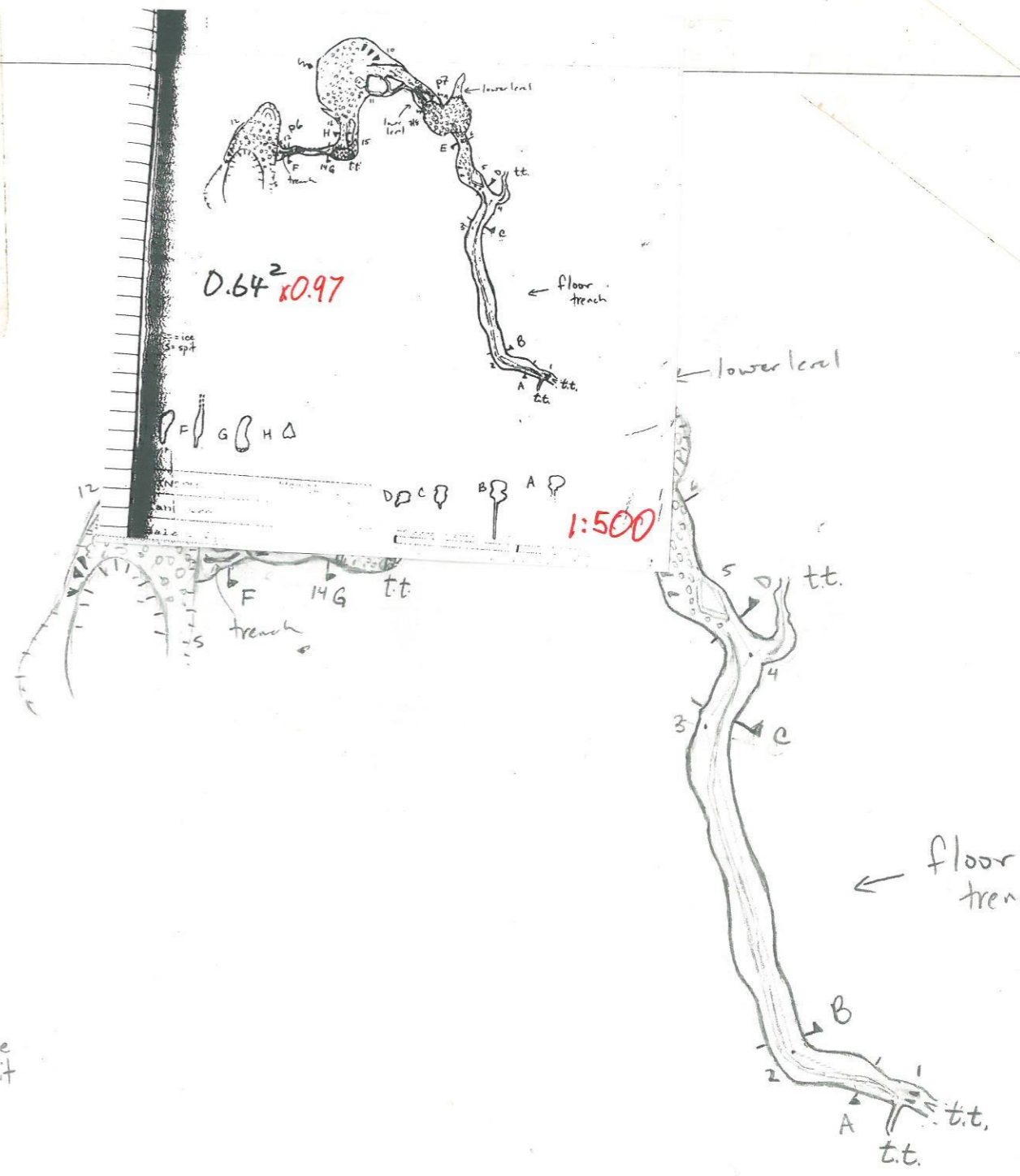
!transport

recalibrate tape +0.0 ; +ve if tape was too short, -ve if too long

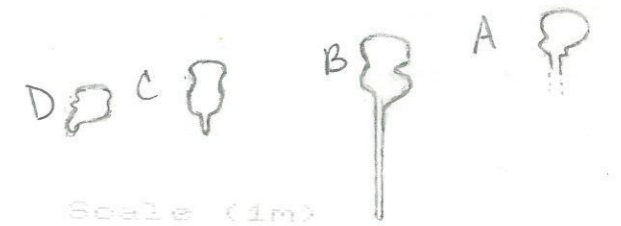
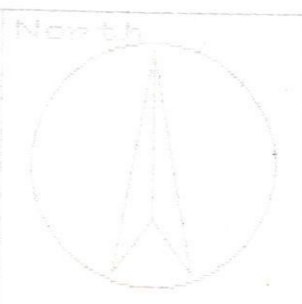
from	to	tape	compass	clino	remarks
1	2	3.60	293	-09	
2	2	10.91	164	+09	
3	4	2.75	034	+14	
4	4	3.41	140	-15.5	
5	6	3.11	344	+34	
6	6	3.92	128	+03	
7	7	6.50	-	down	
8	8	1.35	238	-42	
9	10	7.81	294	+37	
10	10	1.85	032	-01	
11	13	6.50	109	+54	
12	13	4.42	272	+38	
13	15	2.175	064	+22	
14	15	2.70	158	-34	
15	11	3.60	027	-17	

!station details

stage	L	R	U	D	E	description
1	0.1	0.4	0	1.3		;RP in alcove
2	0.7	0.5	0.2	1.2		;RP on nose at bend
3	0	0.9	1.3	0.4		;RP on L wall
4	0.9	-	0.3	0.8		;RP on nubble
5	1.3	0	2.0	1		;RP on nose
6	0.65	0	5	1.1		;RP on wall
7	NE	SE	SW	NW		;bottom of yhang
8	0.5	3.0	0.7	2.0		;top of yhang
9	L	R	U	D		;bolt on R
10	5.0	2.0	-	1.2		;RP lower right wall of chamber
11						;RP boulder in center
12	0	4	25	1.2		;RP on wall
13						;RP near bolt
14	0.6	0	2	1.2		;RP on nose R wall
15	0.75	0	0	1.1		;RP on flat R wall
16	0	-2	10	1		;RP on left side



RAINBOW  
 Plan view  
 Scale 1:300  
 UR page 000°



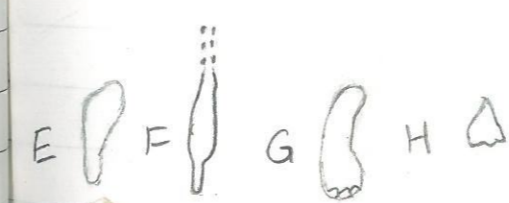
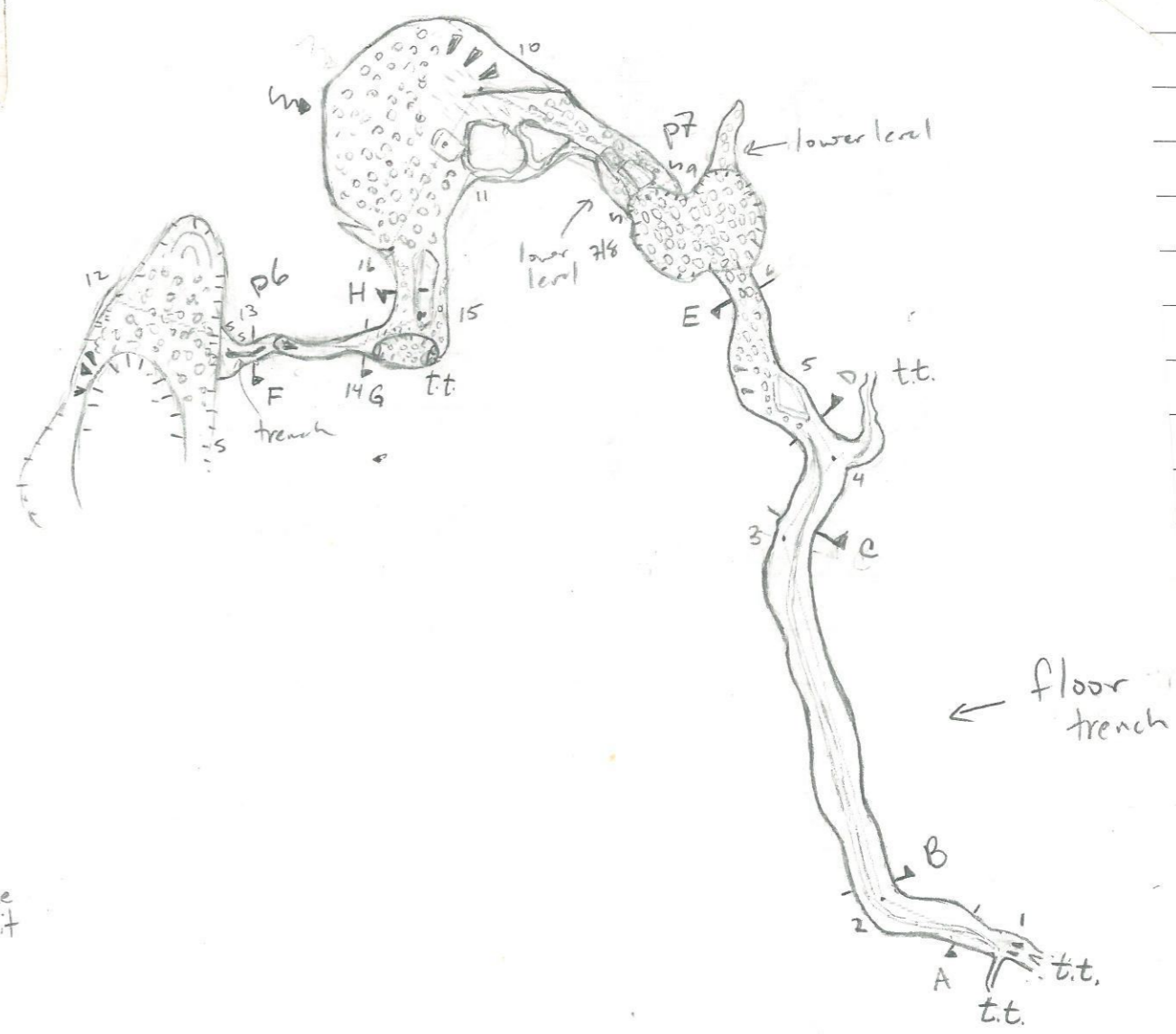
84 Steinbrückenhöhle:  
Rainbow Connection

Locn: Totes Gebirge, Austria - Lösser/Augst-Eck Plateau (Kataster group 45)  
 Cave: Steinbrückenhöhle  
 Survey Name:  
 Date: 1999.08.05  
 By: Ingt: Duncan Collins  
 Notes: Erin Lynch  
 Pics: Erin Lynch  
 Tapes: Both  
 Instruments: Compass set #4; Clino set #4  
 ref.: 1999 NotKH survey book pp -

===== stations refindable to link to other surveys: =====  
 :export  
 :calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

from	to	tape	compass	clino	remarks
1	2	3.60	293	-09	
2	3	10.91	164	+08	
3	4	2.75	034	+14	
4	5	3.41	148	-15.5	
5	6	3.11	344	+34	
6	7	3.92	128	+03	
7	8	6.50	-	down	
8	9	1.35	238	-42	
9	10	7.81	294	+37	
10	11	1.85	032	-01	
11	12	6.50	109	+54	
12	13	4.42	272	+38	
13	14	2.175	064	+22	
14	15	2.70	158	-34	
15	16	3.60	027	-17	

station	L	R	U	D	E	description
1	0.1	0.4	0	1.3		:RP in alcove
2	0.7	0.5	0.2	1.2		:RP on nose at bend
3	0	0.9	1.3	0.4		:RP on L wall
4	0.9	-	0.8	0.8		:RP on nubble
5	1.3	0	2.0	1		:RP on nose
6	0.65	0	5	1.1		:RP on wall
7	NE	SE	SW	NW		:bottom of yhang
8	0.5	3.8	0.7	2.0		:top of yhang,
9	L	R	U	D		:bolt on R
10	5.0	2.0	-	1.2		:RP lower right wall of chamber
11						:RP boulder in center
12	0	4	25	1.2		:RP on wall
13						:RP near bolt
14	0.6	0	2	1.2		:RP on nose R wall
15	0.75	0	0	1.1		:RP on flat R wall
16	0	-2	10	1		:RP on left side

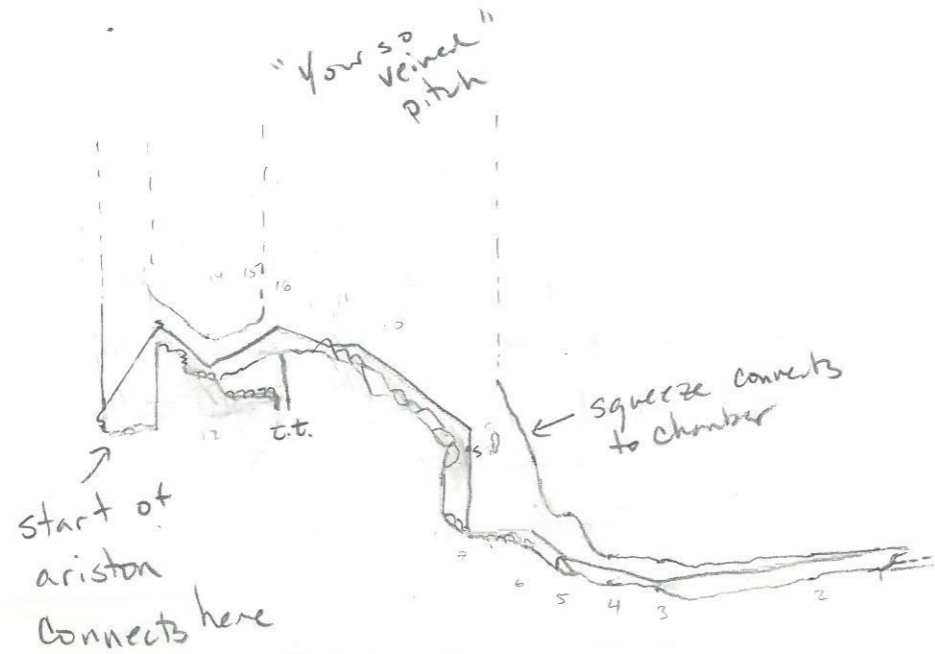


RAINBOW  
 Plan view  
 Scale 1:300  
 UR page 000°

North

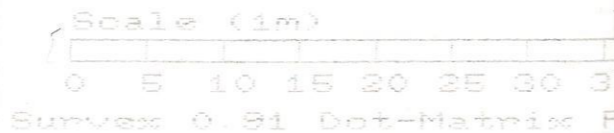
Scale (1m)

Survey: 0.91 Dot-Matrix Print



S = split

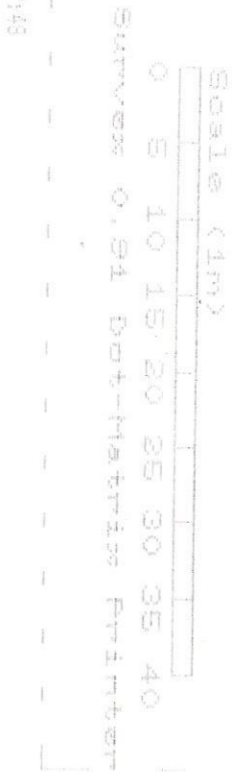
RAINBOW (extended) Elevation on  
 Elevation  
 Scale 1:500  
 View 000°



STEINBRÜCKEN MÖHLE  
 110 A DAY, Wolpertinger Way, Pendulum Pitch, Part 2  
 White Elephant Series

STEINBRK  
 Plan view  
 Scale 1:500  
 Up page 030°

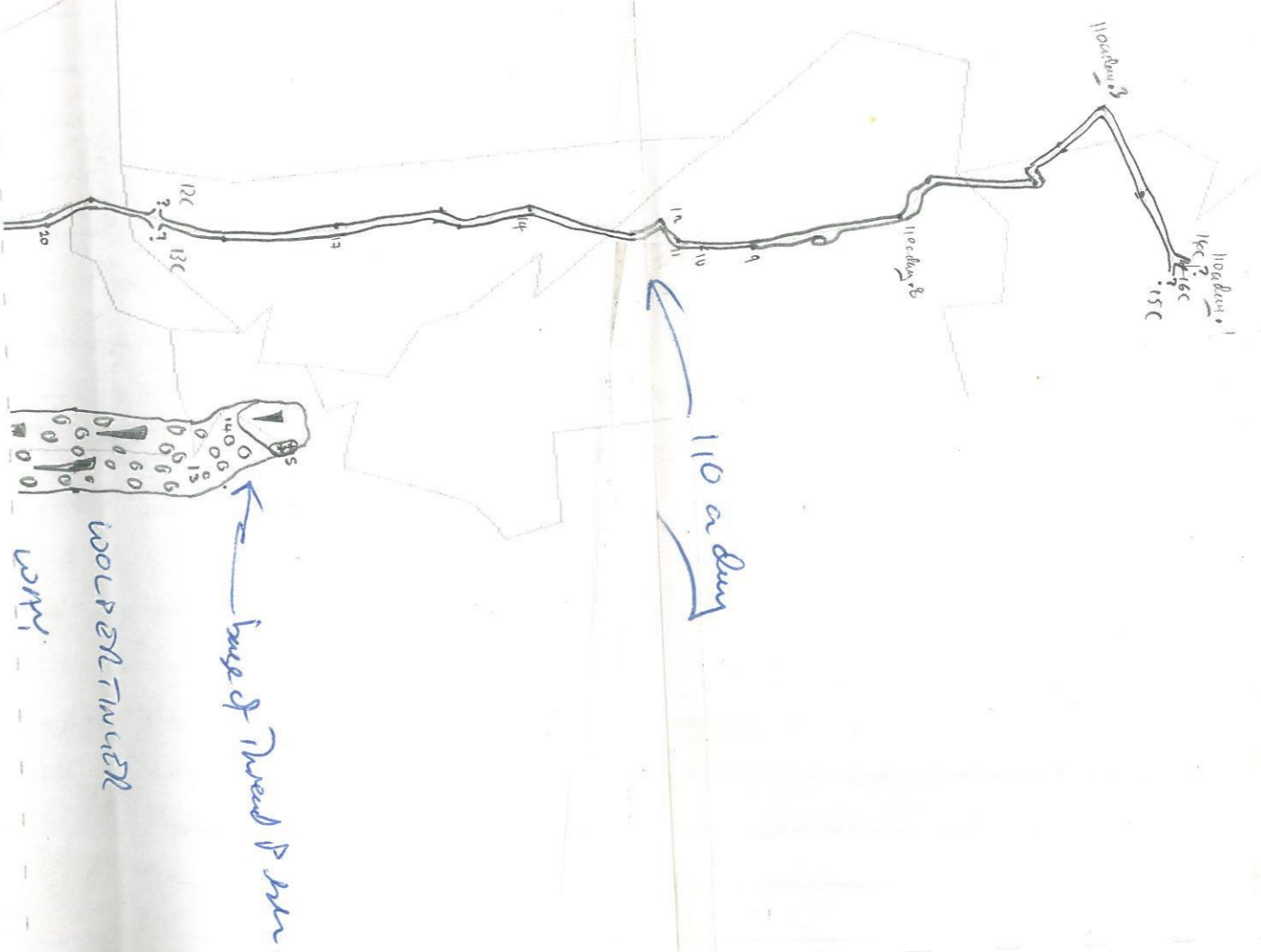
North



110 A DWM, Wolperhinger Way, Perandubum Pitsch, Part D  
 White Elephant Series



Survey: STEINBRÜCKEN, MAYER, Page 1 of 21, Processed on Mon, 09/21/2010 09:15:24:43





138 → 136 → 135 Surface Survey

Marks & Wooley

1999-07-28

Surface near 136

(Composite from 138-136-135 survey)  
97-08 → 136d,  
136d → 139 survey

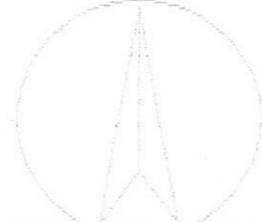


NR138

Plan view

Scale 1:500

North



Scale (1m)

0 5 10 15 20 25 30 35 40

Survey 0.91 Dot-Matrix Print

Instr: set-3      Utag + pks: Marks      Instr + tape: Wooley

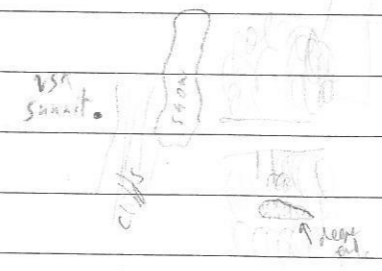
Calibration (Top Camp)      Comp: 268      87/3

Scale      (Lino: +6/5      -6

From	To	Tape	Comp	(Lino)
2	1	10/46	290	-19
3	2	24/43	222	+2/5
3	4	6/37	87/5	-17
5	4	7/55	277	+42
6	4	25/45	248/5	+9/5
6	7	15/30	85/5	-6
7	8	13/84	157	-27

Sfm	Ht	Desc.
1	1/5	p138 Tag Bolt
2	1/3	Top of spike pole
3	1/2	Top of ... west to marked hole.
4	0	Edge of E. cliff overlooking 136 (red paint spot)
5	1/7	p136 tag bolt
6	0/5	Rock in gully E of 136
7	1	Bunde branch
8	0	p135 tag split. (No tag present at time of survey)

Examining the area nearby (looking for 137) we found a new potential site at same level as 135/136/138 and about 200m SSE. It's in the middle of a bunde patch on top of a rise overlooking the snow/cracked area on the 136 → Eishöhle route. Bearing to VSK summit 296° G-PS = 541115 5283/63 (GRK, was 84 datum)



Andy A + Simon Flower

1999-08-07

Surface Survey 139 → 136d [was 97-08] (Underground survey in KH rock)

Insts & Taps: Simon, Nicks + Pils: Andy A Inst set #

Calib: Tap (Top Camp, upper) up: 270, +6

down 091, -7



F	T	Time	Comp	(lim)	Sta	Desc
2	1	16/97	196	-8/5	1	97-08 tag bolt (actually 136d)
2	3	29/48	348	+13/5	2	Cave on path V01 → 136a
4	3	29/45	133	-36	3	Rock wall
4	5	25/39	261/5	+18/5	4	Rock
5	6	11/75	295/5	+02	5	Rock
					6	Cave 139 tag bolt.

NB: 2 legs of 136 inside → 136(b), c, d underground survey (done same day, same people)  
all above ground: 136 c → 136b (sta 15-20-21)

Also same day: 147 tag → 147 orange circle link

From	To	Time	Comp	Dir.
Orange link	147 tag	1/57	096/5	-1

Connects tag (placed 1999, , huines, wooly, atkinson) to old p147  
start of underground survey (orange circle with orange dot on rock include above entrance)

136 shelf 1999-08-03

Caves on 136 shelf - 97-08 = 136d → 96WK-08 → 136a (over 136b = 96WK-09, 136c = 96WK-10)

Insts: Andy A, Nicks Wooly (pt1), then Paul Hancock (pt2), Pils: Wooly

Tap: Paul & Tony

Insts Set 1, Open reel tape

Calibration: Tap: 0, Upper Top Camp: down: 88.5, -7, up: 269.5, +6.5  
(notes say 369.5)

pt1	2	1	29.85	202.5	+5
	2	3	8.80	022.0	-2.5 ; notes say 3 → 2

pt2	1	97-08	7-30	127.5	-03
-----	---	-------	------	-------	-----

pt1:	1	0	97-08 Tag (changed to 136d Tap)
	2	~0.5	Rock by fallen concrete stack schacht (start of survey)
	3	~0.5	Cave

pt2:	1	"	"
	97-08	0	Red spot at top of shelf.

# Eishöhle 'Persistence of Vision'

'Deviant alternative' and lower part of 'Delaging ballise'

1999.08.03 W created for deviant alternative survey

#begin deviant

Loans: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)  
 Cave: Eishöhle, 1623/49  
 Survey Name: Deviant  
 Date: 1999.08.01  
 By: Insts: Andy Atkinson  
 Notes: Wokey  
 Pics: Wokey  
 Tape: Paul Hammond  
 Instruments: Compass #1 ; Clino #1  
 Calibrations: At TC: Up - 269, +6.5 Down - 89, -7 Tape 0.0  
 ref.: 1999 KH survey book pp - ? Dunno

===== stations refindable to link to other surveys: =====

#export

#calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

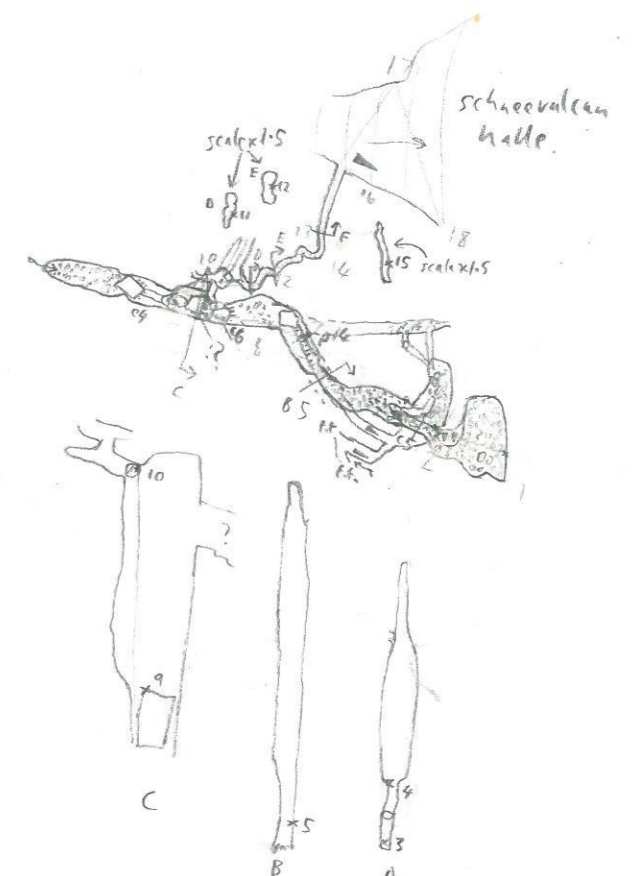
#	from	to	tape	compass	clin	remarks
1	2	1	4.54	106	-20.5	notes say 1 to 2
2	3	3	2.9	286.5	-10.5	
4	3	3	4.5	-	down	
4	5	5	5.58	291.5	+12.5	
5	6	6	3.38	334.5	+11	
6	7	7	13.9	-	up	
8	7	7	2.99	113	-23	
8	9	9	6.5	277	+44	
9	10	10	13.17	014	+80.5	
11	10	10	4.15	278	-44	
12	11	11	1.08	223	-16.5	
13	12	12	5.17	238	-5	
14	13	13	1.10	289	+2	
15	14	14	1.9	186.5	-17	
16	15	15	4.87	190.5	-33	
16	17	17	7.32	31.5	-20	
18	17	17	16.10	340.5	+15	

station details

#	name	L	R	E	D	E	description
11		1.7	3.8	6	1.2		Red dot on wall
12		0.7	0.1	115	2.1		Rock nodule
13		0.4	0.2	115	0		CM, rock foot of plumb
14		0.4	0.5	10+	4.5		(RS) Red spot LH wall
15		0.2	0.5	10+	0.8		RS LH wall
16		0.1	1.1	15+	0.6		CM, wall, bottom of hang
17		1.2	0.6				Deviation knob
18		0	1.6	6	1.7		RS LH wall
19		0.4	2		-0.2		Corner of big boulder
10		-	-	-	-		Pitch head bolt
111		0.5	0	0.5	0.7		RS and '11', RH wall
112		0.5	0	0.8	0.8		RS RH wall
113		0.5	0	-	-		RS RH wall
114		0.5	0	0.5	0.6		RS RH wall
115		0.5	0	1.6	0.8		RS RH wall
116		0	0.6	1.7	1.1		RS LH wall
117		-	-	-	-		Opposite wall
118		-	-	-	-		Pre-existing red mark on wall

#end deviant

Bigger  
pic on  
p95

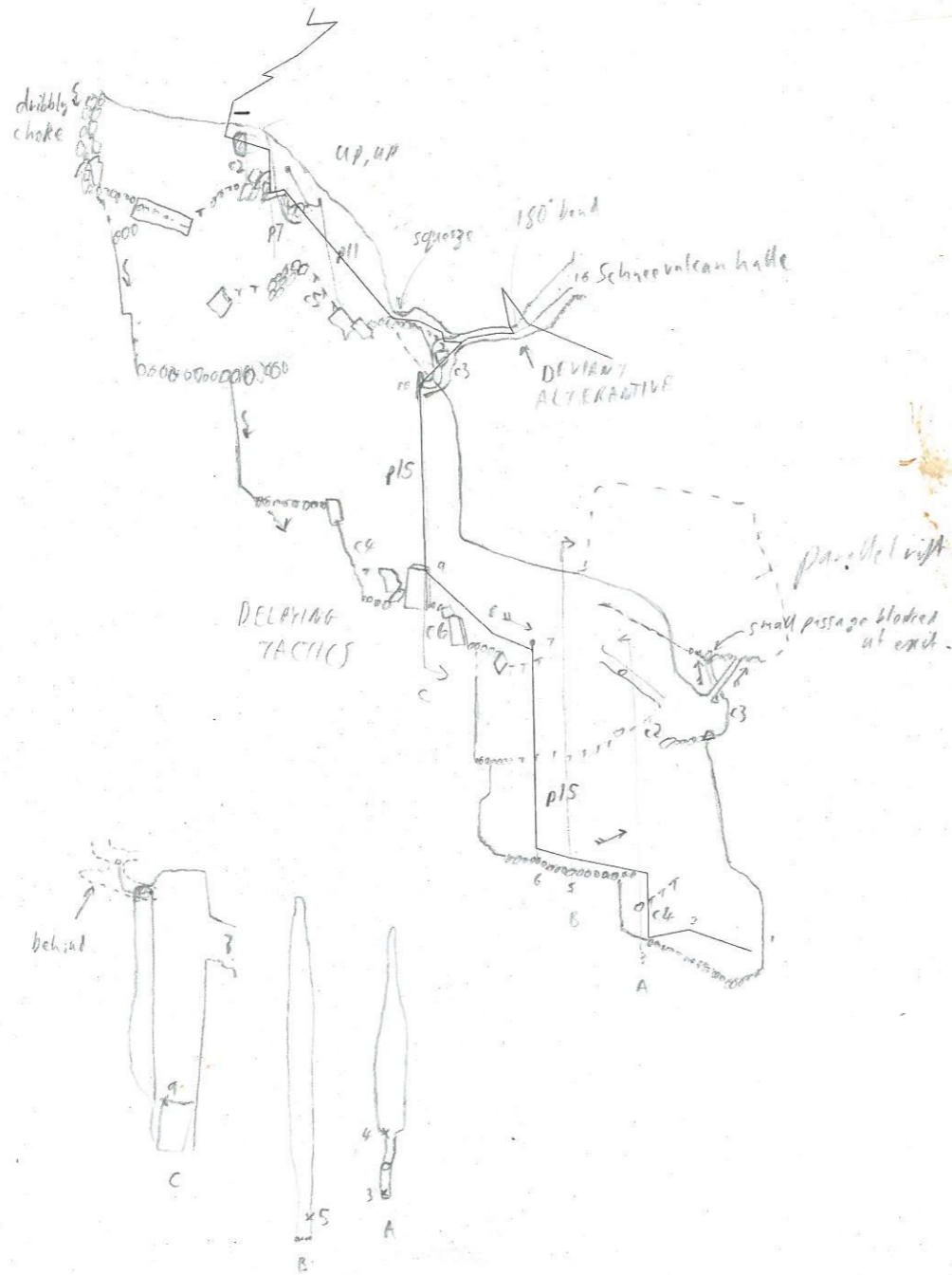


DEVIANT	North
Plan view	
Scale 1:500	
UP PAGE 000°	

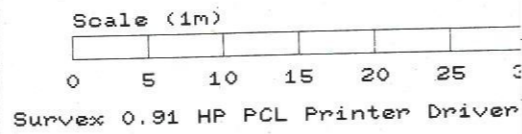
Scale (1m)  
0 5 10 15  
Survey 0.91

Elevation drawn on 'deviant' and 'unaway' surveys.

'Delaying Tactics' lift, 'deviant alternative passage' & 'up, up' drum/chamber.

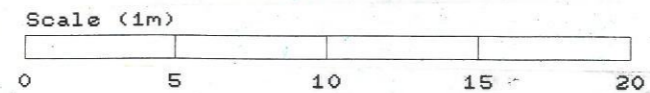
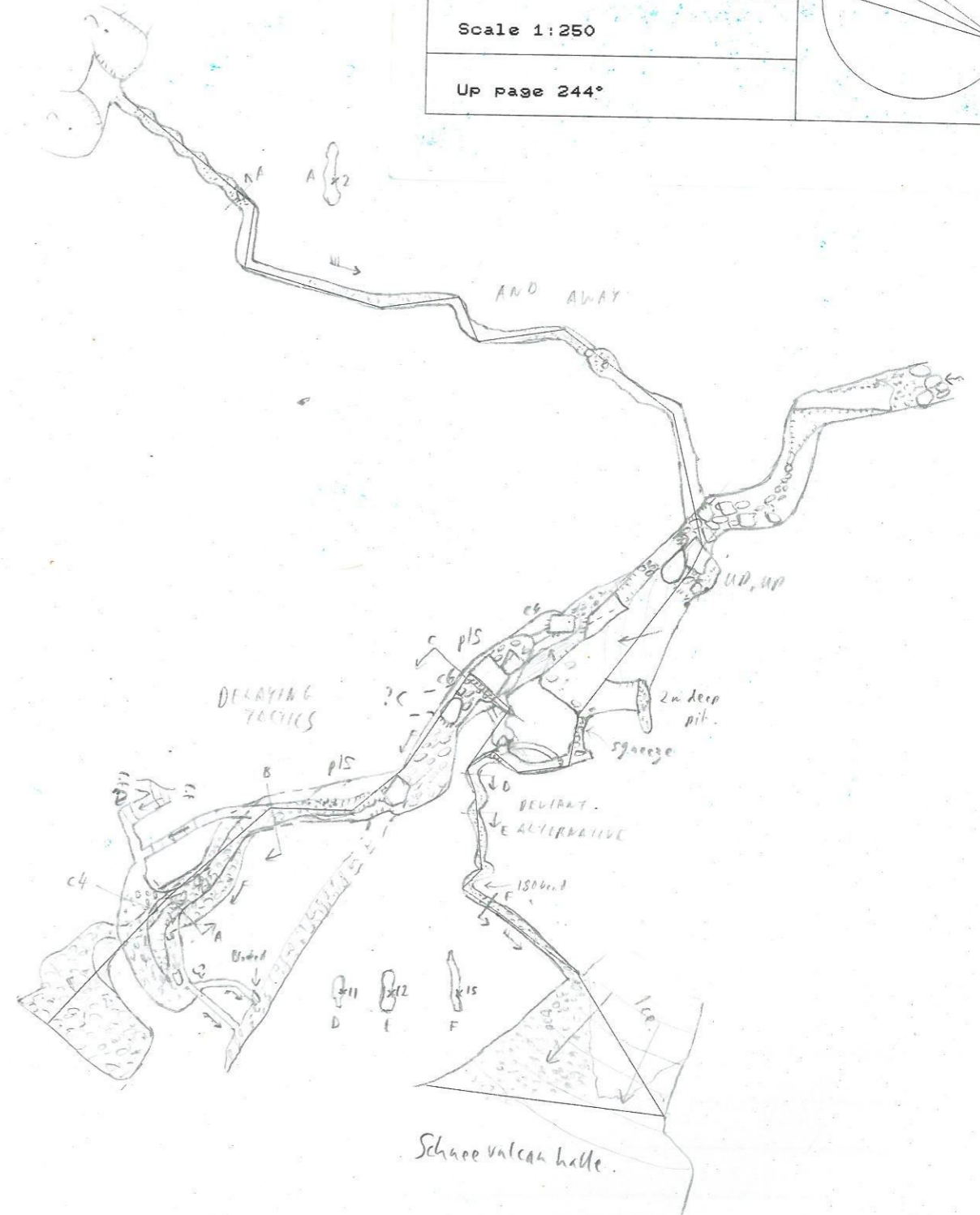


TEST DEVIANT + UNAWAY	Elevation on
Elevation	287°      107°
Scale 1:500	↔
View 017°	



1:250 plan of 'deviant alternative', 'Delaying Tactics', 'up, up' & 'and away' drawn on 'deviant' & 'unaway' surveys.

TEST UNAWAY & DEVIANT	North
Plan view	
Scale 1:250	
Up page 244°	



~~UAWAY~~ 'UP, UP' and 'AND AWAY'

1999.08.02 Mark Shinwell created for uaway survey

\*begin uaway

Locn: Totes Gebirge, Austria - Loefer/Augst-Eck Plateau (Kataster group 1623)  
 Cave: Eishohle, 1623/40  
 Survey Name: Up, up and away  
 Date: 1999.08.02  
 By: Insts: Andy Atkinson  
 Notes: Woakey  
 Pics: Woakey  
 Tapes: Paul Hammond  
 Instrumental: Compass #1 ; Eline #1  
 Collaboration: none  
 ref.: 1999 KH survey book pp - ? dunno

##### stations refindable to link to other surveys: #####

\*export

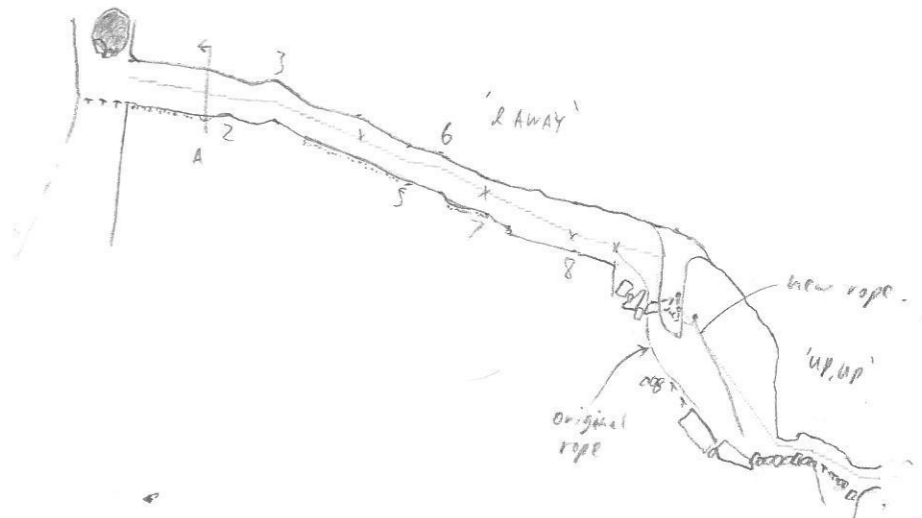
\*calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

from	to	tape	compass	tilt	Remarks
1	2	7.10	012.5	-39	
3	2	1.57	251.5	-03	
3	4	6.19	349	-21	
5	4	3.50	145	+23	
6	6	2.0	40	-5	
7	6	3.89	144.5	+24.5	
7	8	6.12	10.5	-23	
8	9	5.68	50	-10.5	
9	10	3.01	-	down	
10	11	1.05	89	+13	
11	12	11.91	100	-51	
12	13	2.12	075.5	-6	
14	13	2.24	325.5	+22	
15	14	1.46	012	+26	
15	16	1.27	120.5	-4.5	

Station details

name	L	R	U	D	description
11	0	0.5	1.0	1.7	Red Spot (RS) LH wall
12	0	0.5	1.5	2	RS LH wall
13	0.4	0.1	1.3	1.2	RS RH wall
14	0.5	0	1.5	1.2	RS RH wall
15	0	0.5	0.9	1.6	RS LH wall
16	0	0.3	1.0	1.7	RS RH wall
17	0	0.4	0.8	1.5	RS LH wall
18	0.4	0.2	2	1.2	RS RH wall
19	0	1.1	2	3	RS LH wall
10	1.1	0.3	1.5	0	Rock, bottom of plumb
11	1.1	0.1	1.5	-	RS tip of rock
12	0.5	0.05	0.5	0.7	RS tip of rock
13	0	0.5	0.0	0.5	RS LH wall
14	0	0.4	0.5	1.4	RS LH wall
15	-	-	-	-	'11' from yesterday

\*end uaway



UAWAY (extended) Elevation on  
 Elevation  
 Scale 1:500  
 View 000°

270° 090°

# ANGLE OF DANGLE

1999.08.06 W created for Angle of Dangle survey

\*begin dangle

Loans: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (Wateater group 1823)  
 Cave: Eishohle, 1623/40  
 Survey Name: Angle  
 Date: 1999.08.04  
 By: Insts: Andy Atkinson  
 Notes: Wooky  
 Pics: Wooky  
 Tapes: Simon Flower  
 Instruments: Compass #1 ; Clino #1, black open reel tape  
 Calibrations: TC: up: 269.5, +6.5  
                   down: 88.5, -6.75,  
 ref.: 1999 KH survey book pp - 2 danno

\*\*\*\*\* stations referable to link to other surveys: \*\*\*\*\*

\*export

calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

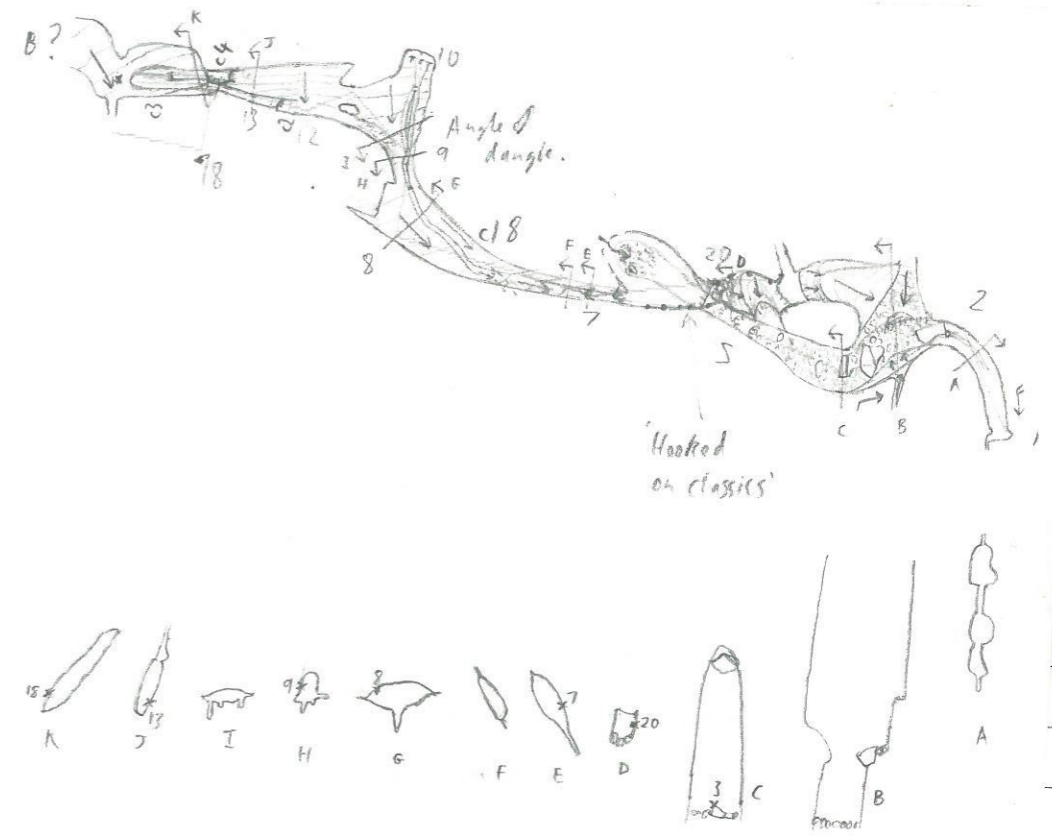
from	to	tape	compass	clino	remarks
2	2	7.78	337	-23.5	
2	3	8.89	089.5	+22.5	
4	4	6.49	291.5	-03	
4	5	18.23	-	down	
5	5	8.25	206	-60.5	
8	8	19.6	283.5	+46.5	
8	9	5.72	188.5	-24	
9	10	8.89	5.5	46.5	
9	11	7.95	317	44.5	
11	11	3.48	67.5	21	
12	12	4.93	103	-27	
14	14	1.79	283.5	+39	
15	15	7.03	277	+32.5	
16	16	3.47	270.5	-14	
17	17	1.60	-	down	
17	18	24.09	187	+51.5	(typo)
18	18	7.38	100	-35.5	
19	19	9.69	083	-32.5	
20	20	4.57	265.5	+19.5	

station details

inass	L	R	U	D	E	description
1	1.5	0	1.2	0.6		; CM RH wall
2	1.5	0	0	0.6		; Pencil 'X' RH wall
3	1.5	1.5	0.8	0.5		; temporary cairn
4				0.1		; bottom of rope
5						; deviation crab
6						; RS on previous survey
; from here on survey in (for L/R)						
7	0.2	0.4	0	0		; CM
8	0.4	3.5	0.4	0.8		; roof nodule
9	1.2	0.1	0.5	1.6		; CM RH wall
10						

11	0.7	0.3	0.3	0.4		; point on 'roof'
12	0.1	0.3	0.3	0.4		; CM RH wall
13	0.1	0.3	0.3	0.4		; CM RH wall
14	0.1	0.3	0.3	0.4		; CM RH wall
15	0.1	0.3	0.3	0.4		; CM RH wall
16	0.1	0.3	0.3	0.4		; CM RH wall
17	0.1	0.3	0.3	0.4		; CM RH wall
18	0.1	0.3	0.3	0.4		; CM RH wall
19	0.1	0.3	0.3	0.4		; CM RH wall
20	0.1	0.3	0.3	0.4		; CM RH wall

\*end dangle



DANGLE

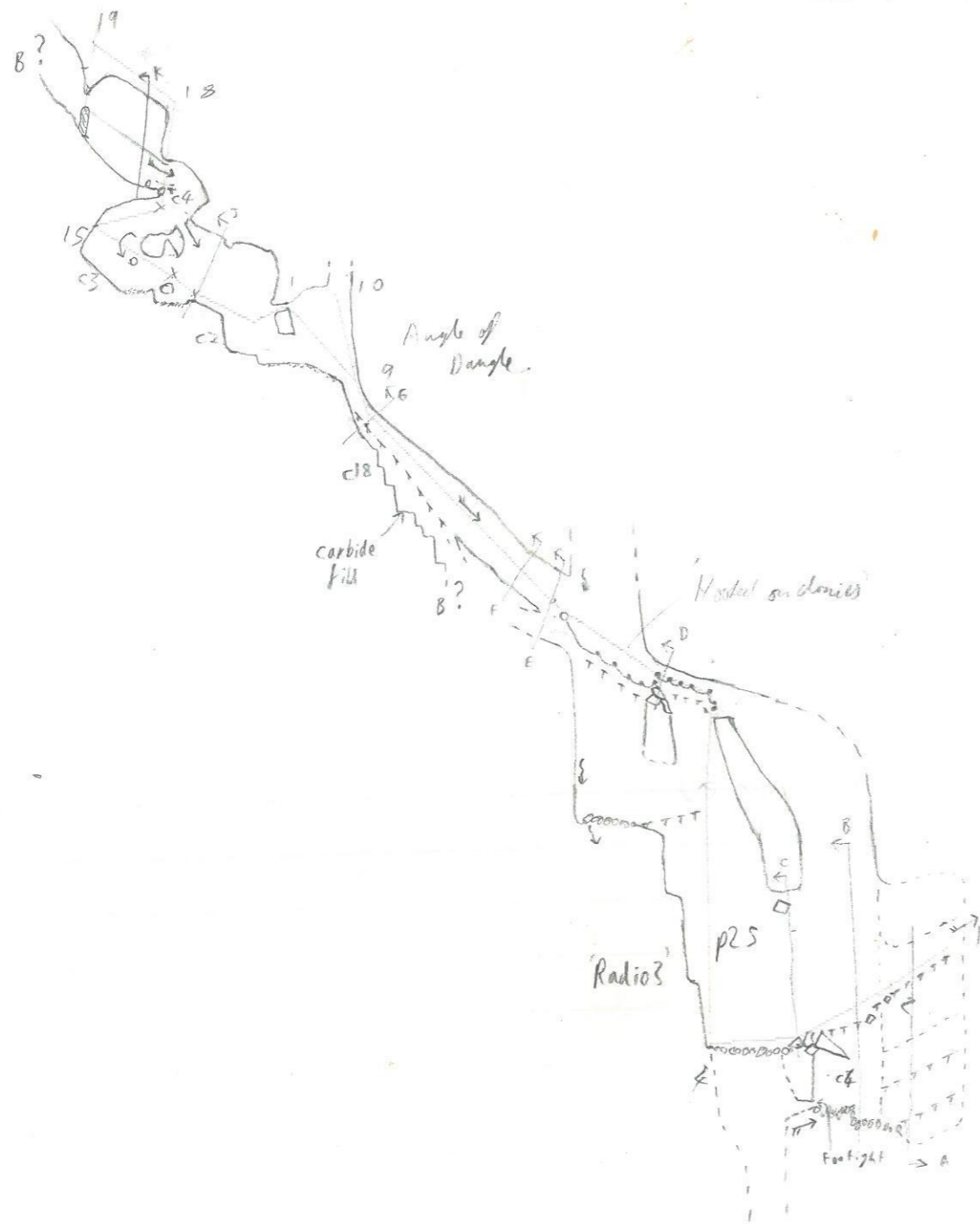
Plan View

Scale 1:500

UP page 000°

North





DANGLE	Elevation on
Elevation	388° 108°
Scale 1:500	↔
View 018°	



1999-08-06 X created for Eiscream survey

\*begin eiscream

```

: Loc: Totes Gebirge, Austria - Loser/Auger-Eck Plateau (Nataster group 1427)
: Cave: Eishöhle, 1623/40
: Survey Name: Eiscream
: Date: 1999-08-05
: By: Insts: Paul, then Andy Atkinson
: Notes: Wookey
: Pics: Wookey
: Tapes: Paul Hammond, Becka, Julian
: Instruments: Compass #1; Clino #1, black open reel tape
: Calibration: (for paul) TCrup: 268.5, 268, 269, +6.5, +6.5, +6.5
:              down: 89.5, 89.5, 90, -6.5, -7, -6.5
: ref.: 1999 KH survey book pp ~ 2 dunno
    
```

\* ===== stations refindable to link to other surveys: =====

\*export

\*calibrate tape +0.0 : +ve if tape was too short, -ve if too long

from	to	tape	compass	clino	remarks
1	1	3.93	005	+12.5	
2	2	3.32	342	-28.5	
3	3	5.00	029.5	-16.5	
4	4	2.80	330.5	+24	
5	5	1.69	177.5	-15.5	
6	6	6.16	134	-18.5	
7	7	7.33	061	+01	
8	8	8.50	246	-26.5	
9	9	2.84	043	+12.5	
10	10	1.77	142	+01.5	
11	11	7.14	251	-17.5	

\* changed team to andy on insts, julian on tape

13	13	2.91	278	-10	
14	14	1.68	133.5	+14.5	
15	15	12.38	340.5	+64	
16	16	0.44	152.5	+20.5	
17	17	7.12	300.5	+47.5	
18	18	12.14	166	-71	
19	19	1.90	107	-14	
20	20	10.63	341	+74	
21	21	16.64	335	+68	
22	22	2.70	046	+15	
23	23	4.30	122	-33	
24	24	3.96	251	-07	

\*station details

#name	L	R	U	D	E	description
11						: CM on ledge
12	0	0.5	1.0	0.5		: RS LH wall
13	0.2	0.7	1.3	0.2		: RS LH wall
14	0.3	0	1.2	0.5		: RS RH wall
15	1.0	0	0.6	0.8		: RS RH wall
16	0.3	0.5	0.2	0.9		: RS roof
17	0.1	0.6	1.2	0.1		: RS LH wall
18	0.5	0.2	0.1	1.2		: RS RHS
19	0.1	1.1	0.9	0.3		: RS on lump
110	0	0.8	0.2	0.5		: RS RHS
111	0	0.9	0.3	0.8		: RS LH wall;

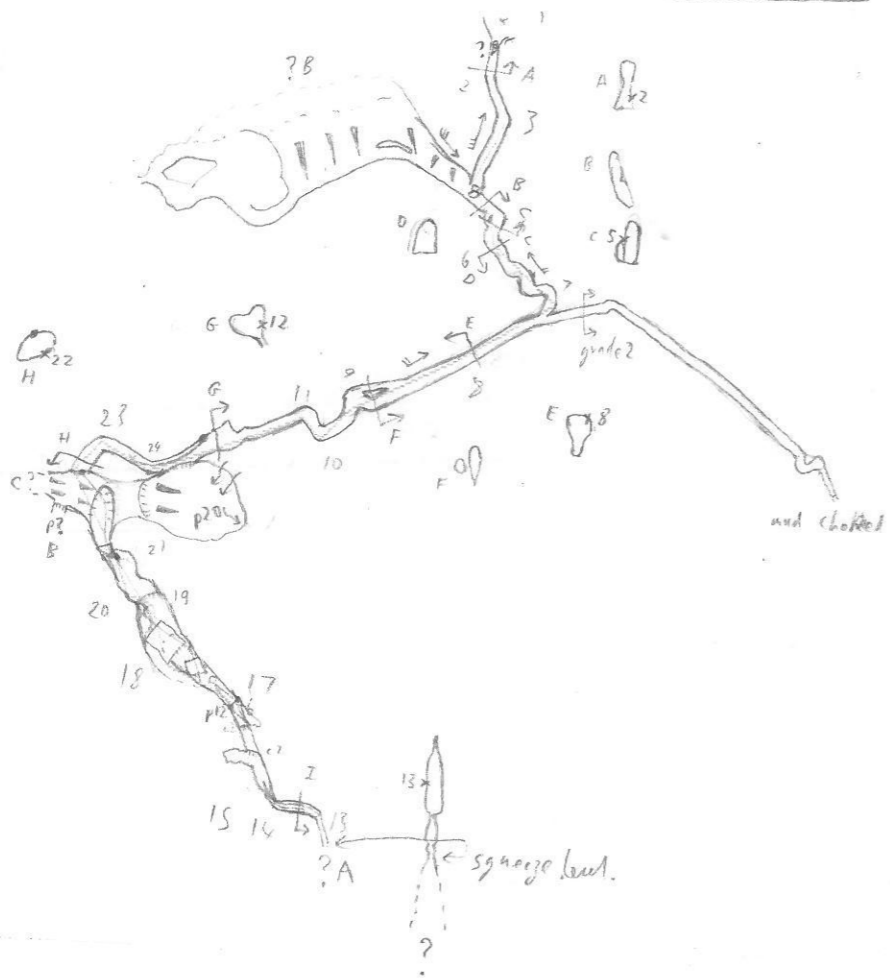
with new team

112	0.1	0.2	0.5	0.8
113	0.7	0.1	1.2	2.2
114	0.4	0	1.0	1.0
115	0.7	0.1	1.8	2.4
116	0	0.7	1.4	1.6
117	0.3	0.2	1.4	1.6
118	1.0	2.0	1.0	0
119	0.5	0.3	2.5	4.5
120	0	1.7	1.0	1.7
121	0.4	0	2.1	3.0
122	0.2	1.0	0.5	0.8
123	0.4	0.5	0	0.8
124	0.8	0	0.5	0.8

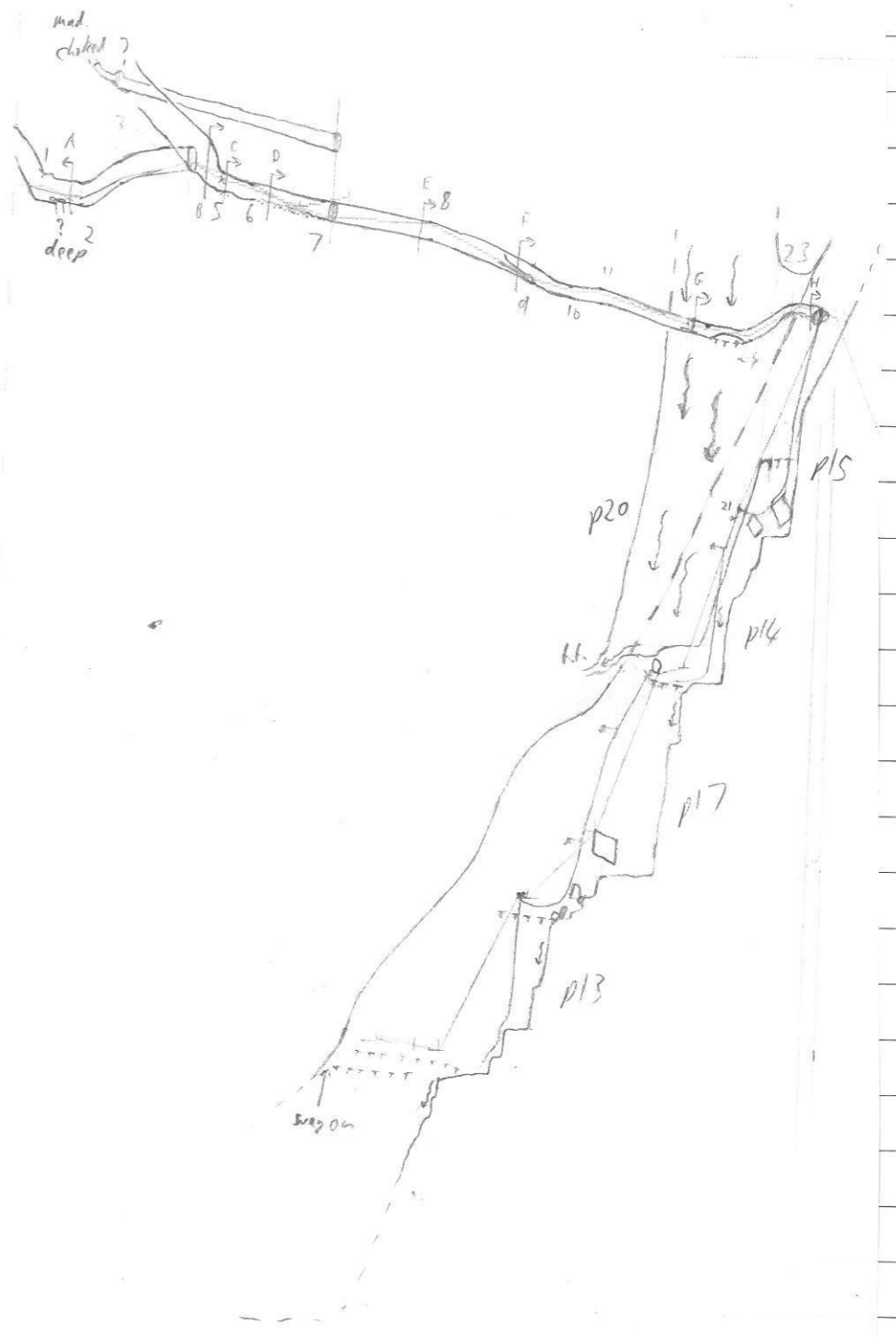
- 112 to 113 (level) CM LRS
- 113 CM RRS
- 114 CM RRS
- 115 to 116 (level) LH to t
- 116 LH wall
- 117 to 118 (B to rock) corner of rock
- 118 CM on roof near thread
- 119 LH wall
- 120 RH wall
- 121 CM on edge of pitch window
- 122 CM on roof
- 123 CM RRS

SEND EISCREAM

x-sect, all x2 scale

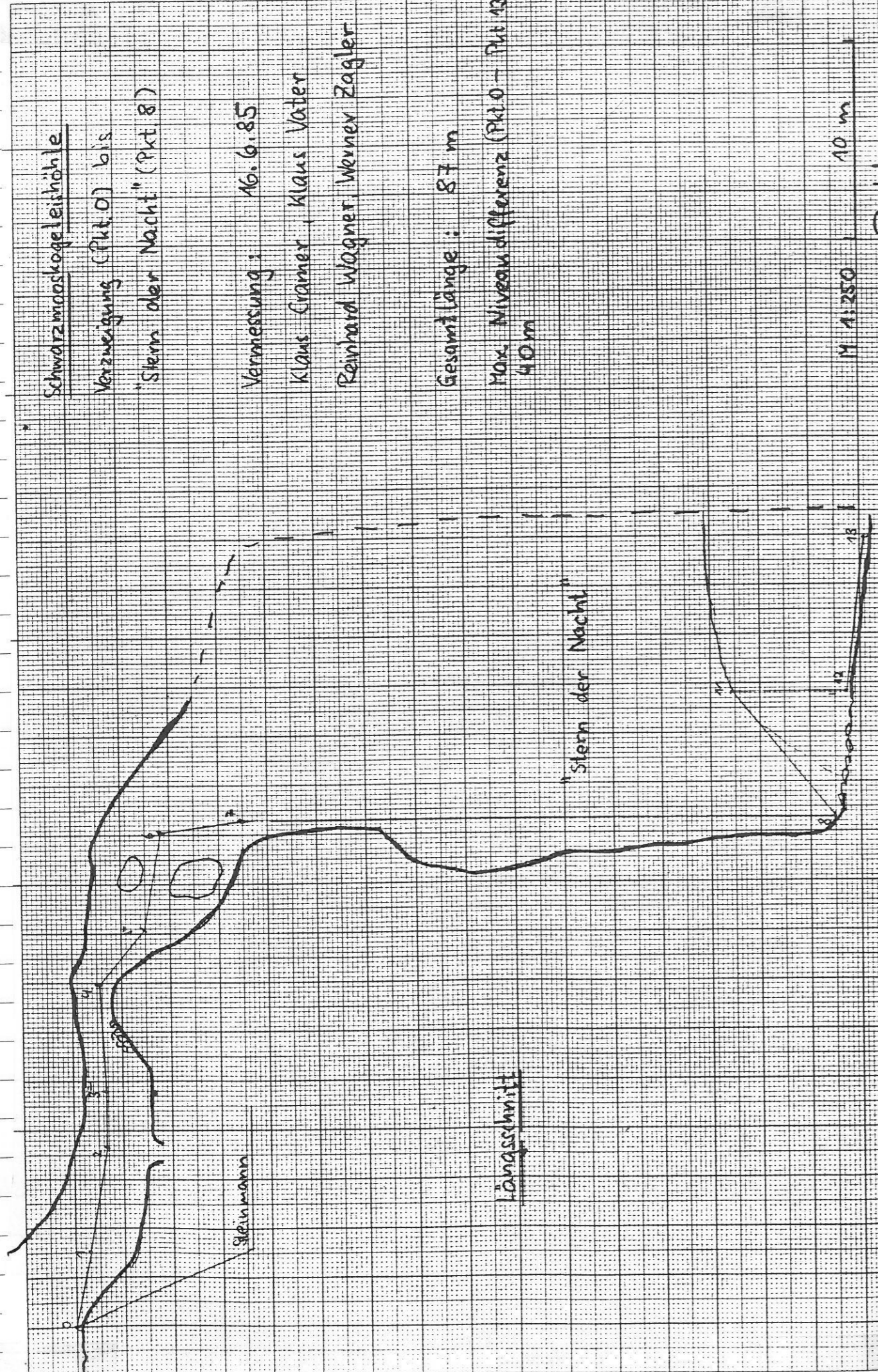


EISCREAM	
Plan view	
Scale 1:500	
Up page 000°	



EISCREAM (extended)	Elevation on		Scale 0 5 Survey 0
Elevation			
Scale 1:500			
View 000°			





Schwarzmooskogeleishöhle

Verzweigung (Pkt. 0) bis

"Stern der Nacht" (Pkt. 8)

Vermessung: 16.6.85

Klaus Gramer, Klaus Vater

Reinhard Wagner, Werner Zagler

Gesamtlänge: 87 m

Max. Niveau differenz (Pkt. 0 - Pkt. 43): 40 m

M 1:250

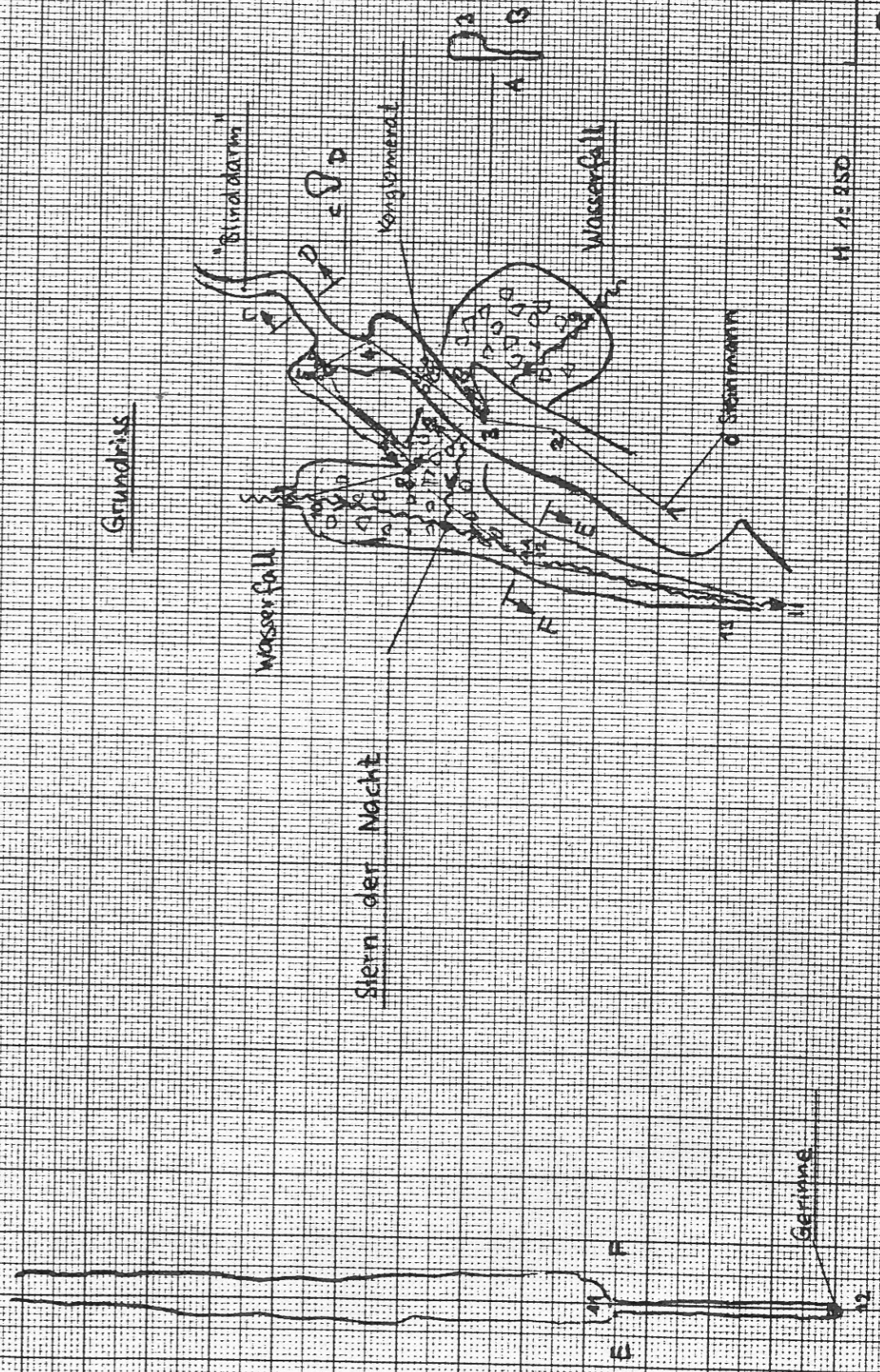
10 m

R. Wagner

Schwarzmooskogel Eishöhle

Verzweigung (Pkt. 0) bis "Stern der Nacht" (Pkt. 8)

Grundriss



Stern der Nacht

Wasserfall

"Strandarm"

Vergleimend

Wasserfall

Steinmann

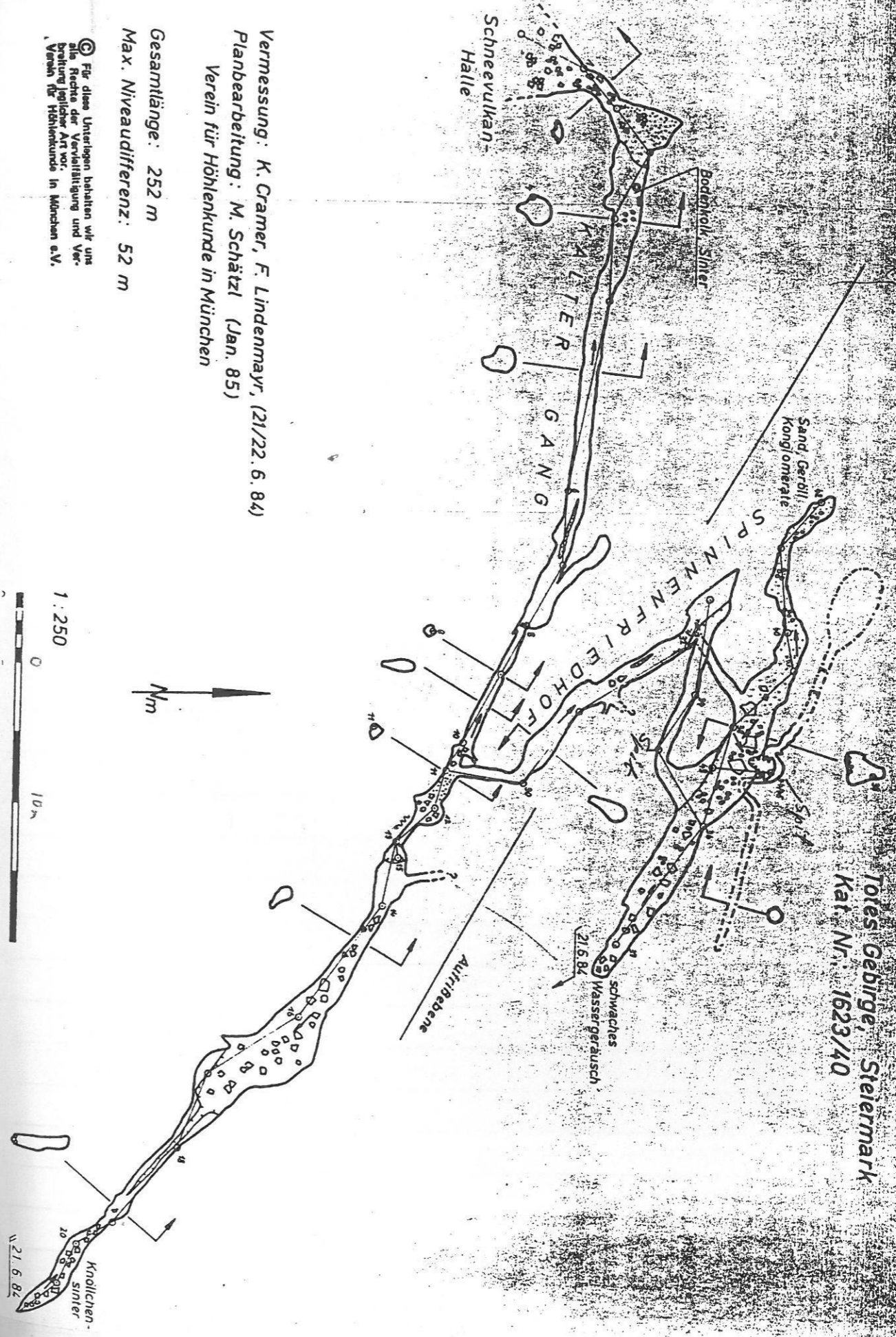
Geringe

M 1:250

10 m

R. Wagner

Schwarzynnskogel - Eishöhle  
Kalter Gang, Spinnenfriedhof  
Rotes Gebirge, Steiermark  
Kat. Nr.: 1623/40



Vermessung: K. Cramer, F. Lindenmayr, (21/22. 6. 84)  
Planbearbeitung: M. Schätzl (Jan. 85)  
Verein für Höhlenkunde in München

Gesamtlänge: 252 m  
Max. Niveaudifferenz: 52 m

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breitung jeglicher Art vor.  
Verein für Höhlenkunde in München e.V.

1:250  
0 10m

Stein der nicht deta.

Spinnen / nicht 4/4 data.

*Complet entry to old Mike Martin Survey:*

```

;> near06
;1999.08.08 surface surveys near 0/6
*equate near06.1 Laser.0_6
*equate near06.3 P76a
*equate near06.5 P76
*equate near06.8 P99

*begin near06
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster
group 1623)
; Cave: Surface
; Survey Name: 0/6 to 76, 76a, 99
; Date: 1999.08.08
; By: Insts: Tina
; Notes: Olly
; Pics:
; Tape: Tina
; Instruments: Compass & Clino set 2
; Calibration: Upper top Camp: compass 269,268,269 [into sun]
;088,088,088
; clino +06,+05,+06 [into sun] ; -07,-07,-07

; ===== stations refindable to link to other surveys: =====
;*export
*calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

;from to tape compass clino ; remarks
2 1 8.33 345 +09
2 3 3.60 350.5 -14
2 4 4.22 259 +10
4 5 5.21 253 -04
4 6 10.81 186 -01
7 6 13.18 315 +06
7 8 14.26 218 -13

;station details
;name L R U D E description
;1 ;0/6 laser pt
;2 ;pt on boulder
;3 ;76a tag bolt
;4 ;temp cairn
;5 ;entrance dotted triangle on 76
;6 ;pt on rock with temp ink spot
;7 ;temp cairn
;8 ;99 tag bolt

*end near06

```

```

*begin not188
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster
group 1623)
; Cave: Surface
; Survey Name: Cave Near Top Camp: '188 candidate' + cave next to it
; note the candidate is not 188.
; Now numbered 99OB03 and 99OB04 respectively
; Date: 1999.08.08
; By: Insts: Tina
; Notes: Olly
; Pics:
; Tape: Tina
; Instruments: Compass & Clino set 2
; Calibration: Upper Top Camp: compass 269,268,269 [into sun]
; 088,088,088
; clino +06,+05,+06 [into sun] ;-07,-07,-07
; (same as 'near06' survey)
; ===== stations refindable to link to other surveys: =====
; *export 1 ; bolt on 99OB04
; *export 4 ; bolt on 99OB03
; *export 6 ; Lower TC fixed pt (bolt (added this year))

3 2 0.93 307. 00
3 4 3.02 182. -06
5 4 14.95 024. -01.5
5 6 29.93 202. 00

;station details
; 1 = bolt on cave (99OB04) next to 188 candidate
; 2 = pt in air
; 3 = top of Ol's camera
; 4 = bolt on 188 candidate (99OB03)
; 5 = temp cairn
; 6 = lower TC fixed pt (bolt)

*end not188

```

1999.08.01

Slightly drafty, but deep, with snow plug at bottom.

Unexplored, not a promising lead

Inside small cliff facing toward B-wall

Benings VSK 151, HSK 065, SLH 010, BZW 222 (from top of small cliff)

```

*begin TCto188
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster
group 1623)
; Cave: Surface
; Survey Name: Cave Near (almost in) Lower Top Camp: 188
; Date: 1999.08.08
; By: Insts: Olly
; Notes: Olly
; Pics:
; Tape: Olly
; Instruments: Compass & Clino set 2
; Calibration: none
; Grade '3-ish'

; ===== stations refindable to link to other surveys: =====
; *export 1 ; Lower TC fixed pt bolt

1 2 18.00 066 -01
2 3 3.75 - Down

;station details
; 1 = lower TC fixed pt (bolt)
; 2 = 1623/188 entrance
; 3 = bottom of 188 entrance

*end TCto188

```

;1999.08.09 AJD created for 196 underground survey

\*begin 196

```

; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster grc
; Cave: 196
; Survey Name: 196
; Date: 1999.08.07
; By: Insts: Duncan Collis
; Notes: Anthony Day
; Pics: Anthony Day
; Tape: Both
; Instruments: Compass set #4 ; Clino set #4
; ref.: 1999 NotKH survey book pp -

```

; ===== stations refindable to link to other surveys: =====

\*export 1

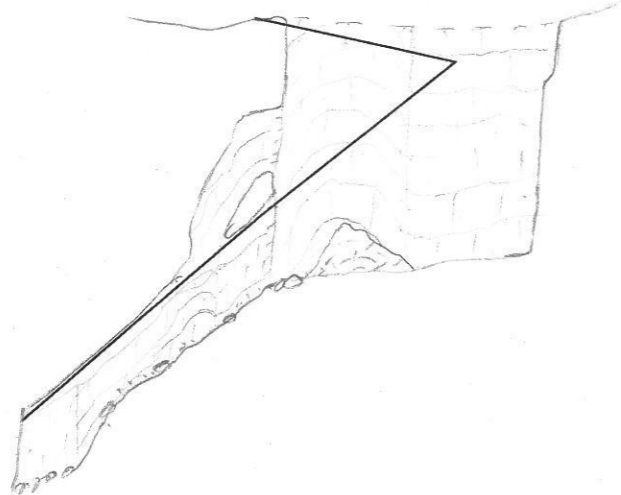
\*calibrate tape +1.0 ; +ve if tape was too short, -ve if too long

from	to	tape	compass	clino	remarks
2	1	8.64	278	+11	
2	3	10.05	218	-34	
4	3	11.50	075	+41	

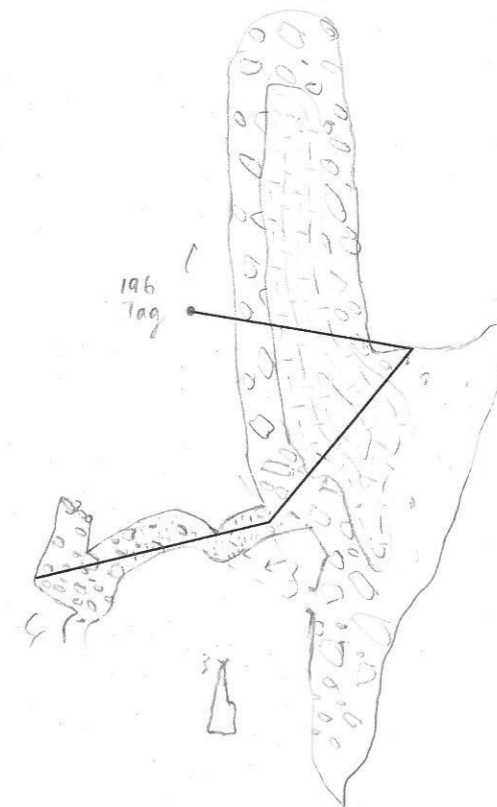
;station details

name	L	R	U	D	E	description
;1	-	-	-	-	-	196 tag bolt
;2	-	-	-	-	-	point on rock
;3	0.40	0.40	0.00	2.40	-	point at entrance
;4	-	-	0.00	-	-	ceiling at end of cave

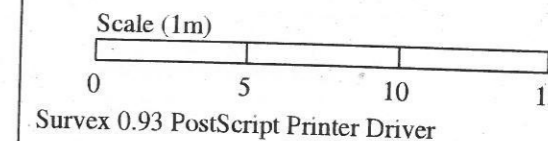
\*end 196



196	Elevation on
Elevation	
Scale 1:250	



196	
Plan view	
Scale 1:250	
Up page 000°	



;1999.08.09 AJD created for surface surveys to 165, 194, 195, 196

\*begin 165tohsk

; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 1623)  
 ; Area: West slope of Hinter SMK  
 ; Caves: 165, 194, 195, 196  
 ; Survey Name: Surface survey from 165 ent to HinterSMK trig pt via 196, 195,  
 ; Date: 1999.08.07  
 ; By: Insts: Duncan Collis  
 ; Notes: Anthony Day  
 ; Pics: Anthony Day  
 ; Tape: Both  
 ; Instruments: Compass set#4 ; Clino set#4, tape read from 1m mark  
 ; Calibration: atTC a few days earlier for a survey in Steinbrueckenhoehle

; ref.: 1999 notKH survey book pp -

; ===== stations refindable to link to other surveys: =====

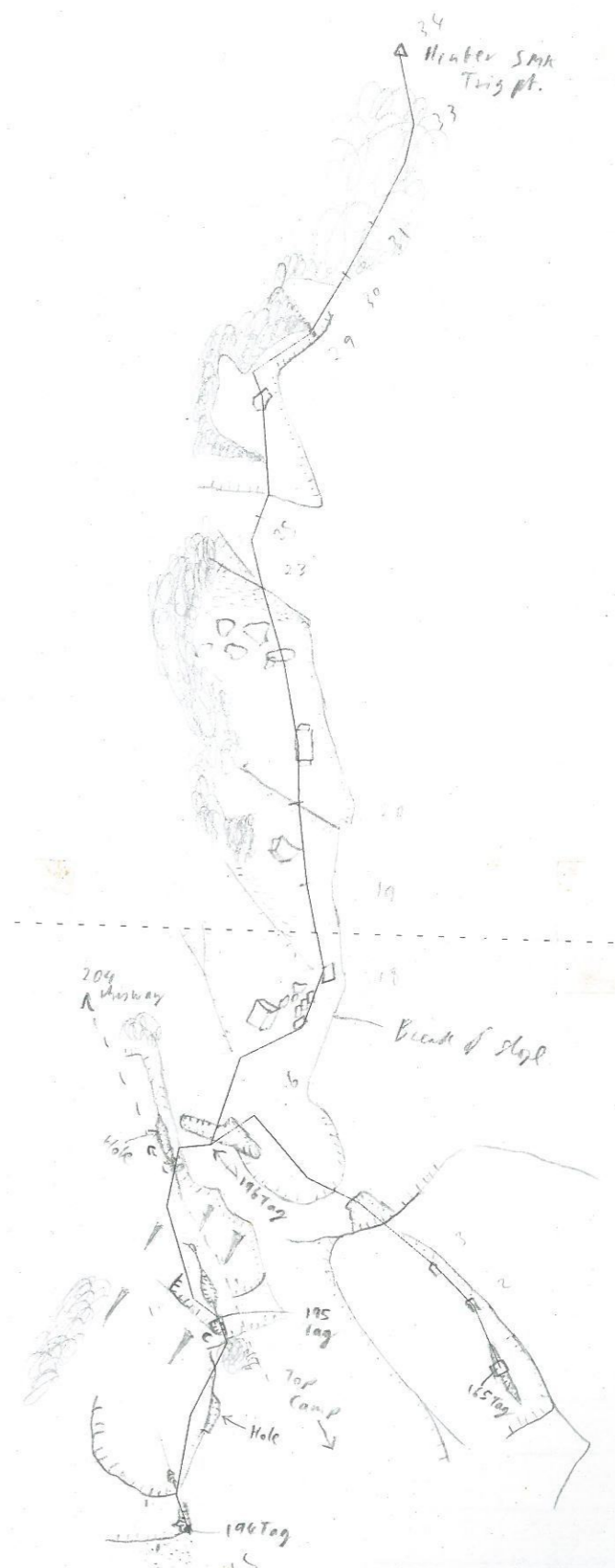
\*export 1  
 \*export 7  
 \*export 11  
 \*export 15  
 \*export 34

\*calibrate tape +1.0 ; +ve if tape was too short, -ve if too long

		tape		compass clino		station details		
;from	to					name	D	description
2	1	20.85	225	-12	1	0		Tag bolt at 165
2	3	17.02	024	+04	2	1.00		top of rock
4	3	30.47	198	+11	3	1.50		big rock tip
4	5	17.19	004	00	4	1.00		point of rock
6	5	24.95	208	+02	5	1.20		pebble on rock
6	7	16.34	304	-02	6	0.00		point on rock
8	7	10.08	152.5	+01.5	7	0.00		tag bolt at 196
8	9	19.03	259.5	-14.5	8	0.20		top of rock
10	9	29.95	052	+17	9	0.00		point on pavement
10	11	9.80	195	+02	10	0.30		boulder
12	11	9.34	048	-17.5	11	0.00		tag bolt at 195
12	13	26.24	275	-22.5	12	1.50		bit of bunde
14	13	25.48	078	+15	13	0.00		flower head
14	15	13.50	229.5	-12	14	0.25		cairn by entrance
16	7	28.20	267	-11	15	0.00		tag bolt at 194
16	17	21.38	132	+14.5	16	0.20		boulder near 196
18	17	20.30	268.5	-22.5	17	1.00		tip of boulder
18	19	28.24	057.5	+20	18	1.50		edge of boulder
20	19	25.56	242	-22	19	1.50		top of boulder
20	21	19.90	067.5	+23	20	0.00		point on terrace
22	21	25.79	238	-16	21	1.80		top of big rock
22	23	25.34	052.5	+23	22	1.00		boulder
24	23	17.42	234.5	-27	23	1.80		boulder
24	25	10.24	089	+36	24	2.00		rocky edge
26	25	8.37	268	-16.5	25	1.50		bunde
26	27	29.34	064	+04	26	-		bunde
28	27	8.56	226	+00.5	27	1.00		pointy rock
28	29	23.87	125	+31	28	0.00		rock route through bunde
30	29	25.36	279	-31	29	1.80		bunde tip
30	31	20.38	096	+30	30	-		bunde
32	31	21.07	275	-18	31	-		bunde
32	33	12.75	081	+10	32	-		bunde
34	33	22.69	236.5	-01	33	-		bunde again
					34	0.00		Hinter SMK trig point

dotgy clino leg 30-29

end 165tohsk



165tohsk		
Plan view		
Scale 1:2000		
Up page 070°		

Scale (10m)  
0 2 4 6 8 10  
Survex 0.93 HP PCL Printer Dri

GPS Locations	Lat/Lon	LER	WG84
99MS01	N 47° 40.605 E 013° 48.976	5411114	5283164
99MS02	N 47° 40.516 E 013° 48.941	5411067	5283001

;Außenvermessung vom LaserMP 8 (Weiße Warze) zum Eingang der Donner und Blitzen Höhle (1623/158) und zur 7-Eingangs-Höhle (neu)  
;Vermessung am 31.10.1999, Uwe Krüger, Jörg Haussmann, Thilo Müller

;\*fix Laser8 36040.75 81522.72 1732.39 ;The Nipple/Bunters Bulge

\*DATA normal from to length gradient bearing ignoreall

Laser8	a	48.60	-12	342
a	b	26.95	0.5	54
b	c	8.09	-7	41
c	d	14.3	11	143
d	e	8.94	3.5	98.5
e	f	49.34	-10	38
f	g	16.39	4	51.5
g	h	48.4	-13	69.5
h	i	35.8	-5.5	40
i	j	38.65	-12	37
j	k	23.52	-8.5	12
k	L	10.7	44	263
L	m	33.88	8.5	312
m	n	26.8	4	307
n	o	30.65	15	342.5
o	p	5	2	39.5
p	q	7.5	4	321
k	1	16.47	-0.5	84

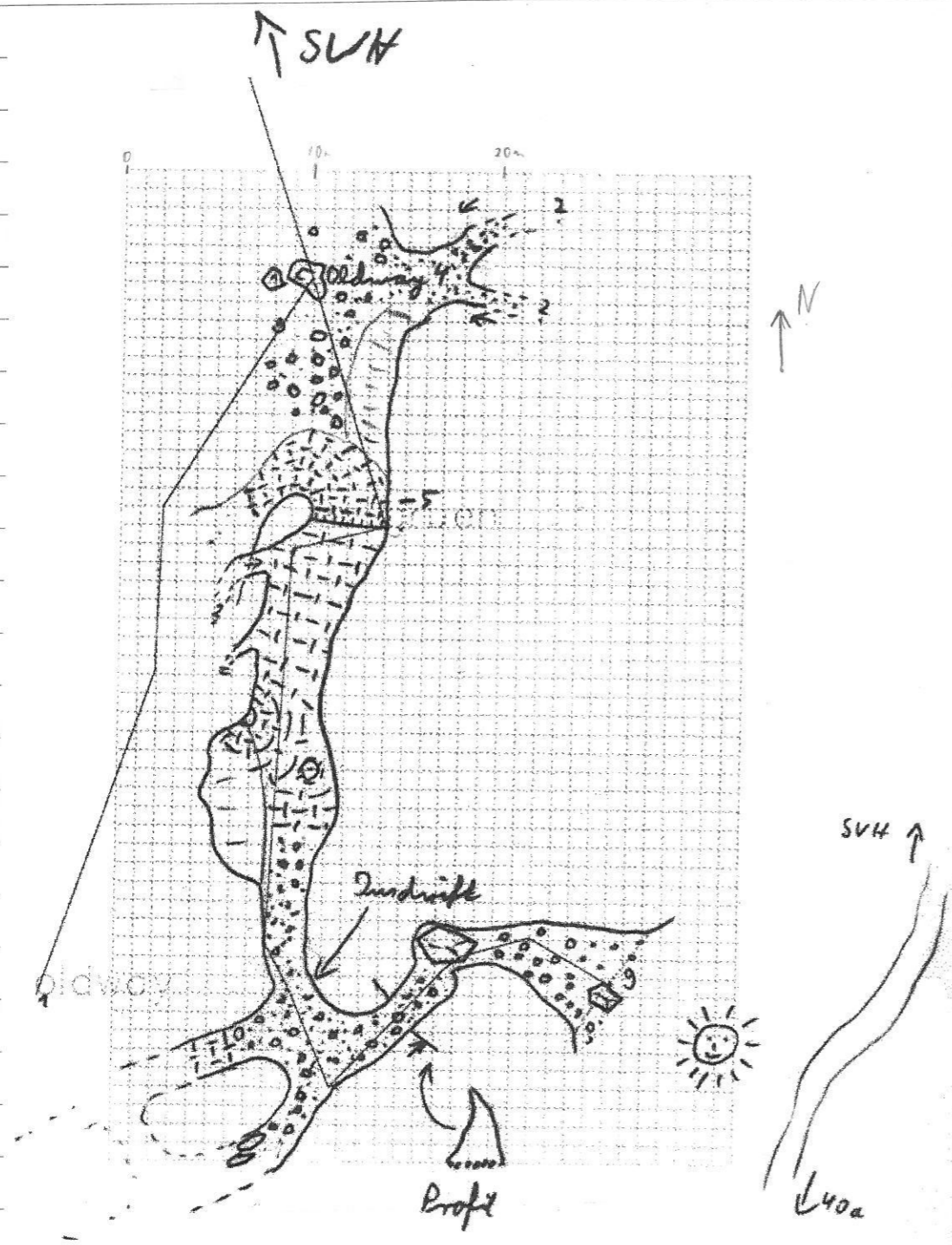
;MP q: Eingang zur 1623/158  
;MP L: Eingang der 7-Eingangs-Höhle

\*end L8to158

GRAEA

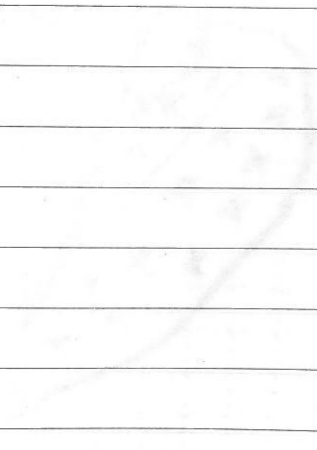
Survey data

1999.10.31



Green Surface

1.500

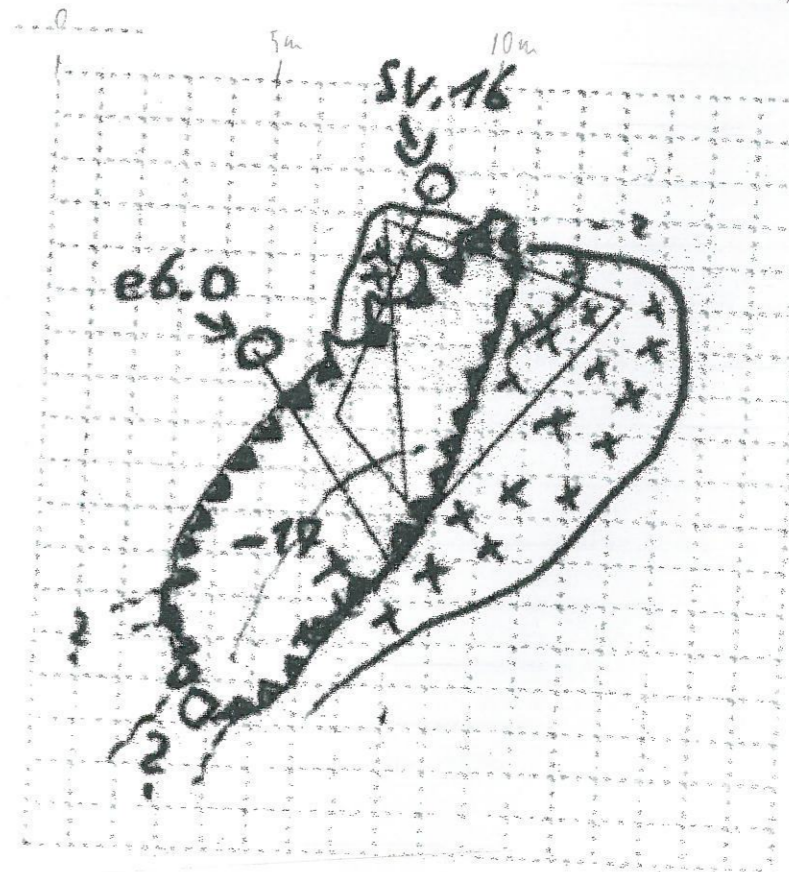
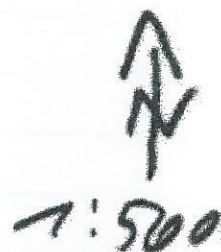




Königsbadde sunny

SMK-40

Königsbadde E 6



*Kammersdorf surface*

\*begin ariston1

```
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster gr
; Cave: Steinbruckenohhle
; Survey Name:
; Date: 1999.08.05
; By: Insts: Tina Richardson
; Notes: Earl Merson
; Pics: Earl Merson
; Tape: Both
; Instruments: Compass set #5 ; Clino set #5
; calib tc bottom->top comp 267 267.5 268
; clino +6.5 +7 +7
; top->bottom comp 91.5 92 92
; clino -7 -6 -6.5
; ref.: 1999 NotKH survey book pp -
; ===== stations refindable to link to other surveys: =====
```

from	to	tape	compass	clino	remarks
1	2	4.88	313	+02	
1	3	3.74	222	+01	
2	4	12.35	-	up	
5	4	0.54°	154	00	
6	5	4.49	182	-03	

```
;stn desc
;1 CM L wall of chamber nr pitch
;2 CM base of pitch
;3 1st bolt on following pitch
;4 RH bolt top of pitch
;5 CM on edge of rock
;6 last red dot from rainbow survey
```

\*end ariston1

\*begin ariston2

```
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster gr
; Cave: Steinbruckenohhle
; Survey Name: Mike & Duncan's continuing pitch series
; Date: 1999.08.09
; By: Insts: Duncan Collis
; Notes: Mike Richardson
; Pics: Mike Richardson
; Tape: Mike Richardson
; Instruments: comp & clino set #5
; calib. at TC: Bottom - top comp:266;266;266;
; clino:+06;+06;+06;
; top - bottom comp:088.5;088;088.5
; clino:-06.5;-06.5;-06.5;
; ref.: 1999 NotKH survey book pp -
; ===== stations refindable to link to other surveys: =====
```

\*export

\*calibrate tape 0.0 ; +ve if tape was too short, -ve if too long

from	to	tape	compass	clino	remarks
1	2	10.90	-	up	
2	3	8.26	-	up	
4	3	3.14	103	-27	
4	5	5.43	301	-18	
6	5	9.67	216	-13	

6	7	12.77	344	+12
8	7	8.13	166	+04
8	9	7.89	311	+03
10	9	15.40	148	+05
10	11	3.51	306	-07.5
12	11	7.34	253	-22.5
12	13	6.52	138	+08
14	13	4.14	223.5	-17
15	11	7.35	062	-34
15	16	6.37	253	-38
17	16	8.03	320	-01
17	18	2.49	048	+06.5
19	18	10.28	-	down
20	19	2.47	209	-46
20	21	3.46	108	+60
22	21	2.05	309	-67
23	22	3.11	310	-16
23	24	35.25	-	up
24	25	6.74	305	+10
25	26	13.90	-	up
27	26	3.70	203	-22

;stn	L	R	U	D	Desc
;1	-	-	-	-	Wall back of shaft
;2	-	-	-	-	Point below bolt level with aven
;3	-	-	-	-	spot bottom of flake <i>floor</i>
;4	-	-	-	0.80	roof
;5	0.00	2.50	0.70	0.70	wall at corner
;6	2.50	1.50	2.00	0.20	rock at corner
;7	0.00	2.50	0.00	2.00	roof knob
;8	1.50	0.00	0.70	0.20	wall
;9	0.00	2.20	0.00	0.70	roof
;10	3.00	0.00	0.00	1.20	roof/wall
;11	-	-	4.00	0.70	top of standing rock junction
;12	0.00	2.60	1.00	1.40	shelf on wall
;13	3.00	0.00	0.60	0.60	wall
;14	0.00	2.00	0.50	1.90	roof flake above edge of pit
;15	3.00	0.00	-	4.00	wall top of climb over
;16	-	-	-	1.40	chamber wall
;17	3.00	0.40	-	0.20	rock on floor
;18	2.00	1.00	-	0.00	rock bottom of plumb (rope hang)
;19	-	-	-	-	bolt
;20	0.00	1.50	-	1.10	wall
;21	0.60	1.00	-	-	notch in flake
;22	0.00	1.40	-	1.00	wall left/below bolt
;23	2.00	3.00	-	0.00	bottom of pitch (plumb)
;24	2.00	2.00	-	-	y-hang knot
;25	1.50	2.50	-	-	bottom of pitch
;26	-	-	-	-	y-hang knot
;27	-	-	-	-	CM opposite y-hang

\*end ariston2

\*begin dome

```
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster group 162
; Cave: Steinbruckenohhle
; Survey Name: Dome (Millenium dome plus pitches beyond)
; Date: 1999.08.08
; By: Insts: Nick Procter
; Notes: Anthony Day
; Pics: Anthony Day
; Tape: Both
; Instruments: Compass set #3; Clino set #3
; ref.: 1999 NotKH survey book pp -
```

; ===== stations refindable to link to other surveys: =====

\*export

\*calibrate tape -0.225 ; +ve if tape was too short, -ve if too long

;from	to	tape	compass	clino	; remarks
1	2	1.71	-	up	
3	2	2.14	174	+03	
4	3	1.27	199	-05	
5	4	2.51	138	+12	
6	5	2.03	092	+13	
6	7	2.17	357	-11	
8	7	2.50	141	+60	
9	8	3.00	196	+85	
9	10	2.09	-	down	
10	11	15.25	-	down	
12	11	3.99	121	-31	
13	12	13.18	262	+43	
14	12	13.70	188	-22	
15	12	6.26	112	-22	
15	16	5.50	277	-35	
17	16	1.81	147	+57	
17	18	10.22	-	down	
19	18	4.19	353	-05	
20	19	3.67	276	+72	
21	20	8.22	269	+86	
21	22	17.92	-	down	
23	22	2.76	015	+21	
23	24	2.46	185	-36	
25	23	2.33	168	+10	
25	26	4.70	283	-33	
27	26	4.99	215	+07	
22	28	0.60	017	+09	
29	28	5.45	183	+50	
30	19	7.83	025	+53	
31	30	2.71	001	+33	
31	32	10.49	-	down	
33	32	7.18	142	+62	
33	34	3.90	232	-05	
34	35	7.08	-	down	
36	35	2.05	100	-20	
37	36	2.03	085	+64	
38	37	2.12	056	+18	
38	39	3.14	177	-02	
39	40	15.54	-	down	
41	40	8.38	022	-27	

;stn	L	R	U	D	Desc
;1	-	-	-	-	yellow dot on climb from last survey
;2	-	-	-	-	point on ceiling

;3	0.45	0.00	0.54	0.60	Red paint mark RH wall
;4	0.55	0.00	0.74	0.41	PM RH wall
;5	0.37	0.00	0.45	0.62	PM RH wall
;6	0.00	1.12	2.00	0.64	PM back wall
;7	1.80	0.00	~3.00	~2.50	PM RH wall
;8	0.00	2.50	lots	lots	PM flake by pitch head bolt
;9	-	-	-	-	PM side of pitch
;10	-	-	-	-	rebelay bolt
;11	-	-	-	1.00	PM boulder
;12	-	-	-	1.50	PM boulder
;13	4.00	1.50	-	~5.00	through boulders PM boulder
;14	3.50	0.60	-	2.00	PM boulder
;15	-	-	-	0.50	PM boulder
;16	2.00	0.50	-	0.70	CM boulder
;17	0.00	0.30	lots	lots	PM LH wall
;18	0.60	2.00	lots	0.00	PM on floor
;19	0.00	~2.00	~3.00	-	PM LH wall at pitch head
;20	-	-	-	-	top deviation krab
;21	-	-	-	-	bottom deviation krab
;22	-	-	-	1.80	PM foot of plumb
;23	0.25	2.00	lots	2.50	PM LH wall
;24	0.20	0.00	lots	3.00	PM RH wall
;25	1.40	0.00	lots	1.60	PM on wall
;26	-	-	-	1.00	CM back wall
;27	1.50	0.70	-	1.70	PM back wall
;28	1.00	1.00	-	2.50	PM on boulder
;29	0.96	6.00	-	1.60	PM RH wall
;30	1.50	0.00	~10.00	1.40	PM RH wall
;31	0.40	0.30	-	-	PM rock at pitch head
;32	-	-	-	-	PM ledge
;33	2.30	0.00	lots	1.70	PM RH wall
;34	-	-	-	1.50 to	top of pitch pitch head bolt
;35	1.20	1.20	lots	0.00	PM foot of plumb
;36	0.00	0.80	-	-	PM pitch head
;37	0.71	0.00	-	1.50	PM RH wall
;38	0.52	0.00	-	2.00	PM RH wall
;39	0.75	1.00	-	0.50	Y-hang knot
;40	1.20	1.20	-	0.00	bottom of rope
;41	0.00	1.50	-	1.00	PM chamber - dot with ring round it

\*end dome

```

; Following surveys (veined and 110aday) done by the following:
;
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster gr
; Cave: Steinbruckenohhle
; Survey Name: veined, 110aday
; Date: 1999.08.04
; By: Insts: Duncan Collis
; Notes: Mike Richardson
; Pics: Mike Richardson
; Tape: Both
; Instruments: Compass set #4 ; Clino set #4
; Calibration: at TC Down - Comp: 089,088,088 Clino: -06,-06,-06
; Up Comp: 269,269,268.5 Clino: +07,+07,+07
; ref.: 1999 NotKH survey book pp -

```

; ===== stations refindable to link to other surveys: =====

\*export

\*begin veined

1	2	15.39	290	72
2	3	2.60	193	50
4	3	2.80	066	-22
4	5	5.48	218	50
5	6	4.40	004	31
7	6	2.60	138	-15
7	8	7.74	016	15.5
9	8	11.22	193.5	-18.5
9	10	6.24	146	-12
11	10	6.66	286	-6
11	12	29.87	034	+21
13	12	4.03	216	-16
13	14	5.16	333	+34
15	14	7.92	243	-34
13	16	15.95	-	UP
17	16	1.73	121	-33

\*end veined

```

;stn L R U D Desc

```

\*begin 110aday

1	2	5.44	277	-10
3	2	7.40	099	13
4	3	3.37	350	5
5	4	4.06	356	23
6	5	1.36	269	11
7	6	8.31	32.5	17
8	7	3.24	346.5	-12.5
8	9	11.08	200	-21
9	10	4.39	208	-17
10	11	1.70	232	-26
11	12	1.82	256	-3
12	13	2.65	200	-24
13	14	8.43	225	-21
15	14	5.46	019	+23
15	16	2.03	245	-21
17	16	8.13	022	19
17	18	8.60	208	-12
19	18	10.60	050	21
20	19	4.03	004	13
20	21	6.53	210	-18
21	22	1.71	226	-12
22	23	13.74	212	-15

```

24      23      3.02    303    10.5
24      25      0.72    112     -1
*end 110aday

```

```

;stn    L      R      U      D      Desc

```

```

; Surveys updip, junction, pretty and pendulum done by:
;
; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster
; Cave: Steinbruckenohhle
; Survey Name: updip, junction, pretty, pendulum
; Date: 1999.08.04
; By:   Insts: Nick Procter
;       Notes: Julia Bradshaw
;       Pics: Anthony Day
;       Tape: Nick & Julia
; Instruments: Compass set #5 ; Clino set #5
; Calibration: at TC Down - Comp: 088 Clino: -06
;               Up      Comp: 272 Clino: +5.5
; ref.: 1999 NotKH survey book pp -

```

```

; ===== stations refindable to link to other surveys: =====

```

```

;*export
*begin pendulum

```

```

1      2      6.93    -      DOWN
3      2      2.12    004    -14
4      2      4.49    162    -23
4      5      2.41    039    8
6      4      7.10    278    -32.5
1      7      2.76    156    51
8      7      9.39    003    2
8      9      4.68    178    -41
10     9      2.95    058    -2
10     11     3.78    100    -26
12     11     3.47    221    -10
13     9      4.79    065    7
13     14     8.14    209    -20
15     14     3.62    022    11
15     16     3.83    245    -12
16     17     5.14    298    -11
18     17     5.15    078    27
1      19     11.82   -      UP
19     20     5.0     224    62
21     20     2.89    155    -30

```

```

;stn    L      R      U      D      Desc
;1      -      -      -      -      CM on flake at base of plumb
;2      0.05   0.61   -      0.41   CM on boulder foot of plumb
;3      0.28   0.00   4.00   1.49   CM on wall
;4      0.00   1.90   -      2.02   CM back of wall
;5      0.15   0.00   -      0.75   CM on wall
;6      0.05   0.00   -      1.65   CM on back wall
;7      1.16   1.60   -      1.45   PM on spike
;8      1.13   0.46   8.00   3.00   CM on top of boulder
;9      0.00   4.87   4.50   1.90   PM on wall
;10     2.50   1.95   0.75   5.00   CM on wall
;11     0.90   0.05   0.80   1.00   PM on spike
;12     -      -      -      -      spike with red dot (stn 7 on
;13     0.84   1.66   2.00   1.46   CM on spike on boulder veined
;14     1.04   1.09   1.75   1.61   PM on flake survey
;15     0.00   0.84   0.50   2.02   CM on wall
;16     0.00   0.78   0.78   1.60   Pm on wall
;17     1.17   1.13   2.50   1.83   PM on wall

```

```

;18     0.54   0.46   0.46   1.13   CM on nobble
;19     -      -      -      -      deviation krab when loaded
;20     -      -      -      -      spike near pitch (PM)
;21     -      -      -      -      stn 39 on ent survey

```

```

*end pendulum

```

```

*begin phreatic

```

```

; Locn: Totes Gebirge, Austria - Loser/Augst-Eck Plateau (kataster g
; Cave: Steinbruckenohhle
; Survey Name:
; Date: 1999.08.05
; By:   Insts: Nick Procter
;       Notes: Helen Twelftree
;       Pics: Anthony Day
;       Tape: All of above
; Instruments: Compass set #5 ; Clino set #5
; calibration as per previous day's effort
; ref.: 1999 NotKH survey book pp -

```

```

; ===== stations refindable to link to other surveys: =====

```

```

;*export

```

```

*calibrate tape +0.0 ; +ve if tape was too short, -ve if too long

```

```

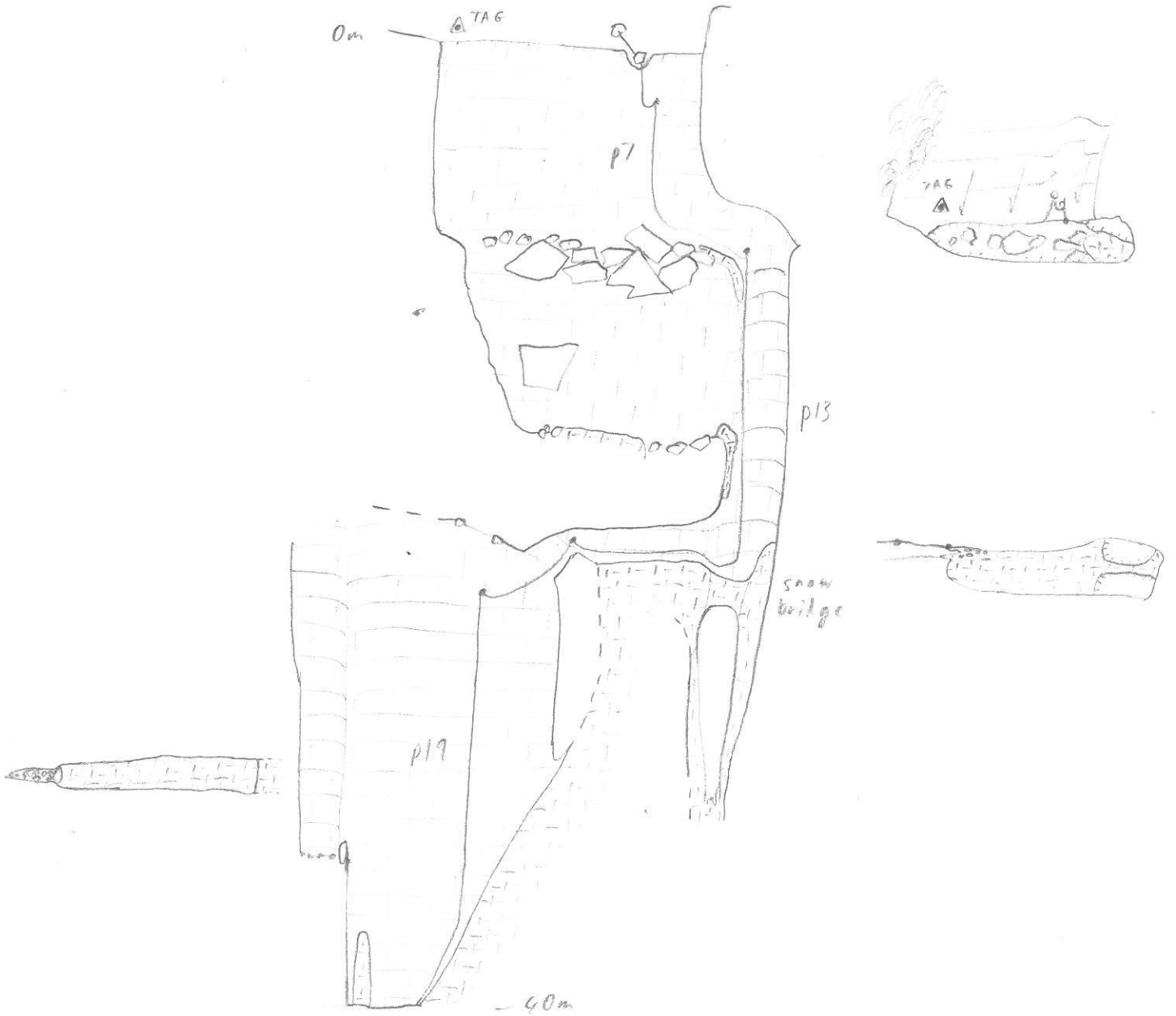
;from   to      tape   compass clino ; remarks
2       1       4.50   185    -19
3       2       2.43   262    -18
4       3       2.10   227    -25
5       4       4.24   121    +17
6       5       2.64   166    +43
6       7       4.44   037    +17
7       8       5.39   104    +21

```

```

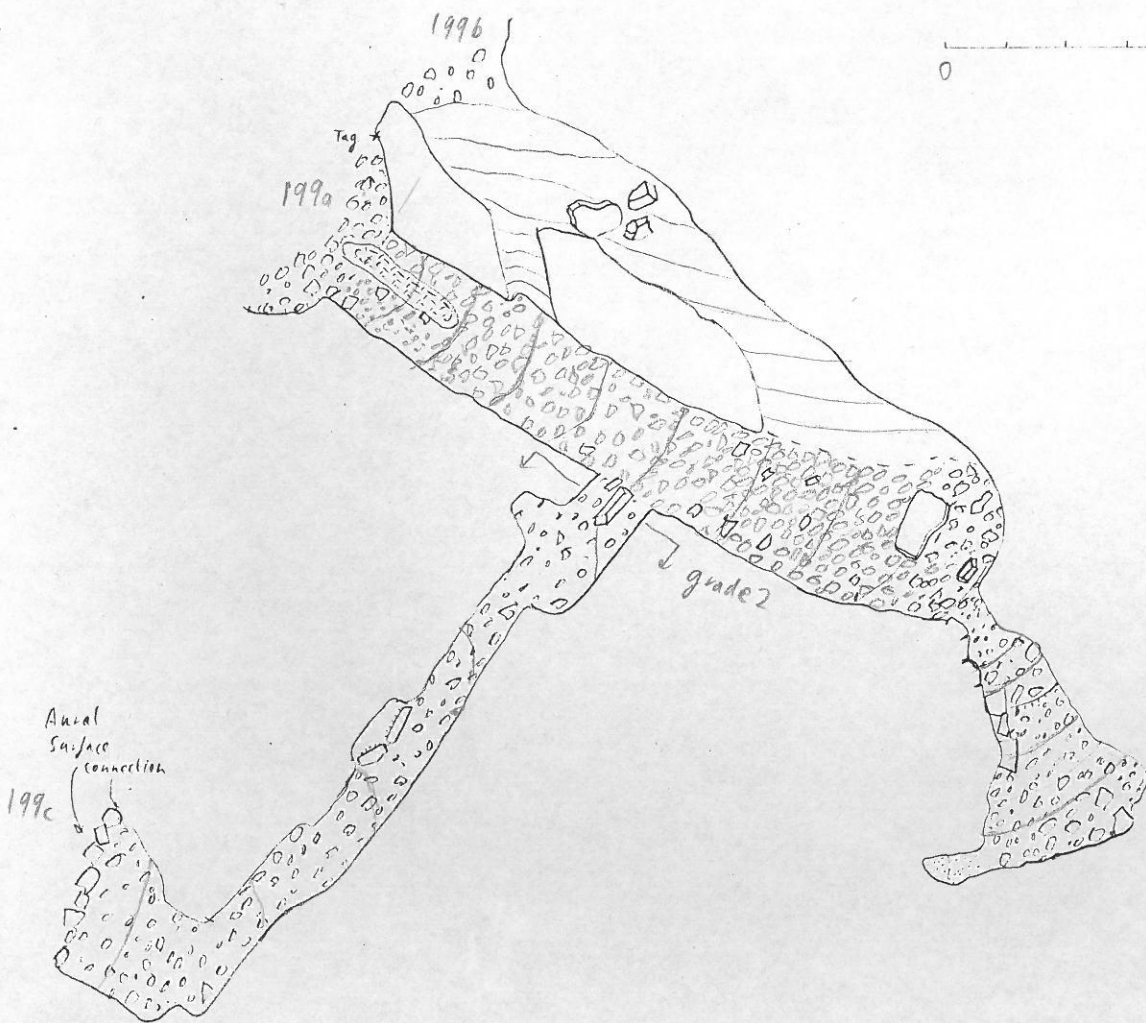
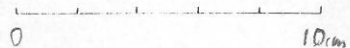
*end phreatic

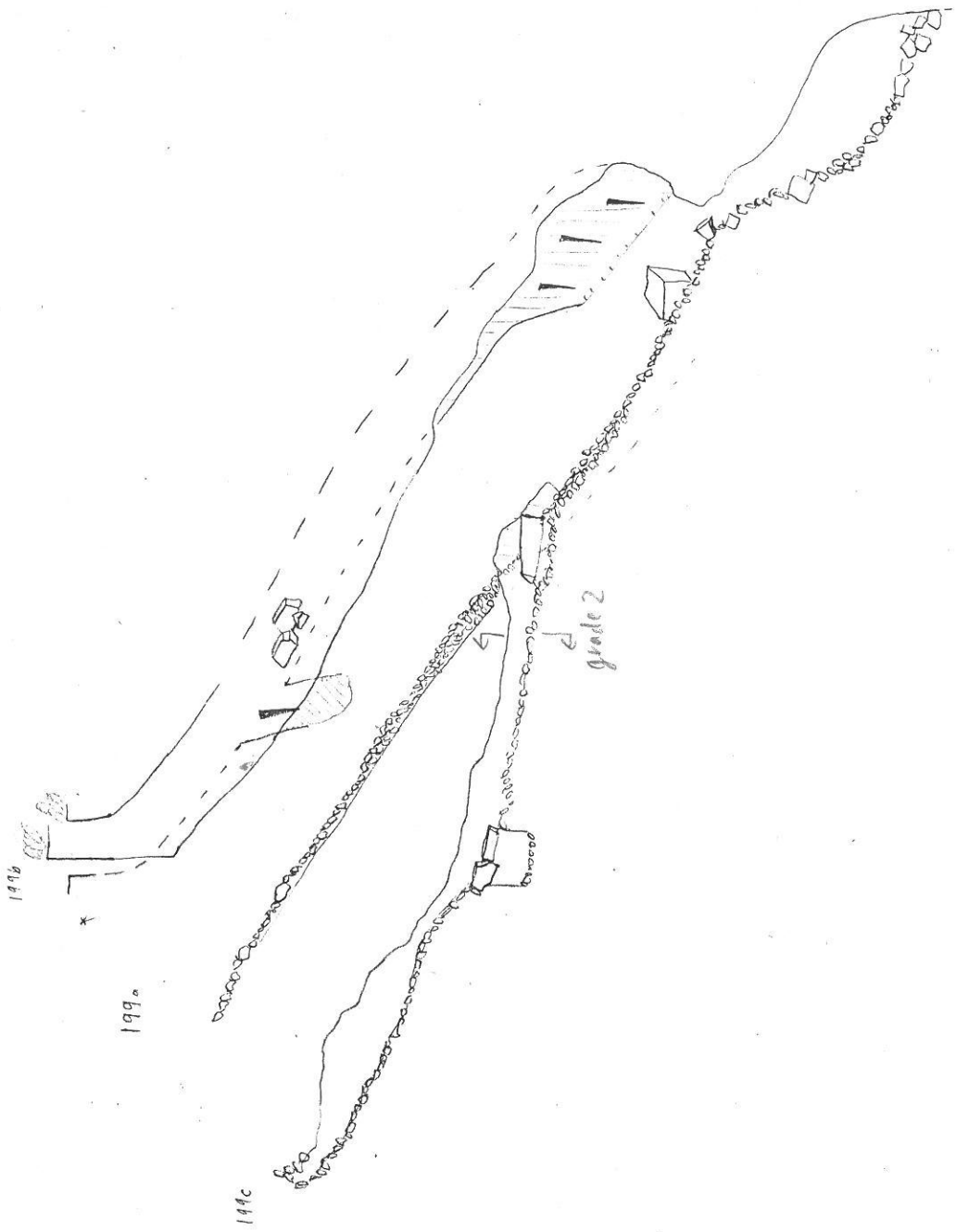
```



1623/200





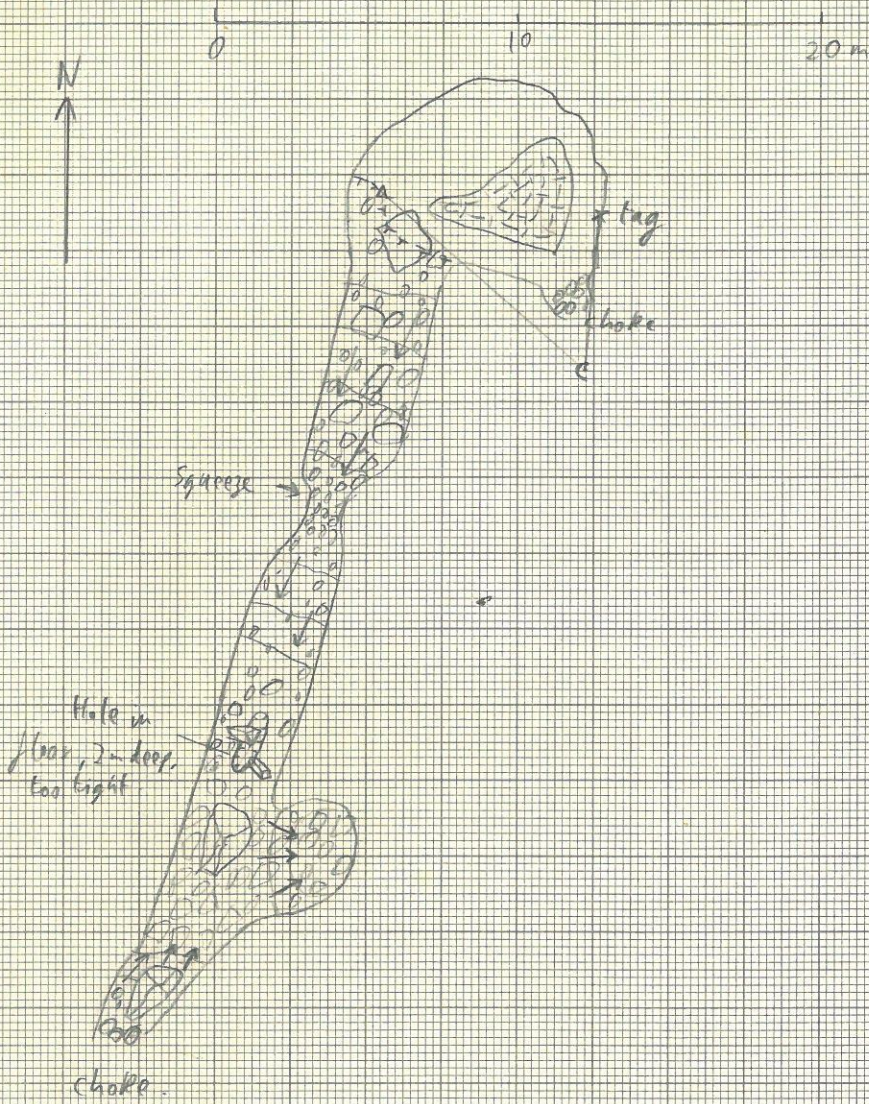


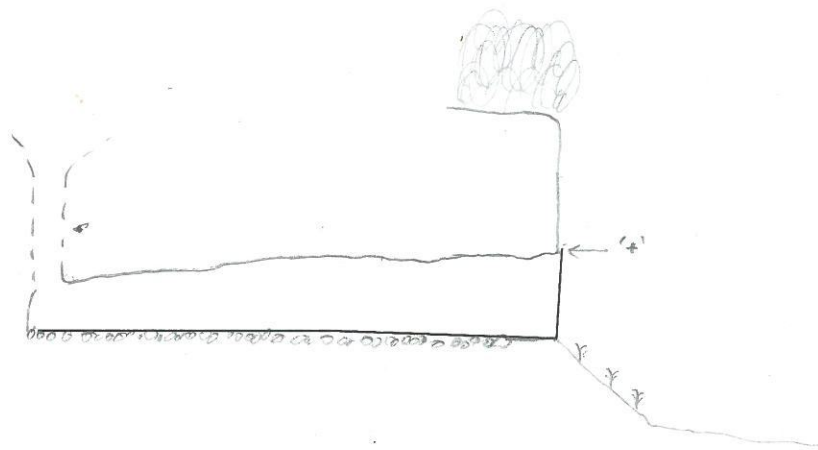


Lardner Festerers. (210)

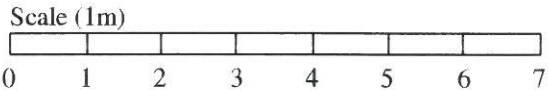
C=Calvin

BCRA Grade 2





wook2 16231207	Elevation on
Elevation	210°      030°
Scale 1:100	←——— ———→
View 300°	

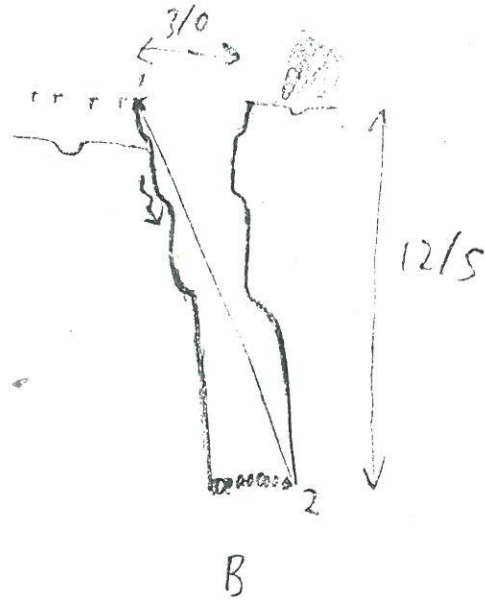
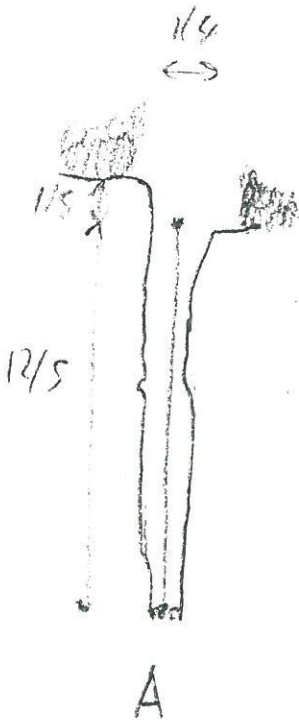
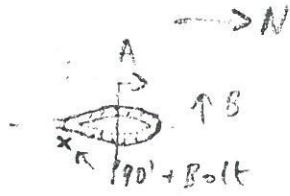


Survex 0.93 PostScript Printer Driver

1-2 13 0 -75

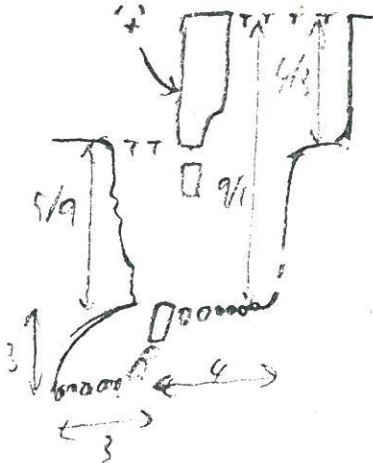
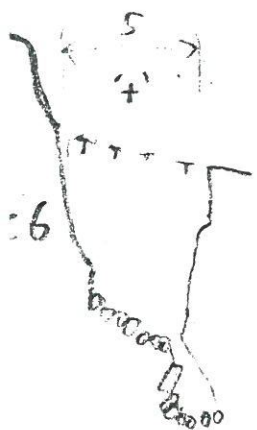
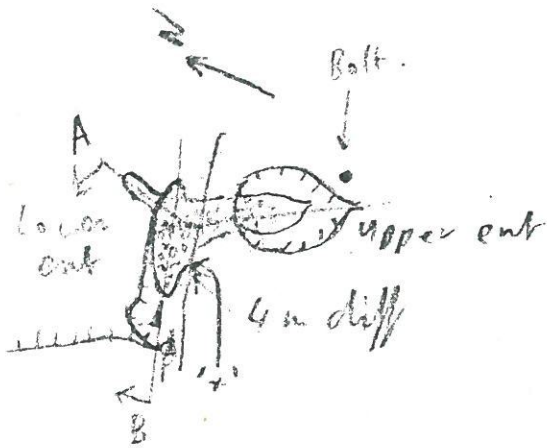
91

90

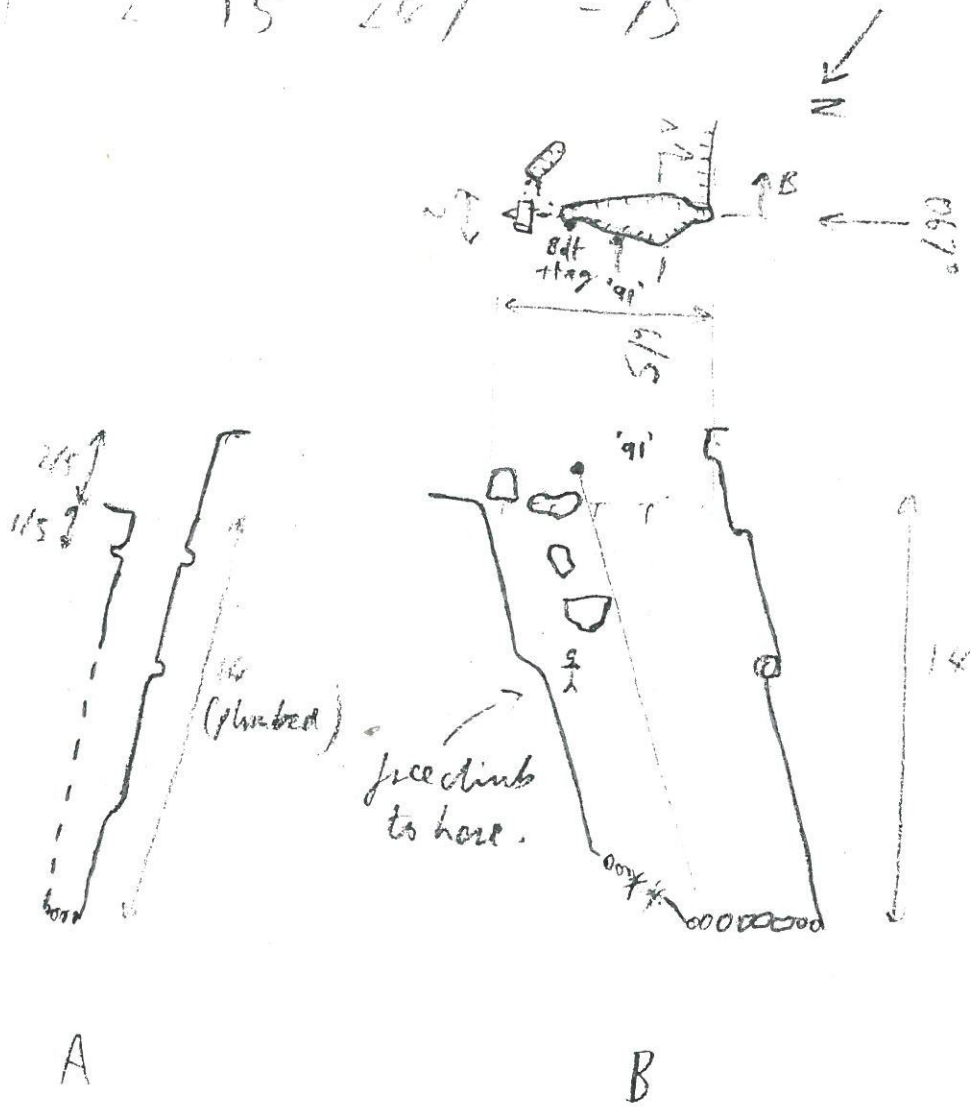


250  
1:500

WK3  
(=208)



Fate: 1 2 15 207 -75

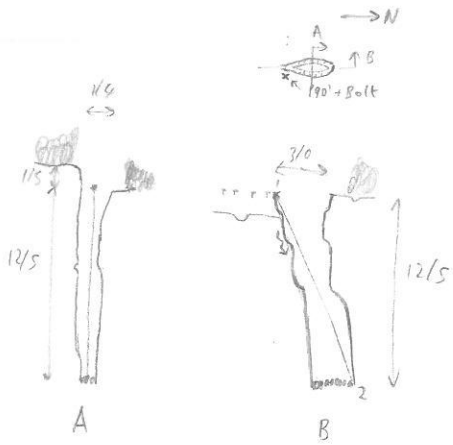


91

1:250

File: 1-2 13 0 -75

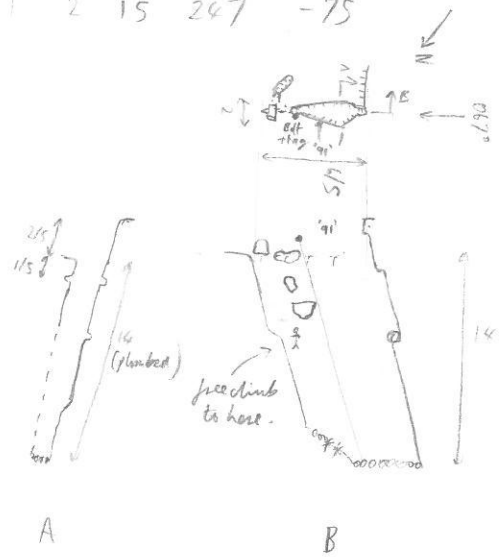
90



1:500

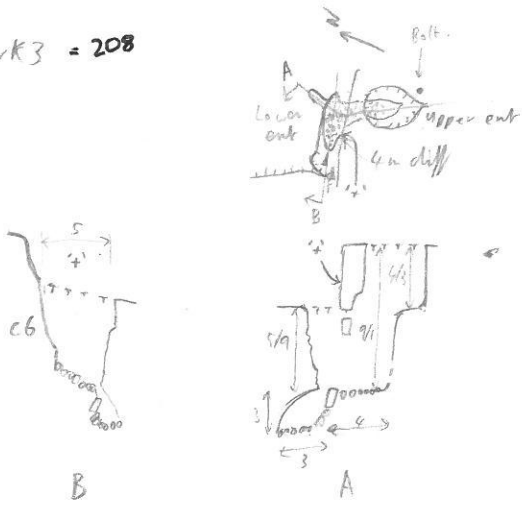
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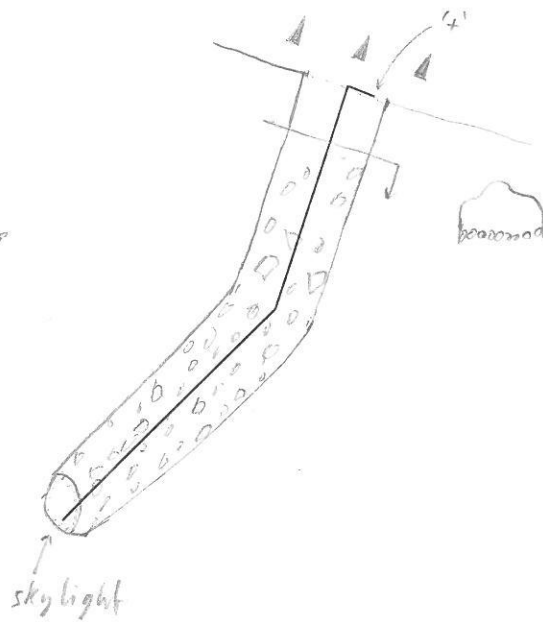


1:500

wk3 = 208

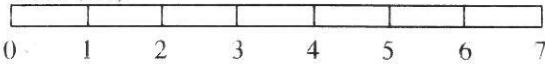


1:500



wook2	<p>North</p>
Plan view	
Scale 1:100	
Up page 000	

Scale (1m)



Survex 0.93 PostScript Printer Driver

1999-07-29 Boulder - Galt (205) surface survey

1999-07-26 North-Hop shale

1999-07-26 North-Hop shale (no data)

1999-07-21 Steinkobben shale Eureka area. (no data)

1999-07-30 Tanking Boulder blocks.

1999-08-03 Felsen (unrestacked)

1999-07-25 93-94 chert, 201 connection, 156 connection

1999-08-05 Steinbrüche shale Karbon connection

1999 Steinbrüche shale middle level plan

1999-07-28 138-136a-135 surface & 136a-136A (quartz)

1999-08-27 136A-139 surface

1999-08-07 Fingering - 9147

1999-08-03 Eshale: General alternative & shaly, carbon.

~~Eshale: shaly~~  
Eshale: Finest, shaly, carbon & shaly survey (see 1216)

1999-08-02 Eshale: Gray & wavy

1999-08-04 Eshale: Angle of Dangle

1999-08-05 Eshale: Eureka

1999-08-16 Eshale: Stern der Markt (Hauk group)

1999-08-22 Eshale: Spinnen pick-up / Koller gang (Hauk group)

1999-08-08 New Laid off: 0-6 → 76 → 76a → 99

1999-08-08 'Mt 188' = 990803 & 990804 → Lower TC.

1999-08-08 188 → Lower TC

1999-08-07 196

1999-08-09 Surf: 165 → 195 → 195 → 196

1999-10-31 Weisses Wary → 7-Eingangs (20) → 158 (ARGE)

1999-10-31 Groener Eingang (Eshale)

1999 Kollerschicht → 400 (Eshale)

1999-08-09 Stabridgen: Ariston 182, dome, record, noddy problem. Note 123-

73-74

75-77

78

79

80-81

82

83

84-86

87

88-89

90-91

91

92-92 (205)

95

96-97

98-100

101-103

104-106

107-108

109

110

111

112-113

114-115

116

117-119

120-122

Dunk = Tagged 'CUC 2000-08' (on way back from 204)

Tagged 'CUC 2000-09'

Tulia + Markin: Tagged 'CUC 1623/193'

Markin/Markis: Tagged B4



1999: 161e, f, c

Wook: Removed CUCC-1988-02 (incorrect tag)

Renumbered CUCC-1988-01 as ~~CUCC-1988-01~~ 201

<sup>put spit in</sup> Tagged @ 135 (put spit in, I think we tagged it too)

Renumbered CUCC-1987 (TBA) as 199

Tagged Laser 0/1 (near 201 & 156)

Brian/Beck: Nordalpa hohle (205) (as 'CUCC 9980-01')

O: Tagged 99, 105, ~~106~~ 88, 811<sup>(197)</sup> <sup>(198)</sup>

Anthony: Tagged 165, 180, 194, 195, 196

161c tagged

Dunk: Tagged 204

2000:

Andy/Al Wook: Moved 161a tag from rigging bolt to P161a (new spit)

Tagged <sup>'CUCC'</sup> 2000-02 ('plus' cave on ridge up to hntar - see '96 docs)

Tagged <sup>'CUCC'</sup> 2000-03 (Beyond 96-03, 02, 04 on way up to hntar summit)

Tagged <sup>'CUCC'</sup> 2000-04 (40 Right beam 145b)

Tagged wk6 & wk5 <sup>WORKS</sup> & <sup>'CUCC'</sup> WK5

Tagged '1999-10' (cave surveyed - to near 205)

Tagged 162 (R162) '1623/162'

Tagged 163 (new point above cave mouth) '1623/163'

Tagged 'VFM 1988' (aka '88H')

Tagged 145b (Not existing survey station)

Tagged 207 (wk2) <sup>WK</sup> '1996 1623/207'

Changed 'wk3' to 208 <sup>1623</sup> '1996, 1623/208'

Tagged '004A01' (between 1716 & 172)

~~Tagged~~ Changed '1993-01' to '1993 1623/200'

Brian/Beck: Tagged '1623/40e' (new point above cave mouth)

Tagged 'CUCC 2000-05' (new ent)

Tagged '1623/40h' (new spit)

Tagged 'CUCC 2000-06' (width 50) - (not at ent station) (new spit)

Tagged 'CUCC 2000-07' (new one along at foot of gallery)

# List of Caves marked or tagged

Wook's notes

1996:

171-176 all tagged by Sepp, Robert and Andy W.

164, 189, 190 " " " " " "

1996-01 to 1996-05 tagged by CUCC.

1997:

Dave M, ASD, AA, Juliet M tagged 136, 138, 139,

97-07 (formerly 'wk07') 97-08 (formerly wk 8, 9 & 10)

ASD - placed spit for tag at 161f. at 161e rock broke :-c

ASD - placed spit for tag at 180, tagged 191, tagged 186.

1998:

Andy W tagged 1976-B8 and 1976-B11, 1623/100

MB spits

MB stud + epoxy.

tagged 156 (1987), Tumbling Boulder Hole CUCC-1987-01 and CUCC-1998-01

tagged 101, 103 and almost 102 all three with MB stud + epoxy.

tagged 102, <sup>1623/102 CUCC 1977</sup> CUCC-1997-01

Wookey tagged CUCC-1998-01 again as CUCC-1998-02 (sigh)

Wookey tagged 90, 91, 93, 94 and 159.

Andy untagged 159 and re-tagged it as 160, since found 159 with a painted number - was correctly tagged 159.

Andy tagged 1998-03

Andy tagged 80, 82, 148, 107 and laser point 0-5

161b, d, e, f Tagged

List of Caves tagged