

1996
TOP CAMP
LOG

DUCK

Grasshopper

1996

TOP CAMP LOG BOOK



Monday 8th July

OXFORD UNIVERSITY
CAVE CLUB
LIBRARY

There is no longer 2 inches of snow at top camp. It's still too damp to pitch the top camp tent but the stash has been collected, and almost all its contents survived; water has been collected from the stream in the valley (the remains of yesterday's storms & snow); and radio contact was established with Pauline at base camp, on the first attempt. It's now 5.15pm and everyone else has set off for base camp - and pancakes!

John & Anita.

Thursday 11th July

Finally found Torca del Vasco, the photo was far more useful than the co-ordinates. The entrance is now gained on a bearing of 338° from the cairn we've just built on the peak knoll on the true left of top camp.

Alex & I (Michael) decided not to wait around for anyone to turn up & took a bag full of rope down to the cave & intending to ring the first 3 pitches. 1st pitch is 30m down besides a snow cone, then through a bit of a rift to the 2nd pitch (18m).

The top of this pitch has some terrible rock, and it took some time to put down 4 bolts in, there are 9 bolts from the previous Spanish exploration but they didn't look that attractive to use. Climb down then 3 bolts across a traverse and a final bolt at the top of the 7m 3rd pitch. Before we decided we had had enough and came out for dinner.

(2)

12th July 1996.

Thick Blue clay at 200 000 ft in all directions. Beautiful. 2nd dip left for Tdel V, Andy writhing with many new ~~gear~~ gear: you could almost see Andy rubbing his hands in the background... Pitchhead a bit chorny, but it looks a fine entrance

• Note - the spring in Vega Aliseda is running, if slowly.

• Today's GPS estimate of Top camp (frangole).

UTM System.

0342018

7 satchets

4788209.

Plus.

12th July

E12

Alex & Nobby

Rigged the first pitch and the climb which was as loose and muddy as ever. The climb opens out over a rift which we descended down a couple of short drops. The rift then goes round a right corner which was blocked by the bits which had fallen down the climb. We started kicking these through a hole in the floor but Alex dislodged a large chunk of the wall which is now blocking the way on.

12 July

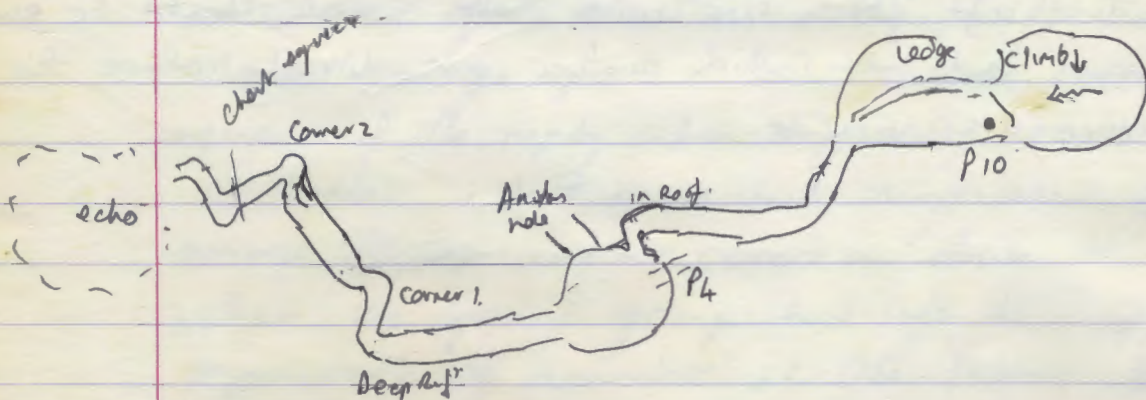
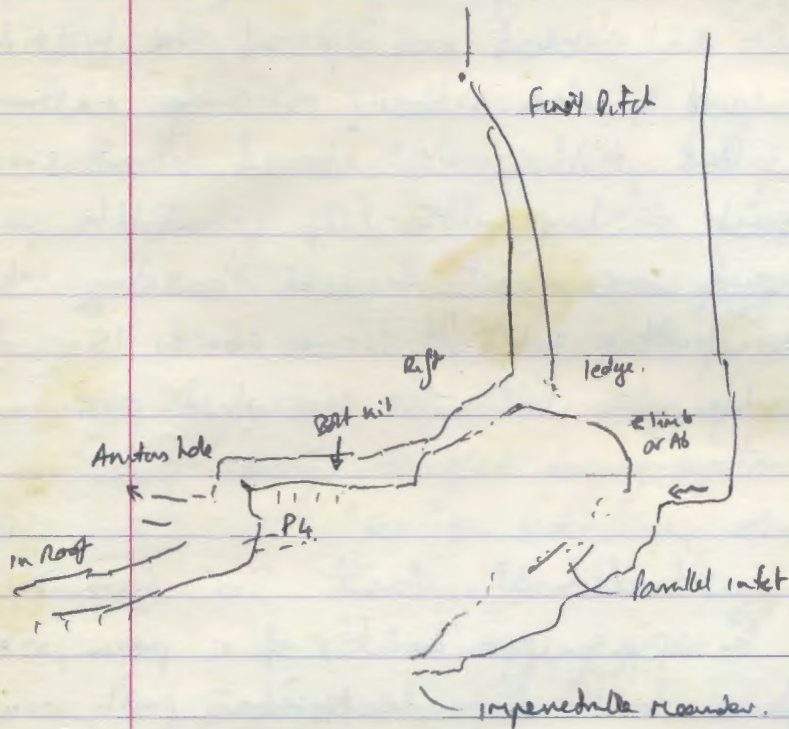
Torca del Vasco

Pauline, Michael, Andy

We rigged on down the next 4 pitches. I managed 2 Y-hangs which I found very satisfying. Team 2 arrived as I was debated the soundness of a 12-year old Posiferno bolt, then Michael headed out with all the remaining rigging gear while I put in a new bolt. Using Andy as an amplifier we managed to curtail the exit of the rigging^{gear} from the cave - now 3 pitches up. ~~the~~ Michael and I met halfway and then I took it down to ~~the~~ Jason. Their aim would be a bit stuffed without the gear! ~~When~~ It hadn't occurred

to them to bring an extra rope, just in case there is a new pitch at the bottom. by now I expect they've rigged to the bottom by now and I wonder what they've found...

Tim's ~~Grade 1~~
of end of Tide v.



- 1) head along rift at roof level.
- or 2) hammer down near 2nd corner.

(4)

Michael, Anita

13 July

Shaft bashing on the
other side of Vega de Aliseda

Having seen off Alex & Olly into the unknown depths of T de V, Michael & I climbed on top of the hillside opposite Top Camp and started exploring morning eastwards. Found many holes but most were choked about 5-10m down. We covered quite a large area (top & middle part of the hillside) and were about to call it a day when Michael spotted a drafting hole. It seems about 15m deep and worth checking out with the aid of a rope.

How to get there?

The entrance is situated at about 20° from Top Camp, to the right of a spiky rock on top of a peak, visible from here. Go down to the Vega de Aliseda path, continue for another 20m from the cairn at the start of the climb and there is another cairn at which you turn right. Follow the valley going NW and climb on top of "peak" to the left. There is a cairn there which should be quite obvious and from which another one, directly above the cave entrance, is visible.

12th July, Torva del vaso - wave 2 or, "Rigging a Spanish cave in day"

Jason, Anita and Tom followed team 1 into TdV in the afternoon with the aim of finishing rigging to the bottom of the known cave and, who knows, beyond... we met Pamire bottoming the 7th pitch, yet another beautifully belated shaft, Andy shivering in his beacon-line shiny new gear, and Michael about to head out with a punnik bag of rigging gear. It's a nasty scratchy bit of rift that enters onto the head of the 7th, just the place for wires, hangers, mantles, and other essential pieces of gear for rigging caves to get stuck on uninteresting little pieces of rock ready for hammering. Anyway, Pamire slipped through, conspicuously short of things to get hung up on.

"see you later then, she said"

"Can I have the rigging gear?" I queried

"What rigging gear? Didn't you bring your own?"

Jason and Anita were clearly thinking the same thing.

"No, Michael said he'd bring it. Where's Michael?"

By this time, Michael was out of earshot somewhere on the 5th pitch. Andy, who was halfway up the 6th, ~~as a result~~ offered to act as relay station and passed shouted messages up. "Oh Bellocos!" was the essence of the reply when it finally arrived.

How, I don't know, but sufficient gear finally arrived ~~later~~ and we roared on down to see just what the Spanish group had left as "apparently unyieldable ~~if~~ recorder" at the bottom. ~~2~~ The 50m 8th pitch is lovely, then a ~~10m~~ 10m whuffle rigged on a 20m rope. The last. No more rope. Why didn't we bring any more rope? Well you wouldn't would you? Go pushing in a cave with your rope, after all. There might be nothing round the next corner.

(6)

The three of us agreed. The English translation of "impenetrable meander" is "impenetrable meander" Harkney draught. Shame.

But half way down the 9th, Anita had ~~passed~~ poked into a high level rift, and Jason was soon back onto it rearing a lippen. Soon we were at another pitch - a lippen we had? But a rope we certainly didn't. "Oh bellorens!" The spare rope was still in Mictos's tackle bag. Well, you wouldn't leave a spare rope with the jinking fear would you - there might be nothing round the next corner.

But Jason is a cunning soul, and soon he was stretching the end of the 20m rope on the last pitch to try a ~~to~~ make stuff alright. Just reached - no problems. Anita looked up a high level window, whilst Jason and I squeezed and hammered our way round a series of sparkling rift corners. After I fumbled my thumb for a rock spine and delivered a nice hammer blow, we decided to leave it with a parallel corner ahead, a draught, and an echo. Alex and Oly are down there now - ----

Tiss

Bread

Chenizo / Salami.

Edge Spanner a One Sharp - T-bag - ductor
chocolate.

Rice.

Veg / eggs.

13/7/96

(17)

- 11.00pm Alex, Oli overdue for callout from Torca del Vasco
- 11.00pm Tim, Jason leave with:
1st wave medical kit and 1st wave rescue kit
Anita goes to cave entrance
- 11.15pm Pauline goes to top of hill to look for lights
2nd wave begin to prepare crawling gear
- 11.20pm Word from Anita to Pauline that Alex is slow (!) - no other problems reported
- 11.25pm Pauline goes up the hill again.
- 11.40pm Pauline reports 4 lights returning from cave
2nd wave stand down
- 11.50pm All returned. Rescue stand down

14th July 1996. 9am Radio call worked fine. Gas bottle + Rigging tape ordered. Michael excited at news that TdeV is going and not through the squences. The hillides are ~~also~~ echoing with the sound of the juveniles mountain club - 20 of them.

GPS - Base time....	1 st	2 nd
Today's Top Camp Reading in UTM	0341979	- 0342021
	4788243	- 4788231
6 satellites.	Altitude estimate	1385 - 1365

(8)

Estimated coordinates for Caves E

Direct reading on 13/7/96

C3 — 0342635
4797846

Direct reading on 13/7/96

C4 — 0342607
4788093

Direct reading on 13/7/96

Quintern — 0342892
4788728

~~1/8~~

Estimated Buntia for Quintern, using Woodcock's bearings
calculated from surface survey to 1/8

1/8 — 0342608
4789256

To be brought from base camp (14/7/96)

- 20m ropes
- toilet paper

13 July

CH

Pauline and Andy.

Well, I had a bit of a battle, whether rigging this cave was for the good of the expedition and would further the aim of understanding the C9 drainage or whether it was becoming a personal project, ~~because~~ ^{because} I had been ~~not~~ wanting to rig this cave since last year when I reached the bottom of the 2nd pitch. ~~The~~ The pitches are nice, ~~as~~ there is a draft, and I could hear water. By 6pm the battle was resolved, I was changed and Tim and Jason were watching us go down the entrance.

I had a bad rigging day. I just couldn't work it out, but we got to the bottom in 2 hours. The big pitch was very scary and I ~~think~~ ~~found~~ felt very strong out. [A day later, it turns out that the bolts I put in were bang on, but 37m of nothing is a bit of a buzz].

So we got to the bottom of the big pitch. While Andy was coming down, I checked out the rift ~~where~~ where the water goes, but that was no good. Then I climbed up to the ledge and looked along the rift. Andy had the ladder which Proc U says is needed for the final pitch, so I looked for a route that needed no rigging, passing over a hole in floor. Andy caught up while I was moving rocks from the continuation of the rift. I eased myself through fortunately not onto a pitch. A bit further on there was a 6m drop. I couldn't be sure that it didn't connect with the bottom of ~~there~~ the ~~the~~ ladder pitch because we didn't have the time to find out, but my feeling was that we were much further on ~~in~~ in the rift than ~~the~~ ~~had~~ had been reached before. We rushed out, to a brilliant sunset. "I think we've found the way on" I said, back at camp, but it got overshadowed by the rescue callout that had just been breached Pauline

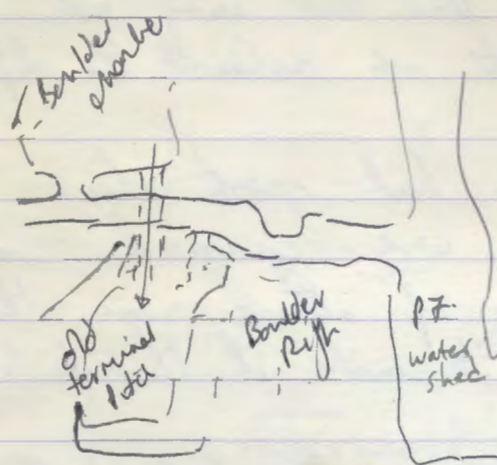
Space, the final frontier
here's life Jim, &
don't we know it

(10)

14th July Tim, Pauline, Andy - C4

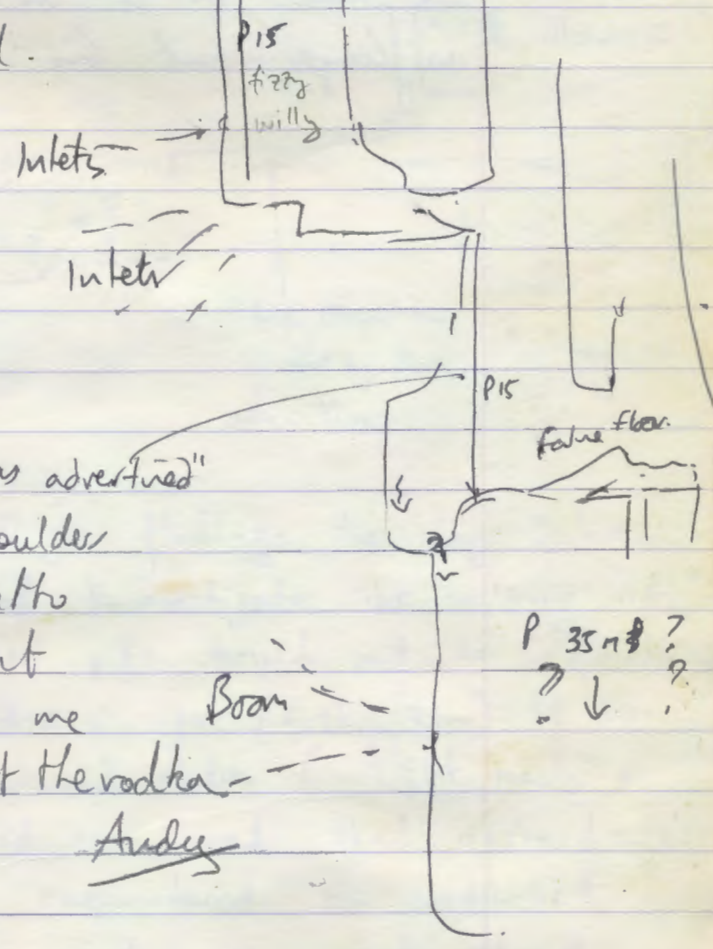
Quick thanks to Alex for going on a bit of an epic and hence to base camp as I was contemplating going down then. Fortunately I stayed and had my best caving trip yet. The 1st trip with Pauline to C4 was a bit frustrating, just as the way on was found we had to head out so I was keen to get back. My vision of straight down the cave to the new pitch didn't quite happen as Tim's re-rigging of the cave seemed to take longer than the original rig in (and made the cave more challenging to get out of), but I did pick up some good rigging tips. Finally at the bottom and off into the rift to catch up with the others, SR that off and $\frac{1}{2}$ way through the tight section there a definite burning smell, quickly wriggle through releasing a flaming carbide hose to wave around the rift. It never quite recovered leaving me with the nagging doubt through the rest of the trip as to whether my head was on fire. 1st new pitch rigged with great excitement down to the 2nd pretty much straight away and you could see the cave was really opening up. Pauline rigged, Tim piced and I smouldered gently and soon we were ^{going} ~~down~~ again. I got the chance to head off first - it's a major buzz being the first person ever to walk there, followed the sound of dripping water and found another pitch down into another big chamber, magic! While Tim rigged me and Pauline had a poke around to try and find a bypass to the pitch, no way through on the main boulder chocked floor but Pauline got down into a rift in the floor which soon opened out over the same chamber beneath. Followed the passage around and ^{looked} up a climb, both stopped fairly soon; major inlets seemed to be coming in from the roof. Down the 3rd new pitch and

14th July ~~from~~ Tim's grade 1 of 4 discoveries.



Tim finds a ~30m+ pitch
 down a short climb by a pool.
 and carries out intensive
 scientific research into the
 gravity field within it.

Check the other way off
 the chamber and find a
 rather alarming no. of
 holes in the "floor" "as advertised"
 which is in fact false, boulder
 jammed in the left retreat to
 safer ground and head out
 having found more than we
 could have hoped for, but not the vodka.



Andy

John: Some screw naturally, really easily, others are
 a much harder screw...

↑
 ↓
 ?

(12)

13th July

Obly, Alex

Tona del Vesco

The execution of this trip may not have been text-book stuff, but we achieved the objective: we found the way on.

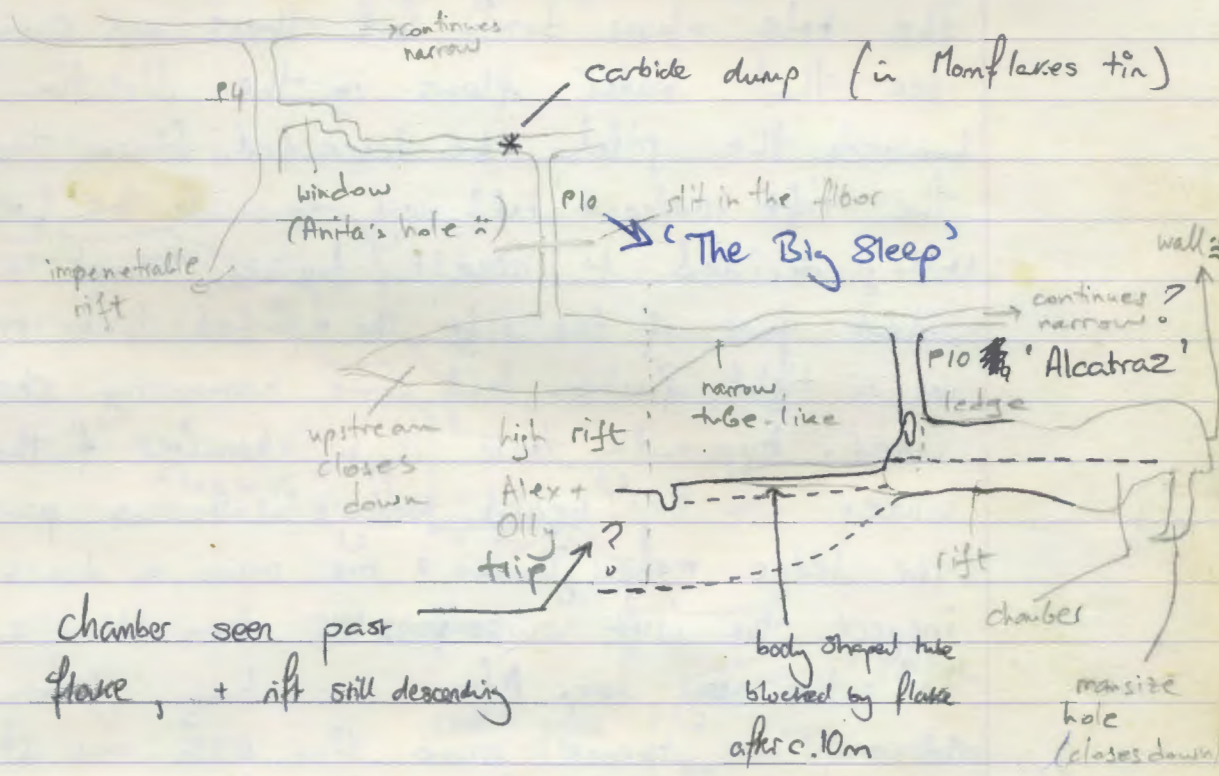
The previous trip had spent time pushing a tight rift which they were convinced was the way on. Our first line of attack was therefore to try hammering the rift to make it through to the passage beyond.

After waiting an hour getting lost half way down, we made it to the bottom only to discover that Alex no longer had his SET hot on him.

14/7

Torca del Vasco - Nobby, Jason, Anita

† 'Alcatraz':
- there's a bloody big rock there, and only one person has ever got out



Encouraged by Alex's & Ollie's findings the day before, team B-Tim + Nobby set off to investigate the "walking rift" at the ^{current} end of T. del V. The rift turned out to be of walking size only as far as A. & O. got (first 3m). It then immediately becomes an awkward tube (tight, nasty + difficult). I went forward, convinced that yesterday's trip went along it but encountered an untouched muddy slope. It is fun on the way out, though, you just slide down. A couple more tight corners (nothing like the Fierce Ladies, ~~and~~ thankfully) and there was a hole on the right hand side! A pitch or a climb? We tied a rope to two naturals and I lowered myself down into a huge rift, landing on a ledge.

(14)

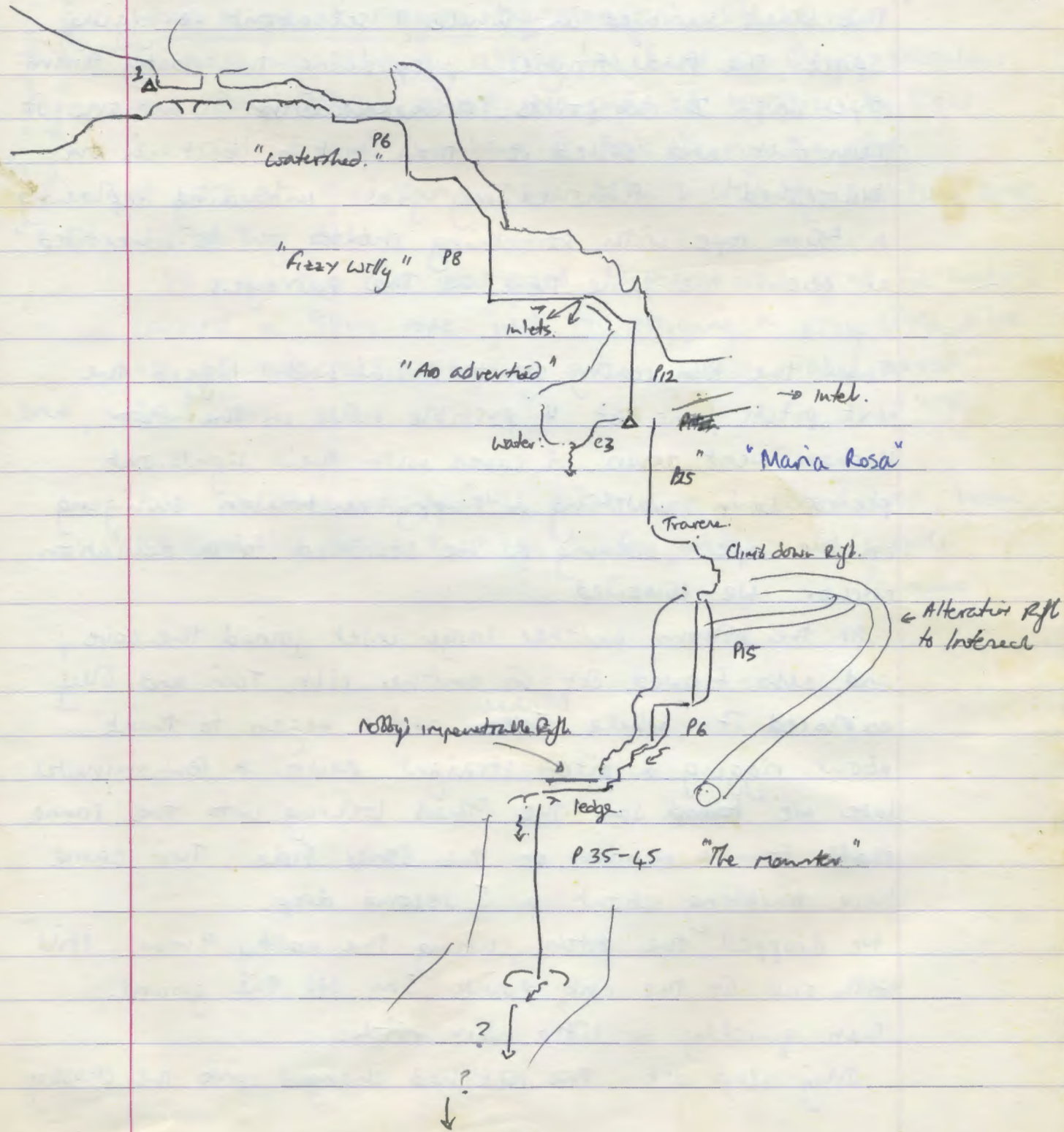
Despite its size, I didn't feel terribly excited. Only a few corners on, the rift ends as a very tall chamber, with possibly a pitch head on its top. Within the chamber there is a hole about 5m deep, large enough to climb down. Water is flowing into that hole, down chamber walls. The hole closes down but there was enough space to see that water flows in the direction of the rift, towards the pitch we descended. Since the ledge of the rift is about half way down to the bottom of the rift, Nobby decided to abseil further, through a very narrow widest part of the rift. He reported that rift continues in a tight fashion, but some hammering should make it wider. Apparently, there is a chamber further on and water can be heard. Nobby's laborious pushing up to the ledge made Jason & me make a decision not to inspect the rift ourselves. We took Nobby's word that that's the way on. After converting Jason into tuna admirer, we turned round. Our ETB was still long way away and Jason got infected by a "bolting bug" so I spent about an hour waiting on the safe side of the narrow bits while Jason and Nobby put in four bolts on some of the oucc pitches, and also replaced some of the rusty Spanish Bolts. Way out was a little slow due to tightening of nuts on some bolts. But we came out with a feeling of having had a good and successful trip.

Anita

15th July 1996. L4. Tim, Pauline, Elly, Michael.

Back 3:30 AM. Fuck does elgo.

fuck it does!



(16)

16th July 1996

GPS reading at Top Camp. in UTM.

0841998

4788213

Altitude 1830m.

15th July 1996

Lanline, Oly, Michael, Tim. Cf.

The story so far...

The others surveyed in, while I set about rerigging 'Space, the final frontier', replacing the nasty 9mm rope with 2 rub points. ~~unmeasured it~~ I cut one of them out and coiled it, then put a bolt in on 'Watershed'. I finished my jobs, including replacing a 40m rope with something shorter on 'As advertised' at about the same time as the surveyors.

Then the fun really started. Tim and I rigged the next pitch, one of 4 possible holes in the floor, and Michael went down. 3 caves with their lights out peered down, watching a happy Australian swinging on the rope, swinging as he searched for a deviation anchor. We followed.

At the bottom another large inlet joined the cave, and also flowed off in another rift. Tim and Oly explored it, while ~~Michael~~ ^{Michael} and I began to think about rigging a pitch straight down. A few minutes later we ~~noticed~~ saw the others looking into the same shaft from a window on the other side. Tim came back burbling about a 5 second drop.

We dropped the pitch, using the nasty 9mm, still with one of the rub points 5m off the ground.

Then quickly a little 5m pitch.

Oly lead off. The rock had changed into the chassy

The 5 second drop I was "choking" about
never for a different in all!

brown stuff. The rift got smaller, as it always does in this type of rock, and Oly said he thought the 'journey's coming to an end'. Moments later we climbed out onto a ledge ~~at~~ part way down a massive ~~a~~ pitch. So we called it 'Nobby's impenetrable rift' because Oly found it.

The pitch head was very chossy, and Tim wanted to have a go at rigging 'the monster'. Off he went?

Michael was already resting his head on Oly's shoulder and Oly looked asleep. We cuddled together to fight the cold during the hour it took to rig the pitch.

It was at the same time both incredibly exciting and incredibly dull.

So, all the rope was used. Michael was glad he hadn't carried a 90m rope just for rigging a proxy little pitch. We got warmed up going out, which takes about 2 hrs now.

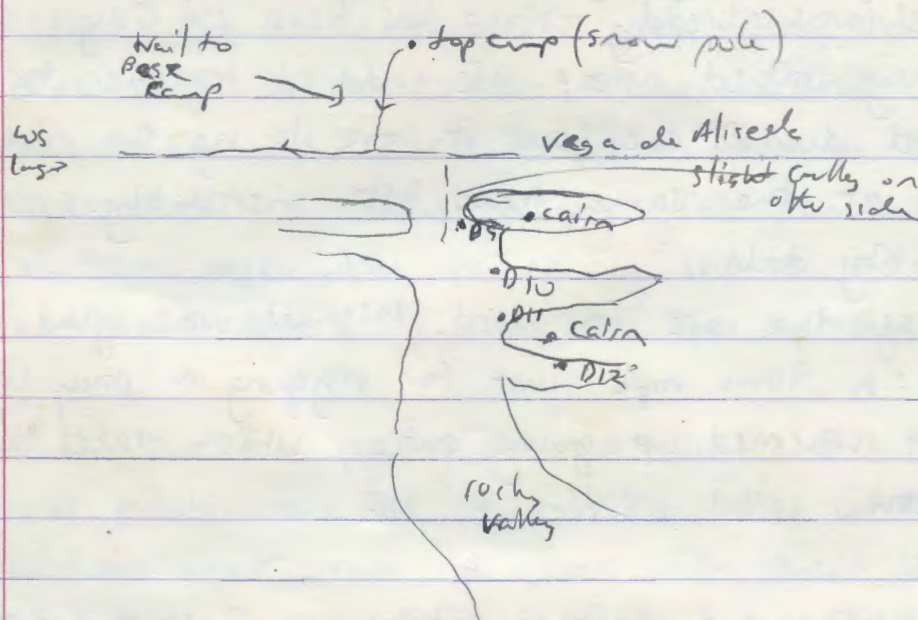
And at the end another pitch - a 2 second drop, boom, followed by booms that go on for another 6 seconds.

Pauline

(18)

GPS reading on snow pole 16/7/95 7pm
0342021 1895 ALT
4788260

16th July 1995 - Michael & Maria Shaff Baskins
we crossed the Vega de Aliseda to the ridge on
the other side (where Anita & I had found a shaft a few
days ago)



9 caves were tagged and are described as follows

D9 (A & B) 2 shafts 20-25 ft deep

GPS reading 0342122 4788681 altitude 1717

Compass bearing to snow pole 208°, 172° to Verdelluenga. 110° to Sulltayu

Collection of shafts in bare sloping rock on RHS of gully

Good digging potential at base of 25' shaft below many eye holes - draughts.

D10 chamber 6m wide/long - dry good potential cache
just around corner from D9. No potential for digging

D11 2m climb down into disused hollow. 5m further on from
D10. somewhat "optimistic" to say it has digging potential a
further 5m ^{climb} down a slot under wall
C.P.S 1801 0342170 4788772

712 - (The sheriff Anita & I heard found)

at Base of cliff on RHS of side Gully (backing down into the main Gully system) we have built a cairn on high point directly above it. 25ft shaft into 4x6m chamber. Trickle of water in one corner & hole in floor to v. small canyon. Potential - none... although we did feel a very distinct breeze on the first visit.

GPS 039 2111 478 8835 altitude 1765
verdellugan 1720
Puña Santa ~~Est~~ nel 228°.

DS still has by far the largest & coldest draught around...

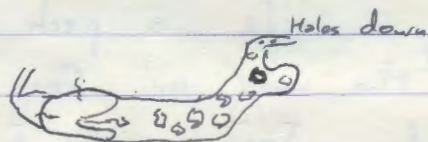
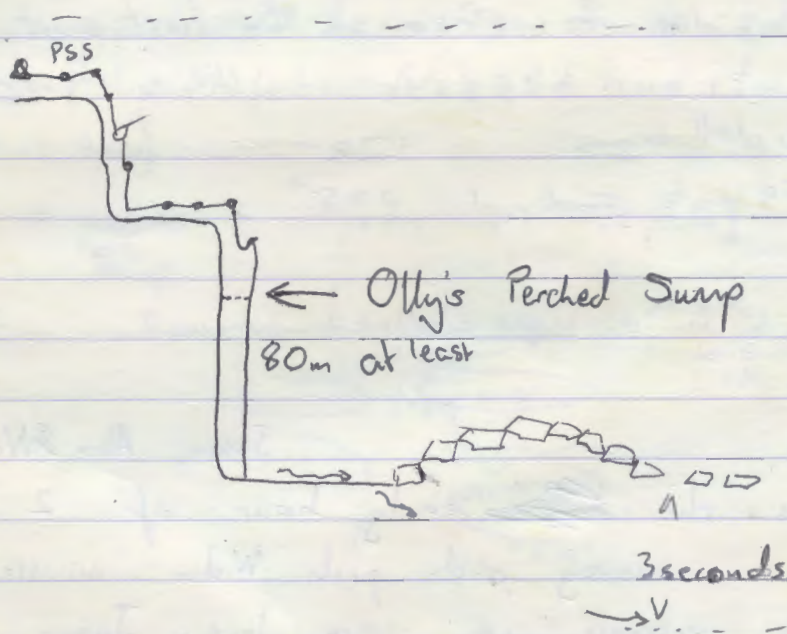
16/7 C4 Jason, Alex & Nobby
Set off at the ~~late~~ early hour of 2 in the afternoon to survey and push. Within minutes of leaving the entrance we were lost. Jason had found a climb up to a rift a pitch early, so Nobby was sent to check 'the way on'. Once Nobby was well and truly wedged Jason and I found the next pitch and carried on up the correct climb and rift.

On down the cave, tightening bolts as we went, to the permanent survey station. Here Jason left us ~~to~~ rerigged the last pitch we had come down whilst we survey. Much later he came down to say he had enough for the day, little knowing what lay after the survey.

Beyond lay the Monster. Initially we rigged the second part of the pitch off the tail of the previous pitch but this was far too short. Soon we had an 80m ish free hang and where stomping down big passage. The passage splits in

(20)

two, right appears to be an aven, left leads down to a rift which is partly chocked with boulders. Holes in the boulders give a three second drop to a streamway.



I tightened the bolt on the rebelay above the slackness and peered down through the stream. 'I don't think I'll bother coming down,' Alex had said. We had figured that the rope used for the top half would probably be long enough - after all, there was about 40m left and we had only used a bit on a 3 bolt traverse...

Not even close. I watched the knot in the bottom slowly approach me, willing the floor to appear, until I hung on the end and could go no further. Suddenly I could see, about 30 ft below me, a sump pool with the tell-tale thick ring of froth around the side. Arse arse arse.

So that's probably it, then. Oh well - I suppose there

might be a way over or round it, so we might as well
chuck the big rope down. Looks pretty terminal though.

We conferred glumly at the top, rerigged and I went down.

AND DOWN

AND DOWN

AND DOWN AND DOWN AND DOWN

About 1/3 of the way down I passed a huge
'tell-tale' band of calcite or quartz or something about
a foot thick! I squealed and kept going.

When I reached the floor there was about a prussic
bagfull worth of rope coiled on the bottom. I just ran
around yelping, and screaming at Alex to come down.

Watching him come down the 85m freehang was incredible

We moved through the bottom of huge over after huge over,
unable to believe it, without once seeing the roof

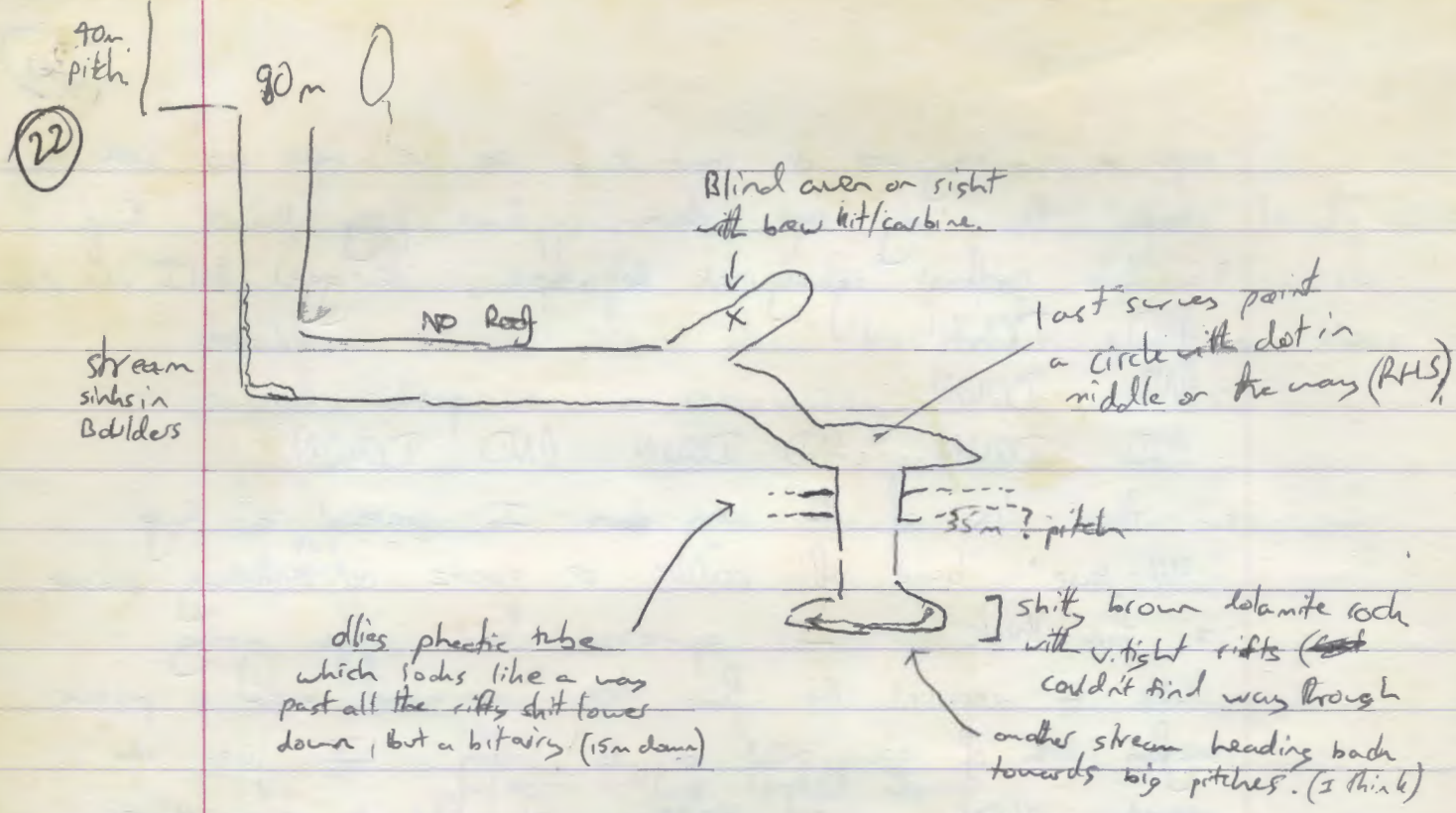
Two ways on led off from a 'chamber' at the top of
a boulder slope. The right hand way led to a choked
over. The left hand led down a slope to a rift
partially filled with rocks. Alex lobbed some down and we
both started yelping again - 3 second drop into a

streamway again. Its wide open, and HUGE
Depth through hysteria. - Out by dawn (just)

Nobby.

1717 E1Z Nobby, Andy

There are no ropes in this cave
- Andy



17/7 Michael, Anita & Ollic

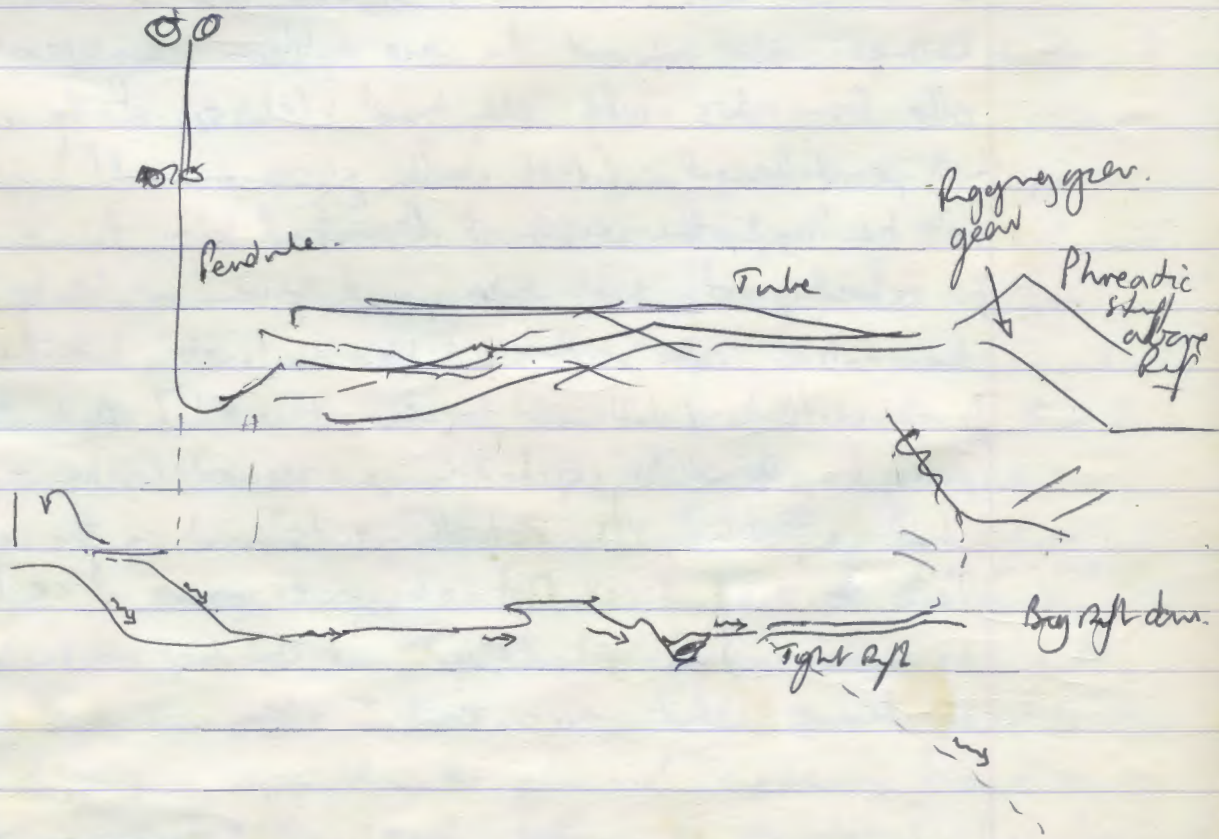
After the amazing tales of monster pitches & 80m shafts I decided to go the whole hog & take a 80m, 20m & 10m rope underground plus a huge variety of rigging gear. So with 3 porters in tow carrying bulging cave packs we trudged up the hill and entered the cave at the respectable (so I am told) time of 3pm. We stuck a second bolt at the top of the 10m pitch (immediately beyond the rift where Pauline had moved the rocks to find the way on), so it now has a backup. Otherwise we proceeded in good order to the top of the monster ~~pitch~~ pitch where we began to survey. We measured the length of the monster pitch ^(38m from bolt over to top) and "Ollic's perched sump" (76m ~~from~~ ^{freehang} from the last bolt) [Note both have about another 5m up over the lip to the top of the pitch] by dropping a rope down the pitch and measuring how much rope was needed to reach bottom. The Monster & Ollic's Perched Sump pitches are incredible - they completely blew me away. I must ~~with~~ congratulate Alex & Nobby on the rigging of the 80m pitch it was v. well done and showed great imagination. We surveyed the horizontal passage at the bottom. I did not take any cross-sections as in all cases it was a rocky floor & straight vertical walls which stretched away to eternity. Nowhere is the roof in

sight the blind area marked on the map, is dry, warm and well situated for a brew-up site (and bivouac site if needed - say in a flood), so we set one up & had dinner. Certainly a highlight of my trip! while Anita & I surveyed the no roof section Ollie rigged the next pitch which we estimate to be 35-40m - free hang all the way. At the bottom, disparate the rock changed to shifty, crumbly brown dolomite rock & the cone entered a narrow, very narrow rift. We climbed & squeezed & got wet & agonised but no luck, we seemed to have killed the cone. Ollie prussiked up & did a pendulum into a wide bit of rift about 15m from the top. He says it has potential for being a way through the rift & I believe him unfortunately by the time it was felt prudent to make our way out. The one problem was extracting Ollie from his rift. He had let go of the rope when he pendulumed in (Not really recommended!) and I ended up hauling up the rope & ~~throwing~~^{throwing} him the end as I prussiked past. We have not given up hope & so left the extra rope, hotting kits, brew kits etc. at the brew up site. [We certainly didn't want to carry it out!] And then the prussik, the Ollies Perched Sump seemed to be endless but what a pitch!, its actually quite good as the rock is quite close so there is not a huge exposure breach out problem. No problems prussiking at, and out by about 9:30 am. A top cave, what more can I say.

(24)

Team C4 back 3:45 AM - Pambua, Tim, Andy

Bit of a tough dip - cold, wet, diving. Rained the tight rift at stream level to find wider higher passage and a long drop down, but concerned that others might not like the squeezes (4 of them). Perched into ~~stream~~ rift at high level where dly was yesterday, and pushed on into winter phreas. Ripped tarere line and chucks down, but Rozz no longer we abandoned the pitch down. Near tear in.... Anyway, ~~the~~ its certainly getting again.



Why is it called "Oly's phreatic tube"? It is phreatic and Oly found it. Bad name.

Team Vasco - back 6 am (again) - Alex, Nobby

What ~~was~~ started out as a poor alternative to a C4 trip turned into another big push that leaves Vasco wide open and getting bigger. The pushmeisters are at it again. Alex took all afternoon to mend his overcoat and we didn't get underground until 6:10 pm. Bombing down, we reached the bottom of Alex and Olly's pitch (The Big Sleep?) in 1hr 20. The idea was to reassess the prospects of progress at the bottom of Alcatraz, so we spent an hour taking turns to hit in the tube and bash at the flake, losing another chisel in the process.

Eventually whilst Alex hammered I went back up the pitch to look at 'Anita's other hole' on the left at the pitchhead, which went immediately, as a steeply descending passage slightly larger than the previous crawls. A 3m climb is followed by a bigger climb, which is now laddered and which leads into a chamber directly below the hammered squeeze beyond Alcatraz.

11 Pitch down
~ 2hr

Beyond this a short pitch (5m) ~~keeps~~ drops into a wider section of rift, where a traverse forward leads to the head of Bolt Farming (p15+) ~~where~~ - Alex waited 3/4hr whilst I hammered crater after crater into the wall in a vain attempt to rig a y-hang. At the bottom water splashes in from an inlet into a big chamber with pretty little pools.

The rift tightens again but the way through is down past a constriction into a deepish pool. I wasn't quite yelping yet but there was a definite burble to be heard as we stamped on downstream a bit further to the head of a Big-Pitch split by a ledge. Another girl, another planet.

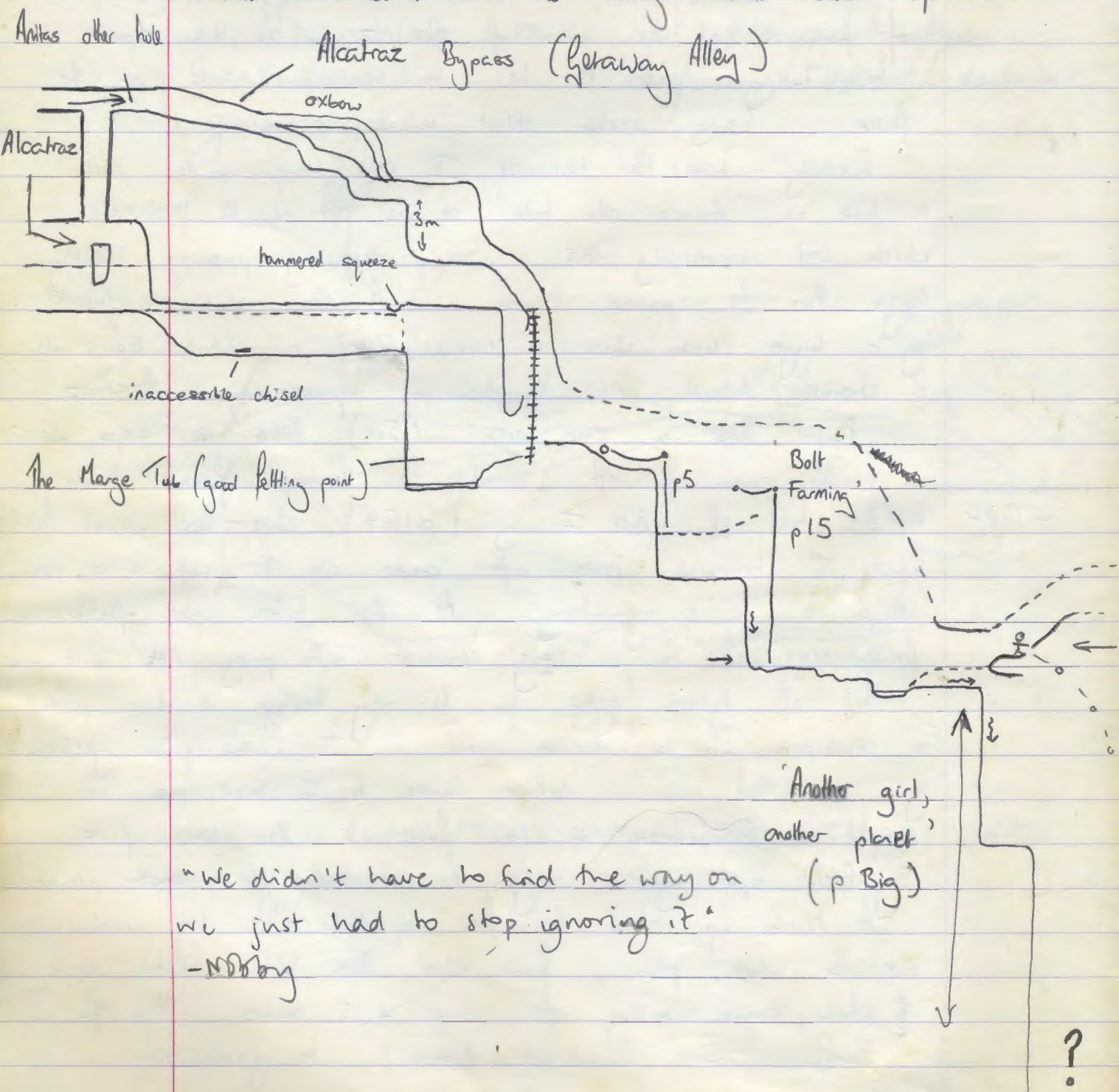
A climb up above the first drop leads to a big window over the whole pitch, from where Alex lobbed rocks down which stopped rattling after about 4-5 seconds. How far? Hum. Some considerable distance! he grinned.

(26)

No. of down returns : 2 in 3 days
 Chisel count : Vasco 2 - 0 C4
 Depth meter : going down ...

Nobby!

Warning - the bolts at the pitchheads of p5m (?) and Bolt Farming have only been tightened with a mallet and should be checked with the bolting hammer next trip.



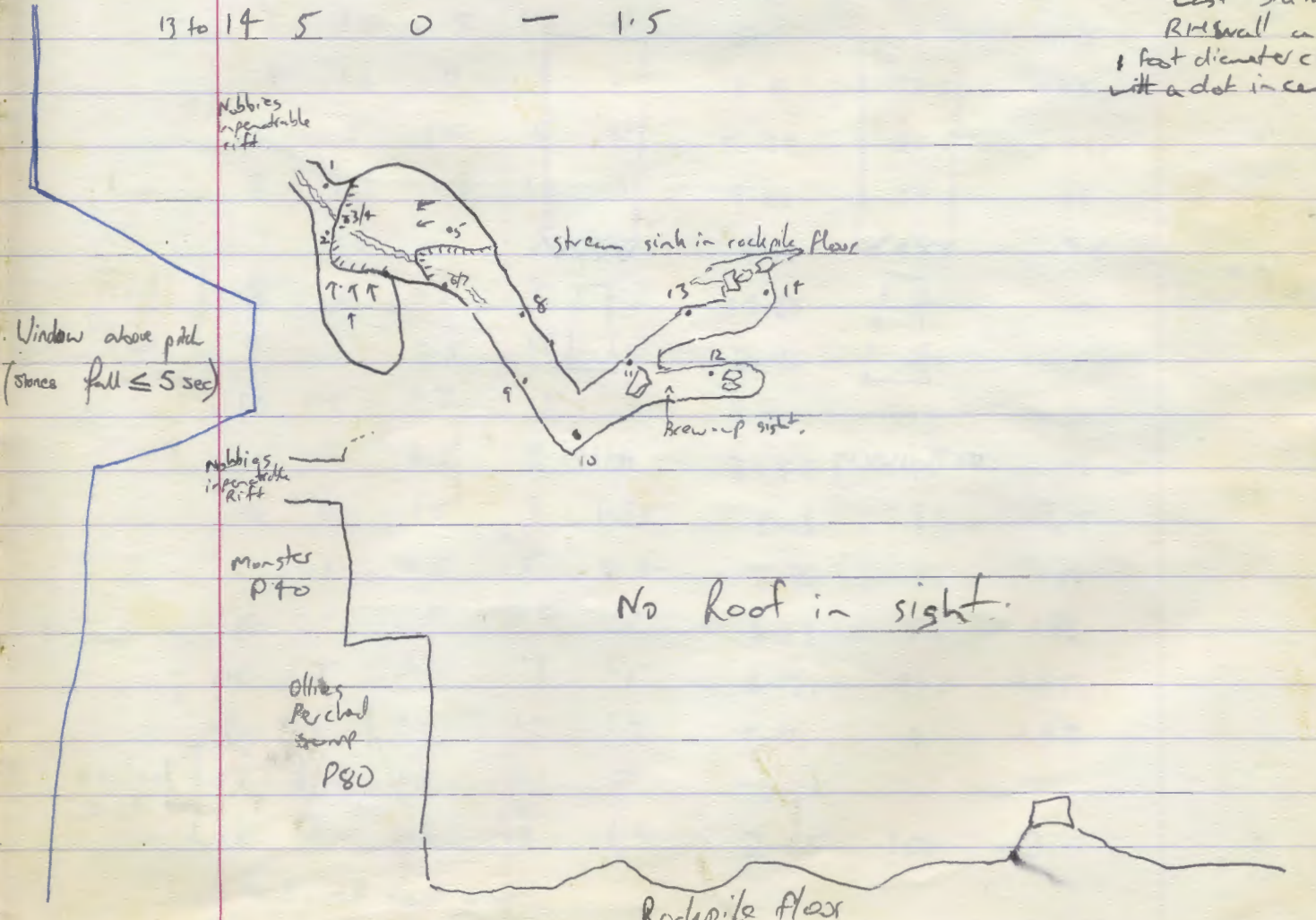
"We didn't have to find the way on we just had to stop ignoring it"
 -Nobby

17/7/96

CA Survey [from top of "monster" to Post the Brew-up site]
(SECTION C)

Michael, Anita, Ollie

	Station	L	R	U	D	Distance	Compass	Climo	Comment
B18 =	1	0	3.5	20	2	2.60	071	-10°	1st Bolt top of Monster
	2	passage	7	20 ⁺	.4	4.96	290.5	-46°	top of lip RHS Bolt over the edge
vertical shot down the "monster"	3	0	3	-	-	38.00	-	-	Bottom of "Monster"
	4	6	5	-	-	7.90	397.5	+7	ledge on LHS
	5	5	4	-	0	6.10	82	-23	Bolt at start of free hang
vertical shot down "ollie's Perched sump"	6	6	0	-	-	76.65	-	-	Bottom of "ollie's rockclimbing"
	7	1.2	1.5	-	0	6.25	148*	-3°	Back Bearing station on LH wall
	8	0	1	-	1	14.65	190	+13	station on RH wall
	9	2	0	-	1.8	13.39	165	0	LH wall
	10	0	4	-	1.25	9.6	280.5	+20	LH wall
	11	0	5	-	1.5	17.31	184	-28	LH wall
	12	0	5	-	1.8	10.76	105	-28	LH wall
11 to	13	0	6	-	1.8	8.66	187.5	-30	LH wall. Last station on RH wall
13 to	14	5	0	-	1.5				1 foot diameter circle with a dot in center

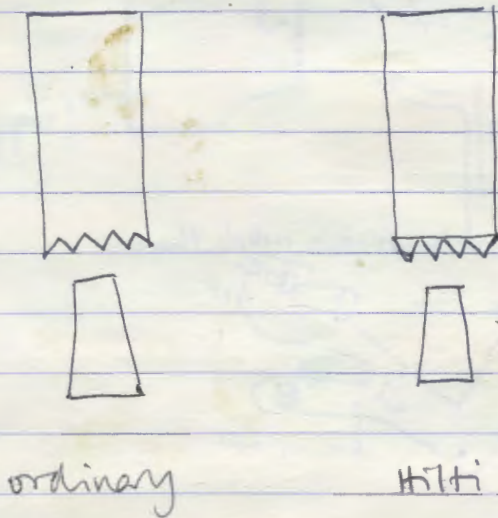


WARNING about bolts

19.7.96

A Hilti anchor turned up in our C4 trip yesterday, to frustrate Tom's attempts to bolt a pitch down the rift at the end of 'Oxy's phreatic tube'. Unlike the ordinary anchors, these have tapered teeth, and the hole at the end is smaller, so it needs a smaller wedge. The tapered teeth seem to be much less effective for drilling the rock, they make it shatter. A Hilti wedge used in an ordinary anchor is very dangerous because it won't grip the rock properly and the bolt will fall out.

so, if you see one of these please report it immediately to the bolt farmer.



11/7/98.

needed:

- Rope
- Gas.
- Flang.
- Regular (not Eq) Tea.
- Tom juice.
- Hexamine.
- Vino.

20/2/98

- Dummy Choe
- Bread.
- Vino
- Chisel
- Spore driven.

19/7/96

Michael & Andy

TDV(A)

survey of Torca del Vasco (TDV) entrance to top of 95m pitch set of instruments N^o 3.

* all L & R are going into the cave.

Station	L	R	V	D	Distance	Compass	Clino	Comment
1	3	3		Entrance	8.80	182	-59°	entrance (6m wide)
2	1.5	1.5		B	17.8	208.5	-67	
3	1.5	5	1.8	0	5.5	109.5	-11.5	
4	1.6	0	8	1	4.4	77.5	-25	
5	1	0.5	5	0	5.49	89.5	-41	
6	1.7	1.8	1.2	1	9.28	53.5	-26	
7	0.3	0.9	5	1	4.13	38.5	-9.5	
8	0	0.8	4	1.2	14.68	-	-	survey point down highest Spanish wall LHS
9	1	2.5	18	0	3.96	88	-1	
10	0.5	0.3	5	1	4.70	112	-61	
11	0.3	2.2	3	1	3.99	46	-16	
12	0	1.5	2	1.75	5.28	93	+6.5	
13	1.2	1.5	5	0.4	8.86	83	-51	
14	1.5	0.5	3.5	1.1	6.62	53	+69	
15	0.5	3.5	7	1.5	6.71	93.5	+8.5	
16	1.2	0.5	1.2	0.4	5.01	9	-44	
17	3	1.5	0.2	-	22.33	-	-	
18	0	1.8	pitch 23	1.4	2.45	108	-3	

vertical shot from highest Spanish wall LHS.

vertical shot

Continued next page

(30)

Station	L	R	U	D	distance	Compass	Clin	Comments
19	1.8	0.4	23	1.2	7.5	358	-52	
20	0	1.5	15	1.8	1.72	72.5	-7	
21	0.5	0	15	1.6	1.77	343	+43	
22	0	0.5	15	drop 90 inch drop	4.58	98.5	+21	
23	1	0	15	90 ish				

Survey ends at bottom of Mallion on Bolt RHS of Yhang

Map drawn on graph paper elsewhere

19/7 FDU - Andy, Michael

After a bit of a Ct epic a nice bumble and my introduction to surveying. Did down to top of 45m patch. Thanks to Michael for instruction and putting up with my jaffing at each survey point. Still haven't got beyond the big patch!

20.7.96

today's position for top camp is

30 T 0342007
 UTM 4788314
 altitude 1871 m

19/7 C4

Alex Nobby Pauline

An efficient resurvey of the previously known cave, though there was a slight technical hitch measuring the 36m free hang. A spirited discussion between Nobby and Pauline on how to measure a large pitch ensued. Meanwhile Alex, bored of being ignored, went and ate his chocolate. Nobby then started hauling in the rope to measure, ~~but~~ believing a knot marked the end of the hang. Twenty metres later Alex finished his chocolate and asked,

'Don't you want me to tie a knot in the rope?'

Then back out to the sunset, having emerged from Torca del Vasco just in time for the morning's sunrise.

20/7 Torca del Vasco

Alex Jason Olly

A mammoth survey trip, 38 legs in total, slight cock up at the start, sending Jason down the 6th pitch with the tape without keeping an end at the top. Otherwise a good trip, surveying to the end of Anita's Hole.

Unfortunately the cave has shrunk again, the P45 was only P28 & the P50 was only P40.

~~20/7~~ 21st July 1996.

Top Camp GBS Reading
UTM Point

Altitude 1858m

0342013

4788249.

7 Settlements

20. 7. Photo epic
breeze

Timi, Pauline, Michael
Andy, Joanne

Timi insisted that his models have a shave before the trip (well Andy did, but I didn't). So we ambled off to the cave with ~~the~~ the only tinnocks bar at top camp, and Nobby playing his harmonica.

Twinings, Thorntons, Tinnocks, Mornflakes and Frinella were posed with lovingly; then also Epigas, and hexamine stoves, a bit hopefully. Andy got quizzed about his sisters.

We went down the cave. Timi began to set up photos on the ledge above the 37m pitch. Jo was coming in slowly with Michael - it's her first canyoning trip, trying out her shiny new gear (though it's not quite as shiny as Andy's was). Photographer began to fret when the first flashgun stopped working and his 3rd able assistant hadn't arrived. Michael arrived, so we took 3 or 4 photos then went down the pitch. I got stopped before the bottom and threw the rope over to the ledge so I could be hauled over and a flashgun passed to me. While I kept turning on the rope I had to arrange the flashgun to backlight me with a windmilling of the feet, ending up with lack of blood in my left leg.

We then took some pictures in the breakthrough rift. Timi's slave flashgun packed in, then starting working again after a thump.

The able assistants were still quite chirpy at this point, singing 'Matty Groves' as we headed

down a few pitches.

Andy got all the easy poses, sitting on his bum, whereas I got the precarious posed on one toe poses, All except for one - the eating ~~the~~ tuna pose.

We finished up after Michael dropped the other little flashgun in the water and that stopped working something had to end the trip. Got out for an early bedtime at 1 ~~am~~ am.

Pauline.

21st July 1996.

Bye everyone.

Bye Michael - sorry we never got married.

Bye Jason - pleased we never got married.

Bye Oly - may your riffs remain impeccable.

Bye Nobby - May your smugs forever float in the clouds.

Bye Andy - Can't wait to meet you winter.

Bye Anita - Don't run out of holes.

Bye John - ~~there~~ Don't worry, I'll take you on a carrying trip when you get back to Britain.

Bye Jo - Don't be your tent this time.

Bye Alex - "Boam" Alex? You there?

Bye Pauline - Jeféka extraordinaria. Look after the lads.

Bye Ch - I'll dream of your monster.

I'll miss ya all
Tina

21.7.96 C9 - Michael Ollie 10hrs back by 1am.

My ~~was~~ last caving trip before I go, so I begged & pleaded my way on the next pushing trip down C9. Yahaw! After a hearty soup for lunch; Ollie, Jasa & I set off for the cave. Jasa was all geared up ready to enter the cave when ~~his~~ the bottom of his generator fell off down into the rockpile. I understand it took him 3 hrs to dig it out, which effectively cut him off from the trip. I took the bolting kit off him, suggested he follow in on his own and left him to it. We didn't see him again!

So Ollie & I dropped pitch after pitch down to the Master ledge where we had our first jobs to do. This involved putting in 2 bolts, one at the start of the traverse around 'ollie's perch' and a final backup bolt at the start of the Tom Creeching. It all went rather well if I do say so myself.

Then that awesome abseil down, lost in a vertical world, down, down, down... what an abseil 'ollie's perch' is.

We stopped in at the brew-up site, commented on all the hangers, mallets etc ^{that} had been left there, and left them there (a fatal mistake).

Then we ~~to~~ bombed down the ~~the~~ pendulum pitch and into the phreatic tube traverse to the pitch at the end.

Note 1: [There is a short abseil at the end of this traverse down to the main pitch. It is rigged off a natural on the RHTS (going in). It ~~should~~ really should have a rope protector as in one spot cutting deep into rock.]

The ~~rope~~ rock looked somewhat shitty to say the least and we could see where Tim's abortion had been. But after a bit of searching we put 3 bolts in the rock, seems to be quite solid rock beneath. The pitch is about 12m.

Note 2: [I've put in a deviation 1m from ~~the~~ ^{then} bottom which may seem stupid, but there is ~~then~~ a climb down at an angle

and the deviation stops the rope being ~~put~~ pulled through the narrow part of the rift, where it could get caught, drop rocks etc...].

This leads to the next pitch, down another wide part of the rift, about 20m, and the stream appears to be at the bottom. we put in 2 bolts; one high as a backup and the rope is tied to this, and a second, low down on the ~~same~~ left hand side around a slight corner. At this point we said "ow shit, we have left all the other hangers back at the brew up site." we had a short discussion about going back and getting them, but nah, 7 bolts in a day is ^{enough} ~~enough~~, so we have left it right open for the next group down.

Note 3: [the 80m rope (the bit not used on the 12m pitch) is in the rope bag at the top of this pitch, as is the bolting kit with seven casings & plugs. the second bolting kit is attached to the traverse about "Olle's perched camp" - it has no plugs or casings.]

A good brew-up, chocolate, peaches and tuna at the brew-up site, and a rest & we were ready for the possible up. the cave seems so much easier now we have done it a few times, and we both were out in a little over 2 hrs. Nothing major to report on the hip out, although I did sprain my thumb... yes it does hurt. Thanks allie for a great last trip. C4 is a great cave... as I said to Tim a few days ago - "If C4 was a woman I'd marry her."

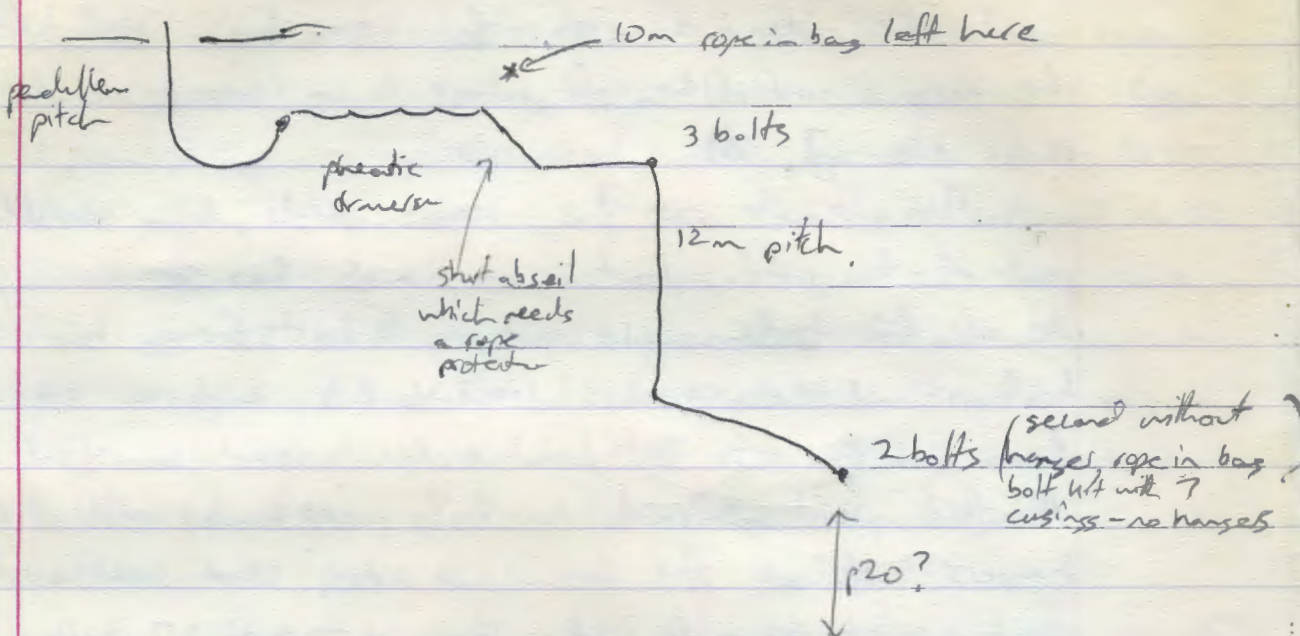
Note 4: there is approx 15 bolts & hangers with attached mailers at the brew up site, plus for so Snaplink's, for so mailers, about 20m of type of various types. Basically all rigging gear need for the immediate future is down at the brew up site.

Notes: Thanks for the great time on Oucc'96. I ~~do~~ have really enjoyed myself says I must leave... but great caring to you all, best wishes... "I'll see you round."

P.T.O. (scale & drawing) [next page]

(26)

beneath the brew up site in C4



PPS if you ever come to Australia, look me up. My parents

address is Mr & Mrs Playford

~~XXXXXXXXXXXXXXXXXXXX~~

~~XXXXXXXXXXXXXXXXXXXX St~~

~~XXXXXXXXXXXXXXXXXXXX~~

~~XXXXXXXXXXXXXXXXXXXX~~

Australia.

a good climbing contact in Sydney who can put you in touch with people is Lucinda Coates

~~XXXXXXXXXXXXXXXXXXXX~~

~~XXXXXXXXXXXXXXXXXXXX~~

~~XXXXXXXXXXXXXXXXXXXX~~

Michael P

22.7.96

Gas shortage in camp - rationing of tea is intensified..

Anita

'Have you had a cup yet this week, Olly?'

22/7/96 = MARTIN SMITH: Equipment loan: (Possibly!)

2 x 4m Wire Belays (Maillon ends)

2 x 2m Wire Belays (C-link)

6 x Petzl Twists & Maillons (Marked "MS" & with 2 pieces black masking tape)

2 x Ring hangers (Marked 2 pieces black masking tape)

2 x Petzl straight hangers & Maillons. (Marked as above) except the hangers.

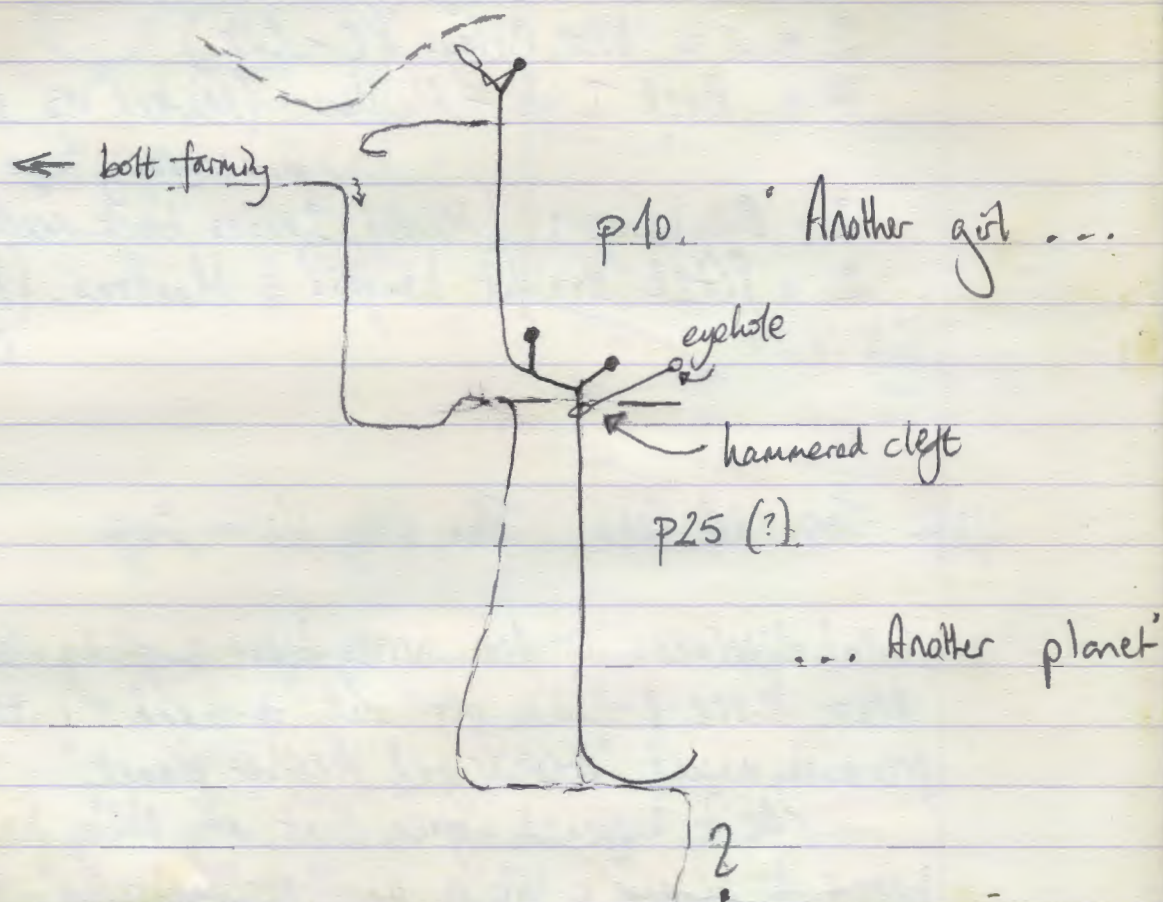
22/7/96 Torca del Vasco John, Nobby, Martin, Geoff.

Initial objectives = complete survey before anything else happened down there & things got out of hand; rig & descend pitch previously named "Another girl, Another planet."

As it happened, given that only Nobby had been down before, it became a bit of an "acclimatizing" trip i.e. route finding and working out that removal of a certain amount of SRT kit, if not all, is really the best way of negotiating the crawls following Anita's various holes. Geoff decided that re-exploring the rifts below Anita's hole would be interesting so we managed to lose him for a while. At the top of the ladder pitch we all had the same question "Where's Geoff?", bigger he's got the survey gear." I went to look for him & caught up at the bottom of "The big sleep". We caught up with the others by the window above "Another girl, Another planet" with Nobby placing a bolt to descend the first part of the pitch to a large ledge. We descended this and could see down a narrow cleft in the floor to another large ledge & a pitch beyond that. The rock was slightly friable so 2 bolts were placed in the available decent rock & the rope deviated through the floor cleft which itself had to be hammered to human size. The pitch itself is c. 25M

(33)

with the one beyond being estimated at 25-30 M.



The pitch, No (?) with a short traverse & pitch followed by a large hang off a wire belay is ~~Dangerous~~! The figure 8 is already starting to rub badly & there is another rub point on a bulge of rock c. 1m below the knot. Converting this hang to a suitable "Y-hang" would solve all problems. Req'd = 1 bolt/Spitz. The bottom of the "big sleep" requires a re-belay.

The top of pitch 4 was very loose (& probably still is) as a significant part of it made it's way onto my head. The black stuff on the side of the shaft is probably dried blood!
TAKE CARE - ONE AT A TIME! Martin Smith.

Wed 24th July 7.15 am

Cl reaches -400m

So you don't need to wake me up,
in cl at the bottom there is:

- 103 of tape
- a dozen mairons
- 2 hangers
- 6 krabs
- no rope
- a bolt kit complete with anchors + wedges
- an undescended 40m pitch (3+ seconds)

Pauline.

Yeah! - 400+ ! Take that + party!

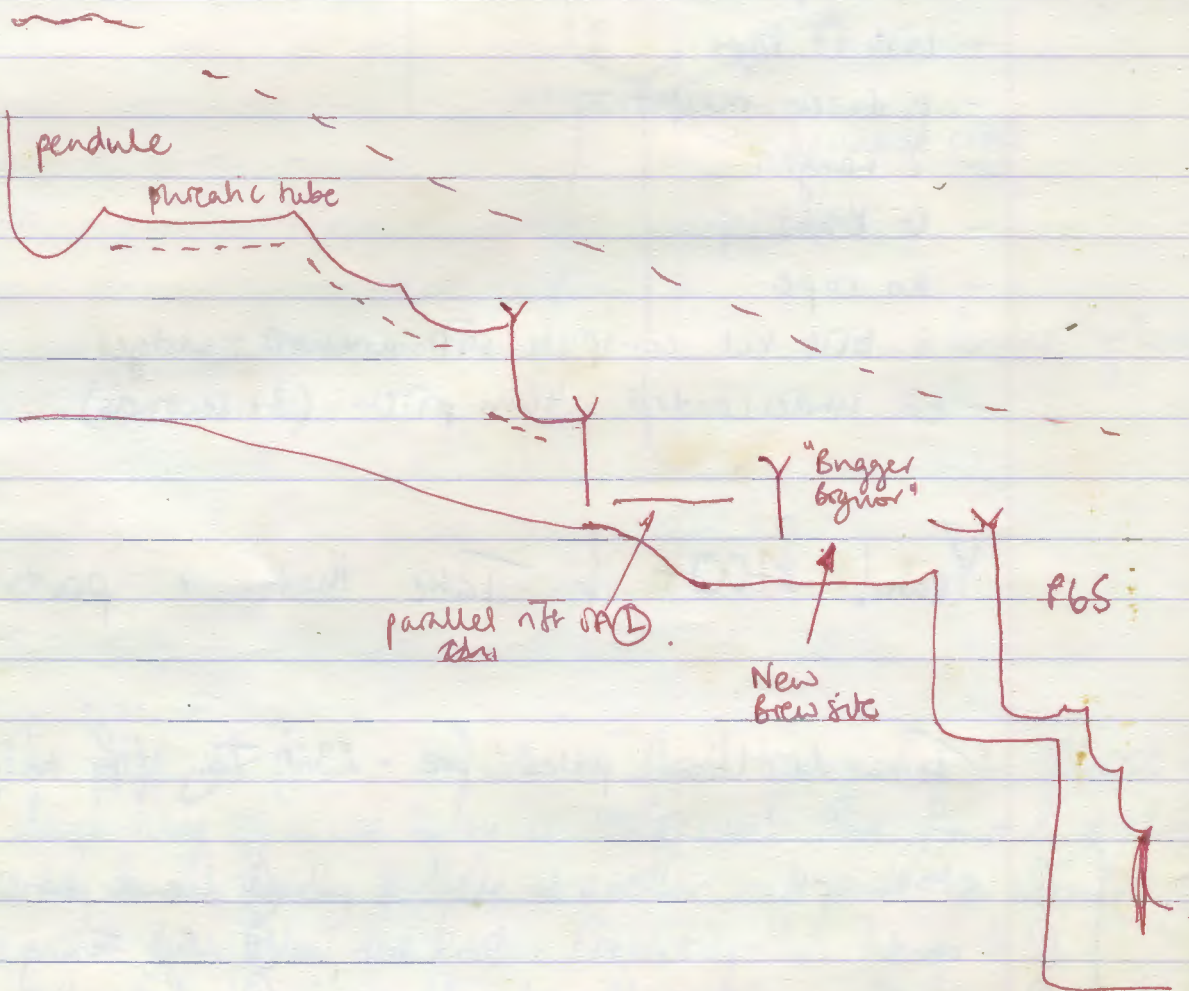
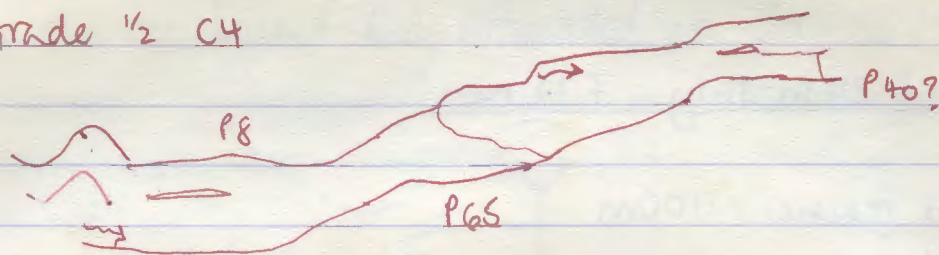
Nob.

Torca del Vasco pitches pre - 23rd July (for re-rigging purposes)

- | | | | | | |
|----------------|---|---|---------------------------------------|---|------------------------------|
| Polifemo
82 | } | ① | entrance ok | ⑬ | another bolt? otherwise ok |
| | | ② | ok? | ⑭ | Bolt Farming - another bolt! |
| | | ③ | ok? | ⑮ | Another grt ... |
| | | ④ | loose needs gardening (see left) | ⑯ | ... another planet |
| | | ⑤ | tiny ok | ⑰ | ??? |
| | | ⑥ | replace crap deviations with rebelay? | | |
| | | ⑦ | eyehole - replace crap natural backup | | |
| | | ⑧ | big pitch (see left?) | | |
| | | ⑨ | ok | | |
| | | ⑩ | Ant's hub pitch - tie off | | |
| | | ⑪ | Big sleep - rebelay urgently | | |
| | | ⑫ | ladder down to Marge Tubs | | |

(40)

Grade 1/2 C4



C4. The Narrative.

Pauline, Nobby, & Tim B.

My first trip to The Picos, first trip down C4
 And what a trip. More depth was revealed than
 most caves in Britain have to start with! Ok, so it's
 easy to discover open leads, but it's thrilling anyway.
 The descents into huge shafts are awesome, & wore
 out my right glove in no time; the mortar - well
 what can I say?

Anyway we were led ably by Pauline to the end of the known cave, Hash Brown pitch which consumed many minutes whilst we searched for the bolts put in by Michael et al. We found one, & didn't use it, but put in one on either side of the passage & Y-rigged a drop through the slot which proved that a deviation was needed to stop the rope rubbing. The pitch is a curious rift that opens out quickly into a larger passage. Back led to a tight squeeze into the descending stream passage, where a trickle tumbles into a slot at the bottom of the rift, about 15' deep. This then came out into a much larger passage with a sandy flared inlet on the left (Bugger Bogner) where we reckon the brew ste should be. Trouble is, that we then decided to put a rope down into it in case the stream route floods. More like Bogner High Street!

The stream disappears into its slot & splashes off into nothingness, over which a bold step reaches a stance, now devoid of all debris, (which is in various locations down in the black bits below), & the start of something that was bigger than all of us. Including bouncers, we averaged out the fall time to be 7.1 (oops), seconds. Pauline then tidied up a piece of the floor, & despatched it down a slot making such a booming noise that Nobby thought the sky was falling in. * This slot may lead to somewhere different to the main pitch & is worth descending (or at least looking at more closely)

* NOTE

Tim put 3 bolts in whilst Pauline re-rigged an earlier pitch, & came back with 90m of rope which was duly attached to the bolts & Tim edged cautiously off into the nothingness. As it happens,

(42)

a large, sometimes spray lashed overhang of a ledge is encountered about 40m down, & P+N followed for a look-see. It being Pauline's cave, we let her do the next bit - i.e. putting in 3 bolts on the way to the bottom, whilst Nobby pruned back up the pitch to get the second Gorking kit, to keep warm. Despite her doubts, the bolts all held, & Pauline disappeared into the beyond nothingness - so of course we both followed. Our joy was curtailed by the guide's reappearance of another 3 to 4 second pitch. Our mate said a 5m rope length wasn't long enough, so we left it for another day.

The trip out was uneventful except that someone had cleverly doubled the number of pitches that I remember abbing down. All out by 6:30 am, & back to camp for tea & spiced lentil stew. Thank you Bob.

TS

C4

Suney Station now on pitch prior to Bugger Bognor

Bolts & Wedges required

More rigging tape

24/7 Tide V Alex, Jo, Martin S.

Continuation of the "Vasco Frasco". Short trip 12 to eradicate the pitch gremlins. Eyehole (7): used 15 year old Spanish bolt as second back up. 40m (8): Placed bolt to create free-hanging Y-hang. Big Sleep (11) Placed bolt for re-belay just below large ledge, rock slightly dodgy. By the time I had done this & had dinner part one the others had caught up. We had dinner part two and set off out. I had dinner part three and watched Alex disappear. Jo & I had a very leisurely exit making a severe gardening effort at 4th pitch.

MJ

25/7 Covers delayed in C4.

7.20 Andy returns from C4. Last saw Geoff and Bob at top of the Monster, approx 1 1/2 hrs behind. Geoff is having problems with his jammer.

MSB

8 am callout time.

9.55 Martin, Tim B and Thumper set off to entrance, taking first wave first aid kit and rescue kit. If the covers are out they will come straight back, otherwise Tim and Thumper will get changed and go down. Martin will come back to ridge and signal.

1 blast on whistle - don't know news

2 blasts - covers safe.

Martin will then go back to entrance, and return to ridge in 1/2 hr or if there is news.

If no news in 1hr from Martin's first contact, 2nd wave to go.

44

10.40

2 blasts heard from ridge.

10.45

cavers seen walking back. Rescue stood down.

P.

26-7-98

ANDY, JEFF + BOB

C4

MY FIRST TWP IN THE PICES, AND WAS I IN FOR A SHOCK! I SORT OF LBD THE WAY IN DOWN THESE INTERESTING 'STABLE' PITCHES AND FOUND ROUTE FINDING VERY EASY, WE DECIDED THE DEPTHS WITH THAT KNOWLEDGE THAT WE HAD TO GO UP AGAIN AFTER. WE REACHED THE BRW SITE AND COLLECTED ALL THE RELEVANT ITEMS TO BE MARKED DOWN TO THE 'BEACH' AT 350M A NICE SPOT, OUT OF THE DRAFT AND A GOOD SUPPLY OF WATER FOR RITTING. WE CONTINUED ON DOWNWARD UNTIL WE CAME TO THE EXTENT OF THE LAST PARTY'S EFFORTS, A BIG BLACK HOLE BECAME, IT WAS A GOOD 3 SECONDS SO WE THOUGHT A ROPE MIGHT BE REQUIRED, A COUPLE OF TAPE SLINGS AND 80M OF ROPE LATER WE WERE ABLE TO DESCEND INTO THE BOWLS OF THE CAVE, YET ANOTHER BIG CORRIDOR, WITH A DEPTH OF ABOUT 45-50M THE PASSAGE WAS ABOUT 6-8M WIDE, THE CAVE CONTINUED DOWN FOR ANOTHER 100M UNTIL ANOTHER DROP OF 10M WAS ENCOUNTERED THIS WAS SWIFTLY DROPPED WHICH THEN LED TO ANOTHER PITCH AFTER ABOUT 50M. 'OH DEAR' ANOTHER BLACK HOLE, THERE WAS ABOUT 35M OF 9mm LEFT SO WE HOPED THAT IT WOULD REACH A 4 BOLT TRAVERSE THEN A RE-BELAY UNDER THE CURR HANGING LEDGE, LBD US DOWN ANOTHER 25M OF SHAFT, YET ANOTHER CORRIDOR, ABOUT 6-8M WIDE AND 30M LONG. THE CAVE THEN DECIDED TO CLOSE DOWN AGAIN, A SMALL RIFT WAS ENCOUNTERED

WHICH WAS VERY TYPICAL OF PAST PASSAGES
SO A QUICK LOOK WAS TAKEN BUT WE ARE SURE
THAT IT WILL GO, INSTEAD BY THE LOWER SECTION
WHICH WILL BE CALLED 'TAPE MEASURE TORTURE' AFTER
ANDY'S BRIEF PROBLEM, WHEN HE FOUND HE WAS WHIRL
AND TRULY STUCK WHILST TRYING TO GET OUT OF THE
LOWER LIFT HE REALISED HE HAD THE TAPE MEASURE
INSIDE HIS WORK SUIT.

WE ALSO SPENT 3 HOURS SURVEILLING FROM THE OLD
BREW SITE DOWN TO THE BOTTOM OF HARBOR BROWN.
SORRY FOR THE LATE EXIT BUT MUCH APPRECIATION TO
THE TEAM WHO WAS WAITING FOR US ON SURFACE.
BeB.K.

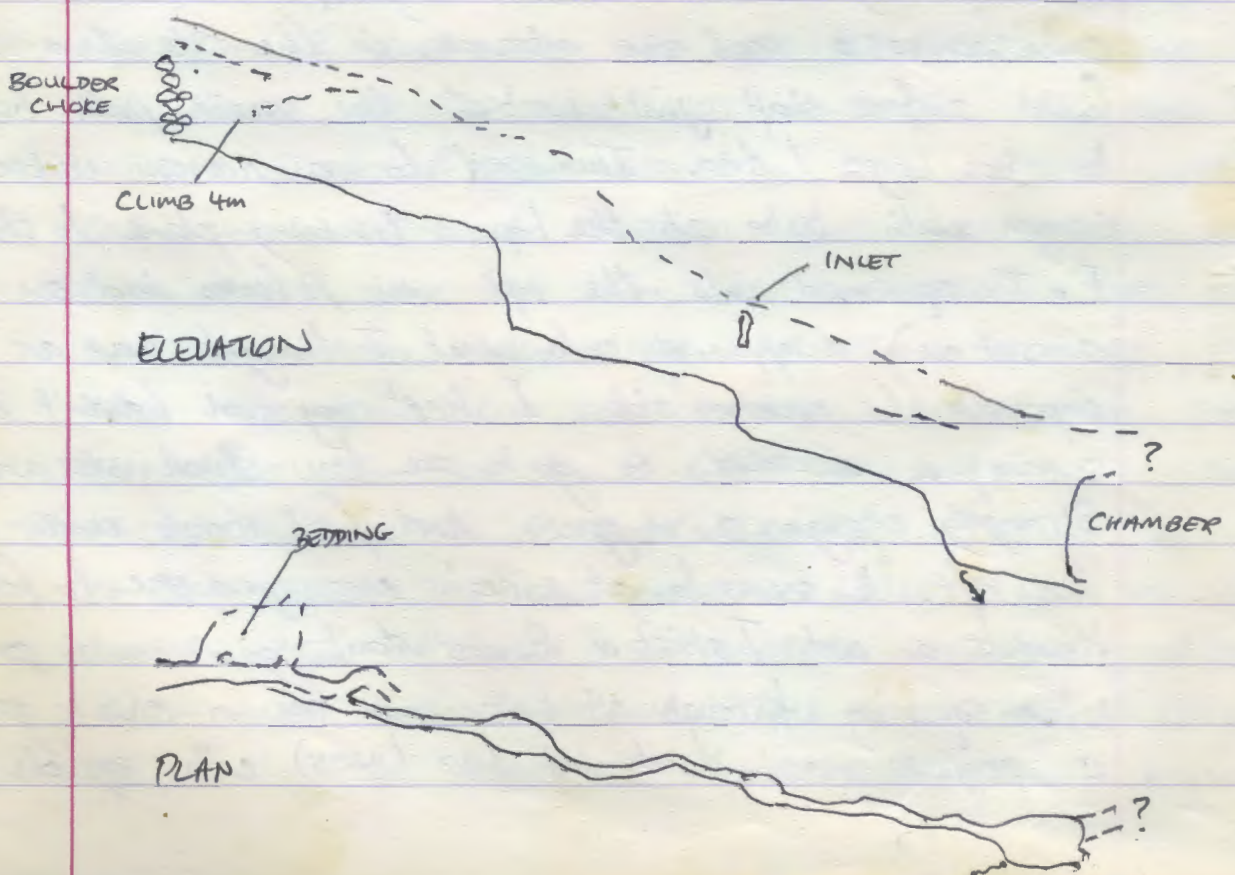
27.7.96

A DIG SOMEWHERE - PAULINE, FUMPA, TIM S.

We walked down to near the main path to look
at a draughting hole which Pauline said needed some
boulders taking out of. It wasn't easily found, but we did
come across a real cave entrance, in the side of a rubble
filled surface shaft just west of the main path back
to Los Lagos / Ario. This went to a narrow vadose
canyon with tube at the top, & bedding plane to the left.
P & T squirmed into the rift, & P (who had sun
oversuit on) disappeared into what I thought was an
impossible to reverse slot. I kept my cool (didn't even
scream) & decided to go & see how stuck she was.
Strangely enough she'd gone, had first back under me in
the rift. "It seems to get wider" encouraged me to follow.
However a wet T shirt & Rdans don't give much comfort
when squeezing through what seems like a cheese grater
& progress was punctuated (as I was) with squeals

(of pain). Down to the canyon bottom, Bridging & climbing, we headed North(ish), downstream passing one or two inlets in good grey limestone, occasional avenus and a small stream in bits.

After a tricky climb down into a chamber made out of ginger nut biscuit type rock, the low route involved crawling (forward Pauline) & so I went over the top to avoid the pain. We joined at another climb down & a chamber of about 5m x 3m was encountered. Problem. No way out. But, 5m up the forward wall is the continuation. A higher level continuation of the canyon at the last climb down took us to the top of the chamber, but still no way across. The climb is possible, but the rock not good. A rope is required & some protection. We exited with only minor route finding problems to find a worried Fumpa. Trip time 30 minutes. Vital Statistics - 55m long, 25m deep. Survey Grade 1.



FRI 26 JULY

What is the matter with Spanish rain?

it's only water, and causes no pain
Yet it falls from the skies with tremendous persistence
as whilst we lie on our backs, with its helpful assistance
Our only excuses for not going caving we lie here
quite happy and thankful its raining!

The caves in Spain lie mainly off the plain
and in the hills, it must be said
the rain will send you off your head.

Boom boom!

The triviums of love

I loved a girl, or so I thought
for now it all has come to naught,
Forever true she said she'd be,
but not to who, it wasn't me.

ANON.

My thinks we need a periscope for seeing the
extent of the slag above us. Are the peaks out of
the cloud, he wonders!

Another shit day at Top Camp - shortage of dry
seating space ...

- Martin : 'Oi! You're trying to shove me off my pew, aren't you?'
- Fumpa : 'Well, it is 200m long ...'

(48)

Andy whilst pouring Grappa into Paulines cup, and Grappa from his own cup onto his feet:

"The good thing about this liquid is that it doesn't affect your co-ordination"

23/7

Torca del Vasco

Fumpa, Jason, Alex, Anita

Jason set off down the entrance pitch and waited there for me (i.e. random company) as Alex told him, as he was going down: "See you at the Marge Tub, than". After 10 min of sorting out my carbide generator and adding snow to it for a jump-start, Jason & I continued down T del V. After 1 1/2 h we were sitting inside the atmospheric walls of the marge tub. And started our wait. Jason: "If they are not here in another hour, I'm going out." Luckily, a pair of wellies appeared about 20 min. before the allocated time. Having gathered, a plan had to be made. One person goes down 2-3 pitches and starts rigging the next one. The others survey. Noone volunteered for rigging. I suggested we all go down to the end & survey loose. ~~then~~ Alex gives me the rigging gear as its decided. I almost put the belt in when I got worried that the belt won't unscrew from the driver (it was my second belt ever, N.B.) Jason came down to my rescue and helped me rig the pitch. No means for guessing what was at the bottom; a rift is. [wonder what would

happen if Nobley & I went on a same trip...]. Huge, tall rift. I went down a couple of climbs, Jason safely remaining at the bottom of the last pitch. I didn't quite fancy squeezing through the further part of the rift and decided that a way on (from a ledge) needs a traverse line. Lets go back. Jason pulled me out from one of the climbs. Might need a hand line there. Alex & Funpa hadn't gone very far in the meantime, surveying. Alex wanted to check out the rift himself. Just as well. He must've gone further than me and it appears he found the way on. Surveying team went towards the Marge tub and after the initial misunderstandings managed to get into a rhythm. We reached the penultimate leg just as Alex reappeared to tell us where the permanent station was. After a fiddle in the famous Marge Tub, I set off for the siddee first. 2h 15', not bad. Alex followed me closely. We waited in front of the entrance for 2h before deciding we really want to go to bed. Jason & Funpa emerged round the corner about 2h later... Still Tidel V is wide open (A.H.). Lets go there tomorrow.

Anita

"Who hasn't got one?"

John, "Well Anita and I have been sharing one".

(50)

Shopping / Carrying List 28/7

Pencils !

Small EPI Gas stove & Cylinders
Paprika (some in Base camp spice rack)

Bread

Vino Tinto

Marg

Slime

More Bread

More Vino

Depth

More depth (Happy to oblige)

28-7-98

JOE + BOB C4

JUST A CAWLE TRIP DOWN C4 TO R8-R16 THE 'MONSTER' WITH ONE 150m 10mm rope. PITCH WAS VERY DIPPY AS USUAL BUT NOT OVER THE TOP. JOE WAITED AT THE BASE OF THE C4S WHILST I RE-RIGGED AND DROPPED THE 80 JUST TO MAKE SURE THE ROPE WOULD REACH. THE 90m ROPE OFF THE BOTTOM PITCH IS NOW STUCK IN THE CAWING SUPPLIES BAG AT THE TOP OF THE 80, WITH A KNOT IN EACH END. THE TOP ROPE 80+ WAS COILED IN TWO LOOPS AND LEFT ATTACHED TO THE TRAVELER AT THE END OF THE RIFT AS YOU ENTER THE MONSTER.

*N B 2ND PITCH UP THE MONSTER, DEVIATION CAME OFF WHILST I WAS PUSHING UP. THE ROPE GOT THROGGA TO THE 'COWS'. IT HAS NOW BEEN CUT AND JOINED WITH A DOUBLE FISHERMAN'S. THE DEVIATION WON'T COME OFF NOW.

(51)

The flow up all the pitches with
little effort, but there was a lot of strange
greenish noise.

Bob-ke

C4 - the next 50 metres.

29-7.

We rigged Martin and Nobby's pitch a bit more out
of the water. It was the most strenuous bolt I've
ever put in. This dropped about 20m to a ledge,
from where you traverse over to a dry shaft of 35-40m
meeting the water again ~~at~~ at the bottom. Tim
bored a lovely Y-hang - and created the pitch head
from hell. Something funny has happened to the
rigging in the bottom part of the cave. Either it
rubs horribly and is easy, or it hangs free and is a
bugger to pass.

We went to the bottom of the pitch. The way on at stream
level closed down immediately, while hammering open
a hole gained a few metres progress, but it closed down
there too.

Just before the bottom of the pitch is a ledge where the
rope is now coiled. (78m from base). Going up a ramp
gets you into the rift higher up, and this is passable
although ~~somehow~~ you have to move horizontally.
Tim reached a smallish pitch ^{20m?} where the rift opens
out again. We think this is the way on. We looked
for a higher traverse at the top of the pitch, but it
didn't look possible.

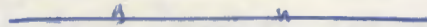
Came out, having beat Andy into silence because he
wanted to survey some more. The last survey station is
at the bottom of the pitch before the 2 we dropped.

Marking the 113 on the right, looking down cave, a knobby spike at the same level as the end of the rope.

Gear

There is so much rigging gear in the cave you could chain all the maillons together and use them to rig a pitch. Well, there's about 20 hangers and maillons, a bolt kit with 8 spits and wedges, some tape, a 40m rope, a 10m rope. The last 2 pitches are ~~only~~ rigged on 125m rope, but only need 80m or so. Also there are the 2 80m ropes Bob left higher up in the cave today.

Pauline.

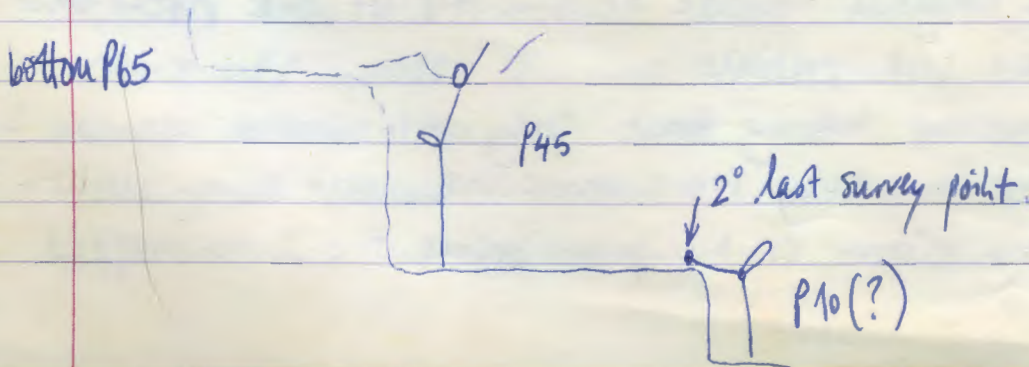


Please can you bring out bags of fettle and empty tacklebags the tea monitor

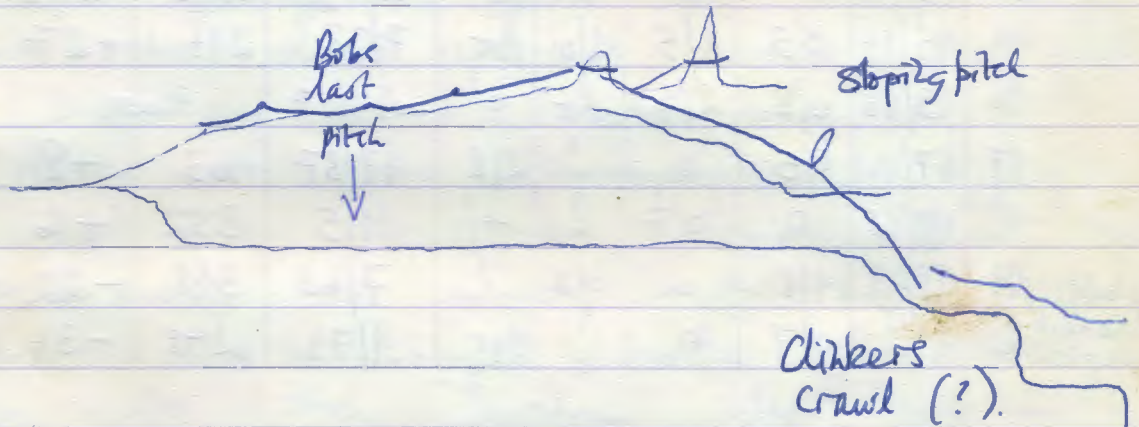


27/7
mmmm C4 Nobby, Olly, Fungus, Martils.

Olly & Myself carted the 125m 9mm rope down to the bottom of Mash Brown & began surveying. Fungus & Nobby caught up as we were messing about on the pitch below "Bigger Bognor" (P65) & joined in, ending the survey at carbide mark at head of next pitch (P10?) :



Ollie & I did the equivalent of a prussik out of G.G. & had a welcome cup of tea & some food. Nobby pushed the tight streamway whilst Furpa^o traversed over previous (last) pitch & watched him emerge. Ollie & I arrived back & we fumbled around rigging the by-pass to the tight section with the rope from the previous pitch (sorry Bob!). This was a bit awkward as the rock is crap. Following Nobby down a passage which sounded like crunching over coals as you brushed against it we dropped down into a small streamway which quickly turned & shot out into a huge shaft in decent rock. A peculiar Y-hang was rigged on naturals & the pitch regarded as too wet to descend, besides it was past 5 A.M. & we had to leave! An uneventful return was made with all out by 12 A.M.



N.B. This write up should come before Pauline's last one in the book!

Survey DATA overlay

50m
18'

?

(54)

C4 SECTION E

STATION	LEG	L	R	U	D	DISTANCE	BRT	CLINO	Notes
D11 = 1		5/0	0	?	3/0				carbide mark RSL (only 2) wall at bottom Kash Brown pitch
2	2/1	1/0	3/0	HASH BELOW	1/5	3/02	047	-22	
3	2/2 ² 3/0	0/3	0/4	?	POT	4/84	340	-15/5	
4	3/4	1/2	0/8	7/97	1/72	7/97	PLUM		N.B. Depth of pitch = 7/97 + 1/72 (Ollie's nose was the station!)
5	4/5	1/0	3/0	?	0/3	7/42	344/5	-10	
6	6/5	0/3	0/6	0/5	POT	5/48	133	-14	
7	6/7	3/0	1/5	?	POT	31/66	PLUM		
8	8/7	3/0	2/0	?	?	1/40	142/5	-32/5	} ledge
9	8/8 ⁸ 2/5	0/5	?	?	?	1/36	303/5	-33	
10	10/9	2/5	0	?	?	2/27	141/5	+55	} re-belay.
11	11/10	?	0	?	?	12/37	123	+76	
12	12/11	1/5	0/7	?	0	17/50	PLUM		
13	13/12	0/3	0	7	1/5	12/33	162	-13/5	
14	13/14	0	1/0	10	2/4	2/09	320/5	+21/5	
15	15/14	0/5	1/5	1/0	POT	7/33	216	+27	
16	15/16	0/8	2/9	POT	0	44/67	PLUM		
17	17/16	0/5	0	?	2/8	17/37	163	-8	
18	17/18	0	0/7	?	4/0	11/5	332	+6	
By up bolt Carbide mark LH side pitch. 19	18/19	1/8	0	0/8	?	7/63	318	-22	Back up bolt.
20	19/20	0/7	0	?	POT	1/73	248	-36	

instruments set 3.

28/7 Torca del Vasco - John, Anita, Alex

The trip turned out to be mainly a surveying trip. Whilst Alex ~~rigged the climb~~ put a bolt, and almost the bolt driver, ~~to the~~ rig the climb before the 8th Spanish pitch, Anita and I surveyed down 'Another Fine Mess'.

We continued to survey the climbs and passages Alex found on his last trip. We rigged 2 small pitches, and a hand line on ~~the~~ a muddy climb up on the way to give us chance to warm up putting in bolts.

The passage is quite old and muddy after the climb up but before the pitches at the end two inlets come in.

After 6 hours surveying and rigging we got to the pitch which Alex had been unable to climb last trip. Two pitches were dropped, both of about 10m. At the bottom the way on closes straight down, but there is a ledge half way up the pitch that ~~could~~ could be the way on...

John

It sure is!!

Oh (05.00 31/7)

(56)

31-7 HOLD YOUR HORSES, BIG DEVELOPMENTS IN 'C4'
THERE WILL BE A PRESS PRESS SHORIBY

BOB K 06:00

We found the boat ...

P 08:00

"It's only recently been superseded by digital technology actually" - Olly on telephone exchanges

'Over here, SRT is the basis ...
caving is ... The Principle !!!'

- Martin's drunken philosophy of Picas caving.

'that'd be the best thing since ...
Marnflashes' - Nobby
(referring to the possibility of a Vasco-C4 link)

Who said of what? #1

'God, it makes you want to shit just looking at it, doesn't it?'

carry list 31.7

- Pencils
- Black bags
- Carbide
- Cave food

30/7 Torca del Vasco Alex Olly Andy

A gentle potter down to the end of the cave, having given the tackle to Andy. The way on was easily seen with a light which actually worked. Swinging off the last pitch and traversing led to a climb down to a large chamber with a big black hole. Coming in through the far wall was an 'inlet'. So I sent Andy off to check the inlet whilst I started rigging the pitch. I finished the first bolt and still Andy wasn't back so I decided to wait a bit.

Andy came tearing back saying, 'It goes! It goes!' It turns out that the 'inlet' is a long section of phreatic passageways with lovely slippery mud all over the place. We rigged a traverse and hand lined two steep muddy sections before we came out a pitch head.

There seems to be a stream at the bottom, the pitch is virtually rigged, it just needs a rope attaching to the hangers.

At the moment Vasco is heading virtually parallel to Underground Overdrive about 650m away.

Alex

(58)

C4 and C9 30-7

I'm going to give up cave exploration because it can't possibly get any more exciting!

Bob, Tim and I got down the cave first, so set about the surveying quickly and, dare I say, efficiently? Well except for the bit where Tim set off down a pitch with the reel, leaving me with the end of the tape at the top. I was already holding too much and then decided to try and pack a tacklebag too. So it was the tape I dropped rather than the survey notes.

Geoff arrived at about this time, but decided that he would get a bit of a head start going out, so we said goodbye to him. Martin had rigged the next ladder pitch and took Bob to line him down it. I got myself under a survival bag yet again. It really works. The bag was slit up one side and I put the corner under my hat. In fact every time I stopped moving someone wrapped me in plastic!

We surveyed to the base of the ladder, then while I was otherwise occupied, Tim and Bob found the way on. I went back up the ladder and was looking at a traverse over the pitch head. There was shouting "Pauline", and "We're here". Oh yes, I'm here too, I thought. I went back down the ladder to find out what was going on. Tim came back to find us and we followed him through a hideously muddy rift. No wonder they waited on the far side and shouted, hoping we'd come through.

The passage was a 3ft wide streamway in very fractured rock. It got bigger and opened up into a 5m wide

boulder floored passage.

There was a difficult looking climb. Tim said don't worry about coming down and ~~gave~~ gave me his shoulder to stand on.

A bit further on, climbing through boulders again, someone said "here's a carbide arrow". Did this mean we were in the main streamway of C9, or was it just an inlet? Don't know, but we'd made the connection. We saw a carbide S, survey station.

The others asked me what to expect. I told them, a beach with an inflatable boat moored beside it. It seemed more like a legend than reality, so I was beside myself when we found it. I left in the air and we all danced around. Expedition objectives achieved!

Pauline.

~~On the way back for food and carbide we ran across the last survey station.~~

On the way back for food and carbide we ran across the last survey station. Besides it was a piece of red tape with 'Snabliet and Pivo, survey end' written on it.

[It's a blackened rock on the top of the boulder by the awkward climb. This climb is on the left of the 2nd boulder chamber you come to].

Where was the BCC sticker?

Who said of whom (or what) #2
'He tried to eat my shorts !'' ?

"I've never been near an ice axe. Why, I've never even smelled one!"

(6)

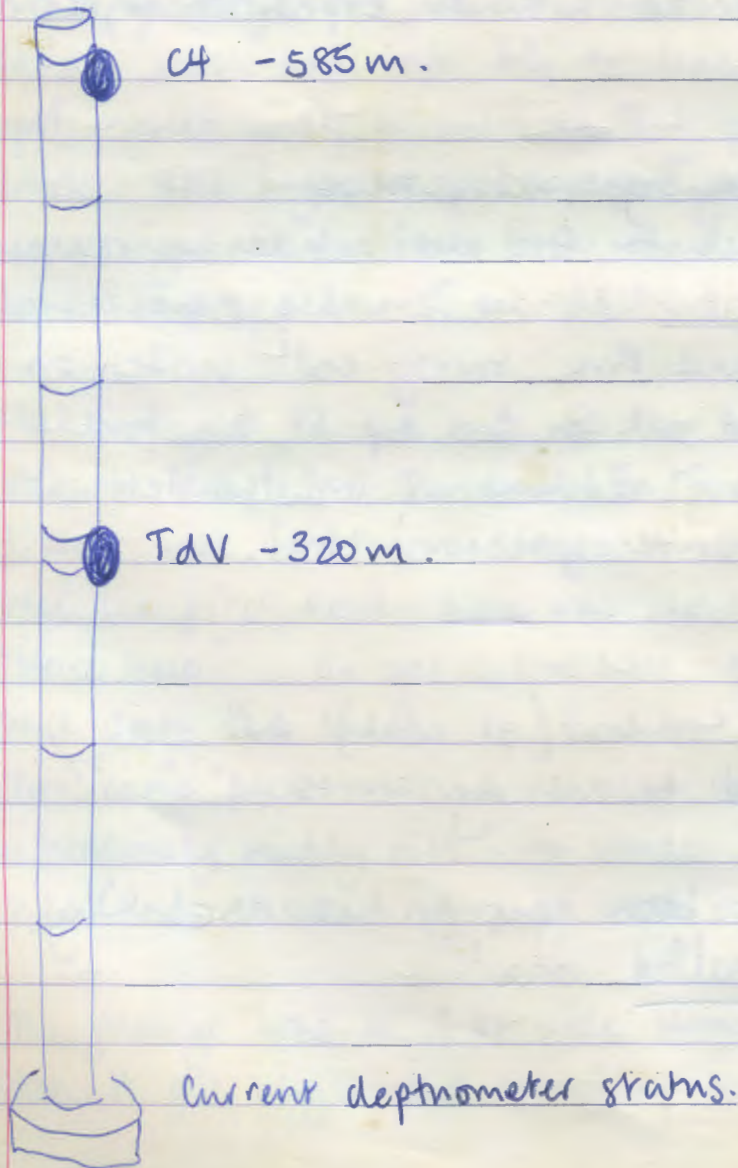
To everyone,

My time is up and I have to go back to my other life. Thanks to everyone for making this such an exciting and fun expedition - the best yet for me. Hope derigging is fast and efficient (!) Hope Vaso becomes the deepest cave in the world. Love after each other and take care,

love Pauline
← X

PS. Please ring Juan-José (tel: 5211 790) and give him an update before going back to England.

PPS. Please bring the logbook to me when it gets to Oxford.



On the perils of a 3-man expedition ...

or 'the monotonously monumental mammoth clearing up operation'
1st August

At this point in time I'm more than a little worried about the prospect of Alex, Andy and I having to dig two deep caves and strike camp by ourselves.

This work intended as a complaint in any way against those who have gone / are going home. Shit happens, and people have jobs to do - this can't be helped.

However, the unfortunately reality of the situation is that we're ~~very~~ dependent upon the appearance of Paul, Bill Naylor and La Vernon to dig us out of one BIT hole. Jo, Martin and Geoff are leaving in less than a week's time, ~~leaving us~~ and I assume John still intends to be home before the 11th, which will leave us three strong inside a week. I'm not sure we can afford to rely upon the appearance of the other three, however much we may think they will arrive - ~~the~~ this is a risky assumption to rely upon.

I personally don't very much like the idea of spending 2 weeks of the 7 spent in Spain shuffling up and down the hill / ~~digging~~ ^{digging} 2 caves as a part of a 3 man team, since I remember John saying how hard it was last year with several more people.

So, here are one or two reflections on the problem:

- (i) Dye - tracing Vasco to Ct is daft. It's a shame we couldn't have begun to dig Ct tomorrow (2nd) because we have two extra cavers keen to help tomorrow in the shape of Rod and Andy Scott. Nevertheless + its entirely fair V that Andy K. should get + good

(62)

to the bottom, and John as well. Dye-tracing, however, will add several days to the schedule — place the detectors Saturday, put fluorescein in Vasco Sunday, and even were we to ~~allow~~ allow only a day for the water to pass through, that would make it ^{at the earliest} Monday before we could begin to dig, without allowing for any days where we didn't have enough fit/keen/available covers to do the work. Martin / Gueff / Jo are leaving midweek, which means under that schedule they would probably only be able to do 1 dig trip

~~the shortage of covers to~~
Given three days that we're wasting here, we could start designing C4 and try to make a physical connection to Vasco ourselves. After all, it remains wide open and reasonably close to the streamway. We should be very wary of committing the time and people now to essential work, given how ~~lacking~~ ^{lacking} in those very resources we shall be in a week's time.

ii) The shortage of covers is already starting to tell — we've lost 6 good covers in two days. I've been available to cover for the last two days and haven't done so because of a shortage of manpower, and even if I came tomorrow it would be a working trip, since except for the bringing out of one bag of rope from the Munster, there's nothing to be done before the dig in C4, and without survey support (ie Alex!?!?) in Vasco.

To be cut down to 3 will be a real g.i.t because we also (ideally) need to man Base, and to have someone carrying food up the hill, which leaves just 1 cover. ~~Hummm~~. Not good.

iii) There are however, still 3 weeks left, which leaves plenty of time to save productivity if we're efficient.
 To this end we might like to consider a no. of ~~ideas~~ ideas:

a) Start carrying gear down the hill now, such as carrying shit from the Hilton, spare crockery or whatever.
 No more empty bags going down

b) Andy move in with John straightaway, + strike + remove the spare tent

c) Run on a lightweight Top Camp? - we really don't need the big green tent and this a lot of the stuff in it for a 3 man (possibly) expedition - we can live in 2 force 10s and cook in the Hilton if we have to, and we ~~could~~ economise in other ways such as maybe carrying down the camping gear stores + living on Epigas (!). There must be loads of things we can do to make it easier for ourselves in the long run.

There needn't be a crisis, but there might be a pain in the arse.
 Lets think about it.

Nobby! ~~scribble~~

Footnote - 2nd August

OK. So I completely panicked.

Nobby: Of things that make you "go":
 Mornflakes are first
 Lentils are second &
 Prussiking is third!
 N.B. (!!) Don't follow him up the monster!

(64)

18/996

Gregg, Alex, Marti. C4. Down the bottom (again! V??V).
 Swift but relaxed trip down. Fumbled & Feh at bottom of
 last rope pitch, ladder pitch then protracted stretch to final
 beach & camp. Took photos & headed towards (?) last
 survey station of '95. Started survey. When hit
 C4 inlet with UPSTREAM inlet heading OFF was
 decided to look at this instead — c. 80M of VERY
 interesting streamway to large waterfall chamber — more photos!
 Then finished of C4 survey with pretty crawl at bottom done
 in 2 legs. Marti headed out, stopped at Buggor Bognor
 for Tea, Alex went on & MS waited for GPN for Tea.
 After Tea, headed out. ~~At 0240 MS~~
 Alex 0240, MS 0500 ~~at 0610~~ GPN 0610.
 All back before call out, pretty swift trip considering, sorry
 about write up 'cos I'm bolloxed!, MS.

Who said to whom of what ?!?! #3

'Go on. Can I ... have a feel ... so to speak?'
 ('Clue - she likes them 'firm but not hard')

Andy, translating the special offer on the outside of the milk tin:
 'Eucharilla gratis er el interior'
 = 'There's a spoon inside us all!'

1st August C4 Martin S, Alex, Geoff
 Through to sump at end of Underground
 Overdrive where Alex went boating & Martin
 took photos. Then back to survey upstream
 from last upstream station of previous year. This
 was continued past C4 inlet into unexplored
 territory. This was a fine streamway ending in
 huge area with waterfall coming down into 'latter'
 at bottom. More photos.

Then tied in survey through to end
 last station in C4.

An absolutely brilliant trip. Enjoyable
 from beginning to end, now by my SRT rig is
 now working more or less properly. (at least)
 C4 now around 600m deep!!
 Geoff.

3/8 → 4/8 C4. In a contrary tone to the positive view from Geoff above,
 the first stage of the de-rig was a bit of a shambles. Not to do
 Nobby, Alex & Andy down 'cos they put in a lot of effort but
 my own part was a waste of time. I got to the brew site c. 8PM
 which was an hour later than agreed. After putting the brew on
 & poking around the cave to keep warm & trying out the
 candle + bivvy bag idea I got concerned. I really didn't
 feel like going to the bottom of the cave having done so
 twice within the previous 4 days (3rd/1st) & we'd agreed I'd
 meet them at the brew site (bugger Bognor) anyway. By
 12 A.M. I got very concerned so descended the 65m & heard
 sounds at the bottom of the 45 ("free & easy"). From there it
 took 2 1/2 hrs to get the rope up the ~~to~~ 45 & 65m by which
 time everybody was cold & tired. We all decided to give up &
 headed out but fell short of our target of bottom of the
 monster. For me, going back down C4 is the most

serious form of torture that could be inflicted on me.
Hopefully I will have recovered sufficiently by tomorrow (5th).

Notable quotes:

Nobby = "It's about 10 o'clock isn't it?"

Answer = "No, it's 3 in the morning"

Alex = "Is there a lighter for this stove?"

Martiz = "Yeah, it's on your helmet"

'An evening in Ario'

It's currently 7.50 am, ~~and~~ the sun has only been around for an hour or so, and I have just arrived at top camp.

Last night at the Ario Redugio ~~at~~ at about 10.35 I could have been heard telling Josep Guomas of the SIE, "It's alright. I've got a torch and I know the route from the path to top camp very well. I've done it ~~the~~ ~~the~~ dozens at times before. I can do it in the dark and the day."

Well it was certainly dark and it was certainly foggy. As I left the redugio, and ~~the~~ looked for the start of the path, ~~it was~~ I had to bend down just to see ~~what~~ what the ground I was walking on looked like. It was now that I ^{should have} spotted the fatal flaw

in my argument. I may have walked between the snow pole and Xitu many times, but I had only been to Aris once a year ago. It took me almost 5 minutes to find the start of a path, ~~however this was~~ This soon had a coniform yellow point mark on it so I kept going; crouching down as I went to examine every rock as I passed it looking for more yellow marks. If I didn't find one within a few metres, I'd backtrack and try again until I did.

Sometimes this process took a number of minutes to find the way on, but I stayed on route, or so I thought, and was getting there slowly. By midnight I was not so sure. I was still following yellow marks but I hadn't passed anything I recognised. In fact I'd passed a number of things I didn't recognise. Then I passed an arrow but ~~didn't~~ couldn't find any continuation of the marks.

After several minutes of looking I examined the arrow more closely. Underneath it wasn't 'ARIS' it said but 'TREA'. At this point I gave up. With visibility still less than 6 feet, and ~~was~~ I not ~~nothing~~ making any chance of getting back to the refuge at all brightly, I broke into my survival

(68)

big. The night was not too cold at any rate, even if it did rain, and I didn't manage to get any sleep. At about 5.30 I got up from my patch of grass ~~below the~~ on the Trec path. Almost an hour later ~~then~~ the day lifted a little and I was able to walk back to the Los Lagos path and follow it to SOD 4 without trouble. From there I proved that at least I did know part of the route and walked up as it got light.

John

P.S. The SIE eat a hell of a lot better than we do. Spaghetti followed by a huge Tortilla, coffee, then Brandy and coviny bullshit...
Excuse me mate but, you're talking a lot of

2/8/96 (overdue wakeup) - C4 Jo, Nobby, Rod, Andy Scott

Various members of my friends and family were ~~to~~ keen to help to doing C4 ('strange people') but ~~this~~ this had to be put off until tomorrow, and because of family commitments (ie 18 month old Top Camp Baby, Heather Scott), ~~then~~ ^{today} looked likely to be the only trip they could do. However, they wanted to do a 'useful' working trip, and so we set about bringing out the rope that had been on the Monster prior to the re-rig, a trip that sounded straightforward...
I had been told that there was a '90m of

rope coiled at the top of the Monoter, and a bag tied to the traverse line on the ledge. What I didn't infer from this, was that the bag on the ledge was full (of 90m of rope) ~~as a result of the~~

The consequence of this was that we bumbled in in about 2hrs with 1 small Oxford bag containing food and carbide to find we had 90m worth of problem on our hands

To went down the perched sump bit of the Monoter for the first time, whilst I brought up the bag of rope from the ledge and we conferred. Then, whilst I waited, Andy and Bob put half the spare rope in the Oxford bag and carried the rest out in their hands, and Jo and I followed behind with the rest.

Andy and Bob were very impressed by C4 ('It's HOOOGE!') and would have liked to have gone deeper, but in the event bringing out 180m+ of rope ~~was~~ (with 1 bag) was quite enough for 1 trip, and a job well done. Nobby!

NB - the un-named pitch below 'Maria Rosa' has been officially christened 'Double Fishermen's', in recognition of Jo's heroic struggle with the deviation at the top, and Bob's yet more heroic prussik past the core, and re-rig!

NB 2 3-4/8/96 To put the record straight, the trip wasn't a complete shambles, although the de-rig may have been. Andy and I had a brilliant time in zooming down the cave after Alex to reach the bottom (in 4hrs) for the first time. Underground Overdrive is very impressive once you get past the boulder chocky bits, with some fine meanders, and we both joined the elite bunch of people who have sailed on the Special Agent Sara. And yes, we yet again proved our complete and undoubted superiority over the '95 expedition by successfully eating 'Peaches on the Beaches'!

Some pitches still need names . . .

C4

(new cave)

- 5 Watershed
- 6 Fizzy Willy
- 7 As advertised
- 8 Maria Rosa
- 9 Double Fishermans
- 10 (poxy ~~the~~ pitch)
- 11 } The Manor
- 12 } (Olives perched sump)
- 13 Growing up
- 14 } (left pitches)
- 15 } ('Conciform rift'?)
- 16 } 'shit gets in your eyes' ←
(we like this!)

- 17 Mash Brown
- 18 Bugger Bognor
- 19 } ? Cat o' nine tails
- 20 }
- 21 Free and Easy
- 22 ? (10m)
- 23 Hope Street (Tape measure Torture rift around here.)
- 24 The ~~Si~~ Cheating Necromancer
- 25 Here be Dragons
- 26 ~~Widger~~ Marie Celeste

Vasco

Spain pitches

(assuming we're going to name them)

- | | | | | | |
|----|---|----------|----|------------------------|---------|
| 1 | | p28 | 13 | Lucky B | p4 |
| 2 | Here a bolt? | p14 | 14 | Bolt Farming | p15 |
| 3 | There a bolt? | p7 | 15 | Another girl | p10 |
| 4 | Red for Danger !! | p24 | 16 | Another planet | p10, 19 |
| 5 | | p5 | 17 | Another fine mess | p19, 16 |
| 6 | Here with the gear | p28 | 18 | p3 | p3 |
| 7 | | p7 | 19 | ropel climb | o |
| 8 | | p40 | 20 | p5 | p5 |
| 9 | | p9 | 21 | p10 ? | p10 |
| 10 | ? the bolt pitch Open all ours, p3 | p3 | 22 | ? Down in the hollows? | c 10 |
| 11 | The Big sleep | p15 (10) | 23 | Then we shall walk | p15 |
| 12 | ? (ladder) Cereal Killer | p8 (4) | 24 | } In Glorious Mud | p8 |
| | | | 25 | | |

- Non fiction series (mid sump)

- 232 (c 8) ↑
- 236 Stone the Giants p10
- 230 In Heil Brown GFS p10

* Smegadrive series

"I'd really love to do this afternoon's derigging trip - it's just that I feel I haven't collected enough snow recently" - John

? ex 5/8/96

04 De-Rig (The nearly final torture)

Gregg & I got up really early & did jobs around camp. After sorting kit out & getting adequate amounts of Mornflakes/flapjack into everybody it had managed to get to the dreadful time of mid-day! Gregg & I headed over, closely followed by Alex & Nick Burcham who had turned up just at the right time to be commandeered for the trip. An extremely swift descent was made to Bugger Boggor where I tidied up the brew kit. The others arrived & we started dragging the Paella up Nash Brown. By the time I arrived at the top Nick had started the great Paella Mutiny & had started plaiting the ropes. He only did ~~two~~ them in double strands so he didn't jam it in the phreatic tube & didn't go through as easy as a single strand! Alex went up the monster & I spent time re-plaiting. An 8 strand sausage of 125M of 9mm went through the rift really easy. We eventually got it all up "Crowing up" by hauling from the top. Hauling up the monster was by Alex. Communication up & down an 80m large shaft is somewhat echo-y & at one point the prussik rope disappeared! Also, the hauling line was 2m short so you had to jump up & clip a hand jammer on it, plus, every crab that went up the pitch didn't come back down. I got to the top & finished the monster off & was replaced by Nobby at the bottom end. Then was the fun of prussiking over the hauling team at the top of monster Pt 1. Hauling the ropes/bags up the next few pitches was very efficient & almost pleasurable, well, for me anyway, as I was experimenting with pulley/jammer hauling systems. The kit seemed to slip through the breakthrough rift

pretty easily with 5 people dotted along. Greg also managed to retrieve his lost tackle bag which was good 'cos he could then concentrate on de-rigging!

"Space..." was a bit of hard work, 3 people pulling at the top with Nick as human deviation just above the re-belay to prevent crap going down the pitch. After lurching the kit into the bottom of the first pitch Nick started the next mutiny & we all gave up. Jo had had bad cramp & was wimping in a corner but got herself up the pitch in a reasonable time. When I set off I thought... "Don't remember this pitch being wet." & sure enough, it was pissing down outside. This was NOT the plan. Another overnight trip down ct, our LAST trip & No surprise, not good.

Return to camp & "Pasta & fishy pasta sauce" by John was VERY welcome (& delicious) when the pasta water had eventually boiled. I was somewhat upset when I couldn't find the lemonade for my Gin & had to suffer Brandy. I eventually learnt that John had put it in the ice so we could have iced G & "T"'s in the lovely morning on exiting the cave. A very nice gesture but not the sort of place you'd look on a wet Picos morning! Anyway, we didn't get the kit completely out of the cave (failure failure) but a pretty splendid effort anyway. Good luck to the rest of the de-riggers. Mark Smith.

9

Well, myself & Greg are bugging off today (Wed 7/8). I would like to say a huge thankyou to everyone in the OUC for making us feel welcome & part of the team, this has contributed in a large way to the enjoyment of this visit to the Picos.

The Caving? It's serious, hard work and very rewarding. To this I'd add that both myself & Greg got to the bottom of ct and to the beach, very satisfying and exciting (bloody marvellous actually!) Gristle '96... "more... a legend than reality" !!

Cheers, Mark Smith.

And back to more serious matters ...

Jo ' Yes, we do seem to have spent an inordinate amount of time this expedition discussing our bowel movements '

Andy ' Well, there's no TV ! '

CHIT IS DONE.

10/8/96

The 3 man expedition is now up to a healthy 6, myself, Bill Naylor & Nick Burcham, - now we need to do some caving! About a week to go for a few pushing trips, photos, surveys & derig. No Problem.

~~Paul~~

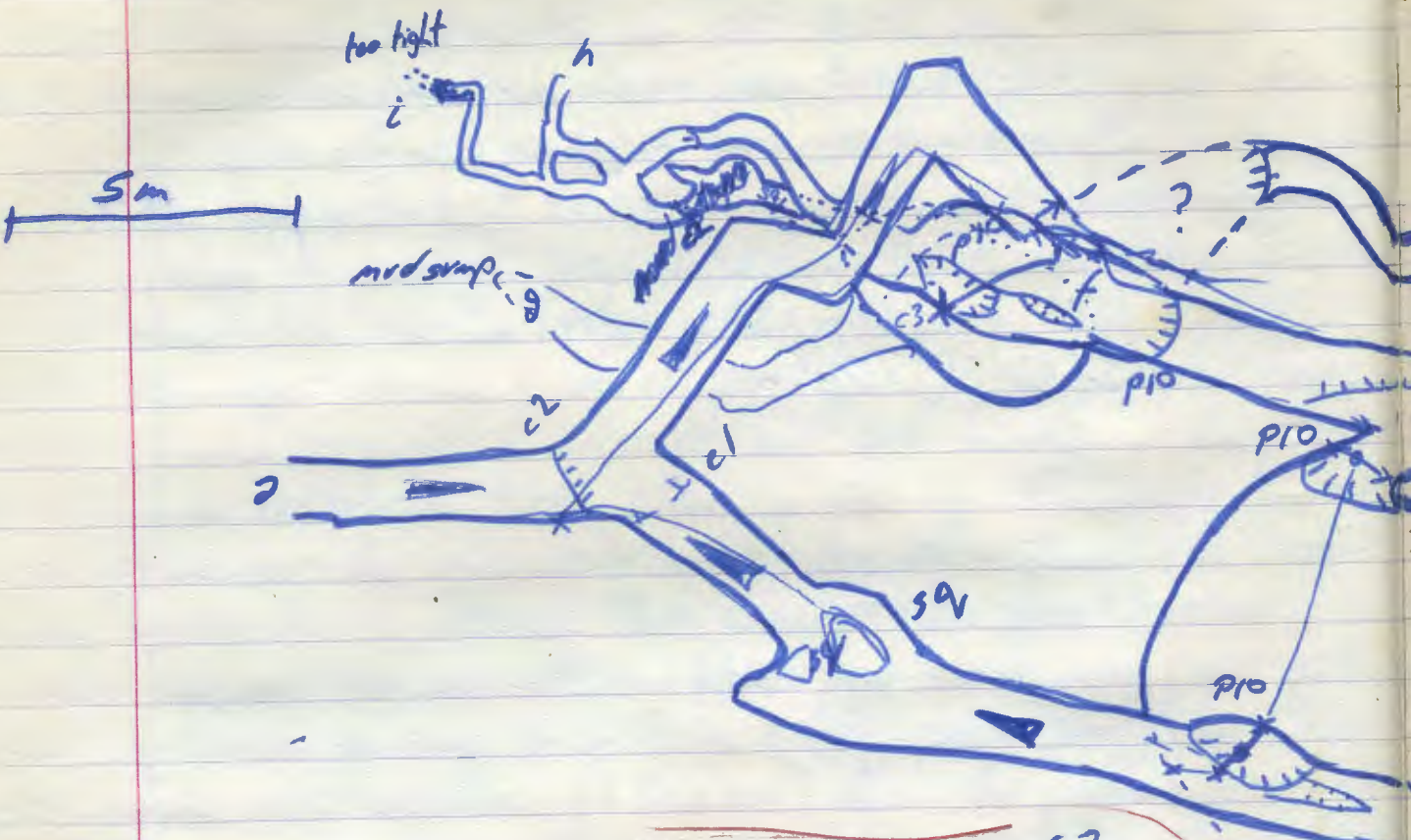
11/8/96

' There must be better places to rape the Japanese than the Welsh valleys' - Nobby
n'est-ce pas, Paul?

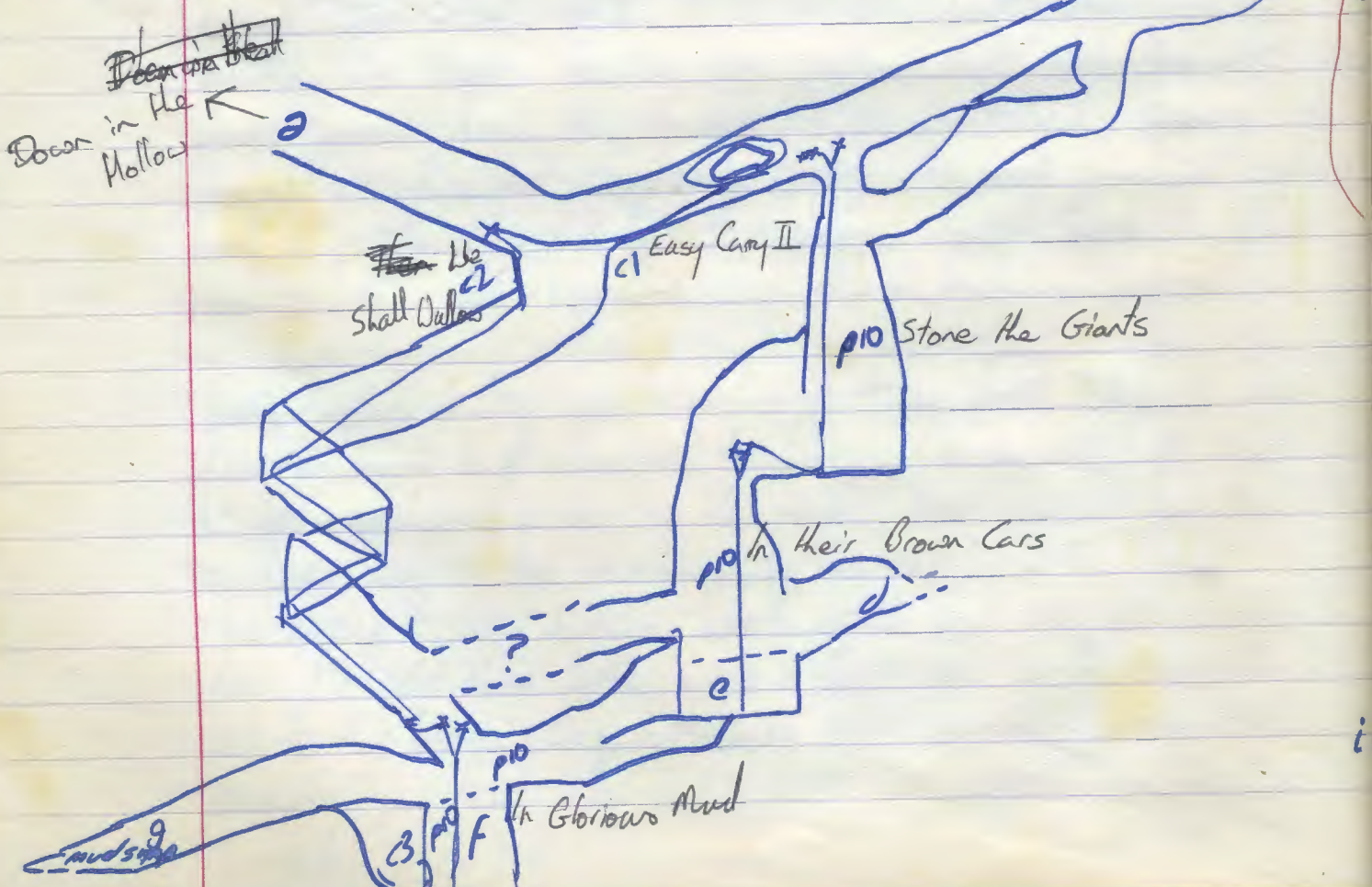
74

Smegadrive Series

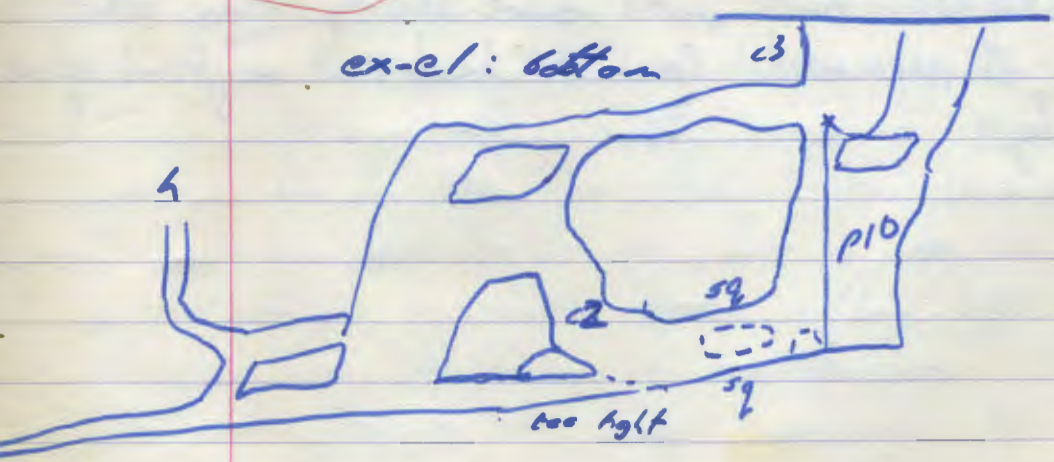
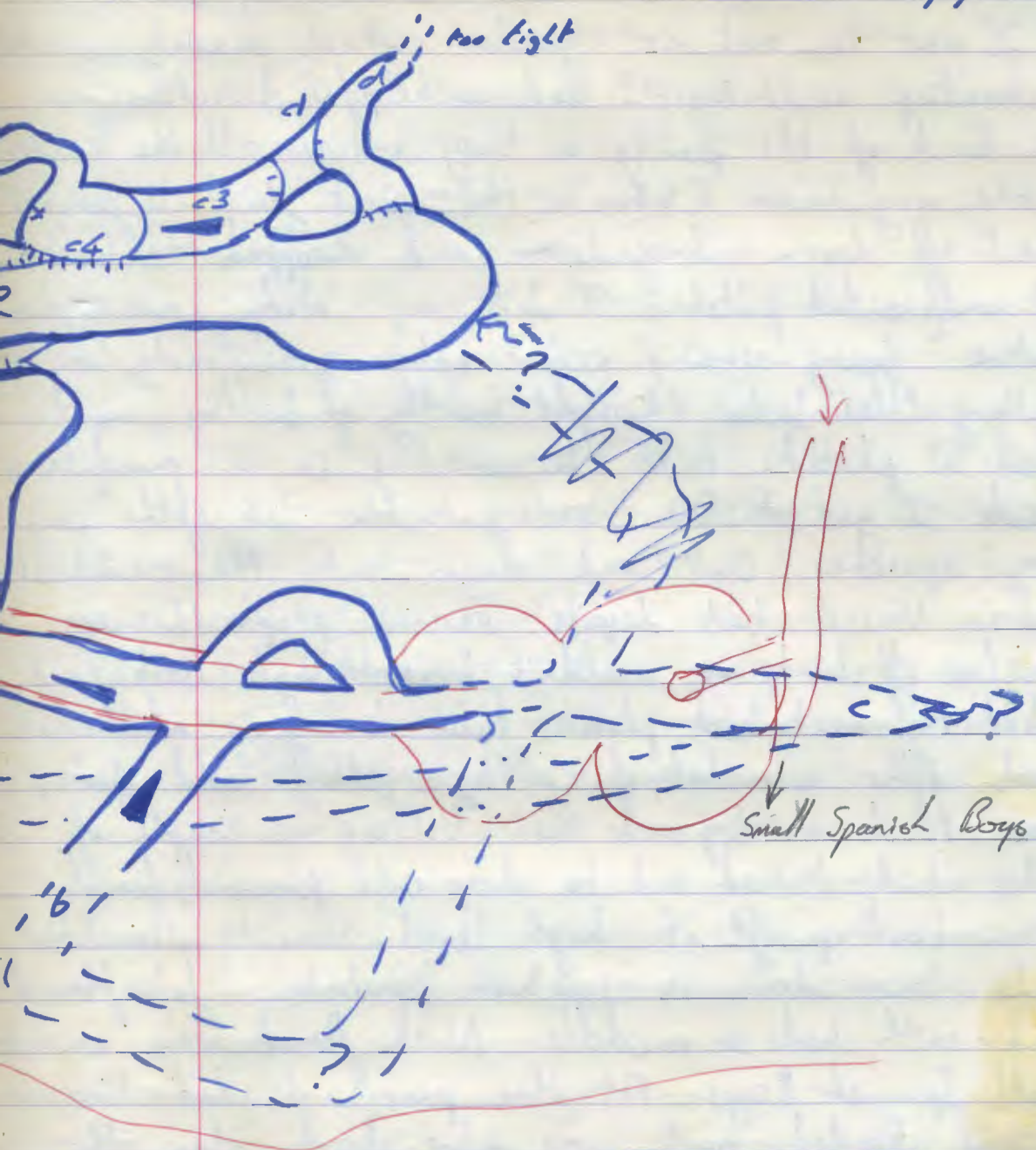
p10



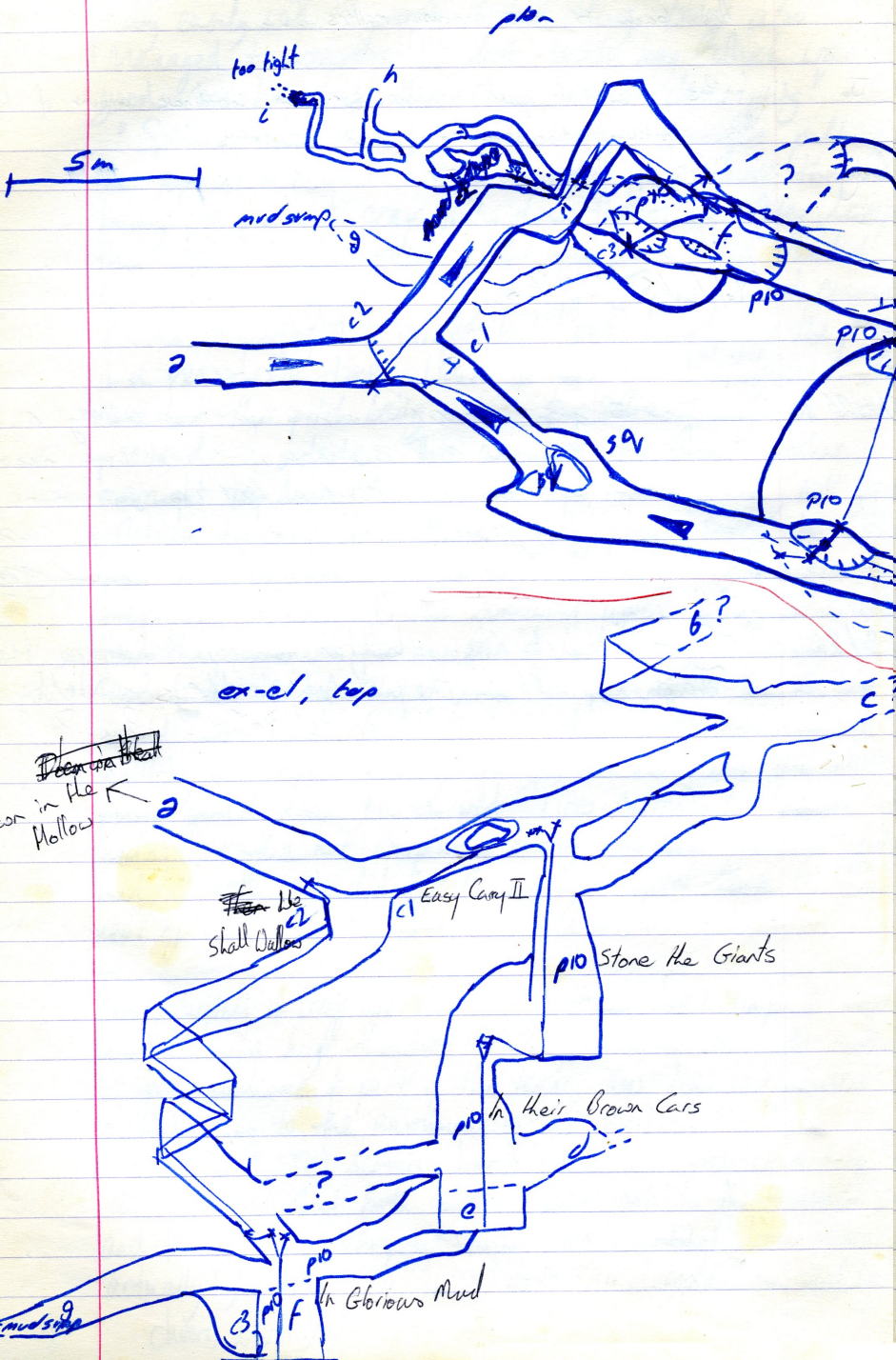
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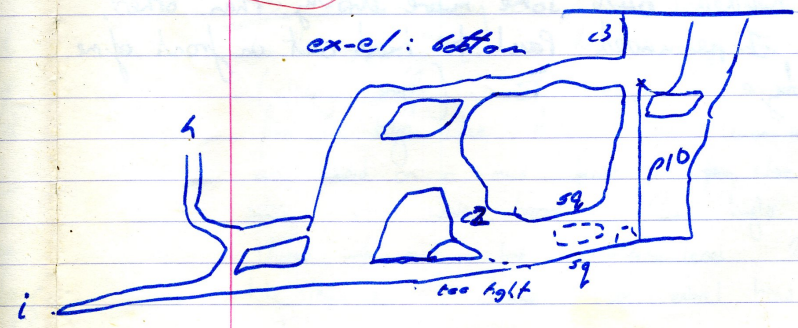
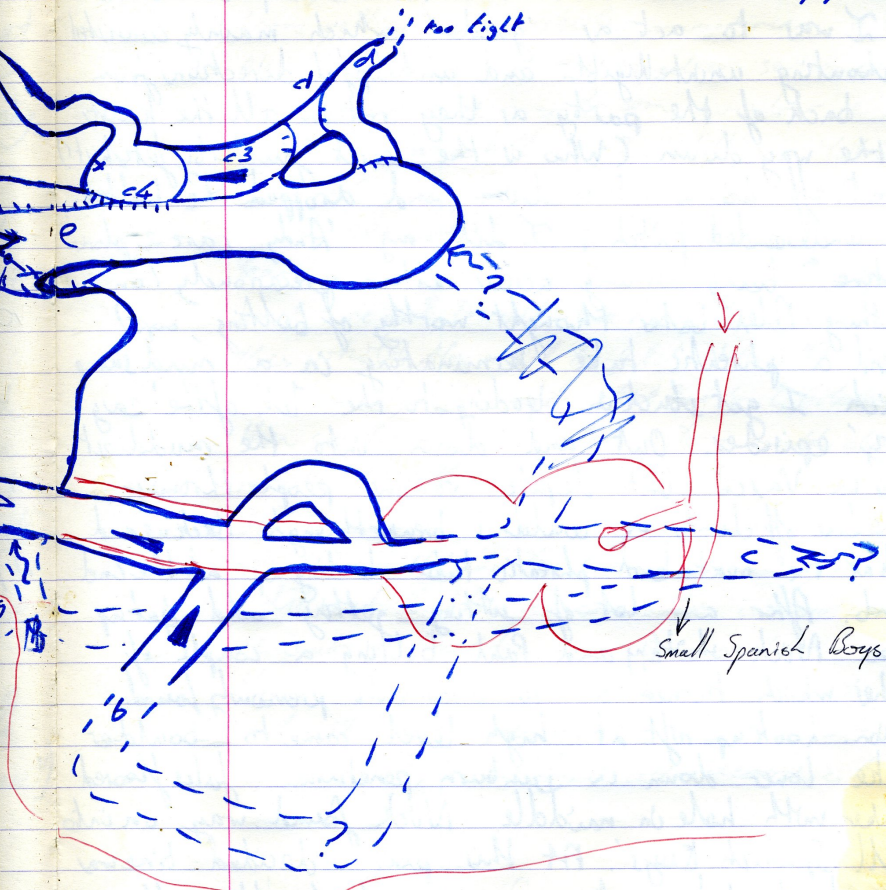
Grade II survey; bottom of pleatitic section in
torca del vasco,
as of 11/8/96 trip.



Smegadrive Series



Grade II survey; bottom of pleatitic section in
torco del vasco,
as of 11/8/96 trip.



(26)

14/11-15-8 Andy, Nick, Paul TOV

It was both Nick and Paul's trip down TOV so I was to act as 'guide' which mainly consisted of shouting unintelligible and unhelpful directions from the back of the party as they retied all the knots on the way down (Who is the secret flutterby fetishist?) Went off down Imagedore and dropped the bolted but unsecured pitch. I did my 'Andy cave explorer routine' being swung across rather precariously (on something Alex later thought worthy of bolting, oops) to find a phreatic tube terminating in a mud ramp which I got stuck in leading to the 'let of the 'eary carry' episodes. Out and down into the muddiest hole in Vasco but despite various people throwing themselves off climb, we couldn't break through. Back up and look at the next lead phreatic tube leading up at the 2nd climb. After a lot of sitting getting cold get up to see Nick shitting and Paul bolting a couple of pitches which turned out to drop into previously found section. Look up rift at high level came to 'boulder choke lower down is 'sunburn penetration' false floored chamber with hole in middle Nick found way on into 'Small Spanish Boys'. At this point decided time was up and headed out some more slowly than others, fortunately I persuaded Paul to head out in front of me.

- Andy

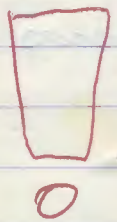
(70)

not - impassable rift, with the sound of a substantial streamway in the bottom. However, I couldn't actually get through the window to confirm that ^{this} was actually the ~~tho~~ streamway. I tried to squeeze through, and failed. I then went back to fetch a hammer, beached some large projections off the walls, tried again, and failed again. Finally I took the top half of my oversuit off and tried again, but by this time I was so knackered that I was almost likely to fail anyway. So I gave up. Take a chisel with you, but try not to drop it, eh? Nobby

Thursday 15th August : Day -9 & counting.

Retour au camp après 2 jours passés sous terre. TPST: 44 hrs. Une première sortie avec Alex et au début Paul pour faire des photos et un peu de topo. Une fois que la topo fut achevée on s'est mis à faire de la première dans «Small Spanish Boys», une série de 5 resauts suivi par 20m de puits. vite terminé avec disparition de l'eau dans un trou avec & dans le sens inverse. Plus de pequenos niños españoles. Retour à «Giant's hole» où Alex est parti vers 1h du matin. Dormi pendant 1h avant reveil par Nobby & Andy. But d'établir une continuation par marteau dans une étroiture vue par Nobby dernièrement. Réussi, mais on s'est trouvé, à mon idée, en aval de «Small Spanish Boys» avec une étroiture encore moins grande, donc impranchable.

en aval. Le chemin Retour ou à «Giant's hole», Repris le chemin en face de «Nobby's hole» suivant «Moon Lizard» jusqu'à une bifurcation très intéressante à la queue de celui-ci. Entré dans «Moon Lizard» on retombe très vite sur la rivière qui arrive de l'étroiture de «chez Nobby» par un résaut. De cette salle la rivière fut suivie jusqu'à un résaut exposé qu'on a laissé tombé vite fait. «Moon Lizard» fut repris et après un peu de montée sur pente boueuse on s'est trouvé à la queue: pente très boueuse qu'on a mis du temps à équiper. ~~Et~~ nous voilà, arrivés à notre bifurcation de toute à l'heure. On s'est mis à équiper un résaut de quelques mètres mais on a fini par continuer en escalade. Descente à «It's tundra» et on sentait le siphon très proche. Une fois Nobby décoincé de son étroiture boueuse, on a reculé de quelques mètres et quelques escalades y compris du toit, on est descendu finalement à «Lemington Spa» le siphon qu'on aimerait croire à -400m. Yes, boys & girls Torca del Casco appears to sump at -400m after much toil and trouble & false leads, dead ends, etc we have found a bottom if you're interested Jimmy!



Rejoins, nous sommes rentrés au camp bivouac où on a pensé à parti se glisser par «Nick's Samba penetration» dans

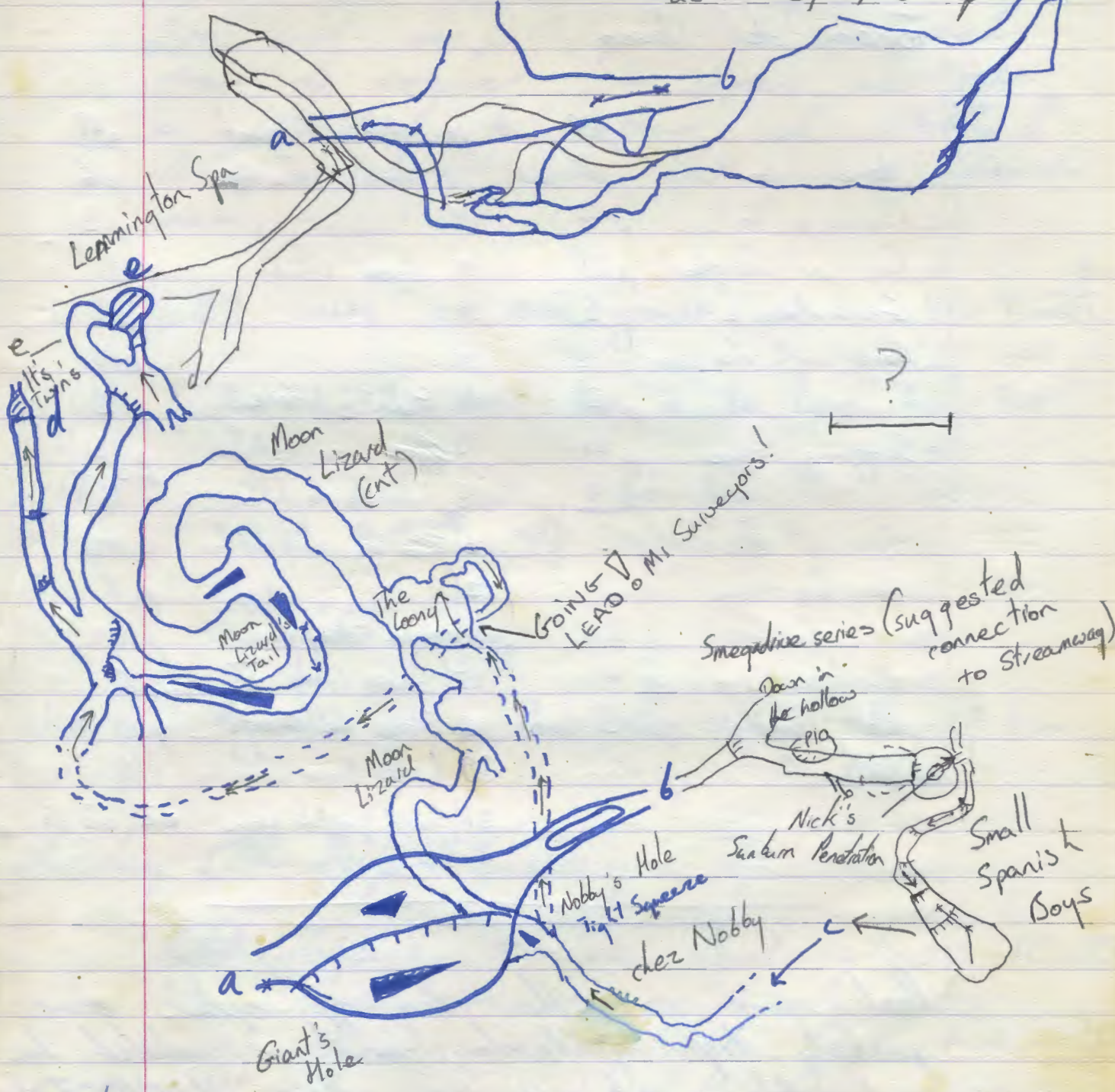
«Small Spanish Boys» pour faire de la topo. Nous disant que nous n'étions pas de grosses pointures dans ce domaine on ~~est~~ parti pour «chez Nobby» et le début de «Moon Lizard». On a fini par ~~parlant~~ très peu de topo "2 LEGS" et on s'est mis à manger un repas pas terrible avant de partir pour la surface, moi avec mon matos perso du camp bivouac et un blocus de pied qui me paraît cher et les autres avec un fût de puce de kit plein de corde, de matos à spiter et d'autres merdes y compris M4 SHIT.

All that remains is for Alex and Paul with his ^{bad} shoulder to survey all the way from «Giants Hole» to «Hemington Spa» and «It's Twins». Accomplished surveys as they are they might even decide to start the de-ice after just having surveyed and be rigged «Small Spanish Boys». What a shame Tim's ^{kind} prevents him from helping out "on los pequeños niños españoles".

Je vais au patch,

Nico

Bottom of Torca del Vasco Grade I/II as at 15/08/96 trip



(82)

Friday 16th August: - 8

Torca del Casco,

Spanish Series

- | | | | |
|--|------|--|--------------------------|
| 1. | p 28 | 16. Another Planet | p 19 |
| 2. Here a bolt? | p 14 | 17. Another Fine Mess | p 16 |
| 3. There a bolt? | p 7 | 18. | p 3 |
| 4. Red for danger | p 24 | 19. Loped Climb | |
| 5. Grandma's | p 5 | 20. | p 5 |
| 6. Gone with the gear | p 28 | 21. | p 10 |
| 7. | p 7 | 22. Giant's Hole | p 5 |
| 8. Shopping bags | p 40 | 23. There Lizard's Tail | p 15 |
| 9. | p 9 | 24. Easy Curry | p 5 |
| 10. Open all ours ^{ours} | p 3 | 25. Down to ^{to} the hollow | c 10 |
| 11. The Big Sleep | p 15 | 26. There ^{There} the shall walk | c 15 |
| 12. (ladder) | p 8 | 27. In Glorious Mud | p 8 |
| 13. Lucky B | p 4 | (Non Fiction Caving) | p 6 |
| 14. Bolt Farming | p 15 | 28. Easy Curry II | c 8 |
| 15. Another Girl | p 10 | 29. Stone the Giants | p 10 |
| | | 30. In their Brown Cars | p 10 |
| | | 31. Small Spanish Boys | c 2, c 3, c 4, c 7, p 20 |

Paul gave us the day off after our pushing trip yesterday, and so whilst he and Alex set off on their MAMMOTH surveying trip (Lemington Spa, It's Twins, Chez Nobby & Small Spanish Boys) the rest of us remained on the surface. Nobby & Bill close to carry rope downstairs this afternoon, Andy sun-bathed & sewed and I sun-bathed and started the washing. Having concluded that writing in French

is a little impractical, I shall save my French for guided tours of "Lemington Spa" and au fait que je suis en train de cuisiner le repas du soir en attendant le retour de Nobby & Dill, un bon verre de jaune dans la main.

Bill wants a rina grande with his lentil burger...

NICK
BILL
NOBBY
NICK

- How do they make them in the lower, then, Bill?
- What, girls?
- They mine them, don't they?
- No, that's in the valleys...

On guitar playing...

Nick: 'My mate reckons Paul Weller stole a gift off him...'

^{ps} Saturday 17th August: Day - 7

~~But~~ Glorious sunrise. Paul returns 10.00. Alex returns some time afterwards after exiting with no light, but OUR FUCKING BREN KIT, BASTARD!!! 62 legs surveyed. Ties bien, Merit Mark. Forgot chez Nobby but remembered los pequeños rinos españoles, Muy muy bien.

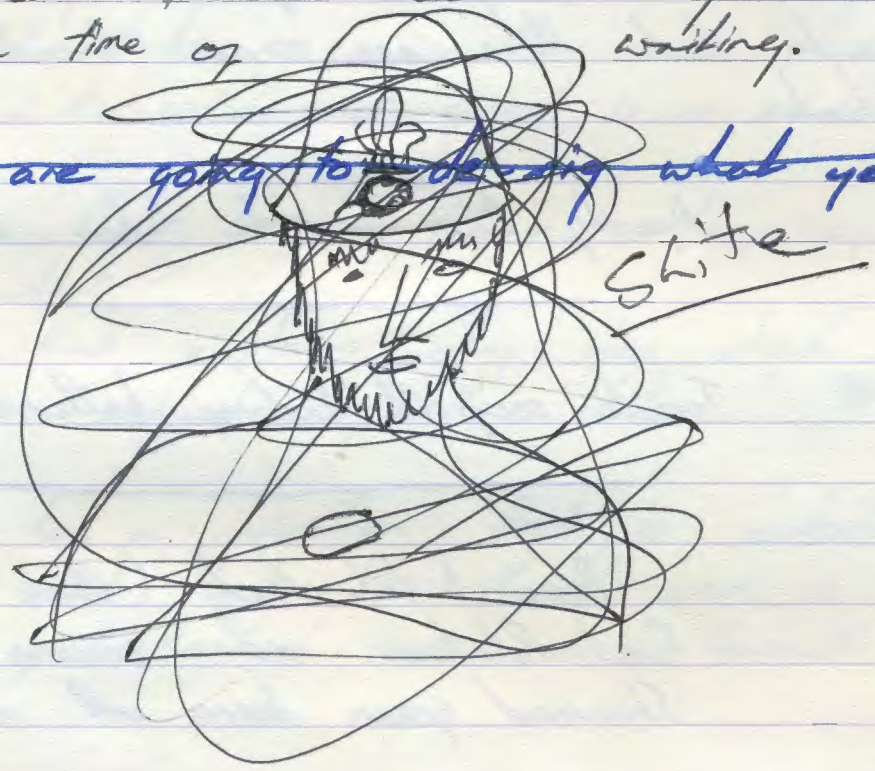
up

Sunday 18th August Day - 6

TPST: 12h30 Partis vers midi hier, rentrés peu après minuit. Torco del Vasco déséquipé entièrement malgré les reticences de Nobby. Parti pisser un coup au fond de Vasco. Fini par pisser trois fois et sorti 500m de corde et deux grand-mères. Manque de rechaud m'a fait chier, mais on a quand-même réussi un très bon plat de nouilles aux champignons avec moules cuit au meta. On est très fier de nous. Il est aussi ^{possible} que ~~le~~ OUCG est compatible avec la speleo light, Dndy ayant découvert le descendeur simple avec skip DMM autalock. Je n'aime pas les grand-mères, j'aime encore moins les porter. Dudley n'est pas un brave car que ses kids se sont bien que pour chier dedans. Ceux qui sont restés à la surface aujourd'hui, surtout

celui qui nous a volé notre recharge,
sort ~~des~~ des CUNTS. However harsh this
may seem, such was the general opinion
at the time of writing.

~~"You are going to decide what you do."~~



Lying in the sun surrounded by the rope
and tackle hauled out of Vasco yesterday
and clouded by a thunder storm in the
night, I find myself with time to mull over
how perfectly the expedition might end. Today
being Sunday we have a full 5 days before
we are due back in Oxford. It is my
belief that if everyone manages one down-
up today the remainder of top camp
can be carried downstairs tomorrow. I
do not consider this impossible. This would
allow us a fine meal and cider rest
at top camp / Ario refuge this evening
followed by a further bout of
rest at Los Lagos tomorrow

(86)
evening. To this end I am preparing the menu for tonight's Top Camp Banquet now. The menu being as follows, allowing for the fact that there are no bread rolls or steaks.

Aperitif - Atris to be taken at sunset.

Tomato soup with knob of butter & Bread rolls

Prime british steak (More lentil burgers)
Fried potatoes with onions & garlic
Steamed green beans with courgettes

Peaches with cream and
chocolate-brandy meringues

Coffee & mints.

The alternative being re-heated pasta, was stop less than appreciated by the returning de-riggers.

My time-scale for the next few days, although ambitious would if successful allow for a full two days of leisure before the long drive back to Oxford. Yes, Tuesday & Wednesday spent on the beach, shopping or frequenting larger bottles. Two whole days of small spanish beer

or middle-aged spanish shower depending on one's persuasion. A fitting end to an outstanding expedition and all that "legend" bollocks. Oh, let it be so..... Oh such a perfect day I'd rather not spend it on a bolt & back-up.

Andy: "Cola Cao makes you waterproof."

Nobby: "You what?....."

"Ah, that explains why you drink such ludicrous amounts of the slite..." *

Nobby has a conviction ~~that~~ for molesting small girls and that Lou Reed was a ~~cover~~ ^{man} with geological tendencies based on the lines:

"You are going to de-rig what you rig."
(reap) (sow)

"You just keep me hanging on."
(Perfect Day)

Does anyone else but Nick write in this book at the moment? (see last nine pages for confirmation...)
And lets stop all this French nonsense, eh?
Its not big and its not clever. fuck it!

Nick: "Are you pleased with Vasco?"

Paul: (pause)... Yes - Mahahahaha! Dont quote me on that...."

* Bill (some hours later) "Waterproof.....?"

88
END

Monday 19th August : Day - 5

Monster carry downstairs. Everybody's gone down with a first load. Back soon for a second. Paul does not lack motivation and has offered to carry me down the hill in the stretcher with the green tent on his back, running all the way.

Answers

Who said of ...?

- ① Olly, of an infeasibly large pan of Mornflakes
- ② To, of an enthusiastic billy goat en route to Top Camp
- ③ " , to Martin, of ~~sa~~ a bag of unripe pears

(B2) What	we	did	on	ow	holidays
Date 11/7	Where Torca del	Who Alex	Left At 15:00	ETB 21:00	Call Out 22:00 ✓
Out ✓	Vasco	Michael			
12/7	Torca de Vasco	Michael Pauline Andy	12:00	18:00	20:00 ✓ OUT
12/7	ER2	Alex Nobby	13:00	17:00	20:00 ✓ OUT
12/7	Torca del Vasco	Tim Jason Anita	17:30	1AM.	0600 out ✓
13/7	Torca del Vasco	Alex Olly	11:00	21:00	23:00 ✓
13/7	Short Bashing on other side of Vege Aliseda	Michael Anita	11:30	16:00	✓
C4 13 July	Pauline Andy	Pauline Andy	4:15	9 pm	midnight ✓
echo-locating (C4 then Gustafsen)	Tim	Tim	4:15	10 pm	midnight ✓
guest appearance in C4	Jason	Jason	4:15	9 pm	midnight ✓
14/7	C4	Pauline Tim Andy	12 midday	8 pm	11 pm OUT ✓
14/7	Torca del Vasco	Jason Nobby Anita	1:00 pm	1:00 am	8:00 am ✓
14/7	Source surveying	Alex Oli	2:00		✓
15/7	C4	Pauline Tim Olly Michael	2:30	12:00 midnight	early morning ~ 7 am ✓

DATE	Where	Who	Time Lett	ETB at Camp	Callout
15/7	Surface survey E12- ^{FEI} regulation	Arita John	5.00		✓
16/7	C4	Alex Nobby Jason	13:30	24:00	07:00 ✓
16/7	Area D Surface work	Michael Mark	14:00	19:00	20:00 Beck ✓
17/7	C4	Michael Ollie Arita John	14:00	5:00 ✓	8:30 8:30 am out ✓
17/7	E12 Deig	Andy Nobby	5:00 pm	7:30 pm	9:30 pm ✓
18/7	C4	Pauline Tim Andy	1 pm	1 am	7 am 19/7 OUT ✓
18/7	Torca del Vasco	Alex Nobby	17:30	06:00	08:30 ✓ OUT 19/7
19/7	Torca del Vasco	Michael Andy	3 pm	9 pm	11 pm ✓
19/7	C4	Pauline Alex Nobby	3:30 pm	10 pm	midnight ✓
20/7	Torca del Vasco	Alex Ollie Jason	11:45	20:00	22:00 ✓
20/7/96	Torca del Regalan. (Photo epic)	Tim Pauline Joanne Michael Andy Abbey	14:00	Midnight.	6 AM ✓ OUT
21/7/96	C4	Michael Ollie Jason OUT	13.00	03.00 am	8 am OUT ✓

(B4)

Date	Where	Who	Time Left	ETB	Call out
21/7	Torca del Vasco	Alex Andy	13:00	23:00	08:30
21/7	Surface Surveying from SnowPole to TdeV.	John Anita	17:30		✓
22/7	Torca del Vasco Survey & push (2)	John! Nobby Martin S. Geoff	14.00	22.00	24.00 ✓
23/7	C4	Pauline Nobby Tim B.	1 pm	3 am. 24/7	8 am 24/7. ✓ OUT
23/7	Torca del Vasco	Alex OUT Jason Gary / Fumpa Anita OUT	1:30 pm	2 am 24/7	8:30 am 24/7 ✓
23/7	Area D Shaft Bails	Andy Bobby	14:00	21:00	24:00 ✓
24/7	Area C4	Andy Bob Geoff	1:30 pm	2:00 am	ALL BACK 8:00 am ✓ ANDY - BACK BOB, GEOFF - DELAYED IN CAVE, OK
24/7	Torca del Vasco	Alex Jo Martin	14:00	22:00	24:00 All back ✓
24/7	snow plug cave	Fumpa Tim B	20:00		None! ✓
25/7	Area 8 (en route to Anita path).	Pauline Fumpa Tim B.	2:30 pm	7 pm	9 pm ✓

Date	Where	Who	Time left	ETB ETO	callout
27.7	C4	Nobby ^{out} ... eventually <u>5J</u> - out Martin - out Fumpa - out	3 pm	10 am 28.7	1 pm 28.7. out
28.7	C4 survey + push	<u>Pauline</u> OUT Andy Tim B	12	8 am 29.7	midday OUT 29.7
28.7	C4 rerig Monster	Jo Bob	1.00	1.00 am	7.00 am (29/7)
28/7	Torca del Vasco	John Anita Alex	13:30	03:00	08:30 OUT 29/7
29/7	TORCA DEL VASCO PHOTO TRIP	BOB MARTIN JOE	16:00	22:00	02:00 30/7
30/7	C4	PAULINE TIM BOB MARTIN GEOFF	11.45?	8 am 31/7	12.00 31/7 out
30/7	Torca del Vasco	Andy <u>Oly</u> out Alex	12:30	02:00 31/7	08:30 31/7 OUT
30/7	Surface surveying in Area F Then Verendaya for sunset	John Anita	4.30	23.00	24.00
30/7	RIDGE WALK TO JULTAYU VIA VERDILVENGA & CALLENTIE	Fumpa	14.45	21.00	22.00

BB

Date	Where, What	who was ^{who} left	Left	ETB	Callout
31/7	Swire Survey to Peak	Tom Anita	2.30	6.00	✓
1/8	C4 Bottom beach, Survey Connection to '95 last survey Stn/Upstream.	Martin OUT Geoff OUT Alex OUT	11.00	10:00	13:00
2/8	C4 - retrieval of ^{200m} rope from Marker	Nobby Jo Paul Andy Scott	11.00	11:00 22.00	Midnight ✓
3/8	C4 1 st wave derig (+ trip to beach with peaches)	Alex OUT Andy? OUT Nobby	11:30	who are you kidding?! ↓ 11:30 02:00 4/8	08:30 4/8 ✓
3/8	C4 2 nd wave derig	Martin OUT	6.00	02.00	08.30 ✓
5/8	C4 1 st wave derig	El Presidente Martin Geoff Nick	12.00	WHEN	9am (6/8)
5/8	C4 2 nd wave derig	Jo Andy Nobby	4 pm	FINISH!	9am (6/8)
7/8	C4 derig	Alex Andy Nobby Nick	14:30	17:00	19:00 ✓
10/8	Vasco	Andy Nick Paul	16:00	08:00 (11/8)	14:00 (11/8) ✓
11/8	Vasco	Alex Bill Nobby	13.30	08.00	12.00
				12/8	12/8 ✓

Date	Where	Who	Left	ETB	Callout
13/8	Torca del Vasco	Alex OUT Nick Paul OUT	13:00	07:00 14/8	13:00 14/8
14/8	Torca del Vasco Final push to sumps	Andy out? Nobby out (Nick) OUT	12:30	10:00 (15/8)	16:00 (15/8) ✓
16/8	Torca del Vasco final survey + start of denig	Paul OUT Alex	12:00	17/8 12:00	17/8 16:00
17/8	Torca del Vasco (denig to Spanish cave)	Andy - OUT Nick - OUT Nobby OUT pessimist cur +	12:00	02:00 (18/8)	09:00 (18/8)

BS

SURVEY DATA

Please copy up ALL your survey data into this book, clearly labeling what it is and where the corresponding drawings are.

Compass and Clino Calibrations

14/7/96

SET 1	Compass 342544 Clino 406556	Compass +0.5° Clino -0.5°	
SET 2	Compass 319123 Clino 226529	Compass -0.5° Clino 0	clino bugged 27.2.96
SET 3 (new this year)	Compass 612251 Clino 607371	Compass +0.5° Clino 0	
SET 4 (SISTECO) (not very good)	Compass 8101.0 Clino 844127	Compass +2.0° Clino 0	

Add these values to every leg to get the corrected values.

Compass corrections assume magnetic bearing from Verdelluenga bolt to Old Top Camp bolt is 291.5°
this needs checking against Proc. 13.

$$\Delta Z = \text{Tape} * \sin(\text{clino})$$

$$\Delta EE = \text{Tape} * \cos(\text{clino})$$

$$\Delta X = \Delta EE * \sin(\text{compass})$$

$$\Delta Y = \Delta EE * \cos(\text{compass})$$

Note: Torca del Vasco section A & C4 sections CKE are in front of log book

14/7

SURFACE SURVEY: SNOW POLE TO GIZ
COMPASS/CLINO SET 3

OLLY & ALEX

(39)

FROM	TO	TAPE	COMPASS	CLINO	+0.5° CORRECTED COMPASS	+0° CORRECTED CLINO
2	1	30.00	288°	-5.5°	288.5°	-5.5°
2	3	26.30	160.5°	-2.0°	161°	-2.0°
4	3	28.27	330°	+9.5°	330.5°	+9.5°
4	5	29.75	117.5°	-9.5°	118°	-9.5°
6	5	30.06	283°	+11.5°	283.5°	+11.5°
6	7	26.17	110.5°	+12°	111°	+12°
8	7	24.44	309°	-34°	309.5°	-34°
8	8a	10.72	197°	-1°	197.5°	-1°
8	9	28.81	122°	+18°	122.5°	+18°
10	9	25.55	317°	-30°	317.5°	-30°
10	11	7.08	194.5°	-26°	195°	-26°
12	11	14.67	350°	-15°	350.5°	-15°
12	13	30.68	038°	-16.5°	038.5°	-16.5°
14	13	30.30	237°	+9°	237.5°	+9°
14a	14	29.17	174.5°	+7.5°	175°	+7.5°
14b	14b	29.70	353.5°	-23°	354°	-23°
14c	14b	30.28	168.5°	+8°	169°	+8°
14c	14d	30.05	337.5°	-10°	338°	-10°
15	14	30.49	198°	+9°	198.5°	+9°
15	16	30.43	072°	-24.5°	072.5°	-24.5°
17	16	24.35	232°	+16.5°	232.5°	+16.5°
17	18	30.10	2028°	-18°	028.5°	-18°
19	18	28.86	284°	-17°	284.5°	-17°
19	20	22.14	049°	+3°	049.5°	+3°
21	20	12.23	313°	-4.5°	313.5°	-4.5°

NOTES

1: SNOW POLE

8a: TAG ON F71

11: CIRCLE ON F53

14: CAIRN BY BIG SNOW PILE

17: 1.5m ABOVE MARKING FOR E7

21: F85/GIZ TAG,

15/7
 (B10)

Surface Survey from E12 to E6 to E1 Regellon
 compass/clino set 2

John & Anita.

-0.5°

0

From	To	TAPE TAPE	COMPASS	CLINO	CORRECTED COMPASS	CORRECTED CLINO
2	1a	29.32	207	+26	206.5	+26
2	1b	25.90	205	+25.5	204.5	+25.5
2	3	30.02	025.5	-25	25	-25
4	3	5.70	194.5	+22	194	+22
4	5	5.86	055.5	-36	55	-36
5	5a	1.20	—	down	—	down
6	5	24.20	314	-21.5	313.5	-21.5
6	7	20.10	118.5	+19.5	118	+19.5
8	7	27.07	292	-19	291.5	-19
8	9	29.15	098	+15.5	097.5	+15.5
10	9	17.86	257	+1	256.5	+1
10	11	24.89	162.5	+33	162	+33
12	11	24.88	300	-32.5	299.5	-32.5
12	13	24.50	119.5	+29	119	+29
14	13	28.74	257.5	-22	257	-22
15	14	11.50	265.5	-25	265	-25
15	16	13.82	052	+9	51.5	+9

Station 1b is 'F85' toy on E12

Station 1a is Cairn above E12

Station 5a is ⊗ on E6 inscription

Station 16 is peak of E1 regellon.

C4 15.7.96 Section A

instruments M.P.
 tape O.J.H.
 book T.C.G.

(S) = 'permanent' survey station
 Probably Set 3

best mark
 at start of
 rift, (S)

Station	L	R	u	D	distance	mag. bearing	vert. angle
1	0	1.12	1	1.6			
↓					2.91	079°	-2°
2	0.4	0	?	1.5			
↓					3.87	078°	+6°
3	0.35	0	0.25	2			
↓					1.52	046°	+7°
4	0	0.4	0.8	0.3			
↓					6.13	055°	-8°
5	0	0.2	↑	1			
↓					2.10	061.5	+8
6	0	0.4	1.5	0.6			
↓					9.23	094	-53
7	0.4	0.5	S?	S?			
↓					2.86	074.5	-73
best 8	0.5	0	10?	6.86			
↓					6.86	-	↓
9	3	1.5	7	0			
↑					6.40	211	-9
10	0	2.3	10+	1.4			
↓					11.37	102	+2
11	1.7	0	10+	1.4			
↓					11.95	195.5	+3
12	0	2.6	10+	1.5			
↓					7.40	241	+4
13	0.8	1.2	10+	0			
↓					6.19	282	-31
14	1.5	0	1	0.4			

B12

Station	L	R	u	D	distance	mag. bearing	vert. angle
10							
↓					6.87	234	+31
15	0.8	1.5	5	0			
↑					10.19	54.5	+14
16	0	1.6	8?	2			
11							
↓					3.79	64.5	-26
17	0.7	0	0.8	2.2			
↓					2.72	356	-48
18	0	2	1.5	12			
↓					11.86	-	↓
19	2.5	1.7	15+	0			
↓					8.85	196.5	-31
20	2.8	2.5	5	♀			
↓					7.23	096.5	-14
21	0.5	0.8	3.5	0			

Rock at base of "As admitted" (S)

C4

16/7/96

Section B

Instruments / Tape
Book

Nobby
Alex

Instrument set 3

Station	L	R	U	D	Tape	Compass	Cling
A19 = 1	2	2	↑	0			
↓					1.55	072.5	+09
2	0	1	↑	0			
↓					0.75	031	-43
3	0.5	0	↑	↓			
↓					2.12		-90
4	0.2	2	↑	0			
↑					4.80	189	-47
5	4	1	↑	$\frac{1.6}{3}$			
↓					9.79	253.5	-22.5
5A	4	2	↑	1.3			
<hr/>							
5	4	1	↑	$\frac{1.6}{3}$			
↓					14.00	328.5	+ +14
6	3	0	↑	$\frac{1.5}{5}$			
↑					4.31	061.5	-04
7	4	1	↑	1.6			
↓					13.55	278	-39
8	3	1.5	↑	1.2			
<hr/>							
7	4	1	↑	1.6			
↓					7.48	061	-39
9	0	1	↑	↓			
↓					0.81	081	+18
10	0	1	↑	↓			
↓					19.14		-90
11	0	5	↑	$\frac{0}{3}$			

Beside pool below inlet

20/3/14

Station	L	R	U	D	Tape	Compass	Climo
11	0	5	↑	0/3			
↑					6.89	282.5	+12
12	1.5	1.5	3	↓			
↓					6.25	—	-90
13	2	2	↑	0			
↑					2.27	280	-33.5
14	1.5	3	↑	0/2			
↓					1.60	108	-11
15	2.5	1	2	↓			
↓					4.34	151	-67
16	0/2	0	↑	1.5			
↑					5.62	228	-13.5
17	5	0	0/4	2			
↓					2.75	299	-31
18	0	5	4	2			

1st bolt of traverse
line for monster part I

C4 Resurvey of top section

19.7.96

book - Pauline

Instruments - Alex (Set 2)

Tape and new ideas for measuring pitches - Noboy.

station	L	R	u	D	Tape	compass	dino	
1	4.3	0	⁴ / _{sky}	1.2				cave tag
↑					2.21	093.5	+13	
2	3	1.5	"	1				
↑					12.25	202°	+62	
3	0.4	0.95	5	0				
↑					3.27	198.5°	+32	
4	0.065	0	0.7	1.7				
↑					2.79	122°	+59.5	
5	0	1.2	4.5	0.9				window
↑					2.70	065.5	+64	
6	0	0.8	1.1	pitch				Ⓛ bolt
↓					15.30	-	↓	
7	0.15	1.68	pitch	1.5				big rock at base
↑					5.54	327.5	-25.5	
8	0	1.2	pitch	1.5				
7								
↑					4.55	147.5	+60	
9	1.1	0.28	5	pitch 0.95				
↓					13.1	-	↓	
10	W 0 E 1.7	N S.24	pitch	0.2				
↑					7.20	178	-22.5	
11	1.8	0	1.03	1.4				
↑↓					8.20	206.5	-25	into an inlet
12	0	0.8	2	2				
↑					2.15	061°	+38	
13	0	0.95	1.5	1.8				

B16

Station	L	R	U	D	Tape	Compass	Uins	
11								
↓					7.20	355.5°	-5	
14	0	4	10	3.3				
↑					6.25	245°	-24	
15	1.5	0	10.5	1.4				
↓					10.95	060°	-41.5	
16	2	5	?	pitch				'parnts beat'
↓					6.75	055.5	-48	
17	S = 4.05 SE = 4.3			1.85				top b/wt on 'space'
↑					4.03	105	+63	
18	wall behind = 2.2		10+	pitch				
↓					36.04	-	↓	
19								centre of chamber

survey legs ~~from~~ ^{to} station 19 ~~to~~ ^{from} walls. (~~last bearings~~)

20					6.35	009	
21					7.1	057.5	
22					3.65 3.65	112	
23					3.55	302.5	

19								
↑					7.90	256	-60.5	
24	2.7	1.3	10.3	1.5				Alex's nose
↓					2.66	059.5	-12.75	
25	0	1.15	0.8	1.68				PSS b/wt.

Torca del Vasco Section B 6th pitch - 11th pitch 20/7/96

Book Alex

Tape / Instruments Olly & Jason

Set 2

	Station	L	R	U	D	Tape	Compass	Climo
	A23= 1	1	0	↑	↓			
	↓					24.11	—	↓
	2	0.5	0.7	↑	0			
	↑					2.27	268.5	-3
	3	1.5/5	1	↑	0/↓			
	↓					3.80	—	↓
	4	4	0	↑	1			
	↑					4.90	251	-15
	5	1.3	1	↑	0			
	↓					6.40	102.5	+9
	6	0	0.3	0.3	1.7/↓			
	↓					1.59	120.5	-49
Bolt	7	2.5	0	↑	↓			
	↓					5.40	—	↓
	8	2	0.7	↑	0/4.5			
	↑					2.10	285	-1
	9	0.5	0	↑	1			
	↓	0.5	0	↑	1	9.92	102.5	+2.5
	10	0	0.2/0.6	1	1			
	↓					3.70	109	-22
	11	0.6	0	0.7	↓			
	↓					6.22	101	-74
	12	0	0.3/2	↑	↓			
	↑					3.70	285 85	-4.5
	12a	0	0.95	2.5	2			
	↑					2.30	135.5	-13.5
	12b	0.5	0	↑ climb	4			
	↓					5.85	264	-51.5
	12c	0	0.7	5	1.6			

B18

Station	L	R	U	D	Tape	Compass	Climo
12c	0	0.7	5	1.6			
↓					4.60	282	-18.5
12d	0.95	0	2	2			
<hr/>							
12	0	0 ³ / ₂	↑	↓			
↓					5.94	—	↓
13	0 ⁰ / _{0.8}	0.2	↑	↓			
↓					28.81	—	↓
14			↑	↓			
↓ 13					4.86	—	↓
15	0.3	2.6	↑	0			
↑					4.91	270	-22
16	1	0	2.5	1.5			
↓					6.17	105	+57
17	2.5	0	↑	1.8			
↓					3.45	195	-10
18	0 ⁰ / _{0.3}	0.7	↑	↓			
↓					8.13	114	-66.5
19	←	0	↑	↓			
↑					7.24	078	+54
19a	0	4	↑	6			
<hr/>							
19	←	0	↑	↓			
↑					5.52	183	+20
20	0	0.3	0.5	1			
↑					2.48	248	+20
21	0.6	0	0.5	1			
↑					2.67	156	+24
Bolt	2	0.3	0.5	↓			
↓					6.08	—	↓
23	0 ⁰ / _{0.7}	0 ⁰ / _{0.7}	↑	0 ⁰ / _{1.6}			

Station	L	R	U	D	Tape	Compass	Climo
23	$\frac{0.1}{0.7}$	$\frac{0}{0.7}$	↑	$\frac{0}{1.6}$			
↓					4.19	342	+74
24	0	1	↑	↓			
↑					3.62	221	+30
25	0	0.8	1	1		221	
↓					3.75	91	-14
26	0	0.5	0.4	0			
↑					2.50	305	-15
27	0.3	0	0.6	1.2			
↓					2.08	90	-25
28	0.6	0	0.5	$\frac{0.7}{1.7}$			
↓					4.09	32	-35
29	0	1	0.7	1.4			
↓					3.34	99	-26
30	0.8	0.1	0	0.2			
↓					1.66	120	+8
31	0	0.2	0.6	0.6			
↓					0.86	168	-3
32	0.5	0	0.8	0.6			
↓					2.40	92	-24
33	0.2	0.3	0.4	$\frac{0}{0.3}$			
↓ 33					2.87	123	-23
34	0	0.7	$\frac{0}{1}$	$\frac{0.5}{0.8}$			
↓					2.34	219	-41
Knot of yhang 35	0.2	0.2	1.2	↓			

(B22)

Surface survey Snow pole - Torca del Vasco

21/7/96 Instruments (SET 2) Anita & John
Book John & Anita

Station		Distance	Bearing	Climo
From	To			
2	1	23.55	170.5	+9
2	3	27.68	330.5	+3
4	3	29.88	128	-8
4	5	31.46	343	-23
6	5	10.75	144.5	+10
6	7	22.50	338	-56.5
8	7	23.82	121.5	+7
8	9	15.03	295.5	-2
10	9	27.65	169	+15
10	11	29.05	350.5	-20
12	11	31.44	183.5	+22
12	13	15.02	335	-4
14	13	30.34	159	+14
14	15	27.80	340.5	+1.5
16	15	26.00	117	+2
16	17a	8.68	299.5	-32.5
16	17b	9.00	284.5	-36

Station 1 is base of snow pole
Station 17a is centre of red dot on
Polifino marking at T del V

Station 17b is bolt on 1st pitch of Torca
del Vasco.

Torca del Vasco
Book Alex

The Big Sleep → The Marge Tub
Section C

2/17/96

Tape Instruments

Andy

Sec 3

Station	L	R	U	D	Tape	Compass	Climo
B35 = 1	0.2	0.2	1.2	↓			
↓					6.82	—	↓
2	0.1	→	↑	0% ↓			
↑					2.24	052	+18
3	←	0	↑	0.5			
↑					4.17	113	+35.5
3a	1	0.5	↑	1/2			
<hr/>							
3	←	0	↑	↓			
↑					3.84	274	+47
4	0.4	0	↑	↓			
↓					4.42	—	↓
5	0.8	0.3	↑	0			
↑					3.42	264	-21
6	0.6	0.2	↑	0.2% ↓			
↑					3.77	179.5	-35
7	0	0.8	3	0.5 / 1.5			
↓					3.39	119	-27
8	0.2	0.2	0	0.5			
↓					1.80	132	-25.5
9	0.3	0.3	0	1.4			
↓					1.57	209.5	-36
10	0.6	0	0.2	0.6			
↓					2.86	123	+33
11	0.05	0.5	0	0.25			
↑					1.45	356.5	-16
12	0.2	0.3	0.3	0.6			
↑					0.54	272	-3.5
13	0.2	0	0.5	0.8			

1322

Station	L	R	U	D	Tape	Compass	C/Ino
13	0.2	0	0.5	0.9			
↓					1.09	51	-17.5
O	0	0.5	0.1	0.7			
↑					1.34	286	+2
M	0.1	0.3	0.5	1			
↓					4.49	130	-14.5
L	0.6	0	0	↓0.6			
↑					2.28	242.5	+21.5
K	0	0.3	0.6	0.7			
↑					1.28	190	+14.5
J	0	0.4	0.3	0.6			
↓					1.28	318.5	-28
I	0	0.5	0.5	0.8			
↑					0.89	234	+17.5
H	0	0.4	0.6	0.5			
↓					0.69	16.5	+4.5
G	0	0.4	0.1	0.6			
↑					3.60	219	+54
F	0.4	0.3	0.5	0			
↓					4.69	42	-34.5
E	0.7	0	0.4	0.3/2.6			
↓					2.53	2	-28.5
D	0.5	0.2	0	↓			
↑					3.70	164	+66
C	0.7	0.3	2	1.4/3			
↑					5.51	11	+31.5
B	0	1.2	10+	1.5			
↓					5.99	254.5	-32
A	0.7	0.7	10+	1.4			

Torca del Vasco The Marge Tub
 Book Alex / Jason Section D
 Instruments Jason / Alex / Fumpa / Anita

2317

Set 3

corion below
 another planet
 E1

chamber
 behind
 another planet
 pitch used.

Station	L	R	U	D	Tape	Compass	Clima
1	2.6	1.7	↑	0			
↑					19.00	/	↓
2	2	1	↑	0/↓			
↑					4.00	95	-9
2a	1.1	0	↑	1.2			
↑					6.70	10	+9
2b	2	2	↑	1.5			
2	2	1	↑	0/↓			
↓					2.03	198	-2.5
3	←	0.2	↑	0			
↑					9.13	/	↓
4	1.5	0.5	2/↑	1/↓			
↓					4.37	257	-25
5	0	0.7	0.5	↓			
↑					1.40	348	+50
6	0.7	0	0.1	0.5			
↑					1.07	325	+2
7	0.5	0	0.5	0.7			
↑					1.50	347	-43
8	0.5	0.5	1	0			
↑					1.94	339	+14
9	0	0.4	0	0.5			
↑					2.51	305	+39
10	1.75	0	3	2			
↑					3.13	195	-18
11	1	0	0.5	1			
↑					1.85	154	-54
12	0	0.5	0.5	2			

B243

	Station	L	R	U	D	Tape	Compass	Climo
	12	0	0.5	0.5	2			
↑	12					2.56	14.55 145.5	-15
	13	1	2.5 0.5	0.5	0			
↑	13					3.10	346	-44
	14	1.5	0.5	↑	0			
↓	14					4.90	240	-24
	15	1.5	0	↑	1.5			
↑	15					16.18	0	↓
	16	0	0.5		↓			
↑	16					4.70	47	+14
	17	2	0	↑	1			
↑	17					4.50	0	↓
	18			0	↓			
↑	18					3.58	35	-31
	19	0.2	0	0.75	↓			
↑	19					1.35	26	-45
	20	0.4	0	0.9	0.6			
↑	20					3.63	334.5	-44
C.C =	21	0.2	0.8	1.5	2.5			

Surface Survey F54 → F64 → F70

25/7

Book Alex

Tape Nobby

Instruments John

Set 3

Station	Tape	Compass	Cline	Note
1				F53 centre of ⊗
↑	25.34	002	-23.5	
2				
↓	30.50	151	+36	
3				
↑	8.58	359.5	-34	
4				
↓	20.30	148.5	+33.5	
5				
↑	29.18	323.5	-33	
6				
↓	26.98	195.5	+31.5	
7				
↑	27.86	323.5	-6.5	
8				
↓	9.07	150.5	+14	
8a				E8 centre of ⊗
<hr/>				
8				
↓	30.33	070	+24	
9				
↓	1.64	 	↓	
9a				
<hr/>				
9				
↑	30.14	324	+9	
10				
↓	11.57	201	+14.5	
11				E11 tag

B26

Station	Tape	Compass	Climo	Note
8				
↓	26.80	194	+18	
12				
↑	29.09	078.5	-5	
13				
↓	23.38	281.5	+25	
14				
↑	17.67	188	+33	
14a				
↓	9.12	206	-1.5	
14b				E10. centre of O
<hr/>				
14				
↑	29.56	066.5	-25	
15				
↓	6.66	205	-20	
15a				E9 centre of O
<hr/>				
15.				
↓	11.00	279.5	+14.5	
16				
↑	16.79	018	-22	
17				
↓	21.43	195.5	+29	
18				F64 1 st survey station Δ
<hr/>				
16				
↑	16.12	180.5	+14	
19				
↓	30.50	333.5	-39.5	
20				
↑	26.53	127	+25	
21				

Station	Tape	Compass	Climo	Notes
21				
↓	16.73	300.5	-21	
22				
↓	2.41	191	-31.5	
22a				F52 centre of ⊗
<hr/>				
22				
⤴	8.68	093.5	0	F56, looking down entrance
22b				
<hr/>				
22				
↑	17.01	112.5	-10.5	
23				
↓	27.73	303	-19	
24				
↑	13.22	179.5	+23.5	
25				
↓	27.32	334.5	-27	
26				on bridge above obelisk
↑	27.18	108	+1	
27				cairn on bridge (Δ 50cm away)
↓	8.96	328	-26	
28				
↑	17.22	171.5	+28	
29				
↓	21.70	295	-30	
30				
↑	19.44	0.76	+9	
31				
↓	5.31	217	+5	above F70
31a				
<hr/>				
↓	19.89	012.5	-25	cairn near F70
32				

(B23)

Surface Survey

F66 → F50

2717

Book Alex

Tape Anita

Instruments Pauline

Set 2

Station	Tape	Compass	Climo	Notes
F54 → F64 → F70/27 = 1				
↑	30.55	25.5	-15.5	Snow Pole cairn on bridge
2				
↓	29.86	189.5	+4	
3				
↑	26.91	18.5	-13.5	
4				
↓	30.38	191	-0.5	
5				
↑	18.11	16	-3	
F54 → F64 → F70/32 = 6				cairn near F70
<hr/>				
F54 → F64 → F70/27 = 7				cairn on bridge (next to it)
↑	19.80	038.5	-16	
8				
↓	23.93	66	+5	
9				
↓	2.48	156	+7.5	
9a				F66 tag
<hr/>				
9	12.63			
↓	12.63	265.5	+5	
10				
↓	21.09	308	-16.5	
10a				F67 tag
<hr/>				
10				
↑	30.68	353	-7	
11				

Station	Tape	Compass	Climo	Notes
11				
↓	28.64	154.5	+5.5	
12				
↑	23.25	328	-17	
13				
↓	17.80	165	+14	
14				
↑	29.53	10	+1	
15				
↓	11.56	197	-9	
15a				centre ⊗ F51
<hr/>				
15				
↓	20.72	168.5	+16	
16				
↑	26.95	323.5	+1.5	
17	26.95	323.5		
↓	26.70	207.5	+0.5	
18	26.70	207.5		PSS F50
<hr/>				
13				
↓	5.21	45	+34	
13a				
↑	13.62	263	-13.5	
13b				
↓	21.41	114	+20	
13c				Tag F68.

B30

C4 SECTION D.

C4 Brew station

(Bob. 12)

(Fampa)

instruments

work ~~RRK~~, ~~AK~~ also GN, AK.

Set 3

25.7

C14 =

Station	L	R	U	D	Tape	Compass	Climo	
1	5	0	?					
↓					4.93 m	268°	-36.5°	
2	0	2	10	15				
↑					18.5	182°	+75°	
3	2	0	10	15				
↓					9.82	353°	+3	
4	0.5	0	0.5	15				
↓					2.63	347°	+2	
5	0	0.5	1	6				
↓					4.90	002°	-40	
6	4	4	10	6				
↓					12.54	357.5°	-52°	
7	0.8	1.0	3.5	11.47				
↓					11.47	Plumb	/	
8	1.5	1.8	15	0				
↓					3.31	353.5°	-6°	
9	8	10	29	7				
↓					9.11	Plumb	/	
10	10	8	16	8				
↑					9.21	244°	+57°	
11	NOT done							

E1 =

~~RRK~~

Torca del Vasco

SECTION E

28/7

Book : John

Tape : Alex & Anita

Instruments : Anita

SET 1

LRUD facing into cave.

Station	Tape	Compass	Clino	L	R	U	D
D1 = 1				2.5	2.5	↑	0
↑	4.30	211	-9				
2				1:0	1.3	14? ↑	↓
↓	16.03	-	down				
3				0.7	0	↑	0.6
↓	1.44	035	+27				
4				0	0.7	↑	1.8
↑	2.00	280	+51				
5				0.5	0	↑	1.5
↑	1.98	168	+21				
6				1.1	0	↑	0.6
↓	1.80	075	-17				
7				0.7	0	↑	2.5
↑	6.16	110	+4				
8				0	1.2	↑	1.4
↑	1.61	219	+6				
9				0	0.7	↑	$\frac{0}{2.5}$
↓	8.95	342	+33				
10				0	0.8	↑	$\frac{1.5}{5?}$
↑	4.58	230	-39				
11				0.8	0	0.15	0.3
↓	3.47	005	+29				
12				0	0.6	$\frac{4}{↑}$	1.6
↑	6.03	237	-1				
13				1.2	0	$\frac{0.3}{3.5}$	1.6

INLET DRIPS IN ABOVE ⑧

1332

Station	Tape	Compass	Climo	L	R	U	D
13							
	↓ 3.68	339	-3				
14				0.1	0.7	$\frac{0.4}{3.5}$	1.4
	↑ 8.75	261	+7				
15				0.8	0	$\frac{0.2}{4}$	0.4
	↓ 2.98	145	-5				
16				0	1.0	4	1.3
	↓ 2.90	134.5	-2				
17				1.1	0	4	$\frac{1}{1.6}$
	↑ 5.10	230	+59				
18				0	0.4	↑	1.4
	↑ 2.01	255.5	+14				
19				0	0.5	0.4	1.4
	↓ 4.16	116	+3				
20				1.0	0	8	1.0
	↑ 3.89	200.5	+9				
21				0.9	0	6	1.5
	↓ 3.50	010	-26				
22				0	0.8	3	2.5
	↑ 3.85	270.5	+13				
23				1.2	0	$\frac{0.5}{5}$	1.2
	↓ 7.29	069	-35				
24				$\frac{0}{3.0}$	1.4	3.2	$\frac{1.2}{2.2}$
	↑ 4.55	223.5	+20				
25				0	0.6	$\frac{0}{3.5}$	0.8

(18) beneath rock bridge

(23) = back up bolt to P4

INLET COMES IN FROM LEFT @ (24)

INLET → $\frac{0}{3.0}$

(25) bolted hole next to large carbide S on LH wall before pitoh P10?

C4 section F, Book PAK, tape TB, instruments set 3 AK.

	Station	L	K	u	D	tape	compass	clino
= E19	1	1.8	0	5	0.5	1.83	262	*
↓	ENT					1.83	262	+2.5
↓	2			?	Atch			
↓						11.35	—	↓
↑	3	2	2	Prm	0.5			
↑						2.55	189.5	+16
↑	4	3	0			1.8		
↑						6.10	130	-23
↑	5	5	0	?	1.6			
↑						3.63		
↑						3.30	115	+1.5
↓	6	3	2	25	8			
↓						5.30	350.5	+9
↑	7	1.5	2	Atch	8			
↑						6.90	156	+67
↑	8		0					
↑						4.47	093	+62
↓	9	0						
↓						4.20	051	-61
	10	1.5	0.5	1	0.2			

1234

30/7/96 Surface survey T de V to DZ

Book: John Instruments: Anita
SET 2

Station				
From	To	Tape	Compass	Clino
2	1	11.31	258.5	-40
2	3	22.90	336.5	+1
4	3	15.30	130	-1
4	5	26.94	294.5	-9
6	5	24.22	065	-9
6	7	19.26	257.5	+8
7	8	8.67	296	-32
5	5a	16.55	333.5	-26
5b	5a	30.32	184.5	+3
5b	5c	30.90	003.5	+3
5d	5c	27.78	159	-11

1 = DZ Tag

5a to 5c = Terminal Moraine in Vega de Aliseda

5d = Naranja de Balues shaped rocks with orange lichen on top at N. end of Moraine

8 = Red dot of POLIFIMO at Torca del Vasco

30/7/96 Surface Survey F13 to F41

Book: John Instruments set 2, Anita

From	To	Tape	Compass	Cline
1	2	5.18	301.5	-18
3	2	26.98	238	+1
3	4	21.36	001	-9
5	4	18.65	202.5	+30
5	6	17.60	039	-31

1 = '0' at 'F13 Oucc'

6 = '0' at F41

836

30/7/96

Surface Survey 'above F59A'

Book : John Instruments SET 2 : Anita

From	To	Tape	Compass	Climo
2	1	21.16	270.5	+2
2	3	25.43	146	+19
3	4	1.58	221	-12
2	5	29.20	034	+16
6	5	26.15	210	-32
6	7	16.52	073	+31
P1	P2	18.90	107.5	-3
P3	P2	30.84	322.5	+9
P3	P4	23.00	217	-15
7	P4	23.24	091	+20

- P3 = Rock next to Caion on pass between La Verde Lengua and F64 shoulder
- P1 = top of subsidiary (F64) peak of La Verdallengua.
- 4 = ~~at~~ at F59A
- 1 = Point between F60A and F60B
shaft A 3m on 30° shaft B 2m on 210°

Surface Survey C9 → C8 29/7/96
Book ~~Survey~~ Olly Instruments Alex Set 1

From	To	Tape	Compass	Climo	Notes
2	1	2.47	285	+2.5	1= Bolt, scare
2	3	8.53	269	+22	of C9 survey
4	3	12.77	070.5	0	2= C9 Tag
4	5	28.07	301.5	-11.5	
5	6	6.19	154	-31.5	6= C20 Tag
5	7	11.03	119	-19.5	7= Above C21
5	8	30.33	035.5	-29	
8	9	3.89	140	-6	9= C19 (tag is at bottom of entrance)
8 ⁸	10	8.48	232.5	+50	
10	11	3.91	287.5	+3	11= C8 Tag

638

Torca del Vasco

Section F

30/7/96

Book Alex

Tape Andy

Instruments Olly

Set 3

Backup Bolt for handline

Station	L	R	U	D	Tape	Compass	Climo
1	0	2.2	0.7	1.1			
↑					7.00	84.5	-11.5
2	2	0/1	1.3	1.3			
↓					3.73	254	+18
3	0	1.5	2	1			
↑					5.84	96.5	+18
4	0	1.5	0.6	0.8			
↓					9.00	234	+22.5
5	0.7	0	1.7	0.5/1.8			
↑					7.34	057	-6
6	0.5	0.7	3	0.4/1.6			
↑					8.23	101.5	-31
7	0	0.8	2	3.5			
↑					5.90	107.5	+4.5
8	0.3	1.2	0	1/3			
↑					8.90	47.5	-3.5
9	0.1	0.4	2	1			
↑					2.13	330.5	+24
10	←	1	1.7	1			
↓					5.62	223	+11
11	1.2	0	6	1.4			
↓					6.00	195	0
11a							

Bolt for undescended pitch

11	1.2	0	6	1.4			
↓	1.2	0	6	1.4	7.82	198.5	+11.5
12	0.5	0.2	6	1.7			
↑					6.09	101	-83
13	0	0.3	1	1.5/↓			

Station	L	R	U	D	Tape	Compass	Climo
13	0	0.3	1	1.5			
↑					2.63	091	-10.5
14	0.2	0.5	1	1.5			
↓					5.34	218	+14.5
15	0.5	0.5	↑	1.5			
↑					5.68	037	-55
16	0.5	0.3	↑	↓			
↑					6.46	041.5	-70.5
17	0.5	0.5	1	↓			
↑					3.68	038.5	+24
18	0	1	1.5	↓			
↑					2.73	017	+7
19	0.5	0	3	2			
↓					0.62	304	-14

E25 = 20

BKD

which set instruments?

U4 Section G

book PAR, RK, TB.

	Station	L	R	U	D	tape	compass	clino.
= F10	1	1.8	1	4.5	2			
	↓					5.43	310	-45
	2	0.5	0.8	4	5			
	↓					5.67	275	-15
	3	0	0.6	?	2			
	↓					2.20	245.5	-4
	4	0	1.5	2	1.1			
	↓					4.94	324	-71
	5	0.4	0	2.5	3.2			
	↓					3.20	rumB.	
	6	0	0.8		0.6			
	↓					5.76	295	-5
	7	0.4	0					
	↓					1.05	235	+3
	8	0			ATCH			
	↓					17.50	rumB	
	9	2	2.7 ledge	ATCH	0			
	↑					2.70	021.5	0
	10				ATCH 0			
	↓					4.60	182	-72
	11	0.8	0	ATCH	0.6			
	↓					4.25	171	-8
BOLT	12	0	0.8	?	ATCH			
	↓					33.80	rumB	
ATCH BASE	13	2	5	ATCH	0			
	↑					5.10	333.5	0
	13A				ATCH 9.3			

beginning of
grassy rft.

LARGE
MARK.

Station	L	R	u	D	tape	compass	dino.
13							
↑					9.35	002	-37
14	1.8	0		0.8			
↑					7.90	024	-12
15	0.3	0	-	-			
↑					2.42	033	+12
16	0.3	0	-	-			
↑					2.85	005	+6
17	0	0.3	-	-			
↑					5.84	042.5	0
18	0.3	0	-	-			
↑					0.96	007	+12
19							
↓					14.18	rumB	
20	2.2	1.2	PITCH	4			
↑					3.75	045	+35
21	2.5	0.1		3			
↑					3.74	080	+45
22	0	1.5	?	0.5			

(Blk)

31/7/96 Surface EQ - Peak at La Verdavalleya

Instruments SET 3 : Anita

Book : John

<u>From</u> <u>Tape</u>	to	Tape	Compus	Clino
2	1	7.97	251	-11
2	3	21.33	140	+23
4	3	22.80	324.5	-14
4	5	25.44	191.5	+32
5	6	16.33	213.5	+46
7	6	16.33 (honestly)	326	-21
8	7	18.79	054	-24
8	9	4.36	252.5	+6
10	9	29.72	349	-4
10	11	26.23	154	+22
12	11	30.44	305	-21
12	13	26.68	105	+24
14	13	27.37	111	-27
14	15	30.57	105.5	+29
16	15	18.92	268	-29
16	17	27.40	061.5	+40
18	17	12.78	269.5	-42
18	19	12.94	003.5	+33
19	20	2.83	013	-6
5	5a	8.13	244	+45
15a	15	18.20	352	+8
15a	15b	19.04	159	0
15b	15c	23.02	223.5	-28

Station 1 = '0' on EQ

Station 5a = Entrance crawl below left of tree (heading 320°)

(PTO)

- Station 9 = Rock on pass of La Verdelluenga
- Station 20 = Bolt on La Verdelluenga Peak
- Station 15c = view point over El Joan at top of green tongue (lowest point)
- Station 16 = Pointed rock just before climb to peak.

Cueva del Arco (F57)

Bearing from Peak 276.5° converted 277°
 Clino from Peak -11.8°

Bearing from Cairn on route back from F64
 (same junction point in surveys above F70) converted 251°
 250.5°
 Clino +2°

Bearing La Verdelluenga - Maria Rosa Converted to Mag North
 332.5° 333°
 -10.3° Clino -10.3°

Blk

C4 Section H

Book Alex

Tape Martin

Instruments Geoff

Set 3

Station	L	R	U	D	Tape	Compass	Climo
95 PSS = 1	3	2	5	0/1			
↑					14.20	016	+31
2	0	0.7	0.8	0.2			
↓					2.34	265.5	+6
3	0.2	1	0	↓			
↑					3.51	021	+62
4	1	0	0.8	0.2			
↓					3.70	264	-21
5	1	1.2	1.5	0 1/2			
↑					5.72	037.5	-45
6	2	0.5	0	3			
↓					7.37	217	-45.5
carbide 5 on rock bridge = 7	0/1.5	1.5	2	1			
↑					4.49	021	-3
8	1	0	2	1.3			
↓					7.43	237	+7.5
9	0/2	0.5	↑	2			
↑					7.22	037	-17
10	4	0	↑	0.7			
↓					3.99	219	-35
11	1.2	0.3	↑	1.5/3			
↑					10.62	011	+2
12	1.5	0	↑	1.5			
↓					6.34	221	-8
13	0.5	0.5	3	1			
↑					5.00	039	-34
14	0	2.5	↑	1.5			
↓					16.44	217	-10.5
15	0	0.8	1.5	1.2			

Carbide $\frac{5}{CH}$

Station	L	R	U	D	Tape	Compass	Climo
15	0	0.8	1.5	1.2			
↑					5.99	031	-38
16	0	1.5	4	$1\frac{2}{3}$			
↓					5.92	193	-22
17	$\frac{1}{3}$	1	7	0			
↑					3.93	0	+23
18	0	0.5	1.6	1.6			
↓					4.74	159	+49
19	0.1	2	4	1.8			
↑					4.76	293	-16
20	0.2	0.3	1.6	$1\frac{4}{5}$			
↓					5.47	170	-15
21	0.4	1	1.2	0			
↑					4.10	291	+29
22	$\frac{0}{1.2}$	0.5	1.8	1			
↓					3.26	138	-14
23	0	0.4	1	2			
↓					3.95	201	0
24	0.2	0.2	0.5	$\frac{0}{1}$			
↓					4.90	211	+12
25	←	0.5	0.5	0.7			
<hr/>							
16	0	1.5	4	$1\frac{2}{3}$			
↓					11.77	215	0
16a	0.5	1	↑	2			
↑					4.88	005	+48
16b	0.5	0	↑	1.5			
↓					8.83	211	-2
16c	1	0	2	1.4			
↑					4.11	133	-20
16d	0.4	1.5	$\frac{0}{1.5}$	$1\frac{3}{3}$			

B46

Station	L	R	U	D	Tape	Compass	Clin
16d	0.4	1.5	0/1.5	1.3/3			
↓					4.33	349	+8
16e	1	1.5	1	0/2.5			
↑					29.90	173	+3
16f	2	0	↑	1			
↓					14.08	008	+3
16g	0	→	↑	1.2			

C4 Rigging Guide

~~Window~~
~~Alvaro's Leap~~

Entrance Pitch		Ladder - spike belay
Window + Alvaro's Leap	40m	Thread (L), Thread hang (L) Chockstone rebelay (R), Spike Deviation (L) Bolt Rebelay (L)
Traverse	5m	Thread (R) Bolt hang (R) rope protector for knot rubs like hell.
Space, the Final Frontier	65m	Bolt (R) Bolt hang (R) Bolt Rebelay (L)
Watershed	20m	Bolt Backup (L) Bolt hang (L) Bolt Rebelay (R)
Fizzy Willy	20m	Spike hang ^{traverse} (L) Bolt hang (R)
As Advertised	?	Thread traverse (L) Bolt hang (L) Bolt Rebelay (L) Bolt Rebelay (R)
Maria Rosa	40m	Bolt backup (R) Bolt (R) Chock deviation (at pitch head) (L) Thread deviation (R)
Double Fisherman's	30m	Bolt traverse (on ledge above) (R) Bolt Y-hang (R, R) Spike Deviation (R) (pitch head)
Nice Rig But...	10m	Spike (L) Thread (R) Y-hang.
The Monster Part I	155m	Spike Traverse (R) Bolt (L) Bolt Rebelay (L) Spike Deviation (L) Bolt Rebelay (L)
	Page II	"
Growing Up	?	3 Bolt Traverse (R, R, R) Bolt Hang (R) Bolt Y-hang Rebelay (R, R) Thread? Backup (L), Bolt? (L) Natural? (R) Y-hang, 2 Bolt Traverse (R, R)
?	"	Bolt hang (R) Thread Rebelay (L) Bolt Traverse
? The Crucifix	35m	Backup from Previous Rope Bolt Y-hang (L, R)
Hash Brown	"	Bolt Y-hang (L, R) Spike Deviation (L) Spike Deviation (L)

B48

Bugger Bognor	15m	Bolt (L), Bolt (R), Spike (L) Tri-hang
? Cat o' nine tails	90m	Bolt Y-hang (L) ^{Bolt Traverse (L)} One bolt very high Bolt Bolt, Spike on ledge (R,R) ^{wide swing outside}
Free 'n' Easy	60m	Bolt Rebalay (R) Bolt Rebalgay (R) Large Spike backup (L) Spike hang (R) Spike deviation (R)
?	15m	Bolt Backup (R) Spike hang (R)
Hope Street	340m	3-Bolt Traverse (R,R,R) Huge Spike ⁴ Rope Protector Useful Spike Backup (R) Spike hang (R) Spike Deviation ^{Thread (L)} Traverse
The cheating Necromancer	125m	Bolt (L) Thread (R) Y-hang
Here be Dragons	"	Bolt Traverse (L) Bolt Y-hang (L,L)
Marie Celeste	40m + 2 ladders	spike for 2 ladders spike (crab + sling) for lifelining from bottom.

Torca del Vasco Section G

Book Alex Tape Bill
 Instruments Alex / Nobby Set 1

Station	L	R	U	D	Tape	Compass	Climo
1	0.4	1.2	3	1.6			
↓					6.59	227	+35.5
2	0	1.3	0.3	0.5			
↑					15.16	27	-34
3	1	1	0	1.3			
↓					7.99	198	0
4	1.2	0.4	1.6	0			
↑					5.17	347	+9.5
5	1.6	0	↑	↓			
↓					3.78		↓
6	2	0.1	↑	0			
↑					3.05	179.5	-3.5
7 7=bolt	0	1.2	↑	↓			
↓					5.95		↓
8	0.7	1.4	↑	1			
<hr/>							
5	1.6	0	↑	↓			
↑					5.19		↓
9	0.4	1.4	0.5	↓			
↓					1.70	180.5	+11
10	2	0.2	1.2	%↓			
↑					6.44	316	-36
11	0.2	1.2	0.6	1.2			
↓					3.60	152.5	+32.5
12	2	0	1.5	0.3			
↑					6.05	284	-29
H6 = 13=bolt	1.8	0	0	1.4			

Station	L	R	U	D	Tape	Compass	Climo
8	0	1.5	1.7	3.2			
↓					8.41	201	+17.5
9	0	1.2	3	1.5			
↑					8.12	311	-32.5
10	0.4	0	3.2	1.5			
↓					15.31	219.5	+47
11	3	0.5	0	2			
↑					3.28	131	+1
F1 = 12 = bolt	0	2	0.5	1			
<hr/>							
G.E = A=1	0.2	1	3	↓			
↑					9.68	111	-50.5
carbide S = B	0	2/	2.8	1.2			
↓					2.31	351.5	+27
C	0	0.6	0.2	1.4			
↑					3.75	127	-28
D	0.7	0	0.9	2.2			
↓					7.29	266.5	+24
E	0.4	0.6	↑	2			
↑					4.35	118	-57.5
F	0.5	0.3	4	1.5			
↓					2.21	261	-31.5
G	0.5	0.1	0	0.5			
↑					1.27	40	+13
H	0.3	0	0.5	2.5			
↓					2.03	196	-43
I	0.7	1.5	1.1	1			

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Surface Survey F46 → F7D → F42 → F57 → F11 → F12 → F54
~~Survey~~ Book Alex Tape Bill
 Instruments Paul Set 2?

From	To	Tape	Compass	Climo
2	1 = F46⊙	16.83	002	-22
2	3	26.50	247	+7
3a	3	23.20	198	+24
3a	3 _b = F7D⊙	2.00	/	↓
4	3	30.90	087	-8
4	5	27.31	251	+7
6	5	18.30	052	-18
6	6a = F42⊙	1.00	177	-22
6	7	29.52	241	+19.5
8	7	25.59	033	-28
8	9	29.40	269	+25
10	9	29.50	059	-33
10	F57⊙ = 10a	19.72	117	-34
10	11	30.55	232	+38
12	11	30.31	019	-32
12	12a = F12⊙	17.93	106	-8
12	12b	24.53	147	+23
12b	12c = F11⊙	1.40	/	↓
12	13	10.26	275	-1
13	14 = F54⊙	18.14	342	-43

Rigging Guide	Torca del Vasco	
Entrance Pitch	40m	Spike, bolt rebelay, thread rebelay
2 nd Pitch (Here a bolt)	25m	bolt traverse (L), bolt hang (L) bolt deviation (pitchhead) (R)
3 rd Pitch (There a bolt)	20m	3 bolt traverse (R, R, R) spike backup (L) bolt hang (L)
4 th Pitch (Reel for danger)	35m	spike traverse (R) bolt hang (L) bolt (L) spike (R) Y-hang rebelay
5 th Pitch	"	bolt hang (L)
6 th Pitch (Gone with the gear)	40m	bolt traverse (L), bolt (R) spike (L) Y-hang, thread deviation (L) spike deviation (end of ledge)
7 th Pitch (The needle)	15m	thread traverse (L) (before eyehold) bolt (R, R) Y-hang.
Pitch 7a	10m	spike traverse (L) bolt hang (far wall)
8 th Pitch	55m	bolt traverse (R) bolt hang (L) bolt (R) spike (L) Y-hang rebelay.
9 th Pitch	15m	spike? traverse (L) bolt backup (R) bolt hang (R)
Open all 'ours	10m	spike traverse (R) bolt hang (far wall)
The Big Sleep	20m	bolt backup (L) bolt hang (R) rebelay (L)
Cereal Killer	ladder	spike
Lucky 13	15m	thread traverse, bolt hang (far wall)
Bolt Farming	20m	bolt traverse (L) bolt hang (L)
traverse	10m	thread (high) (R) large thread (high) (L)
Another girl	15m	large thread (high) (L) bolt (R, ?) Y-hang?
Another planet	30m	backup to previous pitch bolt (L, R) Y-hang long thread deviation (for edge of ledge) (long: 2m)

R54

Another 3 fine mess	25m	Spike traverse (R) bolt hang (L) spike deviation (pitchhead) (R) [bolt rebelay for climb would be useful.]
?	10m	bolt traverse (L) bolt hang (R)
handline	20m	bolt (R)
?	15m	bolt traverse (R) bolt hang (L)
?	20m 35m	large high spike traverse (L) spike traverse (R) bolt hang (L) large spike rebelay (R)
?	"	2 bolt (L) spike (R) Y-hang.

Moon lizard Route

Giant's Hole	20m	2-bolt traverse (R,R) bolt hang (R)
? Lizard's Tail	40m	bolt traverse (L) bolt hang (L)
?	"	bolt hang (R)

Smegadrive Route

traverse Easy Carry	5m	2-bolt traverse (L,L)
handline (Down in the hollow)	15m	bolt backup (L) bolt hang (just below edge) (L)
handline (There we shall wallow)	40m	bolt (R)
Inglorious	"	2-bolt traverse (L,L) bolt hang (far R) (redundant bolt for Y-hang, R)
Mud	"	bolt (far wall)

Round the corner

Easy Casey II?	15m	large thread
Stone the Giants	35m	spike backup, bolt (L) thread (R) Y-hang
In their Brown Cars	"	bolt (R)

Small Spanish Boys
?

20m

bolt traverse (L) bolt (L, U) (hang
bolt rebelay (far wall).

B56

Torca del Vasco Section I

Book Alex

Tape Paul

Instruments Paul

Set 1

Station	L	R	U	D	Tape	Compass	Climo
F11a = 1	←	0	↑	2			
↑					5.19	220	+17
2	0	→	↑	1			
↓					7.93	188	-41
3	←	0	↑	1			
↑					6.72	211	+12
4	1.2	0.3	0	1			
↓					5.68	278	-9
5	0.4	0	0.7	0.7			
↓					5.37	259	-5
6	0	0.9	0.3	0.5			
↓					2.60	278	+10
7	0.2	0.5	0	0.7			
↓					3.76	273	+5
8	0.5	0	0.1	1			
↓					3.34	286	+1
9	0	0.6	0.2	1.1			
↓					2.82	323	-28
10	0	0.6	0.4	0.4			
↓					3.52	306	+18
11	0.3	0.3	0	0.7/1.4			
↓					5.74	306	-20
12	2	0	1.8	1			
↑					1.10	008	-14
13	0.8	0.2	2	0			
↓					10.08	219	-25
14	0.8	0.7	2	0/1.2			
↑					7.78	051	+12
15	2	0	0.5/↑	2.4			
↓					6.40	302	-28
15a	1	0.5	↑	0			

Station	L	R	U	D	Tape	Compass	Climo
15							
↓					9.96	117	+17
16	0.1	0.6	0	0.8			
↑					10.72 9.96	030 117	+17 +32
17	0	1.8	0/1	1			
↓					6.86 10.72	200 030	+32 +16
18	0	2	0.8	1.3			
↑					5.57 6.86	024 206	+16 -5
19	0	1.6	0.3	1.2			
↓					8.67 5.57	256 024	-5
20	1.4	0.6	1.3	0.1			
↑					4.25	050	-4
21	0.6	1.2	1.3	0.2			
↓					8.42	181	+11
22	1.4	0	1	1.6			
↑					8.64	282	+5
23	0	1.6	0.8	1.4			
↓					3.53	103	-21
24	1.7	0	0.7	0.3			
↑					14.83	158	+24
25	1.7	0	0	1			
↓					6.77	227	-16
26	1.2	0.4	1.4	0			
↑					3.13	355	-50
27	1.4	0	0	1.2			
↓					6.30	230	-1
28	0	1.6	0.6	1.2			
↑					7.46	122	+36
29 = bolt	0	1.6	1	↓			
↓					11.07	357	-54
30	1.2	0/1	1	0.3			
↓					8.21	031	-45
31	1.5	0	1	0.1			

B59

Station	L	R	U	D	Tape	Compass	Climo
31	1.5	0	1	0.1			
↑					5.47	154	+27
32	0.2	2.2	0.6	0.3			
↑					5.42	219	+10
33	1.4	0	1.1	1.3			
↓					8.85	326	-32
34	0	1.6	0.6	1/4			
↑					9.07	217	+31
35	0/0.4	0.5/1.2	1.2	4.1			
↓					3.37	087	-30
36	1.6	0	1	1.6			
↑					10.23	178	+29
37	0	1.9	1.2	1.7			
↓					4.84	035	-9
38	1.7	0	0.7	0			
↑					9.69	168	+44
39	1.6	0.7	↑	1.8			
↓					3.83	040	-29
39a	0.3	0	0.3	0.9			
↓					1.49	342	-25
39b	0	0.5	0.3	0.4			
↓					2.12	057	-10
39c	0.2	0.7	0	0.53			
<hr/>							
39	1.6	0.7	↑	1.8			
↓					9.05	273	-9
40	0	1.4	0.3	1.2			
↓					2.55	010	-42
41	1.2	1	1.6	0.2			

Station	L	R	U	D	Tape	Compass	Clino
32	0.2	2.2	0.6	0.3			
↓					11.46	251	0
32a	1.7	0	1	0.8			
↓					3.50	289	0
32b	0.9	0	0	0.3			
<hr/>							
32	0.2	2.2	0.6	0.3			
↓					12.29	292	+11
32c	2	0	1.3	1.2/↓			
↑					8.47	055	-24
32d	0	2	1	1			
↓					11.47	301	+4
32e	1.5	0	2	1/↓			
↓					11.79	071	-19
32f	0	2.5	1.2	1.7/6			
<hr/>							
32	0.2	2.2	0.6	0.3			
↓					3.60	318	-32
32g = bolt	0.5	0	3	↓			
↓					6.21	/	↓
32h	1.3	0.5	↑	0			

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Torca del Vasco Section J
Book Alex Tape Paul
Instruments Paul Set 1

Station	L	R	U	D	Tape	Compass	Climo
1	0	1.2	1.4	1.7			
↓					1.98	000	+3
2	0.4	0	1	2			
↓					2.38	027	-9
3	0.1	0.3	1.2	2.2			
↓					2.25	041	-31
4	0	0.4	1.5	1.4/1.9			
↓					2.04	079	-13
5	0.3	0	1.8	1.4/↓			
↓					2.80	023	-54
6	0.7	0	3	1.9			
↓					2.50	340	-2
7	0	0.5	1.1	2.1			
↓					1.48	348	-29
8	0	0.6	0.7	2			
↓					2.97	051	-36
9	0.7	0	2	1/↓			
↓					6.29	298	-42
10	0	0.9	3	1.8			
↓					5.62	027	-32
11	0	0.9	4	1.9			
↓					5.40	008	-48
12	0.1	0.8	3	2.2			
↓					8.21	035	-51
13	0	0.4	5	1.7			
↓					2.65	018	+8
14 = lower bolt of Y-hang	0	0.5	1	↓			
↓					9.65	—	↓
15	0.3	0	↑	0.2			

(361)
END

Station	L	R	U	D	Tape	Compass	Clino
15	0.3	0	↑	0.2			
↑					1.54	210	-36
16	0.6	0.5	↑	1.1			
↓					5.72	351	-56
17	0.8	1.6	↑	0.8			