### **OTHER MINES & QUARRIES IN CUMBRIA**

Extracts from Underground Logs of D J Blundell 1981-1989. References are to volume of log then page as A1 etc.

### **APPLEBY**

20<sup>th</sup> July 1986 Murton Mine CAT Meet (C78)

12 members present. Up from Hilton Village 2.5 miles on track to just below dressing floors – red flags on Warcop Range weren't up so drove up MOD track. Headed up the fell on N side of valley to Masons Holes, nothing accessible, then continued along valley heading N (difficult footwork on steep grass + loose rock). Eventually found an open level (Curly Level?) and entered. Gives into a maze of low flat workings with small and deep shafts down. At forehead found a deep timber-divided 2 compartment shaft and dropped a rock down in a bag with a marker. Rock took 10 seconds to drop, bouncing off stagings en route. Exited to day. Carried on along fellside to Whartons Level(?) – blocked 15 yards in. Dropped down face of fell to Hardside Low Level and dug entrance clear. 2 entered into X-cut, turned L and after 68 yards recovered rock dropped down shaft at forehead of Curly Level(?). Would go as a through trip with possible sub-levels off. Checked condition of entrance to Hilton Horse Level – well and truly run. Back to cars after a worthwhile day.

15<sup>th</sup> May 1988 Threlkeld Side and Dufton Fell Mines CAT Meet (D32)

7 members present. To Hilton Village but red flags on range so switched toThrelkeld Side and Dufton Mines, recently worked by Norwest Holst Minerals. Investigated a number of levels on either side of Great Rundale Beck along with 2 extersive and highly obtrusive open cast workings for barytes. Reached an ancient timber shooting hut adjacent to Great Rundale Tarn then retraced steps to investigate 2 levels on S bank of stream and recently abandoned (July 1987) crushing and jigging plant.

#### **BASSENTHWAITE**

10<sup>th</sup> July 1983 Robin Hood Mine Visit + Ian Tyler (B36)

Mine is near Castle Inn at N end of lake (marked on 2.5" OS Sheet No. NY23). Level is right next to road, entered via a barricaded roof collapse next to entrance. Like potholing in a town dump as entrance has been used as a tip — knee-depth water, level driven on vein forks after 70 yards — LH branch ends after 20 yards in blank wall (slate). RH branch driven on quartz string then forks after 20 yards. All end in blank walls + very little mineralisation visible, so not to be re-visited.

#### **BROUGHTON MILLS**

12<sup>th</sup> August 1981 Hawk Pyrites Mine CAT Meet (A3)

Mine also known in 'Lakeland Geology' as Boot Potash Mine at Appletreeworth Beck – very short c10 yards – also haematite mine on edge of forest – level run in.

21st April 1982 Stainton Ground Quarries CAT Meet (A31)

First level is adjacent to shaft, filled by scrap cans, gives into 3 chambers linked by short levels – fairly interesting. Chamber near  $1^{st}$  level lit by hole up in roof – date inscribed on right at level entrance is 'W.A. 1841'. Next quarry up gave short level constructed through stacked deads to collapse at end – short continuation on far side of open quarry blocked by falls. 2 further quarries up hillside but no more levels visible.

#### **CALDBECK**

1st August 1982 Caldbeck Barytes Mines CAT Meet (A45)

5 members only. Walked up track past Howthwaite Level (run in) to Sandbeds Mine. All levels run due to depth of boulder clay but some may repay dig. Followed track round to Pott's Gill, levels run and then followed track up E side of dry gill past well-preserved timberlined powder house (? bothy), levels all run. A. McFadzean walked over stopes to W of gill; could see tubs and bogies in bottom of stope – found short section of open level on vein on E of gill with hole in floor so followed uphill and checked stopes. Some descended but all very loose (was difficult as no rope ladder on meet). Over hill to Sandbeds and back along to cars. Along road to Carrock End or Queen Mine near Stone Ends Farm. Strolled across moss, possible remains of horse whim visible round pinched-in shaft and 1 open level (run in at timbers c. 30 yards from entrance – very wet @ mid-chest depth). Other level has run in but may repay a dig in the future – is it worth it?

## 14<sup>th</sup> November 1982 Carrock Mine CAT Meet (A73)

11 members plodded up to mine in heavy snow. Mine owners had refused permission to enter but been granted to explore surface workings and mill surroundings. Checked entrance to New Adit X-Cut on Harding Level, well and truly gated with plate steel door. Up hill behind, on W bank of Brandy Gill, past run in level (?Harding Level), open stope and found ventilation shaft then to level overlooking beck. Into level, short X-cut to vein – turned R (north) to wide quartz vein. Well stoped above and below level, mainly below; stopes below appear to go to bottom level. Across 5 bridges to top of fixed ladder way. Also ladder way up at this point to ventilation shaft with extractor fan. Level continues for c. 150 yards over 4 more stopes to blind end. Back to ladder way, down (approx. 20') short Electron pitch (10') to top of next fixed ladder (awkward step) then 60' pitch of Electron via 3 stagings past sub-level to 2 more fixed ladder pitches to level at base – fixed ladders c. 50' long. Along level over more stopes (rails in situ) to large rail bridge in sub-level. Run in to

south (left), blind along to north. Probably level horizon noticed on way in – Harding Level? Down 5 fixed ladders, rather wobbly, arrived at level at point P16, painted on wall next to hopper No. 16. Turned to right (north), along past another 20 hoppers to forehead, strong quartz vein but very little sign of wolfram. Backtracked approx. half distance travelled then up fixed ladder way for 120' to same horizon as bottom of Electron pitch. Working level, complete with Holman compressed air hoist. Picked up steel drill bit and brass ICI detonator pricker, also coils of detonator wire. Blind after c. 400 yards to S, 200 yards to N. Stopes off and sub-levels below. Back down to main bottom level and along, past development drives to Air Receiver on 4-way junction (NB: A75A contains a rough hand-drawn sketch of this part of the mine). S leads to gated entrance, W to old level passing under beck to Comb Height, now dammed sludge on floor as old workings on S side of beck now back-filled with mill tailings. Gas warning signs, air certainly not good. N leads to junction, then 'T'-junction. W leads to forehead (blind) with rise up to day – blocked? E along main level past Hoppers No's 1-15 to string of trucks at forehead of level. Logical = development drives to E of this level again very strong quartz vein but very little wolfram. Possibly Smith Vein. Some superb quartz crystals in level roof where blocked out for stoping. Back to day by same route. Underground 11am – 4.30pm.

A very interesting mine but somewhat scruffy timbering etc. considering it is a working mine, albeit on a 'care and maintenance' basis. Much use of PVC 'Caterpillar'-type ventilation trunking hung off wires fixed to pegs in level wall with electric fans fixed in at intervals to boost air flow. Clear plastic 'Visqueen'-type sleeving used in side drives.

## 12<sup>th</sup> January 1983 Rachel Wood Mine Visit with Ian Tyler (A87)

Up forestry road from garage to mine. A real 'SAS'-style operation getting into this one involving a dash from the track through the trees to the concrete entrance portal (directly overlooked by bedroom windows of 2 houses). Well barricaded entrance timber and wire mesh along with Forestry Commission "Keep Out" notice. Squeezed past barrier into long, straight X-cut – very dry level with no water. Along to Rachel Wood Vein, run in to S of X-cut – after short distance stopes continue on above but couldn't climb up into. On N side of X-cut (within a few yards) is engine shaft full to top, ladders in position in shaft – also skipdumping plate in situ. Ladder way goes up above – 25fm. as quoted? Level continues on beyond and eventually swings round to join parallel level driven on East Ladstock Vein. Some small trials off. Back round to main X-cut, long straight level presumably heading for West Ladstock Vein – blocked before it reaches vein by blockage of fine fault material. No signs of any trials off this section. A long exploratory drive and for what?

NB: A87A contains rough hand-drawn sketch of this exploration.

## 2<sup>nd</sup> January 1984 Carrock Mine Visit + Ian Tyler (B67)

Parked up on heaps at mine beyond office. Plodded up Coombe Height following mill tailings rising main from Old Mill. Up to manway down to No. 2 level on Harding Vein. Grating over ladder way, 3 ladders x 6' & 7' & 18' drops into level. Immediately is shaft down – laddered for 10' then nothing – full of tailings below? Ledge on L passes shaft to hopper with wooden end-tipping tub and another flat-bed bogie on its' side. Over 6'fall into stope – 35' high with timber and stacked deads – 2 more hoppers – daylight coming down beyond – total length in region of 40 yards (entrance run). Out to day and inspected mill and offices.

## 8<sup>th</sup> January 1984 Carrock Mine Visit + Ian Tyler (B68)

Parked by engineer's shop and up hill to rear of old mine office to run in open stope to Emmerson Vein (E of Brandy Gill). Crawled in through part-collapsed entrance, over blocks in open stope and into level. Shaft hard up against LH wall. Level is driven hard on vein, quartz vein 2' wide in roof with wolfram specimens. Level extends for c. 30 yards with stoping in roof c. 20' high. Rigged shaft for descent but did not descend due to feeling weak. Life-lined Ian down. Shaft 43' deep in total, landing on heap of deads. Descent into stope, run in sub-levels on S side, down rubble slope on N side into level. Level extends for 70 yards to forehead. De-rigged pitch and out to day. Called it a day as felt unwell.

## 15<sup>th</sup> January 1984 Sandbeds Mine/Rachel Wood Mine CAT Meet (B69)

Tried to get to Sandbeds Mine but snow too deep beyond Mungrisedale so to Rachel Wood Mine X-Cut. 10 members in all. 3 members ventured up into stopes on S end of Rachel Wood Vein for about 50' – very loose – confronted by 20' high wall of stacked deads – extra ladder therefore required so for another day. Tried ladder way on Rachel wood Vein on N side of X-Cut – amongst stacked deads – under false roof. Out to day and home in blizzard.

# 26<sup>th</sup> February 1984 Driggeth and Drygill Mines Visit + Ian Tyler (B73)

Up to open stopes above Driggeth Mine and stopped at open shaft at top of valley above Driggeth Beck. Securely fenced around but shaft was completely covered with snow. Rigged abseil rope while Ian cleared snow to reveal open stope on NE-SW heading, looking to N. Re-rigged pitch so that ladder was on footwall side on S side of stope and Ian descended. Total depth 60' with levels off on both sides though all have run after a few yards. A large cone of loose material takes up the base of the stope. No possibility of any further exploration in this spot although there is a copper vein in one of the levels on the E side. Passed spoil heap from No. 2 X-cut and dropped down into valley bottom, passed entrance to 30 FM level, shaft top and on to site of old dressing floor – remains of jigging box still in position though deteriorating. Followed water leat round to Drygill. First level hard on vein on N side of stream – didn't enter; Ian said approx. 50 yards long and wet. Next level on S side – entrance blocked with snow. Again didn't enter as according to Ian deep water and

blocked after a few yards. Third level on N bank of stream well and truly run. Looked around for samples then back to cars.

# 28<sup>th</sup> March 1984 Ladstock Mine Visit + Ian Tyler (B79)

Up track to mine from Coombe Beck. Level just in wood on N side of beck. Open, some water inside but did not enter as very dangerous – sump may be 6' deep immediately inside entrance across full width of level and possibly 15-20' long. May be worth a dig some time to drop the water level and then either try and fill the sump or bridge it using timber. Crossed back to tackle level on S side of beck on possible extension of Rachel Wood Vein. Entrance cut gives into part rubble-filled sump/stope at entrance (crossed by bridging) into level which is fairly low and narrow with not many drill marks. Along to back-filled X-cut on LHS (S side) of level - appears to be 15' long, then small hole in floor on RHS giving into stoped out floor, full width of level and c. 15' long. Crossed by bridging with windfall trees and goes for another 15 yards round corner to shaft run in to level from above. After much beggaring about with duff bolts, lan descended 23' and through small hole in base of stope into sub-level with another shaft off 10 yards back under main level to N; appears to be about 20' deep and dry - somewhat of a mystery as where does the water drain to? Didn't fancy trying as plastered with glutinous mud. Inspected open stope with small hole in back, still on S aside of beck sand slightly downhill and to E of the level. Was probably 30-35' deep recently with slight traces of galena on footwall.

# 6<sup>th</sup> May 1984 Red Gill Mine & Mexico Mine Roughtengill CAT Meet (B85)

A dozen or so present to tackle recently-dug shaft in newly-opened level at Mexico Mine. Party split with 6 off to Red Gill and rest to Roughtengill. On arrival plodded up slope to open shaft down to what is probably rise up from No. 3 or Top Level; run at entrance. Geared up and after belaying rope back to fence posts Ian Tyler descended only to find rise blocked after 30'. On return he stepped across with difficulty into level on W side which went for about 15 yards with some stoping. After everyone else had sampled the delights of the 'soil mine' as it was named, descended to another dug level below – probably Old Dutch or No. 2 level. Had recently been dug open by mineral collectors, entry via 6' deep shaft and belly down slither. Level dry and goes to R (west) on vein about 100 yards long; ends in stope 25' high with shaft in roof (photos taken). Quartz vein hereabouts 3-4' wide with good though much battered examples of chryscolla in vein in roof. Mineral collectors in their element cracking rocks and wrapping up samples - not the only ones to have done this judging by the amount of newspaper lying around!. On exit slithered down to Deep or No. 1 Level; well and truly blocked but a good flow of water issuing out. A possible future dig? No sign of rest of party re-appearing so walked up to Mexico Mine via Roughtengill and along the main lode across the face of Iron Crag to the tips. Progress report given that they had gone into level about 100 yards long in knee-depth water to shaft in floor; much difficulty clearing it of boulders and about 2 hours so spent. Easy incline like a ramp - length 40' and gives into section of level with main pitch of about 120' to level at bottom, chest depth

water and deepening along its length of 200 yards back towards level mouth (about W). MEXICO Mine is so named according to archives because it was owned by <u>ME</u>tcalfe, di<u>X</u>on <u>& CO</u>; clever stuff!

## 3<sup>rd</sup> June 1984 Brandy Gill Level Carrock Mine Solo visit (B88)

The level high up Brandy Gill on W bank about 300 yards below ridge (20 minutes walk up gill) is one recently dug open after being blocked for about 15 years. Entrance is in pit about 5' deep, low slither into level, crotch-depth water for 50 yards to 'T'-junction. Level winds and meanders for a considerable distance to R (North?) with x-cuttings and to L (South?) with rise up and small stope beyond and a longish run of level with no mineralisation. The object was to climb the rise(easily done by lassooing a rope over a stemple and life-lining up about 12' high) then crawl through low wet boxhole to base of rise - about 30' high to upper level – blocked under source at surface but with old shaft dropping down into it from surface - now blocked with large rocks. Set off climbing up shaft, knocked peg in at 12' and hung ladder off it but not very secure so tried bolt - drilled in easily but wouldn't hold tried another peg but no better as sprung out when I put my weight on the ladder hung off it and dropped me 10'. Gave up and retreated out down gill and inspected ventilation shaft. Laddered to level in from beck but only part beyond that - short trial dig in beck below invisible quartz vein – reputed to be a level but not that obvious so left for another day. Noticed that door of Portacabin office has been broken in and contents ransacked. Salvaged some of the contents but the plans had gone.

## 1<sup>st</sup> July 1984 Emmerson Shaft/No. 2 Level Harding Vein Carrock Mine Visit + Ian Tyler (B89)

Re-run of January 1984 so up hill to Emmerson Level. Rigged pitch with timber belays and peg in situ in back wall opposite. Tight at top then very roomy, rock nicely angled making for pleasant ladder climb – 42' long. Pack wall on S side at bottom with sub-levels above to S. Stoped to N for approx. 70 yards to forehead – stoping has max. height of 30'. Out then up opposite side of valley to manway down to No. 2 Level on Harding Vein on Coombe Height. 3 ladders being 6', 6' and 18' to No. 2 Level. Shaft down is immediately in front (see 8/1/84 above). Timber belay used along with base of fixed ladder up. First part of pitch is 10' down fixed ladder to manway then 30' to pillar in vein. Level continues to N over holes in floor covered by steel-sectioned ladders though stacked deads beyond - 20' to S from base of Electron on N side of shaft is another hole in the floor with sub-level continuing to S over top of stope. Dropping rocks down, reckoned that shaft was in excess of 100' to bottom from that point so too much for ladders to hand so retreated, noting that below this point there is much evidence of fine tailings material - pumped in here as sludge from mill sometime after 1978. Subsequent examination of newly-acquired plans indicates that shaft drops into stope continuing all the way down to Harding (No. 1) Level with extra under beck to S – approx. 55 metres lower down.

### 26<sup>th</sup> August 1984 Mexico Mine Roughtengill Visit + Ian Tyler & others (C2)

Up to mouth of level which is straight for about 100 yards with shaft in full width of floor 10 yards from end. Slight flow of water from blockage at end of level down shaft, rails spanning shaft with large bar belay across level. Incline shaft is not steep enough to ladder properly and is 30' down to run level on E side and open level on W side. Level on W side extends through almost to day in deepening water; I gave up at thigh depth owing to hole in wetsuit. Shaft continues for about 120' below first level at same angle so too flat for laddering and not steep enough for SRT. At bottom to W, level goes almost to surface in ever deepening water (as first level). To E level had part run, backing water up to within 18" of the roof. Dug through this fall dropping water level by 18" and releasing a strong flow of water. Level extends for a further 45 yards E and ends in a large fall completely blocking the level. Way back up to surface was to self-lifeline up fixed rope using ladder for hand-holds and feet on the rock with shoulders wedged against roof of shaft. Out to day.

# 4<sup>th</sup> September 1984 Hay Gill, Short Grain, Ingray Gill Fellside Visit + Ian Tyler (C16)

Aim was to dig open a level on Hay Gill on RHS above Dale Beck X-Cut. Dug for a couple of hours but gave up as still in the boulder clay and no obvious wall in either side though a good flow of water issuing out. Then up to Short Grain to a level entrance below the Water Board enclosure. A nice stone-walled level entrance on N side of beck but after digging for 2 hours with a good flow of water still had not found any trace of the level roof. Decided that level entrance must have been blown in when waterworks scheme was completed in 1937. A large sump has appeared on the N side of the waterworks hut which does not look promising even if the entrance could be cleared. Walked across the moor to N past most westerly workings of Potts Gill Barytes Mine and down to Ingray Gill to mine on N bank. Some difficulty in locating the entrance and unsure where to dig as what we thought was the level drainage turned out to be the land drainage. Half-hearted attempt at another level on S bank but again gave up. Not a very rewarding day as 4 digs tried with no result!

# 18<sup>th</sup> November 1984 Drygill, 30FM Level Driggith and Sandbeds Visit + Ian Tyler (C18)

Walked up to the 1905 mill at Driggith and took photos of jigging box then up to Drygill Mine to the shaft in the shale bank above the stream (RHS). Shaft has been dug and lined with timber with knotted rope holds. Shaft 12' deep, down slope and into water. Not passable even in wetsuit as water at least 10' high in places and always up to armpits. Walked round water leat to 30FM Level at Driggith at head of gulley. Entered through 6' shaft to knee-depth water. Level is driven directly on a N/S vein with 2 stopes immediately inside entrance, one c. 35' high with traces of chalcopyrite, galena and haematite in roof vein. About 200 yards to 4-way junction on 3' wide loose sugary quartz vein with some barytes and no metallic minerals. Level to N gives in to stoped area – heavily timbered run. To L part back-filled and inaccessible; to R level wanders on past hopper for about 40 yards to blind forehead. Out to day and over hill to N past old open cast workings and down to Sandbeds and thence to cars.

## 3<sup>rd</sup> March 1985 Bottom Level Redgill Mine Visit + Ian Tyler & others (C28)

Shouldered gear up fellside to Bottom Level at Redgill. Wetsuit on and in through chest-deep water past R branch for about 70 yards to rise up with a cone of rubbish beneath. Rise climbed for 30' (very loose and unstable rock) until baulked by blockage of loose material – almost to day? Dug through rubbish, exposed and cleared level on other side. Mid-thigh depth water, driven on vein for 69 yards to sump on L (plumbed to about 6'), traverse line rigged and crossed by ledge against RH wall to loose rubble pile. Stoped above for next 20 yards to height of 45-50' – strong quartz vein visible in roof of stope 18"-2' wide. Level then passes under pillar of rock (stoped above) and ends in a cone of small shale, blocking level. Part dug but very fine material and only gave access up into stope for a height of 4'. Would require driving forward rather than upwards and would need roof support. Might be able to maypole up into stope over pillar of rock (about 30') but not worth a separate trip to try. Out to day and trial dig at old level on opposite side of stream but higher up – not at all rewarding as did not appear to be in right position. Looked at level opposite Redgill Bottom Level then home.

NB: Page C27A has a rough sketch of Redgill Bottom Level as above.

# 8<sup>th</sup> March 1985 Ingray Gill (South & North), Fellside and Carrock Visit + Ian Tyler (C29)

See 4/9/84 above. 30 minutes digging at Ingray Gill South Bank soon had the mine dewatering like mad with a torrent pouring down and discolouring Ingray Gill, prompting concern re NWWA inspectors!. Water level eventually dropped to 4'. Entrance appears to be driven through mudsttone/stiff boulder clay. Ian entered and said level runs for 105 yards being 30 yards straight from entrance, to L for 30 yards (very broken quartz – no minerals) then 10 yard X-cut to L to forehead then right-angle bend to R and 35 yards to fall. Very large blocks across (start of stope?). In water all the way, decreases to crotch—depth at end. Not a recommended dig as very unstable. Crossed beck and started digging on probable site of level on N bank. Apart from tip, no clear signs as to precisely where the level is as the only point issuing water appears to be through water-worn pebbles above the bedrock level. To be left to see what transpires. Looked round at Carrock on way back. Portakabin has been removed but mill is still secure with all doors welded up. Picked up some useful information from an abandoned filing cabinet outside the old stone-built mine office.

## 29<sup>th</sup> March 1985 Carrock and Redgill Mines Solo visit (C34)

Up Brandy Gill past exposure of Harding Vein in waterfall and up to the head levels on W bank of Brandy Gill then back to car via Smith Vein. Repeated photos from 12 months earlier then transported 4  $\times$  12' lengths of 6" Osma plastic pipe round to Redgill Mine to ensure that the recently-dug entrance did not re-block. Pipes retrieved from under road bridge at Paddy Gill and taken to Redgill. Set off up fellside carrying/dragging the pipes, all in pouring rain! Pipes positioned though entrance had run over 10' long section to depth of 3' and requires re-digging. Left other pipes at entrance cut and home.

## 10<sup>th</sup> August 1986 Sandbeds East Mine CAT Meet (C79)

8 members present. Walked round to recent dig (90FM Level at Sandbeds East). Had been dug open but had run in again in intervening weeks. Dig was attempted but as the shale bank above was so unstable and kept running, this was abandoned and attention transferred to the fenced air shaft on the moor about 200 yards above. All descended save me. Total descent 150' through the internal 80FM Level down to the 90FM Level. Blocked in a short distance in both directions by falls but followed back to X-cut entrance.

# 19<sup>th</sup> October 1986 Brandy Gill Area + Carrock CAT Meet (C89)

15 members present. Ian Tyler led some into old workings on Emmerson Vein then up to lead trials above Brandy Gill then to Drygill. I took others into Carrock exploring. Noticeable air still bad in Emmerson X-Cut. Inspected the stopes and ladder ways above the Harding North Vein.

# 17<sup>th</sup> May 1987 Carrock Fell Mine CAT Meet (D13)

16 present. 3 parts to the meet. Firstly a descent through some of the old stopes on South Harding Vein from No. 1 Level down and out at No. 2 Level (about 60'). Secondly a descent on Smith Vein from upper adit down to lower adit level. Thirdly through the adits, climbing a ladder way up the stopes on Smith Vein. Then tackled Harding Vein North and up through stopes to No. 3 Level. Finally a trip round the mill.

## 17<sup>th</sup> January 1988 Thornthwaite Mine Solo Visit (D22)

Solo reconnaissance before leading a CAT Meet. Off into Rachel Wood Level. Access through barricaded entrance as before but much underground deterioration since last visit in 1985. Then looked at Beckside Mine (virtually non-existent) then to Ladstock Mine on Coombe Beck. Didn't enter as remembered it was shakey from previous visit. Then lastly to upper section of Coombe Beck to find breached mines reservoir in gorge; quite impressive.

### 31<sup>st</sup> January 1988 Thornthwaite Mine CAT Meet (D23)

18 members present including Ian Tyler and Warren Allison who set off to tackle Ladstock West Mine whilst I led the group into Rachel Wood Level to examine the vein. Down to Ladstock where some entered the level Ian had rigged on N bank of Coombe Beck at Ladstock West Mine. Meanwhile we rigged the pitch (tight between timbers) 20' down in the old stope/level in the S bank of the beck. Level very narrow so only 1 person at a time. Very little general enthusiasm in the group. Ian and Warren emerged plastered with mud after their sortie underground.

#### **CLEATOR MOOR**

## 19<sup>TH</sup> June 1983 Kinnerside Lead Mine Visit + Ian Tyler (B31)

Anomalous lead mine amongst the haematite. Parked at 043145. Within 50 yards of road is highly visible well fenced engine shaft about 200' deep — superb circular sandstone-lined shaft. Parked on tips then over hill to N. 3 levels, 2 run in and 1 open. Dead straight to air shaft, knee depth water, crawl over rubbish and dead sheep then level swings R then L then

straight ahead. Level then forks with boulder in middle. LH fork = shaft in floor after 40' – shaft about 70' deep – X-cut (trial) to L – stope in vein – stacked deads down about 80' high but run in beyond both ways. Back to main level – appears to be by-pass drift as re-joins vein – stoped out below and backfilled but dry – may possibly go but hairy – run in in front and behind - so much for that – it was hoped that we could have got as far as the engine shaft. Walked over Flat Fell to S on course of vein to short 15 yards back-filled trial next to stream. Collected samples from spoil heap then back to car.

## 3<sup>rd</sup> July 1983 Kinnerside Lead Mine Visit + Ian Tyler (B34)

First checked site of old shaft adjacent to road near river as per 1864 OS Sheet. Found probable site but no spoil visible. Drove round to Engine Shaft and met others so as to descend the internal shaft and possibly the stone-lined engine shaft itself. In through the adit and into the internal shaft. 2 bolts driven for abseil rope and then one man down. Another bolt knocked in for ladder and then the rest went down. Shaft c. 42' deep with level off on S. side c. 12' up from bottom and level off on S side at the bottom. Upper level runs through stoping with cribwork, good examples of stemples, plenty of stacked deads over and holes in floor down to level below - runs for c. 20 yards. Back to shaft, abseiled down and along bottom level – runs for about same distance as above before ends in upper stope below upper section. A poke around in deads in the floor revealed a crawl which gave into the stope at a lower level. To S run after c. 40 yards, just after a small chamber. To N level ends in a climbable incline c. 30' deep; left for another day. Plenty of clog marks in mud in floor. Out to day and over hill to Engine Shaft. 1 abseiled down and reported as follows: 230' deep, stone-lined for first 50' level (appears large with rails) - runs off on N side c. 150' down, shaft blocked at bottom with rubbish, soft and slimy inc. dead sheep No signs of level - dry but slight seepage of water in through lining.

### 10<sup>th</sup> July 1983 Kinnerside Lead Mine Visit + Ian Tyler (B36)

Into level through and down shaft abseiling on double rope off pulley so as to be able to lifeline from bottom. Along bottom level to L through hole, climbed down into stope and doubled back along passage with clog marks in floor to position reached last week. Placed bolt in RHS at shoulder height and used my rope as a handline. Ian abseiled down and I joined him. Incline is c. 60' long and 30' high, appears to have been a form of manway as plenty of stemples in position – level runs for 30' to S, dipping as it goes and runs into a flooded shaft in floor; appears very deep. Only Engine Shaft now left and to be surveyed next week?

### 28<sup>th</sup> September 1986 Gutterby No. 3 Pit Haematite Mine Moor Row CAT Meet (C87)

Haematite Heritage Trust of West Cumbria had decided, following archive research, to dig out the inclined drift entrance to the pit, using an excavator. Incline descends at about 30 degrees for 96' vertical height with levels off on either side. At bottom further incline drops down for further 18' but is flooded to within 12" of roof. Some off to R (N) at bottom, along level to forehead about 300 yards along — workings below this are flooded. Backtracked and scrambled up into inclined flats and headed further N. Very little sign of minerals but didn't reach end. Backtracked again to incline and into level on N side then into another flat. Rock cut shaft upwards revealed along with another string of flats headed S. Back to surface. Others had gone as far S as we had N and still not reached the end. A fairly extensive system of workings but their problem is to stabilise the entrance using a blockwork shaft or MH rings. Tackling the air shaft might be easier as can only be a couple of feet below the surface.

#### **COCKERMOUTH**

5<sup>TH</sup> February 1984 Embleton Lead Mine Visit + Ian Tyler (B71)

Permission obtained from farmer then across field past fenced shaft and down hill to top level entrance (gated). Far more accessible than before when surrounded by brambles and gorse. In round gate on glass and rubbish to small chamber then up and over cone of rubbish under shaft (blocked) to crawl up into open chamber - rises up steeply over large blocks almost to surface – blocked at end. Shaft is down rubble-filled sloping side passage at entrance into chamber on L. 2 bolts fixed on RH wall half way down rubble slope to top of pitch – 20' of ladder required, drops into rubble slope (very steep) which itself drops straight into shaft. Total length of lifeline 40' to shaft top at middle level. Carefully round shaft to L and level runs out almost to day. Small X-cuts give into broken collapsed stopes. Tree root in floor for c. 15' near entrance. Did not descend shaft as not enough time but Ian did, so fixed to bolts in hanging wall at junction with X-cut - he reports levels off to N and S about 25' down - under-stoped in places and so suspect. A further 15' down to bottom - total 40'. Lands in base of stope. Sub-level goes off top flooded shaft - level of water 6' below level floor - approx. 13' of water to base in bottom level. Water level has increased since surveyed by NMRS in 1964 as then 4' deep in bottom level but now 13'. Out to day and home.

#### **DUDDON VALLEY**

6<sup>th</sup> January 1983 Copper Trials Ulpha Visit with Ian Tyler/D Jeffrey (A84)

First looked over area – open stope immediately adjacent to car parking at Bobbin Mill Bridge – c. 60' deep – quartz vein with chalcopyrite sunk in vein. Immediately adjacent is a run-in level. On N side of road is small level on copper vein – thin vein of chalcopyrite in quartz – no stoping – turns at right angle at end – solid (this is on S bank of stream). Across

beck at bridge and up through wood on N side - wet level opposite 1<sup>st</sup> level. Sizeable spoil heap, but when entered was found to be a slate level and never developed (no closeheads) – waist-deep water due to part run-in entrance. At last a chance to see the K&DMRS boat in action – a superb sight! Only a short level so somewhat frustrating and so rolled-up dinghy thrown into beck and had to be retrieved. Descent of the shaft by other two but I stayed up top. They spent 1.5 hours in a small trial but not surveyed – a future K&DMRS meet for that?

### 29<sup>th</sup> May 1983 Duddon Valley Copper Mines Visit + Ian Tyler (B26)

To Buckbarrow Beck Mine on Corney Fell. Original entrance run, enter via roof collapse adjacent. Level runs for 125 yards NE with about 3' of water. Some of level ropey as driven through boulder clay. Considerable traces of haematite on tips but very little copper. On to Whinfield Ground Farm and up to Folds Farm. Half mile walk up track at rear to Logan Beck Mine – a delightfully sited mine down by the stream. Remains of office and smithy with solid rock cut entrance immediately adjacent. Flooded shaft above and partly run flooded level lower downstream to S. Into level, almost at once past flooded shaft on R then bridging over flooded stope in floor and on to flooded stopes across width of level at about 50' from entrance. Water level 4' below level and about 18" deep. Stope is about 18' long and bridged by 3 stemples of dubious quality, spaced at about 6' centres. As stope was too wide for bridging and no holds on side walls, didn't attempt but decided to return with a long ladder. Across moor to S to Bowscale Beck copper trials. Small level in side of beck which turns R in thigh-depth water and at once arrives at 20' flooded sump in floor. Couldn't cross but apparently only extends for about 30' beyond. Small tip on opposite bank of stream. Drove round to Holehouse Bridge, walked up past reservoir to Holehouse Gill Copper Mine, crossing over footbridge built of mine rails. Bottom level open via roof collapse, original entrance run. Immediately drops into 3' water – c. 90 yards long and fairly straight with no side branches, next to no mineralisation. Level above (run) has large buildings to R and smithy lower down – in fairly good condition. Further over to L is gunpowder store also in good condition. On return past shaft at Ulpha Copper Mine but could hardly see it from road as covered with greenery.

## 9<sup>th</sup> July 1983 Holehouse Gill Copper Mine CAT Meet (B35)

Up to Middle Level to continue previous dig. In via a roof collapse. Knee depth mud inside runs for 20 yards then forks. LH branch blind after 15 yards with remains of wooden wheelbarrow on floor. RH branch runs for 30 yards, past walled-up X-cut on R to collapse. Appears to be a rise up at this point to surface (muck has dropped down blocking level). Would probably go if dug as extensive spoil heaps outside level but low priority. Entrance was left slabbed over to make safe.

14<sup>th</sup> August 1983 Ulpha Copper Mine Visit + Ian Tyler (B48)

Rigged pitch and descended 40' on S side of shaft to large heap of rubbish. Up and over pile to level proper. Strong quartz vein – very hard – giving out to clay vein. Stope down side drive on R c. 30' long x 25' high. Short lengths of light pressed rail in position along with iron strips, possibly running strips off wooden rails. Remains of horse gin on surface with engine mounting beds. Considerable amount of haematite in vein; unsurprising given number of runs to S and W.

15<sup>th</sup> September 1985 Ulpha Copper Mine CAT Meet (C52)

11 members present. Up to Holehouse Gill Copper Mine via Ulpha Shaft then across fell and to Logan Beck Mine. Brief attempt at digging lower flooded level downstream from main adit then to cars.

13<sup>th</sup> August 1986 Ulpha Area Slate Mines CAT Meet (C79)

Wandered around in the woods and explored 3 levels and chambers in Low Wood close to public footpath.

#### **ELTERWATER**

29<sup>TH</sup> June 1983 Lord's Quarry & Pepper Mine CAT Meet (B33)

8 members for an evening meet. Parked near cottage on hill above cutting sheds then down track to edge of spoil heaps and over spoil to entrance cut. Level off at rear on L of cut, leads into chamber with slope of deads. Down slope to base of chamber and contour round base which is flooded c 6' deep in slate slurry from cutting sheds and to base of incline. Continued building causeway where left off by others 2 years ago to reach incline/stairway on opposite side. Eventually got across to find it doesn't go anywhere in particular. Nearly marooned there as a result of large rocks flung down from top breaking the surface of the slurry and liquefying it. Eventually returned and travelled up incline to top (remains of stairway on RHS). At top remains of winch and level (run) and through stocked deads to day. Also vertical shaft down into part-flooded lower chamber. Incline head was open to day via shaft c. 40' deep. Retraced steps down incline, round slurry and up slope to chamber and out to day. Had a look round sheds, yard etc. and a look down into Lord's Quarry and old winding engine before home.

#### **ENNERDALE**

28<sup>th</sup> August 1986 Kelton Fell Iron Ore Mine Kirkland COMRU Rescue (C82)

Long account of rescue of two men + dogs trapped in old iron ore mine. Article from West Cumbria Gazette 4<sup>th</sup> September 1986 also included on page C82A.

#### **ESKDALE**

14<sup>th</sup> August 1983 Spot How Gill Copper Mine Visit + Ian Tyler (B48)

Lowest level with considerable size spoil heap is in centre of wood. Entered through collapse, down 12' high slope – level driven through boulder clay and has collapsed c. 25 yards along at site of air shaft – water is waist deep. Air shaft in corner of wood is sunk through boulder clay – run in c. 15'down with remains of Morris van blocking it! Next level is across on E side of gill, level with lower spoil heaps on W side. Level X-cuts to the vein. To E stoping soon runs out; to W over fall into stoping above c. 35'high, below unknown depth (blocked with deads); small hole gives into base of sump leading to level above (c. 20' high). Stemples and boarding in position. Strong hard quartz vein with haematite and 1" rib of copper (chalcopyrite). Out to day and back across gill to spoil heaps on W side. From centre of heaps a built-up causeway leads along walls of ravine to top level. On W side of gill, just above water level, level immediately gives into sump (base entered from level below). Ledge round then after 10 yards gives into stope c. 20' up from bottom. An interesting little mine with plenty of good chalcopyrite on the tips (evidence of tips having been turned over recently).

#### **FRIZINGTON**

19<sup>th</sup> July 1981 Agnes and Margaret Mines NMRS Meet (A3)

Iron ore mines – no underground exploration – on to winding engine house at Haig Colliery Whitehaven – along beach to Saltram Coal Pit and Duke Pit.

#### **FURNESS**

23<sup>RD</sup> April 1983 Ding Dong Mine Marton CAT Meet (B23)

12 members present. Began by pushing waggon across field to shaft to tip 2 tons of limestone aggregate near shaft top. Then descended to clean off limestone collar to shaft c. 40' down. Spent rest of day sawing up various lengths of used boiler tube to span across the shaft (about 25 in all), lowering them down along with sheets of corrugated galvanised iron for covering the tubes and buckets of concrete to bed end of tubes into. Formwork to be completed next week prior to pouring concrete next weekend. Progress at last after 3 years digging.

24<sup>th</sup> April 1983 Haematite Mine Carter Ground Dunnerdale K&DMRS Meet (B24)

Inspected site of level (run in) by stream just above road midway between Ball Hall and Carter Ground. Well and truly run in but remains of stone-walled entrance cut — water issuing from site of level. Got permission from farmer's wife at Jackson Ground Farm to descend shaft so parked at top of hill above Carter Ground, loaded up with tackle and headed across country for about 600 yards to shaft above Carter Ground. Due to shortage of

natural belays, 2 bolts were placed in a rock adjacent to the shaft and another in a nearby rock, then linked belays, a ladder and an abseil rope put in place. Shaft descends vertically for 30' then runs under rubble slope to west for another 30' then blocked by assorted rubbish so couldn't pass. Dead ewe found as well as a live one. Exploration then turned into a rescue mission with a harness being rigged round the live ewe and it was hauled up the shaft and went on its way. Farmer seemed unconcerned on report of this especially as it did not bear their mark! Nice site for a mine but not worth a return trip for further exploration.

## 27<sup>th</sup> July 1983 Burlington Slate Quarries CAT Meet (B42)

13 members for a surface trip only. Examined various levels especially at the bottom of the older section of the quarry then the present workings. Saw adit entrance constructed of massive slate slabs then to main level, high enough to take a double-decker bus.

## 5<sup>th</sup> August 1983 Ding Dong Mine Marton CAT Meet (B44)

4 members. Got on with concreting, placing about 0.5 ton in place with cement mixer and a chute of galvanised corrugated sheet. Descended to level the concrete and finished off. Will be a long job.

## 9<sup>th</sup> October 1983 Haematite Mine Santon Bridge & Logan Beck Copper Mine Ulpha (B54)

Up to haematite mine with Ian Tyler and daughter Kate. Ian had started a dig at the level entrance the week before and dropped the water level by 3' – just as well as it was now chest deep again! Solid metal rails in position. Level approx. 150 yards long – 3 small falls – roof and walls fairly loose – appears to be a form of decomposed granite – only small stones. Appears to have been more of a trial than anything else. Surface trials and run-in levels above. Out to day in heavy rain so over Birker Fell to Logan Beck. Up hill with ladders to level then roped ladders together and across 18' long stope that had stopped us before. Another flooded sump immediately on right, short X-cut on left. Level contains past area of malachite staining with large hole in floor just beyond – passable by ledge on LHS. Another 30 yards further on at base of wall on LHS gives into stope, water level 10-12' down – appears fairly deep – level divides further along – both forks blind – approx. 150 yards of levels beyond ladder-crossing stope. Bad weather prevented further exploration of Bowscale Beck Level by dinghy so home instead.

NB: Page B79A contains a Westmorland Gazette report of a CAT expedition to Whittriggs near Lindal with some history from Peter Fleming.

#### **GLENRIDDING**

## 29<sup>th</sup> November 1981 Greenside Mine CAT Meet (A7)

Small partially bricked-up wet entrance at Glencoyne Level (soon to be gated). All ladders in place and in reasonable condition all things considered. Last 40' of ladder missing – Electron required to reach Long Tongue Level. A hard trip, a long slog up to Glencoyne Level, 708' of ladders. Route Glencoyne Level to High Horse Level; 2 pitches down to Low Horse Level – down Willie Shaft to Long Tongue Level. Underground 12.45-18.30.

# 23<sup>rd</sup> February 1983 Greenside Mine Visit + Ian Tyler (B11)

Up zig-zags to 1834 crushing mill. Low Horse Level is on opposite side of beck. Unfortunately blocked solid with snow and ice – approx.. 12' thick in gulley. Didn't seem worth trying to dig it out and not worth risk of flogging over to Glencoyne Level only to find it snowed up as well so abandoned visit.

# 27<sup>th</sup> March 1983 Greenside Mine Visit + Ian Tyler (B16)

Walked up zig-zags to Low Horse Level. Waded across stream then slid down into entrance — tight with constant dropping water. Level partly walled up at entrance. Into knee-depth water, shallowing out. Long fairly straight level to part-walled junction c. 350 yards from entrance. Blind development level on L for 350 yards. Main level tends to R and for another 50 yards — level to L backfilled to 9" of roof (? Excavation) — main level continues. 2 pairs of bogies and very large-bodied steel truck at this point. Rails in position vertically holding up roof; c. 50 yards beyond this point level ends in collapse. Major collapse on open stopes — vents well. Out to day and up to 1790-1834 dressing floors. Ratched round on tips then up hillside inspecting collapsed open stopes and up to ridge to be met by snowfall on N facing slope. Dropped down and round to Glencoyne Level. Another wet crawl at entrance in kneedepth water into a long straight X-cut with remains of door + frame part way down. 4-way junction — R is long drive with side development off on R = blind. Straight ahead is blind after c. 30 yards. Left is Greenside through trip route. Winding level that has 3' drainage channel cut out of two-thirds width at floor at later date; c. 150 yards then ends in a 25' ladder way down (wooden ladder) to High Horse Level.

# 10<sup>th</sup> April 1983 Greenside Mine Visit + Ian Tyler (B20)

Up hill to mine then underground. Entrance still part-filled with snow. Through knee-depth water and down 25' ladder way to High Horse Level. Along level, surveyed branch to R (blind) then to timbered section immediately before curved 2.5 brick dam. Through dam (12" of pipe in floor) to dam around shaft on R – passed along and turned up branch level on L. Surveyed along with 2 side branches off to R (south). Back to level and along to L (south) to curved ribbed dam with hatchway and pipe through – total collapse c. 10' beyond – start of stoping? Backtracked to chamber at shaft top – penstock in position on pipe along with

priming pump on pipe work. Passed around shaft and along level to S – runs for c. 45 yards then drops into stope – sounded deep – possibly down to Low Horse Level 216' below. Back to shaft and down 2 ladder ways 87' long, changed ladders, down 15' then low level off on S side. Didn't enter as for next time – 20' lower – end of ladder. Total descent 122' – ladder way descended down below, next ladder approx. 40' long (curves), probably another 90' left beneath us. Back up ladders, along level to base of small ladder way. Look at old mill site on way down in a blizzard.

# 13<sup>th</sup> November 1983 Greenside Mine Visit + Ian Tyler (B60)

Plod up hill and over to Glencoyne Adit. In through knee-depth water, along and down 30' ladder way to High Horse Level. Along (seemed wetter than usual) to dam, through and down ladder way 36 fm deep (216') – last 2 lengths 20' and 30' are chain ladder – bottom section swings around somewhat. When down, level did not appear to extend very far to N before ending in a blind wall – at odds with the sections as the level should continue further N than Glencoyne Level. Worthy of investigation sometime. Along level to top of Willie Shaft (see 27/11/83 below) – descended one pitch down just to check the general state of the ladder – all metal construction – fairly rocky ladders – may need future attention. Checked and surveyed level so far as collapse in stope and also checked X-cuts. Back up to High Horse/Glencoyne Level and out to eay. Noticed fairly deep shaft/stope in floor adjacent to Willie Shaft top with chain ladder hung down – possibly connects to shaft lower down?

# 27<sup>th</sup> November 1983 Greenside Mine CAT Meet + Ian Tyler (B62)

Off up hill with Ian Tyler then down Glencoyne Rise and along to shaft top. Down 35 fm (216') shaft – chain ladder on last 40' is a right swine, pivoting round as you climb down. Along Low Horse Level to top of ladder way (steel ladders) and down through stoped area to level with tub in position with loads of drill steels. Down to Alma Level, along and down ladder way with shaft (winding) alongside. Came to a halt at the end of the fixed ladders 40' above Lucy Level then waited 1 hour for the CAT members to catch up with the Electron ladder. Abseiled down the southern of the 2 shafts (joined by 10' long level) - not a good idea with just a waist belay - staging half way down with a vicious spike sticking out of the wall – next time try the northern shaft, straight pitch. Along Lucy Level to Smith's Top Shaft - total descent from Glencoyne Level to Lucy Tongue Level is 733' made up of 25' Glencoyne rise to High Horse Level, 216' to Low Horse Level and 492' (82 fm) Low Horse Level to Lucy Tongue Level via Alma Level and possibly 48 Fathom Level. Once at Smith's Shaft Top had lunch and set off back. At bottom of Electron met last of party coming down (32 in total). Ladders up always harder work than ladders down but eventually back to level mouth. Ian pleased with the descent but perhaps not again – at last a mine that defeats his surveying as too damn big!

## 22<sup>nd</sup> April 1984 Greenside Mine Visit + Ian Tyler & others (B83)

Up zig-zags and across stream to Low Horse Level. Entrance enlarged and height of spoil bank reduced to aid ventilation and to attempt to eliminate the risk of more rubble tumbling down and blocking the entrance. Inside at 3pm and to end. Had a partial dig at the collapse then back to part back-filled level on L to partially dig out to try and by-pass collapses. No good as got through after 25 yards but level blocked both ways. Returned, waded through deep silt and out. Water level lower than previous trip in early 1983, less than welly depth.

# 7<sup>th</sup> October 1984 Greenside Mine CAT Meet (C9)

About 15 members present. Up and into Low Horse Level but rapidly decided that the dig on the main level was not worth the effort so the part back-filled X-cut was rapidly dug to L and to the vein – 60 yards to L but to a blind. On R leads to a rubble slope of a massive blockage, probably the start of the first stope. Some decided to dig from the inside so entered via Glencoyne Level above but no real progress made. All hard pressed to find anything diggable either way. May try another route in next year.

#### **HAWESWATER**

## 23<sup>rd</sup> February 1983 Copper Mine Visit + Ian Tyler (B11)

Half mile west of Burnbanks Village. Three levels sited low down on Great Birkhouse Hill. Lower level run + spoil heap on low side of track over wall. Middle level walled is long level driven on clay fault, slight copper staining, no stoping, small trials off on L then 90 degrees bend to east to a flooded shaft in floor. Vein lodes to N, shaft in excess of 50' deep, remains of timber uprights over shaft, probably hand windlass. Top level is short X-cut to vein, 'T' junction, on poor copper vein to L, plenty of staining to R, wide level narrowing then 90 degrees bend then long level on poor quality vein to water entering through roof at end. Numerous small surface trials and hushes leading approx. E across the fell side. A disappointment for those concerned as copper thinly spread through quartz veins.

NB: See K&DMRS Newsletter December 1981 for full survey.

#### **HELVELLYN**

# 26<sup>th</sup> December 1981 Wythburn Lead Mine CAT Meet (A8)

9 men dragging 2 x 40 gallon bottomless oil drums up Helvellyn through deep, frozen snow in a blizzard at 10am the day after Xmas! A. McFadzean had dug out entrance to No. 1 level through frozen scree, hence oil drums to support entrance before thaw. Slithering entrance under timbers to reveal level abandoned in 1880 when Manchester Corporation Water took over Thirlmere. Level c.200 yards long, driven on vein shaft in mid-point; c. 200' deep down to No. 2 level. Future possibility for exploration. Underground 1.30 – 3.30pm.

## 26<sup>th</sup> January 1983 Wythburn Mine Visit + Ian Tyler and Dave Jeffrey (B2)

Up from car park to Mines Gill, past No's 3 and 2 levels and up to No. 1 level. Barrel entrance to No. 1 level still in position and even better positioned than when we placed them in December 1981. Barrel well slabbed over at entrance. Slithered in through drums and under timber stemples to level itself. Water less than 2" deep. Along level, through area of stoping c. 40' high to shaft in floor down to No. 2 level – also stoped up to Arnison's Level at this point. Past the shaft with difficulty to small stoped area c. 20' short of blind end, some good samples of galena and barytes at this point. Out to day and up to Arnison's Level to weigh up possible dig – would probably go – one for the future possibly. Down to No. 2 spoil heap and across beck to old smithy store and office. Down zig-zagging miners track into wood for a quick dig out at No. 4 level immediately adjacent to beck. Down hill to powder house (?) in wood and out to mill site – across bridge on nature trail through mill to weigh up spoil heaps on N side of beck – no signs of any mining – but considerable sixed heaps.

NB: CAT Newsletter No. 2 of December 1982 by Alan McFadzean refers.

# 15<sup>th</sup> July 1984 Wythburn Mine CAT Meet (B91)

Object was to send team down the shaft from No. 1 to No. 2 level to try to dig their way out to day whilst the rest tried to dig their way in from day. Underground party descended (5 in number) and we others set off digging from a depression on the line of the level and about 12' above. After 3 hours we had taken out a fait-sized chunk but no sign of real progress. Ground is very loose and would not stand up on its own so we gave up despite being able to hear faint thumping sounds from those underground. We then tried a more likely prospect at Arnison's Level complete with water seeping out. Started from the level floor and dug for 10' ending up with a cutting 6' deep with bedrock showing on the back wall and no sign of a level. Packed up and back to drum entrance to meet underground team. Went in with lan for his survey then out again.

## 22<sup>nd</sup> Jul<u>y 1984</u> Birkside Gill Copper Mine NMRS Meet (B92)

Authorised by NWWA and plodded up through woods to boundary wall with level just beyond on LH bank of stream about 30' above it. Level entrance has been partly walled-up very recently with small cubbyhole on LHS for entry. Very little water. Level wanders around with very little stoping then splits into 2 equal branches with little or no stoping on either branch. Perfectly safe – doesn't require walling up. Shaft is about 80 yards upstream. On arrival found that this too had been made safe by NWWA; shaft has been completely covered by 2 layers of mesh clipped together and pegged/bolted into the rock all around. Managed to scrape a low tunnel underneath to gain access. Hung ladders on belay to ash tree on opposite side of beck about 20' away. Shaft is 30' deep and lands on a loose rubble slope so down slope to a flooded sump (plumbed to 40' deep) with rotting timbers over and 30' high stope above. A narrow ledge leads round on RHS and gives into straight level

beyond about 80 yards long. 1 small stope 18-20' high with deads stacked on platform spanning level.

22<sup>nd</sup> July 1984 Wythburn Mine NMRS Meet (B92)

Dug out entrance at No. 4 Level and chopped up some windfall trees and built a roof over entrance to stop it filling up with rubble from above. Level mid-calf depth with water and size of level was striking – about 7' square just like a slate level. About 300 yards to forehead – X-cut off to L (blind) and small X-cut off to R (blind) with no signs of stoping. Very poor vein but sleeper holes and marks of rail tracks showed up clearly in mud on floor.

6<sup>th</sup> December 1987 Wythburn Mine CAT Meet (D20)

10 members present. Up to No. 2 Level then all down to No. 3 Level to try and dig out the entrance. 3 hours work and managed to clear most of the large boulders but despite following the walls, didn't make that much progress in clearing the level so left for another day.

#### **HONISTER**

31<sup>st</sup> August 1986 Yew Crag Quarries CAT Meet (C84)

17 members present. Up quarry road and incline to first open quarry at top. All into level in N wall then down hole in RHS of closehead. This led down through chambers (and a short 15' abseil) to No. 6 Level (entrance blocked) and then down through chambers to No. 5 Level (entrance open). Down through some very interesting chambers (all level exits blocked save No. 4). Last chamber worked is on No. 1 Level with plenty of rail, pipework, winches and drill bits still in position. Had to retrace steps back up to No. 5 Level to get out. Inspected old copper trials (coffin level) on slopes of Marden Moor on way home.

18<sup>th</sup> October 1987 Honister Quarries CAT Meet (D18)

13 members present. Plodded up to main gated level then up slabs on pins, round a gorge, down a scree gulley and through a window into a level driven parallel to the crag face and back to main entrance. Then along level, up new incline on steps and exploring levels off. Later along the level, past the window and out to day before in again at base of old incline (counterbalanced) and up, exploring levels off, to the top. Out again, round a ravine and up external incline to top of open quarry. All a delight in pouring rain and howling wind!

#### **KENTMERE**

3<sup>rd</sup> October 1982 Kentmere Quarries K&DMRS Meet (A63)

Up to quarry behind Reservoir Cottage – tackled up hole in floor on S side of open quarry – W end of hole = pitch of c. 25′ between wall of stacked deads and side wall of quarry – down into open chamber – R (west) led into rubble slope and area of roof collapses - straight ahead is a straight level (waist deep in water) so out to day behind bunkhouse. L (east) through to open section, up 15′ scramble and down 25′ abseil to another chamber – rusting detonator boxes found – unstable so left. Hand over hand up rope and managed OK by 3 ex 4 but 1 flunked it and had to be hauled out. Crossed over river to quarries up hillside over ford. Didn't enter lower level – informed straight and wet, without interest so up to 2<sup>nd</sup> level – branch to R blocked with air pipe protruding – straight ahead past another level; on R not entered, through stone-arched level through to chamber at end. Back up rubble incline through chambers and down unstable slope to another pile, up and down to level passed on R on way in then out to day. Fairly interesting. Next level up hill run in at entrance, up to top level, insignificant tips – 3 small chambers but down slopes to back-filled chambers on lower tram level No. 3 – to back of fall and return. Tongue Quarries checked – no levels – all open work.

NB: A62A contains rough hand-drawn sketch illustrating this route in the open quarry.

6<sup>th</sup> November 1982 Kentmere Quarries Visit with 2 others (A72)

Parked at Hartrigg Farm and walked up. Entered lowest open level across ford and through to end. Part of old leather boot collected as souvenir. After previous exit experience, went back same way. Underground only about 20 minutes.

#### LONGSLEDDALE

18<sup>th</sup> April 1982 Wrengill Quarry K&DM Meet (A30)

Long haul up. Poked around in all levels; nothing of any great interest. Short, wet levels with no chambers of any size. A very messy quarry with spoil heaps spreading all over stream gulley. Some abseil practising, some not very proficient and some terrified!

#### ST JOHN'S IN THE VALE

16<sup>th</sup> January 1983 Wanthwaite Mine Visit with Ian Tyler (A91)

Up track from Fernside Farm and, with permission of farmer's wife, up hill at back and through gate on intake wall, striking diagonally up hill side. Mine is on top of a considerable spoil heap — part remains of a building (one wall) up against rock outcrop at back of heap. Original level entrance has run so up slight depression for 20' to small hole. Slither down 8' rubble slope to level. Water in excess of 4'deep, too deep for waders so didn't try. One to try after a long dry spell. Appears to run straight for 15-20 yards then bend to L.

## 17<sup>th</sup> February 1983 Wanthwaite Mine Visit with Ian Tyler (B8)

Again up track behind farm to mine. Water level has dropped by approx. 18" since last visit but still 4' deep in places. Level twisted about somewhat – was high at almost 8' in places and wide at entrance at about 6', narrowing to 4' at end. Total length 115 yards. No sign of any mineralisation whatsoever – almost like a slate mine.

## 8<sup>th</sup> April 1984 Lowthwaite Mine Solo visit (B80)

Up via Bram Crag Quarry. After about 0.3 mile copper vein becomes visible on base of crags with large orange spoil heaps about 60-70′ high with ocherous stream issuing from level and cascading down RHS of tip. Entrance cut above is stone-walled and in reasonable condition but entrance blocked by bank of scree holding back water to 3.5′ depth. Set to and dug it out with one hell of an ocherous cascade foaming down the hillside when I finally cut through the dam. Reduced level by 2-3′ so just on wellington depth. In and level heads to L – very ocherous with stalactites on roof. Level has been blocked as former tideline is up to roof. Hanging wall on very flat angle leading to fall blocking level – crawled through and into crotch-depth ocherous water which after about 120 yards ends in collapse in another stope. Digging could be difficult due to angle of vein but might be possible. Inspected a part-dug trial on vein almost 100′ above and gave it 30 minutes digging and then left it to write it off as a trial only.

#### **STAVELEY**

## 6<sup>th</sup> June 1982 Frost Hole K&DM Meet (A37)

Survey and trials. Supposedly 8 small trials on east bank of stream above Side House, just below track. Only 4 open and visible. Lowest level run in; soon dug clear, decomposing ewe in entrance; thigh-depth water – straight with 2 X-Cuts – no sign of mineralisation – c. 60' long. Other 2 levels both deliberately blocked with birch wood, straight and dry – c. 25' long each. Left after clearing  $4^{th}$  level, run in level down slope.

#### **THRELKELD**

# 30<sup>th</sup> December 1982 Woodend and Gategill Mines Visit + Ian Tyler (A81)

Following reconnaissance 2 days earlier, met Ian at concrete batching plant and started out by entering level (with permission of farmer) at rear of farmhouse and across beck (Woodend Home Level?) Along for c. 500 yards in knee-depth water at first but dry later. Past 2 shafts upwards in roof, part run in, to roof collapse. Level flooded to roof – no sign of mineralisation, little stoping, thin feeble quartz/barytes veins. Up beck to Gategill levels. Past run-in level adjacent to hut, to open work on LH bank, slid down fell at rear to level, avoiding shaft (on vein) approx. 40' deep on RH side. Along level for c. 250 yards – dry, strong quartz vein in roof but ends in shattered zone of roof collapses on clay faults. Other level on LH bank is only c. 50 yards long and ends in blank wall – could the main level above

be Gategill Middle Level? On RH bank slightly lower is a level which appears to be completely back-filled. Approx. 100 yards lower down beck is a X-cut level. Approx. 35 yards in, vein is cut with shaft in roof. Appears to be c. 60-70' high with possibility of sublevels above. LH branch goes for c. 70 yards with little stoping – run in at end. RH branch is a crawl past a dead ewe then into water at welly depth. Some small amounts of stoping and slight collapses but ends after c. 100 yards in a forehead. Further possibility for exploration if previously-mentioned shaft was abseiled – belay required (fence post) but doubtful if sublevels extend very far – otherwise they would be extended through to hillside above beck?

 $2^{nd}$  January 1984 Mousethwaite Combe Mine Visit + Ian Tyler (B67)

Drove up road to Mousethwaite Combe and then up to level on LHS of valley below tourist trail. Fairly extensive heap. Geological Survey Report states level 400 yards long but did not cut vein — only just short of 200 yards now accessible but run at end — driven on fault/clay vein — roof very loose in places — rock very shaky — small collapses in places — water knee depth but had been higher.

#### **ULLSWATER**

13<sup>th</sup> March 1983 Eagle Crag Mine and Ruthwaite Mine Visit + Ian Tyler (A15)

Up Grisedale Road past signs forbidding cars and along gated track to barn just beyond Elmhow Farm. Examined run in level on S side of track before fork; stone-arched entrance open but run after 42'. Across to lowest level of Eagle Crag Mine (No. 1) by beck, part blocked and filled with water to roof - would probably repay dig. Open work runs up W from here, all the way up crag. Followed up past old dressing floors and examined remains of two storey shop and office. Rather than flog straight up across, decided to contour round to trials at Ruthwaite Lodge (Sheffield University Climbing Hut) and up beck into Ruthwaite Cave and round to rear (W) of Eagle Crag to examine top levels. Examined open trials and 2 open levels — one very short c. 35', other c. 120 yards long (down by waterfall in beck) — small copper vein, filled with mud — very poor. Weather prevented trip further up hill so examined run level on S side of beck by ford on way back to cars. Then walked along track to examine 2 slate quarries on fell side to E of farm. Small caverns and uninteresting.

26<sup>th</sup> June 1983 Eagle Crag Mine Grisedale K&DMRS Meet + Ian Tyler (B32)

Inspected No. 1 level on way up – short level 40 yards long – knee depth water – poor lead vein 1.5" wide with specks of chalcopyrite in roof – good quality quartz crystals in LH wall at entrance. No sign of rise mentioned by Shaw. Up heaps to dressing floor tips then round to R and up Nethermeet Cove Beck for 1100' to the 1900' contour. Open stopes on top of crag with hut adjacent – stopes are dry – flooded stopes immediately to E. Slightly downhill to N is No. 6 X-Cut. Started digging then bolted belay to open stope. Hole opened up dropping down 10' tight rubble slope into level and waist/mid-chest water. X-Cuts to vein then swings

along vein to W to flooded shaft in floor. Inspected run –in lead level on side of beck on way down.

7<sup>th</sup> August 1983 Eagle Crag Mine/Nethermeet Cove Slate Trial + Ian Tyler (B46)

Aim is to investigate sump on vein at No. 6 level seen on  $26^{th}$  June. Into mid-chest depth water, low roof, narrow level, cross-cutting to the vein, total length c. 40 yards. On hitting vein, to R is a stope above which has run. To L c. 7 yards of level then top of pitch which might go. c. 15' to water level. ?a flooded sump/stope but Ian thought passable. Drove 2 bolts and ladders down to find ladders disappearing into 10'+ of water so gave up and out to day. Down Nethermeet Cove Beck to level on E side. Unusual structure at entrance; store hut with flue? Scramble into level over collapse, very wide, appears to be slate trial. Midthigh depth of water, straight until it cuts very poor copper trial vein - c. 50 yards long in total.

#### **ULVERSTON**

14<sup>th</sup> July 1982 Plumpton Mines Canal Foot CAT Meet (A42)

Walk along shore to site of haematite mine in the limestone quarry at Plumpton – no trace of any levels and quarry now occupied by tip.

#### **WHITEHAVEN**

15<sup>TH</sup> July 1983 Albright & Wilson Marchon Anhydrite Mine CAT Meet (B37)

Through factory to mine. Inspected winding equipment then into 2 small cars to be lowered down 1000 yard incline at 1:7.5 at maximum speed of 7mph. To bottom then set off walking, inspecting base of ventilation shaft to day, 20' diameter concrete-lined and 418' deep complete with caged ladder way. Levels (or tunnels) are 30' wide x 26' high and are roofed by 2" thick slate layer which gives a smooth roof. The size defies imagination, 70 miles of tunnels laid out on a grid-iron plan with columns at 150' centres; the workforce used to run around in vans!. Anhydrite was drilled and blasted out by compressed air drilling rigs fed from 2 central compressor stations by air lines, mucked out by Terex shovels into 14 ton trailers pulled by 'Super 6' tractors and taken to one of two hammer action crushers thence to surface on conveyor incline parallel to man-riding inclined ropeway. Usual production was 10,000 tons per week with a maximum of 17,000 tons. Mine has been on care and maintenance since 1975 with talk of possible closure. Most machinery is still down mine and hardly worth salvaging. About 10 loaders and 14 tractors still there. Everything needed down the mine came down the incline including the shovels which had their tyres let down and their steering wheels removed to give clearance under the roof, then lowered down the ropeway with someone lying flat on the floor steering with a pair of stilsons clamped on the steering column! Mine was opened about 21 years ago and had an expected life of 100 years but it is no longer economic to produce their own product and it is now

imported as sulphur from Morocco. Facilities include tyre-fitting shop, electrical shop, fitter's shop, welder's shop, lubrication bay, deputies' office, etc. In the operating days workforce numbered between 60-100. Roof generally fairly good but in places such as fitter's shop roofed with corrugated iron. Base of incline and other permanent walking places had roof rock-bolted with steel mesh fixed to it for protection. The off-run of water in the mine is c. 2000 gallons a minute and is pumped from the sump up to a reservoir at the base of the incline then up to the surface. 3 hour tour then up incline to surface.