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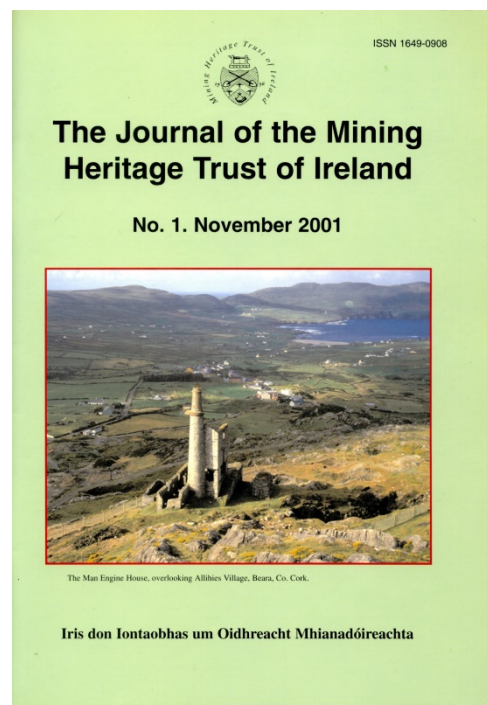
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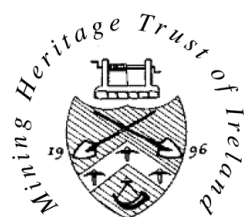
Chester, S., Burns, N. (2001) 'The Mines of Barravore, Glenmalure, Co. Wicklow' *Journal of the Mining Heritage Trust of Ireland*, **1**, pp. 67-76

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THE MINES OF BARAVORE, GLENMALURE, CO. WICKLOW

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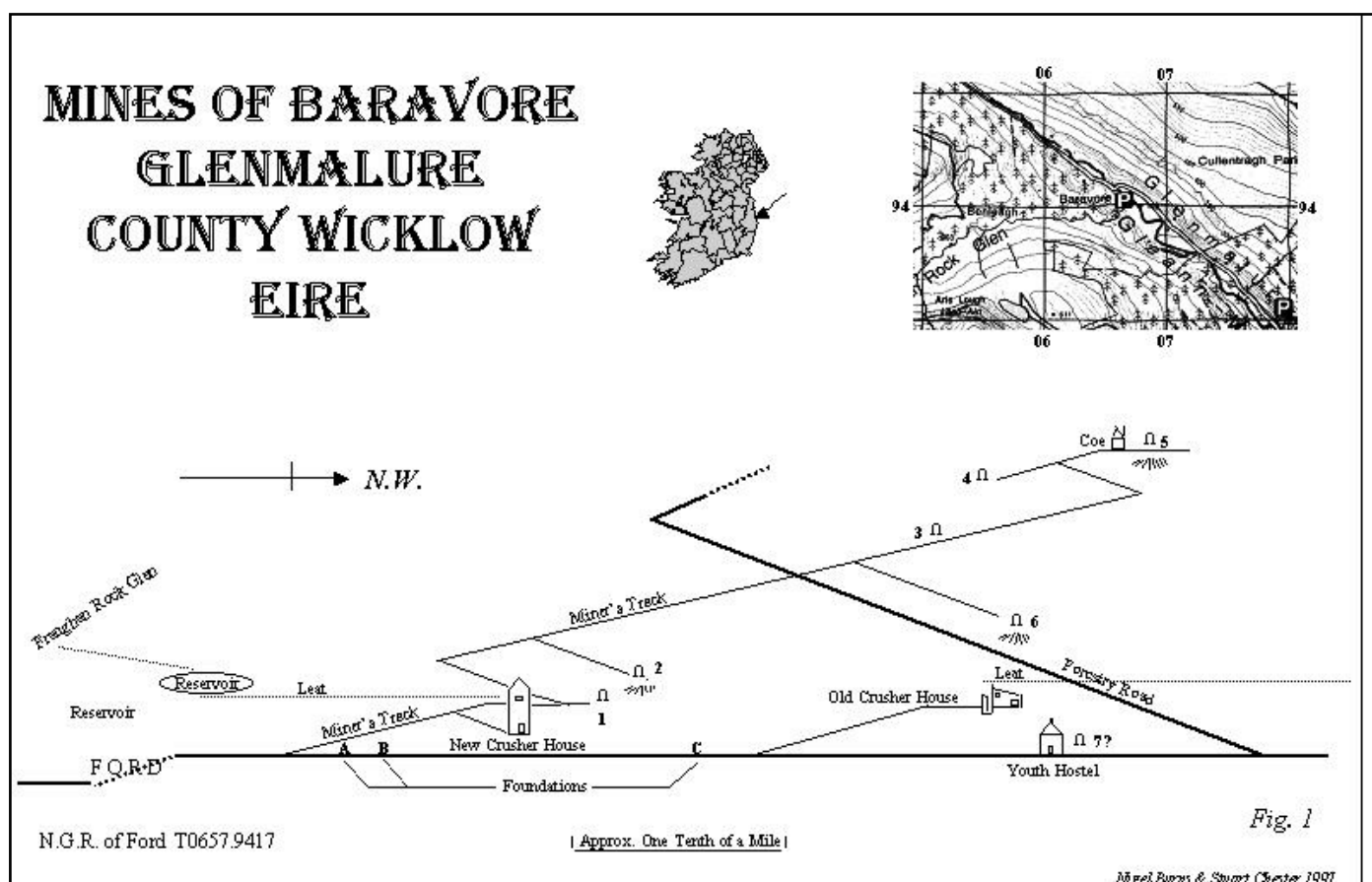
Abstract: The extant remains from 19th century mining at Baravore, in Glenmalure, County Wicklow are described. Six adits are connected by a miner's road. Two crusher houses are present, the older one with a water wheel pit. A series of leats, diverting water from an adjacent stream and a reservoir have also been identified. Another series of building remains are of uncertain function but are probably associated with the mining. *Journal of the Mining Heritage Trust of Ireland*, 1, 2001, 67-76.

All features in this report are on the South side of Glenmalure. (Refer to sketched plan of the area. *Fig. 1*) A total of six, maybe seven adits have been identified, but due to the entire area being covered by forest* (and midges) it is possible that others may exist. A miner's road, constructed to give access to all the adits, (except number seven), has a starting point approximately 100 yards from the Ford across the Avonbeg River, at NGR T0657.9415. Adit two is best approached directly from adit one, and adit six from the prominent spoil heaps at the side of the forestry road. Where the miner's track crosses the forestry road is not too obvious, so it is best to walk up the track from the ford

via the new crusher house and number one adit. In some areas the track is totally obscured by the remains of felled trees.

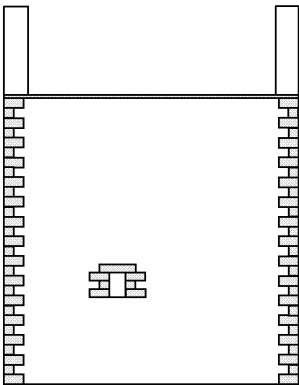
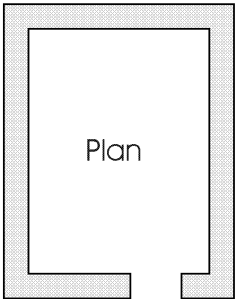
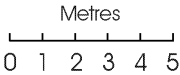
CRUSHER HOUSES

There are two crusher houses at Baravore and their positions are as shown in *Fig. 1*. Structurally the New Crusher House is in very good condition, the roof and floors having been removed. The only threat to this structure at present is the rotting away of the internal wooden lintel above the opening in the north wall. This could soon cause the collapse of the gable end above this

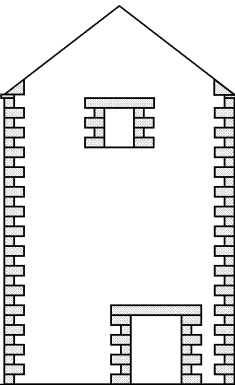


THE NEW CRUSHER HOUSE
BARAVORE
GLENMALURE
COUNTY WICKLOW

N.G.R. T0632-9423



Ground Level



Ground Level

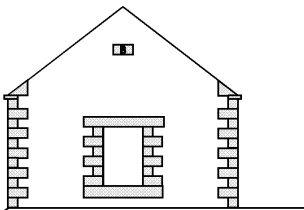
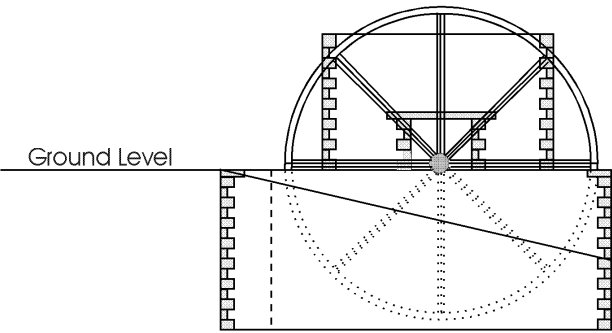
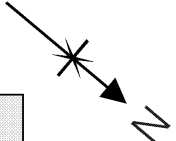
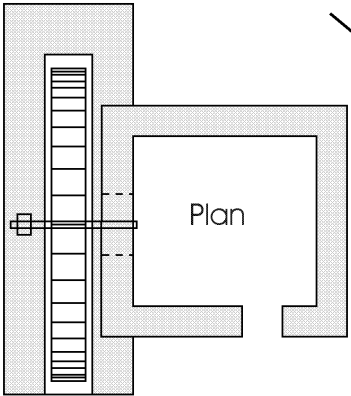
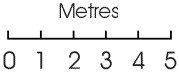
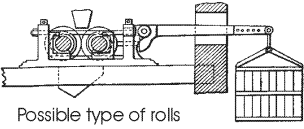


fig. 2

Based on measurements taken by Nigel Burns & Stuart Chester. 1997.

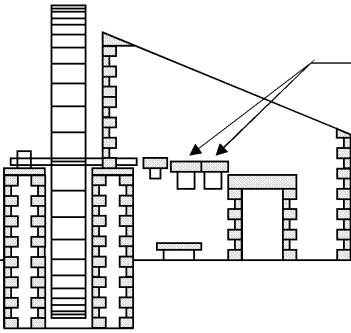
THE OLD CRUSHER HOUSE
BARAVORE
GLENMALURE
COUNTY WICKLOW

N.G.R. T0607-9442



Ground Level

Ground Level



Openings for Weighted levers

Ground Level

fig. 3

Based on measurements taken by Nigel Burns & Stuart Chester. 1997.



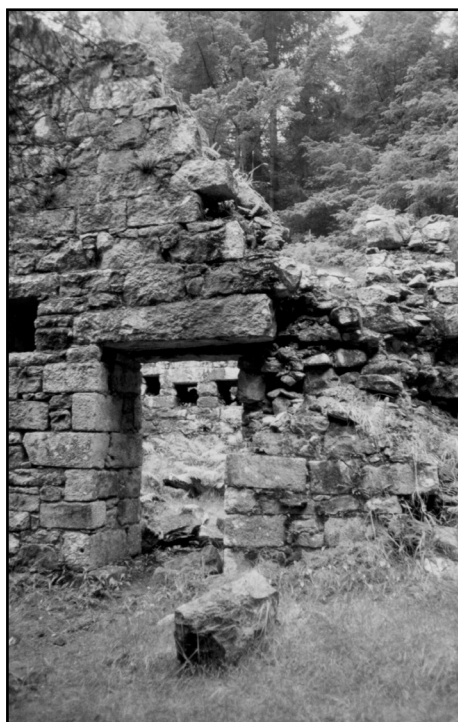
Above: East wall of New Crusher House with the remains of the wheel pit in front

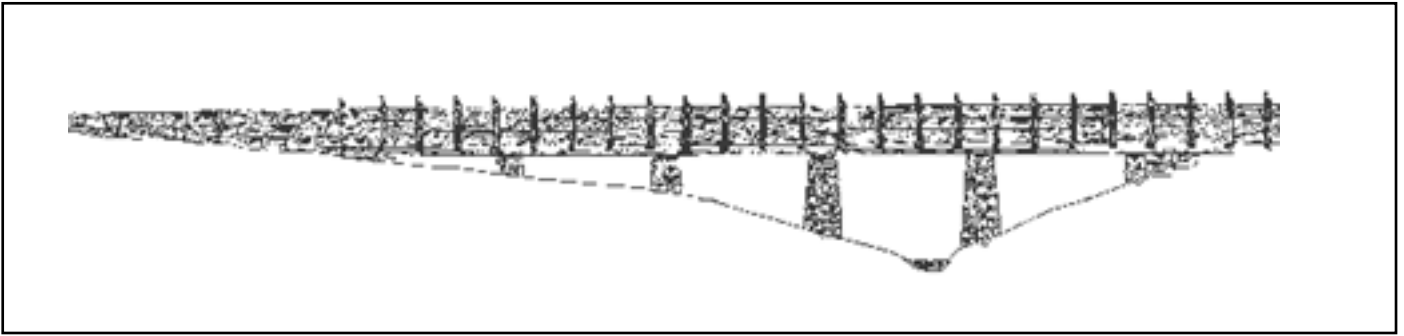
Above right: North wall of Old Crusher House showing apertures for the weighted levers

Below left: Old Crusher House. Entrance in North wall showing imminent collapse of large lintel

Below middle: Old Crusher House. View from inside showing fixing bolts for the wheel bearing set in the East wall

Below right: Old Crusher House. The wheel pit looking South

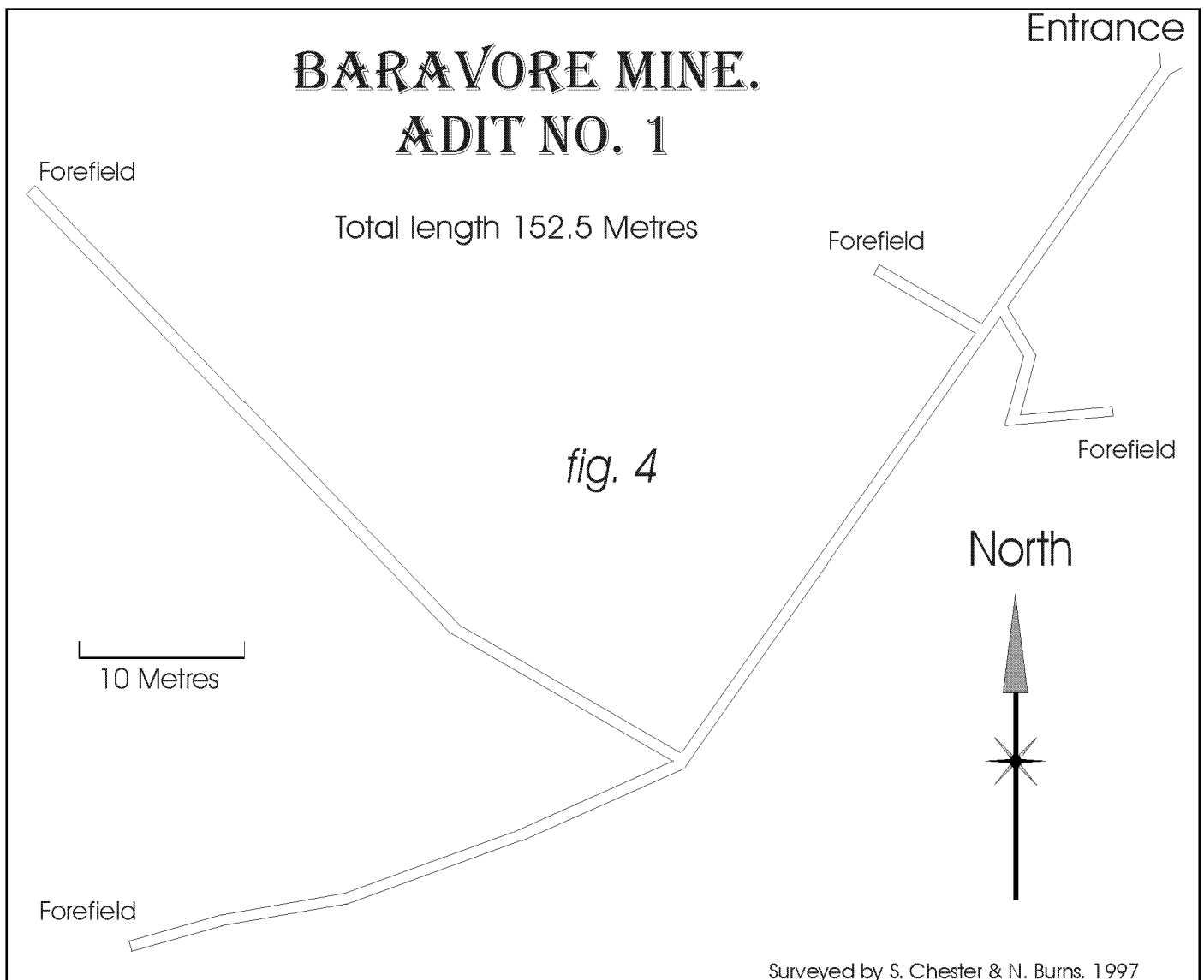


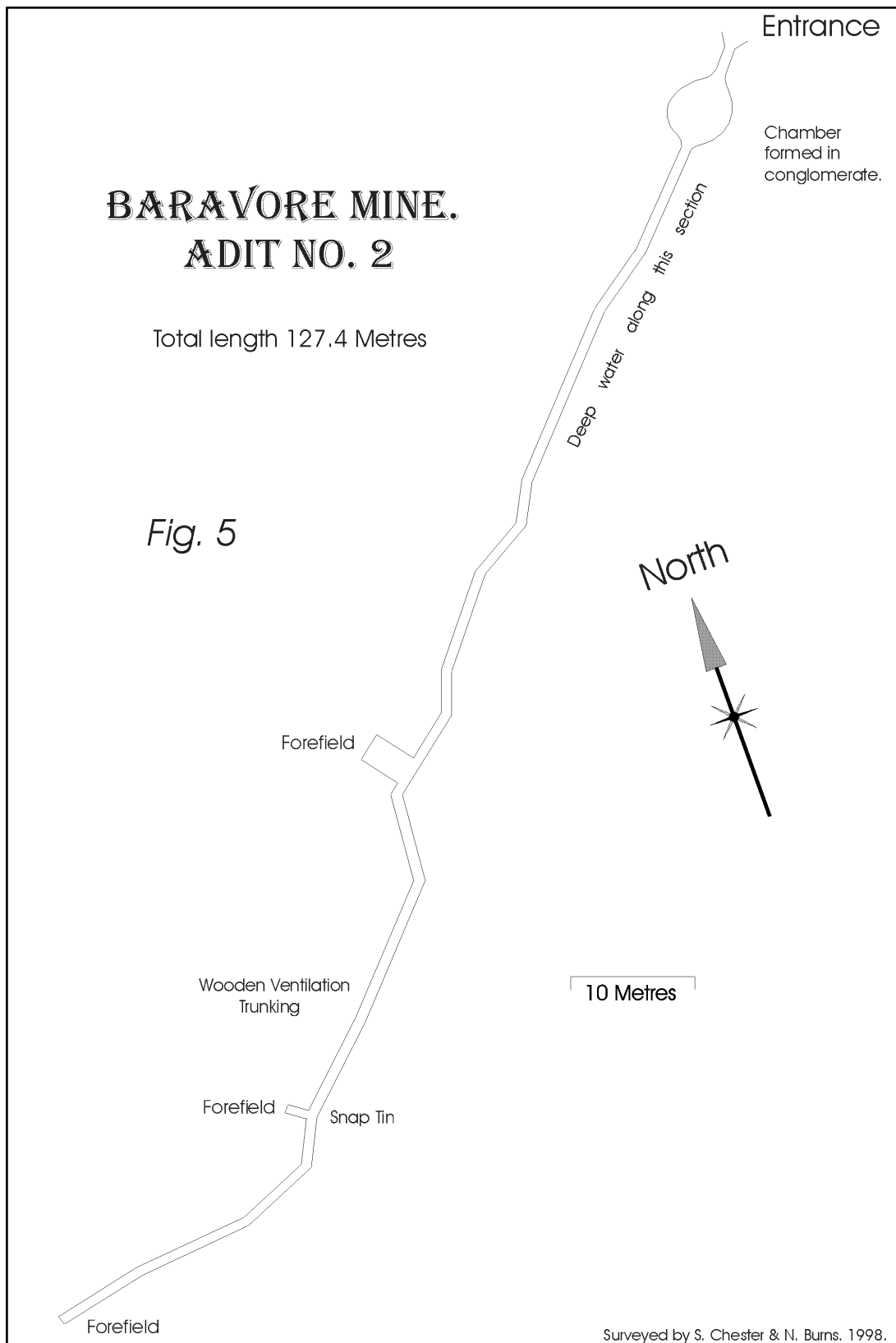


point. Above the opening in the South wall, there is a stone block with the letter "B" carved into it: Baravore? There is no indication that this building was ever equipped with a water wheel or crushers. The maximum size of the wheel that could have operated here would have been 5ft. breast by 24ft diameter. The leat to supply water to the wheel can be followed in a South Easterly direction for 390ft., where it turns South West through a cutting leading to a large dry reservoir. This cutting is the result of a collapse of a natural part of the reservoir wall. In the bottom of this cutting are the remains of a stone lined sluice, which would have controlled the amount of water being fed into the leat. The reservoir is approximately 300ft diameter with a

head of 8 to 10ft above the leat, giving it a capacity of more than 4 million gallons. Most of the original dam wall at the Eastern end of the reservoir has been washed away leaving a 40ft wide breach, but to one side you can still see the masonry which formed the overflow spillway. From the rear of the reservoir a second leat can be followed in a South Easterly direction for 700ft. to where it intercepts the large stream that runs through Fraughan Rock Glen. At this point there may be the remains of a further dam but interpretation is difficult due to erosion, and damage caused by the forestry.

The Old Crusher House is, in places in a poor condition, but all





West direction at quite a steep gradient to a point where the forestry track has destroyed it. By walking a short distance down the forestry track, (almost to the barrier), and then heading up the hillside into the forest, the continuation may quickly be found. The leat is complete apart from one small section where it was carried in a wooden launder supported on stone pillars, and the last few hundred feet where it has been destroyed by the Road. The measured length of this leat is in excess of 2000 feet.

Figs. 2 & 3 are based on measurements of the remains at the time of our visit. Please note! The Wheel does not exist at the Old Crusher House as shown in *fig. 3*. Pity, but we can all dream.

ADIT ONE

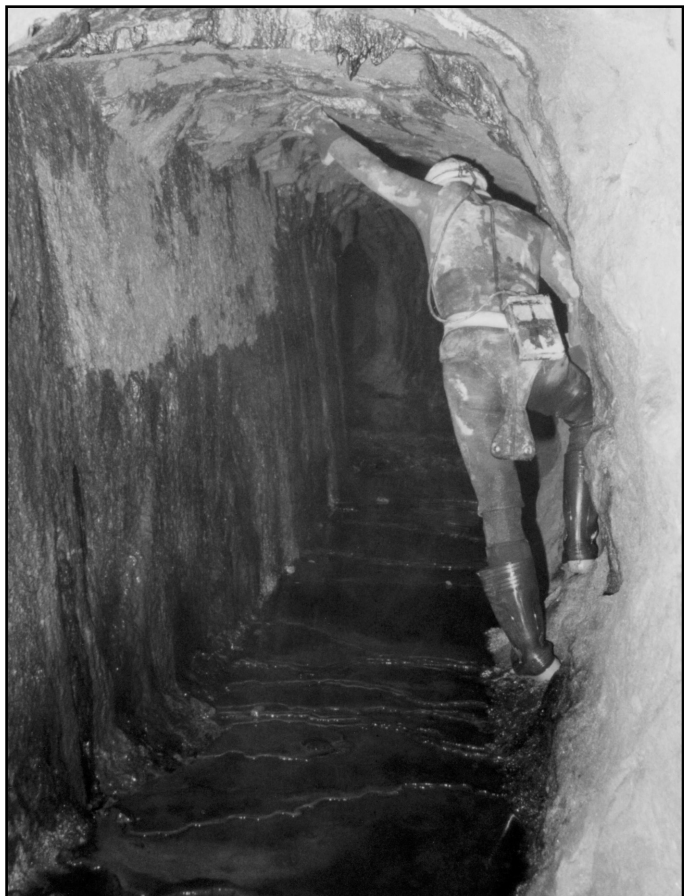
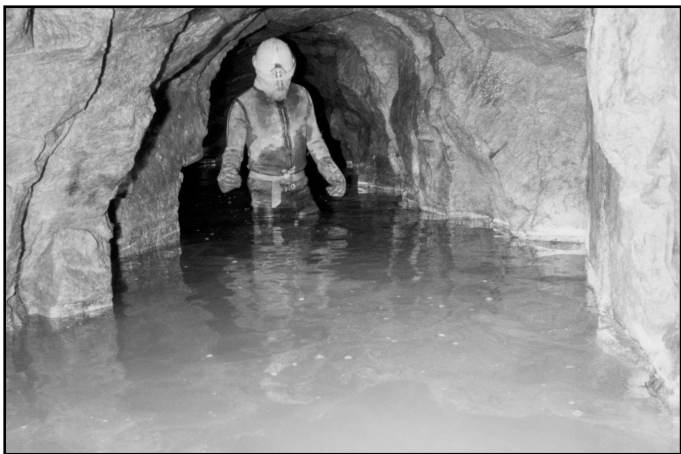
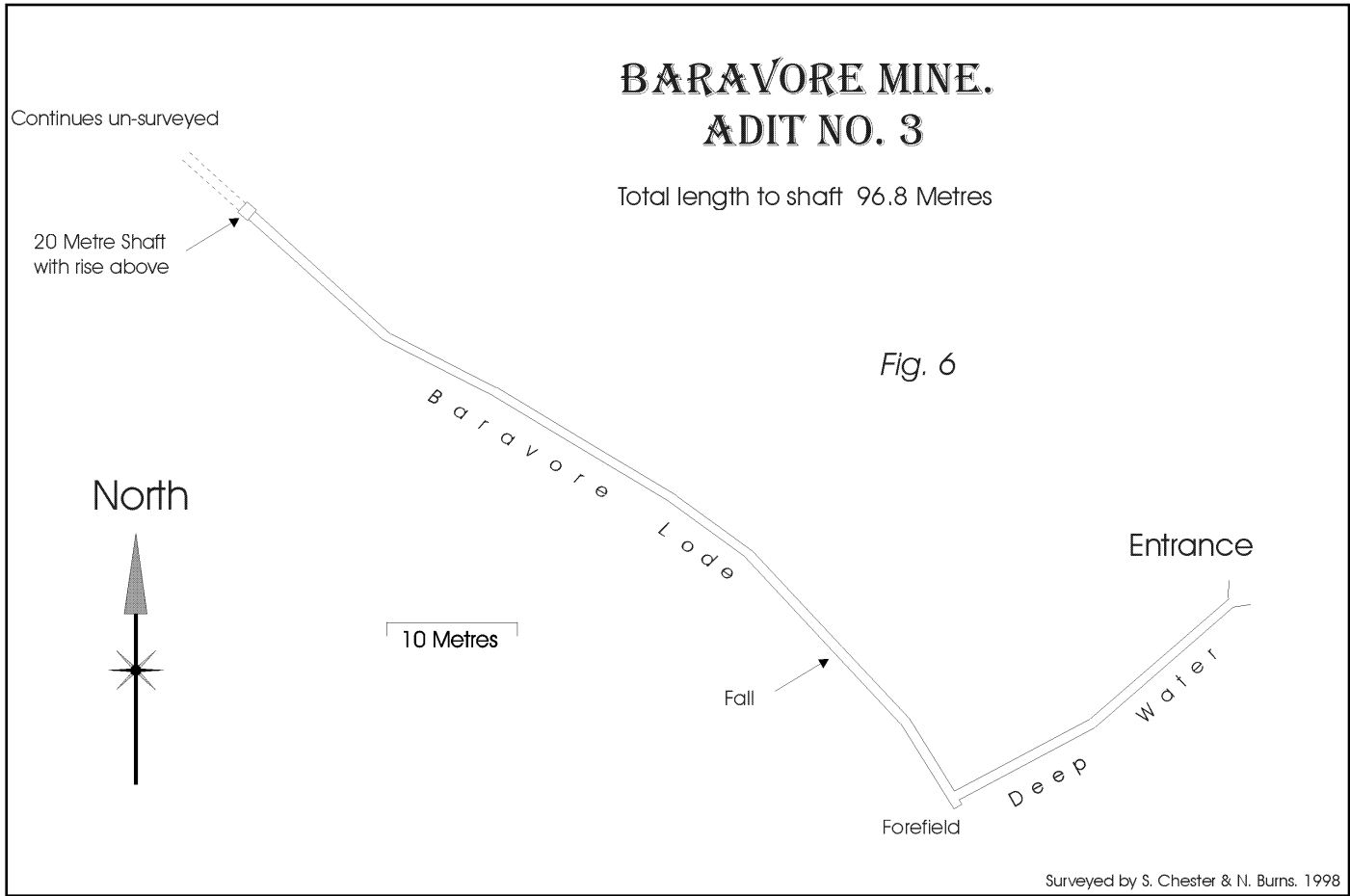
See *Fig. 4*. This is a large open adit with a total of 152.5 metres of passage, and because of its obvious entrance and ease of access it is well trodden. The water in this passage is only a few inches deep near the entrance. All passages end at a forefield, so the full extent of the adit is still accessible and it is unlikely that any ore was produced. The only remains seen were two small iron wedges and a piece of broken drill or chisel.

the main features can still be seen. The wheel pit is complete and the North wall has apertures for the weighted levers that applied pressure to the rolls. The Doorway on the North side is in urgent need of attention, as the masonry on the West side has collapsed, leaving the very large stone lintel unsupported. If this were to fall the entire North wall would become unstable.

The leat, who's source was the Avonbeg river, runs in a North

ADIT TWO

See *Fig. 5*. This is the most interesting of all the adits, with a total of 127.4 metres of passage. To locate this adit, if you stand looking at the entrance to adit one, and look up and to your right, you should see the spoil heap that is covered in moss between the trees. The entrance is a steeply descending short crawl, into a chamber that has formed through the collapse of



Top left: Looking out of adit number 1 Bottom left: Coming out of deep water at the beginning of adit number 2
Right: Avoiding damage to the formation by traversing the wall, near the end of adit number 2

BUILDING REMAINS AT BARAVORE

Fig. 7

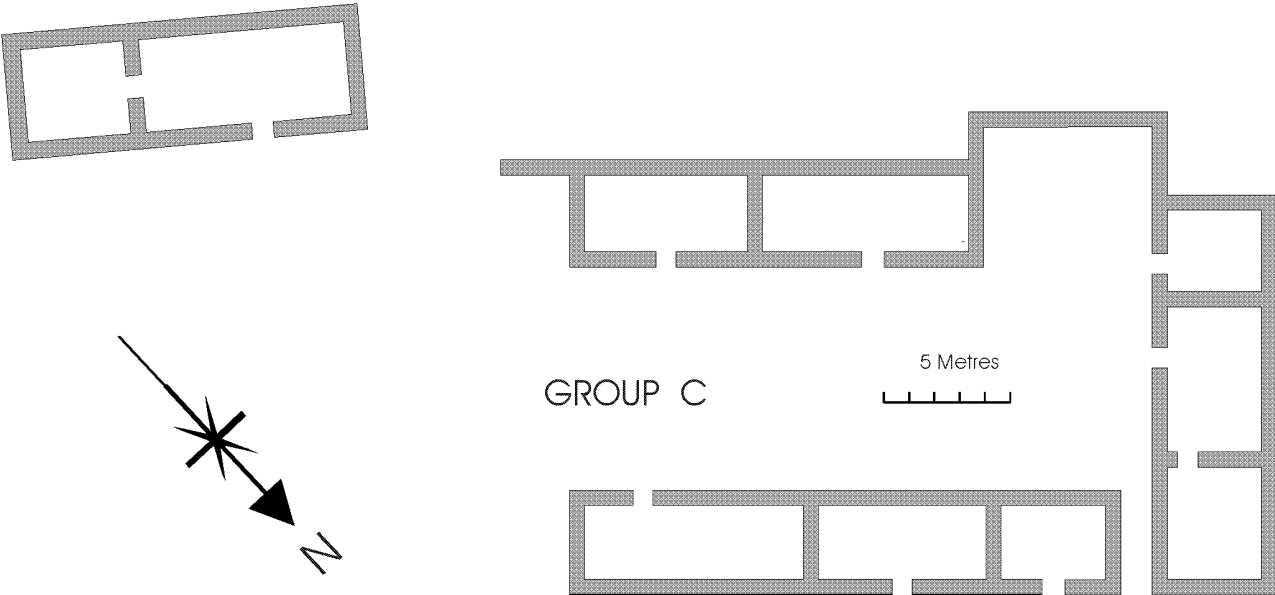
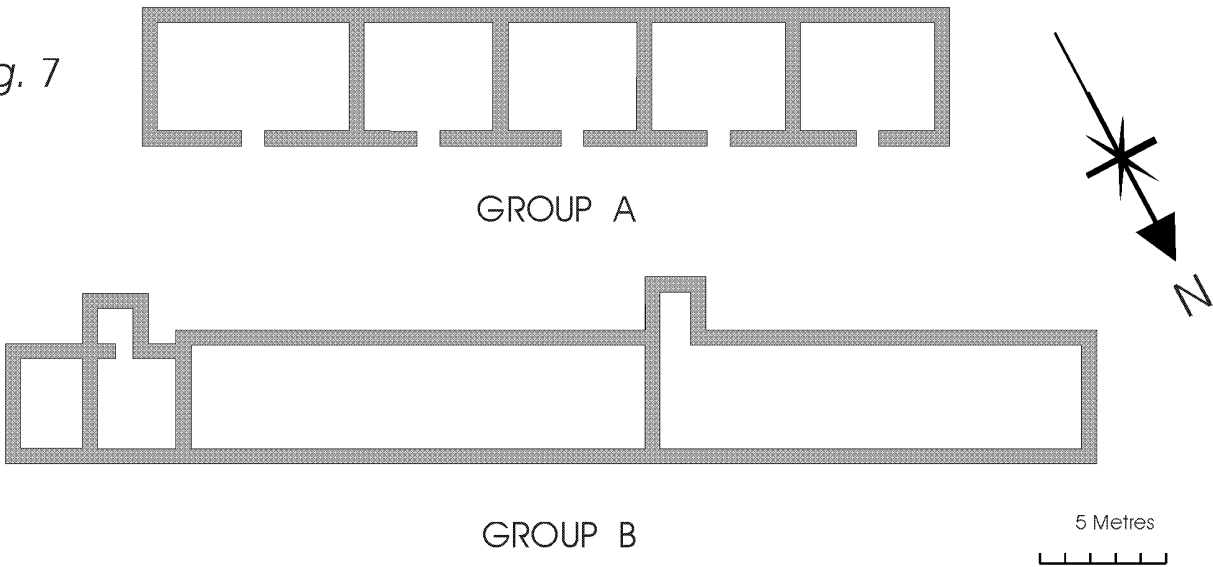


Fig. 8

Based on measurements taken by Nigel Burns & Stuart Chester. 1998.

the overlying conglomerate, but appears quite stable. A step down out of the chamber gives access to the level, which at this point has chest deep water. All the passage is of walking height with the water gradually de-creasing in depth to a slight trickle. There are various artifacts spread along the passage including a miner's snap tin, (empty). The most interesting part contains a

run of square section wooden ventilation trunking attached to the wall. It consists of 6 feet long sections, 4 inches square. The ends of each section are chamfered to allow airtight joints, and an iron band to stop the box splitting when the ends are pushed one inside the other. The level ends in a forefield having not reached any ore deposits. The flowstone formations in this level

* On a visit to the site in December 1999, an area of forest to the South East of the new crusher house had been cleared, making the interpretation of the leat system easier. Figure 9 provides an overview of the site after this forestry clearance.

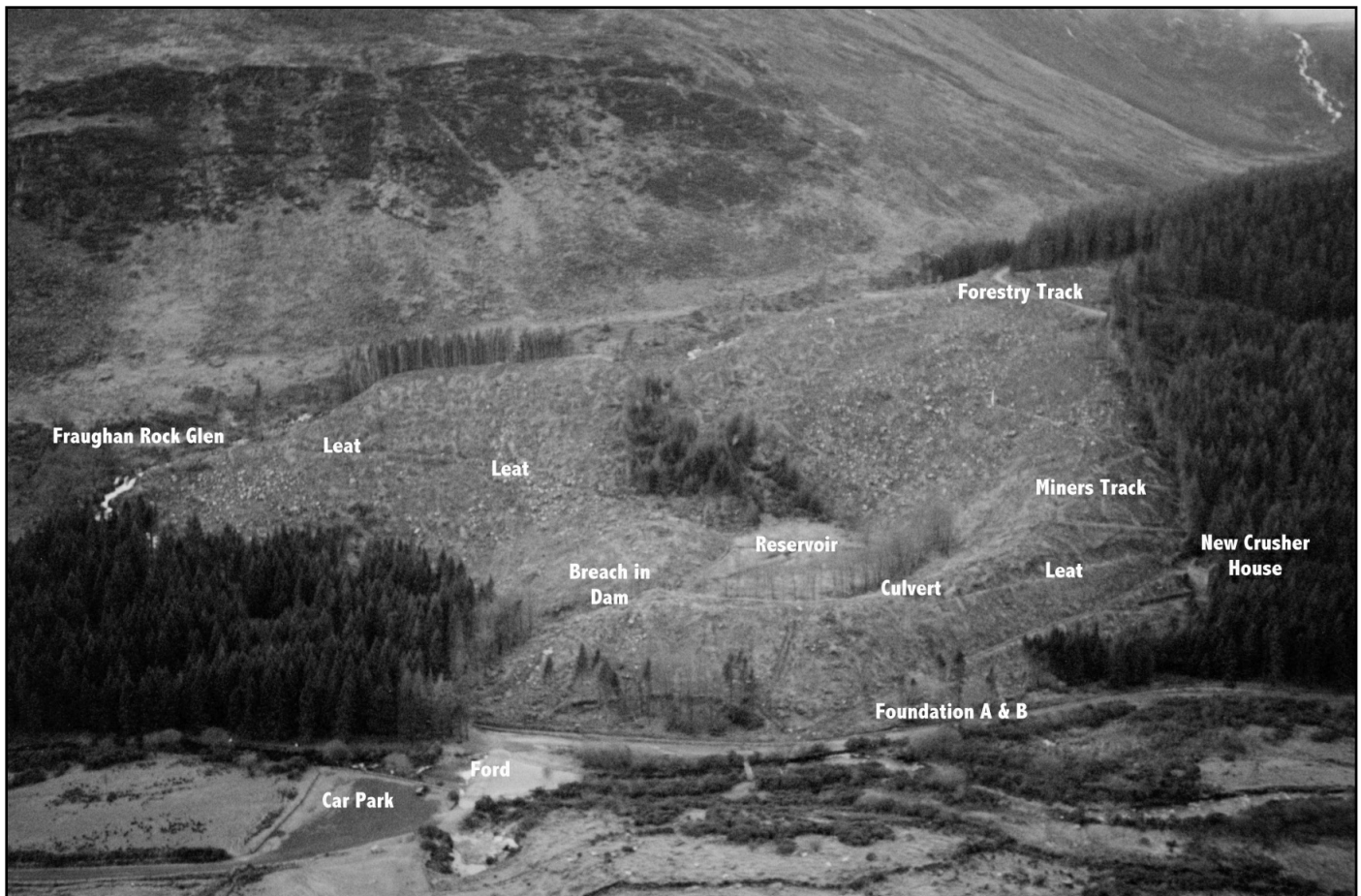


Fig 9. A view over part of the site after forestry clearance, with individual features identified on the ground.

are exceptional and every care should be taken to preserve them. (Careful where you put your feet.)

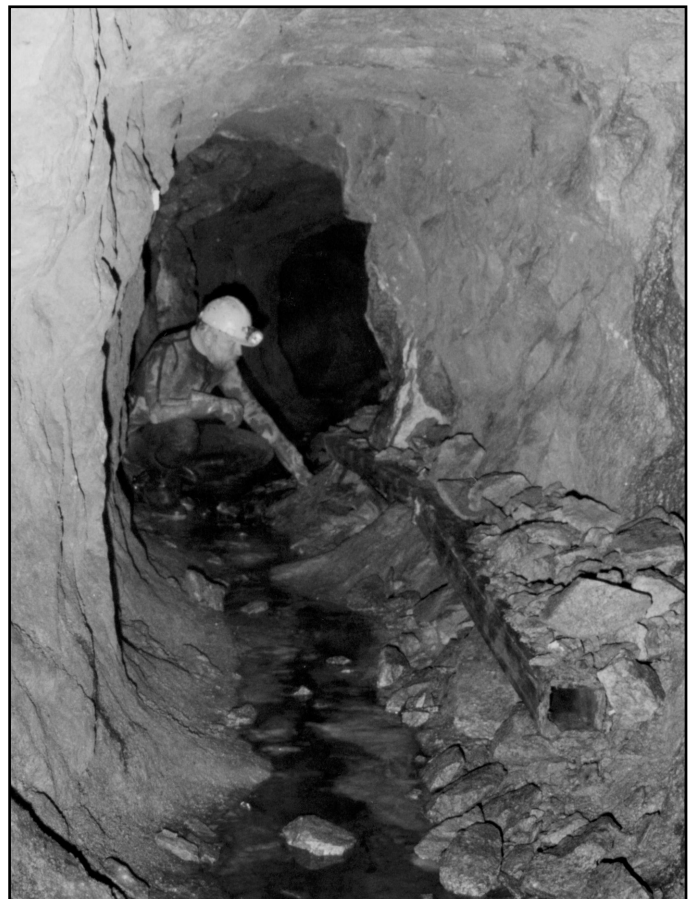
ADIT THREE

See Fig. 6. This adit is easy to locate, being at the back of a small cutting at the side of the track and having a small stream issuing from it. For the first few yards the water is chest deep with only a few inches of airspace, but after turning right along the vein and climbing over a collapse, the passage gradually becomes dry. A 66 feet deep shaft in the floor is the full width of the passage, this being crossed over by bringing in timber from the forest. The shaft continues upwards for an unknown distance, with wooden staging at intervals. This staging has zinc? ventilation pipe attached to it, being approximately three inch diameter. A length of this pipe was later found outside the entrance. The shaft was not descended. Across the shaft the passage is decorated with copper stained blue flowstone. Ahead there are the remains of an ore hopper, it being possible to advance a short distance both under and over this to where the passage has collapsed, halting any further progress. Parts of this mine are very unstable (Take care).

ADIT FOUR

This is just a cutting into the hillside and is assumed to have

Right: Ventilation trunking in adit number 2.



been an adit although no evidence of the passage now exists due to collapse.

ADIT FIVE

The impressive entrance is just past the remains of a small building complete with fireplace at what appears to be the end of the track. A short passage soon intercepts the Baravore lode, which has been stoped out to form a chamber. A short passage driven into the far wall was presumably to test for a parallel vein. The South East end of the stope has a 20 feet deep shaft in the floor, giving access to a lower stoped out area. In a North West direction the passage continues for 24 metres to a collapse

ADIT SIX

Judging by the size of the spoil heap associated with this adit, much of it being removed by the construction of the forest road, it would appear that this was the main working at Baravore. Unfortunately the entrance has collapsed leaving only a fair sized stream issuing through the boulders. A wall built at the back of the spoil heap has large apertures set into it and may have been some sort of ore bins.

ADIT SEVEN?

When we visited the site, the vegetation was very dense in this area, but it gives the impression that some excavation had taken place here.

OTHER REMAINS.

In addition to the two crusher houses there are remains of other buildings in the area. These are shown in Fig. 7 & 8, but it must be emphasized that the interpretation of some of these foundations proved difficult. At group B, the drainage ditch that runs along the side of the road has partially buried the front walls so entrances could not be traced without excavation. Pieces of dressed blue roofing slate were found at group B. There is no evidence that suggests that these buildings were directly associated with the mines, but the position of groups A & B, at the commencement of the miners track, may be relevant.

REFERENCES TO BARAVORE

Anon 1856. *The Mines of Wicklow*. p. 20.

Baravore, where a fine strong and promising lode, having the same bearing as, and supposed to be a continuation of, the Ballinafunshogue Lode, has been worked upon to a considerable extent. This mine has been lately abandoned: and the parties who were working it are now working on the opposite side of the valley, at Ballygoneen.

Cole, G.A.J. 1998. *Memoir of localities of Minerals of Economic Importance and Metalliferous Mines in Ireland*. A facsimile edition of the Geological Survey of Ireland Memoir of 1922. Mining Heritage Society of Ireland, 155 pp. pages 17 & 114.

Baravore (Barravore). 1" 130. 6" Wicklow 23 S.W. This is one

of the Glenmalure Mines (See under Lead). The Lode contains an important quantity of Barytes.

Baravore (Barravore of Griffith's Map; Baravone of Lists of Mines) is N.W. of Clonkeen. Smyth ("Mines of Wicklow," p. 360) speaks of a considerable trial here in 1846. The mine is in the official lists from 1865 to 1874. On the MS 6" Geological Survey map, the lode appears to be a direct continuation of that of Ballinafunshoge.

Smyth, Warrington W. 1853. *On the Mines of Wicklow and Wexford*. p. 362.

Since 1846 a considerable trial has been carried on in the townland of Baravore, upon a strong lode, coursing E.S.E. and bearing galena with zinc blend, copper pyrites, black oxide and carbonate of copper. It is at present abandoned.

The Mining Journal. From September to November 1859.

The prospectus for a new mining company has appeared, it is called the Barravore Silver- Lead mining company. There are eight directors, four Irish and four English. Having a limited number of shares which will no doubt be immediately subscribed for. The consulting manager and engineer is Mr James Skimming of Castleblaney.

The company has a capital of £6,500 in £1 shares. The present owner gets £500 and 2,000 shares to transfer his entire interest in the lease for 62 years from 1849 at 1/16th Together with all the improvements to the property including the Managers house and offices, workshop and forge with tools complete, 18 labourers cottages recently erected, water wheel and crusher and all mining implements on the premises also 8 tons of ore at surface. The mining engineer reports that the erection of the same buildings on the property would cost at least £ 1,500 and plant £ 160 and over all value can not be less than £ 3,000.

The promoters get 1,000 free shares with £ 3,000 left as working capital, half of which would suffice. The mineral sett is over 1,200 acres. Situated in the Glenmalure valley, a favourite spot for mining operations "the lodes are believed to run parallel to those of the Luganure mines" with the advantage of elevation for de-watering etc. With sufficient water to operate machinery. "The cost of delivering ores to the port of Wicklow is 10 shillings per ton. (The mining industry in Ireland. from correspondent in Dublin. M.J. 3 Sept. 1859. P. 624)

By Sept 17th it was reported that the Barravore shares had been taken up by private partners.

By the end of September the same Dublin correspondent reported that new machinery was being erected at Barravore by Capt. Skimming (P.708)

He again reported on Barravore that "by the first monthly pay-sheet it was found that the value of the ore raised exceeded the expenditure" (M.J. The Mining Industry in Ireland 22nd October 1859. P. 739)

The company are erecting a water-wheel for working the stamps and crushers and dressing a large quantity of ore at present at surface. The monthly expenditure is £ 200 for wages alone. (M.J. The Mining Industry in Ireland. from a Correspondent in Dublin. 26.Nov.1859. P.824)

The Mining Journal. January 19th 1861. Page 41

At the Barravore Silver-Lead Mining Company meeting, in Dublin, on Thursday, the directors report stated that, under the advice of their captain, certain machinery had been erected, with the view to deep sinking, this work being strongly recommended by him as actually necessary to develop the mine, and render the speculation profitable. In October a deputation from England, accompanied by Mr. J. Stanton, visited the mines, and concluded that the deep sinking then in operation should be suspended, it not having been found remunerative, and that another course of operation should be pursued. The directors carried on the work recommended for upwards of two months, and then consulted Mr. Evan Hopkins, and, acting upon his report, they considered it advisable to make considerable reduction in the establishment as a temporary measure, and until after the holding of the meeting. Of the original money capital of 3500l., about 600l. remains unexpended, which, being quite insufficient to carry on the works, the directors recommended that the existing liabilities be discharged, and the works suspended, unless the proprietary are of opinion that further trials should be made, which can only be done by an increase in capital.- by the reconstitution of the company. The directors have carried on the duties entrusted to them free of all charges to the company, and one of their number, Mr. Crampon, has acted as hon. secretary. Mr. Cousins, who has hitherto assisted in the office, will henceforth act as secretary, - Mr. A. de B. Bliss was appointed auditor. A call of 2s. 6d. per share was made. An extraordinary general meeting is convened for Feb. 1. when it will be decided whether the company shall be re-formed, or its affairs wound-up.

INITIAL INVESTIGATION INTO THE MINERALOGY OF THE BARAVORE MINES, GLENMALURE, CO.WICKLOW

Richard Unitt

Previous Reports

Kinahan (1889) describes the lode at Baravore as containing lead, zinc and 'superior barytes'. Cole (1922) suggests that this lode is a continuation of that at Ballinafunshoge which Kinahan reported to contain 'galenite, barytes, sphalerite and specks of chalcopryrite'. Greg and Lettsom (1858) claim to have discovered anglesite in Glenmalure and Russell (1907a) reports the first occurrence of the mineral caledonite $[\text{Pb}_5\text{Cu}_2(\text{CO}_3)(\text{SO}_4)(\text{OH})_6]$ associated with linarite at Ballinafunshoge. This is the only record of caledonite anywhere

in Ireland. Later studies of the mineralogy by Ryback and Moreton (1993) report the additional occurrence of cerussite and pyromorphite at Ballinafunshoge. Moreton (pers comm., 1999) has identified fluorite as a common gangue mineral forming mainly as epimorphs (negative pseudomorphs) in quartz at Ballinafunshoge and cubic crystals up to 1cm on the highest dumps at Baravore (Adit 5?).

Minerals from Adit 6

During the MHSI fieldtrip to Baravore (14th February, 1999) only one of the three main spoil tips, associated with adits, was investigated. The spoil tip occurs below adit 6, dipping steeply down until it meets a forestry road.

A brief investigation revealed large quantities of pink to grey baryte in veins up to 15cm in diameter, galena aggregates (up to 5cm) hosted in quartz and associated with red-brown sphalerite and small disseminated crystals of chalcopryrite. Some fluorite epimorphs in quartz were found up to about 0.5cm associated with black amorphous manganese oxide (the manganese oxide, romanechite, is prominent in the Camaderry Lode, Luganure Mines, where it is associated with pyromorphite).

Minor green and blue crusts at Baravore represent secondary copper (malachite) and lead minerals. Rare pink crusts may be mistaken for erythrite, but are in fact a variety of lichen!

Further investigations into the mineralogy of the Glenmalure area need to be undertaken to present a clear picture of the minerals present.

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