

## Information Sheet 3E: Metalliferous Mining

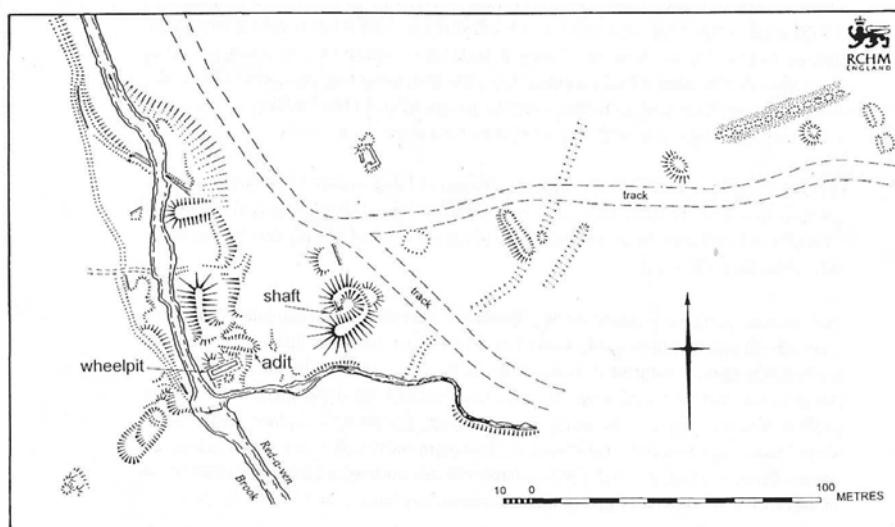
### Introduction

Over the last two hundred years attempts have been made to exploit the tin and copper mineralization of the rocks of the Meldon area, on the edge of the Dartmoor granite massif and at least three small mines are recorded. These included **Homerton Mine** on the south-west side of Meldon Reservoir and **Forest Mine** (also known as Okement Consols), both of which now lie submerged under the reservoir. The third was **Meldon Mine**, situated on the east side of the Red-a-ven Brook, but also known under a variety of names such as Devon Copper Mine, Okehampton Wheal Maria and Red-a-ven Mine. All three mines appear to have worked the same deposit, a band of metamorphosed rock impregnated with metal-rich fluids during or soon after the emplacement of the molten magma of the granite. This type of deposit is quite unlike the more typical ore-bearing veins of the region, known as lodes, where mineralising fluids have been injected through cracks in the bedrock including along faults (for further geological information on the nature of the deposit and mineralization in the area, see InformationSheet 1F). Each mine is described further below.

Further evidence of metal mining activity survives on the east side of the West Okement, to the south of the overgrown limestone quarries. Here a long shallow trench cuts into the gently sloping hillside and is fronted by a wedge shaped spoil heap; the eastern end of the excavation is blocked although water still seeps from it. A further adit is situated on the western side of the river to the south of Meldon Pool and was probably worked in tandem with the shafts which ascend the slope directly above it. There is no documentary evidence to indicate the dates of these workings, although by analogy with similar well documented mines on Dartmoor, they probably date from the mid 19<sup>th</sup> century.

### Meldon Mine (SX 57019177)

This mine is situated beside the Red-a-ven Brook and surviving field evidence consists of an alignment of three blocked shafts on the east side of the brook and an adit at river level. The engine shaft is the lowest of the three, sited 60m from the river. This is surrounded by a bank of spoil and has an additional linear dump to the south. On the edge of shaft is a masonry lined flat rod opening which aligns with a water wheel pit adjacent to the river. The wheel-pit is a substantial stone built structure 9m x 1.8m in size and remains more or less intact although now filled with rubble.



RCHME earthwork survey of Red-a-ven (Meldon) Mine (© Crown copyright. NMR)

North of the wheel-pit is the former adit opening which is now blocked. Material was trammed (i.e. taken in small trucks on rails) from the adit and dumped to the north onto a linear spoil heap running parallel with the river. On the west side of the stream there is a section of open-working following the approximate alignment of the lode. Small conical pits within and to the west of the openwork could also represent additional underground activity.



View along Red-a-ven Brook towards the tip heaps of Meldon Mine, c.1900  
(Source: Museum of Dartmoor Life, Okehampton)

The mine was most probably worked only intermittently during the nineteenth century but there is documentary evidence that a *new sett* (i.e. 'claim') was taken-up in 1863. A Josiah Hugo Hitchins inspected the property in 1864 and noted that previously it had been called Okehampton Wheal Maria and that the 'lode' was up to 6m thick. A week later, Captain Charles Thomas reported that three lodes were present. These workings were drained by an 8.8m x 1.2m ('29 ft x 4 ft') waterwheel. In September 1864, a hauling machine was attached to the wheel and a shaft was noted as having been excavated down to 22m ('12 fathoms') below the level of the adit. Within a few months, miners were cutting through the main mineralized deposit present, the so-called 'Great Lode', at 33 m ('18 fathoms') below the adit level. No sales of ore were recorded however, and working ceased with the materials and machinery being auctioned in 1865.



Tip heaps at Meldon Mine today (Photo: Kevin Page 2005)

## Forest Mine (SX 561912)

Forest Mine lay to west of Meldon Mine, on the opposite side of Homerton Hill, beside the West Okement River but is now submerged beneath Meldon Reservoir. It was probably first worked during part of the 18th century, as in 1798 it was described as already being long since abandoned. In 1854 a fresh lease was obtained from the Reverend John Luxmore, Lord of the Manor and principal owner of mineral rights in the area.

In 1855 the mine was restarted as Okement Consols and in May 1856 a capstan, shears and other materials were purchased from the 'old Wheal Robert' and a 12m x 2.4m ('40 ft x 8ft') water wheel erected, powered by water from the West Okement River. By 1857 the mine was heavily in debt and forced into liquidation. Working resumed in 1862 and five years later 15 men were employed and an engine shaft had been sunk to a depth of 91m ('50 fathoms'). In May 1868, however, all work stopped and machinery and materials were sold off. The workings were restarted in 1870 under their previous name of Okement Consols but apparently only to 44m ('24 fathoms') depth. As well as copper it was claimed that tin was being produced, although geological conformation of the nature or even presence of workable deposits of the latter is currently lacking. No further details of workings appear to exist.

## Homerton Mine (SX 55499067)

This was the third mine working the mineralised deposit which stretched from at least here to Red-a-ven Brook, and as with Forest Mine, most of its workings, including its adit and shaft, are now submerged under the reservoir. Workings were not extensive however, and were probably little more than trials.

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