Upper Wharfedale Heritage Group

Lead and Coal Mining in Upper Wharfedale

Black Rock Lead Mine

Hawkswick

This report was produced as part of the UWHG Lead and Coal Mining in Upper Wharfedale Project.

Upper Wharfedale Heritage Group

Lead and Coal Mining Survey Report

Site – Black Rock Lead Mine	**Site ID No. – LCMS 04**
Location – Hawkswick	**NGR – SD 9389 7279**
Survey Date – April 2019	**Report Date – April 2019**

Introduction

This report is part of the Upper Wharfedale Heritage Group's survey of lead and coal mining sites in Upper Wharfedale. The purpose of the survey is to record the principal features of some of the less well documented sites in their landscape settings.

Summary

Black Rock lead mine worked one of the many small veins on Hawkswick Moor. It was a small-scale operation consisting of number of shallow shafts along the vein together with a small reservoir to provide water for dressing the ore.

History of the site

Black Rock lead mine was worked before 1779, the ore being smelted at Kilnsey (Raistrick, 1973). In 1811 "six meers of ground were granted to Robert Pickles and Co. under the name of Buckscave". The ground was granted to Richard Jaques and Sons in 1829 and to Henry Wiseman in 1834. No production data survives (Gill, 1994). Raistrick states that the mine has been worked with the Coldstreak mine.

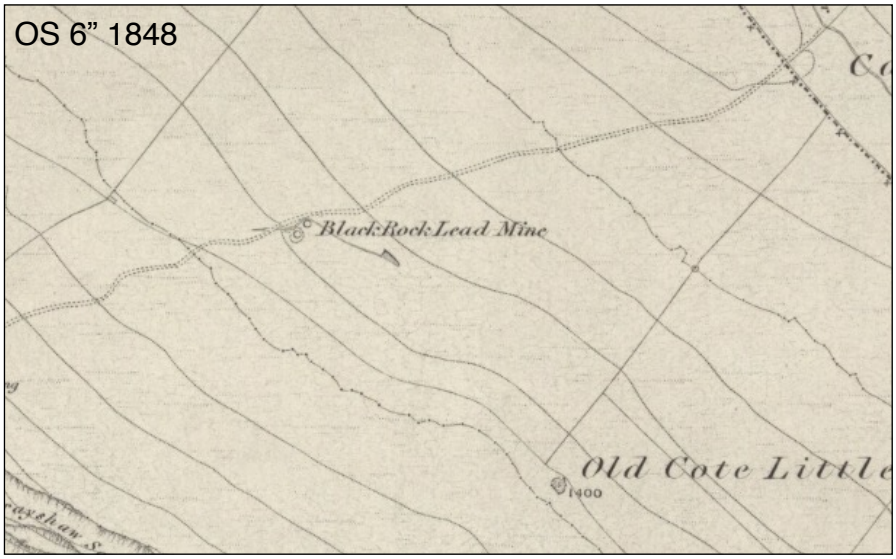
Description of the site

Located on Old Cote Moor north east of Arncliffe, the site consists of a line of shafts along the vein with upcast and waste scattered downslope. All of the shafts are filled. Much of the waste has been crushed to small fragments but there is little vein (gangue) mineral present and only one sample of galena was found in the waste. Upslope there is an area of marsh with a low bank along the contour. This was the site of the reservoir shown on the Ordnance Survey First Edition Six Inch Map (1848). This would have provided the water used to separate the lead ore from the other vein (gangue) minerals.The track shown on the Ordnance Survey First Edition Six Inch Map (1848) crosses the line of shafts to the north of shaft 2. The modern track now passes to the south of shaft 2. The leat shown on the Ordnance Survey map is no longer evident on the ground due to the growth of vegetation in the area of the reservoir and erosion along the line of the modern track. However, water may be seen flowing along the line of the leat in wet periods.

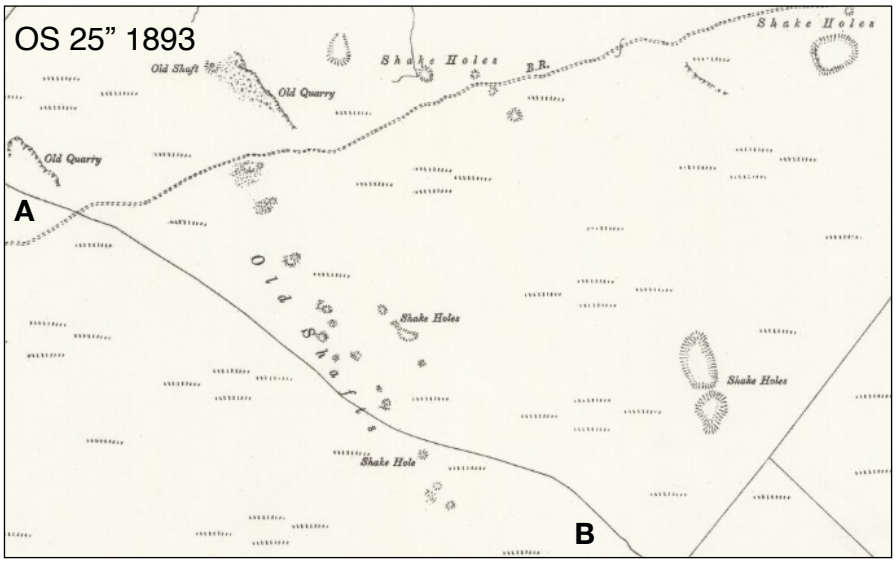
A small outcrop of Simonstone Limestone (Alston Formation, Wensleydale Group, Carboniferous, 330ma) has been quarried. There are waste tips but no indication of any link to the mining activity. There is a small stone structure downslope from shaft 3 which appears to be a ruined grouse butt. Stonework suggests it may have been adapted from an earlier structure possibly related to the mining activity.

The First Edition Six Inch Ordnance Survey map (1848) shows two shafts, the reservoir and leat. Later maps Twenty Five Inch maps (1893 and 1907) show a line of 'old shafts' along the vein. The spacing of these 'old shafts' suggests that they were worked under the meer system. The meer system was an early form of mining, groups of miners were granted mining rights to work an area of ground along a vein (measured in meers, typically 30 yards). The mineral lord took a share of the lead produced. The meer system was eventually replaced by a system of bargaining where miners were paid to undertake work and by larger companies leasing large areas of ground for mining. Thus the spacing of shafts indicates that they were worked in the 18th century or earlier which accords with the historical record.

Fig. 1 - Historic Ordnance Survey Maps

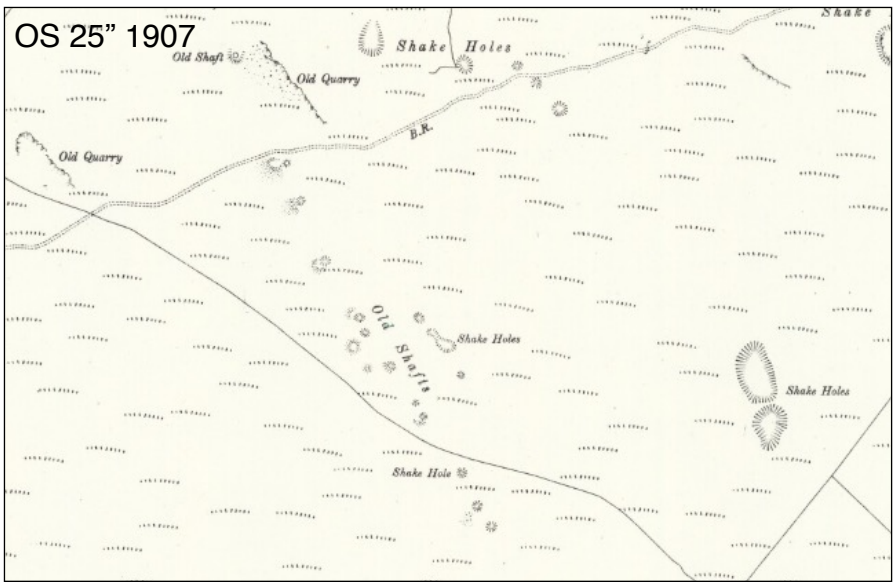


The First Edition Six Inch Ordnance Survey map shows two shafts, the reservoir and leat.



This Twenty Five Inch Ordnance Survey map shows a line of ‘old shafts’ along the vein. Lines of ‘old shafts’ such as these are not routinely shown on the smaller scale First Edition Six Inch Ordnance Survey maps.

The wall A-B divides John Hammond’s Pasture to the north, where the vein was known as the Black Rock vein, from Thomas Rathmell’s Pasture to the south, where the vein was known as Buck’s Cave vein.



The spacing of the ‘old shafts’ suggests that they were worked under the meer system in the 18th century or earlier.

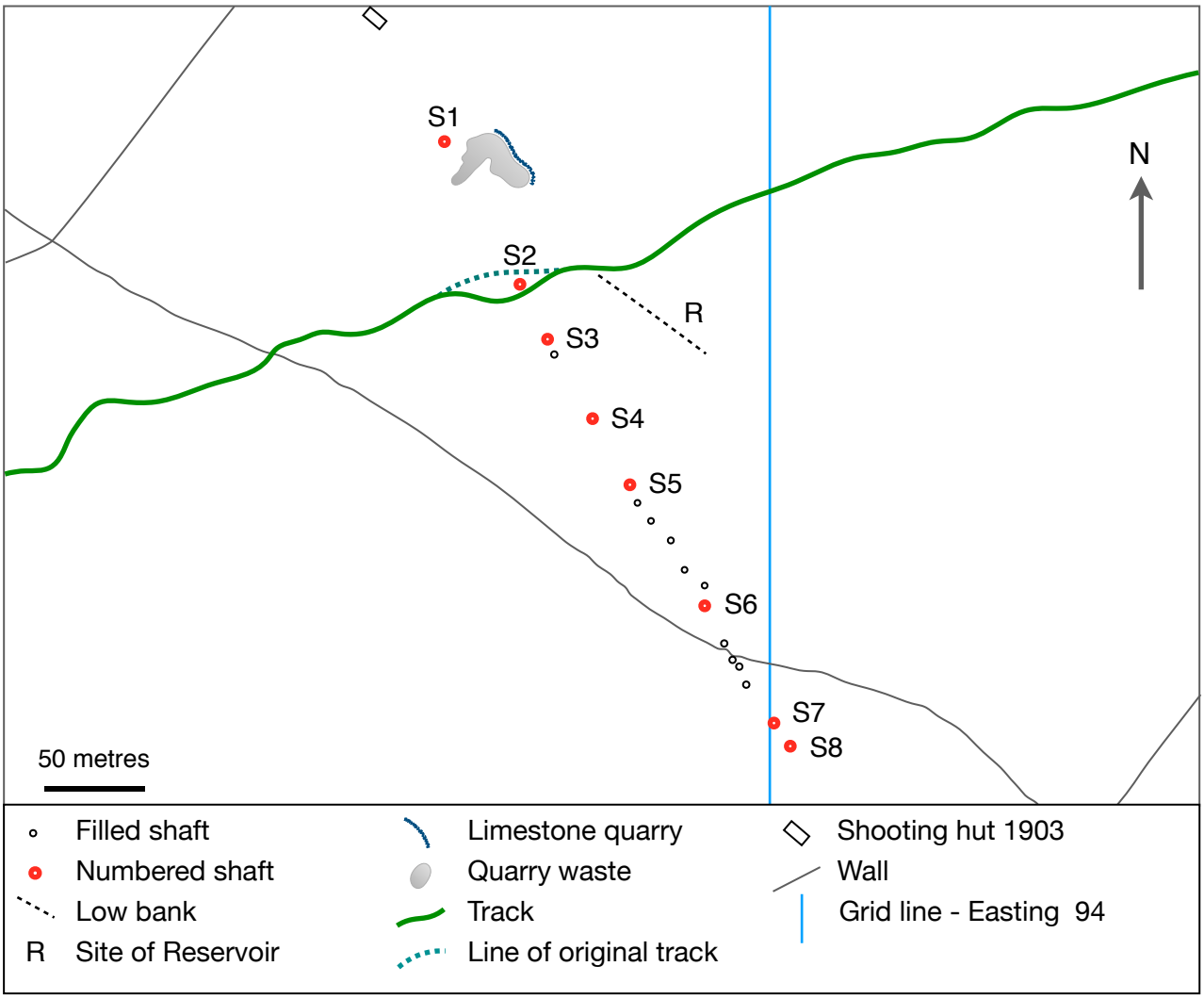
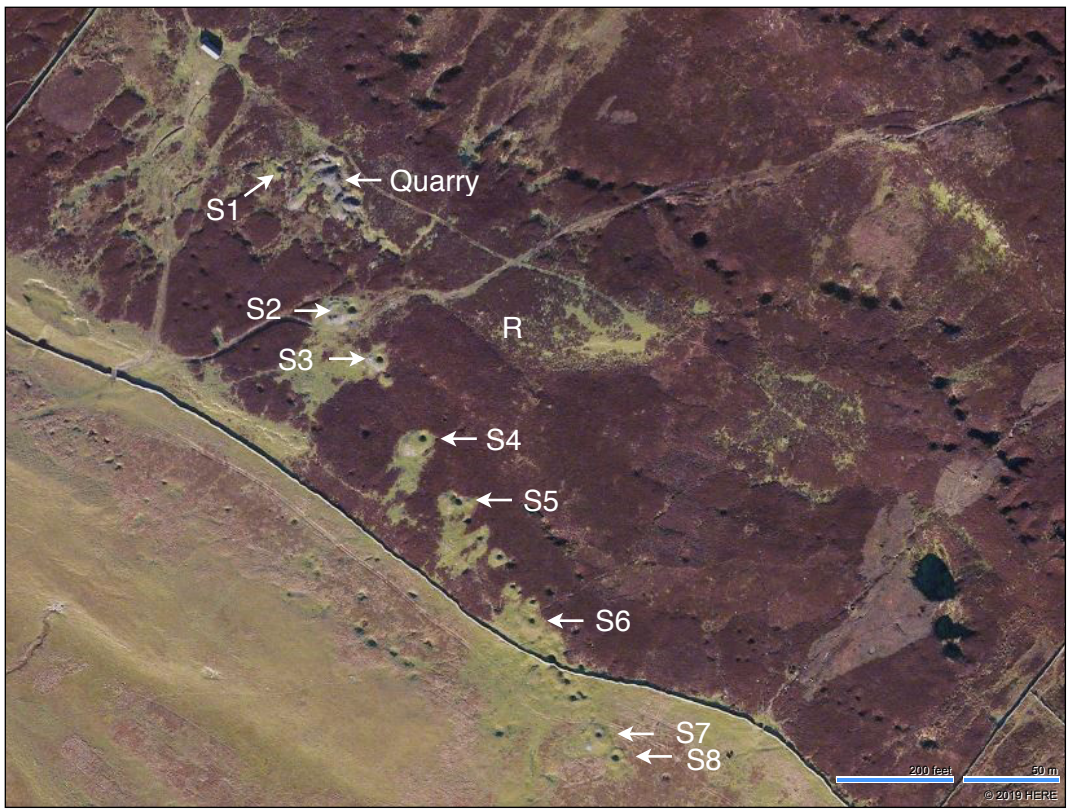


Fig. 2 (Above) - Map of the site. P1 - (Below) Aerial Photograph (Bing Image).



P2 - Filled shaft 1 with shooting hut beyond. Looking north north west. NGR SD 93828 72855. (Scale one metre ranging poles)

P3 - Filled shaft 2 with large waste heap and modern track running in front. Looking north north west. NGR SD 93867 72779. (Scale one metre ranging poles)

P4 - Filled shaft 3 with stone structure downslope to the left. Looking north west. NGR SD 93882 72751. (Scale one metre ranging poles)

P5 - Filled shaft 4 with large waste heap. Looking north west. NGR SD 93905 72709. (Scale one metre ranging poles)

P6 - Filled shaft 5 with corona of waste. Looking north west. NGR SD 93924 72674. (Scale one metre ranging poles)

P7 - Filled shaft 6. Looking north north west. NGR SD 93964 72610. (Scale one metre ranging poles)

P8 - Filled shaft 8 with spoil from shaft 7 upslope above. Looking north north west. NGR SD 94010 72537. (Scale one metre ranging poles)

P9 - Limestone quarry waste. Looking north west. NGR SD 93858 72850. (Scale one metre ranging poles)

P10 - Site of reservoir. Looking north west. NGR SD 93936 72772. (Scale one metre ranging poles)

P11 - Line of leat. Modern track in the foreground. Water may be seen flowing along the line of the leat in wet periods. Looking east south east. NGR SD 93913 72784. (Scale one metre ranging poles)

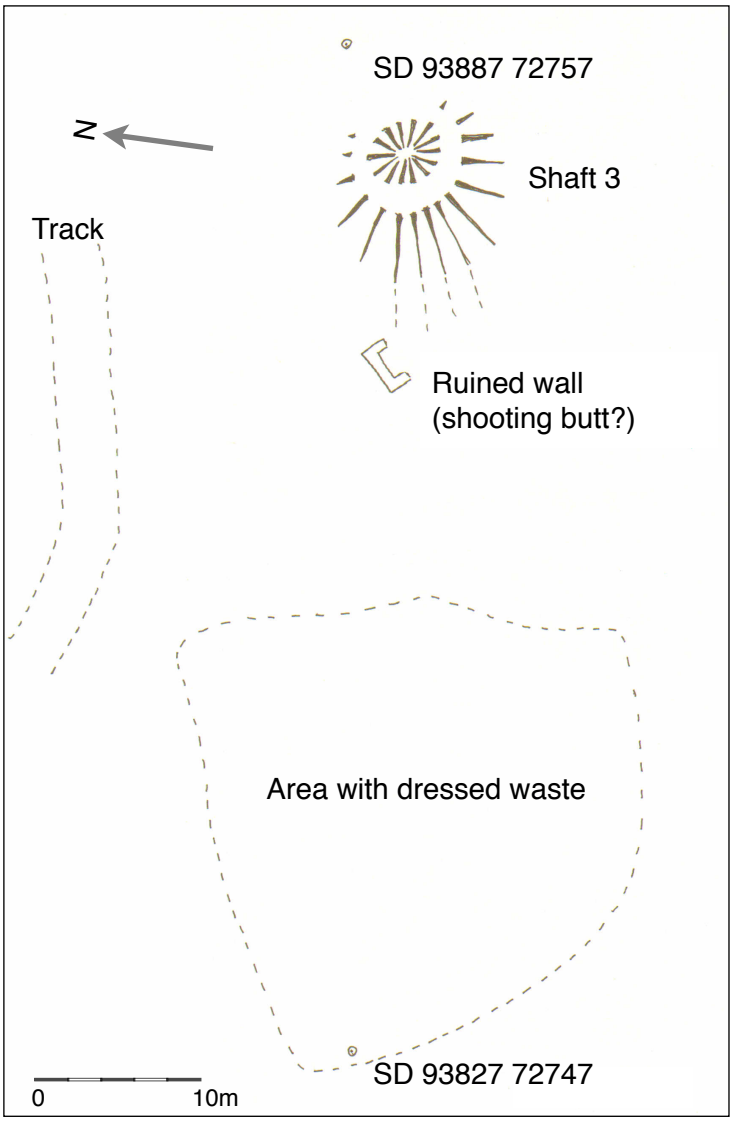

SD 93887 72757
N
Shaft 3
Track
Ruined wall
(shooting butt?)
Area with dressed waste
SD 93827 72747
0
10m

Fig. 4 - Shaft 3.

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9	11	Line of leat.

Sources

1. Lead Mining in the Mid-Pennines, Raistrick, 1973.
2. British Mining No.49 - The Wharfedale Mines, Gill, 1994.
3. Bolton Abbey & Chatsworth Archives - Mike Gill research.

Survey details

Surveyors - Pat Carroll, Phil Carroll, Shirley Everett, Peter Gallagher, William Varley, Maurice White. Drawings - William Varley. Measured drawing - Pat Carroll. Photographs - William Varley. Report - William Varley. The survey was undertaken in April 2019. The survey group is grateful to Mike Gill (NMRS) for advice and historical information, and to James Metcalfe for giving us permission to survey and record the site.