## A NOTE ON THE OCHRE MINES AND WORKS AT WICK, SOUTH GLOUCESTERSHIRE

## Ron Smith

Wick is a village situated some eight miles east of Bristol on the A420 road. It is probable that a number of Society members will have visited the Wick quarry and enjoyed examining the interesting geology that can be seen in the Dinantian and Namurian rocks that are so well exposed there, and no doubt have specimens from the quarry in their collections. Far fewer members will be aware that adjacent to the quarry on the west side there was once a works processing ochre, mined in nearby mines, and employing some 200 people.

My first acquaintance with the site was in the early 1970s when I lived near Gloucester and visited the mines with a party of Gloucester Industrial Archaeology Society members. The mines had not been worked for a number of years but the remains of shallow mine entrances could be seen. The works site was not visited.

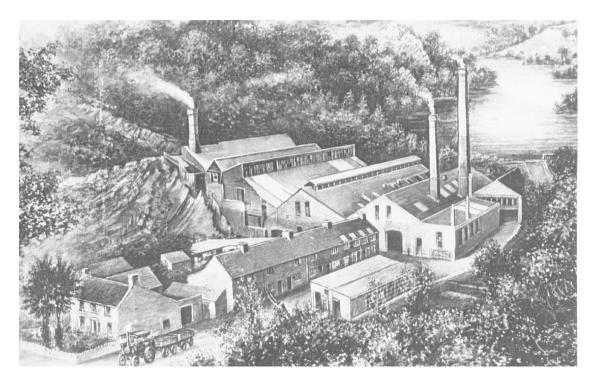
When I moved from Gloucester to live a few miles from the works site my interest in the site was aroused by a course on the history of industries around Bristol that included the Wick Works, talking to Wick residents, some of whom had been employed at the works and references to the site in older geological books and papers. Finally having acquired a good deal of information relating to the site, I produced, with another Society member, Mike Breakspeare, that a paper was **Bristol** published by the Industrial Archaeology Society and awarded the Brunel Prize.

Ochre is a naturally occurring material and is essentially a mixture of clay and iron oxide. When the predominant iron oxide is the anhydrous form (haematite) its colour is red; when hydrous forms predominate the colour is yellow and varying proportions of these produce a range of colours. It has been used

from the earliest times as a pigment and has been exploited in many places in England and Wales. Some Society members may have visited Winford in Somerset where a deep red ochre (Redding) was mined.

At Wick the River Boyd, flowing southwards from the Cotswolds to the River Avon, has cut a deep gorge. The works was situated at the bottom of the gorge and on the lower slopes (ST 707 732), the ochre mines on the plateau above. (ST 706 736) The ochre occurs in roughly stratified bands in Triassic rocks. Fullers Earth also occurs. A dam across the river produced a large lake in what is now the quarry area and supplied water to a turbine that provided initially all the power for the works machinery. This was supplemented at a later date by steam and diesel power. The ochre from the mines was brought by horse drawn trucks to the top of the gorge slope and lowered to the works by a balanced incline system, the loaded trucks pulling up the empty ones. The Drum House containing the drum, cable and brake control used for lowering the trucks still remains.

The ochre processing consisted essentially of drying, grinding and separation of the ochre from contaminating materials. One process used was known as levigation in which the ground ochre was mixed with water and the finest material floated off. This was then dried, ground and graded. Over time the demand for finer grades of material increased grinding by grind-stones supplemented by mills such as 'Ball Mills' in which grinding was carried out by balls in a rotating drum. The very finest material was produced by a device known as a 'Microniser' in which superheated steam was used to spin and grind the ochre. As the demand for ochre increased considerable quantities of raw material were imported.



View of the works around 1900, from a postcard dated 1904.

The ochre produced was used for a wide range of purposes, one of the earliest was in the manufacture of coloured paper. Other important uses included the manufacture of paints and distempers and the colouring of stone work and asphalt.

The works closed in 1970, the mines having closed some years earlier, and soon afterwards the works buildings were demolished. Today no evidence of the mines remain, the Drum House is still standing and

the dam on the river remains but lowered from its original height. The foundations and some of the walls of the works can still be seen, all very reddened by the ochre, and gradually being covered by vegetation.

There are a number of RIGS on the old works site, which is accessible to the public, but are becoming overgrown. It is possible that the site will be given some Wildlife status in the not too distant future.

## **CAREERS IN GEOLOGY**

Congratulations to two of our student members from Stonar School. Following successful A level results:-

Siobhan Moore is following the first JET (Jewellery, Education & Training) course with the National Association of Goldsmiths

Charlotte Sealy is now reading Exploration Geology at the University of Wales, Cardiff