

Monktonhall Colliery – Scotland 1988**Mine: Shaft sealing**

The mine is located 8km south-east of the city of Edinburgh

A complicated, interconnected network of old workings exist in this area. Water levels within these workings were controlled by pumping from several locations within the basin. These abandoned collieries pumped 15,000 litres per minute to control the water entering the workings.

Much of this leakage was through passages too fine to be sealed by grouting with cement.

By 1986 the problem was considered serious as the water inflows were causing disruption to colliery operation. British coal carried out studies to determine the best solution to the problem. After considering all available options they concluded that Sovereign offered the most cost effective solution.

The Sovereign grout treatment started in June 1988, on which date the water make from the shaft interval was 2880 litres per minute. 15,000 litres of Scem66 was injected and the water inflow reduced by 96%.

Following the successful sealing of No 1 Shaft it was decided to seal No 2 Shaft as well. Work started in August at which time the inflow in the shaft interval was 785 litres per minute. After injection of 16,500 litres of Scem66, this water inflow was reduced to 47 litres per minute.