

LOCAL GEOLOGICAL SITES UTTLESFORD DISTRICT



UfdG2 Arkesden Chalk Pit

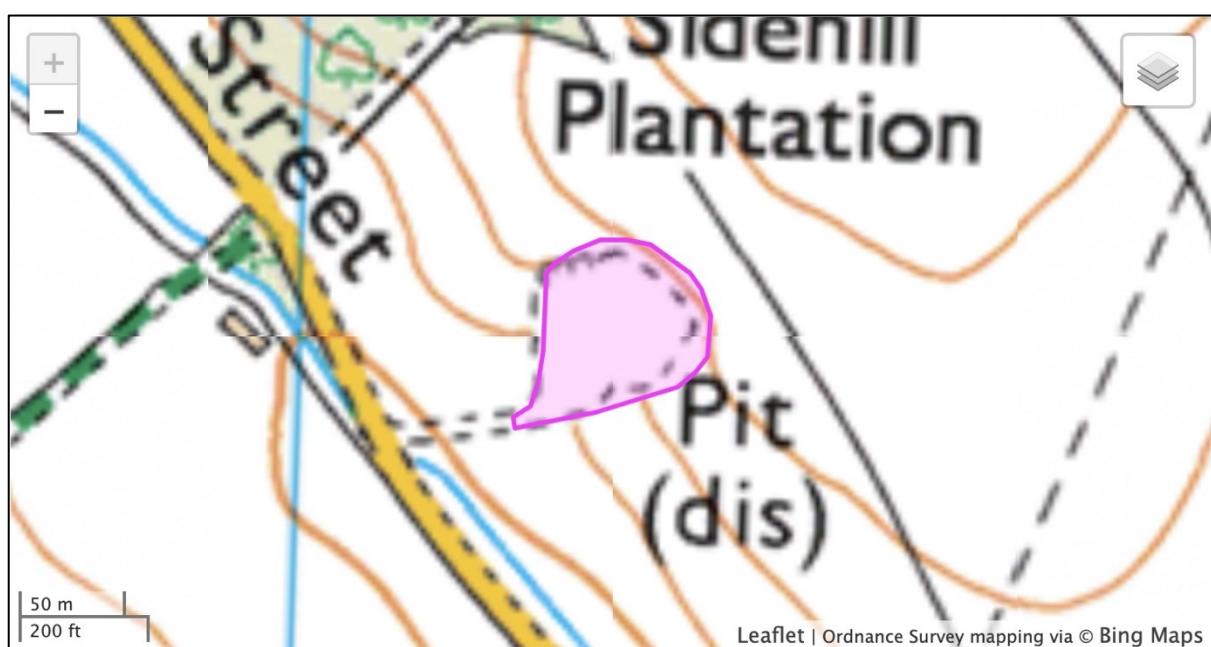
Site location: Off Poore Street south-east of Arkesden village.

Grid Reference: TL 4914 3368

Status: On private land

Summary of the geological interest:

Disused quarry in the Upper Chalk, cut into the hillside and visible from the road. A fine vertical exposure of Upper Chalk. One of the highest chalk exposures in North Essex. Formerly called the Parish Chalk Pit. The pit is a Local Wildlife Site.



Site Assessment. Local Geological Sites (LoGS) in Essex are assessed using criteria based on DEFRA guidance. An assessment form is used which asks key questions under four value categories: scientific, educational, historical and aesthetic. This site has been assessed and qualifies under these criteria.

Scientific interest and site importance

Arkesden Chalk pit provides some of the best exposures of Upper Chalk in north Essex. Chalk is a special type of limestone formed on the floor of a tropical sea about 80 million years ago during the Cretaceous period. The Chalk Sea is thought to have covered most of northern Europe, the purity of the chalk being evidence that coastlines were then far away and sea level was very high. At this time the European continent had not yet separated from North America. Fossils of creatures that lived in the Chalk Sea have been found in the Chalk here but they are rare.

The chalk at Arkesden is soft, white, blocky chalk. There are widely-spaced courses of nodular flint and layers and oblique veins of tabular flint. Flint is an extremely hard, black form of quartz that originates from the skeletons of organisms such as sponges that were dissolved by sea water and precipitated as mostly horizontal layers. Some fine flint nodules can often be seen on the floor of the quarry.



Arkesden Chalk Pit viewed from the road. Photo: G Lucy