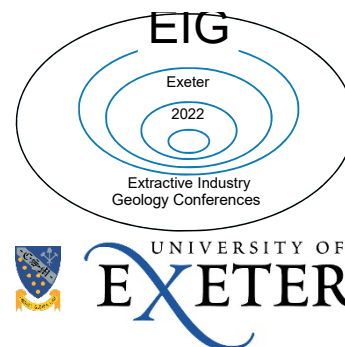


*EIG FIELD TRIP GUIDE*WEDNESDAY 7<sup>TH</sup> JULY 2022***WESTLEIGH QUARRY  
(AGGREGATE INDUSTRIES)***

TIVERTON

EX16 7JB

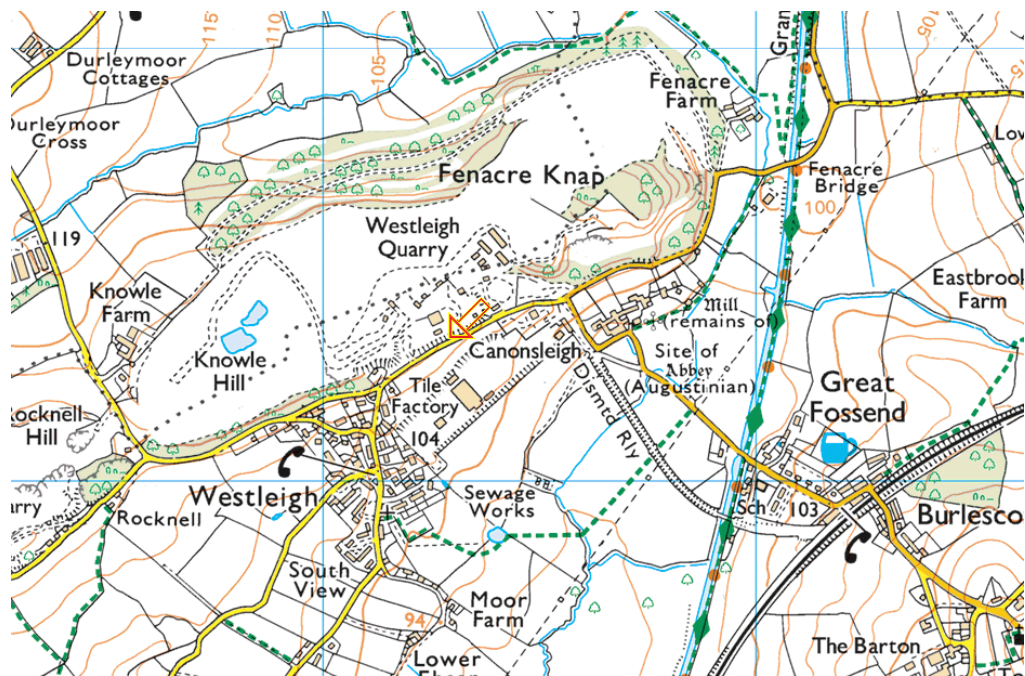


<b><i>Location</i></b>	Westleigh Quarry, Tiverton, EX16 7JB
<b><i>Field Trip Leader</i></b>	Grace Wadsworth, Senior Engineering Geologist – Aggregate Industries (07385 460075)
<b><i>Contact &amp; Meeting Point</i></b>	Office Car Park
<b><i>Website</i></b>	<a href="http://www.aggregate.com/">www.aggregate.com/</a>
<b><i>Time of Arrival</i></b>	1:30 for 2pm start
<b><i>Length of Visit</i></b>	2 hours
<b><i>PPE Required</i></b>	Steel toe-cap boots Hard hat High visibility top (vest or jacket) AND Trousers Safety glasses Gloves
<b><i>Driving time Exeter University</i></b>	1hr

Location Map



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<p><b>Outline of Trip</b></p>	<p>Visit to large limestone quarry excavation. Discussion and examples of geotechnical challenges, future development, overburden stripping, and industrial archaeology.</p>
<p><b>Geology</b></p>	<p>The Westleigh Quarry complex covers an area of 140 hectares and comprises three separate quarries: Westleigh, Rocknell and Fenacre. The quarry produces approximately 1 million tonnes of limestone products a year.</p> <p>The first recorded use of the local limestone in construction was in 1282 when Canonsleigh Abbey was founded on this site by Augustinian Nuns. The remains can still be seen today incorporated into farm buildings.</p> <p>With the intensification of agriculture in the 18th century the demand for lime to spread on fields soared. Quarried limestone was 'slaked' in local lime kilns and transported away from site along the Grand Western Canal after it was constructed in 1814. In 1841 the Bristol-Exeter railway was built and a short connecting stretch was added to allow transport of lime by rail.</p> <p>From the beginning of the 19th century the quarry became an increasingly important source of limestone for construction. Lime is no longer produced at the quarry but there are two surviving lime kilns which have been preserved for their historical importance and which can still be seen.</p> <p>Westleigh Quarry is currently extracting Lower Carboniferous age limestone mineral belonging to the Westleigh Limestone Group. Mineral is currently extracted from Westleigh and Rocknell, overburden is about to be stripped from Fenacre to allow the continuation of quarrying in this area.</p> <p>Structurally, most of the material has been extracted within parts of both limb and the axial zone of an anticline with limited lateral displacement on multiple perpendicular faults that transverse the site. This has resulted in most of the quarry sidewalls being excavated within geotechnically favourable conditions with strata dipping into the north-western and south-eastern faces. The limestone in the Rocknell Excavation is known to be extremely Karstic, with the area previously consisting of one of the largest cave networks in Devon.</p> <div data-bbox="367 1120 1372 1993"> <p><b>Key</b></p> <ul style="list-style-type: none"> <li>Permian Lower Marls</li> <li>Westleigh Limestone</li> <li>Transition Beds (Mudstone &amp; Limestone)</li> <li>Interbedded Shale and Limestone</li> <li>Lines of possible quarry development             <ul style="list-style-type: none"> <li>a - Within current planning permission</li> <li>b - Within current ECCQ ownership</li> <li>c - With Redwood's land</li> </ul> </li> </ul> <p><b>FIGURE 6</b></p> <p><b>GEOLOGICAL SECTIONS OF ROCKNELL HILL</b></p> <p>(See Figure 2 for positions of the sections)</p> </div>