
ELC_18: Pencraig Wood Quarry

Site information

Location and summary description:

The site comprises a disused quarry to the south-east of Pencraig Wood, approximately 2 km to the west of the village of East Linton. The quarry exposes a non-porphyrific intrusive trachyte sill. The car park and view point to the east and north of the quarry respectively have excellent views out across East Lothian.

National Grid reference:

Mid-point: [NT 57286 76536]

Site type: Artificial quarry works; Artificial section; Natural view

Site ownership: Viewpoint - East Lothian Council

Current use: Disused

Field surveyors: Rachael Ellen and Sarah Arkley

Current geological designations: None

Date visited: 16th April 2014

Other designations: None

Site map

(Figure 23) Pencraig Wood Location Map. Site boundary has been drawn to include rock exposures (blue hatched areas) and also site access and viewpoints (drawn as geologically significant site area).

Site description

Background

The disused quarry within Pencraig Wood lies to the north of the A199. The woods in the high ground to the north of the quarry are used as an archery ground, but the quarry floor itself has no access restrictions. The quarry itself is easily accessed by foot from the lay-by to the east of the site, and there are footpaths in place toward the view point at the north of the site.

Volcanic rocks

The massive, non-porphyrific fine-grained purple trachyte exposed at the site forms part of the Pencraig Sill, an intrusive igneous rock belonging to the Midland Valley Early Carboniferous Felsic Sill Suite (ELC_18_P1). Sub-vertical fractures cut the trachyte throughout the extent of the exposure. Iron staining of the trachyte and small feldspar phenocrysts (5mm or less) are seen in fallen rock blocks on the quarry floor (ELC_18_P2).

Geomorphology

There are excellent views towards North Berwick Law and Traprain Law from the lay-by east of the site

(ELC_18_P3), and the viewpoint just north of the car park (ELC_18_P4).

Access and additional information

Access to the base of the quarry face is not recommended due to danger of rock fall. Gorse bush coverage also restricts access to part of the quarry face. Markle Quarry to the north of the site is currently being actively worked in the same lithology (Pencraig Sill).

Stratigraphy and rock types

Age: Carboniferous

Formation: Midland Valley Early Carboniferous Felsic Sill Suite

Rock type: Trachyte

Assessment of site: access and safety

Road access and parking Parking at the lay-by just to the east of the site is available. Walk along the pavement at the side of the road to access the old quarry.

Safety of access Care should be taken walking along the pavement as the A199 is a busy and fast road. Car parking is available off the main road. The floor of the quarry is uneven and overgrown in places.

Safety of exposure Recent rockfalls at the base of the cliff suggest the quarry walls are actively eroding, and potential loose material may fall. As with all quarry faces, care should be taken and an assessment made of each face before approaching.

Access Access from main road.

Current condition Gorse bushes and trees obscure most of the quarry walls, and there is a lot of rock debris at their base.

Current conflicting activities None known

Restricting conditions Access along the top of the quarry may be restricted due to the archery ground.

Nature of exposure Vertical quarry faces

Assessment of site: culture, heritage & economic value

Historic, archaeological & literary associations Not known

Aesthetic landscape Good views out to the south of East Lothian, including the SSSI Traprain Law, from the viewpoint at the car park next to the site.

History of earth sciences Not known

Economic geology Quarry active since at least 1855 and abandoned between 1895 and 1908 (based on OS Historical Maps).

Assessment of site: geoscientific merit

Rarity

Quality

Literature/collections Primary interest

Lithostratigraphy

Sedimentology

Igneous/mineral/metamorphic
geology

Local

Poor

Structural geology

Palaeontology

Geomorphology

Local

Good

X

Site geoscientific value

The site exposes a fine-grained purple trachyte, which forms part of the Pencraig Sill. Whilst exposure of the rock is poor within the quarry, the car park adjacent to it provides spectacular views across the south of East Lothian, and the viewpoint provides views toward North Berwick Law. North Berwick and

Traprain Law are impressive features on the landscape related to Carboniferous volcanic systems, and stand proud in the landscape due to glacial scouring of softer rocks surrounding these resistant volcanic rocks.

Pencraig Wood Quarry provides a poor example of an intrusive trachyte sill with local significance. It also provides a good viewpoint of local geomorphological features in the landscape which reflect East Lothian's volcanic past.

Assessment of site: current site usage

Community The quarry is unlikely to be visited often; however the lay-by is often used and it is assumed the view point is accessed on a daily basis.

Education At present the old quarry itself is unlikely to be used as an educational resource.

Interpretation boards for the view at the lay-by and viewpoint are already in place, and these could be expanded on in order to explain the geology of the area.

Assessment of site: fragility and potential use of the site

Fragility Weathering/erosion, natural overgrowth.

Potential use On-site interpretation

Geodiversity summary

Pencraig Wood Quarry exposes a poor example of the Pencraig Wood trachyte sill. However, the lay-by adjacent to the quarry offers views across the south of East Lothian toward Traprain Law and pre-existing interpretation boards here could be expanded on to include more information about the local geology. An interpretation board at the viewpoint north of the quarry (providing views toward North Berwick Law) could also be expanded on to include details about the local geology.

Site photos

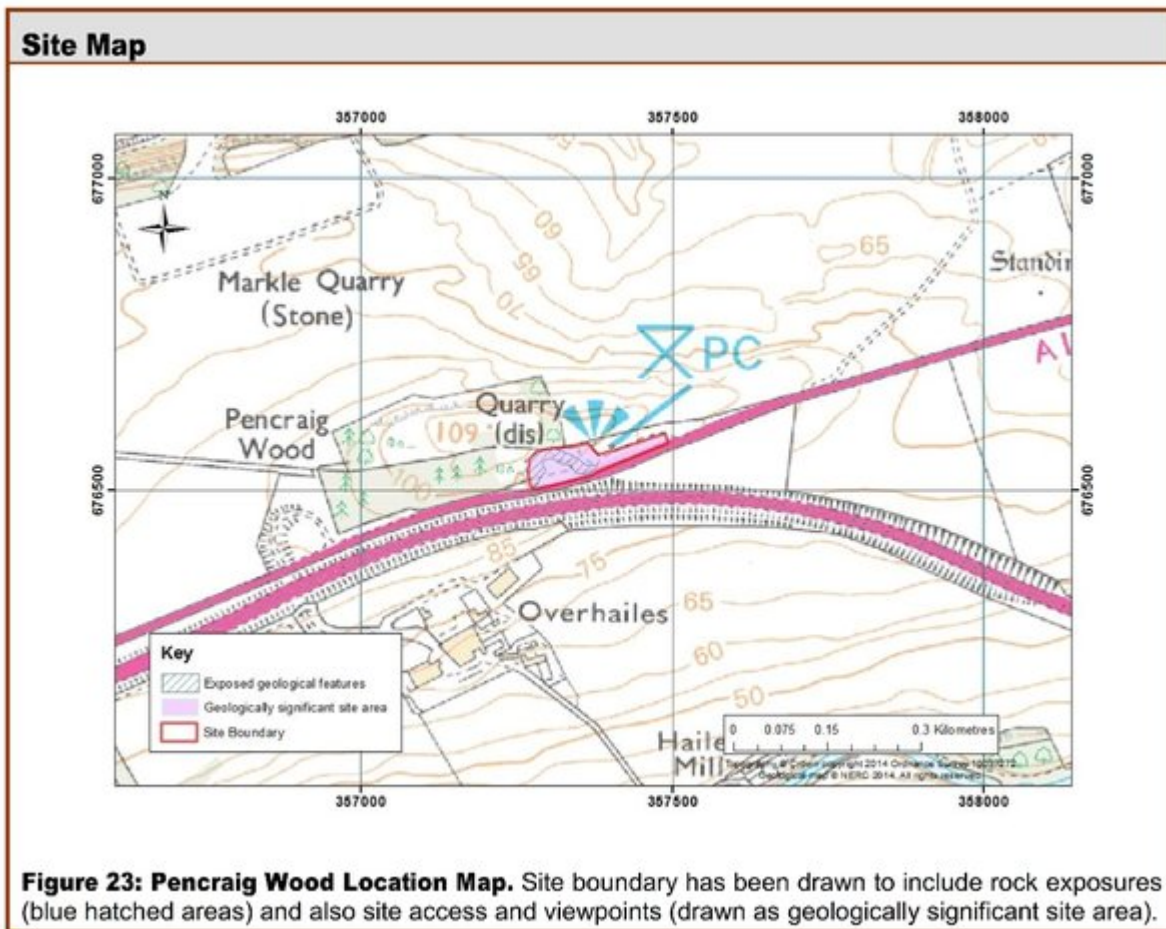
(ELC_18_P1) Pencraig Wood Quarry. The quarry walls are overgrown by gorse and trees, and are covered at their base by rock fall. Photo looking toward the north. © BGS, NERC.

(ELC_18_P2) Iron staining of the trachyte within the quarry, caused by movement of fluids along pore space within the rock. © BGS, NERC.

(ELC_18_P3) View from the car park in the east of the site, looking southward toward Traprain Law. © BGS, NERC

(ELC_18_P4) View from the viewpoint to the north of the car park, looking northward toward North Berwick Law. © BGS, NERC.

References



(Figure 23) Penraig Wood Location Map. Site boundary has been drawn to include rock exposures (blue hatched areas) and also site access and viewpoints (drawn as geologically significant site area).



(ELC_18_P1) Pencraig Wood Quarry. The quarry walls are overgrown by gorse and trees, and are covered at their base by rock fall. Photo looking toward the north. © BGS, NERC.



(ELC_18_P2) Iron staining of the trachyte within the quarry, caused by movement of fluids along pore space within the rock. © BGS, NERC.



(ELC_18_P3) View from the car park in the east of the site, looking southward toward Traprain Law. © BGS, NERC



(ELC_18_P4) View from the viewpoint to the north of the car park, looking northward toward North Berwick Law. © BGS, NERC.