

UNIVERSITY OF KEELE

INFORMAL LOCAL FIELD EXCURSION - SCYTHIAN FLUVIAL SEDIMENTOLOGY IN NORTH STAFFS.

"This is the world's limit that we have come to: this is the Scythian Country, an untrodden desolation" Aeschylus in "Prometheus Bound".

LOCALITY 1: (if shooting programme permits) Red Hill Rife Range Quarry (SJ787395). Bromsgrove or Helsby Sandstone Formation (formerly Lower Keuper Sandstone: now Upper Scythian) fills deep 7 m channel into Wildmoor or Wilmslow Sandstone Formation (formerly Bunter Upper Mottled Sandstone: Scythian). Low energy sandy fluvial strata with one possible aeolian bed (WSF) succeeded by high energy cut and fill fluvial strata (BSF). Possible diversion to see Maer Hall, the home of Emma Wedgwood who married Charles Darwin. The latter made geological investigations locally whilst in residence.

LOCALITY 2: M6 Motorway Cut and Kingswood Bank

(a) (i) Pebbly Sandstone; (ii) Pebble Beds; (iii) Pebbly Sandstone members of the Cannock Chase Formation (?Lower Scythian) lie with angular unconformity upon the Etruria Marl Fm and Newcastle Sandstone Fm just north of the motorway bridge near Gravel Pit Lodge SJ852407. Succession coarsens upwards, then fines upwards.

(b) Outcrop on east side of motorway cut. Pebbly sandstones (facies C) interbedded with conglomerate/gravel beds (facies B).

(c) Outcrop on the main face of Kingswood Bank Quarry - the former Trentham Gravel Pit. The main gravel/conglomerate bed - The Trentham Conglomerate Member. Facies B (crossbedded conglomerate with rhythmic foresets in part) and facies A (flat bedded and massive conglomerate). Thin developments of facies C (pebbly sandstone).

(d) Outcrop on the west of the former Trentham Gravel Pit.

Facies A (flat bedded imbricated conglomerate) interbedded with Facies C (cross-bedded pebbly sandstone). More argillaceous sandstone (?facies D) above.

LOCALITY 3: The Hulme Quarries

Travel through the area of the Trent Vale earthquakes (mining induced) to the Park Hall Country Park north east of Longton.

(a) Small quarry to the east of the unconformable contact: (loc.4 on separate map). Pebbly Sandstone member (facies C) at the base of the Cannock Chase Formation.

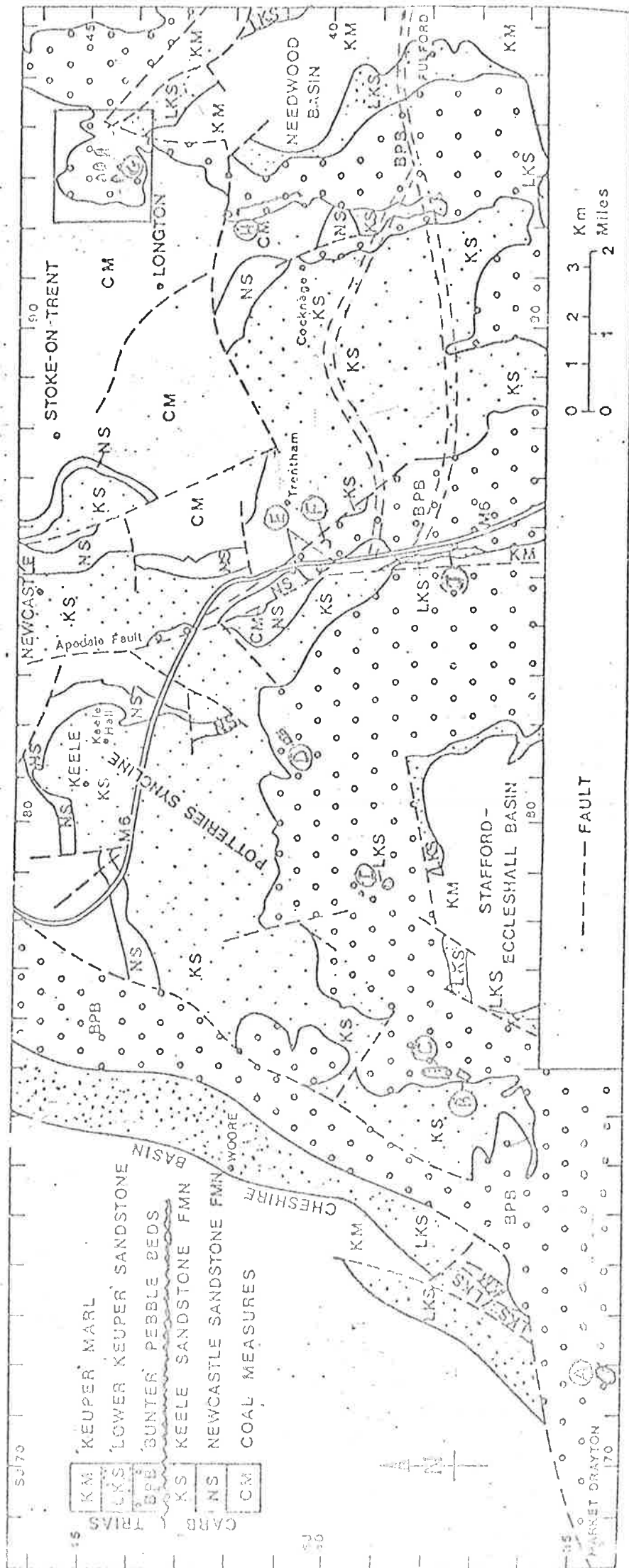
(b) Large North Central Quarry. Conglomerate member of the Cannock Chase Formation. Conglomerate beds of flat bedded facies A and crossbedded B below with interesting textures and fabrics: longitudinal and diagonal gravel bars. Pebbly sandstone beds of facies C above. Locality 13 on separate map.

(c) Large Northeast Quarry. Conglomerate member of the Cannock Chase Formation. Facies B crossbedded conglomerate facies, but interesting lateral passages to pebbly sandstone and argillaceous sandstone. Locality 14 on separate map.

LOCALITY 4: The Beech Quarries

Return, if time permits, to Beech (SJ854382). Crossbedded sandstones in Bromsgrove Sandstone Formation stratigraphically above those of locality 1. Mudstone lenses, wedging sandstone bodies and much intraformational reworking of mudstones.

Thompson
Text-Fig. 2



Thompson Text-fig. 6.

