

DESCRIPTION OF MAP UNITS

Quf Alluvium, modern (Holocene)
Silty clay and sand, with minor sand and sparse gravel, found in floodplains along streams to the Ohio River, and inset into adjacent map units; mostly sand sparse gravel along the banks of the Ohio River; contact with adjacent units varies from sharp to poorly defined, and is mapped on the basis of field observations and topographic expression.

Qufp Alluvium, Ohio River floodplain (Holocene)
Sand, silt, fine gravel and clay; surface mantled by silty clay and sandy silt. Forms lowest well-developed terrace along the Ohio River; approximately 50 feet thick, and overlies sand and gravel deposits of older terrace deposits; contact is sharp, drawn at scarp of next higher terrace.

Quf1 Alluvium, natural levee (Holocene)
Sand and silt deposited in natural levees or oxbow deposits on the Ohio River floodplain and low terrace; typically underlain by older terrace deposits, and is mapped based on field observations and topographic expression.

Quf2 Outwash, terrace (Pleistocene)
Fine to coarse sand and gravel, with local lenses of silt and clay; gravel includes chert, quartzite, sandstone, siltstone, gneiss and metacarbonate rocks, limestone, and coal; lithologically indistinguishable from adjacent outwash terraces, deposited in glacial outwash; forms well-developed, dissected terrace along Ohio River valley; surface mantled with silty sand and sandy silt; contact is sharp, drawn at scarp of next higher terrace or upland.

Quf3 Loess (Pleistocene)
Silt, clayey silt, and fine sand deposited by wind, typically massive, mantling upland areas and other landforms, especially the lacustrine-lake-water deposits and bedrock, with is approximately 30 feet thick near the Ohio River valley and thin to less than 10 feet in the southern part of the quadrangle; new radiocarbon and thermoluminescence dates suggest an age of 22,500 to less than 14,000 ybp (Newell and others, in prep.).

Quf4 Outwash, terrace (Pleistocene)
Fine to coarse sand and gravel, with local lenses of silt and clay; gravel includes chert, quartzite, sandstone, siltstone, gneiss and metacarbonate rocks, limestone, and coal; lithologically indistinguishable from adjacent outwash terraces, deposited in glacial outwash; forms well-developed, dissected terrace along Ohio River valley; surface mantled with silty sand and sandy silt; contact is sharp, drawn at scarp of lacustrine terrace or upland.

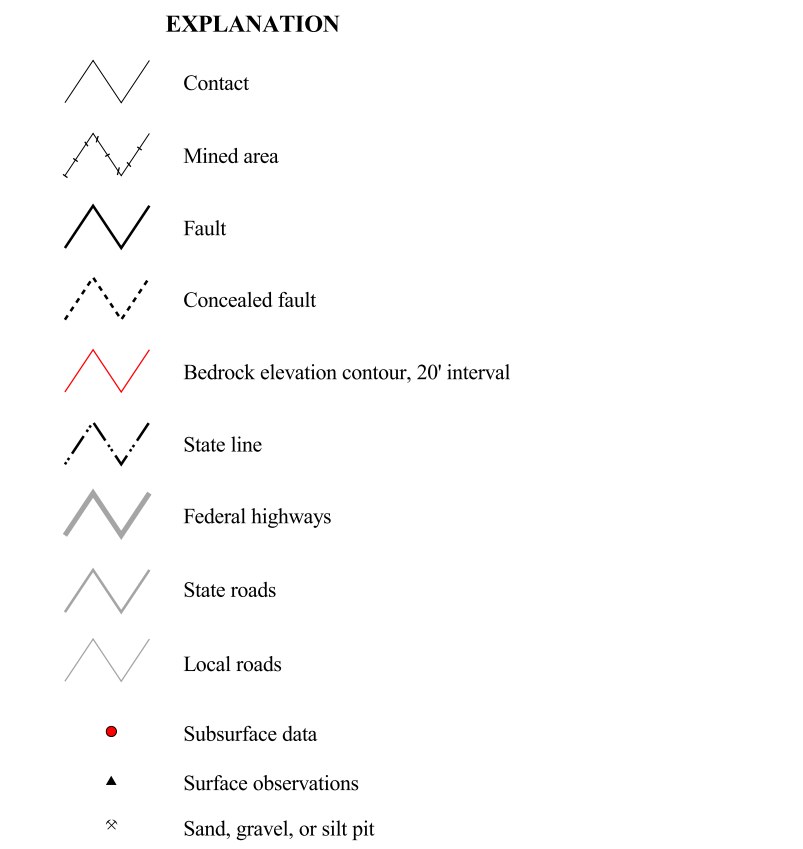
Qf Lacustrine, terrace (Pleistocene)
Clayey silt, 30 to 45 feet thick, overlying complex deposits of sand, silt, clay, and minor gravel; locally mantled by loess; upper part of unit deposited in lacustrine and shallow environments associated with alluviation of the Ohio River valley by glacial outwash; lower part of unit of apparent mixed fluvial and fluvio-lacustrine origin; unit includes marginal of complex transition between lacustrine deposits and loess mantling upland; new radiocarbon dates of 22,450 and 22,060 ybp to Owsboro West quadrangle (Newell and others, in prep.) are consistent with previous dates of 18,520 and 19,940 ybp (Rubin and Alexander, 1996).

Qf2p Upland gravel (Pliocene-Pleistocene)
Gravel and medium to coarse sand; pebbles include brown, pink, chert, quartz, and silicified fossils; locally covered by fine sand; unit found on uplands, covered by loess and poorly exposed, comparable to the Last Glacial of Ray (1963).

Pz Bedrock (Pennsylvanian)
Consolidated shale, sandstone, coal, and overlying poorly sorted gravels, comprising the core of the upland area, includes areas of less than 3 ft (1 m).

af1 Artificial fill (engineered fill)
Engineered fill for construction of roads, railroads, dams, floodwalls, and foundations.

af2 Artificial fill (mine spoil)
Mine spoil associated with disturbed bedrock material.



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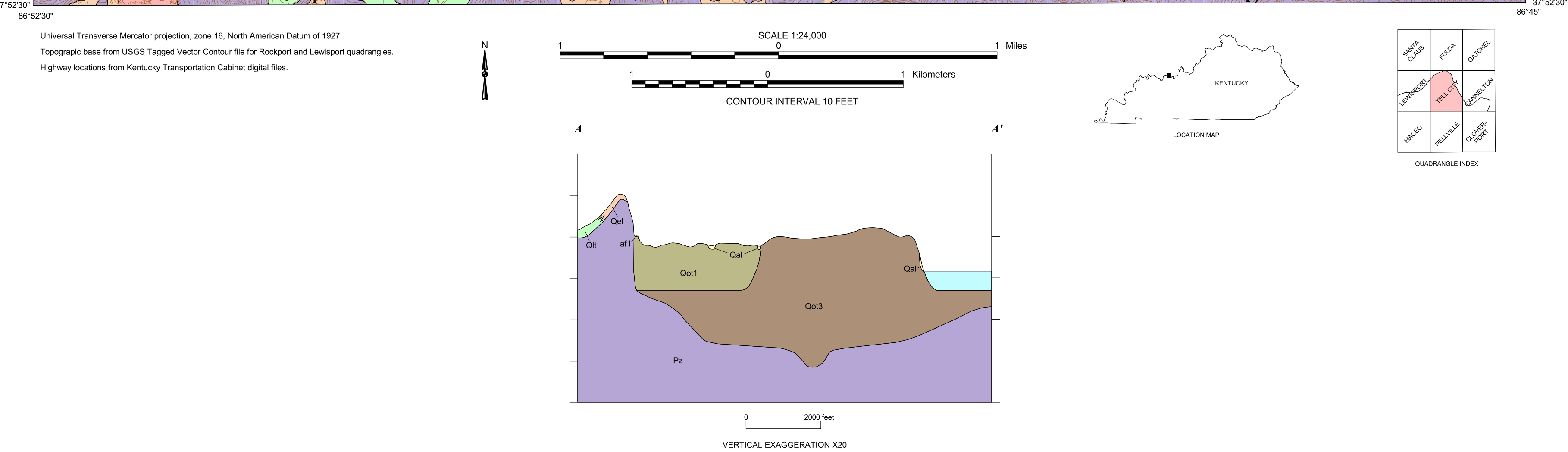
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QUATERNARY GEOLOGIC MAP OF PART OF THE TELL CITY 7.5-MINUTE QUADRANGLE, WESTERN KENTUCKY
By
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2005