

**CORRELATION OF MAP UNITS**

Qal	Qalq	Qat	Qat3	Qat1	Qat2	Qat4	Qat5	Qat6	Qat7	Qat8	Qat9	Qat10	Qat11	Qat12	Qat13	Qat14	Qat15	Qat16	Qat17	Qat18	Qat19	Qat20	Qat21	Qat22	Qat23	Qat24	Qat25	Qat26	Qat27	Qat28	Qat29	Qat30	Qat31	Qat32	Qat33	Qat34	Qat35	Qat36	Qat37	Qat38	Qat39	Qat40	Qat41	Qat42	Qat43	Qat44	Qat45	Qat46	Qat47	Qat48	Qat49	Qat50	Qat51	Qat52	Qat53	Qat54	Qat55	Qat56	Qat57	Qat58	Qat59	Qat60	Qat61	Qat62	Qat63	Qat64	Qat65	Qat66	Qat67	Qat68	Qat69	Qat70	Qat71	Qat72	Qat73	Qat74	Qat75	Qat76	Qat77	Qat78	Qat79	Qat80	Qat81	Qat82	Qat83	Qat84	Qat85	Qat86	Qat87	Qat88	Qat89	Qat90	Qat91	Qat92	Qat93	Qat94	Qat95	Qat96	Qat97	Qat98	Qat99	Qat100
Holocene										Pleistocene										Pliocene (?)										Pleistocene																																																																								
QUATERNARY																				TERTIARY (?)																				PALEOZOIC																																																														

- DESCRIPTION OF MAP UNITS**
- Qal** Alluvium, modern (Holocene) Silty clay and sandy silt, with minor sand and gravel. Found in floodplains along streams to the Ohio River, and into adjacent upland areas. Sand and gravel are deposited in the Ohio River valley; contact with adjacent units varies from sharp to poorly defined, and is mapped on the basis of field observations and topographic expression.
  - Qatp** Alluvium, Ohio River floodplain (Holocene) Sand, silt, fine gravel and clay, surface overlain 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 outwash deposits; contact is sharp, drawn at scarp of next higher terrace.
  - Qalq** Alluvium, natural levee (Holocene) Sand and silt deposited in natural levees or overwash deposits on the Ohio River floodplain and low outwash terraces, typically underlain by adjacent floodplain deposits, and is mapped based on field observations and topographic expression.
  - Qat** Alluvial fan (Holocene) Silt derived from loess-covered upland areas; forms small, low-relief fans on outwash terrace surfaces.
  - Qat3** Outwash, terrace (Pleistocene) Fine to coarse sand and gravel, with local lenses of silt and clay; gravel includes chert, quartzite, sandstone, siltstone, igneous and metamorphic rocks, limestone, and coal. Lithologically indistinguishable from adjacent outwash terraces; deposited as glacial outwash; forms well-developed, low-relief terraces along Ohio River valley; surface marked with silty sand and sandy silt; contact is sharp, drawn at scarp of next higher terrace or upland.
  - Qat1** Loess (Pleistocene) Silt, clayey silt, and fine sand deposited by wind; typically massive, mantling upland areas and older landforms, especially the lacustrine slackwater deposits and bedrock; it is approximately 50 feet thick near the Ohio River valley and thins 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 (Overell and others, in prep).
  - Qat5** Outwash, terrace (Pleistocene) Fine to coarse sand and gravel, with local lenses of silt and clay; gravel includes chert, quartzite, sandstone, siltstone, igneous and metamorphic rocks, limestone, and coal. Lithologically indistinguishable from adjacent outwash terraces; deposited as glacial outwash; forms well-developed, dissected terraces along Ohio River valley; surface marked with silty sand and sandy silt; contact is sharp, drawn at scarp of lacustrine terrace or upland.
  - Qat** 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 slackwater 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 a range of complex transition between lacustrine deposits and loess mantling upland; new radiocarbon dates of 22,430 and 22,060 ybp (Overell and others, in prep) and others, in prep) are consistent with previous dates of 18,520 and 19,940 ybp (Rabin and Alexander, 1965).
  - Qat7** Upland gravel (Pleistocene-Pleistocene) Gravel and medium to coarse sand; pebbles include brown, patina chert, quartz, and silicified rocks; locally cemented by iron oxide; unit found on upland, covered by loess and poorly exposed; comparable to the Lee Creek of (Ray, 1965).
  - Pz** Bedrock (Pennsylvanian) Consolidated shale, sandstone, coal, and overlying poorly sorted regolith, comprising the core of the upland area, include areas of loess thinner than 3 ft (1 m).
  - a1** artificial fill (engineered fill) Engineered fill of construction of roads, railroads, dams, floodwalls, and foundations.
  - a2** artificial fill (mine spoil) Mine spoil associated with disturbed bedrock material.
  - a3** artificial fill (other) Areas of disturbed unconsolidated material not related to engineering or mining purposes.

- EXPLANATION**
- Contact
  - Mineral area
  - Fault
  - Concealed fault
  - Bedrock elevation contour, 20' interval
  - State line
  - Federal highways
  - State roads
  - Local roads
  - Subsurface data
  - Surface observations
  - Sand, gravel, or silt pit

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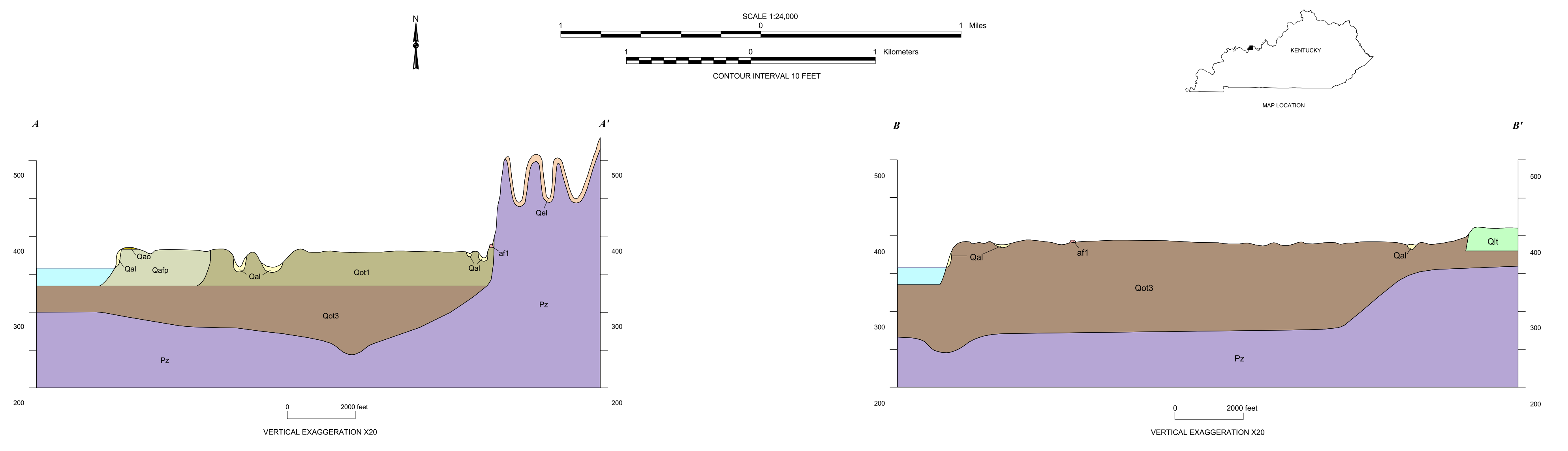
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Universal Transverse Mercator projection, zone 16, North American Datum of 1983  
Topographic base from USGS Tagged Vector Contour file for Rockport and Lewisport quadrangles.  
Highway locations from Kentucky Transportation Cabinet digital files.



**QUATERNARY GEOLOGIC MAP OF PARTS OF THE ROCKPORT AND LEWISPORT 7.5-MINUTE QUADRANGLES, WESTERN KENTUCKY**

By  
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