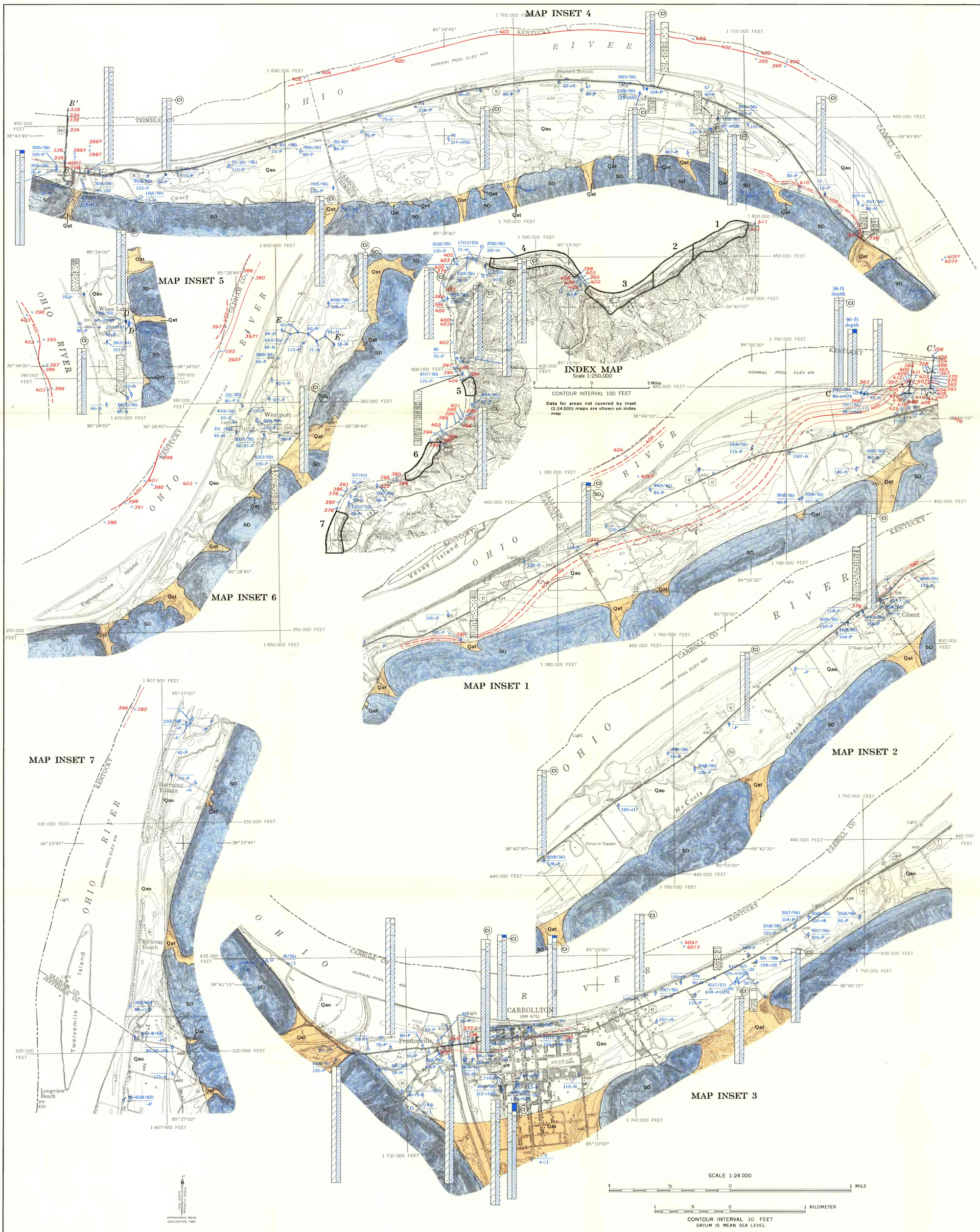
PREPARED IN COOPERATION WITH THE COMMONWEALTH OF KENTUCKY
THE UNIVERSITY OF KENTUCKY, KENTUCKY GEOLOGICAL SURVEY
AND THE KENTUCKY DEPARTMENT OF COMMERCE



Base maps compiled from U.S. Geological Survey 7½-minute topographic quadrangles

EXPLANATION

Note: well symbols may be combined on map

- Well, drilled
- Well, driven
- Well, dug
- Well, water-level observation
- Well, chemical analysis available
- Well, log available
- Well, chemical analysis and log available
- Spring
- Test boring or sounding (*Sounding in river may be to boulders, not bedrock*)
- Geologic section available

TYPE OF PUMP	YIELD
H Hand	e Estimated
P Power	r Reported
N None	m Measured

Well: 334 — 23(5/60) (2) — 114-r100

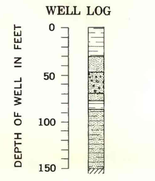
- Aquifer, if bedrock of Silurian (S) or Ordovician (O) age
- Depth to water, in feet below land surface
- Month and year of water-level measurement
- Key number for specific capacity, transmissibility, and permeability given in table below
- Yield of well, in gallons per minute. When yield is unknown, type of pump is given
- Depth of well, in feet below land surface
- Bedrock elevation, in feet above mean sea level

Key number	Specific capacity of well (gpm/ft drawdown)	Duration of draw-down test (hrs)	Trans-missi-bility (gpd/ft)	Permea-bility (gpd/sq ft)	Remarks
(1)	1.7	3.5			At 58-ft depth
(1)	14	2			At 88-ft depth
(2)	13	2			At 250 gpm
(2)	8.7	2	18,000	300	At 429 gpm
(3)	146				
(4)	154				
(5)	34	8			
(6)	26	2.75			
(7)	31	96			
(8)	59				
(9)	21				At 400 gpm
(9)	27	13			At 600 gpm
(10)	8	2			Dug well
(11)	164	.5			

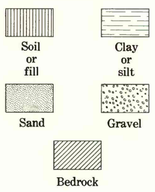
MAP SYMBOLS

- Qao — Quaternary alluvium of Ohio Valley (*Includes deposits of till of Illinoian(?) age in places*)
- Qat — Quaternary alluvium of tributary valley
- SO — Bedrock of Silurian and Ordovician age
- Geologic contact — *Dashed where approximately located*
- 400 — Contour on bedrock — *Dashed where approximately located; contour interval 10 feet; datum is mean sea level*

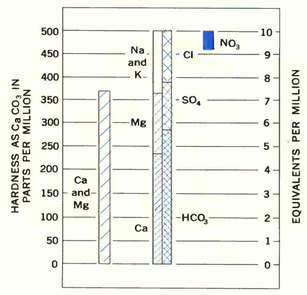
WELL LOG



LOG SYMBOLS



CHEMICAL ANALYSES



Hardness is read only to top of magnesium or sum of calcium and magnesium. When amount of nitrate is less than 10 parts per million (0.161 equivalents) it is combined with chloride. Dashed lines on bar graphs indicate that chemical data were estimated.

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1964—W63261

GEOLOGY AND HYDROLOGY OF ALLUVIAL DEPOSITS ALONG THE OHIO RIVER BETWEEN ETHRIDGE AND THE TWELVEMILE ISLAND, KENTUCKY

By
William E. Price, Jr.
1964

For sale by U.S. Geological Survey, price $1.00 per set