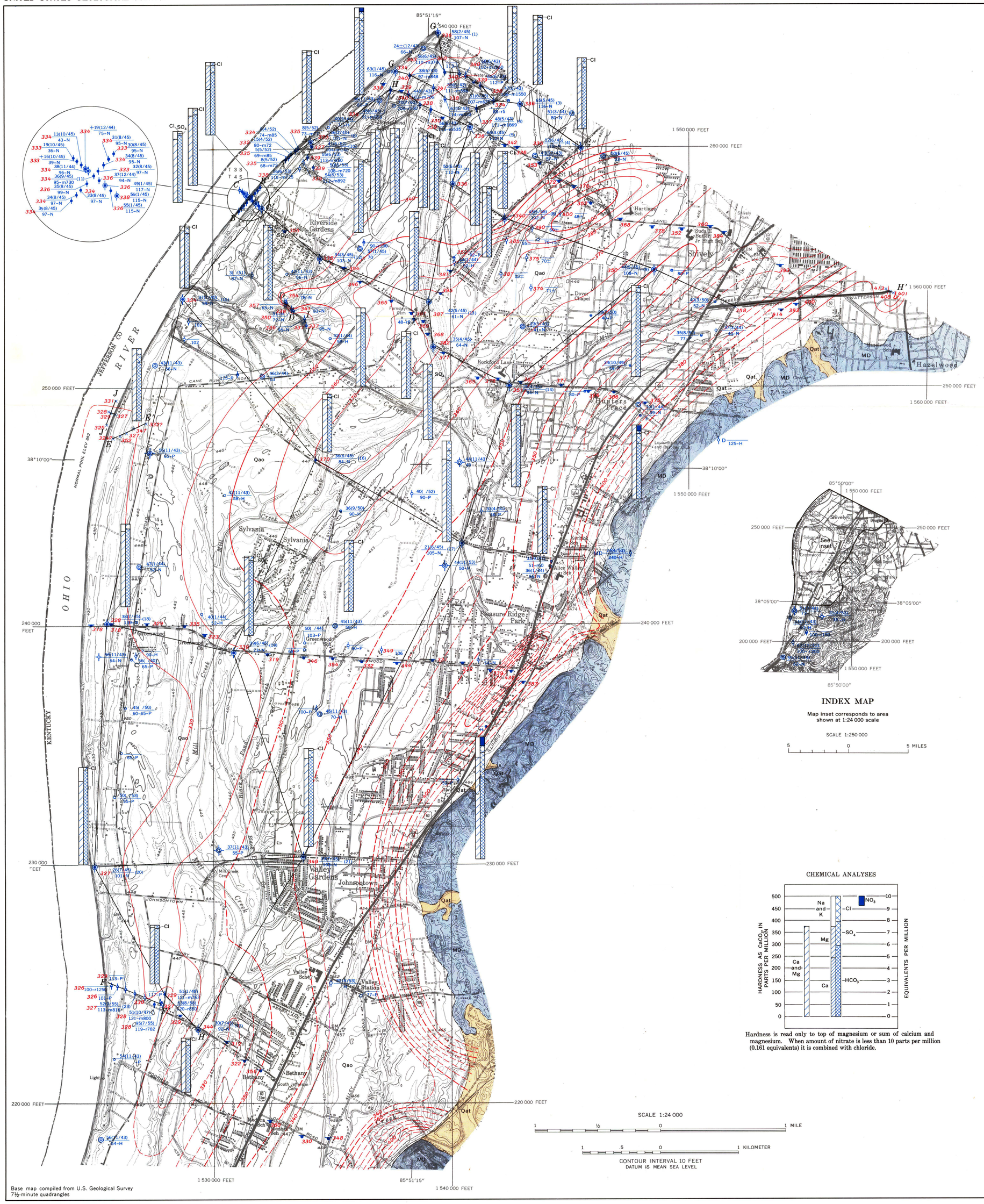
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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

HYDROLOGIC INVESTIGATIONS
ATLAS HA-111(SHEET 1 OF 2)



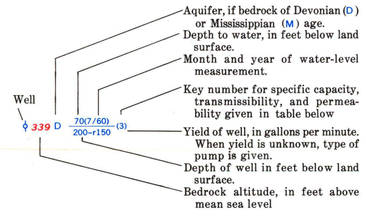
EXPLANATION

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
- Test boring or sounding
- Resistivity test site

Bedrock data derived from resistivity methods is approximate

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



Key number	Specific capacity of well (gpm/ft drawdown)	Duration of drawdown test (hrs)	Transmissibility (gpd/ft)	Permeability (gpd/sq ft)	Depth of permeability sample (ft)	Remarks
(1)				900	60-105	Median of 9 samples
(2)				600	60-114	Median of 11 samples
(3)				500	60-114	Median of 11 samples
(4)				150	50-115	Median of 13 samples
(5)				525	65-110	Median of 8 samples
(6)				600	50-99	Median of 10 samples
(7)				675	50-110	Median of 12 samples
(8)				500	50-100	Median of 20 samples
(9)				480	45-100	Median of 11 samples
(10)				1400	64-104	With river infiltration
(11)	15	528	20,000[a] / 45,000[b]	1000	0-95	Median of 7 samples
(12)				390	50-101	Median of 10 samples
(13)				1100	40-59	Median of 4 samples
(14)				480	50-92	Median of 9 samples
(15)				165	45-97	Median of 10 samples
(16)				575	40-78	Median of 8 samples
(17)				775	60-90	Median of 6 samples
(18)				190	33-105	Median of 14 samples
(19)				900	50-105	Median of 10 samples
(20)				300	25-99	Median of 14 samples
(21)				450	25-100	Median of 16 samples
(22)				260	25-90	Median of 13 samples
(23)	36.4 / 20.5[c]	48				

[a] For section of aquifer near water's edge.
[b] For section of aquifer landward from water's edge.
[c] Median of 15 other wells in the area whose specific capacities range from 14 to 200 gpm/ft drawdown.

INDEX MAP

Map inset corresponds to area shown at 1:24 000 scale

SCALE 1:250 000

5 0 5 MILES

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.

MAP SYMBOLS

- Qao — Quaternary alluvium of Ohio Valley
- Qat — Quaternary alluvium of tributary valley
- MD — Mississippian and Devonian bedrock
- Geologic contact — *Dashed where approximately located*
- 400 — Contour on bedrock — *Dashed where approximately located; contour interval 10 feet; datum is mean sea level*

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

TRUE NORTH — MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1964

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

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1964—W 63416

GEOLOGY AND HYDROLOGY OF ALLUVIAL DEPOSITS ALONG THE OHIO RIVER BETWEEN SOUTHWESTERN LOUISVILLE AND WEST POINT, KENTUCKY

By
William E. Price, Jr.

1964

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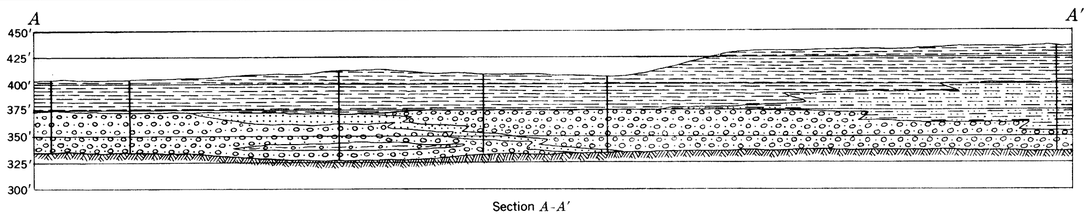
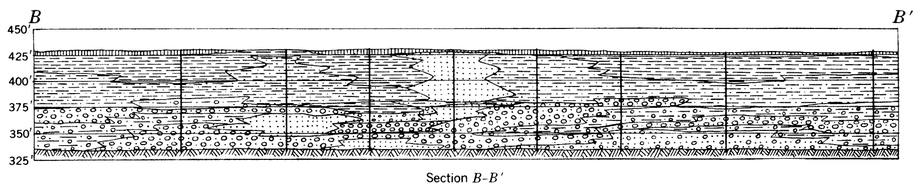


Section *A-A′*



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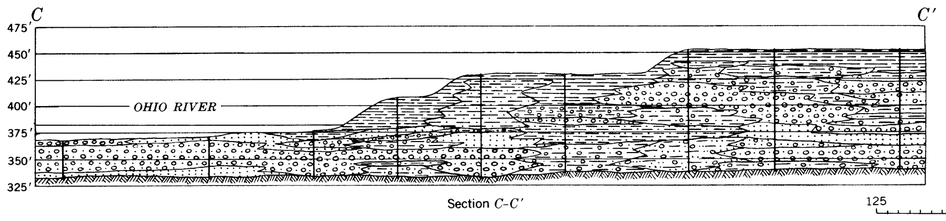
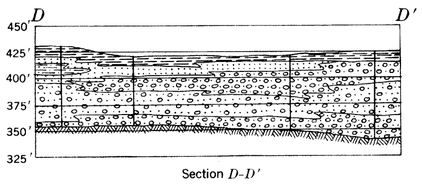
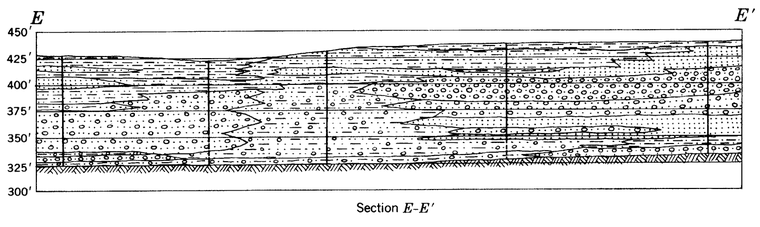


Section *C-C′*

125 0 125 FEET

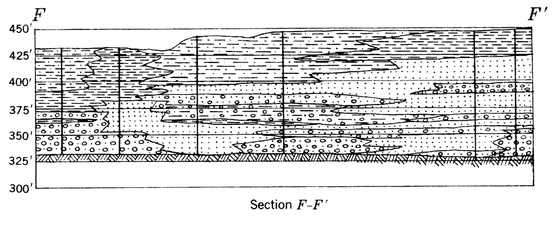


Section *D-D′*



Section *E-E′*

250 0 250 FEET



Section *F-F′*

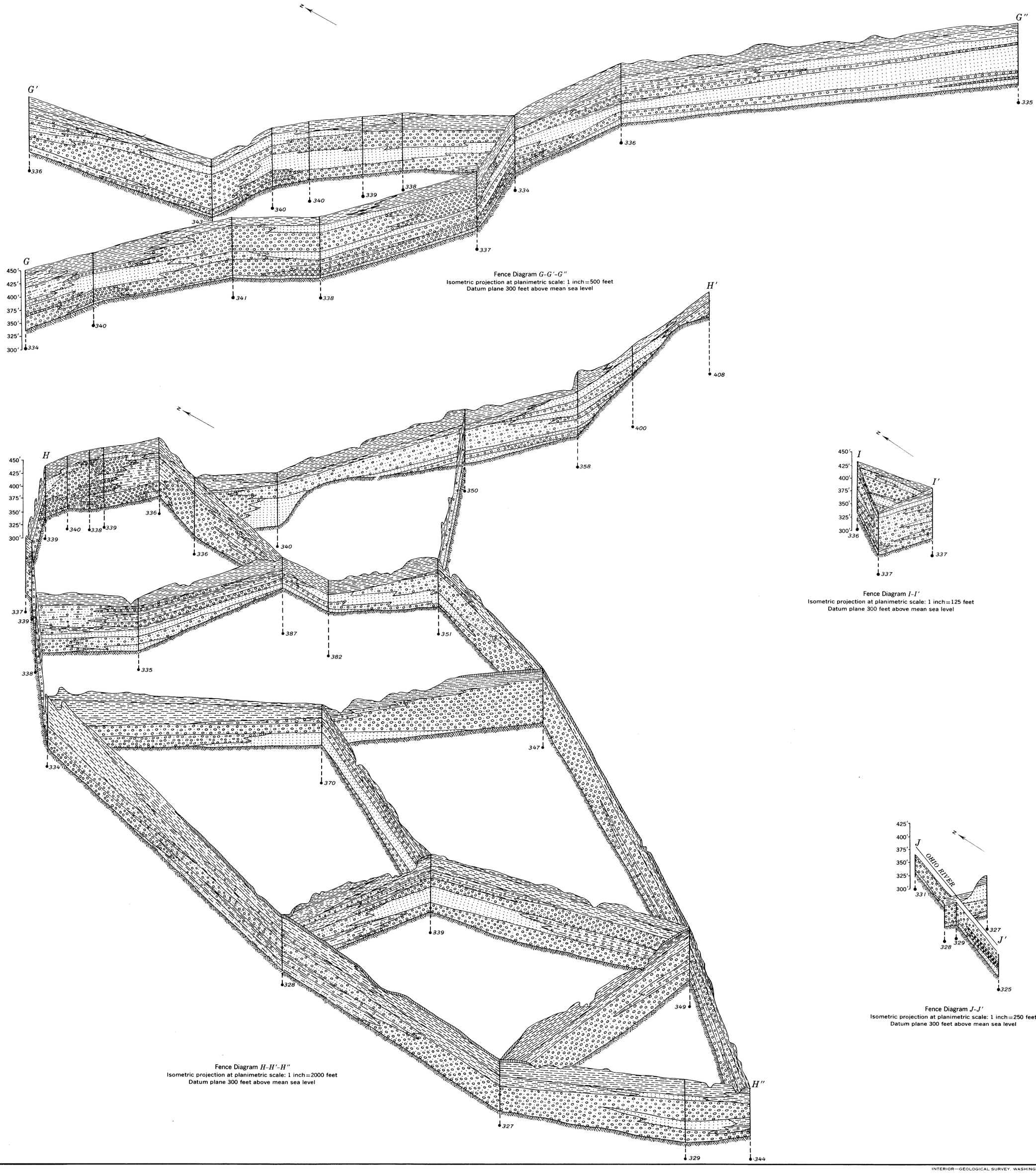
500 0 500 FEET

EXPLANATION

- Soil or fill
- Clay or silt
- Sand
- Gravel
- Boulders
- Bedrock
- Well or test boring
- ● 335

Dot represents the projected position of well or test boring on an imaginary datum plane. Number shows altitude of bedrock surface, in feet above mean sea level.

Approximate boundary between lithologic units, generally gradational



Fence Diagram *G-G′-G″*
Isometric projection at planimetric scale: 1 inch=500 feet
Datum plane 300 feet above mean sea level

Fence Diagram *I-I′*
Isometric projection at planimetric scale: 1 inch=125 feet
Datum plane 300 feet above mean sea level

Fence Diagram *J-J′*
Isometric projection at planimetric scale: 1 inch=250 feet
Datum plane 300 feet above mean sea level

Fence Diagram *H-H′-H″*
Isometric projection at planimetric scale: 1 inch=2000 feet
Datum plane 300 feet above mean sea level

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