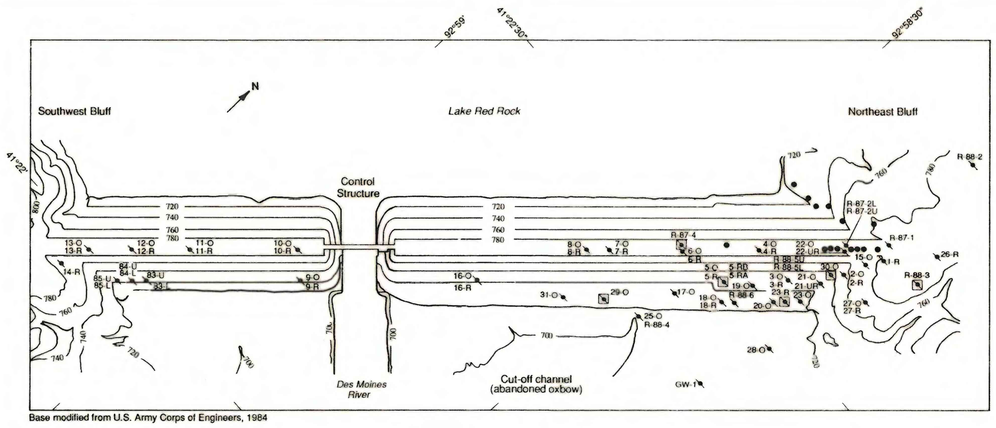


Base modified from U.S. Army Corps of Engineers, 1984

EXPLANATION

— 720 — TOPOGRAPHIC CONTOUR--Shows elevation of land surface in feet above sea level. Contour interval is 20 feet

7-O OBSERVATION WELL--Number refers to text and is from U.S. Army Corps of Engineers' well identification system. Letter refers to unit monitored:

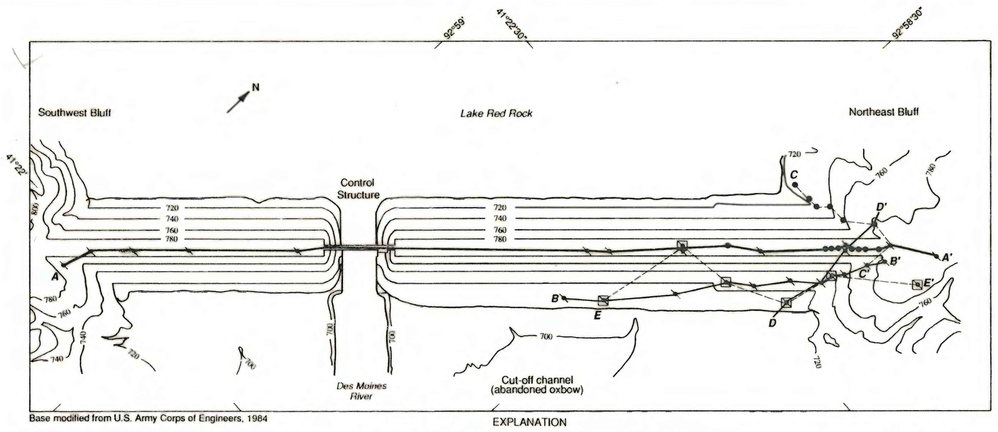
GW-; -O	OVERBURDEN
R-88-2; R-88-3	PENNSYLVANIAN BEDROCK (SHALE)
U; -U; -UR	UPPER BEDROCK, ST. LOUIS LIMESTONE
-L; R-; -R; -RA; -RB	LOWER BEDROCK, ST. LOUIS LIMESTONE

29-O WATER-QUALITY WELL--Observation well sampled for water-quality constituents; number refers to text and letter reference above

● EXPLORATORY BORING

0 500 1,000 FEET
0 100 200 300 METERS

Red Rock Dam site with observation wells.



Base modified from U.S. Army Corps of Engineers, 1984

EXPLANATION

— 720 — TOPOGRAPHIC CONTOUR--Shows elevation of land surface in feet above sea level. Contour interval is 20 feet

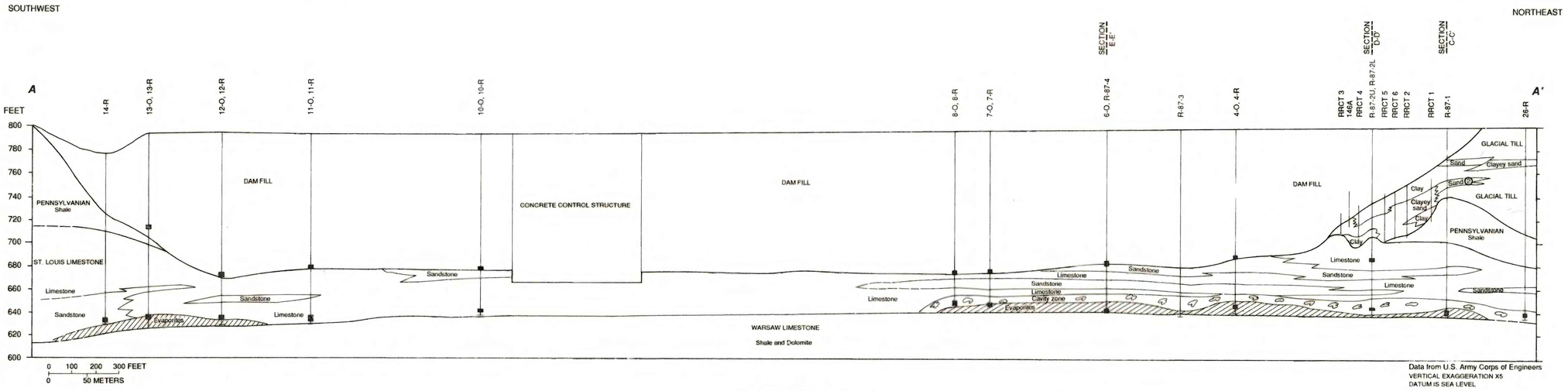
OBSERVATION WELL

WATER-QUALITY WELL

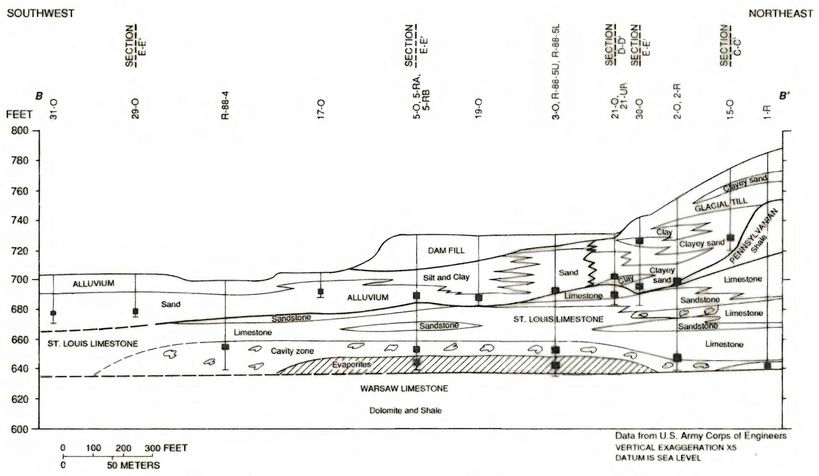
● EXPLORATORY BORING

0 500 1,000 FEET
0 100 200 300 METERS

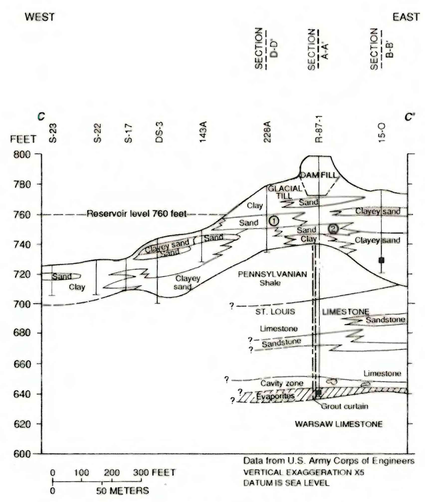
Location of geologic and hydrogeologic sections.



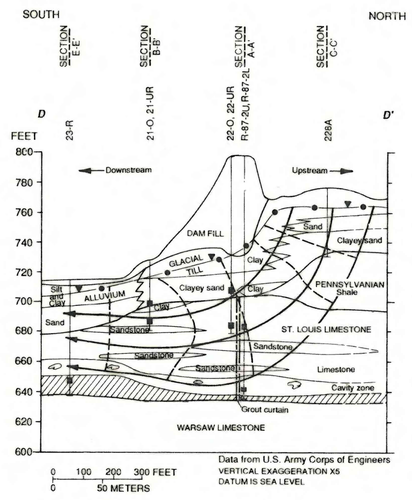
Geologic section A-A'.



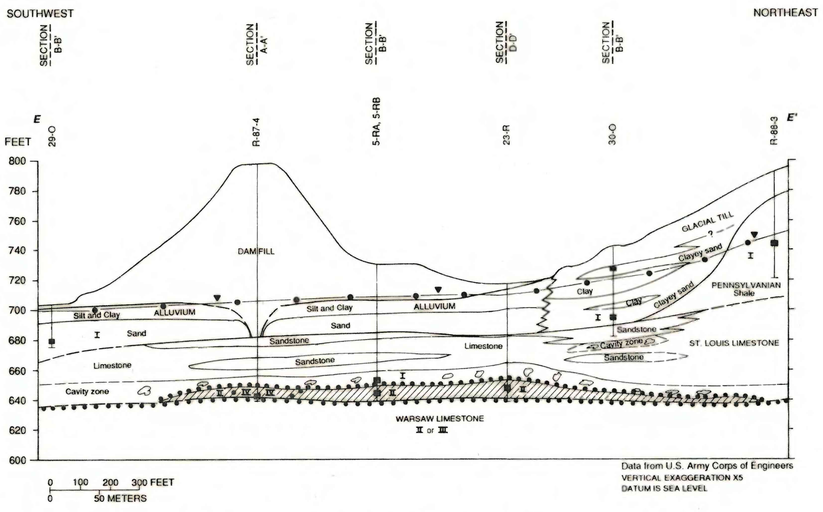
Geologic section B-B'.



Geologic section C-C'.



Hydrogeologic section D-D' showing idealized ground-water flow system.



Hydrogeologic section E-E' showing distribution of water composition types.

EXPLANATION
(For all sections)

- Sand — UNCONSOLIDATED SAND
- CAVITY ZONE
- EVAPORITES (GYPSUM AND ANHYDRITE)
- SAND 1--Refers to text and section C-C'
- SAND 2--Refers to text, section A-A' and section C-C'
- I — CALCIUM BICARBONATE WATER (SECTION E-E')
- II — CALCIUM SULFATE WATER (SECTION E-E')
- III — SODIUM SULFATE WATER (SECTION E-E')
- IV — COMPLEX WATER TYPE (SECTION E-E')
- GEOLOGIC UNIT CONTACT
- LITHOLOGIC CONTACT
- APPROXIMATE CONTACT BETWEEN ALLUVIUM AND GLACIAL TILL
- GROUT CURTAIN
- APPROXIMATE WATER-TABLE SURFACE
- GROUND-WATER EQUIPOTENTIAL LINE, JULY 9, 1990 (SECTION D-D')
- GENERALIZED DIRECTION OF GROUND-WATER FLOW (SECTION D-D')
- APPROXIMATE BOUNDARY BETWEEN WATER TYPES (SECTION E-E')
- OBSERVATION WELL SHOWING SCREENED INTERVAL
- OBSERVATION WELL NEST SHOWING TWO SCREENED INTERVALS
- EXPLORATORY BORING--RRCT, Red Rock cut-off trench

LOCATION OF OBSERVATION WELLS, AND GEOLOGIC AND HYDROGEOLOGIC SECTIONS AT
THE RED ROCK DAM SITE NEAR PELLA, IOWA