

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 11, 1979

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Denton:

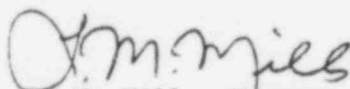
In the Matter of the Application of)	Docket Nos. STN 50-553
Tennessee Valley Authority)	STN 50-554

In a September 4, 1979, telephone conversation, Jerry Wills of my staff notified Bob Benedict of your staff that additional faults had been discovered at our Phipps Bend Nuclear Plant in the area of the intake pumping station. A conference call was subsequently made to the NRC geologist, Sandra Wastler, on September 4, 1979, to discuss the fault. The enclosure provides a detailed description of this feature.

We do not consider this minor fault to be capable within the meaning of Appendix A to 10 CFR Part 100.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

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PHIPPS BEND NUCLEAR PLANT

Thrust And Transverse Faults In The Intake Pumping Station Area

Final excavation of the intake pumping station has exposed two thrust faults and a series of transverse faults. (See attached map.)

Fault number 12 has been removed in the pumping station excavation, but is visible for 70 feet on the south and west walls. It is a thrust fault striking N.45° - 60°E. with a dip of 24° to the SE. (See photograph #1.)

Thrust fault number 13 (see photograph #2) strikes N.45° - 60°E. and dips 45° - 50° SE. The plane of this fault cuts the north wall of the pumping station and trends southwest across the floor of the excavation for approximately 80 feet where it is visible in the west wall.

Both of these faults are characterized by highly contorted beds in the upper plate that form tightly folded plunging anticlines and synclines. The lower plate shows little contortion of the beds which are dipping 25° - 30° SE. Both of these fault planes are calcite healed, but become weathered as they near the top of rock.

Fault number 14 is a series of N.0° - 10°E. trending transverse faults which dip 80° - 90° to the east and are calcite healed. The longest of these is visible for approximately 40 feet with a maximum 6 inch displacement of the beds. (See attached map and photographs #3 and #4.)

These faults are not considered to be capable of producing ground offsets or generating earthquakes. Therefore, we do not consider them as capable faults, within the meaning of Appendix A to 10 CFR Part 100.

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INTAKE PUMPING STATION

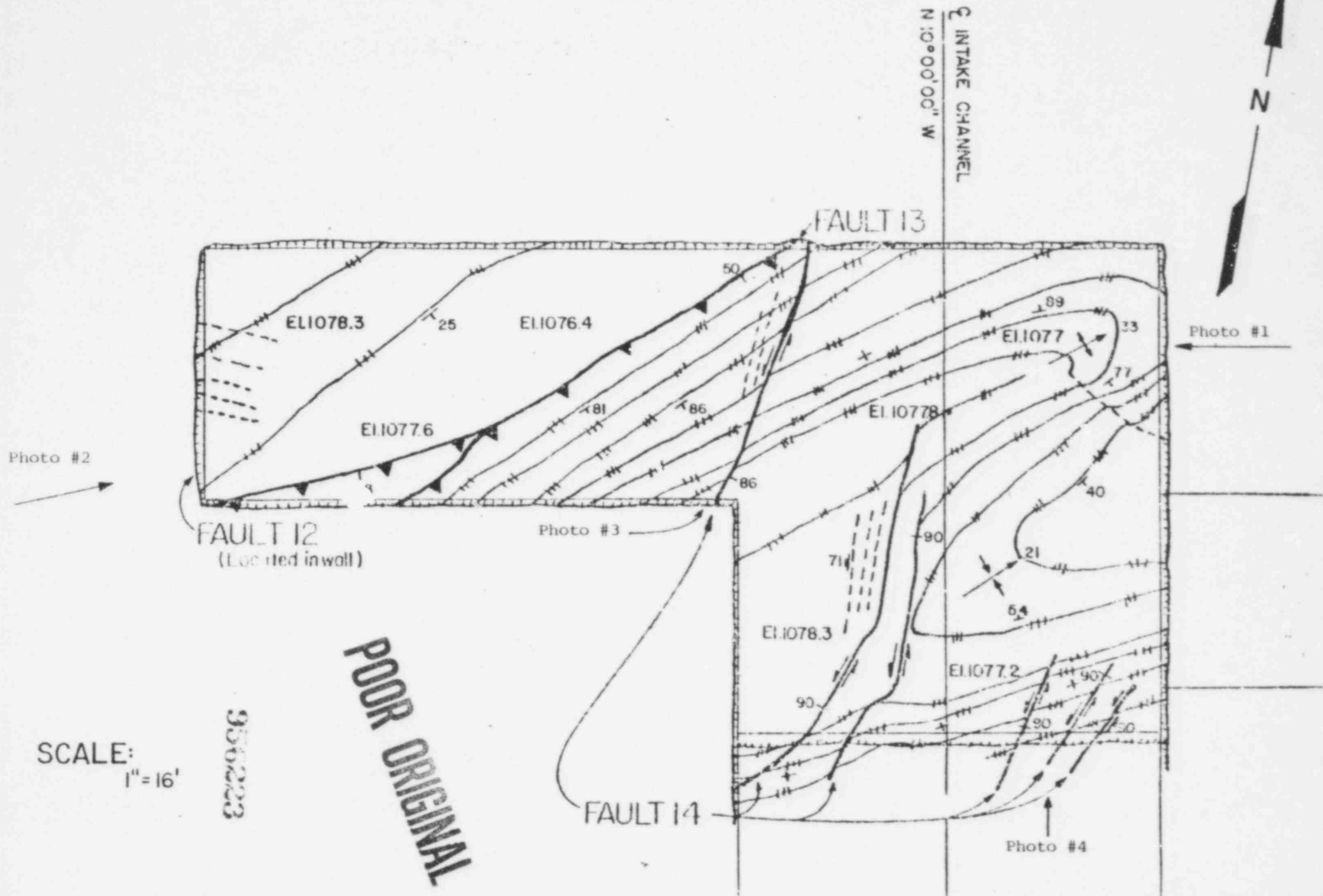




PHOTO #1 - Faults #12 & #13
View West



PHOTO #3 - Fault #14
View North

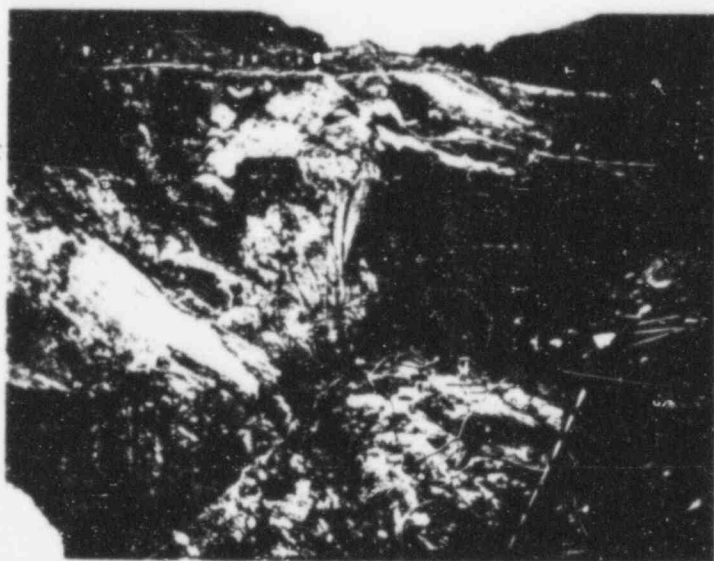


PHOTO #2 - Fault #13
View Northeast

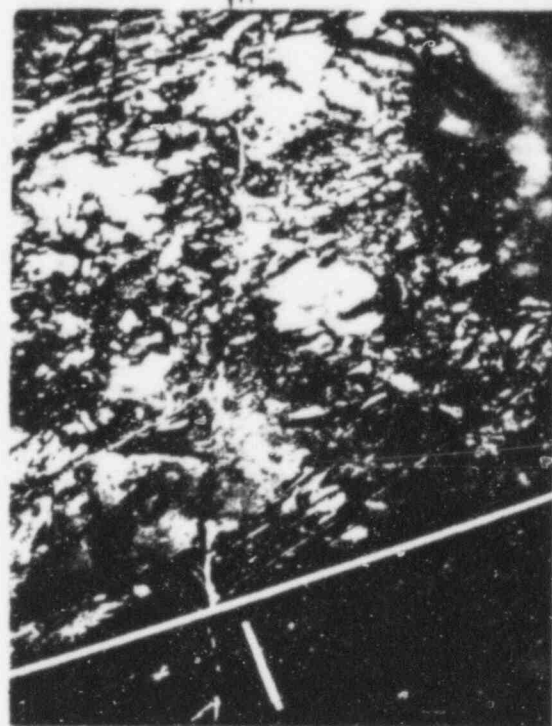


PHOTO #4 - Fault #14
View North

POOR ORIGINAL

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