

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Conservation and Survey Division

Natural Resources, School of

1997

Field Trip Guide (for the Nebraska Well Drillers Association) Northeastern Nebraska Geology

S. Olafsen Lackey

University of Nebraska-Lincoln, slackey1@unl.edu

R. F. Diffendal

University of Nebraska-Lincoln, rdiffendal1@unl.edu

R.R. Burchett

University of Nebraska - Lincoln

D. A. Eversoll

University of Nebraska-Lincoln, deversoll2@unl.edu

R.A. Tremblay

University of Nebraska - Lincoln

Follow this and additional works at: <https://digitalcommons.unl.edu/conservationsurvey>

 Part of the [Geology Commons](#), [Geomorphology Commons](#), [Hydrology Commons](#), [Paleontology Commons](#), [Sedimentology Commons](#), [Soil Science Commons](#), and the [Stratigraphy Commons](#)

Olafsen Lackey, S.; Diffendal, R. F.; Burchett, R.R.; Eversoll, D. A.; and Tremblay, R.A., "Field Trip Guide (for the Nebraska Well Drillers Association) Northeastern Nebraska Geology" (1997). *Conservation and Survey Division*. 241.

<https://digitalcommons.unl.edu/conservationsurvey/241>

This Article is brought to you for free and open access by the Natural Resources, School of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Conservation and Survey Division by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

FIELD TRIP GUIDE

(for the Nebraska Well Drillers Association)

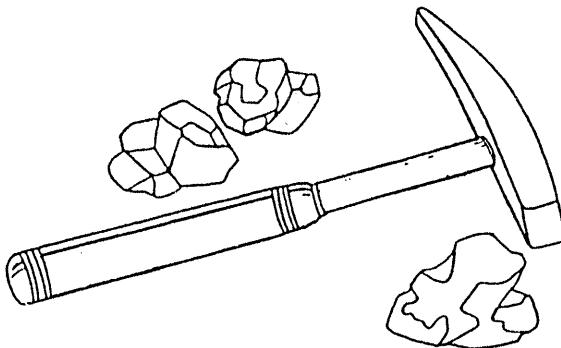
NORTHEASTERN NEBRASKA GEOLOGY

Sue Olafsen Lackey, Robert F. Diffendal, Jr.

Raymond R. Burchett and Duane A. Eversoll

(Nebraska Geological Survey)

Rodney J. Tremblay (Nebraska Department of Health)



NEBRASKA GEOLOGICAL SURVEY

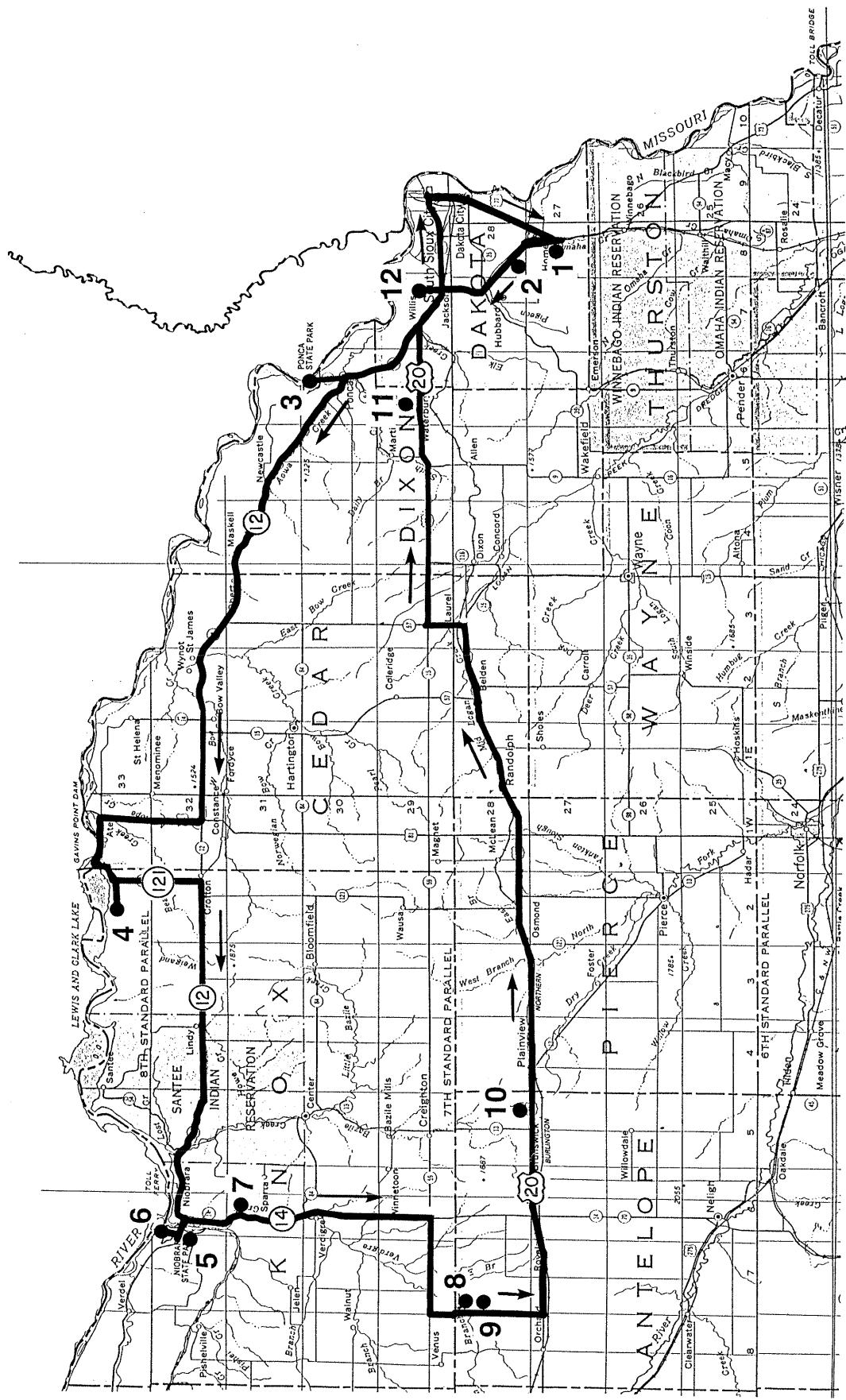
Conservation and Survey Division
Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln



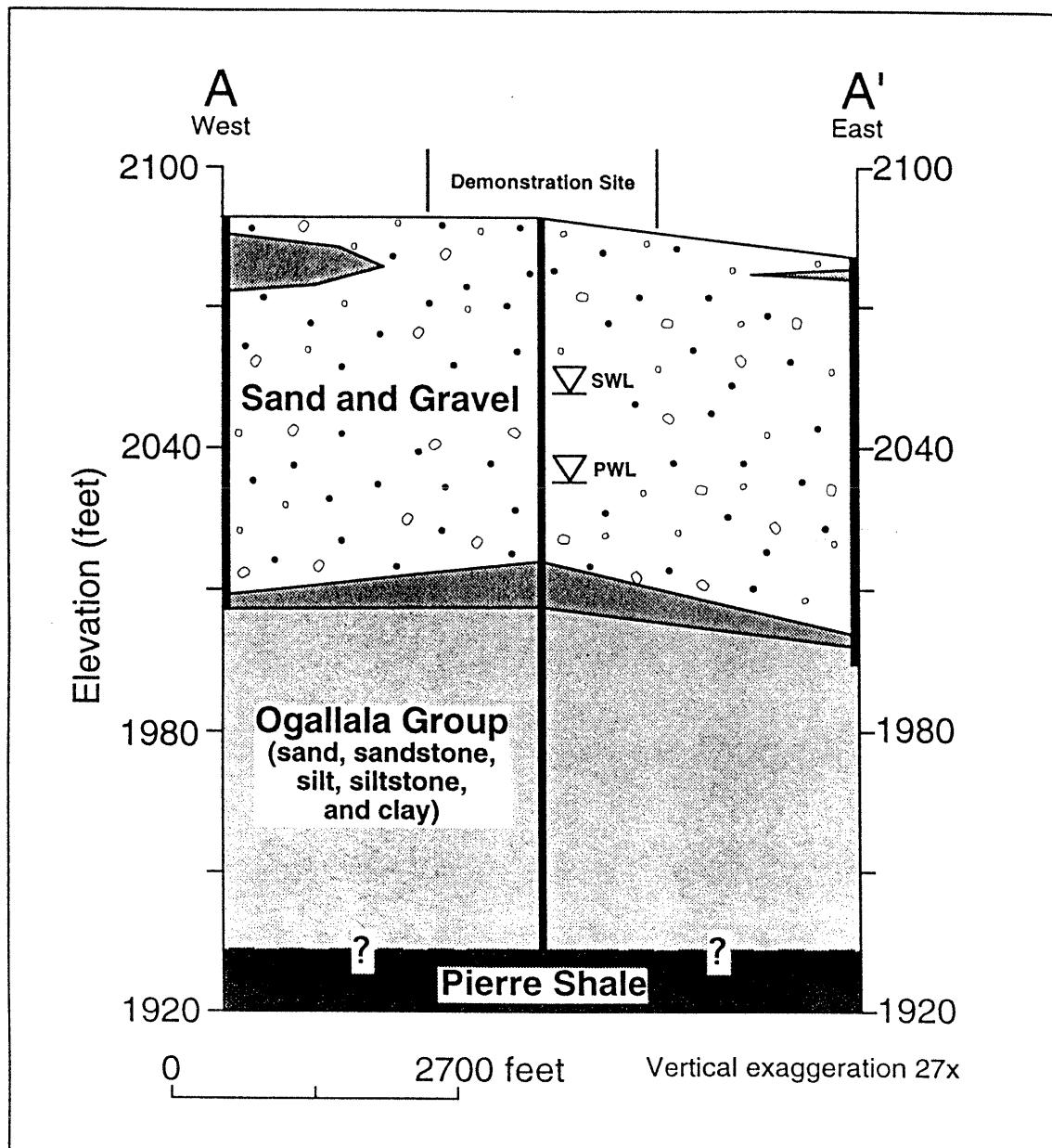
September 19, 1997



Index map showing location of stops

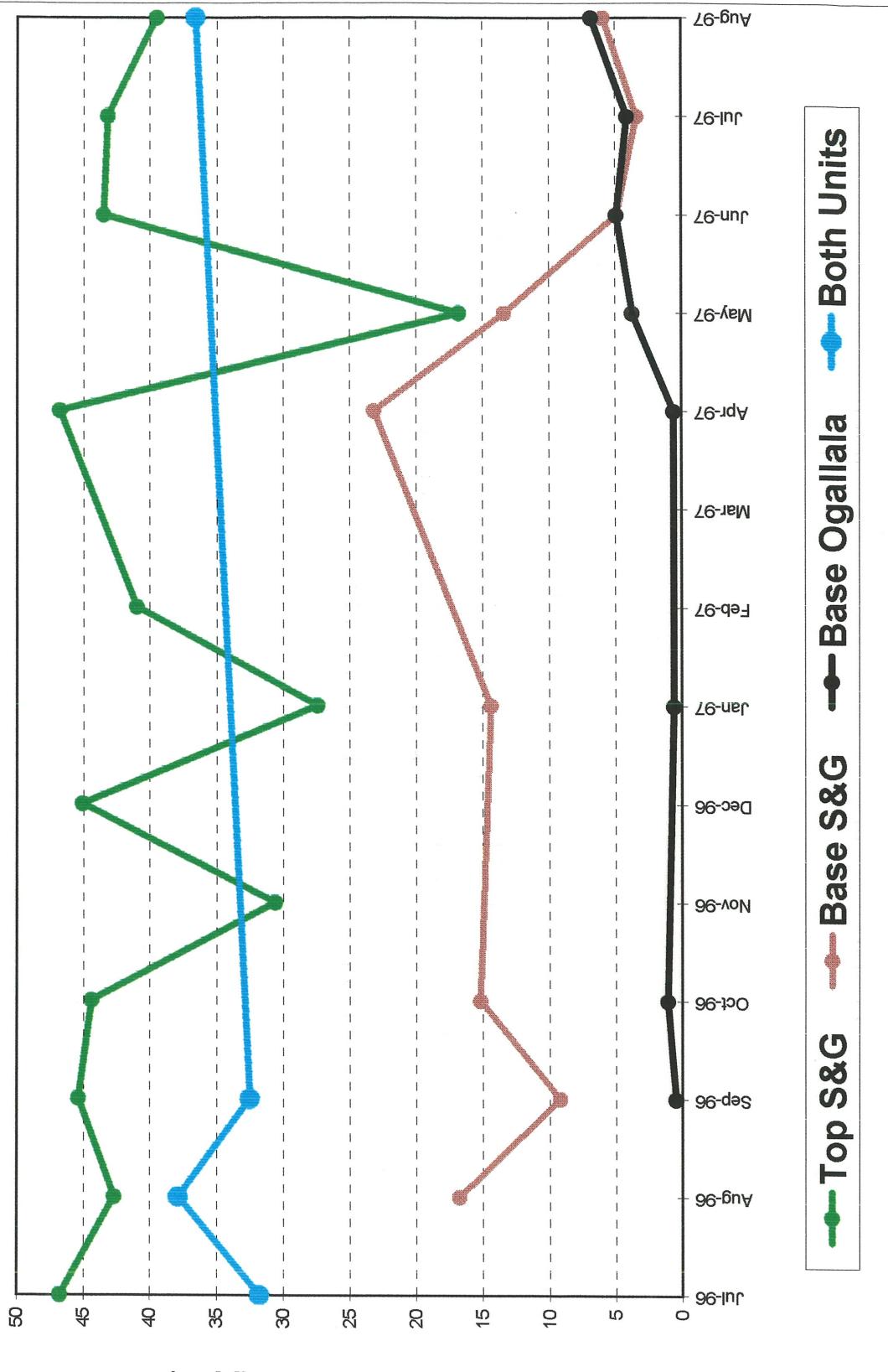


Atkinson Site

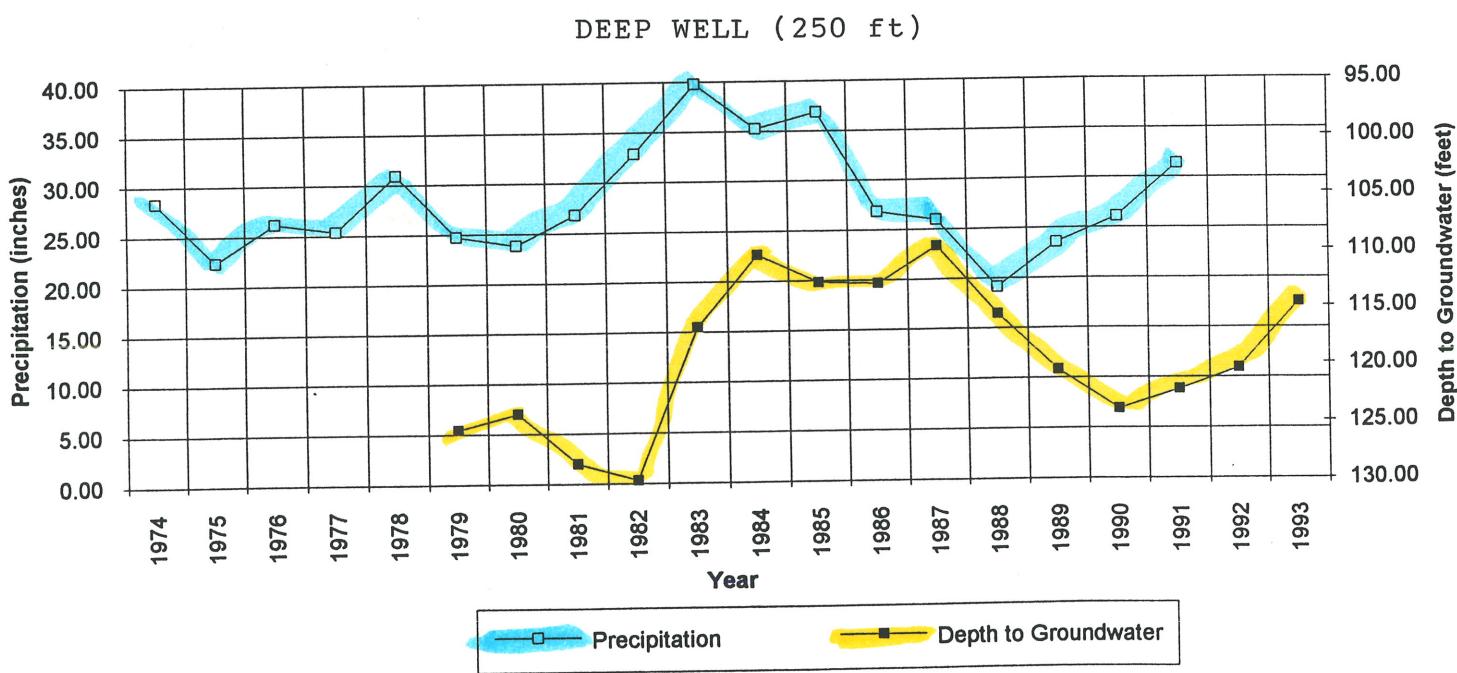
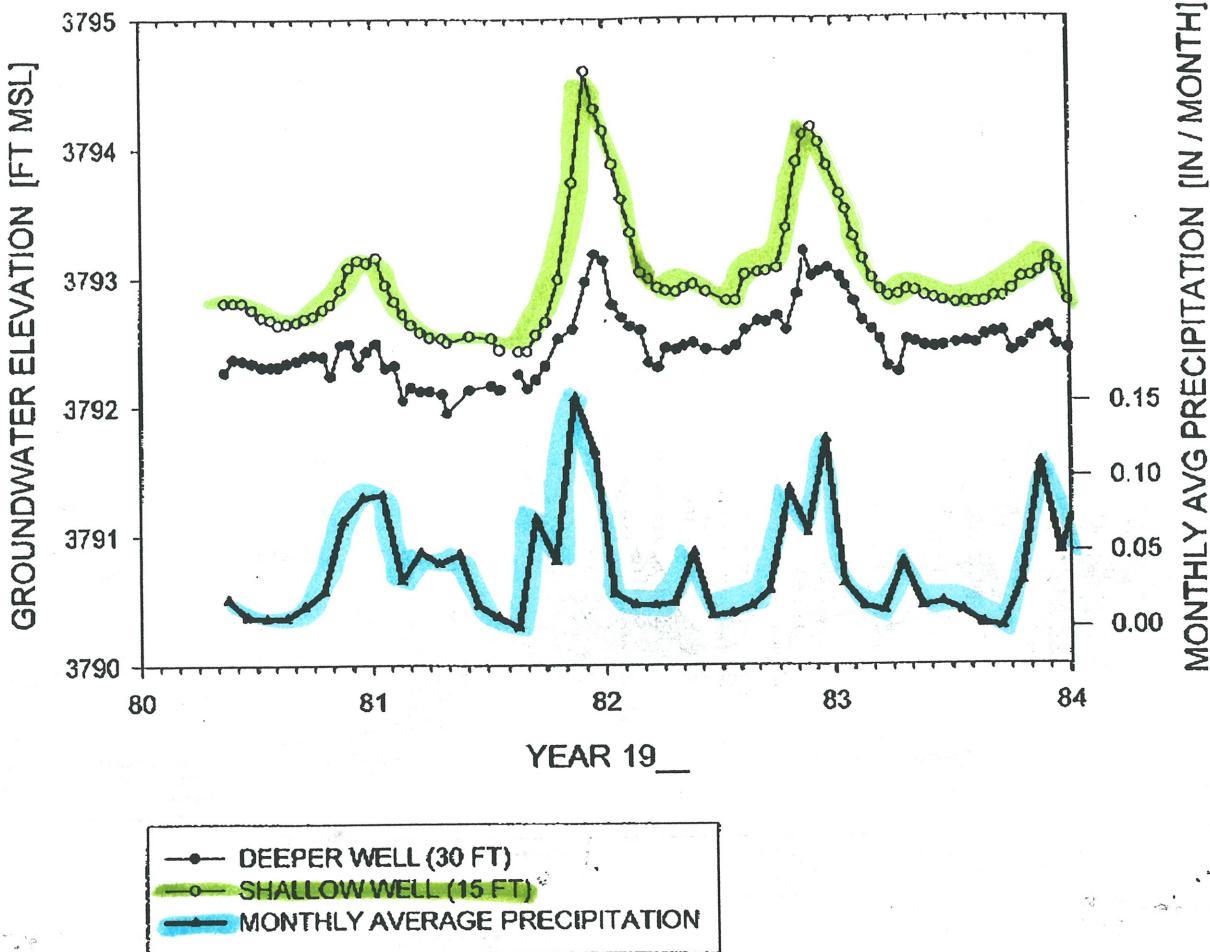


HOLT COUNTY GROUNDWATER EDUCATION PROGRAM

Atkinson Site Nitrate Concentrations



GROUNDWATER WELL RESPONSE TO PRECIPITATION DEEPER WELL VS SHALLOW WELL



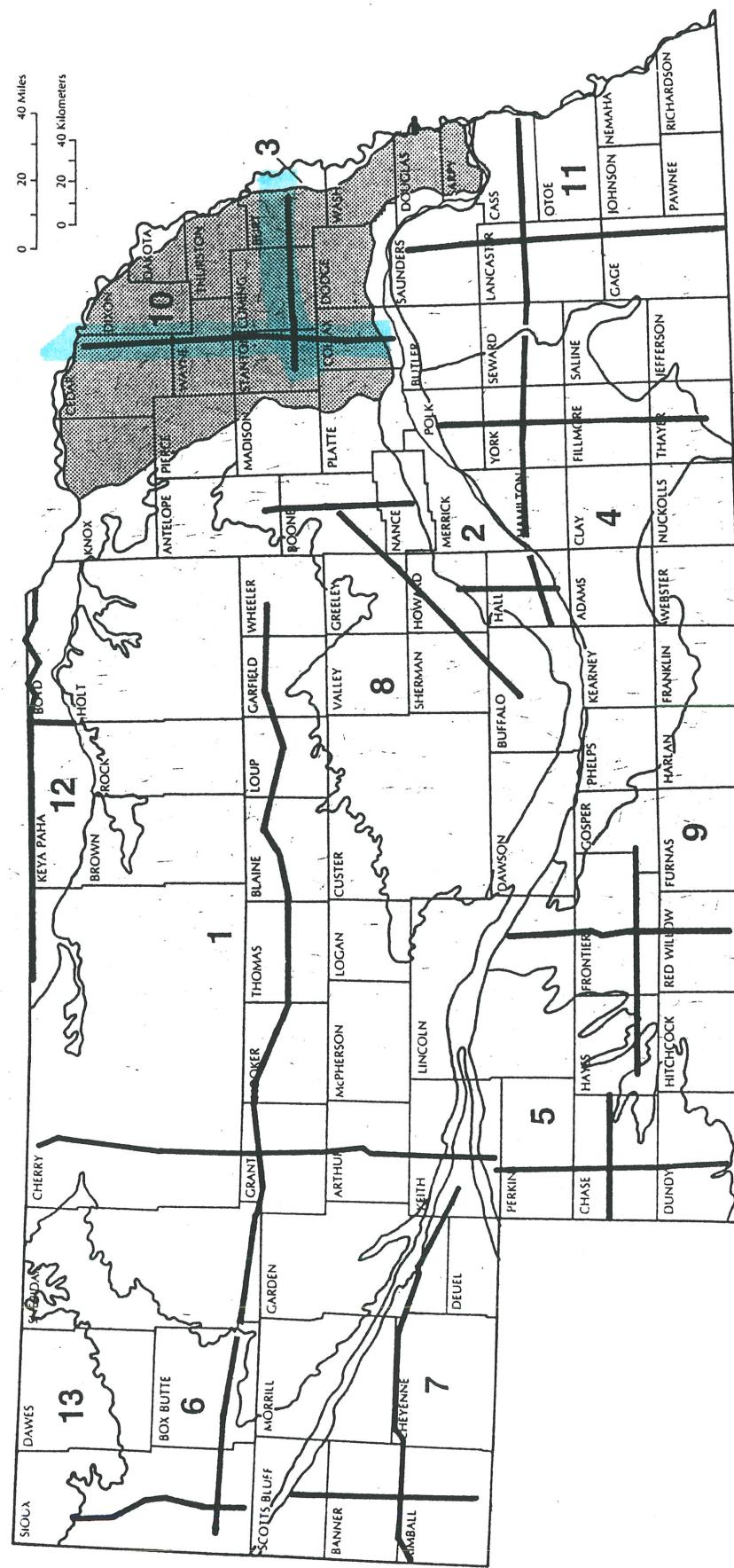
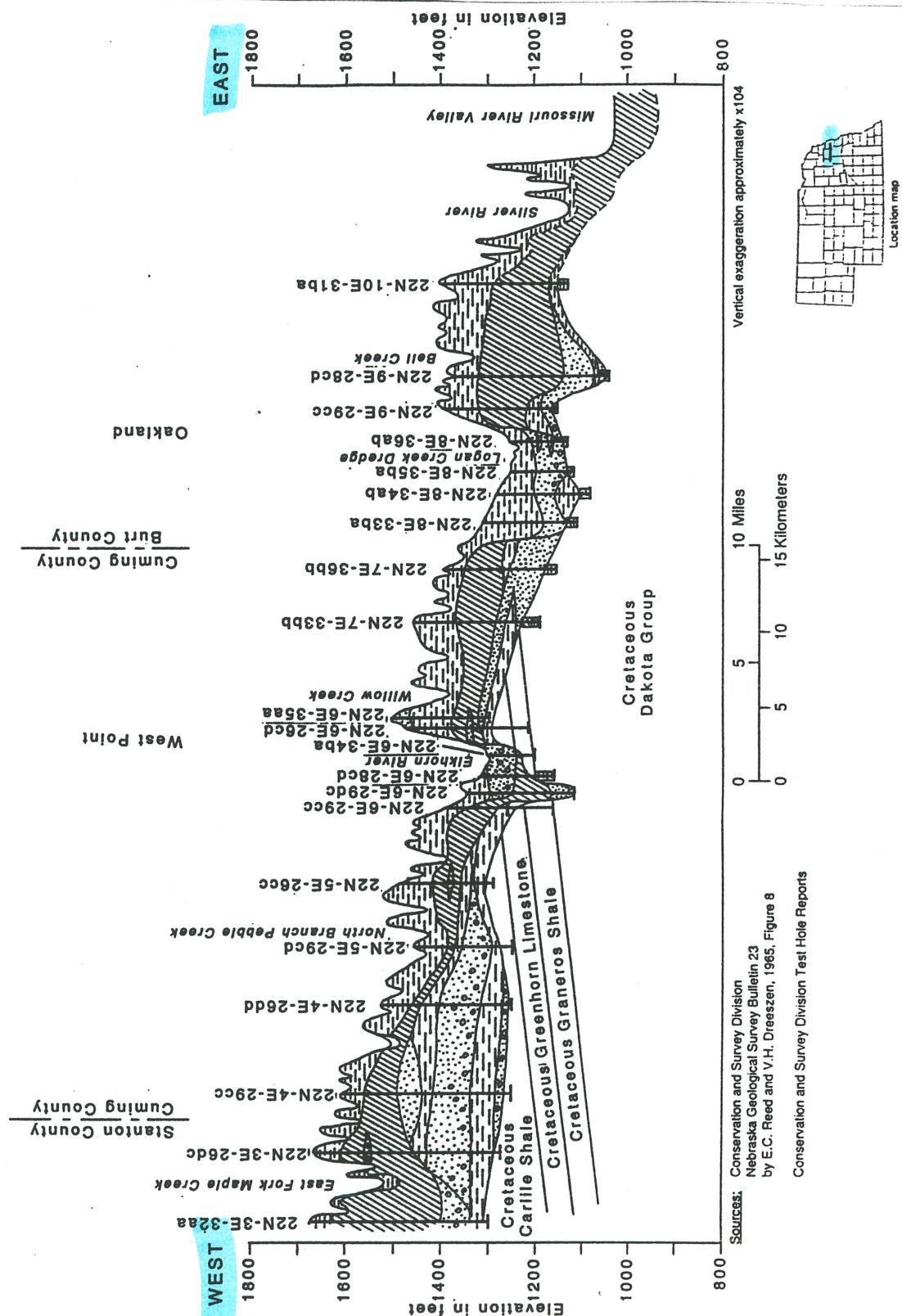
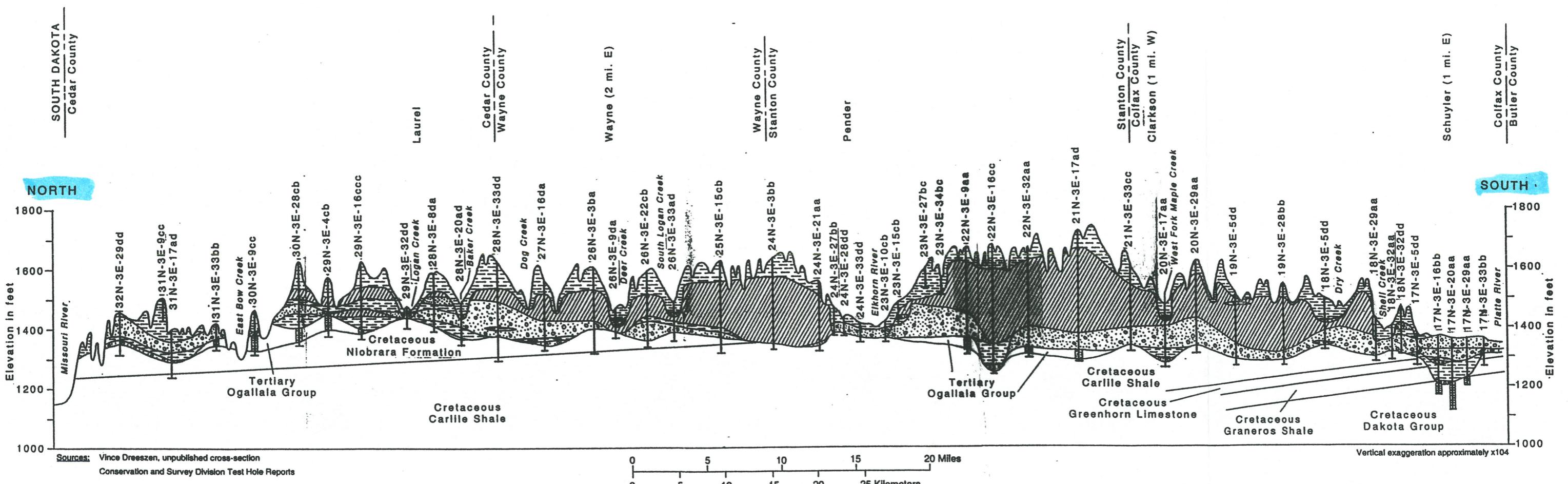


Fig. 1—*Locations of geologic cross sections (Region 10 in gray)*





Geologic materials

- Silt and clay
- Till
- Sand
- Sand and gravel

Materials in Ogallala Group and Dakota Group

- 21N-3E-29dd
- 31N-3E-9cc
- 31N-3E-17ad
- 30N-3E-9cc
- 30N-3E-4cb
- 30N-3E-16ccc
- 29N-3E-28cb
- 29N-3E-4da
- 28N-3E-20ad
- 28N-3E-8da
- 28N-3E-16da
- 28N-3E-33dd
- 26N-3E-3ba
- 26N-3E-9da
- 26N-3E-22cb
- 26N-3E-33ad
- Dog Creek
- Baker Creek
- Logan Creek
- Elkhorn River
- Deer Creek
- South Logan Creek
- 25N-3E-15cb
- 24N-3E-21aa
- 24N-3E-27bb
- 24N-3E-28dd
- 24N-3E-33dd
- 23N-3E-10cb
- 23N-3E-15cb
- 23N-3E-27bc
- 23N-3E-34bc
- 22N-3E-9aa
- 22N-3E-16cc
- 22N-3E-32aa
- 21N-3E-17ad
- 21N-3E-33cc
- 20N-3E-17aa
- West Fork Maple Creek
- 20N-3E-29aa
- 19N-3E-5dd
- 18N-3E-28bb
- Dry Creek
- Shell Creek
- 18N-3E-32dd
- 18N-3E-32aa
- 17N-3E-20aa
- 17N-3E-16bb
- 17N-3E-33bb
- Platte River

Test hole

Cross section illustrates general distribution of geologic materials.
Where additional geologic and stratigraphic information was available from published reports or from technical reviews, it was included on the section.