Redefinition of the Tectonic Features in Portions of Nebraska and Adjoining Areas

New Approaches to Exploration

Marvin P. Carlson
Nebraska Geological Survey

William H. Sydow
Nebraska Oil and Gas Conservation Commission
Structural Features, Region

[Map of structural features]
Structural Features, Nebraska

MINOR FEATURES
1. Richfield Arch
2. Denton Arch
3. Union Fault
4. Burchard Fault
5. Bed Canyon Fault

Approximate limits of selected arches
Diagrammatic Section across a Continental-Margin Subduction System

(modified from Hamilton, 1988)
Regional Uplifts

1. Hartville Fault (Sims et al., 1981)
2. Cheyenne Belt (Sims et al., 1981)
3. Agate-White River Fault (Swinehart et al., 1985)
4. Rocky Mountains
5. Morrill County High (Sonneberg and Weimer, 1981)
6. Nemaha Uplift
7. Wattenberg High (Sonneberg and Weimer, 1981)
8. Los Animas Arch (Sonneberg and Weimer, 1981)
9. Ord Arch (Carlson, 2000)
10. North Platte Arch (Carlson, 2000)
11. Cambridge Arch (Carlson, 2000)
Structures/Sutures

1 Hartville Fault (Sims et al., 1981)
2 Cheyenne Belt (Sims et al., 1981)
3 Agate-White River Fault (Swinehart et al., 1985)
4 Skin Gulch Shear (Tweto, 1980)
5 Morrill County High (Sonneberg and Weimer, 1981)
6 Idaho Springs Shear (Tweto, 1980)
7 Wattenberg High (Sonneberg and Weimer, 1981)
8 Los Animas Arch (Sonneberg and Weimer, 1981)
9 Ord Arch (Carlson, 2000)
10 North Platte Arch (Carlson, 2000)
11 Cambridge Arch (Carlson, 2000)
12 Central Kansas Uplift (Cole, 1976)
13 Rush Rib (Cole, 1976)
14 Northern boundary Granite-Rhyolite province (Van Schmus et al., 1993)
Revised Structural Features, Nebraska