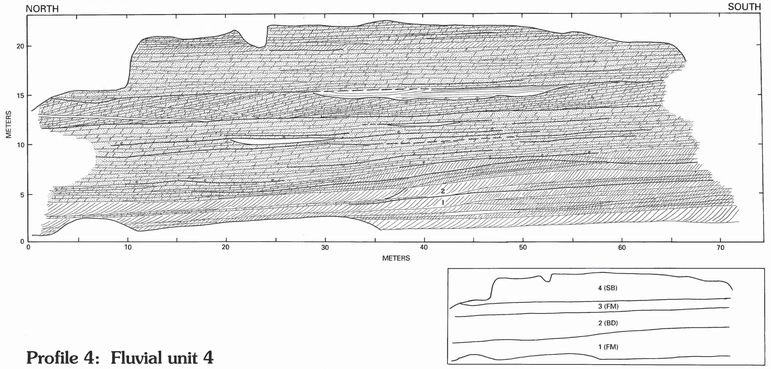
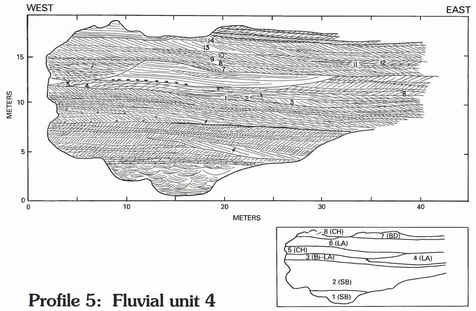
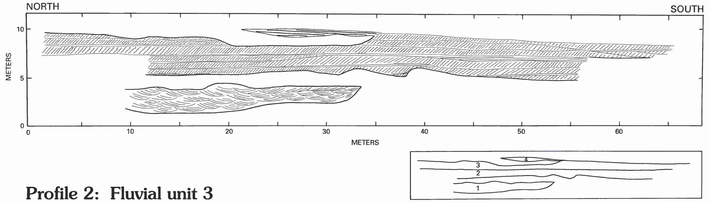


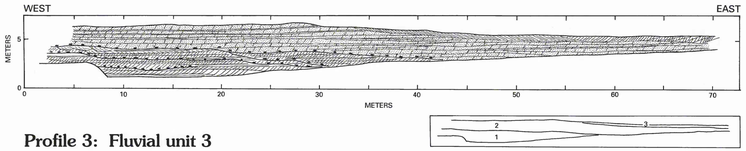
Profile 4: Fluvial unit 4



Profile 5: Fluvial unit 4



Profile 2: Fluvial unit 3



Profile 3: Fluvial unit 3

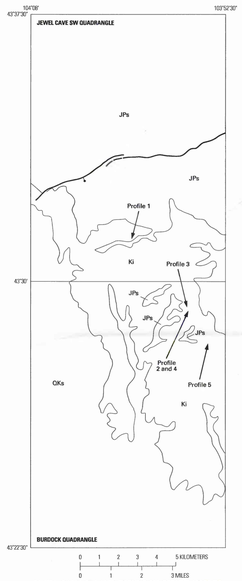
EXPLANATION

LITHOFACIES

- **Massive intraformational conglomerate** (Grm)
- **Erosional surface within sandstone** (Se)
  - **Intraclast strewn**
  - **Without intraclasts**
- **Massive sandstone** (Sm)
- **Laminated sandstone** (Slm)
- **Planar crossbedded sandstone** (Sp)
  - **Large scale (>30 cm thick)**—Drawn to scale
  - **Small scale**—Drawn schematically
- **Trough crossbedded sandstone** (St)
  - **Nested**—Drawn schematically
  - **Isolated**—Generally drawn to scale
- **Rippled sandstone** (Sr)
- **Fine-grained and carbonaceous partings** (Fp and Cp)
- **Paleocurrent symbols**—For crossbeds that have apparent dip close to zero in the plane of the profile. In this case, current flowed into the profile
- **Surface inferred across poor outcrop**

ELEMENTS (as labeled on index figures)

BD	**Bar-top deposit**
Bi–LA	**Bilateral accretion deposit**
CH	**Channelized element of any scale**
FM	**Foreset macroform**
LA	**Lateral accretion deposit**
MC	**Massive channel deposit**
OF	**Overbank fine-grained deposit**
SB	**Sandy bedform element**
3	**Numbers of feature or element discussed in text**



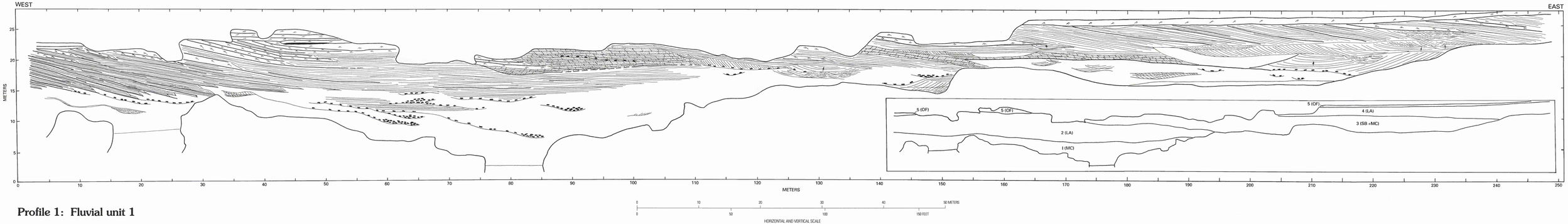
JEWEL CAVE SW AND BURDOCK QUADRANGLES
BASE MAP AND FORMATION CONTACTS FROM GOTT AND OTHERS (1974)

EXPLANATION

- OKs — **Sedimentary rocks (Quaternary to Cretaceous)**
- Ki — **Sedimentary rocks of the Inyan Kara Group (Fall River and Lakota Formations) (Lower Cretaceous)**
- JPs — **Sedimentary rocks (Jurassic to Permian)**
- **Fault in the Dewey structural zone**—Bar and ball on downthrown side

REFERENCE

Gott, G.B., Wolcott, D.E., and Bowles, C.G., 1974, Stratigraphy of the Inyan Kara Group and localization of uranium deposits, southern Black Hills, South Dakota and Wyoming: U.S. Geological Survey Professional Paper 763, 57 p.



Profile 1: Fluvial unit 1

LATERAL PROFILES OF FLUVIAL UNITS 1, 3, AND 4 OF THE LOWER CRETACEOUS LAKOTA FORMATION, CUSTER AND FALL RIVER COUNTIES, SOUTH DAKOTA

By
David J. Dahlstrom and James E. Fox

1995