

Key section 3. Measured along stream bank 2 miles southwest of Kelso and in road ditches 1 1/2 miles south of Parkerville, Morris County T: 15S R: 7E S: 16

Latitude: 38.746712 Longitude: -96.658482 Elevation (GL): 1412.0 Depth: 56.0

Depth	Stratigraphic Units		Rock Color	Lithology Rock Column	Sedimentary Structures	Fossils	Remarks
	Members	Formations					
0	Schroyer Limestone	Wierford Limestone					15. Limestone yellowish gray 14. Shale light gray very calcareous silty shaly bedded FOSSILS Globivalvulina Bulopora
5							13. Limestone dusky yellow weathers same medium hard thin wavy bedded chert-bearing uniform texture fine-granular 12. Shale yellowish brown very calcareous silty shaly bedded contains small limestone nodules basal portion covered with FOSSILS (a) Thamniscus (a) Polypora (c) Fenestrellina
10							11. Limestone grayish yellow weathers grayish yellow to moderate brown very hard thin bedded in upper and lower portions thick bedded in middle chert-bearing nonuniform 10. Shale yellowish brown calcareous silty shaly bedded FOSSILS Globivalvulina (a) Tetrataxis (a) Geinitzina
15	Havensville Shale						9. Limestone yellowish gray weathers dusky yellow hard thick bedded chert-bearing nonuniform texture subgranular matrix CHERT four beds numbered 1 to 4 in upward order (1) light gray to very light gray dark-gray calcareous chert at base 8. Shale grayish yellow very calcareous silty shaly bedded FOSSILS Rhombopora (s)
20	Threemile Limestone						7. Limestone light yellowish gray weathers same hard thin to medium bedded chert-bearing uniform texture very fine 6. Shale dusky yellow very calcareous silty shaly bedded calcareous nodules near top dark-gray limy lenses near center (0.1 foot thick) yellowish-brown shaly limestone at base is irregularly bedded as much as 2.5 feet in thickness FOSSILS Globivalvulina Tetrataxis Thamniscus Rhombopora Fenestrellina Composita Dictyoelostus Bezbyla productid spines sponges and plates crinoid stems minute gastropods
25							5. Limestone light grayish yellow weathers grayish yellow hard very thick bedded to massive very porous solution pits 2 cm or more across extend deeply into the rock chert-bearing uppermost foot is dusky yellow and nonporous four specimens taken at 5-foot intervals show the following: (1) nonuniform texture fine-subgranular matrix (2) crystalline at border (owing to weathering) locally crystalline within mostly fine-granular matrix (3) uniform texture fine-granular matrix (4) uniform texture finely crystalline matrix CHERT five main nodular layers numbered 1 to 5 in upward order (1) yellowish gray to very light gray (2) yellowish gray (3) light yellowish gray to very light gray containing scattered dark patches (4) grayish yellow to very light gray (5) light gray to very light gray FOSSILS Tetrataxis (c) Emmeretella (s) Dibunophyllum (s) Stereostylus (c) Fenestrellina (a) ramose bryozoan fragments encrusting bryozoans (c) Composita (c) productid spines sponges and plates crinoid stems chert contains fusulinids? Tetrataxis (c) ramose and fenestrate bryozoan fragments productid spines fossil debris 21.0 Loc. 66 SW sec. 30 T. 15 S. R. 8 E.
30							4. Limestone basal 0.5 foot light yellowish gray to dark gray mottled medium hard to soft shaly to thin bedded grades laterally into hard limestone limestone above is yellowish gray hard massive both chert-bearing nonuniform texture fine-subgranular matrix CHERT two beds numbered 1 and 2
35							3. Limestone pale yellowish brown to mottled light gray and medium dark gray weathers yellowish brown hard thick
40							2. Shale medium gray mottled dark gray very calcareous medium hard shaly bedded grades vertically and laterally to very argillaceous shaly bedded limestone base more persistently a limestone FOSSILS Tetrataxis (c)
45	Speiser Shale						1. Shale upper 2.2 feet light olive gray upper two very calcareous all silty top 2.2 feet shaly bedded FOSSILS upper 2.2 feet Cornuspira (s) Globivalvulina (s)
50							1. Shale next 1 foot dusky yellowish green upper two very
55							1. Shale next 1.5 feet grayish green two lower units noncalcareous all silty lower 2 feet weathers blocky base of 1. Shale basal 0.5 foot dusky

Primary Rock Lithology

- Shale
- Limestone
- Limestone (massive)
- Limestone (wavy)

Secondary Rock Lithology

- Shaly, shale
- Silty, Silt
- Cherty, chert
- Calcareous

Fossils

- Fresh Water
- Brackish Water
- Marine
- (F) Few
- (M) Many
- (B) Broken
- Macrofossils
- Trilobites
- Brachiopods
- Bryozoans
- Cnidarians
- Crinoids
- Echinoids
- Gastropods
- Pelecypods
- Sponges
- Vertebrates
- Microfossils
- Foraminifera
- Larger Foraminifera, or fusulin
- Ostracodes
- Spicules

Sedimentary Structure Symbols

Depositional Structures

- Bedding Base
- Abrupt or sharp, planar base of bed
- Stratification
- Horizontal bedding
- Parallel wavy bedding
- Normal grading/fining upward

Deformational Structures

- Nodules
- Nodules - Carbonates