ENCAMPMENT CREEK, ALASKA

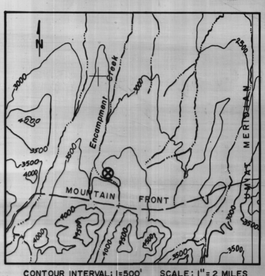
STRATIGRAPHIC SECTION

CHANDLER LAKE QUADRANGLE

LAT. 68° 17' 30"N
LONG. 152° 9' 6"W

SECTION MEASURED IN 70 METER HIGH SOUTH FACING BLUFF ON NORTH BANK OF ENCAMPMENT CREEK

Measured with Jacob Staff, June 1983
by Dirk A. Bodnar and
Teresa Imm

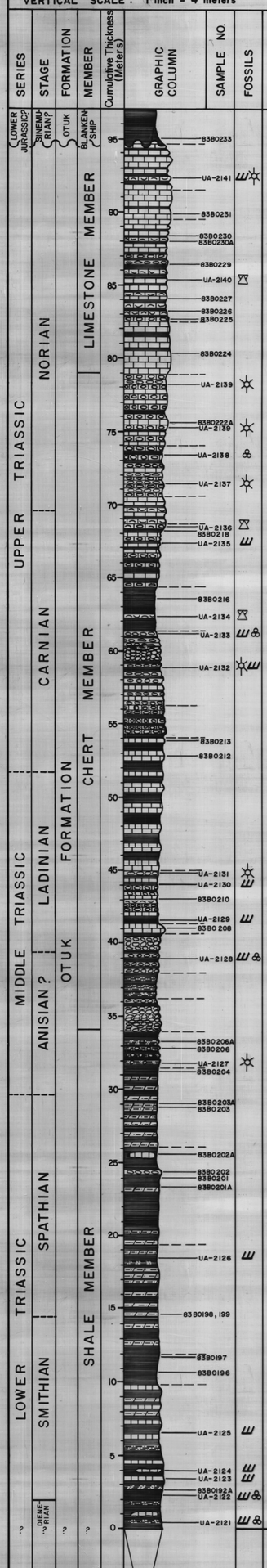


CONTOUR INTERVAL: 1=500' SCALE: 1" = 2 MILES

LEGEND

- Radiolaria
- Foraminifera
- Brachiopods
- Pelecypods
- Orthoconic Nautiloids
- Limestone
- Silicified Limestone (very cherty)
- Shale
- Limestone Nodules
- Ostracodes
- Conodonts
- Ammonites
- Belemnites
- Trace Fossils
- Siltstone, Dolomitic Siltstone
- Bedded Chert
- Fossiliferous
- Cherty Nodules

VERTICAL SCALE : 1 inch = 4 meters



LITHOLOGY DESCRIPTION

Top of section covered, silty black shale rubble for 5 meters, then moss and top of bluff.

Gray and black calcareous silty shale that weathers very fissile.

Rhythmically interbedded tan weathering fine-grained limestone, black shale and green-gray clay shale. Centers of shale breaks are green shale. Thin coquinoid beds of Monotis occur in shale breaks also. One meter thick cycles in which limestone, and black and green shale interbeds become consistently thinner up the section.

Evenly bedded tan weathering fine-grained limestone with minor interbedded thin gray non-calcareous shale. Beds up to 30 cm thick.

Rhythmically interbedded tan weathering limestone and calcareous black shale. Fossiliferous on bedding planes(Monotis). Pyrite nodules common. Limestone has some wispy laminations and banded weathering pattern. Interbeds of shale are separated by coquina of thin shelled pelecypods from limestone beds. One meter thick cycles in which limestone, and black and green shale interbeds become consistently thinner up the section.

Wavy bedded tan weathering limestone(90%) with interbedded silty green shale and black calcareous shale. Limestone beds to 20 cm thick.

Gray fine-grained limestone interbedded with banded black and tan silicified limestone and some calcareous black shale. Silicified limestone is thinly laminated. Gray limestone weathers tan.

Silicified limestone thinly interbedded with black cherts and black fissile calcareous shale. Limestone thinly laminated, black when fresh, weathers gray.

Thinly bedded black fossiliferous limestone with interbeds of sooty black calcareous shale. Halobia on bedding planes.

Black siliceous limestone thinly interbedded with black platy limestone and sooty black calcareous shale. Platy limestone is fossiliferous and strongly fetid (Halobia). The amount of limestone changes from 10% at base to 50% at the top of the interval with a concomitant decrease in amount of shale.

Black fossiliferous calcareous sooty shale interbedded with platy weathering black non-calcareous shale. (Monotis, Halobia)

Black chert rhythmically interbedded with silty black shale and minor thin gray limestone beds. Near top of interval is a lenticular silty dolomitic shale bed. (60% chert, 35% shale, 5% limestone)

Silicified limestone evenly interbedded with black and gray cherts and silty black shale. Very thinly laminated black silicified limestone.

Interbedded black limestone and sooty black calcareous shale. Limestone black crystalline when fresh. Top of the interval grades into unit above. There is a fold and possible fault in this interval.

Black calcareous sooty shale interbedded with black fossiliferous thinly laminated limestone. A few thin black cherty interbeds.(First pelecypods seen as one works upwards from base, Daonella).

Light gray limestone, fetid and has crinkly laminations.

Black chert and interbedded black fissile shale. Becomes more shaly up interval.

Black non-calcareous shale interbedded with green-gray siliceous silty shale and minor black chert.

Gray chert with interbedded black sooty shale.

Black non-calcareous shale interbedded with green-gray siliceous silty shales. Green-gray shales have some wispy laminations on a fine scale.

Black silty shale interbedded rhythmically with green-gray dolomitic siltstones. Beds very continuous on strike. Basal bed contacts sharp and grade into green-gray beds above. Wispy laminations and cross laminations in a few beds.

Black fissile silty shale with minor green-gray(5%) dolomitic beds. A few black chert beds and gray limestone nodules near the top of interval. A small poorly preserved ammonite was found in a small nodule.

Rhythmically interbedded black shale and green-gray dolomitic silty shale beds. Distinctive interbedded olive silty shale and black shale near top of the interval(17-18 meters). Individual black shale bed contacts have sharp bases and gradational tops with green-gray silty shales or siltstones. Aluminum tag attached to top of distinctive rhythmically bedded zone at 18 meters.

Black non-calcareous shale with minor green silty shale interbeds. Thinly bedded.

Black silty shale and rhythmically interbedded with light green silty shales, limestone beds and nodules. Some limestones show cross-lamination and most have laminated tops and bottoms with massive centers. Silty shales may be slightly dolomitic. Bedding contacts sharp or may be gradational and thinly interlaminated. Black shale near top of interval has starved ripples.

Base of outcrop, at creek level.

Strike N 60°W
Dip 25°N