

$\delta^{13}\text{C}_{\text{carb}}$ [‰VPDB]

-3 -2 -1 0 1 2 3 4

-1 σ (0.035)0.5 %
relative 1 σ -1 σ (0.094)

?

- Winsenberg Fm sediments (marl with thin shale and micrite, "Adorf Bänderschiefer")
- nodular limestone interbedded with marl
- limestone
- dark limestones
- limestone with pyrite weathering
- rhythmic limestone (Usseln)
- light shales
- brown shales
- black/grey shales

(e)

DEVONIAN

Upper

Frasnian

Famennian

upper rhenana

linguiformis

triangularis

1100 [cm]

clarki

1000

subop. lobifer

13c

900

FZ13b

800

700

600

500

FZ13a

400

300

200

100

FZ12

0

UKW

LKW

(a)

(b)

(c)

(d)

(e)

CaCO₃ [wt%] $\delta^{13}\text{C}_{\text{corg}}$ [‰VPDB]

0 25 50 75 100

-31 -30 -29 -28 -27 -26 -25 -24 -23

