GEOLOGICA CARPATHICA, AUGUST 2018, 69, 4, 315–334 doi: 10.1515/geoca-2018-0019

A calcite crisis unravelling Early Miocene (Ottnangian) stratigraphy in the North Alpine–Carpathian Foreland Basin: a litho- and chemostratigraphic marker for the *Rzehakia* Lake System

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(Manuscript received December 21, 2017; accepted in revised form May 31, 2018)

Abstract: Within the Lower Austrian part of the North Alpine Foreland Basin (NAFB), up to 1000 m of sediments were deposited throughout the Ottnangian (Early Miocene, Burdigalian). According to homogeneous compositions and sparse biostratigraphic resolution, a consistent stratigraphic concept from the basin margins into the foreland depocenter was still lacking. New investigations on several deep drill cores throughout the basin provide comprehensive sedimentological, mineralogical, chemical and micropaleontological data. A calcite poor, fossil- and pyrite-free, smectite-rich, up to 800 m thick interval was identified and correlated to the time interval of the late Ottnangian brackish *Rzehakia* Lake System. For this section, we introduce the term Calcite Minimum Interval (CMI). We define the onset of the CMI by a sharp decrease of calcite contents and the disappearance of autochthonous (and reworked) calcareous nannofossils. We define the termination of the CMI by the permanent increase of pyrite contents and the reappearance of calcareous nannofossils. The CMI as a litho- and chemostratigraphical marker for the *Rzehakia* Lake System constitutes a stratigraphic key horizon. Within the NAFB in Lower Austria, its onset corresponds to the middle/upper Ottnangian transition while its termination correlates roughly to the Ottnangian/Karpatian boundary. This allows a precise definition, identification and correlation of (upper) Ottnangian stratigraphic units of the NAFB. For the central basinal parts of the *Rzehakia* Lake System, we introduce the new lithostratigraphic term Wildendürnbach Formation which correlates to the marginal Traisen Formation.

Keywords: Stratigraphy, Early Miocene, late Ottnangian, Molasse Basin, *Rzehakia* Lake System, Calcite Minimum Interval.

Introduction

Stratigraphic correlation in foreland basins such as the Northern Alpine Foreland Basin (NAFB, Rasser et al. 2008) is often hampered by restricted marine environments, frequent and diachronous marine–non-marine facies changes due to tectonic control on regional subsidence and uplift, and the lack of basin-wide synchronous stratigraphic events (e.g., Harzhauser & Mandic 2008; Kováč et al. 2017; Sant et al. 2017b). Although the large-scale stratigraphic geometry and succession of foreland basins follow process-based first-principle models (e.g., Sinclair & Allen 1992; Sinclair 1997; Sissingh 1997) governed by flexural subsidence due to foreland-propagating orogenic loading and the evolution from underfilled (deep-marine) to overfilled (marginal marine-limnic) phases (Allen et al. 1991), detailed stratigraphic correlations and the identification of synchronous basin-wide markers pose a major problem (Sant et al. 2017b). Magnetostratigraphy and absolute dating of tuffs have improved correlations for parts of the NAFB from Austria to Switzerland (e.g., Schlunegger et al. 1996; Nehyba & Roetzel 1999; Reichenbacher et al. 2013; Roetzel et al. 2014; Sant et al. 2017a). Short regional climatic events (e.g., Böhme et al. 2008) expressed in the basin fill may provide a way for detailed correlation, with astronomical tuning providing means for establishing high-resolution time frames (Abdul Aziz et al. 2003).

Here we use litho- and chemostratigraphical approaches to unravel a prominent signal of reduced calcite contents at the transition from the NAFB to the Carpathian foredeep in Lower (eastern) Austria and link it to the Burdigalian sea-level lowstand and the corresponding late Ottnangian *Rzehakia* Lake System, a distinct depositional phase of the NAFB (Čtyroký 1968; Mandic & Ćorić 2007; Harzhauser & Mandic 2008). The stratigraphy in the study area was so far only resolved in low resolution and rather poorly defined in modern lithostratigraphic terms due to poor outcrop conditions as well as the lack of distinctive microfossils and magnetostratigraphic studies (e.g., Roetzel et al. 1999a, 2006; Ćorić & Roegl 2004; Piller et al. 2004, 2007; Wessely 2006; Mandic & Ćorić 2007; Harzhauser & Mandic 2008; Gebhardt et al. 2013). Although a large number of wells were drilled by the petroleum industry especially in the 1960s to 1980s, stratigraphic concepts and

correlations remained dubious and contradictory (e.g., Aniwandter et al. 1990; Hamilton 1997; Mandic & Ćorić 2007; Harzhauser & Mandic 2008; Gebhardt et al. 2013; Kováč et al. 2017; Sant et al. 2017b). Based on chemical and mineralogical data, a prominent and traceable event signal can be identified which constitutes a new tool to correlate synchronous deposits throughout the Lower Austrian Molasse Basin (LAMB) and to the Western Carpathians. We rely on correlations of industry well data with the surface geology to set up a modified lithostratigraphic concept for the late Ottnangian Lower Austrian part of the NAFB, the LAMB and its correlations to the west and east.

Geological setting

The easternmost part of the NAFB, the Lower Austrian Molasse Basin (LAMB), is situated at the transition to the Carpathian Foreland Basin and the Vienna Basin between the Bohemian Massif to the NW, the Alpine orogen to the S, and the Western Carpathian fold-and-thrust belt to the NE. It is part of the Central Paratethys paleogeographic realm (Fig. 1; Roegl & Steininger 1983).

During the Early Miocene (Burdigalian, Eggenburgian–Karpatian of the regional Central Paratethys stratigraphy, e.g., Piller et al. 2007; Krijgsman & Piller 2012), up to 2000 m of clastic pelitic and sandy sediments (as can be identified in the well Laa 1), often referred to as "Schlier", were deposited in the study area. These sediments show a homogeneous mineralogical and chemical composition. According to poor biostratigraphical resolution, the internal differentiation and correlations to Molasse successions to the west (e.g., Upper Austria and Bavaria, Rupp et al. 2008; Heckeberg et al. 2010; Reichenbacher et al. 2013; Pippèrr & Reichenbacher 2017; Sant et al. 2017b) and (north-) east (e.g., Čtyroký 1972; Čtyroký et al. 1973; Holcová 2001, 2002; Krhovský et al. 2001; Kováč et al. 2004, 2017; Šikula & Nehyba 2004) remained questionable. Additional problems arise, as the Ottnangian is subdivided into a marine lower and middle and a brackish upper Ottnangian in the west by use of benthic foraminifers (e.g., Rupp et al. 2008; Grunert et al. 2010a; Pippèrr & Reichenbacher 2017; Sant et al. 2017a). This subdivision is rarely aplicable for the LAMB where poor microfossil content and biostratigraphic resolution makes a precise chronostratigraphic attribution more challenging. Especially the distinction of a lower and middle Ottnangian remains

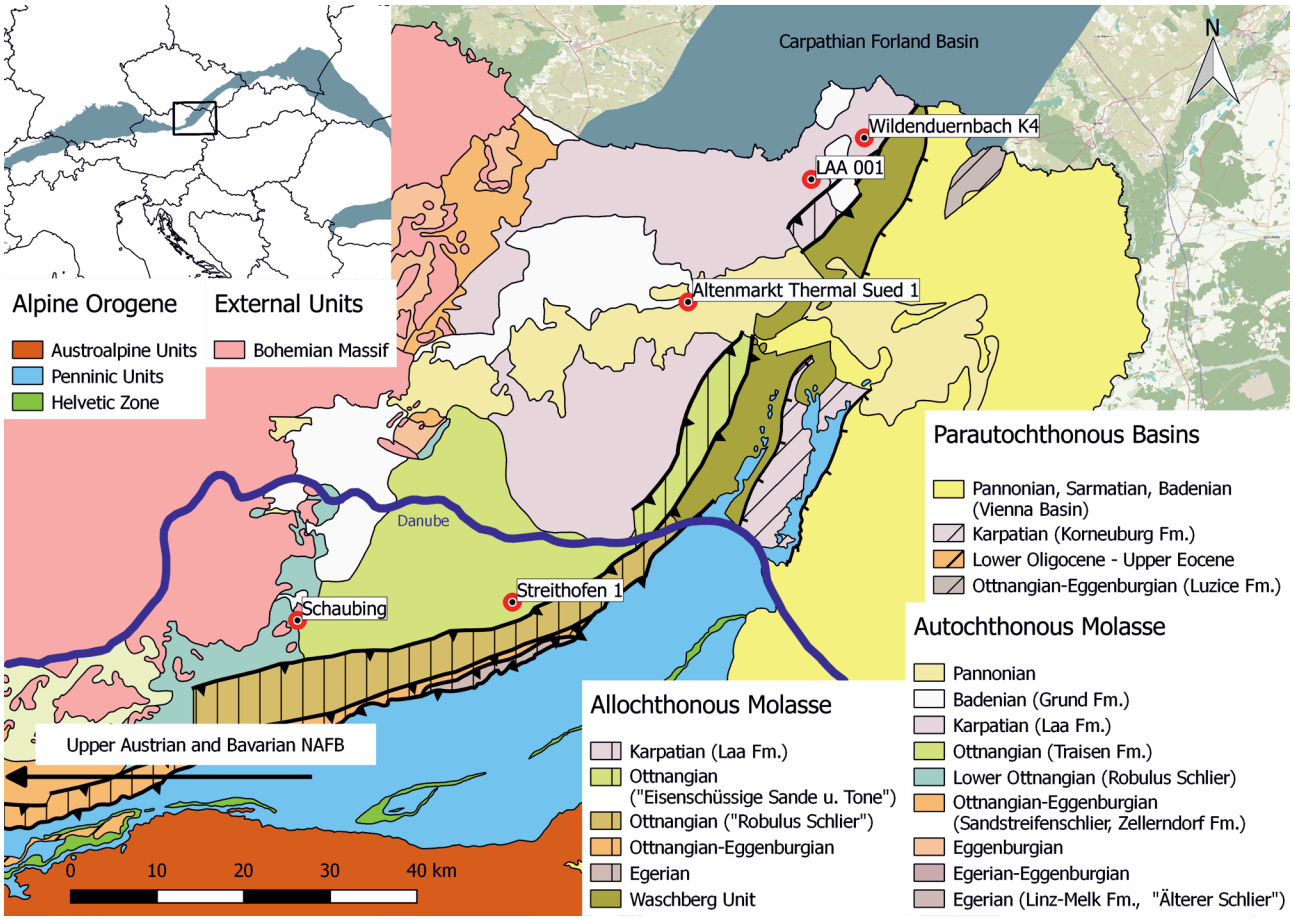

Fig. 1. Geological map of the study area in Lower Austria and investigated wells. Compilation of maps by Wessely (2006) and Schuster et al. (2015).

undefined regarding modern chronostratigraphy. Piller et al. (2007) describes the Ottnangian in the NAFB as a "*strictly twofold stage with a normal marine development in its lower part and a predominance of restricted marine to fresh water environments in its upper part*" (Piller et al. 2007, p. 155). Čtyroký (1968) already described the occurrence of brackish *Rzehakia* Beds or Series from Switzerland to the Caspian region. Harzhauser & Mandic (2008) defined the brackish *Rzehakia* Lake System which prevailed during the late Ottnangian in the sense of Piller et al. (2007).

The overview map (Fig. 1) based on Wessely (2006) shows the distribution of the lower Ottnangian "Robulus Schlier s.l. (sensu lato)" (Piller et al. 2004) at the southeastern rim of the LAMB. To the north, it is overlain by massive decalcified micaceous Ottnangian sands of the Traisen Fm. (Formation). The Traisen Fm. was defined by Gebhardt et al. (2013) and comprises the former outcropping *Oncophora* sands in Lower Austria south of the Danube. North of the Danube, the Traisen Fm. is overlain by the Karpatian Laa Fm. (Roegl et al. 1997). In contrast to the decalcified Traisen Fm., the calcareous Laa Fm. bears a distinct marine microfauna (Roetzel et al. 1999a, 2009; Roegl et al. 2002; Ćorić & Roegl 2004).

The Ottnangian north of the Danube is represented by the Zellerndorf Fm. (Roetzel et al. 1999c, 2006; Piller et al. 2004), which crops out at the NW rim of the LAMB to the Bohemian Massif. It is also overlain by the Karpatian Laa Fm. The delimitation of the Zellerndorf Fm. in the NW to the Traisen Fm. and the "Robulus Schlier" in the S is so far undefined. Whether the Zellerndorf Fm. correlates to the Traisen Fm., to the "Robulus Schlier s.l." or to both remains unsolved.

While numerous investigations where conducted on surface outcrops close to the Bohemian Massif in the NW and the Alpine front in the S (Roetzel 1991, 1992, 1994; Roetzel et al. 1999b, 2006; Roegl et al. 2002; Wessely 2006; Mandic & Ćorić 2007; Grunert et al. 2010b; Nehyba & Roetzel 2010; Wimmer-Frey et al. 2013; Gebhardt et al. 2014), the central and subsurface parts of the LAMB remained mostly uncharted except for oil industry internal reports (OMV AG, RAG) and few published papers (Aniwandter et al. 1990; Hamilton 1997; Ćorić & Roegl 2004). Consequently, the correlation of Ottnangian deposits throughout the LAMB remains challenging. In addition, sparse biostratigraphical resolution, high sedimentation rates and the absence of microfossils in large parts of the Ottnangian deposits complicate the development of a consistent (litho-) stratigraphic model in the LAMB.

Material and methods

Seven wells in a SW–NE transect throughout the LAMB were chosen for detailed investigations. Data of the more complete five wells are presented hereinafter: Schaubing (water well, data courtesy by Austrian Geological Survey), Streithofen 1, Altenmarkt im Thale 1, Laa 1 and Wildendürnbach K4 (Fig. 1; all well data except Schaubing courtesy of OMV AG). While the shallow (140 m) well of Schaubing offered a continuous core, all other wells provide 3–5 m long drill-cores with gaps of 50–200 m in between. Drill cutting samples were taken from these uncored intervals were necessary. A total of 280 drill core samples and additional 164 samples of cuttings were analyzed.

The carbonate-content was measured by a Carbonate Bomb (Mueller & Gastner 1971). A certain amount of sample-powder was placed in the Carbonate Bomb. The Bomb was closed and the sample-powder was mixed with 25% hydrochloric acid, which reacted with carbonate. The resulting CO_2 increased the air-pressure which was measured and allowed the determination of the carbonate content.

The bulk mineralogy was analyzed by X-ray diffraction (XRD) on oriented powders by a Panalytical X'Pert PRO diffractometer (CuKα radiation, 40 kV, 40 mA, step size 0.0167, 5 s per step). Semi-quantitative information was extracted by using peak intensities as counts per second (cps) of characteristic peaks with low or without overlapping problems with other minerals. Background values were subtracted from peak heights.

Dry powders were analyzed by a Bruker AXS TRACER IV-SD handheld Energy Dispersive X-ray Fluorescence (ED-XRF) instrument. The measured cps were used for inferring semiquantitative trends calibrated to internal quantitative data, for which elements/oxides were determined by ICP-MS by the ACME-Labs (now Bureau Veritas) in Vancouver/Canada.

For nannofossil analyses on 169 samples, smear slides were prepared according to the standard smear slide technique of Bown & Young (1998). The samples were analyzed using a Leica DM 2700P microscope (×1000 magnification) in parallel (bright field — BF) and crossed polarized light (XPL). The microphotographs were captured with a Leica MC170 HD camera. Relative abundance/sample was assessed as follows: A — Abundant (21–50 specimens/Field of View FOV), C — Common (11–20 specimens/FOV), F — Few (1–10 specimens/FOV), R — Rare (1–10 specimens/10 FOV), VR — Very rare (1 specimen/>11 FOV) and B — barren of nannofossils. Preservation was noted with G — good, M — moderate and P — poor. We refer here to the standard zonations of Martini (1971) and Okada & Bukry (1980), based on the First Occurrence (FO) and Last Occurrence (LO) of the zonal markers species. 50 samples were chosen for organic walled dinoflagellate cysts. The sample preparation method is described in Soliman (2012). Data were imported to a relational access database allowing for combined analyses. Excerpts of this database are presented here.

Results

Wildendürnbach Formation

To solve the problems and contradictions concerning the correlation of Ottnangian deposits, (especially the former

outdated term "*Oncophora* Beds"), we hereby introduce a new lithostratigraphic unit, the Wildendürnbach Fm. It represents the upper Ottnangian deposits of the Rzehakia Lake System in the central LAMB. The detailed formalization and definition of the herein newly defined Wildendürnbach Fm. can be found in Appendix A.

Formerly used terms are inapropriate for the deposits of the Wildendürnbach Fm. The term "Robulus Schlier s.l." (as an extension of the term "Robulus Schlier s. str." in Upper Austria) is poorly defined in Lower Austria and usually comprises calcareous pelitic deposits with a marine fauna. The Traisen Fm. is precisely defined from outcrop studies and includes proximal, massive sands exposed in the southern parts of the basin (Gebhardt et al. 2013). The Zellerndorf Fm. includes an interval of calcareous marine pelites and comprises all of the Ottnangian (and even the upper Eggenburgian, e.g., Roetzel et al. 1999a, 2006, 2014). "*Oncophora* Beds" is a widely and sometimes erroneously used term, e.g., for strata without any sign of the bivalve "*Oncophora*" or "*Rzehakia*" (Aniwandter et al. 1990; Čtyroký 1972; Gebhardt et al. 2013; Hamilton 1997). The term "Fisch Fazies" usually used in petroleum industry well profile descriptions is poorly defined, not described in surface outcrops and unknown to many surface geologists.

Well descriptions

The 144 m deep well Schaubing (SCHB, Fig. 2) offers a continuous 144 m long drill core section from the crystalline basement to the surface. The basal Bohemian Massiv granulites are overlain by a conglomerate and monotonous carbonate-rich silts interlayered with coarse-grained sands of reworked granulites. From 112 m upwards, marly silts rich in fish-scales become frequent. At 72 m, a bed of fine-grained micaceous sands interrupts the pelites and is followed by a carbonate-poor clay layer of 5 m thickness. The clastic input starts to increase at 40 m. Massive sands interrupted by carbonate-cemented sandstones dominate above 25 m.

The 1300 m deep well Streithofen 1 (STRTH-1) comprises a profile of 3–5 m thick drill core sections every 50 m (except in the uppermost 300 m) from the surface to the crystalline basement. The crystalline basement is overlain by quartz rich sandstones and coaly clay to siltstones. The coaly beds are tectonically fractured and show pieces of polished slickensides. At 1120 m, strongly bioturbated bluish sandstones occur. At 1100 m, they are overlain by the typical "Schlier" succession of layered muddy clay, silt and sandstones. Sands show partly erosional bases and planar lamination, but structureless massive sand layers dominate. A decrease in carbonate content was recognized at 850 m. Self-Potential-Logs indicate the increase of coarse clastic sediments at 780 m. The upper 800 m are dominated by micaceous, massive sand packages interrupted by carbonate cemented layers, fining upward cycles, rip up clasts, planar laminations and convolute bedding. Few pelitic interlayers were detected.

The 3200 m deep well of Altenmark T1 (ALT-T1) offers 3–5 m thick drill core sections every 100–200 m. Cutting samples were taken every 30–50 m to fill the gaps. At 1205 m, a breccia of (Mesozoic?) carbonate clasts and a sandy matrix is discordantly overlain by a strongly bioturbated sandstone. From 1070 m to 530 m, light grey micaceous sands with partly turbiditic structures grading into yellowish to brownish muds, dominate the drill cores. These sands are interrupted by bluish-grey, mm-laminated shale. Self-Potential-Logs indicate pelitic intervals interrupting the turbiditic succession at 790–735 m and 690–675 m. At 505 m, yellowish muds occur.

Two drill core sections of good preservation from the 3100 m deep well Laa 1 (1633–1638 m; 1794–1799 m) were available. The cores show turbiditic structures and were dominated by light grey micaceous sands and brownish muds and muddy sands containing numerous clay clasts. Many erosional surfaces are present. A bluish-grey, mm-laminated shale constitutes the background sedimentation. Plant fragments and fish scales commonly occur. Cuttings and Self-Potential-Logs indicate a homogeneous pelitic sedimentation from 1945–1550 m followed by a turbiditic sand-dominated sedimentation up to 935 m interrupted by several pelitic intervals (1400–1356 m; 1275–1250 m; 1190–1170 m).

The 2600 m deep well of Wildendürnbach K4 (WDK-4; Fig. 3) offeres a large number of 3–5 m thick cored sections. Unfortunately, 20–80 % of the original material is missing. Most cores are unsorted and the origin of several pieces is questionable according to divergent drill core diameters. Nevertheless, the overall characteristics can be recognized. Below 1500 m, strongly bioturbated fine-grained and massive sands occur. Fish scales are common. Between 1500–1250 m (supported by Self-Potential-Logs), a bluish-grey, pelitic background sedimentation interrupted by turbiditic sands and few debris flows or slumps occur. The turbiditic sands become more frequent to the top. According to Self-Potential-Logs and drill cores, the amount of sands and muds strongly increases between 1250–1135 m, while pelites dominate between 1135–1045 m. Up to 800 m, massive sand dominated intervals alternate with pelitic intervals. At 750 m, the sediments are again dominated by pelites. The turbiditic sands are light grey, micaceous and carbonate bearing and contain clay clasts and plant remnants. The mm-laminated bluish-grey pelites usually contain fish scales and offer changing carbonate contents.

Micropaleontology

101 of the 169 samples proved to be barren of nannofossils, and 26 yielded only few individuals. These samples were investigated only qualitatively (presence/absence data). The calcareous nannofossil association is highly diverse and contains well to poorly preserved specimens (Fig. 4; Appendix B for full taxonomic list and Appendix C "Calcareous Nannofossil Data"). In general, the species belonging to the autochthonous assemblage are better preserved than the reworked ones. In this study, the long ranging taxa such as: *Coccolithus pelagicus, Cyclicargolithus floridanus, Reticulofenestra minuta* and *Braarudosphaera bigelowii* were considered as being part of

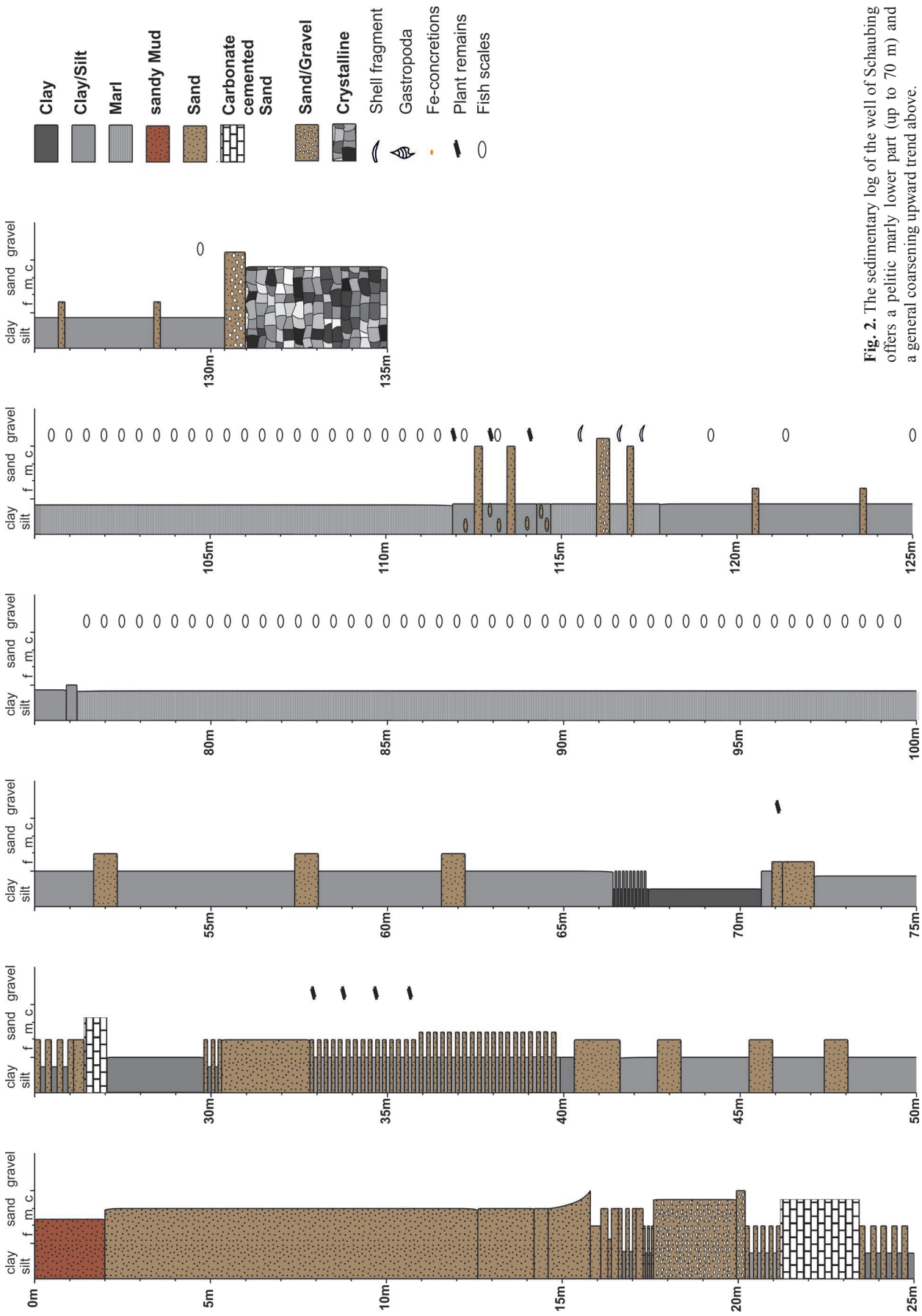

Fig. 2. The sedimentary log of the well of Schaubing offers a pelitic marly lower part (up to 70 m) and a general coarsening upward trend above.

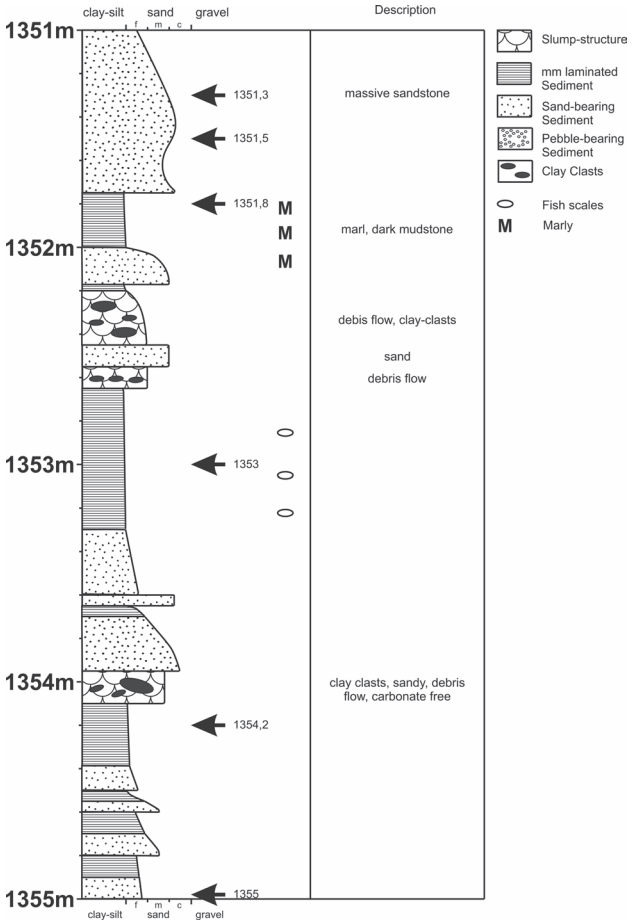

Fig. 3. The sedimentary log of Wildendürnbach K4 between 1355–1351 m is presented as a facies example for the analysed drill cores of the Wildendürnbach Fm. Drill core intervals comprised 1–5 m with gaps of 40–250 m in between. Pelitic deposits interrupted by turbiditic fining upward cycles or other mass movements such as mudflows are common.

the autochthonous assemblage. The assemblage contains 46 species, being dominated by: *Coccolithus pelagicus, Reticulofenestra minuta, R. pseudoumbilicus, Helicosphaera ampliaperta, Syracosphaera* spp. (*S.* cf. *pulchra* and *S.* cf. *oneillii*), *R. haqii, Coronosphaera mediterranea* and *Braarudosphaera bigelowii*. Rare to very rare presence have *Acanthoica* sp., *Calcidiscus* spp., *Coronocyclus* spp., *Cyclicargolithus floridanus*, *Discoaster* spp., *Helicosphaera mediterranea*, *H. carteri*, *H. scissura*, *H. vedderi*, *Helicosphaera* sp., *Hughesius tasmaniae*, *Pontosphaera multipora*, *Reticulofenestra ampliumbilicus*, *R. gelida*, *Sphenolithus* spp., *Triquetrorhabdulus* sp., *Thoracosphaera* sp., *Umbilicosphaera jafari* and *U. rotula*. Other species with rare occurrence can be seen in Appendix B.

Intervals lacking nannofossils occurred in all wells (Appendix D). In the well of Schaubing, all samples above 80 m depth were barren. In the well of Streithofen 1, all except three samples above 855 m depth were barren. The samples at 853.8 m, 654.8 m and 151.5 m contained only few specimens. The well of Altenmarkt T1 offered a barren interval between 1030–801 m depth with one exception at 870 m (103 specimens). The samples at 780 m and 760 m were very poor in nannofossils (<5 specimens). In the well of Laa 1, all samples between 1840–1360 m depth except one at 1630 m (3 specimens) were barren while underlying and overlying samples contained partly numerous specimens. Finally, in the well of Wildendürnbach, all samples below 1055 m except one sample at 1254.3 m (307 specimens) proved to be barren.

The samples investigated for dinoflagellate cysts were barren or offered a strongly reduced amount of specimens (Appendix E) in the same intervals as the calcareous nannofossils were impoverished. In the well of Schaubing, all investigated samples between 131–65 m depth contained dinoflagellate cysts. However, while all samples below 80 m contained more than 100 specimens, the two uppermost samples contained only sparse specimens (At 72 m depth 26 specimens, at 65 m depth, only 10 specimens).

In the well of Streithofen 1, all samples contained less than 100 specimens. While all samples below 990 m contained between 6 to 74 dinoflagellate cysts, most samples above 965 m depth are barren. Only the uppermost three samples (249.3 m, 151.5 m, 53.8 m) contained a very low amount of two to seven specimens.

In the well of Wildendürnbach, all samples between 1533–1301 m were barren while the lowermost sample at 1563 m and 8 of 10 samples between 1254.5–753 m contained dinoflagellate cysts. The samples between 1155–1051 m offered only very few (>12) dinoflagellate cysts.

Mineralogy

The investigated samples consist of varying amounts of quartz, K-feldspar, plagioclase, calcite, dolomite, muscovite, chlorite and pyrite. Kaolinite, halite, gypsum and glauconite were detected in several samples. Carbonate contents (weight %) range between <5–40 % with few outliers of carbonate-cemented sands. As the primary carbonate content is the matter of interest here, diagenetically carbonate-cemented sands were excluded from the profiles or they are ignored in the interpretation. Clay mineralogy analysis indicate varying amounts of smectite, illite, chlorite and kaolinite.

Discussion

Calcite Minimum Interval

Depth profiles of carbonate content, XRD peak heights of calcite and pyrite and XRF cps of Ca (Figs. 5–12) indicate a prominent, up to 800 m thick interval within the pelites of the investigated profiles. While carbonate contents range between 15–25 % below and above, they fall mostly below 12 % within this interval. It must be taken into account that Carbonate Bomb measurements become very inaccurate below 15 % and tend to overestimate carbonate contents at very low levels. This may partly obscure the decrease. The reduced

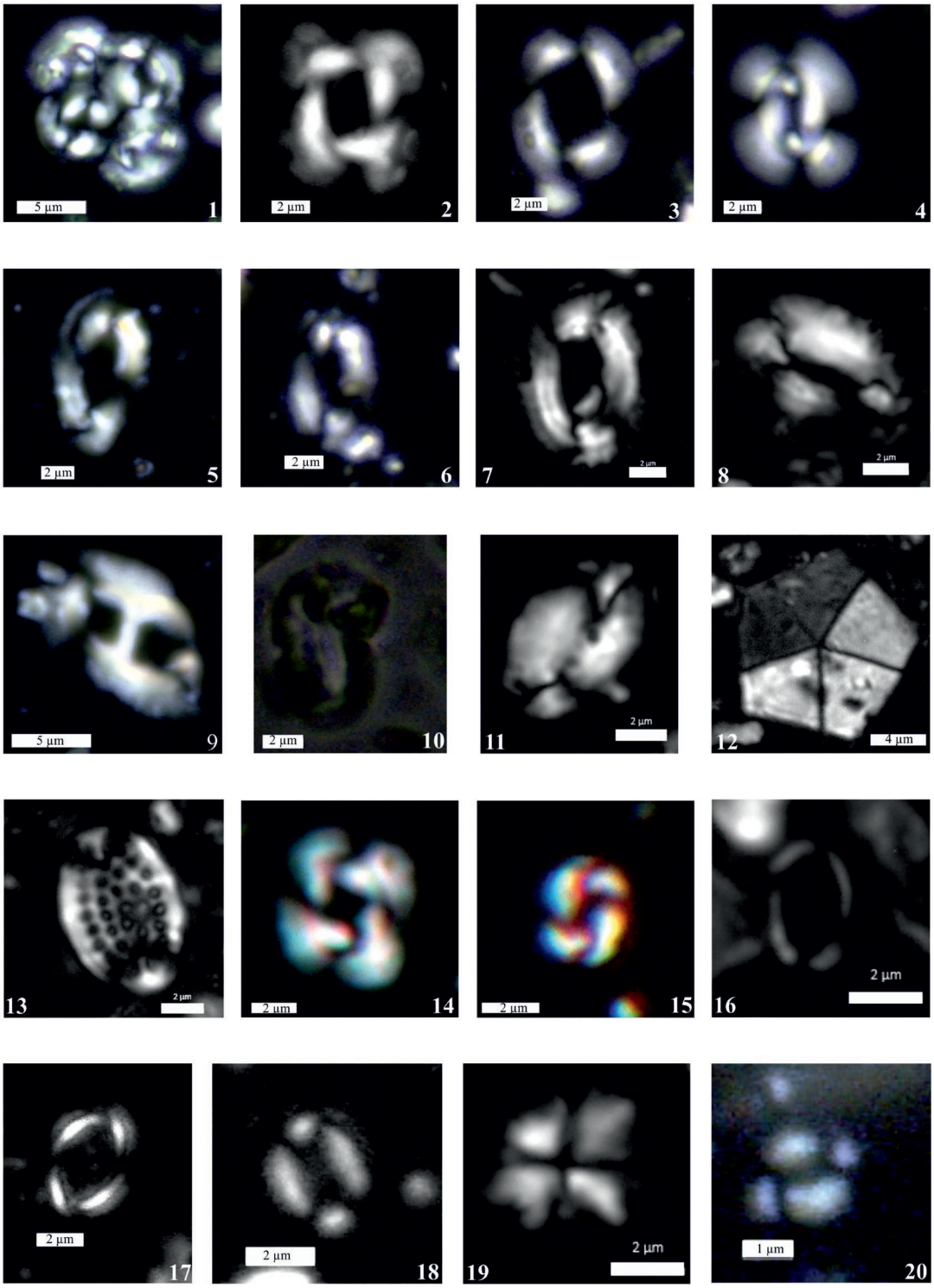

Fig. 4. Calcareous nannofossils from the investigated boreholes. The microphotographs are taken under Cross-Polarized Light (XPL) and Bright Field (BF): **1** — *Coccolithus pelagicus* (coccosphere, XPL, sample POR-2/437); **2** — *Reticulofenestra pseudoumbilicus* (XPL, sample POR-2/552); **3** — *Reticulofenestra pseudoumbilicus* (XPL, sample POR-2/1254); **4** — *Reticulofenestra gelida* (XPL, sample POR-2/1254); **5** — *Helicosphaera ampliaperta* (>10 µm, XPL, sample POR-2/552); **6** — *Helicosphaera ampliaperta* (<10 µm, XPL, sample POR-2/552); **7** — *Helicosphaera ampliaperta* (>10 µm, XPL, sample WDK-4/752); **8** — *Helicosphaera scissura* (XPL, sample WDK-4/752); **9** — *Helicosphaera mediterranea* (XPL, sample POR-2/1254); **10** — *Helicosphaera carteri* (XPL, sample POR-2/1254); **11** — *Helicosphaera carteri* (XPL, sample WDK-4/854.5); **12** — *Braarudosphaera bigelowii* (XPL, sample WDK-4/752); **13** — *Pontosphaera multipora* (XPL, sample WDK-4/752); **14** — *Cyclicargolithus floridanus* (XPL, samples STRTH-1/964.8); **15** — *Reticulofenestra haqii* (XPL, samples STRTH-1/1022.6); **16** — *Coronosphaera mediterranea* (XPL, sample WDK-4/752); **17** — *Syracosphaera cf. pulchra* (XPL, sample POR-2/554.4); **18** — *Syracosphaera? cf. oneillii* (XPL, sample POR-2/552); **19** — *Sphenolithus moriformis* (XPL, sample WDK-4/854.5); **20** — *Reticulofenestra minuta* (XPL, sample POR-2/1254).

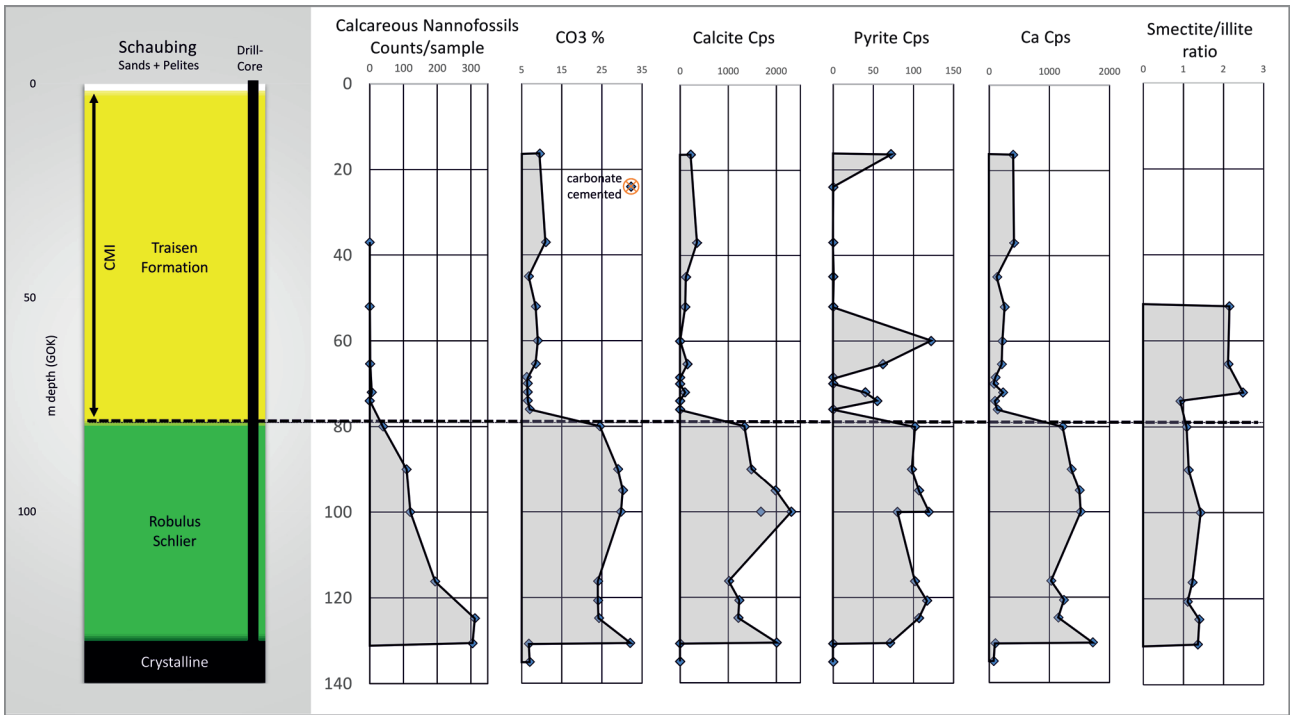

Fig. 5. Depth profiles of the well of Schaubing: Counted specimens of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite, the cps for Ca and the smectite/illite ratio are plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset of the Calcite Minimum Interval (CMI). The calcite-cemented sample at 24 m depth was excluded from interpretation. XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

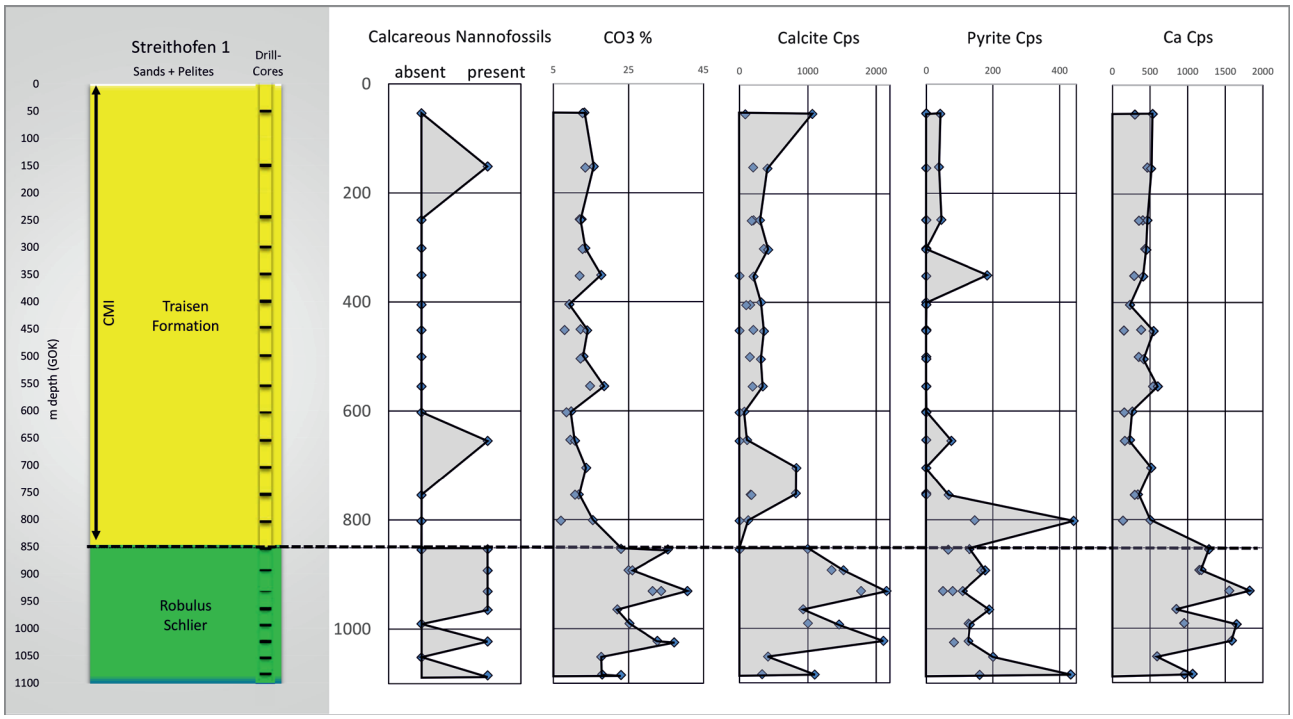

Fig. 6. Depth profiles of all samples (including pelites and sands) of the well of Streithofen 1: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca are plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

carbonate contents correlate with strongly reduced XRD peak heights of calcite**.** The nannofossil investigations indicate that the strongly reduced calcite content intervals are consistent with the absence of primary and reworked calcareous nannofossils while nannofossils occurred below and above this interval. The onset of this interval is also characterized by increasing pyrite peak heights, immediately followed by the overall decrease of pyrite below detectable amounts. XRF-data of Ca (presented as cps/depth) constitute an additional proxy. Hereinafter, we define the interval of reduced calcite content as a significant event, the **Calcite Minimum Interval (CMI)**.

Particularly, the depth-profiles of Schaubing (Fig. 5) record a strong and sharp decrease of calcite contents around 80 m. Pyrite also decreases and shows strongly varying values between 80–50 m. While all samples below 80 m revealed a rich nannofossil flora and numerous individuals, the samples were (nearly) barren above 80 m. The samples at 72 m and 65.4 m contained only few individuals.

The profile of Streithofen 1 (Figs. 6–7) indicates the onset of the CMI between 850 m and 800 m. Although the CMI can be identified if all samples are plotted (Fig. 6), the CMI becomes more obvious if only pelitic samples are taken into account (Fig. 7).

Altough the profile of Altenmarkt T1 offered only few drill cores (Figs. 8–9), the pelites (Fig. 8) indicates reduced calcite contents between 1000–800 m. The profile of cuttings (Fig. 9) reveals the onset of the CMI around 1125 m followed by a pyrite peak at 1100 m and a drop of pyrite values below detection limits above 1050 m. Pyrite was detected in all samples above 900 m. The calcite content recovers between 1000 m and 900 m. Calcareous nannofossils were absent in all but two samples between 1125 m and 800 m and present in all remaining samples.

Pelitic samples of the two drill cores of Laa (1799–1794 m, 1638–1632 m) record reduced calcite contents and are barren of calcareous nannofossils. Cuttings from every 20–40 m (samples between 1630 m and 1470 m were excluded due to contamination) indicate the onset of the CMI around 1850 m. The pyrite values slightly increase to a maximum at 1840 m and drop below detection limit at 1820 m. The pyrite reappears at 1450 m. Calcareous nannofossils are absent in all except one sample between 1850–1340 m and present in all samples above and below.

The profile of Wildendürnbach (Fig. 11) offers large variations of calcite and Ca values which were caused by the sampling method. Samples of all lithologies were taken for every 1 m of available drill core. Therefore, rare lithologies such as carbonate-cemented sands appear overrepresented, while the dominating carbonate-poor pelitic lithology is underestimated. Further on, varying drill core diameters indicate, that drill cores of other wells were mixed with drill cores of Wildendürnbach K4. Nevertheless, the onset of the CMI can be identified around 1530 m. A corrected profile, where sands, muds, drill gouges and (according to the drill core diameter) suspicious samples were excluded, reveals the CMI more clearly at 1530 m (Fig. 12). After the onset of the CMI, the pyrite contents increase to a maximum at 1530 m and decrease below detection limit at 1450 m. Pyrite reappears at 1250 m. The calcite content recovers with strong fluctuations between 1300 m and 1100 m. All except one sample below 1050 m were barren of microfossils while all samples above 1050 m contained nannofossils.

Clay mineral investigations indicate increased smectite/illite ratios within the CMI. Smectite/illite ratios double from 1 to 2 in the well of Schaubing (Fig. 5). In the well of Wildendürnbach K4, smectite/illite ratios reach values up to 3 for several samples. For the well of Streithofen 1, the increase is less obvious, but while most samples underlying the CMI show smectite/illite values clearly below 1, samples of the CMI show ratios around or clearly above 1.

In general, carbonate, calcite, and Ca contents provide good proxies for the CMI which is characterized by the absence of both autochthonous and reworked calcareous nannofossils, dinoflagellate cysts (unpublished data, this study), reduced pyrite contents and usually increased smectite/illite ratios. We define the onset of the CMI by the drop in calcite and the disappearance of primary and reworked calcareous nannofossils.

The upper limit of the CMI is represented by a more broad transitional recovery zone than a sharp boundary. The slow and discontinuous increase of calcite contents in the upper part of the CMI and the sporadic occurrence of calcareous nannofossils within the CMI complicate a precise definition of the upper boundary. All attempted precise definitions (reappearance of nannofossils, increase of calcite or pyrite contents) delivered conflicts and uncertainties.

Micropaleontology and biostratigraphy

The investigated sediments belong to the broad interval from upper NN2 — *Discoaster druggii* Zone to NN4 —*Helicosphaera ampliaperta* Zone (Martini 1971). Using the standard zonation of Okada & Bukry (1980) this correlates to the CN2 — *Sphenolithus belemnos* Zone and the CN3 — *Helicosphaera ampliaperta* Zone.

The Early Miocene nannoplankton biostratigraphy (NN2–NN4 interval) is based on the presence of several species, such as *Discoaster druggii*, *Sphenolithus disbelemnos*, *S. belemnos*, *S. heteromorphus*, *Triquetrorhabdulus carinatus* and *Helicosphaera ampliaperta* (Martini 1971). In the investigated samples the only primary markers present are *Helicosphaera ampliaperta* and *Sphenolithus heteromorphus*.

Helicosphaera ampliaperta is abundant in the upper part of the Wildendürnbach K4 (sample WDK-4/752) and a drastic decrease is noticed downward. *H. ampliaperta* is present but very rare in the Schaubing, in Laa 1, Altenmarkt-T1 and in Streithofen 1 boreholes.

The marker *Sphenolithus belemnos* (restricted to NN3) is completely missing, while *Sphenolithus heteromorphus* (NN3/NN4–top NN5) is present in only one sample from the Wildendürnbach K4 borehole (WDK-4/854.5) above the CMI (Appendix C, Wildendürnbach K4).

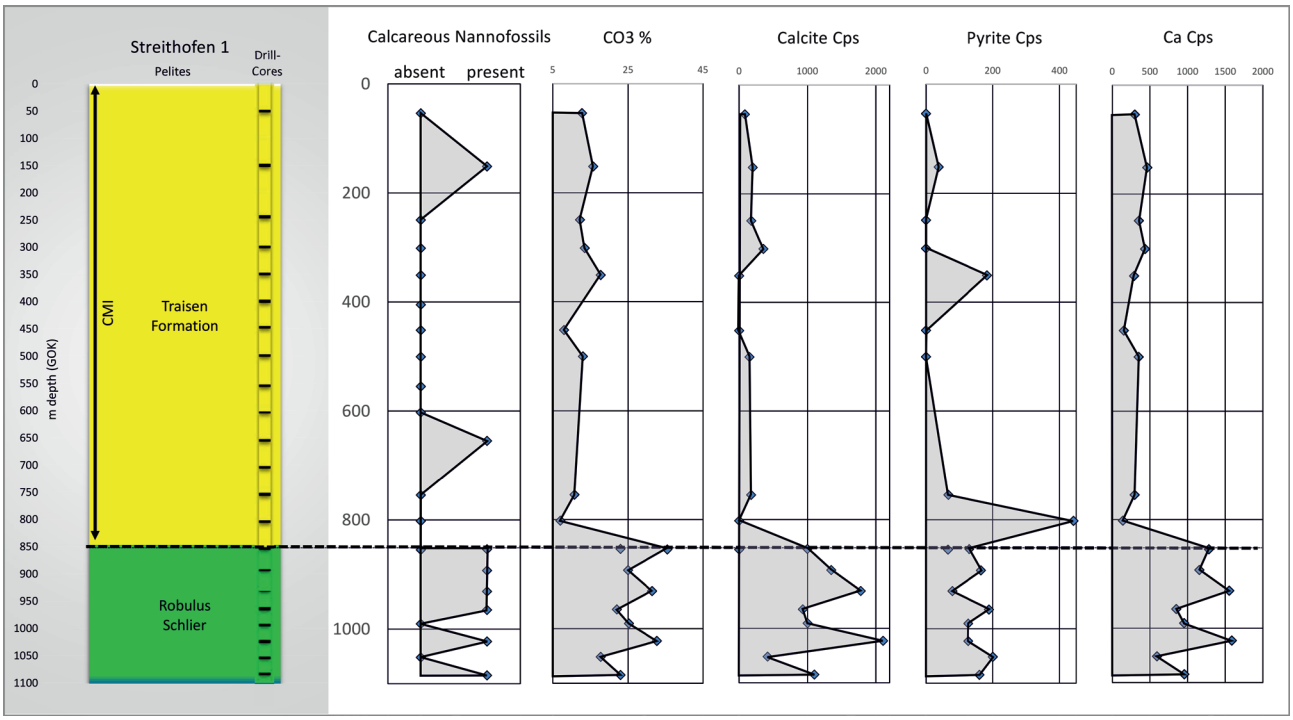

Fig. 7. Depth profiles of pelitic samples of the well of Streithofen 1: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca are plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

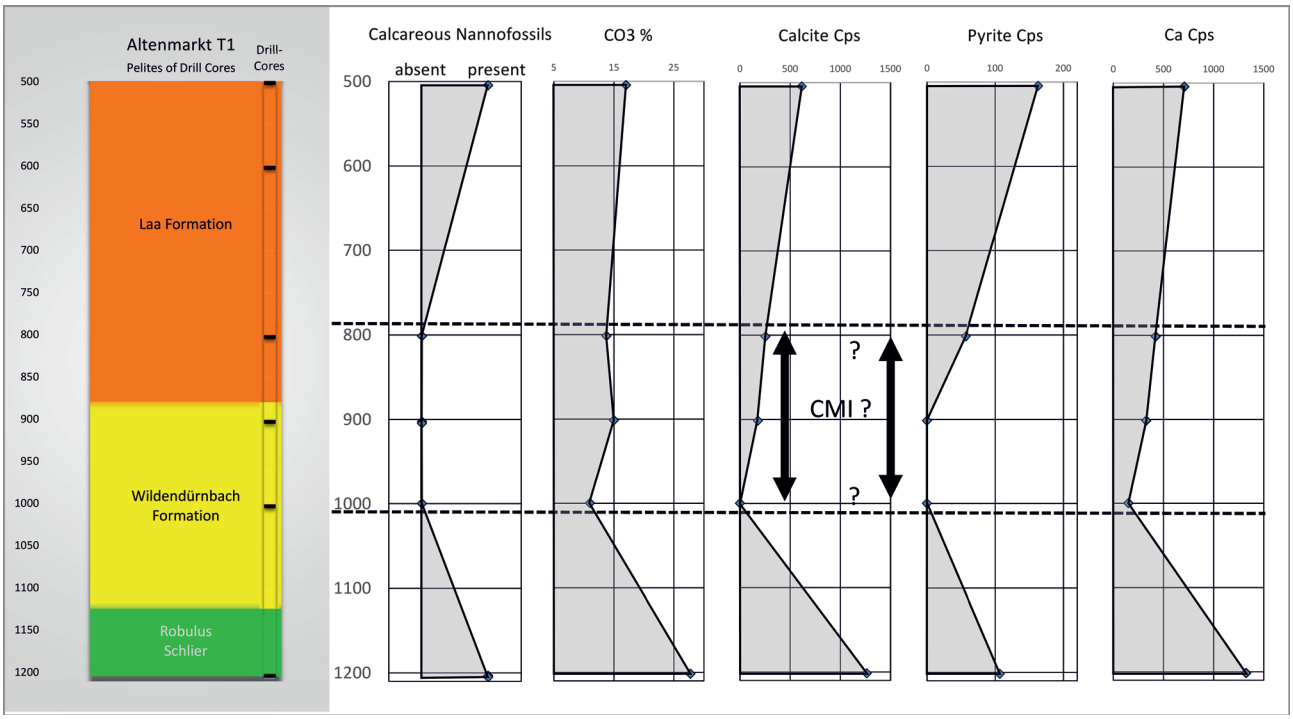

Fig. 8. Depth profiles of pelitic drill core samples of the well of Altenmarkt i. T. 1: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset and termination of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

Although very rare, the presence of other species is somehow supportive for the biostratigraphy assignment. The species *Sphenolithus conicus* appears in sample WDK-4/905(2) below the samples containing *S. heteromorphus*. Another species restricted to the NN3-NN4 interval is *S. multispinatus* which is very scarce and is present only in sample ALT-T1/751.5(1) above the CMI (Appendix C, Altenmarkt T1).

The species *Helicosphaera scissura*, known to have an earlier occurrence in the Central Paratethys (in NN2) is also very rare, but present in some samples from Wildendürnbach K4, Schaubing, Laa 1 and Altenmarkt T1 and is missing in Streithofen 1 borehole.

The attribution to the above mentioned nannofossils standard zones from upper NN2 to NN4 would indicate in general an interval from late Eggenburgian to early Badenian, in the Central Paratethys regional stratigraphy (Piller et al. 2007; Gradstein et al. 2012). No further reliable biostratigraphic subdivision can be made due to the extreme rarity and nearly total absence of some of the mentioned marker species. A largely similar conclusion on biostratigraphy was given by Ćorić & Roegl (2004) for the nearby Roggendorf-1 borehole, where the carbonate-poor interval was dated as NN3 to lower NN4 based on nannofossil and foraminifera from under- and overlying sediments.

CMI Processes and causes

The reduced calcite content of the CMI can be ascribed to one or several of the following causes and processes:

1. The overall calcite content, controlled by primary marine production may be strongly reduced by an unfavorable environment such as brackish water incursion (which is supported by mollusc data of Mandic & Ćorić 2007) that caused a breakdown of the primary (calcite and organic-walled) marine plankton productivity (Melinte 2004; Mattioli et al. 2009; Hofer et al. 2011, 2013).
2. Calcite (both of primary production and detrital input) was dissolved as a result of acidification of the water column (Zachos et al. 2005; Bordiga et al. 2013; Cobianchi et al. 2015).
3. Calcite was dissolved after sedimentation by early diagenesis (Wilson & Thomson 1998; Wendler et al. 2002; Jourabchi 2007).
4. Calcite was dissolved by a late diagenetic process, i.e. pore water chemistry was already independent from open water chemistry (Baumann et al. 2016).
5. The calcite content was strongly reduced by the dilution due to increased clastic input rates (Haq 1991; Ricken 1996; Dunbar & Dickens 2003).

Cause 1, an environmental crisis (e.g., reduced salinities, Hofer et al. 2011; Hofer et al. 2013) causing breakdown of primary production, is indicated by the absence of micro- and nannofossils. Especially the absence of dinoflagellate cysts, which should be unaffected by calcite dissolution, speaks for unfavorable primary conditions. Our data indicates a correlation between nannofossil content and calcite content. A breakdown of primary production of calcite may cause reduced calcite contents. On the other hand, a breakdown of primary production should not affect the redeposition of reworked Mesozoic and Paleogene calcareous nannofossils. The absence of such "allochthonous" calcareous nannofossils, which constitute up to 50 % of the nannofossil assemblage below and above the CMI, indicate, in addition, calcite dissolution and therefore cause 2, 3 or 4.

Cause 2 and 3, dissolution of calcite within the water column (Zachos et al. 2005; Cobianchi et al. 2015) or during early diagenesis in the sediment under near surface conditions (Wilson & Thomson 1998; Jourabchi 2007), cannot be distinguished with the data at hand. It is hard to decide whether the calcite was completely dissolved already in the water column and never reached the floor, or if the dissolution continued after deposition in pore spaces due to a changing chemical composition of pore waters (which are still influenced by the open water chemistry). Nevertheless, both models explain the dissolution of calcite by a changed water chemistry within that time-period. Our data suggests a relation between the smectite/illite ratio and the calcite dissolution. Either, the clay mineral composition influenced the pore-water or water-column chemistry (or both) or external controlling factors (such as volcanic ash input, e.g., Roetzel et al. 2014; Cobianchi et al. 2015; Self et al. 2015) influenced both, water chemistry and clay mineral composition.

Cause 4, late diagenetic processes, may have played a role in further reducing the carbonate content and carbonate redistribution as calcite concretions (Baumann et al. 2016). Nevertheless, the CMI seems to be bound rather to a certain stratigraphic level than to a certain depth (CMI at surface in the south and in 1000 m well depth in the north). The stratigraphic succession of signals is always the same (i.e. sharp decrease of calcite and disappearance of microfossils followed by the disappearance of pyrite and a broad transition zone as upper limit) arguing for a distinct time sequence of primary controlling factors. Further on, the CMI is independent of grain size, and appears both in sands to south and pelites to north, respectively. In case of a purely diagenetic origin of the CMI, we would rather expect a more heterogeneous signal which is bound to a certain depth, lithology/grain size or mineralogical composition.

Cause 5, dilution effect by increased clastic input (Haq 1991; Ricken 1996; Dunbar & Dickens 2003) seems unlikely, as the CMI occurs both in massive sands in the south (Schaubing, Streithofen 1) and in pelitic sediments to the north (Wildendürnbach K4, Laa 1). Further on, the data indicate, that the calcite contents of sands are usually higher than of the pelites within the CMI. In addition, dilution would not explain the absence of calcareous nannofossils and dinoflagellate cysts. Therefore dilution (cause 5) is excluded.

For these reasons, a combination of cause 1 (environmental crises), 2 (calcite dissolution in the water column) and 3 (calcite dissolution in the near surface pore waters) is preferred to explain the CMI. A change in the water column (and associated near-surface pore-water) chemistry that resulted in

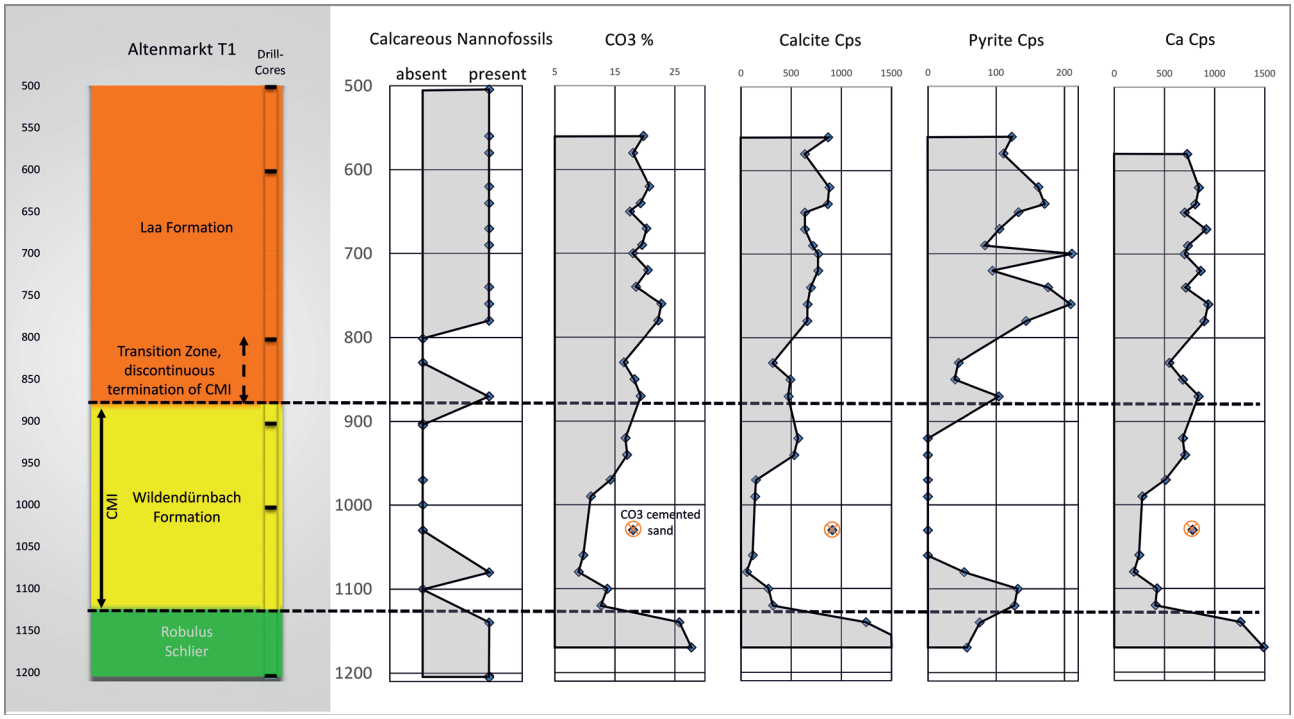

Fig. 9. Depth profiles of all cutting samples of the well of Altenmarkt i. T. 1: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset and termination of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

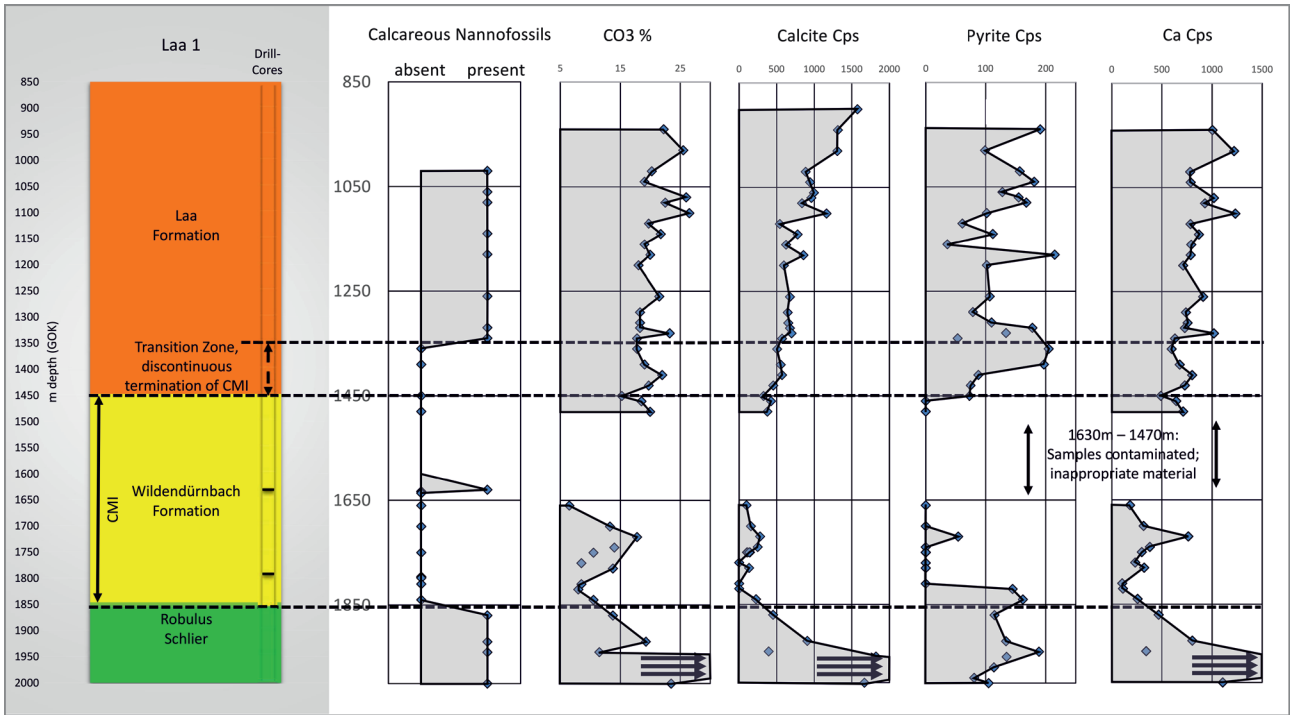

Fig. 10. Depth profiles of all cutting samples of the well of Laa 1: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset of the Calcite Minimum Interval (CMI) as well as the limits of the "Transition Zone" which constitutes the upper limit of the CMI. Samples between 1640–1460 m were contaminated and therefore excluded. XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

an acidification caused a primary dissolution of calcite and (to a much lower degree) of dolomite. The primary production was severely constrained or completely ceased. The reduction of organic sulfur controlled the pyrite content. At the onset of the crises, more organic material was available and therefore, the pyrite contents temporarily increased. The permanent absence of primary production caused a fast, but compared to calcite delayed decrease in pyrite.

Paleogeographic and tectonic interpretation

The CMI comprises the upper Ottnangian Traisen Fm. which constitute already identified deposits of the *Rzehakia* Lake System (formerly *Rzehakia* or *Oncophora* Beds, e.g., Mandic & Ćorić 2007; Gebhardt et al. 2013). Therefore, the CMI and the Wildendürnbach Fm. in the basinal part of the LAMB correlate to the upper Ottnangian and their deposition can be linked to the *Rzehakia* Lake System (Harzhauser & Mandic 2008).

Thus, we conclude that the CMI was caused by the late Ottnangian regression which initiated the establishment of brackish-water environments collectively termed as *Rzehakia* Lake System, interpreted as marine-derived brackish lakes (Čtyroký 1968; Harzhauser & Mandic 2008). This corresponds to the mid-Burdigalian sea-level lowstand Bur4 (Piller et al. 2007; Krijgsman & Piller 2012). During that sea-level lowstand, huge amounts of sediments were delivered from the Alpine orogen. This can be seen at Streithofen 1 (Figs. 6, 7, 13), where due to locally high tectonically driven subsidence rates more than 800 m of sediments were deposited within the CMI probably in less than 0.5 Ma (Krijgsman & Piller 2012). The combination of the high sedimentation rates, tectonic processes and the sea-level lowstand caused the closure of the gateway at the Amstetten Swell between the western and eastern Austrian Molasse Basin (e.g., Roegl & Steininger 1983; Bieg 2005; Harzhauser & Mandic 2008; Sant et al. 2017b) and isolated the upper Austrian and Bavarian Molasse Basin. This closure in combination with the progressing narrowing of the LAMB by the advancing Alpine and Carpathian fold-thrust belt east of the Bohemian Massif (Ustaszewski et al. 2008; Beidinger & Decker 2014), may have led to a (semi-) isolated water body in the LAMB and to a change from well circulated open-marine (Faupl & Roetzel 1987; Bieg 2005; Roetzel et al. 2006; Grunert et al. 2010b) to restricted and less circulated to stagnant water column (Harzhauser & Mandic 2008). This is supported by the work of Mandic & Ćorić (2007) who describe an upper Ottnangian brackish mollusc assemblage within the Traisen Fm.

In addition, the increased smectite contents indicate enhanced input of volcanic ashes from northern Hungary and southern Slovakia (Nehyba & Roetzel 1999; Roetzel et al. 2014), which probably had influence on the water chemistry and increased acidity (Jones & Gislason 2008; Duggen et al. 2010; Ayris & Delmelle 2012; Self et al. 2015). The isolation of the LAMB was terminated by the Karpatian transgression (Piller et al. 2007; Roetzel et al. 2009; Grunert et al. 2010a) after the Bur4 lowstand, beginning at c. 17.2 Ma (Krijgsman & Piller 2012; Sant et al. 2017b).

Stratigraphic and paleogeographic implications

Numerous, mostly poorly defined lithostratigraphic terms such as *Oncophora* Beds, *Rzehakia* Beds, Lužice Fm, "Sandstreifenschlier", "Haller Schlier", "Jüngerer Schlier", have been used for Ottnangian deposits mostly in the Austrian part of the NAF (Čtyroký 1972; Aniwandter et al. 1990; Roegl et al. 1997; Sauer & Kuffner 1997; Roetzel et al. 1999a; Kuffner 2001; Kováč et al. 2004; Gebhardt et al. 2013; Wimmer-Frey et al. 2013). Recently, Pippèrr et al. (2018) formalized the Oncophora Fm. in SE Germany (Bavaria) and Upper Austria. The identification of the CMI as a litho- and chemostratigraphic marker may provide an appropriate instrument for a refined and simplified lithostratigraphic concept of Ottnangian sediments in the LAMB (Fig. 14). Although the CMI can be recognized in sands, pelites should be preferred for tracing it.

We propose to define the boundary between "Robulus Schlier" and Traisen Fm. by the onset of the CMI. Furthermore, the termination of the CMI can be used to define the boundary between the upper Ottnangian Traisen Fm. and the overlying Karpatian Laa Fm. Several descriptions of the Zellerndorf Fm. indicate the existence of a CMI-like decalcified interval (Roetzel et al. 1999a,c, 2006, 2014; Grunert et al. 2010b). Nevertheless, discussion is ongoing whether this interval constitutes the upper Ottnangian part of the Zellerndorf Fm. (Reinhard Roetzel per. comm. 2017).

To avoid confusion by the usage of a significantly emended and redefined Zellerndorf Fm., we introduce the term Wildendürnbach Fm. which constitutes the deposition of the central basinal parts of the *Rzehakia* Lake System in the LAMB and define its limits by the CMI (Appendix A).

In our stratigraphic model (Fig. 14, column "LAMB, This Study"), the Zellerndorf Fm. represents the proximal pelitic Ottnangian deposits as defined at outcrops along the eastern margin of the Bohemian Massif. The calcareous lower part correlates to the basinal "Robulus Schlier s.l." and the decalcified upper part may represent the CMI and correlates at least partly to the Wildendürnbach Fm. and the Traisen Fm. We propose to delimit the Zellerndorf Fm. by its facies, mineralogy and depositional environment. The Zellerndorf Fm. therefore comprises non-turbiditic deposits derived from the Bohemian Massif while turbiditic sands of the Wildendürnbach Fm. were derived from the Alpine and Carpathian orogen. Further on, we propose to define the upper boundary of the Zellerndorf Fm. by the termination of the CMI. Whether the Zellerndorf Fm. should be divided into a lower/middle Ottnangian marine unit and an upper Ottnangian predominantly brackish unit remains open and needs more investigations.

Correlation throughout the NAFB

The CMI constitutes an effective tool for a correlation of the autochthonous Lower Austrian Molasse to the upthrusted

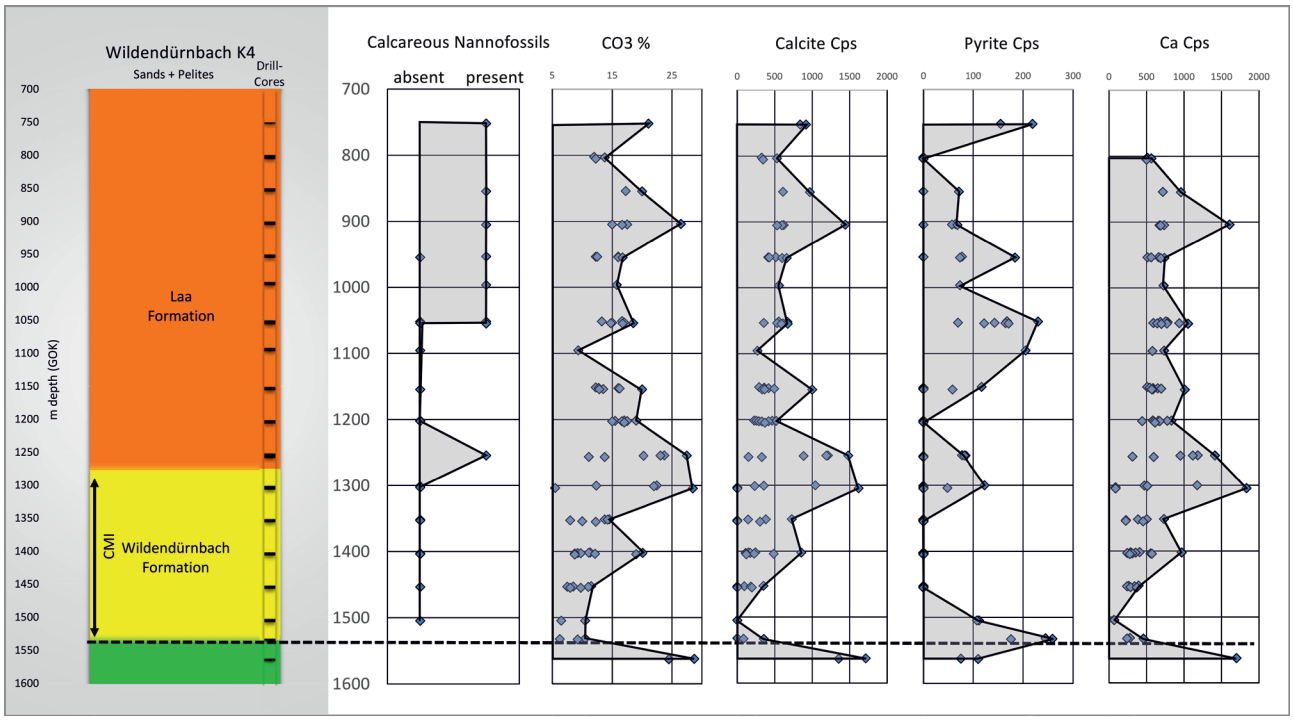

Fig. 11. Depth profiles of all samples of the well of Wildendürnbach K4: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

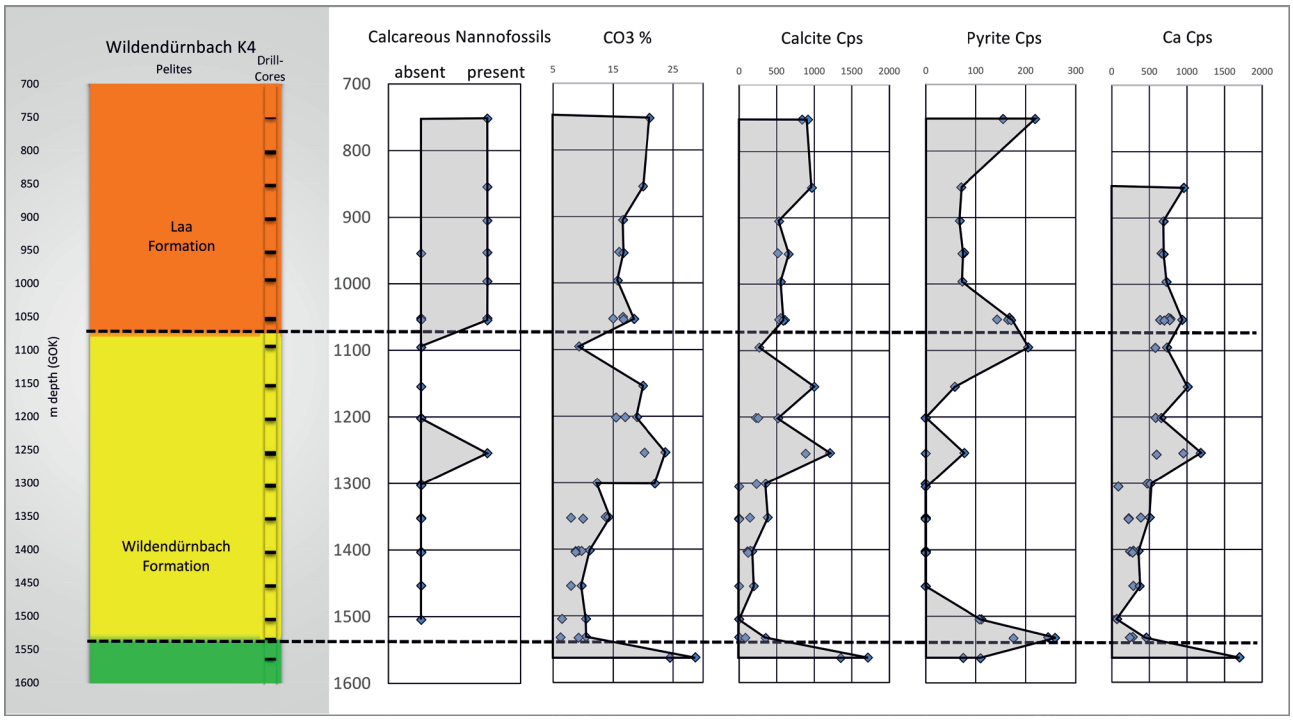

Fig. 12. Depth profiles of pelitic samples of the well of Wildendürnbach K4: Absence/Presence of calcareous nannofossils, carbonate content (weight %), the characteristic XRD peak-heights for calcite and pyrite and the cps for Ca plotted against drill-core depth. Drill-core positions are shown by the black intervals of the inserted drill-core profile. Dashed lines indicate the onset and termination of the Calcite Minimum Interval (CMI). XRD netto (peak height−background) peak height for calcite: 3.03 Å; for pyrite: 2.70 Å.

allochthonous Molasse in Lower Austria and in the Czech Republic. Krhovský et al. (2001) related the Austrian "Waschberg Unit s.l." (including the "Roseldorf Zone" and the "Waschberg Unit s. str.", Fig. 1) to the Czech Pouzdřany and Ždánice Units. The Ždánice Unit constitutes the continuation of the Waschberg Unit in the Czech Republic with tectonic slices, the Pouzdřany Unit, at its front. Grill (1962) already correlated the generally micro- and nannofossil-barren non-calcareous "clays and limonitic claystones" ("Eisenschüssige Tone und Sande", Grill 1962) to the "*Oncophora* Beds". Gebhardt et al. (2013) also correlated the Traisen Fm. to the "Eisenschüssige Tone und Sande". Preliminary field mapping results of the Austrian Geological Survey (Holger Gebhardt per. comm. 2017) support the finding, that these sediments represent the CMI in the upthrusted part of the LAMB. Various authors described the "Eisenschüssige Tone und Sande" as calcite-poor to -free and correlated them to the Pavlovice Fm. of the Pouzdřany Unit and to the upper part of the Křepice Fm. (Krhovský et al. 2001; Krenmayr et al. 2002; Roegl et al. 2009; Roetzel et al. 2009). The absence of microfossils and calcite is mentioned for both the Pavlovice and for the Křepice formations, respectively, which indicates that the CMI probably comprises both units. This is in good agreement with correlations to the "Eisenschüssige Tone und Sande" of Grill (1962).

As the CMI represents the marker signal of the late Ottnangian (Piller et al. 2007), we propose a slightly modified stratigraphy of the allochthonous Molasse in Lower Austria and the Czech Republic. In this model, the "Eisenschüssige Tone und Sande", the Pavlovice Fm. and the Křepice Fm. belong to the late Ottnangian *Rzehakia* Lake System. Consequently, the underlying "Schiefrige Tonmergel", the Sakvice Fm. and the Boudky Fm. include the lower and middle Ottnangian. The lower and upper boundaries of these units may thus be uniformly defined by using the onset and termination of the CMI.

Equivalent CMI-deposits in the area of the (later developing) Vienna Basin were not reported so far in published literature. According to the stratigraphic scheme of Kováč et al. (2004), such an interval should comprise parts of the Lužice Fm. and/or the Laksary Fm. However, a sedimentation gap has been assumed for the late Ottnangian (Harzhauser & Mandic 2008; Reichenbacher et al. 2013; Sant et al. 2017b). Nevertheless, in the light of the identification and stratigraphic value

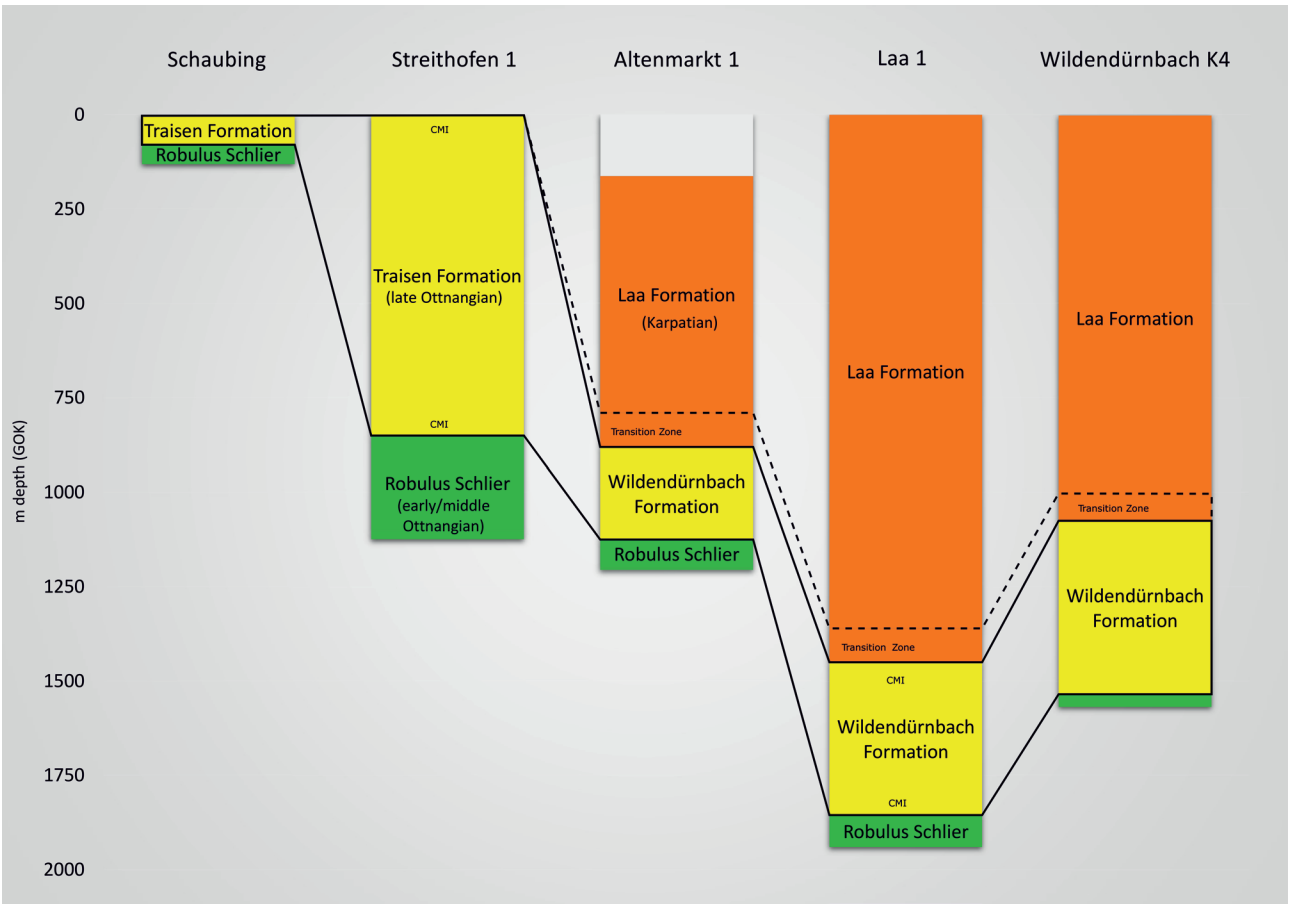

Fig. 13. Correlation of the CMI representing the upper Ottnangian over investigated wells. CMI comprises the Traisen Fm. and the Wildendürnbach Fm. For Altenmarkt 1, Laa 1 and Wildendürnbach K4, the dashed line indicates the extent of the transitional zone between the upper Ottnangian and the Karpatian (Laa Fm.).

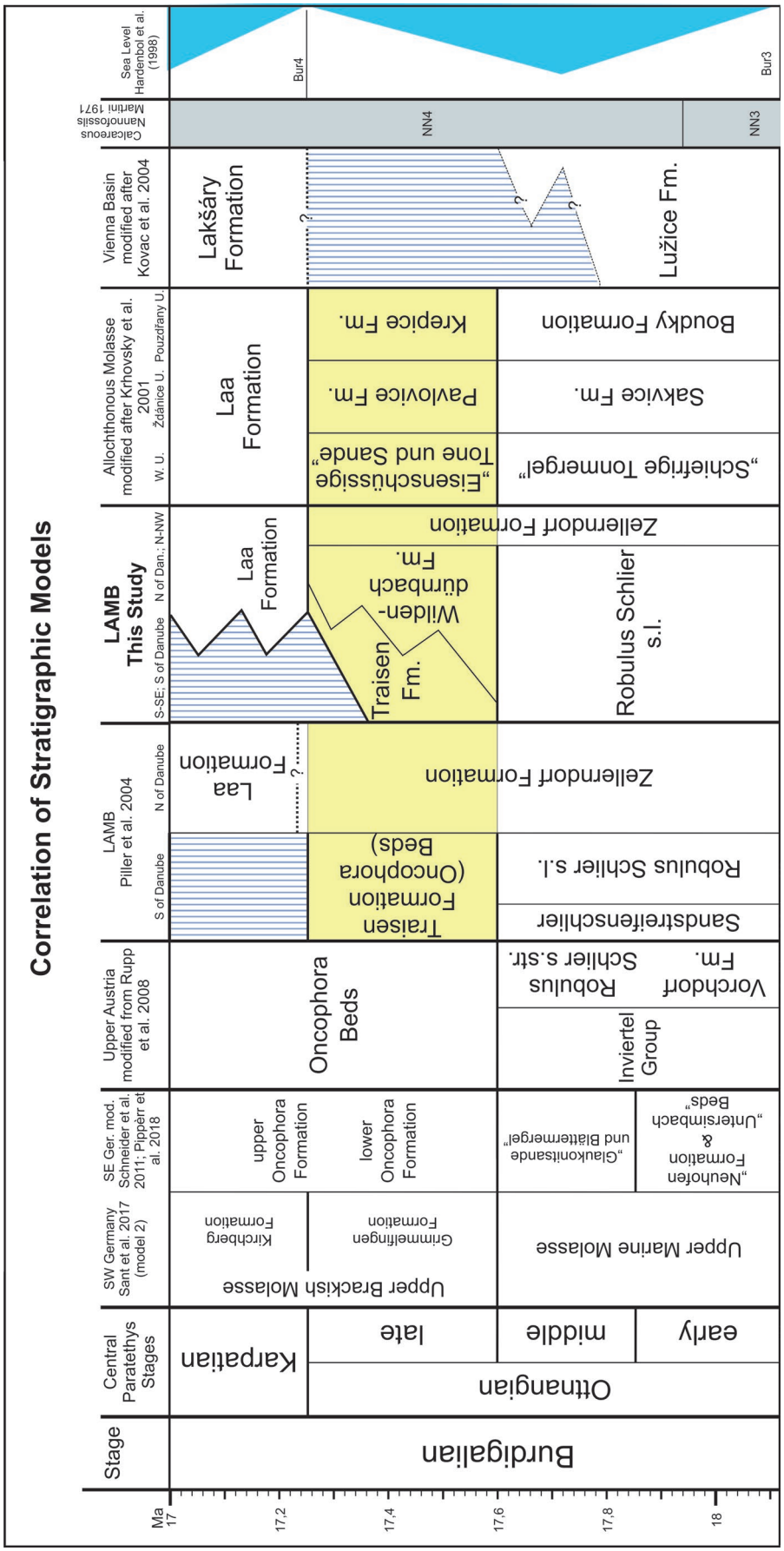

Fig. 14. Stratigraphic chart comparing the proposed stratigraphy to other (modified) stratigraphic models (Krhovský et al. 2001; Kováč et al. 2004; Piller et al. 2004; Rupp et al. 2008; Schneider et al. 2011; Sant et al. 2017a; Pippèrr et al. 2018). Calcareous nannofossil zones were taken from Martini (1971) and cyclostratigraphy was taken from Hardenbol et al. (1998). The chart was partly prepared using the "Time Scale Creator" software (Ogg & Lugowski 2017). The yellow box indicates the stratigraphic units affected by the CMI. The blue striped pattern indicates hiatuses. Ger. Mod.: Germany modified; Dan.: Danube; W.U.: Waschberg Unit; s. str.: senso stricto; s.l.: senso lato.

of the CMI in the NAFB, a careful revision may be appropriate for correlative profiles in the Vienna Basin (e.g., Harzhauser et al. 2018).

A correlation of the CMI to the west, to Upper Austria and Bavaria is not straightforward and partly speculative. As the onset of the CMI corresponds to a major paleogeographic re-organization with the closure of the seaway west of the LAMB by the swell of Amstetten (Bieg 2005; Pippèrr & Reichenbacher 2017; Sant et al. 2017a), the water bodies in the LAMB and those of Upper Austria and Bavaria were at least partly disconnected during the late Ottnangian (Bieg 2005; Mandic & Ćorić 2007; Harzhauser & Mandic 2008; Kováč et al. 2017; Sant et al. 2017a,b). A direct correlation of a signal such as the CMI, which was caused by changing water chemistry is restricted to the basin and thus connected waterbodies. Nevertheless, brackish conditions were also established in western Austria and southern Germany (Rupp et al. 2008; Reichenbacher et al. 2013; Pippèrr & Reichenbacher 2017; Sant et al. 2017a,b) reflecting the global sea-level fall of Bur4.

In Upper Austria and South Germany the subdivision between the fully marine lower and the restricted marine middle Ottnangian is better defined than in Lower Austria (Wenger 1987; Rupp et al. 2008; Grunert et al. 2010a; Schneider et al. 2011; Reichenbacher et al. 2013; Pippèrr & Reichenbacher 2017; Sant et al. 2017a). In Upper Austria and eastern Bavaria, the *Rzehakia* Lake System is represented by the classical "*Oncophora* Beds" with the typical *Rzehakia* mollusc assemblage (Papp 1955; Papp et al. 1973; Rupp et al. 2008). Pippèrr et al. (2018) recently formalized these deposits as Oncophora Fm. and stated, that only the lower Oncophora Fm. is of Ottnangian age while the upper Oncophora Fm. represents already Karpatian deposits. The Oncophora Fm. overlies the "Glauconitsande und Blättermergel" in eastern Bavaria and the "Robulus Schlier s. str." and the Innviertel Group in Upper Austria, which comprises lower and middle Ottnangian units. Whether the upper Oncophora Fm. was affected by the early Karpatian transgression or not is under discussion (Lemcke 1988; Piller et al. 2007; Pippèrr & Reichenbacher 2017).

In the remaining part of the S-German Molasse Basin, the Upper Brackish Molasse (OBM for the German "Obere Brackwassermolasse" to avoid confusion with the "Untere Brackwassermolasse") corresponds to the *Rzehakia* Lake System. According to Pippèrr & Reichenbacher (2017) and Sant et al. (2017a), the OBM comprises the upper Ottnangian Grimmelfingen Fm. and the lower Karpatian Kirchberg Fm. Where fossils are absent, Reichenbacher et al. (2013) distinguish the Grimmelfingen Fm. from the Kirchberg Fm. by reduced carbonate contents. In the southwest-German Molasse Basin, time equivalent units to the "Robulus Schlier s.l." are the lower Ottnangian "OMM-Basisschichten" and Kalkofen Fm. and the middle Ottnangian Baltringen and Steinhöfen Fm. (in Fig. 14 summarized as Upper Marine Molasse, Heckeberg et al. 2010). The new model of Sant et al. (2017a) (model 2) and of Pippèrr & Reichenbacher (2017) with an upper Ottnangian, non-calcareous brackish Grimmelfingen Fm. and a lower Karpatian Kirchberg Fm. representing the early Karpatian transgression is in good agreement with our model of the CMI (Traisen Fm. And Wildendürnbach Fm.) terminated by the Bur4 transgression. However, this is speculative as no comparable chemical data are known from Bavaria.

Conclusions

Based on biostratigraphical, lithological and chemical depth profiles of wells throughout the Lower Austrian Molasse Basin (LAMB), we identify a prominent and stratigraphically significant unit, the Calcite Minimum Interval (CMI) which constitutes a lithological expression and chemical signal of the *Rzehakia* Lake System (Harzhauser & Mandic 2008). Consequently, this interval is of late Ottnangian age and related to the mid-Burdigalian Bur4 sea-level lowstand (Piller et al. 2007; Rupp et al. 2008; Sant et al. 2017a). The CMI offers a valuable litho- and chemostratigraphic signal for an interval of high sedimentation rates, poor biostratigraphical resolution and extremely poor to lacking microfossil content. We define the onset of the CMI as corresponding to the sharp decrease of calcite contents and the disappearance of autochthonous (and reworked) calcareous nannofossils. Further on, we define the termination of the CMI by the permanent increase of pyrite contents and the constant reappearance of calcareous nannofossils, which correlates with a more diffuse and gradational increase of calcite contents.

We propose a new stratigraphic model that correlates the limits of the CMI to the middle/upper Ottnangian and the Ottnangian/Karpatian boundary (Piller et al. 2007; Harzhauser & Mandic 2008) and allows for a detailed correlation of upper Ottnangian units. Further on, we introduce the newly defined Wildendürnbach Fm. comprising the upper Ottnangian depositions in the central, basinal parts of the LAMB and define its limits by the CMI.

We discuss the capacity of the CMI as a litho- and chemostratigraphical key horizon to correlate the late Ottnangian time interval throughout eastern Austrian and Czech part of the Molasse Basin. According to lithological descriptions and former comparisons, we correlate the Traisen Fm., the Wildendürnbach Fm., the upper part of the Zellerndorf Fm. and the "Eisenschüssige Tone und Sande" to the upper Ottnangian (Roetzel et al. 1999a, 2014; Krhovský et al. 2001; Krenmayr et al. 2002; Harzhauser & Mandic 2008; Gebhardt et al. 2013). The Czech Křepice and Pavlovice Fm. should be investigated in detail, whether they represent the continuation of the CMI into the Czech Republic as already suggested (Krhovský et al. 2001; Krenmayr et al. 2002; Roetzel et al. 2009). In the west, the Grimmelfingen Fm. in western Bavaria may represent time equivalent deposits and the newly defined Oncophora Fm. (Pippèrr et al. 2018) may constitute partly time equivalent deposits in Upper Austrian and eastern Bavaria.

Acknowledgments: This work was funded by a cooperation project of OMV Exploration and Production AG and the University of Vienna. The publication was approved by OMV. We thank especially Holger Gebhardt, Stjepan Ćorić, Reinhard Roetzel, Philipp Strauß, Thomas Kuffner, Wolfgang Hujer, Mathias Harzhauser, Dörte Theobalt, Andreas Beidinger and Kurt Decker for their assistance and numerous fruitful discussions.

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SUPPLEMENT

Appendix A

Formal Definition of the Wildendürnbach Formation

Validity: Described in unpublished OMV drilling reports as "Oncophora Beds" or "Fisch Fazies". A sedimentological description of the type section and reference profiles can be found in unpublished oil company (OMV) reports by Kuffner (2001), Sauer & Kuffner (1997) and Palzer-Khomenko et al. (2016a).

Type area: Central parts of the Lower Austrian Molasse Basin north of the Danube and southwestern Czech Molasse Basin. The unit is only described from drill cores.

Type section: The well of Laa 1 (48°42'28" N, 16°25'48" E) between 1550–1855 m depth represents the type section. Two drill cores (1794–1799 m and 1632–1638 m), a self-potential log, a resistivity log and cutting-samples every 20–40 m as well as OMV-archive data (sedimentological descriptions, heavy mineral data, paleontological data, lithostratigraphic interpretation) are available. The section was investigated and described by internal OMV-reports such as Kuffner (2001) and Palzer-Khomenko et al. (2016a). Preliminary results were also presented by Knierzinger et al. (2015), Palzer et al. (2015) and Palzer-Khomenko et al. (2016b).

Reference section(s): Reference sections are the OMV-wells of Wildendürnbach K4 (48°44'58" N, 16°30'51" E; 1300–1535 m depth) and Altenmarkt T1 (48°34'59" N, 16°14'03" E; 880–1125 m depth). Self-potential logs, cuttings and OMV-archive data are available. For Wildendürnbach K4, a resistivity log is available as well. The reference profiles were investigated by the same studies as the type section. Additionally, Wildendürnbach K4 was described more closely by Sauer & Kuffner (1997). Kreutzer (1993) and Hamilton (1997) described and discussed the subcrop stratigraphy around Wildendürnbach K4.

Remarks: No surface outcrops apart from wells and drill cores are known for the Wildendürnbach Formation. The drill cores available are in parts of poor quality, especially in the well of Wildendürnbach K4. According to the better drill core quality, Laa 1 was chosen as type profile instead of Wildendürnbach K4.

Derivation of name: After the reference well section Wildendürnbach K4 well and the nearby village of Wildendürnbach. The term Laa Formation already exists.

Synonyms: The "Fisch-Facies" frequently used in well descriptions is more or less equivalent. Nevertheless, "Fisch-Fazies" is a descriptive term which indicates pelitic and semi-pelitic sediments rich in fish scales. Although fish scales are a common feature for the Wildendürnbach Formation, they are also found in other intervals. Vice versa, the Wildendürnbach Formation includes layers free of fish scales.

Another synonym are the so called Oncophora Beds. The term mostly describes calcite-poor and microfossil-free sand-dominated sediments including pelitic intervals at the base. Gebhardt et al. (2013) redefined the exposed Oncophora Beds south of the Danube (mostly massive sands) as Traisen Formation. The Traisen Formation represents the southern, proximal coarse grained equivalent and continuation of the (semi)-pelitic Wildendürnbach Formation. The term "Oncophora Beds", which was used for pelitic or turbiditic intervals in the central basinal parts, can be seen as synonym of the Wildendürnbach Formation. Around the village of Wildendürnbach (48°45'20" N, 16°30'02" E) at the Czech border, the term "Oncophora Beds" was used for a sand dominated, carbonate bearing interval including a marine micro-fauna which is clearly overlying the calcite poor Wildendürnbach Formation (Aniwandter et al. 1990; Hamilton 1997). There, the term "Oncophora Beds" is synonymous for Laa Formation.

The (especially in older literature) frequently used term "Sandstreifenschlier" (Piller et al. 2004) includes pelitic and semi-pelitic Ottnangian sediments. It is equivalent to the Wildendürnbach Formation, the lower pelitic part of the Traisen Formation and the (in Lower Austria also poorly defined) "Robulus Schlier sensu lato".

The Zellerndorf Formation represents a not fully formalized Ottnangian unit cropping out at the rim of the Bohemian Massif between Maissau (48°34'13" N, 15°49'35" E) and the Czech border (Roetzel et al. 1999; Roetzel et al. 2006; Roetzel et al. 2015). In the Austrian Stratigraphic Chart of Piller et al. (2004), it represents the deposits of the Ottnangian Molasse Basin north of the Danube. The Zellerndorf Formation consists of pelitic sediments and includes a calcareous interval with a marine micro-fauna and a carbonate and micro-fossil free, smectite rich interval (Roetzel et al. 2015). This calcite-free interval of the Zellerndorf Formation represents the proximal continuation of the Wildendürnbach Formation. Despite the fact that the Zellerndorf Formation represents the Ottnangian sediments north of the Danube in the Austrian Stratigraphic Chart, the term was usually not used in well-profile descriptions and its usage was restricted to proximal outcrops close to the Bohemian Massif. Nevertheless, the Wildendürnbach Formation should replace the upper Ottnangian non-calcareous part of the Zellerndorf Formation in the centre of the Lower Austrian Molasse Basin.

Lithology: The Wildendürnbach Formation consists of bluish-grey fine grained silts and silty clays with intercalated unstructured coarse grained silts, muds and fine grained sands as well as fining upward cycles of grey to yellowish sands and yellowish to brownish muds. Beds of medium grained sands

appear. Rip-up clasts of clay and mud usually occur at the erosive base of the fining upward cycles. The sedimentary structures of sand-layers grade with decreasing grain size from massive to planar parallel stratification, ripple cross lamination and mm laminated silts. Slumping structures frequently occur. Dewatering-structures can be found. The pelites are usually mica-rich and calcite-free. Intercalated sands consist of quartz, muscovite, chlorite, dolomite and feldspar and show a varying calcite content. Heavy mineral assemblages are dominated by garnet and epidote/zoisite and contain low amounts of zircon, rutile, tourmaline, titanite and amphibole (Knierzinger et al. 2015). Carbonate Bomb (Mueller & Gastner 1971) measurements confirm reduced carbonate contents (<15 %; often <10 %) for the pelites. XRD analyses reveal reduced calcite contents, an increased smectite/illite ratio compared to under- and overlying units and the absence of detectable amounts of pyrite.

Fossils: The Wildendürnbach Formation is usually free of microfossils including the absence of re-sedimented Cretaceous and Paleogene nannofossils, which are common in over- and underlying units. Where calcareous nannofossils are present, they consist of the same assemblage as the underlying Robulus Schlier and the overlying Laa Formation. A biostratigraphic distinction between Ottnangian and Karpatian is not possible. Fish scales frequently occur, shell fragments are rare. Plant remains usually occur in fining upwards cycles.

Origin, facies: Kuffner (2001) describes Tab, Tabc and Tbc Bouma sequences for the drill cores of Laa 1. For Wildendürnbach K4, Kuffner (2001) describes hemipelagic, mudy and turbiditic sedimentation between 1300–1530 m. Palzer-Khomenko et al. (2016a) follows the facies interpretation of Hamilton (1997) and Kuffner (2001) as a deeper-water trough with turbiditic flow and other types of mass flows such as slumps.

Chronostratigraphic age: late Ottnangian.

The Wildendürnbach Formation is interpreted to represent the depositions in the centre of the Lower Austrian Molasse Basin during the late Ottnangian Rzehakia Lake System (Harzhauser & Mandic 2008). Piller et al. (2007) describes the Ottnangian as a "*strictly twofold stage with a normal marine development in its lower part and a predominance of restricted marine to fresh water environments in its upper part"*. Therefore the Wildendürnbach Formation corresponds to the late Ottnangian sensu Piller et al. (2007).

Biostratigraphy: Microfossils are rarely found. Where available, calcareous nannofossils are similar to underlying and overlying units and indicate NN3-NN4.

Thickness: up to 300m (well of Laa 1).

Lithostratigraphically higher rank unit: Pixendorf Group (includes then Dietersdorf Formation, Traisen Formation and Wildendürnbach Fromation).

Lithostratigraphic subdivision: not yet defined.

Lower and upper boundary: The base and top of the Wildendürnbach Formation is principally defined by the overall reduction in the carbonate content (the carbonate minimum interval), i.e. the lower boundary by a relatively sharp reduction in the carbonate content to almost zero (except diagenetic carbonate redistribution and accumulation). The upper boundary is often transitional over tens of metres with a more gradual increase in carbonate content of pelites. A more distinct upper boundary of the W.F. and thus lower boundary of the Laa Formation (see also Rögl et al. 1997) can be defined by the appearance of calcareous nannofossils (in smear slides) and also pyrite, both typical for re-established fully marine conditions, and (although not in detail investigated in our study) the coeval appearance of a Karpatian foraminiferal assemblage (Rögl et al. 1997; Ćorić & Rögl 2004).

Underlying units: Robulus Schlier s.l., Zellerndorf Formation, "Sandstreifen Schlier".

Overlying units: Laa Formation.

Lateral boundary: The Wildendürnbach Formation comprises the central basinal depositions of late Ottnangian age. It is characterized by continuous pelitic deposition and pelites interrupted by gradated sand layers with ripples and planar parallel stratification of Alpine and Carpathian provenance indicated by garnet-dominated heavy mineral spectras.

Lateral units: To the Bohemian Massif: Zellerndorf Formation; to the Alpine–Carpathian Orogen: Traisen Formation and "Eisenschüssige Tone und Sande"; to the autochthonous Czech Molasse Basin: unknown; to the allochthonous Zdanice Unit: Pavlovice Formation.

Geographic distribution: Central parts of the Lower Austrian and Czech Molasse Basin, from the area of Schaubing to Wildendürnbach near the Czech border. Continuation into the Czech Molasse Basin unknown.

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Appendix B

List of Calcareous Nannofossils

Cenozoic calcareous nannofossils:

Acanthoica sp.
Braarudosphaera bigelowii (Gran and Braarud 1935) Deflandre 1947
Calcidiscus leptoporus (Murray & Blackman 1898) Loeblich & Tappan 1978
Calcidiscus pataecus (Gartner 1967) de Kaenel & Villa 1996
Calciosolenia fossilis (Deflandre in Deflandre & Fert 1954) Bown in Kennedy et al. 2000
Coccolithus miopelagicus Bukry 1971
Coccolithus pelagicus (Wallich 1871) Schiller 1930
Coccolithus sp.
Coronocyclus baileyi da Gama & Varol 2013
Coronocyclus cf. *nitescens* Hay Mohler & Wade 1966
Coronosphaera mediterranea (Lohmann 1902) Gaarder 1977
Cyclicargolithus floridanus (Roth & Hay 1967) Bukry 1971
Discoaster deflandrei Bramlette & Riedel 1954
Discoaster cf. *druggii* Bramlette & Wilcoxon 1967
Discoaster sp.
Hayaster sp.
Hayella challengeri (Muller 1974) Theodoridis 1984
Helicosphaera ampliaperta Bramlette & Wilcoxon 1967
Helicosphaera carteri (Wallich 1877) Kamptner 1954
Helicosphaera euphratis Haq 1966
Helicosphaera intermedia Martini 1965
Helicosphaera mediterranea Muller 1981
Helicosphaera scissura Miller 1981
Helicosphaera vedderi Bukry 1981
Helicosphaera sp.
Hughesius tasmaniae (Edwards & Perch-Nielsen 1975) de Kaenel & Villa 1996
Lithostromation sp.
Pontosphaera multipora (Kamptner 1948) Roth 1970
Reticulofenestra ampliumbilicus Theodoridis 1984
Reticulofenestra gelida (Geitzenauer 1972) Backman 1978
Reticulofenestra haqii Backman 1978
Reticulofenestra minuta Roth 1970
Reticulofenestra pseudoumbilicus (Gartner 1967) Gartner 1969
Sphenolithus conicus Bukry 1971
Sphenolithus heteromorphus Deflandre 1953
Sphenolithus moriformis (Brönnimann & Stradner 1960) Bramlette & Wilcoxon 1967
Sphenolithus multispinatus Maiorano & Monechi 1997
Sphenolithus sp.
Syracosphaera cf. *pulchra* Lohmann 1902
Syracosphaera tanzanensis Bown 2005
Syracosphaera? cf. *oneillii* da Gama & Varol 2013
Syracosphaera sp.
Thoracosphaera sp.
Triquetrorhabdulus sp.
Umbilicosphaera jafari Müller 1974
Umbilicosphaera rotula (Kamptner 1956) Varol 1982

Reworked Cenozoic calcareous nannofossils:

Campylosphaera eroskayi (Varol 1989) Bown 2005
Campylosphaera sp.
Chiasmolithus cf. *bidens* (Bramlette & Sullivan 1961) Hay & Mohler 1967
Chiasmolithus cf. *expansus* (Bramlette & Sullivan 1961) Gartner 1970
Chiasmolithus sp.
Clausicoccus subdistichus (Roth & Hay in Hay et al. 1967) Prins 1979
Clausicoccus sp.
Coccolithus bownii Jiang & Wise 2007
Coccolithus foraminis Bown 2005
Coccolithus formosus (Kamptner 1963) Wise 1973
Coccolithus latus Bown 2005
Coccolithus pauxillus Bown 2005
Coccolithus staurion Bramlette & Sullivan 1961
Craticullithus sp.
Cruciplacolithus asymmetricus van Heck & Prins 1987
Cruciplacolithus tenuis (Stradner 1961) Hay & Mohler in Hay et al. 1967
Cruciplacolithus sp.
Cyclicargolithus luminis (Sullivan 1965) Bukry 1971
Discoaster barbadiensis Tan 1927
Discoaster cf. *lodoensis* Bramlette & Riedel 1954
Discoaster cf. *nodifer* (Bramlette & Riedel 1954) Bukry 1973
Discoaster sp.
Ericsonia robusta (Bramlette & Sullivan 1961) Edwards & Perch-Nielsen 1975
Ericsonia staerkeri Bown 2005
Ericsonia subpertusa Hay & Mohler 1967
Ericsonia sp.
Helicosphaera recta (Haq 1966) Jafar & Martini 1975
Ilselithina fusa Roth 1970
Isthmolithus recurvus Deflandre *in* Deflandre & Fert 1954
Neochiastozygus sp.
Pontosphaera exilis (Bramlette & Sullivan 1961) Romein 1979
Pontosphaera sp.
Prinsius bisulcus (Stradner 1963) Hay & Mohler 1967
Prinsius martinii (Perch-Nielsen 1969) Haq 1971
Prinsius sp.
Reticulofenestra bisecta (Hay Mohler & Wade 1966) Roth 1970
Reticulofenestra daviesii (Haq 1968) Haq 1971
Reticulofenestra dictyoda (Deflandre in Deflandre & Fert 1954) Stradner in Stradner & Edwards 1968
Reticulofenestra hillae Bukry & Percival 1971
Reticulofenestra lockeri Müller 1970
Reticulofenestra reticulata (Gartner & Smith 1967) Roth & Thierstein 1972
Reticulofenestra scrippsae Bukry & Percival 1971
Reticulofenestra stavensis (Levin & Joerger 1967) Varol 1989
Reticulofenestra umbilicus (Levin 1965) Martini & Ritzkowski 1968
Rhabdosphaera gracilentus (Bown & Dunkley Jones 2006) Dunkley Jones et al. 2009
Sphenolithus acervus Bown 2005
Sphenolithus arthurii Bown 2005
Sphenolithus calyculus Bukry 1985
Sphenolithus ciperoensis Bramlette & Wilcoxon 1967
Sphenolithus distentus (Martini 1965) Bramlette & Wilcoxon 1967
Sphenolithus editus Perch-Nielsen in Perch-Nielsen et al. 1978
Sphenolithus pseudoradians Bramlette & Wilcoxon 1967
Sphenolithus radians Delfandre in Grassé 1952
Sphenolithus spiniger Bukry 1971
Toweius callosus Perch-Nielsen 1971
Toweius gammation (Bramlette & Sullivan 1961) Romein 1979
Toweius occultatus (Locker 1967) Perch-Nielsen 1971
Toweius pertusus (Sullivan 1965) Romein 1979

Toweius rotundus Perch-Nielsen in Perch-Nielsen et al. 1978
Toweius selandianus Perch-Nielsen 1979
Toweius serotinus Bybell & Self-Trail 1995
Zygodiscus sp.
Zygrhablithus sp.

Mesozoic calcareous nannofossils:

Arkhangelskiella cymbiformis Vekshina 1959
Arkhangelskiella cf. *maastrichtiensis* Burnett 1997
Arkhangelskiella specillata Vekshina 1959
Arkhangelskiella sp.
Broinsonia enormis (Shumenko 1968) Manivit 1971
Broinsonia parca subsp. constricta Hattner et al. 1980
Calculites percernis Jeremiah 1996
Calculites obscurus (Deflandre 1959) Prins & Sissingh in Sissingh 1977
Calculites sp. Prins & Sissingh in Sissingh 1977
Chiastozygus sp.
Cretarhabdus sp.
Cribrosphaerella ehrenbergii (Arkhangelsky 1912) Deflandre in Piveteau 1952
Cyclagelosphaera tubulata (Grün & Zweili 1980) Cooper 1987
Cyclagelosphaera sp.
Eiffellithus cf. *eximius* (Stover 1966) Perch-Nielsen 1968
Eiffellithus cf. *gorkae* Reinhardt 1965
Eiffellithus sp.
Gartnerago segmentatum (Stover 1966) Thierstein 1974
Lithraphidites bollii (Thierstein 1971) Thierstein 1973
Lithraphidites houghtonii Jeremiah 2001
Lucianorhabdus cf. *maleformis* Reinhardt 1966
Manivitella sp.
Micrantholithus hoschulzii (Reinhardt 1966) Thierstein 1971
Micrantholithus sp.
Microrhabdulus decoratus Deflandre 1959
Micula murus (Martini 1961) Bukry 1973
Micula premolisilvae Lees & Bown 2005
Micula prinsii Perch-Nielsen 1979
Micula staurophora Gardet 1955
Micula cf. *swastica* Stradner & Steinmetz 1984
Micula sp. Vekshina 1959
Nannoconus sp.
Parhabdolithus sp.
Prediscosphaera cretacea (Arkhangelsky 1912) Gartner 1968
Prediscosphaera spinosa (Bramlette & Martini 1964) Gartner 1968
Prediscosphaera sp.
Radiolithus planus Stover 1966
Reinhardtites levis Prins & Sissingh in Sissingh 1977
Retecapsa sp.
Stradnerlithus sp.
Tortolithus sp.
Uniplanarius gothicus (Deflandre 1959) Hattner & Wise 1980
Uniplanarius sissinghii Perch-Nielsen 1986
Uniplanarius sp.
Quadrum gartneri Prins & Perch-Nielsen in Manivit et al. 1977
Quadrum svabenickae Burnett 1997
Quadrum sp.
Watznaueria barnesiae (Black in Black & Barnes 1959) Perch-Nielsen 1968
Watznaueria biporta Bukry 1969
Watznaueria britannica (Stradner 1963) Reinhardt 1964
Watznaueria communis Reinhardt 1964
Watznaueria fossacincta (Black 1971) Bown in Bown & Cooper 1989
Watznaueria ovata Bukry 1969
Watznaueria manivitiae Bukry 1973
Watznaueria sp.

Appendix C

Calcareous nannofossils: Counts of the most important specimens in the well of Schaubing (48°15'28" N, 15°37'02" E).

Sample no. / Schaubing	Abundance	Preservation	*Acanthoica* sp.	*Braarudosphaera bigelowii*	*Calcidiscus leptoporus*	*Coccolithus pelagicus*	*Coccolithus* sp.	*Coronosphaera mediterranea*	*Cyclicargolithus floridanus*	*Discoaster* sp.	*Helicosphaera ampliaperta* (<10)	*Helicosphaera ampliaperta* (>10)	*Helicosphaera carteri*	*Helicosphaera mediterranea*	*Helicosphaera scissura*	*Helicosphaera vedderi*	*Helicosphaera* sp.	*Pontosphaera multipora*	*Reticulofenestra ampliumbilicus*	*Reticulofenestra gelida*	*Reticulofenestra haqii*	*Reticulofenestra minuta*	*Reticulofenestra pseudoumbilicus* (5–7)	*Reticulofenestra pseudoumbilicus* (>7)	*Sphenolithus moriformis*	*Sphenolithus* sp.	*Syracosphaera* cf. *pulchra*	*Umbilicosphaera rotula*	*Umbilicosphaera jafari*
SCHB/37	B																												
SCHB/52	B																												
SCHB/65,4	B																												
SCHB/72	B																												
SCHB/74	B																												
SCHB/80	R	P			1	12	1		1		1										1	2	1			1			
SCHB/90	F	MP				38			4								1		3	2	8	4	4		1	1			
SCHB/100	F	MP	2	1		64		1	4		1						1			2	2	3	3		1	2	1		1
SCHB/116,2	R	MP		2		19	1		1								1		2		14	8	6			2			
SCHB/120,7	FC	M	2	2		150	1	1	2		7		1	1	2	4	1	3	10	3	12	14	16	4	2		1	1	
SCHB/124,8	FC	M		1		151		1	3	2	1	1	1			9	1		7	3	18	18	26	2		2	1		1
SCHB/130,6	FC	MG		1		153	1	1	8	1	8	1	1	1		7	2			4	16	23	21		1	3			

Calcareous nannofossils: Counts of the most important specimens in the well of Streithofen 1 (48°16'30" N, 15°57'12" E).

Sample no. / Streithofen 1	**Abundance**	**Preservation**	***Coccolithus pelagicus***	***Cyclicargolithus floridanus***	***Helicosphaera ampliaperta*** (<10)	***Reticulofenestra haqii***	***Reticulofenestra minuta***	***Reticulofenestra pseudoumbilicus*** (5–7)	***Sphenolithus moriformis***	***Thoracosphaera*** sp.	**Mesozoic — reworked**	**Paleogene — reworked**
STR-1/53,8	B											
STR-1/151,5	VR											
STR-1/249,3	B											
STR-1/301,8	B											
STR-1/351,2	B											
STR-1/405	B											
STR-1/451,9	B											
STR-1/500,5	B											
STR-1/554,8	B											
STR-1/602,7	B											
STR-1/654,8	VR											
STR-1/754,5	B											
STR-1/802	B											
STR-1/853,8	VR	P	2								2	0
STR-1/854,9	B											
STR-1/892,8	VR	P	3	2		1		1			5	1
STR-1/931	VR	M	2		1			1		1	1	
STR-1/964,8	VR	M	1	2		1						
STR-1/990,5	B											
STR-1/1022,6	R	M	10	5		3	2				8	2
STR-1/1051,8	B											
STR-1/1084,8	R	M	8			3				1	1	1

Calcareous nannofossils: Counts of the most important specimens in the well of Altenmarkt T1 (48°34'59" N, 16°14'03" E).

Sample no. / Altenmarkt T1	Abundance	Preservation	*Acanthoica* sp.	*Braarudosphaera bigelowii*	*Calcidiscus leptoporus*	*Calcidiscus pataecus*	*Calcidiscus* cf. *tropicus*	*Coccolithus miopelagicus*	*Coccolithus pelagicus*	*Coccolithus* sp.	*Coronosphaera mediterranea*	*Cyclicargolithus floridanus*	*Discoaster* cf. *druggii*	*Discoaster* sp.	*Hayaster perplexus*	*Helicosphaera ampliaperta* (<10)	*Helicosphaera ampliaperta* (>10)	*Helicosphaera mediterranea*	*Helicosphaera scissura*	*Helicosphaera vedderi*	*Helicosphaera* sp.	*Reticulofenestra ampliumbilicus*	*Reticulofenestra gelida*	*Reticulofenestra haqii*	*Reticulofenestra minuta*	*Reticulofenestra pseudoumbilicus* (5-7)	*Reticulofenestra pseudoumbilicus* (>7)	*Sphenolithus moriformis*	*Sphenolithus multispinatus*	*Sphenolithus* sp.	*Syracosphaera* cf. *pulchra*	*Syracospahera?* cf. *oneillii*	*Thoracosphaera* sp.	*Umbilicosphaera jafari*	*Umbilicosphaera rotula*
ALT-1/504,5	VR																																		
ALT-1/509,5	FR	PM			2		1		44		1				1	2			1	1				3	3	1		2		1	2	4			
ALT-1/560,0	C	M		22					190		13	2									1				1	1	1				67				
ALT-1/580,0	R	M		3					40		2			2		2	1	1						1	4	8	2			1		1			
ALT-1/603,0	VR	P							1																										
ALT-1/603,0(2)	VR																																		
ALT-1/603,5	VR	PM							3		1															1							1		
ALT-1/620,0	R	MP		1					8															1		2					1	1			
ALT-1/640,0	R	M		7		1			37		5			1								1	1	5		2		1			1	2			
ALT-1/670,0	VR	MP		1					6																	1	1					3			
ALT-1/690,0	VR	M							10																										
ALT-1/740,0	VR	M		1	1	1			25		2	1				1					1			2		1				1	1			
ALT-1/760,0	VR	M		x																															
ALT-1/780,0	VR	M		x						1																									
ALT-1/801,4	B																																		
ALT-1/830,0	B			x																															
ALT-1/870,0	R	MP		10				1	31			6	1										2	3		4				3		3		1	
ALT-1/902,7	B																																		
ALT-1/904,5 (1)	B																																		
ALT-1/904,5 (2)	B																																		
ALT-1/970,0	B																																		
ALT-1/999,6	B																																		
ALT-1/1030,0	B																																		
ALT-1/1080,0	R	MP		3		1			45		2						1		1		1		2	6		9								4	3
ALT-1/1100,0	B																																		
ALT-1/1140,0	R	MP		5					18		6	1					1						2	2		2					1	8		2	2
ALT-1/1203,5	VR	MP							4																	1	1						1		
ALT-1/1205,0 (1)	R	MP	2						5																	3	1								

Calcareous nannofossils: Counts of the most important specimens in the well of Laa 1 (48°42'28" N, 16°25'48" E).

Sample no. / Laa 1	Abundance	Preservation	*Braarudosphaera bigelowii*	*Calciditiscus leptoporus*	*Calciditiscus pataecus*	*Coccolithus pelagicus*	*Coronocyclus* cf. *nitescens*	*Coronosphaera mediterranea*	*Cyclicargolithus floridanus*	*Helicosphaera ampliaperta* (<10)	*Helicosphaera ampliaperta* (>10)	*Helicosphaera carteri*	*Helicosphaera scissura*	*Helicosphaera vedderi*	*Helicosphaera* sp.	*Pontosphaera multipora*	*Reticulofenestra ampliumblicus*	*Reticulofenestra haqii*	*Reticulofenestra minuta*	*Reticulofenestra pseudoumbilicus* (5–7)	*Reticulofenestra pseudoumbilicus* (>7)	*Sphenolithus moriformis*	*Sphenolithus* sp.	*Syracosphaera* cf. *pulchra*	*Syracosphaera?* cf. *oneillii*	*Thoracosphaera* sp.	*Triquetrorhabdulus* sp.
LAA-1/900,0	VR	M				6				2								3	4	17				9			1
LAA-1/980,0	VR	MP				11													1	2						1	
LAA-1/1020,0	RVR	M																									
LAA-1/1060,0	VR	M				56			1			2			1			2	1	5	1	1	1	4			
LAA-1/1080,0	RVR	M				6							1		1												
LAA-1/1140,0	RVR	M				7						1													1		
LAA-1/1180,0	VR	M	26		1	64		42										5	3	1	1			116	14		2
LAA-1/1260,0	FR	M	8			54		5	1	8	2	1	1					2	1	1	2			2	2		
LAA-1/1320,0	VR	M	16		1	76												2	3	1			1	1			
LAA-1/1340,0	VR	M				4					1							2						4			
LAA-1/1360,0	B																										
LAA-1/1390,0	B																										
LAA-1/1450,0	B																										
LAA-1/1480,0	B																										
LAA-1/1630,0	VR	M				4																					
LAA-1/1633,2	B																										
LAA-1/1633,7(1)	B																										
LAA-1/1633,7(2)	B																										
LAA-1/1636,5	B																										
LAA-1/1660,0	B																										
LAA-1/1700,0	B																										
LAA-1/1750,0	B																										
LAA-1/1795,4	B																										
LAA-1/1796,5(1)	B																										
LAA-1/1796,5(2)	B																										
LAA-1/1797,0	B																										
LAA-1/1798,9	B																										
LAA-1/1810,0	B																										
LAA-1/1840,0	B																										
LAA-1/1870,0	VR	M				4									1						2			1			
LAA-1/1920,0	R	M				46	1			1		3		1	1	2		4	21	1	9		1		2		
LAA-1/1940,0	VR	MP		1		3									1				4		2			1			
LAA-1/2000,0	F	M				52				2			1	1	2		2	5	4	3	18				2		

Calcareous nannofossils: Counts of the most important specimens in the well of Wildendürnbach K4 (48°44'58" N, 16°30'51" E).

Sample no. / Wildendürnbach K4	Abundance	Preservation	*Acanthoica* sp.	*Braarudosphaera bigelowii*	*Calciditscus leptoporus*	*Calciosolenia fossilis*	*Coccolithus miopelagicus*	*Coccolithus pelagicus*	*Coccolithus* sp.	*Coronocyclus baileyi*	*Coronocyclus* cf. *nitescens*	*Coronosphaera mediterranea*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster* sp.	*Helicosphaera ampliaperta* (<10)	*Helicosphaera ampliaperta* (>10)	*Helicosphaera carteri*	*Helicosphaera intermedia*	*Helicosphaera mediterranea*	*Helicosphaera scissura*	*Helicosphaera vedderi*	*Lithostromation* sp.	*Pontosphaera multipora*	*Reticulofenestra ampliumbilicus*	*Reticulofenestra gelida*	*Reticulofenestra haqii*	*Reticulofenestra minuta*	*Reticulofenestra pseudoumbilicus* (5–7)	*Sphenolithus conicus*	*Sphenolithus heteromorphus*	*Sphenolithus moriformis*	*Sphenolithus* sp.	*Syracosphaera* cf. *pulchra*	*Syracosphaera?* cf. *oneillii*	*Thoracosphaera* sp.	*Triquetrorhabdulus* sp.	*Umbilicosphaera jafari*
WDK-4/752	FC	PM		6		1		97	1		1	11		1	1	23	37	2		3	1	1	1	4			5	9	5			1	5	3	3	1		
WDK-4/854,5	F	M	1	1	1		1	92	1	3		1	2	1	1			30		10		7		1	3		13	17	3		1	5	1		1	1	1	
WDK-4/905(2)	F	MP	1	1				53			1	3				2						1			1		4	8	2	1			4	1	1			
WDK-4/953,5	R/VR	P		2				29			1					3				1		3					7	4	5			2	1					2
WDK-4/954,8	B																																				
WDK-4/996,5(2)	VR	P						4																				3	1									
WDK-4/1051	B																																				
WDK-4/1051,9	F	M	1	13				147				4	3			8	1					12			1	1	5	12	6			3	1	1	3			
WDK-4/1054,2	B																																				
WDK-4/1054,8	R	MP		2				29	1	2	2		2			4	2			1		5					5	3				2	2			1		
WDK-4/1095,4(2)	B																																				
WDK-4/1154,5(2)	B																																				
WDK-4/1201,5(1,2)	B																																				
WDK-4/1202,35	B																																				
WDK-4/1254,3 (2)	FC	MP	1	7				165	2	2	2		1		1				1	1		5			3	1	14	7	3			1	2		3			
WDK-4/1301,1	B																																				
WDK-4/1303	B																																				
WDK-4/1351,8	B																																				
WDK-4/1353	B																																				
WDK-4/1402,6	B																																				
WDK-4/1403,6	B																																				
WDK-4/1453,25	B																																				
WDK-4/1504	B																																				

Appendix D

Calcareous Nannofossils: Total counts per sample

Well	Sample	Well Depth (m)	Counted Specimens
Wildendürnbach K4	2014-WDK4 752	752.0	311
Wildendürnbach K4	2014-WDK4 854,5	854.5	301
Wildendürnbach K4	2014-WDK4 905	905.0	105
Wildendürnbach K4	2014-WDK4 953,5	953.5	35
Wildendürnbach K4	2014-WDK4 954,8	954.8	0
Wildendürnbach K4	2014-WDK4 996,5	996.5	18
Wildendürnbach K4	2014-WDK4 1051,7	1051.7	0
Wildendürnbach K4	2014-WDK4 1051,9T	1051.9	131
Wildendürnbach K4	2014-WDK4 1054,2	1054.2	0
Wildendürnbach K4	2014-WDK4 1054,8	1054.8	51
Wildendürnbach K4	2014-WDK4 1095,4	1095.4	0
Wildendürnbach K4	2014-WDK4 1154,5	1154.5	0
Wildendürnbach K4	2014-WDK4 1201,5	1201.5	0
Wildendürnbach K4	2014-WDK4 1202,35	1202.3	0
Wildendürnbach K4	2014-WDK4 1254,3	1254.3	307
Wildendürnbach K4	2014-WDK4 1301,1	1301.1	0
Wildendürnbach K4	2014-WDK4 1303	1303.0	0
Wildendürnbach K4	2014-WDK4 1351,8	1351.8	0
Wildendürnbach K4	2014-WDK4 1353	1353.0	0
Wildendürnbach K4	2014-WDK4 1402,6	1402.6	0
Wildendürnbach K4	2014-WDK4 1403,6	1403.6	0
Wildendürnbach K4	2014-WDK4 1453,35	1453.3	0
Wildendürnbach K4	2014-WDK4 1504,5T	1504.5	0

Appendix E

Dinoflagellate cysts: Total counts per sample

Well	Sample	Well Depth (m)	Counted Specimens
Schaubing	2014-Schb 65,4	65.4	10
Schaubing	2014-Schb 72	72.0	26
Schaubing	2014-Schb 80	80.0	209
Schaubing	2014-Schb 90	90.0	200
Schaubing	2014-Schb 100	100.0	102
Schaubing	2014-Schb 116,2	116.2	400
Schaubing	2014-Schb 120,7	120.7	226
Schaubing	2014-Schb 124,8	124.8	203
Schaubing	2014-Schb 130,6	130.6	179

Appendix F

List of samples and adjacent data.

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
01/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Low. A. Ernstbrunn	16.30749424	48.51999682		Iron bearing Sands and Clays	Claystone
02/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Low. A. Ernstbrunn	16.28944408	48.47472236		Iron bearing Sands and Clays	Clay
03/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Up. A. Gurten	13.34361233	48.24916164		Wildendürnbach Formation	Fine grained Sand
04/17.04	0	Sample	Concretion	-	-	-	-	-	-	-	-	-	-	-	Up. A. Gurten	13.34361233	48.24916164		Wildendürnbach Formation	Fine grained Sand
05/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Up. A. Roßbach	13.23944964	48.18721279		Wildendürnbach Formation	Sand
06/17.04	0	Sample	Fossilien (Oncophora)	-	-	-	-	-	-	-	-	-	-	-	Up. A. Roßbach	13.23944964	48.18721279		Wildendürnbach Formation	Sand
07/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Up. A. Roßbach	13.23944964	48.18721279		Wildendürnbach Formation	Siltstone
08/17.04	0	Sample		-	-	-	-	-	-	-	-	-	-	-	Up. A. Roßbach	13.23944964	48.18721279		Wildendürnbach Formation	Sand
2014-05 I	0	Sample	Konkretionen aus Basis	-	-	-	-	-	-	-	-	-	-	4	Low. A. St. Pölten	15.62278165	48.22194085		Traisen Formation	Silt, Sand, Fine grained Gravel
2014-06 I	0	Sample	Sand	1	-	1	-	-	-	-	-	1	-	-	Low. A. St. Pölten	15.62278165	48.22194085		Traisen Formation	Silt, Sand, Fine grained Gravel
2014-07 I	0	Sample	direkt über laminiertem: schräg-Geschichtete Schichten, Grobsand mit Feinkies	1	-	1	-	-	-	-	-	1	-	-	Low. A. St. Pölten	15.62278165	48.22194085		Traisen Formation	Silt, Sand, Fine grained Gravel
2014-11 I	0	Sample		1	-	1	-	-	-	-	-	1	-	-	Low. A. Dietersdorf	15.96000442	48.25861174		Dietersdorf Formation	Conglomerate
2014-12 I	0	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Pixendorf	15.96944347	48.28110576		Traisen Formation	Fine grained Gravel, Sand
2014-WDK4 1562,4	1562.4	Sample		1	-	-	-	-	-	1	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Bioturbated Sandstone	Very fine grained Sand, Siltstone, unknown
2014-WDK4 1563	1563	Sample		1	-	1	1	-	-	1	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Bioturbated Sandstone	Very fine grained Sand, Glaukonitsandstein
2014-WDK4 1531,7	1531.7	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Siltstone
2014-WDK4 1532,5	1532.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Siltstone
2014-WDK4 1504,7	1504.7	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Siltstone

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-WDK4 1452,4	1452.4	Sample		1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand, Very fine grained Sand, Arkose
2014-WDK4 1453	1453	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand, Very fine grained Sand
2014-WDK4 1453,35	1453.35	Sample	fine laminated carbonate poor siltstone	1	-	1	-	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Fine grained Sand, Very fine grained Sand
2014-WDK4 1453,5	1453.5	Sample		1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand, Very fine grained Sand, Arkose
2014-WDK4 1454,85	1454.85	Sample	light grey massive to deformed Sand, dark grey carbonate free	1	-	-	-	-	1	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Very fine grained Sand, Fine grained Sand, Arkose
2014-WDK4 1455	1455	Sample	carbonate free, light grey	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand, Very fine grained Sand
2014-WDK4 1401,65	1401.65	Sample		1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Very fine grained Sand, Arkose
2014-WDK4 1401,75	1401.75	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite
2014-WDK4 1402	1402	Sample	pps, massive	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Very fine grained Sand, Arkose
2014-WDK4 1402,5	1402.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite
2014-WDK4 1403	1403	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite
2014-WDK4 1403,6	1403.6	Sample		1	1	1	-	1	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Very fine grained Sand
2014-WDK4 1404,2	1404	Sample	laminated dark Siltstone	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand
2014-WDK4 1404,7	1404.7	Sample	dark fine banked	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite
2014-WDK4 1351,3	1351.3	Sample	massive Sandstone, coarsening upwards	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Medium Grained Sand, Lithic Arkose
2014-WDK4 1351,5	1351.5	Sample	massive Sandstone	1	-	-	-	-	1	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Coarse Grained Sand, Lithic Arkose
2014-WDK4 1351,8	1351.8	Sample	marly	1	-	-	-	1	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Silt, Pelite
2014-WDK4 1353	1353	Sample		1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Silt
2014-WDK4 1354,2	1354.2	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Pelite, Silt
2014-WDK4 1355	1355	Sample		1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Wildendürnbach Formation	Fine grained Sand, Very fine grained Sand, Lithic Arkose

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-WDK4 1301,1	1301.1	Sample		1	-	1	1	1	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1303	1303	Sample	rich in plants	1	-	-	-	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1304	1304	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Pelite
2014-WDK4 1304,5	1304.5	Sample	Fe-bearing clasts, fining upwards	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand, Medium Grained Sand, Arkose
2014-WDK4 1305	1305	Sample	carbonate poor	1	-	-	-	-	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite, Very fine grained Sand
2014-WDK4 1300	1300	Sample	Top of Turpedite	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1300,5	1300.5	Sample	Sandlinsen, großer Schliff	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Sandstone, Feldspathic Wacke
2014-WDK4 1254,3	1254.3	Sample	ripples, light grey, poor in mica	1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1254,4	1254.4	Sample	ripples, light grey, poor in mica, top of turpedite	1	-	-	-	-	4	1	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1254,5	1254.5	Sample	ripples, light grey, poor in mica	1	-	-	1	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Silt, Wacke
2014-WDK4 1254,9	1254.9	Sample	light grey, poor in mica	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1256,3	1256.3	Sample	micaceous, Top of small turpedite	1	-	-	-	-	-	1	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite, Very fine grained Sand
2014-WDK4 1256,8	1256.8	Sample	poorly sorted	1	-	1	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Medium Grained Sand, Coarse Grained Sand, Feldspathic Wacke
2014-WDK4 1201,4	1201.4	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand
2014-WDK4 1201,5	1201.5	Sample		1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-WDK4 1201,6	1201.6	Sample	ripples	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Arkose
2014-WDK4 1201,95	1201.95	Sample	bouma Sequence, fining upwards, ripples	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand, Very fine grained Sand, Arkose
2014-WDK4 1202,35	1202.35	Sample		1	-	-	-	1	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1202,5	1202.5	Sample		1	1	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1202,7	1202.7	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand
2014-WDK4 1204,5	1204.5	Sample		1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand, Arkose
2014-WDK4 1151,5	1151.5	Sample		1	-	-	-	-	4	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Medium Grained Sand, Lithic Arkose
2014-WDK4 1152,2	1152.2	Sample	fining upwards	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Medium Grained Sand, Fine grained Sand, Lithic Arkose
2014-WDK4 1152,5	1152.5	Sample	coarsening	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Fine grained Sand
2014-WDK4 1153	1153	Sample		1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand
2014-WDK4 1154	1154	Sample	fining upwards	1	1	1	-	-	1	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Medium Grained Sand, Fine grained Sand, Arkose
2014-WDK4 1154,2	1154.2	Sample	Pelite-Sand Intrelayering	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite, Sand
2014-WDK4 1154,5	1154.5	Sample	Pelite-VF-Sand interlayering	1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Pelite
2014-WDK4 1150,5	1150.5	Sample	sandy and marly banks	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Medium Grained Sand
2014-WDK4 1095,4	1095.4	Sample	dark grey brownish grey Siltstone, changing SO3 content	1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-WDK4 1095,8	1095.8	Sample	dark grey brownish grey Siltstone, changing SO3 content	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite, Feldspathic Wacke
2014-WDK4 1051h	1051	Sample	changing marl content	1	-	1	1	1	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1051,7	1051.7	Sample	consolidated	1	-	-	-	1	-	-	-	1	1	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand, Feldspathic Wacke
2014-WDK4 1053,3	1053.3	Sample	strongly consolidated FS	1	1	-	-	-	-	1	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Fine grained Sand
2014-WDK4 1053,6	1053.6	Sample	marly Siltstone	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1054	1054	Sample	marly Siltstone, Fe-rich	1	-	-	-	-	-	1	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 1054,5	1054.5	Sample	debris flow; Clay Clasts, strongly consolidated, clay minerals	1	1	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Feldspathic Wacke, Fine grained Sand, Silt
2014-WDK4 1054,8	1054.8	Sample		1	-	-	-	1	-	-	-	1	7	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Transition Facies Ottnangian/ Karpatian	Pelite
2014-WDK4 996,5	996.5	Sample	light grey Siltstone with changing marl-content	1	-	1	-	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-WDK4 953,5	953.5	Sample		1	1	-	-	1	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-WDK4 953,7	953.7	Sample	consolidated	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Fine grained Sand
2014-WDK4 953,9	953.9	Sample	consolidated	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Fine grained Sand, Feldspathic Wacke
2014-WDK4 954,7	954.7	Sample	clay clasts	1	-	-	-	-	4	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Medium Grained Sand, Fine grained Sand, Wacke
2014-WDK4 954,8	954.8	Sample		1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-WDK4 903,7	903.7	Sample	ripples, pps, fining upwards	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Very fine grained Sand, Fine grained Sand, Arkose
2014-WDK4 904,5	904.5	Sample	coarsening, poorly consolidated	1	1	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Very fine grained Sand, Arkose
2014-WDK4 904,7	904.7	Sample	poorly consolidated sheeted FS + plants, Xrd indicates Fe-rich composition	1	-	1	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Fine grained Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-WDK4 905	905	Sample		1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-WDK4 854	854	Sample	Drill Gouge	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Drill Gouge
2014-WDK4 854,5	854.5	Sample	marly Siltstone	1	-	1	1	1	-	-	-	1	1	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-WDK4 802,2	802.2	Sample	poorly consolidated	1	1	1	-	-	1	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Medium Grained Sand, Feldspathic Wacke
2014-WDK4 803,2	803.2	Sample	poorly consolidated	1	-	-	-	-	-	-	-	1	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Coarse Grained Sand
2014-WDK4 805	805	Sample	poorly consolidated	1	-	-	-	-	-	-	-	1	-	1	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Coarse Grained Sand, Arkose
2014-WDK4 752	752	Sample	slightly marly silts, CO3 rich and mica-poor; poorly consolidated	1	-	-	-	1	-	-	-	-	-	-	Low. A. Wildendürnbach	16.51372494	48.75002006	Wildendürnbach K4	Laa Formation	Pelite
2014-Schb 130,6	130.6	Sample	kalkhaltiger grauer Silt mit Fischschuppen nahe Basis	1	-	1	1	1	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 124,8	124.8	Sample	hellgrauer mergeliger Silt ==> für Schwerminerale	1	5	1	1	1	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 120,7	120.7	Sample	grauer Silt-Feinsand, strukturlos; immer wieder Siltlagen im Pelit	1	5	1	1	1	-	1	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt, Fine grained Sand
2014-Schb 116,2	116.2	Sample	Grobsand + Pelit, mergelig, massig grau; Schneiden!! GrobsandLage gefolgt von siltig tonigen hell/dunkelgrau mm laminierten Schichten, 10cm höher dann eine 5cm dicke feinsandige Lage mit einem leichten fining upward. ==> flachmarine ruhige sedimentation o	1	1	1	1	1	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Coarse Grained Sand, Silt
2014-Schb 100	100	Sample	grauer siltiger Mergel; Schneiden!! Mehrere cm dicke dunkle feinkörnige (Ton-Silt) Lage unterbrochen von mm-cm dicken gröberen hellgrauen Lagen. Die hellgrauen Lagen sind Grobsilt-SF-Sand; eine mehrere mm dicke Lage zeigt komplexe linsenartige Strukturen	1	5	1	1	1	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 90	90	Sample	grauer siltiger Mergel; Fischschuppen aufgeschnitten: mm-cm dicker eben laminierter hell/dunkerlgrauer Fein-Grobsilt, gröbere u. feinere Bereiche wechseln	1	5	1	1	1	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 80	80	Sample	grauer siltiger Mergel; Fischschuppen Aufgeschnitten: mm dicker hell/dunkelgrauer eben laminierter siltiger Mergel	1	-	1	1	1	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 74	74	Sample	fein laminierte hellgraue Silte, teils bräunlich-dunkel verfärbt, kalkfrei + Gipsblüten	1	-	1	1	1	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt
2014-Schb 72	72	Sample	Silt-Feinsande, kalkfrei, hellgrau, keine bation?Gipsblüten, angeschnitten sind Strukturen erkennbar, Biotur	1	1	1	1	1	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Silt, Fine grained Sand
2014-Schb 65,4	65.4	Sample	teils dunkle Lagen reich an org. Material, Gipsblüten, kalkfrei	1	-	1	1	1	-	1	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Silt
2014-Schb 52	52	Sample	kalkfreie tonige Silte, hellgrau, keine Gipsblüten	1	-	1	1	1	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Silt
2014-Schb 37	37	Sample	FS, kalkarm, Pflanzenreste, gelblich rötlich	1	5	1	1	1	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Fine grained Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Schb 24	24	Sample	verfestigter gradierter MS-FS kalkreich ==> Schneiden/Dünnschliff, angeschnitten ein strukrurloser stark verfestigter Mittelsand	1	1	1	-	-	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Medium Grained Sand
2014-Schb 16,3	16.3	Sample	MS, rötlich, verfestigt, kalkfrei; Augeschnitten: strukturloser stark verfestigter Mittelsand	1	5	1	-	-	-	-	-	1	-	2	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Medium Grained Sand
2014-Laa 1799	1799	Sample	fine sand, convolute bedding,	1	4	1	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Fine grained Sand
2014-Laa 1798,4	1798.4	Sample	graublaue Hintergrundsedimentation	1	-	1	4	1	-	1	-	1	7	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay
2014-Laa 1797	1797	Sample	FS-Ms + Clay clasts	1	6	-	-	1	-	-	1	1	-	6	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Sand
2014-Laa 1796,5	1796.5	Sample	Mud + Sand. Viel Straukturen	1	-	-	-	1	-	-	1	1	-	6	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud, Sand
2014-Laa 1795,8	1795.8	Sample	Mud und helle Linsen	1	-	-	4	1	-	-	-	1	7	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-Laa 1795,3	1795.3	Sample	silitiger Mud, finning upward	1	-	-	-	-	-	-	1	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-Laa 1638	1638	Sample	MS	-	4	-	-	-	-	-	-	-	-	5	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Medium Grained Sand
2014-Laa 1636,5	1636.5	Sample	MS-Mud-MS, Entwässerungsstrukturen	1	-	-	-	1	-	-	1	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1635,5	1625.5	Sample	MS	-	1	-	-	-	-	-	-	-	-	5	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Medium Grained Sand
2014-Laa 1636	1636	Sample	Mud-MS	-	-	-	-	-	-	-	1	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1633,7	1633.7	Sample	MS-Mud-MS-Mud	1	-	-	-	1	-	-	1	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1633,2	1633.2	Sample	Mud	1	-	1	4	1	-	-	-	1	7	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-AltT1 1205	1205	Sample	Jura Kalk ==> Basis Eggenburg, Ms, Gradient: Schwarze Minerale werden nach oben hin weniger	1	6	-	-	1	-	-	1	1	7	6	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Carbonate Arenite Serie	unknown
2014-AltT1 1203,3	1203.3	Sample	Bioturbated Sand	1	-	-	4	1	-	-	-	-	1	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Bioturbated Sandstone	Sand
2014-AltT1 1201,5	1201.5	Sample	Bioturbated Sand	1	4	-	-	-	-	1	-	1	-	5	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Bioturbated Sandstone	Sand
2014-AltT1 1001,5	1001.5	Sample	Sand, MS-FS, Entwässerungsstrukturen	1	6	-	-	-	-	-	1	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Sand
2014-AltT1 999,8	999.8	Sample	MS-Mud und Feinkies	-	-	-	-	-	-	-	1	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	unknown
2014-AltT1 904,5	904.5	Sample	MS-Mud-MS	-	-	-	-	1	-	-	1	1	-	6	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	unknown
2014-AltT1 903,5	903.5	Sample	MS	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Medium Grained Sand
2014-AltT1 902,7	902.7	Sample	Mud	-	-	-	4	1	-	-	-	-	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mud
2014-AltT1 901,3	901.3	Sample	Mud (ohne Sandlage)	1	-	1	-	-	-	-	-	1	1	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mud

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-AltT1 900,5	900.5	Sample	CS-MS-Cs	1	4	-	-	-	-	-	-	1	-	5	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Coarse Grained Sand
2014-AltT1 803,5	803.5	Sample	Sand	1	1	1	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Sand
2014-AltT1 802,8	802.8	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Sand
2014-AltT1 801,4	801.4	Sample	Mud	1	-	-	-	1	-	-	1	1	7	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Mud
2014-AltT1 603,5	603.5	Sample	Mud	1	-	-	4	1	-	-	-	-	1	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mud
2014-AltT1 603	603	Sample	Mud, Sand, komplexe Strukturen	-	-	-	-	1	-	-	1	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	unknown
2014-AltT1 602	602	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Sand
2014-AltT1 504,5	504.5	Sample	Marl	1	-	-	-	1	-	-	1	1	1	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Marl
2014-Por2 1358	1358	Sample	Glaukonitsandstein	-	-	-	-	-	-	-	1	1	-	6	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Glaukonitsandstein
2014-Por2 1357,5	1357.5	Sample	Glaukonitsandstein	1	4	-	-	-	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Glaukonitsandstein
2014-Por2 1294	1294	Sample	aufgearbeiteter Glaukonitsandstein	1	4	1	-	-	-	-	1	1	-	5	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Glaukonitsandstein
2014-Por2 1255,5	1255.5	Sample	Bioturbierte Fischfazies?	1	4	-	4	1	-	1	1	1	7	5	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Sand
2014-Por2 1102,5	1102.5	Sample	brauner Mud	1	-	-	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mud
2014-Por2 1005	1005	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Sand
2014-Por2 1004,5	1004.5	Sample	hellbrauner (1; XRF 109) und dunkelbrauner (2; XRF 110) Mud; XRD: ID 1213-1219 entspricht 2.; ID 1220-1226 entspricht 1.; CO3: ID 123 entspricht 1.; ID 124 entspricht 2.;	1	-	-	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mud
2014-Por2 1004,8	1004.8	Sample	Sand und Pflanzenhäcksel	-	-	-	-	-	-	-	1	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Sand
2014-Por2 857	857	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Sand
2014-Por2 856,5	856.5	Sample	brauner Mud	1	-	-	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mud
2014-Por2 704	704	Sample	hellbrauner Mud	1	-	-	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mud
2014-Por2 554,4	554.4	Sample	Sand-Mud, fining upward	-	-	-	-	1	-	-	1	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-Por2 552,5	552.5	Sample	Sand + Clay Clasts	1	1	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Por2 552	552	Sample	dunkelbrauner Mud	1	-	-	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mud
2014-Por2 437	437	Sample	Mud	1	-	1	4	1	-	-	-	1	7	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-Por2 437,5	437.5	Sample	VF Sand	1	4	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mud, Very fine grained Sand
2014-Mail2 1455	1455	Sample	Jurakalk	-	-	-	-	-	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Carbonate Reef	Marble
2014-Mail2 1381	1381	Sample	Sand, hellgrau, gelb +Pflanzenreste; eher eckige schlecht sortierte Sande, (lokal?);	1	6	-	-	-	-	-	1	1	-	6	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sand
2014-Mail2 1330,5	1330.5	Sample	Sand	1	4	-	-	-	-	-	-	1	-	5	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sand
2014-Mail2 1329,5	1329.5	Sample	zementierter Sand	1	1	-	-	-	-	-	-	1	-	5	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sandstone
2014-Mail2 1269	1269	Sample	Sand	1	1	1	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sand
2014-Mail2 1266	1266	Sample	zementierter Sand; zementierte Bereiche stark durchwühlt	-	-	-	-	-	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sandstone
2014-Mail2 1210	1210	Sample	Ton, Fischschuppen	1	-	1	4	1	-	1	-	1	1	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Clay
2014-Mail2 1115	1115	Sample	Grobsand	1	1	-	-	-	-	-	-	1	-	5	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Coarse Grained Sand
2014-Mail2 1114,5	1114.5	Sample	unverfestigter Sand + Muschelreste, vermutlich Luciniden-Reste, die vollmarine Bedingungen andeuten	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Sand
2014-Mail2 1114	1114	Sample	zementierter Sand + Clay Clasts	-	-	-	-	1	-	-	1	1	-	6	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Sandstone
2014-Mail2 978	978	Sample	Sand-Ton Wechsellagerung; distales Delta?	-	-	-	-	1	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	unknown
2014-Mail2 977	977	Sample	Sand-Ton Wechsellagerung; distales Delta?	-	-	-	-	1	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	unknown
2014-Mail2 976	976	Sample	Sand-Ton Wechsellagerung; distales Delta?	-	-	-	-	1	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	unknown
2014-Mail2 975	975	Sample	Ton/Mud	1	-	-	4	1	-	-	-	1	1	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mud
2014-Mail2 875	875	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 753	753	Sample	FS, ripples, Top of Turpedit?	1	1	-	4	1	-	-	-	1	1	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Fine grained Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Mail2 752,5	750.5	Sample	Sand	1	1	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 751,5	751.5	Sample	Mud-Sand	-	-	-	-	1	-	-	1	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	unknown
2014-Mail2 655	655	Sample	zementierter Konglomerat + Sand	-	-	-	-	-	-	-	1	1	-	6	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Conglomerate
2014-Mail2 653	653	Sample	Sand	1	6	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 651	651	Sample	Konglomerat unverfestigt (Flussschotter?);	-	7	-	-	-	-	-	-	-	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Conglomerate
2014-Mail2 554	554	Sample	Sand	1	6	-	-	-	-	-	-	1	-	6	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-AltT1 999,6	999.6	Sample	gelblicher Mud	1	-	-	4	1	-	-	-	1	1	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mud
2014-Por2 1254	1254	Sample	Bioturbierte Fischfazies?	1	4	-	4	1	-	-	1	1	7	5	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Sand
2015-01/01 I	0	Sample	Sandlage, Karbonat und Augensteine gemischt	1	6	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Quatenary Lake Sediments	Coarse Grained Sand
2015-01/01 II	0	Sample	dirty sample of quatenary sand including augenstein formation	-	-	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Quatenary Lake Sediments	Coarse Grained Sand
2015-01/01 III	0	Sample	Clay sample. Quatenary lake clays?	-	-	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Quatenary Lake Sediments	Clay
2015-01/01 IV	0	Sample	Paleosol	-	-	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Paleosol	Clay
2015-01/01 V	0	Sample	Large sample for sieving	1	-	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Quatenary Lake Sediments	Coarse Grained Sand
2015-01/02 I	0	Sample	quatenary lake sediments?	1	6	-	-	-	-	-	-		-	-	Low.A. Mailberg	15.26308389	47.68774639		Quatenary Lake Sediments	Coarse Grained Sand
2015-01/03 I	0	Sample	In situ Augensteine? Strongly weathered, deep soils,	1	6	-	-	-	-	-	-	-	-	-	Low.A. Mailberg	15.26225971	47.68814417		Augenstein Formation	Conglomerate
2015-01/01 VI	0	Sample	large components	-	-	-	-	-	-	-	-		-	-	Zellersteritzen	15.26445371	47.68721238		Quatenary Lake Sediments	Conglomerate
2015-Laa1 1020	1020	Sample (cuttings)	Cuttings: hellgrau, cm groß, kugelig bis plattig, verklumpend Lithologie: vorwiegend Ton Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton > Silt
2015-Laa1 1040	1040	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm groß, plattig, teilweise verklumpend Lithologie: Ton/Silt Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton > Silt
2015-Laa1 1060	1060	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm groß, meist plattig Lithologie: CO3 zemetierte Sande, Qz-Kiese, Silte, Tone Verunreinigung: magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt/ Sand/Feinkies

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1070	1070	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm groß, vorwiegend plattig, leicht verklumpend Lithologie: vorwiegend Tone u. Silte, Sandstücke CO3 zementiert Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-Laa1 1080	1080	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm groß, meist plattig Lithologie: Silte überwiegen Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-Laa1 1100	1100	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm gr0ß, vorwiegend plattig Lithologie: alles dabei, Sande oft CO3 zementiert Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Laa1 1120	1120	Sample (cuttings)	Cuttings: hellgrau, mm-1cm groß, vorwiegend plattig, einzelne Mineralkörner, wenig Material Lithologie: alles dabei, glimmerführend Verunreinigung: wenige magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Laa1 1140	1140	Sample (cuttings)	Cuttings: hellgrau, mm-2cm groß, kugelig bis plattig, teilweise verklumpend Lithologie: Silte, VFSande u. Tone Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-Laa1 1160	1160	Sample (cuttings)	Cuttings: hellgrau, mm.2cm groß, kugelig u. plattig Lithologie: Fsande mit eingebetteten gröberen Komponenten Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt > Sand
2015-Laa1 1180	1180	Sample (cuttings)	Cuttings: hellgrau 0,5cm-2cm groß, kugelig bis plattig, verklumpend Lithologie: Tonreich, meist Siltüberzogen Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton > Silt
2015-Laa1 1200	1200	Sample (cuttings)	Cuttings: hellgrau, 0,5mm-3cm groß, blättrig bis kugelig Lithologie: glimmerige Fsande u. Silte mit gröberen Komponenten Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt > Sand
2015-Laa1 1240	1240	Sample (cuttings)	Cuttings: Lithologie: Verunreinigung: Qualität 1-5:	-	-	-	-	-	-	-	-	-	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	unknown
2015-Laa1 1260	1260	Sample (cuttings)	Cuttings: hellgrau, mm-cm groß, blättrig bis kugelig, leicht verklumpend, wenig Material Lithologie: glimmerführende Silte/Fsande mit gröberen Komponenten Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt > Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1290	1290	Sample (cuttings)	Cuttings: hellgrau, 0,5-2cm groß, kugelig, verklumpend, wenig Material Lithologie: glimmereiche Silte u. Feinsande, größere Körner teilweise in FS/Silt-Matrix eingebettet Verunreinigung: wenige Pflanzenreste Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt > Sand
2015-Laa1 1310	1310	Sample (cuttings)	Cuttings: hellgrau, mm-cm, blättrig bis kugelig, stark verklumpend Lithologie: glimmereiche Silte u. Sande Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt
2015-Laa1 1320	1320	Sample (cuttings)	Cuttings: mittelgrau, cm groß, kugelig, selten blättrig Lithologie: MS-FS, Silte, teilweise glimmerreich Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	unknown
2015-Laa1 1330	1330	Sample (cuttings)	Cuttings: mittelgrau, mm-1,5cm, blättrig bis kugelig Lithologie: glimmereicher Feinsand, Silt, auch Ton, wenige Qz-Körener Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt/ VFSand
2015-Laa1 1340	1340	Sample (cuttings)	Cuttings: hellgrau, 0,5mm-2cm groß, kugelig, selten blättrig Lithologie: glimmereiche Feinsande u. Silte Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: VFSand/Silt
2015-Laa1 1360	1360	Sample (cuttings)	Cuttings: mittelgrau, mm-2cm, blättrig bis kugelig Lithologie: Tone, glimmereiche Silte, wenige glimmereiche Feinsandstücke Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt/ VFSand
2015-Laa1 1390	1390	Sample (cuttings)	Cuttings: mittelgrau, mm-2cm, blättrig u. kugelig Lithologie: Ton u. Silt, wenig Feinsand, Silt 50% Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt/ VFSand
2015-Laa1 1410	1410	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm, kugelig u. blättrig Lithologie: viel Feinsand, wenig Silt u. Ton Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt > Ton
2015-Laa1 1430	1430	Sample (cuttings)	Cuttings: hellgrau, mm-2cm groß, kugelig oder Blättchen Lithologie: Helle Feinsande u. Silte, kaum Tone Verunreinigung: Bauschutt?? Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt
2015-Laa1 1450	1450	Sample (cuttings)	Cuttings: hellgrau, mm-2cm große teils kugelige Stücke, wenig Material Lithologie: Feinsande und Silte, kaum Tone Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1460	1460	Sample (cuttings)	Cuttings: sehr hellgrau, cm groß kugelig u. verklumpend Lithologie: große Klumpen aus sehr feinem Sand bis Silt, sehr einheitliche Zusammensetzung Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt
2015-Laa1 1480	1480	Sample (cuttings)	Cuttings: sehr hellgrau, cm groß kugelig u. verklumpend Lithologie: große Klumpen aus sehr feinem Sand bis Silt, sehr einheitliche Zusammensetzung Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt
2015-Laa1 1510	1510	Sample (cuttings)	Cuttings: hellbraun, mm-1cm große Stücke Lithologie: ? Verunreinigung: Gumme, extrem viele magnetische Stücke, Bauschutt, Pflanzenreste Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Feinkies/Sand
2015-Laa1 1530	1530	Sample (cuttings)	Cuttings: hellgelb, bis 2cm große Stücke Lithologie: Kies u. Sand? (schwer zu sagen aufgrund extremer Verunreinigung) Verunreinigung: extrem viele magnetische Stücke, Eisenspäne, Gumme, Bauschutt, Asphalt? Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Feinkies/Sand
2015-Laa1 1550	1550	Sample (cuttings)	Cuttings: hellgelb, mm-cm groß, kugelig, grobkies Lithologie: Verunreinigung: extrem viele magnetische Stücke u. Eisenspäne, Gummi, Schuttstücke Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Feinkies/Sand
2015-Laa1 1570	1570	Sample (cuttings)	Cuttings: hellgrau, gut gerundete mm-cm große Stücke, Lithologie: Kies u. Dand Verunreinigung: extrem viele magnetische Stücke u. Eisenspäne, Pflanzenreste, Betonstücke, Asphalt?? Qualität 1-5: 6	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Feinkies/Sand
2015-Laa1 1630	1630	Sample (cuttings)	Cuttings: hellgrau, mm-cm große Blättchen, einzelne Klumpen, sehr heterogen Lithologie: viel Silt u. Feinsand, wenig Ton, mehrere Kohlestücke Verunreinigung: sehr viele magnetische Stücke, Pflanzenreste Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Ton/Silt/ VFSand
2015-Laa1 1660	1660	Sample (cuttings)	Größe der Cuttings: mm große elongierte Plättchen Korngröße: Tone, wenig Silt Lithologie: Tone, sehr wenige Stücke von Silt oder Sand Verunreinigung: sehr viele Eisenspäne, einzelne Qz u. Fsp Körner Qualität 1-5: 3 (sehr Homogen und gut aussehend auf ers	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay, Silt, Coal

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1700	1700	Sample (cuttings)	Größe der Cuttings: mm-cm große Plättchen, cm große Kügelchen Korngröße: Tone bis Feinsande Lithologie: Ton-Chips, Silte und Feinsande, 30:30:30 Verunreinigung: viele Eisenspäne Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Coal, Clay, Silt, Sand
2015-Laa1 1720	1720	Sample (cuttings)	Größe der Cuttings: mm große Plättchen und mm-cm große kugelige Stücke Korngröße: Tone bis Sande Lithologie: Ton Chips, Silte und viel Feinsand >50% Verunreinigung: kleine Eisenspäne Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay, Silt, Fine grained Sand, Coal
2015-Laa1 1740	1740	Sample (cuttings)	Größe der Cuttings: mm-cm große teilweise elongierte Plättchen, wenige cm große Kugeln Korngröße: Tone, Silte und Feinsande Lithologie: Tone, Silte + Feinsande >50% Verunreinigung: wenige kleine Eisenspäne Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2015-Laa1 1750	1750	Sample (cuttings)	Größe der Cuttings: mm-cm große elongierte Plättchen und kugelige Klumpen Korngröße: sand bis ton Lithologie: Ton-Chips und Feinsand-Stücke, Kohlestücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay, Fine grained Sand, Coal, Silt
2015-Laa1 1770	1770	Sample (cuttings)	Größe der Cuttings: mm große längliche Plättchen, wenige cm-große kugelige Stücke Korngröße: hauptsächlich Ton, wenig Silt oder Feinsand Lithologie: Ton, wenig Feinsand <10% Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay, Silt, Very fine grained Sand
2015-Laa1 1780	1780	Sample (cuttings)	Größe der Cuttings: kleine cuttings (mm-Bereich), wenige cm große Stücke Korngröße: Silt-Ton, Feinsand 10-20 % Lithologie: Glimmerführende Feinsande, Kohlen, Silte und Tone Verunreinigung: Vorhanden aber gering, 1 Gummistück und wenige Eisenstücke	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Clay, Very fine grained Sand, Silt, Coal
2015-Laa1 1810	1810	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm große Blättchen Lithologie: Tone, wenige Silte Verunreinigung: einige magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Laa1 1820	1820	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm große Blättchen Lithologie: Tone, wenige Silte, einzelne Klumpen Verunreinigung:wenige Eisenstücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Ton > Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1840	1840	Sample (cuttings)	Cuttings: dunkelgrau, mm große Blättchen Lithologie: Tone wenige Silte, einzelne Feinsandstücke, einzelne Kiesstücke Verunreinigung: wenige magnetische Stücke Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Laa1 1870	1870	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm große Blättchen, kogelige Klümpchen Lithologie: Tone, wenige Silte Verunreinigung: wenige magnetische Stücke Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Laa1 1920	1920	Sample (cuttings)	Cuttings: dunkelgrau, hellere Stücke, mm-1cm große Blättchen Lithologie: Tone, sehr wenige hellere-Siltstücke, Verunreinigung: sehr wenige magnetische Stücke Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Laa1 1940	1940	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm große Blättchen Lithologie: Tone, Silte, sehr wenige Sand-Stücke und einzelne Kies-Stücke (Qz) Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Laa1 1950	1950	Sample (cuttings)	Cuttings: dunkelgrau, mm-1,5cm große Blättchen, wenige helle Stücke Lithologie: Tone/Silte, Karbonate, CO3 zemntierte Sande Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Carbonate Arenite Serie	Mixed Sample: Ton/Silt > Carbonate/Sands
2015-Laa1 1970	1970	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm große Blättchen Lithologie: Tone/Silte, karbonatische Stücke, CO3 zementierte Sandsteine (sehr untergeordnet) Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Carbonate Arenite Serie	Mixed Sample: Ton/Silt > Carbonate
2015-Laa1 1990	1990	Sample (cuttings)	Cuttings: dunkelgrau; wenige helle Stücke, mm-1cm große Blättchen Lithologie: Tone, Silte, wenige Karbonate, einzelne kohlige Stücke Verunreinigung: sehr wenige magnetische Stücke, 1 Eisenspan, 1 Pflanzenrest Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Carbonate Arenite Serie	Mixed Sample: Ton/Silt > Carbonate
2015-Laa1 2000	2000	Sample (cuttings)	Cuttings: dunkelgrau, wenige helle Stücke, mm-1cm große Blättchen Lithologie: Ton, Silt, wenige Kohle-Stücke, karbonatische Stücke Verunreinigung: wenige magnetische Stücke Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Carbonate Arenite Serie	Mixed Sample: Ton > Silt
2015-Laa1 900	900	Sample (cuttings)	Cuttings: hellgrau, mm-1cm groß, meist kleine Stücke oder große kugelige Klumpen Lithologie: Tonklasten mit Siltüberzug, CO3 zementierte Sandstücke, feinkiesige Qz-Klasten Verunreinigung: magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt > Carbonate/Sands

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 940	940	Sample (cuttings)	Cuttings: hellgrua, mm-1,5cm, meist plattig, verklumpend Lithologie: Tonklasten mit Siltüberzug Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt
2015-Laa1 980	980	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm, plattig, selten kugelig, verklumpend Lithologie: Tonklasten mit Siltüberzug Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Laa Formation	Mixed Sample: Ton/Silt
2015-AltT1 1030	1030	Sample (cuttings)	Cuttings: hellgrau, <1cm, kantige Stücke Lithologie: überwiegend FS u. Qz-Kies Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: Sand > Ton/Silt
2015-AltT1 1060	1060	Sample (cuttings)	Cuttings: dunkelgrau, mm-1,cm, meist plattig Lithologie: Tone, wenig Silte, Qz-Körner u. CO3 zementierte Sande Verunreinigung: viele magnetische Stücke, Pflanzenreste Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-AltT1 1080	1080	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm, plattig und kugelig verklumpend Lithologie: stark verklumpte Aggregate aus Kies u. Ton, wenig Silt/Sand Verunreinigung: wenig magnetische Stücke, Bauschutt? Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Robulus Schlier	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-AltT1 1100	1100	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm, plattig u. kugelig, verklumpend Lithologie: Tonstücke überwiegen, selten Sand, einige einzelne Mineralkörner verkittet in Klumpen Verunreinigung: wenige magnetische Stücke, Bauschutt? Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Robulus Schlier	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-AltT1 1120	1120	Sample (cuttings)	Cuttings: dunkelgrau, <1cm, plattig Lithologie: Tonplattchen, untergeordnet, Feinkiesstücke (Qz) u. CO3 zementierte Sandstücke Verunreinigung: magentische Stücke, Pflanzenreste Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Robulus Schlier	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-AltT1 1140	1140	Sample (cuttings)	Cuttings: hellgrau, mm-1cm groß, meist kugelig, eckig Lithologie: Hauptsächlich Feinsand Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Bioturbated Sandstone	Mixed Sample: Sand > Ton/Silt
2015-AltT1 1220	1220	Sample (cuttings)	Cuttings: weiß, dunkle Stücke darin, < 0,5cm, plattig bis kugelig Lithologie: Karbonate, Ton Silt u. Qz- Glauconit-Körner sehr untergeordnet Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Carbonate Reef	Mixed Sample: Carbonat > Ton/Silt/ Sand/Kies
2015-AltT1 1250	1250	Sample (cuttings)	Cuttings: wieß, dunkelgraue Stücke, <0,5cm, kugelig Lithologie: Karbonate überwiegen, daneben Ton/Sand u. Qz/Glaukonit-Körner Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Carbonate Reef	Mixed Sample: Carbonat > Ton/Silt/ Sand/Kies

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-AltT1 580	580	Sample (cuttings)	Cuttings: hellgrau, 0,5cm-3cm, plattig bis kugelig Lithologie: Tonklasten mit Silt/Feinsandüberzug u. wenige Siltig/sandige Klasten Verunreinigung: wenig Bauschutt? Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt/Sand
2015-AltT1 620	620	Sample (cuttings)	Cuttings: mittelgrau, mm-2cm groß, plattig bis eckig, verklumpend Lithologie: Ton > Silt, Sand Verunreinigung: Bauschutt Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt/Sand
2015-AltT1 640	640	Sample (cuttings)	Cuttings: mittelgrau, mm-5cm, kugelig bis eckig, stark verklumpend Lithologie: Drill Gouge? Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt)
2015-AltT1 650	650	Sample (cuttings)	Cuttings: hellgrau, mm-2cm, meist kugelig Lithologie: Tonklasten, Silt/Sand untergeordnet Verunreinigung: Bauschutt Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt/Sand
2015-AltT1 670	670	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm, plattig bis kugelig, absandend, wenig Material Lithologie: FS/Silt Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-AltT1 690	690	Sample (cuttings)	Cuttings: hellgrau, 0,5-3cm, plattig-kugelig Lithologie: Ton Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt
2015-AltT1 700	700	Sample (cuttings)	Cuttings: mittelgrau, 1-4cm groß, kugelig Lithologie: Ton Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt
2015-AltT1 720	720	Sample (cuttings)	Cuttings: hellgrau, mm-3cm, plattig bis kugelig, Lithologie: alles dabei Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton/Silt/Sand/Feinkies
2015-AltT1 740	740	Sample (cuttings)	Cuttings: hellgrau, 1-3cm, kugelig Lithologie: Tonkugeln, 1 Sandkugel Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt/Sand
2015-AltT1 760	760	Sample (cuttings)	Cuttings: hellgrau, 1-3cm, plattig bis kugelig Lithologie: Tonklasten mit Siltüberzug Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton > Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-AltT1 780	780	Sample (cuttings)	Cuttings: hellgrau, mm-2cm, plattig bis kugelig, leicht verklumpend Lithologie: Tonklasten mit Siltüberzug Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton/Silt
2015-AltT1 830	830	Sample (cuttings)	Cuttings: hellgrau, mm-4cm, plattig bis kugelig verklumpend, absandend Lithologie: Tonklasten mit Silt u. Sandüberzug, Sand dazwischen Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt/ Sand
2015-AltT1 850	850	Sample (cuttings)	Cuttings: mittelgrau, mm-5cm, plattig, eckig, stark verklumpend Lithologie: Silt, Ton, VFS Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt > Ton
2015-AltT1 870	870	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm, meist plattig, verklumpend Lithologie: Tonstücke mit Siltüberzug, Feinsand, verkittete Mineralkörner Verunreinigung: Bauschutt, Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-AltT1 920	920	Sample (cuttings)	Cuttings: mittelgrau, mm-2cm, plattig, kugelig verklumpend Lithologie: Vorwiegend Fein/Grobsand Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: Sand > Ton/Silt
2015-AltT1 940	940	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm groß, kugelig bis eckig, absandend Lithologie: Feinsand, einzelne Mineralkörner Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: VFSand/Silt > Sand
2015-AltT1 970	970	Sample (cuttings)	Cuttings: dunkelgrau, mm-1cm, plattig u. kugelig, wenig Material Lithologie: Tonstücke mt Siltüberzug, einzelne verkittete Mineralkörner Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt > Feinkies
2015-AltT1 990	990	Sample (cuttings)	Cuttings: dunkelgrau, 1-3cm, gut gerundet kugelig Lithologie: Tonkugeln, einzelne Qz-Körner verkittet, wenige CO3 zementierte Sandstücke Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt > Feinkies
2015-Mail2 1000	1000	Sample (cuttings)	Cuttings: hellgrau, mm-2cm, plattig, kugelig, verklumpend Lithologie: glimmereiche Feinsande u. Silte, wenig Ton Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 1030	1030	Sample (cuttings)	Cuttings: grau, leicht gelblich, mm-2cm verklumpend, sonst kugelig bis plattig Lithologie: Ton Silt Feinsand verklumpend Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt/ VFSand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Mail2 1060	1060	Sample (cuttings)	Cuttings: hellgrau, absandend und cm groß verklumpend Lithologie: VFS-Silt-Klumpen, absandend Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Drillgouge (VFS/Silt)
2015-Mail2 1090	1090	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm groß, plattig bis kugelig, absandend Lithologie: Feinsand, glimmerreich Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 1125	1125	Sample (cuttings)	Cuttings: mittelgrau, mm-1cm groß, plattig elongiert, selten kugelig Lithologie: Ton u. Siltklasten, wenig gröberes Verunreinigung: Pflanzenreste, Bauschuttreste? Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-Mail2 1145	145	Sample (cuttings)	Cuttings: dunbkelbraun, mm-1cm groß, meist plattig, seltener kugelig Lithologie: Tonklasten mit "erdigem" Überzug Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Mail2 1165	1165	Sample (cuttings)	Cuttings: dunbkelbraun, m-1cm groß, klein plattig und größer kugelig verklumpend Lithologie: Tonklasten mit "erdigem" Überzug Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Mail2 1175	1175	Sample (cuttings)	Cuttings: mittelgrau, mm-2cm groß, klein plattig bis größer kugelig, erig Lithologie: Tonklasten mit erdigem Überzug Verunreinigung: wenige Pflanzenreste Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Mail2 1190	1190	Sample (cuttings)	Cuttings: dunkelgraubraun, mm-1cm groß, klein plattig und größer kugelig, sehr wenig Material Lithologie: ton-Siltklasten mit erdigem Überzug Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Mail2 1220	1220	Sample (cuttings)	Cuttings: dunkelgraubraun, mm-1cm groß, klein plattig und größer kugelig, sehr wenig Material Lithologie: ton-Siltklasten mit erdigem Überzug Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Wildendürnbach Formation	Mixed Sample: Ton > Silt
2015-Mail2 1240	1240	Sample (cuttings)	Cuttings: sehr dunkelgrau bis dunkelbraun, mm große Blättchen und größere Klumpen, sehr wenig Material Lithologie: Ton mit erdigem Überzug Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Bioturbated Sandstone	Mixed Sample: Ton > Silt
2015-Mail2 1250	1250	Sample (cuttings)	Cuttings: dunkelgrau-bräunlich, mm-1cm groß, kugelig-plattig, "erdig", verklumpend Lithologie: erdig überzogene Ton u. Siltklasten Verunreinigung: viele Pflanzenreste, wenige magnetische Stücke Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Bioturbated Sandstone	Mixed Sample: Ton/Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Mail2 1260	1260	Sample (cuttings)	Cuttings: bräunlich-dunkelgrau, mm-< 1cm, plattig, selten kugelig, verklumpend, wirkt "erdig" ungewaschen, wenig Material Lithologie: Silt u. Tonstücke mit erdigem überzug Verunreinigung: Pflanzenreste Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Bioturbated Sandstone	Mixed Sample: Ton/Silt
2015-Mail2 1280	1280	Sample (cuttings)	Cuttings: dunkelgrau, mm-2cm groß, plattig, wenig Material Lithologie: Tonblättchen, seltener Silt, CO3 zementierte Sandstücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Ton > Silt/Sand
2015-Mail2 1310	1310	Sample (cuttings)	Cuttings: dunkelgrau, mm-1,5cm, meist plattig, absandend erdig Lithologie: Ton mit "erdigem" Überzug Verunreinigung: wenige Pflanzenreste, wenige magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Ton > Silt
2015-Mail2 1342,5	1345	Sample (cuttings)	Cuttings: mittelgrau, mm groß, kugelig, selten plattig Lithologie: Qz-reicher Grobsand, CO3 zementoierter Sand u. Silt-Ton-Stücke Verunreinigung: Planzenreste, magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Feinkies /Grobsand> Ton/Silt
2015-Mail2 1365	1365	Sample (cuttings)	Cuttings: farblos-hellgrau, mm groß, kugelig Lithologie: Qz-reicher Grobsand Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Feinkies/Sand
2015-Mail2 1400	1400	Sample (cuttings)	Cuttings: mittelgrau-grünlich-farblos, mm groß, kugelig, Lithologie: Grobsand-Feinkies, Qz-reich, Glaukonit?, CO3 zementierte Sande Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Feinkies/Sand
2015-Mail2 1435	1435	Sample (cuttings)	Cuttings: grau bis speckig, mm-1cm, große plattige u. kleine kugelige Stücke, sehr wenig Material Lithologie: große flache Tonstücke, mm-großer Qz-Kies, CO3 zementierte Sande Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Mixed Sample: Feinkies /Grobsand> Sand/Silt/ Ton
2015-Mail2 1470	1470	Sample (cuttings)	Cuttings: weiß, mm-1cm , plattig bis kugelig, stark absandend Lithologie: Karbonate Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Carbonate Reef	Carbonate
2015-Mail2 1500	1500	Sample (cuttings)	Cuttings: weiß, mm-1cm groß, kugelig bis plattig, wenig Material Lithologie: Karbonat Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Carbonate Reef	Carbonate
2015-Mail2 570	570	Sample (cuttings)	Cuttings: mittelgrau, mm-3cm, verklumpend, eckig Lithologie: ? Verunreinigung: keine Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Mail2 590	590	Sample (cuttings)	Cuttings: mittelgrau, mm-3cm, verklumpend, eckig Lithologie: ? Verunreinigung: keine Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)
2015-Mail2 620	620	Sample (cuttings)	Cuttings: hellgrau, mm-2cm, kugelig bis plattig, verklumpend Lithologie: glimmereiche Silte u. Feinsande Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 675	675	Sample (cuttings)	Cuttings: hellgrau, 0,5-3cm groß, plattig bis kugelig, verklumpend Lithologie: Ton u. Siltklasten Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Ton/Silt
2015-Mail2 700	700	Sample (cuttings)	Cuttings: hellgrau, mm-2cm groß, plattig bis kugelig verklumpend Lithologie: glimmerreiche Silte u. Feinsande, wenig Tonklasten Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 730	730	Sample (cuttings)	Cuttings: hellgrau, mm-1,5cm groß, kugelig bis plattig Lithologie: glimmereicher Feinsand u. Silt, wenig Tonklasten, wenige Einzelmineralkörner Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 790	790	Sample (cuttings)	Cuttings: hellgrau, leicht gelblich, mm-1cm, plattig bis kugelig, verklumpend Lithologie: glimmerreiche Silte u. Feinsande, wenig Tone Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-Mail2 825	825	Sample (cuttings)	Cuttings: mittelgrau, 0,2cm-1,5cm, leicht geplättet bis kugelig Lithologie: Tonklasten mitSiltüberzug, glimmerführend Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Ton > Silt/Sand
2015-Mail2 845	845	Sample (cuttings)	Cuttings: hellgrau, mm-2cm groß, meist kugelig, absandend Lithologie: Tonklasten, mit Feinsand-Überzug, Silt u. glimmereicher VFS Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Ton/Silt/ VFSand
2015-Mail2 870	870	Sample (cuttings)	Cuttings: hellgrau, mm-2cm, kugelig bis plattig, verklumpend, absandend Lithologie: glimmereicher Feinsand, wenig Tonklasten oder Qz-Einzelkörner Verunreinigung: kein Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Sand/Ton
2015-Mail2 900	900	Sample (cuttings)	Cuttings: bunt (grau, gelblich, farblos, weiß), mm-1cm, kugelig Lithologie: Qz-reicher Feinkies, Grobsand, eckige Silt u. Tonklasten Verunreinigung: keine Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: Feinkies /Grobsand> Sand/Silt/ Ton

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Mail2 920	920	Sample (cuttings)	Cuttings: hellgrau, sub mm bis 2cm, kugelig, selten plattig, verklumpend, absandend, teils eckig Lithologie: glimmereiche Feinsande, wenige Qz-reiche Grobsande, wenig Ton Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Sand/Ton
2015-Mail2 945	945	Sample (cuttings)	Cuttings: hellgrau, mm-3cm groß, plattig bis kugelig stark verklumpend, absandend Lithologie: glimmereiche Silte/Feinsande, wenig Tone Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Mixed Sample: VFSand/Silt > Ton
2015-AltT1 560	560	Sample (cuttings)	Cuttings: mittelgrau, 0,5cm-3cm, kugelig bis plattig Lithologie: Ton/Silt Verunreinigung: wenig Bauschutt Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mixed Sample: Ton/Silt
2014-Mail2 1114,5_1-0,5	1114.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Sand
2014-Mail2 1114,5_0,5-0,25	1114.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Sand
2014-Mail2 1114,5_<0,25	1114.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Transition Facies Ottnangian/ Karpatian	Sand
2014-Mail2 653 2-1mm	653	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 653 1-0,5mm	653	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 653 0,5-0,25mm	653	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 653 0,25-0,063mm	653	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Mail2 651 >2mm	651	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Conglomerate, Fine grained Gravel
2014-Mail2 554 sand	554	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	Sand
2014-Laa1 1796,5 Mud	1796.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-Laa1 1795,3 Mud	1795.3	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-Laa1 1795,3 Sand	1795.3	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Laa1 1635,5 Sand	1635.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Sand
2014-Laa1 1635,5 Mud	1635.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-Laa1 1633,7 Sand	1633.7	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Sand
2014-Laa1 1633,7 Mud	1633.7	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Mud
2014-AltT1 1205 Oben Sand	1205	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Bioturbated Sandstone	Sand
2014-AltT1 1205 Unten Sand	1205	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Carbonate Reef	Sand
2014-Mail2 1381 Sand	1381	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Basal External Sands	Sand
2014-AltT1 1001,5 Sand	1001.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Traisen Formation	Sand
2014-AltT1 801,4 VFS	801.4	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Transition Facies Ottnangian/ Karpatian	Very fine grained Sand, Sand
2014-AltT1 504,5 Mud	504.5	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	Mud
2015-01/01 V no CO3	0	Sample		1	-	-	-	-	-	-	-	1	-	-	Zellersteritzen	15.26445371	47.68721238		Augenstein Formation	unknown
2015-01/03 I 1-0,5 mm no CO3	0	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Mailberg	15.26225971	47.68814417		Augenstein Formation	unknown
2014-Laa1 1797 Sand	1797	Sample		1	-	-	-	-	-	-	-	1	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	Sand
2015-Por2 1015	1015	Sample (cuttings)	Cuttings: mittelgrau, mm-cm große Blättchen Lithologie: Ton/Silt Blättchen, vereinzelte Qz-Körner Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton > Silt
2015-Por2 1035	1035	Sample (cuttings)	Cuttings: hellgrau, mm groß kugelig und mm-cm große Blättchen Lithologie: Ton, silt, karbonatisch zementierter Sand u. quarzitischer Feinkies Verunreinigung: viele magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 1060	1060	Sample (cuttings)	Cuttings: helle (Qz) u. dunkle Körner, mm groß, kugelig Lithologie: quarzitischer Feinkies, wenige Ton-Stücke Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Feinkies /Grobsand> Ton/Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Por2 1095	1095	Sample (cuttings)	Cuttings: hellgrau, mm groß, kugelig, wenige größere Blättchen Lithologie: quarzitischer Feinkies, untergeordnet auch karbonatisch zementierter Sand (+ dunkle mineralkörner), Ton u. Siltblättchen Verunreinigung: magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Feinkies /Grobsand> Sand/Silt/ Ton
2015-Por2 1125	1125	Sample (cuttings)	Cuttings: mittelgrau, mm-cm große Blättchen, teils elongiert Lithologie: Ton/Silt Blättchen Verunreinigung: sehr wenige magnetische Stücke Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Por2 1145	1145	Sample (cuttings)	Cuttings: hellgrau, mm-cm große Blättchen sowie größere Kugeln Lithologie: Tonblättchen u. CO3 haltige siltige Kugeln Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Por2 1165	1165	Sample (cuttings)	Cuttings: mittelgrau, mm-cm große Blättchen, auch elongiert Lithologie: Ton/Silt Stücke, wenige Feinsandstücke oder einzelne Qz-Körner Verunreinigung: mini-Eisendraht; wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Por2 1175	1175	Sample (cuttings)	Cuttings: hellgrau, mm-cm große Blättchen, cm große sehr helle Kugeln Lithologie: To/Silt-Blättchen sowie cm große CO3 reiche siltige Kügelchen Verunreinigung: wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Robulus Schlier	Mixed Sample: Ton > Silt
2015-Por2 1195	1195	Sample (cuttings)	Cuttings: bunt (dunkel-hellgrau, gelb, weiß); mm-groß kugelig, wenige größere Blättchen Lithologie: bunter mix, Qz u. Fsp-Feinkies, Sandstücke, Ton/Silt-Stücke Verunreinigung: sehr viele magnetische Stücke Qualität 1-5: 5 (geringe Probenmenge)	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Robulus Schlier	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 1220	1220	Sample (cuttings)	Cuttings: dunkelgrau, mm-cm große Blättchen, wenige hellere GrobsiltKlumpen Lithologie: überwiegend Ton, wenig Silt Verunreinigung: ganz wenig magnetische Stücke Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Mixed Sample: Ton > Silt
2015-Por2 1250	1250	Sample (cuttings)	Cuttings: mittelgrau, mm-cm große Blättchen, oft elongiert Lithologie: Ton-Stücke, wenig Silt Verunreinigung: kaum magnetische Stücke Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Mixed Sample: Ton > Silt
2015-Por2 1270	1270	Sample (cuttings)	Cuttings: hellgrau-gelblich, mm-groß kugelig, wenige größere Blättchen Lithologie: quarzitischer Feinkies, wenige To-Silt-Blättchen Verunreinigung: Holzstücke, viele magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Mixed Sample: Feinkies /Grobsand> Ton/Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Por2 1290	1290	Sample (cuttings)	Cuttings: mittelgrau, mm-cm-groß, Blättchen Lithologie: Ton u. Silt (glimmerig?); wenig quarzitischer Feinkies Verunreinigung: magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Bioturbated Sandstone	Mixed Sample: Ton/Silt > Feinkies
2015-Por2 1310	1310	Sample (cuttings)	Cuttings: hellgrau-gelblich; mm-groß, kugelig, wenige cm-große Blättchen Lithologie: quarzitischer Feinkies mit wenigen kaolinitschen Fsp Stücken, einige Ton/Silt-Blättchen Verunreinigung: viele magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Mixed Sample: Feinkies /Grobsand> Ton/Silt
2015-Por2 1335	1335	Sample (cuttings)	Cuttings: mittelgrau, mm-groß, blättrig u. kugelig Lithologie: Ton/Silt Stücke + quarzitischer Feinkies, ca. 50:50 Verunreinigung: viele magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Mixed Sample: Ton/Silt = Feinkies
2015-Por2 1350	1350	Sample (cuttings)	Cuttings: hellgrau, mm-groß, kugelig Lithologie: quarzitischer Kies u. Qz-reiche Sandstücke, Sandstücke enthalten deutlichen Anteil an dunklen Mineralen Verunreinigung: viele Magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Mixed Sample: Feinkies/Sand
2015-Por2 1375	1375	Sample (cuttings)	Größe der Cuttings: bunter mix, weiße, gelbliche, mittelgraue Stücke; mm große Kugeln, wenige cm große elongierte Blättchen Lithologie: Ton, Silt, Sand und quarzitischer Finkies, auch Fsp-Stücke (Kaolinit?) Verunreinigung: viele magnetische Stücke Qualitä	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 1395	1395	Sample (cuttings)	Größe der Cuttings: hellgrau-gelblich, mm-kugelig, wenige cm-große Blättchen Lithologie: quarzitischer Feinkies, dazu wenige Ton/Silt-Blättchen Verunreinigung: wenige magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Fine grained Gravel
2015-Por2 1410	1410	Sample (cuttings)	Größe der Cuttings: mittelgrau, teilweise elongierte bis 1cm große Blättchen und runde mm große Körner Lithologie: Ton u. Silt-Stücke, Sand, Feinkies (Qz Körner), Fein-Grob ca. 50:50 Verunreinigung: bunte Plastikstücke, Holzreste, sehr viele magnetische S	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Clay, Fine grained Gravel, Silt, Sand
2015-Por2 1415	1415	Sample (cuttings)	Größe der Cuttings: hellgrau, 2-5 mm groß, kugelig Lithologie: Feinkies, runde Qz-Körner, eckige Fsp-Stücke (kaolinitisiert?); wenige Silt-Stücke Verunreinigung: körner oberflächlich sehr dreckig, wenige magnetische Stücke Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Basal External Sands	Fine grained Gravel
2015-Por2 1430	1430	Sample (cuttings)	Größe der Cuttings: hellgrau, 2-5 mm kugelig Lithologie: Feinkies, viele Qz Körner und (kaolinitisierte?) Fsp-Stücke, kristalliner Kies, Kohelstücke, wenige Ton u. Silt-Stücke Verunreinigung: viele magnetische Stücke, keine Eisenspäne? Qualität 1-5: 2	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Fine grained Gravel

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Por2 1453	1453	Sample (cuttings)	Größe der Cuttings: mittelgrau bis dunkelgrau, mm, wenige cm große Stücke Lithologie: Tone, Silte, Sande und Feinkies-Stücke Verunreinigung: magnetische Stücke Qualität 1-5: 4 (bunter Mischmasch)	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud, Sand
2015-Por2 1473	1473	Sample (cuttings)	Größe der Cuttings: dunkelgrau, mm-cm große Stücke Lithologie: Tone bis Sande, Kristallinstücke?? Verunreinigung: wenige magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Sand, Mud
2015-Por2 1483	1483	Sample (cuttings)	Größe der Cuttings: mittelgrau-dunkelgrau, mm-cm große Blättchen Korngröße: Tone u. Silte, wenige Sandstücke und vereinzelt monomin. Kiesstücke Lithologie: Tone u. Silte Verunreinigung: Pflanzenreste, viele magnetische Stücke Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud
2015-Por2 1487	1487	Sample (cuttings)	Größe der Cuttings: mittelgrau, mehrere mm -cm groß Korngröße: Überwiegent Ton, daneben Silt u. einzelne Feinkieskörner Lithologie: Tone, Silte Verunreinigung: Holzstücke, magnetische Stücke Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud, Coal
2015-Por2 1499	1499	Sample (cuttings)	Größe der Cuttings: mittelgrau, mm-cm große Cuttings Korngröße: Ton, Silt, Sand u. Feinkies Lithologie: Tone, Silte und Qz/Fsp Körner Verunreinigung: wenige Pflanzenstücke; einige Eisenspäne Qualität 1-5: 4 (sehr bunt gemischt)	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud, Fine grained Gravel
2015-Por2 1510	1510	Sample (cuttings)	Größe der Cuttings: mm-cm große, dunkle, teilweise elongierte Blättchen Korngröße: Ton und Silt, wenige Stücke Feinsand, mm große Qz Körner Lithologie: Tone und Silte Verunreinigung: wenige Pflanzenstücke, einige magnetische Stücke Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud
2015-Por2 1516	1516	Sample (cuttings)	Größe der Cuttings: mm-cm große Blättchen Korngröße: Ton und Silt, wenig Sand Lithologie: Ton und Silt > 90% Verunreinigung: wenige helle Körner, einige Eisenspäne Qualität 1-5: 3	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Upper Quartz Arenite Series	Clay, Silt, Mud, Sand
2015-Por2 490	490	Sample (cuttings)	Cuttings: weiß, hellgrau, mm-cm groß blättrig, flach, selten kugelig Lithologie: Ton/Silt, Karbonat, wenige Kiesstücke Verunreinigung: 2 Qualität 1-5: 2	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Carbonat > Ton/Silt
2015-Por2 520	520	Sample (cuttings)	Cuttings: hell, 0,5-3cm groß u. flach, einige dunkelgraue Stücke, wenig Material Lithologie: Carbonate u. einige Kohlestücke Verunreinigung: Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Carbonat > Kohle

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Por2 540	540	Sample (cuttings)	Cuttings: weißlich, 0,5-3cm große flache Stücke Lithologie: Carbonat? Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Carbonate
2015-Por2 570	570	Sample (cuttings)	Cuttings: gelblich hellgrau, cm große flache u. kugelige Stücke, wenig Material Lithologie: Ton/Silt Verunreinigung: wenige magnetische Stücke Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Ton > Silt
2015-Por2 590	590	Sample (cuttings)	Cuttings: hellgrau, mm-cm blättrig bis kugelig, sehr wenig Material Lithologie: Ton/Silt, Drill Gouge? Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-Por2 610	610	Sample (cuttings)	Cuttings: hellgrau, cm groß blättrig-kugelig, wenig Material Lithologie: Ton/Silt Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Ton > Silt
2015-Por2 640	640	Sample (cuttings)	Cuttings: hellgrau, große Stücke (blättchen + Drill Gouge) und kugeliger Kies, Feinstkörniges, sehr wenig Material Lithologie: Drill Gouge (Ton-Kies) Verunreinigung: keine Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)
2015-Por2 670	670	Sample (cuttings)	Cuttings: hellgrau bis farblos, mm kugelig, wenige größere Blättchen Lithologie: quarzitischer Feinkies (auch andere Min), wenig karbonatzementierter Sand, Wenige Ton/Silt-Stücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Feinkies /Grobsand> Sand/Silt/ Ton
2015-Por2 710	710	Sample (cuttings)	Cuttings: hellgrau, mm groß blättrig u. kugelig, bis 1cm große Drill Gouge Stücke, wenig Material Lithologie: Drillgouge (Ton-Feinkies) + Ton-Kies Verunreinigung: Holzreste, wenige Eisenstücke Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Drillgouge + Ton-Kies
2015-Por2 740	740	Sample (cuttings)	Cuttings: hellgrau, mm große Blättchen, Drillgouge, sehr wenig Material Lithologie: Drillgouge (Ton/Silt) Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt)
2015-Por2 750	750	Sample (cuttings)	Cuttings: hellgrau, cm große Drill-Gouge Stücke, wenig Material Lithologie: Drillgouge, Ton/Silt überwiegen Verunreinigung: keine Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	Mixed Sample: Drillgouge (Ton/Silt)
2015-Por2 760	760	Sample (cuttings)	Cuttings: hellgrau, mm große Blättchen, drillgouge artige Stücke, extrem wenig Material Lithologie: Ton-Feinkies, Drillgouge Verunreinigung: wenige magnetische Stücke Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Por2 780	780	Sample (cuttings)	Cuttings: hellgrau, mm große Blättchen, drillgouge artige Stücke, extrem wenig Material Lithologie: Ton-Feinkies, Drillgouge Verunreinigung: viele magnetische Stücke Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)
2015-Por2 810	810	Sample (cuttings)	Cuttings: hellgrau, Drillgouge?, wenige Blättchen, geringe Probenmenge Lithologie: Ton-Feinkies scheint durch carbonatischen Zement zu Drillgouge verkittet Verunreinigung: Eisenkugel, wenige magnetische Stücke Qualität 1-5: 5	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Drillgouge (Ton/Silt/ Sand/Feinkies)
2015-Por2 830	830	Sample (cuttings)	Cuttings: hellgrau, mm-cm Blättchen, mm-cm kugelig, sehr wenig Material Lithologie: Ton, Silt, Sand, Feinkies Verunreinigung: fast keine Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 870	870	Sample (cuttings)	Cuttings: bunt (hellgrau, weiß, transparent, gelblich), mm groß kugelig u. bis cm große Blättchen, geringe Probenmenge Lithologie: Feinkiese (Qz, Karbonate, Fsp), untergeordnet Tone/Silte Verunreinigung: viele magnetische Stücke Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Feinkies /Grobsand> Sand/Silt/ Ton
2015-Por2 880	880	Sample (cuttings)	Cuttings: hellgrau, mm-cm große Blättchen, geringe Probenmenge Lithologie: karbonatzementierter Feinsand, wenig Silt/Ton oder Feinkies Verunreinigung: wenige magnetische Stücke Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Sand > Ton/Silt/Feinkies
2015-Por2 900	900	Sample (cuttings)	Cuttings: hellgrau, eher Blättchen, sehr wenig Material Lithologie: Ton/Silt vorherrschend Verunreinigung: keine Qualität 1-5: 5	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt > Sand/Feinkies
2015-Por2 940	940	Sample (cuttings)	Cuttings: hellgrau, mm groß kugelig, mm-cm große Blättchen Lithologie: Viel quarzitischer Feinkies u. Karbonatzementierter Sand, auch Ton u. Silt Verunreinigung: magnetische Stücke Qualität 1-5: 4	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 980	980	Sample (cuttings)	Cuttings: hellgrau, mm groß kugelig, mm-cm große Blättchen Lithologie: Ton, Silt, karbonat-zementierter sand u. quarzitischer Feinkies Verunreinigung: viele magnetische Stücke Qualität 1-5: 4	1	-	-	-	1	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Traisen Formation (turbiditic)	Mixed Sample: Ton/Silt/ Sand/Feinkies
2015-Por2 490 Carbonate	490	Sample (cuttings)	Cuttings: weiß, hellgrau, mm-cm groß blättrig, flach, selten kugelig Lithologie: Ton/Silt, Karbonat, wenige Kiesstücke Verunreinigung: 2 Qualität 1-5: 2	-	-	-	-	1	-	-	-		-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2015-AltT1 1170	1170	Sample (cuttings)	Cuttings: hellgrau mm-1c groß, meist kugelig Lithologie: Silt/Feinsand, glimmerreich Verunreinigung: keine Qualität 1-5: 1	1	-	-	-	-	-	-	-	1	-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Bioturbated Sandstone	Mixed Sample: VFSand/Silt

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Schb 130,8	130.8	Sample	Verwittertes Kristallines Basement	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Crystalline	Gneiss
2014-Schb 135	135	Sample	Kristallines Basement	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Crystalline	Gneiss
2014-Schb 45	45	Sample	sandiger Ton	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Mixed Sample: Ton/Silt
2014-Schb 60	60	Sample	toniger Silt, Feinsandlagen	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Mixed Sample: Ton/Silt
2014-Schb 68,5	68.5	Sample	Ton, gipsblüten	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Clay
2014-Schb 70	70	Sample	dunkler vertrockneter Ton mit Gipsblüten	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Traisen Formation	Clay
2014-Schb 76	76	Sample	Dunkler Ton	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Clay
2014-Schb 95	95	Sample	Blaugrauer Ton	1	-	-	-	-	-	-	-	1	-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	Clay
2015-Strth 1 1022,6	1022.6	Sample	dunkler mergeliger siltiger Tonstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	silty marly Claystone
2015-Strth 1 1025	1025	Sample	Sandreichere Lagen in Tonstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Fine grained Sandstone
2015-Strth 1 1051,8	1051.8	Sample	mergeliger Tonstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	marly Claystone
2015-Strth 1 1084	1084	Sample	feinkörnige hellgraue Sandsteinhorizont in Tonmergeln	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	unknown
2015-Strth 1 1084,8	1084.8	Sample	sandiger siltiger dunkler Tonmergelstein, Fossilreste, Pflanzenreste	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Silty Claystone, Fine grained Sandstone
2015-Strth 1 1119,7	1119.7	Sample	CO3 reicher sehr feinkörniger Sandstein mit gröberen Nestern, stark bioturbiert	1	-	3	1	1	-	1	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Bioturbated Sandstone	Very fine grained Sandstone
2015-Strth 1 1142	1142	Sample	graublauer wenig tektonisch zerscherter Sandstein, eingeschwemmte Pflanzenreste	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Fine grained Sandstone
2015-Strth 1 1144,8	1144.8	Sample	schwarzer tektonisch zerscherter Siltstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Siltstone
2015-Strth 1 1172,5	1172.5	Sample	dunkler feinkörniger Sandstein, pyritisierungen, Glaukonit?	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Fine grained Sandstone
2015-Strth 1 1176	1176	Sample	dunkler bioturbater mittelkörniger Sandstein mit vielen hellen Klasten, Tonklasten, Pyritkonkretionen, viele grünliche Minerale: Glauconit?	1	-	-	-	-	-	1	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Medium Grained Sandstone
2015-Strth 1 1178,9	1178.9	Sample	CO3 zementierter feinkörniger Sandstein	1	-	3	1	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Fine grained Sandstone
2015-Strth 1 1201,5	1201.5	Sample	hellgrauer mittelkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Medium Grained Sandstone
2015-Strth 1 1202	1202	Sample	schwarzer tektonischer sandiger Siltstein mit großen Komponenten	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Sandy Siltstone
2015-Strth 1 1210,8	1210.8	Sample	grauer tektonisch zerscherter Tonstein/Siltstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Silty Claystone
2015-Strth 1 1211,5	1211.5	Sample	schwarzer tektonischer Sandstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Claystone

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Strth 1 1215	1215	Sample	schwarzer tektonischer Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Fine grained Sandstone
2015-Strth 1 1218,4	1218.4	Sample	schwarzer Sandstein, Tektonit	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Medium Grained Sandstone
2015-Strth 1 1220	1220	Sample	weißlicher MS	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Basal External Sands	Coarse Grained Sandstone
2015-Strth 1 1233	1233	Sample	Dioritgneis	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Crystalline	Dioritegneis
2015-Strth 1 151,5	151.5	Sample	siltführender Tonstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 153,5	153.5	Sample	mittelkörniger Sand	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sand
2015-Strth 1 248,5 CS	248.5	Sample	hellgrauer grobkörniger Sand	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Coarse Grained Sand
2015-Strth 1 249,3	249.3	Sample	Ton + Sandlagen	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 301,8	301.8	Sample	Tonstein/sandig	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 303,5	303.5	Sample	grobkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Coarse Grained Sand
2015-Strth 1 351,2	351.2	Sample	Tonstein/braun	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 352,5	352.5	Sample	mittelkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sandstone
2015-Strth 1 400,2	400.2	Sample	CO3 zementierter Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sandstone
2015-Strth 1 404,5	404.5	Sample	mittelkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sandstone
2015-Strth 1 405	405	Sample	Sand/Ton Wechsellagerung; rip up clasts in Sand	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 450,6	450.6	Sample	grobkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Coarse Grained Sandstone
2015-Strth 1 451,9	451.9	Sample	dunkelbrauner Ton	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 452,8	452.8	Sample	weißer FS	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Fine grained Sand
2015-Strth 1 500,5	500.5	Sample	siltiger Tonstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 504,5	504.5	Sample	grobkörniger Sand/Sandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Coarse Grained Sandstone
2015-Strth 1 53	53	Sample	Sand	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Fine grained Sandstone
2015-Strth 1 53,8	53.8	Sample	Ton + Sandlagen	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 54,2	54.2	Sample	GR-Feinkies	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Very Coarse Grained Sand

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Strth 1 554,5	554.5	Sample	mittelkörniger hellgrauer Sand, leicht verfestigt	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sand
2015-Strth 1 554,8	554.8	Sample	gelblicher Tonstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	unknown
2015-Strth 1 601	601	Sample	MS-MS-Stein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sand
2015-Strth 1 602,7	602.7	Sample	brauner Tonstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	unknown
2015-Strth 1 653,2	653.2	Sample	mittelkörniger Sandstein	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sandstone
2015-Strth 1 654,8	654.8	Sample	brauner Tonstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	unknown
2015-Strth 1 704,5	704.5	Sample	hellgrauer feinkörniger Sandstein, Drillmud?	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Fine grained Sandstone
2015-Strth 1 751,5	751.5	Sample	Kies	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Fine grained Gravel
2015-Strth 1 754	754	Sample	FS-MS	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Traisen Formation	unknown
2015-Strth 1 754,5	754.5	Sample	dunkler Siltstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Siltstone, Fine grained Sandstone
2015-Strth 1 801	801	Sample	verschiedene Sandlagen, dickste bei 801	1	-	3	1	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Fine grained Sandstone
2015-Strth 1 802	802	Sample	CO3 armer/freier Tonstein	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Claystone
2015-Strth 1 853,8	853.8	Sample	sandiger mergeliger Tonstein, cm große Qz-Körner in Tonmatrix	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	sandy marly Claystone
2015-Strth 1 854,9	854.9	Sample	CO3 armer/freier Tonstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Silty Claystone
2015-Strth 1 892,8	892.8	Sample	sandiger mergeliger Tonstein, cm große Qz-Stücke,	1	-	3	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	sandy marly Claystone
2015-Strth 1 893	893	Sample	hellgrau Feinsandstein-Lagen in Tonmergel	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Fine grained Sandstone
2015-Strth 1 931 Gesamt	931	Sample	fine grained sand + siltstone	1	-	-	-	-	-	-	-	1	-	6		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Silty Sandstone
2015-Strth 1 931 Sand	931	Sample	silty Sandstone	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Silty Sandstone
2015-Strth 1 931 Ton	931	Sample	Ton	1	-	-	-	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Sandy Siltstone
2015-Strth 1 964,8	964.8	Sample	mergeliger sandiger graublauer Siltstein	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	marly Claystone
2015-Strth 1 990,5	990.5	Sample	CO3 reicher feinsandiger Tonstein, Fischschuppen,	1	-	3	1	1	-	-	-	1	1	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	silty marly Claystone
2015-Strth 1 992,6	992.6	Sample	Sandreichere Lagen in Tonstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Robulus Schlier	Fine grained Sandstone
2015-Strth 1 248,5 FS	248.5	Sample	Mittelsandstein	1	-	-	-	-	-	-	-	1	-	-		15.95194574	48.27448633	Streithofen 1	Traisen Formation	Medium Grained Sandstone

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2014-Schb 100 XRD (new prep) Test1	100	Sample	grauer siltiger Mergel; Schneiden!! Mehrere cm dicke dunkle feinkörnige (Ton-Silt) Lage unterbrochen von mm-cm dicken gröberen hellgrauen Lagen. Die hellgrauen Lagen sind Grobsilt-SF-Sand; eine mehrere mm dicke Lage zeigt komplexe linsenartige Strukturen	1	-	-	-	-	-	-	-		-	-	Low. A. Schaubing	15.61724925	48.2578592	Schaubing	Robulus Schlier	unknown
2014-Mail2 554 XRD (new prep) Test1 körnig	554	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	unknown
2014-Mail2 554 XRD (new prep) Test2 körnig	554	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	unknown
2014-Mail2 554 XRD (new prep) Test3 körnig	554	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	unknown
2014-Mail2 554 XRD (new prep) Test4 körnig	554	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Mailberg	16.23055478	48.66057951	Mailberg 2	Laa Formation	unknown
2014-Por2 704 XRD (new prep) Test1	704	Sample	hellbrauner Mud	1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-Por2 704 XRD (new prep) Test2	704	Sample	hellbrauner Mud	1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-Por2 704 XRD (new prep) Test3	704	Sample	hellbrauner Mud	1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-Por2 704 XRD (new prep) Test4	704	Sample	hellbrauner Mud	1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.18936668	48.55780493	Porrau2	Laa Formation	unknown
2014-AltT1 504,5 XRD (new prep) Test1	504.5	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	unknown
2014-AltT1 504,5 XRD (new prep) Test2	504.5	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	unknown
2014-AltT1 504,5 XRD (new prep) Test3	504.5	Sample		1	-	-	-	-	-	-	-		-	-	Low.A. Altenmarkt T1	16.23276131	48.58340218	Altenmarkt Thermal Süd 1	Laa Formation	unknown
2015-Laa1 1750 XRD (Instrument Bias) Test1	1750	Sample (cuttings)	Größe der Cuttings: mm-cm große elongierte Plättchen und kugelige Klumpen Korngröße: sand bis ton Lithologie: Ton-Chips und Feinsand-Stücke, Kohlestücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	-	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).

Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
2015-Laa1 1750 XRD (Instrument Bias) Test2	1750	Sample (cuttings)	Größe der Cuttings: mm-cm große elongierte Plättchen und kugelige Klumpen Korngröße: sand bis ton Lithologie: Ton-Chips und Feinsand-Stücke, Kohlestücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	-	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2015-Laa1 1750 XRD (Instrument Bias) Test3	1750	Sample (cuttings)	Größe der Cuttings: mm-cm große elongierte Plättchen und kugelige Klumpen Korngröße: sand bis ton Lithologie: Ton-Chips und Feinsand-Stücke, Kohlestücke Verunreinigung: keine Qualität 1-5: 3	1	-	-	-	-	-	-	-	-	-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1795,8 XRD (new prep) Test1	1795.8	Sample	Mud und helle Linsen	1	-	-	-	-	-	-	-		-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1795,8 XRD (new prep) Test2	1795.8	Sample	Mud und helle Linsen	1	-	-	-	-	-	-	-		-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1795,8 XRD (new prep) Test3	1795.8	Sample	Mud und helle Linsen	1	-	-	-	-	-	-	-		-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2014-Laa 1795,8 XRD (new prep) Test4	1795.8	Sample	Mud und helle Linsen	1	-	-	-	-	-	-	-		-	-	Low.A. Laa	16.42935529	48.70801476	LAA 001	Wildendürnbach Formation	unknown
2016-MolMeet_ Stop3 I	0	Sample	Brünner Sande	1	6	-	-	-	-	-	-	1	-	-	Boscovice Graben	16.337296	49.11369		unknown	Sand
2016-MolMeet_ Stop5 I	0	Sample	Badenische Sande des nördlichen Wiener Beckens	1	6	-	-	-	-	-	-	1	-	-	Wiener Becken	16.680073	48.791029		unknown	Sand
MPK-MOL_170101 II	0	Sample	Diatomit hell, zerfällt plattig	1	-	1	-	-	-	-	-	1	-	-		55.31064115	3.136189756		Limberg Member	Diatomite
MPK-MOL_170101 I	0	Sample	Diatomit fein geschichtet, hell, CO3 arm	1	-	1	-	-	-	-	-	1	-	4		55.31064115	3.136189756		Limberg Member	Diatomite
MPK-MOL_170101 III	0	Sample	Zellerndorf Formation mergeliger pelit	1	-	1	-	3	-	-	-	1	-	-		55.31064115	3.136189756		Zellerndorf Formation	Pelite
MPK-MOL_170101 IV	0	Sample	tephra oder Löss?	1	-	1	-	-	-	-	-	1	-	7		55.31064115	3.136189756		unknown	Tephra
MPK-MOL_170101 V	0	Sample	Pelit oberer Teil Zellerndorf Formation?	1	-	1	-	3	-	-	-	1	-	7		55.31064115	3.136189756		unknown	unknown
MPK-MOL_170101 VI	0	Sample	weißes Zeug in der zellerndorf Formation, Carbonat	1	-	1	-	3	-	-	-	1	-	-		55.31064115	3.136189756		Zellerndorf Formation	Carbonate

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Sample No.	Depth GOK	Sample — Kind	Description	XRD	Heavy minerals	Chemistry	Dinoflagelate cysts	Calcarfeous Nannofossils	Microprobe	Foraminifera	XRF-Profile	XRF-Bulk	Clays	Thin section	Location	WGS 84 Longitude	WGS 84 Latitude	Well	Formation / Lithodem	Lithology
MPK-MOL_170101 VII	0	Sample	Konkretion, rund um Stein?	1	-	1	-	-	-	-	-	1	-	7		55.31064115	3.136189756		Zellerndorf Formation	Concretion
MPK-MOL_170101 VIII	0	Sample		1	-	1	-	3	-	-		1	-	-		55.31064115	3.136189756		Zellerndorf Formation	Pelite

Legend: 1 — investigated; 2 — in investigation; 3 — sent; 4 — prepared; 5 — in preparation; 6 — planned (priority); 7 — planned (no priority).