Electronic supplement A. Properties of the lithostratigraphic units distinguished in the western part of the Magura Nappe (supplemented and modified after Teťák et al. 2019).

Tectono-lithofacial unit	Lithostratigraphic unit		Age	Unit thickness	Lithology, lithofacies and their arrangement	Correlation (Equivalents)	Photo attach.	Logs
Siary & Rača Unit		**Vsetín Mb.** (Pesl 1968)	middle to late Eocene (Oligocene)	over 600 m	glauconitic sandstones: medium to thick-bedded, fine (medium) grained, quartz glauconitic sandstones; Bystrica type mudstones: thick grey mudstones	Magura Fm. - glauconite facies (Książkiewicz 1953); Zembrzyce Mb. (Książkiewicz 1974)		J23
Rača Unit		**Babiše Mb.** (Teťák 2005)	(middle?) to late Eocene (Oligocene)	700 m	Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones; glauconitic sandstones: medium to thick-bedded, fine (medium) grained, quartz glauconitic sandstones; (Bystrica type mudstones: thick grey mudstones)	Kýčera Mb.; partially Maszkowice Mb. (Oszczypko 1991)		Dp119
Rača & Bystrica Unit	**Zlín Fm.**	**Kýčera Mb.** (Pesl 1968)	(middle?) to late Eocene (Oligocene)	1,600 m / up to 400 m	Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones	Kýčera development of Zlín Fm. (Pesl 1964); Magura sst (Roth et al. 1963); Babia hora sst (Matějka and Roth 1952); Wątkowa sst (Cieszkowski et al. 2006); arkose and muscovite facies of Magura sst (Książkiewicz 1953), Makovica Mb. (Leško and Samuel 1968)	29-31, 35, 37, 38	F599, F919, Dp3, J77, J164, J171, Lm1, Dp76/BKs1313, T491, T492
		Újezd Mb. (Pesl 1968)	middle to late Eocene	30 to 150 m	thin-bedded facies: fine-grained laminated sandstones; glauconitic sandstones: medium-bedded, fine grained, quartz glauconitic sandstones; Bystrica type mudstones: thick grey mudstones	Sub-Magura Mb. (Paul 1980); Hieroglyphic Mb. (Cieszkowski et al. 2006); Lower Zlín Mb. (Matějka and Roth 1956); Oščadnica Mb. (Potfaj et al. 2003)		
		Bystrica Mb. (Sikora and Żytko 1959)	middle to late Eocene	200 to 500 m / up to 1,000 m	glauconitic sandstones: medium to thick-bedded, fine (medium) grained, quartz glauconitic sandstones; Bystrica type mudstones: thick grey mudstones; thick Łącko type marls	Osielec sst (Książkiewicz 1958); Pasierbiec sst (Bieda 1946); Łącko Mb. (Książkiewicz 1958); Żeleznikowa Fm. (Oszczypko 1991); Vsetín Mb. (Pesl 1968)	1, 2, 27	F2, F512, F701, F901, F906, F907, F1047, Dp48, Dp119, J365, BKs1042
Bystrica Unit		**Oravské Veselé Mb.** (Teťák et al. 2016)	middle to late Eocene	300 to 500 m	Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones; glauconitic sandstones: medium to thick-bedded, fine (medium) grained, quartz glauconitic sandstones; (Bystrica type mudstones: thick grey mudstones); thick Łącko type marls	Bystrica Mb. (Pesl 1968); Poprad Mb. (Birkenmajer and Oszczypko 1989)	20, 21	F193, F345, F390, F676, F696
	Vychylovka Fm. (Potfaj 1989)		middle Eocene	few 10 m	thin-bedded facies: green fine-grained laminated sandstones with bioglyphs, non-calcareous mudstones and claystones; glauconitic sandstones: medium to thick-bedded, fine grained, quartz glauconitic sandstones; Bystrica type mudstones: thick grey mudstones	Hieroglyphic Mb. (Cieszkowski et al., 2006); Beloveža Fm. (Leško and Samuel, 1968); Bystrica Mb. (Pesl, 1968); Łącko Mb. (Książkiewicz, 1958)		
Rača Unit	**Luhačovice Fm.**	**Upper Luhačovice Mb.** (Pesl 1968)	middle Eocene	up to 120 m	Riečky type sandstone: thick to very thick-bedded medium to coarse-grained greywacke sandstones to fine grained-conglomerates	Luhačovice sandstone (Matějka and Roth 1956)		Dp98, Dp124, J196, J285, Lm7
		Lower Luhačovice Mb. (Pesl 1968)	middle Eocene	up to 120 m	Pasierbiec type sandstone: quartz glauconitic thick-bedded coarse-grained sandstones to fine grained-conglomerates; (Bystrica type mudstones: thick grey mudstones; thick Łącko type marls)	Pasierbiec sst (Bieda 1946; Sikora and Żytko 1956; Książkiewicz 1958); Luhačovice sandstone (Matějka and Roth 1956)	34	J73, J136, BKs1384
Rača & Bystrica Unit	**Beloveža Fm.**	**Upper Beloveža Mb.** (Stráník 1965)	early to middle Eocene	70 to 200 m	thin-bedded facies: fine-grained laminated sandstones with bioglyphs, non-calcareous mudstones and claystones	Hieroglyphic Mb. (Cieszkowski et al. 2006); Beloveža Fm. (Leško and Samuel 1968)	25, 26, 36	F355, F362, Mk29, J258, BKs1384
		Lower Beloveža Mb. (Stráník 1965)	Paleocene to early Eocene	up to 150 m	thin-bedded facies: fine-grained laminated sandstones with bioglyphs, non-calcareous mudstones and claystones; variegated (red and green) mudstones; Riečky type sandstones: thick to very thick-bedded medium to coarse-grained greywacke muscovite sandstones to fine grained-conglomerates	Łabowa shale Fm. (Oszczypko 1992)	33	Mk8, Mk24, Mk29, Mk42, Mk53, OL2, J15, J22, J37, J47, J49, J155, J214, J256
	Ropianka Fm.	**Szczawina Mb.** (Sikora and Żytko 1959)	Maastrichtian to Paleocene	150 to 800 m	Szczawina type sandstone: thick to very thick-bedded medium to coarse-grained greywacke muscovite sandstones to fine grained-conglomerates	Muscovitic sst of Inoceramian Mb. (Książkiewicz 1966); Altlengbach Fm. (Schnabel 1992)		F749, Sk1
		Ropianka Fm. s.s. (Teťák et al. 2017)	Campanian to Paleocene	up to 400 m	thin-bedded facies: green fine-grained laminated muscovite sandstones with bioglyphs, non-calcareous mudstones and claystones; variegated (red and green) mudstones; (Szczawina type sandstone: thick to very thick-bedded medium to coarse-grained greywacke muscovite sandstones; glauconitic sandstones)	Inoceramian Mb. (Książkiewicz 1966); Soláň Fm. (Pesl 1968); biotite-feldspar Mb. (Sikora and Żytko 1959); Mutne sst (Cieszkowski et al. 2007); Ráztoka Mb. (Pesl 1981); Ondrášovec Mb. (Potfaj 1993); Altlengbach Fm. (Schnabel 1992); Szczawnica Fm. (Birkenmajer and Oszczypko 1989)	28	F772
Siary Unit	**Soláň Fm.** (Matějka and Roth 1948)	**Lukov Mb.**	Maastrichtian to Paleocene	up to 1,000 m	Soláň type sandstone: thick to very thick-bedded medium-grained greywacke muscovite sandstones to conglomerates	sandstone-claystone and sandstone-conglomerate development of Soláň Fm. (Pesl 1951; Menčík 1956; Matějka and Roth 1956; Matějka in Buday et al. 1963; Pesl and Hanzlíková 1963); Pesl (1963, 1965, 1968); Inoceramian Beds (Sikora and Żytko 1959)		Mk38, Mk52, OL3, OL4
		Ráztoka Mb.	Campanian to early Paleocene	300 m	thin-bedded facies: green fine-grained laminated muscovite sandstones with bioglyphs, non-calcareous mudstones and claystones	Inoceramian Beds (Sikora and Żytko 1959)	32	Mk39, J6, J16, J142
Rača Unit	**Cebula Fm.** (Sikora and Żytko 1959)		Cenomanian to Campanian	cca 200 m	calcareous and non-calcareous red claystones and marls, thin-bedded facies, bedded green gray marls with patina	Variegated sh. (Sikora and Żytko 1959); Cebula variegated marls (Golonka and Malata 1977); Haluszowa Fm. (Birkenmajer and Oszczypko 1989); Malinowa Fm. (Birkenmajer and Oszczypko 1989); Kaumberg Fm. (Schnabel 1992)		
Krynica Unit	**Malcov Fm.** (Świdziński 1961)		late Eocene to late Oligocene (early Miocene?)	up to 660 m	medium to thick-bedded, fine- (coarse)-grained calcareous and greywacke sandstones; sandy and muddy slumps; light gray claystones, (variegated mudstones)	Menilite-Krosno series (Jucha and Kotlarczyk 1958)		T230, T620
	Racibor Fm.	**Racibor Fm. s.s.** (Potfaj et al. 1991)	middle Eocene to early Oligocene	1,500 m	Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones; Bystrica type mudstones: thick grey mudstones; mud slump bodies; (glauconitic sandstones)	Magura Fm. (Potfaj et al. 1991); Poprad Mb. (Birkenmajer and Oszczypko 1989)	13-17	F46-85-86, F222, F234, Ve5, T228
		Račová Mb. (Potfaj et al. 1991)	middle Eocene	100 to 200 m	Bystrica type mudstones: thick grey mudstones; mud slump bodies; (Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones; Łącko type marls; red mudstones)	Kowaniec Mb. (Cieszkowski 1979); Mniszek Shale Mb. (Birkenmajer and Oszczypko 1989); Hanuszów sh. (Wójcik et al. 1995; Piotrowski and Piotrowska 2004)	3, 4	F21, F112
	Zábava Fm.	**Zábava Fm. s.s.** (Potfaj et al. 1991)	late Paleocene to middle Eocene	up to 3,000 m	thin-bedded facies: fine-grained laminated sandstones with bioglyphs, non-calcareous mudstones and claystones; Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones	Magura Fm. (Potfaj et al. 1991); Piwniczna Mb. (Birkenmajer and Oszczypko 1989); Turbacz beds (Watycha 1976; Cieszkowski and Olszewska 1986); Zarzecze Fm. (Birkenmajer and Oszczypko 1989); Jaszcze beds (Alexandrowicz et al. 1984; Cieszkowski and Olszewska 1986); Krynica congl. (Alexandrowicz et al. 1984)	5-12, 18, 22-24	F42, F43, F44, F45, F95, F133, F148, F212, T56, T503
		Redikálne Mb. (Teťák et al. 2016)	Paleocene(?)	up to 150 m	thin-bedded facies: fine-grained laminated sandstones with bioglyphs, non-calcareous mudstones and claystones; variegated (red and green) mudstones	Variegated sh. (Jankowski and Kopciowski 1999)	19	F155
Biele Karpaty Unit	**Svodnice Fm.**	**Bzová Mb.** (Potfaj 1993)	early Eocene	cca 600 m	Magura type sandstone: medium to very thick-bedded, medium to coarse-grained greywacke sandstones	sandstone development of upper Svodnice Fm. (Stráník et al. 1989)		
		Svodnice Fm. s.s. (Pesl 1968)	Paleocene to early Eocene	over 500 m	medium to thick-bedded fine-grained quartz-carbonate sandstones; Bystrica type mudstones: thick grey mudstones	Potfaj (1993), Stráník et al. (1995), Teťák (2016)		M55, M78, M80, M91, M118, M197, M216, BKs834
		Chabová Mb. (Potfaj et al. 1986)	Paleocene	up to 400 m	thick-bedded and massive quartz-carbonate sandstones with liesegang rings, almost without claystones	Stráník et al. (1986); partially Rajkovec Fm. (Began et al. 1988)	43, 46, 47	BKs346, BKs348, BKs462, BKs473
	Lopeník Fm.	**Drietomica Mb.** (Potfaj 1993)	Maastrichtian to ?Paleocene	up to 300 m	thick-bedded quartz-carbonate sandstones, polymict conglomerates, disintegrating conglomerate, without clystones		41, 42	BKs239
		Javorina Mb. (Potfaj et al. 1986)	late Campanian to Maastrichtian	200 m up to over 800 m	layered thick-bedded fine-grained quartz-carbonate sandstones and thin-bedded flysch deposits with grey-green claystones, layers of marlstones to limestones with patina	Stráník et al. (1986); partially Rajkovec Fm. (Began et al. 1988)	39, 40, 44, 45, 48-50	M30, M130, BKs57, BKs66, BKs73, BKs84, BKs101, BKs239, BKs339, BKs390, BKs486, BKs487, BKs498, BKs499, BKs571
		Ondrášovec Mb. (Potfaj 1993)	middle Campanian to late Maastrichtian	few 10 m	thin-bedded facies: green fine-grained laminated muscovite sandstones with bioglyphs, non-calcareous mudstones and claystones; variegated (red and green) mudstones	variegated formation (Potfaj et al. 1986); Gbely Mb. (Stráník et al. 1986, 1989)		M120, M222, BKs638

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Electronic supplement B. Photo attachment.


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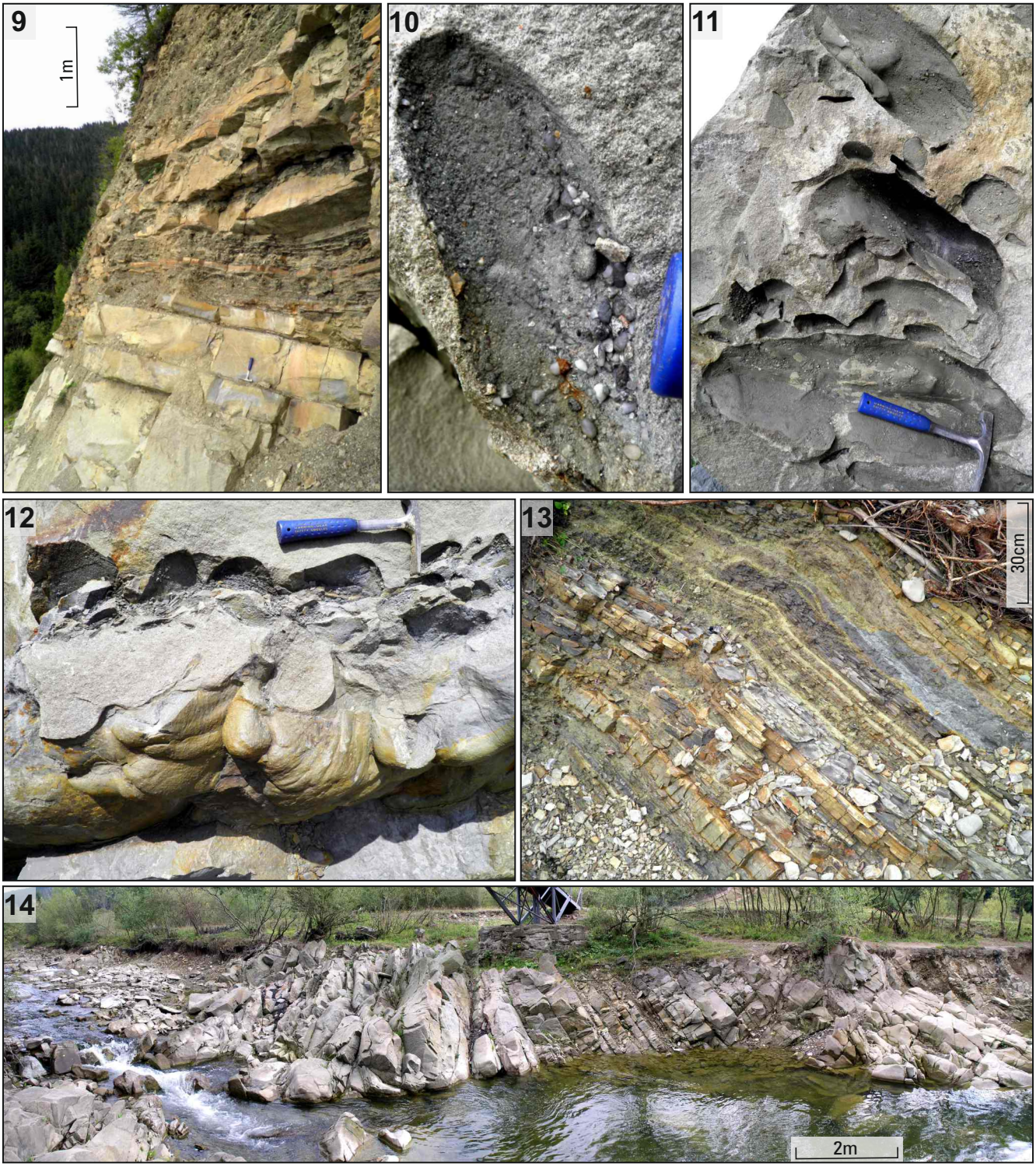

Photo 9-14: 9) F43 – Zábava Fm. – both thin-bedded and sandstone facies with Magura type greywacke sandstone beds (quarry north of Breza village); **10** – **11)** F43 – Zábava Fm. – armoured mudstone intraclast and large mudstone intraclasts in Magura type greywacke sandstone bed (quarry north of Breza village); **12)** F43 – Zábava Fm. – amalgamated beds of Magura type greywacke sandstone with distinctive load casts and claystone intraclasts (quarry north of Breza village); **13)** F46 – Racibor Fm. – laminated thin beds of sandstons and thin yellow beds of the slumps (Veselianka river bed above the Oravská Jasenica village); **14)** F46 – Racibor Fm. – alternation of laminated thin beds of sandstons to thick-bedded Magura type greywacke sandstones with Bystrica type grey mudstones (Veselianka river bed above the Oravská Jasenica village).

Photo 1-8: 1) F2 – Bystrica Mb. of Zlín Fm. – mostly thick beds of quartzy glauconitic sandstones accompanied with thick beds of Bystrica type mudstones, sporadically with muddy slumps (quarry NE of the Novoť village below Malý Kopec hill); **2)** F2 – Bystrica Mb. of Zlín Fm. – trough filled by quartzy glauconitic sandstone (quarry NE of the Novoť village below Malý Kopec hill); **3)** F21 – Račová Mb. of Racibor Fm. – thin layer of red mudstonens (nonexistent outcrop in the road NE of Oravská Jasenica village); **4)** F21 – Račová Mb. of Racibor Fm. – beds of Łącko marls (nonexistent outcrop in the road NE of Oravská Jasenica village); **5)** F42 – Zábava Fm. – both sandstone and thin-bedded facies (quarry north of Lomná village); **6)** F42 – Zábava Fm. – thin-bedded facies (quarry north of Lomná village); **7)** F42 – Zábava Fm. – flute casts of Magura type greywacke sandstone bed (quarry north of Lomná village); **8)** F43 – Zábava Fm. – flute casts and load casts of Magura type greywacke sandstone bed (quarry north of Breza village).


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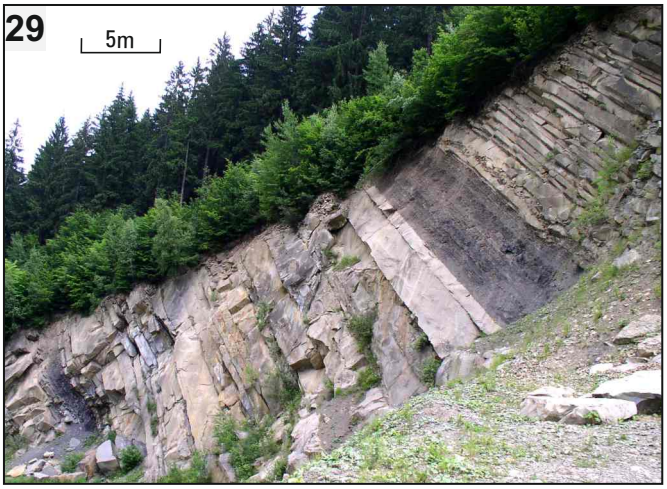
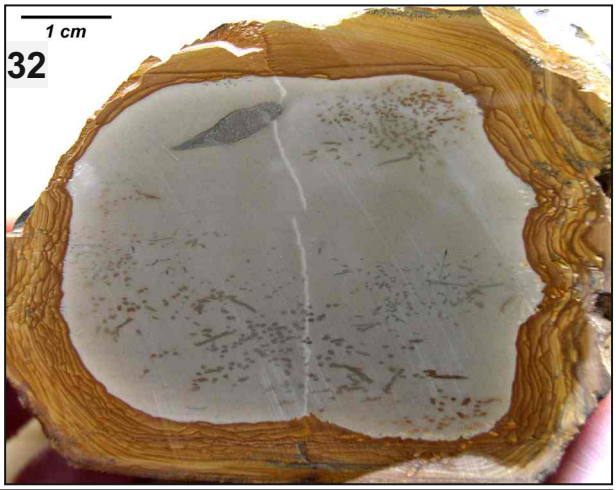
Photo 23-28: 23) F212 – Zábava Fm. – both thin-bedded and sandstone facies (quarry above the Goral settlement on SE slope of the Oravská Magura Mts.); **24)** F212 – Zábava Fm. – sandstone facies with groove casts and amalgamated sandstone bed (quarry above the Goral settlement on SE slope of the Oravská Magura Mts.); **25)** F355 – Upper Beloveža Mb. – very thin-bedded deposits (Veselianka river bed south of the Oravské Veselé village above the Rakovec creek); **26)** F362 – Upper Beloveža Mb. – thin-bedded deposits (Vahanovský potok creek east of the Oravské Veselé village); **27)** F701 – Bystrica Mb. of Zlín Fm. – extremly thick bed of glauconitic sandstone and succeeding Bystrica type mudstone (rock 500m to the SW of the Sihelniansky hrádok hill); **28)** F772 – Ropianka Fm. – alternation of laminated thin- to medium-bedded sandstones with grey-green silty claystones (cutting behind the Biela farma cottage west of the Oravská Polhora village).

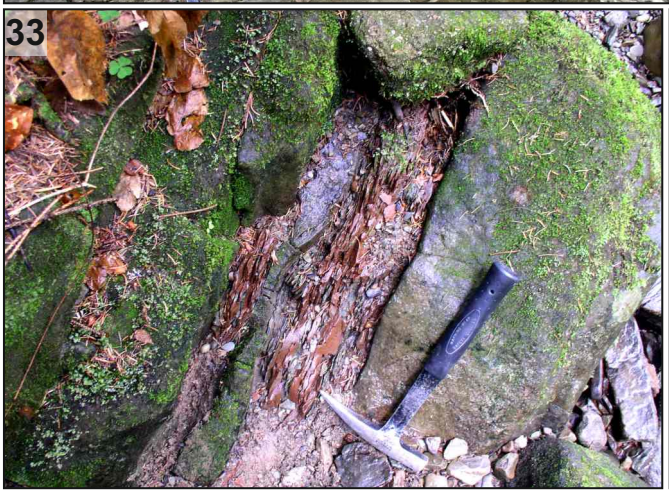
Photo 15-22: 15, 16) F46 – alternation of thin laminated sandston beds, thick-bedded Magura type greywacke sandstones and muddy slumps, sole marks on sole surface (Veselianka river bed above the Oravská Jasenica village); **17)** crossing groove casts on sole surface of Magura type greywacke sandstone (quarry in Oravská Jasenica village); **18)** F133 – Zábava Fm. – sandstone facies with Magura type greywacke sandstones (Veselianka river bed south of Oravské Veselé village); **19)** F155 – Redikálne Mb. of Zábava Fm. – massive variegated claystones (Redikálne – east slope of Veselianka valley); **20, 21)** F193 – Oravské Veselé Mb. of Zlín Fm. – quartzy glauconitic sandstones and Magura type greywacke sandstones accompanied with thick beds of Bystrica type mudstones, with the muddy slumps, detail of folded sandy clastic dike (quarry by the road to the Mútne village behin the turning to Beňadovo village); **22)** F212 – Zábava Fm. – thin-bedded facies (quarry above the Goral settlement on SE slope of the Oravská Magura Mts.).


29
5m

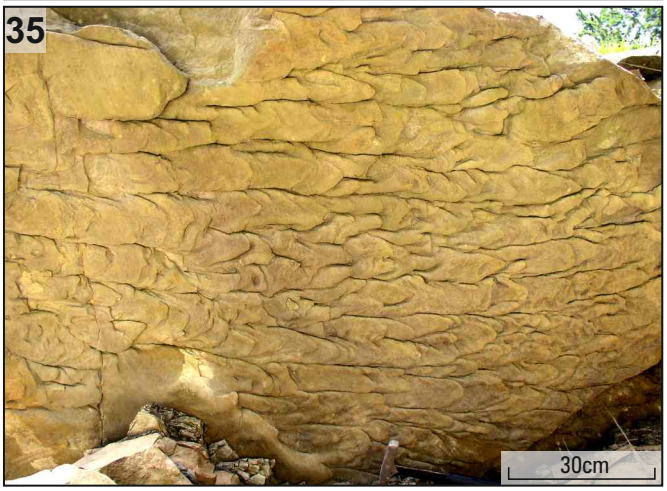

30
2m


31


1 cm
32


33


34


35
30cm


36
50cm

Photo 37-42: 37, 38) Lm1 – Kýčera Mb. of Zlín Fm. – bioturbation *Zoophycos* in Magura (Kýčera) type greywacke sandstone (quarry Lúky pod Makytou village); **39)** BKs57 – Javorina Mb. of Lopeník Fm. – thin-bedded quartz-carbonate sandstone facies (Chocholnica valley – Bernabáška – road cutting); **40)** BKs66 – Javorina Mb. of Lopeník Fm. – prevail thick-bedded quartz-carbonate sandstone facies (Chocholnica valley – road cutting); **41)** BKs239 – Drietomica Mb. of Lopeník Fm. – detail of the amalgamated thick-bedded quartz-carbonate sandstones and fine grained conglomerates (Drietomica valley – road cutting); **42)** BKs239 – Drietomica Mb. of Lopeník Fm. – thick-bedded amalgamated quartz-carbonate sandstones and fine grained conglomerates (Drietomica valley – road cutting).

Photo 29-36: 29, 30) Dp3 – Kýčera Mb. of Zlín Fm. – great profile with predominance of thick-bedded Magura (Kýčera) greywacke type sandstone (large quarry north of the Veľké Rovné village at Bieščari settlement); **31)** Dp3 – Kýčera Mb. of Zlín Fm. – sole marks on sole surface of Magura (Kýčera) greywacke type sandstones (large quarry north of the Veľké Rovné village at Bieščari settlement); **32)** J6 – Ráztoka Mb. of Soláň Fm. – bioturbated marl (Ráztoky creek valley above the Štiavnik village); **33)** J49 – Lower Beloveža Mb. – horizon of Riečky type sandstones with the intercalation of variegated claystones (Buntova dolina valley north of the Štiavnik village); **34)** J73 – Lower Luhačovice Mb. – solid bed of sandy laminated marl (east of the Čierne hill); **35)** J77 – Kýčera Mb. of Zlín Fm. – flute (load) casts on sole sufrace of Magura (Kýčera) type greywacke sandstone (small quarry by the road in the valley above the Nocnárovo settlement – Štiavnik village); **36)** J258 – Upper Beloveža Mb. – thin-bedded deposits (Papradnianka creek).

43

44

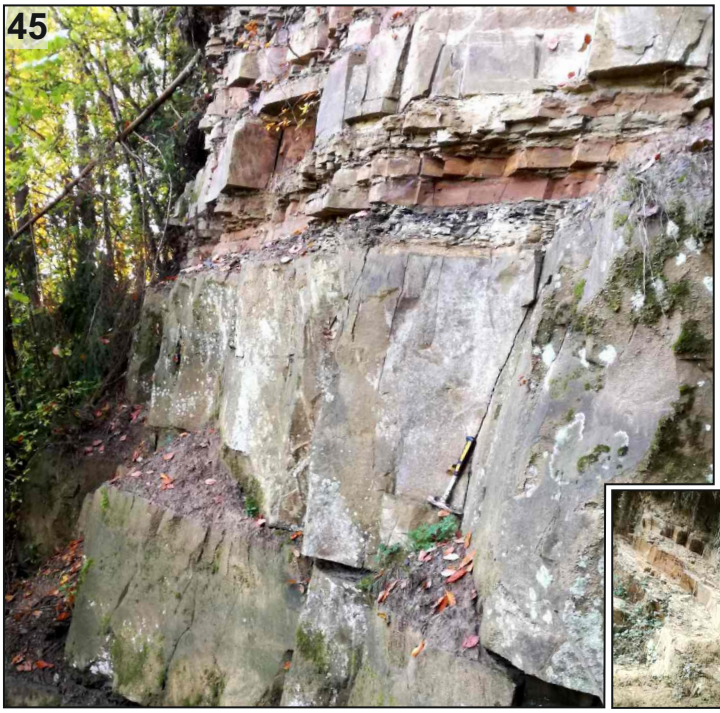


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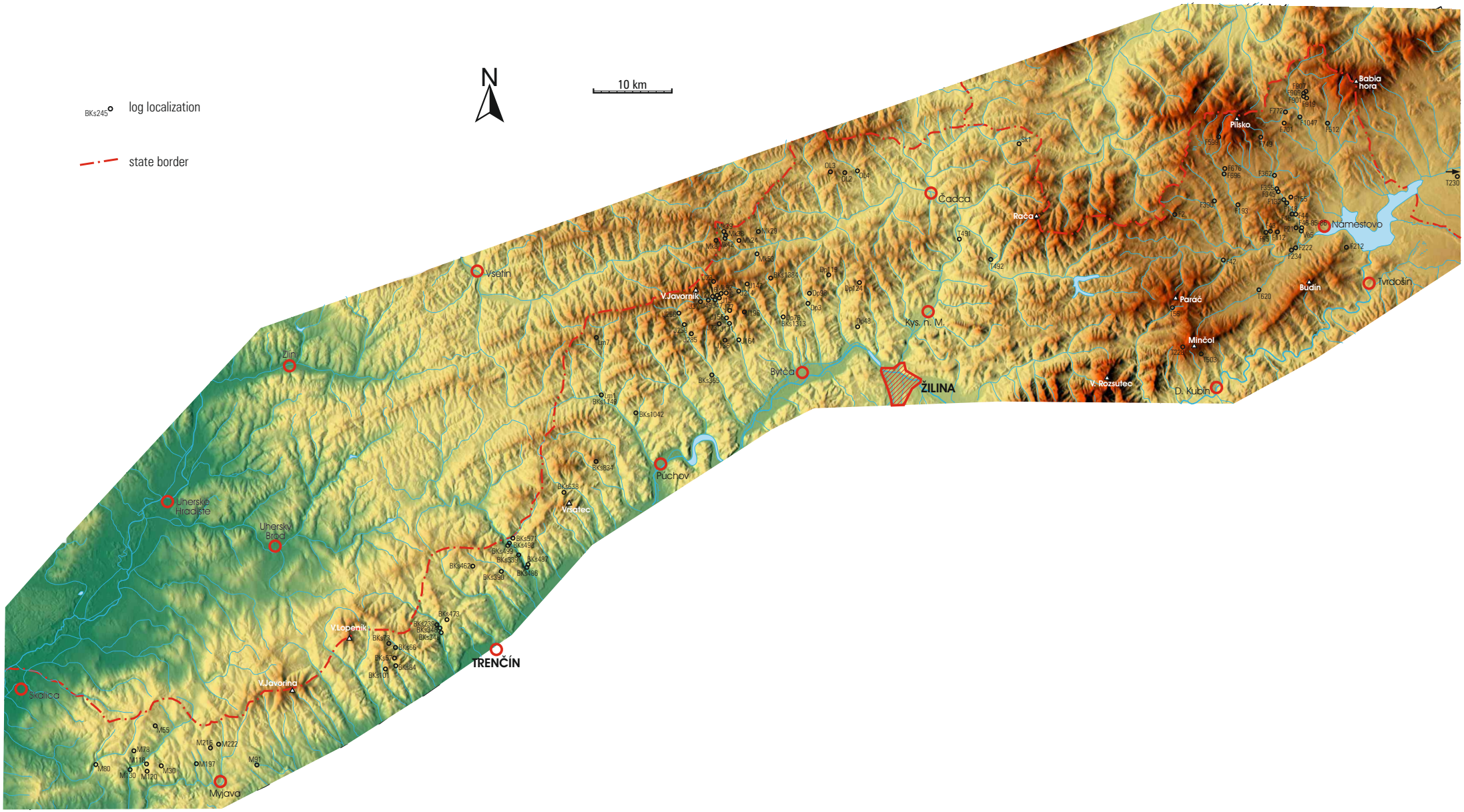
Photo 43-50: 43) Chabová Mb. of Lopeník Fm. – thick-bedded of quartz-carbonate sandstone with expressive liesegang; **44)** BKs339 – Javorina Mb. of Lopeník Fm. – thin-bedded quartz-carbonate sandstone facies (Vlára river valley – Rajkovec quarry); **45)** BKs339 – Javorina Mb. of Lopeník Fm. – domination of thick-bedded quartz-carbonate sandstone facies (Vlára river valley – Rajkovec quarry); **46)** BKs346 – Chabová Mb. of Lopeník Fm. – both thin-bedded and thick-bedded quartz-carbonate sandstone facies of lower part of Chabová Mb. similar to Javorina Mb. (Drietomica valley – main road cutting); **47)** BKs348 – Chabová Mb. – thick-bedded quartz-carbonate sandstone facies (old quarry south of the Mrázikovci settlement – main road cutting); **48)** BKs486 – Javorina Mb. of Lopeník Fm. – thick-bedded quartz-carbonate sandstone facies (Horné Srnie village); **49)** BKs487 – Javorina Mb. of Lopeník Fm. – fold of the thin-bedded quartz-carbonate sandstone facies (Horné Srnie village); **50)** BKs487 – Javorina Mb. of Lopeník Fm. – thick-bedded quartz-carbonate sandstone facies (Horné Srnie village).

Electronic supplement C. Map of localization of documented outcrops.



Electronic supplement D. Thickness, location, tectonic and lithostratigraphic classification of documented outcrops.

profile	thickness	WGS84-lat	WGS84-lon	region	tectonic. unit	lithostrat. unit
Peira Cava		43.91098°	7.35361°	France	(foreland basin)	Grès d´Annot (early Oligocene)
F2	**51m**	**49.43563°**	**19.23418°**	**Orava**	**Bystrica U.**	**Zlín Fm. - Bystrica Mb.**
F21	**94m**	**49.40400°**	**19.42998°**	**Orava**	**Krynica U.**	**Racibor Fm. - Račová Mb.**
F42	**46m**	**49.36659°**	**19.30025°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F43	**24m**	**49.39951°**	**19.37985°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F44	**18m**	**49.41734°**	**19.42493°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F45	**22m**	**49.41958°**	**19.42146°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F46-85-86	**162m**	**49.40117°**	**19.43786°**	**Orava**	**Krynica U.**	**Racibor Fm.**
F95	7,5m	49.39820°	19.37787°	Orava	Krynica U.	Zábava Fm.
F112	13m	49.39882°	19.39139°	Orava	Krynica U.	Racibor Fm. - Račová Mb.
F133	**20m**	**49.43875°**	**19.40403°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F148	8,5m	49.43480°	19.40686°	Orava	Krynica U.	Zábava Fm.
F155	4m	49.43835°	19.41849°	Orava	Krynica U.	Redikálne Mb.
F193	14,5m	49.42951°	19.32422°	Orava	Bystrica U.	Zlín Fm. - Oravské Veselé Mb.
F212	**59m**	**49.38360°**	**19.51530°**	**Orava**	**Krynica U.**	**Zábava Fm.**
F222	16m	49.38004°	19.42652°	Orava	Krynica U.	Racibor Fm.
F234	3,5m	49.37899°	19.42314°	Orava	Krynica U.	Racibor Fm.
F345	**30m**	**49.44359°**	**19.39836°**	**Orava**	**Bystrica U.**	**Zlín Fm. - Oravské Veselé Mb.**
F355	**32m**	**49.44777°**	**19.39305°**	**Orava**	**Bystrica U.**	**Upper Beloveža Mb.**
F362	5m	49.46774°	19.38789°	Orava	Bystrica U.	Upper Beloveža Mb.
F390	8m	49.43259°	19.28284°	Orava	Bystrica U.	Zlín Fm. - Oravské Veselé Mb.
F512	**21m**	**49.52402°**	**19.47709°**	**Orava**	**Bystrica U.**	**Zlín Fm. - Bystrica Mb.**
F599	4,5m	49.50782°	19.28610°	Orava	Rača U.	Zlín Fm. - Kýčera Mb.
F676	3,5m	49.47282°	19.29833°	Orava	Bystrica U.	Zlín Fm. - Oravské Veselé Mb.
F696	4,5m	49.46683°	19.29414°	Orava	Bystrica U.	Zlín Fm. - Oravské Veselé Mb.
F701	11m	49.52162°	19.40378°	Orava	Bystrica U.	Zlín Fm. - Bystrica Mb.
F749	7m	49.50765°	19.36104°	Orava	Bystrica U.	Ropianka.Fm. - Szczawina Mb.
F772	**16m**	**49.53691°**	**19.39985°**	**Orava**	**Bystrica U.**	**Ropianka.Fm.**
F901	6m	49.55499°	19.42675°	Orava	Bystrica U.	Zlín Fm. - Bystrica Mb.
F906	12m	49.55728°	19.42672°	Orava	Bystrica U.	Zlín Fm. - Bystrica Mb.
F907	**37m**	**49.55843°**	**19.42723°**	**Orava**	**Bystrica U.**	**Zlín Fm. - Bystrica Mb.**
F919	4m	49.55342°	19.42736°	Orava	Bystrica U.	Zlín Fm. - Kýčera Mb.
F1047	**48m**	**49.52932°**	**19.43098°**	**Orava**	**Bystrica U.**	**Zlín Fm. - Bystrica Mb.**
BKs1042	10m	49.17712°	18.27224°	Javorníky	Bystrica U.	Zlín Fm. - Bystrica Mb.
T228	**43m**	**49.26760°**	**19.23444°**	**Orava**	**Krynica U.**	**Racibor Fm.**
Ve5	0,1m	49.40117°	19.43786°	Orava	Krynica U.	Racibor Fm.
T56	**20m**	**49.31085°**	**19.21377°**	**Orava**	**Krynica U.**	**Zábava Fm.**
T503	**30m**	**49.26578°**	**19.27670°**	**Orava**	**Krynica U.**	**Zábava Fm.**
T230	**51m**	**49.48756°**	**20.04935°**	**Nowy Targ**	**Krynica U.**	**Malcov Fm.**
T620	**9m**	**49.33522°**	**19.36879°**	**Orava**	**Krynica U.**	**Malcov Fm.**
Sk1	**25m**	**49.49756°**	**18.92734°**	**Kysuce**	**Rača U.**	**Szczawina Mb.**
Mk8	**22m**	**49.37825°**	**18.40787°**	**Kysuce**	**Rača U.**	**Lower Beloveža Mb.**
Mk24	**80m**	**49.3795°**	**18.4485°**	**Kysuce**	**Rača U.**	**Lower Beloveža Mb.**
Mk29	**21,5m**	**49.38302°**	**18.46225°**	**Kysuce**	**Rača U.**	**Lower/Upper Beloveža Mb.**
Mk38	13m	49.38892°	18.42260°	Kysuce	Rača U.	Soláň Fm. - Lukov Mb.
Mk39	4m	49.39005°	18.42176°	Kysuce	Rača U.	Soláň Fm. - Ráztoka Mb.
Mk42	2m	49.38586°	18.42171°	Kysuce	Rača U.	Lower Beloveža Mb.
Mk52	4,5m	49.31939°	18.42781°	Kysuce	Rača U.	Soláň Fm. - Lukov Mb.
Mk53	12m	49.36298°	18.48314°	Kysuce	Rača U.	Lower Beloveža Mb.
OL2	9m	49.45500°	18.62720°	Kysuce	Rača U.	Lower Beloveža Mb.
OL3	4+1+1m	49.45698°	18.60228°	Kysuce	Rača U.	Soláň Fm. - Lukov Mb.
OL4	**15+2m**	**49.46205°**	**18.65351°**	**Kysuce**	**Rača U.**	**Soláň Fm. - Lukov Mb.**
Dp3	**85m**	**49.30993°**	**18.57245°**	**Javorníky**	**Rača U.**	**Zlín Fm. - Kýčera Mb.**
Dp76/BKs1313	**34m**	**49.29367°**	**18.52953°**	**Javorníky**	**Rača U.**	**Zlín Fm. - Kýčera Mb.**
T491	**71m**	**49.38218°**	**18.84103°**	**Kysuce**	**Rača U.**	**Zlín Fm. - Kýčera Mb.**
T492	**114m**	**49.36471°**	**18.89656°**	**Kysuce**	**Rača U.**	**Zlín Fm. - Kýčera Mb.**

Dp98	2m	49.32007°	18.57647°	Javorníky	Rača U.	Upper Luhačovice Mb.
Dp119	3m	49.34155°	18.60741°	Javorníky	Rača U.	Zlín Fm. - Babiše Mb. - Glt sst
Lm7	4m	49.26553°	18.20219°	Javorníky	Rača U.	Upper Luhačovice Mb.
Dp124	4m	49.33422°	18.66230°	Javorníky	Rača U.	Upper Luhačovice Mb.
J6	0,1m	49.31939°	18.42781°	Javorníky	Rača U.	Soláň Fm. - Ráztoka Mb.
J15	3m	49.31374°	18.41642°	Javorníky	Rača U.	Lower Beloveža Mb.
J16	3,5m	49.31539°	18.41458°	Javorníky	Rača U.	Soláň Fm. - Ráztoka Mb.
J22	1,2m	49.31454°	18.40758°	Javorníky	Rača U.	Lower Beloveža Mb.
J23	1,5m	49.33112°	18.40622°	Javorníky	Rača U.	Zlín Fm. - Vsetín Mb.
J37	1,5m	49.30992°	18.38613°	Javorníky	Rača U.	Lower Beloveža Mb.
J47	5m	49.31187°	18.40999°	Javorníky	Rača U.	Lower Beloveža Mb.
J49	6,5m	49.31175°	18.39608°	Javorníky	Rača U.	Lower Beloveža Mb.
J73	0,35m	49.28458°	18.41650°	Javorníky	Rača U.	Lower Luhačovice Mb.
J77	7m	49.29983°	18.43614°	Javorníky	Rača U.	Zlín Fm. - Kýčera Mb.
J136	0,9m	49.26580°	18.42754°	Javorníky	Rača U.	Lower Luhačovice Mb.
BKs1384	**72m**	**49.33843°**	**18.50733°**	**Javorníky**	**Rača U.**	**Lower Luhačovice Mb.**
J142	0,4m	49.32661°	18.46621°	Javorníky	Rača U.	Soláň Fm. - Ráztoka Mb.
J155	**26m**	**49.29131°**	**18.42965°**	**Javorníky**	**Rača U.**	**Lower Beloveža Mb.**
J164	21m	49.26597°	18.45178°	Javorníky	Rača U.	Zlín Fm. - Kýčera Mb.
J171	0,5m	49.28514°	18.43543°	Javorníky	Rača U.	Zlín Fm. - Kýčera Mb.
BKs1149/Lm1	**48m**	**49.19906°**	**18.21442°**	**Javorníky**	**Rača U.**	**Zlín Fm. - Kýčera Mb.**
J196	1,5m	49.29873°	18.46297°	Javorníky	Rača U.	Upper Luhačovice Mb.
J214	12m	49.32252°	18.44761°	Javorníky	Rača U.	Lower Beloveža Mb.
J256	3,5m	49.29618°	18.34801°	Javorníky	Rača U.	Lower Beloveža Mb.
J258	4m	49.28841°	18.35041°	Javorníky	Rača U.	Upper Beloveža Mb.
J285	3,5m	49.27234°	18.36943°	Javorníky	Rača U.	Upper Luhačovice Mb.
J365	11,5m	49.21655°	18.41477°	Javorníky	Bystrica U.	Zlín Fm. - Bystrica Mb.
Dp48	3,5m	49.28370°	18.66175°	Javorníky	Bystrica U.	Zlín Fm. - Bystrica Mb.
M55	2m	48.81358°	17.44809°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M78	9,5m	48.78357°	17.41109°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M80	3m	48.76763°	17.34625°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M91	3,5m	48.77100°	17.62601°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M118	6,5m	48.76755°	17.43624°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M197	3,5m	48.77131°	17.52171°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
M216	3,5m	48.78962°	17.54534°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
BKs834	11m	49.12181°	18.20957°	Biele Karpaty	Biele Karpaty U.	Svodnice Fm.
BKs346	7m	48.93583°	17.94038°	Biele Karpaty	Biele Karpaty U.	Chabová Mb.
BKs348	**32m**	**48.92908°**	**17.94207°**	**Biele Karpaty**	**Biele Karpaty U.**	**Chabová Mb.**
BKs462	4,5m	49.00666°	18.00242°	Biele Karpaty	Biele Karpaty U.	Chabová Mb.
BKs473	5m	48.94973°	17.95249°	Biele Karpaty	Biele Karpaty U.	Chabová Mb.
BKs239	**18m**	**48.93984°**	**17.93536°**	**Biele Karpaty**	**Biele Karpaty U.**	**Javorina/Drietomica Mb.**
M30	6m	48.76812°	17.45968°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
M130	3m	48.76169°	17.40572°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs57	3,5m	48.89844°	17.86128°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs66	4,5m	48.90862°	17.86570°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs73	3m	48.91674°	17.84692°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs84	4,5m	48.89102°	17.86346°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs101	4m	48.88565°	17.84549°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs339	**38m**	**49.01602°**	**18.07857°**	**Biele Karpaty**	**Biele Karpaty U.**	**Javorina Mb.**
BKs390	10m	48.99842°	18.05355°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs486	**20m**	**49.00505°**	**18.09127°**	**Biele Karpaty**	**Biele Karpaty U.**	**Javorina Mb.**
BKs487	**24m**	**49.00528°**	**18.09260°**	**Biele Karpaty**	**Biele Karpaty U.**	**Javorina Mb.**
BKs498	15m	49.02675°	18.05823°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs499	3m	49.02513°	18.05840°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs571	11m	49.03399°	18.06196°	Biele Karpaty	Biele Karpaty U.	Javorina Mb.
BKs638	**10,5m**	**49.08832°**	**18.15459°**	**Biele Karpaty**	**Biele Karpaty U.**	**Ondrášovec Mb.**
M120	5,5m	48.76101°	17.43538°	Biele Karpaty	Biele Karpaty U.	Ondrášovec Mb.
M222	1m	48.79499°	17.55890°	Biele Karpaty	Biele Karpaty U.	Ondrášovec Mb.