

## APPENDIX 1

### Grain size data for the Kühnring Member (FA 1), Burgschleinitz Formation (FA 2, FA 3, FA 4–5), Gauderndorf Formation (FA 6) and Zogelsdorf Formation (FA 7)

Sample	Gravel [%]	Sand [%]	Coarse sand [%]	Medium sand [%]	Fine sand [%]	Silt [%]	Clay [%]	Mean Mz	Stdev $\sigma_1$	Skew
<b>Kühnring Mb.</b>										
<b>FA 1</b>										
MAI1-12	27.3	53.0	10.0	17.0	26.1	18.5	1.2	1.6	3.1	0.2
MAI1-13	19.6	62.0	17.1	20.2	24.6	15.5	2.9	1.8	3.1	0.7
MAI1-14	26.6	55.2	20.8	15.7	18.7	16.3	1.9	1.3	3.2	0.6
MAI2-1	29.7	53.6	17.8	18.1	17.8	12.4	4.3	1.3	3.9	1.3
MAI2-13	25.8	38.7	13.1	10.1	15.4	31.2	4.4	2.4	3.9	0.2
MAI2-14	25.9	40.1	12.0	10.8	17.3	19.8	14.3	2.9	4.6	0.5
MAI2-15	17.3	66.3	27.6	19.6	19.0	13.0	3.5	1.6	3.0	1.2
MAI2-16	18.5	65.3	29.6	18.0	17.7	13.3	2.9	1.5	2.9	1.0
MAI2-17	59.8	34.3	18.9	10.3	5.2	5.1	0.7	-1.0	2.6	1.6
MAI2-18	39.1	50.1	26.1	13.6	10.4	9.2	1.5	0.2	2.9	1.2
MAI2-19	39.2	52.1	25.6	13.6	12.9	7.9	0.9	0.2	2.7	1.1
MAI3-1	48.7	30.7	15.7	9.3	5.7	17.1	3.5	0.5	4.1	1.1
MAI3-2	40.0	49.4	27.3	14.6	7.4	8.8	1.8	0.0	3.2	1.2
MAI3-3	40.3	29.6	11.0	6.2	12.4	28.2	1.9	1.1	4.1	0.4
<b>Burgschleinitz Fm.</b>										
<b>FA 2</b>										
MAI1-1E	0.0	81.5	2.7	24.8	54.0	16.1	2.3	3.2	2.1	3.3
MAI1-1W	0.1	84.1	3.8	16.0	64.3	13.5	2.3	3.3	2.2	3.9
MAI1-2E	0.3	90.1	6.2	49.7	34.2	8.7	0.8	2.3	1.6	2.0
MAI1-2W	0.5	92.6	8.5	45.4	38.7	5.9	1.0	2.3	1.6	2.3
MAI1-3E	4.2	88.6	21.9	34.1	32.6	6.2	1.0	1.9	1.9	1.4
MAI1-3W	0.4	91.4	11.1	40.4	40.0	7.4	0.8	2.3	1.6	1.6
MAI1-4E	8.2	82.3	31.4	33.8	17.2	8.1	1.4	1.4	2.2	1.7
MAI1-4W	1.1	93.7	23.9	48.6	21.3	4.2	1.0	1.7	1.7	2.3
MAI1-10	0.1	73.4	3.6	21.3	48.5	15.1	11.5	4.2	3.3	1.7
MAI1-15	4.6	70.7	5.2	17.3	48.1	22.2	2.5	3.2	2.3	0.6
MAI1-16	1.4	68.7	3.2	16.5	48.9	28.5	1.4	3.5	1.9	0.4
MAI1-17	1.0	65.5	3.0	11.3	51.2	32.0	1.4	3.6	1.7	0.6
MAI1-18	0.8	75.5	3.4	16.9	55.3	21.7	2.0	3.4	1.9	1.1
MAI1-19	1.1	70.5	2.5	14.9	53.0	25.9	2.4	3.7	2.0	0.9
MAI1-20	0.4	73.1	1.7	14.8	56.7	24.0	2.5	3.7	1.9	1.2
MAI1-21	0.2	75.1	5.1	29.6	40.4	21.4	3.3	3.3	2.2	1.3
MAI1-22	0.2	75.9	3.0	31.2	41.7	20.9	3.0	3.3	2.1	1.4
MAI2-2	0.3	81.9	2.8	23.3	55.7	15.1	2.8	3.3	2.3	3.5
MAI2-10	11.0	74.0	7.0	21.0	46.0	12.9	2.1	2.5	2.6	0.9
MAI2-11	0.3	82.1	3.4	27.7	51.0	14.5	3.2	3.2	2.2	2.6
MAI2-20	15.8	66.0	19.1	25.6	21.4	15.2	3.0	1.9	2.9	0.7
MAI2-21	9.8	67.1	20.6	23.6	22.9	18.9	4.2	2.3	2.9	0.9
MAI2-22	10.1	69.9	14.2	13.4	42.2	15.8	4.2	2.6	2.9	0.5
MAI2-23	12.3	73.4	14.7	14.9	43.7	12.2	2.2	2.3	2.6	0.4

MAI2-24	20.1	63.4	15.9	12.4	35.1	13.2	3.4	1.9	3.1	0.6
MAI2-25	17.1	69.4	11.9	12.8	44.7	11.1	2.4	2.1	2.9	1.0
MAI2-26	1.5	81.6	5.2	15.6	60.8	15.2	1.8	3.1	1.8	0.9
MAI2-27	2.1	74.4	8.8	12.0	53.5	22.1	1.5	3.2	2.1	0.4
MAI2-28	0.7	91.1	7.4	26.7	57.0	7.0	1.1	2.7	1.6	1.4
<b>Burgschleinitz Fm.</b>										
<b>FA 3</b>										
MAI1-5W	15.0	76.7	52.4	13.6	10.7	7.3	1.0	0.7	2.3	1.8
MAI1-5WC	14.0	77.0	50.4	14.3	12.3	8.0	1.0	0.8	2.3	1.7
MAI1-6W	6.6	87.6	49.3	28.6	9.7	5.1	0.7	0.9	1.9	1.8
MAI1-8A	24.6	68.4	43.9	9.2	15.3	5.9	1.1	0.5	2.4	1.7
MAI1-8B	9.8	79.9	50.1	21.6	8.3	9.3	0.9	0.9	2.2	1.7
MAI2-3	11.7	83.5	45.5	20.0	17.9	4.3	0.5	0.8	1.9	1.4
MAI2-4	7.6	85.0	50.2	21.1	13.6	6.1	1.2	1.0	2.2	1.8
MAI2-5	7.9	87.3	29.2	23.6	34.5	3.8	1.0	1.5	2.1	1.4
MAI2-6	11.3	82.8	45.3	21.3	16.2	5.4	0.6	0.9	2.0	1.6
MAI2-29	0.7	91.8	7.2	40.0	44.5	5.8	1.8	2.5	1.8	2.9
MAI3-4	0.3	91.4	8.8	39.9	42.7	6.9	1.3	2.4	1.7	2.0
MAI3-5	9.6	84.1	20.6	33.8	29.7	4.9	1.4	1.6	2.1	1.6
<b>Burgschleinitz Fm.</b>										
<b>FA 4–FA 5</b>										
MAI1-5E	13.0	61.0	37.0	13.5	10.5	22.5	3.4	1.7	3.2	1.3
MAI2-7	8.6	85.0	41.4	28.3	15.4	4.5	1.9	1.2	2.3	2.2
MAI2-8	2.3	94.1	31.2	46.9	15.9	2.9	0.7	1.3	1.6	2.1
MAI3-6	0.9	94.3	10.0	48.4	35.9	3.6	1.2	2.2	1.7	3.3
MAI3-7E	4.5	92.5	32.1	48.5	11.9	2.1	0.8	1.2	1.7	2.5
MAI3-7W	5.1	90.0	28.9	46.4	14.7	3.3	1.6	1.4	2.2	3.2
MAI3-12	0.2	95.9	11.4	71.5	12.9	3.0	1.0	1.8	1.4	3.7
<b>Gauderndorf Fm.</b>										
<b>FA 6</b>										
MAI1-7W	4.1	51.8	28.1	9.6	14.1	39.4	4.7	3.1	3.1	0.7
MAI2-9	0.4	51.3	6.7	12.1	32.6	43.4	4.9	4.1	2.6	1.4
MAI2-9A	1.9	56.6	8.4	13.2	35.0	37.6	3.9	3.7	2.5	0.9
MAI2-31	0.3	72.8	4.0	8.9	59.9	25.8	1.1	3.7	1.7	0.7
MAI3-8E	12.0	73.3	20.4	30.0	22.9	10.1	4.6	2.0	3.1	1.4
MAI3-8W	9.0	82.5	28.6	30.6	23.3	7.6	1.0	1.5	2.1	1.1
MAI3-9E	0.7	69.4	3.7	6.0	59.7	22.9	7.0	4.0	2.5	1.5
MAI3-9W	1.3	75.1	5.8	8.9	60.4	18.8	4.8	3.6	2.4	1.4
<b>Zogelsdorf Fm.</b>										
<b>FA 7</b>										
MAI1-9	9.1	66.0	19.2	18.9	27.9	19.2	5.7	2.8	3.2	1.1
MAI2-32	12.9	69.8	20.2	23.4	26.2	13.7	3.6	2.1	3.1	0.8
MAI3-10E	2.5	51.0	6.1	9.4	35.5	31.8	14.7	4.9	3.6	0.8
MAI3-10W	3.4	64.8	9.7	15.3	39.8	23.6	8.3	3.8	3.2	1.1
MAI3-11E	9.4	75.9	17.7	20.4	37.8	12.2	2.6	2.2	2.6	0.8

The average grain size is expressed by the first standardised moment ( $M_z$ ), the uniformity of the grain size distribution/sorting by the second standardised moment (graphic standard deviation  $Stdev \sigma_1$ ) and the degree of the symmetry by the moment coefficient of skewness (Skew)