DR. SPANG

Projekt: S6 2. Baustufe
Böschungsbruchberechnung, D12 QP 9 km 174,800, max. H = 6,0 m

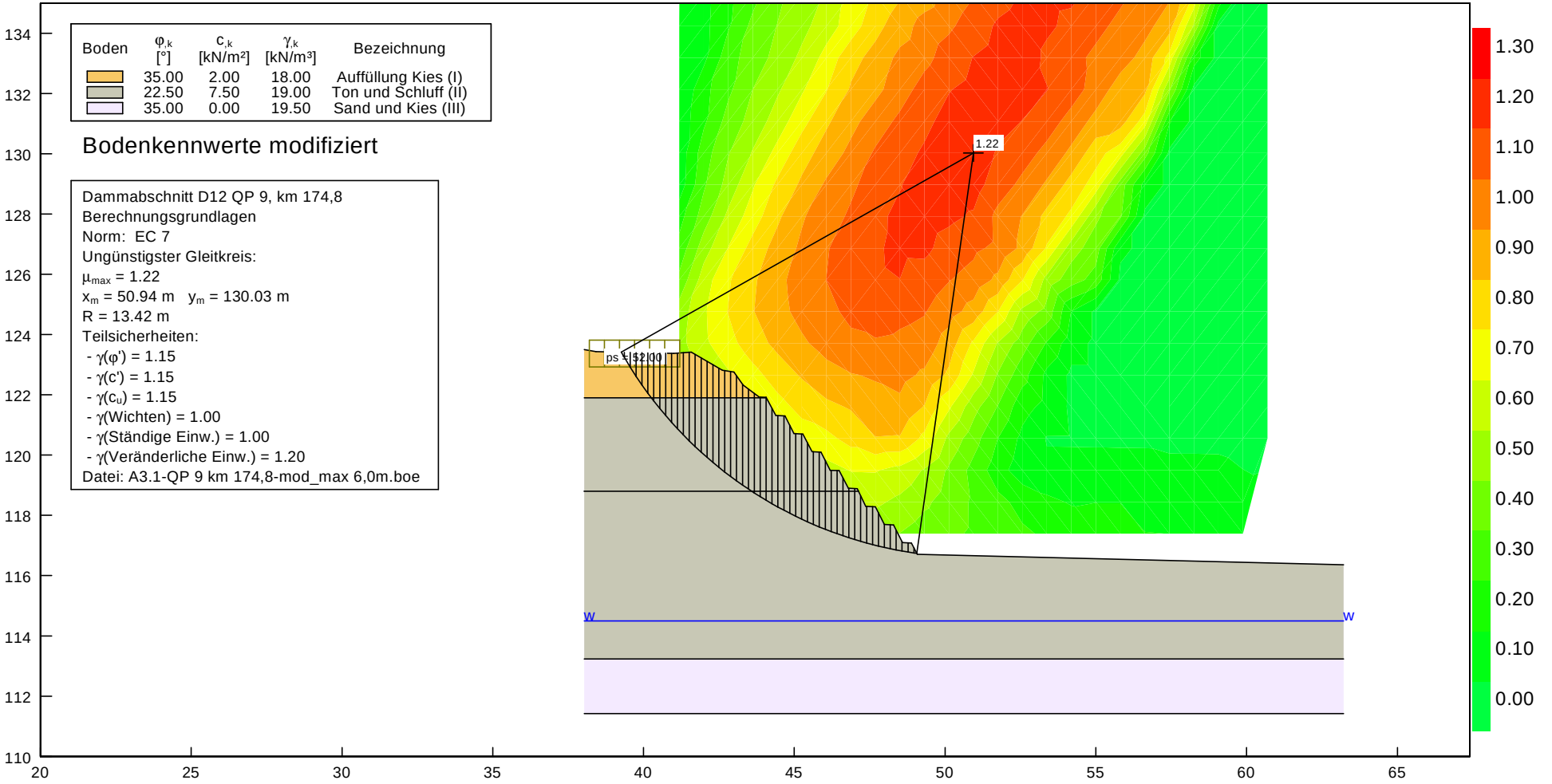
Projekt:	P 33.3184
Anlage:	3.1
Bearbeiter:	Den/Fe
Datum:	24.07.2013

Boden	$\varphi_{,k}$ [°]	$c_{,k}$ [kN/m²]	$\gamma_{,k}$ [kN/m³]	Bezeichnung
	35.00	2.00	18.00	Auffüllung Kies (I)
	22.50	7.50	19.00	Ton und Schluff (II)
	35.00	0.00	19.50	Sand und Kies (III)

Bodenkennwerte modifiziert

Dammabschnitt D12 QP 9, km 174,8
Berechnungsgrundlagen
Norm: EC 7
Ungünstigster Gleitkreis:
μ_{max} = 1.22
x_m = 50.94 m y_m = 130.03 m
R = 13.42 m
Teilsicherheiten:
- $\gamma(\varphi')$ = 1.15
- $\gamma(c')$ = 1.15
- $\gamma(c_u)$ = 1.15
- γ(Wichten) = 1.00
- γ(Ständige Einw.) = 1.00
- γ(Veränderliche Einw.) = 1.20

Datei: A3.1-QP 9 km 174,8-mod_max 6,0m.boe



DR. SPANG

Projekt: S6 2. Baustufe
Böschungsbruchberechnung, D12, QP 9 km 174,800, H = 4,0 m

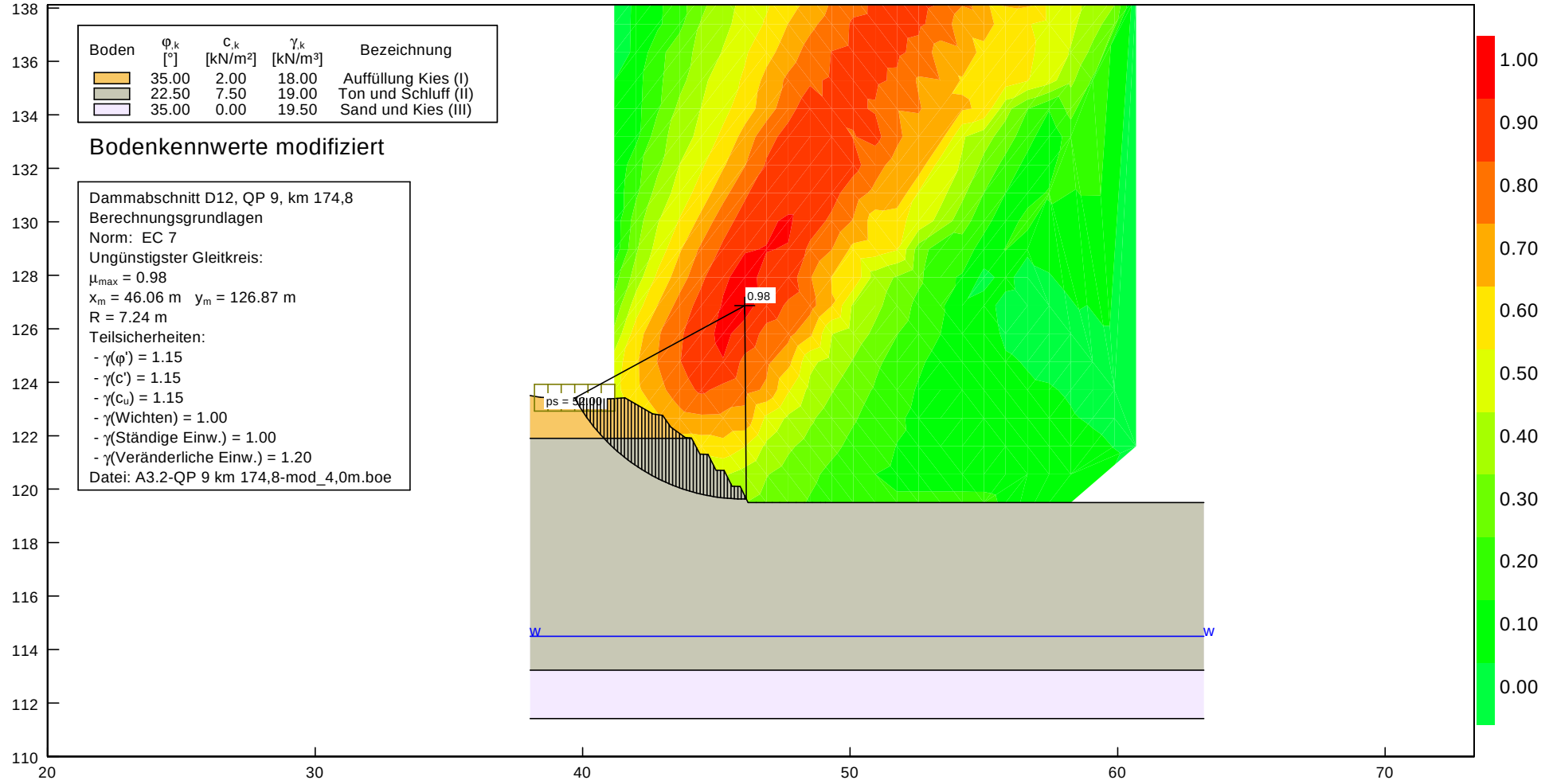
Projekt:	P 33.3184
Anlage:	3.2
Bearbeiter:	Den/Fe
Datum:	24.07.2013

Boden	$\varphi_{,k}$ [°]	$c_{,k}$ [kN/m²]	$\gamma_{,k}$ [kN/m³]	Bezeichnung
	35.00	2.00	18.00	Auffüllung Kies (I)
	22.50	7.50	19.00	Ton und Schluff (II)
	35.00	0.00	19.50	Sand und Kies (III)

Bodenkennwerte modifiziert

Dammabschnitt D12, QP 9, km 174,8
Berechnungsgrundlagen
Norm: EC 7
Ungünstigster Gleitkreis:
μ_{max} = 0.98
x_m = 46.06 m y_m = 126.87 m
R = 7.24 m
Teilsicherheiten:
- $\gamma(\varphi')$ = 1.15
- $\gamma(c')$ = 1.15
- $\gamma(c_u)$ = 1.15
- γ(Wichten) = 1.00
- γ(Ständige Einw.) = 1.00
- γ(Veränderliche Einw.) = 1.20

Datei: A3.2-QP 9 km 174,8-mod_4,0m.boe



Böschungsberechnung nach EC 7
mit Kreisgleitflächen

Dammabschnitt D12, QP 9, km 174,8
Datei: A3.2-QP 9 km 174,8-mod_4,0m.boe

Parameterliste
phi [°] = Reibungswinkel
c [kN/m²] = Kohäsion
gamma [kN/m³] = Wichte
mue [-] = Ausnutzungsgrad
xm,ym [m] = x,y-Wert des Gleitkreismittelpunktes
rad [m] = Radius des Gleitkreises

Teilsicherheiten: (GEO-3)
- gam(phi)= 1.15
- gam(c') = 1.15
- gam(cu) = 1.15
- gam(Wichten) = 1.00
- gam(Ständige Einw.) = 1.00
- gam(Veränderliche Einw.) = 1.20

Bewegungsrichtung des Gleitkörpers nach rechts

Koordinaten der Geländepunkte

Nr.	x	y	Nr.	x	y	Nr.	x	y	Nr.	x	y	Nr.	x	y
[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]
1	38.037	123.500	2	38.425	123.431	3	40.997	123.375	4	41.581	123.419	5	42.617	122.814
6	42.994	122.758	7	43.298	122.324	8	43.838	121.925	9	44.068	121.913	10	44.388	121.313
11	44.688	121.298	12	44.988	120.713	13	45.288	120.698	14	45.588	120.113	15	45.888	120.098
16	46.188	119.498	17	46.488	119.498	18	46.788	119.498	19	47.088	119.498	20	47.368	119.498
21	47.688	119.498	22	47.988	119.498	23	48.288	119.498	24	48.588	119.498	25	48.888	119.498
26	49.078	119.498	27	63.221	119.498									

Charakteristische Bodenkennwerte

Boden	$\varphi_{,k}$	$c_{,k}$	$\gamma_{,k}$	Bezeichnung
[-]	[°]	[kN/m²]	[kN/m³]	
1	35.00	2.00	18.00	Auffüllung Kies (I)
2	22.50	7.50	19.00	Ton und Schluff (II)
3	35.00	0.00	19.50	Sand und Kies (III)

Bemessungs-Bodenkennwerte

Boden	$\varphi_{,d}$	$c_{,d}$	$\gamma_{,d}$	Bezeichnung
[-]	[°]	[kN/m²]	[kN/m³]	
1	31.34	1.74	18.00	Auffüllung Kies (I)
2	19.81	6.52	19.00	Ton und Schluff (II)
3	31.34	0.00	19.50	Sand und Kies (III)

Koordinaten der Schichten und Bodennummern

Nr.	x(links)	y(links)	x(rechts)	y(rechts)	Boden-Nr.
[-]	[m]	[m]	[m]	[m]	
1	38.037	121.900	44.075	121.900	1
2	38.037	113.230	63.221	113.230	2
3	38.037	111.420	63.221	111.420	3

Koordinaten des Porenwasserdruck-Polygonzuges

Nr.	x	y	Nr.	x	y
[-]	[m]	[m]	[-]	[m]	[m]
1	38.037	114.500	2	63.221	114.500

Ständige Lasten

Nr.	Größe(links)	Größe(rechts)	x(links)	x(rechts)	y
[-]	[kN/m²]	[kN/m²]	[m]	[m]	[m]
1	52.00	52.00	38.20	41.20	122.92

Wasserstand vor der Böschung links [m] = 114.50
Wasserstand vor der Böschung rechts [m] = 114.50

gamma Wasser [kN/m³] = 10.000

Berechnung mit Berücksichtigung des passiven Erddruckkeils

Ergebnisse
Suchbereich
Art Suchradius
Horizontale Tangenten
x / y (Anfang): 41.2455 114.9789
x / y (Ende): 40.0183 124.2780
Anzahl Radien = 40

Nr	xm	ym	Radius	Lamellen	mue	Zähler	Nenner	M(Ti)	M(R)	M(Gi)	M(S)
[-]	[m]	[m]	[m]	[-]	[-]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]
1	41.1863	117.3947	nicht berechnet								
2	41.1863	118.4472	nicht berechnet								
3	41.1863	119.4997	nicht berechnet								
4	41.1863	120.5523	nicht berechnet								
5	41.1863	121.6048	2.9697	60	0.4183	353.119	844.099	844.1	0.0	353.1	0.0
6	41.1863	122.6573	2.9837	61	0.4647	333.656	718.006	718.0	0.0	333.7	0.0
7	41.1863	123.7098	2.6088	53	0.5168	205.694	398.023	398.0	0.0	205.7	0.0
8	41.1863	124.7624	3.2741	50	0.4960	241.582	487.015	487.0	0.0	241.6	0.0
9	41.1863	125.8149	3.8617	50	0.3743	213.232	569.723	569.7	0.0	213.2	0.0
10	41.1863	126.8674	4.4493	50	0.2829	131.855	466.039	466.0	0.0	131.9	0.0
11	41.1863	127.9200	5.2693	50	0.2114	93.230	440.959	441.0	0.0	93.2	0.0
12	41.1863	128.9725	6.0894	50	0.0924	23.961	259.360	259.4	0.0	24.0	0.0
13	41.1863	130.0250	7.1419	50	0.0864	27.640	319.774	319.8	0.0	27.6	0.0
14	41.1863	131.0776	8.1944	50	0.0843	33.672	399.324	399.3	0.0	33.7	0.0
15	41.1863	132.1301	9.0145	50	0.0513	5.619	109.503	109.5	0.0	5.6	0.0
16	41.1863	133.1826	10.0670	50	0.0508	6.502	128.102	128.1	0.0	6.5	0.0
17	41.1863	134.2352	11.1196	50	0.0501	7.404	147.657	147.7	0.0	7.4	0.0
18	41.1863	135.2877	12.1721	50	0.0495	8.325	168.110	168.1	0.0	8.3	0.0
19	41.1863	136.3402	12.9922	50	0.0014	0.062	42.996	43.0	0.0	0.1	0.0
20	41.1863	137.3928	14.0447	50	0.0017	0.083	48.194	48.2	0.0	0.1	0.0
21	41.1863	138.4453	15.0972	50	0.0020	0.105	53.619	53.6	0.0	0.1	0.0
22	41.1863	139.4978	16.1498	50	0.0022	0.128	59.268	59.3	0.0	0.1	0.0
23	41.1863	140.5504	17.2023	50	0.0023	0.152	65.145	65.1	0.0	0.2	0.0
24	41.1863	141.6029	18.2548	50	0.0025	0.178	71.243	71.2	0.0	0.2	0.0
25	41.1863	142.6554	19.3074	50	0.0026	0.204	77.566	77.6	0.0	0.2	0.0
26	41.9990	117.3947	nicht berechnet								
27	41.9990	118.4472	3.7636	79	0.3651	642.369	1759.382	1759.4	0.0	642.4	0.0
28	41.9990	119.4997	nicht berechnet								
29	41.9990	120.5523	3.7719	59	0.4399	700.057	1591.237	1591.2	0.0	700.1	0.0
30	41.9990	121.6048	3.5626	57	0.4928	583.549	1184.211	1184.2	0.0	583.5	0.0
31	41.9990	122.6573	3.2865	55	0.5542	439.300	792.622	792.6	0.0	439.3	0.0
32	41.9990	123.7098	2.4048	50	0.6289	166.984	265.528	265.5	0.0	167.0	0.0
33	41.9990	124.7624	3.9715	50	0.6360	445.763	700.834	700.8	0.0	445.8	0.0
34	41.9990	125.8149	4.5591	50	0.6011	442.584	736.310	736.3	0.0	442.6	0.0
35	41.9990	126.8674	5.1467	50	0.5047	371.803	736.735	736.7	0.0	371.8	0.0
36	41.9990	127.9200	5.7343	50	0.3961	250.326	631.992	632.0	0.0	250.3	0.0
37	41.9990	128.9725	6.5543	50	0.3363	205.331	610.527	610.5	0.0	205.3	0.0
38	41.9990	130.0250	7.6069	50	0.3034	230.053	758.135	758.1	0.0	230.1	0.0
39	41.9990	131.0776	8.4269	50	0.2324	136.261	586.252	586.3	0.0	136.3	0.0
40	41.9990	132.1301	9.4795	50	0.2194	158.180	721.078	721.1	0.0	158.2	0.0
41	41.9990	133.1826	10.2995	50	0.1248	27.875	223.399	223.4	0.0	27.9	0.0
42	41.9990	134.2352	11.3520	50	0.1202	33.702	280.410	280.4	0.0	33.7	0.0
43	41.9990	135.2877	12.4046	50	0.1144	37.072	324.037	324.0	0.0	37.1	0.0
44	41.9990	136.3402	13.2246	50	0.0688	9.241	134.416	134.4	0.0	9.2	0.0
45	41.9990	137.3928	14.2772	50	0.0666	10.094	151.641	151.6	0.0	10.1	0.0
46	41.9990	138.4453	15.3297	50	0.0646	10.959	169.597	169.6	0.0	11.0	0.0
47	41.9990	139.4978	16.3822	50	0.0629	11.840	188.322	188.3	0.0	11.8	0.0
48	41.9990	140.5504	17.4348	50	0.0613	12.736	207.821	207.8	0.0	12.7	0.0
49	41.9990	141.6029	18.4873	50	0.0598	13.648	228.083	228.1	0.0	13.6	0.0
50	41.9990	142.6554	19.5398	50	0.0585	14.569	248.960	249.0	0.0	14.6	0.0
51	42.8117	117.3947	4.0911	88	0.3653	612.747	1677.505	1677.5	0.0	612.7	0.0
52	42.8117	118.4472	4.5905	80	0.3937	1007.711	2559.279	2559.3	0.0	1007.7	0.0
53	42.8117	119.4997	4.5208	69	0.4302	1066.371	2479.024	2479.0	0.0	1066.4	0.0

54	42.8117	120.5523	3.9105	60	0.4856	775.420	1596.719	1596.7	0.0	775.4	0.0
55	42.8117	121.6048	3.8590	53	0.5618	718.966	1279.660	1279.7	0.0	719.0	0.0
56	42.8117	122.6573	3.7409	51	0.6361	598.478	940.833	940.8	0.0	598.5	0.0
57	42.8117	123.7098	3.6292	50	0.7165	453.025	632.279	632.3	0.0	453.0	0.0
58	42.8117	124.7624	4.6690	50	0.7535	725.398	962.750	962.8	0.0	725.4	0.0
59	42.8117	125.8149	5.2565	50	0.7389	728.104	985.425	985.4	0.0	728.1	0.0
60	42.8117	126.8674	5.6116	50	0.6533	530.728	812.383	812.4	0.0	530.7	0.0
61	42.8117	127.9200	6.4317	50	0.5738	539.470	940.198	940.2	0.0	539.5	0.0
62	42.8117	128.9725	7.2518	50	0.4888	518.831	1061.404	1061.4	0.0	518.8	0.0
63	42.8117	130.0250	8.0718	50	0.4441	455.627	1026.035	1026.0	0.0	455.6	0.0
64	42.8117	131.0776	8.8919	50	0.3904	371.009	950.318	950.3	0.0	371.0	0.0
65	42.8117	132.1301	9.7119	50	0.3282	258.834	788.651	788.7	0.0	258.8	0.0
66	42.8117	133.1826	10.7645	50	0.3088	294.368	953.200	953.2	0.0	294.4	0.0
67	42.8117	134.2352	11.5845	50	0.2392	147.910	618.228	618.2	0.0	147.9	0.0
68	42.8117	135.2877	12.6371	50	0.2293	170.347	742.884	742.9	0.0	170.3	0.0
69	42.8117	136.3402	13.6896	50	0.2193	192.810	879.025	879.0	0.0	192.8	0.0
70	42.8117	137.3928	14.5096	50	0.1318	31.469	238.756	238.8	0.0	31.5	0.0
71	42.8117	138.4453	15.5622	50	0.1272	34.221	268.934	268.9	0.0	34.2	0.0
72	42.8117	139.4978	16.6147	50	0.1232	37.012	300.539	300.5	0.0	37.0	0.0
73	42.8117	140.5504	17.6672	50	0.1194	39.832	333.464	333.5	0.0	39.8	0.0
74	42.8117	141.6029	18.7198	50	0.1141	42.972	376.498	376.5	0.0	43.0	0.0
75	42.8117	142.6554	19.5398	50	0.0685	11.266	164.476	164.5	0.0	11.3	0.0
76	43.6245	117.3947	4.0911	91	0.3691	559.521	1516.020	1516.0	0.0	559.5	0.0
77	43.6245	118.4472	5.1811	80	0.4096	1276.860	3117.632	3117.6	0.0	1276.9	0.0
78	43.6245	119.4997	4.6753	69	0.4434	1103.587	2489.031	2489.0	0.0	1103.6	0.0
79	43.6245	120.5523	4.0029	60	0.5060	773.781	1529.122	1529.1	0.0	773.8	0.0
80	43.6245	121.6048	3.7602	52	0.6009	629.123	1046.908	1046.9	0.0	629.1	0.0
81	43.6245	122.6573	4.0438	50	0.7158	690.634	964.865	964.9	0.0	690.6	0.0
82	43.6245	123.7098	4.2414	50	0.8044	671.511	834.833	834.8	0.0	671.5	0.0
83	43.6245	124.7624	4.6690	50	0.8454	658.292	778.632	778.6	0.0	658.3	0.0
84	43.6245	125.8149	5.9540	50	0.8337	1050.530	1260.030	1260.0	0.0	1050.5	0.0
85	43.6245	126.8674	6.3091	50	0.7877	842.517	1069.619	1069.6	0.0	842.5	0.0
86	43.6245	127.9200	6.8967	50	0.7004	724.266	1034.118	1034.1	0.0	724.3	0.0
87	43.6245	128.9725	7.7167	50	0.6386	717.856	1124.033	1124.0	0.0	717.9	0.0
88	43.6245	130.0250	8.5368	50	0.5581	680.495	1219.304	1219.3	0.0	680.5	0.0
89	43.6245	131.0776	9.3568	50	0.4881	612.760	1255.480	1255.5	0.0	612.8	0.0
90	43.6245	132.1301	10.1769	50	0.4507	504.192	1118.751	1118.8	0.0	504.2	0.0
91	43.6245	133.1826	10.9969	50	0.4005	388.960	971.249	971.2	0.0	389.0	0.0
92	43.6245	134.2352	12.0495	50	0.3767	436.293	1158.347	1158.3	0.0	436.3	0.0
93	43.6245	135.2877	12.8695	50	0.3158	265.538	840.767	840.8	0.0	265.5	0.0
94	43.6245	136.3402	13.9221	50	0.3030	304.477	1004.917	1004.9	0.0	304.5	0.0
95	43.6245	137.3928	14.7421	50	0.2248	110.624	492.175	492.2	0.0	110.6	0.0
96	43.6245	138.4453	15.7946	50	0.2194	130.726	595.804	595.8	0.0	130.7	0.0
97	43.6245	139.4978	16.8472	50	0.2136	150.973	706.688	706.7	0.0	151.0	0.0
98	43.6245	140.5504	17.8997	50	0.2086	174.487	836.581	836.6	0.0	174.5	0.0
99	43.6245	141.6029	18.7198	50	0.1305	32.521	249.189	249.2	0.0	32.5	0.0
100	43.6245	142.6554	19.7723	50	0.1269	35.198	277.455	277.5	0.0	35.2	0.0
101	44.4372	117.3947	4.0911	96	0.3551	480.879	1354.043	1354.0	0.0	480.9	0.0
102	44.4372	118.4472	5.1811	80	0.4046	1180.967	2919.005	2919.0	0.0	1181.0	0.0
103	44.4372	119.4997	4.7783	69	0.4361	1063.552	2438.608	2438.6	0.0	1063.6	0.0
104	44.4372	120.5523	4.4648	60	0.4966	911.785	1836.233	1836.2	0.0	911.8	0.0
105	44.4372	121.6048	4.0566	51	0.5951	669.983	1125.842	1125.8	0.0	670.0	0.0
106	44.4372	122.6573	4.0438	50	0.7341	585.472	797.578	797.6	0.0	585.5	0.0
107	44.4372	123.7098	4.6495	50	0.8680	774.914	892.785	892.8	0.0	774.9	0.0
108	44.4372	124.7624	5.5989	50	0.9172	1081.390	1179.020	1179.0	0.0	1081.4	0.0
109	44.4372	125.8149	6.4189	50	0.9245	1295.421	1401.248	1401.2	0.0	1295.4	0.0
110	44.4372	126.8674	6.7740	50	0.8884	1053.359	1185.634	1185.6	0.0	1053.4	0.0
111	44.4372	127.9200	7.5941	50	0.8303	1101.682	1326.879	1326.9	0.0	1101.7	0.0
112	44.4372	128.9725	8.4141	50	0.7691	1115.711	1450.750	1450.8	0.0	1115.7	0.0
113	44.4372	130.0250	9.0017	50	0.6799	896.483	1318.469	1318.5	0.0	896.5	0.0
114	44.4372	131.0776	9.8218	50	0.5960	834.930	1400.891	1400.9	0.0	834.9	0.0
115	44.4372	132.1301	10.6418	50	0.5354	756.793	1413.630	1413.6	0.0	756.8	0.0
116	44.4372	133.1826	11.4619	50	0.4795	643.754	1342.461	1342.5	0.0	643.8	0.0
117	44.4372	134.2352	12.2819	50	0.4526	509.905	1126.651	1126.7	0.0	509.9	0.0
118	44.4372	135.2877	13.3345	50	0.4263	566.361	1328.527	1328.5	0.0	566.4	0.0
119	44.4372	136.3402	14.1545	50	0.3821	410.343	1073.830	1073.8	0.0	410.3	0.0
120	44.4372	137.3928	15.2071	50	0.3608	443.527	1229.341	1229.3	0.0	443.5	0.0
121	44.4372	138.4453	16.0271	50	0.3055	248.345	812.969	813.0	0.0	248.3	0.0

122	44.4372	139.4978	17.0797	50	0.2956	284.624	962.717	962.7	0.0	284.6	0.0
123	44.4372	140.5504	18.1322	50	0.2862	321.069	1121.976	1122.0	0.0	321.1	0.0
124	44.4372	141.6029	19.1847	50	0.2757	355.351	1288.822	1288.8	0.0	355.4	0.0
125	44.4372	142.6554	20.0048	50	0.1809	75.941	419.881	419.9	0.0	75.9	0.0
126	45.2499	117.3947	5.7664	100	0.3256	1451.242	4457.680	4457.7	0.0	1451.2	0.0
127	45.2499	118.4472	5.1811	80	0.3819	1040.962	2725.520	2725.5	0.0	1041.0	0.0
128	45.2499	119.4997	4.7783	69	0.4034	908.462	2251.843	2251.8	0.0	908.5	0.0
129	45.2499	120.5523	5.3424	60	0.4615	1275.136	2763.094	2763.1	0.0	1275.1	0.0
130	45.2499	121.6048	2.6732	51	0.6168	150.752	244.403	244.4	0.0	150.8	0.0
131	45.2499	122.6573	3.2865	50	0.7299	200.939	275.310	275.3	0.0	200.9	0.0
132	45.2499	123.7098	4.8536	50	0.8211	709.150	863.653	863.7	0.0	709.2	0.0
133	45.2499	124.7624	5.3664	50	0.9473	741.057	782.261	782.3	0.0	741.1	0.0
134	45.2499	125.8149	6.4189	50	0.9672	1064.829	1100.888	1100.9	0.0	1064.8	0.0
135	45.2499	126.8674	7.4715	50	0.9559	1423.582	1489.216	1489.2	0.0	1423.6	0.0
136	45.2499	127.9200	8.2915	50	0.9389	1561.858	1663.552	1663.6	0.0	1561.9	0.0
137	45.2499	128.9725	8.8791	50	0.8679	1365.899	1573.878	1573.9	0.0	1365.9	0.0
138	45.2499	130.0250	9.6991	50	0.8092	1361.024	1681.842	1681.8	0.0	1361.0	0.0
139	45.2499	131.0776	10.2867	50	0.7165	1079.089	1506.132	1506.1	0.0	1079.1	0.0
140	45.2499	132.1301	11.1068	50	0.6372	996.839	1564.318	1564.3	0.0	996.8	0.0
141	45.2499	133.1826	11.9268	50	0.5728	926.319	1617.196	1617.2	0.0	926.3	0.0
142	45.2499	134.2352	12.7469	50	0.5190	772.010	1487.437	1487.4	0.0	772.0	0.0
143	45.2499	135.2877	13.7994	50	0.5028	912.746	1815.399	1815.4	0.0	912.7	0.0
144	45.2499	136.3402	14.6195	50	0.4556	733.531	1609.891	1609.9	0.0	733.5	0.0
145	45.2499	137.3928	15.4395	50	0.4265	525.225	1231.444	1231.4	0.0	525.2	0.0
146	45.2499	138.4453	16.4921	50	0.4102	597.765	1457.422	1457.4	0.0	597.8	0.0
147	45.2499	139.4978	17.5446	50	0.3938	668.875	1698.472	1698.5	0.0	668.9	0.0
148	45.2499	140.5504	18.3647	50	0.3473	418.635	1205.398	1205.4	0.0	418.6	0.0
149	45.2499	141.6029	19.4172	50	0.3366	472.841	1404.768	1404.8	0.0	472.8	0.0
150	45.2499	142.6554	20.2373	50	0.2753	211.189	767.244	767.2	0.0	211.2	0.0
151	46.0626	117.3947	5.8781	100	0.3069	1350.160	4399.300	4399.3	0.0	1350.2	0.0
152	46.0626	118.4472	5.1811	80	0.3415	857.457	2510.638	2510.6	0.0	857.5	0.0
153	46.0626	119.4997	4.5787	69	0.3517	637.333	1811.955	1812.0	0.0	637.3	0.0
154	46.0626	120.5523	5.5733	60	0.4148	1199.405	2891.525	2891.5	0.0	1199.4	0.0
155	46.0626	121.6048	2.6732	51	0.5533	107.753	194.757	194.8	0.0	107.8	0.0
156	46.0626	122.6573	3.1351	50	0.7247	114.078	157.416	157.4	0.0	114.1	0.0
157	46.0626	123.7098	4.2414	50	0.7810	244.767	313.383	313.4	0.0	244.8	0.0
158	46.0626	124.7624	5.3664	50	0.8215	471.983	574.538	574.5	0.0	472.0	0.0
159	46.0626	125.8149	6.1864	50	0.9214	630.284	684.038	684.0	0.0	630.3	0.0
160	46.0626	126.8674	7.2390	50	0.9778	959.395	981.159	981.2	0.0	959.4	0.0
161	46.0626	127.9200	8.2915	50	0.9757	1290.863	1322.985	1323.0	0.0	1290.9	0.0
162	46.0626	128.9725	9.3440	50	0.9457	1567.757	1657.713	1657.7	0.0	1567.8	0.0
163	46.0626	130.0250	10.1641	50	0.8920	1627.313	1824.359	1824.4	0.0	1627.3	0.0
164	46.0626	131.0776	10.9842	50	0.8342	1595.195	1912.145	1912.1	0.0	1595.2	0.0
165	46.0626	132.1301	11.5717	50	0.7446	1298.371	1743.699	1743.7	0.0	1298.4	0.0
166	46.0626	133.1826	12.3918	50	0.6832	1202.432	1759.886	1759.9	0.0	1202.4	0.0
167	46.0626	134.2352	13.2119	50	0.6059	1072.483	1769.957	1770.0	0.0	1072.5	0.0
168	46.0626	135.2877	14.0319	50	0.5632	939.291	1667.684	1667.7	0.0	939.3	0.0
169	46.0626	136.3402	15.0844	50	0.5379	1053.926	1959.209	1959.2	0.0	1053.9	0.0
170	46.0626	137.3928	15.9045	50	0.4870	856.834	1759.418	1759.4	0.0	856.8	0.0
171	46.0626	138.4453	16.9570	50	0.4681	960.816	2052.747	2052.7	0.0	960.8	0.0
172	46.0626	139.4978	17.7771	50	0.4390	764.664	1741.968	1742.0	0.0	764.7	0.0
173	46.0626	140.5504	18.8296	50	0.4223	850.453	2013.644	2013.6	0.0	850.5	0.0
174	46.0626	141.6029	19.6497	50	0.3913	565.934	1446.188	1446.2	0.0	565.9	0.0
175	46.0626	142.6554	20.7022	50	0.3802	642.670	1690.439	1690.4	0.0	642.7	0.0
176	46.8753	117.3947	5.8781	100	0.2794	1132.898	4054.056	4054.1	0.0	1132.9	0.0
177	46.8753	118.4472	5.1811	80	0.3085	715.700	2320.036	2320.0	0.0	715.7	0.0
178	46.8753	119.4997	4.7783	69	0.3220	617.971	1919.086	1919.1	0.0	618.0	0.0
179	46.8753	120.5523	5.1576	60	0.3545	745.867	2103.928	2103.9	0.0	745.9	0.0
180	46.8753	121.6048	6.6258	51	0.4313	1690.461	3919.143	3919.1	0.0	1690.5	0.0
181	46.8753	122.6573	3.1351	50	0.5273	47.319	89.736	89.7	0.0	47.3	0.0
182	46.8753	123.7098	4.2414	50	0.7358	142.209	193.281	193.3	0.0	142.2	0.0
183	46.8753	124.7624	5.1339	50	0.7704	208.574	270.722	270.7	0.0	208.6	0.0
184	46.8753	125.8149	6.1864	50	0.8136	343.134	421.731	421.7	0.0	343.1	0.0
185	46.8753	126.8674	7.2390	50	0.9109	616.985	677.305	677.3	0.0	617.0	0.0
186	46.8753	127.9200	8.2915	50	0.9301	904.678	972.686	972.7	0.0	904.7	0.0
187	46.8753	128.9725	9.3440	50	0.9525	1228.885	1290.184	1290.2	0.0	1228.9	0.0
188	46.8753	130.0250	10.3966	50	0.9367	1554.948	1660.015	1660.0	0.0	1554.9	0.0
189	46.8753	131.0776	11.4491	50	0.9189	1887.156	2053.794	2053.8	0.0	1887.2	0.0

190	46.8753	132.1301	12.2692	50	0.8596	1832.785	2132.067	2132.1	0.0	1832.8	0.0
191	46.8753	133.1826	13.0892	50	0.8185	1816.868	2219.619	2219.6	0.0	1816.9	0.0
192	46.8753	134.2352	13.6768	50	0.6956	1353.756	1946.154	1946.2	0.0	1353.8	0.0
193	46.8753	135.2877	14.7293	50	0.6806	1538.259	2260.210	2260.2	0.0	1538.3	0.0
194	46.8753	136.3402	15.5494	50	0.6150	1375.014	2235.893	2235.9	0.0	1375.0	0.0
195	46.8753	137.3928	16.3695	50	0.5630	1223.585	2173.411	2173.4	0.0	1223.6	0.0
196	46.8753	138.4453	17.1895	50	0.5248	1026.403	1955.691	1955.7	0.0	1026.4	0.0
197	46.8753	139.4978	18.2420	50	0.5051	1142.817	2262.511	2262.5	0.0	1142.8	0.0
198	46.8753	140.5504	19.0621	50	0.4616	888.553	1924.742	1924.7	0.0	888.6	0.0
199	46.8753	141.6029	20.1146	50	0.4519	1030.523	2280.348	2280.3	0.0	1030.5	0.0
200	46.8753	142.6554	20.9347	50	0.4316	734.852	1702.564	1702.6	0.0	734.9	0.0
201	47.6880	117.3947	5.8781	100	0.2607	985.936	3782.054	3782.1	0.0	985.9	0.0
202	47.6880	118.4472	5.1811	80	0.2809	620.276	2208.056	2208.1	0.0	620.3	0.0
203	47.6880	119.4997	4.7783	69	0.2839	516.735	1819.909	1819.9	0.0	516.7	0.0
204	47.6880	120.5523	5.5733	60	0.3157	788.394	2497.027	2497.0	0.0	788.4	0.0
205	47.6880	121.6048	6.6258	51	0.3646	1313.546	3602.237	3602.2	0.0	1313.5	0.0
206	47.6880	122.6573	7.6784	50	0.4323	2164.152	5006.123	5006.1	0.0	2164.2	0.0
207	47.6880	123.7098	4.4455	50	0.5620	77.278	137.517	137.5	0.0	77.3	0.0
208	47.6880	124.7624	5.3664	50	0.6764	143.713	212.457	212.5	0.0	143.7	0.0
209	47.6880	125.8149	6.4189	50	0.7836	272.069	347.204	347.2	0.0	272.1	0.0
210	47.6880	126.8674	7.4715	50	0.8325	426.471	512.273	512.3	0.0	426.5	0.0
211	47.6880	127.9200	8.5240	50	0.9126	715.098	783.546	783.5	0.0	715.1	0.0
212	47.6880	128.9725	9.5765	50	0.9463	1067.916	1128.491	1128.5	0.0	1067.9	0.0
213	47.6880	130.0250	10.6291	50	0.9616	1423.088	1479.967	1480.0	0.0	1423.1	0.0
214	47.6880	131.0776	11.4491	50	0.9132	1465.250	1604.479	1604.5	0.0	1465.2	0.0
215	47.6880	132.1301	12.5016	50	0.8940	1728.308	1933.156	1933.2	0.0	1728.3	0.0
216	47.6880	133.1826	13.5542	50	0.8811	2063.605	2342.013	2342.0	0.0	2063.6	0.0
217	47.6880	134.2352	14.3742	50	0.8214	2020.570	2459.861	2459.9	0.0	2020.6	0.0
218	47.6880	135.2877	15.1943	50	0.7706	1886.159	2447.502	2447.5	0.0	1886.2	0.0
219	47.6880	136.3402	16.0143	50	0.7014	1709.903	2437.785	2437.8	0.0	1709.9	0.0
220	47.6880	137.3928	16.8344	50	0.6521	1585.899	2432.105	2432.1	0.0	1585.9	0.0
221	47.6880	138.4453	17.6545	50	0.5899	1358.384	2302.896	2302.9	0.0	1358.4	0.0
222	47.6880	139.4978	18.4745	50	0.5524	1151.617	2084.678	2084.7	0.0	1151.6	0.0
223	47.6880	140.5504	19.5270	50	0.5272	1307.933	2481.126	2481.1	0.0	1307.9	0.0
224	47.6880	141.6029	20.3471	50	0.4945	1057.890	2139.145	2139.1	0.0	1057.9	0.0
225	47.6880	142.6554	21.3996	50	0.4773	1165.513	2441.834	2441.8	0.0	1165.5	0.0
226	48.5008	117.3947	5.8781	100	0.2436	875.663	3594.216	3594.2	0.0	875.7	0.0
227	48.5008	118.4472	5.1811	80	0.2492	523.046	2098.600	2098.6	0.0	523.0	0.0
228	48.5008	119.4997	4.7783	69	0.2413	415.725	1722.603	1722.6	0.0	415.7	0.0
229	48.5008	120.5523	5.5733	60	0.2711	644.106	2375.730	2375.7	0.0	644.1	0.0
230	48.5008	121.6048	6.6258	51	0.3186	1082.281	3397.368	3397.4	0.0	1082.3	0.0
231	48.5008	122.6573	7.6784	50	0.3648	1702.502	4666.647	4666.6	0.0	1702.5	0.0
232	48.5008	123.7098	8.7309	50	0.4245	2614.256	6157.847	6157.8	0.0	2614.3	0.0
233	48.5008	124.7624	9.0860	50	0.4734	2683.724	5669.023	5669.0	0.0	2683.7	0.0
234	48.5008	125.8149	6.6514	50	0.6702	178.567	266.426	266.4	0.0	178.6	0.0
235	48.5008	126.8674	7.7039	50	0.7892	329.779	417.869	417.9	0.0	329.8	0.0
236	48.5008	127.9200	8.5240	50	0.7569	361.381	477.436	477.4	0.0	361.4	0.0
237	48.5008	128.9725	9.5765	50	0.8278	572.874	692.041	692.0	0.0	572.9	0.0
238	48.5008	130.0250	10.6291	50	0.9011	925.335	1026.883	1026.9	0.0	925.3	0.0
239	48.5008	131.0776	11.6816	50	0.9137	1280.436	1401.312	1401.3	0.0	1280.4	0.0
240	48.5008	132.1301	12.7341	50	0.9126	1573.188	1723.935	1723.9	0.0	1573.2	0.0
241	48.5008	133.1826	13.7867	50	0.9098	1923.659	2114.393	2114.4	0.0	1923.7	0.0
242	48.5008	134.2352	14.8392	50	0.8988	2284.601	2541.891	2541.9	0.0	2284.6	0.0
243	48.5008	135.2877	15.6592	50	0.8385	2227.026	2655.852	2655.9	0.0	2227.0	0.0
244	48.5008	136.3402	16.4793	50	0.7887	2070.132	2624.799	2624.8	0.0	2070.1	0.0
245	48.5008	137.3928	17.2994	50	0.7270	1944.022	2674.064	2674.1	0.0	1944.0	0.0
246	48.5008	138.4453	18.1194	50	0.6569	1715.343	2611.138	2611.1	0.0	1715.3	0.0
247	48.5008	139.4978	18.9395	50	0.6132	1493.906	2436.357	2436.4	0.0	1493.9	0.0
248	48.5008	140.5504	19.9920	50	0.6017	1739.648	2891.112	2891.1	0.0	1739.6	0.0
249	48.5008	141.6029	20.8121	50	0.5510	1440.481	2614.145	2614.1	0.0	1440.5	0.0
250	48.5008	142.6554	21.6321	50	0.5185	1180.267	2276.385	2276.4	0.0	1180.3	0.0
251	49.3135	117.3947	5.8781	100	0.2249	770.388	3424.996	3425.0	0.0	770.4	0.0
252	49.3135	118.4472	5.1811	80	0.2186	437.083	1999.910	1999.9	0.0	437.1	0.0
253	49.3135	119.4997	4.7783	69	0.2015	329.853	1637.301	1637.3	0.0	329.9	0.0
254	49.3135	120.5523	5.5733	60	0.2245	506.899	2257.421	2257.4	0.0	506.9	0.0
255	49.3135	121.6048	6.6258	51	0.2731	885.505	3242.607	3242.6	0.0	885.5	0.0
256	49.3135	122.6573	7.6784	50	0.3062	1328.736	4339.035	4339.0	0.0	1328.7	0.0
257	49.3135	123.7098	8.7309	50	0.3569	2068.462	5795.622	5795.6	0.0	2068.5	0.0

258	49.3135	124.7624	9.7834	50	0.4117	2984.477	7250.022	7250.0	0.0	2984.5	0.0
259	49.3135	125.8149	10.8360	50	0.4540	3961.416	8724.909	8724.9	0.0	3961.4	0.0
260	49.3135	126.8674	7.9364	50	0.6530	207.061	317.110	317.1	0.0	207.1	0.0
261	49.3135	127.9200	8.7565	50	0.6463	238.335	368.795	368.8	0.0	238.3	0.0
262	49.3135	128.9725	9.8090	50	0.7517	406.753	541.081	541.1	0.0	406.8	0.0
263	49.3135	130.0250	10.8615	50	0.8300	642.986	774.681	774.7	0.0	643.0	0.0
264	49.3135	131.0776	11.9141	50	0.8857	972.674	1098.193	1098.2	0.0	972.7	0.0
265	49.3135	132.1301	12.9666	50	0.9065	1349.775	1489.056	1489.1	0.0	1349.8	0.0
266	49.3135	133.1826	14.0191	50	0.9108	1728.489	1897.690	1897.7	0.0	1728.5	0.0
267	49.3135	134.2352	14.8392	50	0.8585	1708.492	1990.058	1990.1	0.0	1708.5	0.0
268	49.3135	135.2877	15.8917	50	0.8591	2058.994	2396.812	2396.8	0.0	2059.0	0.0
269	49.3135	136.3402	16.9443	50	0.8525	2421.568	2840.480	2840.5	0.0	2421.6	0.0
270	49.3135	137.3928	17.7643	50	0.7924	2229.451	2813.452	2813.5	0.0	2229.5	0.0
271	49.3135	138.4453	18.5844	50	0.7506	2103.236	2801.950	2801.9	0.0	2103.2	0.0
272	49.3135	139.4978	19.4044	50	0.6802	1856.375	2729.100	2729.1	0.0	1856.4	0.0
273	49.3135	140.5504	20.2245	50	0.6350	1624.826	2558.845	2558.8	0.0	1624.8	0.0
274	49.3135	141.6029	21.2770	50	0.6235	1884.760	3022.781	3022.8	0.0	1884.8	0.0
275	49.3135	142.6554	22.0971	50	0.5797	1631.465	2814.510	2814.5	0.0	1631.5	0.0
276	50.1262	117.3947	5.6547	100	0.2033	592.593	2914.487	2914.5	0.0	592.6	0.0
277	50.1262	118.4472	5.1811	80	0.1934	370.320	1914.557	1914.6	0.0	370.3	0.0
278	50.1262	119.4997	4.7783	69	0.1718	269.217	1567.489	1567.5	0.0	269.2	0.0
279	50.1262	120.5523	5.5733	60	0.1816	390.520	2150.326	2150.3	0.0	390.5	0.0
280	50.1262	121.6048	6.6258	51	0.2253	694.996	3085.224	3085.2	0.0	695.0	0.0
281	50.1262	122.6573	7.6784	50	0.2594	1075.884	4147.260	4147.3	0.0	1075.9	0.0
282	50.1262	123.7098	8.7309	50	0.2894	1530.030	5287.195	5287.2	0.0	1530.0	0.0
283	50.1262	124.7624	9.7834	50	0.3430	2346.036	6839.999	6840.0	0.0	2346.0	0.0
284	50.1262	125.8149	10.8360	50	0.3987	3313.038	8309.638	8309.6	0.0	3313.0	0.0
285	50.1262	126.8674	11.6560	50	0.4310	3867.474	8973.009	8973.0	0.0	3867.5	0.0
286	50.1262	127.9200	9.2214	50	0.6356	228.810	359.998	360.0	0.0	228.8	0.0
287	50.1262	128.9725	10.0415	50	0.6242	258.445	414.061	414.1	0.0	258.4	0.0
288	50.1262	130.0250	11.0940	50	0.7420	444.196	598.674	598.7	0.0	444.2	0.0
289	50.1262	131.0776	12.1465	50	0.7967	649.389	815.124	815.1	0.0	649.4	0.0
290	50.1262	132.1301	13.1991	50	0.8847	1055.414	1193.003	1193.0	0.0	1055.4	0.0
291	50.1262	133.1826	14.0191	50	0.8458	1085.213	1283.039	1283.0	0.0	1085.2	0.0
292	50.1262	134.2352	15.0717	50	0.8635	1461.297	1692.261	1692.3	0.0	1461.3	0.0
293	50.1262	135.2877	16.1242	50	0.8640	1840.263	2130.036	2130.0	0.0	1840.3	0.0
294	50.1262	136.3402	17.1767	50	0.8687	2220.863	2556.453	2556.5	0.0	2220.9	0.0
295	50.1262	137.3928	18.2293	50	0.8642	2605.975	3015.609	3015.6	0.0	2606.0	0.0
296	50.1262	138.4453	19.0493	50	0.8040	2392.161	2975.145	2975.1	0.0	2392.2	0.0
297	50.1262	139.4978	19.8694	50	0.7632	2253.091	2952.265	2952.3	0.0	2253.1	0.0
298	50.1262	140.5504	20.6894	50	0.6940	1996.625	2876.842	2876.8	0.0	1996.6	0.0
299	50.1262	141.6029	21.7420	50	0.6962	2323.008	3336.797	3336.8	0.0	2323.0	0.0
300	50.1262	142.6554	22.5620	50	0.6369	2075.999	3259.306	3259.3	0.0	2076.0	0.0
301	50.9389	117.3947	5.2080	100	0.1856	406.465	2189.993	2190.0	0.0	406.5	0.0
302	50.9389	118.4472	5.1811	80	0.1784	331.285	1857.461	1857.5	0.0	331.3	0.0
303	50.9389	119.4997	4.7783	69	0.1585	242.136	1527.508	1527.5	0.0	242.1	0.0
304	50.9389	120.5523	5.5733	60	0.1501	309.284	2060.680	2060.7	0.0	309.3	0.0
305	50.9389	121.6048	6.6258	51	0.1812	532.368	2938.378	2938.4	0.0	532.4	0.0
306	50.9389	122.6573	7.6784	50	0.2097	827.921	3947.898	3947.9	0.0	827.9	0.0
307	50.9389	123.7098	8.7309	50	0.2411	1215.184	5040.873	5040.9	0.0	1215.2	0.0
308	50.9389	124.7624	9.7834	50	0.2670	1661.783	6223.482	6223.5	0.0	1661.8	0.0
309	50.9389	125.8149	10.8360	50	0.3308	2596.956	7850.612	7850.6	0.0	2597.0	0.0
310	50.9389	126.8674	11.8885	50	0.3729	3491.722	9363.387	9363.4	0.0	3491.7	0.0
311	50.9389	127.9200	12.9410	50	0.3996	4397.767	11006.209	11006.2	0.0	4397.8	0.0
312	50.9389	128.9725	10.5064	50	0.6031	243.361	403.509	403.5	0.0	243.4	0.0
313	50.9389	130.0250	11.3265	50	0.5980	271.126	453.408	453.4	0.0	271.1	0.0
314	50.9389	131.0776	12.3790	50	0.7249	473.632	653.331	653.3	0.0	473.6	0.0
315	50.9389	132.1301	13.4315	50	0.7875	688.801	874.708	874.7	0.0	688.8	0.0
316	50.9389	133.1826	14.4841	50	0.8800	1124.030	1277.327	1277.3	0.0	1124.0	0.0
317	50.9389	134.2352	15.3041	50	0.8427	1145.756	1359.652	1359.7	0.0	1145.8	0.0
318	50.9389	135.2877	16.3567	50	0.8659	1551.694	1791.990	1792.0	0.0	1551.7	0.0
319	50.9389	136.3402	17.4092	50	0.8670	1960.185	2260.775	2260.8	0.0	1960.2	0.0
320	50.9389	137.3928	18.4617	50	0.8761	2371.069	2706.269	2706.3	0.0	2371.1	0.0
321	50.9389	138.4453	19.5143	50	0.8743	2782.961	3182.924	3182.9	0.0	2783.0	0.0
322	50.9389	139.4978	20.3343	50	0.8146	2551.490	3132.044	3132.0	0.0	2551.5	0.0
323	50.9389	140.5504	21.1544	50	0.7624	2383.305	3126.260	3126.3	0.0	2383.3	0.0
324	50.9389	141.6029	22.2069	50	0.7557	2773.476	3670.290	3670.3	0.0	2773.5	0.0
325	50.9389	142.6554	23.0270	50	0.7083	2468.604	3485.134	3485.1	0.0	2468.6	0.0

326	51.7516	117.3947	4.8729	100	0.1831	323.223	1765.038	1765.0	0.0	323.2	0.0
327	51.7516	118.4472	5.1811	80	0.1750	321.635	1837.671	1837.7	0.0	321.6	0.0
328	51.7516	119.4997	4.7783	69	0.1585	242.136	1527.508	1527.5	0.0	242.1	0.0
329	51.7516	120.5523	5.5733	60	0.1367	272.820	1996.468	1996.5	0.0	272.8	0.0
330	51.7516	121.6048	6.6258	51	0.1479	415.254	2807.040	2807.0	0.0	415.3	0.0
331	51.7516	122.6573	7.6784	50	0.1635	613.083	3750.690	3750.7	0.0	613.1	0.0
332	51.7516	123.7098	8.7309	50	0.1883	906.328	4812.364	4812.4	0.0	906.3	0.0
333	51.7516	124.7624	9.7834	50	0.2173	1291.367	5941.979	5942.0	0.0	1291.4	0.0
334	51.7516	125.8149	10.8360	50	0.2526	1811.407	7171.944	7171.9	0.0	1811.4	0.0
335	51.7516	126.8674	11.8885	50	0.3034	2685.535	8851.510	8851.5	0.0	2685.5	0.0
336	51.7516	127.9200	12.9410	50	0.3405	3576.563	10503.241	10503.2	0.0	3576.6	0.0
337	51.7516	128.9725	10.9714	50	0.5570	212.185	380.922	380.9	0.0	212.2	0.0
338	51.7516	130.0250	11.7914	50	0.5731	251.040	438.046	438.0	0.0	251.0	0.0
339	51.7516	131.0776	12.8440	50	0.7371	480.383	651.744	651.7	0.0	480.4	0.0
340	51.7516	132.1301	13.6640	50	0.7085	495.016	698.634	698.6	0.0	495.0	0.0
341	51.7516	133.1826	14.7166	50	0.7723	716.825	928.152	928.2	0.0	716.8	0.0
342	51.7516	134.2352	15.5366	50	0.7547	760.871	1008.200	1008.2	0.0	760.9	0.0
343	51.7516	135.2877	16.5891	50	0.8361	1192.777	1426.652	1426.7	0.0	1192.8	0.0
344	51.7516	136.3402	17.6417	50	0.8661	1629.278	1881.078	1881.1	0.0	1629.3	0.0
345	51.7516	137.3928	18.6942	50	0.8719	2067.701	2371.475	2371.5	0.0	2067.7	0.0
346	51.7516	138.4453	19.7467	50	0.8812	2507.838	2845.991	2846.0	0.0	2507.8	0.0
347	51.7516	139.4978	20.5668	50	0.8192	2299.147	2806.409	2806.4	0.0	2299.1	0.0
348	51.7516	140.5504	21.6193	50	0.8236	2702.635	3281.650	3281.7	0.0	2702.6	0.0
349	51.7516	141.6029	22.6719	50	0.8256	3147.826	3812.560	3812.6	0.0	3147.8	0.0
350	51.7516	142.6554	23.4919	50	0.7748	2928.940	3780.363	3780.4	0.0	2928.9	0.0
351	52.5643	117.3947	4.0911	100	0.1745	131.125	751.392	751.4	0.0	131.1	0.0
352	52.5643	118.4472	5.1811	80	0.1750	321.635	1837.671	1837.7	0.0	321.6	0.0
353	52.5643	119.4997	4.7783	69	0.1585	242.136	1527.508	1527.5	0.0	242.1	0.0
354	52.5643	120.5523	5.5733	60	0.1367	272.820	1996.468	1996.5	0.0	272.8	0.0
355	52.5643	121.6048	6.6258	51	0.1314	355.390	2705.441	2705.4	0.0	355.4	0.0
356	52.5643	122.6573	7.6784	50	0.1280	456.595	3567.275	3567.3	0.0	456.6	0.0
357	52.5643	123.7098	8.7309	50	0.1414	646.215	4571.125	4571.1	0.0	646.2	0.0
358	52.5643	124.7624	9.7834	50	0.1648	931.231	5651.340	5651.3	0.0	931.2	0.0
359	52.5643	125.8149	10.8360	50	0.2016	1379.541	6843.564	6843.6	0.0	1379.5	0.0
360	52.5643	126.8674	11.8885	50	0.2231	1810.861	8115.154	8115.2	0.0	1810.9	0.0
361	52.5643	127.9200	12.9410	50	0.2700	2678.232	9918.635	9918.6	0.0	2678.2	0.0
362	52.5643	128.9725	13.7611	50	0.3061	3217.060	10508.140	10508.1	0.0	3217.1	0.0
363	52.5643	130.0250	12.2564	50	0.5184	214.690	414.178	414.2	0.0	214.7	0.0
364	52.5643	131.0776	13.0764	50	0.5400	251.620	465.962	466.0	0.0	251.6	0.0
365	52.5643	132.1301	14.1290	50	0.7157	496.567	693.867	693.9	0.0	496.6	0.0
366	52.5643	133.1826	14.9490	50	0.6855	508.265	741.500	741.5	0.0	508.3	0.0
367	52.5643	134.2352	16.0016	50	0.7627	747.110	979.605	979.6	0.0	747.1	0.0
368	52.5643	135.2877	16.8216	50	0.7369	767.094	1040.917	1040.9	0.0	767.1	0.0
369	52.5643	136.3402	17.8742	50	0.8272	1227.482	1483.816	1483.8	0.0	1227.5	0.0
370	52.5643	137.3928	18.9267	50	0.8643	1693.177	1959.045	1959.0	0.0	1693.2	0.0
371	52.5643	138.4453	19.9792	50	0.8750	2161.449	2470.307	2470.3	0.0	2161.4	0.0
372	52.5643	139.4978	20.7993	50	0.8177	1977.256	2418.079	2418.1	0.0	1977.3	0.0
373	52.5643	140.5504	21.8518	50	0.8227	2408.179	2927.085	2927.1	0.0	2408.2	0.0
374	52.5643	141.6029	22.9043	50	0.8306	2840.589	3420.048	3420.0	0.0	2840.6	0.0
375	52.5643	142.6554	23.9569	50	0.8338	3303.522	3961.892	3961.9	0.0	3303.5	0.0
376	53.3770	117.3947	3.8677	100	0.1720	109.469	636.404	636.4	0.0	109.5	0.0
377	53.3770	118.4472	4.7677	80	0.1710	257.690	1507.128	1507.1	0.0	257.7	0.0
378	53.3770	119.4997	4.7783	69	0.1585	242.136	1527.508	1527.5	0.0	242.1	0.0
379	53.3770	120.5523	5.5733	60	0.1367	272.820	1996.468	1996.5	0.0	272.8	0.0
380	53.3770	121.6048	6.6258	51	0.1314	355.390	2705.441	2705.4	0.0	355.4	0.0
381	53.3770	122.6573	7.6784	50	0.1116	385.528	3453.519	3453.5	0.0	385.5	0.0
382	53.3770	123.7098	8.7309	50	0.1053	458.287	4353.231	4353.2	0.0	458.3	0.0
383	53.3770	124.7624	9.7834	50	0.1158	625.705	5402.082	5402.1	0.0	625.7	0.0
384	53.3770	125.8149	10.8360	50	0.1505	981.801	6522.641	6522.6	0.0	981.8	0.0
385	53.3770	126.8674	10.2612	50	0.1700	8.567	50.392	50.4	0.0	8.6	0.0
386	53.3770	127.9200	12.4761	50	0.1707	1264.191	7404.531	7404.5	0.0	1264.2	0.0
387	53.3770	128.9725	13.2961	50	0.1822	1411.833	7748.777	7748.8	0.0	1411.8	0.0
388	53.3770	130.0250	12.7213	50	0.4149	156.915	378.221	378.2	0.0	156.9	0.0
389	53.3770	131.0776	13.5414	50	0.4820	210.740	437.245	437.2	0.0	210.7	0.0
390	53.3770	132.1301	14.3615	50	0.4985	245.262	492.011	492.0	0.0	245.3	0.0
391	53.3770	133.1826	15.4140	50	0.6876	504.659	733.904	733.9	0.0	504.7	0.0
392	53.3770	134.2352	16.2340	50	0.6634	513.658	774.320	774.3	0.0	513.7	0.0
393	53.3770	135.2877	17.2866	50	0.7480	768.797	1027.842	1027.8	0.0	768.8	0.0

394	53.3770	136.3402	18.1066	50	0.7006	731.550	1044.127	1044.1	0.0	731.5	0.0
395	53.3770	137.3928	19.1592	50	0.8173	1248.395	1527.551	1527.6	0.0	1248.4	0.0
396	53.3770	138.4453	20.2117	50	0.8603	1742.785	2025.872	2025.9	0.0	1742.8	0.0
397	53.3770	139.4978	21.0318	50	0.8015	1587.790	1980.949	1980.9	0.0	1587.8	0.0
398	53.3770	140.5504	22.0843	50	0.8200	2045.739	2494.920	2494.9	0.0	2045.7	0.0
399	53.3770	141.6029	23.1368	50	0.8245	2504.909	3038.121	3038.1	0.0	2504.9	0.0
400	53.3770	142.6554	24.1894	50	0.8358	2966.213	3548.792	3548.8	0.0	2966.2	0.0
401	54.1898	117.3947	3.4209	100	0.1671	72.141	431.630	431.6	0.0	72.1	0.0
402	54.1898	118.4472	4.2951	80	0.1664	194.585	1169.103	1169.1	0.0	194.6	0.0
403	54.1898	119.4997	4.7783	69	0.1585	242.136	1527.508	1527.5	0.0	242.1	0.0
404	54.1898	120.5523	5.5733	60	0.1367	272.820	1996.468	1996.5	0.0	272.8	0.0
405	54.1898	121.6048	6.6258	51	0.1314	355.390	2705.441	2705.4	0.0	355.4	0.0
406	54.1898	122.6573	7.6784	50	0.1116	385.528	3453.519	3453.5	0.0	385.5	0.0
407	54.1898	123.7098	8.5268	50	0.0905	350.562	3871.669	3871.7	0.0	350.6	0.0
408	54.1898	124.7624	9.3185	50	0.0848	349.909	4127.589	4127.6	0.0	349.9	0.0
409	54.1898	125.8149	10.1385	50	0.0709	1.983	27.974	28.0	0.0	2.0	0.0
410	54.1898	126.8674	11.1911	50	0.0597	316.472	5298.816	5298.8	0.0	316.5	0.0
411	54.1898	127.9200	11.5462	50	0.1414	6.528	46.153	46.2	0.0	6.5	0.0
412	54.1898	128.9725	12.3662	50	0.1980	41.213	208.179	208.2	0.0	41.2	0.0
413	54.1898	130.0250	13.1863	50	0.2951	95.113	322.310	322.3	0.0	95.1	0.0
414	54.1898	131.0776	14.0063	50	0.3742	148.618	397.169	397.2	0.0	148.6	0.0
415	54.1898	132.1301	14.8264	50	0.4414	200.619	454.515	454.5	0.0	200.6	0.0
416	54.1898	133.1826	15.6465	50	0.4595	232.601	506.224	506.2	0.0	232.6	0.0
417	54.1898	134.2352	16.6990	50	0.6609	504.807	763.777	763.8	0.0	504.8	0.0
418	54.1898	135.2877	17.5191	50	0.6384	511.395	801.003	801.0	0.0	511.4	0.0
419	54.1898	136.3402	18.5716	50	0.7311	782.442	1070.201	1070.2	0.0	782.4	0.0
420	54.1898	137.3928	19.3916	50	0.6883	742.239	1078.294	1078.3	0.0	742.2	0.0
421	54.1898	138.4453	20.4442	50	0.7836	1176.216	1500.950	1501.0	0.0	1176.2	0.0
422	54.1898	139.4978	21.4967	50	0.8544	1778.648	2081.753	2081.8	0.0	1778.6	0.0
423	54.1898	140.5504	22.3168	50	0.7963	1613.453	2026.207	2026.2	0.0	1613.5	0.0
424	54.1898	141.6029	23.3693	50	0.8203	2099.623	2559.708	2559.7	0.0	2099.6	0.0
425	54.1898	142.6554	24.4218	50	0.8276	2587.475	3126.593	3126.6	0.0	2587.5	0.0
426	55.0025	117.3947	2.9742	100	0.1624	41.971	258.363	258.4	0.0	42.0	0.0
427	55.0025	118.4472	3.8226	80	0.1626	141.020	867.277	867.3	0.0	141.0	0.0
428	55.0025	119.4997	4.7397	69	0.1582	236.566	1494.934	1494.9	0.0	236.6	0.0
429	55.0025	120.5523	5.5733	60	0.1367	272.820	1996.468	1996.5	0.0	272.8	0.0
430	55.0025	121.6048	6.4282	51	0.1296	318.308	2456.175	2456.2	0.0	318.3	0.0
431	55.0025	122.6573	7.2240	50	0.1075	299.264	2783.961	2784.0	0.0	299.3	0.0
432	55.0025	123.7098	8.1187	50	0.0869	277.722	3195.867	3195.9	0.0	277.7	0.0
433	55.0025	124.7624	8.8535	50	0.0662	218.380	3300.971	3301.0	0.0	218.4	0.0
434	55.0025	125.8149	10.8360	50	0.0977	4.728	48.378	48.4	0.0	4.7	0.0
435	55.0025	126.8674	11.4236	50	0.0814	2.615	32.123	32.1	0.0	2.6	0.0
436	55.0025	127.9200	11.5462	50	0.0216	89.486	4150.838	4150.8	0.0	89.5	0.0
437	55.0025	128.9725	12.8312	50	0.1104	4.321	39.141	39.1	0.0	4.3	0.0
438	55.0025	130.0250	13.6512	50	0.1815	13.262	73.081	73.1	0.0	13.3	0.0
439	55.0025	131.0776	14.4713	50	0.2487	83.640	336.256	336.3	0.0	83.6	0.0
440	55.0025	132.1301	15.2914	50	0.3231	134.572	416.514	416.5	0.0	134.6	0.0
441	55.0025	133.1826	16.1114	50	0.3901	184.009	471.699	471.7	0.0	184.0	0.0
442	55.0025	134.2352	17.1639	50	0.6355	466.627	734.295	734.3	0.0	466.6	0.0
443	55.0025	135.2877	17.9840	50	0.6272	496.635	791.821	791.8	0.0	496.6	0.0
444	55.0025	136.3402	18.8041	50	0.6073	501.667	826.032	826.0	0.0	501.7	0.0
445	55.0025	137.3928	19.8566	50	0.7154	787.957	1101.427	1101.4	0.0	788.0	0.0
446	55.0025	138.4453	20.6767	50	0.6713	745.132	1110.034	1110.0	0.0	745.1	0.0
447	55.0025	139.4978	21.7292	50	0.7665	1166.850	1522.331	1522.3	0.0	1166.9	0.0
448	55.0025	140.5504	22.7817	50	0.8328	1708.226	2051.173	2051.2	0.0	1708.2	0.0
449	55.0025	141.6029	23.6018	50	0.7902	1626.870	2058.745	2058.7	0.0	1626.9	0.0
450	55.0025	142.6554	24.6543	50	0.8187	2139.257	2612.875	2612.9	0.0	2139.3	0.0
451	55.8152	117.3947	2.5274	100	0.1585	18.181	114.677	114.7	0.0	18.2	0.0
452	55.8152	118.4472	nicht berechnet								
453	55.8152	119.4997	nicht berechnet								
454	55.8152	120.5523	5.1114	60	0.1326	206.167	1554.497	1554.5	0.0	206.2	0.0
455	55.8152	121.6048	5.9341	51	0.1246	236.505	1897.841	1897.8	0.0	236.5	0.0
456	55.8152	122.6573	6.7697	50	0.1027	226.045	2201.375	2201.4	0.0	226.0	0.0
457	55.8152	123.7098	7.7106	50	0.0828	214.926	2597.236	2597.2	0.0	214.9	0.0
458	55.8152	124.7624	8.3886	50	0.0616	159.097	2583.569	2583.6	0.0	159.1	0.0
459	55.8152	125.8149	9.2086	50	0.0329	89.099	2707.866	2707.9	0.0	89.1	0.0
460	55.8152	126.8674	10.2612	50	0.0214	68.102	3178.172	3178.2	0.0	68.1	0.0
461	55.8152	127.9200	12.7086	50	0.0790	2.550	32.281	32.3	0.0	2.5	0.0

462	55.8152	128.9725	13.5286	50	0.1541	10.768	69.892	69.9	0.0	10.8	0.0
463	55.8152	130.0250	14.3487	50	0.0904	5.036	55.728	55.7	0.0	5.0	0.0
464	55.8152	131.0776	14.9363	50	0.1499	9.698	64.688	64.7	0.0	9.7	0.0
465	55.8152	132.1301	15.7563	50	0.2180	60.084	275.587	275.6	0.0	60.1	0.0
466	55.8152	133.1826	16.5764	50	0.3014	107.465	356.519	356.5	0.0	107.5	0.0
467	55.8152	134.2352	17.3964	50	0.3845	157.995	410.929	410.9	0.0	158.0	0.0
468	55.8152	135.2877	18.4490	50	0.5990	453.816	757.609	757.6	0.0	453.8	0.0
469	55.8152	136.3402	19.2690	50	0.5945	480.835	808.837	808.8	0.0	480.8	0.0
470	55.8152	137.3928	20.0891	50	0.5758	483.608	839.902	839.9	0.0	483.6	0.0
471	55.8152	138.4453	21.1416	50	0.6946	785.733	1131.238	1131.2	0.0	785.7	0.0
472	55.8152	139.4978	22.1941	50	0.7998	1245.848	1557.610	1557.6	0.0	1245.8	0.0
473	55.8152	140.5504	23.0142	50	0.7463	1144.051	1533.039	1533.0	0.0	1144.1	0.0
474	55.8152	141.6029	24.0667	50	0.8230	1713.190	2081.752	2081.8	0.0	1713.2	0.0
475	55.8152	142.6554	24.8868	50	0.7814	1627.121	2082.338	2082.3	0.0	1627.1	0.0
476	56.6279	117.3947	nicht berechnet								
477	56.6279	118.4472	nicht berechnet								
478	56.6279	119.4997	nicht berechnet								
479	56.6279	120.5523	4.6495	60	0.1279	151.007	1180.971	1181.0	0.0	151.0	0.0
480	56.6279	121.6048	5.4401	51	0.1045	149.077	1426.052	1426.1	0.0	149.1	0.0
481	56.6279	122.6573	6.3154	50	0.0830	141.000	1699.263	1699.3	0.0	141.0	0.0
482	56.6279	123.7098	7.0984	50	0.0621	113.863	1833.671	1833.7	0.0	113.9	0.0
483	56.6279	124.7624	7.9236	50	0.0443	86.994	1965.397	1965.4	0.0	87.0	0.0
484	56.6279	125.8149	8.7437	50	0.0200	40.944	2044.974	2045.0	0.0	40.9	0.0
485	56.6279	126.8674	9.7962	50	0.0114	27.468	2418.553	2418.6	0.0	27.5	0.0
486	56.6279	127.9200	10.6163	50	0.0012	3.034	2429.194	2429.2	0.0	3.0	0.0
487	56.6279	128.9725	13.9936	50	0.0680	1.978	29.100	29.1	0.0	2.0	0.0
488	56.6279	130.0250	14.8136	50	0.1894	15.621	82.497	82.5	0.0	15.6	0.0
489	56.6279	131.0776	15.6337	50	0.1029	6.386	62.030	62.0	0.0	6.4	0.0
490	56.6279	132.1301	16.2213	50	0.1169	6.256	53.536	53.5	0.0	6.3	0.0
491	56.6279	133.1826	17.0413	50	0.1876	17.727	94.496	94.5	0.0	17.7	0.0
492	56.6279	134.2352	17.8614	50	0.2534	85.349	336.861	336.9	0.0	85.3	0.0
493	56.6279	135.2877	18.9139	50	0.5539	393.081	709.687	709.7	0.0	393.1	0.0
494	56.6279	136.3402	19.7340	50	0.5660	434.673	768.018	768.0	0.0	434.7	0.0
495	56.6279	137.3928	20.5540	50	0.5552	458.146	825.250	825.3	0.0	458.1	0.0
496	56.6279	138.4453	21.6066	50	0.7085	800.878	1130.459	1130.5	0.0	800.9	0.0
497	56.6279	139.4978	22.4266	50	0.6747	775.722	1149.748	1149.7	0.0	775.7	0.0
498	56.6279	140.5504	23.4791	50	0.7554	1128.473	1493.785	1493.8	0.0	1128.5	0.0
499	56.6279	141.6029	24.2992	50	0.7248	1107.420	1527.799	1527.8	0.0	1107.4	0.0
500	56.6279	142.6554	25.3517	50	0.8113	1705.304	2101.933	2101.9	0.0	1705.3	0.0
501	57.4406	117.3947	nicht berechnet								
502	57.4406	118.4472	nicht berechnet								
503	57.4406	119.4997	nicht berechnet								
504	57.4406	120.5523	4.1876	60	0.1222	106.327	870.441	870.4	0.0	106.3	0.0
505	57.4406	121.6048	5.0448	51	0.0993	109.936	1107.350	1107.4	0.0	109.9	0.0
506	57.4406	122.6573	5.8611	50	0.0769	98.060	1274.451	1274.5	0.0	98.1	0.0
507	57.4406	123.7098	6.6902	50	0.0570	80.373	1410.533	1410.5	0.0	80.4	0.0
508	57.4406	124.7624	7.4587	50	0.0290	41.840	1443.033	1443.0	0.0	41.8	0.0
509	57.4406	125.8149	8.2787	50	0.0102	15.188	1485.390	1485.4	0.0	15.2	0.0
510	57.4406	126.8674	9.3313	50	0.0045	8.052	1772.779	1772.8	0.0	8.1	0.0
511	57.4406	127.9200	9.6864	50	0.0001	0.000	1189.207	1189.2	0.0	0.0	0.0
512	57.4406	128.9725	10.7389	50	0.0001	0.000	1386.957	1387.0	0.0	0.0	0.0
513	57.4406	130.0250	11.5590	50	0.0001	0.000	1276.086	1276.1	0.0	0.0	0.0
514	57.4406	131.0776	16.0986	50	0.1606	11.958	74.442	74.4	0.0	12.0	0.0
515	57.4406	132.1301	16.9187	50	0.1051	6.696	63.731	63.7	0.0	6.7	0.0
516	57.4406	133.1826	17.5063	50	0.0823	3.270	39.741	39.7	0.0	3.3	0.0
517	57.4406	134.2352	18.3263	50	0.1548	12.700	82.048	82.0	0.0	12.7	0.0
518	57.4406	135.2877	19.3789	50	0.4907	315.346	642.639	642.6	0.0	315.3	0.0
519	57.4406	136.3402	20.1989	50	0.5171	369.717	714.992	715.0	0.0	369.7	0.0
520	57.4406	137.3928	21.0190	50	0.5250	408.074	777.282	777.3	0.0	408.1	0.0
521	57.4406	138.4453	21.8390	50	0.5177	428.271	827.283	827.3	0.0	428.3	0.0
522	57.4406	139.4978	22.8916	50	0.6812	784.653	1151.830	1151.8	0.0	784.7	0.0
523	57.4406	140.5504	23.7116	50	0.6491	757.865	1167.630	1167.6	0.0	757.9	0.0
524	57.4406	141.6029	24.7642	50	0.7318	1098.216	1500.683	1500.7	0.0	1098.2	0.0
525	57.4406	142.6554	25.5842	50	0.6976	1057.667	1516.050	1516.0	0.0	1057.7	0.0
526	58.2533	117.3947	nicht berechnet								
527	58.2533	118.4472	nicht berechnet								
528	58.2533	119.4997	nicht berechnet								
529	58.2533	120.5523	3.7257	60	0.1152	71.107	617.448	617.4	0.0	71.1	0.0

530	58.2533	121.6048	4.5507	51	0.0913	70.900	776.486	776.5	0.0	70.9	0.0
531	58.2533	122.6573	5.4067	50	0.0574	52.814	920.209	920.2	0.0	52.8	0.0
532	58.2533	123.7098	6.2821	50	0.0401	42.063	1049.991	1050.0	0.0	42.1	0.0
533	58.2533	124.7624	6.9937	50	0.0099	9.974	1009.991	1010.0	0.0	10.0	0.0
534	58.2533	125.8149	7.8138	50	0.0010	1.038	1022.654	1022.7	0.0	1.0	0.0
535	58.2533	126.8674	8.4014	50	0.0001	0.000	792.639	792.6	0.0	0.0	0.0
536	58.2533	127.9200	9.6864	50	0.0001	0.000	1189.207	1189.2	0.0	0.0	0.0
537	58.2533	128.9725	10.5064	50	0.0001	0.000	1106.529	1106.5	0.0	0.0	0.0
538	58.2533	130.0250	11.5590	50	0.0001	0.000	1276.086	1276.1	0.0	0.0	0.0
539	58.2533	131.0776	12.3790	50	0.0001	0.000	1125.386	1125.4	0.0	0.0	0.0
540	58.2533	132.1301	13.1991	50	0.0001	0.000	933.235	933.2	0.0	0.0	0.0
541	58.2533	133.1826	18.2037	50	0.1953	40.079	205.183	205.2	0.0	40.1	0.0
542	58.2533	134.2352	19.0238	50	0.2859	136.390	477.076	477.1	0.0	136.4	0.0
543	58.2533	135.2877	19.8438	50	0.3724	216.964	582.644	582.6	0.0	217.0	0.0
544	58.2533	136.3402	20.6639	50	0.4431	289.344	652.990	653.0	0.0	289.3	0.0
545	58.2533	137.3928	21.4839	50	0.4721	340.326	720.931	720.9	0.0	340.3	0.0
546	58.2533	138.4453	22.3040	50	0.4811	375.110	779.675	779.7	0.0	375.1	0.0
547	58.2533	139.4978	23.3565	50	0.6765	764.556	1130.139	1130.1	0.0	764.6	0.0
548	58.2533	140.5504	24.1766	50	0.6554	761.050	1161.226	1161.2	0.0	761.1	0.0
549	58.2533	141.6029	24.9966	50	0.6245	733.278	1174.130	1174.1	0.0	733.3	0.0
550	58.2533	142.6554	26.0492	50	0.7139	1087.155	1522.763	1522.8	0.0	1087.2	0.0
551	59.0661	117.3947	nicht berechnet								
552	59.0661	118.4472	nicht berechnet								
553	59.0661	119.4997	nicht berechnet								
554	59.0661	120.5523	nicht berechnet								
555	59.0661	121.6048	4.0566	51	0.0692	35.563	513.826	513.8	0.0	35.6	0.0
556	59.0661	122.6573	4.9524	50	0.0392	24.773	632.094	632.1	0.0	24.8	0.0
557	59.0661	123.7098	5.6699	50	0.0155	9.641	620.123	620.1	0.0	9.6	0.0
558	59.0661	124.7624	6.5288	50	0.0009	0.619	661.111	661.1	0.0	0.6	0.0
559	59.0661	125.8149	6.6514	50	0.0001	0.000	226.719	226.7	0.0	0.0	0.0
560	59.0661	126.8674	8.4014	50	0.0001	0.000	792.639	792.6	0.0	0.0	0.0
561	59.0661	127.9200	nicht berechnet								
562	59.0661	128.9725	9.8090	50	0.0001	0.000	405.515	405.5	0.0	0.0	0.0
563	59.0661	130.0250	11.0940	50	0.0001	0.000	719.572	719.6	0.0	0.0	0.0
564	59.0661	131.0776	12.1465	50	0.0001	0.000	824.092	824.1	0.0	0.0	0.0
565	59.0661	132.1301	13.1991	50	0.0001	0.000	933.235	933.2	0.0	0.0	0.0
566	59.0661	133.1826	14.0191	50	0.0001	0.000	692.319	692.3	0.0	0.0	0.0
567	59.0661	134.2352	15.0717	50	0.0001	0.000	771.632	771.6	0.0	0.0	0.0
568	59.0661	135.2877	20.3088	50	0.2384	113.773	477.264	477.3	0.0	113.8	0.0
569	59.0661	136.3402	21.1288	50	0.3235	188.369	582.374	582.4	0.0	188.4	0.0
570	59.0661	137.3928	21.9489	50	0.3914	258.029	659.171	659.2	0.0	258.0	0.0
571	59.0661	138.4453	22.7689	50	0.4242	305.541	720.303	720.3	0.0	305.5	0.0
572	59.0661	139.4978	23.5890	50	0.4796	328.953	685.838	685.8	0.0	329.0	0.0
573	59.0661	140.5504	24.6415	50	0.6467	734.917	1136.403	1136.4	0.0	734.9	0.0
574	59.0661	141.6029	25.4616	50	0.6235	730.029	1170.800	1170.8	0.0	730.0	0.0
575	59.0661	142.6554	26.2816	50	0.5939	700.909	1180.190	1180.2	0.0	700.9	0.0
576	59.8788	117.3947	nicht berechnet								
577	59.8788	118.4472	nicht berechnet								
578	59.8788	119.4997	nicht berechnet								
579	59.8788	120.5523	nicht berechnet								
580	59.8788	121.6048	3.5626	51	0.0474	14.833	313.219	313.2	0.0	14.8	0.0
581	59.8788	122.6573	4.4981	50	0.0234	9.451	404.731	404.7	0.0	9.5	0.0
582	59.8788	123.7098	5.2617	50	0.0009	0.344	401.466	401.5	0.0	0.3	0.0
583	59.8788	124.7624	6.0638	50	0.0001	0.000	387.748	387.7	0.0	0.0	0.0
584	59.8788	125.8149	6.6514	50	0.0001	0.000	226.719	226.7	0.0	0.0	0.0
585	59.8788	126.8674	7.7039	50	0.0001	0.000	282.458	282.5	0.0	0.0	0.0
586	59.8788	127.9200	nicht berechnet								
587	59.8788	128.9725	9.8090	50	0.0001	0.000	405.515	405.5	0.0	0.0	0.0
588	59.8788	130.0250	nicht berechnet								
589	59.8788	131.0776	11.9141	50	0.0001	0.000	542.571	542.6	0.0	0.0	0.0
590	59.8788	132.1301	12.7341	50	0.0001	0.000	287.011	287.0	0.0	0.0	0.0
591	59.8788	133.1826	14.0191	50	0.0001	0.000	692.319	692.3	0.0	0.0	0.0
592	59.8788	134.2352	15.0717	50	0.0001	0.000	771.632	771.6	0.0	0.0	0.0
593	59.8788	135.2877	16.1242	50	0.0001	0.000	853.762	853.8	0.0	0.0	0.0
594	59.8788	136.3402	16.9443	50	0.0001	0.000	440.462	440.5	0.0	0.0	0.0
595	59.8788	137.3928	22.4138	50	0.2937	141.017	480.064	480.1	0.0	141.0	0.0
596	59.8788	138.4453	23.2339	50	0.3768	209.068	554.885	554.9	0.0	209.1	0.0
597	59.8788	139.4978	24.0539	50	0.4169	257.892	618.570	618.6	0.0	257.9	0.0

598	59.8788	140.5504	25.1065	50	0.6206	678.245	1092.849	1092.8	0.0	678.2	0.0
599	59.8788	141.6029	25.9265	50	0.6109	698.460	1143.371	1143.4	0.0	698.5	0.0
600	59.8788	142.6554	26.7466	50	0.5925	692.037	1168.046	1168.0	0.0	692.0	0.0
601	60.6915	117.3947	nicht berechnet								
602	60.6915	118.4472	nicht berechnet								
603	60.6915	119.4997	nicht berechnet								
604	60.6915	120.5523	nicht berechnet								
605	60.6915	121.6048	3.1673	51	0.0292	5.635	192.774	192.8	0.0	5.6	0.0
606	60.6915	122.6573	3.7409	50	0.0001	0.000	144.892	144.9	0.0	0.0	0.0
607	60.6915	123.7098	4.8536	50	0.0001	0.000	231.234	231.2	0.0	0.0	0.0
608	60.6915	124.7624	5.8313	50	0.0001	0.000	275.177	275.2	0.0	0.0	0.0
609	60.6915	125.8149	6.6514	50	0.0001	0.000	226.719	226.7	0.0	0.0	0.0
610	60.6915	126.8674	7.7039	50	0.0001	0.000	282.458	282.5	0.0	0.0	0.0
611	60.6915	127.9200	nicht berechnet								
612	60.6915	128.9725	9.5765	50	0.0001	0.000	187.219	187.2	0.0	0.0	0.0
613	60.6915	130.0250	nicht berechnet								
614	60.6915	131.0776	nicht berechnet								
615	60.6915	132.1301	12.7341	50	0.0001	0.000	287.011	287.0	0.0	0.0	0.0
616	60.6915	133.1826	nicht berechnet								
617	60.6915	134.2352	nicht berechnet								
618	60.6915	135.2877	nicht berechnet								
619	60.6915	136.3402	nicht berechnet								
620	60.6915	137.3928	nicht berechnet								
621	60.6915	138.4453	23.4664	50	0.0258	0.318	12.329	12.3	0.0	0.3	0.0
622	60.6915	139.4978	24.5189	50	0.3228	174.427	540.324	540.3	0.0	174.4	0.0
623	60.6915	140.5504	25.3390	50	0.3707	220.443	594.594	594.6	0.0	220.4	0.0
624	60.6915	141.6029	26.3915	50	0.5800	635.959	1096.520	1096.5	0.0	636.0	0.0
625	60.6915	142.6554	27.2115	50	0.5758	654.264	1136.257	1136.3	0.0	654.3	0.0

Ungünstigster Gleitkreis

Nr	xm	ym	Radius	Lamellen	mue	Zähler	Nenner	M(Ti)	M(R)	M(Gi)	M(S)
[-]	[m]	[m]	[m]	[-]	[-]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]
160	46.0626	126.8674	7.2390	50	0.9778	959.395	981.159	981.2	0.0	959.4	0.0

DR. SPANG

Projekt: S6 2. Baustufe

Böschungsbruchberechnung, D15 QP 14, km 179,100, max. H = 3,97 m

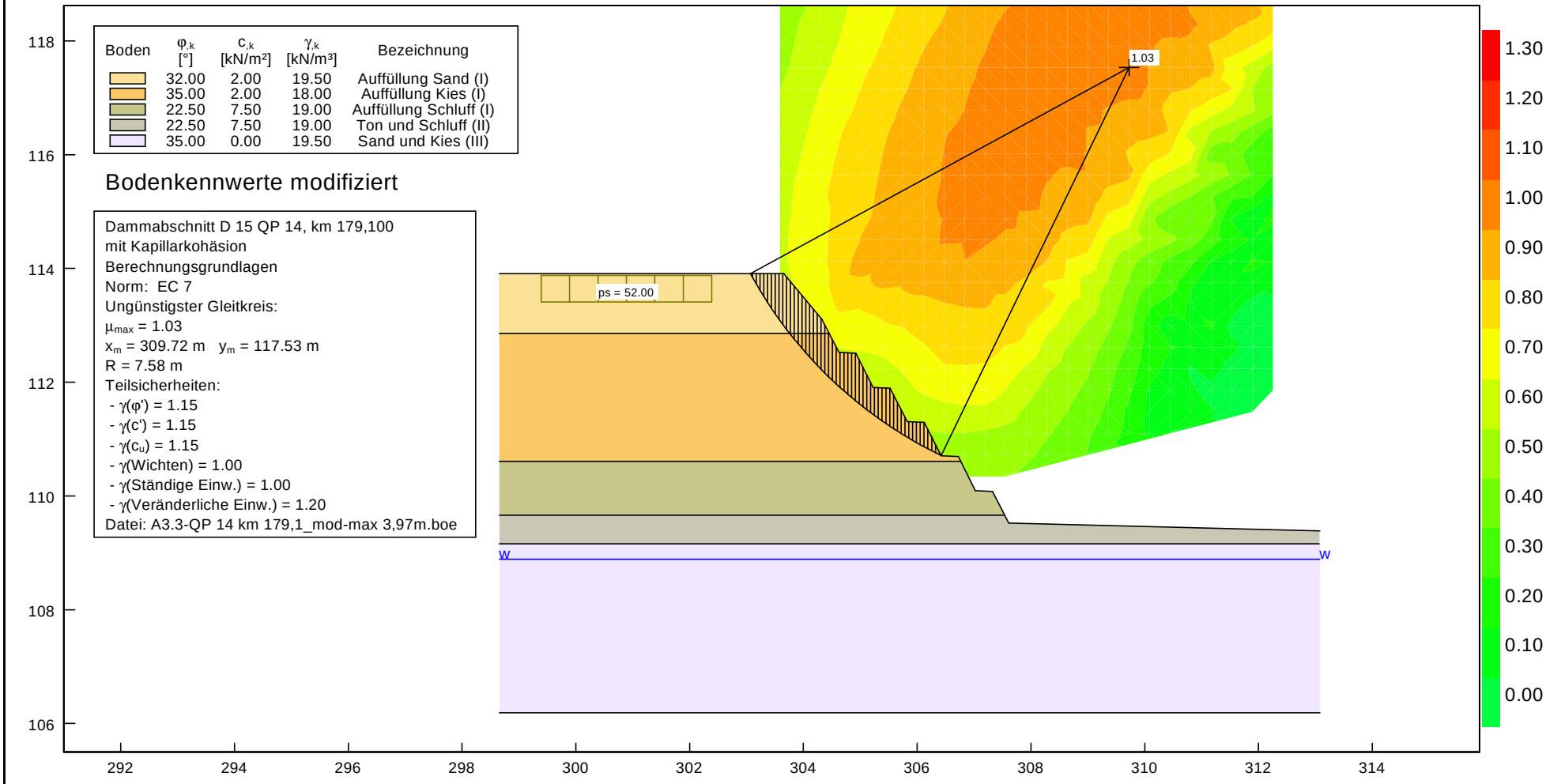
Projekt:	P 33.3184
Anlage:	3.3
Bearbeiter:	Den/Fe
Datum:	24.07.2013

Boden	$\varphi_{,k}$ [°]	$c_{,k}$ [kN/m²]	$\gamma_{,k}$ [kN/m³]	Bezeichnung
	32.00	2.00	19.50	Auffüllung Sand (I)
	35.00	2.00	18.00	Auffüllung Kies (I)
	22.50	7.50	19.00	Auffüllung Schluff (I)
	22.50	7.50	19.00	Ton und Schluff (II)
	35.00	0.00	19.50	Sand und Kies (III)

Bodenkennwerte modifiziert

Dammabschnitt D 15 QP 14, km 179,100
mit Kapillarkohäsion
Berechnungsgrundlagen
Norm: EC 7
Ungünstigster Gleitkreis:
μ_{max} = 1.03
x_m = 309.72 m y_m = 117.53 m
R = 7.58 m
Teilsicherheiten:
- $\gamma(\varphi')$ = 1.15
- $\gamma(c')$ = 1.15
- $\gamma(c_u)$ = 1.15
- γ(Wichten) = 1.00
- γ(Ständige Einw.) = 1.00
- γ(Veränderliche Einw.) = 1.20

Datei: A3.3-QP 14 km 179,1_mod-max 3,97m.boe



DR. SPANG

Projekt: S6 2. Baustufe
Böschungsbruchberechnung, D15 QP 14, km 179,100, H = 2,6 m

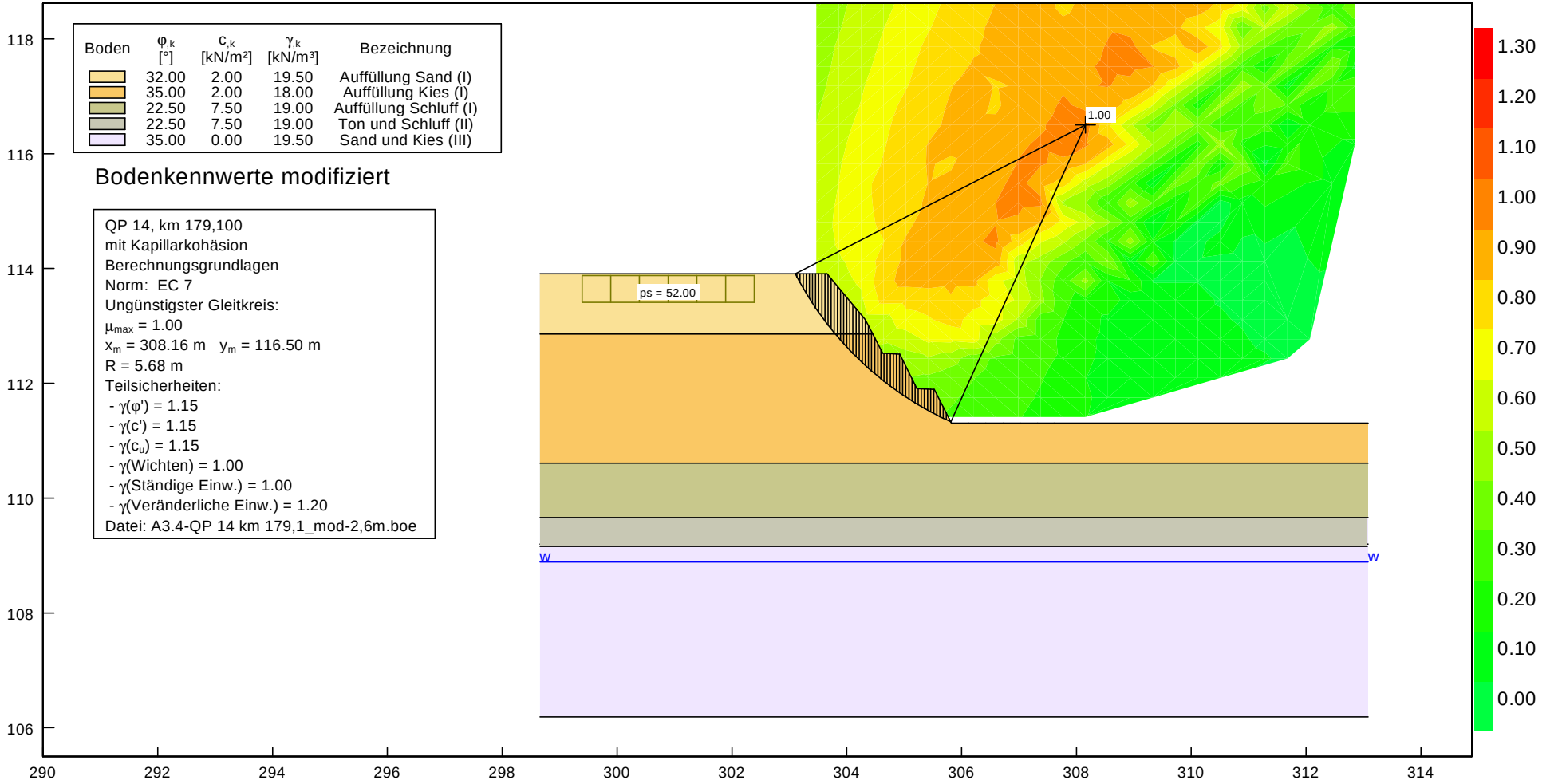
Projekt:	P 33.3184
Anlage:	3.4
Bearbeiter:	Den/Fe
Datum:	24.07.2013

Boden	$\varphi_{,k}$ [°]	$c_{,k}$ [kN/m²]	$\gamma_{,k}$ [kN/m³]	Bezeichnung
	32.00	2.00	19.50	Auffüllung Sand (I)
	35.00	2.00	18.00	Auffüllung Kies (I)
	22.50	7.50	19.00	Auffüllung Schluff (I)
	22.50	7.50	19.00	Ton und Schluff (II)
	35.00	0.00	19.50	Sand und Kies (III)

Bodenkennwerte modifiziert

QP 14, km 179,100
mit Kapillarkohäsion
Berechnungsgrundlagen
Norm: EC 7
Ungünstigster Gleitkreis:
μ_{max} = 1.00
x_m = 308.16 m y_m = 116.50 m
R = 5.68 m
Teilsicherheiten:
- $\gamma(\varphi')$ = 1.15
- $\gamma(c')$ = 1.15
- $\gamma(c_u)$ = 1.15
- γ(Wichten) = 1.00
- γ(Ständige Einw.) = 1.00
- γ(Veränderliche Einw.) = 1.20

Datei: A3.4-QP 14 km 179,1_mod-2,6m.boe



Böschungsberechnung nach EC 7
mit Kreisgleitflächen

QP 14, km 179,100
mit Kapillarkohäsion
Datei: A3.4-QP 14 km 179,1_mod-2,6m.boe

Parameterliste
phi [°] = Reibungswinkel
c [kN/m²] = Kohäsion
gamma [kN/m³] = Wichte
mue [-] = Ausnutzungsgrad
xm,ym [m] = x,y-Wert des Gleitkreismittelpunktes
rad [m] = Radius des Gleitkreises

Teilsicherheiten: (GEO-3)
- gam(phi)= 1.15
- gam(c') = 1.15
- gam(cu) = 1.15
- gam(Wichten) = 1.00
- gam(Ständige Einw.) = 1.00
- gam(Veränderliche Einw.) = 1.20

Bewegungsrichtung des Gleitkörpers nach rechts

Koordinaten der Geländepunkte

Nr.	x	y	Nr.	x	y	Nr.	x	y	Nr.	x	y	Nr.	x	y
[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]	[-]	[m]	[m]
1	298.658	113.908	2	303.657	113.908	3	304.324	113.109	4	304.624	112.524	5	304.924	112.509
6	305.224	111.909	7	305.524	111.894	8	305.824	111.309	9	306.124	111.309	10	306.424	111.309
11	306.724	111.309	12	307.024	111.309	13	307.324	111.309	14	307.608	111.309	15	313.080	111.309

Charakteristische Bodenkennwerte

Boden	$\varphi_{,k}$	$c_{,k}$	$\gamma_{,k}$	Bezeichnung
[-]	[°]	[kN/m²]	[kN/m³]	
1	32.00	2.00	19.50	Auffüllung Sand (I)
2	35.00	2.00	18.00	Auffüllung Kies (I)
3	22.50	7.50	19.00	Auffüllung Schluff (I)
4	22.50	7.50	19.00	Ton und Schluff (II)
5	35.00	0.00	19.50	Sand und Kies (III)

Bemessungs-Bodenkennwerte

Boden	$\varphi_{,d}$	$c_{,d}$	$\gamma_{,d}$	Bezeichnung
[-]	[°]	[kN/m²]	[kN/m³]	
1	28.52	1.74	19.50	Auffüllung Sand (I)
2	31.34	1.74	18.00	Auffüllung Kies (I)
3	19.81	6.52	19.00	Auffüllung Schluff (I)
4	19.81	6.52	19.00	Ton und Schluff (II)
5	31.34	0.00	19.50	Sand und Kies (III)

Koordinaten der Schichten und Bodennummern

Nr.	x(links)	y(links)	x(rechts)	y(rechts)	Boden-Nr.
[-]	[m]	[m]	[m]	[m]	
1	298.656	112.860	304.452	112.860	1
2	298.656	110.610	313.080	110.610	2
3	298.656	109.660	313.080	109.660	3
4	298.656	109.160	313.067	109.160	4
5	298.656	106.190	313.080	106.190	5

Koordinaten des Porenwasserdruck-Polygonzuges

Nr.	x	y	Nr.	x	y
[-]	[m]	[m]	[-]	[m]	[m]
1	298.656	108.888	2	313.080	108.888

Ständige Lasten

Nr.	Größe(links)	Größe(rechts)	x(links)	x(rechts)	y
[-]	[kN/m²]	[kN/m²]	[m]	[m]	[m]
1	52.00	52.00	299.39	302.39	113.41

Wasserstand vor der Böschung links [m] = 108.89
Wasserstand vor der Böschung rechts [m] = 108.89

gamma Wasser [kN/m³] = 10.000

Berechnung mit Berücksichtigung des passiven Erddruckkeils

Ergebnisse
Suchbereich
Art Suchradius
Horizontale Tangenten
x / y (Anfang): 298.3816 113.9887
x / y (Ende): 298.2351 106.0752
Anzahl Radien = 40

Nr	xm	ym	Radius	Lamellen	mue	Zähler	Nenner	M(Ti)	M(R)	M(Gi)	M(S)
[-]	[m]	[m]	[m]	[-]	[-]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]
1	303.4688	119.5575	7.3493	50	0.4408	578.173	1311.540	1311.5	0.0	578.2	0.0
2	303.4688	119.2181	7.0100	50	0.4492	545.409	1214.185	1214.2	0.0	545.4	0.0
3	303.4688	118.8788	6.6706	50	0.4580	512.759	1119.492	1119.5	0.0	512.8	0.0
4	303.4688	118.5395	6.5292	50	0.4687	568.715	1213.461	1213.5	0.0	568.7	0.0
5	303.4688	118.2002	6.1898	50	0.4909	555.877	1132.316	1132.3	0.0	555.9	0.0
6	303.4688	117.8609	5.8505	50	0.5005	516.878	1032.734	1032.7	0.0	516.9	0.0
7	303.4688	117.5215	5.5112	50	0.5104	478.011	936.495	936.5	0.0	478.0	0.0
8	303.4688	117.1822	5.5675	50	0.5237	616.237	1176.743	1176.7	0.0	616.2	0.0
9	303.4688	116.8429	5.2282	50	0.5376	574.961	1069.506	1069.5	0.0	575.0	0.0
10	303.4688	116.5036	4.6910	50	0.5509	448.682	814.489	814.5	0.0	448.7	0.0
11	303.4688	116.1642	4.3517	50	0.5582	403.060	722.124	722.1	0.0	403.1	0.0
12	303.4688	115.8249	3.6167	50	0.5669	233.948	412.675	412.7	0.0	233.9	0.0
13	303.4688	115.4856	3.4752	50	0.5820	259.581	446.011	446.0	0.0	259.6	0.0
14	303.4688	115.1463	3.1359	50	0.5846	219.755	375.884	375.9	0.0	219.8	0.0
15	303.4688	114.8069	2.5988	50	0.6025	143.956	238.933	238.9	0.0	144.0	0.0
16	303.4688	114.4676	4.2378	50	0.6022	692.592	1150.138	1150.1	0.0	692.6	0.0
17	303.4688	114.1283	4.0963	51	0.6067	695.921	1147.098	1147.1	0.0	695.9	0.0
18	303.4688	113.7890	3.7689	66	0.5946	592.000	995.593	995.6	0.0	592.0	0.0
19	303.4688	113.4496	3.4441	59	0.5758	491.136	853.009	853.0	0.0	491.1	0.0
20	303.4688	113.1103	3.4950	56	0.5583	523.371	937.438	937.4	0.0	523.4	0.0
21	303.4688	112.7710	3.1350	58	0.5372	411.301	765.703	765.7	0.0	411.3	0.0
22	303.4688	112.4317	2.9969	59	0.5141	374.835	729.074	729.1	0.0	374.8	0.0
23	303.4688	112.0923	2.6175	57	0.4900	274.281	559.809	559.8	0.0	274.3	0.0
24	303.4688	111.7530	2.5799	64	0.4589	262.928	572.903	572.9	0.0	262.9	0.0
25	303.4688	111.4137	2.6441	70	0.3943	295.868	750.287	750.3	0.0	295.9	0.0
26	303.8596	119.5575	7.5471	50	0.4897	672.714	1373.767	1373.8	0.0	672.7	0.0
27	303.8596	119.2181	7.2078	50	0.4994	634.711	1270.906	1270.9	0.0	634.7	0.0
28	303.8596	118.8788	7.0663	50	0.5182	719.344	1388.161	1388.2	0.0	719.3	0.0
29	303.8596	118.5395	6.7270	50	0.5325	684.549	1285.439	1285.4	0.0	684.5	0.0
30	303.8596	118.2002	6.3877	50	0.5433	639.909	1177.841	1177.8	0.0	639.9	0.0
31	303.8596	117.8609	6.2462	50	0.5605	716.755	1278.694	1278.7	0.0	716.8	0.0
32	303.8596	117.5215	5.9069	50	0.5715	665.076	1163.655	1163.7	0.0	665.1	0.0
33	303.8596	117.1822	5.5675	50	0.5827	613.425	1052.690	1052.7	0.0	613.4	0.0
34	303.8596	116.8429	4.8325	50	0.5946	387.551	651.733	651.7	0.0	387.6	0.0
35	303.8596	116.5036	4.4932	50	0.6079	348.450	573.199	573.2	0.0	348.4	0.0
36	303.8596	116.1642	4.3517	50	0.6281	390.375	621.476	621.5	0.0	390.4	0.0
37	303.8596	115.8249	3.6167	50	0.6421	217.738	339.101	339.1	0.0	217.7	0.0
38	303.8596	115.4856	3.0796	50	0.6508	134.427	206.564	206.6	0.0	134.4	0.0
39	303.8596	115.1463	3.1359	50	0.6623	203.730	307.618	307.6	0.0	203.7	0.0
40	303.8596	114.8069	2.5988	50	0.6672	124.636	186.815	186.8	0.0	124.6	0.0
41	303.8596	114.4676	2.4573	50	0.6585	131.674	199.965	200.0	0.0	131.7	0.0
42	303.8596	114.1283	4.0963	50	0.6411	690.954	1077.753	1077.8	0.0	691.0	0.0
43	303.8596	113.7890	3.7689	50	0.6288	584.021	928.839	928.8	0.0	584.0	0.0
44	303.8596	113.4496	3.4441	52	0.6087	482.194	792.192	792.2	0.0	482.2	0.0
45	303.8596	113.1103	3.1872	52	0.5867	409.012	697.101	697.1	0.0	409.0	0.0
46	303.8596	112.7710	3.1350	53	0.5605	400.741	714.973	715.0	0.0	400.7	0.0
47	303.8596	112.4317	2.9969	56	0.5340	363.804	681.322	681.3	0.0	363.8	0.0
48	303.8596	112.0923	2.7205	58	0.5043	289.069	573.164	573.2	0.0	289.1	0.0
49	303.8596	111.7530	2.5799	65	0.4689	250.690	534.599	534.6	0.0	250.7	0.0

50	303.8596	111.4137	2.6441	70	0.4046	280.040	692.138	692.1	0.0	280.0	0.0
51	304.2504	119.5575	7.5471	50	0.5375	651.598	1212.357	1212.4	0.0	651.6	0.0
52	304.2504	119.2181	7.6035	50	0.5502	858.072	1559.685	1559.7	0.0	858.1	0.0
53	304.2504	118.8788	7.0663	50	0.5710	705.387	1235.439	1235.4	0.0	705.4	0.0
54	304.2504	118.5395	6.7270	50	0.5836	660.860	1132.409	1132.4	0.0	660.9	0.0
55	304.2504	118.2002	6.3877	50	0.5969	616.364	1032.665	1032.7	0.0	616.4	0.0
56	304.2504	117.8609	6.0483	50	0.6091	571.928	938.984	939.0	0.0	571.9	0.0
57	304.2504	117.5215	5.7090	50	0.6237	527.426	845.619	845.6	0.0	527.4	0.0
58	304.2504	117.1822	5.5675	50	0.6410	590.471	921.144	921.1	0.0	590.5	0.0
59	304.2504	116.8429	5.0304	50	0.6537	438.533	670.800	670.8	0.0	438.5	0.0
60	304.2504	116.5036	4.4932	50	0.6760	323.389	478.413	478.4	0.0	323.4	0.0
61	304.2504	116.1642	4.1539	50	0.6908	283.956	411.077	411.1	0.0	284.0	0.0
62	304.2504	115.8249	3.8146	50	0.7034	244.611	347.752	347.8	0.0	244.6	0.0
63	304.2504	115.4856	3.6731	50	0.7216	273.042	378.396	378.4	0.0	273.0	0.0
64	304.2504	115.1463	3.3337	50	0.7225	226.820	313.931	313.9	0.0	226.8	0.0
65	304.2504	114.8069	3.1923	50	0.7174	241.198	336.204	336.2	0.0	241.2	0.0
66	304.2504	114.4676	2.6551	50	0.7066	143.549	203.155	203.2	0.0	143.5	0.0
67	304.2504	114.1283	2.5136	50	0.6752	144.214	213.583	213.6	0.0	144.2	0.0
68	304.2504	113.7890	3.3932	50	0.6604	427.685	647.658	647.7	0.0	427.7	0.0
69	304.2504	113.4496	3.1023	50	0.6363	349.463	549.209	549.2	0.0	349.5	0.0
70	304.2504	113.1103	2.8793	52	0.6022	294.632	489.290	489.3	0.0	294.6	0.0
71	304.2504	112.7710	3.1350	51	0.5693	378.930	665.563	665.6	0.0	378.9	0.0
72	304.2504	112.4317	3.2368	52	0.5396	415.635	770.254	770.3	0.0	415.6	0.0
73	304.2504	112.0923	2.9266	60	0.5039	323.266	641.481	641.5	0.0	323.3	0.0
74	304.2504	111.7530	2.5799	65	0.4594	227.478	495.212	495.2	0.0	227.5	0.0
75	304.2504	111.4137	2.8514	70	0.3996	311.971	780.733	780.7	0.0	312.0	0.0
76	304.6412	119.5575	7.9428	50	0.5891	885.482	1503.133	1503.1	0.0	885.5	0.0
77	304.6412	119.2181	7.6035	50	0.6012	834.856	1388.649	1388.6	0.0	834.9	0.0
78	304.6412	118.8788	7.2641	50	0.6141	784.200	1277.091	1277.1	0.0	784.2	0.0
79	304.6412	118.5395	7.3205	50	0.6300	1013.383	1608.589	1608.6	0.0	1013.4	0.0
80	304.6412	118.2002	6.3877	50	0.6480	578.053	892.087	892.1	0.0	578.1	0.0
81	304.6412	117.8609	6.0483	50	0.6637	533.010	803.098	803.1	0.0	533.0	0.0
82	304.6412	117.5215	5.7090	50	0.6800	488.063	717.688	717.7	0.0	488.1	0.0
83	304.6412	117.1822	5.3697	50	0.6941	443.118	638.362	638.4	0.0	443.1	0.0
84	304.6412	116.8429	4.8325	50	0.7111	309.881	435.763	435.8	0.0	309.9	0.0
85	304.6412	116.5036	4.8889	50	0.7320	450.313	615.181	615.2	0.0	450.3	0.0
86	304.6412	116.1642	4.5496	50	0.7440	398.189	535.200	535.2	0.0	398.2	0.0
87	304.6412	115.8249	4.2102	50	0.7560	346.111	457.795	457.8	0.0	346.1	0.0
88	304.6412	115.4856	3.6731	50	0.7807	232.909	298.345	298.3	0.0	232.9	0.0
89	304.6412	115.1463	3.3337	50	0.7763	186.788	240.604	240.6	0.0	186.8	0.0
90	304.6412	114.8069	3.1923	50	0.7690	202.039	262.746	262.7	0.0	202.0	0.0
91	304.6412	114.4676	3.2486	50	0.7473	270.358	361.767	361.8	0.0	270.4	0.0
92	304.6412	114.1283	1.3266	50	0.7930	7.668	9.670	9.7	0.0	7.7	0.0
93	304.6412	113.7890	1.1390	50	0.8187	7.298	8.915	8.9	0.0	7.3	0.0
94	304.6412	113.4496	0.8808	50	0.7835	4.191	5.349	5.3	0.0	4.2	0.0
95	304.6412	113.1103	1.0323	50	0.6039	10.808	17.898	17.9	0.0	10.8	0.0
96	304.6412	112.7710	3.5459	52	0.5583	481.968	863.261	863.3	0.0	482.0	0.0
97	304.6412	112.4317	3.2368	51	0.5256	380.070	723.058	723.1	0.0	380.1	0.0
98	304.6412	112.0923	2.9266	60	0.4828	288.651	597.885	597.9	0.0	288.7	0.0
99	304.6412	111.7530	2.5799	65	0.4261	193.623	454.446	454.4	0.0	193.6	0.0
100	304.6412	111.4137	3.3350	70	0.3905	426.001	1090.821	1090.8	0.0	426.0	0.0
101	305.0320	119.5575	7.9428	50	0.6369	839.222	1317.739	1317.7	0.0	839.2	0.0
102	305.0320	119.2181	7.6035	50	0.6489	788.401	1214.893	1214.9	0.0	788.4	0.0
103	305.0320	118.8788	7.2641	50	0.6634	737.412	1111.569	1111.6	0.0	737.4	0.0
104	305.0320	118.5395	6.9248	50	0.6785	686.575	1011.909	1011.9	0.0	686.6	0.0
105	305.0320	118.2002	6.5855	50	0.6944	635.727	915.538	915.5	0.0	635.7	0.0
106	305.0320	117.8609	6.2462	50	0.7109	584.836	822.630	822.6	0.0	584.8	0.0
107	305.0320	117.5215	5.9069	50	0.7277	533.976	733.813	733.8	0.0	534.0	0.0
108	305.0320	117.1822	5.5675	50	0.7445	483.174	648.989	649.0	0.0	483.2	0.0
109	305.0320	116.8429	5.0304	50	0.7721	348.622	451.548	451.5	0.0	348.6	0.0
110	305.0320	116.5036	4.6910	50	0.7872	303.431	385.441	385.4	0.0	303.4	0.0
111	305.0320	116.1642	4.7474	50	0.7943	428.961	540.045	540.0	0.0	429.0	0.0
112	305.0320	115.8249	4.2102	50	0.8161	295.604	362.234	362.2	0.0	295.6	0.0
113	305.0320	115.4856	4.2666	50	0.8140	405.215	497.831	497.8	0.0	405.2	0.0
114	305.0320	115.1463	3.9273	50	0.8141	338.995	416.412	416.4	0.0	339.0	0.0
115	305.0320	114.8069	2.2031	50	0.8134	18.907	23.244	23.2	0.0	18.9	0.0
116	305.0320	114.4676	1.8638	50	0.8637	13.308	15.408	15.4	0.0	13.3	0.0
117	305.0320	114.1283	1.5244	50	0.8696	7.713	8.869	8.9	0.0	7.7	0.0

118	305.0320	113.7890	1.3269	50	0.8833	6.587	7.457	7.5	0.0	6.6	0.0
119	305.0320	113.4496	1.3935	50	0.7778	15.213	19.559	19.6	0.0	15.2	0.0
120	305.0320	113.1103	1.1862	50	0.7162	11.199	15.636	15.6	0.0	11.2	0.0
121	305.0320	112.7710	1.4916	50	0.5933	32.022	53.971	54.0	0.0	32.0	0.0
122	305.0320	112.4317	1.5571	52	0.5176	41.863	80.876	80.9	0.0	41.9	0.0
123	305.0320	112.0923	1.8964	60	0.4510	73.587	163.169	163.2	0.0	73.6	0.0
124	305.0320	111.7530	3.6125	65	0.4032	481.908	1195.210	1195.2	0.0	481.9	0.0
125	305.0320	111.4137	4.3022	70	0.3806	752.283	1976.391	1976.4	0.0	752.3	0.0
126	305.4228	119.5575	8.1406	50	0.6790	917.296	1350.944	1350.9	0.0	917.3	0.0
127	305.4228	119.2181	7.8013	50	0.6941	860.302	1239.411	1239.4	0.0	860.3	0.0
128	305.4228	118.8788	7.4620	50	0.7096	803.234	1131.917	1131.9	0.0	803.2	0.0
129	305.4228	118.5395	6.5292	50	0.7258	375.396	517.235	517.2	0.0	375.4	0.0
130	305.4228	118.2002	6.1898	50	0.7435	337.496	453.959	454.0	0.0	337.5	0.0
131	305.4228	117.8609	6.2462	50	0.7681	523.326	681.361	681.4	0.0	523.3	0.0
132	305.4228	117.5215	5.9069	50	0.7860	472.243	600.853	600.9	0.0	472.2	0.0
133	305.4228	117.1822	5.5675	50	0.7999	421.115	526.448	526.4	0.0	421.1	0.0
134	305.4228	116.8429	5.2282	50	0.8154	370.037	453.808	453.8	0.0	370.0	0.0
135	305.4228	116.5036	4.8889	50	0.8271	318.967	385.628	385.6	0.0	319.0	0.0
136	305.4228	116.1642	4.7474	50	0.8528	365.631	428.724	428.7	0.0	365.6	0.0
137	305.4228	115.8249	4.4081	50	0.8539	307.053	359.607	359.6	0.0	307.1	0.0
138	305.4228	115.4856	4.2666	50	0.8514	337.962	396.934	396.9	0.0	338.0	0.0
139	305.4228	115.1463	2.7402	50	0.8646	27.278	31.551	31.6	0.0	27.3	0.0
140	305.4228	114.8069	2.4009	50	0.9117	19.916	21.845	21.8	0.0	19.9	0.0
141	305.4228	114.4676	2.0616	50	0.9213	12.581	13.656	13.7	0.0	12.6	0.0
142	305.4228	114.1283	2.1179	50	0.8899	29.225	32.841	32.8	0.0	29.2	0.0
143	305.4228	113.7890	1.8904	50	0.8887	24.991	28.122	28.1	0.0	25.0	0.0
144	305.4228	113.4496	1.7353	50	0.7905	24.092	30.477	30.5	0.0	24.1	0.0
145	305.4228	113.1103	1.8019	50	0.7402	38.645	52.207	52.2	0.0	38.6	0.0
146	305.4228	112.7710	1.4916	50	0.6757	23.454	34.709	34.7	0.0	23.5	0.0
147	305.4228	112.4317	1.5571	52	0.5388	33.056	61.348	61.3	0.0	33.1	0.0
148	305.4228	112.0923	1.8964	60	0.4334	64.240	148.207	148.2	0.0	64.2	0.0
149	305.4228	111.7530	2.3218	65	0.3926	111.299	283.501	283.5	0.0	111.3	0.0
150	305.4228	111.4137	4.0949	70	0.3668	604.194	1647.390	1647.4	0.0	604.2	0.0
151	305.8136	119.5575	7.9428	50	0.7183	675.624	940.554	940.6	0.0	675.6	0.0
152	305.8136	119.2181	7.8013	50	0.7444	786.106	1056.092	1056.1	0.0	786.1	0.0
153	305.8136	118.8788	7.4620	50	0.7590	728.762	960.186	960.2	0.0	728.8	0.0
154	305.8136	118.5395	7.1227	50	0.7766	671.565	864.790	864.8	0.0	671.6	0.0
155	305.8136	118.2002	6.7833	50	0.7945	614.321	773.225	773.2	0.0	614.3	0.0
156	305.8136	117.8609	6.4440	50	0.8124	557.067	685.668	685.7	0.0	557.1	0.0
157	305.8136	117.5215	6.1047	50	0.8298	499.863	602.361	602.4	0.0	499.9	0.0
158	305.8136	117.1822	5.7654	50	0.8460	442.703	523.306	523.3	0.0	442.7	0.0
159	305.8136	116.8429	5.4260	50	0.8592	385.396	448.573	448.6	0.0	385.4	0.0
160	305.8136	116.5036	5.0867	50	0.8674	328.210	378.369	378.4	0.0	328.2	0.0
161	305.8136	116.1642	4.7474	50	0.8622	270.965	314.287	314.3	0.0	271.0	0.0
162	305.8136	115.8249	4.6059	50	0.8415	300.787	357.461	357.5	0.0	300.8	0.0
163	305.8136	115.4856	3.0796	50	0.8655	20.331	23.491	23.5	0.0	20.3	0.0
164	305.8136	115.1463	3.1359	50	0.8824	47.657	54.011	54.0	0.0	47.7	0.0
165	305.8136	114.8069	2.7966	50	0.9109	35.952	39.470	39.5	0.0	36.0	0.0
166	305.8136	114.4676	2.4573	50	0.9062	24.235	26.742	26.7	0.0	24.2	0.0
167	305.8136	114.1283	2.5136	50	0.8899	47.965	53.897	53.9	0.0	48.0	0.0
168	305.8136	113.7890	2.4539	50	0.8747	60.356	69.003	69.0	0.0	60.4	0.0
169	305.8136	113.4496	2.0770	50	0.8389	35.730	42.593	42.6	0.0	35.7	0.0
170	305.8136	113.1103	1.8019	50	0.7848	24.451	31.156	31.2	0.0	24.5	0.0
171	305.8136	112.7710	1.4916	50	0.6818	13.920	20.417	20.4	0.0	13.9	0.0
172	305.8136	112.4317	1.5571	52	0.4917	22.670	46.104	46.1	0.0	22.7	0.0
173	305.8136	112.0923	2.4115	60	0.3932	105.386	267.997	268.0	0.0	105.4	0.0
174	305.8136	111.7530	4.2149	65	0.3626	595.134	1641.332	1641.3	0.0	595.1	0.0
175	305.8136	111.4137	3.8877	70	0.3358	454.376	1353.117	1353.1	0.0	454.4	0.0
176	306.2044	119.5575	7.9428	50	0.7663	588.747	768.313	768.3	0.0	588.7	0.0
177	306.2044	119.2181	7.6035	50	0.7834	538.667	687.579	687.6	0.0	538.7	0.0
178	306.2044	118.8788	7.2641	50	0.8006	488.472	610.126	610.1	0.0	488.5	0.0
179	306.2044	118.5395	6.9248	50	0.8171	438.364	536.476	536.5	0.0	438.4	0.0
180	306.2044	118.2002	6.5855	50	0.8324	388.221	466.386	466.4	0.0	388.2	0.0
181	306.2044	117.8609	6.4440	50	0.8427	444.633	527.602	527.6	0.0	444.6	0.0
182	306.2044	117.5215	6.1047	50	0.8555	388.695	454.340	454.3	0.0	388.7	0.0
183	306.2044	117.1822	5.7654	50	0.8881	352.238	396.623	396.6	0.0	352.2	0.0
184	306.2044	116.8429	5.4260	50	0.8856	294.722	332.778	332.8	0.0	294.7	0.0
185	306.2044	116.5036	5.0867	50	0.8682	237.173	273.188	273.2	0.0	237.2	0.0

186	306.2044	116.1642	3.9560	50	0.8729	35.958	41.196	41.2	0.0	36.0	0.0
187	306.2044	115.8249	3.6167	50	0.8957	26.892	30.024	30.0	0.0	26.9	0.0
188	306.2044	115.4856	3.6731	50	0.9152	62.255	68.023	68.0	0.0	62.3	0.0
189	306.2044	115.1463	3.3337	50	0.9447	48.082	50.897	50.9	0.0	48.1	0.0
190	306.2044	114.8069	2.9944	50	0.9459	33.924	35.863	35.9	0.0	33.9	0.0
191	306.2044	114.4676	3.0508	50	0.9348	66.834	71.497	71.5	0.0	66.8	0.0
192	306.2044	114.1283	2.7115	50	0.9210	46.863	50.882	50.9	0.0	46.9	0.0
193	306.2044	113.7890	2.4539	50	0.8850	36.288	41.004	41.0	0.0	36.3	0.0
194	306.2044	113.4496	2.0770	50	0.7761	17.099	22.031	22.0	0.0	17.1	0.0
195	306.2044	113.1103	1.8019	50	0.7200	10.681	14.836	14.8	0.0	10.7	0.0
196	306.2044	112.7710	1.4916	50	0.7065	6.185	8.755	8.8	0.0	6.2	0.0
197	306.2044	112.4317	1.5571	52	0.3919	13.801	35.213	35.2	0.0	13.8	0.0
198	306.2044	112.0923	2.9266	60	0.3528	156.070	442.384	442.4	0.0	156.1	0.0
199	306.2044	111.7530	3.0102	65	0.3271	187.501	573.304	573.3	0.0	187.5	0.0
200	306.2044	111.4137	2.8514	70	0.3035	161.746	532.982	533.0	0.0	161.7	0.0
201	306.5952	119.5575	8.1406	50	0.8060	622.817	772.769	772.8	0.0	622.8	0.0
202	306.5952	119.2181	7.8013	50	0.8228	566.710	688.719	688.7	0.0	566.7	0.0
203	306.5952	118.8788	7.4620	50	0.8393	510.485	608.231	608.2	0.0	510.5	0.0
204	306.5952	118.5395	7.1227	50	0.8544	454.347	531.774	531.8	0.0	454.3	0.0
205	306.5952	118.2002	6.7833	50	0.8668	398.205	459.413	459.4	0.0	398.2	0.0
206	306.5952	117.8609	6.4440	50	0.8699	342.010	393.178	393.2	0.0	342.0	0.0
207	306.5952	117.5215	6.1047	50	0.8644	285.734	330.544	330.5	0.0	285.7	0.0
208	306.5952	117.1822	5.7654	50	0.8440	229.481	271.902	271.9	0.0	229.5	0.0
209	306.5952	116.8429	5.0304	50	0.8354	90.909	108.816	108.8	0.0	90.9	0.0
210	306.5952	116.5036	4.6910	50	0.8670	76.793	88.569	88.6	0.0	76.8	0.0
211	306.5952	116.1642	4.3517	50	0.8984	62.688	69.775	69.8	0.0	62.7	0.0
212	306.5952	115.8249	4.0124	50	0.9166	48.657	53.085	53.1	0.0	48.7	0.0
213	306.5952	115.4856	4.0687	50	0.9281	95.803	103.229	103.2	0.0	95.8	0.0
214	306.5952	115.1463	3.7294	50	0.9501	75.823	79.802	79.8	0.0	75.8	0.0
215	306.5952	114.8069	3.3901	50	0.9465	55.871	59.030	59.0	0.0	55.9	0.0
216	306.5952	114.4676	3.2486	50	0.9705	64.717	66.685	66.7	0.0	64.7	0.0
217	306.5952	114.1283	2.9093	50	0.9138	41.555	45.475	45.5	0.0	41.6	0.0
218	306.5952	113.7890	2.4539	50	0.6708	12.303	18.340	18.3	0.0	12.3	0.0
219	306.5952	113.4496	2.2479	50	0.6996	11.304	16.158	16.2	0.0	11.3	0.0
220	306.5952	113.1103	1.9558	50	0.6989	7.217	10.326	10.3	0.0	7.2	0.0
221	306.5952	112.7710	1.6286	50	0.4862	2.299	4.729	4.7	0.0	2.3	0.0
222	306.5952	112.4317	3.2368	52	0.3341	170.253	509.629	509.6	0.0	170.3	0.0
223	306.5952	112.0923	3.4417	60	0.3142	231.905	738.044	738.0	0.0	231.9	0.0
224	306.5952	111.7530	3.6125	65	0.3005	276.437	919.773	919.8	0.0	276.4	0.0
225	306.5952	111.4137	3.5422	70	0.2846	263.383	925.507	925.5	0.0	263.4	0.0
226	306.9859	119.5575	8.1406	50	0.8280	481.757	581.840	581.8	0.0	481.8	0.0
227	306.9859	119.2181	7.8013	50	0.8391	426.682	508.489	508.5	0.0	426.7	0.0
228	306.9859	118.8788	7.4620	50	0.8436	371.740	440.659	440.7	0.0	371.7	0.0
229	306.9859	118.5395	7.3205	50	0.8923	462.950	518.842	518.8	0.0	462.9	0.0
230	306.9859	118.2002	6.9812	50	0.8963	400.526	446.852	446.9	0.0	400.5	0.0
231	306.9859	117.8609	6.6419	50	0.8927	338.055	378.677	378.7	0.0	338.1	0.0
232	306.9859	117.5215	6.3025	50	0.8762	275.528	314.443	314.4	0.0	275.5	0.0
233	306.9859	117.1822	5.1719	50	0.8546	40.333	47.196	47.2	0.0	40.3	0.0
234	306.9859	116.8429	5.2282	50	0.8945	94.186	105.293	105.3	0.0	94.2	0.0
235	306.9859	116.5036	4.8889	50	0.9238	77.477	83.868	83.9	0.0	77.5	0.0
236	306.9859	116.1642	4.5496	50	0.9405	60.862	64.711	64.7	0.0	60.9	0.0
237	306.9859	115.8249	4.6059	50	0.9535	118.588	124.373	124.4	0.0	118.6	0.0
238	306.9859	115.4856	4.2666	50	0.9756	95.482	97.867	97.9	0.0	95.5	0.0
239	306.9859	115.1463	3.9273	50	0.9784	72.278	73.873	73.9	0.0	72.3	0.0
240	306.9859	114.8069	3.5879	50	0.9311	49.180	52.820	52.8	0.0	49.2	0.0
241	306.9859	114.4676	3.2486	50	0.7991	26.908	33.673	33.7	0.0	26.9	0.0
242	306.9859	114.1283	2.9093	50	0.5874	10.942	18.628	18.6	0.0	10.9	0.0
243	306.9859	113.7890	2.6418	50	0.6036	7.076	11.723	11.7	0.0	7.1	0.0
244	306.9859	113.4496	2.4188	50	0.6396	7.062	11.040	11.0	0.0	7.1	0.0
245	306.9859	113.1103	2.1097	50	0.5398	2.289	4.240	4.2	0.0	2.3	0.0
246	306.9859	112.7710	4.2306	50	0.3235	359.245	1110.477	1110.5	0.0	359.2	0.0
247	306.9859	112.4317	3.8368	50	0.3061	275.566	900.270	900.3	0.0	275.6	0.0
248	306.9859	112.0923	3.8537	60	0.2874	287.451	1000.296	1000.3	0.0	287.5	0.0
249	306.9859	111.7530	3.6125	65	0.2776	245.057	882.887	882.9	0.0	245.1	0.0
250	306.9859	111.4137	3.3350	70	0.2564	192.019	748.843	748.8	0.0	192.0	0.0
251	307.3767	119.5575	8.3385	50	0.8833	519.274	587.908	587.9	0.0	519.3	0.0
252	307.3767	119.2181	7.9991	50	0.8908	456.522	512.485	512.5	0.0	456.5	0.0
253	307.3767	118.8788	7.6598	50	0.8930	393.910	441.119	441.1	0.0	393.9	0.0

254	307.3767	118.5395	7.3205	50	0.8863	331.350	373.839	373.8	0.0	331.4	0.0
255	307.3767	118.2002	6.9812	50	0.8663	268.665	310.122	310.1	0.0	268.7	0.0
256	307.3767	117.8609	6.2462	50	0.8495	104.757	123.320	123.3	0.0	104.8	0.0
257	307.3767	117.5215	5.9069	50	0.8712	88.312	101.372	101.4	0.0	88.3	0.0
258	307.3767	117.1822	5.9632	50	0.8900	165.601	186.070	186.1	0.0	165.6	0.0
259	307.3767	116.8429	5.6239	50	0.9172	142.494	155.360	155.4	0.0	142.5	0.0
260	307.3767	116.5036	5.2846	50	0.9416	119.436	126.840	126.8	0.0	119.4	0.0
261	307.3767	116.1642	4.9452	50	0.9584	96.486	100.673	100.7	0.0	96.5	0.0
262	307.3767	115.8249	4.6059	50	0.9553	73.459	76.897	76.9	0.0	73.5	0.0
263	307.3767	115.4856	4.2666	50	0.9055	50.536	55.809	55.8	0.0	50.5	0.0
264	307.3767	115.1463	4.1251	50	0.9711	64.006	65.912	65.9	0.0	64.0	0.0
265	307.3767	114.8069	3.7858	50	0.8513	37.720	44.309	44.3	0.0	37.7	0.0
266	307.3767	114.4676	3.4464	50	0.6582	16.894	25.666	25.7	0.0	16.9	0.0
267	307.3767	114.1283	3.1071	50	0.5098	5.880	11.534	11.5	0.0	5.9	0.0
268	307.3767	113.7890	2.8296	50	0.4453	1.997	4.485	4.5	0.0	2.0	0.0
269	307.3767	113.4496	2.5897	50	0.4827	2.059	4.265	4.3	0.0	2.1	0.0
270	307.3767	113.1103	4.1107	50	0.2940	247.340	841.278	841.3	0.0	247.3	0.0
271	307.3767	112.7710	4.2306	50	0.2967	318.566	1073.694	1073.7	0.0	318.6	0.0
272	307.3767	112.4317	3.9567	53	0.2760	264.013	956.680	956.7	0.0	264.0	0.0
273	307.3767	112.0923	3.7507	60	0.2561	226.342	883.836	883.8	0.0	226.3	0.0
274	307.3767	111.7530	3.4404	65	0.2401	175.831	732.293	732.3	0.0	175.8	0.0
275	307.3767	111.4137	3.1277	70	0.2176	128.934	592.466	592.5	0.0	128.9	0.0
276	307.7675	119.5575	8.3385	50	0.8550	350.140	409.519	409.5	0.0	350.1	0.0
277	307.7675	119.2181	7.9991	50	0.8392	288.908	344.284	344.3	0.0	288.9	0.0
278	307.7675	118.8788	7.0663	50	0.8136	65.354	80.327	80.3	0.0	65.4	0.0
279	307.7675	118.5395	7.3205	50	0.8309	205.980	247.912	247.9	0.0	206.0	0.0
280	307.7675	118.2002	6.7833	50	0.8746	124.843	142.735	142.7	0.0	124.8	0.0
281	307.7675	117.8609	6.4440	50	0.8952	105.620	117.985	118.0	0.0	105.6	0.0
282	307.7675	117.5215	6.5004	50	0.9136	195.282	213.750	213.7	0.0	195.3	0.0
283	307.7675	117.1822	6.1610	50	0.9394	168.930	179.825	179.8	0.0	168.9	0.0
284	307.7675	116.8429	5.8217	50	0.9626	142.507	148.043	148.0	0.0	142.5	0.0
285	307.7675	116.5036	5.4824	50	0.9786	116.204	118.740	118.7	0.0	116.2	0.0
286	307.7675	116.1642	5.1431	50	0.9773	89.946	92.039	92.0	0.0	89.9	0.0
287	307.7675	115.8249	4.8037	50	0.9361	63.760	68.116	68.1	0.0	63.8	0.0
288	307.7675	115.4856	4.4644	50	0.8033	37.762	47.009	47.0	0.0	37.8	0.0
289	307.7675	115.1463	4.1251	50	0.5308	14.340	27.013	27.0	0.0	14.3	0.0
290	307.7675	114.8069	3.9836	50	0.7191	24.364	33.880	33.9	0.0	24.4	0.0
291	307.7675	114.4676	3.6443	50	0.5687	8.640	15.194	15.2	0.0	8.6	0.0
292	307.7675	114.1283	3.3050	50	0.3810	1.511	3.966	4.0	0.0	1.5	0.0
293	307.7675	113.7890	4.8960	50	0.2895	344.646	1190.283	1190.3	0.0	344.6	0.0
294	307.7675	113.4496	4.2985	50	0.2698	215.193	797.467	797.5	0.0	215.2	0.0
295	307.7675	113.1103	4.2646	50	0.2512	235.314	936.775	936.8	0.0	235.3	0.0
296	307.7675	112.7710	4.0937	50	0.2298	211.906	921.977	922.0	0.0	211.9	0.0
297	307.7675	112.4317	3.8368	53	0.2347	192.909	822.070	822.1	0.0	192.9	0.0
298	307.7675	112.0923	3.5447	60	0.2121	149.318	704.045	704.0	0.0	149.3	0.0
299	307.7675	111.7530	3.1823	65	0.1987	110.157	554.368	554.4	0.0	110.2	0.0
300	307.7675	111.4137	2.9205	70	0.1834	86.305	470.460	470.5	0.0	86.3	0.0
301	308.1583	119.5575	8.5363	50	0.8663	337.247	389.277	389.3	0.0	337.2	0.0
302	308.1583	119.2181	8.1970	50	0.8371	269.791	322.278	322.3	0.0	269.8	0.0
303	308.1583	118.8788	7.8577	50	0.8547	240.247	281.096	281.1	0.0	240.2	0.0
304	308.1583	118.5395	7.5183	50	0.8774	213.965	243.873	243.9	0.0	214.0	0.0
305	308.1583	118.2002	7.1790	50	0.8997	187.828	208.770	208.8	0.0	187.8	0.0
306	308.1583	117.8609	6.8397	50	0.9203	161.562	175.558	175.6	0.0	161.6	0.0
307	308.1583	117.5215	6.5004	50	0.9392	135.459	144.222	144.2	0.0	135.5	0.0
308	308.1583	117.1822	6.1610	50	0.9459	109.459	115.715	115.7	0.0	109.5	0.0
309	308.1583	116.8429	5.8217	50	0.9317	83.621	89.748	89.7	0.0	83.6	0.0
310	308.1583	116.5036	5.6802	50	0.9981	108.092	108.299	108.3	0.0	108.1	0.0
311	308.1583	116.1642	5.3409	50	0.9636	78.464	81.429	81.4	0.0	78.5	0.0
312	308.1583	115.8249	5.0016	50	0.8523	49.072	57.573	57.6	0.0	49.1	0.0
313	308.1583	115.4856	4.6623	50	0.6033	21.159	35.070	35.1	0.0	21.2	0.0
314	308.1583	115.1463	4.3229	50	0.4574	3.022	6.608	6.6	0.0	3.0	0.0
315	308.1583	114.8069	4.1814	50	0.6194	11.994	19.363	19.4	0.0	12.0	0.0
316	308.1583	114.4676	3.8421	50	0.4273	2.376	5.560	5.6	0.0	2.4	0.0
317	308.1583	114.1283	4.8877	50	0.2660	245.317	922.122	922.1	0.0	245.3	0.0
318	308.1583	113.7890	3.3932	50	0.4863	2.798	5.752	5.8	0.0	2.8	0.0
319	308.1583	113.4496	4.2985	50	0.2153	160.450	745.210	745.2	0.0	160.4	0.0
320	308.1583	113.1103	4.1107	50	0.1990	149.789	752.817	752.8	0.0	149.8	0.0
321	308.1583	112.7710	3.8198	50	0.1734	114.857	662.210	662.2	0.0	114.9	0.0

322	308.1583	112.4317	3.5968	53	0.1662	103.671	623.824	623.8	0.0	103.7	0.0
323	308.1583	112.0923	3.3386	60	0.1514	84.677	559.154	559.2	0.0	84.7	0.0
324	308.1583	111.7530	3.0102	65	0.1657	74.570	450.136	450.1	0.0	74.6	0.0
325	308.1583	111.4137	2.7132	70	0.1556	57.458	369.183	369.2	0.0	57.5	0.0
326	308.5491	119.5575	8.3385	50	0.8566	154.133	179.941	179.9	0.0	154.1	0.0
327	308.5491	119.2181	7.9991	50	0.8719	132.486	151.955	152.0	0.0	132.5	0.0
328	308.5491	118.8788	7.6598	50	0.8849	110.963	125.400	125.4	0.0	111.0	0.0
329	308.5491	118.5395	7.7162	50	0.9209	217.570	236.264	236.3	0.0	217.6	0.0
330	308.5491	118.2002	7.3768	50	0.9405	188.040	199.932	199.9	0.0	188.0	0.0
331	308.5491	117.8609	7.0375	50	0.9561	158.472	165.751	165.8	0.0	158.5	0.0
332	308.5491	117.5215	6.6982	50	0.9655	129.079	133.695	133.7	0.0	129.1	0.0
333	308.5491	117.1822	6.3589	50	0.9532	99.913	104.819	104.8	0.0	99.9	0.0
334	308.5491	116.8429	6.0196	50	0.9012	70.892	78.667	78.7	0.0	70.9	0.0
335	308.5491	116.5036	5.6802	50	0.7627	42.168	55.291	55.3	0.0	42.2	0.0
336	308.5491	116.1642	5.5387	50	0.8938	61.699	69.033	69.0	0.0	61.7	0.0
337	308.5491	115.8249	5.1994	50	0.6665	29.517	44.288	44.3	0.0	29.5	0.0
338	308.5491	115.4856	4.8601	50	0.4992	4.307	8.628	8.6	0.0	4.3	0.0
339	308.5491	115.1463	5.5100	50	0.2436	214.414	880.246	880.2	0.0	214.4	0.0
340	308.5491	114.8069	4.3793	50	0.4700	3.511	7.471	7.5	0.0	3.5	0.0
341	308.5491	114.4676	4.0400	50	0.2369	0.610	2.576	2.6	0.0	0.6	0.0
342	308.5491	114.1283	3.8985	50	0.4558	2.784	6.107	6.1	0.0	2.8	0.0
343	308.5491	113.7890	4.3324	50	0.1494	87.484	585.702	585.7	0.0	87.5	0.0
344	308.5491	113.4496	3.4441	50	0.2256	0.830	3.682	3.7	0.0	0.8	0.0
345	308.5491	113.1103	3.8028	50	0.1254	61.558	490.992	491.0	0.0	61.6	0.0
346	308.5491	112.7710	3.5459	50	0.1223	54.422	444.943	444.9	0.0	54.4	0.0
347	308.5491	112.4317	3.3568	53	0.1257	56.448	449.141	449.1	0.0	56.4	0.0
348	308.5491	112.0923	3.0296	60	0.1142	42.753	374.394	374.4	0.0	42.8	0.0
349	308.5491	111.7530	2.5799	65	0.1126	28.427	252.465	252.5	0.0	28.4	0.0
350	308.5491	111.4137	nicht berechnet								
351	308.9399	119.5575	8.7341	50	0.8839	231.382	261.777	261.8	0.0	231.4	0.0
352	308.9399	119.2181	8.1970	50	0.9061	129.450	142.864	142.9	0.0	129.5	0.0
353	308.9399	118.8788	8.0555	50	0.9166	172.949	188.688	188.7	0.0	172.9	0.0
354	308.9399	118.5395	7.7162	50	0.9238	143.932	155.798	155.8	0.0	143.9	0.0
355	308.9399	118.2002	7.3768	50	0.9209	115.106	124.997	125.0	0.0	115.1	0.0
356	308.9399	117.8609	7.2354	50	0.9815	150.425	153.265	153.3	0.0	150.4	0.0
357	308.9399	117.5215	6.8960	50	0.9734	117.675	120.897	120.9	0.0	117.7	0.0
358	308.9399	117.1822	6.5567	50	0.9277	85.262	91.910	91.9	0.0	85.3	0.0
359	308.9399	116.8429	6.2174	50	0.8086	53.207	65.800	65.8	0.0	53.2	0.0
360	308.9399	116.5036	5.8781	50	0.5686	19.543	34.372	34.4	0.0	19.5	0.0
361	308.9399	116.1642	5.7366	50	0.7238	39.654	54.788	54.8	0.0	39.7	0.0
362	308.9399	115.8249	5.3973	50	0.5382	5.909	10.979	11.0	0.0	5.9	0.0
363	308.9399	115.4856	5.0579	50	0.2916	1.225	4.201	4.2	0.0	1.2	0.0
364	308.9399	115.1463	4.9164	50	0.5098	4.955	9.720	9.7	0.0	5.0	0.0
365	308.9399	114.8069	4.5771	50	0.2936	1.130	3.847	3.8	0.0	1.1	0.0
366	308.9399	114.4676	4.4356	50	0.5012	4.057	8.094	8.1	0.0	4.1	0.0
367	308.9399	114.1283	4.4920	50	0.0880	44.813	509.454	509.5	0.0	44.8	0.0
368	308.9399	113.7890	3.9567	50	0.2415	1.006	4.164	4.2	0.0	1.0	0.0
369	308.9399	113.4496	3.9567	50	0.0867	38.166	440.081	440.1	0.0	38.2	0.0
370	308.9399	113.1103	3.6489	50	0.0771	29.991	388.792	388.8	0.0	30.0	0.0
371	308.9399	112.7710	3.4089	50	0.0873	31.768	364.037	364.0	0.0	31.8	0.0
372	308.9399	112.4317	3.1169	53	0.1034	33.524	324.317	324.3	0.0	33.5	0.0
373	308.9399	112.0923	2.8235	60	0.1074	30.239	281.674	281.7	0.0	30.2	0.0
374	308.9399	111.7530	2.5799	65	0.1126	28.427	252.465	252.5	0.0	28.4	0.0
375	308.9399	111.4137	nicht berechnet								
376	309.3307	119.5575	8.9320	50	0.9204	231.709	251.737	251.7	0.0	231.7	0.0
377	309.3307	119.2181	8.5927	50	0.9334	199.138	213.336	213.3	0.0	199.1	0.0
378	309.3307	118.8788	8.2533	50	0.9433	166.647	176.659	176.7	0.0	166.6	0.0
379	309.3307	118.5395	7.9140	50	0.9388	134.434	143.202	143.2	0.0	134.4	0.0
380	309.3307	118.2002	7.5747	50	0.9141	102.494	112.122	112.1	0.0	102.5	0.0
381	309.3307	117.8609	7.2354	50	0.8424	70.955	84.226	84.2	0.0	71.0	0.0
382	309.3307	117.5215	7.0939	50	0.9525	101.094	106.135	106.1	0.0	101.1	0.0
383	309.3307	117.1822	6.7546	50	0.8468	65.465	77.307	77.3	0.0	65.5	0.0
384	309.3307	116.8429	6.4152	50	0.6470	26.893	41.564	41.6	0.0	26.9	0.0
385	309.3307	116.5036	6.0759	50	0.3842	2.800	7.289	7.3	0.0	2.8	0.0
386	309.3307	116.1642	5.9344	50	0.5460	13.536	24.793	24.8	0.0	13.5	0.0
387	309.3307	115.8249	5.5951	50	0.3437	2.033	5.917	5.9	0.0	2.0	0.0
388	309.3307	115.4856	5.2558	50	0.0798	0.075	0.937	0.9	0.0	0.1	0.0
389	309.3307	115.1463	5.1143	50	0.3462	1.868	5.395	5.4	0.0	1.9	0.0

390	309.3307	114.8069	4.7750	50	0.0394	14.928	378.658	378.7	0.0	14.9	0.0
391	309.3307	114.4676	4.6335	50	0.1595	0.396	2.484	2.5	0.0	0.4	0.0
392	309.3307	114.1283	4.4920	50	0.3372	2.057	6.100	6.1	0.0	2.1	0.0
393	309.3307	113.7890	3.5810	50	0.0485	10.086	207.801	207.8	0.0	10.1	0.0
394	309.3307	113.4496	3.2732	50	0.0607	11.364	187.163	187.2	0.0	11.4	0.0
395	309.3307	113.1103	3.4950	50	0.0671	21.812	325.144	325.1	0.0	21.8	0.0
396	309.3307	112.7710	3.1350	50	0.0810	21.935	270.957	271.0	0.0	21.9	0.0
397	309.3307	112.4317	2.8769	53	0.0855	21.342	249.607	249.6	0.0	21.3	0.0
398	309.3307	112.0923	2.6175	60	0.1027	23.030	224.297	224.3	0.0	23.0	0.0
399	309.3307	111.7530	2.3218	65	0.1074	20.067	186.884	186.9	0.0	20.1	0.0
400	309.3307	111.4137	nicht berechnet								
401	309.7215	119.5575	8.9320	50	0.9020	145.234	161.020	161.0	0.0	145.2	0.0
402	309.7215	119.2181	8.7905	50	0.9591	191.181	199.339	199.3	0.0	191.2	0.0
403	309.7215	118.8788	8.4512	50	0.9583	155.334	162.092	162.1	0.0	155.3	0.0
404	309.7215	118.5395	8.1118	50	0.9343	119.869	128.300	128.3	0.0	119.9	0.0
405	309.7215	118.2002	7.7725	50	0.8729	84.913	97.277	97.3	0.0	84.9	0.0
406	309.7215	117.8609	7.4332	50	0.8088	48.089	59.460	59.5	0.0	48.1	0.0
407	309.7215	117.5215	7.2917	50	0.8826	79.133	89.658	89.7	0.0	79.1	0.0
408	309.7215	117.1822	6.9524	50	0.6625	40.526	61.168	61.2	0.0	40.5	0.0
409	309.7215	116.8429	6.6131	50	0.4293	4.060	9.458	9.5	0.0	4.1	0.0
410	309.7215	116.5036	6.4716	50	0.5397	24.461	45.319	45.3	0.0	24.5	0.0
411	309.7215	116.1642	6.1323	50	0.3917	3.115	7.953	8.0	0.0	3.1	0.0
412	309.7215	115.8249	5.7929	50	0.1463	0.298	2.036	2.0	0.0	0.3	0.0
413	309.7215	115.4856	5.6514	50	0.3951	2.861	7.241	7.2	0.0	2.9	0.0
414	309.7215	115.1463	5.5100	50	0.1713	0.820	4.786	4.8	0.0	0.8	0.0
415	309.7215	114.8069	5.1706	50	0.2420	1.005	4.153	4.2	0.0	1.0	0.0
416	309.7215	114.4676	4.2378	50	0.0364	9.526	261.449	261.4	0.0	9.5	0.0
417	309.7215	114.1283	4.0963	50	0.0419	12.627	301.051	301.1	0.0	12.6	0.0
418	309.7215	113.7890	3.5810	50	0.0485	10.086	207.801	207.8	0.0	10.1	0.0
419	309.7215	113.4496	3.2732	50	0.0607	11.364	187.163	187.2	0.0	11.4	0.0
420	309.7215	113.1103	2.8793	50	0.0612	8.960	146.508	146.5	0.0	9.0	0.0
421	309.7215	112.7710	2.9981	50	0.0773	17.855	230.971	231.0	0.0	17.9	0.0
422	309.7215	112.4317	2.6369	53	0.0795	14.810	186.322	186.3	0.0	14.8	0.0
423	309.7215	112.0923	2.4115	60	0.0974	16.963	174.215	174.2	0.0	17.0	0.0
424	309.7215	111.7530	nicht berechnet								
425	309.7215	111.4137	nicht berechnet								
426	310.1123	119.5575	9.1298	50	0.9045	132.508	146.494	146.5	0.0	132.5	0.0
427	310.1123	119.2181	8.9883	50	0.9742	177.947	182.651	182.7	0.0	177.9	0.0
428	310.1123	118.8788	8.6490	50	0.9555	138.877	145.338	145.3	0.0	138.9	0.0
429	310.1123	118.5395	8.3097	50	0.8987	100.191	111.490	111.5	0.0	100.2	0.0
430	310.1123	118.2002	7.9704	50	0.7712	62.299	80.782	80.8	0.0	62.3	0.0
431	310.1123	117.8609	7.8289	50	0.9143	94.055	102.875	102.9	0.0	94.1	0.0
432	310.1123	117.5215	7.4896	50	0.7241	51.862	71.624	71.6	0.0	51.9	0.0
433	310.1123	117.1822	7.1502	50	0.4714	5.639	11.963	12.0	0.0	5.6	0.0
434	310.1123	116.8429	6.8109	50	0.1913	0.622	3.249	3.2	0.0	0.6	0.0
435	310.1123	116.5036	6.6694	50	0.4360	4.505	10.331	10.3	0.0	4.5	0.0
436	310.1123	116.1642	6.3301	50	0.2078	0.706	3.396	3.4	0.0	0.7	0.0
437	310.1123	115.8249	6.1886	50	0.4406	4.144	9.407	9.4	0.0	4.1	0.0
438	310.1123	115.4856	6.0471	50	0.2914	2.257	7.744	7.7	0.0	2.3	0.0
439	310.1123	115.1463	5.7078	50	0.3140	1.905	6.068	6.1	0.0	1.9	0.0
440	310.1123	114.8069	4.3793	50	0.0178	3.825	214.868	214.9	0.0	3.8	0.0
441	310.1123	114.4676	4.0400	50	0.0185	3.518	190.580	190.6	0.0	3.5	0.0
442	310.1123	114.1283	3.8985	50	0.0377	8.704	230.856	230.9	0.0	8.7	0.0
443	310.1123	113.7890	3.5810	50	0.0485	10.086	207.801	207.8	0.0	10.1	0.0
444	310.1123	113.4496	3.2732	50	0.0607	11.364	187.163	187.2	0.0	11.4	0.0
445	310.1123	113.1103	2.8793	50	0.0612	8.960	146.508	146.5	0.0	9.0	0.0
446	310.1123	112.7710	2.4503	50	0.0701	7.308	104.276	104.3	0.0	7.3	0.0
447	310.1123	112.4317	2.3969	53	0.0727	9.716	133.596	133.6	0.0	9.7	0.0
448	310.1123	112.0923	2.2054	60	0.0915	12.035	131.582	131.6	0.0	12.0	0.0
449	310.1123	111.7530	nicht berechnet								
450	310.1123	111.4137	nicht berechnet								
451	310.5031	119.5575	9.3277	50	0.8852	115.057	129.978	130.0	0.0	115.1	0.0
452	310.5031	119.2181	9.1862	50	0.9729	159.242	163.676	163.7	0.0	159.2	0.0
453	310.5031	118.8788	8.8468	50	0.9244	116.914	126.480	126.5	0.0	116.9	0.0
454	310.5031	118.5395	8.5075	50	0.8114	75.332	92.836	92.8	0.0	75.3	0.0
455	310.5031	118.2002	8.1682	50	0.6977	24.678	35.372	35.4	0.0	24.7	0.0
456	310.5031	117.8609	8.0267	50	0.7753	64.353	83.000	83.0	0.0	64.4	0.0
457	310.5031	117.5215	7.6874	50	0.5110	7.574	14.823	14.8	0.0	7.6	0.0

458	310.5031	117.1822	7.3481	50	0.2509	1.256	5.007	5.0	0.0	1.3	0.0
459	310.5031	116.8429	7.2066	50	0.4773	6.239	13.071	13.1	0.0	6.2	0.0
460	310.5031	116.5036	6.8673	50	0.2649	1.334	5.038	5.0	0.0	1.3	0.0
461	310.5031	116.1642	6.7258	50	0.4831	5.754	11.911	11.9	0.0	5.8	0.0
462	310.5031	115.8249	6.3864	50	0.1614	0.464	2.873	2.9	0.0	0.5	0.0
463	310.5031	115.4856	6.2450	50	0.3777	3.125	8.273	8.3	0.0	3.1	0.0
464	310.5031	115.1463	4.5208	50	0.0029	0.448	152.795	152.8	0.0	0.4	0.0
465	310.5031	114.8069	4.1814	50	0.0065	0.885	136.078	136.1	0.0	0.9	0.0
466	310.5031	114.4676	5.6227	50	0.1009	0.450	4.463	4.5	0.0	0.5	0.0
467	310.5031	114.1283	3.7006	50	0.0261	4.359	167.338	167.3	0.0	4.4	0.0
468	310.5031	113.7890	3.3932	50	0.0354	5.451	153.971	154.0	0.0	5.5	0.0
469	310.5031	113.4496	3.1023	50	0.0466	6.678	143.387	143.4	0.0	6.7	0.0
470	310.5031	113.1103	2.7254	50	0.0565	6.353	112.517	112.5	0.0	6.4	0.0
471	310.5031	112.7710	2.4503	50	0.0701	7.308	104.276	104.3	0.0	7.3	0.0
472	310.5031	112.4317	2.0370	53	0.0711	5.094	71.682	71.7	0.0	5.1	0.0
473	310.5031	112.0923	1.8964	60	0.0713	5.718	80.189	80.2	0.0	5.7	0.0
474	310.5031	111.7530	nicht berechnet								
475	310.5031	111.4137	nicht berechnet								
476	310.8938	119.5575	9.5255	50	0.8303	92.595	111.525	111.5	0.0	92.6	0.0
477	310.8938	119.2181	9.3840	50	0.9483	135.134	142.496	142.5	0.0	135.1	0.0
478	310.8938	118.8788	9.0447	50	0.8482	89.793	105.866	105.9	0.0	89.8	0.0
479	310.8938	118.5395	8.7054	50	0.6913	41.160	59.536	59.5	0.0	41.2	0.0
480	310.8938	118.2002	8.3660	50	0.3506	3.117	8.890	8.9	0.0	3.1	0.0
481	310.8938	117.8609	8.2245	50	0.5114	16.908	33.062	33.1	0.0	16.9	0.0
482	310.8938	117.5215	7.8852	50	0.3055	2.166	7.090	7.1	0.0	2.2	0.0
483	310.8938	117.1822	7.7437	50	0.5101	15.623	30.629	30.6	0.0	15.6	0.0
484	310.8938	116.8429	7.4044	50	0.3179	2.219	6.982	7.0	0.0	2.2	0.0
485	310.8938	116.5036	7.2629	50	0.3103	2.521	8.125	8.1	0.0	2.5	0.0
486	310.8938	116.1642	6.9236	50	0.2284	1.054	4.614	4.6	0.0	1.1	0.0
487	310.8938	115.8249	6.7821	50	0.4345	4.693	10.801	10.8	0.0	4.7	0.0
488	310.8938	115.4856	nicht berechnet								
489	310.8938	115.1463	6.3013	50	0.1052	0.327	3.110	3.1	0.0	0.3	0.0
490	310.8938	114.8069	3.9836	50	0.0001	0.000	83.514	83.5	0.0	0.0	0.0
491	310.8938	114.4676	nicht berechnet								
492	310.8938	114.1283	3.5028	50	0.0119	1.246	104.668	104.7	0.0	1.2	0.0
493	310.8938	113.7890	3.2053	50	0.0249	2.567	103.149	103.1	0.0	2.6	0.0
494	310.8938	113.4496	2.9314	50	0.0344	3.535	102.896	102.9	0.0	3.5	0.0
495	310.8938	113.1103	2.5715	50	0.0438	3.574	81.652	81.7	0.0	3.6	0.0
496	310.8938	112.7710	2.3133	50	0.0566	4.531	80.116	80.1	0.0	4.5	0.0
497	310.8938	112.4317	2.0370	53	0.0711	5.094	71.682	71.7	0.0	5.1	0.0
498	310.8938	112.0923	nicht berechnet								
499	310.8938	111.7530	nicht berechnet								
500	310.8938	111.4137	nicht berechnet								
501	311.2846	119.5575	9.7233	50	0.7963	62.115	78.009	78.0	0.0	62.1	0.0
502	311.2846	119.2181	9.5818	50	0.8794	105.565	120.041	120.0	0.0	105.6	0.0
503	311.2846	118.8788	9.2425	50	0.6840	57.632	84.252	84.3	0.0	57.6	0.0
504	311.2846	118.5395	8.9032	50	0.3973	4.559	11.475	11.5	0.0	4.6	0.0
505	311.2846	118.2002	8.7617	50	0.5674	40.909	72.094	72.1	0.0	40.9	0.0
506	311.2846	117.8609	8.4224	50	0.3558	3.387	9.520	9.5	0.0	3.4	0.0
507	311.2846	117.5215	8.2809	50	0.1831	1.740	9.504	9.5	0.0	1.7	0.0
508	311.2846	117.1822	7.9416	50	0.3673	3.397	9.249	9.2	0.0	3.4	0.0
509	311.2846	116.8429	7.8001	50	0.3821	4.211	11.021	11.0	0.0	4.2	0.0
510	311.2846	116.5036	7.4608	50	0.2899	1.926	6.642	6.6	0.0	1.9	0.0
511	311.2846	116.1642	nicht berechnet								
512	311.2846	115.8249	6.9800	50	0.0253	0.016	0.620	0.6	0.0	0.0	0.0
513	311.2846	115.4856	6.8385	50	0.2136	1.300	6.087	6.1	0.0	1.3	0.0
514	311.2846	115.1463	nicht berechnet								
515	311.2846	114.8069	3.7858	50	0.0001	0.000	43.167	43.2	0.0	0.0	0.0
516	311.2846	114.4676	nicht berechnet								
517	311.2846	114.1283	3.3050	50	0.0026	0.166	63.229	63.2	0.0	0.2	0.0
518	311.2846	113.7890	3.0175	50	0.0107	0.666	62.391	62.4	0.0	0.7	0.0
519	311.2846	113.4496	2.5897	50	0.0059	0.237	40.152	40.2	0.0	0.2	0.0
520	311.2846	113.1103	2.4176	50	0.0334	1.779	53.237	53.2	0.0	1.8	0.0
521	311.2846	112.7710	2.0394	50	0.0342	1.308	38.238	38.2	0.0	1.3	0.0
522	311.2846	112.4317	1.7970	53	0.0573	2.201	38.424	38.4	0.0	2.2	0.0
523	311.2846	112.0923	nicht berechnet								
524	311.2846	111.7530	nicht berechnet								
525	311.2846	111.4137	nicht berechnet								

526	311.6754	119.5575	9.9212	50	0.6736	27.512	40.842	40.8	0.0	27.5	0.0
527	311.6754	119.2181	9.7797	50	0.7370	70.884	96.177	96.2	0.0	70.9	0.0
528	311.6754	118.8788	9.4404	50	0.4409	6.358	14.419	14.4	0.0	6.4	0.0
529	311.6754	118.5395	9.2989	50	0.6423	53.410	83.157	83.2	0.0	53.4	0.0
530	311.6754	118.2002	8.9595	50	0.4050	4.855	11.986	12.0	0.0	4.9	0.0
531	311.6754	117.8609	8.8181	50	0.2870	4.607	16.049	16.0	0.0	4.6	0.0
532	311.6754	117.5215	8.4787	50	0.4133	4.902	11.860	11.9	0.0	4.9	0.0
533	311.6754	117.1822	8.1394	50	0.1020	0.208	2.044	2.0	0.0	0.2	0.0
534	311.6754	116.8429	7.9979	50	0.3465	3.112	8.981	9.0	0.0	3.1	0.0
535	311.6754	116.5036	7.8564	50	0.0533	0.115	2.164	2.2	0.0	0.1	0.0
536	311.6754	116.1642	7.7150	50	0.1833	1.511	8.242	8.2	0.0	1.5	0.0
537	311.6754	115.8249	7.3756	50	0.3056	2.789	9.126	9.1	0.0	2.8	0.0
538	311.6754	115.4856	nicht berechnet								
539	311.6754	115.1463	nicht berechnet								
540	311.6754	114.8069	nicht berechnet								
541	311.6754	114.4676	nicht berechnet								
542	311.6754	114.1283	2.9093	50	0.0001	0.000	10.115	10.1	0.0	0.0	0.0
543	311.6754	113.7890	nicht berechnet								
544	311.6754	113.4496	2.4188	50	0.0001	0.000	21.329	21.3	0.0	0.0	0.0
545	311.6754	113.1103	2.1097	50	0.0006	0.011	19.411	19.4	0.0	0.0	0.0
546	311.6754	112.7710	1.9025	50	0.0226	0.563	24.935	24.9	0.0	0.6	0.0
547	311.6754	112.4317	1.5571	53	0.0310	0.568	18.288	18.3	0.0	0.6	0.0
548	311.6754	112.0923	nicht berechnet								
549	311.6754	111.7530	nicht berechnet								
550	311.6754	111.4137	nicht berechnet								
551	312.0662	119.5575	10.3168	50	0.7843	85.528	109.044	109.0	0.0	85.5	0.0
552	312.0662	119.2181	9.9775	50	0.5202	18.158	34.905	34.9	0.0	18.2	0.0
553	312.0662	118.8788	9.6382	50	0.2305	1.361	5.905	5.9	0.0	1.4	0.0
554	312.0662	118.5395	9.4967	50	0.4511	6.770	15.007	15.0	0.0	6.8	0.0
555	312.0662	118.2002	9.3552	50	0.3797	8.854	23.319	23.3	0.0	8.9	0.0
556	312.0662	117.8609	9.0159	50	0.4564	6.772	14.837	14.8	0.0	6.8	0.0
557	312.0662	117.5215	8.6766	50	0.1687	0.647	3.834	3.8	0.0	0.6	0.0
558	312.0662	117.1822	8.5351	50	0.3988	4.648	11.656	11.7	0.0	4.6	0.0
559	312.0662	116.8429	8.3936	50	0.1714	1.082	6.313	6.3	0.0	1.1	0.0
560	312.0662	116.5036	8.0543	50	0.2023	1.118	5.527	5.5	0.0	1.1	0.0
561	312.0662	116.1642	nicht berechnet								
562	312.0662	115.8249	4.6059	50	0.0001	0.000	20.133	20.1	0.0	0.0	0.0
563	312.0662	115.4856	nicht berechnet								
564	312.0662	115.1463	nicht berechnet								
565	312.0662	114.8069	nicht berechnet								
566	312.0662	114.4676	nicht berechnet								
567	312.0662	114.1283	2.9093	50	0.0001	0.000	10.115	10.1	0.0	0.0	0.0
568	312.0662	113.7890	2.6418	50	0.0001	0.000	14.337	14.3	0.0	0.0	0.0
569	312.0662	113.4496	nicht berechnet								
570	312.0662	113.1103	1.9558	50	0.0001	0.000	8.771	8.8	0.0	0.0	0.0
571	312.0662	112.7710	1.7655	50	0.0050	0.074	14.659	14.7	0.0	0.1	0.0
572	312.0662	112.4317	nicht berechnet								
573	312.0662	112.0923	nicht berechnet								
574	312.0662	111.7530	nicht berechnet								
575	312.0662	111.4137	nicht berechnet								
576	312.4570	119.5575	10.5147	50	0.6025	24.717	41.022	41.0	0.0	24.7	0.0
577	312.4570	119.2181	10.1754	50	0.2866	2.375	8.284	8.3	0.0	2.4	0.0
578	312.4570	118.8788	10.0339	50	0.4941	9.094	18.405	18.4	0.0	9.1	0.0
579	312.4570	118.5395	9.6945	50	0.2832	2.215	7.822	7.8	0.0	2.2	0.0
580	312.4570	118.2002	9.5531	50	0.4968	9.041	18.199	18.2	0.0	9.0	0.0
581	312.4570	117.8609	9.2137	50	0.2305	1.365	5.922	5.9	0.0	1.4	0.0
582	312.4570	117.5215	9.0722	50	0.4473	6.570	14.690	14.7	0.0	6.6	0.0
583	312.4570	117.1822	8.9308	50	0.2735	2.797	10.229	10.2	0.0	2.8	0.0
584	312.4570	116.8429	8.5914	50	0.2774	2.299	8.288	8.3	0.0	2.3	0.0
585	312.4570	116.5036	nicht berechnet								
586	312.4570	116.1642	nicht berechnet								
587	312.4570	115.8249	nicht berechnet								
588	312.4570	115.4856	7.8277	50	0.1100	0.832	7.558	7.6	0.0	0.8	0.0
589	312.4570	115.1463	nicht berechnet								
590	312.4570	114.8069	nicht berechnet								
591	312.4570	114.4676	nicht berechnet								
592	312.4570	114.1283	nicht berechnet								
593	312.4570	113.7890	nicht berechnet								

594	312.4570	113.4496	nicht berechnet								
595	312.4570	113.1103	1.8019	50	0.0001	0.000	0.289	0.3	0.0	0.0	0.0
596	312.4570	112.7710	1.4916	50	0.0001	0.000	1.738	1.7	0.0	0.0	0.0
597	312.4570	112.4317	nicht berechnet								
598	312.4570	112.0923	nicht berechnet								
599	312.4570	111.7530	nicht berechnet								
600	312.4570	111.4137	nicht berechnet								
601	312.8478	119.5575	10.7125	50	0.3389	3.730	11.005	11.0	0.0	3.7	0.0
602	312.8478	119.2181	10.5710	50	0.5370	23.929	44.560	44.6	0.0	23.9	0.0
603	312.8478	118.8788	10.2317	50	0.3345	3.500	10.465	10.5	0.0	3.5	0.0
604	312.8478	118.5395	10.0902	50	0.4382	7.011	15.999	16.0	0.0	7.0	0.0
605	312.8478	118.2002	9.7509	50	0.2879	2.398	8.331	8.3	0.0	2.4	0.0
606	312.8478	117.8609	9.6094	50	0.1921	1.249	6.505	6.5	0.0	1.2	0.0
607	312.8478	117.5215	9.2701	50	0.1316	0.463	3.520	3.5	0.0	0.5	0.0
608	312.8478	117.1822	9.1286	50	0.3452	3.919	11.352	11.4	0.0	3.9	0.0
609	312.8478	116.8429	nicht berechnet								
610	312.8478	116.5036	nicht berechnet								
611	312.8478	116.1642	8.5063	50	0.1310	0.802	6.122	6.1	0.0	0.8	0.0
612	312.8478	115.8249	nicht berechnet								
613	312.8478	115.4856	nicht berechnet								
614	312.8478	115.1463	nicht berechnet								
615	312.8478	114.8069	nicht berechnet								
616	312.8478	114.4676	nicht berechnet								
617	312.8478	114.1283	nicht berechnet								
618	312.8478	113.7890	nicht berechnet								
619	312.8478	113.4496	nicht berechnet								
620	312.8478	113.1103	1.8019	50	0.0001	0.000	0.289	0.3	0.0	0.0	0.0
621	312.8478	112.7710	nicht berechnet								
622	312.8478	112.4317	nicht berechnet								
623	312.8478	112.0923	nicht berechnet								
624	312.8478	111.7530	nicht berechnet								
625	312.8478	111.4137	nicht berechnet								

Ungünstigster Gleitkreis

Nr	xm	ym	Radius	Lamellen	mue	Zähler	Nenner	M(Ti)	M(R)	M(Gi)	M(S)
[-]	[m]	[m]	[m]	[-]	[-]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]	[kN*m/m]
310	308.1583	116.5036	5.6802	50	0.9981	108.092	108.299	108.3	0.0	108.1	0.0