

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,6146

Parameter:

Aluminium

Vergleichsstandardabweichung:

0,0494

Gruppe:

A

Z(u)-Score = -2

0,5194

Z(u)-Score = +2

0,7177

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0167	0,316	-6,2738
4-0063	0,388	-4,7608
4-0398	0,433	-3,8151
4-0328	0,451	-3,4369
4-0239	0,53	-1,7768
4-0062	0,5312	-1,7516
4-0264	0,585	-0,6210
4-0371	0,585	-0,6210
4-0130	0,59	-0,5159
4-0131	0,592	-0,4739
4-0001	0,594	-0,4319
4-0099	0,60	-0,3058
4-0305	0,603	-0,2427
4-0017	0,604	-0,2217
4-0331	0,608	-0,1377
4-0140	0,610	-0,0956
4-0351	0,611	-0,0746
4-0037	0,6114	-0,0662
4-0079	0,617	0,0475
4-0217	0,620	0,1057
4-0157	0,624	0,1832
4-0108	0,626	0,2220
4-0003	0,6288	0,2763
4-0282	0,630	0,2996
4-0141	0,6337	0,3713
4-0396	0,641	0,5129
4-0373	0,653	0,7456
4-0272	0,655	0,7843
4-0021	0,662	0,9201
4-0074	0,665	0,9783
4-0165	0,72	2,0448
4-0222	0,74	2,4326
4-0040	0,865	4,8565

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,5002

Parameter:

Aluminium

Vergleichsstandardabweichung:

0,0434

Gruppe:

B

Z(u)-Score = -2

0,4168

Z(u)-Score = +2

0,5912

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0382	0,390	-2,6417												
4-0206	0,412	-2,1144												
4-0022	0,43	-1,6829												
4-0008	0,432	-1,6349												
4-0145	0,467	-0,7959												
4-0205	0,479	-0,5083												
4-0143	0,48	-0,4843												
4-0402	0,48	-0,4843												
4-0004	0,481	-0,4603												
4-0358	0,485	-0,3644												
4-0169	0,488	-0,2925												
4-0067	0,489	-0,2685												
4-0248	0,489	-0,2685												
4-0117	0,490	-0,2446												
4-0180	0,490	-0,2446												
4-0383	0,492	-0,1966												
4-0335	0,499	-0,0288												
4-0334	0,51	0,2153												
4-0315	0,511	0,2373												
4-0064	0,5124	0,2681												
4-0312	0,513	0,2813												
4-0401	0,515	0,3252												
4-0158	0,523	0,5010												
4-0223	0,524	0,5230												
4-0230	0,54	0,8747												
4-0273	0,54	0,8747												
4-0134	0,543	0,9406												
4-0086	0,545	0,9846												
4-0030	0,550	1,0945												
4-0159	0,606	2,3253												
4-0249	0,61	2,4132												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,3496

Parameter:

Aluminium

Vergleichsstandardabweichung:

0,0416

Gruppe:

C

Z(u)-Score = -2

0,2707

Z(u)-Score = +2

0,4384

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0321	0,245	-2,6527
4-0010	0,249	-2,5513
4-0237	0,2576	-2,3332
4-0162	0,264	-2,1709
4-0139	0,283	-1,6891
4-0184	0,288	-1,5623
4-0091	0,324	-0,6494
4-0291	0,329	-0,5226
4-0137	0,3298	-0,5023
4-0194	0,332	-0,4465
4-0155	0,339	-0,2690
4-0072	0,341	-0,2183
4-0031	0,343	-0,1676
4-0070	0,346	-0,0915
4-0122	0,348	-0,0408
4-0013	0,353	0,0764
4-0161	0,353	0,0764
4-0148	0,354	0,0989
4-0257	0,3554	0,1304
4-0367	0,356	0,1439
4-0095	0,36	0,2340
4-0126	0,360	0,2340
4-0296	0,37	0,4591
4-0207	0,375	0,5717
4-0326	0,380	0,6843
4-0209	0,383	0,7518
4-0339	0,383	0,7518
4-0060	0,389	0,8869
4-0389	0,391	0,9319
4-0057	0,395	1,0220
4-0403	0,404	1,2246
4-0261	0,408	1,3147
4-0281	0,456	2,3954

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,8718

Parameter:

Ammonium

Vergleichsstandardabweichung:

0,0456

Gruppe:

A

Z(u)-Score = -2

0,7829

Z(u)-Score = +2

0,9655

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0139	0,450	-9,4911	4-0064	0,895	0,4948
4-0307	0,63	-5,4411	4-0209	0,897	0,5375
4-0189	0,712	-3,5961	4-0034	0,899	0,5802
4-0017	0,808	-1,4361	4-0162	0,904	0,6870
4-0050	0,8134	-1,3146	4-0140	0,919	1,0073
4-0165	0,82	-1,1661	4-0079	0,925	1,1354
4-0331	0,824	-1,0761	4-0122	0,925	1,1354
4-0389	0,824	-1,0761	4-0099	0,96	1,8828
4-0291	0,827	-1,0086	4-0344	0,96	1,8828
4-0053	0,83	-0,9411	4-0235	0,980	2,3099
4-0403	0,841	-0,6936			
4-0237	0,8415	-0,6824			
4-0150	0,848	-0,5362			
4-0130	0,85	-0,4912			
4-0358	0,85	-0,4912			
4-0021	0,856	-0,3562			
4-0207	0,858	-0,3112			
4-0288	0,859	-0,2887			
4-0001	0,864	-0,1762			
4-0083	0,865	-0,1537			
4-0278	0,865	-0,1537			
4-0367	0,865	-0,1537			
4-0003	0,868	-0,0862			
4-0108	0,87	-0,0412			
4-0348	0,87	-0,0412			
4-0273	0,872	0,0037			
4-0067	0,88	0,1745			
4-0312	0,880	0,1745			
4-0328	0,886	0,3026			
4-0155	0,887	0,3240			
4-0249	0,888	0,3453			
4-0194	0,89	0,3880			
4-0388	0,89	0,3880			
4-0037	0,893	0,4521			
4-0257	0,8946	0,4863			

Ringversuch:

4-2011

Mittelwert nach Hampel:

1,0399

Parameter:

Ammonium

Vergleichsstandardabweichung:

0,0709

Gruppe:

B

Z(u)-Score = -2

0,9026

Z(u)-Score = +2

1,1869

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0315	0,70	-4,9510	4-0141	1,102	0,8447									
4-0261	0,719	-4,6742	4-0217	1,105	0,8855									
4-0040	0,72	-4,6597	4-0321	1,105	0,8855									
4-0022	0,90	-2,0379	4-0203	1,14	1,3617									
4-0240	0,943	-1,4116	4-0158	1,18	1,9059									
4-0008	0,968	-1,0475	4-0222	62,6	837,5617									
4-0351	0,971	-1,0038												
4-0195	0,975	-0,9455												
4-0334	0,977	-0,9164												
4-0239	0,98	-0,8727												
4-0396	0,993	-0,6833												
4-0041	1,00	-0,5814												
4-0398	1,00	-0,5814												
4-0373	1,013	-0,3920												
4-0089	1,02	-0,2901												
4-0157	1,020	-0,2901												
4-0281	1,02	-0,2901												
4-0131	1,025	-0,2172												
4-0060	1,03	-0,1444												
4-0169	1,03	-0,1444												
4-0282	1,03	-0,1444												
4-0072	1,031	-0,1298												
4-0134	1,05	0,1372												
4-0335	1,05	0,1372												
4-0118	1,056	0,2189												
4-0004	1,06	0,2733												
4-0117	1,067	0,3685												
4-0025	1,07	0,4093												
4-0167	1,07	0,4093												
4-0295	1,076	0,4910												
4-0086	1,077	0,5046												
4-0070	1,08	0,5454												
4-0057	1,084	0,5998												
4-0143	1,089	0,6678												
4-0371	1,09	0,6814												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,7761

Parameter:

Ammonium

Vergleichsstandardabweichung:

0,0388

Gruppe:

C

Z(u)-Score = -2

0,7004

Z(u)-Score = +2

0,8558

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0184	0,560	-5,7049
4-0339	0,693	-2,1941
4-0223	0,729	-1,2438
4-0135	0,735	-1,0855
4-0401	0,735	-1,0855
4-0120	0,737	-1,0327
4-0095	0,74	-0,9535
4-0357	0,752	-0,6367
4-0382	0,755	-0,5575
4-0205	0,760	-0,4255
4-0248	0,760	-0,4255
4-0326	0,76	-0,4255
4-0030	0,764	-0,3200
4-0010	0,765	-0,2936
4-0042	0,766	-0,2672
4-0074	0,77	-0,1616
4-0402	0,77	-0,1616
4-0077	0,778	0,0472
4-0244	0,780	0,0974
4-0327	0,78	0,0974
4-0145	0,783	0,1727
4-0283	0,786	0,2481
4-0031	0,787	0,2732
4-0148	0,787	0,2732
4-0091	0,788	0,2983
4-0284	0,789	0,3234
4-0161	0,79	0,3485
4-0183	0,79	0,3485
4-0374	0,79	0,3485
4-0013	0,794	0,4489
4-0137	0,794	0,4489
4-0062	0,80	0,5996
4-0230	0,80	0,5996
4-0063	0,801	0,6247
4-0272	0,806	0,7502

4-0159	0,832	1,4031
4-0264	0,84	1,6040
4-0206	0,859	2,0810

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,3470

Parameter:

Eisen

Vergleichsstandardabweichung:

0,0183

Gruppe:

A

Z(u)-Score = -2

0,3113

Z(u)-Score = +2

0,3846

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0398	0,296	-2,8546
4-0140	0,317	-1,6788
4-0037	0,3211	-1,4493
4-0099	0,33	-0,9510
4-0130	0,33	-0,9510
4-0040	0,331	-0,8950
4-0074	0,333	-0,7830
4-0003	0,3340	-0,7270
4-0001	0,337	-0,5590
4-0222	0,338	-0,5030
4-0079	0,339	-0,4471
4-0305	0,339	-0,4471
4-0017	0,340	-0,3911
4-0239	0,34	-0,3911
4-0282	0,340	-0,3911
4-0272	0,341	-0,3351
4-0264	0,342	-0,2791
4-0108	0,346	-0,0551
4-0328	0,3465	-0,0271
4-0283	0,347	0,0008
4-0021	0,348	0,0539
4-0063	0,349	0,1070
4-0217	0,350	0,1602
4-0131	0,354	0,3726
4-0062	0,3555	0,4523
4-0351	0,356	0,4788
4-0371	0,356	0,4788
4-0331	0,363	0,8506
4-0141	0,364	0,9037
4-0396	0,367	1,0631
4-0307	0,37	1,2224
4-0356	0,371	1,2755
4-0373	0,371	1,2755
4-0165	0,379	1,7004
4-0157	0,385	2,0191

4-0167	0,422	3,9842
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Ringversuch:

4-2011

Mittelwert nach Hampel:

0,2633

Parameter:

Eisen

Vergleichsstandardabweichung:

0,0201

Gruppe:

B

Z(u)-Score = -2

0,2245

Z(u)-Score = +2

0,3052

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0288	0,168	-4,9084
4-0382	0,220	-2,2295
4-0145	0,229	-1,7658
4-0064	0,2390	-1,2506
4-0315	0,248	-0,7870
4-0143	0,25	-0,6839
4-0205	0,250	-0,6839
4-0230	0,25	-0,6839
4-0158	0,251	-0,6324
4-0086	0,252	-0,5809
4-0022	0,253	-0,5294
4-0135	0,253	-0,5294
4-0401	0,253	-0,5294
4-0004	0,256	-0,3748
4-0383	0,259	-0,2203
4-0334	0,26	-0,1687
4-0041	0,261	-0,1172
4-0030	0,262	-0,0657
4-0223	0,263	-0,0142
4-0083	0,264	0,0346
4-0067	0,265	0,0823
4-0169	0,268	0,2255
4-0053	0,27	0,3210
4-0273	0,27	0,3210
4-0358	0,272	0,4164
4-0402	0,272	0,4164
4-0008	0,273	0,4641
4-0117	0,274	0,5119
4-0284	0,274	0,5119
4-0278	0,276	0,6073
4-0206	0,278	0,7028
4-0312	0,279	0,7505
4-0134	0,283	0,9414
4-0159	0,286	1,0846
4-0180	0,291	1,3233

4-0335	0,304	1,9437
4-0248	0,505	11,5373
4-0249	0,545	13,4465

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,5999

Parameter:

Eisen

Vergleichsstandardabweichung:

0,0300

Gruppe:

C

Z(u)-Score = -2

0,5414

Z(u)-Score = +2

0,6615

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0261	0,212	-13,2474
4-0389	0,222	-12,9059
4-0070	0,560	-1,3637
4-0291	0,561	-1,3295
4-0194	0,57	-1,0222
4-0031	0,575	-0,8514
4-0155	0,580	-0,6807
4-0257	0,5844	-0,5304
4-0207	0,587	-0,4417
4-0137	0,588	-0,4075
4-0072	0,5886	-0,3870
4-0296	0,59	-0,3392
4-0013	0,592	-0,2709
4-0161	0,595	-0,1685
4-0339	0,595	-0,1685
4-0091	0,600	0,0022
4-0095	0,60	0,0022
4-0209	0,600	0,0022
4-0326	0,600	0,0022
4-0060	0,601	0,0346
4-0279	0,604	0,1321
4-0139	0,606	0,1971
4-0122	0,607	0,2295
4-0162	0,609	0,2945
4-0034	0,61	0,3270
4-0010	0,612	0,3920
4-0237	0,6147	0,4797
4-0367	0,615	0,4894
4-0184	0,645	1,4639
4-0235	0,648	1,5614
4-0057	0,660	1,9512
4-0321	0,668	2,2110
4-0148	0611	19827,9872

Ringversuch: 4-2011

Parameter: Elektr. Leitf. (20°C)

Gruppe: A

Mittelwert nach Hampel: 643,9462

Vergleichsstandardabweichung: 9,3306

Z(u)-Score = -2 625,4182

Z(u)-Score = +2 662,7445

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0257	585	-6,3629	4-0278	647	0,3249									
4-0141	593	-5,4994	4-0165	649	0,5377									
4-0360	610	-3,6643	4-0230	650	0,6441									
4-0315	623	-2,2610	4-0383	650	0,6441									
4-0351	626	-1,9372	4-0046	651,	0,7505									
4-0189	631	-1,3975	4-0131	651	0,7505									
4-0089	634	-1,0736	4-0398	652	0,8569									
4-0077	636	-0,8577	4-0021	654	1,0696									
4-0155	636	-0,8577	4-0091	661	1,8144									
4-0274	637	-0,7498	4-0335	662	1,9208									
4-0285	638	-0,6419	4-0328	665	2,2400									
4-0367	639	-0,5339	4-0017	700	5,9637									
4-0382	639	-0,5339	4-0297	720	8,0915									
4-0162	640	-0,4260	4-0143	727	8,8363									
4-0312	640	-0,4260												
4-0001	641	-0,3180												
4-0050	641	-0,3180												
4-0194	642	-0,2101												
4-0327	642	-0,2101												
4-0031	644	0,0057												
4-0074	644	0,0057												
4-0117	644	0,0057												
4-0244	644	0,0057												
4-0296	644	0,0057												
4-0003	645	0,1121												
4-0064	645	0,1121												
4-0239	645	0,1121												
4-0399	645	0,1121												
4-0063	646	0,2185												
4-0134	646	0,2185												
4-0207	646	0,2185												
4-0223	646	0,2185												
4-0284	646	0,2185												
4-0035	647	0,3249												
4-0206	647	0,3249												

Ringversuch: 4-2011

Parameter: Elektr. Leitf. (20°C)

Gruppe: B

Mittelwert nach Hampel: 576,7527

Vergleichsstandardabweichung: 8,3733

Z(u)-Score = -2 560,1260

Z(u)-Score = +2 593,6226

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0402	564	-1,5340	4-0299	581	0,5035									
4-0040	565	-1,4137	4-0330	581	0,5035									
4-0291	566	-1,2934	4-0339	581	0,5035									
4-0202	567	-1,1731	4-0281	582	0,6221									
4-0288	567	-1,1731	4-0209	583	0,7406									
4-0245	568	-1,0528	4-0004	584	0,8592									
4-0025	569	-0,9326	4-0261	585	0,9777									
4-0095	570	-0,8123	4-0264	585	0,9777									
4-0099	571	-0,6920	4-0065	587	1,2149									
4-0022	573	-0,4514	4-0305	588	1,3334									
4-0057	573	-0,4514	4-0321	590	1,5705									
4-0083	573	-0,4514	4-0145	592	1,8076									
4-0120	573	-0,4514	4-0169	598	2,5190									
4-0122	573	-0,4514	4-0208	630	6,3127									
4-0135	573	-0,4514	4-0248	631	6,4312									
4-0320	573	-0,4514	4-0231	645	8,0910									
4-0373	573	-0,4514	4-0389	707	15,4414									
4-0144	574	-0,3311												
4-0353	574	-0,3311												
4-0067	575	-0,2108												
4-0167	575	-0,2108												
4-0401	575	-0,2108												
4-0357	576	-0,0905												
4-0388	576	-0,0905												
4-0158	577	0,0293												
4-0195	577	0,0293												
4-0331	577	0,0293												
4-0137	578	0,1479												
4-0157	578	0,1479												
4-0280	578	0,1479												
4-0371	578	0,1479												
4-0053	579	0,2664												
4-0037	580	0,3850												
4-0079	580	0,3850												
4-0008	581	0,5035												

Ringversuch: 4-2011

Parameter: Elektr. Leitf. (20°C)

Gruppe: C

Mittelwert nach Hampel: 682,3222

Vergleichsstandardabweichung: 11,2596

Z(u)-Score = -2 659,9858

Z(u)-Score = +2 705,0303

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0359	613	-6,2071	4-0326	687	0,4120									
4-0347	652	-2,7150	4-0374	687	0,4120									
4-0333	653	-2,6255	4-0060	688	0,5001									
4-0311	657	-2,2673	4-0159	688	0,5001									
4-0273	667	-1,3720	4-0392	689	0,5881									
4-0010	668	-1,2824	4-0203	690	0,6762									
4-0180	669	-1,1929	4-0343	694	1,0285									
4-0249	671	-1,0138	4-0205	695	1,1166									
4-0100	672	-0,9243	4-0222	697	1,2927									
4-0253	672	-0,9243	4-0272	699	1,4689									
4-0086	674	-0,7452	4-0325	713	2,7019									
4-0070	676	-0,5661	4-0030	731	4,2873									
4-0358	676	-0,5661	4-0334	751	6,0488									
4-0150	677	-0,4766	4-0028	760	6,8414									
4-0042	679	-0,2975	4-0307	760	6,8414									
4-0108	682	-0,0289	4-0292	765	7,2818									
4-0140	682	-0,0289	4-0139	772	7,8983									
4-0148	682	-0,0289												
4-0237	682	-0,0289												
4-0282	682	-0,0289												
4-0085	683	0,0597												
4-0380	683	0,0597												
4-0129	684	0,1478												
4-0062	685	0,2358												
4-0130	685	0,2358												
4-0161	685	0,2358												
4-0041	686	0,3239												
4-0072	686	0,3239												
4-0184	686	0,3239												
4-0217	686	0,3239												
4-0396	686	0,3239												
4-0403	686	0,3239												
4-0013	687	0,4120												
4-0235	687	0,4120												
4-0283	687	0,4120												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,3180

Parameter:

Färbung

Vergleichsstandardabweichung:

0,0556

Gruppe:

A

Z(u)-Score = -2

0,2149

Z(u)-Score = +2

0,4408

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0089	0,09	-4,4237
4-0248	0,157	-3,1240
4-0034	0,22	-1,9018
4-0288	0,233	-1,6496
4-0205	0,26	-1,1259
4-0278	0,26	-1,1259
4-0137	0,279	-0,7573
4-0291	0,281	-0,7185
4-0060	0,283	-0,6797
4-0003	0,289	-0,5633
4-0223	0,292	-0,5051
4-0158	0,3	-0,3499
4-0017	0,308	-0,1947
4-0135	0,31	-0,1559
4-0145	0,31	-0,1559
4-0339	0,315	-0,0590
4-0206	0,317	-0,0202
4-0180	0,318	-0,0008
4-0037	0,32	0,0319
4-0070	0,32	0,0319
4-0091	0,32	0,0319
4-0159	0,32	0,0319
4-0327	0,32	0,0319
4-0021	0,33	0,1949
4-0072	0,33	0,1949
4-0373	0,33	0,1949
4-0374	0,33	0,1949
4-0169	0,34	0,3578
4-0120	0,35	0,5207
4-0351	0,35	0,5207
4-0001	0,361	0,6999
4-0057	0,37	0,8465
4-0148	0,37	0,8465
4-0249	0,375	0,9280
4-0273	0,38	1,0094

4-0326	0,38	1,0094
4-0389	0,46	2,3127
4-0230	0,52	3,2902
4-0396	0,632	5,1148

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,2681

Parameter:

Färbung

Vergleichsstandardabweichung:

0,0369

Gruppe:

B

Z(u)-Score = -2

0,1987

Z(u)-Score = +2

0,3477

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0261	0,003	-7,6425	4-0063	0,320	1,3032									
4-0398	0,14	-3,6934	4-0004	0,338	1,7554									
4-0130	0,16	-3,1169	4-0040	0,34	1,8057									
4-0358	0,165	-2,9727	4-0297	0,34	1,8057									
4-0008	0,198	-2,0215	4-0312	0,34	1,8057									
4-0328	0,20	-1,9639												
4-0382	0,20	-1,9639												
4-0079	0,24	-0,8108												
4-0184	0,24	-0,8108												
4-0074	0,25	-0,5226												
4-0139	0,25	-0,5226												
4-0140	0,250	-0,5226												
4-0161	0,25	-0,5226												
4-0025	0,26	-0,2343												
4-0209	0,26	-0,2343												
4-0357	0,260	-0,2343												
4-0281	0,262	-0,1767												
4-0162	0,267	-0,0326												
4-0041	0,270	0,0470												
4-0062	0,27	0,0470												
4-0099	0,27	0,0470												
4-0122	0,27	0,0470												
4-0155	0,27	0,0470												
4-0189	0,27	0,0470												
4-0237	0,270	0,0470												
4-0282	0,27	0,0470												
4-0331	0,270	0,0470												
4-0207	0,274	0,1475												
4-0150	0,28	0,2982												
4-0233	0,28	0,2982												
4-0257	0,283	0,3736												
4-0095	0,29	0,5495												
4-0022	0,30	0,8007												
4-0380	0,311	1,0771												
4-0401	0,312	1,1022												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,2381

Parameter:

Färbung

Vergleichsstandardabweichung:

0,0432

Gruppe:

C

Z(u)-Score = -2

0,1582

Z(u)-Score = +2

0,3338

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0272	0,011	-5,6831
4-0383	0,143	-2,3793
4-0143	0,17	-1,7035
4-0203	0,18	-1,4532
4-0284	0,18	-1,4532
4-0067	0,20	-0,9526
4-0156	0,2	-0,9526
4-0165	0,20	-0,9526
4-0315	0,2	-0,9526
4-0334	0,20	-0,9526
4-0335	0,2	-0,9526
4-0053	0,217	-0,5271
4-0134	0,219	-0,4770
4-0131	0,22	-0,4520
4-0402	0,22	-0,4520
4-0086	0,23	-0,2017
4-0167	0,23	-0,2017
4-0403	0,234	-0,1016
4-0217	0,237	-0,0265
4-0010	0,24	0,0405
4-0031	0,24	0,0405
4-0064	0,24	0,0405
4-0388	0,24	0,0405
4-0083	0,25	0,2493
4-0108	0,25	0,2493
4-0141	0,250	0,2493
4-0367	0,25	0,2493
4-0030	0,257	0,3955
4-0013	0,26	0,4582
4-0283	0,26	0,4582
4-0371	0,26	0,4582
4-0222	0,27	0,6670
4-0244	0,28	0,8758
4-0264	0,28	0,8758
4-0157	0,30	1,2934

4-0239	0,3	1,2934
4-0321	0,3	1,2934
4-0050	0,324	1,7945
4-0194	0,34	2,1286
4-0117	0,60	7,5577

Ringversuch:	4-2011	Mittelwert nach Hampel:	2,0979
Parameter:	Kupfer	Vergleichsstandardabweichung:	0,1049
Gruppe:	A	Z(u)-Score = -2	1,8931
		Z(u)-Score = +2	2,3132

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0356	1,74	-3,4951												
4-0398	1,819	-2,7237												
4-0001	1,997	-0,9854												
4-0140	2,014	-0,8194												
4-0199	2,017	-0,7901												
4-0305	2,025	-0,7120												
4-0282	2,04	-0,5655												
4-0062	2,046	-0,5069												
4-0079	2,055	-0,4190												
4-0099	2,06	-0,3702												
4-0222	2,07	-0,2725												
4-0108	2,074	-0,2335												
4-0239	2,08	-0,1749												
4-0331	2,08	-0,1749												
4-0037	2,082	-0,1554												
4-0351	2,088	-0,0968												
4-0217	2,09	-0,0772												
4-0003	2,096	-0,0186												
4-0167	2,10	0,0194												
4-0017	2,102	0,0380												
4-0074	2,11	0,1123												
4-0131	2,112	0,1309												
4-0040	2,13	0,2981												
4-0396	2,14	0,3910												
4-0063	2,145	0,4374												
4-0141	2,150	0,4839												
4-0328	2,16	0,5768												
4-0130	2,23	1,2270												
4-0373	2,247	1,3849												
4-0371	2,29	1,7844												
4-0165	2,35	2,3417												
4-0272	2,53	4,0138												

Ringversuch:	4-2011	Mittelwert nach Hampel:	2,2517
Parameter:	Kupfer	Vergleichsstandardabweichung:	0,1126
Gruppe:	B	Z(u)-Score = -2	2,0319
		Z(u)-Score = +2	2,4828

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0382	2,0	-2,2903												
4-0067	2,032	-1,9991												
4-0008	2,101	-1,3713												
4-0205	2,117	-1,2258												
4-0145	2,153	-0,8982												
4-0230	2,16	-0,8345												
4-0383	2,20	-0,4706												
4-0358	2,202	-0,4524												
4-0134	2,214	-0,3432												
4-0158	2,217	-0,3159												
4-0143	2,22	-0,2886												
4-0335	2,22	-0,2886												
4-0064	2,223	-0,2613												
4-0249	2,23	-0,1977												
4-0278	2,24	-0,1067												
4-0284	2,240	-0,1067												
4-0334	2,25	-0,0157												
4-0169	2,258	0,0543												
4-0223	2,270	0,1582												
4-0041	2,28	0,2447												
4-0248	2,285	0,2880												
4-0022	2,29	0,3313												
4-0135	2,29	0,3313												
4-0273	2,29	0,3313												
4-0004	2,30	0,4178												
4-0312	2,307	0,4784												
4-0288	2,323	0,6169												
4-0401	2,33	0,6775												
4-0180	2,34	0,7640												
4-0402	2,35	0,8505												
4-0030	2,40	1,2833												
4-0159	2,42	1,4564												
4-0315	2,55	2,5815												
4-0086	2660	23002,0065												

Ringversuch:	4-2011	Mittelwert nach Hampel:	2,5191
Parameter:	Kupfer	Vergleichsstandardabweichung:	0,1260
Gruppe:	C	Z(u)-Score = -2	2,2732
		Z(u)-Score = +2	2,7776

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0137	2,3	-1,7817												
4-0207	2,305	-1,7410												
4-0291	2,320	-1,6190												
4-0070	2,42	-0,8058												
4-0281	2,428	-0,7407												
4-0257	2,445	-0,6025												
4-0194	2,460	-0,4805												
4-0321	2,472	-0,3829												
4-0122	2,473	-0,3747												
4-0095	2,48	-0,3178												
4-0209	2,480	-0,3178												
4-0139	2,492	-0,2202												
4-0060	2,501	-0,1470												
4-0010	2,505	-0,1145												
4-0389	2,505	-0,1145												
4-0072	2,508	-0,0901												
4-0091	2,530	0,0845												
4-0161	2,54	0,1619												
4-0367	2,54	0,1619												
4-0013	2,55	0,2392												
4-0155	2,556	0,2856												
4-0366	2,5654	0,3584												
4-0339	2,583	0,4945												
4-0326	2,593	0,5719												
4-0296	2,6	0,6260												
4-0184	2,61	0,7034												
4-0031	2,640	0,9355												
4-0148	2,65	1,0128												
4-0162	2,744	1,7400												
4-0057	2,78	2,0185												

Ringversuch:	4-2011	Mittelwert nach Hampel:	0,2787
Parameter:	Mangan	Vergleichsstandardabweichung:	0,0241
Gruppe:	A	Z(u)-Score = -2	0,2325
		Z(u)-Score = +2	0,3291

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0243	0,156	-5,3114												
4-0131	0,240	-1,6764												
4-0130	0,245	-1,4600												
4-0062	0,249	-1,2869												
4-0140	0,250	-1,2436												
4-0003	0,2578	-0,9061												
4-0264	0,258	-0,8974												
4-0305	0,258	-0,8974												
4-0001	0,259	-0,8541												
4-0156	0,261	-0,7676												
4-0079	0,267	-0,5079												
4-0331	0,268	-0,4647												
4-0167	0,272	-0,2916												
4-0074	0,273	-0,2483												
4-0222	0,274	-0,2050												
4-0239	0,275	-0,1617												
4-0371	0,275	-0,1617												
4-0099	0,28	0,0501												
4-0108	0,280	0,0501												
4-0017	0,2806	0,0739												
4-0282	0,282	0,1295												
4-0351	0,284	0,2089												
4-0217	0,286	0,2883												
4-0396	0,286	0,2883												
4-0398	0,289	0,4074												
4-0037	0,2892	0,4153												
4-0063	0,293	0,5662												
4-0040	0,298	0,7647												
4-0021	0,299	0,8044												
4-0328	0,300	0,8441												
4-0283	0,305	1,0426												
4-0373	0,307	1,1220												
4-0272	0,308	1,1617												
4-0165	0,311	1,2808												
4-0307	0,32	1,6380												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,4727

Parameter:

Mangan

Vergleichsstandardabweichung:

0,0271

Gruppe:

B

Z(u)-Score = -2

0,4199

Z(u)-Score = +2

0,5286

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
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4-0402	0,38	-3,5105
4-0223	0,397	-2,8666
4-0145	0,422	-1,9197
4-0180	0,430	-1,6167
4-0382	0,430	-1,6167
4-0117	0,442	-1,1622
4-0004	0,448	-0,9350
4-0159	0,452	-0,7835
4-0134	0,457	-0,5941
4-0288	0,461	-0,4426
4-0335	0,461	-0,4426
4-0205	0,462	-0,4047
4-0206	0,4665	-0,2343
4-0169	0,467	-0,2153
4-0230	0,47	-0,1017
4-0284	0,470	-0,1017
4-0383	0,47	-0,1017
4-0067	0,473	0,0113
4-0064	0,4738	0,0399
4-0158	0,475	0,0828
4-0334	0,475	0,0828
4-0358	0,475	0,0828
4-0030	0,480	0,2616
4-0143	0,48	0,2616
4-0273	0,48	0,2616
4-0278	0,482	0,3331
4-0022	0,485	0,4404
4-0086	0,485	0,4404
4-0401	0,4984	0,9197
4-0135	0,502	1,0484
4-0312	0,502	1,0484
4-0041	0,507	1,2272
4-0315	0,509	1,2988
4-0249	0,51	1,3345
4-0248	0,520	1,6922

4-0008	0,543	2,5147
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Ringversuch:	4-2011	Mittelwert nach Hampel:	0,3229
Parameter:	Mangan	Vergleichsstandardabweichung:	0,0194
Gruppe:	C	Z(u)-Score = -2	0,2852
		Z(u)-Score = +2	0,3630

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0291	0,294	-1,5340												
4-0070	0,295	-1,4809												
4-0207	0,296	-1,4279												
4-0235	0,305	-0,9506												
4-0122	0,306	-0,8975												
4-0257	0,3096	-0,7066												
4-0095	0,31	-0,6854												
4-0194	0,31	-0,6854												
4-0281	0,311	-0,6324												
4-0091	0,312	-0,5793												
4-0060	0,313	-0,5263												
4-0031	0,314	-0,4733												
4-0072	0,3167	-0,3301												
4-0326	0,318	-0,2611												
4-0237	0,3192	-0,1975												
4-0296	0,32	-0,1551												
4-0013	0,323	0,0038												
4-0137	0,324	0,0537												
4-0148	0,327	0,2036												
4-0161	0,328	0,2535												
4-0209	0,328	0,2535												
4-0367	0,33	0,3534												
4-0010	0,331	0,4033												
4-0261	0,331	0,4033												
4-0155	0,338	0,7529												
4-0139	0,339	0,8029												
4-0184	0,340	0,8528												
4-0339	0,343	1,0027												
4-0321	0,347	1,2024												
4-0057	0,351	1,4022												
4-0389	0,360	1,8517												
4-0162	0,362	1,9516												

Ringversuch:

4-2011

Mittelwert nach Hampel:

50,6756

Parameter:

Nitrat

Vergleichsstandardabweichung:

2,5338

Gruppe:

A

Z(u)-Score = -2

45,7285

Z(u)-Score = +2

55,8763

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0021	11,10	-15,9995
4-0348	39,57	-4,4897
4-0122	47,3	-1,3647
4-0189	48,08	-1,0493
4-0389	48,8	-0,7582
4-0140	49,0	-0,6774
4-0403	49,0	-0,6774
4-0278	49,1	-0,6370
4-0099	49,2	-0,5965
4-0209	49,5	-0,4753
4-0388	49,78	-0,3621
4-0331	49,8	-0,3540
4-0367	49,8	-0,3540
4-0108	50,2	-0,1923
4-0291	50,25	-0,1720
4-0165	50,3	-0,1518
4-0237	50,31	-0,1478
4-0257	50,41	-0,1074
4-0003	50,43	-0,0993
4-0235	50,45	-0,0912
4-0249	50,50	-0,0710
4-0288	50,5	-0,0710
4-0162	50,53	-0,0588
4-0273	50,77	0,0363
4-0155	51,03	0,1363
4-0050	51,08	0,1555
4-0139	51,4	0,2786
4-0037	51,44	0,2940
4-0064	51,47	0,3055
4-0130	51,5	0,3171
4-0358	51,5	0,3171
4-0194	51,7	0,3940
4-0017	51,77	0,4209
4-0207	51,78	0,4247
4-0053	52,7	0,7785

4-0312	53,19	0,9670
4-0079	53,96	1,2631
4-0001	55,8	1,9707
4-0067	57,12	2,4783
4-0328	63,3	4,8549

Ringversuch:

4-2011

Mittelwert nach Hampel:

64,8461

Parameter:

Nitrat

Vergleichsstandardabweichung:

3,2423

Gruppe:

B

Z(u)-Score = -2

58,5156

Z(u)-Score = +2

71,5010

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0222	1,026	-20,1628
4-0315	58,8	-1,9101
4-0334	59,16	-1,7964
4-0398	62,55	-0,7254
4-0040	63,0	-0,5832
4-0167	63,3	-0,4884
4-0089	63,4	-0,4569
4-0070	63,5	-0,4253
4-0351	63,7	-0,3621
4-0355	63,85	-0,3147
4-0281	63,95	-0,2831
4-0296	64	-0,2673
4-0143	64,17	-0,2136
4-0041	64,2	-0,2041
4-0169	64,22	-0,1978
4-0282	64,3	-0,1725
4-0396	64,4	-0,1409
4-0217	64,6	-0,0777
4-0203	64,65	-0,0619
4-0321	64,83	-0,0051
4-0072	64,85	0,0012
4-0239	65	0,0463
4-0057	65,1	0,0763
4-0134	65,1	0,0763
4-0141	65,1	0,0763
4-0131	65,19	0,1034
4-0004	65,4	0,1665
4-0157	65,40	0,1665
4-0335	66,2	0,4069
4-0373	66,25	0,4219
4-0060	66,44	0,4790
4-0158	66,6	0,5271
4-0022	66,7	0,5572
4-0008	67,1	0,6774
4-0117	67,2	0,7074

4-0195	68	0,9478
4-0086	70,10	1,5790
4-0261	75,54	3,2138

Ringversuch:

4-2011

Mittelwert nach Hampel:

33,1019

Parameter:

Nitrat

Vergleichsstandardabweichung:

1,6551

Gruppe:

C

Z(u)-Score = -2

29,8704

Z(u)-Score = +2

36,4990

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0402	21,6	-7,1186	4-0145	35,8	1,5885									
4-0148	29,3	-2,3530	4-0339	36,00	1,7062									
4-0248	29,7	-2,1054	4-0230	41	4,6498									
4-0030	31,2	-1,1771												
4-0264	31,40	-1,0533												
4-0357	31,59	-0,9357												
4-0031	31,7	-0,8676												
4-0382	31,7	-0,8676												
4-0205	32,0	-0,6820												
4-0159	32,01	-0,6758												
4-0091	32,32	-0,4839												
4-0401	32,6	-0,3106												
4-0042	32,8	-0,1868												
4-0305	32,85	-0,1559												
4-0206	32,91	-0,1188												
4-0135	32,95	-0,0940												
4-0272	33,0	-0,0631												
4-0299	33,00	-0,0631												
4-0223	33,05	-0,0321												
4-0074	33,2	0,0578												
4-0063	33,27	0,0990												
4-0327	33,3	0,1166												
4-0244	33,60	0,2933												
4-0283	33,6	0,2933												
4-0326	33,6	0,2933												
4-0374	33,8	0,4110												
4-0010	33,94	0,4934												
4-0161	33,95	0,4993												
4-0095	34,0	0,5288												
4-0184	34	0,5288												
4-0284	34,07	0,5700												
4-0013	34,1	0,5876												
4-0137	34,15	0,6171												
4-0356	34,6	0,8820												
4-0062	35,00	1,1175												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,3208

Parameter:

Nitrit

Vergleichsstandardabweichung:

0,0182

Gruppe:

A

Z(u)-Score = -2

0,2853

Z(u)-Score = +2

0,3583

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0307	0,095	-12,7384
4-0021	0,1050	-12,1742
4-0344	0,29	-1,7375
4-0348	0,294	-1,5119
4-0017	0,296	-1,3990
4-0067	0,305	-0,8913
4-0328	0,306	-0,8349
4-0140	0,308	-0,7220
4-0189	0,308	-0,7220
4-0278	0,308	-0,7220
4-0079	0,31	-0,6092
4-0235	0,310	-0,6092
4-0388	0,31	-0,6092
4-0237	0,3104	-0,5867
4-0001	0,313	-0,4400
4-0207	0,314	-0,3836
4-0122	0,315	-0,3271
4-0209	0,315	-0,3271
4-0273	0,315	-0,3271
4-0108	0,316	-0,2707
4-0162	0,319	-0,1015
4-0003	0,320	-0,0451
4-0053	0,32	-0,0451
4-0194	0,32	-0,0451
4-0037	0,322	0,0640
4-0358	0,322	0,0640
4-0064	0,323	0,1173
4-0331	0,323	0,1173
4-0139	0,324	0,1706
4-0249	0,325	0,2239
4-0403	0,327	0,3305
4-0099	0,33	0,4904
4-0291	0,330	0,4904
4-0312	0,332	0,5970
4-0150	0,335	0,7569

4-0050	0,3386	0,9488
4-0165	0,339	0,9701
4-0288	0,343	1,1834
4-0367	0,35	1,5565
4-0389	0,351	1,6098
4-0257	0,3586	2,0149
4-0130	0,36	2,0895
4-0155	0,407	4,5947

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,7160

Parameter:

Nitrit

Vergleichsstandardabweichung:

0,0368

Gruppe:

B

Z(u)-Score = -2

0,6443

Z(u)-Score = +2

0,7916

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0040	0,080	-17,7257	4-0396	0,785	1,8262									
4-0261	0,312	-11,2599	4-0141	0,798	2,1703									
4-0157	0,666	-1,3941												
4-0004	0,668	-1,3384												
4-0134	0,676	-1,1154												
4-0072	0,681	-0,9761												
4-0143	0,687	-0,8088												
4-0086	0,688	-0,7810												
4-0217	0,688	-0,7810												
4-0158	0,69	-0,7252												
4-0070	0,692	-0,6695												
4-0057	0,694	-0,6138												
4-0282	0,698	-0,5023												
4-0222	0,7	-0,4465												
4-0315	0,70	-0,4465												
4-0351	0,708	-0,2236												
4-0203	0,71	-0,1678												
4-0335	0,712	-0,1121												
4-0334	0,714	-0,0564												
4-0117	0,715	-0,0285												
4-0321	0,716	-0,0006												
4-0281	0,717	0,0259												
4-0041	0,719	0,0788												
4-0239	0,72	0,1053												
4-0131	0,722	0,1583												
4-0060	0,7274	0,3012												
4-0167	0,73	0,3701												
4-0169	0,73	0,3701												
4-0373	0,736	0,5289												
4-0398	0,739	0,6083												
4-0022	0,75	0,8995												
4-0008	0,752	0,9525												
4-0195	0,753	0,9790												
4-0089	0,76	1,1643												
4-0263	0,76	1,1643												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,4798

Parameter:

Nitrit

Vergleichsstandardabweichung:

0,0240

Gruppe:

C

Z(u)-Score = -2

0,4330

Z(u)-Score = +2

0,5291

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0148	0,459	-0,8885
4-0343	0,46	-0,8458
4-0401	0,4605	-0,8245
4-0030	0,466	-0,5897
4-0264	0,466	-0,5897
4-0091	0,467	-0,5470
4-0305	0,467	-0,5470
4-0230	0,47	-0,4189
4-0326	0,47	-0,4189
4-0374	0,47	-0,4189
4-0223	0,472	-0,3335
4-0062	0,475	-0,2054
4-0206	0,475	-0,2054
4-0382	0,475	-0,2054
4-0272	0,476	-0,1627
4-0074	0,48	0,0077
4-0095	0,48	0,0077
4-0135	0,480	0,0077
4-0299	0,480	0,0077
4-0013	0,482	0,0890
4-0284	0,482	0,0890
4-0042	0,483	0,1296
4-0161	0,483	0,1296
4-0339	0,485	0,2108
4-0010	0,486	0,2514
4-0046	0,4868	0,2839
4-0031	0,488	0,3326
4-0357	0,488	0,3326
4-0063	0,490	0,4139
4-0145	0,490	0,4139
4-0327	0,49	0,4139
4-0137	0,491	0,4545
4-0244	0,493	0,5357
4-0248	0,493	0,5357
4-0159	0,494	0,5763

4-0283	0,512	1,3074
4-0205	0,524	1,7948
4-0184	0,60	4,8816
4-0402	0,60	4,8816

Ringversuch:

4-2011

Mittelwert nach Hampel:

5,1697

Parameter:

Oxidierbarkeit

Vergleichsstandardabweichung:

0,4429

Gruppe:

A

Z(u)-Score = -2

4,3186

Z(u)-Score = +2

6,0969

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0022	3,09	-4,8872
4-0017	4,09	-2,5373
4-0063	4,51	-1,5503
4-0117	4,6	-1,3388
4-0284	4,78	-0,9158
4-0041	4,86	-0,7279
4-0159	4,86	-0,7279
4-0148	4,88	-0,6809
4-0388	4,88	-0,6809
4-0223	4,89	-0,6574
4-0291	4,95	-0,5164
4-0321	4,98	-0,4459
4-0079	5,02	-0,3519
4-0062	5,09	-0,1874
4-0326	5,10	-0,1639
4-0273	5,12	-0,1169
4-0382	5,125	-0,1051
4-0203	5,13	-0,0934
4-0249	5,188	0,0394
4-0001	5,2	0,0653
4-0134	5,22	0,1084
4-0248	5,295	0,2702
4-0108	5,32	0,3241
4-0358	5,36	0,4104
4-0158	5,37	0,4320
4-0074	5,39	0,4751
4-0169	5,50	0,7124
4-0402	5,50	0,7124
4-0145	5,52	0,7555
4-0339	5,80	1,3595
4-0335	5,82	1,4026
4-0135	6,00	1,7909
4-0205	6,29	2,4164

Ringversuch:

4-2011

Mittelwert nach Hampel:

7,3849

Parameter:

Oxidierbarkeit

Vergleichsstandardabweichung:

0,3692

Gruppe:

B

Z(u)-Score = -2

6,6640

Z(u)-Score = +2

8,1428

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0189	6,752	-1,7558												
4-0261	6,85	-1,4840												
4-0031	7,04	-0,9569												
4-0257	7,057	-0,9097												
4-0122	7,07	-0,8737												
4-0373	7,18	-0,5685												
4-0155	7,21	-0,4853												
4-0396	7,21	-0,4853												
4-0281	7,24	-0,4021												
4-0327	7,24	-0,4021												
4-0278	7,25	-0,3743												
4-0299	7,28	-0,2911												
4-0305	7,28	-0,2911												
4-0064	7,291	-0,2606												
4-0030	7,32	-0,1801												
4-0348	7,32	-0,1801												
4-0371	7,32	-0,1801												
4-0150	7,35	-0,0969												
4-0161	7,35	-0,0969												
4-0067	7,45	0,1717												
4-0086	7,46	0,1981												
4-0137	7,5	0,3037												
4-0236	7,524	0,3670												
4-0008	7,55	0,4356												
4-0162	7,62	0,6203												
4-0139	7,64	0,6731												
4-0209	7,66	0,7259												
4-0091	7,70	0,8314												
4-0053	7,77	1,0162												
4-0004	7,896	1,3487												
4-0237	7,921	1,4146												
4-0328	8,28	2,3620												
4-0050	11,89	11,8884												
4-0184	30,5	60,9981												

Ringversuch:

4-2011

Mittelwert nach Hampel:

6,2583

Parameter:

Oxidierbarkeit

Vergleichsstandardabweichung:

0,3129

Gruppe:

C

Z(u)-Score = -2

5,6474

Z(u)-Score = +2

6,9006

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0315	5,3	-3,1372												
4-0272	5,79	-1,5332												
4-0244	5,90	-1,1731												
4-0264	5,94	-1,0421												
4-0143	5,97	-0,9439												
4-0239	6	-0,8457												
4-0222	6,05	-0,6820												
4-0057	6,1	-0,5184												
4-0194	6,1	-0,5184												
4-0131	6,12	-0,4529												
4-0157	6,12	-0,4529												
4-0312	6,17	-0,2892												
4-0095	6,2	-0,1910												
4-0195	6,2	-0,1910												
4-0374	6,2	-0,1910												
4-0037	6,21	-0,1583												
4-0140	6,21	-0,1583												
4-0167	6,26	0,0051												
4-0072	6,28	0,0674												
4-0130	6,3	0,1297												
4-0060	6,31	0,1608												
4-0217	6,38	0,3788												
4-0282	6,4	0,4411												
4-0334	6,43	0,5345												
4-0156	6,46	0,6279												
4-0331	6,46	0,6279												
4-0013	6,53	0,8459												
4-0401	6,57	0,9705												
4-0380	6,63	1,1573												
4-0099	6,64	1,1884												
4-0040	6,69	1,3441												
4-0165	6,99	2,2783												

Ringversuch:

4-2011

Mittelwert nach Hampel:

7,4228

Parameter:

pH-Wert

Vergleichsstandardabweichung:

0,0763

Gruppe:

A

Z(u)-Score = -2

7,2711

Z(u)-Score = +2

7,5761

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0152	7,1	-4,2549
4-0348	7,17	-3,3322
4-0297	7,2	-2,9368
4-0257	7,26	-2,1459
4-0274	7,27	-2,0141
4-0165	7,29	-1,7505
4-0328	7,32	-1,3551
4-0141	7,33	-1,2232
4-0312	7,33	-1,2232
4-0399	7,36	-0,8278
4-0398	7,37	-0,6960
4-0315	7,38	-0,5642
4-0383	7,38	-0,5642
4-0050	7,39	-0,4324
4-0258	7,39	-0,4324
4-0335	7,39	-0,4324
4-0091	7,40	-0,3006
4-0194	7,4	-0,3006
4-0223	7,40	-0,3006
4-0296	7,4	-0,3006
4-0003	7,41	-0,1688
4-0017	7,41	-0,1688
4-0207	7,41	-0,1688
4-0327	7,41	-0,1688
4-0031	7,42	-0,0370
4-0063	7,43	0,0939
4-0064	7,43	0,0939
4-0155	7,43	0,0939
4-0278	7,43	0,0939
4-0117	7,44	0,2243
4-0131	7,44	0,2243
4-0162	7,44	0,2243
4-0244	7,44	0,2243
4-0360	7,44	0,2243
4-0035	7,45	0,3548

4-0189	7,45	0,3548
4-0382	7,45	0,3548
4-0001	7,47	0,6157
4-0021	7,48	0,7462
4-0074	7,48	0,7462
4-0239	7,48	0,7462
4-0089	7,49	0,8767
4-0134	7,49	0,8767
4-0367	7,49	0,8767
4-0284	7,50	1,0071
4-0143	7,51	1,1376
4-0206	7,51	1,1376
4-0077	7,52	1,2681
4-0351	7,53	1,3985
4-0337	7,54	1,5290
4-0230	7,55	1,6594

Ringversuch:

4-2011

Mittelwert nach Hampel:

7,0160

Parameter:

pH-Wert

Vergleichsstandardabweichung:

0,0712

Gruppe:

B

Z(u)-Score = -2

6,8742

Z(u)-Score = +2

7,1592

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0231	6,50	-7,2791
4-0022	6,74	-3,8935
4-0065	6,75	-3,7525
4-0025	6,84	-2,4829
4-0120	6,91	-1,4954
4-0245	6,91	-1,4954
4-0145	6,93	-1,2133
4-0040	6,95	-0,9311
4-0320	6,95	-0,9311
4-0321	6,95	-0,9311
4-0144	6,96	-0,7901
4-0371	6,96	-0,7901
4-0157	6,97	-0,6490
4-0167	6,97	-0,6490
4-0261	6,98	-0,5079
4-0037	6,99	-0,3669
4-0083	6,99	-0,3669
4-0248	6,99	-0,3669
4-0264	6,99	-0,3669
4-0331	6,99	-0,3669
4-0339	6,99	-0,3669
4-0357	6,99	-0,3669
4-0053	7,00	-0,2258
4-0057	7,00	-0,2258
4-0158	7,0	-0,2258
4-0330	7,00	-0,2258
4-0353	7,00	-0,2258
4-0388	7,00	-0,2258
4-0004	7,01	-0,0847
4-0079	7,01	-0,0847
4-0122	7,01	-0,0847
4-0208	7,01	-0,0847
4-0373	7,01	-0,0847
4-0288	7,02	0,0558
4-0067	7,03	0,1954

4-0135	7,03	0,1954
4-0305	7,03	0,1954
4-0008	7,04	0,3351
4-0137	7,05	0,4747
4-0099	7,06	0,6143
4-0402	7,07	0,7540
4-0095	7,08	0,8936
4-0169	7,08	0,8936
4-0401	7,09	1,0333
4-0281	7,12	1,4522
4-0299	7,12	1,4522
4-0338	7,12	1,4522
4-0195	7,13	1,5918
4-0291	7,13	1,5918
4-0209	7,15	1,8711
4-0233	7,2	2,5693
4-0389	7,22	2,8486

Ringversuch:

4-2011

Mittelwert nach Hampel:

7,7633

Parameter:

pH-Wert

Vergleichsstandardabweichung:

0,0776

Gruppe:

C

Z(u)-Score = -2

7,6088

Z(u)-Score = +2

7,9193

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0293	7,44	-4,1851	4-0013	7,80	0,4704									
4-0028	7,5	-3,4084	4-0148	7,80	0,4704									
4-0359	7,55	-2,7612	4-0159	7,80	0,4704									
4-0140	7,66	-1,3372	4-0184	7,8	0,4704									
4-0203	7,67	-1,2078	4-0334	7,80	0,4704									
4-0235	7,67	-1,2078	4-0041	7,81	0,5986									
4-0042	7,69	-0,9489	4-0072	7,82	0,7267									
4-0070	7,70	-0,8194	4-0086	7,82	0,7267									
4-0292	7,70	-0,8194	4-0161	7,82	0,7267									
4-0100	7,71	-0,6899	4-0343	7,82	0,7267									
4-0108	7,71	-0,6899	4-0374	7,82	0,7267									
4-0333	7,72	-0,5605	4-0010	7,84	0,9830									
4-0347	7,72	-0,5605	4-0060	7,85	1,1112									
4-0150	7,73	-0,4310	4-0392	7,85	1,1112									
4-0325	7,73	-0,4310	4-0253	7,96	2,5210									
4-0380	7,73	-0,4310												
4-0129	7,74	-0,3016												
4-0139	7,74	-0,3016												
4-0272	7,74	-0,3016												
4-0326	7,74	-0,3016												
4-0085	7,75	-0,1721												
4-0237	7,75	-0,1721												
4-0249	7,75	-0,1721												
4-0358	7,76	-0,0427												
4-0403	7,76	-0,0427												
4-0030	7,77	0,0859												
4-0062	7,77	0,0859												
4-0205	7,77	0,0859												
4-0217	7,77	0,0859												
4-0396	7,77	0,0859												
4-0130	7,78	0,2141												
4-0282	7,78	0,2141												
4-0222	7,79	0,3422												
4-0273	7,79	0,3422												
4-0283	7,79	0,3422												

Ringversuch:

4-2011

Mittelwert nach Hampel:

7,6936

Parameter:

TOC

Vergleichsstandardabweichung:

0,3847

Gruppe:

A

Z(u)-Score = -2

6,9425

Z(u)-Score = +2

8,4832

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0339	6,45	-3,3115												
4-0063	7,200	-1,3144												
4-0274	7,24	-1,2079												
4-0326	7,28	-1,1013												
4-0108	7,4	-0,7818												
4-0402	7,4	-0,7818												
4-0062	7,49	-0,5421												
4-0003	7,494	-0,5315												
4-0159	7,56	-0,3557												
4-0291	7,56	-0,3557												
4-0203	7,7	0,0162												
4-0367	7,79	0,2442												
4-0079	7,8	0,2695												
4-0335	7,80	0,2695												
4-0134	7,81	0,2949												
4-0158	7,83	0,3455												
4-0273	7,85	0,3962												
4-0042	7,91	0,5482												
4-0022	7,95	0,6495												
4-0382	8,0	0,7761												
4-0180	8,11	1,0548												
4-0235	8,254	1,4195												
4-0017	8,40	1,7893												

Ringversuch:	4-2011	Mittelwert nach Hampel:	11,6335
Parameter:	TOC	Vergleichsstandardabweichung:	0,8581
Gruppe:	B	Z(u)-Score = -2	9,9761
		Z(u)-Score = +2	13,4177

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0155	10,25	-1,6695												
4-0064	10,58	-1,2713												
4-0137	10,80	-1,0058												
4-0236	10,96	-0,8127												
4-0257	11,16	-0,5714												
4-0030	11,29	-0,4145												
4-0373	11,51	-0,1491												
4-0050	11,70	0,0745												
4-0207	11,73	0,1081												
4-0067	12	0,4108												
4-0053	12,1	0,5229												
4-0371	12,12	0,5453												
4-0031	12,2	0,6350												
4-0396	12,36	0,8143												
4-0281	12,50	0,9713												
4-0351	12,78	1,2851												

Ringversuch:

4-2011

Mittelwert nach Hampel:

9,4589

Parameter:

TOC

Vergleichsstandardabweichung:

0,6598

Gruppe:

C

Z(u)-Score = -2

8,1822

Z(u)-Score = +2

10,8277

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
4-0315	6,8	-4,1654												
4-0037	8,33	-1,7685												
4-0072	8,34	-1,7528												
4-0355	8,69	-1,2045												
4-0398	9,04	-0,6562												
4-0380	9,07	-0,6092												
4-0131	9,16	-0,4682												
4-0010	9,23	-0,3585												
4-0013	9,23	-0,3585												
4-0401	9,28	-0,2802												
4-0222	9,30	-0,2489												
4-0060	9,33	-0,2019												
4-0239	9,4	-0,0922												
4-0130	9,45	-0,0139												
4-0070	9,52	0,0893												
4-0194	9,6	0,2062												
4-0312	9,6	0,2062												
4-0272	9,77	0,4546												
4-0283	9,78	0,4692												
4-0143	9,93	0,6884												
4-0099	10,2	1,0829												
4-0217	10,7	1,8134												
4-0282	11,06	2,3394												
4-0057	11,18	2,5147												

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,8455

Parameter:

Trübung

Vergleichsstandardabweichung:

0,1250

Gruppe:

A

Z(u)-Score = -2

0,6113

Z(u)-Score = +2

1,1169

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0356	0,61	-2,0109
4-0297	0,62	-1,9255
4-0388	0,64	-1,7547
4-0037	0,67	-1,4985
4-0237	0,72	-1,0715
4-0325	0,73	-0,9861
4-0180	0,732	-0,9690
4-0169	0,74	-0,9007
4-0263	0,75	-0,8153
4-0203	0,77	-0,6445
4-0070	0,79	-0,4737
4-0017	0,795	-0,4310
4-0003	0,80	-0,3883
4-0143	0,80	-0,3883
4-0239	0,80	-0,3883
4-0086	0,812	-0,2858
4-0305	0,818	-0,2346
4-0089	0,83	-0,1321
4-0145	0,83	-0,1321
4-0021	0,832	-0,1151
4-0057	0,85	0,0334
4-0205	0,85	0,0334
4-0117	0,858	0,0923
4-0060	0,86	0,1070
4-0367	0,86	0,1070
4-0031	0,88	0,2544
4-0355	0,88	0,2544
4-0222	0,89	0,3280
4-0281	0,89	0,3280
4-0389	0,89	0,3280
4-0158	0,9	0,4017
4-0217	0,90	0,4017
4-0373	0,91	0,4754
4-0159	0,92	0,5491
4-0403	0,92	0,5491

4-0134	0,96	0,8437
4-0282	0,99	1,0648
4-0321	1	1,1384
4-0135	1,01	1,2121
4-0072	1,034	1,3889
4-0001	1,20	2,6119
4-0333	1,22	2,7592
4-0334	1,69	6,2218

Ringversuch:

4-2011

Mittelwert nach Hampel:

0,6708

Parameter:

Trübung

Vergleichsstandardabweichung:

0,1066

Gruppe:

B

Z(u)-Score = -2

0,4719

Z(u)-Score = +2

0,9039

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0248	0,157	-5,1672
4-0122	0,46	-2,1201
4-0357	0,500	-1,7178
4-0288	0,53	-1,4162
4-0226	0,54	-1,3156
4-0022	0,55	-1,2150
4-0358	0,55	-1,2150
4-0025	0,56	-1,1145
4-0139	0,56	-1,1145
4-0283	0,57	-1,0139
4-0120	0,58	-0,9133
4-0150	0,59	-0,8128
4-0223	0,59	-0,8128
4-0244	0,59	-0,8128
4-0062	0,61	-0,6116
4-0380	0,62	-0,5111
4-0091	0,64	-0,3100
4-0074	0,67	-0,0083
4-0327	0,67	-0,0083
4-0374	0,67	-0,0083
4-0137	0,675	0,0359
4-0339	0,678	0,0616
4-0398	0,678	0,0616
4-0326	0,68	0,0788
4-0008	0,69	0,1646
4-0312	0,70	0,2504
4-0189	0,71	0,3362
4-0040	0,72	0,4220
4-0041	0,72	0,4220
4-0206	0,72	0,4220
4-0077	0,73	0,5078
4-0264	0,73	0,5078
4-0161	0,75	0,6794
4-0162	0,76	0,7652
4-0184	0,76	0,7652

4-0063	0,763	0,7909
4-0004	0,78	0,9368
4-0207	0,78	0,9368
4-0272	0,790	1,0226
4-0095	0,80	1,1084
4-0148	0,808	1,1770
4-0311	0,81	1,1942
4-0335	0,96	2,4812

Ringversuch:

4-2011

Mittelwert nach Hampel:

1,1271

Parameter:

Trübung

Vergleichsstandardabweichung:

0,1993

Gruppe:

C

Z(u)-Score = -2

0,7579

Z(u)-Score = +2

1,5675

Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score	Code	Laborwert	Z(u)-Score
------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------	------	-----------	------------

4-0208	0,66	-2,5306
4-0291	0,71	-2,2597
4-0347	0,73	-2,1513
4-0315	0,74	-2,0971
4-0167	0,756	-2,0105
4-0359	0,85	-1,5012
4-0067	0,91	-1,1761
4-0383	0,97	-0,8511
4-0292	0,99	-0,7427
4-0230	1,0	-0,6886
4-0233	1,0	-0,6886
4-0028	1,02	-0,5802
4-0273	1,02	-0,5802
4-0402	1,02	-0,5802
4-0328	1,05	-0,4177
4-0099	1,07	-0,3093
4-0331	1,08	-0,2551
4-0351	1,093	-0,1847
4-0079	1,1	-0,1468
4-0249	1,10	-0,1468
4-0157	1,12	-0,0384
4-0010	1,14	0,0586
4-0083	1,14	0,0586
4-0257	1,14	0,0586
4-0401	1,16	0,1494
4-0013	1,18	0,2402
4-0050	1,19	0,2857
4-0360	1,20	0,3311
4-0165	1,25	0,5581
4-0382	1,26	0,6035
4-0141	1,28	0,6943
4-0209	1,28	0,6943
4-0278	1,28	0,6943
4-0053	1,30	0,7852
4-0108	1,30	0,7852

4-0064	1,305	0,8079
4-0131	1,31	0,8306
4-0155	1,33	0,9214
4-0130	1,34	0,9668
4-0202	1,35	1,0122
4-0320	1,37	1,1030
4-0030	1,40	1,2393
4-0194	1,57	2,0112

