

Nome punto	Campagna	Benzene	Etilbenzen e	Stirene	Toluene	o-Xilene	m,p- Xilene	Triclorom etano (clorofo mio)	Cloruro di vinile	1,2- Dicloroet ano	1,1- Dicloroeti lene	Tricloroet ilene
		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
EP001	giu-lug 2011	991	< 1,9	< 1	18,4	< 1,4	< 5,2	8281		64,4	796	2338
EP002	giu-lug 2011	< 0,012	0,062	< 0,01	< 0,012	0,1	0,51	< 0,014		0,12	0,38	0,28
EP003	giu-lug 2011	< 0,012	< 0,019	< 0,01	0,45	< 0,014	0,3	< 0,014		< 0,013	0,004	< 0,02
EP025	giu-lug 2011	< 0,012	0,048	< 0,01	0,29	0,061	0,39	0,57		0,76	4,6	3,6
GP001	giu-lug 2011	4,2	0,057	< 0,01	2,2	0,16	0,49	5,4		2,6	148	17,4
GP002	giu-lug 2011	< 0,012	< 0,019	< 0,01	< 0,012	< 0,014	< 0,052	0,65		2,7	22,4	6,1
GP003	giu-lug 2011	< 0,012	< 0,019	< 0,01	0,33	< 0,014	< 0,052	1,8		0,32	4,9	5,7
GP026	giu-lug 2011	< 0,012	< 0,019	< 0,01	< 0,012	< 0,014	< 0,052	1,5		0,22	21,4	3
GP027	giu-lug 2011	< 0,012	< 0,019	< 0,01	< 0,012	< 0,014	< 0,052	0,84		0,17	2,5	3,4
GP031	giu-lug 2011	< 0,012	< 0,019	< 0,01	< 0,012	< 0,014	< 0,052	1,2		0,49	5,6	5,1
GP032	giu-lug 2011	2469	181	14,2	536	134	544	4870		2128	8276	1421
GP033	giu-lug 2011	423	0,19	< 0,1	7,4	13,4	1,3	485		58,8	789	239
EP001	mar-apr 2012	0,93	0,22	0,02	< 0,013	0,23	0,27	6,76	24,3	4,53	50,5	176
EP002	mar-apr 2012	< 0,019	< 0,014	< 0,012	< 0,013	< 0,02	0,017	0,27	0,1	0,48	1,63	1,41
EP003	mar-apr 2012	< 0,019	0,015	< 0,012	< 0,013	< 0,02	0,032	1,49	0,39	0,59	4,46	1,21
EP025	mar-apr 2012	< 0,019	< 0,014	< 0,012	< 0,013	< 0,02	0,018	1,54	0,85	1,33	6,36	6,36
GP001	mar-apr 2012	0,447	0,028	< 0,012	< 0,013	0,025	0,06	2,88	3,77	2,43	40,4	27,2
GP002	mar-apr 2012	< 0,019	< 0,014	< 0,012	< 0,013	< 0,02	0,032	1,61	0,759	2	25,2	4,6
GP003	mar-apr 2012	< 0,019	0,019	< 0,012	< 0,013	< 0,02	0,035	0,73	0,021	0,237	1,93	3,34
GP026	mar-apr 2012	< 0,019	< 0,014	< 0,012	< 0,013	< 0,02	0,022	1,08	0,63	0,12	15,2	1,61
GP027	mar-apr 2012	< 0,019	0,028	< 0,012	0,24	0,039	0,099	0,25	0,41	0,15	0,58	1,41
GP031	mar-apr 2012	< 0,019	< 0,014	< 0,012	< 0,013	< 0,02	0,024	1,47	0,205	1,08	8,99	16,3
GP032	mar-apr 2012	1320	573	43,4	1225	243	588	739	4280	96,1	844	455
GP033	mar-apr 2012	146	0,66	0,67	< 0,13	1,86	0,83	122	788	24	446	180

Nota: ai fini del calcolo del 95%UCL, le concentrazioni inferiori al limite di rilevabilità sono state poste pari al limite stesso.

Nome punto	Campagna	Tetraclor oetilene (PCE)	Esacloro butadiene	1,1- Dicloroet ano	1,2- dicloroeti lene	1,2- Dicloropr opano	1,1,2- Tricloroet ano	1,2,3- Triclorop ropano	1,1,2,2- Tetraclor oetano	Diclorom etano	Monoclor obenzene	1,4- Diclorobe nzene	Idrocarbu ri Totali
		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	ug/l	µg/l	µg/l	µg/l
EP001	giu-lug 2011	1248	< 0,14	6312	2236	35	4806	< 0,089	< 0,1	< 2,3	454	13	90
EP002	giu-lug 2011	0,11	< 0,0014	1,3	0,47	0,0064	0,87	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
EP003	giu-lug 2011	< 0,012	< 0,0014	< 0,014	< 0,017	0,0038	< 0,0013	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
EP025	giu-lug 2011	1,4	< 0,0014	11,2	6	0,12	11,8	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP001	giu-lug 2011	6,5	< 0,0014	127	46,6	0,71	90	< 0,00089	< 0,001	< 0,023	9,4	0,43	< 12
GP002	giu-lug 2011	2,4	< 0,0014	21,4	8,8	0,14	28,2	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP003	giu-lug 2011	2,7	< 0,0014	14,7	7,3	0,16	20,9	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP026	giu-lug 2011	1,3	< 0,0014	12,4	5,1	0,06	12,7	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP027	giu-lug 2011	1,6	< 0,0014	8,8	3,5	0,082	11	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP031	giu-lug 2011	2,6	< 0,0014	18,1	7,8	0,14	18,3	< 0,00089	< 0,001	< 0,023	< 0,011	< 0,001	< 12
GP032	giu-lug 2011	1199	3,1	10055	2866	6,8	1930	< 0,89	< 1	2406	1075	9,5	438
GP033	giu-lug 2011	51,5	< 0,014	2130	566	1,1	351	< 0,0089	< 0,01	< 0,23	134	0,92	31
EP001	mar-apr 2012	90,4	0,18	741	153	4,07	360	0,47	0,078	< 0,049	20,4	1,1	31
EP002	mar-apr 2012	0,68	< 0,011	9,76	2,41	0,046	4,79	0,0057	< 0,0013	< 0,049	< 0,019	< 0,013	< 10
EP003	mar-apr 2012	0,71	< 0,011	18,4	4,75	0,044	5,84	0,0095	0,0025	< 0,049	< 0,019	< 0,013	< 10
EP025	mar-apr 2012	3,22	< 0,011	30,6	10,8	0,18	20,7	0,023	0,0026	< 0,049	< 0,019	< 0,013	36
GP001	mar-apr 2012	14,4	< 0,011	154	45,2	0,632	88,5	0,101	< 0,0013	< 0,049	1,79	0,097	< 10
GP002	mar-apr 2012	2,56	0,058	29,6	7,71	0,084	18,9	0,023	0,004	< 0,049	0,098	< 0,013	< 10
GP003	mar-apr 2012	2,21	< 0,011	15,1	3,5	0,089	10,6	< 0,00092	< 0,0013	< 0,049	0,114	< 0,013	< 10
GP026	mar-apr 2012	0,85	< 0,011	10,8	3,25	0,037	6,81	0,0055	< 0,0013	< 0,049	0,156	0,457	< 10
GP027	mar-apr 2012	0,86	< 0,011	6,4	1,25	0,084	5,35	0,0042	< 0,0013	< 0,049	< 0,019	< 0,013	< 10
GP031	mar-apr 2012	9,46	0,036	108	18	0,433	27,3	0,0631	0,0051	< 0,049	0,133	0,064	< 10
GP032	mar-apr 2012	259	< 0,11	4917	721	1,56	139	0,138	0,64	< 0,49	1554	2,02	507
GP033	mar-apr 2012	48,8	< 0,11	1201	273	1,6	185	0,3	0,18	< 0,49	150	9,59	11,9

Appendice 3.2 - Output del software ProUCL - Concentrazioni rappresentative (area E-G)

General UCL Statistics for Full Data Sets

User Selected Options

From File	M:\AR\46318605 - Syndial - Area Micorosa Brindisi (BR)\input\UCL\Crappl\input_Crapp_E-G.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Arsenico

General Statistics

Number of Valid Observations	24	Number of Distinct Observations	21
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Raw Statistics

Minimum	0,92
Maximum	474
Mean	29,31
Median	1,6
SD	102,4
Coefficient of Variation	3,492
Skewness	4,059

Log-transformed Statistics

Minimum of Log Data	-0,0834
Maximum of Log Data	6,161
Mean of log Data	0,916
SD of log Data	1,514

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic	0,31
Shapiro Wilk Critical Value	0,916

Data not Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic	0,516
Shapiro Wilk Critical Value	0,916

Data not Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL	65,12
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95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL	82,18
95% Modified-t UCL	68,01

Assuming Lognormal Distribution

95% H-UCL	21,91
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95% Chebyshev (MVUE) UCL	19,07
97,5% Chebyshev (MVUE) UCL	24,22
99% Chebyshev (MVUE) UCL	34,33

Gamma Distribution Test

k star (bias corrected)	0,275
Theta Star	106,5
nu star	13,21
Approximate Chi Square Value (.05)	6,034
Adjusted Level of Significance	0,0392
Adjusted Chi Square Value	5,695

Anderson-Darling Test Statistic	6,981
Anderson-Darling 5% Critical Value	0,859
Kolmogorov-Smirnov Test Statistic	0,497
Kolmogorov-Smirnov 5% Critical Value	0,194

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL	64,17
95% Adjusted Gamma UCL	67,99

Potential UCL to Use

Data Distribution

Data do not follow a Discernable Distribution (0.05)

Nonparametric Statistics

95% CLT UCL	63,68
95% Jackknife UCL	65,12
95% Standard Bootstrap UCL	62,18
95% Bootstrap-t UCL	5346
95% Hall's Bootstrap UCL	2121
95% Percentile Bootstrap UCL	68,54
95% BCA Bootstrap UCL	92,38
95% Chebyshev(Mean, Sd) UCL	120,4
97.5% Chebyshev(Mean, Sd) UCL	159,8
99% Chebyshev(Mean, Sd) UCL	237,2

Use 99% Chebyshev (Mean, Sd) UCL 237,2

Use 95% Hall's Bootstrap UCL 495,6

Use 99% Chebyshev (Mean, Sd) UCL 277,5

## General Statistics

Number of Distinct Observations 8

### Log-transformed Statistics

Minimum of Log Data -4,605  
Maximum of Log Data 3,77  
Mean of log Data -3,393  
SD of log Data 2,401

### Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,305  
Shapiro Wilk Critical Value 0,916

Shapiro Wilk Test Statistic 0,566  
Shapiro Wilk Critical Value 0,916

**Data not Lognormal at 5% Significance Level**

### Assuming Lognormal Distribution

95% H-UCL 6,245

95% Chebyshev (MVUE) UCL 1,571

97,5% Chebyshev (MVUE) UCL 2,071

99% Chebyshev (MVUE) UCL 3,052

### Data Distribution

**Data do not follow a Discernable Distribution (0.05)**

## Nonparametric Statistics

95% CLT UCL 5,565

95% Jackknife UCL 5,695

95% Standard Bootstrap UCL 5.528

95% Bootstrap-t UCL 101,5

95% Hall's Bootstrap UCL 98,45

95% Percentile Bootstrap UCL 6,033

95% BCA Bootstrap UCL 8,474

95% Chebyshev(Mean, Sd) UCL 10,65

97.5% Chebyshev(Mean, Sd) UCL 14,19

99% Chebyshev(Mean, Sd) UCL 21,13

Use 99% Chebyshev (Mean, Sd) UCL 21,13

### Potential UCL to Use

**In Case Bootstrap t and/or Hall's Bootstrap yields an unreasonably large UCL value, use 97.5% or 99% Chebyshev (Mean, Sd) UCL**

## General Statistics

Number of Distinct Observations 13

### Log-transformed Statistics

Minimum of Log Data -4,269  
Maximum of Log Data 5,493  
Mean of log Data -2,266  
SD of log Data 2,929

### Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,339  
Shapiro Wilk Critical Value 0,916

Shapiro Wilk Test Statistic 0,709  
Shapiro Wilk Critical Value 0,916

**Data not Lognormal at 5% Significance Level**

### Assuming Lognormal Distribution

95% H-UCL 229,6  
95% Chebyshev (MVUE) UCL 16,63  
97,5% Chebyshev (MVUE) UCL 22,16  
99% Chebyshev (MVUE) UCL 33,01

### Data Distribution

k star (bias corrected)	0,16
Theta Star	102,5
nu star	7,696
Approximate Chi Square Value (.05)	2,56
Adjusted Level of Significance	0,0392
Adjusted Chi Square Value	2,357
Anderson-Darling Test Statistic	4,882
Anderson-Darling 5% Critical Value	0,915
Kolmogorov-Smirnov Test Statistic	0,37
Kolmogorov-Smirnov 5% Critical Value	0,199

**Data do not follow a Discernable Distribution (0.05)**

## Nonparametric Statistics

95% CLT UCL 35,05  
95% Jackknife UCL 35,83  
95% Standard Bootstrap UCL 34,32  
95% Bootstrap-t UCL 335,9  
95% Hall's Bootstrap UCL 400,7  
95% Percentile Bootstrap UCL 36,73  
95% BCA Bootstrap UCL 46,74  
95% Chebyshev(Mean, Sd) UCL 65,77  
97.5% Chebyshev(Mean, Sd) UCL 87,12  
99% Chebyshev(Mean, Sd) UCL 129

95% Approximate Gamma UCL 49,41  
95% Adjusted Gamma UCL 53,68

Use 99% Chebyshev (Mean, Sd) UCL 129



## General Statistics

Number of Distinct Observations 19

## Raw Statistics

### Log-transformed Statistics

Minimum of Log Data -4,075  
Maximum of Log Data 6,377  
Mean of log Data -1,509  
SD of log Data 2,848

### Relevant UCL Statistics

### Normal Distribution Test

Shapiro Wilk Test Statistic 0,322  
Shapiro Wilk Critical Value 0,916

**Data not Normal at 5% Significance Level**

### Assuming Normal Distribution

95% Student's-t UCL 103,5

### 95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL 124,2  
95% Modified-t UCL 107,1

### Gamma Distribution Test

k star (bias corrected) 0,154  
Theta Star 309,5  
nu star 7,379

Approximate Chi Square Value (.05) 2,381

Adjusted Level of Significance 0,0392

Adjusted Chi Square Value 2,186

Anderson-Darling Test Statistic 5,162

Anderson-Darling 5% Critical Value 0,918

Kolmogorov-Smirnov Test Statistic 0,393

Kolmogorov-Smirnov 5% Critical Value 0,199

**Data not Gamma Distributed at 5% Significance Level**

### Assuming Gamma Distribution

95% Approximate Gamma UCL 147,5  
95% Adjusted Gamma UCL 160,6

### Potential UCL to Use

### Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,762  
Shapiro Wilk Critical Value 0,916

**Data not Lognormal at 5% Significance Level**

### Assuming Lognormal Distribution

95% H-UCL 324,4

95% Chebyshev (MVUE) UCL 29,17

97,5% Chebyshev (MVUE) UCL 38,81

99% Chebyshev (MVUE) UCL 57,75

### Data Distribution

**Data do not follow a Discernable Distribution (0.05)**

## Nonparametric Statistics

95% CLT UCL 101,2

95% Jackknife UCL 103,5

95% Standard Bootstrap UCL 100

95% Bootstrap-t UCL 7253

95% Hall's Bootstrap UCL 8801

95% Percentile Bootstrap UCL 96,53

95% BCA Bootstrap UCL 140,3

95% Chebyshev(Mean, Sd) UCL 189,8

97.5% Chebyshev(Mean, Sd) UCL 251,3

99% Chebyshev(Mean, Sd) UCL 372,1

Use 99% Chebyshev (Mean, Sd) UCL 372,1

**In Case Bootstrap t and/or Hall's Bootstrap yields an unreasonably large UCL value, use 97.5% or 99% Chebyshev (Mean, Sd) UCL**

**In Case Bootstrap t and/or Hall's Bootstrap yields an unreasonably large UCL value, use 97.5% or 99% Chebyshev (Mean, Sd) UCL**

1,2-Dicloroetano

General Statistics

Number of Valid Observations 24

Number of Distinct Observations 23

Raw Statistics

Minimum 0,013  
Maximum 2128  
Mean 99,65  
Median 0,92  
SD 432,8  
Coefficient of Variation 4,343  
Skewness 4,873

Log-transformed Statistics

Minimum of Log Data -4,343  
Maximum of Log Data 7,663  
Mean of log Data 0,436  
SD of log Data 2,689

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic 0,242  
Shapiro Wilk Critical Value 0,916

Data not Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,932  
Shapiro Wilk Critical Value 0,916

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL 251,1

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL 338,8  
95% Modified-t UCL 265,7

Assuming Lognormal Distribution

95% H-UCL 1041  
95% Chebyshev (MVUE) UCL 139,7  
97,5% Chebyshev (MVUE) UCL 185,3  
99% Chebyshev (MVUE) UCL 274,9

Gamma Distribution Test

k star (bias corrected) 0,185  
Theta Star 538,9  
nu star 8,877  
Approximate Chi Square Value (.05) 3,253  
Adjusted Level of Significance 0,0392  
Adjusted Chi Square Value 3,017

Anderson-Darling Test Statistic 3,471  
Anderson-Darling 5% Critical Value 0,903  
Kolmogorov-Smirnov Test Statistic 0,336  
Kolmogorov-Smirnov 5% Critical Value 0,198

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL 272  
95% Adjusted Gamma UCL 293,2

Potential UCL to Use

Data Distribution

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

95% CLT UCL 245  
95% Jackknife UCL 251,1  
95% Standard Bootstrap UCL 238,6  
95% Bootstrap-t UCL 2581  
95% Hall's Bootstrap UCL 1896  
95% Percentile Bootstrap UCL 272,6  
95% BCA Bootstrap UCL 364,5  
95% Chebyshev(Mean, Sd) UCL 484,7  
97.5% Chebyshev(Mean, Sd) UCL 651,3  
99% Chebyshev(Mean, Sd) UCL 978,6

Use 99% Chebyshev (Mean, Sd) UCL 978,6

1,1-Dicloroetilene

General Statistics

Number of Valid Observations 24

Number of Distinct Observations 24

Raw Statistics

Minimum 0,004  
Maximum 8276  
Mean 479,8  
Median 12,1  
SD 1683  
Coefficient of Variation 3,508  
Skewness 4,695

Log-transformed Statistics

Minimum of Log Data -5,521  
Maximum of Log Data 9,021  
Mean of log Data 2,723  
SD of log Data 3,076

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic 0,306  
Shapiro Wilk Critical Value 0,916

Data not Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,961  
Shapiro Wilk Critical Value 0,916

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL 1069

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL 1397  
95% Modified-t UCL 1124

Assuming Lognormal Distribution

95% H-UCL 72939  
95% Chebyshev (MVUE) UCL 3493  
97,5% Chebyshev (MVUE) UCL 4663  
99% Chebyshev (MVUE) UCL 6962

Gamma Distribution Test

k star (bias corrected) 0,213  
Theta Star 2255  
nu star 10,21  
Approximate Chi Square Value (.05) 4,076  
Adjusted Level of Significance 0,0392  
Adjusted Chi Square Value 3,806

Anderson-Darling Test Statistic 1,854  
Anderson-Darling 5% Critical Value 0,889  
Kolmogorov-Smirnov Test Statistic 0,263  
Kolmogorov-Smirnov 5% Critical Value 0,197

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL 1202  
95% Adjusted Gamma UCL 1288

Potential UCL to Use

Data Distribution

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

95% CLT UCL 1045  
95% Jackknife UCL 1069  
95% Standard Bootstrap UCL 1042  
95% Bootstrap-t UCL 3908  
95% Hall's Bootstrap UCL 3042  
95% Percentile Bootstrap UCL 1144  
95% BCA Bootstrap UCL 1506  
95% Chebyshev(Mean, Sd) UCL 1977  
97.5% Chebyshev(Mean, Sd) UCL 2625  
99% Chebyshev(Mean, Sd) UCL 3898

Use 99% Chebyshev (MVUE) UCL 6962

Use 99% Chebyshev (MVUE) UCL 1951

Use 99% Chebyshev (MVUE) UCL 914,6

Use 99% Chebyshev (Mean, Sd) UCL 1,436



**In Case Bootstrap t and/or Hall's Bootstrap yields an unreasonably large UCL value, use 97.5% or 99% Chebyshev (Mean, Sd) UCL**

**Recommended UCL exceeds the maximum observation**

Use 97.5% Chebyshev (MVUE) UCL 7,245

1,1,2-Tricloroetano

General Statistics

Number of Valid Observations 24

Number of Distinct Observations 24

Raw Statistics

Minimum 0,0013  
Maximum 4806  
Mean 339,7  
Median 19,8  
SD 1030  
Coefficient of Variation 3,03  
Skewness 4,021

Log-transformed Statistics

Minimum of Log Data -6,645  
Maximum of Log Data 8,478  
Mean of log Data 3,142  
SD of log Data 2,881

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic 0,368  
Shapiro Wilk Critical Value 0,916

Data not Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic 0,865  
Shapiro Wilk Critical Value 0,916

Data not Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL 699,9

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL 869,7  
95% Modified-t UCL 728,7

Assuming Lognormal Distribution

95% H-UCL 39958

95% Chebyshev (MVUE) UCL 3300  
97,5% Chebyshev (MVUE) UCL 4393  
99% Chebyshev (MVUE) UCL 6540

Gamma Distribution Test

k star (bias corrected) 0,257  
Theta Star 1320  
nu star 12,35

Approximate Chi Square Value (.05) 5,46  
Adjusted Level of Significance 0,0392  
Adjusted Chi Square Value 5,139

Anderson-Darling Test Statistic 1,945  
Anderson-Darling 5% Critical Value 0,867  
Kolmogorov-Smirnov Test Statistic 0,263  
Kolmogorov-Smirnov 5% Critical Value 0,195

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL 768,6  
95% Adjusted Gamma UCL 816,5

Potential UCL to Use

Data Distribution

Data do not follow a Discernable Distribution (0.05)

Nonparametric Statistics

95% CLT UCL 685,4  
95% Jackknife UCL 699,9  
95% Standard Bootstrap UCL 676,9  
95% Bootstrap-t UCL 3120  
95% Hall's Bootstrap UCL 2383  
95% Percentile Bootstrap UCL 732,3  
95% BCA Bootstrap UCL 928,2  
95% Chebyshev(Mean, Sd) UCL 1256  
97.5% Chebyshev(Mean, Sd) UCL 1652  
99% Chebyshev(Mean, Sd) UCL 2431

Use 99% Chebyshev (Mean, Sd) UCL 2431

Use 99% Chebyshev (Mean, Sd) UCL 0,503



Diclorometano

General Statistics				
Number of Valid Observations		24,00		
Number of Distinct Observations		6,000		
Raw Statistics		Log-transformed Statistics		
	Minimum	0,0230	Minimum of Log Data	
	Maximum	2406	Maximum of Log Data	
	Mean	100,4	Mean of log Data	
	Median	0,0490	SD of log Data	
	SD	491,1		
	Coefficient of Variation	4,890		
	Skewness	4,899		
Relevant UCL Statistics				
Normal Distribution Test		Lognormal Distribution Test		
	Shapiro Wilk Test Statistic	0,211	Shapiro Wilk Test Statistic	0,549
	Shapiro Wilk Critical Value	0,916	Shapiro Wilk Critical Value	0,916
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level		
Assuming Normal Distribution		Assuming Lognormal Distribution		
	95% Student's-t UCL	272,2	95% H-UCL	24,11
95% UCLs (Adjusted for Skewness)			95% Chebyshev (MVUE) UCL	4,908
	95% Adjusted-CLT UCL	372,4	97,5% Chebyshev (MVUE) UCL	6,481
	95% Modified-t UCL	288,9	99% Chebyshev (MVUE) UCL	9,571
Gamma Distribution Test		Data Distribution		
	k star (bias corrected)	0,127	Data do not follow a Discernable Distribution (0.05)	
	Theta Star	790,4		
	nu star	6,099		
	Approximate Chi Square Value (.05)	1,690		
	Adjusted Level of Significance	0,0392		
	Adjusted Chi Square Value	1,533		
	Anderson-Darling Test Statistic	7,592		
	Anderson-Darling 5% Critical Value	0,979		
	Kolmogorov-Smirnov Test Statistic	0,465		
	Kolmogorov-Smirnov 5% Critical Value	0,203		
Data not Gamma Distributed at 5% Significance Level				
Assuming Gamma Distribution				
	95% Approximate Gamma UCL	362,3		
	95% Adjusted Gamma UCL	399,5		
	Potential UCL to Use			
	Potential UCL to Use			
In Case Bootstrap t and/or Hall's Bootstrap yields an unreasonably large UCL value, use 97.5% or 99% Chebyshev (Mean, Sd) UCL				
			97.5% Chebyshev (Mean, Sd) UCL	726,4
			Use 95% Hall's Bootstrap UCL	2,502

Use 99% Chebyshev (Mean, Sd) UCL 319,5



Nome punto	Campagna	Benzene	Toluene	o-Xilene	m,p-Xilene	Triclorometano (cloroformio)	Cloruro di vinile	1,2-Dicloroetano	1,1-Dicloroetilene	Tricloroetilene	Tetracloroetilene (PCE)
		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
HP001	giu-lug 2011	374	14,7	2,3	17,6	< 0,014	790	22,1	2,9	4,2	0,15
HP002	giu-lug 2011	113	7	0,68	12,6	< 0,014	515	7,2	1,1	3,6	0,074
HP004	giu-lug 2011	0,65	1,3	0,37	2,9	2,4	189	2,7	31,1	30,4	5,4
HP005	giu-lug 2011	526	52,9	3,5	9	4,5	936	23,9	4,1	11,3	0,19
HP008	giu-lug 2011	140	5,9	0,27	7,8	< 0,014	223	5,7	0,12	0,81	< 0,012
HP009	giu-lug 2011	891	58,4	26	16,3	317	4179	75,6	65,6	47,1	23,2
HP010	giu-lug 2011	240	7,2	2,5	4,1	6,7	946	15,9	4,7	21	0,78
HP001	nov-11	156	6,1	1,2	3,4	< 0,014	< 0,012	< 0,013	0,75	2,8	0,057
HP002	nov-11	122	4	0,28	2,9	< 0,014	2,5	< 0,013	0,13	1,3	0,016
HP003	nov-11	93,6	3	0,52	1	< 0,014	11,1	< 0,013	0,21	1,5	0,034
HP004	nov-11	0,17	< 0,012	0,02	< 0,052	1,5	1,2	1,6	18,7	17,4	1,6
HP005	nov-11	286	4,8	1,4	1,1	1,9	31,6	5,1	1,3	5,5	0,52
HP008	nov-11	10	3,9	< 0,014	3,4	< 0,014	1,2	< 0,013	0,076	0,7	< 0,012
HP009	nov-11	1266	39,8	41,4	25,7	233	726	37,2	50	51,2	18
HP010	nov-11	222	7,3	1,3	1,3	8	157	29,2	3,4	34,3	0,41
HP001	mar-apr 2012	157	12,4	0,99	7,92	< 0,0085	9,06	2	0,65	1,92	0,15
HP002	mar-apr 2012	147	8,93	2	1,66	1	24,5	0,2	0,34	2,18	0,031
HP003	mar-apr 2012	2,09	0,304	0,052	0,207	0,44	0,69	0,27	0,1	0,26	0,67
HP004	mar-apr 2012	0,78	0,25	0,047	0,079	< 0,0085	1,08	0,28	1,47	1,71	0,19
HP005	mar-apr 2012	120	6,14	1,24	1,4	0,91	19,3	2,47	1,5	4,8	0,15
HP008	mar-apr 2012	24,4	3,41	0,092	2,49	0,12	2,57	0,32	0,05	0,44	0,025
HP009	mar-apr 2012	858	62,9	38,2	20,3	183	579	22,5	34,5	42,1	33,3
HP010	mar-apr 2012	129	6,52	1,81	1,63	4,55	94,9	8,6	1,15	19,6	0,49

Concentrazione massima      1266      62,9      41,4      25,7      317      4179      75,6      65,6      51,2      33,3

Nome punto	Campagna	Esaclo- butadiene	1,1- Dicloroet- ano	1,2- dicloroetil- ene	1,2- Dicloropr- opano	1,1,2- Tricloroet- ano	1,2,3- Tricloropr- opano	1,1,2,2- Tetraclor- oetano	Monoclor- obenzene	1,4- Diclorobe- nzene
		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
HP001	giu-lug 2011	0,012	609	16,8	< 0,00094	< 0,0013	< 0,00089	< 0,001	194	5,1
HP002	giu-lug 2011	< 0,0014	310	7,1	0,043	< 0,0013	< 0,00089	< 0,001	88,1	5,3
HP004	giu-lug 2011	< 0,0014	114	45,1	0,55	14,4	< 0,00089	< 0,001	9,5	0,88
HP005	giu-lug 2011	0,069	727	31,4	0,19	< 0,0013	< 0,00089	< 0,001	276	12,1
HP008	giu-lug 2011	< 0,0014	133	2,4	0,031	< 0,0013	< 0,00089	< 0,001	19,6	0,51
HP009	giu-lug 2011	< 0,0014	215	178	0,96	66,3	< 0,00089	< 0,001	11301	2,3
HP010	giu-lug 2011	0,24	781	23,3	0,16	< 0,0013	< 0,00089	< 0,001	510	21,1
HP001	nov-11	0,019	375	9,5	< 0,00094	< 0,0013	< 0,00089	0,2	127	5,4
HP002	nov-11	< 0,0014	355	3,1	< 0,00094	< 0,0013	< 0,00089	< 0,001	98,9	4,1
HP003	nov-11	< 0,0014	374	5,5	< 0,00094	< 0,0013	< 0,00089	< 0,001	151	7,7
HP004	nov-11	< 0,0014	82,9	32,1	0,25	9,1	0,042	< 0,001	2,5	0,46
HP005	nov-11	< 0,0014	1031	13,8	0,23	1,6	0,23	0,85	506	26,6
HP008	nov-11	< 0,0014	172	2	< 0,00094	< 0,0013	0,032	0,051	19,5	0,43
HP009	nov-11	< 0,14	258	156	1,5	63,4	0,23	< 0,1	15647	4,9
HP010	nov-11	0,095	887	46,7	0,57	0,79	0,27	0,67	442	29,2
HP001	mar-apr 2012	0,016	294	5,5	< 0,001	< 0,0009	< 0,00092	< 0,0013	146	3,98
HP002	mar-apr 2012	0,14	535	6,13	0,059	< 0,0009	< 0,00092	< 0,0013	419	17,5
HP003	mar-apr 2012	< 0,011	6,74	0,445	0,011	1,22	0,0093	0,0022	1,15	0,12
HP004	mar-apr 2012	0,071	13	3,73	0,04	0,23	< 0,00092	0,0065	4,41	1,33
HP005	mar-apr 2012	< 0,011	442	6,71	0,19	< 0,0009	0,258	0,301	307	12,9
HP008	mar-apr 2012	< 0,011	93,8	1,04	0,014	< 0,0009	< 0,00092	0,015	38,2	0,387
HP009	mar-apr 2012	< 1,1	208	115	1,29	37,1	0,37	< 0,13	13458	11,1
HP010	mar-apr 2012	0,11	564	19	0,44	< 0,0009	0,41	0,28	358	20,2

Concentrazione massima      0,24      1031      178      1,5      66,3      0,41      0,85      15647      29,2