	A	B	C	D	E	F	G	H	I	J	K	L
1				**Background Statistics for Uncensored Full Data Sets**								
2		**User Selected Options**										
3		Date/Time of Computation		7/30/2013 7:42:52 AM								
4		From File		WorkSheet.xls								
5		Full Precision		OFF								
6		Confidence Coefficient		95%								
7		Coverage		95%								
8		New or Future K Observations		1								
9		mber of Bootstrap Operations		2000								
10												
11	**PCDD**											
12												
13	**General Statistics**											
14				Total Number of Observations		33			Number of Distinct Observations			33
15				Minimum		0.00563			First Quartile			0.0165
16				Second Largest		0.168			Median			0.0391
17				Maximum		0.308			Third Quartile			0.107
18				Mean		0.0675			SD			0.0682
19				Coefficient of Variation		1.01			Skewness			1.625
20				Mean of logged Data		-3.223			SD of logged Data			1.099
21												
22				**Critical Values for Background Threshold Values (BTVs)**								
23				Tolerance Factor K (For UTL)		2.176			d2max (for USL)			2.787
24												
25				**Normal GOF Test**								
26				Shapiro Wilk Test Statistic		0.817			**Shapiro Wilk GOF Test**			
27				5% Shapiro Wilk Critical Value		0.931			Data Not Normal at 5% Significance Level			
28				Lilliefors Test Statistic		0.182			**Lilliefors GOF Test**			
29				5% Lilliefors Critical Value		0.154			Data Not Normal at 5% Significance Level			
30				**Data Not Normal at 5% Significance Level**								
31												
32				**Background Statistics Assuming Normal Distribution**								
33				95% UTL with 95% Coverage		0.216			90% Percentile (z)			0.155
34				95% UPL (t)		0.185			95% Percentile (z)			0.18
35				95% USL		0.257			99% Percentile (z)			0.226
36												
37				**Gamma GOF Test**								
38				A-D Test Statistic		0.64			**Anderson-Darling Gamma GOF Test**			
39				5% A-D Critical Value		0.774			etected data appear Gamma Distributed at 5% Significance Lev			
40				K-S Test Statistic		0.12			**Kolmogrov-Smirnoff Gamma GOF Test**			
41				5% K-S Critical Value		0.157			etected data appear Gamma Distributed at 5% Significance Lev			
42				**Detected data appear Gamma Distributed at 5% Significance Level**								
43												
44				**Gamma Statistics**								
45				k hat (MLE)		1.086			k star (bias corrected MLE)			1.008
46				Theta hat (MLE)		0.0621			Theta star (bias corrected MLE)			0.067
47				nu hat (MLE)		71.69			nu star (bias corrected)			66.5
48				MLE Mean (bias corrected)		0.0675			MLE Sd (bias corrected)			0.0672
49												
50				**Background Statistics Assuming Gamma Distribution**								
51				95% Wilson Hilferty (WH) Approx. Gamma UPL		0.205			90% Percentile			0.155
52				95% Hawkins Wixley (HW) Approx. Gamma UPL		0.214			95% Percentile			0.202
53				95% WH Approx. Gamma UTL with 95% Coverage		0.274			99% Percentile			0.31
54				95% HW Approx. Gamma UTL with 95% Coverage		0.296						
55				95% WH USL		0.389			95% HW USL			0.44
56												
57				**Lognormal GOF Test**								
58				Shapiro Wilk Test Statistic		0.951			**Shapiro Wilk Lognormal GOF Test**			
59				5% Shapiro Wilk Critical Value		0.931			Data appear Lognormal at 5% Significance Level			
60				Lilliefors Test Statistic		0.0956			**Lilliefors Lognormal GOF Test**			
61				5% Lilliefors Critical Value		0.154			Data appear Lognormal at 5% Significance Level			
62				**Data appear Lognormal at 5% Significance Level**								

	A	B	C	D	E	F	G	H	I	J	K	L
63												
64	**Background Statistics assuming Lognormal Distribution**											
65					95% UTL with 95% Coverage	0.435				90% Percentile (z)		0.163
66					95% UPL (t)	0.264				95% Percentile (z)		0.243
67					95% USL	0.851				99% Percentile (z)		0.513
68												
69	**Nonparametric Distribution Free Background Statistics**											
70	**Data appear Gamma Distributed at 5% Significance Level**											
71												
72	**Nonparametric Upper Limits for Background Threshold Values**											
73					Order of Statistic, r	33				95% UTL with 95% Coverage		0.308
74					Approximate f	1.737				Confidence Coefficient (CC) achieved by UTL		0.816
75					95% Percentile Bootstrap UTL with 95% Coverage	0.308				95% BCA Bootstrap UTL with 95% Coverage		0.308
76					95% UPL	0.21				90% Percentile		0.156
77					90% Chebyshev UPL	0.275				95% Percentile		0.163
78					95% Chebyshev UPL	0.369				99% Percentile		0.263
79					95% USL	0.308						
80												
81	Note: The use of USL to estimate a BTV is recommended only when the data set represents a background											
82	data set free of outliers and consists of observations collected from clean unimpacted locations.											
83	The use of USL tends to provide a balance between false positives and false negatives provided the data											
84	represents a background data set and when many onsite observations need to be compared with the BTV.											
85												