TAM TRAIL
SAN RAFAEL, CALIFORNIA

APPENDIX B

Non-parametric Statistics

Data File		Variable:	SB surface
Number of Valid Samples	29		
Number of Unique Samples	24		
Minimum	7.8		
Maximum	670		
Mean	86.85517		
Median	49		
Standard Deviation	127.094		
Variance	16152.89		
Coefficient of Variation	1.463287		
Skewness	3.76986		
Mean of log data	3.911597		
Standard Deviation of log data	1.007938		
90% UCLs (Adjusted for Skewness)			
Adjusted-CLT UCL	128.8993		
Modified-t UCL	120.5854		
90% Non-parametric UCLs			
CLT UCL	117.1008		
Jackknife UCL	117.8318		
Standard Bootstrap UCL	117.1155		
Bootstrap-t UCL	154.5343		
Hall's Bootstrap UCL	271.6061		
Percentile Bootstrap UCL	118.9931		
BCA Bootstrap UCL	132.5172		
90% Chebyshev (Mean, Sd) UCL	157.6575		
95% Chebyshev (Mean, Sd) UCL	189.7285		
97.5% Chebyshev (Mean, Sd) UCL	234.2419		
99% Chebyshev (Mean, Sd) UCL	321.6799		

Non-parametric Statistics

Data File					Variable:	SB 0.3m		
Number of Valid Samples				28				
Number of Unique Samples				27				
Minimum				2.5				
Maximum				180				
Mean				57.05				
Median				39.5				
Standard Deviation				54.15421				
Variance				2932.679				
Coefficient of Variation				0.949241				
Skewness				1.143964				
Mean of log data				3.511532				
Standard Deviation of log data				1.181795				
90% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				71.74565				
Modified-t UCL				70.86343				
90% Non-parametric UCLs								
CLT UCL				70.16564				
Jackknife UCL				70.49468				
Standard Bootstrap UCL				69.74958				
Bootstrap-t UCL				72.66233				
Hall's Bootstrap UCL				71.61189				
Percentile Bootstrap UCL				70.525				
BCA Bootstrap UCL				70.34643				
90% Chebyshev (Mean, Sd) UCL				87.75255				
95% Chebyshev (Mean, Sd) UCL				101.6598				
97.5% Chebyshev (Mean, Sd) UCL				120.9625				
99% Chebyshev (Mean, Sd) UCL				158.8788				

Non-parametric Statistics

Data File					Variable:	SB 0.6m		
Number of Valid Samples				26				
Number of Unique Samples				22				
Minimum				2.5				
Maximum				170				
Mean				50.45				
Median				37				
Standard Deviation				47.81866				
Variance				2286.624				
Coefficient of Variation				0.947843				
Skewness				1.223605				
Mean of log data				3.374566				
Standard Deviation of log data				1.195995				
90% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				64.07549				
Modified-t UCL				63.16977				
90% Non-parametric UCLs								
CLT UCL				62.4684				
Jackknife UCL				62.7947				
Standard Bootstrap UCL				61.89998				
Bootstrap-t UCL				65.30856				
Hall's Bootstrap UCL				64.49853				
Percentile Bootstrap UCL				62.29231				
BCA Bootstrap UCL				63.88846				
90% Chebyshev (Mean, Sd) UCL				78.58403				
95% Chebyshev (Mean, Sd) UCL				91.3278				
97.5% Chebyshev (Mean, Sd) UCL				109.0157				
99% Chebyshev (Mean, Sd) UCL				143.76				

Non-parametric Statistics

Data File					Variable:	SB surface		
Number of Valid Samples				29				
Number of Unique Samples				24				
Minimum				7.8				
Maximum				670				
Mean				86.85517				
Median				49				
Standard Deviation				127.094				
Variance				16152.89				
Coefficient of Variation				1.463287				
Skewness				3.76986				
Mean of log data				3.911597				
Standard Deviation of log data				1.007938				
95% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				143.3286				
Modified-t UCL				129.7568				
95% Non-parametric UCLs								
CLT UCL				125.675				
Jackknife UCL				127.0032				
Standard Bootstrap UCL				125.1019				
Bootstrap-t UCL				174.1696				
Hall's Bootstrap UCL				288.5052				
Percentile Bootstrap UCL				127.0897				
BCA Bootstrap UCL				150.6828				
95% Chebyshev (Mean, Sd) UCL				189.7285				
97.5% Chebyshev (Mean, Sd) UCL				234.2419				
99% Chebyshev (Mean, Sd) UCL				321.6799				

Non-parametric Statistics

Data File					Variable:	SB 0.3m		
Number of Valid Samples				28				
Number of Unique Samples				27				
Minimum				2.5				
Maximum				180				
Mean				57.05				
Median				39.5				
Standard Deviation				54.15421				
Variance				2932.679				
Coefficient of Variation				0.949241				
Skewness				1.143964				
Mean of log data				3.511532				
Standard Deviation of log data				1.181795				
95% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				76.24784				
Modified-t UCL				74.85052				
95% Non-parametric UCLs								
CLT UCL				73.88374				
Jackknife UCL				74.48176				
Standard Bootstrap UCL				73.8487				
Bootstrap-t UCL				77.36244				
Hall's Bootstrap UCL				75.40201				
Percentile Bootstrap UCL				73.975				
BCA Bootstrap UCL				75.84286				
95% Chebyshev (Mean, Sd) UCL				101.6598				
97.5% Chebyshev (Mean, Sd) UCL				120.9625				
99% Chebyshev (Mean, Sd) UCL				158.8788				

Non-parametric Statistics

Data File					Variable:	SB 0.6m		
Number of Valid Samples				26				
Number of Unique Samples				22				
Minimum				2.5				
Maximum				170				
Mean				50.45				
Median				37				
Standard Deviation				47.81866				
Variance				2286.624				
Coefficient of Variation				0.947843				
Skewness				1.223605				
Mean of log data				3.374566				
Standard Deviation of log data				1.195995				
95% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				68.28007				
Modified-t UCL				66.84403				
95% Non-parametric UCLs								
CLT UCL				65.87545				
Jackknife UCL				66.46896				
Standard Bootstrap UCL				65.51554				
Bootstrap-t UCL				70.24699				
Hall's Bootstrap UCL				69.51973				
Percentile Bootstrap UCL				66.52692				
BCA Bootstrap UCL				67.21154				
95% Chebyshev (Mean, Sd) UCL				91.3278				
97.5% Chebyshev (Mean, Sd) UCL				109.0157				
99% Chebyshev (Mean, Sd) UCL				143.76				

Non-parametric Statistics

Data File					Variable:	NB surface		
Number of Valid Samples				7				
Number of Unique Samples				7				
Minimum				33				
Maximum				1400				
Mean				449				
Median				280				
Standard Deviation				462.5621				
Variance				213963.7				
Coefficient of Variation				1.030205				
Skewness				1.801194				
Mean of log data				5.626594				
Standard Deviation of log data				1.166839				
90% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				758.0538				
Modified-t UCL				720.5527				
90% Non-parametric UCLs								
CLT UCL				673.0563				
Jackknife UCL				700.7154				
Standard Bootstrap UCL				655.7126				
Bootstrap-t UCL				913.88				
Hall's Bootstrap UCL				1676.44				
Percentile Bootstrap UCL				655.7143				
BCA Bootstrap UCL				734.7143				
90% Chebyshev (Mean, Sd) UCL				973.4961				
95% Chebyshev (Mean, Sd) UCL				1211.075				
97.5% Chebyshev (Mean, Sd) UCL				1540.826				
99% Chebyshev (Mean, Sd) UCL				2188.557				

Non-parametric Statistics

Data File					Variable:	NB 0.3m		
Number of Valid Samples				7				
Number of Unique Samples				7				
Minimum				15				
Maximum				1600				
Mean				327.7143				
Median				180				
Standard Deviation				568.0366				
Variance				322665.6				
Coefficient of Variation				1.733329				
Skewness				2.510631				
Mean of log data				4.711948				
Standard Deviation of log data				1.606605				
90% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				748.3511				
Modified-t UCL				670.7819				
90% Non-parametric UCLs								
CLT UCL				602.8604				
Jackknife UCL				636.8265				
Standard Bootstrap UCL				578.4604				
Bootstrap-t UCL				1798.117				
Hall's Bootstrap UCL				2347.038				
Percentile Bootstrap UCL				567.5714				
BCA Bootstrap UCL				751.5714				
90% Chebyshev (Mean, Sd) UCL				971.8072				
95% Chebyshev (Mean, Sd) UCL				1263.56				
97.5% Chebyshev (Mean, Sd) UCL				1668.501				
99% Chebyshev (Mean, Sd) UCL				2463.929				

Non-parametric Statistics

Data File					Variable:	NB 0.6m		
Number of Valid Samples				7				
Number of Unique Samples				7				
Minimum				8.1				
Maximum				840				
Mean				245.4429				
Median				160				
Standard Deviation				278.1098				
Variance				77345.04				
Coefficient of Variation				1.133094				
Skewness				2.05244				
Mean of log data				4.871196				
Standard Deviation of log data				1.440893				
90% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				438.3861				
Modified-t UCL				410.3742				
90% Non-parametric UCLs								
CLT UCL				380.1539				
Jackknife UCL				396.7837				
Standard Bootstrap UCL				370.9795				
Bootstrap-t UCL				611.0326				
Hall's Bootstrap UCL				1079.608				
Percentile Bootstrap UCL				366.8714				
BCA Bootstrap UCL				432.8571				
90% Chebyshev (Mean, Sd) UCL				560.7897				
95% Chebyshev (Mean, Sd) UCL				703.6312				
97.5% Chebyshev (Mean, Sd) UCL				901.8896				
99% Chebyshev (Mean, Sd) UCL				1291.33				

Non-parametric Statistics

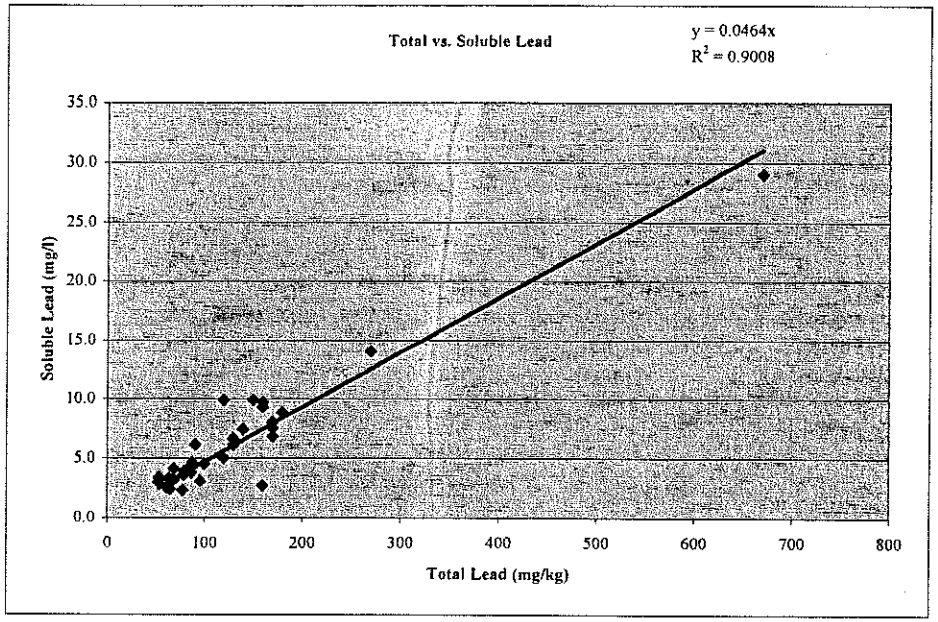
Data File		Variable:	NB surface
Number of Valid Samples	7		
Number of Unique Samples	7		
Minimum	33		
Maximum	1400		
Mean	449		
Median	280		
Standard Deviation	462.5621		
Variance	213963.7		
Coefficient of Variation	1.030205		
Skewness	1.801194		
Mean of log data	5.626594		
Standard Deviation of log data	1.166839		
95% UCLs (Adjusted for Skewness)			
Adjusted-CLT UCL	863.7513		
Modified-t UCL	808.5673		
95% Non-parametric UCLs			
CLT UCL	736.5731		
Jackknife UCL	788.73		
Standard Bootstrap UCL	716.7308		
Bootstrap-t UCL	1562.14		
Hall's Bootstrap UCL	2471.347		
Percentile Bootstrap UCL	738.5714		
BCA Bootstrap UCL	850		
95% Chebyshev (Mean, Sd) UCL	1211.075		
97.5% Chebyshev (Mean, Sd) UCL	1540.826		
99% Chebyshev (Mean, Sd) UCL	2188.557		

Non-parametric Statistics

Data File					Variable:	NB 0.3m		
Number of Valid Samples				7				
Number of Unique Samples				7				
Minimum				15				
Maximum				1600				
Mean				327.7143				
Median				180				
Standard Deviation				568.0366				
Variance				322665.6				
Coefficient of Variation				1.733329				
Skewness				2.510631				
Mean of log data				4.711948				
Standard Deviation of log data				1.606605				
95% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				898.5521				
Modified-t UCL				778.8659				
95% Non-parametric UCLs								
CLT UCL				680.8605				
Jackknife UCL				744.9104				
Standard Bootstrap UCL				655.4058				
Bootstrap-t UCL				1993.065				
Hall's Bootstrap UCL				2464.774				
Percentile Bootstrap UCL				732.1429				
BCA Bootstrap UCL				779.4286				
95% Chebyshev (Mean, Sd) UCL				1263.56				
97.5% Chebyshev (Mean, Sd) UCL				1668.501				
99% Chebyshev (Mean, Sd) UCL				2463.929				

Non-parametric Statistics

Data File					Variable:	NB 0.6m		
Number of Valid Samples				7				
Number of Unique Samples				7				
Minimum				8.1				
Maximum				840				
Mean				245.4429				
Median				160				
Standard Deviation				278.1098				
Variance				77345.04				
Coefficient of Variation				1.133094				
Skewness				2.05244				
Mean of log data				4.871196				
Standard Deviation of log data				1.440893				
95% UCLs (Adjusted for Skewness)								
Adjusted-CLT UCL				505.4729				
Modified-t UCL				463.2919				
95% Non-parametric UCLs								
CLT UCL				418.3426				
Jackknife UCL				449.7014				
Standard Bootstrap UCL				406.752				
Bootstrap-t UCL				709.2517				
Hall's Bootstrap UCL				1127.495				
Percentile Bootstrap UCL				425.1714				
BCA Bootstrap UCL				475.4429				
95% Chebyshev (Mean, Sd) UCL				703.6312				
97.5% Chebyshev (Mean, Sd) UCL				901.8896				
99% Chebyshev (Mean, Sd) UCL				1291.33				

TAM Trail

Boring	Sample Depth (m)	Sample Depth (ft)	Total Lead (mg/kg)	WET (mg/l)
SB1-0	0	0	53	3.0
SB2-0	0	0	62	2.5
SB3-0	0	0	150	9.9
SB3-1	0.3	1	140	7.4
SB3-2	0.6	2	170	6.8
SB4-0	0	0	65	2.4
SB4-1	0.3	1	69	4.1
SB4-2	0.6	2	100	4.5
SB6-0	0	0	54	3.4
SB6-1	0.3	1	130	6.1
SB6-2	0.6	2	80	3.9
SB7-0	0	0	130	6.6
SB7-1	0.3	1	170	7.5
SB8-0	0	0	160	9.7
SB8-1	0.3	1	64	3.3
SB8-2	0.6	2	87	3.8
SB9-0	0	0	120	9.9
SB9-1	0.3	1	79	3.6
SB10-0	0	0	670	29
SB10-1	0.3	1	160	2.7
SB10-2	0.6	2	88	4.6
SB12-0	0	0	160	9.3
SB14-0	0	0	69	3.2
SB15-0	0	0	270	14
SB15-1	0.3	1	120	5.0
SB15-2	0.6	2	96	3.1
SB16-1	0.3	1	180	8.8
SB18-0	0	0	83	4.0
SB18-1	0.3	1	54	3.4
SB18-2	0.6	2	65	3.2
SB19-2	0.6	2	91	6.1
SB21-2	0.6	2	170	8.0
SB29-0	0	0	78	2.3