CALCULATING THE 95th PERCENTILE AND PREDICTING POSSIBLI

Data Set	ln(x)
277	5.624
180	5.193
435	6.075
125	4.828
404	6.001
159	5.069
475	6.163
254	5.537
244	5.497
130	4.868
258	5.553
273	5.609
487	6.188
345	5.844
691	6.538
237	5.468
194	5.268
711	6.567
617	6.425
187	5.231
259	5.557
239	5.476
94.9	4.553
1190	7.082
156	5.05
285	5.652
218	5.384
221	5.398
60.1	4.096
529	6.271

COLOR KEY

User Inputs

Number of Data Points* 54

Enter Percentile 0.95 (Note: Enter in decimal form, e.g. 0.95)

Allowable Limit** 847.150 " For a normal distribution"

ln(x) value at percentile 6.71941

Allowable Limit** 828.329 "For a lognormal distribution"

*Enter the data in column A starting with Cell A5; the spreadsheet will count the number of entries. Enter up to 200 data points. Data can be entered at random in any cell in the column.

**This calculated value indicates the limit which will have the entered percentage (percentile) of data points below the "Allowable Limit". In other words, this limit represents the "confidence" that a permittee will be capable of compliance based on the percentile.

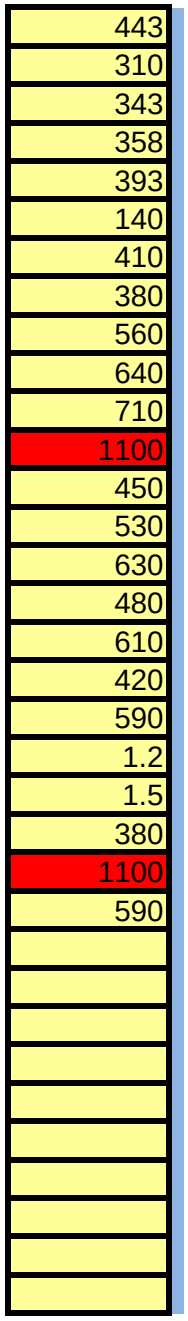
*****Possible Outliers: Any Data Set values more than two standard deviations from the Mean (Ref: Chauvenet's criterion) will be formatted with a RED BACKGROUND. These values should be reviewed for possible exclusion from the data.**

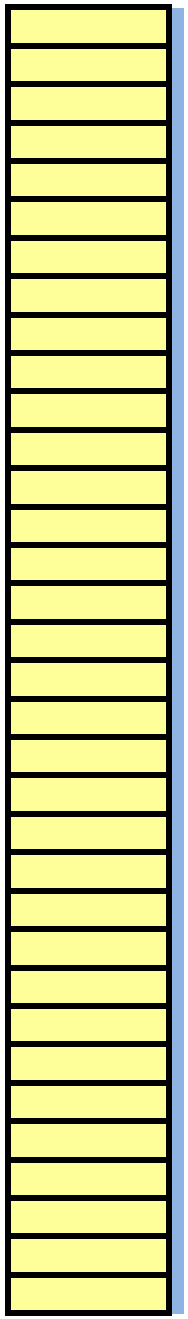
Permit Engineer: _____ Date: _____

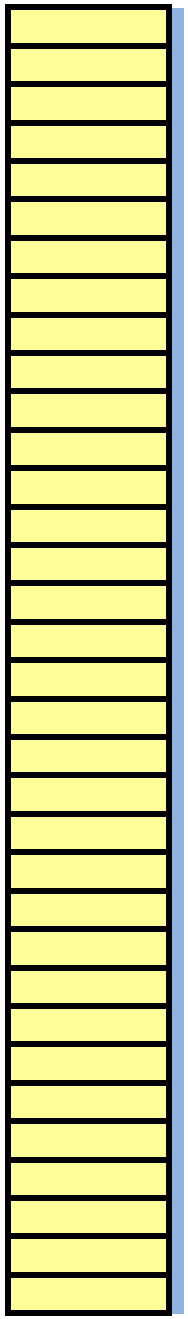
Reviewing Engineer: _____ Date: _____

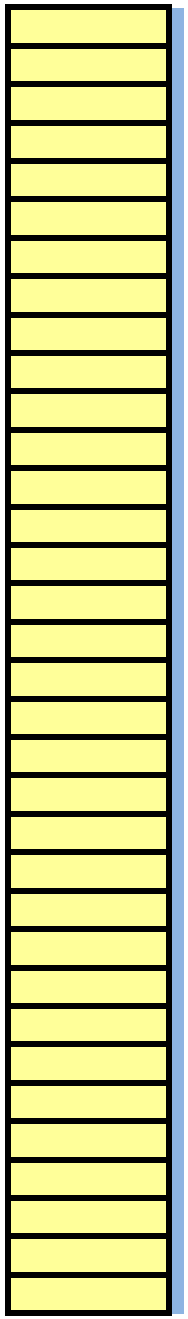
DATA SOURCE: _____

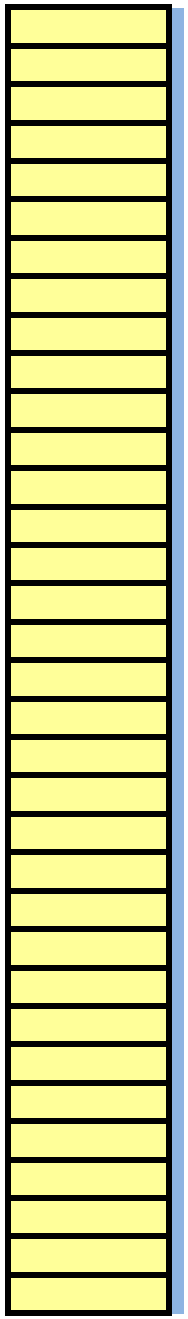
443	6.094
310	5.737
343	5.838
358	5.881
393	5.974
140	4.942
410	6.016
380	5.94
560	6.328
640	6.461
710	6.565
1100	7.003
450	6.109
530	6.273
630	6.446
480	6.174
610	6.413
420	6.04
590	6.38
1.2	0.182
1.5	0.405
380	5.94
1100	7.003
590	6.38











E OUTLIERS

Outliers*

Mean =	398.2
Std Dev (σ) =	254.6
Min Value =	1.2
Mean - 2σ =	-111
Max Value =	1190
Mean + 2σ =	907.5