Directions:

Based on the information provided by the L-J chart, determine the assigned mean and assigned SD in umol/L. Based on your visual examination of the chart, approximate the observed mean and observed SD in umol/L. Fill in the blank spaces with your responses.

Draw the Gaussian curve using the assigned mean and assigned SD on the L-J chart. Draw another Gaussian curve using the observed mean and observed SD. Label the following sections of the curves as *true accept* and *false accept*. Refer to Job Aid 1: Possible Outcomes for assistance.



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Using the assigned SD, what are the values (umol/L) for ± 2SD control limits?

Using the observed SD, what are the values (umol/L) for ± 2SD?

We expect that 68% of the measurements lie between -1SD and +1SD control limits when the assigned = observed on the chart. However on this chart where the SD assigned ≠ SD observed, 68% of the data points lie between what control limits?

95% of the data points lie between what control limits?

What QC Rule(s) are violated on the chart when the assigned SD ≠observed SD

|  |  |  |
| --- | --- | --- |
| **Run Number** | **Rule(s) Violated** | **Interpret the Control Measurement (true accept, false reject, or false accept** |
|  |  |  |
|  |  |  |
|  |  |  |

The data points used in Chart #5 are identical to the data points used in Chart #1 (a stable population normally distributed). When compared to Chart #1, there is an increase / decrease in rule violations and this is because……

Circle one

If the next measurement (Run #31) is 78 umol/L, what type of outcome would be given to that value? Refer to Job Aid 1: Possible Outcomes, if needed.

Using your SDobserved, how many multiples of SD does the 78 umol/L control measurement lie from the meanobserved?

Draw the Gaussian curves of the assigned and observed populations on the next page of the worksheet.

Label the following sections of the curves as *true accept* and *false accept*.