# Jefferson Lab Alignment Group <br> Data Transmittal 

TO: B. Wojtsekjowski, C. Soova, J. Buttler, R. Wines
DATE: 27 Feb 2020
FROM: Chris Gould
DETAILS:
Checked:
\# : A1972

Below are results of the SBS conical beamline inspection. Values are based on best-fit geometry constructed from measured data. Using the dimensional values from drawing JL0092408, XY reference planes were constructed along the Z axis. Cones were then constructed using localized measurements and intersected with the reference plane to construct circles. Since the circles are based on best-fit geometry the shape cannot be inferred. Values are in inches.

|  | X | Y | Z | Measured Diameter | Ideal Diameter | Delta | CONE <br> RMS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.018 | 0.002 | 0.000 | 3.774 | 3.790 | -0.016 | 0.017 |
| 2 | 0.019 | 0.006 | 3.770 | 3.973 | 3.980 | -0.007 | 0.017 |
| 3 | 0.018 | 0.009 | 10.140 | 4.307 | 4.310 | -0.003 | 0.006 |
| 4 | -0.003 | -0.016 | 22.140 | 4.941 | 4.940 | 0.001 | 0.005 |
| 5 | -0.011 | -0.036 | 28.140 | 5.234 | 5.260 | -0.026 | 0.010 |
| 6 | -0.058 | -0.071 | 33.770 | 5.563 | 5.550 | 0.013 | 0.005 |
| 7 | -0.071 | -0.071 | 43.770 | 6.065 | 6.080 | -0.015 | 0.007 |
| 8 | -0.097 | -0.101 | 52.140 | 6.521 | 6.510 | 0.011 | 0.005 |
| 9 | -0.100 | -0.107 | 57.770 | 6.798 | 6.810 | -0.012 | 0.015 |
| 10 | -0.112 | -0.130 | 62.140 | 7.031 | 7.040 | -0.009 | 0.018 |
| 11 | -0.096 | -0.130 | 69.770 | 7.449 | 7.440 | 0.009 | 0.013 |
| 12 | -0.094 | -0.154 | 77.770 | 7.856 | 7.860 | -0.004 | 0.020 |
| 13 | -0.081 | -0.148 | 84.140 | 8.200 | 8.190 | 0.010 | 0.021 |
| 14 | -0.075 | -0.157 | 96.140 | 8.830 | 8.820 | 0.010 | 0.019 |
| 15 | -0.070 | -0.134 | 101.770 | 9.123 | 9.110 | 0.013 | 0.048 |
| 16 | -0.072 | -0.125 | 104.140 | 9.252 | 9.240 | 0.012 | 0.048 |
| 17 | -0.080 | -0.114 | 109.770 | 9.533 | 9.530 | 0.003 | 0.059 |
| 18 | -0.051 | -0.071 | 124.140 | 10.301 | 10.280 | 0.021 | 0.040 |
| 19 | -0.019 | 0.010 | 135.730 | 10.911 | 10.890 | 0.021 | 0.014 |

