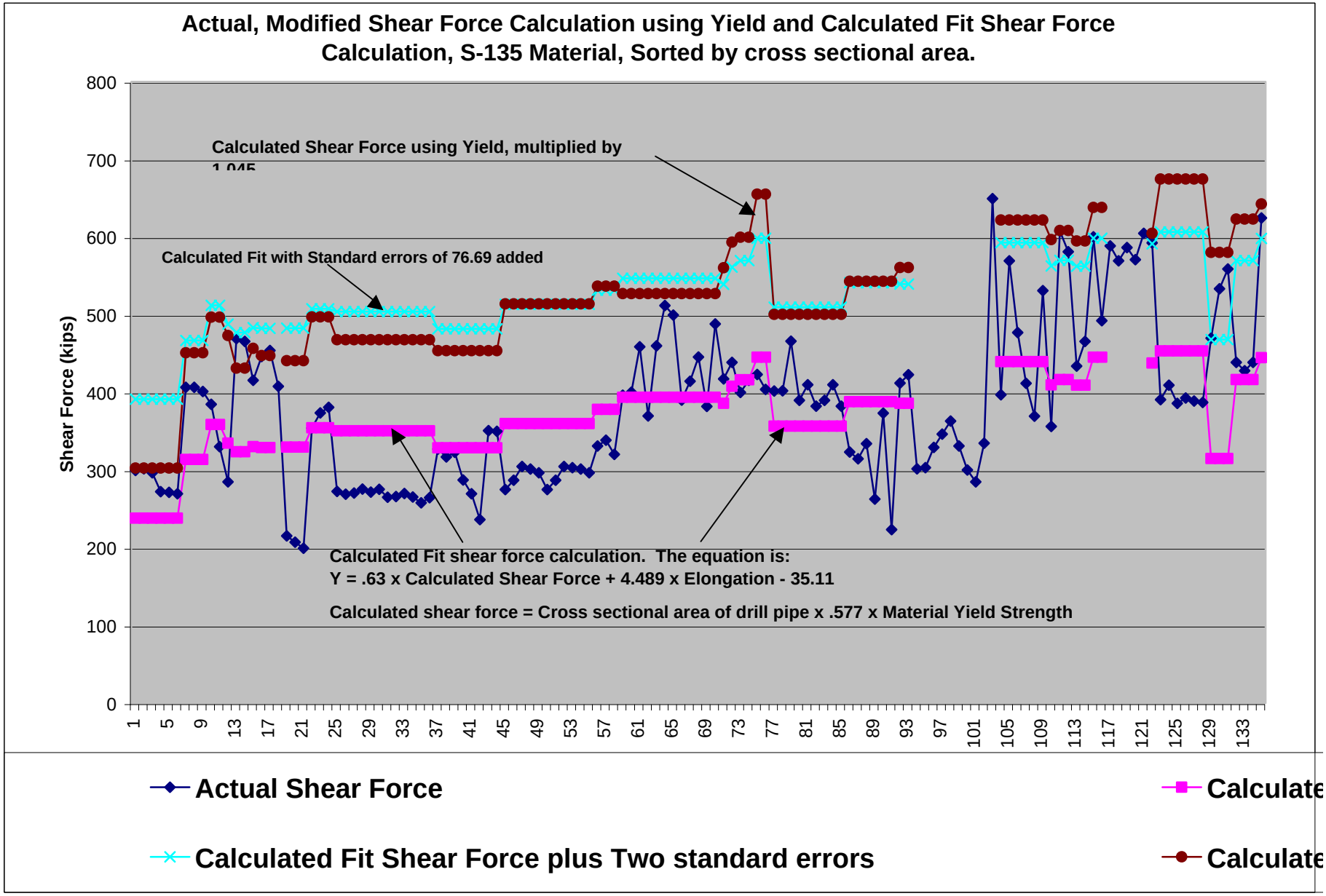
Actual, Modified Shear Force Calculation using Yield and Calculated Fit Shear Force Calculation, S-135 Material, Sorted by cross sectional area.
Shear Force (kips)
800
700
600
500
400
300
200
100
0
Calculated Shear Force using Yield, multiplied by 1.045
Calculated Fit with Standard errors of 76.69 added
Calculated Fit shear force calculation. The equation is:
Y = .63 x Calculated Shear Force + 4.489 x Elongation - 35.11
Calculated shear force = Cross sectional area of drill pipe x .577 x Material Yield Strength
1 5 9 13 17 21 25 29 33 37 41 45 49 53 57 61 65 69 73 77 81 85 89 93 97 101 105 109 113 117 121 125 129 133
Actual Shear Force
Calculate
Calculated Fit Shear Force plus Two standard errors
Calculate