SHEET1

**Regression Analysis: ΔL versus T1, T13, T15**

**Regression Equation**

|  |  |  |
| --- | --- | --- |
| ΔL | = | -3.42 + 1.554 T1 + 1.029 T13 - 3.037 T15 |

**Coefficients**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Term** | **Coef** | **SE Coef** | **T-Value** | **P-Value** | **VIF** |
| Constant | -3.42 | 4.31 | -0.79 | 0.430 |  |
| T1 | 1.554 | 0.180 | 8.62 | 0.000 | 12.59 |
| T13 | 1.029 | 0.199 | 5.17 | 0.000 | 20.06 |
| T15 | -3.037 | 0.334 | -9.10 | 0.000 | 5.78 |

**Model Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **S** | **R-sq** | **R-sq(adj)** | **R-sq(pred)** |
| 0.887178 | 94.38% | 94.15% | 93.91% |

**Analysis of Variance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source** | **DF** | **Adj SS** | **Adj MS** | **F-Value** | **P-Value** |
| Regression | 3 | 990.68 | 330.226 | 419.56 | 0.000 |
| T1 | 1 | 58.43 | 58.428 | 74.23 | 0.000 |
| T13 | 1 | 21.08 | 21.078 | 26.78 | 0.000 |
| T15 | 1 | 65.20 | 65.199 | 82.84 | 0.000 |
| Error | 75 | 59.03 | 0.787 |  |  |
| Total | 78 | 1049.71 |  |  |  |

**Fits and Diagnostics for Unusual Observations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Obs** | **ΔL** | **Fit** | **Resid** | **Std Resid** |  |  |
| 1 | 0.000 | -0.612 | 0.612 | 0.89 |  | X |
| 2 | 0.932 | 1.353 | -0.421 | -0.54 |  | X |
| 23 | 16.598 | 14.476 | 2.121 | 2.41 | R |  |
| 27 | 16.862 | 14.913 | 1.949 | 2.21 | R |  |
| 29 | 17.117 | 15.143 | 1.974 | 2.25 | R |  |
| 60 | 14.355 | 16.238 | -1.883 | -2.15 | R |  |

*R  Large residual  
X  Unusual X*