

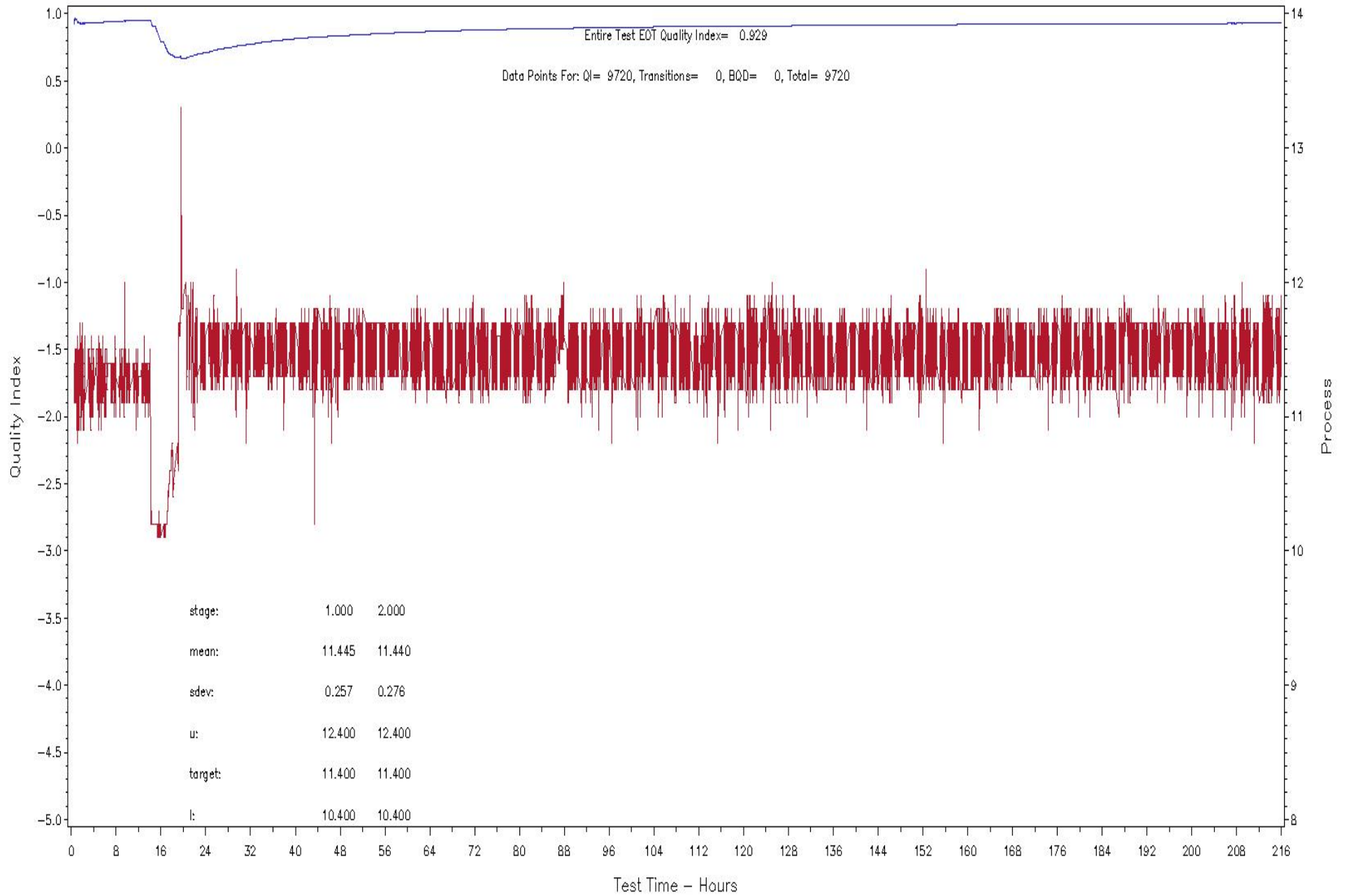
# Chain Wear QI Plots

Data from Testkeys 113312, 113313,  
113420, 113422, 113827 and  
113419

# Humidity

- All Values Positive

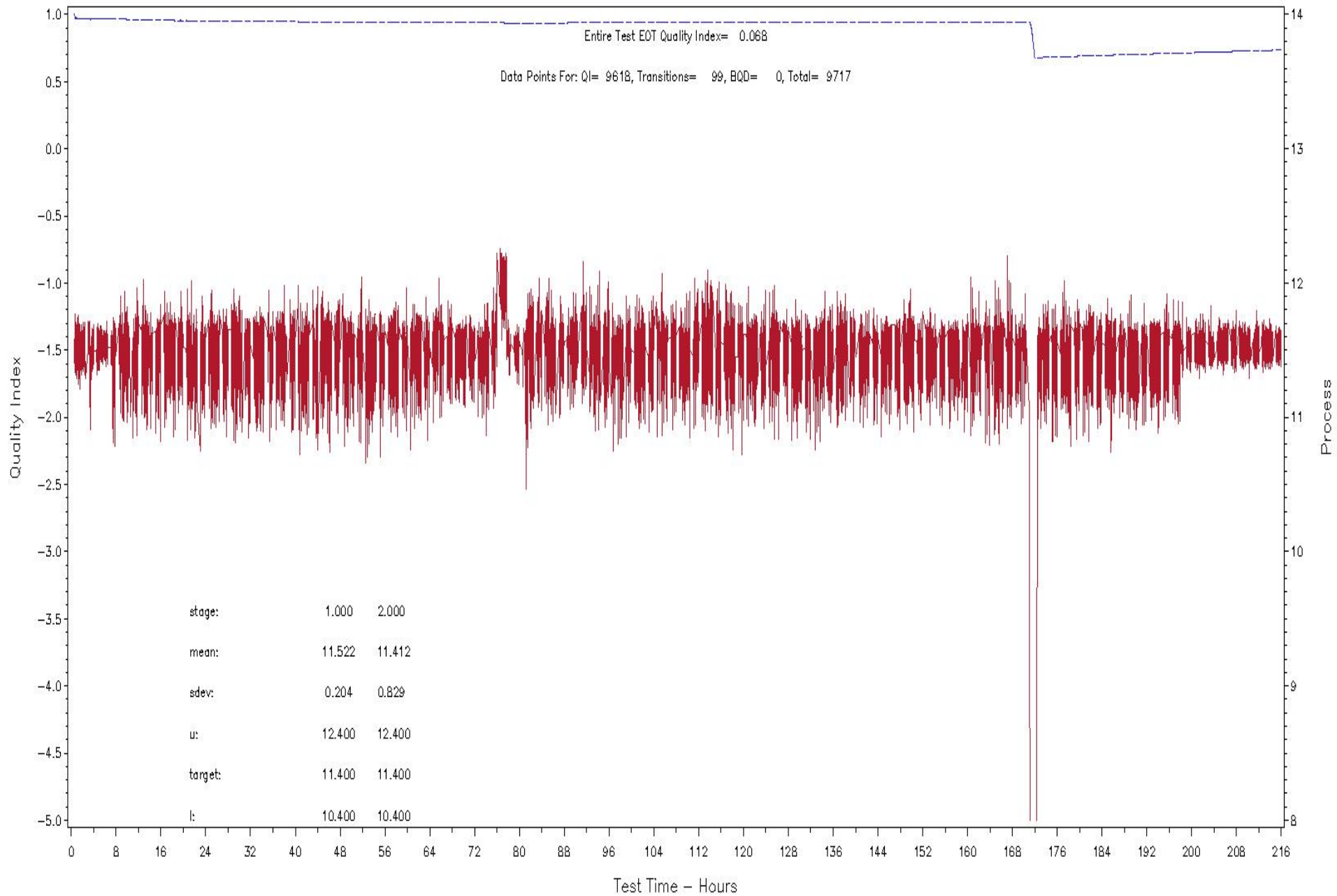
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity - g/kg (CONTROL)  
LAB= A Stand= 8 QIR= 113422



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity - g/kg (CONTROL)  
LAB= GStand= 95 CMR= 11.3419

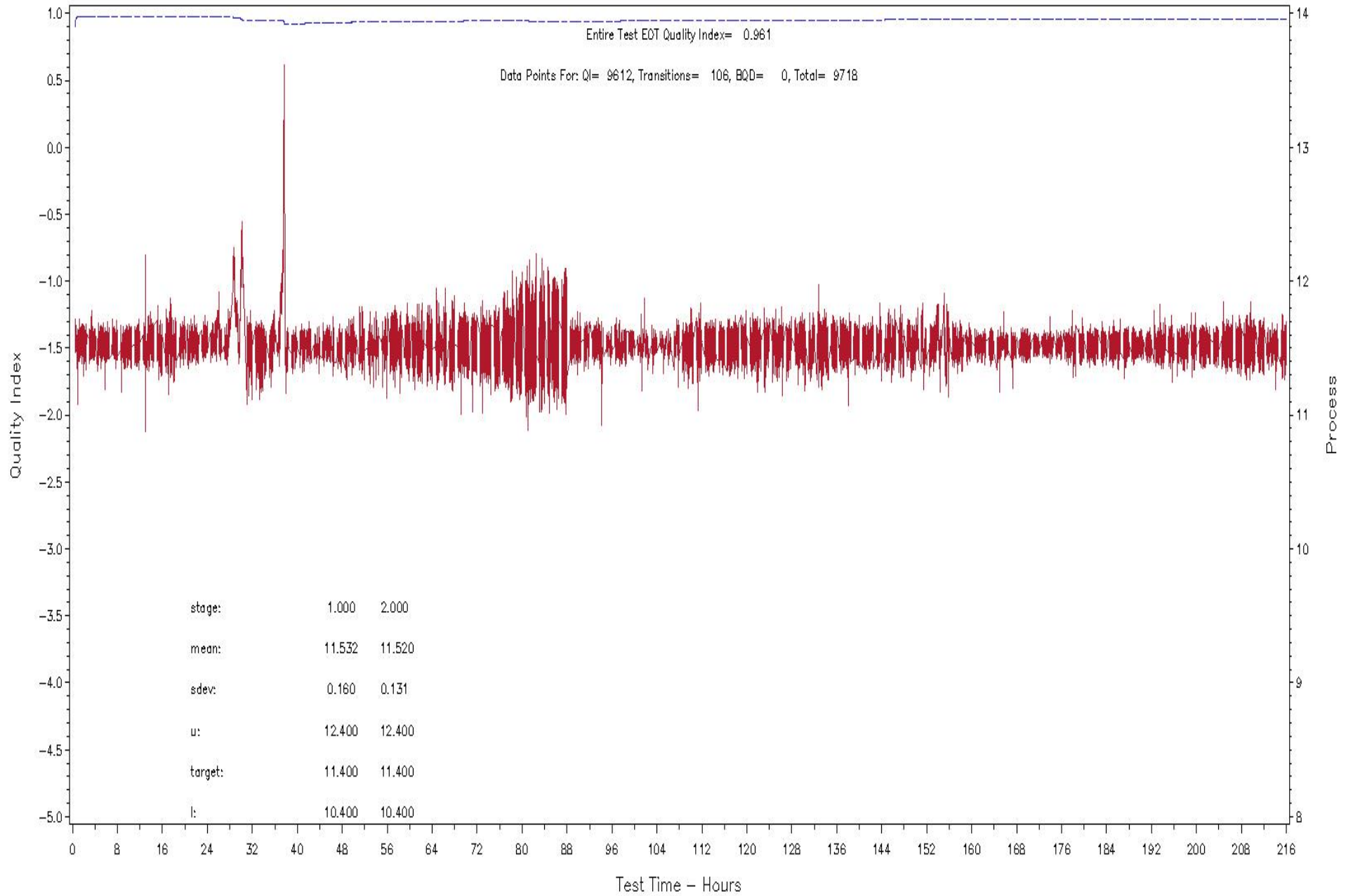
Entire Test EOT Quality Index= 0.068

Data Points For: QI= 9618, Transitions= 99, BQD= 0, Total= 9717

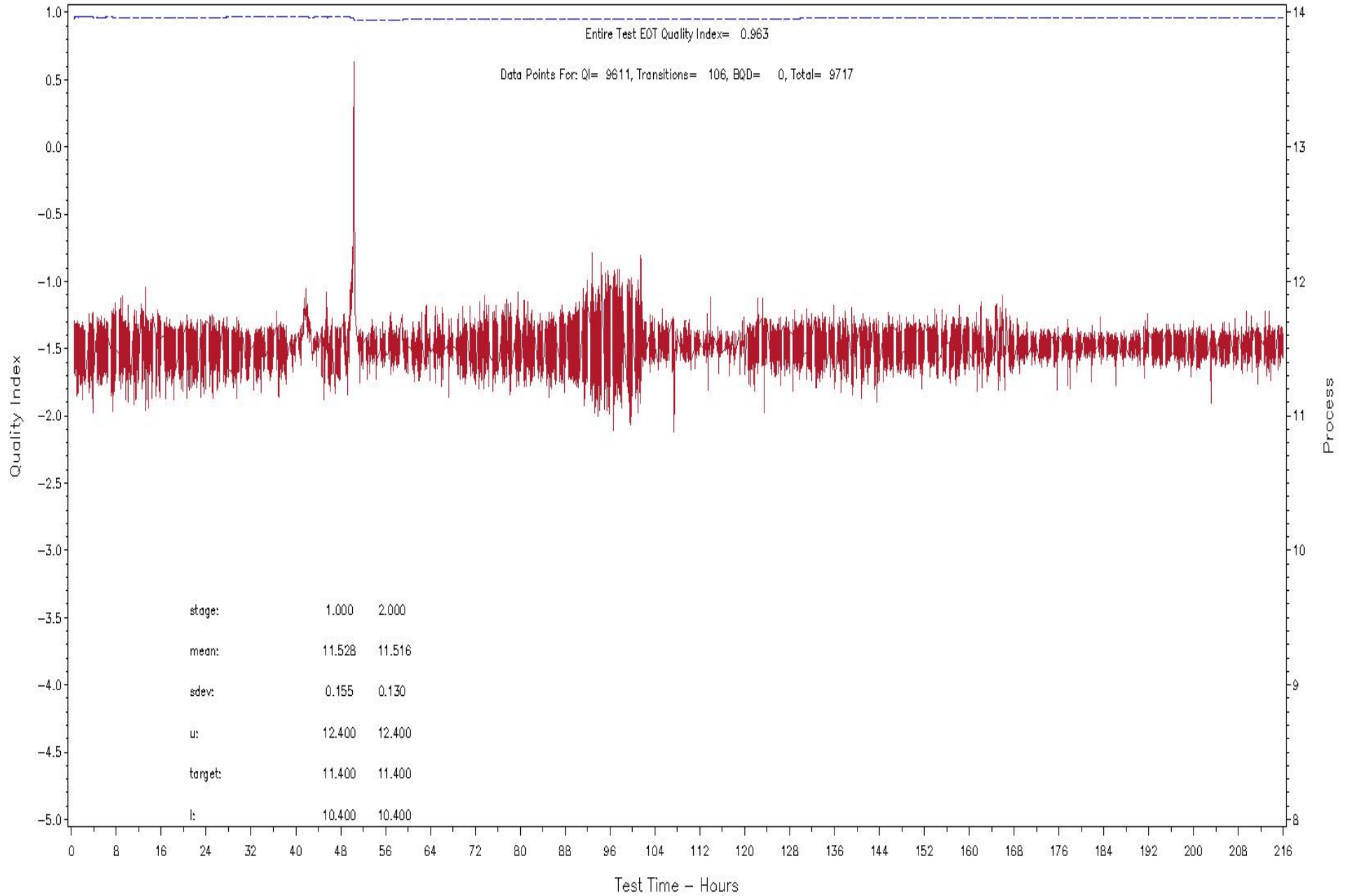




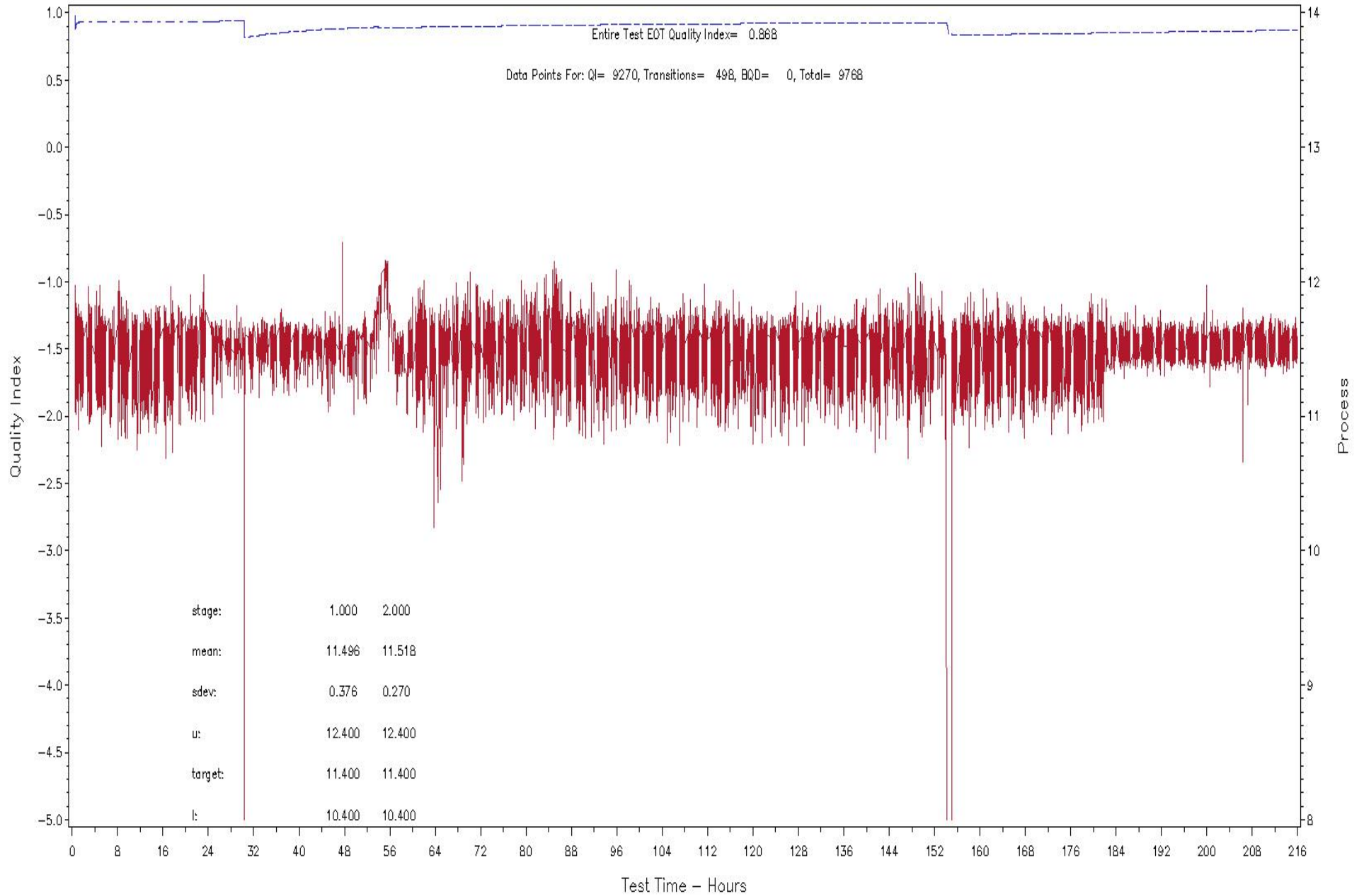
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity - g/kg (CONTROL)  
LAB= G Stand= 95 CMR= 11.3420



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity – g/kg (CONTROL)  
LAB= GStand= 93 CMR= 11.3313



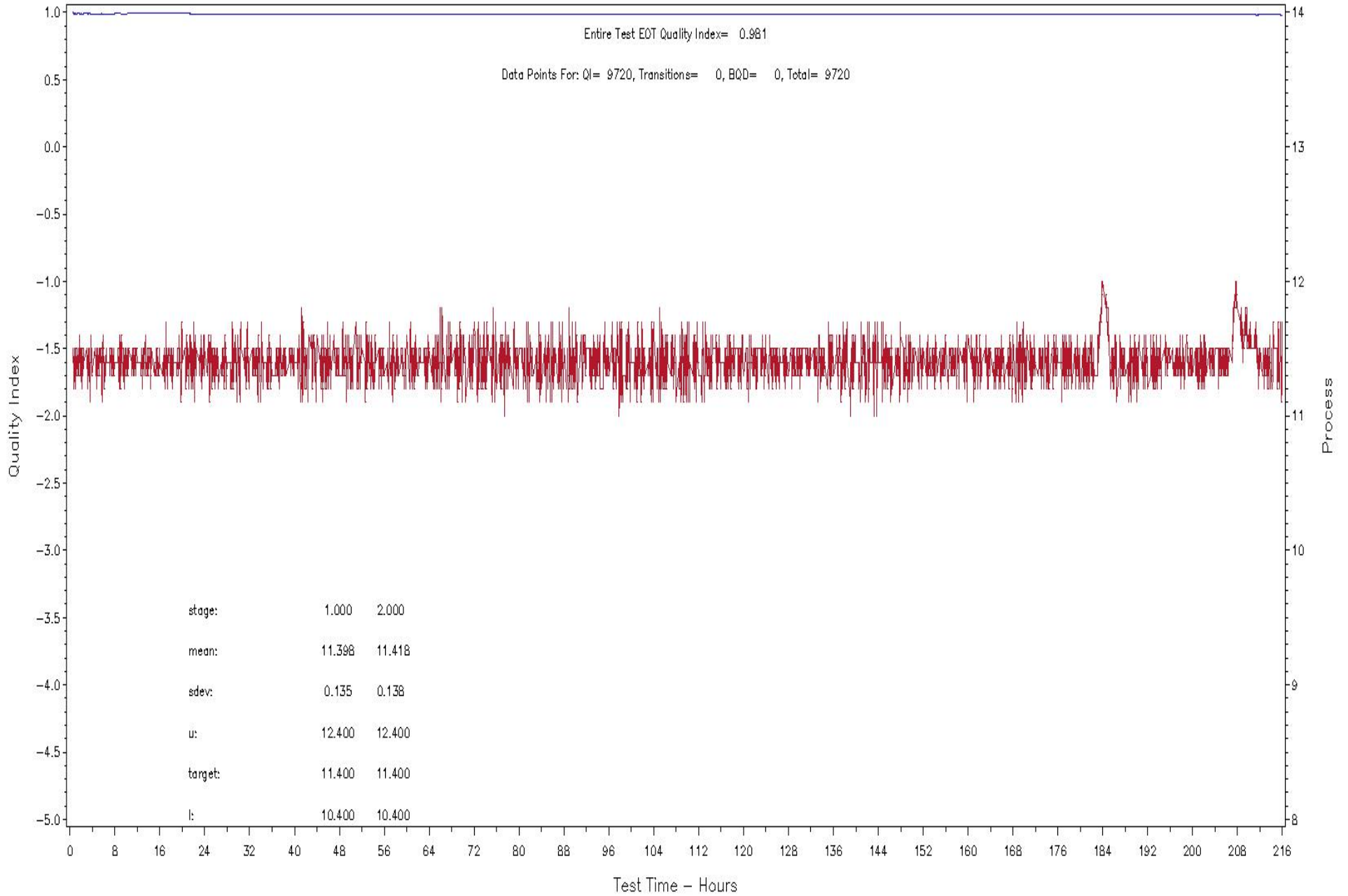
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity - g/kg (CONTROL)  
LAB= GStand= 93 CMR= 11.3312



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Humidity - g/kg (CONTROL)  
LAB= A Stand= 27 CMIR= 113827

Entire Test EOT Quality Index= 0.981

Data Points For: QI= 9720, Transitions= 0, BQD= 0, Total= 9720



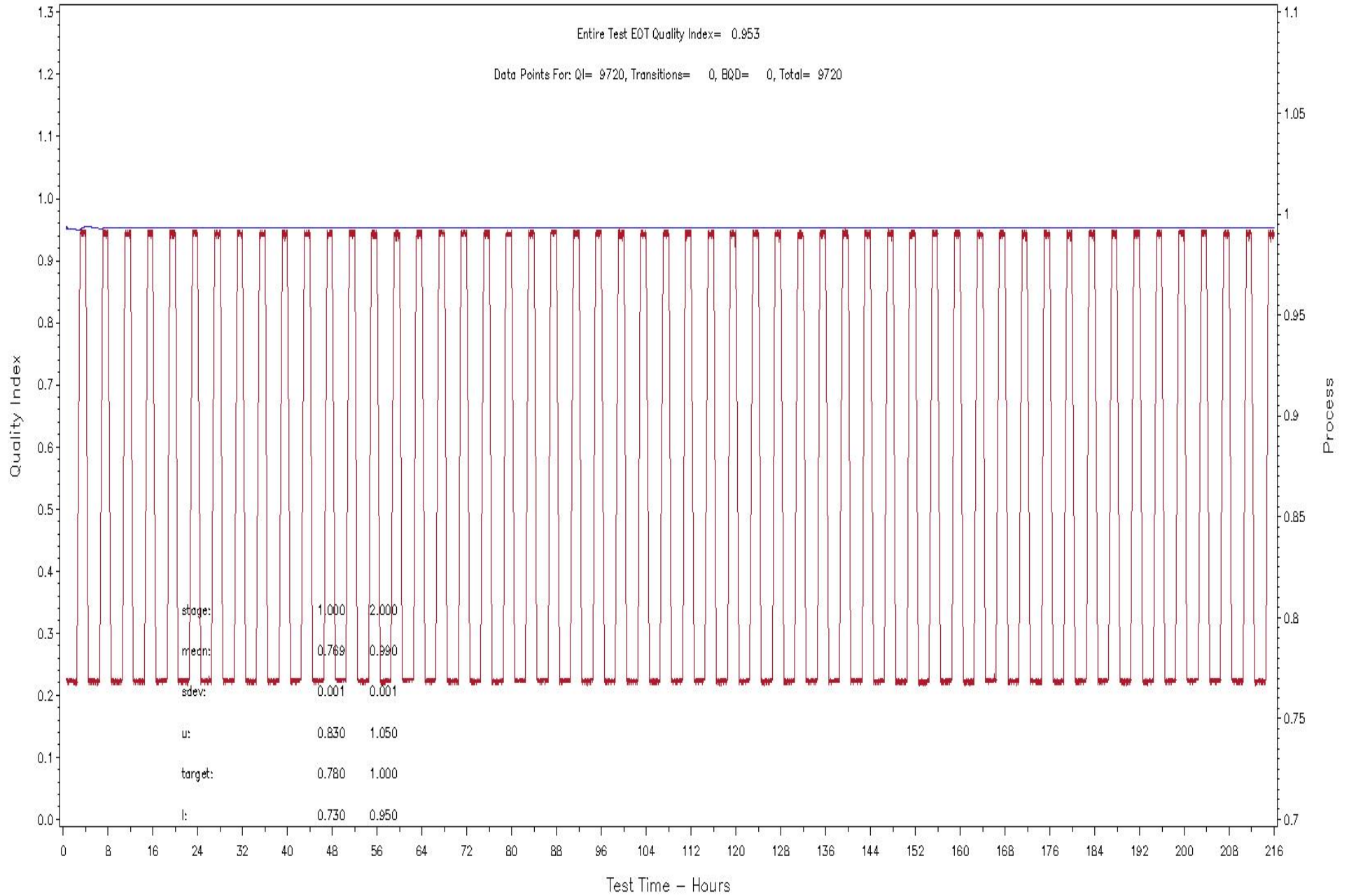
# Lambda

- All Values Positive

CWT QUALITY INDEX OPERATIONAL REVIEW  
 AFR - Lambda (CONTROL)  
 LAB= A Stand= 8 QMIR= 113422

Entire Test EOT Quality Index= 0.953

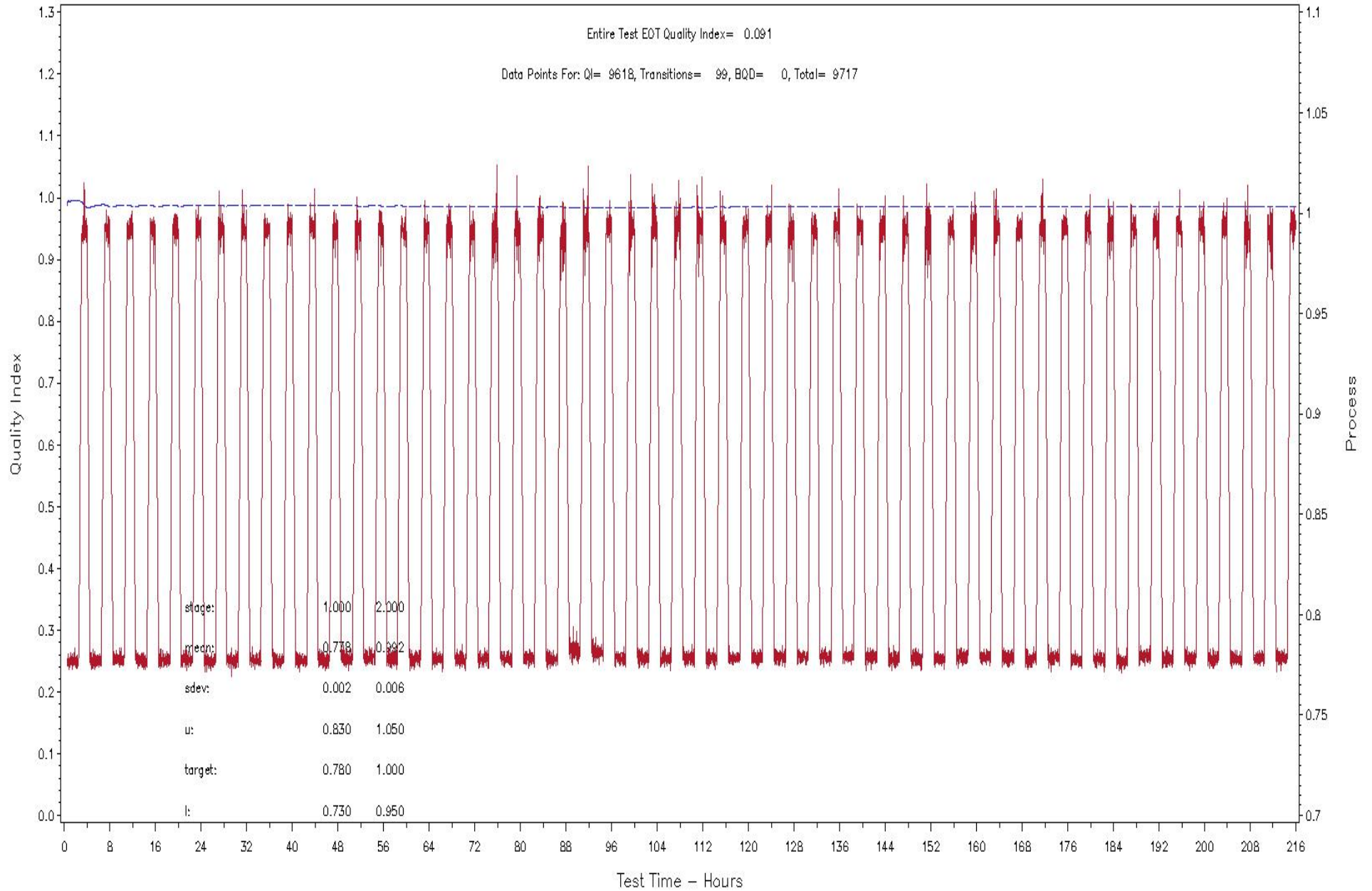
Data Points For: QI= 9720, Transitions= 0, BQD= 0, Total= 9720



CWT QUALITY INDEX OPERATIONAL REVIEW  
 AFR - Lambda (CONTROL)  
 LAB= G Stand= 95 CMR= 113419

Entire Test EOT Quality Index= 0.091

Data Points For: QI= 9618, Transitions= 99, BQD= 0, Total= 9717

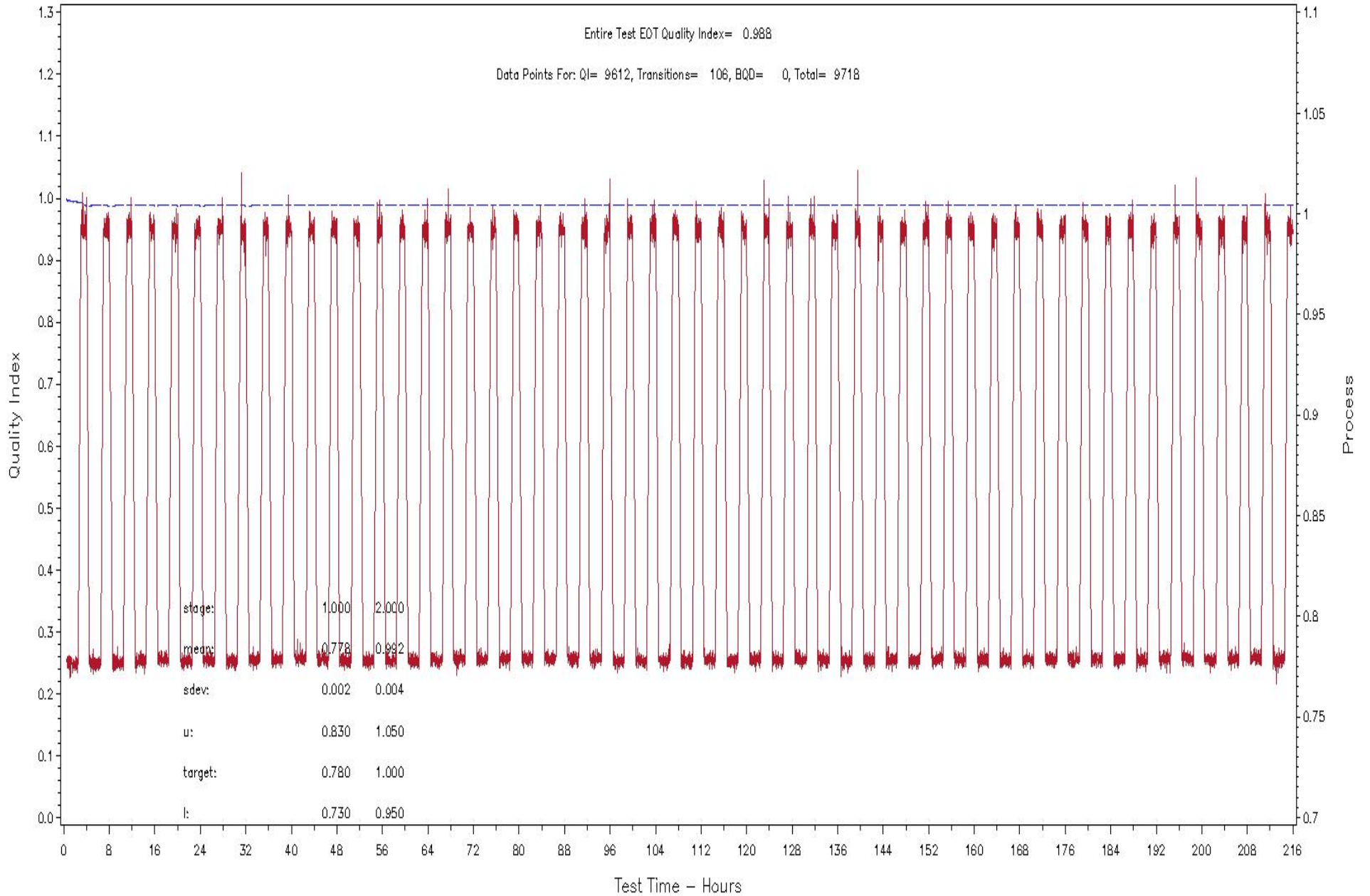




CWT QUALITY INDEX OPERATIONAL REVIEW  
AFR - Lambda (CONTROL)  
LAB= G Stand= 95 CMR= 113420

Entire Test EOT Quality Index= 0.988

Data Points For: QI= 9612, Transitions= 106, BQD= 0, Total= 9718

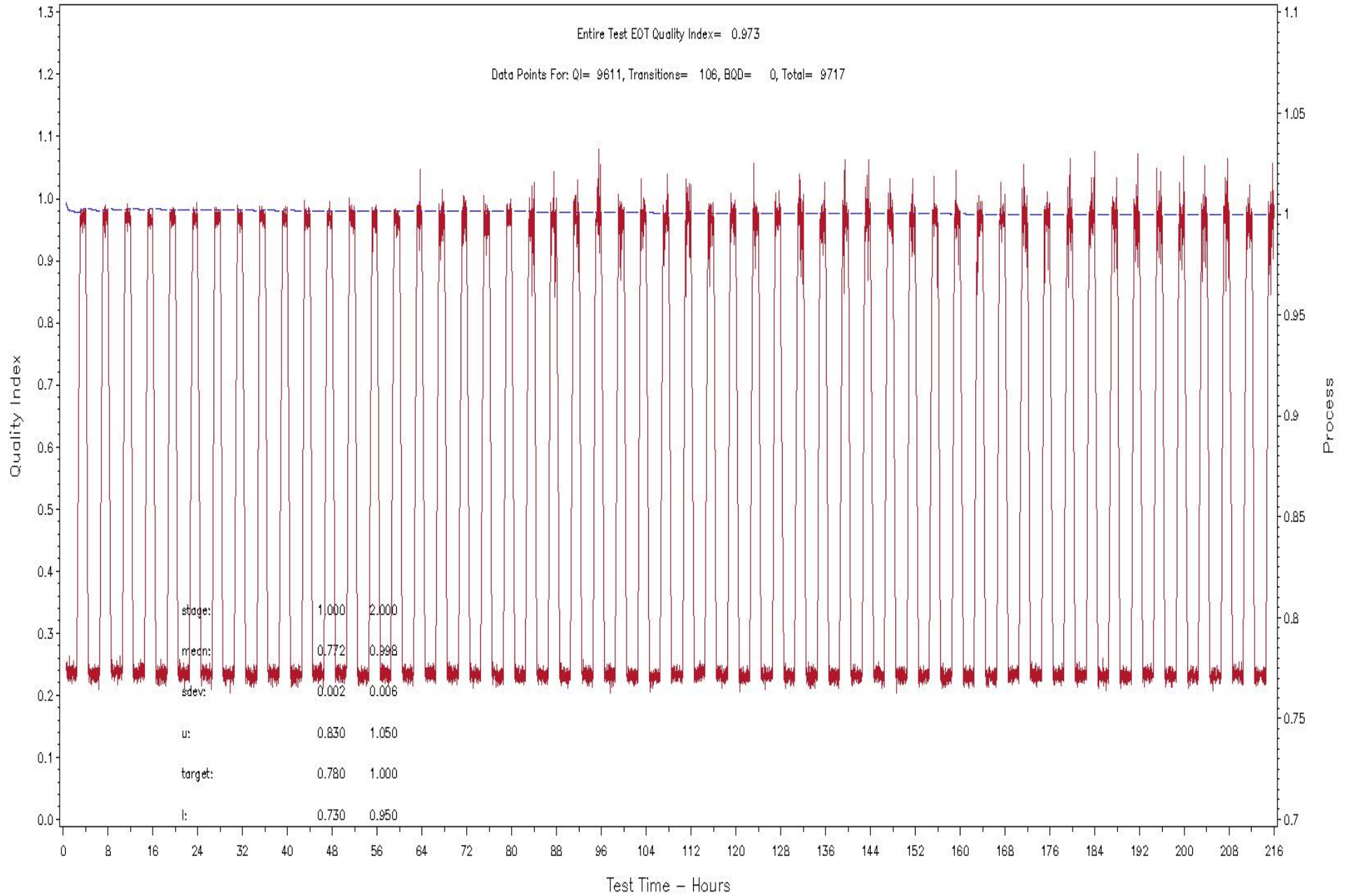




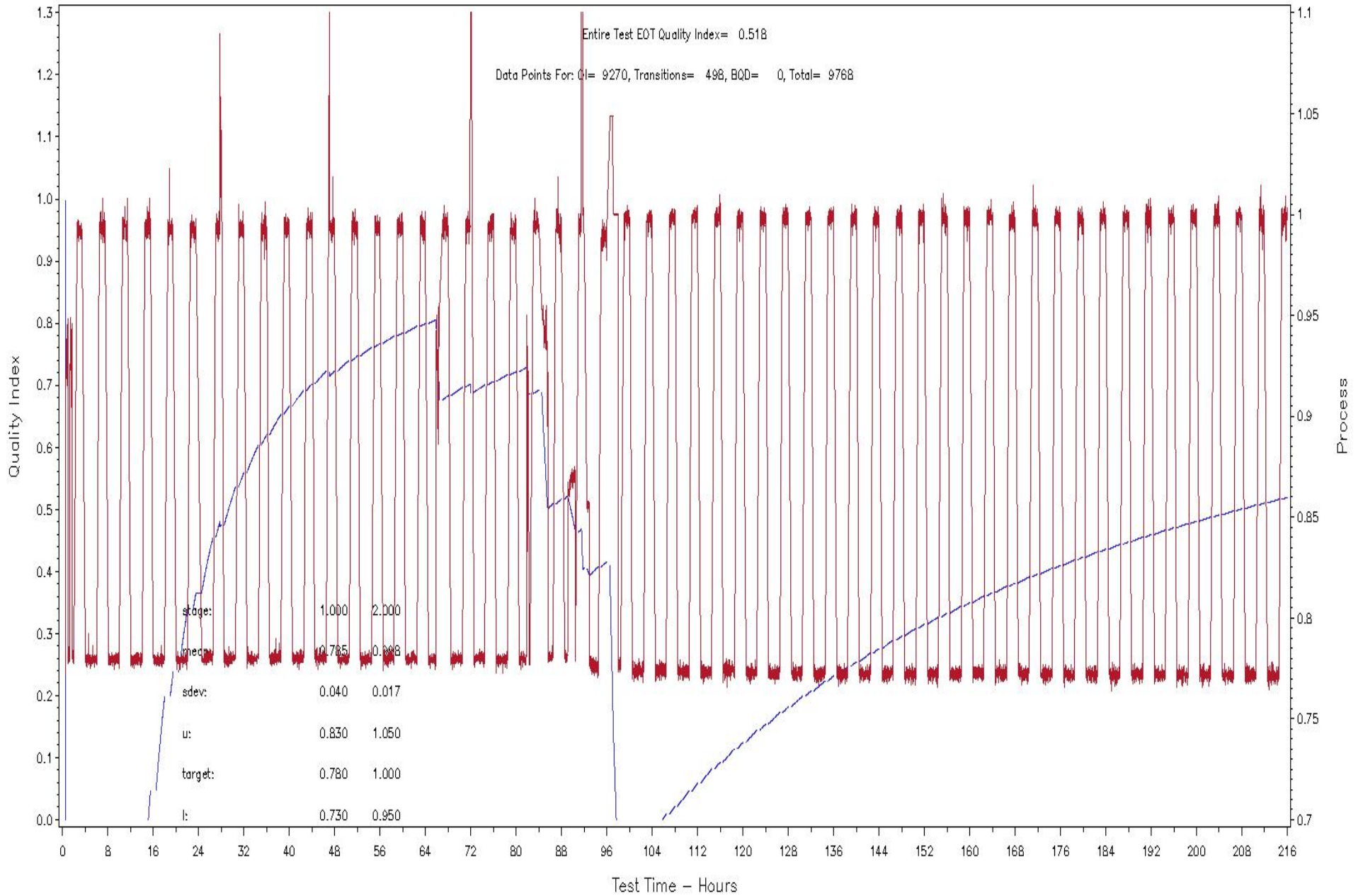
CWT QUALITY INDEX OPERATIONAL REVIEW  
 AFR - Lambda (CONTROL)  
 LAB= GStand= 93 CMR= 113313

Entire Test EOT Quality Index= 0.973

Data Points For: QI= 9611, Transitions= 106, BQO= 0, Total= 9717



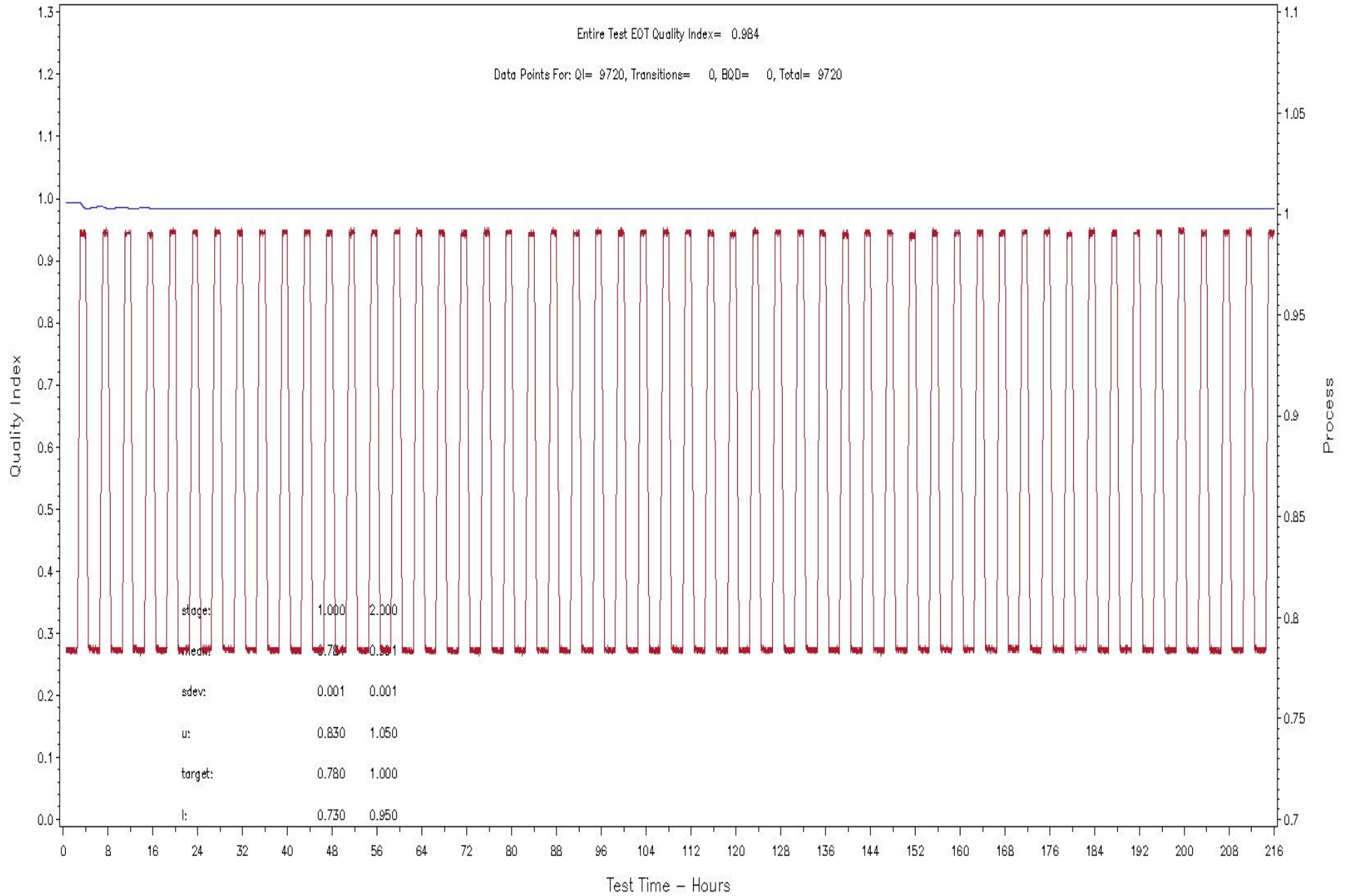
CWT QUALITY INDEX OPERATIONAL REVIEW  
 AFR - Lambda (CONTROL)  
 LAB= G Stand= 93 CMR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
 AFR - Lambda (CONTROL)  
 LAB= A Stand= 27 CMIR= 113827

Entire Test EOT Quality Index= 0.984

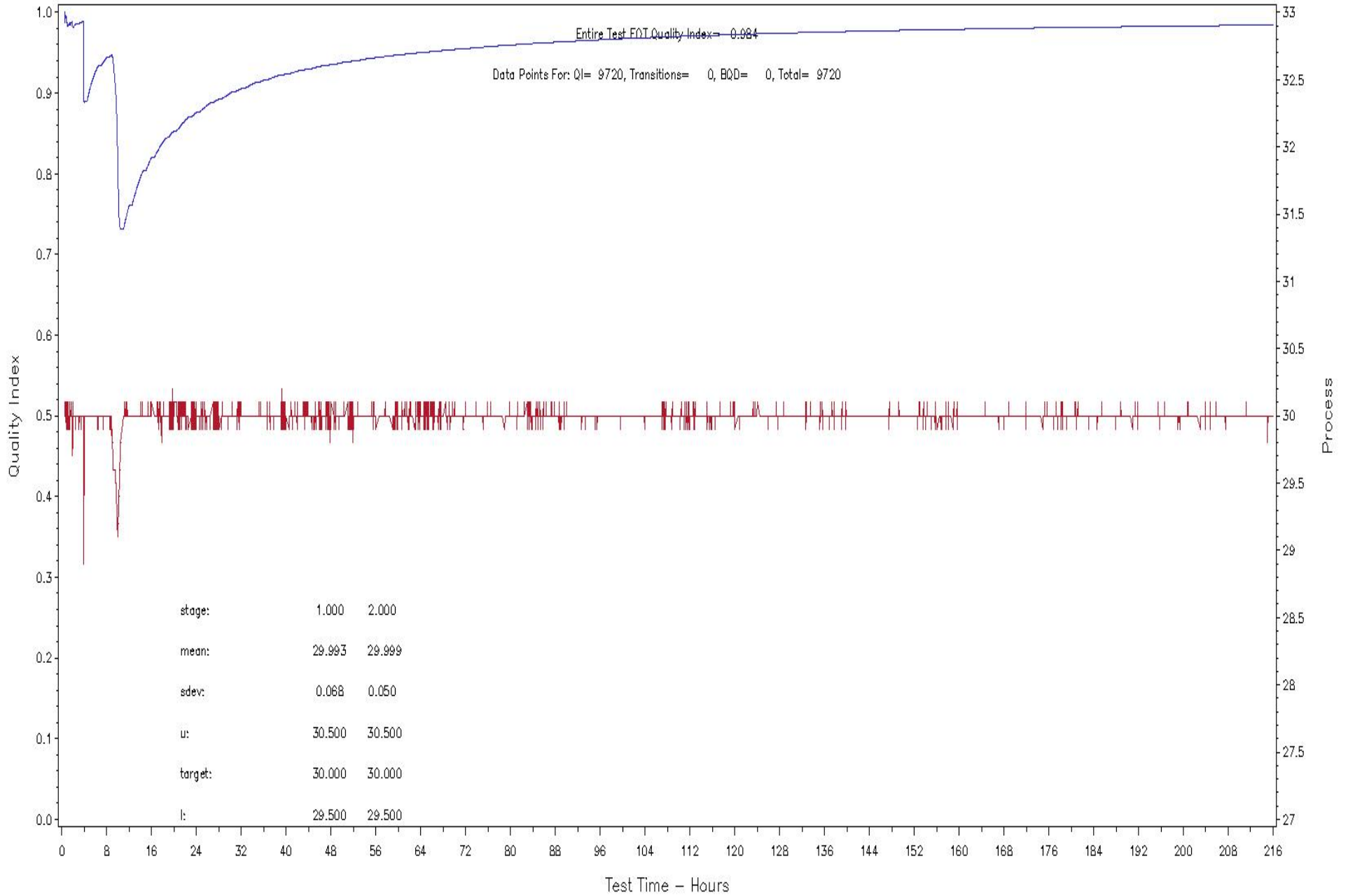
Data Points For: QI= 9720, Transitions= 0, BQD= 0, Total= 9720



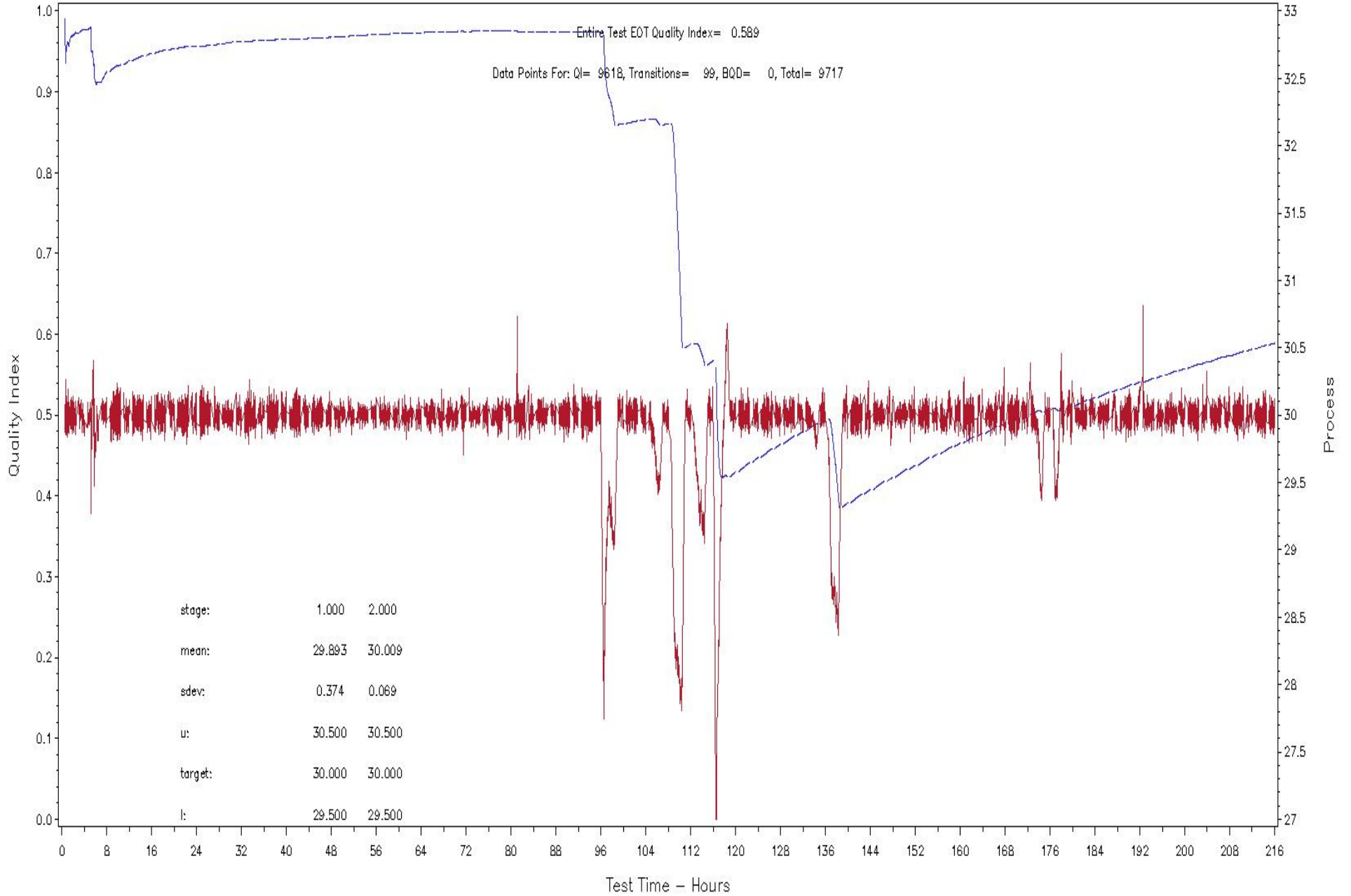
# Air Charge Temperature

- All Values Positive

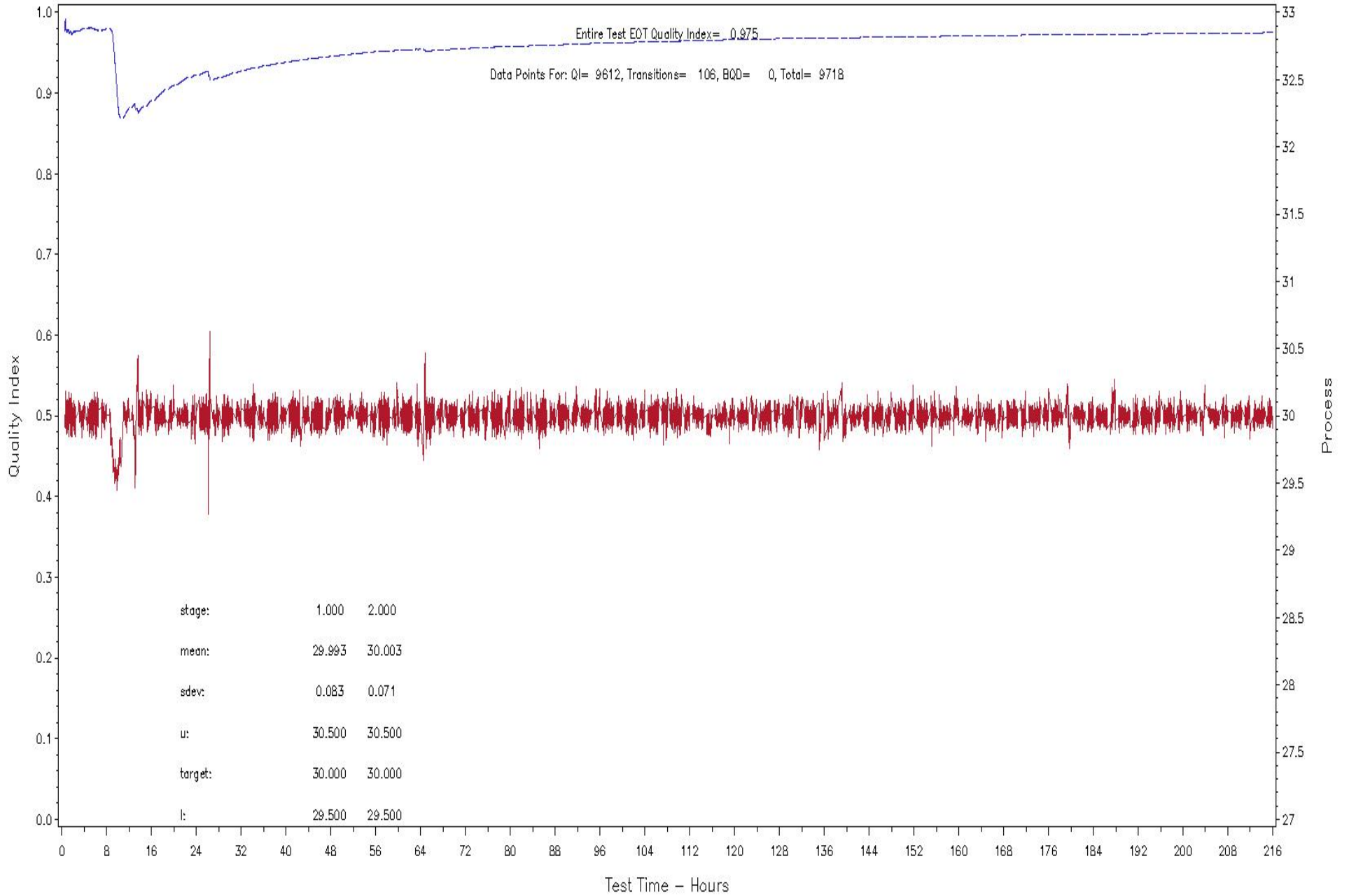
CWT QUALITY INDEX OPERATIONAL REVIEW  
Air Charge Temperature – Degrees C (CONTROL)  
LAB= A Stand= 8 QMIR= 113422



CWT QUALITY INDEX OPERATIONAL REVIEW  
Air Charge Temperature – Degrees C (CONTROL)  
LAB= GStand= 95 CMR= 113419

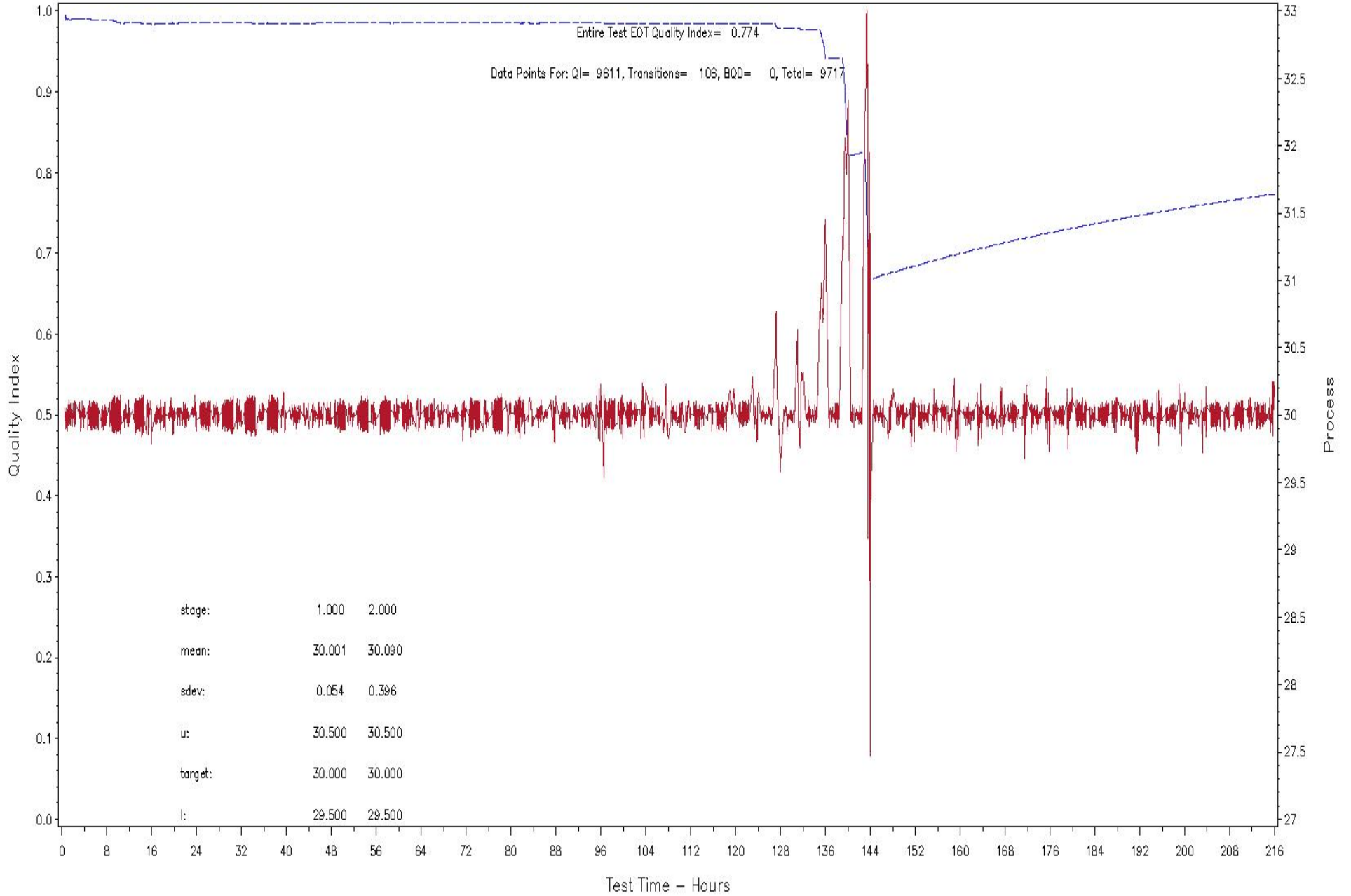


CWT QUALITY INDEX OPERATIONAL REVIEW  
Air Charge Temperature – Degrees C (CONTROL)  
LAB= GStand= 95 CMIR= 113420



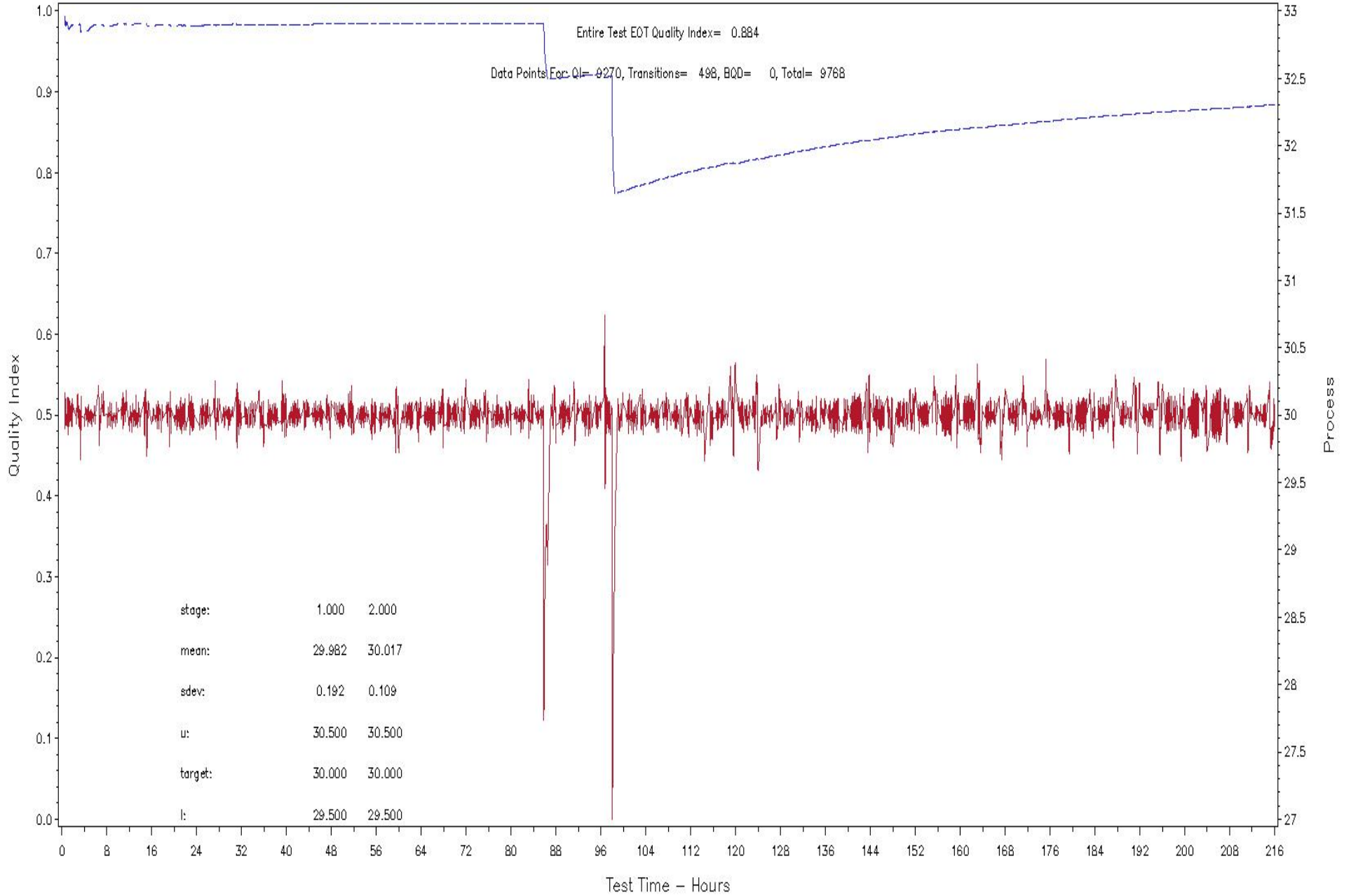


CWT QUALITY INDEX OPERATIONAL REVIEW  
Air Charge Temperature – Degrees C (CONTROL)  
LAB= GStand= 93 CMR= 113313

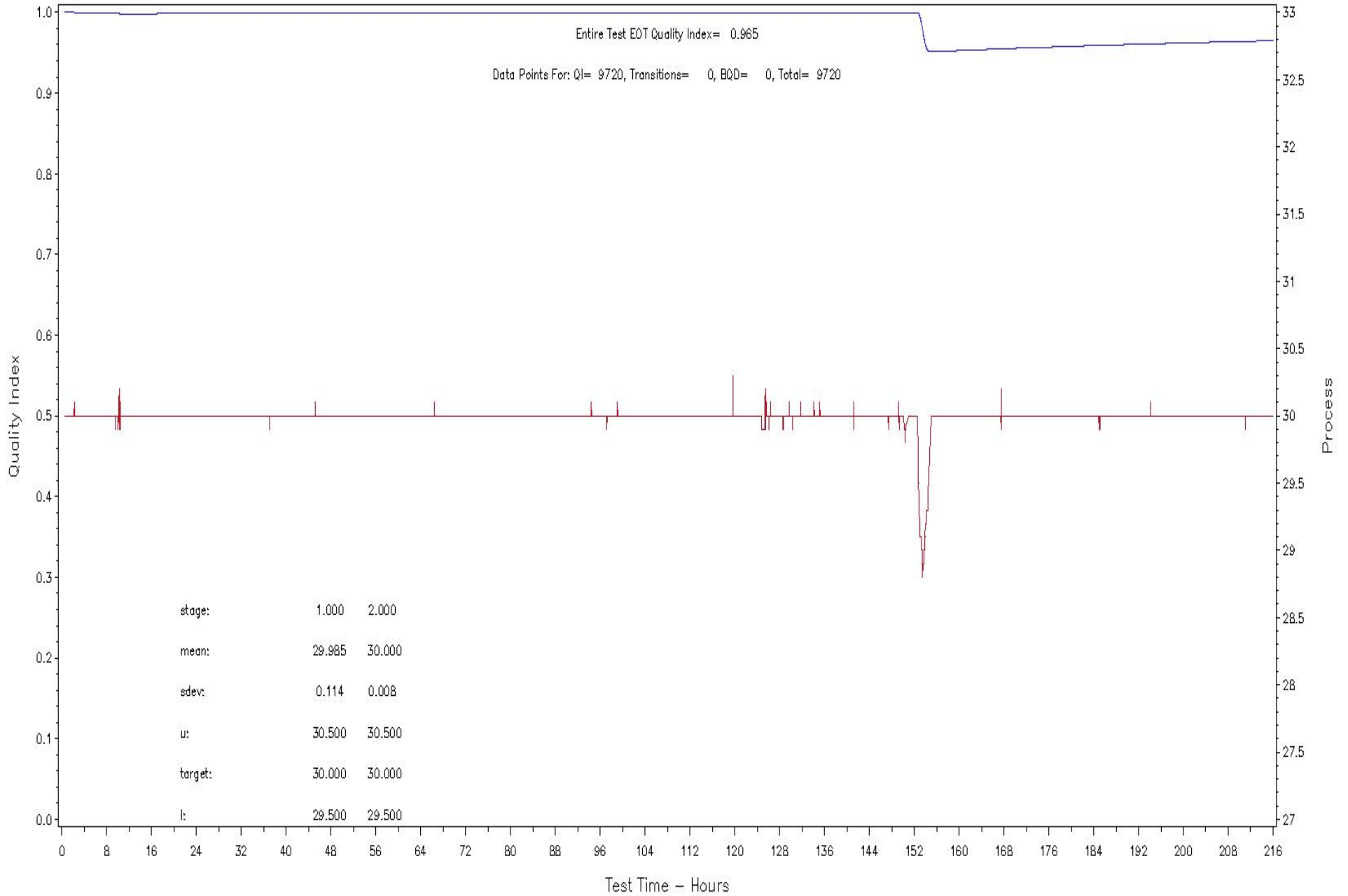




CWT QUALITY INDEX OPERATIONAL REVIEW  
 Air Charge Temperature – Degrees C (CONTROL)  
 LAB= GStand= 93 CMR= 113312

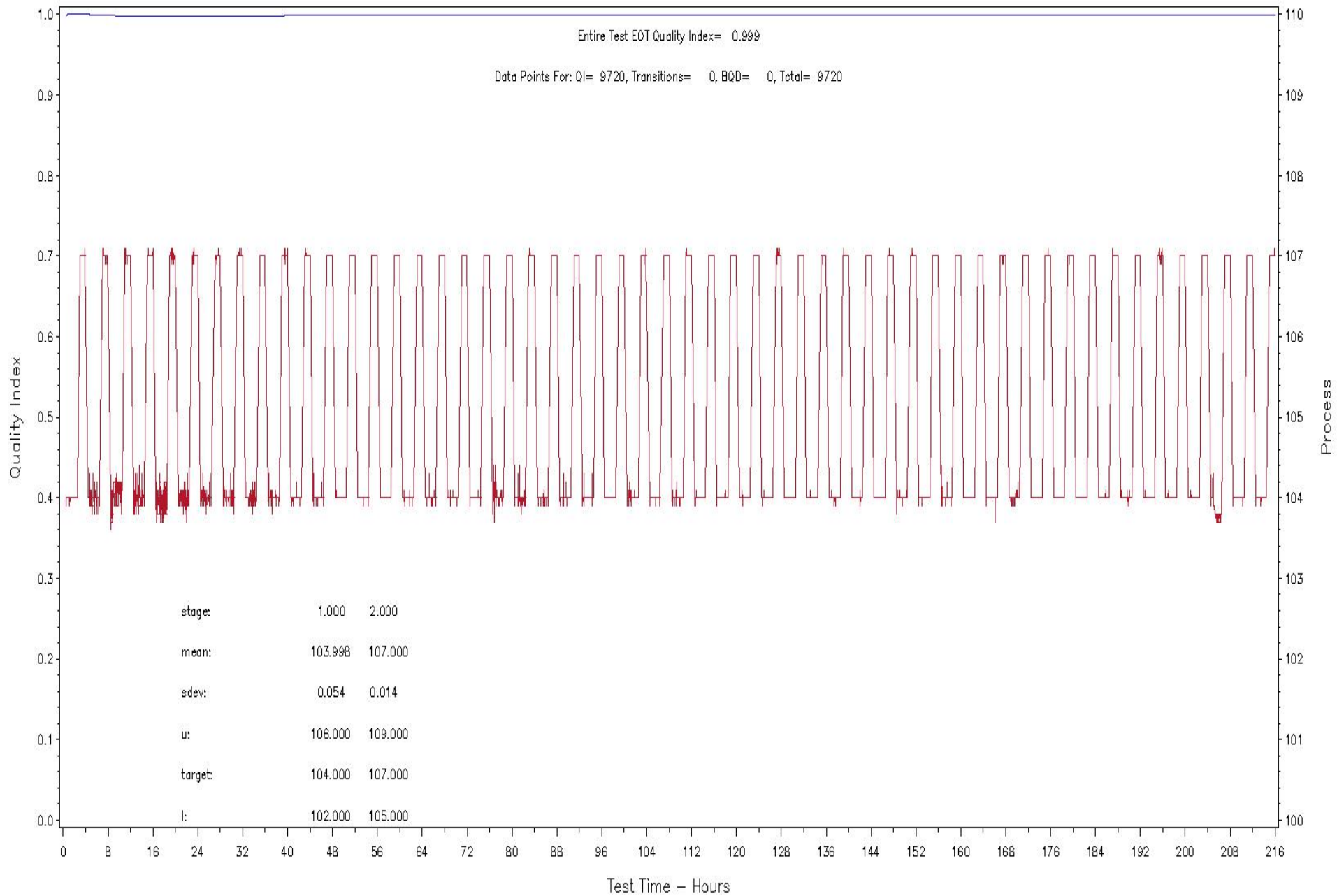


CWT QUALITY INDEX OPERATIONAL REVIEW  
Air Charge Temperature – Degrees C (CONTROL)  
LAB= A Stand= 27 CMIR= 113827

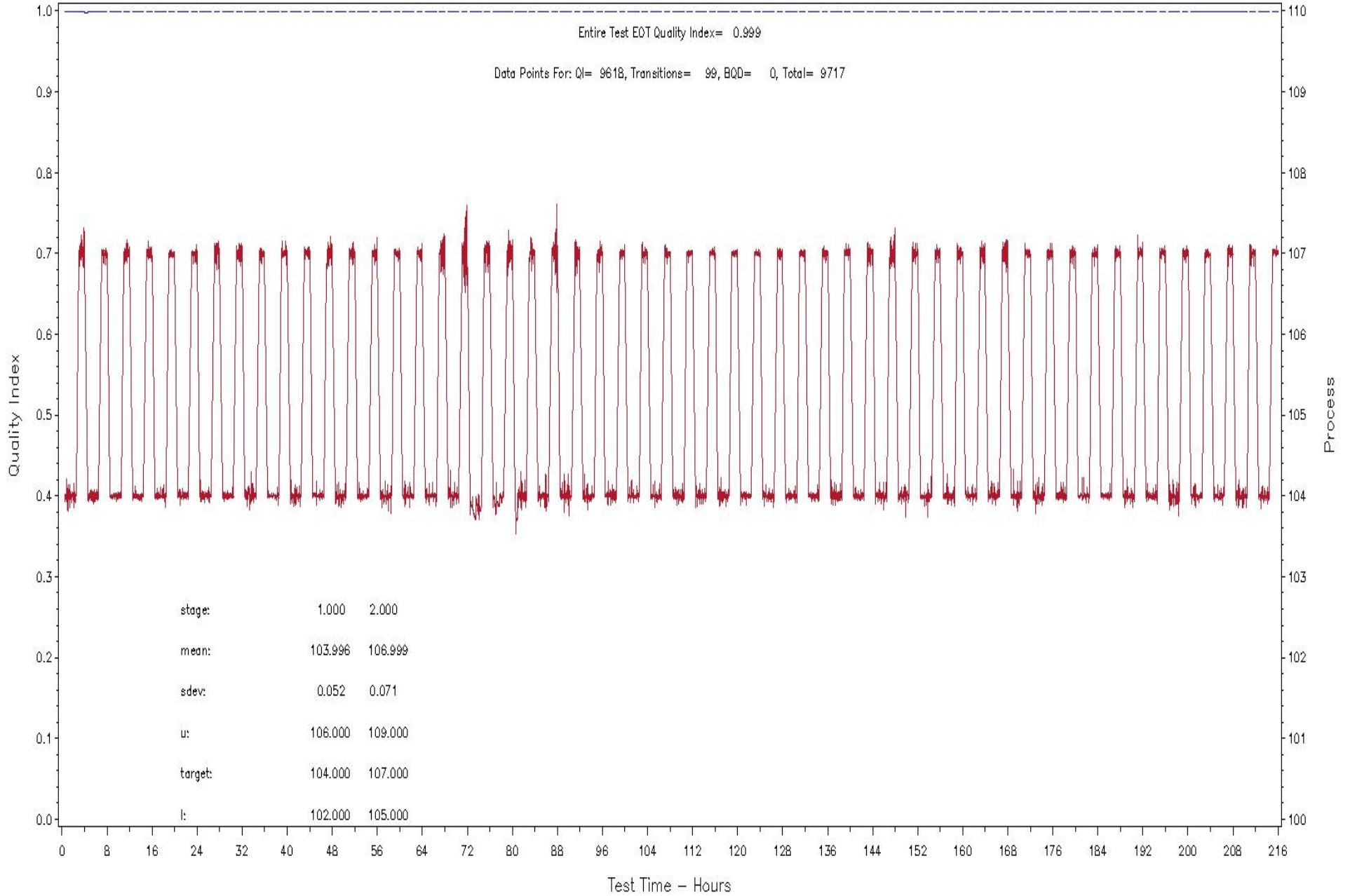


# Exhaust Back Pressure

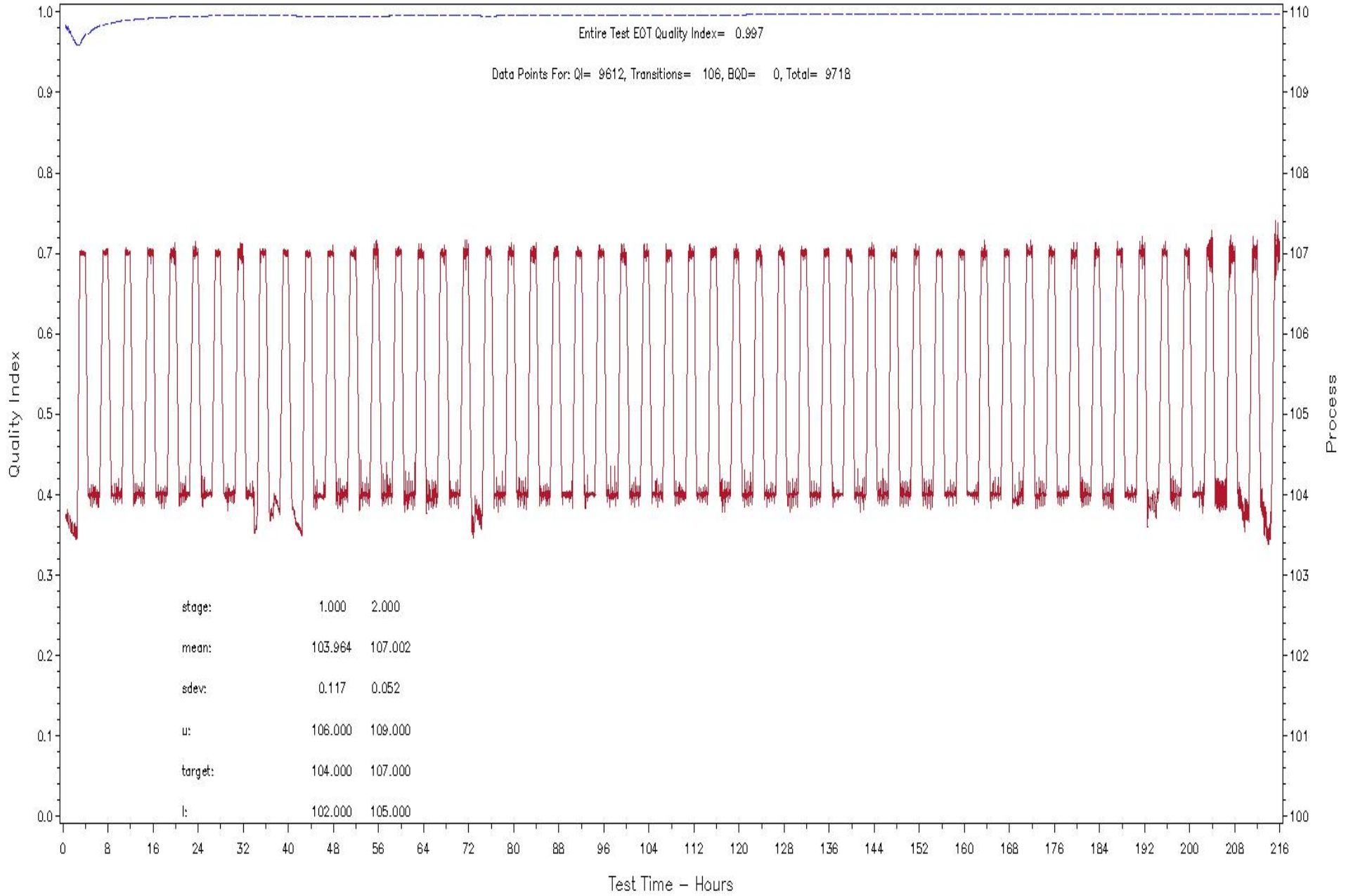
CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure - kPa (CONTROL)  
LAB= A Stand= 8 QMR= 113422



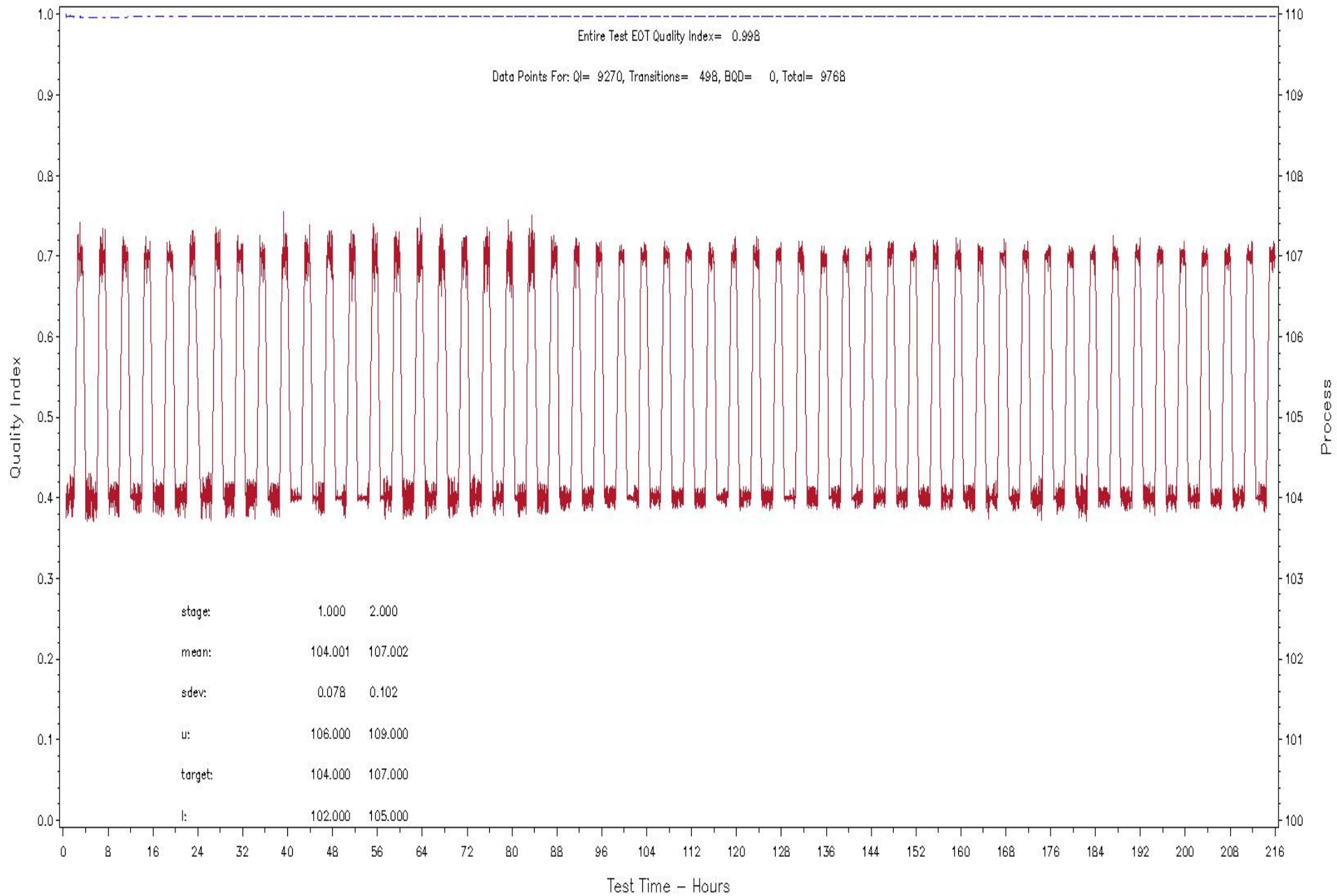
CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure – kPa (CONTROL)  
LAB= GStand= 95 CMR= 113419



CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure – kPa (CONTROL)  
LAB= G Stand= 95 CMR= 113420

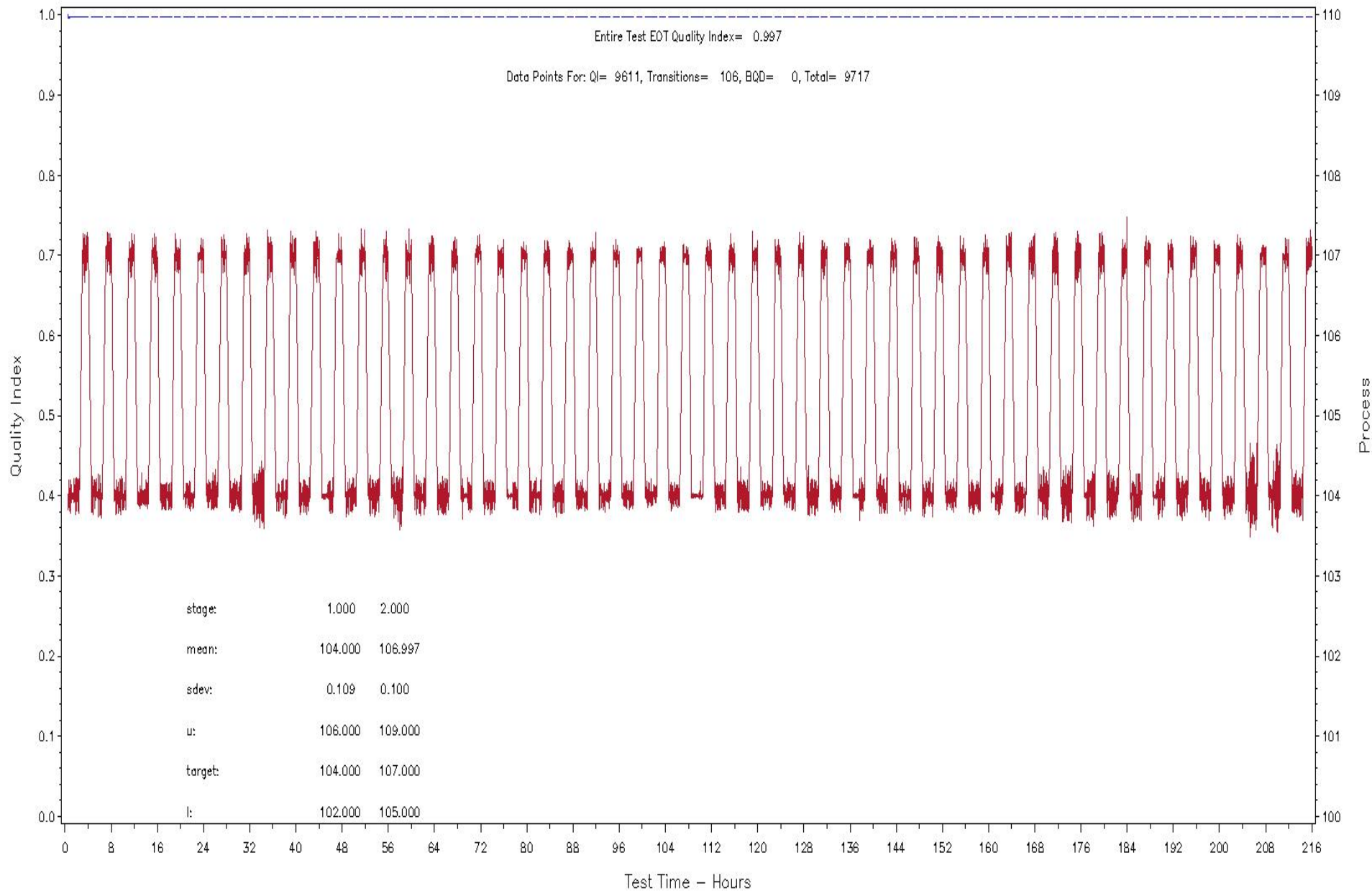


CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure - kPa (CONTROL)  
LAB= GStand= 93 CMR= 113312



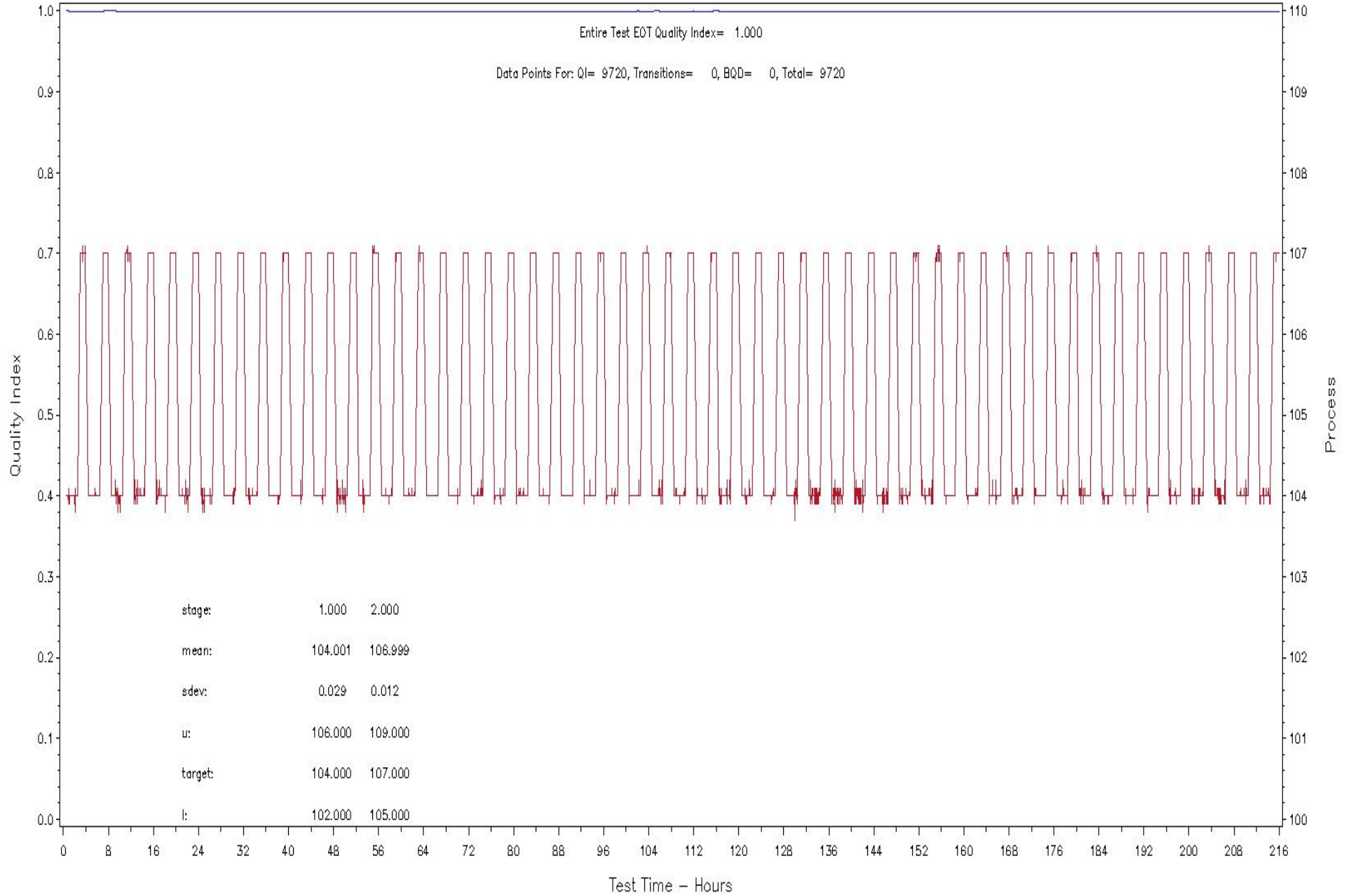


CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure – kPa (CONTROL)  
LAB= GStand= 93 CMR= 113313





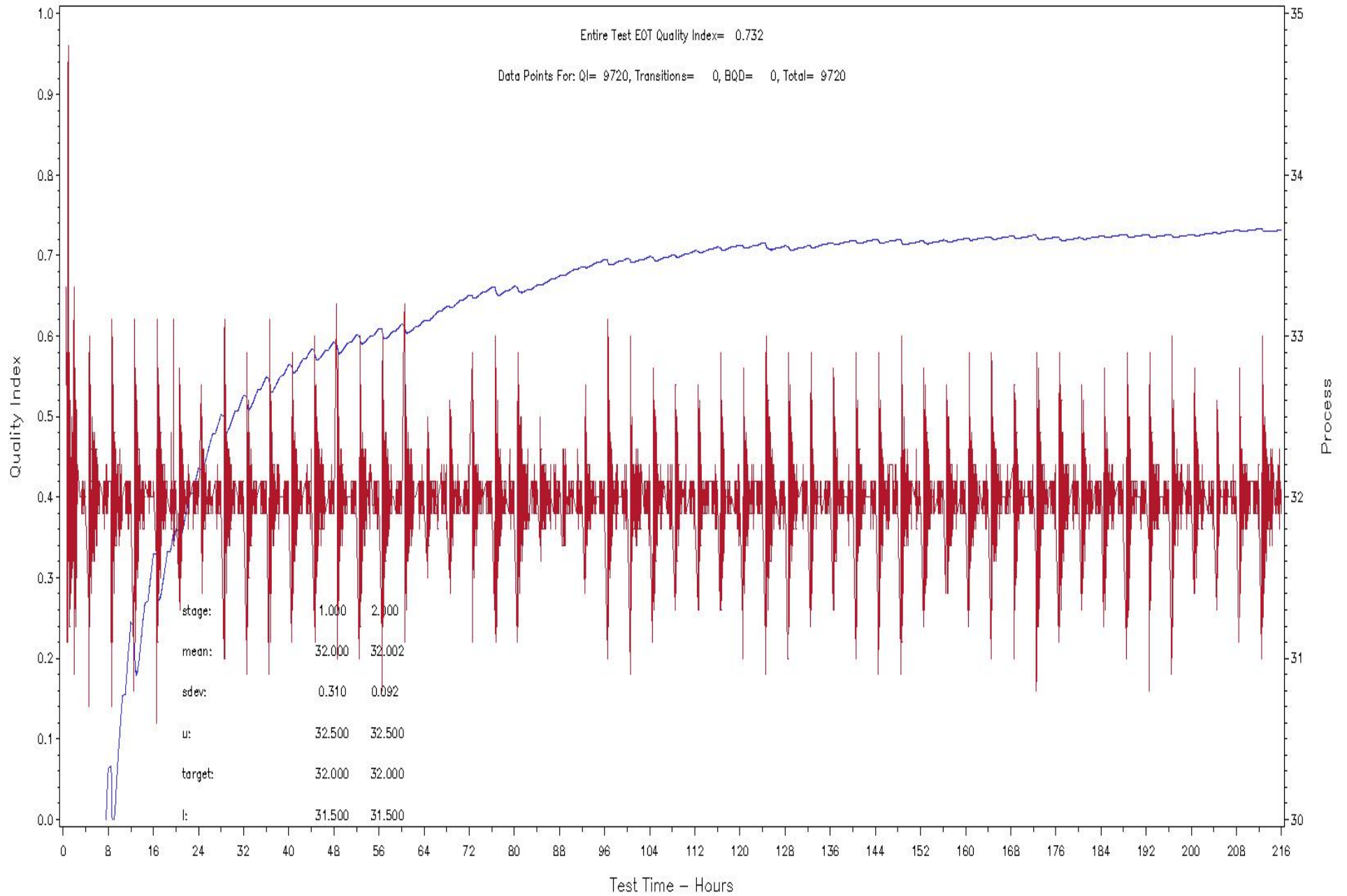
CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure - kPa (CONTROL)  
LAB= A Stand= 27 CMIR= 113827



# Inlet Air Temperature

- All tests positive

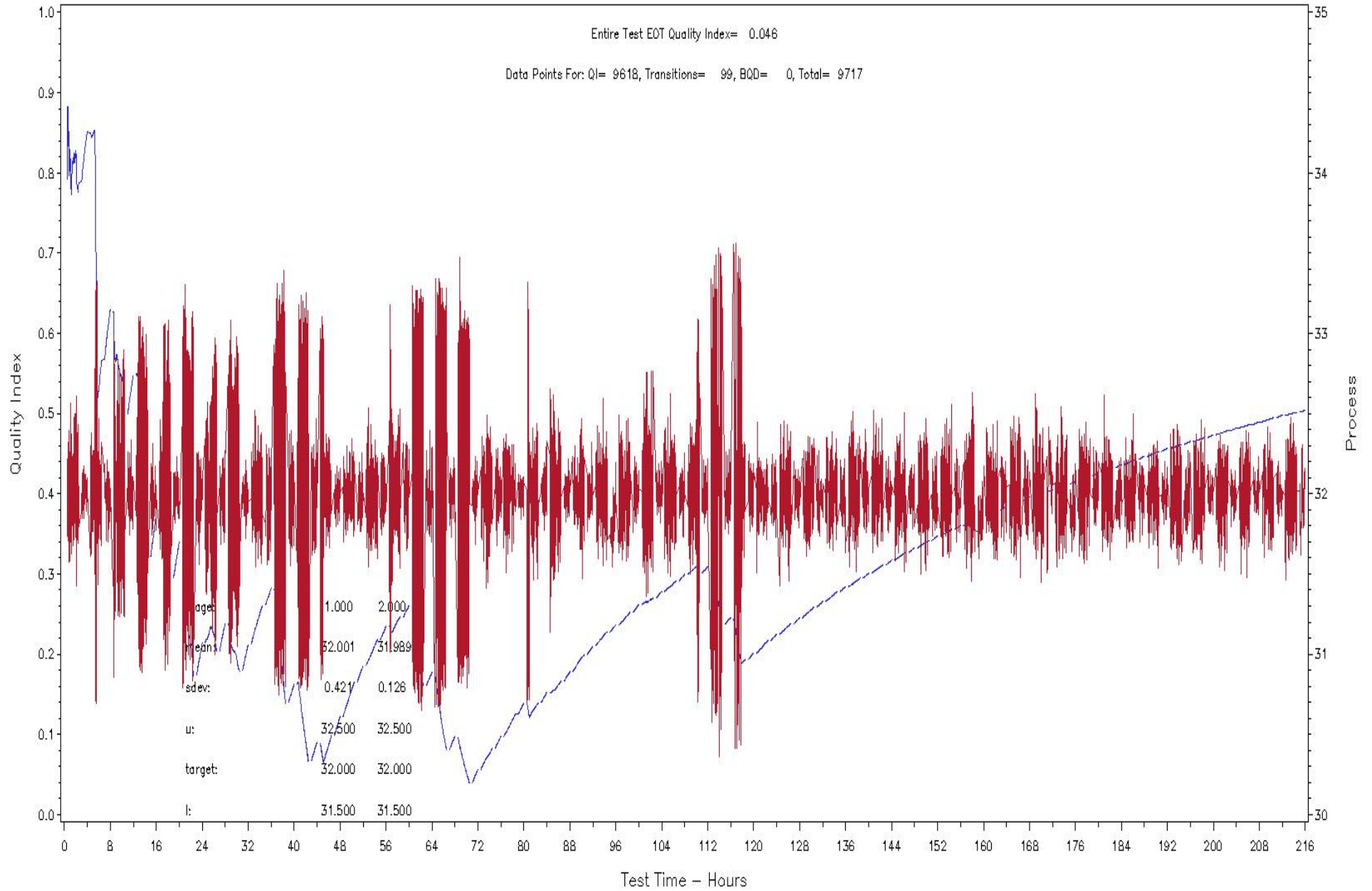
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature – Degrees C (CONTROL)  
LAB= A Stand= 8 QIR= 113422



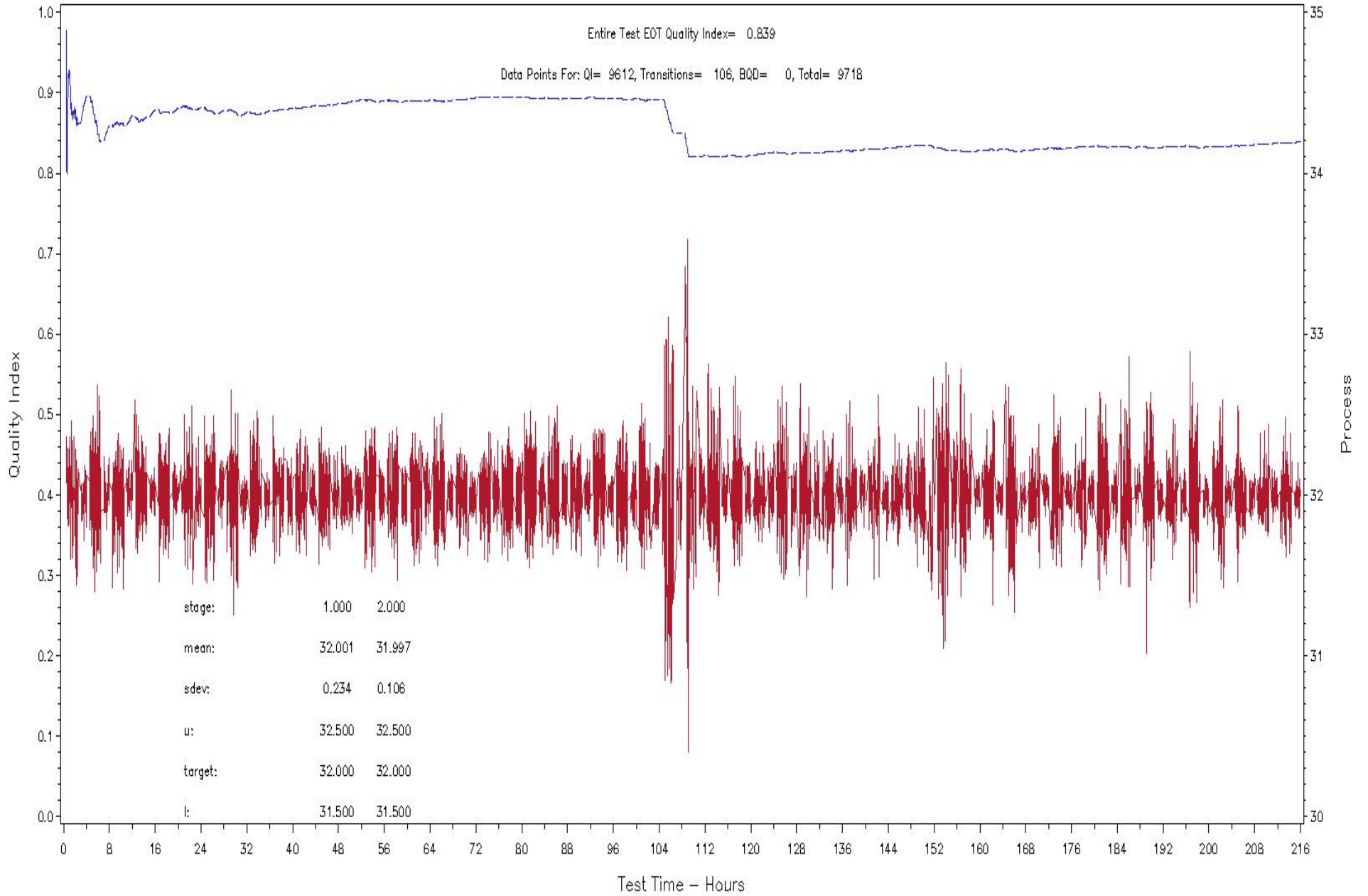
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature – Degrees C (CONTROL)  
LAB= GStand= 95 CMIR= 113419

Entire Test EOT Quality Index= 0.046

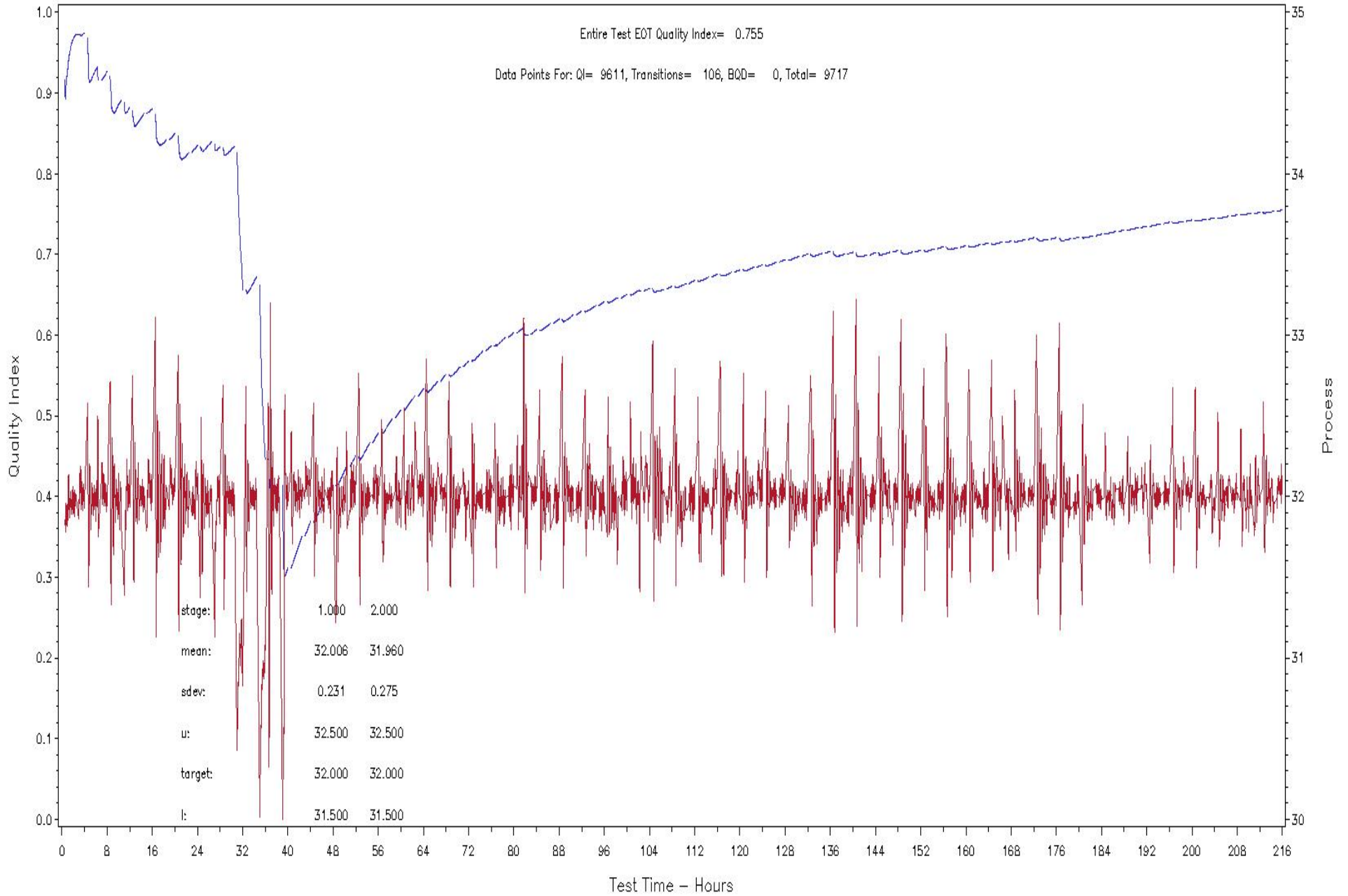
Data Points For: QI= 9618, Transitions= 99, BQD= 0, Total= 9717



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature – Degrees C (CONTROL)  
LAB= G Stand= 95 CMR= 113420

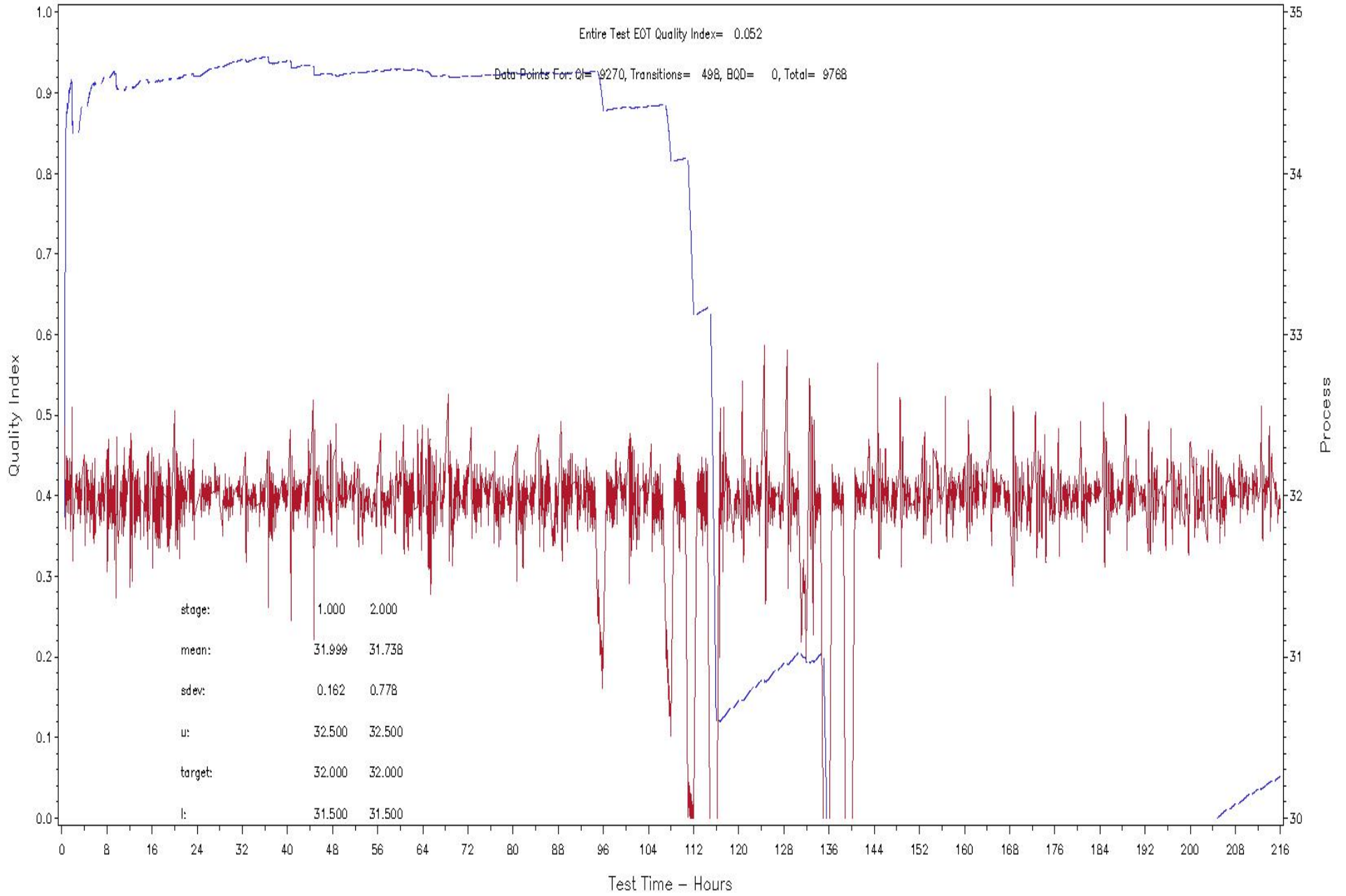


CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature – Degrees C (CONTROL)  
LAB= GStand= 93 CMR= 113313

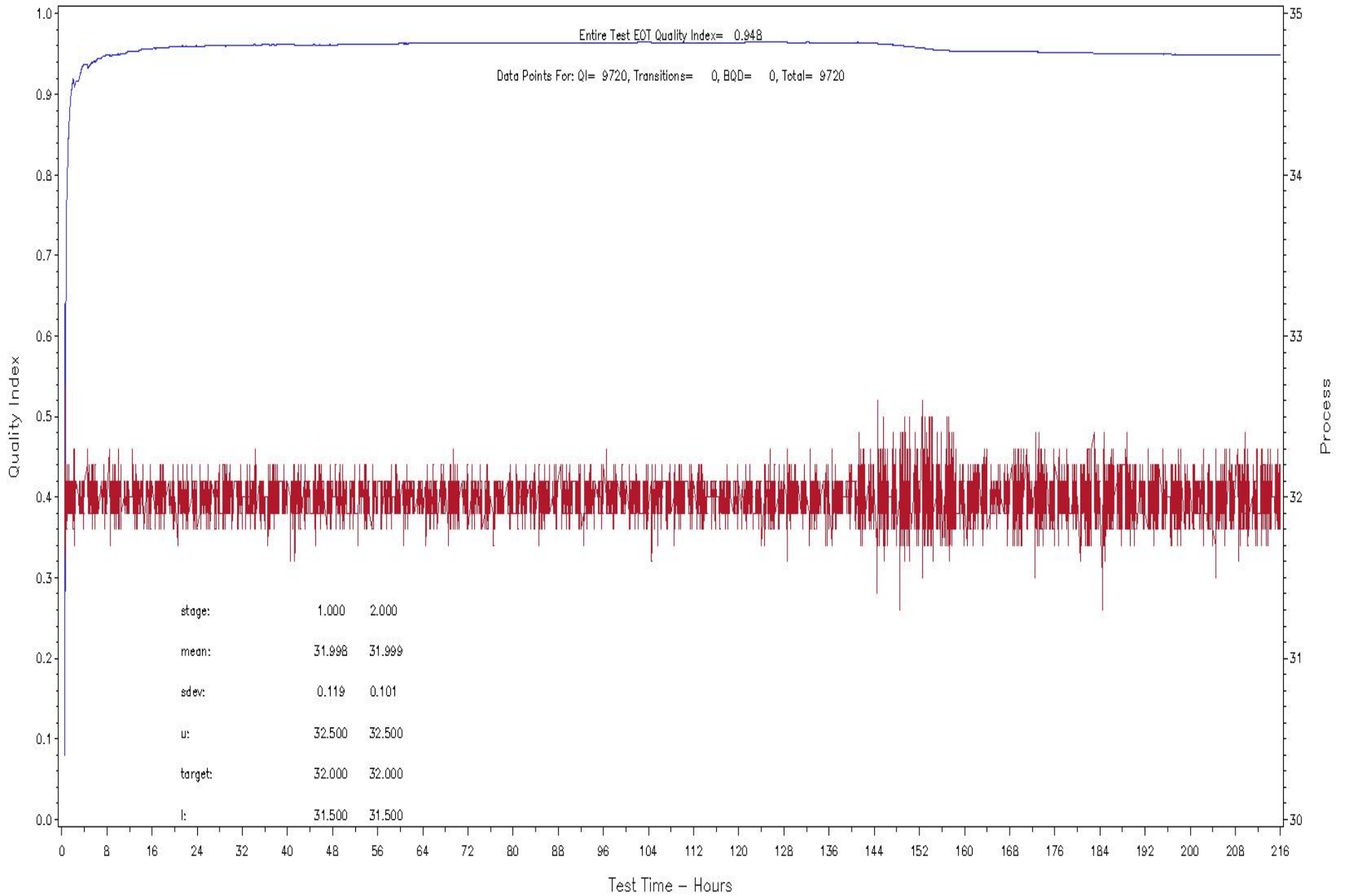




CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature - Degrees C (CONTROL)  
LAB= GStand= 93 CMIR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Temperature – Degrees C (CONTROL)  
LAB= A Stand= 27 CMIR= 113827

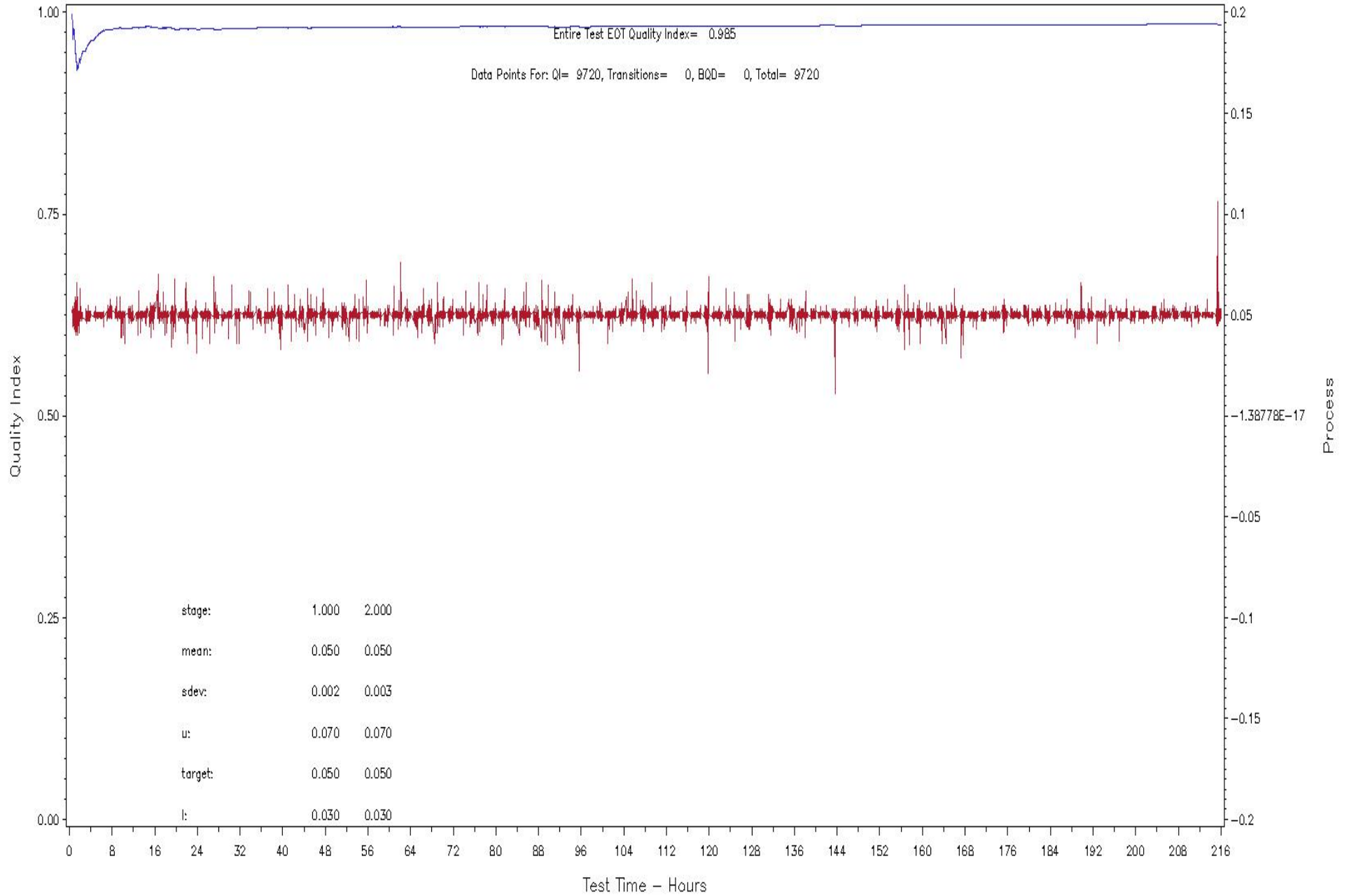




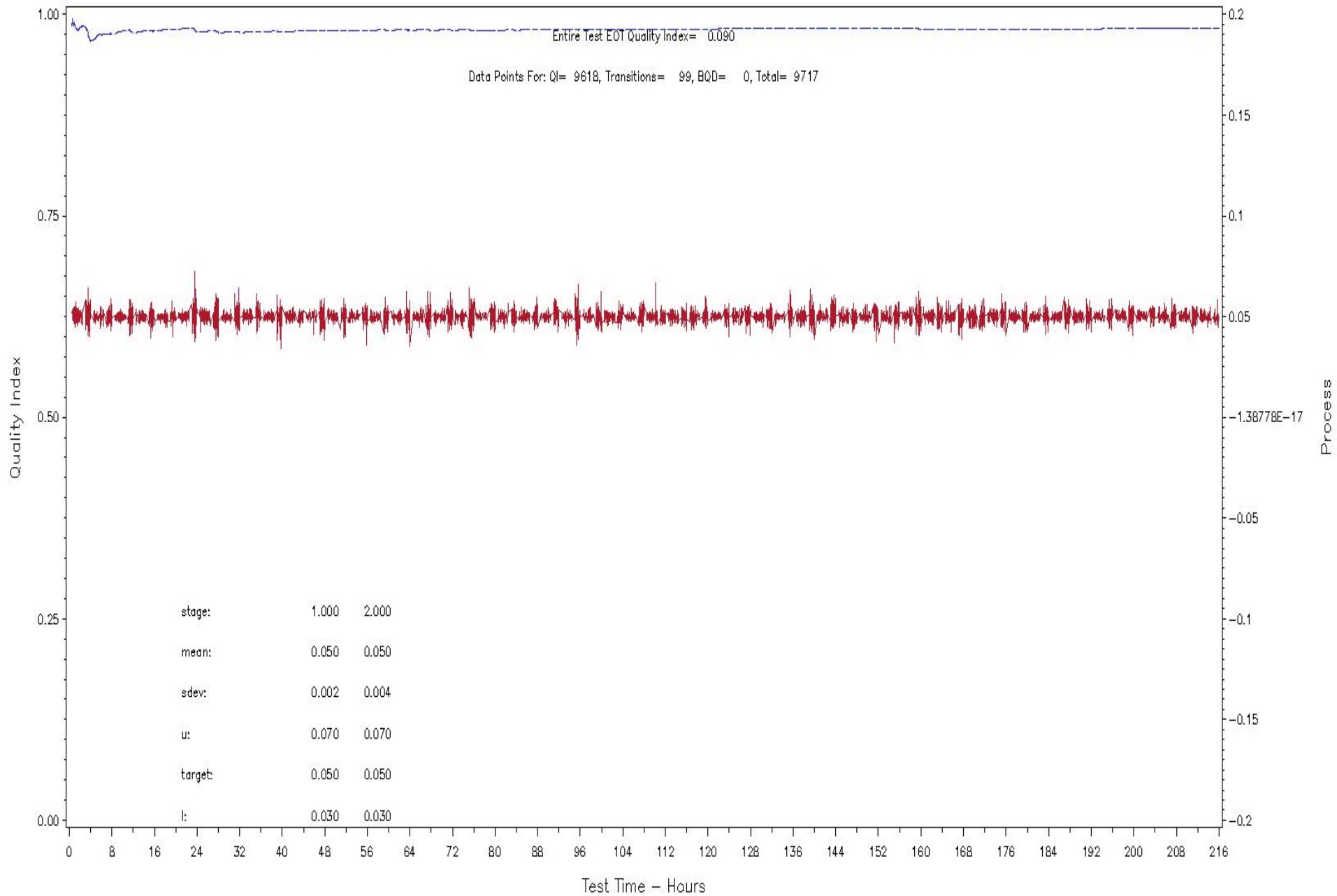
# Inlet Air Pressure

- All values positive

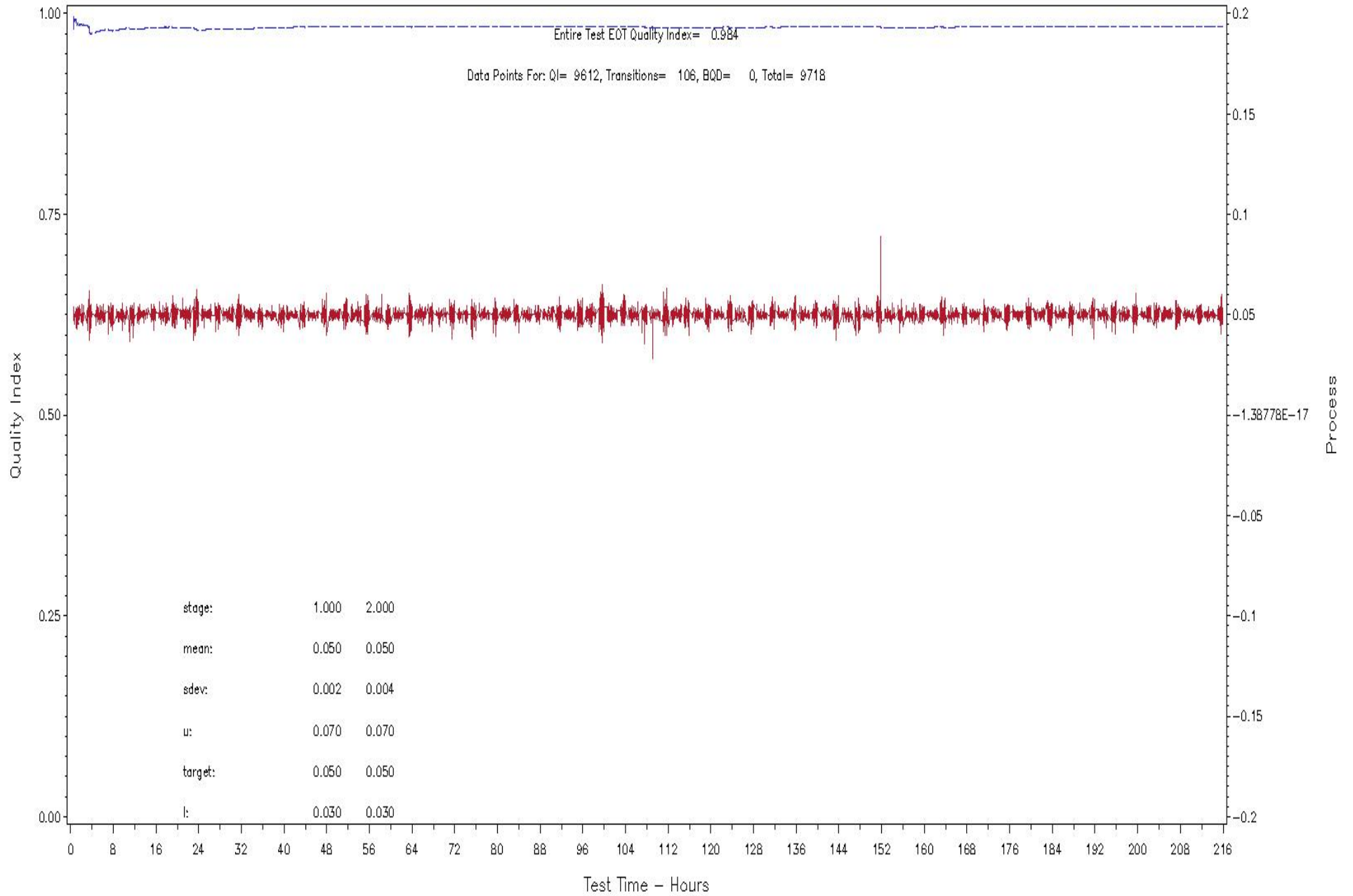
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Pressure - kPa (CONTROL)  
LAB= A Stand= 8 QMR= 113422



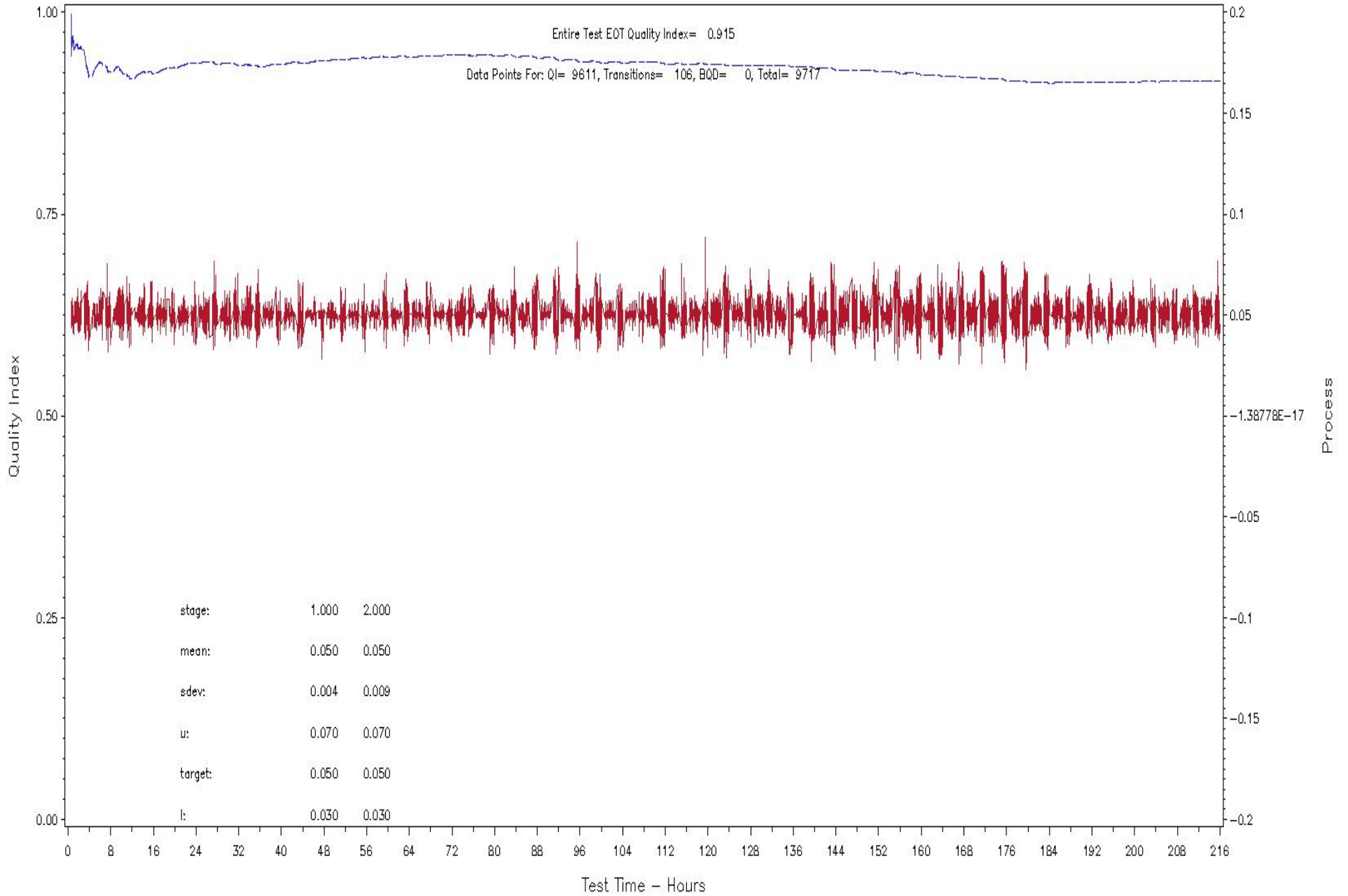
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Intake Air Pressure - kPa (CONTROL)  
 LAB= GStand= 95 CMR= 113419



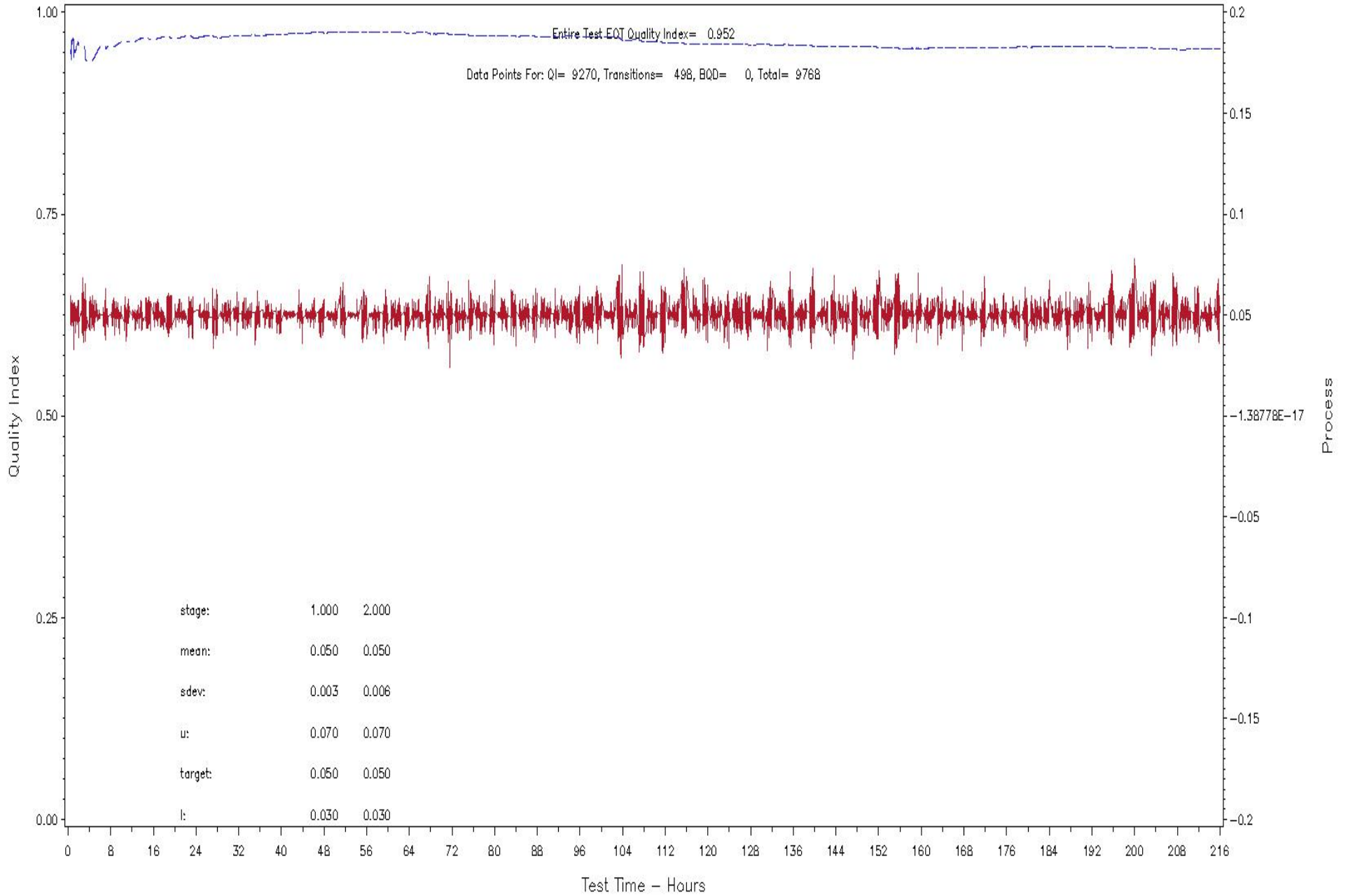
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Pressure - kPa (CONTROL)  
LAB= G Stand= 95 CMR= 113420



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Pressure - kPa (CONTROL)  
LAB= GStand= 93 CMR= 113313



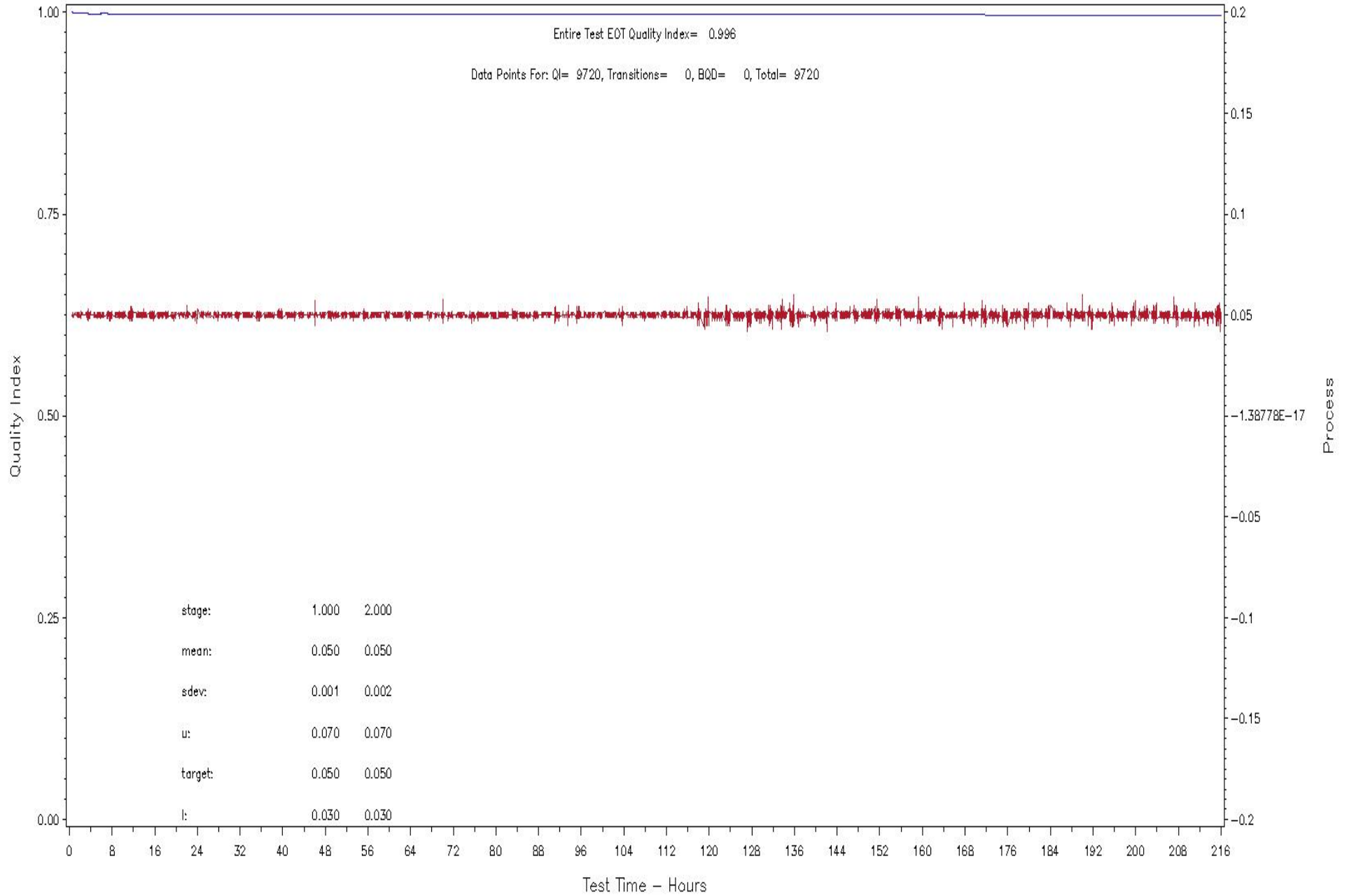
CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Pressure - kPa (CONTROL)  
LAB= GStand= 93 CMR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
Intake Air Pressure - kPa (CONTROL)  
LAB= A Stand= 27 CMIR= 113827

Entire Test EOT Quality Index= 0.996

Data Points For: QI= 9720, Transitions= 0, BQD= 0, Total= 9720

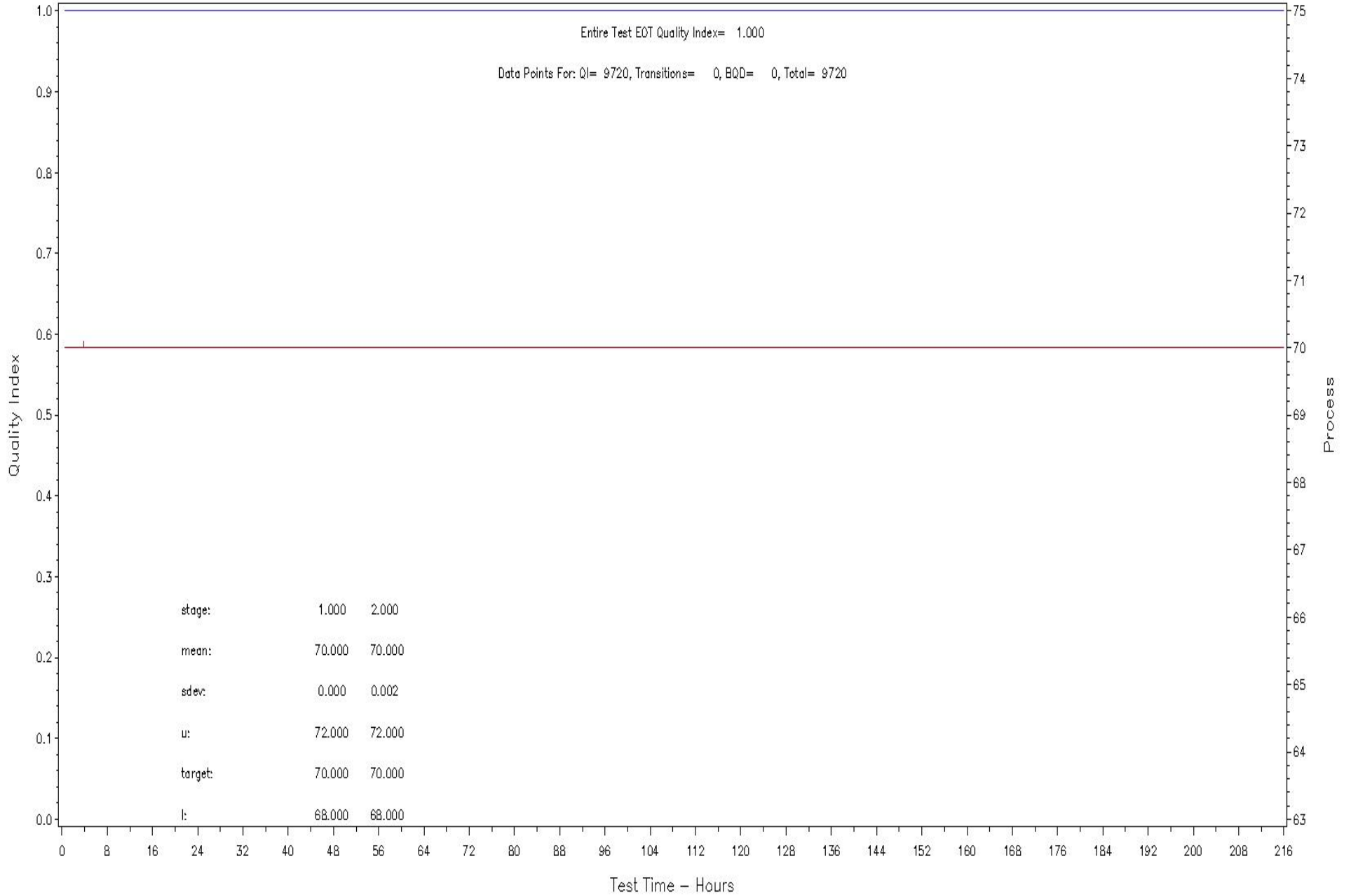




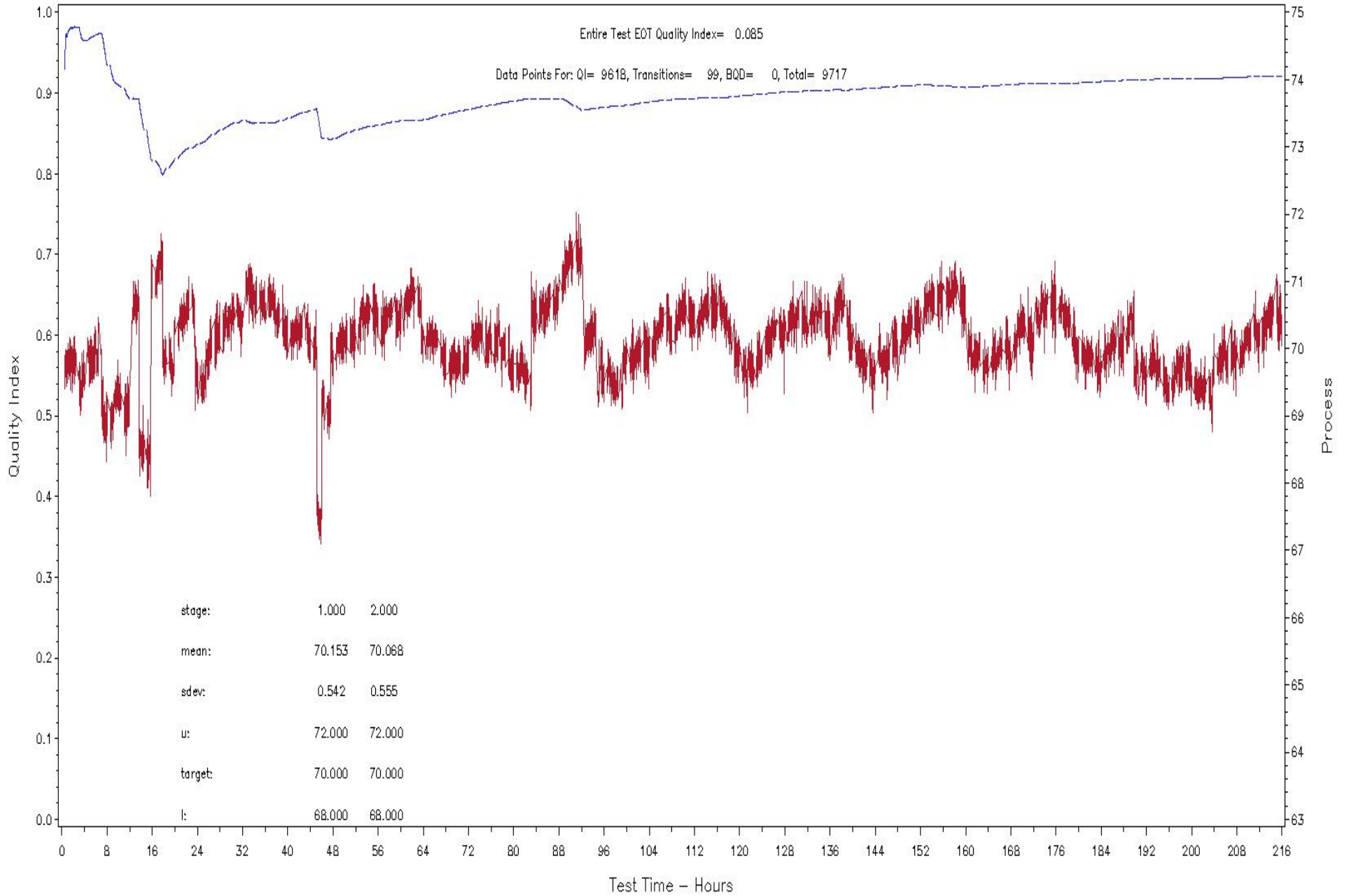
# Coolant Pressure

- All tests positive

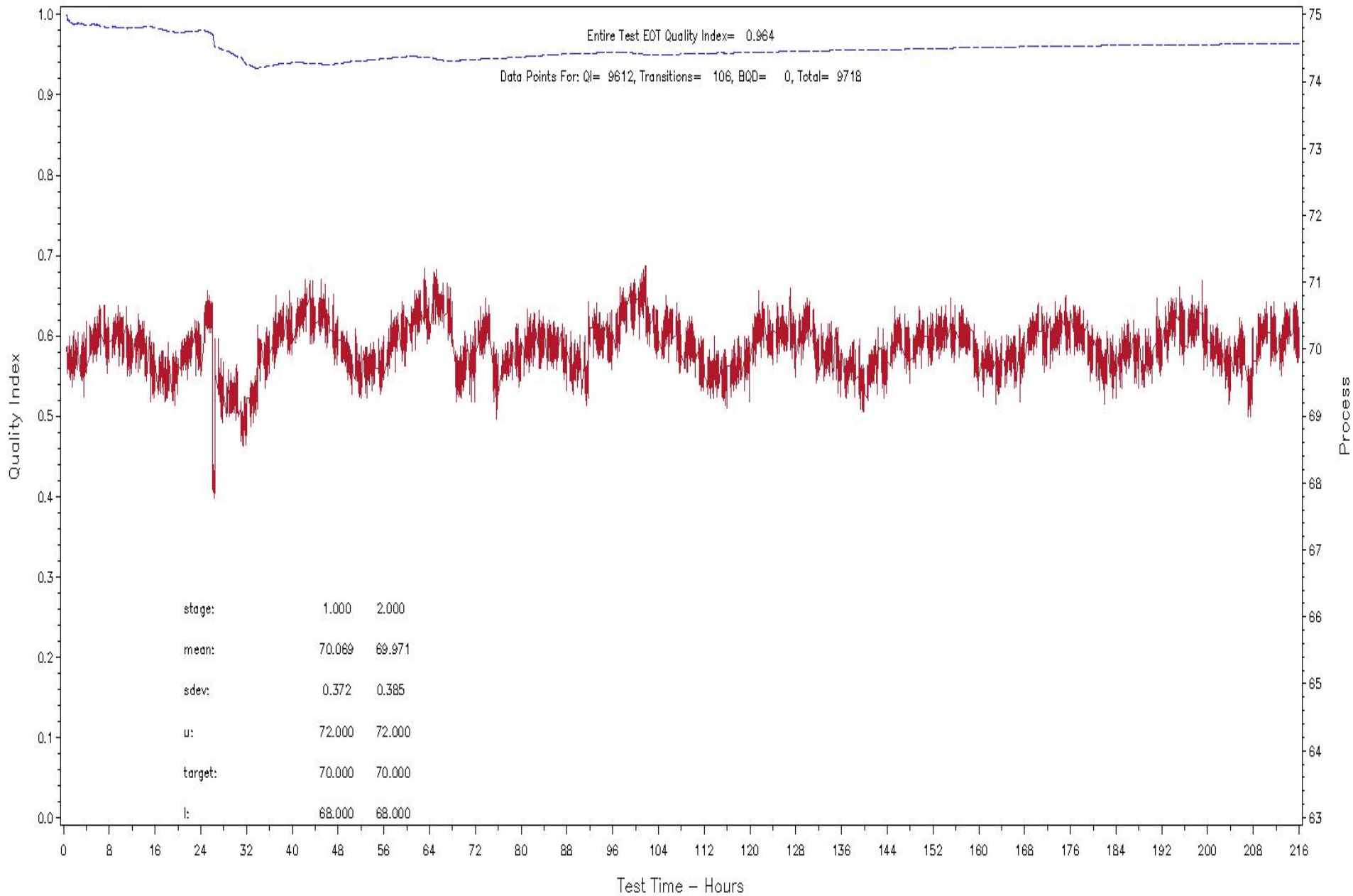
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure - kPa (CONTROL)  
LAB= A Stand= 8 QMR= 113422



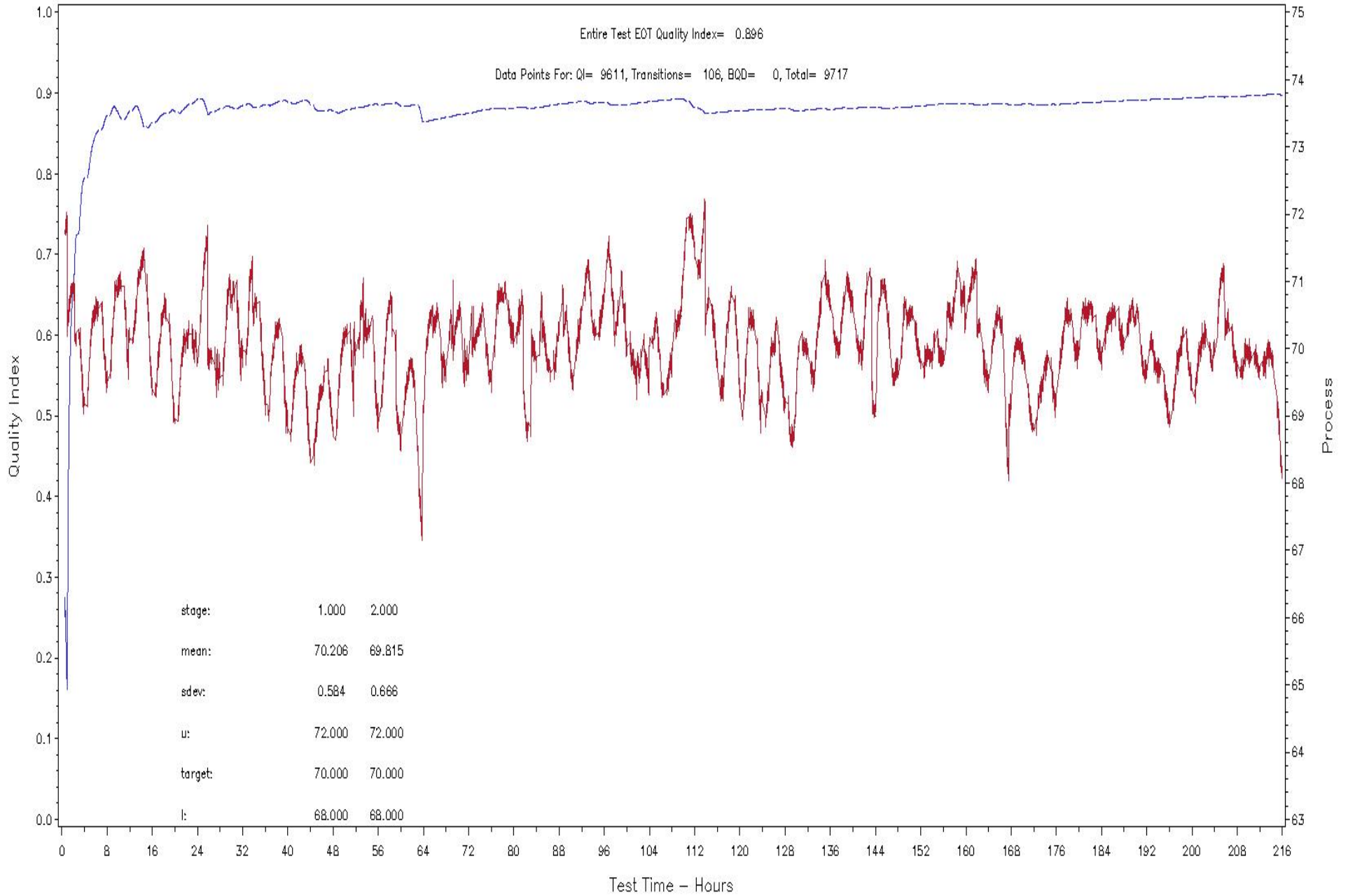
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure - kPa (CONTROL)  
LAB= GStand= 95 CMR= 113419



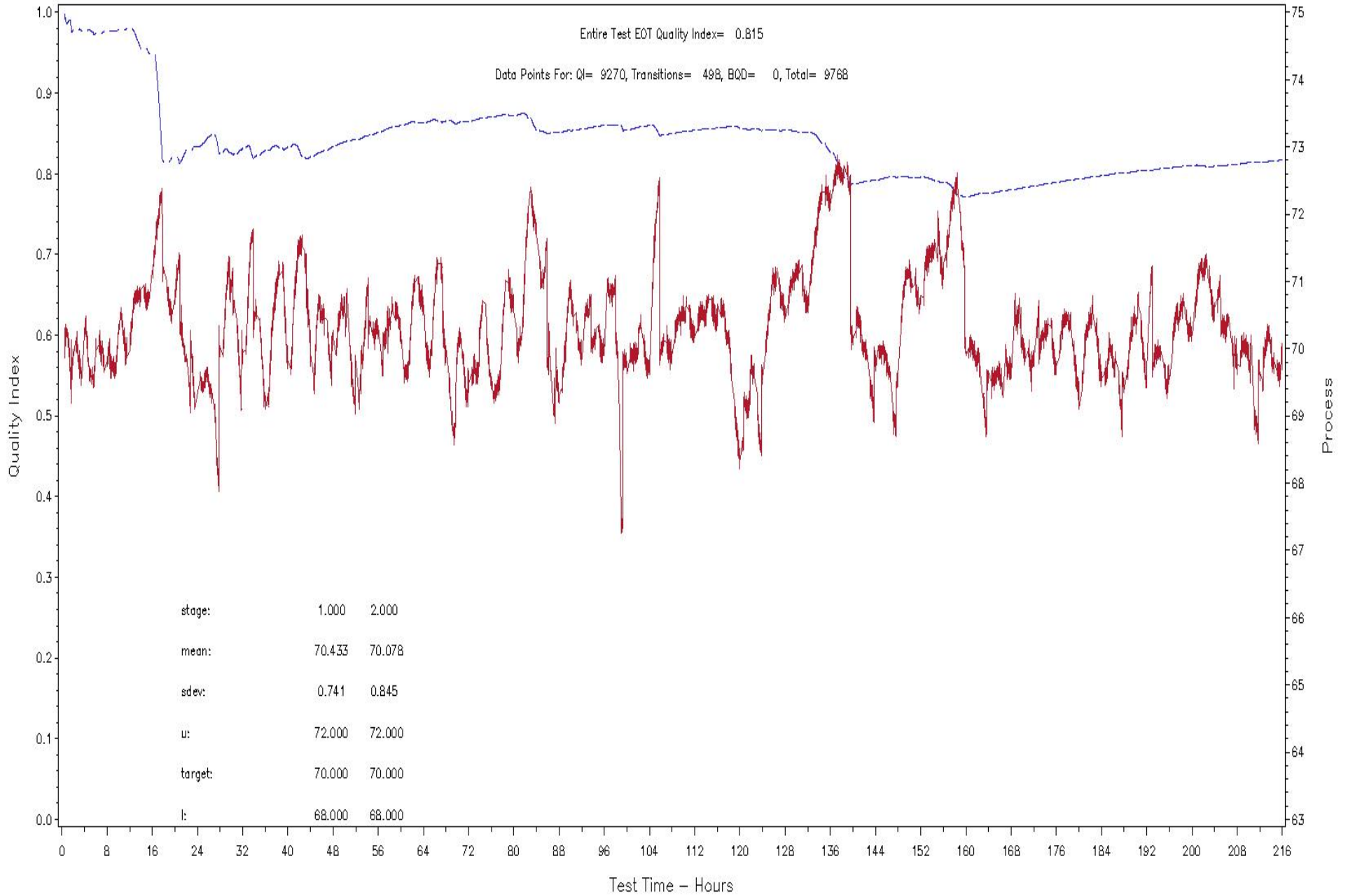
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure – kPa (CONTROL)  
LAB= GStand= 95 CMR= 113420



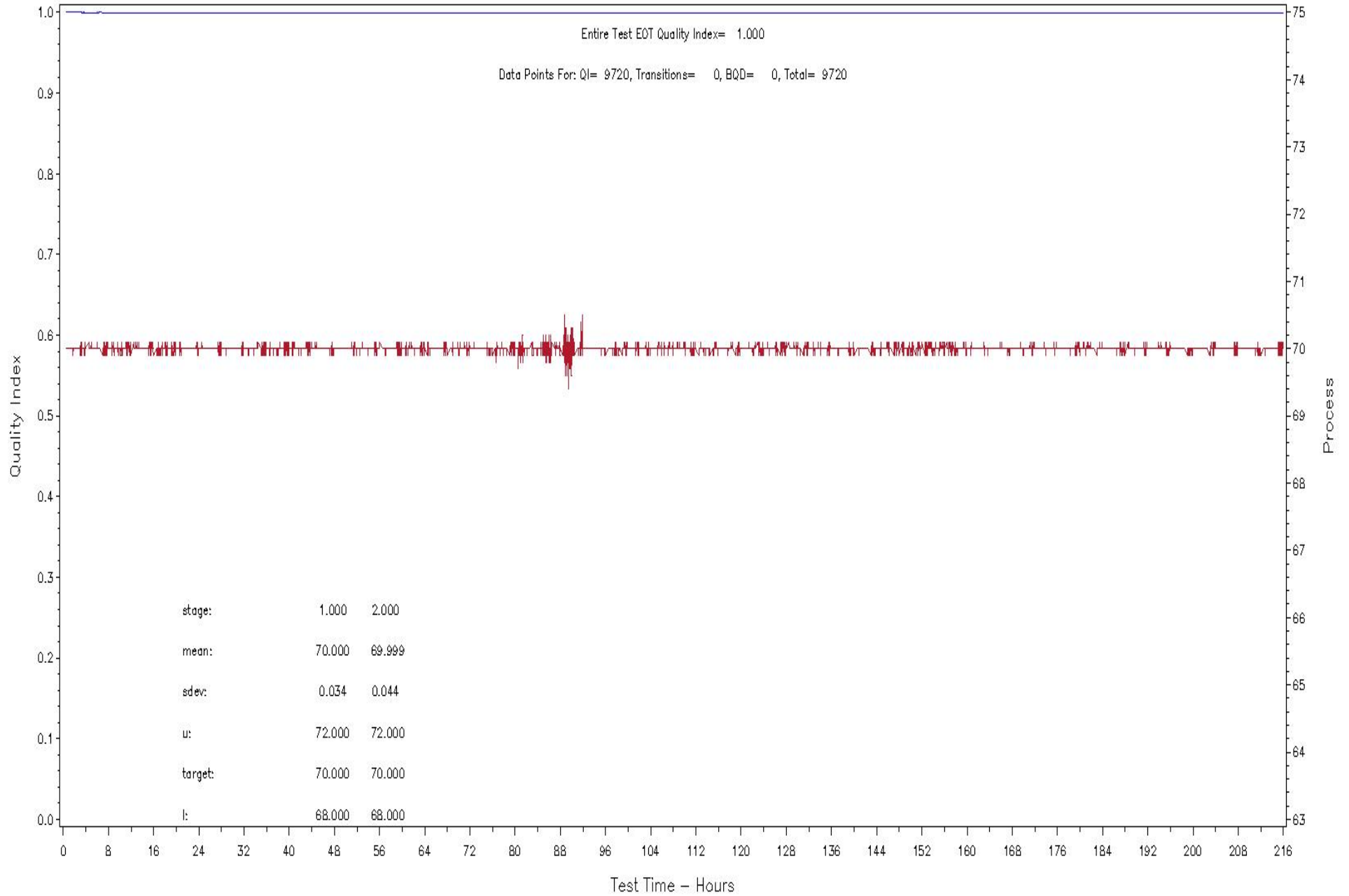
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure - kPa (CONTROL)  
LAB= GStand= 93 CMR= 113313



CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure - kPa (CONTROL)  
LAB= GStand= 93 CMR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Pressure - kPa (CONTROL)  
LAB= A Stand= 27 CMIR= 113827

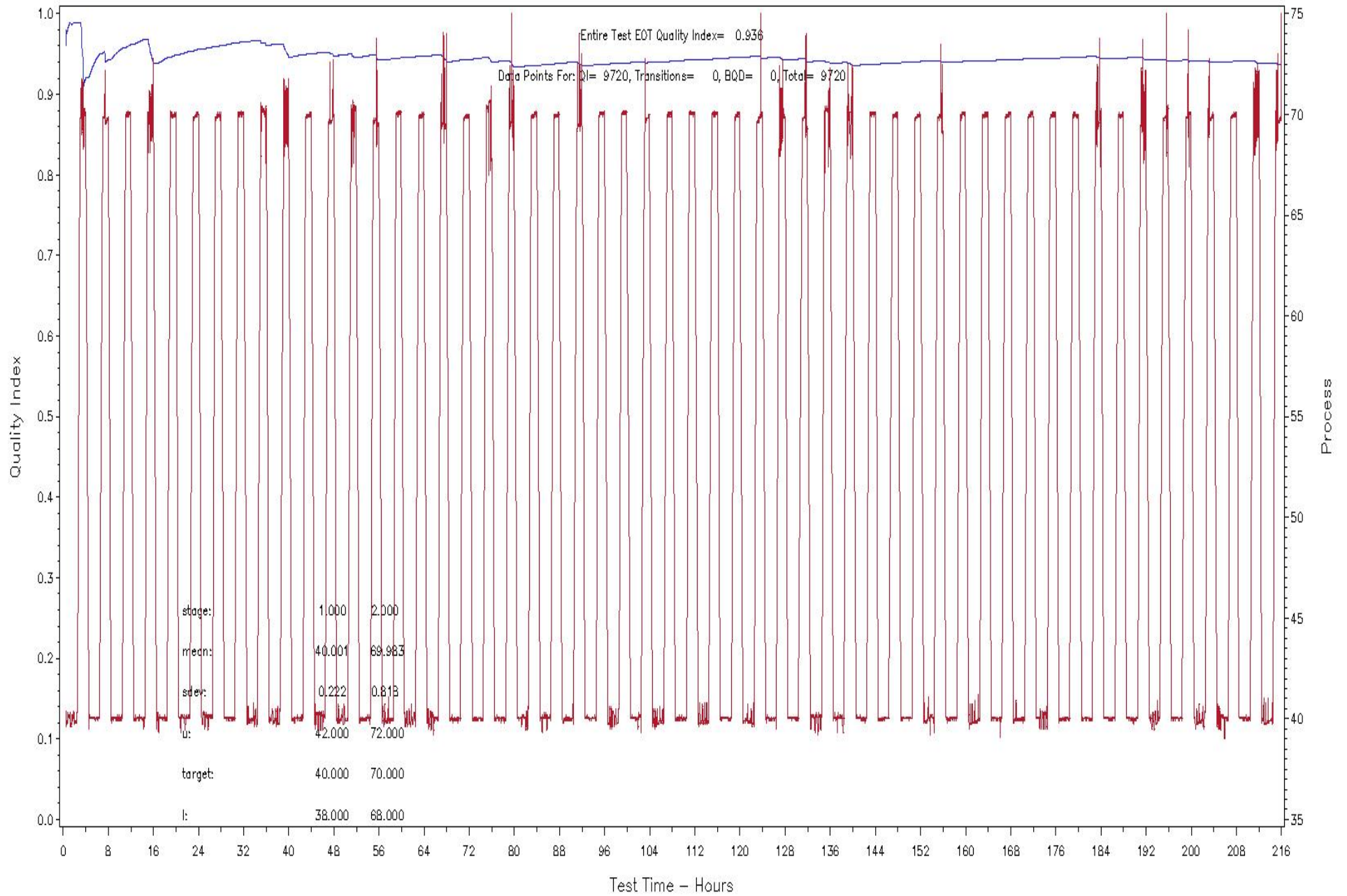




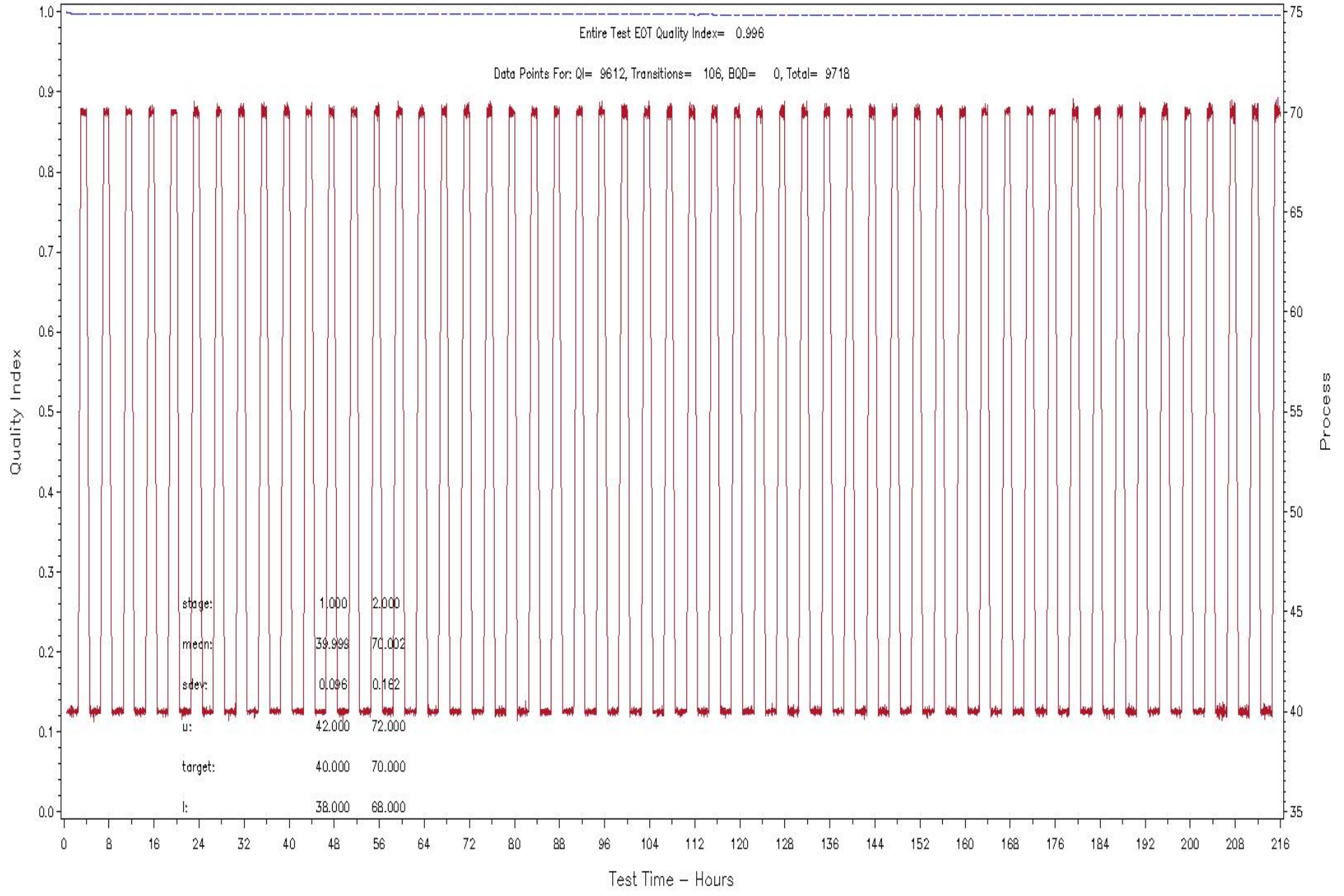
# Coolant Flow

- All results were positive

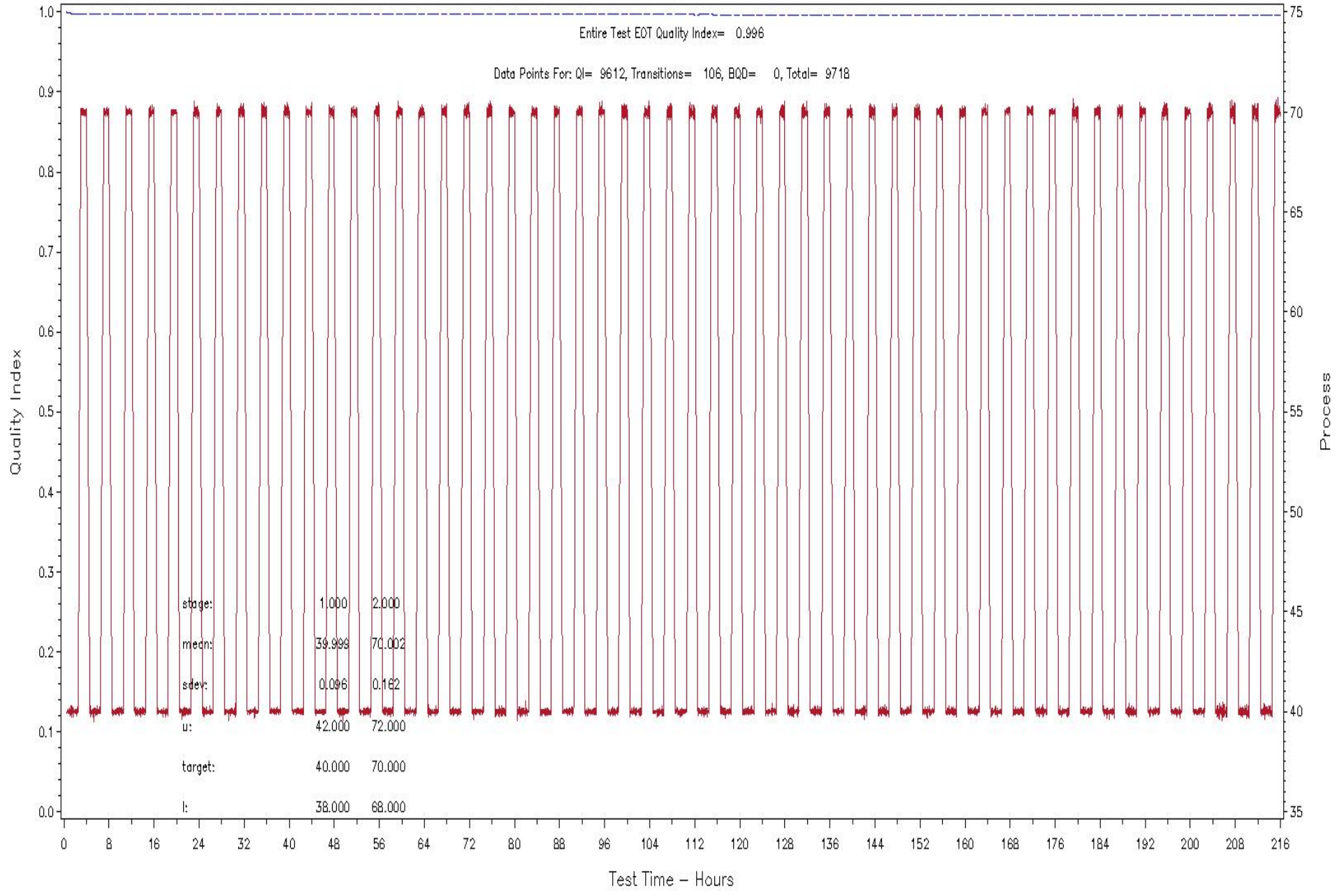
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Engine Coolant Flow – L/min (CONTROL)  
 LAB= A Stand= 8 QMR= 113422



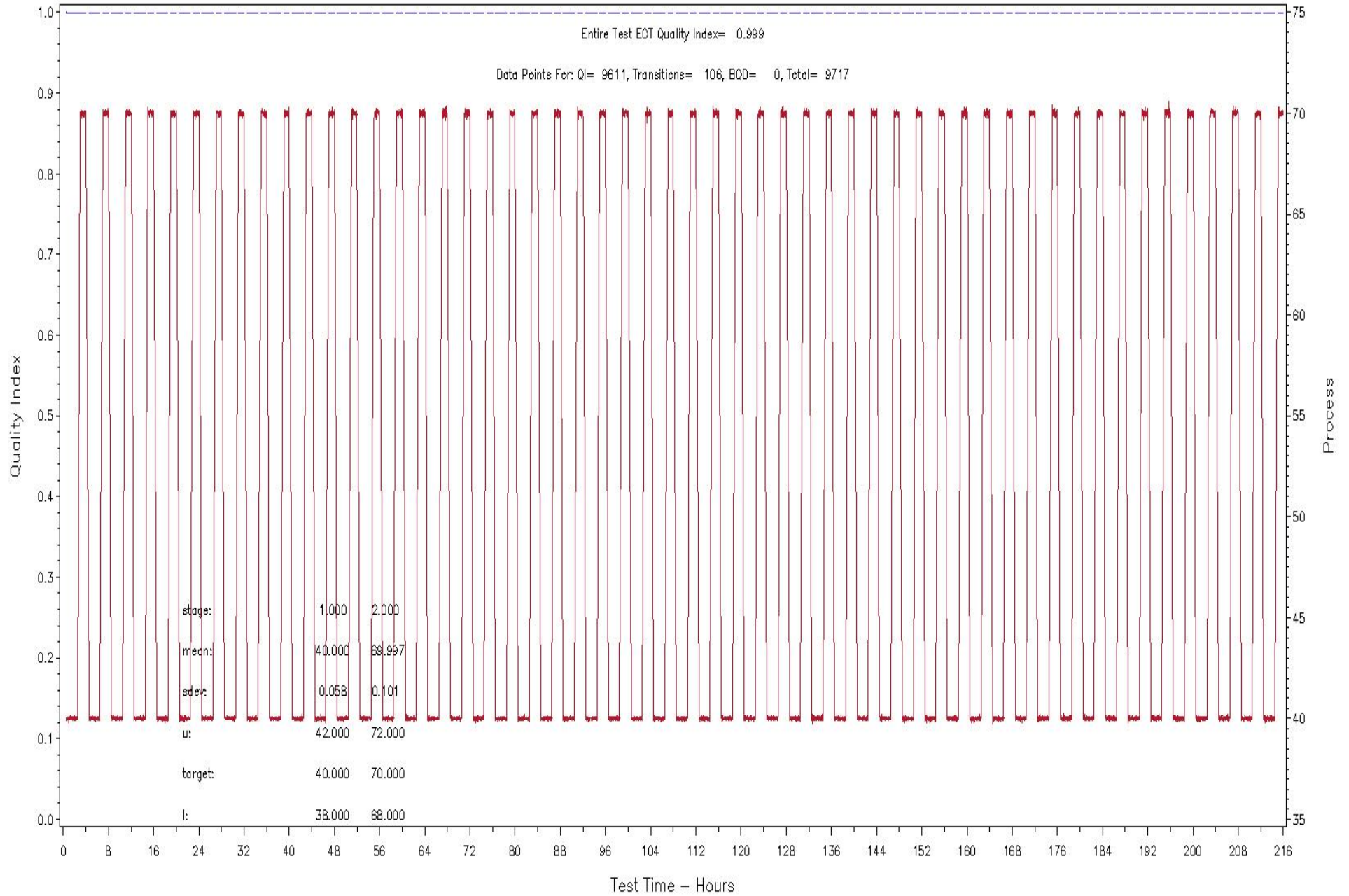
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Engine Coolant Flow – L/min (CONTROL)  
 LAB= GStand= 95 CMR= 113420



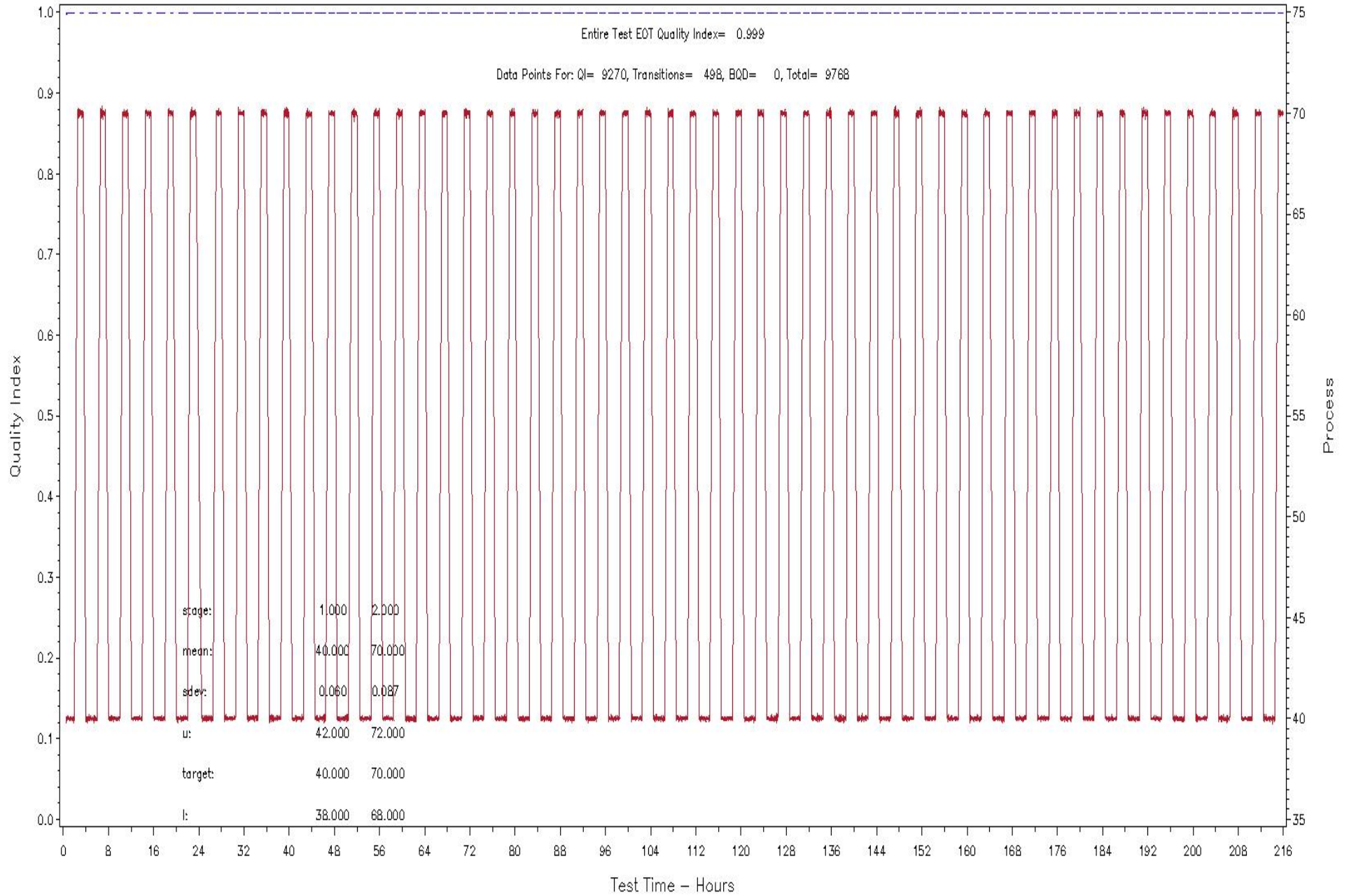
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Engine Coolant Flow – L/min (CONTROL)  
 LAB= GStand= 95 CMR= 113420



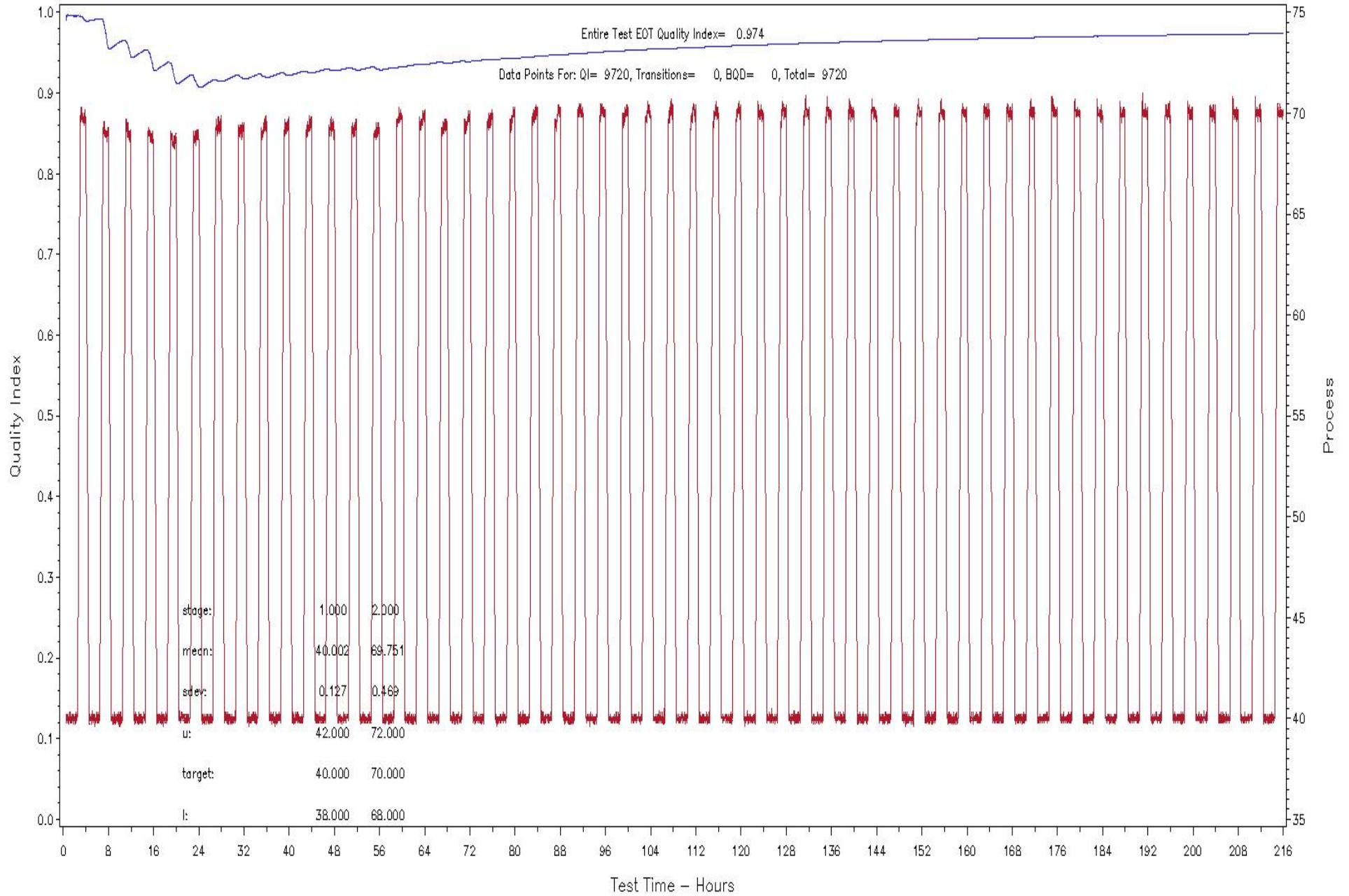
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Engine Coolant Flow – L/min (CONTROL)  
 LAB= GStand= 93 CMR= 113313



CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Coolant Flow – L/min (CONTROL)  
LAB= GStand= 93 CMR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Engine Coolant Flow – L/min (CONTROL)  
 LAB= A Stand= 27 CMIR= 113827

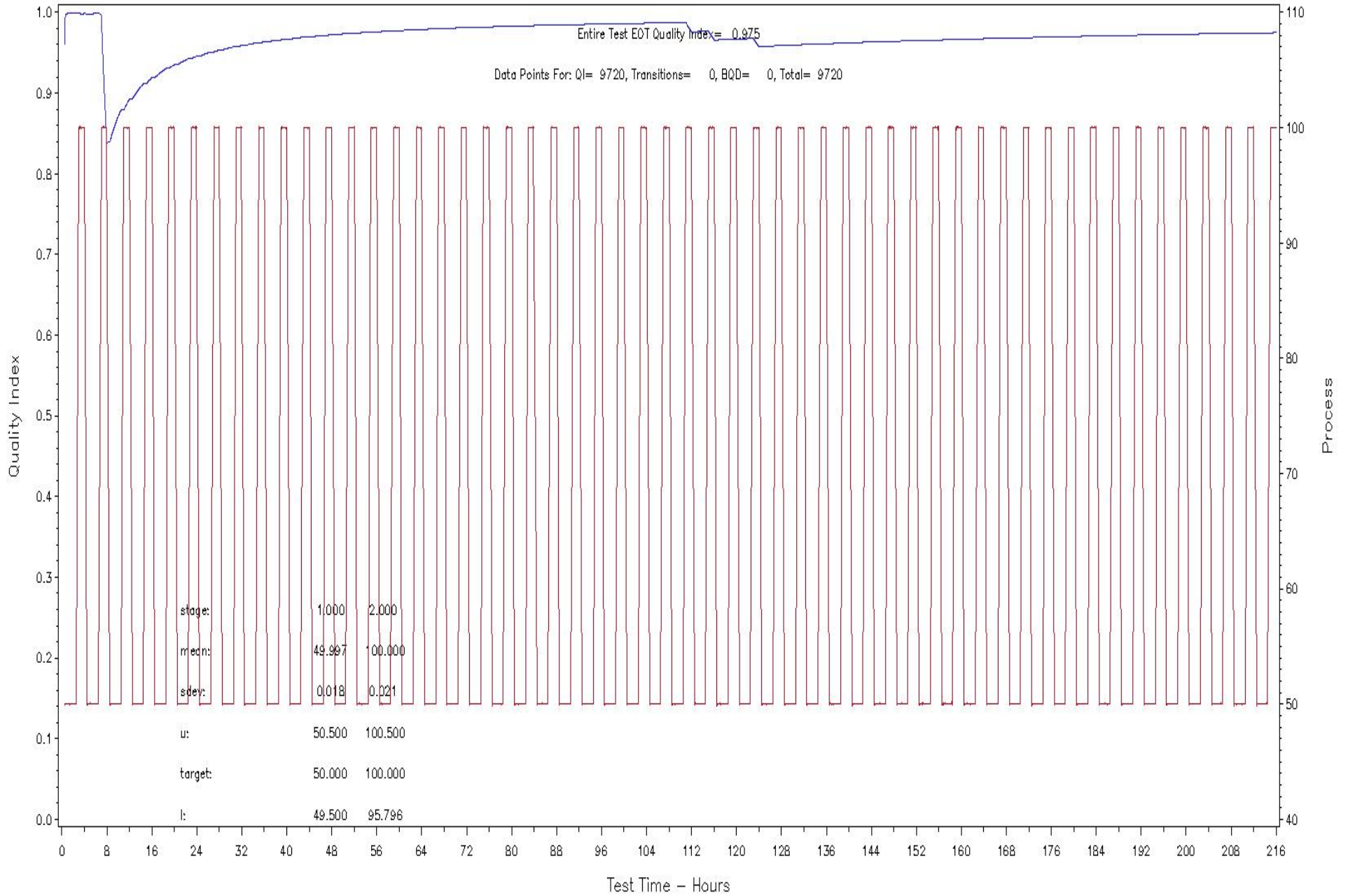




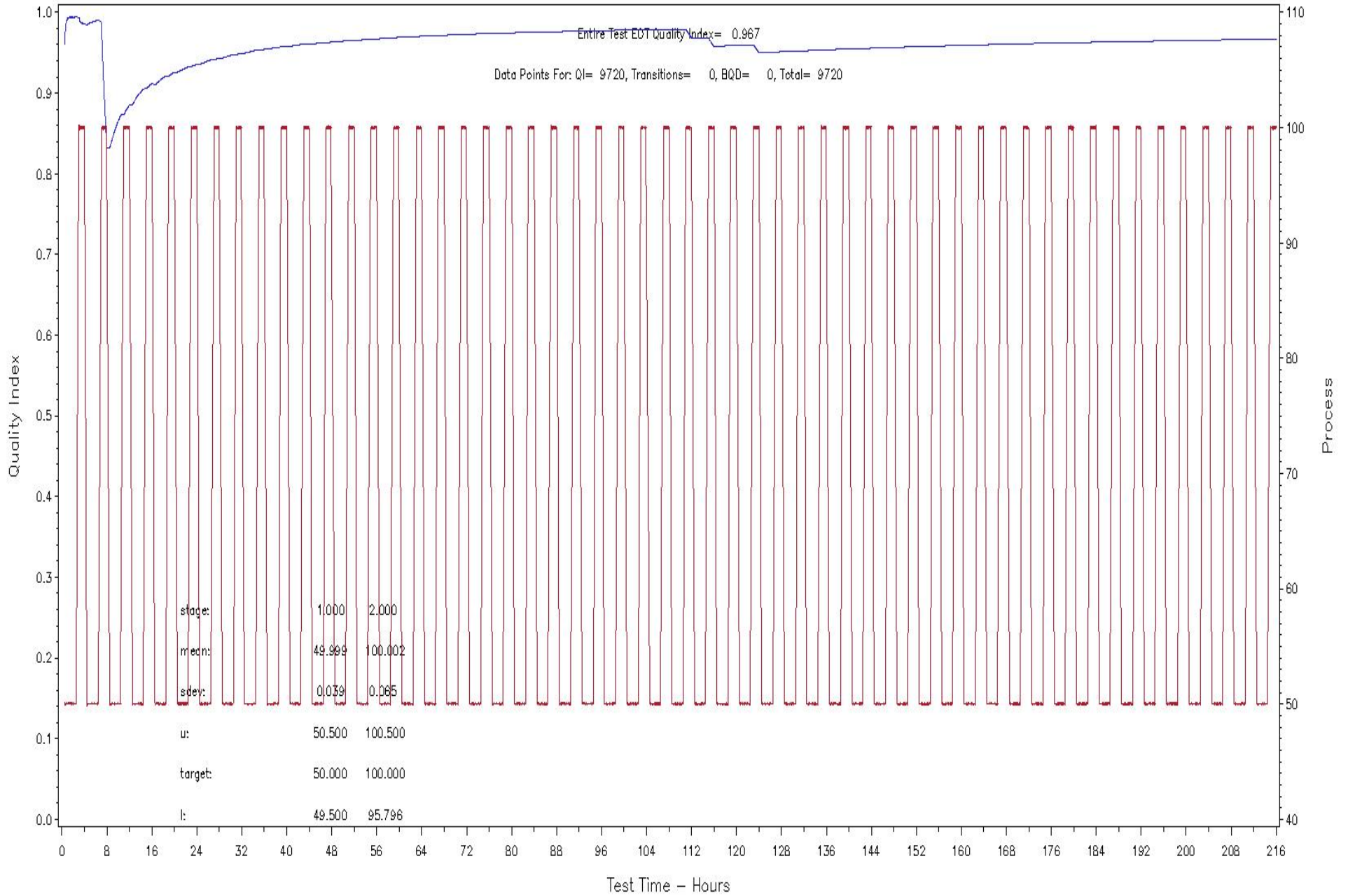
# Oil Gallery Temperature

- All values positive

CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= A Stand= 27 CMIR= 113827



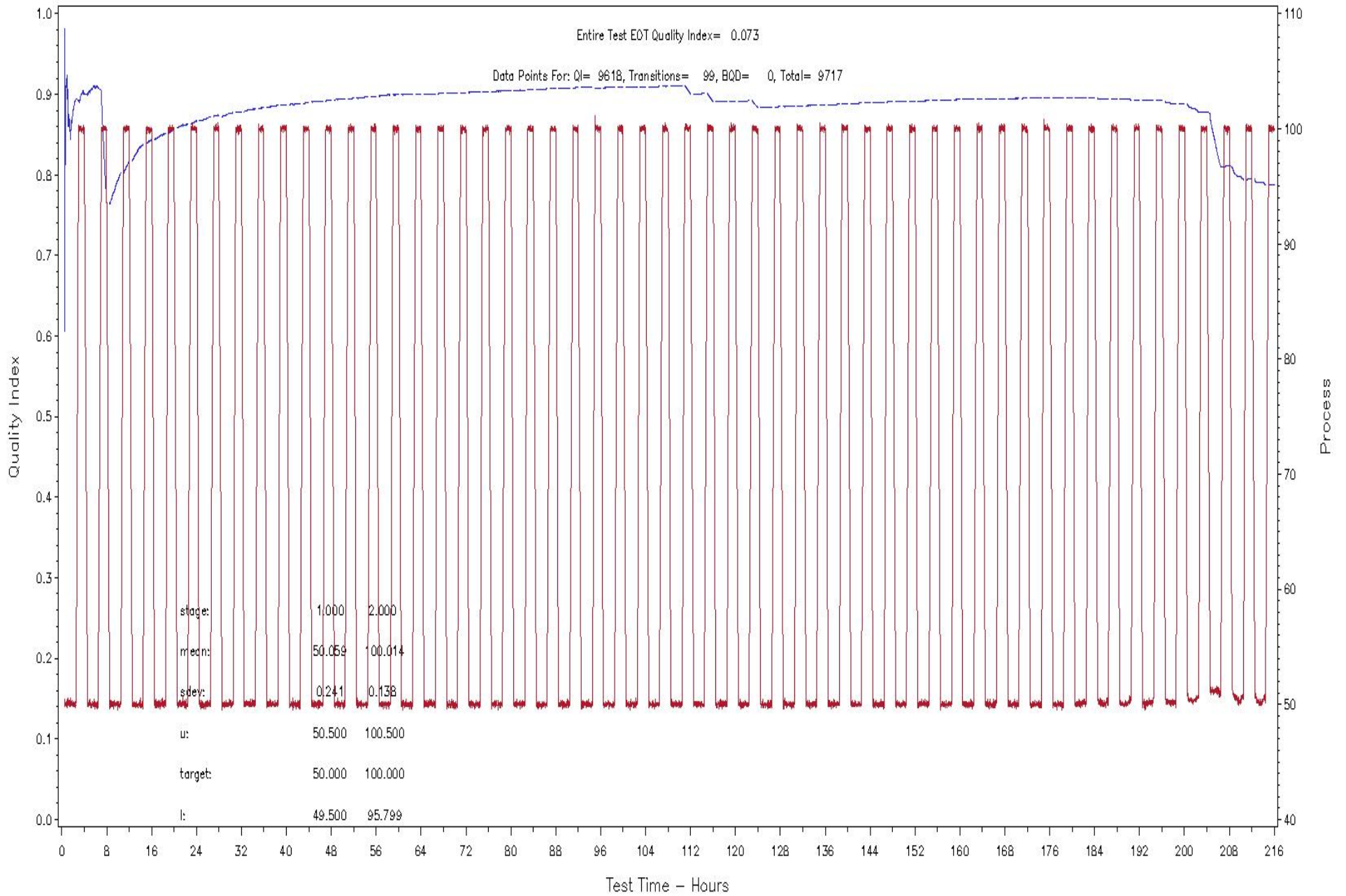
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= A Stand= 8 QIR= 113422



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= GStand= 95 CMR= 113419

Entire Test EOT Quality Index= 0.073

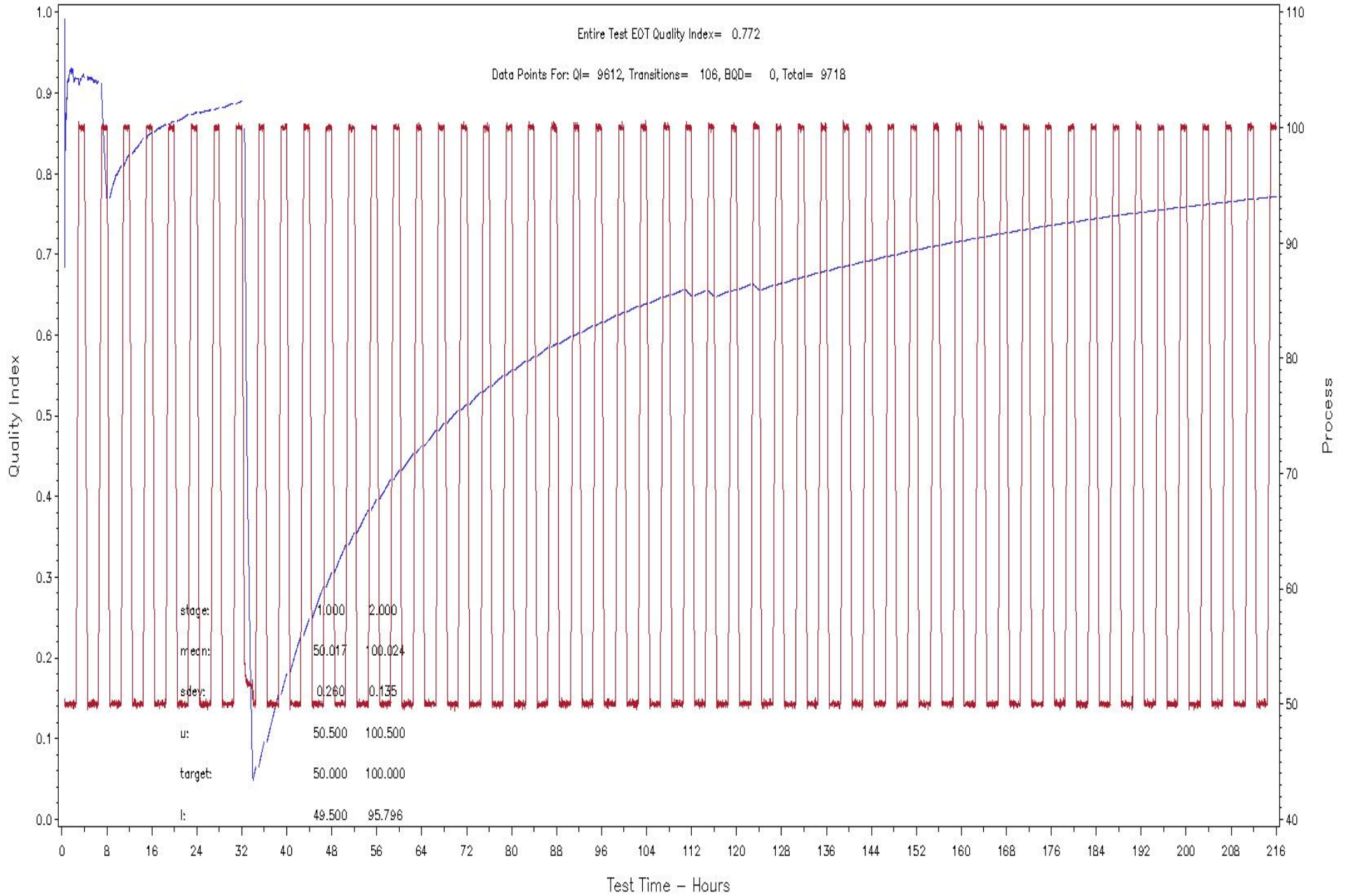
Data Points For: QI= 9618, Transitions= 99, BQD= 0, Total= 9717



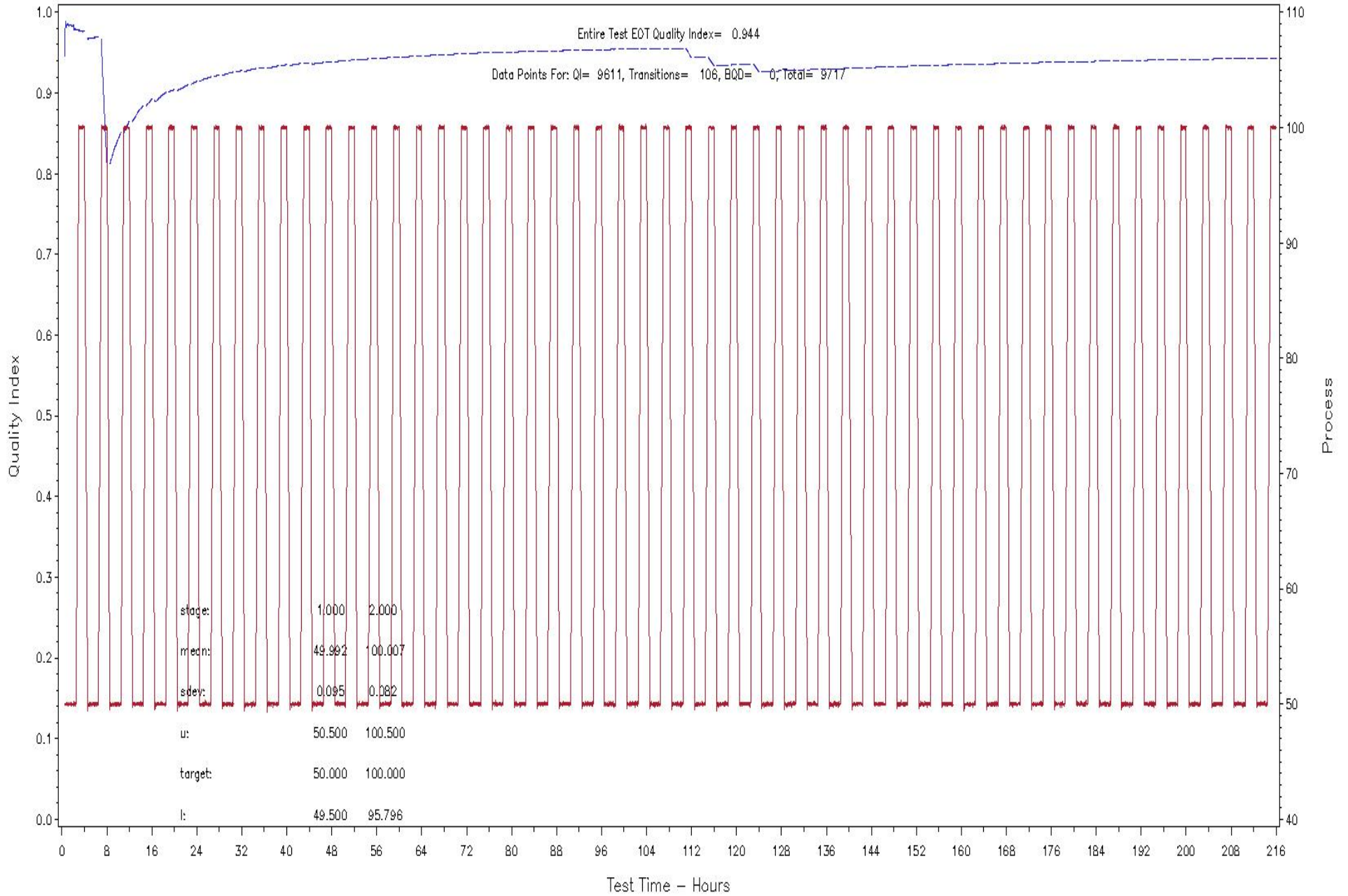
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= GStand= 95 CMIR= 113420

Entire Test EOT Quality Index= 0.772

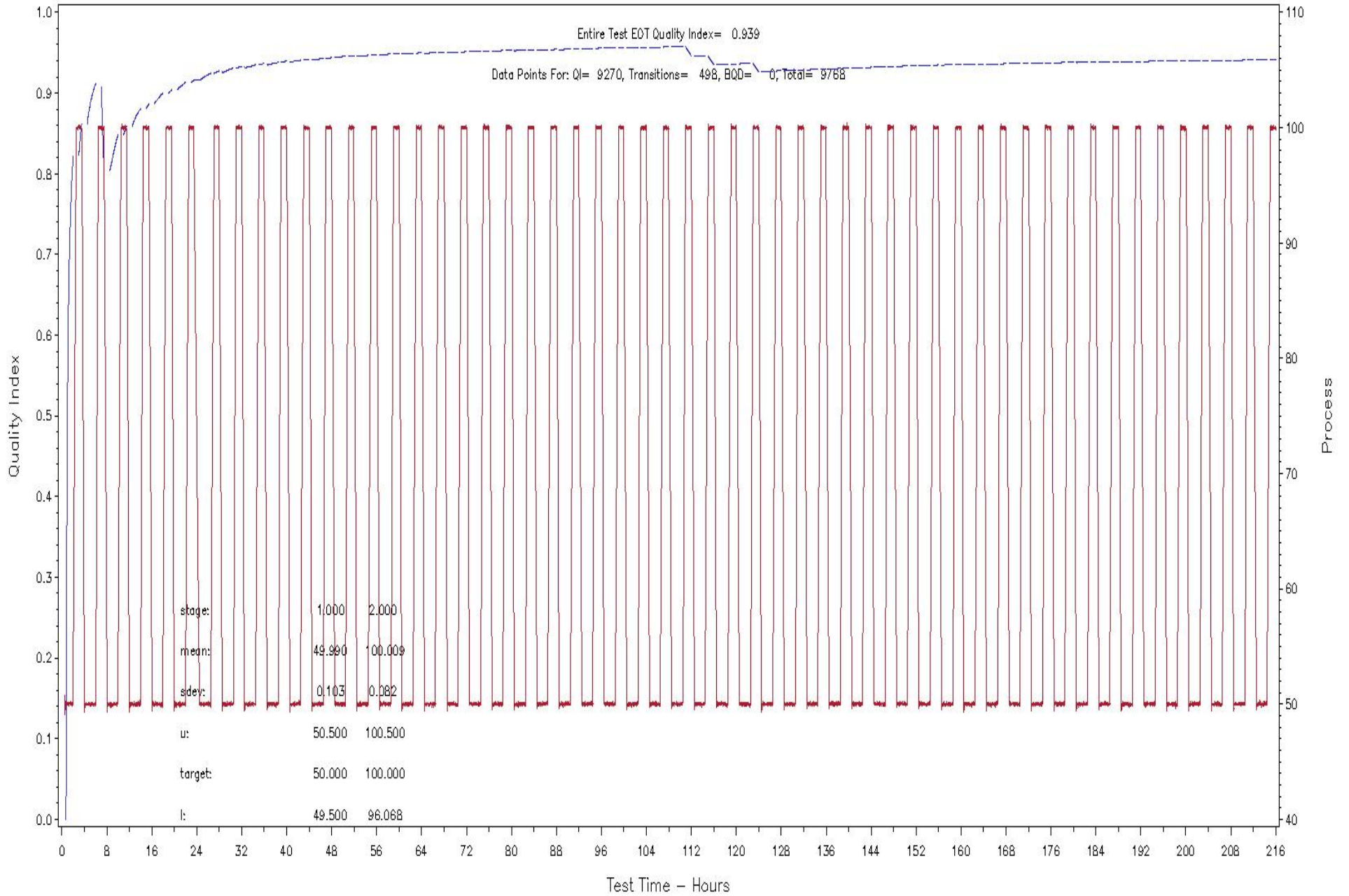
Data Points For: QI= 9612, Transitions= 106, BQD= 0, Total= 9718



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= GStand= 93 CMR= 113313



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Oil Gallery Temperature - Degrees C (CONTROL)  
 LAB= GStand= 93 CMR= 113312

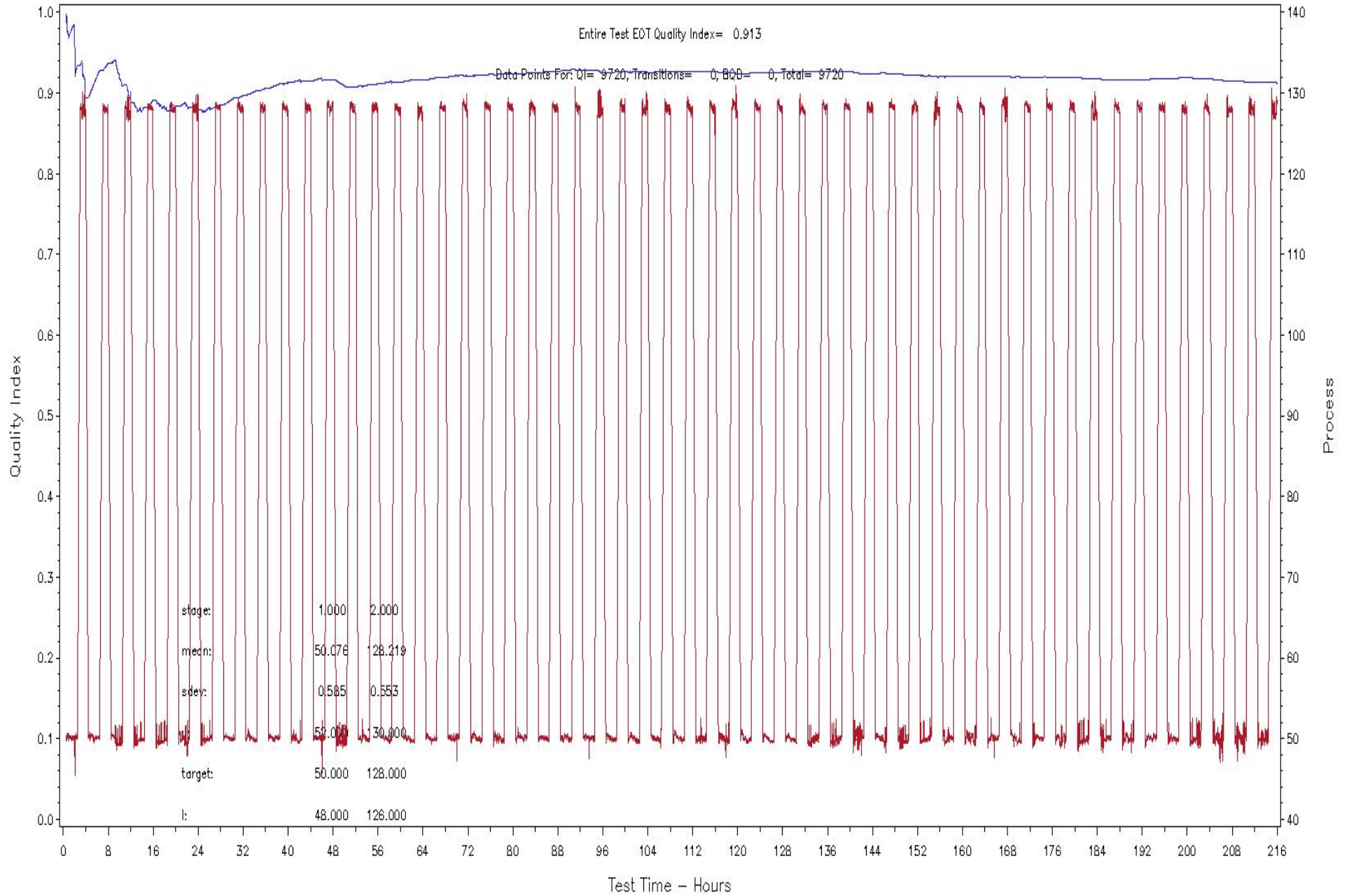




# Torque

- All values positive

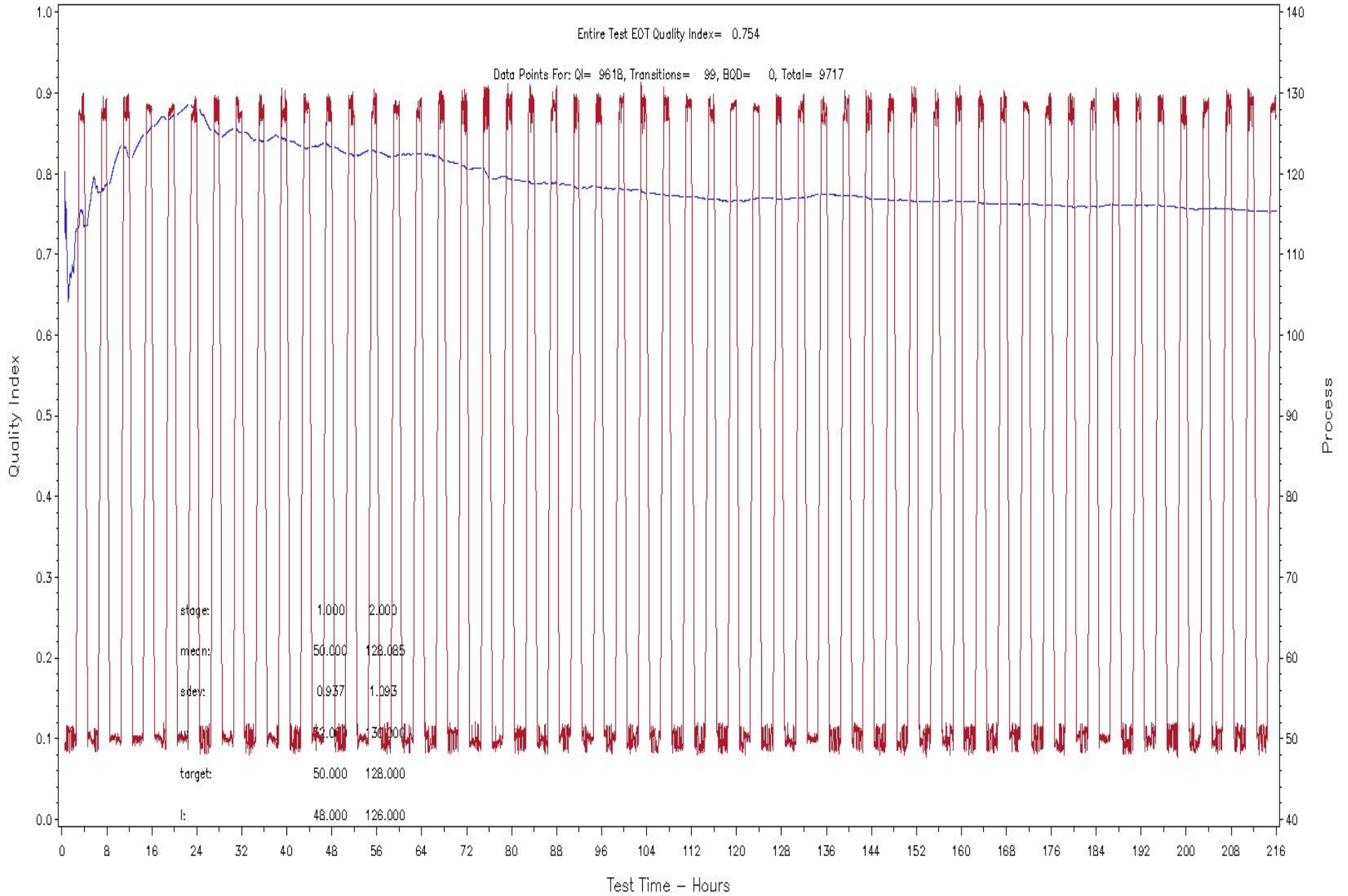
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Torque - N m (CONTROL)  
 LAB= A Stand= 27 CMIR= 113827



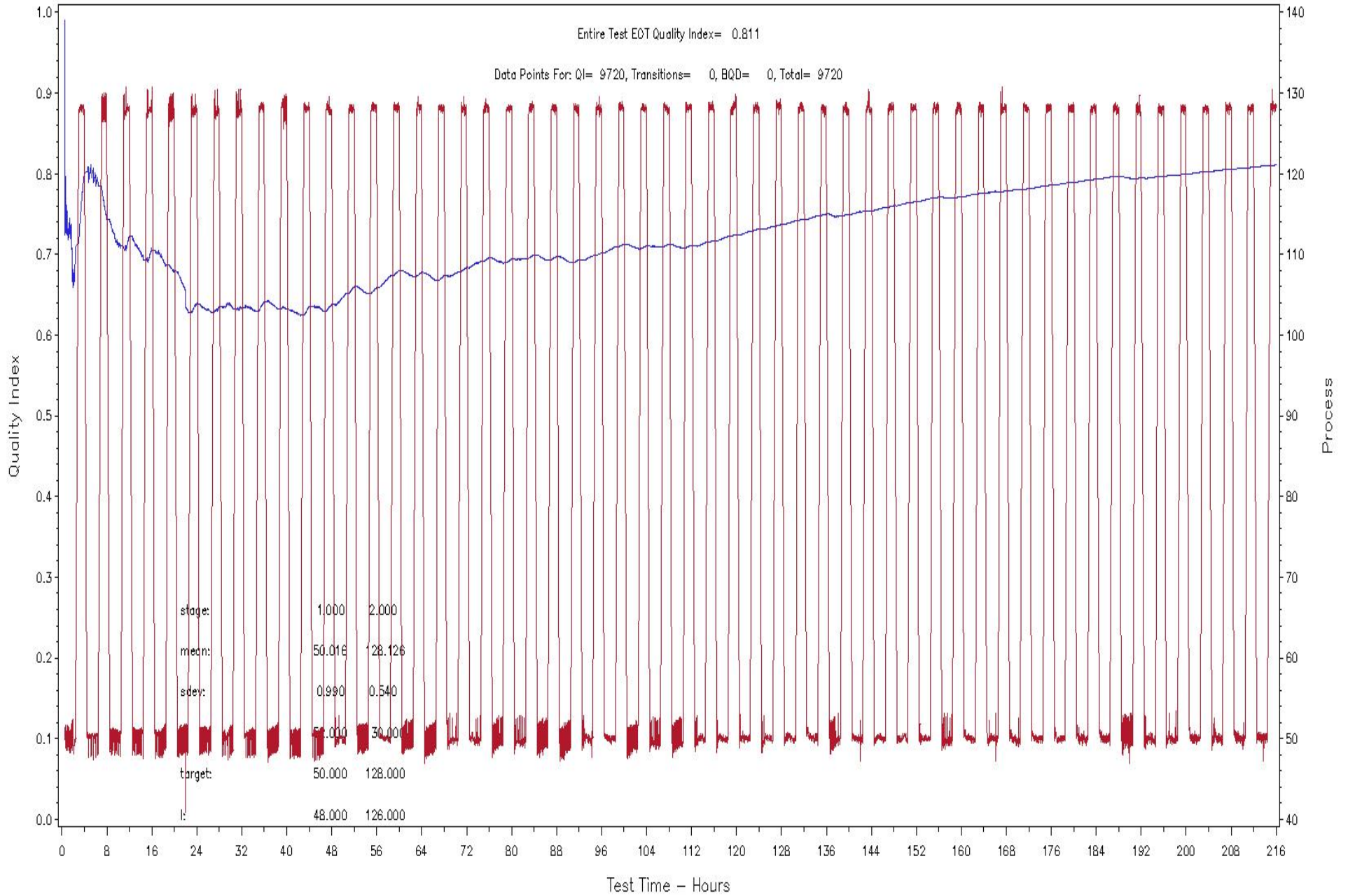
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Torque - N m (CONTROL)  
 LAB= GStand= 95 CMIR= 113419

Entire Test EOT Quality Index= 0.754

Data Points For: QI= 9618, Transitions= 99, BQD= 0, Total= 9717



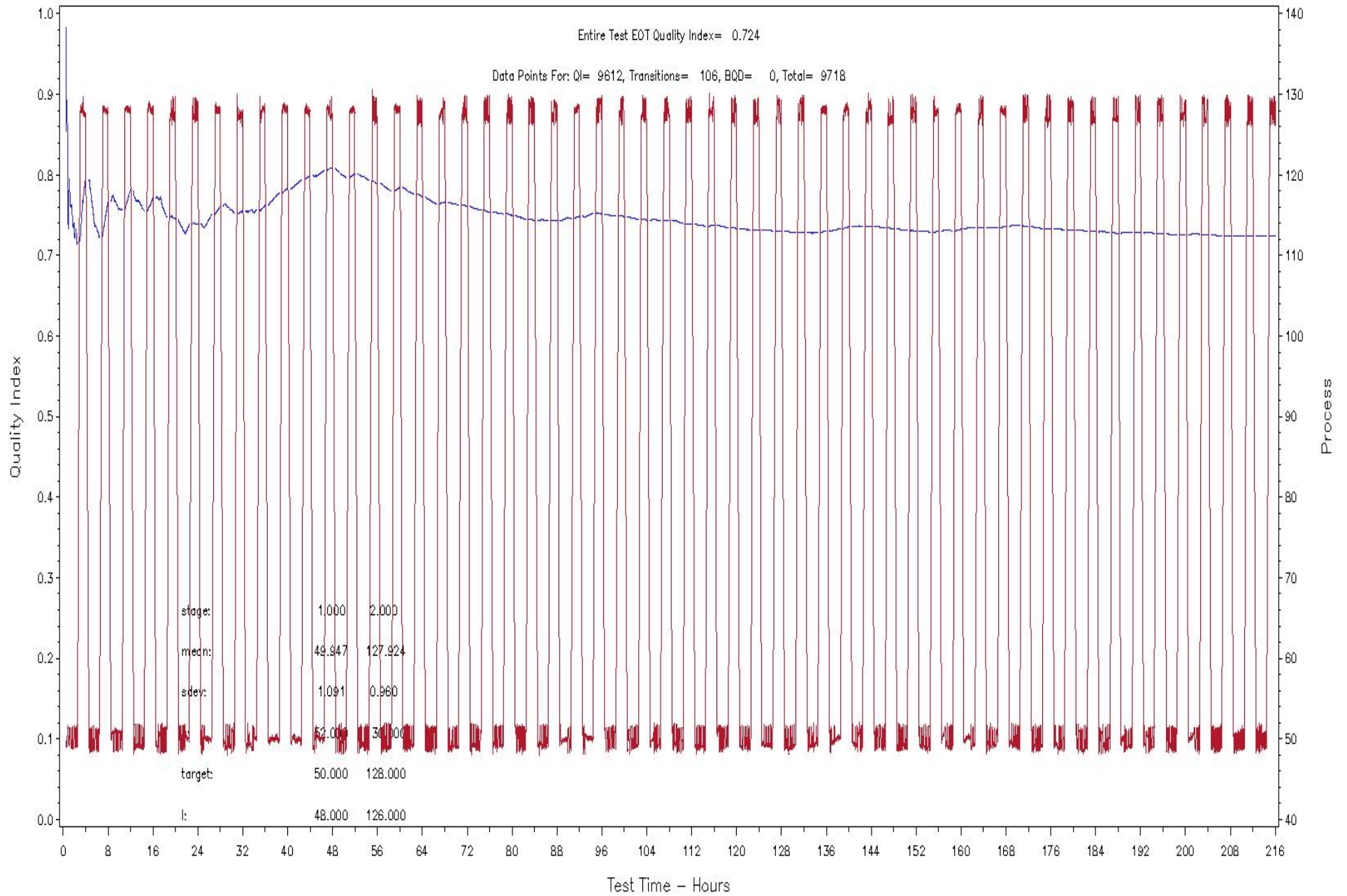
CWT QUALITY INDEX OPERATIONAL REVIEW  
 Torque - N m (CONTROL)  
 LAB= A Stand= 8 QMR= 113422



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Torque - N m (CONTROL)  
 LAB= G Stand= 95 CMR= 113420

Entire Test EOT Quality Index= 0.724

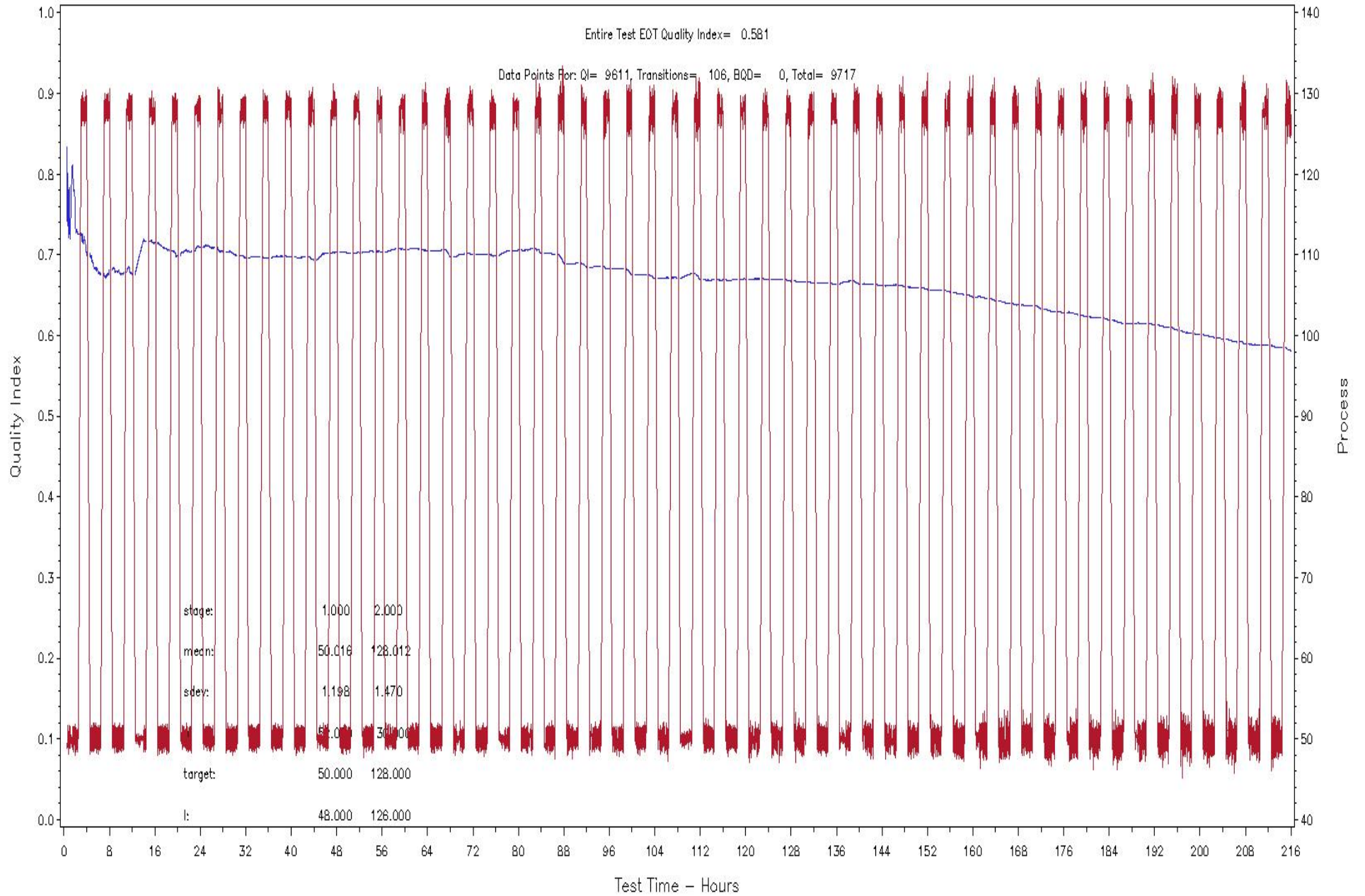
Data Points For: QI= 9612, Transitions= 106, BQD= 0, Total= 9718



CWT QUALITY INDEX OPERATIONAL REVIEW  
 Torque - N m (CONTROL)  
 LAB= G Stand= 93 CMR= 113313

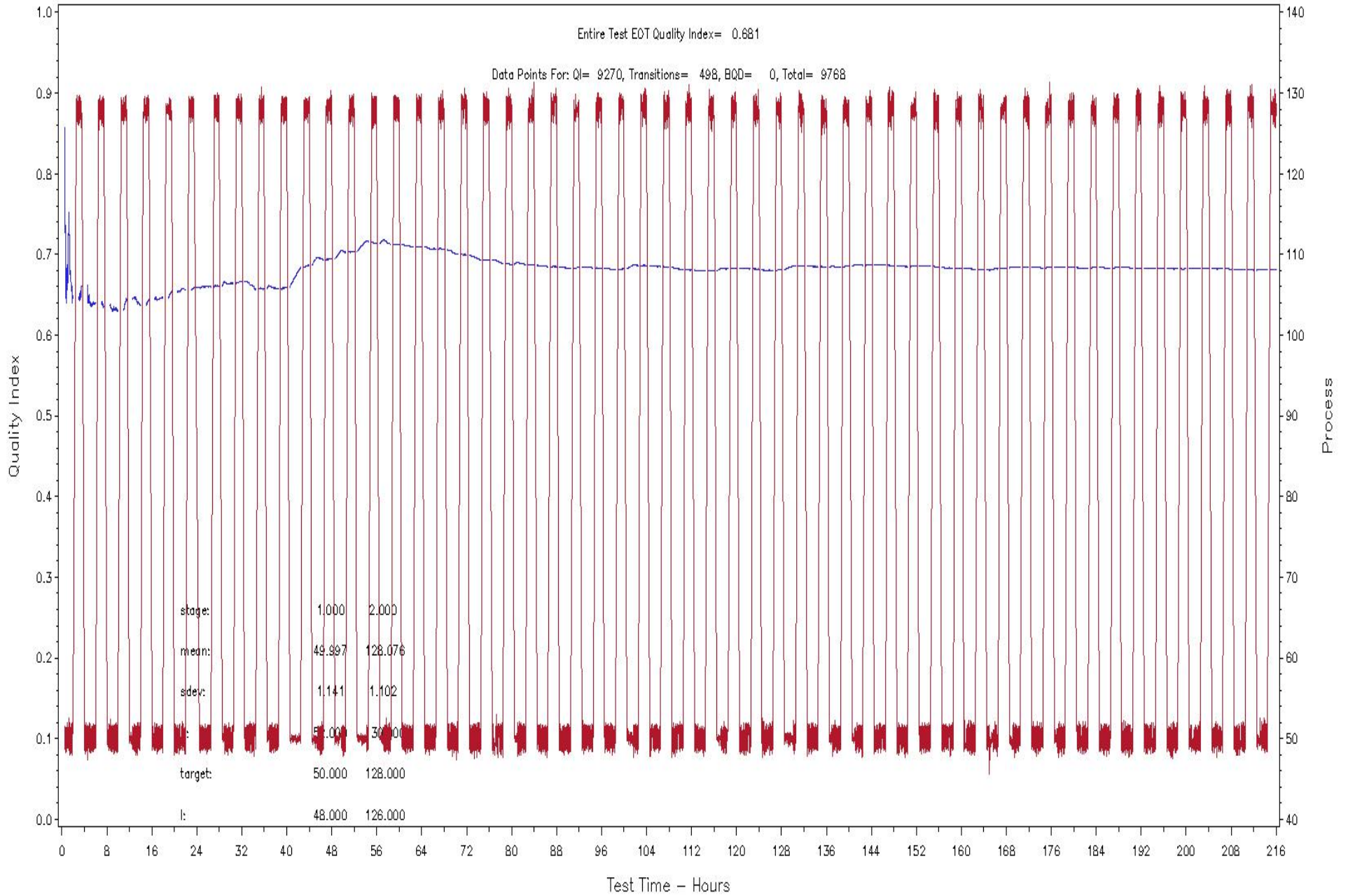
Entire Test EOT Quality Index= 0.581

Data Points For: QI= 9611, Transitions= 106, BQD= 0, Total= 9717





CWT QUALITY INDEX OPERATIONAL REVIEW  
Torque - N m (CONTROL)  
LAB= GStand= 93 CMR= 113312





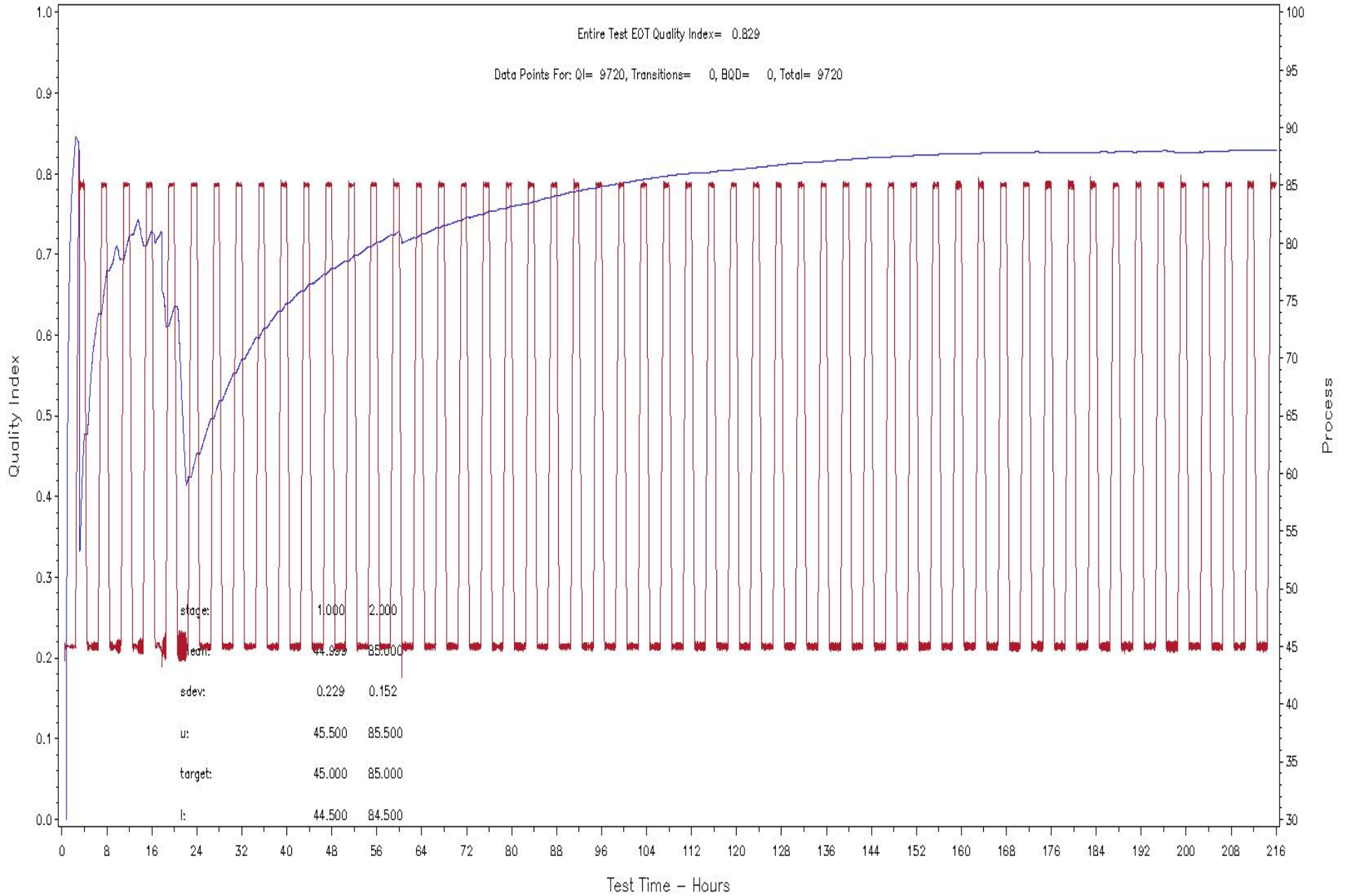
# Coolant Out Temperature

- No issues

CWT QUALITY INDEX OPERATIONAL REVIEW  
 Coolant Out Temperature - Degrees C (CONTROL)  
 LAB= A Stand= 8 QMIR= 113422

Entire Test EOT Quality Index= 0.829

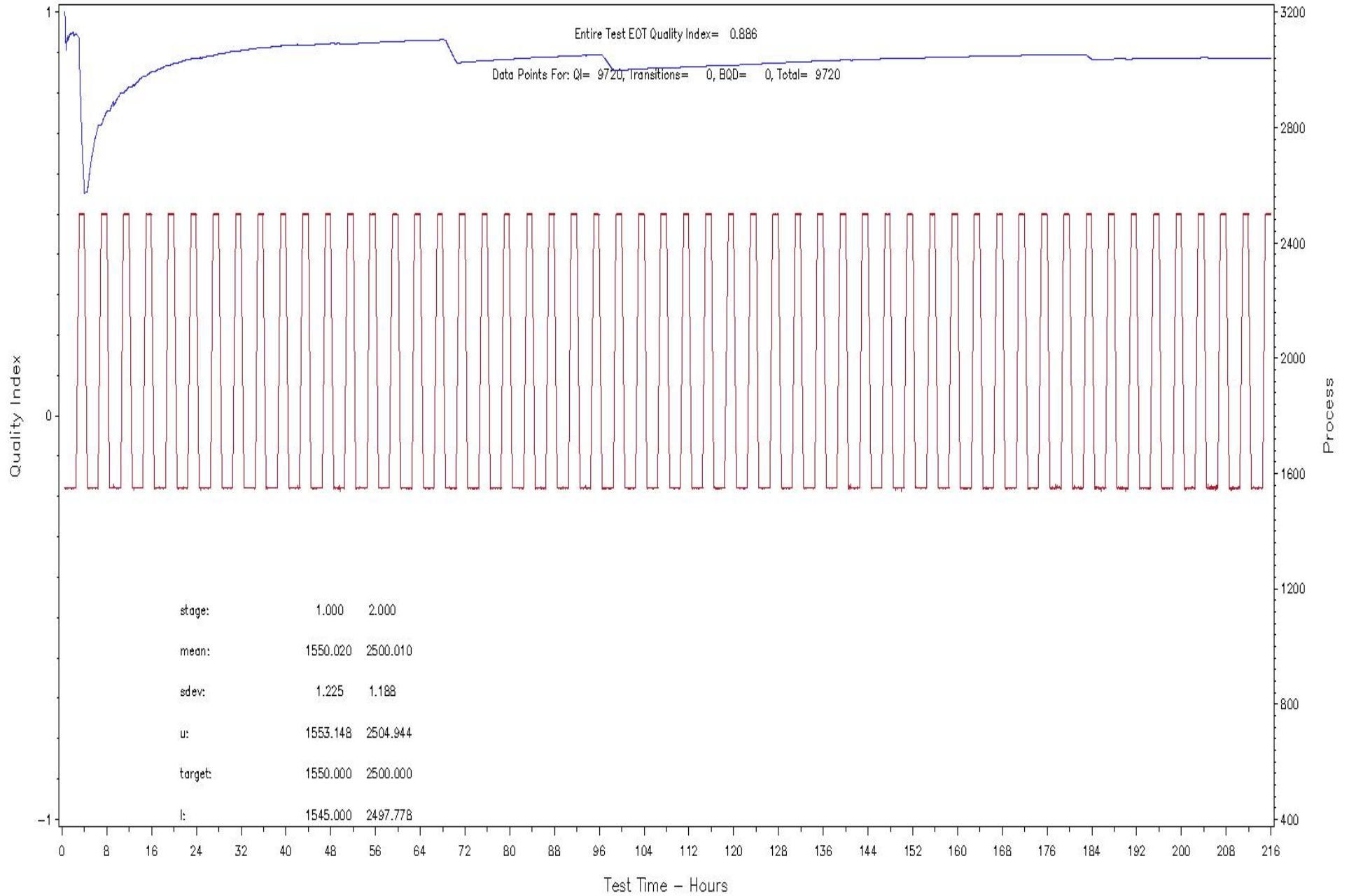
Data Points For: QI= 9720, Transitions= 0, BQD= 0, Total= 9720



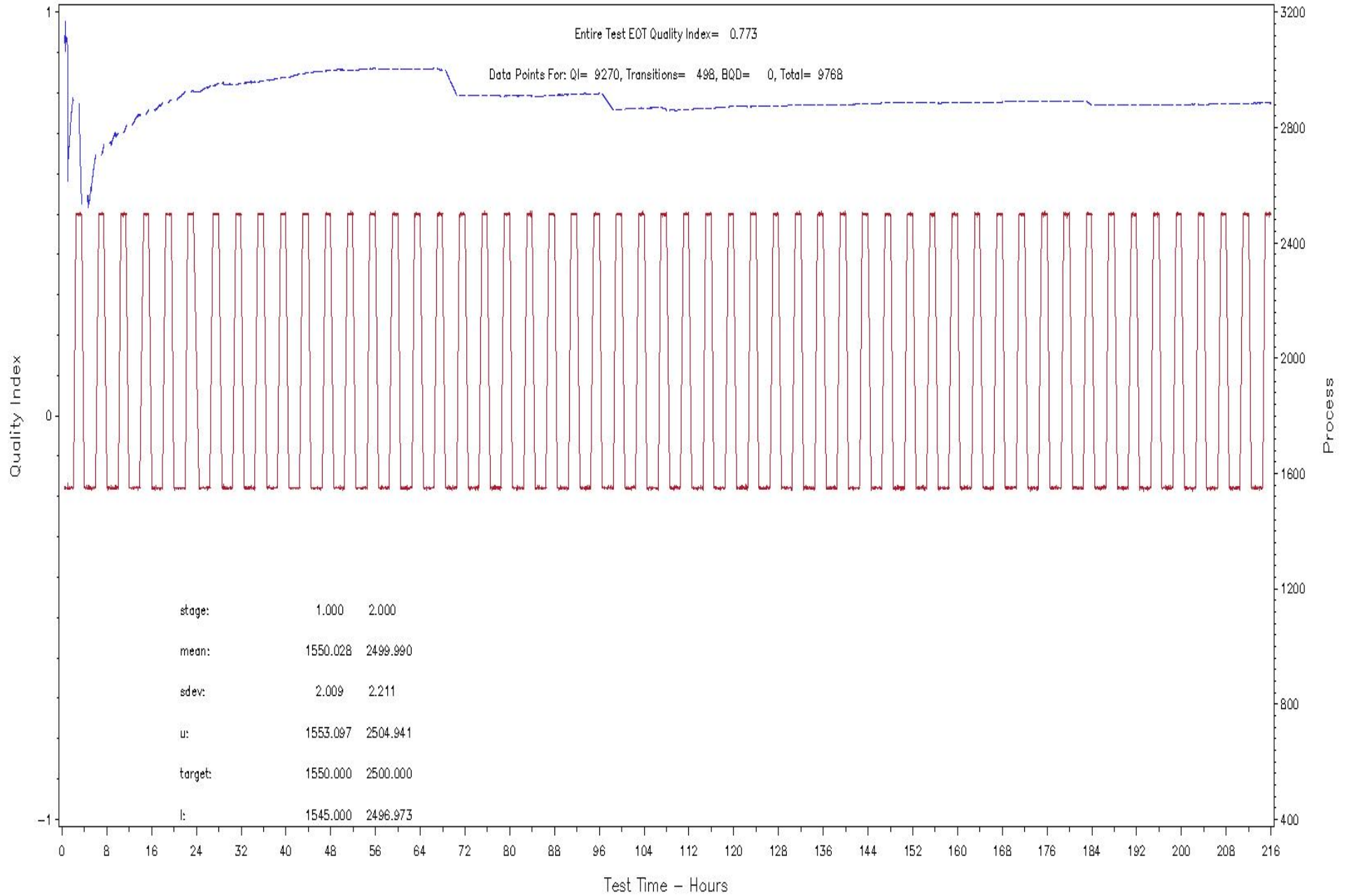
# Speed

- No issues

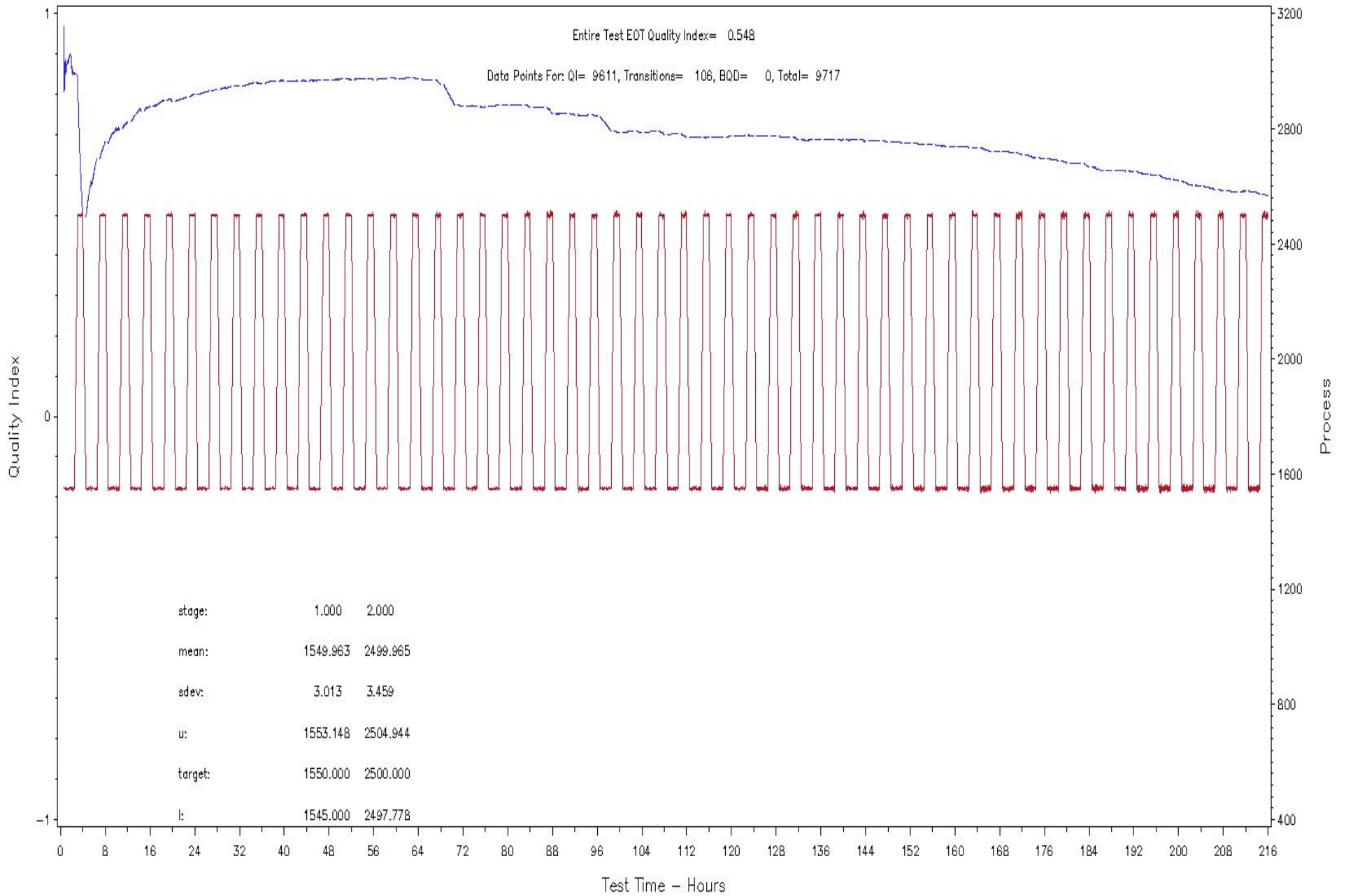
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Speed - r/min (CONTROL)  
LAB= A Stand= 27 CMIR= 113827



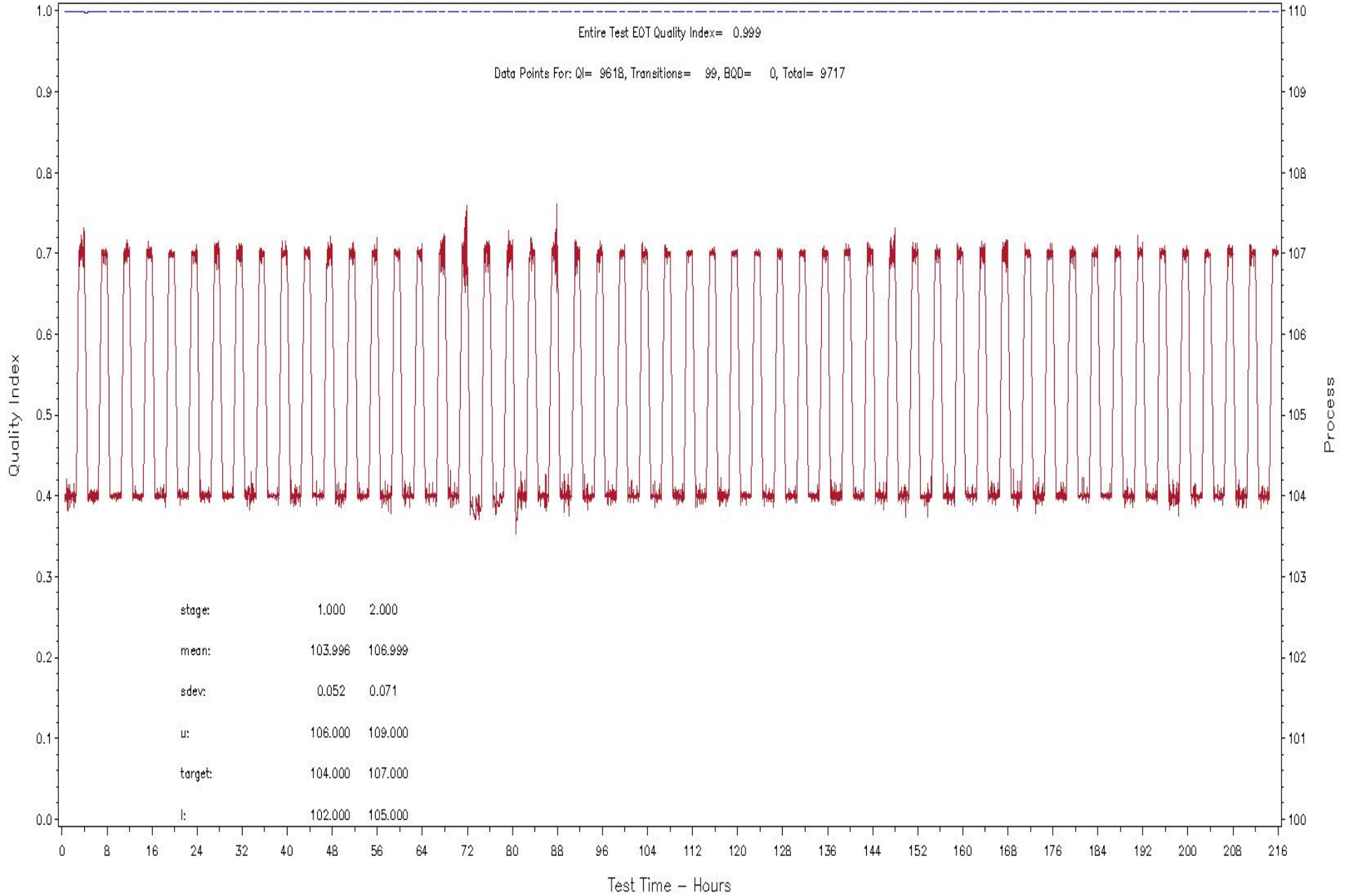
CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Speed - r/min (CONTROL)  
LAB= GStand= 93 CMR= 113312



CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Speed - r/min (CONTROL)  
LAB= GStand= 93 CMR= 113313

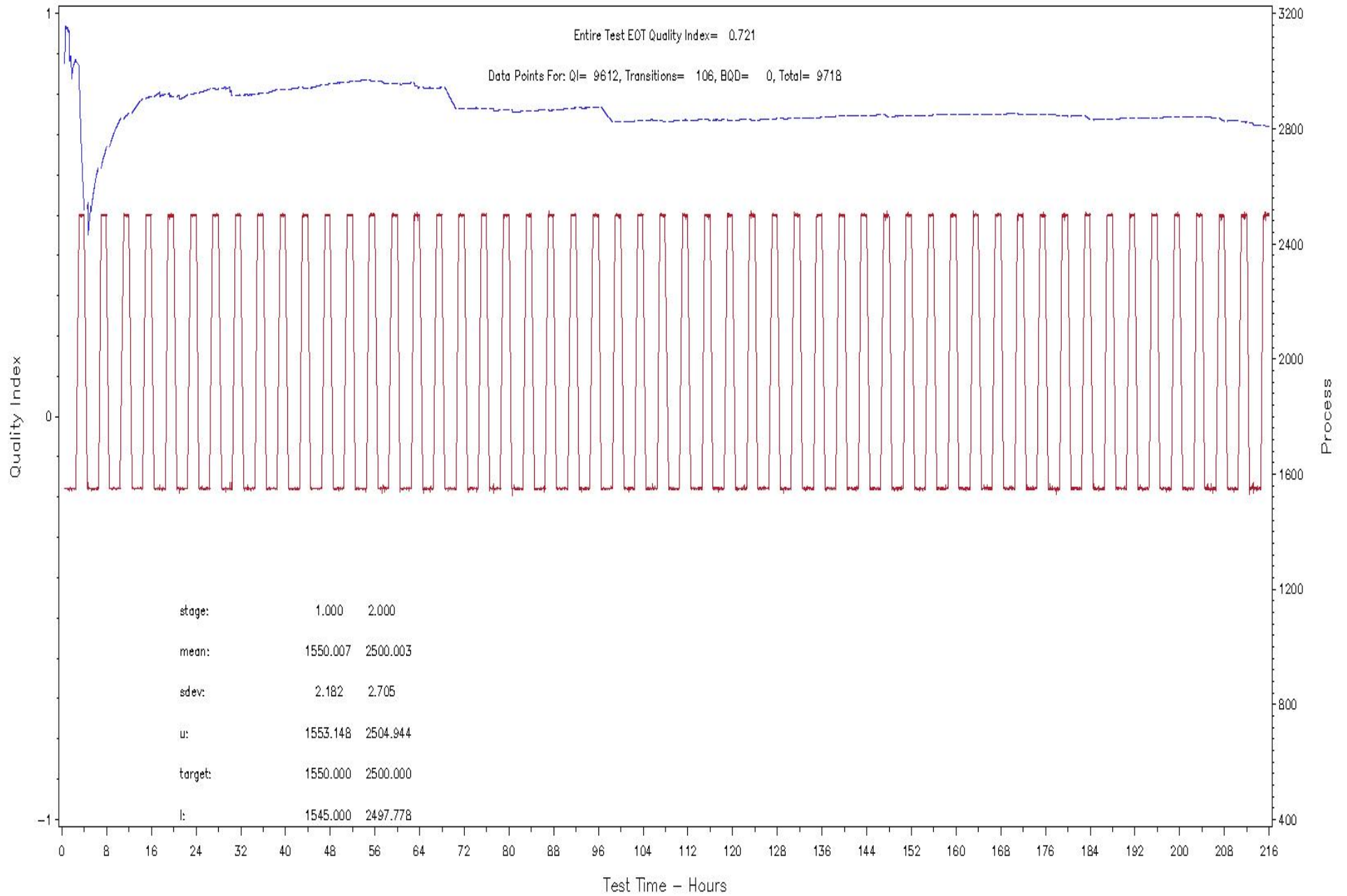


CWT QUALITY INDEX OPERATIONAL REVIEW  
Exhaust Back Pressure - kPa (CONTROL)  
LAB= GStand= 95 CMR= 113419





CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Speed - r/min (CONTROL)  
LAB= G Stand= 95 CMR= 113420



CWT QUALITY INDEX OPERATIONAL REVIEW  
Engine Speed - r/min (CONTROL)  
LAB= A Stand= 8 QMR= 113422

