# BelSign Quality Assurance Report

*Project: Belman A/S – Photo Documentation System*

*Prepared by: [Your Name]*

Date: [Insert Date Here]

# 1. Project Summary

The BelSign application was developed for Belman A/S to document and validate quality assurance in production. It is a JavaFX-based desktop system connected to a Microsoft SQL Server backend. The system features role-based access control for Admin, QA, and Production users.

# 2. Code Quality Pipeline

A modular quality pipeline has been implemented using PowerShell scripts and Maven plugins. The pipeline includes static analysis (PMD, SpotBugs), test coverage (JaCoCo), unit/integration tests (Surefire/Failsafe), and CSS analysis.

# 3. Quality Metrics

This section provides a summary of the code and style quality metrics collected during the latest analysis. See .junie/quality-assessment.md for full details.

# 4. Recommendations

• Refactor all duplicate CSS rules into shared utility classes.  
• Convert for-loops to Stream API where flagged.  
• Fix remaining test failures in QAService and ReportService classes.

# 5. Test Failures

• PhotoQualitySpecificationTest.testMissingMetadata – expected true but got false.  
• OrderBusinessPhotoManagementTest.setup – invalid order number format.  
• WorkerFlowIntegrationTest – cannot stub void method with return.