

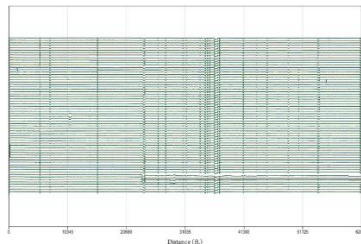
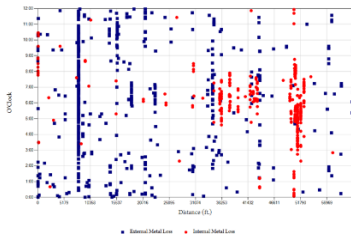
UHR Inspection of 10" Jet Fuel System Phoenix Sky Harbor International Airport

Description:

- Turnkey inspection including sub-cm survey, gauge pigs, ILI tracking, and UHR MFL inspection. The line was last inspected in Q4 2020 by Q-INLINE with legacy technology
- Customer desired UHR Data on their pipelines.

Solution:

- EcoVision™ 10" MFL-A UHR, GEO, IMU Tool
- Experienced technicians with required DOT PHMSA OQ's.
- First Run Success with excellent sensor data



Background

PHX is one of the busiest travel hubs in the U.S., typically serving over 52 million passengers annually. PHX has ~ 69,000 barrels of storage providing 16-20,000 barrels per day of jet fuel with its 10" pipeline. Cypress inspected ~ 11.77 miles with its EcoVision™ 10" MFL-A UHR, Geo, IMU Tool. Swissport desired a turnkey solution with UHR MFL technology.

Unexpected challenges

The launchers and receivers required some maintenance that delayed the start. Based upon an est. flow rate of 2,380 bph the original run was estimated to be 3.8 hours at ~ 3 MPH. The actual run was ~ 4:50 with average speed of 2.1 MPH. 16 AGM sites were utilized.

Data Analysis

Our DA team of experts identified ~ 500 anomalies including ~ 130 clusters with our UHR technology. This compares with only 186 anomalies identified by the prior competitor using legacy technology. We identified three > 30% compared to none with the prior competitor. Our UHR tools was also able to identify ~ 100 smaller pinhole type of anomalies not detected by the prior vendor. ~ 50% of the anomalies were internal vs. external compared with < 20% internal in the prior inspection.

Summary

Swissport selected Cypress for a turnkey project including a sub-cm survey, ILI tool tracking, , gauge plates, to capture UHR data on their system. Our advanced technology, with a sampling rate of 1,408 Hz per second, allowed us to capture 100% of the data with first run success providing them with superior data (400% more) vs. prior legacy ILI vendor. Cypress UHR technology provided superior data and identified more threats than legacy technology to support their integrity program

