

Application Spotlight: A Case Study on Aging Pipelines using Remote Video

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Contact: Ryan Brosda



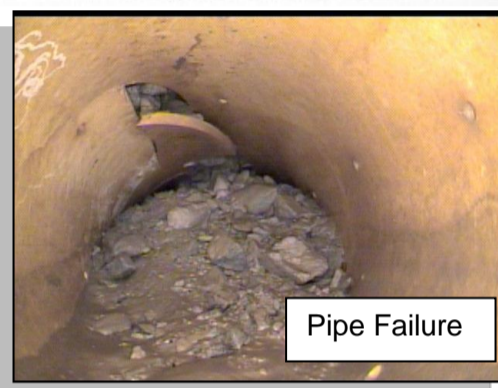
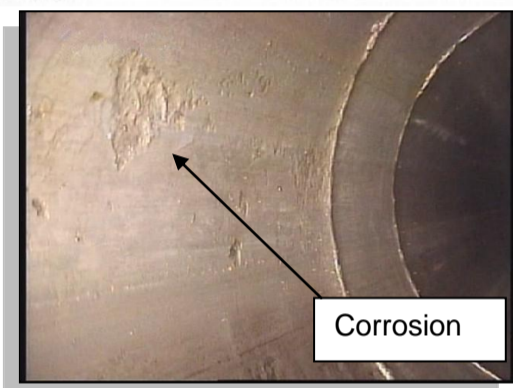
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Contact: Len Olchove



Maverick is Moving!
Recently purchased
10,000 sq.ft. Building with
multiple bays.....
Contact: Steven Toner



The Problem: Many of today's pipelines in the Canadian fields have been buried for over 50 years. The problem in most cases is that the available pipeline drawings, showing the pipeline material, configurations, tie-in points, internal coatings, pipe size changes, elevations and the locations of the lines are misplaced or lost. The aging pipelines do occasionally run into problems such as internal corrosion, fouling, stuck pigs, collapses and other failures. Where this is the case, smart-tools such as in-line pigging cannot adequately log information required by the engineers and integrity specialists.

The Solution: Remote video inspections are an alternative method to inspecting various sized pipelines. Robotic crawlers, track or wheeled configurations, and push system cameras can be introduced into the pipelines to gather live video of the pipeline's internal conditions. The video observations obtained from these rugged tools can also confirm any changes in the pipeline size, coating materials, configuration of the pipeline or tie-in points. They can quantify build-up, and measure defects. Video crawlers can also confirm data provided by the engineers and integrity specialist, or from other NDT results, such as smart pigs, showing damaged internals. Maverick Inspection Ltd. carries Class1/ Division 1 and Explosive Proof crawlers for hazardous environments. This is important when dealing with H2S, Benzene and other toxic substances.

The Result: Remote video crawlers and push system cameras provide the engineers and integrity specialists with a video observation of the pipeline conditions; The DVD footage of the video inspection is easily viewed by the client to further their evaluation of conditions of the lines so that they may proceed with other actions such as repairing the line, cleaning the line or replacing the line. Digital reporting (Images) and laser profile reporting can also be implemented using video crawlers to provide further information showing the true ID, and deformation of pipelines. These robotic systems are quick to deploy without delays to the client.





Exchangers-Verify Cleaning & Defects



Ineffective Cleaning



Fouling/ Corrosion



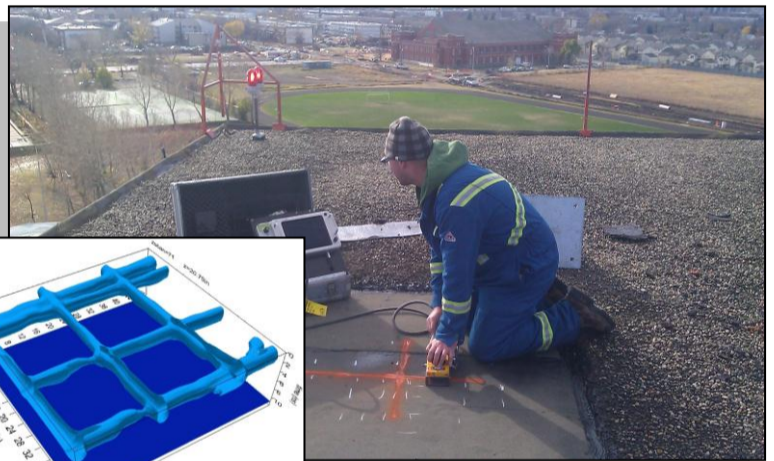
Exchangers, Condensers, Fan Fin Coolers and Reactor tubes are commonly cleaned during turnaround outages without the client really knowing what condition they are in prior or after cleaning. Maverick Inspection uses small diameter video-scopes to observe the tubes internal conditions. This technology can help set cleaning run times for cleaning companies, confirm internal surface wear damages from other NDT results or to just perform a general observation of the tubes conditions for determination of others methods of testing.



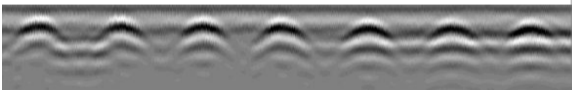
For more information on video inspection technology, please contact Ryan Brosda @ 780-467-1606

GPR – Roof Scanning –Anchor/ Duct Work

High-rise buildings are continuously going through renovations and new construction on the roof tops. Ground Penetrating Radar can scan the roof floor for confirmation of the rebar patterns, conduits and post-tension cables before coring or cutting for purposed additions of the roofs floor for towers, ducts, anchor points and window washing stations. The software interpretation and 3D profile reporting can give the clients a broader approach to understanding what lies beneath without potential hazards.



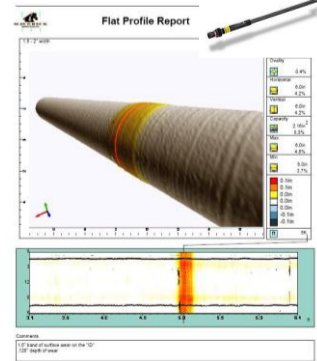
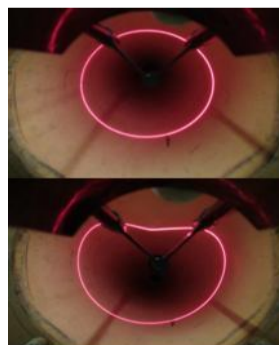
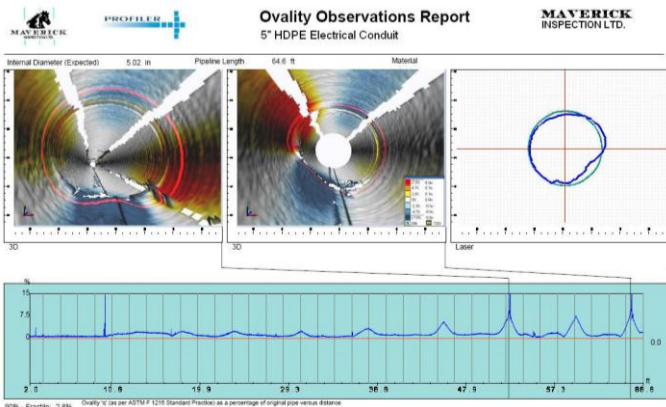
For more information about GPR capabilities, please contact James Harrison @ 780-467-1606



Laser Profiling Pipe / Pipelines

The laser profiler is a Snap-On tool onto our existing robotic crawlers that displaces an illuminated ring of light on the pipe wall surface. The information gathered from this is interpreted through Machine Vision software to observe any changes within the cross section of the pipe for any deformations, true 'ID', and to quantify build up before after cleaning.

For more information about Laser profiling, please contact Leonard Olchove @ 780-467-1606



For information about Maverick's safety program, please contact Leslie Tessari @ 780-467-1606

Company Culture o Safe Behaviour o Accountability o Safe Environment



HOW TO CONTACT US:

Phone: (780) 467 1606 Fax: (780) 467 9987
Email: feedback@maverickinspection.com
Website: www.maverickinspection.com
#22, 161 Broadway Blvd. Sherwood Park, AB T8H 2A8

