Guided Wave Testing Case Study 9
Permanently Installed Monitoring System (PIMS)

The gPIMS® system is GUL's permanently installed pipe monitoring system, which is the economical solution to reinspection of inaccessible pipes and corrosion monitoring through frequent data collection.

**Job Details**
- 8" Crude Oil line
- Pipe resting on simple supports
- Sleevied pipe through road crossing

**Main Findings**
- Corrosion under pipe support in the inaccessible area was successfully monitored.
- Remaining life was estimated to be 2 years before wall thickness reaches 50% wall loss

**Equipment:**

- Wavemaker® G4™
- gPIMS® Ring

Graph of estimated maximum corrosion depth against inspection year with two years forecast.

**Technical Details:**

- Max Corrosion Depth vs Time at +50m
- Collected Wall Loss (%)

- 2008: 9%
- 2009: 17%
- 2010: 26%
- 2011: 35%
- 2012: 44%
- 2013: 53%

**Dates:**
- 2008: 9%
- 2009: 17%
- 2010: 26%
- 2011: 35%
- 2012: 44%
- 2013: 53%

**2011 (Reinspection)**
- Delta (dB)
- Amplitude (dB)
- Distance (ft)

**2007 (Baseline Data)**
- Delta (dB)
- Amplitude (dB)
- Distance (ft)

Website: www.irisndt.com