

What are you looking for? Missed opportunities

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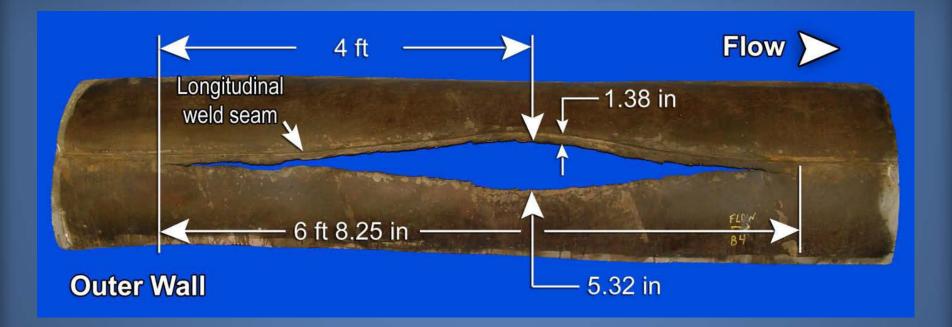
Director - Office of Railroad, Pipeline and Hazardous Materials Investigations
August 5, 2014

NTSB Investigations

- Catastrophic accident
- Comprehensive
- Retrospective look
- Connect the dots



Marshall, MI



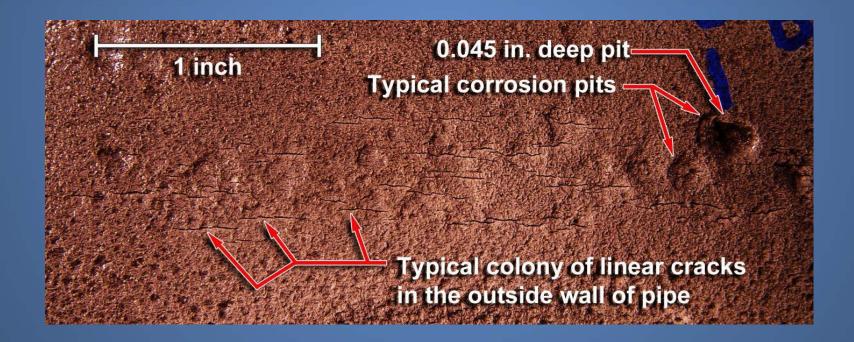


Marshall, MI

- July 25, 2010
- 1 Billion dollar clean-up
- Multiple Inspections
- Metal loss and cracks identified
- No excavation



Palm City, FL





Palm City, FL

- May 4, 2009
- Misclassified as Class 1
- 2004 MFL inspection identified corrosion
- No excavation



Chalk Point, MD



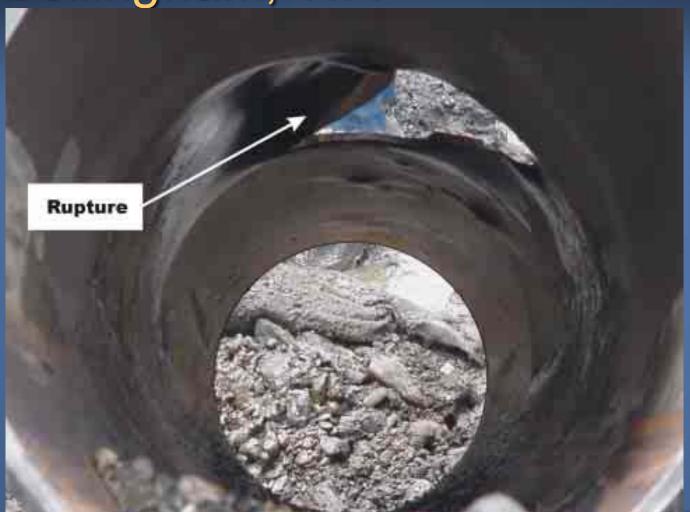


Chalk Point, MD

- April 7, 2000
- Significant environmental impact
- Wrinkle bend
- Misidentified as "T section"
- No excavation



Bellingham, WA





Bellingham, WA

- June 10, 1999
- Three fatalities
- Third-party damage
- Metal loss and dent identified
- No excavation



Summary

- Defects often disguised
- Expect the unexpected
- Use all available information
- Know all there is to know
- Inspect comprehensively

