

2014 AER PIPELINE PERFORMANCE: Shaping the Next Era



March, 2014

COMPOSITE PIPELINE MANAGEMENT

Overview

1. Causes & Contributing factors
2. Loss Prevention Improvements for Pipelines
3. Summary

COMPOSITE PIPELINE MANAGEMENT

- Causes and Contributing Factors
 - Failures resulting from:
 - Static Stresses
 - Dynamic Stresses

2014 AER PIPELINE PERFORMANCE

Loss Prevention Improvements for Pipelines



LOSS PREVENTION IMPROVEMENTS FOR PIPELINES

- Application of Enhanced Tools
 - Through the improved ability to leverage data through GIS, use available technology to help us further improve and refine our pipeline risk assessment process
- Mitigation of incidents
 - Design & Installation to reduce probability
 - Design improvements to manage consequence
 - Ongoing Operations Training
 - Continuous evaluation of lifecycle phases

COMPOSITE PIPELINES INSTALLATION MITIGATION ACTIONS

- Procedural changes
- Engineering higher grade pipe
- Modification of sequences
- Assessment of valve closing times
- Sharing of best practices
- Continued awareness
- Ensure minimal over-excavation

COMPOSITE PIPELINES INSTALLATION MITIGATION ACTIONS

- **Industry has seen an increase in Composite failures attributed to Installation methods.**
- **Continued proactive approach and measures can be taken to reduce the probability and consequence**

