

ROOT CAUSE ANALYSIS: A JOURNEY OF DISCOVERY

Presented by:

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Journey of Discovery:

- My journey as a root cause analyst
- My involvement at DOE/NNSA sites
- Examples of recent RCAs
- Lessons Learned and ways we can improve our root cause analysis

My Journey as a Root Cause SME



My Involvement at DOE/NNSA Sites & Prime Contractors



Pueblo Chemical Agent-Destruction Pilot Plant



Blue Grass Chemical Agent-Destruction Pilot Plant





Journey of Discovery:

Examples of Recent
Proactive and Reactive
Root Cause Analyses

Examples of Recent Reactive & Proactive RCAs

- **Human Performance Issues**

- **Equipment Failures**

- **Organizational and Programmatic Breakdowns**



Human Performance: Non-qualified Electrical Worker Cuts Live 20 amp Wire at K-1652 in Oak Ridge, TN



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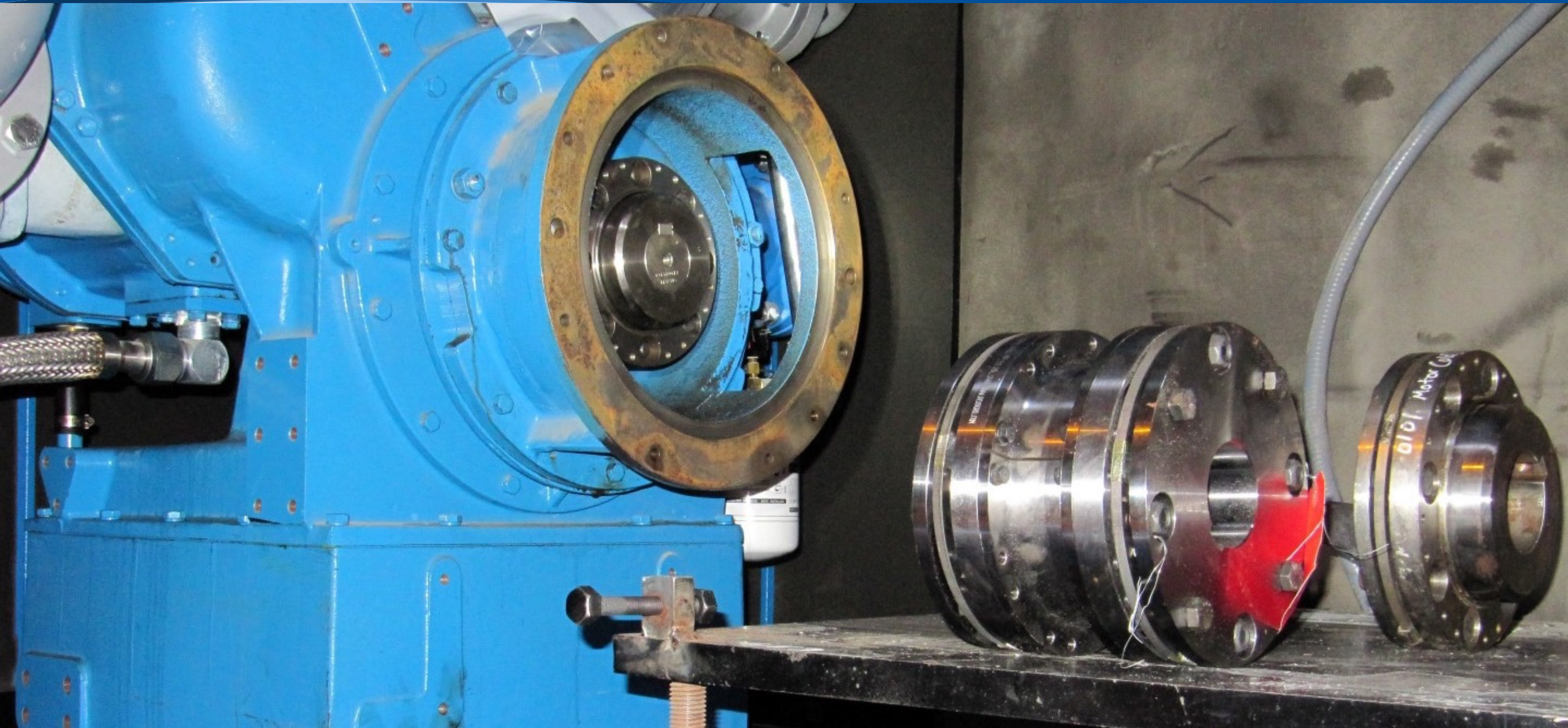
Snippets used by
the construction
worker were not
insulated



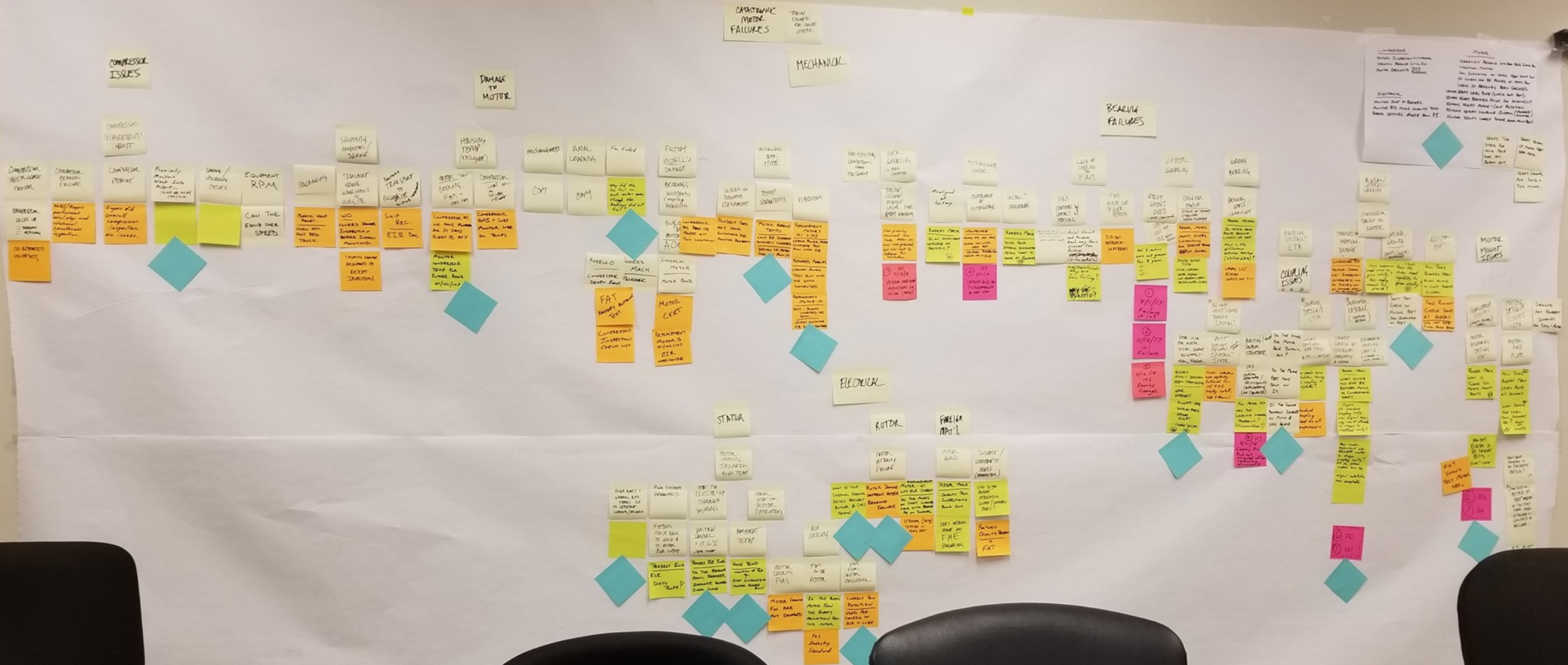
Equipment Example: 7 Consecutive Motor Failures at the Chemical Agent Destruction Pilot Plant in Blue Grass, KY



Equipment Failure: 7 Consecutive Motor Failures at the Chemical Agent Destruction Pilot Plant in Blue Grass, KY



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Level of Effort:

- 8.5 days to complete the analysis
- 4 RCA team members
- 1 of the team members was the Compressed Air System Engineer (SME)
- Most complex equipment failure RCA I have ever conducted