

Stork Twin City Testing Corporation

PROJECT NUMBER: SOU263-01-15-91979

DATE: January 21, 2008

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CHEMICAL ANALYSIS

Sample Identification:

Cracked 2" diameter gas pipe section from PS07-002 Natural Gas Incident, Mitchell, South Dakota

Test Location:

Adjacent End B of full-length section

Specimen Size: N/A

Result:

Chemical Element	Cracked Gas Pipe Section, %	Requirement for Grade A25, Class II per API 5L*, %	Requirement for butt-welded, Class II per API 5L**, %
Carbon	0.08	0.21 max	Not specified
Manganese	0.45	0.60 max	0.30-0.60
Phosphorus	0.048	0.045-0.080	0.045-0.080
Sulfur	0.020	0.030 max	0.060 max
Silicon	<0.002	Not specified	Not specified
Chromium	0.02	Not specified	Not specified
Nickel	0.03	Not specified	Not specified
Molybdenum	0.02	Not specified	Not specified
Copper	0.04	Not specified	Not specified
Aluminum	0.04	Not specified	Not specified
Iron	Balance	Balance	Balance

* API Specification 5L dated March, 2004 effective date October 4, 2004

* API Specification 5L dated March, 1955

The chemical analysis meets the specified requirements. It was conducted on January 16, 2008 according to ASTM: E415-99a (Re-approved 2005).

Test Equipment:

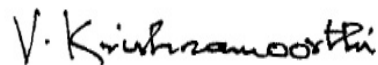
1. Thermo Electron ARL Quantris Optical Emission Spectrometer, S/N 66, calibration verified

Prepared By:



Richard Kielty, P.E.
Senior Metallurgical Engineer
Materials Testing & Analysis Group
Phone: (651) 659-7229

Reviewed By:



Viswanathan Krishnamoorthi, P.E.
Manager, Failure Analysis
Materials Testing & Analysis Group
Phone: (651) 659-7346