

QC Metallurgical, Inc.

Testing & Consulting Services

2870 Stirling Road • Hollywood, FL 33020-1199 • (954) 889-0089 • Fax (954) 241-5890

INSPECTION REPORT

DATE September 25, 2012

QCM JOB# 12IM-924 CUSTOMER Sante Shipping Lines

DESCRIPTION 2 samples - steel plates (red) A - Oval B - Square

CUSTOMER ORDER# Verbal MATERIAL _____

INSPECTION SPECIFIED Tensile & Chemistry

APPLICABLE SPECIFICATIONS _____

RESULTS OF INSPECTION

TENSILE TEST RESULTS:

SAMPLE	DIAMETER	AREA	T/(KSI)	Y/(KSI)	% EL	FAILURE LOCATION
A	.371 - .499	.1851	74.0	69.6	23.1	Gauge Area
B	.375 - .500	.1875	61.6	48.4	37.6	Gauge Area

CHEMISTRY RESULTS:

Chemistry (In percent):

<i>Elements</i>	<i>Sample A</i>	<i>Sample B</i>	<i>Specs</i>
Carbon	0.083	0.067	.26 max.
Silicon	0.286	0.306	---
Manganese	1.11	0.81	---
Phosphorus	0.014	0.011	.04 max.
Sulfur	0.0034	0.0031	.05 max.
Chromium	0.140	0.045	---
Nickel	0.190	0.082	---
Molybdenum	0.051	0.010	---
Copper	0.301	0.250	.20 min.
Iron	BALANCE	BALANCE	BALANCE

Sample A (Oval) = Material is identified to be A36.

Sample B (Square) = Material is identified to be A36.



Frank Grate