



NIAGARA  
SPECIALTY METALS

# MATERIAL CERTIFICATION

NJ STEEL BARON  
TAG #2432

Production Order: 154135  
Grade: 440-C ESR

Description:  
440-C ESR HRA DESCALED SHEARED PLATE  
.275/.300 x 23/25" RW x 36.000" Ex.  
Heat# G31260

## Chemistry Analysis

Heat Number:	G31260		Hardness:	<div></div>	Hppm:	<div></div>	
Carbon:	<div>1.050</div>	Manganese:	<div>0.760</div>	Phosphorus:	<div>0.019</div>	Copper:	<div>0.100</div>
Silicon:	<div>0.340</div>	Chromium:	<div>16.620</div>	Vanadium:	<div>0.060</div>	Niobium:	<div>0.010</div>
Cobalt:	<div>0.050</div>	Molybdenum:	<div>0.500</div>	Nickel:	<div>0.200</div>	Nitrogen:	<div>0.050</div>
Sulphur:	<div>0.001</div>	Tungsten:	<div>0.050</div>	Titanium:	<div>0.010</div>	Aluminum:	<div>0.010</div>

## Remarks

Chemistry as per ASTM A-276, ASTM F899-12b  
Country of origin: USA

Federal ID #: 16-1179936

  
General Manager/Quality

We provide material that is free from mercury contamination and radiation at the time of shipment. No weld repair is done.

We are compliant with EU directive 2002/95/EC (ROHS), REACH, EN 10204 2004 3.1 and DFARS 252.225.7001,7002,7008,7009. Material is melted and manufactured in North America.

The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under federal statutes including Federal Law, Title 18, Chapter 47. The above are true and correct results of tests on samples of the material. Said results meet the specification(s) and are on record.