

RVID 2 - Excel Worksheet Version

The information contained here represents the collected state of knowledge concerning US reactor pressure vessels as of July 2000. Many of the values represented here, particularly the fluence values, have since been updated several times. The chemistry values, particularly those for Linde 80 welds, have likewise been updated due to a mixture of enhanced analysis, sample testing, and estimate refinement.

The NRC staff collected this information as a review aid and as a snapshot of reactor vessel materials. The values found herein were values sufficient and proper for use in interacting with the NRC. Consequently many values were conservatively reported.

Many of the terms contained in the headings will be uninterpretable without the aid of NRC Regulatory Guide 1.99, Rev. 2, "Radiation Embrittlement of Reactor Vessel Materials," which can be found at the NRC public website. As of the release of this data collection, the Regulatory Guide was available at the following address:

<http://pbadupws.nrc.gov/docs/ML0037/ML003740284.pdf>

[illegible]

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
BROWNS FERRY 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 2	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
BROWNS FERRY 3	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	FORGING
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	FORGING
BRUNSWICK 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	WELD
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	WELD
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	PLATE
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	PLATE
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	PLATE
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	FORGING
BRUNSWICK 2	GE	CHICAGO BRIDGE AND IRON	BWR	NONE	FORGING
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	FORGING
BYRON 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	NONE	WELD
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
CALLAWAY 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
CALVERT CLIFFS 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
CALVERT CLIFFS 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
CALVERT CLIFFS 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE

[illegible]

[illegible]

[illegible]

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
FITZPATRICK	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
FORT CALHOUN	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
GINNA	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
GRAND GULF 1	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
HADDAM NECK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HATCH 2	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
HOPE CREEK	GE	HITACHI	BWR	BWROG	WELD

[illegible]

[illegible]

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
MILLSTONE 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
MILLSTONE 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
MILLSTONE 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
MILLSTONE 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
MILLSTONE 3	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
MONTICELLO	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
MONTICELLO	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
MONTICELLO	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
MONTICELLO	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 1	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NINE MILE POINT 2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
NORTH ANNA 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
NORTH ANNA 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
NORTH ANNA 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
NORTH ANNA 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
NORTH ANNA 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
NORTH ANNA 2	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	PLATE
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	PLATE
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	PLATE
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	PLATE
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	PLATE
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 1	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 2	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 2	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 2	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 2	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 2	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	FORGING
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OCONEE 3	B&W	BABCOCK & WILCOX	PWR	B&WOG	WELD
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
OYSTER CREEK	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALISADES	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 1	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 2	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PALO VERDE 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 2	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
PEACH BOTTOM 3	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
PERRY	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	PLATE
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
PILGRIM	GE	COMBUSTION ENGINEERING	BWR	BWROG	WELD
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
POINT BEACH 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
POINT BEACH 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
POINT BEACH 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
POINT BEACH 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
PRAIRIE ISLAND 1	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 1	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 1	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 1	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	WELD
PRAIRIE ISLAND 1	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	WELD
PRAIRIE ISLAND 2	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 2	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 2	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	FORGING
PRAIRIE ISLAND 2	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	WELD
PRAIRIE ISLAND 2	WESTINGHOUSE	SOCIETE CREUSOT	PWR	WOG	WELD
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 1	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	PLATE
QUAD CITIES 2	GE	BABCOCK & WILCOX	BWR	BWROG	WELD
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
RIVER BEND	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
ROBINSON 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
SALEM 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE

[illegible]

[illegible]

[illegible]

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 1	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
VOGTLE 2	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	PLATE
WATERFORD 3	C-E	COMBUSTION ENGINEERING	PWR	CEOG	WELD
WATTS BAR 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	WELD
WATTS BAR 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
WATTS BAR 1	WESTINGHOUSE	ROTTERDAM DOCKYARD	PWR	WOG	FORGING
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	WELD
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WNP-2	GE	CHICAGO BRIDGE AND IRON	BWR	BWROG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	WELD
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
WOLF CREEK	WESTINGHOUSE	COMBUSTION ENGINEERING	PWR	WOG	PLATE
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 1	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	FORGING
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE

PLANT	DESIGNER	MANUFACTURER	REACTOR TYPE	OWNER GROUP	MATERIAL
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	PLATE
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD
ZION 2	WESTINGHOUSE	BABCOCK & WILCOX	PWR	B&WOG	WELD

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
528360(AYN 131)	LOWER NOZZLE BELT FORGING	GENERIC	A 508-2
C-5114-1	LOWER SHELL COURSE	DIRECT	A 533B
C-5114-2	UPPER SHELL COURSE	DIRECT	A 533B
C-5120-1	LOWER SHELL COURSE	65%	A 533B
C-5120-2	UPPER SHELL COURSE	65%	A 533B
8T1762	LOWER SHELL AXIAL WELDS WF-18	EMA	LINDE 80
8T1762	UPPER SHELL AXIAL WELD WF-18	EMA	LINDE 80
821T44	NOZZLE BELT/UPPER SHELL CIRC. WELD WF-	EMA	LINDE 80
406L44	UPPER/LOWER SHELL CIRC. WELD WF-112	EMA	LINDE 80
83650	INT. TO LOWER SHELL CIRC. WELD 9-203	DIRECT	LINDE 0091
10120	INT. SHELL AXIAL WELDS 2-203A,B,C	DIRECT	LINDE 0091
10120	LOWER SHELL AXIAL WELDS 3-203A,B,C	DIRECT	LINDE 0091
B-2545-2	LOWER SHELL C-8010-3	65%	A 533B
B-2545-1	LOWER SHELL C-8010-2	65%	A 533B
C-8161-2	LOWER SHELL C-8010-1	65%	A 533B
C-8161-1	INTERMEDIATE SHELL C-8009-2	65%	A 533B
C-8182-2	INTERMEDIATE SHELL C-8009-3	DIRECT	A 533B
C-8161-3	INTERMEDIATE SHELL C-8009-1	65%	A 533B
10137	UPPER/INT SHELL CIRC WELD 8-203	10 F DATA	LINDE 0091
C6293-2	LOWER SHELL B7203-2	DIRECT	A 533B
C4381-1	INTERMEDIATE SHELL B6607-1	DIRECT	A 533B
C4381-2	INTERMEDIATE SHELL B6607-2	DIRECT	A 533B
C6317-1	LOWER SHELL B6903-1	DIRECT	A 533B
90136	CIRC WELD 11-714	SISTER PLANT	LINDE 0091
305424	INTER SHELL AXIAL WELD 19-714	SURV WELD	LINDE 1092
305414	LOWER SHELL AXIAL WELD 20-714	SISTER PLANT	LINDE 1092
83642	AXIAL WELDS	DIRECT	LINDE 0091
83642	CIRC. WELD	DIRECT	LINDE 0091
C0544-2	INTERMEDIATE SHELL B9004-2	DIRECT	A 533B
C0544-1	INTERMEDIATE SHELL B9004-1	DIRECT	A 533B
C1408-1	LOWER SHELL B9005-2	DIRECT	A 533B
C1408-2	LOWER SHELL B9005-1	DIRECT	A 533B
19246-1	NO LOCATION IDENT S-5503-1	DIRECT	A 302B
19246-3	NO LOCATION IDENTIFICATION S-5503-3	DIRECT	A 302B
19246-2	NO LOCATION IDENTIFICATION S-5503-2	DIRECT	A 302B
19246-4	NO LOCATION IDENTIFICATION S-5503-4	DIRECT	A 302B
NA/W-B	CIRC WELD	EMA	ARCOS-B5
NA/W-A	AXIAL WELDS	EMA	ARCOS-B5
442011	MIDDLE CIRC. WELD WF-562	DIRECT	LINDE 80
5P-7016	LOWER NOZZLE BELT FORGING	DIRECT	A 508-2
49D867-1-1/49C813-1-1	LOWER SHELL FORGING	DIRECT	A 508-3
H4498	UPPER CIRC. WELD WF-645	DIRECT	LINDE 80
49C344-1-1/49D383-1-1	UPPER SHELL FORGING	DIRECT	A 508-3
31401	LOWER CIRC WELD WF-653	DIRECT	LINDE 80
442011	MIDDLE CIRC. WELD WF-562	DIRECT	LINDE 80
49D963-1-1/49C904-1-1	UPPER SHELL FORGING	DIRECT	A 508-3
1084-18	LOWER CIRC WELD WF-696	DIRECT	LINDE 80
5P-7056	LOWER NOZZLE BELT FORGING	DIRECT	A 508-3
H4498	UPPER CIRC. WELD WF-645	DIRECT	LINDE 80
50D102-1-1/50C97-1-1	LOWER SHELL FORGING	DIRECT	A 508-3
C2753-1	INTERMEDIATE SHELL	EMA	A 302BM
C2868-2	INTERMEDIATE SHELL	65%	A 302BM
C2884-2	INTERMEDIATE SHELL	65%	A 302BM
A1009-1	LOWER SHELL	EMA	A 302BM
A0999-1	LOWER SHELL	EMA	A 302BM
B5864-1	LOWER SHELL	EMA	A 302BM
NA/W-A	AXIAL WELDS	EMA	ESW
406L44	CIRC WELD WF-154	EMA	LINDE 80
D55733	CIRC WELDS	DIRECT	YF-200
C2849-1	LOWER-INTERMEDIATE SHELL	EMA	A 302BM
C2460-2	LOWER SHELL	EMA	A 302BM

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
A0981-1	LOWER-INTERMEDIATE SHELL	65%	A 302BM
C2467-2	LOWER SHELL	EMA	A 302BM
C2467-1	LOWER-INTERMEDIATE SHELL	EMA	A 302BM
C2463-1	LOWER SHELL	EMA	A 302BM
NA/W-A	AXIAL WELDS	EMA	ESW
D55733/D51852	CIRC WELD	DIRECT	YF-200
C3188-2	LOWER-INTERMEDIATE SHELL	65%	A 302BM
B7267-1	LOWER-INTERMEDIATE SHELL	EMA	A 302BM
C3213-1	LOWER SHELL	EMA	A 302BM
C3201-2	LOWER-INTERMEDIATE SHELL	EMA	A 302BM
C3217-2	LOWER SHELL	EMA	A 302BM
C3222-2	LOWER SHELL	EMA	A 302BM
NA/W-A	AXIAL WELDS ES	EMA	ESW
S3986	AXIAL WELDS	EMA	LINDE 124
1P4218	CIRCUMFERENTIAL WELD	EMA	LINDE 124
C4550-1	LOWER SHELL	EMA	A 533B
C4487-1	LOWER INTERMEDIATE SHELL	EMA	A 533B
C4535-2	LOWER SHELL	EMA	A 533B
Q2Q1VW	NOZZLE FORGING N16A	EMA	A 508-2
Q2Q1VW	NOZZLE FORGING N16B	EMA	A 508-2
B8496-1	LOWER INTERMEDIATE SHELL	EMA	A 533B
3P4000	CIRCUMFERENTIAL WELD	EMA	LINDE 124
S3986	AXIAL WELDS	EMA	LINDE 124
C4550-2	LOWER SHELL	EMA	A 533B
C4521-2	LOWER INTERMEDIATE SHELL	EMA	A 533B
C4489-1	LOWER INTERMEDIATE SHELL	EMA	A 533B
C4500-2	LOWER SHELL	EMA	A 533B
Q2Q1VW	NOZZLE FORGING N16B	EMA	A 508-2
Q2Q1VW	NOZZLE FORGING N16A	EMA	A 508-2
442011	UPPER CIRC. WELD WF-501	DIRECT	LINDE 80
442002	MIDDLE CIRC. WELD WF-336	DIRECT	LINDE 80
5P-5951	LOWER SHELL FORGING	DIRECT	A 508-2
5P-5933	INT. SHELL FORGING	DIRECT	A 508-2
123J218	LOWER NOZZLE BELT FORGING	DIRECT	A 508-2
31401	LOWER CIRC. WELD WF-472	DIRECT	LINDE 80
49D329-1-1/49C297-1-1	INTERMEDIATE SHELL FORGING	DIRECT	A 508-2
442011	UPPER CIRC. WELD WF-562	DIRECT	LINDE 80
442002	MIDDLE CIRC. WELD WF-447	DIRECT	LINDE 80
4P-6107	LOWER NOZZLE BELT FORGING	DIRECT	A 508-2
49D330-1-1/49C298-1-1	LOWER SHELL FORGING	DIRECT	A 508-2
31401	LOWER CIRC. WELD WF-614	DIRECT	LINDE 80
90077	INT. & LW SHELL AX. WELDS 101-124B/C, -	DIRECT	LINDE 0091
90077	INT. & LOW. SHELL AX. WELDS 101-124A, -142A		LINDE 0091
90077	INT. TO LOWER SHELL CIRC. WELD 101-171	DIRECT	LINDE 124
C4344-1	INTERMEDIATE SHELL R2707-1	DIRECT	A 533B
C4472-1	LOWER SHELL R2708-2	DIRECT	A 533B
C4383-1	INTERMEDIATE SHELL R2707-2	DIRECT	A 533B
C4383-2	INTERMEDIATE SHELL R2707-3	DIRECT	A 533B
C4499-2	LOWER SHELL R2708-1	DIRECT	A 533B
C4499-1	LOWER SHELL R2708-3	DIRECT	A 533B
B-8489-1	LOWER SHELL D-7207-3	65%	A 533B
C-4351-2	INTERMEDIATE SHELL D-7206-1	65%	A 533B
B-8489-2	LOWER SHELL D-7207-2	65%	A 533B
C-4441-2	INTERMEDIATE SHELL D-7206-2	65%	A 533B
C-4441-1	INTERMEDIATE SHELL D-7206-3	DIRECT	A 533B
C-4420-1	LOWER SHELL D-7207-1	65%	A 533B
21935	LOWER SHELL AXIAL WELD 3-203A/C	SISTER PLANT	LINDE 1092
20291/12008	INTERMEDIATE SHELL AXIAL WELD 2-203	SISTER PLANT	LINDE 1092
33A277	INT. TO LOWER SHELL CIRC. WELD 9-203	SURV WELD	LINDE 0091
B-9427-2	INTERMEDIATE SHELL D-8906-2	65%	A 533B
C-5803-3	LOWER SHELL D-8907-3	65%	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
A-4463-2	INTERMEDIATE SHELL D-8906-3	65%	A 533B
C-5286-1	LOWER SHELL D-8907-2	DIRECT	A 533B
A-4463-1	INTERMEDIATE SHELL D-8906-1	65%	A 533B
C-5804-1	LOWER SHELL D-8907-1	65%	A 533B
A8746	INTER SHELL AXIAL WELD 2-203A/C	GENERIC	LINDE 124
10137	INT./LOWER SHELL CIRC. WELD 9-203	SURV WELD	LINDE 0091
33A277	LOWER SHELL AXIAL WELDS 3-203A/C	SISTER PLANT	LINDE 0091
895075	CIRC. WELD W05	DIRECT	GRAU LO
527708	LOWER SHELL 04 FORGING	DIRECT	A 508-2
411343	INTERMEDIATE SHELL 05 FORGING	DIRECT	A 508-2
83648	GIRTH WELD G1.45	DIRECT	LINDE 0091
83648	AXIAL WELD G1.45	DIRECT	LINDE 0091
A0617-1	INTERMEDIATE SHELL B8616-1	DIRECT	A 533B
C2288-1	LOWER SHELL B8806-1	DIRECT	A 533B
C2272-2	LOWER SHELL B8806-3	DIRECT	A 533B
C2272-1	LOWER SHELL B8806-2	DIRECT	A 533B
C0543-2	INTERMEDIATE SHELL B8605-2	DIRECT	A 533B
C0543-1	INTERMEDIATE SHELL B8605-1	DIRECT	A 533B
3P4955/3478(S)	WELDS	DIRECT	UNKNOWN
3P4955/0342(S)	WELDS	DIRECT	UNKNOWN
3P4955/0342(T)	WELDS	DIRECT	UNKNOWN
3P4955/0951(T)	WELDS	DIRECT	UNKNOWN
3P4955/3478(T)	WELDS	DIRECT	UNKNOWN
3P4955/0951(S)	WELDS	DIRECT	UNKNOWN
431T1831	WELDS		UNKNOWN
C4320-2	SHELL COURSE 2	DIRECT	A 533B
C4363-2	SHELL COURSE 2	DIRECT	A 533B
C4380-2	SHELL COURSE 2	DIRECT	A 533B
5P6756	WELDS	DIRECT	UNKNOWN
A2758-1	SHELL COURSE 1	50 F DATA	A 533B
76492	WELDS	DIRECT	UNKNOWN
A2740-1	SHELL COURSE 1	30 F DATA	A 533B
88112	LOWER SHELL AXIAL WELDS 101-142A/C	SURV WELD	LINDE 0091
88112	INTERMEDIATE SHELL AXIAL WELDS 101-	SURV WELD	LINDE 0091
88112	CIRC. WELD 101-171	SURV WELD	LINDE 0091
C4533-2	LOWER SHELL R1108-2	DIRECT	A 533B
C4106-2	INTERMEDIATE SHELL R1107-3	DIRECT	A 533B
B7854-1	INTERMEDIATE SHELL R1107-2	DIRECT	A 533B
C4021-1	INTERMEDIATE SHELL R1107-1	DIRECT	A 533B
C4589-1	LOWER SHELL R1108-3	DIRECT	A 533B
C4464-1	LOWER SHELL R1108-1	DIRECT	A 533B
NR64439-1	LOWER SHELL R3816-2	DIRECT	A 533B
NR64443-1	LOWER SHELL R3816-3	DIRECT	A 533B
89833	CIRC. WELD	SURV WELD	LINDE 124
89833	INTERMEDIATE SHELL AXIAL WELDS	DIRECT	LINDE 0091
89833	LOWER SHELL AXIAL WELDS	DIRECT	LINDE 0091
NR64435-1	LOWER SHELL R3816-1	DIRECT	A 533B
B9566-1	INT SHELL R3807-3	DIRECT	A 533B
C5522-1	INT SHELL R3807-1	DIRECT	A 533B
C5522-2	INT SHELL R3807-2	DIRECT	A 533B
C1260	INTERMEDIATE SHELL B4406-1	DIRECT	A 533B
C3932	LOWER SHELL B4407-2	DIRECT	A 533B
C3594	NOZZLE SHELL B4405-2	65%	A 533B
C3594	NOZZLE SHELL B4405-1	65%	A 533B
C3872	NOZZLE SHELL B4405-3	65%	A 533B
C3929	LOWER SHELL B4407-3	DIRECT	A 533B
C3929	LOWER SHELL B4407-1	DIRECT	A 533B
C3506	INTERMEDIATE SHELL B4406-2	DIRECT	A 533B
C3506	INTERMEDIATE SHELL B4406-3	DIRECT	A 533B
13253/12008(T)	NOZZLE SHELL AXIAL WELDS 1-442 A,B,&C	SISTER PLANT	LINDE 1092
13253/12008(T)	LOWER SHELL AXIAL WELDS 3-422 A,B,&C	SISTER PLANT	LINDE 1092

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
13253/12008(T)	INT. SHELL AXIAL WELDS 2-442 A,B,&C	SISTER PLANT	LINDE 1092
20291	NOZZLE/INT SHELL CIRC WELD 8-442	SISTER PLANT	LINDE 1092
1P3571	INT./LOWER SHELL CIRC WELD 9-442	SISTER PLANT	LINDE 1092
S3986	LOWER SHELL AXIAL WELDS	SURV WELD	LINDE 124
S3986	INT SHELL AXIAL WELDS	SURV WELD	LINDE 124
S3986	CIRC WELD	SURV WELD	LINDE 124
C5540-2	LOWER SHELL PLATE 9-1	DIRECT	A 533B
C5521-2	INTERMEDIATE SHELL PLATE 10-2	DIRECT	A 533B
C5592-1	LOWER SHELL PLATE 9-2	DIRECT	A 533B
C5556-2	INTERMEDIATE SHELL PLATE 10-1	DIRECT	A 533B
C2407-1	LOWER INTERMEDIATE SHELL G-2801-7	65%	A 533B
C2331-2	LOWER INTERMEDIATE SHELL G-2802-1	65%	A 533B
C2274-2	LOWER SHELL G-2803-3	65%	A 533B
C2274-1	LOWER SHELL G-2803-1	65%	A 533B
21935	LOWER/LOWER INT. SHELL CIRC WELD 1-240	EMA	LINDE 1092
C2307-1	LOWER SHELL G-2803-2	65%	A 533B
C2307-2	LOWER INTERMEDIATE SHELL G-2802-2	65%	A 533B
27204/12008	LOWER INT. SHELL AXIAL WELDS 1-233A/C	SURV WELD	LINDE 1092
12420	LOWER SHELL AXIAL WELDS 2-233A/C	EMA	LINDE 1092
C4347-1	LOWER SHELL	DIRECT	A 533B
C4347-2	LOWER SHELL	DIRECT	A 533B
AZJ94	NOZZLE BELT FORGING	GENERIC	A 508-2
8T1554	UPPER SHELL CIRC WELD (OUTSIDE 60%) WF-	EMA	LINDE 80
8T1762	UPPER SHELL AXIAL WELD WF-8 / WF-18	EMA	LINDE 80
8T1762	LOWER SHELL AXIAL WELDS SA-1580	EMA	LINDE 80
C4344-1	UPPER SHELL	DIRECT	A 533B
C4344-2	UPPER SHELL	DIRECT	A 533B
71249	UPPER SHELL CIRC. WELD (INSIDE 40%) SA-	EMA	LINDE 80
72105	UPPER/LOWER SHELL CIRC WELD WF-70	EMA	LINDE 80
5P4086 (BCC241)	LOWER SHELL FORGING	DIRECT	A 508-2
123Y317 (ADB 203)	NOZZLE BELT FORGING	DIRECT	A 508-2
123X244 (AKJ233)	UPPER SHELL FORGING	DIRECT	A 508-2
8T3914	NZ. BELT/UPPER SHL CIRC WELD(INSIDE	EMA	LINDE 80
T29744	NZ. BELT/UP SHL CIRC WELD(OUTSIDE	EMA	LINDE 80
821T44	UPPER/LOWER SHELL CIRC WELD WF-182-1	DIRECT	LINDE 80
C2793-1	INTERMEDIATE SHELL B4106-3	65%	A 533B
C3131-1	LOWER SHELL B4107-3	DIRECT	A 533B
C3131-2	LOWER SHELL B4107-2	DIRECT	A 533B
C2854-2	INTERMEDIATE SHELL B4106-2	DIRECT	A 533B
C3121-1	LOWER SHELL B4107-1	DIRECT	A 533B
C2884-1	INTERMEDIATE SHELL B4106-1	DIRECT	A 533B
21935	INT/LOWER SHELL CIRC WELD 9-442	SISTER PLANT	LINDE 1092
27204	INT. SHELL AXIAL WELD 2-442C	SURV WELD	LINDE 1092
27204	LOWER SHELL AXIAL WELDS 3-442A, B	SURV WELD	LINDE 1092
27204	INT. SHELL AXIAL WELDS 2-442A, B	SURV WELD	LINDE 1092
27204	LOWER SHELL AXIAL WELD 3-442C	SURV WELD	LINDE 1092
10120	INT./LOWER SHELL CIRC WELD 9-201	10 F DATA	LINDE 0091
C5176-1	LOWER SHELL B5455-3	DIRECT	A 533B
C5175-1	LOWER SHELL B5455-1	DIRECT	A 533B
C5175-2	LOWER SHELL B5455-2	DIRECT	A 533B
C5168-2	INTERMEDIATE SHELL B5454-2	DIRECT	A 533B
C5161-1	INTERMEDIATE SHELL B5454-1	DIRECT	A 533B
C5161-2	INTERMEDIATE SHELL B5454-3	DIRECT	A 533B
21935/12008	INTERMEDIATE SHELL AXIAL WELD 2-201A	SURV WELD	LINDE 1092
21935/12008	INTERMEDIATE SHELL AXIAL WELD 2-201C	SURV WELD	LINDE 1092
21935/12008	INTERMEDIATE SHELL AXIAL WELD 2-201B	SURV WELD	LINDE 1092
33A277	LOWER SHELL AXIAL WELD 3-201B	10 F DATA	LINDE 124
33A277	LOWER SHELL AXIAL WELD 3-201A	10 F DATA	LINDE 124
33A277	LOWER SHELL AXIAL WELD 3-201C	10 F DATA	LINDE 124
B5764-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
1P0815	LOWER INTERMEDIATE SHELL AXIAL WELD	EMA	LINDE 80

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
1P0815	LOWER SHELL AXIAL WELD	EMA	LINDE 80
1P0661	LOWER INT. SHELL AXIAL WELD	EMA	LINDE 80
B3990-2	LOWER SHELL	EMA	A 302BM
A9128-2	LOWER SHELL	EMA	A 302BM
A9128-1	LOWER SHELL	EMA	A 302BM
B4030-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
B4030-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
B4065-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
71249	LOWER INT TO LOWER SHELL CIRC. WELD	EMA	LINDE 80
PQ1092C-2	LOWER INTERMEDIATE SHELL AXIAL WELDS	EMA	UNKNOWN
PQ1092C-2	LOWER SHELL AXIAL WELD	EMA	UNKNOWN
C1256-2	LOWER SHELL	EMA	A 302BM
C1290-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
B5118-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C1182-2	LOWER SHELL	EMA	A 302BM
A0237-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
PQ1300	LOWER & LOWER INTERMEDIATE SHELL AXIAL	EMA	UNKNOWN
B5159-2	LOWER SHELL	EMA	A 302BM
299L44/8650	LOWER INT. TO LOWER SHELL CIRC WELD	EMA	LINDE 80
432Z4521	AXIAL WELDS	EMA	E 8018
CTY538	CIRC WELD	EMA	E 8018
09L853	CIRC WELD	EMA	E 8018
432Z0471	AXIAL WELDS	EMA	E 8018
07L669	CIRC WELD	EMA	E 8018
C6439-2	LOWER SHELL 1-18	EMA	A 533B
B0402-1	LOWER SHELL 1-19	EMA	A 533B
B0673-1	LOWER INTERMEDIATE SHELL 1-21	EMA	A 533B
B0436-2	LOWER INTERMEDIATE SHELL 1-20	EMA	A 533B
C6308-2	INTERMEDIATE SHELL B6903-3	65%	A 533B
C6294-1	INTERMEDIATE SHELL B6903-2	65%	A 533B
C6940-1	LOWER SHELL B6919-1	65%	A 533B
C6897-2	LOWER SHELL B6919-2	65%	A 533B
90099	LOWER SHELL AXIAL WELDS	STAT ANALYSIS	LINDE 0091
6329637	CIRC. WELD	10 F DATA	LINDE 0091
33A277	INTERMEDIATE SHELL AXIAL WELDS	SURV WELD	LINDE 1092
BOLA SMAW	INT. SHELL AXIAL WELD 19-923B	SURV WELD	SMAW
HODA SMAW	INTER. SHELL AXIAL WELD 19-923A	10 F DATA	SMAW
83640	LOWER SHELL AXIAL WELDS 20-923A/B	10 F DATA	LINDE 0091
C6888-2	LOWER SHELL B7210-1	DIRECT	A 533B
C6293-1	LOWER SHELL B7210-2	DIRECT	A 533B
C6309-2	INTERMEDIATE SHELL B7203-1	DIRECT	A 533B
5P5622	CIRC. WELD 11-923	10 F DATA	LINDE 0091
C7466-1	INTERMEDIATE SHELL B7212-1	DIRECT	A 533B
C4540-2	LOWER SHELL G-3706-1	65%	A 533B
C4564-1	LOWER INTERMEDIATE SHELL G-3703-5	65%	A 533B
C4574-2	LOWER INTERMEDIATE SHELL G-3705-2	65%	A 533B
C4560-1	LOWER SHELL G-3706-2	65%	A 533B
C4554-1	LOWER SHELL G-3706-3	65%	A 533B
B8614-1	LOWER INTERMEDIATE SHELL G-3705-1	65%	A 533B
C4568-2	LOWER INTERMEDIATE SHELL G3705-3	65%	A 533B
10137	LOWER/LOWER INT. SHELL CIRC WELD 1-313	10 F DATA	LINDE 0091
13253/12008	LOWER SHELL AXIAL WELDS 2-307A,B,C	NRC GENERIC	LINDE 1092
33A277	LOWER INT. SHELL AXIAL WELDS 15-308	10 F DATA	LINDE 124
C3394-1	LOWER SHELL	65%	A 533B
C3278-2	LOWER INTERMEDIATE SHELL	65%	A 533B
C3368-1	LOWER INTERMEDIATE SHELL	65%	A 533B
C3376-2	LOWER SHELL	65%	A 533B
C3103-2	LOWER SHELL	65%	A 533B
C3301-1	LOWER INTERMEDIATE SHELL	65%	A 533B
13253/12008	LOWER INT. SHELL AXIAL WELDS 1-233A/C	EMA	LINDE 1092
27204/12008	LOWER SHELL AXIAL WELDS 2-233A/C	EMA	LINDE 1092

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
305414	CIRC WELD 1-240	EMA	LINDE 1092
A1768-1	INTERMEDIATE SHELL D-4802-2	DIRECT	A 533B
C3143-3	LOWER SHELL D-4812-3	65%	A 533B
C3143-2	LOWER SHELL D-4812-2	65%	A 533B
A1768-2	INTERMEDIATE SHELL D-4802-3	65%	A 533B
C2585-3	INTERMEDIATE SHELL D-4802-1	65%	A 533B
C3213-2	LOWER SHELL D-4812-1	65%	A 533B
51989(T)	INTERMEDIATE SHELL AXIAL WELDS 2-410A/C	NRC GENERIC	LINDE 124
27204(T)	LOWER SHELL AXIAL WELDS 3-410A/C	SISTER PLANT	LINDE 1092
13253/12008(T)	LOWER SHELL AXIAL WELDS 3-410A/C	EMA	LINDE 1092
20291(S)	INTERMEDIATE /LOWER SHELL CIRC WELD	SISTER PLANT	LINDE 1092
27204/12008(T)	LOWER SHELL AXIAL WELDS 3-410A/C	SISTER PLANT	LINDE 1092
13253(T)	LOWER SHELL AXIAL WELDS 3-410A/C	SISTER PLANT	LINDE 1092
125P666VA1	LOWER SHELL	65%	A 508-2
125S255VA1	INTERMEDIATE SHELL	65%	A 508-2
61782	LOWER SHELL/ DUTCHMAN CIRC. WELD SA-	EMA	LINDE 80
61782	INT./LOWER SHELL CIRC. WELD SA-847	EMA	LINDE 80
71249	NOZZLE/INT. SHELL CIRC. WELD SA-1101	EMA	LINDE 80
123P118VA1	NOZZLE FORGING	65%	A 508-2
5P6214B	#2 SHELL AXIAL WELDS	DIRECT	LINDE 124
626677	#2 SHELL AXIAL WELDS	DIRECT	E8018, SMAW
C2593-2	#2 SHELL	DIRECT	A 533B
C2594-1	#2 SHELL	DIRECT	A 533B
C2594-2	#2 SHELL	DIRECT	A 533B
A1224-1	#2 SHELL PLATE	DIRECT	A 533B
627260	#2 SHELL AXIAL WELDS	DIRECT	E8018, SMAW
A5892	INTERMEDIATE SHELL W9807-2	65%	A 302B
A5887	NOZZLE SHELL W9807-1	DIRECT	A 302B
B0716	NOZZLE SHELL W9807-8	DIRECT	A 302B
A5897	NOZZLE SHELL W9807-6	65%	A 302B
A5877	INTERMEDIATE SHELL W9807-4	65%	A 302B
B0650	LOWER SHELL W9807-3	65%	A 302B
A5911	INTERMEDIATE SHELL W9807-7	65%	A 302B
P1444	LOWER SHELL W9807-9	65%	A 302B
A5891	LOWER SHELL W9807-5	65%	A 302B
86054B	UPPER CIRC. WELD 2-373	SURV WELD	ARCS B-5 SAW
9565/86054B	NOZZLE SHELL AXIAL WELDS 5-373A/C	SURV WELD	ARCS B-5 SAW
86054B	LOWER SHELL AXIAL WELDS 7-373A,B,C	SURV WELD	ARCS B-5 SAW
86054B	INT. AXIAL WELDS 6-373A,B,C	SURV WELD	ARCS B-5 SAW
1248	LOWER SHELL CIRC WELD 3-373	SISTER PLANT	ARCS B-5 SAW
C3985-2	LOWER INT. SHELL G-4804-1	EMA	A 533B
C4112-1	LOWER SHELL G-4805-1	EMA	A 533B
C4112-2	LOWER SHELL G-4805-2	EMA	A 533B
C4114-2	LOWER INT. SHELL G-4804-2	65%	A 533B
C4149-1	LOWER SHELL G-4805-3	EMA	A 533B
C4337-1	LOWER INT. SHELL G-4803-7	EMA	A 533B
90099	CIRC WELD 1-313A	EMA	LINDE 0091
13253	LOWER SHELL AXIAL WELDS 1-307A/C	EMA	LINDE 1092
33A277	CIRC WELD 1-313B	EMA	LINDE 0091
1P2809	LOWER INTERMEDIATE AXIAL WELDS 1-308	EMA	LINDE 1092
1P2815	LOWER INTERMEDIATE AXIAL WELDS 1-308	EMA	LINDE 1092
4P6052	CIRC WELD 301-871	10 F DATA	LINDE 0091
C8571-1	LOWER SHELL G6603-3	65%	A 533B
C8554-1	LOWER INTERMEDIATE SHELL G6602-2	65%	A 533B
C8553-2	LOWER SHELL G6603-1	65%	A 533B
C8554-2	LOWER INTERMEDIATE SHELL G6602-1	65%	A 533B
C8553-1	LOWER SHELL G6603-2	65%	A 533B
C8579-2	LOWER INTERMEDIATE SHELL G6601-4	65%	A 533B
51874	LOWER INTERMEDIATE AXIAL WELDS 101-834	10 F DATA	LINDE 0091
10137	LOWER SHELL AXIAL WELDS 101-842A/C	10 F DATA	LINDE 0091
504-01205	INT.-LOWER TO INT. SHELL	10 F DATA	SMAW

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
504-01205	LOW PRESSURE COOLANT INJECTION	10 F DATA	SAW
519-01205	LOW PRESSURE COOLANT INJECTION	10 F DATA	SMAW
519-01205	INT-LOWER TO INT. SHELL CIRCUMFERENTIAL	10 F DATA	SMAW
001-01205	LOW PRESSURE COOLANT INJECTION	10 F DATA	SMAW
5K3230-1-2	LOWER SHELL (#5)	DIRECT	A 533B
5K2963-1-2	LOWER INTERMEDIATE SHELL	DIRECT	A 533B
5K2530-1-2	LOWER INTERMEDIATE SHELL	DIRECT	A 533B
6C45-1-2	LOWER SHELL	DIRECT	A 533B
D53040	INT-LOWER TO LOWER SHELL	DIRECT	SAW
D53040	LOWER SHELL (#5) AXIAL WELDS	DIRECT	SAW
D53040	INTERMEDIATE SHELL AXIAL WELDS	DIRECT	SAW
510-01205	LOWER-INT TO LOWER SHELL	DIRECT	SAW
510-01205	INTERMEDIATE SHELL AXIAL WELDS	DIRECT	SMAW
510-01205	INT.-LOWER TO INT. SHELL	DIRECT	SMAW
510-01205	LOWER SHELL AXIAL WELDS	DIRECT	SMAW
6C35-1-2	LOWER SHELL	DIRECT	A 533B
5K2608-1	INTERMEDIATE SHELL	DIRECT	A 533B
5K3238-1-2	LOWER INTERMEDIATE	DIRECT	A 533B
5K2698-1	INTERMEDIATE SHELL	DIRECT	A 533B
D53040	INT-LOWER TO INT. SHELL CIRCUMFERENTIAL	DIRECT	SAW
D55733	INT.-LOWER TO INT. SHELL	10 F DATA	SAW
19468-1	LOW PRESSURE COOLANT INJECTION	DIRECT	A-508
10024-1	LOW PRESSURE COOLANT INJECTION	DIRECT	A-508
5K3025-1	INTERMEDIATE SHELL	DIRECT	A 533B
B-4701-2	INTERMEDIATE SHELL B2002-2	65%	A 302BM
B-4782-1	LOWER SHELL B2003-2	65%	A 302BM
34B009	INT./LOWER SHELL CIRC WELD 9-042	10 F DATA	LINDE 1092
B-4922-1	INTERMEDIATE SHELL B2002-3	65%	A 302BM
B-4791-1	LOWER SHELL B2003-1	65%	A 302BM
B-4688-2	INTERMEDIATE SHELL B2002-1	65%	A 302BM
W5214	LOWER SHELL AXIAL WELDS 3-042 A/C	SURV WELD	LINDE 1092
W5214	INT. SHELL AXIAL WELDS 2-042 A/C	SURV WELD	LINDE 1092
A-0495-2	LOWER SHELL B2803-1	DIRECT	A 302BM
34B009	INTERMEDIATE SHELL AXIAL WELDS 2-042	SISTER PLANT	LINDE 1092
34B009	LOWER SHELL AXIAL WELDS 3-042	SISTER PLANT	LINDE 1092
B-5391-2	INTERMEDIATE SHELL B2802-3	DIRECT	A 302BM
B-5394-2	INTERMEDIATE SHELL B2802-1	DIRECT	A 302BM
C-1397-3	LOWER SHELL B2803-2	DIRECT	A 302BM
A-0516-2	INTERMEDIATE SHELL B2802-2	DIRECT	A 302BM
13253	INT./LOWER SHELL CIRC. WELD 9-042	SISTER PLANT	LINDE 1092
A-0512-2	LOWER SHELL B2803-3	DIRECT	A 302BM
122K208VA1	INTERMEDIATE SHELL B-6306	65%	A 508-2
123K167VA1	LOWER SHELL B-6307	65%	A 508-2
1P3571	INT./LOWER CIRC. WELD	DIRECT	LINDE 1092
C5978-1	LOWER SHELL G-5603-1	EMA	A 533B
C5978-2	LOWER SHELL G-5603-2	EMA	A 533B
C6318-1	LOWER INTERMEDIATE SHELL G-5604-2	EMA	A 533B
A5333-1	MIDDLE SHELL G-5605-1	EMA	A 533B
C5979-1	LOWER SHELL G-5603-3	EMA	A 533B
C6123-2	MIDDLE SHELL G-5605-3	EMA	A 533B
C6345-1	LOWER INTERMEDIATE SHELL G-5604-1	EMA	A 533B
B0078-1	MIDDLE SHELL G-5605-2	EMA	A 533B
C6345-2	LOWER INTERMEDIATE SHELL G-5604-3	EMA	A 533B
4P6519	LOWER/LOWER INT. SHELL CIRC WELD 1-313	EMA	LINDE 1092
21935	LOWER SHELL AXIAL WELDS 2-307A/C	EMA	LINDE 1092
12008	LOWER-INT. SHELL AXIAL WELDS 4-308A/C	EMA	LINDE 1092
6329637	MIDDLE TO LOWER-INT. CIRC WELD 6-308	EMA	LINDE 1092
12008	LOWER SHELL AXIAL WELDS 2-307A/C	EMA	LINDE 1092
305424	MIDDLE SHELL AXIAL WELDS 3-308A/C	EMA	LINDE 1092
305414	LOWER INT. SHELL AXIAL WELDS 4-308A/C	EMA	LINDE 1092
1P3571	MIDDLE SHELL AXIAL WELDS 3-308 A/C	EMA	LINDE 1092

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
3P4000	LOWER-INTERMEDIATE SHELL AXIAL WELDS	EMA	LINDE 124
3P4966	LOWER SHELL AXIAL WELDS BD/BF	EMA	LINDE 124
5P6771	CIRCUMFERENTIAL WELD AB	EMA	LINDE 124
C9404-2	LOWER-INTERMEDIATE SHELL 22-2	EMA	A 533B
C9434-2	LOWER SHELL 21-3	EMA	A 533B
C9481-1	LOWER-INTERMEDIATE SHELL 22-1	EMA	A 533B
C9601-2	LOWER-INTERMEDIATE SHELL 22-3	EMA	A 533B
C9425-2	LOWER SHELL 21-1	EMA	A 533B
C9425-1	LOWER SHELL 21-2	EMA	A 533B
3P4000	LIMITING MATERIAL FOR AXIAL WELD BC	EMA	LINDE 124
662A746	LIMITING MATERIAL FOR AXIAL WELD BD	EMA	SMAW
09M057/C109A27A	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
07L857/B101A27A	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
1P4218	LIMITING MATERIAL FOR AXIAL WELDS BA, BB,	EMA	LINDE 124
S3986	LIMITING MATERIAL FOR AXIAL WELD BF	EMA	LINDE 124
5P6756	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
640892/J424B27AE	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
C7689-1	SHELL COURSE # 2 17-1	EMA	A 533B
C7698-2	SHELL COURSE # 1 14-2	EMA	A 533B
C7698-1	SHELL COURSE # 2 17-3	EMA	A 533B
C7677-1	SHELL COURSE # 2 17-2	EMA	A 533B
C7688-1	SHELL COURSE # 1 14-1	EMA	A 533B
C7688-2	SHELL COURSE # 1 14-3	EMA	A 533B
03M014/C118A27A	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
661A746/H013A27A	LIMITING MATERIAL FOR AXIAL WELD BC	EMA	SMAW
09M057/C109A27A	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
07L857/B101A27A	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
432A2671/H019A27A	LIMITING MATERIAL- AXIAL WELDS	EMA	SMAW
640892/J424B27AE	CIRCUMFERENTIAL WELD	EMA	8018 NM SMAW
C9569-2	SHELL COURSE # 2 17-1	EMA	A 533B
C9526-2	SHELL COURSE # 2 17-3	EMA	A 533B
C9526-1	SHELL COURSE # 2 17-2	EMA	A 533B
B3312-1	SHELL COURSE # 1 14-1	EMA	A 533B
B3416-1	SHELL COURSE # 1 14-2	EMA	A 533B
C9621-2	SHELL COURSE # 1 14-3	EMA	A 533B
C-3982-5	INTERMEDIATE SHELL D-8406-3	65%	A 533B
B-8324-1	LOWER SHELL D-8407-3	65%	A 533B
B-7955-1	INTERMEDIATE SHELL D-8406-1	DIRECT	A 533B
51989	AXIAL WELDS 2-203	NRC GENERIC	LINDE 124
B-7955-2	INTERMEDIATE SHELL D-8406-2	65%	A 533B
13253/12008	AXIAL WELDS 3-203	SISTER PLANT	LINDE 1092
B-8330-2	LOWER SHELL D-8407-2	65%	A 533B
B-8330-1	LOWER SHELL D-8407-1	65%	A 533B
1P3571	CIRC. WELDS 9-203	SURV WELD	LINDE 1092
83640	INT./LOWER SHELL CIRC. WELD G1.39	DIRECT	LINDE 0091
C4374-2	LOWER SHELL B5013-2	65%	A 533B
C4371-2	LOWER SHELL B5013-3	65%	A 533B
C4387-2	INTERMEDIATE SHELL B5012-1	65%	A 533B
C4377-2	INTERMEDIATE SHELL B5012-3	65%	A 533B
C4315-1	LOWER SHELL B5013-1	65%	A 533B
C4417-3	INTERMEDIATE SHELL B5012-2	65%	A 533B
20291/12008	INTERMEDIATE SHELL AXIAL WELDS M1.2	DIRECT	LINDE 1092
21935/12008	LOWER SHELL AXIAL WELD M1.32	SISTER PLANT	LINDE 1092
895075	INT/LOWER CIRCUMFERENTIAL SHELL WELD	DIRECT	GRAU LO, SAW
411337-11	LOWER SHELL 04	65%	A 508-2
526840	INTERMEDIATE SHELL 05	DIRECT	A 508-2
C1079-1	LOWER-INT. SHELL G-2002-5	65%	A 302B
C1140-1	LOWER-INT. SHELL G-2002-6	65%	A 302B
B5013-2	LOWER-INT. SHELL G-2002-4	65%	A 302B
34B009	LOWER /LOWER-INT. SHELL CIRC WELD	SURV WELD	LINDE 1092
W5214	AXIAL WELDS 2-073A/C	SISTER PLANT	LINDE 1092

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
W5214	AXIAL WELDS 1-073A/C	SISTER PLANT	LINDE 1092
C1359-1	LOWER SHELL G-2001-1	65%	A 302B
C1140-2	LOWER SHELL G-2001-5	65%	A 302B
B4928-1	LOWER SHELL G-2001-3	65%	A 302B
C-5843-1	INTERMEDIATE SHELL C-505-1	DIRECT	A 533B
C-5843-3	INTERMEDIATE SHELL C-505-3	DIRECT	A 533B
C-5843-2	INTERMEDIATE SHELL C-505-2	DIRECT	A 533B
A-5518	LOWER SHELL C-506-3	65%	A 533B
A8746	LOWER SHELL AXIAL WELDS 3-203A	10 F DATA	LINDE 124
A8746	INTERMEDIATE SHELL AXIAL WELDS 2-	10 F DATA	LINDE 124
C-5667-1	LOWER SHELL C-506-1	DIRECT	A 533B
C-5667-2	LOWER SHELL C-506-2	65%	A 533B
10137	UPPER/INT. SHELL CIRC WELD 8-203	SURV WELD	LINDE 0091
10137	INT./LOWER SHELL CIRC. WELD 9-203/3999	SURV WELD	LINDE 0091
33A277	UPPER/INT SHELL CIRC WELD 8-203	SISTER PLANT	LINDE 0091
90136	INT/LOWER SHELL CIRC WELD 9-203	SURV WELD	LINDE 0091
4P6052	WELDS	DIRECT	LINDE 0091
C-4039-2	INTERMEDIATE SHELL B9805-1	DIRECT	A 533B
C-4068-1	INTERMEDIATE SHELL B9805-2	DIRECT	A 533B
C-4028-1	INTERMEDIATE SHELL B9805-3	DIRECT	A 533B
D-1242-1	LOWER SHELL B9820-3	DIRECT	A 533B
D-1242-2	LOWER SHELL B9820-2	DIRECT	A 533B
B-8961-1	LOWER SHELL B9820-1	DIRECT	A 533B
NA/W-A	WELDS	EMA	E8018N
A0946-1	LOWER SHELL I-16	EMA	A 533B
C2193-1	LOWER SHELL I-17	EMA	A 533B
C2220-1	LOWER/INT. SHELL I-14	EMA	A 533B
C2220-2	LOWER/INT. SHELL I-15	65%	A 533B
P2130A	LOWER SHELL G-8-3	DIRECT	A 302BM
P2130B	LOWER SHELL G-8-4	DIRECT	A 302BM
P2074	UPPER SHELL G-307-3	65%	A 302BM
86054B	LOWER SHELL AXIAL WELDS 2-564D/F	NRC GENERIC	ARCS B-5 SAW
86054B	LOWER INT SHELL AXIAL WELDS 2-564A/C	NRC GENERIC	ARCS B-5 SAW
1248	LOWER INT./LOWER SHELL CIRC WELD 3-564	NRC GENERIC	ARCS B-5 SAW
P2091	UPPER SHELL G-307-10	65%	A 302BM
P2112	LOWER SHELL G-8-1	EMA	A 302BM
P2076	UPPER SHELL G-307-4	EMA	A 302BM
5P6214B(T)	#1 SHELL AXIAL WELDS BA, BB, BC	DIRECT	LINDE 124
4P7465(T)	CIRCUMFERENTIAL WELD	DIRECT	LINDE 124
4P7465(S)	CIRCUMFERENTIAL WELD	DIRECT	LINDE 124
5P6214B(S)	#1 SHELL AXIAL WELDS BA, BB, BC	DIRECT	LINDE 124
4P7216(T)	CIRCUMFERENTIAL WELD	DIRECT	LINDE 124
5P5657(T)	#2 SHELL AXIAL WELDS BD, BE, BF	DIRECT	LINDE 124
4P7216(S)	CIRCUMFERENTIAL WELD	DIRECT	LINDE 124
C3065-1	NUMBER 2 SHELL	DIRECT	A 533B
C3065-2	NUMBER 1 SHELL	DIRECT	A 533B
C3066-2	NUMBER 1 SHELL	DIRECT	A 533B
5P5657(S)	#2 SHELL AXIAL WELDS BD, BE, BF	DIRECT	LINDE 124
C3121-2	NUMBER 2 SHELL	DIRECT	A 533B
C3147-1	NUMBER 2 SHELL	DIRECT	A 533B
C3147-2	NUMBER 1 SHELL	DIRECT	A 533B
25531	INT. TO LOWER SHELL CIRC. WELD 04	DIRECT	SMIT 89 SAW
4278	NOZZLE TO INT. SHELL CIRC. WELD 05B (ID	SISTER PLANT	SMIT 89 SAW
990311/298244	INTERMEDIATE SHELL FORGING 04	DIRECT	A 508-2
990286/295213	NOZZLE SHELL FORGING 05	SURV PLATE	A 508-2
990400/292332	LOWER SHELL FORGING 03	DIRECT	A 508-2
25295	NOZZLE TO INT. SHELL CIRC. WELD 05A (OD	SISTER PLANT	SMIT 89 SAW
716126	INT. TO LOWER SHELL CIRC. WELD 04	DIRECT	LW 320 SAW
990598/291396	NOZZLE SHELL FORGING 05	EQ TO FORG	A 508-2
990496/292424	INTERMEDIATE SHELL FORGING 04	DIRECT	A 508-2
4278	NOZZLE TO INT. SHELL CIRC. WELD 05A (OD	SISTER PLANT	SMIT 89 SAW

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
990533/297355	LOWER SHELL FORGING 03	DIRECT	A 508-2
801	NOZZLE TO INT. SHELL CIRC. WELD 05B (ID	EMA	SMIT 89 SAW
C3265-1	UPPER SHELL	DIRECT	A 302BM
C2800-1	LOWER SHELL	B&W GENERIC	A 302BM
C2800-2	LOWER SHELL	DIRECT	A 302BM
C3278-1	UPPER SHELL	B&W GENERIC	A 302BM
C2197-2	INTERMEDIATE SHELL	B&W GENERIC	A 302BM
AHR54 (ZV2861)	LOWER NOZZLE BELT	B&W GENERIC	A 508-2
8T1762	UPPER SHELL AXIAL WELDS SA-1493	EMA	LINDE 80
8T1762	LOWER SHELL AXIAL WELDS SA-1426	EMA	LINDE 80
8T1762	LOWER SHELL AXIAL WELDS SA-1430	EMA	LINDE 80
1P0962	INTERMEDIATE SHELL AXIAL WELDS SA-1073	EMA	LINDE 80
72445	UPPER/LOWER SHELL CIRC WELD SA-1585	EMA	LINDE 80
61782	NOZZLE BELT/INT. SHELL CIRC WELD SA-1135	EMA	LINDE 80
71249	INT./UPPER SHL CIRC WELD (INSIDE 61%) SA-	EMA	LINDE 80
299L44	INT./UPPER SHL CIRC WELD (OUTSIDE 39%)	EMA	LINDE 80
AWG-164 (4P1885)	LOWER SHELL FORGING	DIRECT	A 508-2
AAW-163 (3P2359)	UPPER SHELL FORGING	DIRECT	A 508-2
AMX-77 (123T382)	LOWER NOZZLE BELT FORGING	GENERIC	A 508-2
406L44	NB/UPPER SHELL CIRC WELD WF-154	EMA	LINDE 80
299L44	MIDDLE CIRC WELD WF-25	EMA	LINDE 80
AWS-192/522314	UPPER SHELL	DIRECT	A 508-2
ANK-191/522194	LOWER SHELL	DIRECT	A 508-2
4680	LOWER NOZZLE BELT SHELL FORGING	GENERIC	A 508-2
821T44	LOWER NOZZLE BELT/UPPER SHL CIRC WELD	EMA	LINDE 80
72442	UPPER/LOWER SHL CIRC WELD (INSIDE 75%)	EMA	LINDE 80
72105	UPPER/LOWER SHL CIRC WELD (OUTSIDE	EMA	LINDE 80
T1937-2	LOWER SHELL G-307-1	65%	A 302B
T1937-1	LOWER SHELL G-308-1	EMA	A 302B
P2136-2	LOWER-INT SHELL G-8-8	65%	A 302B
P2150-1	LOWER-INT. SHELL G-8-6	EMA	A 302B
P2161-1	LOWER-INT. SHELL G-8-7	EMA	A 302B
1248	LOWER/LOWER INT. SHELL CIRC WELD 3-564	EMA	ARCS B-5 SAW
P2076-2	LOWER SHELL G-307-5	EMA	A 302B
86054B	LOWER-INT. SHELL AXIAL WELDS 2-564D,E,F	EMA	ARCS B-5 SAW
86054B	LOWER SHELL AXIAL WELDS 2-564A,B,C	EMA	ARCS B-5 SAW
B-5294	D-3804-3	65%	A 302BM
C-1308A	D-3804-1	65%	A 302BM
C-1308B	D-3804-2	65%	A 302BM
34B009	LOWER SHELL AXIAL WELD 3-112A/C	SISTER PLANT	LINDE 1092
27204	CIRC. WELD 9-112	SISTER PLANT	LINDE 124
W5214	LOWER SHELL AXIAL WELDS 3-112A/C	SISTER PLANT	LINDE 1092
W5214	INTERMEDIATE SHELL AXIAL WELDS 2-112 A/C	SISTER PLANT	LINDE 1092
C-1279	D-3803-3	DIRECT	A 302BM
C-1279	D-3803-1	DIRECT	A 302BM
A-0313	D-3803-2	65%	A 302BM
62817-1	LOWER SHELL M-4311-2	DIRECT	A 533B
62722-1	LOWER SHELL M-4311-3	DIRECT	A 533B
4P7869	CIRC. WELD 101-171	DIRECT	LINDE 124
90071	LOWER SHELL AXIAL WELDS 101-142A,B,C	DIRECT	LINDE 0091
62467-1	LOWER SHELL M-4311-1	DIRECT	A 533B
4P6052	INTERMEDIATE SHELL AXIAL WELDS 101-	DIRECT	LINDE 0091
C4188-1	INTERMEDIATE SHELL M-6701-3	DIRECT	A 533B
C4188-2	INTERMEDIATE SHELL M-6701-2	DIRECT	A 533B
C4142-1	INTERMEDIATE SHELL M-6701-1	DIRECT	A 533B
63464-1	INTERMEDIATE SHELL F-765-5	DIRECT	A 533B
63427-1	INTERMEDIATE SHELL F-765-4	DIRECT	A 533B
64071-1	LOWER SHELL F-773-1	DIRECT	A 533B
4P7869	CIRC WELD 101-171	DIRECT	LINDE 124
64065-1	LOWER SHELL F-773-2	DIRECT	A 533B
63716-1	INTERMEDIATE SHELL F-765-6	DIRECT	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
89833	INTERMEDIATE SHELL AXIAL WELDS 101-	DIRECT	LINDE 124
63987-1	LOWER SHELL F-773-3	DIRECT	A 533B
3P7317	LOWER SHELL AXIAL WELDS 101-142A,B,C	DIRECT	LINDE 124
4P7869	CIRC. WELD 101-171	DIRECT	LINDE 124 SAW
4P7869	LOWER SHELL AXIAL WELDS 101-142A,B,C	DIRECT	LINDE 124 SAW
4P7869	INTERMEDIATE SHELL AXIAL WELDS 101-	DIRECT	LINDE 124 SAW
79011-1	INTERMEDIATE SHELL F-6407-6	DIRECT	A 533B
65202-1	INTERMEDIATE SHELL F-6407-4	DIRECT	A 533B
79545-1	LOWER SHELL F-6411-1	DIRECT	A 533B
79745-1	LOWER SHELL F-6411-2	DIRECT	A 533B
79659-1	LOWER SHELL F-6411-3	DIRECT	A 533B
65219-1	INTERMEDIATE SHELL F-6407-5	DIRECT	A 533B
S3986	LOWER TO LOWER-INT SHELL	EMA	LW 320 SAW
C2761-2	LOWER INTERMEDIATE SHELL	65%	A 302BM
C2761-1	LOWER SHELL	EMA	A 302BM
C2791-2	LOWER SHELL	EMA	A 302BM
C2873-2	LOWER SHELL	EMA	A 302BM
C2873-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C2894-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
37C065	AXIAL WELDS B1/3 & C1/3	DIRECT	ESW
3P4000	LOWER TO LOWER-INT SHELL	10 F DATA	LINDE 124
1P4217	INT. TO LOWER-INT. SHELL	10 F DATA	LINDE 124
C4654-1	INTERMEDIATE SHELL 6-146-2	EMA	A 302BM
C4608-1	INTERMEDIATE SHELL 6-146-5	EMA	A 302BM
C4689-2	LOWER SHELL 6-146-1	EMA	A 302BM
C4689-1	INTERMEDIATE SHELL 6-146-4	EMA	A 302BM
C4627-1	LOWER SHELL 6-146-7	EMA	A 302BM
C2775-1	LOWER INTERMEDIATE SHELL 6-139-11	EMA	A 302BM
C4684-2	LOWER SHELL 6-146-3	EMA	A 302BM
C3103-1	LOWER INTERMEDIATE SHELL 6-139-12	65%	A 302BM
C2773-2	LOWER INTERMEDIATE SHELL 6-139-10	EMA	A 302BM
37C065	AXIAL WELDS (D1/3, E1/3, F1/3)	DIRECT	ESW
626677/C301A27AF	AXIAL WELD	DIRECT	SMAW
627069/C312A27A	AXIAL WELD	DIRECT	SMAW
5P6214B/0331	AXIAL WELD	DIRECT	LINDE 124 SAW
624063/D228A27A	AXIAL WELD	DIRECT	SMAW
C2557-1	# 2 SHELL PLATES	DIRECT	A 533B
A1155-1	# 2 SHELL PLATES	DIRECT	A 533B
B6270-1	# 2 SHELL PLATES	DIRECT	A 533B
627260/B322A27AE	AXIAL WELD	DIRECT	SMAW
C-2957-2	LOWER SHELL G-3109-2	65%	A 533B
C-2957-1	LOWER SHELL G-3109-1	65%	A 533B
C-2945-1	LOWER INTERMEDIATE SHELL G-3108-2	65%	A 533B
C-2945-2	LOWER INTERMEDIATE SHELL G-3108-3	65%	A 533B
C-2973-1	LOWER SHELL G-3109-3	65%	A 533B
C-2921-2	LOWER INTERMEDIATE SHELL G-3108-1	65%	A 533B
21935	LOWER INT./LOWER SHELL CIRC WELD 1-344	NRC GENERIC	LINDE 1092
27204/12008	LOWER SHELL AXIAL WELDS 2-338A,B,C	NRC GENERIC	LINDE 1092
27204/12008	LOWER INT. SHELL AXIAL WELDS 1-338A,B,C	NRC GENERIC	LINDE 1092
13253	LOWER INT/UPPER SHELL CIRC WELD 3-339B	SURV WELD	LINDE 1092
122P237	NOZZLE BELT FORGING	65%	A 508-2
C-1423-1	LOWER SHELL	65%	A 302B
1P0815	INT. SHELL AXIAL WELDS (INSIDE 27%) SA-812	EMA	LINDE 80
1P0661	INT. SHELL AXIAL WELDS (OUTSIDE 73%) SA-		LINDE 80
8T1762	NOZZLE BELT/INT. SHELL CIRC WELD SA-1426	EMA	LINDE 80
A-9811-1	INTERMEDIATE SHELL	65%	A 302B
61782	LOWER SHELL AXIAL WELDS SA-847	EMA	LINDE 80
71249	CIRCUMFERENTIAL WELD SA-1101	EMA	LINDE 80
122W195	LOWER SHELL FORGING	65%	A 508-2
123V500	INTERMEDIATE SHELL FORGING	65%	A 508-2
123V352	NOZZLE BELTLINE FORGING	65%	A 508-2

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
21935	NOZZLE BELTLINE TO INT. SHELL CIRC. WELD	NRC GENERIC	LINDE 1092
72442	INTERMEDIATE TO LOWER SHELL CIRC. WELD	EMA	LINDE 80
21887/38530	LOWER SHELL FORGING D	DIRECT	A 508-3
21918/38566	INT. SHELL FORGING C	DIRECT	A 508-3
21744/38384	NOZZLE SHELL FORGING B	65%	A 508-3
1752	CIRC WELD	SURV WELD	UM89
2269	NOZZLE TO INT. SHELL CIRC. WELD	10 F DATA	
22231/39088	NOZZLE SHELL FORGING B	65%	A 508-3
22829	INTERMEDIATE SHELL FORGING C	DIRECT	A 508-3
22642	LOWER SHELL FORGING D	DIRECT	A 508-3
2721	CIRCUMFERENTIAL WELD	SURV WELD	UM 89, SAW
1752	NOZZLE SHELL TO INTERMEDIATE SHELL	DIRECT	UM 89
A0931-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C1498-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C1505-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
A0610-1	LOWER SHELL	EMA	A 302BM
72445	LOWER INT. TO LOWER SHELL CIRC WELD	EMA	LINDE 80
C1485-2	LOWER SHELL	EMA	A 302BM
PQ2563	LOWER INTERMDIATE AND LOWER SHELL	EMA	UNKNOWN, ESW
PQ1300	LOWER AND LOWER INTERMEDIATE AXIAL	EMA	UNKNOWN, ESW
B5524-1	LOWER SHELL	EMA	A 302BM
406L44	LOWER INT. TO LOWER SHELL CIRC WELD	EMA	LINDE 80
S3986	LOWER INT/LOWER SHELL CIRC WELD	EMA	LINDE 124 SAW
C2868-1	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C2753-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C3307-2	LOWER INTERMEDIATE SHELL	EMA	A 302BM
C-1722-2	LOWER SHELL	EMA	A 302BM
C-1516-2	LOWER SHELL	EMA	A 302BM
C-1501-2	LOWER SHELL	EMA	A 302BM
PQ1300	LOWER INTERMEDIATE & LOWER SHELL AXIAL	EMA	UNKNOWN, ESW
492L4871/A421B27AF	AXIAL WELDS	DIRECT	SMAW
492L4871/A421B27AE	AXIAL WELDS	DIRECT	SMAW
C3138-2	# 2 SHELL PLATES	DIRECT	A 533B
C3054-2	# 2 SHELL PLATES	DIRECT	A 533B
C3054-1	# 2 SHELL PLATES	DIRECT	A 533B
5P6756/0342(T)	AXIAL WELDS	DIRECT	SAW
5P6756/0342(S)	AXIAL WELDS	DIRECT	SAW
B1250-1	INTERMEDIATE SHELL W10201-6	65%	A 302A
B1256-1	INTERMEDIATE SHELL W10201-5	65%	A 302A
B1255-1	UPPER SHELL W10201-3	65%	A 302A
A6604-1	INTERMEDIATE SHELL W10201-4	EMA	A 302A
B0650-1	LOWER SHELL W9807-3	65%	A 302A
A6623-1	UPPER SHELL W10201-1	EMA	A 302A
P1444-1	LOWER SHELL W9807-9	65%	A 302A
A5891-1	LOWER SHELL W9807-5	65%	A 302A
A6520-1	UPPER SHELL W10201-2	65%	A 302A
34B009	LOWER CIRC WELD 11-273	SISTER PLANT	LINDE 1092
W5214	UPPER CIRC WELD 10-273	SISTER PLANT	LINDE 1092
86054B	UPPER SHELL AXIAL WELDS 1-273A,B,C	SISTER PLANT	ARCOS-B5
86054B	LOWER SHELL AXIAL SEAMS 3-273A,B,C	SISTER PLANT	ARCOS-B5
86054B	INTERMEDIATE SHELL AXIAL WELDS 2-	SISTER PLANT	ARCOS-B5
39B196/34B009(T)	INTERMEDIATE SHELL AXIAL WELD 2-042 C	GENERIC	LINDE 1092
39B196/34B009(T)	INTERMEDIATE SHELL AXIAL WELDS 2-042	GENERIC	LINDE 1092
C-1356-3	LOWER SHELL B2403-3	65%	A 533B
C-1356-1	LOWER SHELL B2403-1	65%	A 533B
C-1356-2	LOWER SHELL B2403-2	65%	A 533B
34B009	LOWER SHELL AXIAL WELDS 3-042 A&B	SISTER PLANT	LINDE 1092
34B009	LOWER SHELL AXIAL WELDS 3-042 C	SISTER PLANT	LINDE 1092
C-1397-2	INTERMEDIATE SHELL B2402-3	DIRECT	A 533B
13253	INTERMEDIATE TO LOWER SHELL CIRC WELD	SURV WELD	LINDE 1092
C-1354-1	INTERMEDIATE SHELL B2402-1	DIRECT	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
C-1354-2	INTERMEDIATE SHELL B2402-2	DIRECT	A 533B
C-4194-2	INTERMEDIATE SHELL B4712-3	DIRECT	A 533B
C-4182-2	LOWER SHELL B4713-2	DIRECT	A 533B
B-8343-1	LOWER SHELL B4713-3	DIRECT	A 533B
C-4182-1	LOWER SHELL B4713-1	DIRECT	A 533B
C-4186-2	INTERMEDIATE SHELL B4712-2	DIRECT	A 533B
C-4173-1	INTERMEDIATE SHELL B4712-1	DIRECT	A 533B
90099	INT./LOWER SHELL CIRC WELD 9-442	GENERIC	LINDE 0091
21935/12008(T)	LOWER SHELL AXIAL WELD 3-442 B	SISTER PLANT	LINDE 1092
21935/12008(T)	LOWER SHELL AXIAL WELDS 3-442 A&C	SISTER PLANT	LINDE 1092
13253/20291(T)	INTERMEDIATE SHELL AXIAL WELDS 2-442 A	GENERIC	LINDE 1092
13253/20291(T)	INTERMEDIATE SHELL AXIAL WELDS 2-442	GENERIC	LINDE 1092
4P6052	INT. SHELL AXIAL WELDS 101-124A/C	SURV WELD	LINDE 0091
4P6052	LOWER SHELL AXIAL WELDS 101-142A/C	SURV WELD	LINDE 0091
4P6052	INT./LOWER SHELL CIRC. WELD 101-171	SURV WELD	LINDE 0091
C4036-2	INTERMEDIATE SHELL R1806-1	DIRECT	A 533B
D1081-3	LOWER SHELL R1808-1	DIRECT	A 533B
D1081-2	LOWER SHELL R1808-2	DIRECT	A 533B
A2749-2	INTERMEDIATE SHELL R1806-2	DIRECT	A 533B
D1136-2	LOWER SHELL R1808-3	DIRECT	A 533B
C4197-1	INTERMEDIATE SHELL R1806-3	DIRECT	A 533B
980919/281587	LOWER SHELL FORGING 04	DIRECT	A 508-2
980807/281489	INTERMEDIATE SHELL 05 FORGING	DIRECT	A 508-2
25295	CIRC WELD	DIRECT	SMIT 89
4278	CIRC WELD	DIRECT	SMIT 89
288757/981057	INTERMEDIATE SHELL FORGING 05	DIRECT	A 508-2
990469/293323	LOWER SHELL FORGING 04	65%	A 508-2
5P6771	CIRC. WELD	SURV WELD	LINDE 124
4P4784	INT. AND LOWER AXIAL WELDS	DIRECT	LINDE 124
C9924-1	LOWER SHELL	DIRECT	A 533B-1
C9924-2	LOWER SHELL	DIRECT	A 533B-1
A9153-1	INTERMEDIATE SHELL	DIRECT	A 533B-1
B4197-2	INTERMEDIATE SHELL	DIRECT	A 533B-1
BOLA	INTERMEDIATE SHELL AXIAL WELD 2-203C	0 & 10 F DATA	E 8018
BOLA	INTERMEDIATE SHELL AXIAL WELD 2-203B	0 & 10 F DATA	E 8018
BOLA	INTERMEDIATE SHELL AXIAL WELD 2-203A	0 & 10 F DATA	E 8018
83637	LOWER SHELL AXIAL WELD 3-203B	10 F DATA	LINDE 0091
83637	LOWER SHELL AXIAL WELD 3-203A	10 F DATA	LINDE 0091
83637	LOWER SHELL AXIAL WELD 3-203C	10 F DATA	LINDE 0091
90130	INT./LOWER SHELL CIRC WELD 9-203	DIRECT	LINDE 0091
C-7595-1	INTERMEDIATE SHELL C-6404-3	DIRECT	A 533B-1
C-7596-1	INTERMEDIATE SHELL C-6404-1	DIRECT	A 533B-1
C-7596-2	LOWER SHELL C-6404-6	DIRECT	A 533B-1
C-7595-2	INTERMEDIATE SHELL C-6404-2	DIRECT	A 533B-1
A-6735-1	LOWER SHELL C-6404-4	DIRECT	A 533B-1
C-7585-1	LOWER SHELL C-6404-5	DIRECT	A 533B-1
10137	UPPER/INT. SHELL CIRC WELD 8-203	10 F DATA	LINDE 0091
90136	UPPER/INT CIRC WELD 8-203	10 F DATA	LINDE 0091
83650	INTERMEDIATE SHELL AXIAL WELDS 2-203C	20 F DATA	LINDE 0091
83650	INTERMEDIATE SHELL AXIAL WELDS 2-203A	20 F DATA	LINDE 0091
88114	LOWER SHELL AXIAL WELDS 3-203B	DIRECT	LINDE 0091
88114	LOWER SHELL AXIAL WELDS 3-203A	DIRECT	LINDE 0091
88114	LOWER SHELL AXIAL WELDS 3-203C	DIRECT	LINDE 0091
C-9218-1	LOWER SHELL C-6802-5	DIRECT	A 533B
C-9218-2	INTERMEDIATE SHELL C-6802-2	DIRECT	A 533B
90144	INT/LOWER SHELL CIRC WELD 9-203	DIRECT	LINDE 124
88118	UPPER/INT. SHELL CIRC WELD 8-203	10 F DATA	LINDE 0091
83650	INTERMEDIATE SHELL AXIAL WELDS 2-203B	20 F DATA	LINDE 0091
C-9220-1	LOWER SHELL PLATE C-6802-4	DIRECT	A 533B
90069	INT./LOWER SHELL CIRC WELD 9-203	DIRECT	LINDE 124
C-9195-1	INTERMEDIATE SHELL C-6802-3	DIRECT	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
C-9195-2	INTERMEDIATE SHELL C-6802-1	DIRECT	A 533B
B-3388-1	LOWER SHELL C-6802-6	DIRECT	A 533B
89476	INT. SHELL AXIAL WELDS	DIRECT	LINDE 0091
89476	LOWER SHELL AXIAL WELDS	DIRECT	LINDE 0091
89476	CIRC WELD	DIRECT	LINDE 124
B-8120-1	INTERMEDIATE SHELL R1606-2	DIRECT	A 533B
B-8120-2	INTERMEDIATE SHELL R1606-1	DIRECT	A 533B
B-9566-2	LOWER SHELL R1622-1	DIRECT	A 533B
C-4326-2	INTERMEDIATE SHELL R1606-3	DIRECT	A 533B
B-9575-1	LOWER SHELL R1622-3	DIRECT	A 533B
B-9575-2	LOWER SHELL R1622-2	DIRECT	A 533B
NR 64 647-1	LOWER SHELL R3022-1	DIRECT	A 533B
NR 64 445-1	LOWER SHELL R3022-3	DIRECT	A 533B
NR 64 627-1	LOWER SHELL R3022-2	DIRECT	A 533B
NR 62 067-1	INTERMEDIATE SHELL R2507-1	DIRECT	A 533B
90209	INTERMEDIATE SHELL AXIAL WELDS G3.0	DIRECT	LINDE 0091
90209	LOWER SHELL AXIAL WELDS	DIRECT	LINDE 124
90209	CIRC WELD	DIRECT	LINDE 124
NR 62 248-1	INTERMEDIATE SHELL R2507-3	DIRECT	A 533B
NR 62 230-1	INTERMEDIATE SHELL R2507-2	DIRECT	A 533B
A-4567-2	INTERMEDIATE SHELL C-7-3	65%	A 533B
B-9427-1	INTERMEDIATE SHELL C-7-2	65%	A 533B
A-4567-1	INTERMEDIATE SHELL C-7-1	65%	A 533B
C-5935-3	LOWER SHELL C-8-3	65%	A 533B
C-5935-1	LOWER SHELL C-8-1	65%	A 533B
C-5935-2	LOWER SHELL C-8-2	DIRECT	A 533B
A8746/34B009(T)	INTERMEDIATE SHELL AXIAL WELDS 2-203	GENERIC	LINDE 124
90136	INT./LOWER SHELL CIRC WELD 9-203	SURV WELD	LINDE 0091
305424	LOWER SHELL AXIAL WELDS 3-203	SISTER PLANT	LINDE 1092
83637	INT SHELL AXIAL WELDS 101-124C	DIRECT	LINDE 0091
83637	LOWER SHELL AXIAL WELDS 101-142A,B,C	DIRECT	LINDE 0091
83637	INT./LOWER SHELL CIRC WELD 101-171	DIRECT	LINDE 124
83642	INTERMEDIATE SHELL AXIAL WELDS 101-	DIRECT	LINDE 0091
B-8307-2	LOWER SHELL M-4116-1	DIRECT	A 533B
3P7317	INT/LOWER SHELL CIRC WELD 101-171	DIRECT	LINDE 124
A-3131-2	LOWER SHELL M-4116-3	DIRECT	A 533B
A-3131-1	LOWER SHELL M-4116-2	DIRECT	A 533B
A-8490-1	INTERMEDIATE SHELL M-605-3	DIRECT	A 533B
A-8490-2	INTERMEDIATE SHELL M-605-1	DIRECT	A 533B
B-3416-2	INTERMEDIATE SHELL M-605-2	DIRECT	A 533B
4P4784	WELDS	DIRECT	LINDE 124
C9923-1	LOWER SHELL	DIRECT	A 533B
C9923-2	LOWER SHELL	DIRECT	A 533B
A9153-2	INTERMEDIATE SHELL	DIRECT	A 533B
A9154-1	INTERMEDIATE SHELL	DIRECT	A 533B
C4415-2	LOWER SHELL	65%	A 533B
C4415-1	LOWER SHELL	DIRECT	A 533B
C4326-2	INTERMEDIATE SHELL	65%	A 533B
C4326-1	INTERMEDIATE SHELL	DIRECT	A 533B
122V109VA1	NOZZLE SHELL FORGING	65%	A 508-2
8T1554	LOWER SHELL AXIAL WELD L1 SA-1494	EMA	LINDE 80
8T1554	INT. SHELL AXIAL WELDS L3 AND L4 SA-1494	EMA	LINDE 80
72445	INT. TO LOW. SHELL CIRC. WELD SA-1585(ID	SISTER PLANT	LINDE 80
72445	INT. TO LOW. SHELL CIRC. WELD SA-1650(OD	EMA	LINDE 80
25017 ROTTERDAM	NOZZLE TO INT. SHELL CIRC WELD J726	EMA	LINDE 80
299L44	LOWER SHELL AXIAL WELDS L2 SA-1526	SURV WELD	LINDE 80
C4339-1	LOWER SHELL	65%	A 533B
C4339-2	INTERMEDIATE SHELL	65%	A 533B
123V303VA1	NOZZLE SHELL FORGING	65%	A 508-2
C4331-2	INTERMEDIATE SHELL	DIRECT	A 533B
C4208-2	LOWER SHELL	65%	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
0227 RDAM	INT. TO LOWER SHELL CIRC. WELD R3008	SURV WELD	LINDE 80
8T1762	LOW. SHELL AXIAL WELDS L1 AND L2 WF-4 & -	EMA	LINDE 80
8T1762	INT. SHELL AXIAL WELD L4 WF-4 (ID 50%)	EMA	LINDE 80
72445	INT. SHELL AXIAL WELDS L3 (100%), L4 (OD	SISTER PLANT	LINDE 80
4275 RDAM	NOZZLE TO INT. SHELL CIRC. WELD L737	EMA	LINDE 80
402C4371/C115A27A	WELD	10 F DATA	SMAW
412P3611/J417B27AF	WELD	DIRECT	SMAW
411L3071/L311A27AF	WELD	DIRECT	SMAW
402K9171/K315A27AE	WELD	DIRECT	SMAW
401S0371/B504B27AE	WELD	DIRECT	SMAW
629616/L320A27AG	WELD	DIRECT	SMAW
494K2351/L307A27AD	WELD	DIRECT	SMAW
C0803-1	LOWER INTERMEDIATE SHELL 22-1	EMA	A 533B-1
C2433-1	LOWER INTERMEDIATE SHELL 22-3	65%	A 533B-1
C0776-1	LOWER INTERMEDIATE SHELL 22-2	EMA	A 533B-1
C0814-2	LOWER SHELL 21-3	10 F DATA	A 533B-1
B5083-1	LOWER SHELL 21-1	EMA	A 533B-1
C0770-2	LOWER SHELL 21-2	EMA	A 533B-1
402C4371/C115A27A	WELD	10 F DATA	SMAW
09M057/C109A27A	WELD	EMA	LINDE 124
412P3611/J417B27AF	WELD	DIRECT	SMAW
411L3071/L311A27AF	WELD	DIRECT	SMAW
402K9171/K315A27AE	WELD	DIRECT	SMAW
401S0371/B504B27AE	WELD	DIRECT	SMAW
629616/L320A27AG	WELD	DIRECT	SMAW
659N315/F414B27AF	WELD	DIRECT	SMAW
494K2351/L307A27AD	WELD	DIRECT	SMAW
624263/E204A27A	WELD	40 F DATA	SMAW
6C980-1-1	LOWER SHELL 21-2	40 F DATA	A 533B-1
6C1053-1-1	LOWER SHELL 21-3	40 F DATA	A 533B-1
C2433-2	LOWER INTERMEDIATE SHELL 22-3	EMA	A 533B-1
6C956-1-1	LOWER SHELL 21-1	40 F DATA	A 533B-1
C2929-1	LOWER INTERMEDIATE SHELL 22-2	65%	A 533B-1
C2421-3	LOWER INTERMEDIATE SHELL 22-1	EMA	A 533B-1
ARY 059	LOWER NOZZLE	GENERIC	A 508-2
C2789-1	UPPER SHELL	GENERIC	A 533B-1
C2789-2	UPPER SHELL	DIRECT	A 533B-1
C3251-1	LOWER SHELL	GENERIC	A 533B-1
C3307-1	LOWER SHELL	DIRECT	A 533B-1
8T1762	UPPER SHELL AXIAL WELDS WF-8	EMA	LINDE 80 SAW
72105	NOZZLE BELT/UPPER SHELL CIRC WELD WF-	EMA	LINDE 80 SAW
299L44	LOWER SHELL AXIAL WELD (INNER 37%) (SA-	EMA	LINDE 80 SAW
299L44	LOWER SHELL AXIAL WELD (100%) (SA-1526)	EMA	LINDE 80 SAW
299L44	UPPER/LOWER SHELL CIRC WELD WF-25	EMA	LINDE 80 SAW
123P461VA1	INTERMEDIATE SHELL FORGING	65%	A 508-2
123S266VA1	LOWER SHELL FORGING	65%	A 508-2
122S146VA1	UPPER SHELL FORGING	65%	A 508-2
71249	INT. TO LOWER SHELL CIRC WELD SA-1101		LINDE 80 SAW
72442	UPPER/INT. SHELL CIRC WELD SA-1484	EMA	LINDE 80 SAW
123P481VA1	INTERMEDIATE SHELL FORGING	65%	A 508-2
122S180VA1	LOWER SHELL FORGING	65%	A 508-2
124S309VA1	NOZZLE BELT FORGING	65%	A 508-2
71249	INT./LOWER SHELL CIRC WELD SA-1101		LINDE 80
72442	NOZZLE/INT. SHELL CIRC WELD (INSIDE	EMA	LINDE 80
72105	NOZZLE/INT. SHELL CIRC WELD(OUTSIDE		LINDE 80
NA/W-A	WELDS	EMA	E 8018
C3017-2	LOCATION UNKNOWN 1-14	65%	A 533B
C2640-1	LOCATION UNKNOWN 1-17	EMA	A 533B
C2653-3	LOCATION UNKNOWN 1-16	EMA	A 533B
C3116-2	LOCATION UNKNOWN 1-15	EMA	A 533B
83653	AXIAL AND GIRTH WELDS	DIRECT	LINDE 0091

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
C-2146-1	LOWER SHELL B8606-1	DIRECT	A 533B
C-2146-2	LOWER SHELL B8606-2	DIRECT	A 533B
C-0623-1	INTERMEDIATE SHELL B8805-3	DIRECT	A 533B
C-2085-2	LOWER SHELL B8606-3	DIRECT	A 533B
C-0613-1	INTERMEDIATE SHELL B8805-1	DIRECT	A 533B
C-0613-2	INTERMEDIATE SHELL B8805-2	DIRECT	A 533B
C-3500-2	LOWER SHELL B8628-1	DIRECT	A 533B
C-3552-1	INTERMEDIATE SHELL R4-3	DIRECT	A 533B
87005	AXIAL WELDS	DIRECT	LINDE 0091
87005	CIRC WELD	DIRECT	LINDE 124
C-3527-2	INTERMEDIATE SHELL R4-2	DIRECT	A 533B
C-3500-1	LOWER SHELL B8825-1	DIRECT	A 533B
C-4304-1	LOWER SHELL R8-1	DIRECT	A 533B
C-3527-1	INTERMEDIATE SHELL R4-1	DIRECT	A 533B
56512-1	INTERMEDIATE SHELL M-1003-2	65%	A 533B
56484-1	INTERMEDIATE SHELL M-1003-3	65%	A 533B
56488-1	INTERMEDIATE SHELL M-1003-1	65%	A 533B
BOLA/HODA	INTERMEDIATE SHELL AXIAL WELDS 101-	DIRECT	E 8018
83653	LOWER SHELL AXIAL WELDS 101-142A/C	DIRECT	LINDE 0091
57286-1	LOWER SHELL M-1004-2	65%	A 533B
57326-1	LOWER SHELL M-1004-1	65%	A 533B
57359-1	LOWER SHELL M-1004-3	65%	A 533B
88114	INT./LOWER SHELL CIRC WELD 101-171	DIRECT	LINDE 0091
895075	CIRC WELD	DIRECT	GRAU LO
528522	LOWER SHELL 04	65%	A 508-2
527536	INTERMEDIATE SHELL 05	EMA	A 508-2
3P4966(T)	RING 21 AXIAL WELDS BA/BB/BC/BD	EMA	LINDE 124
3P4966(S)	RING 21 AXIAL WELDS BA/BB/BC/BD	EMA	LINDE 124
3P4955(S)	CIRCUMFERENTIAL WELD AB	DIRECT	LINDE 124
3P4966(S)	RING 22 AXIAL WELDS BE/BF/BG/BH	EMA	LINDE 124
3P4955(T)	CIRCUMFERENTIAL WELD AB	DIRECT	LINDE 124
3P4966(T)	RING 22 AXIAL WELDS BE/BF/BG/BH	EMA	LINDE 124
5P6756(S)	CIRCUMFERENTIAL WELD AB	DIRECT	LINDE 124
5P6756(T)	CIRCUMFERENTIAL WELD AB	DIRECT	LINDE 124
C1336-1	#2 RING	EMA	A 533B CL1
B5301-1	#2 RING	EMA	A 533B CL1
C1273-2	#1 RING	EMA	A 533B CL1
C1273-1	#1 RING	EMA	A 533B CL1
C1337-1	#2 RING	EMA	A 533B CL1
C1337-2	#2 RING	EMA	A 533B CL1
C1272-2	#1 RING	EMA	A 533B CL1
C1272-1	#1 RING	EMA	A 533B CL1
90146	INT. AND LOWER SHELL AXIAL WELDS G2.06	DIRECT	LINDE 0091
90146	INT./LOWER SHELL CIRC WELD E3.16	SURV WELD	LINDE 124
NR61 783-1	INTERMEDIATE SHELL R2005-2	DIRECT	A 533B
NR61 836-1	INTERMEDIATE SHELL R2005-1	DIRECT	A 533B
NR61 799-1	INTERMEDIATE SHELL R2005-3	DIRECT	A 533B
C4840-2	LOWER SHELL R2508-2	DIRECT	A 533B
C4935-2	LOWER SHELL R2508-3	DIRECT	A 533B
B8759-2	LOWER SHELL R2508-1	DIRECT	A 533B
ANA 102	UPPER SHELL FORGING	65%	A 508-2
B7835-1	INTERMEDIATE SHELL	DIRECT	A 533B
C3795-2	INTERMEDIATE SHELL	65%	A 533B
B7823-1	LOWER SHELL	65%	A 533B
C3799-2	LOWER SHELL	65%	A 533B
8T1762	LOWER/ INT. SHELL AXIAL WELDS WF-8	EMA	LINDE 80
8T1762	INTERMEDIATE SHELL AXIAL WELDS WF-4	EMA	LINDE 80
406L44A	UPPER CIRC WELD WF-154	EMA	LINDE 80
72105	MIDDLE CIRC WELD WF-70	EMA	LINDE 80
ZV 3855	LOWER NOZZLE BELT FORGING	GENERIC	A 508-2
B8029-1	LOWER SHELL	65%	A 533B

HEAT ID	BELTLINE IDENTITY	UMETHOD	BASEMETAL
C4007-1	LOWER SHELL	DIRECT	A 533B
B8006-1	INT. SHELL	65%	A 533B
B8040-1	INT. SHELL	65%	A 533B
821T44	NOZZLE BELT/INT. SHELL CIRC WELD WF-200	EMA	LINDE 80
72102	LOWER INT. SHELL AXIAL WELD WF-29	EMA	LINDE 80
71249	INT./LOWER SHELL CIRC WELD SA-1769	EMA	LINDE 80
72105	LOWER SHELL AXIAL WELDS WF-70	EMA	LINDE 80

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.03	0.7	0.009	0.015
		0.15	0.52	0.01	0.016
		0.15	0.52	0.01	0.016
		0.17	0.55	0.014	0.013
		0.17	0.55	0.014	0.013
8T1762	LINDE 80	0.19	0.57	0.004	0.017
8T1762	LINDE 80	0.19	0.57	0.004	0.017
821T44	LINDE 80	0.24	0.63	0.014	0.013
406L44	LINDE 80	0.27	0.59	0.016	0.015
83650	LINDE 0091	0.045	0.087	0	0
10120	LINDE 0091	0.046	0.082	0	0
10120	LINDE 0091	0.046	0.082	0	0
		0.08	0.653	0.003	0.007
		0.083	0.668	0.003	0.008
		0.085	0.585	0.006	0.008
		0.085	0.6	0.009	0.011
		0.096	0.58	0.009	0.011
		0.098	0.605	0.01	0.014
10137	LINDE 0091	0.216	0.043	0	0
		0.14	0.57	0.015	0.015
		0.14	0.62	0.015	0.016
		0.14	0.62	0.015	0.016
		0.2	0.54	0.01	0.015
90136	LINDE 0091	0.269	0.07	0.013	0.01
305424	LINDE 1092	0.273	0.629	0.013	0.01
305414	LINDE 1092	0.337	0.609	0.012	0.01
83642	LINDE 0091	0.047	0.085	0	0
83642	LINDE 0091	0.047	0.085	0	0
		0.06	0.57	0.01	0.016
		0.07	0.53	0	0
		0.07	0.57	0	0
		0.08	0.58	0	0
		0.1	0.18	0	0
		0.1	0.18	0	0
		0.1	0.18	0	0
		0.1	0.18	0	0
UNKNOWN	ARCOS B-5	0.28	0.2	0	0
UNKNOWN	ARCOS B-5	0.28	0.2	0	0
442011	LINDE 80	0.03	0.67	0.012	0.01
		0.04	0.71	0.008	0.008
		0.04	0.74	0.007	0.006
H4498	LINDE 80	0.042	0.46	0.01	0.007
		0.05	0.73	0.008	0.007
31401	LINDE 80	0.193	0.58	0.013	0.014
442011	LINDE 80	0.03	0.67	0.012	0.01
		0.03	0.71	0.007	0
1084-18	LINDE 80	0.038	0.6	0.011	0.011
		0.04	0.9	0.005	0.007
H4498	LINDE 80	0.042	0.46	0	0
		0.056	0.767	0.006	0.004
		0.08	0.5	0.009	0.014
		0.09	0.48	0.007	0.009
		0.12	0.53	0.008	0.015
		0.14	0.5	0.009	0.01
		0.14	0.6	0.01	0.014
		0.15	0.44	0.005	0.016
UNKNOWN	ESW	0.24	0.37	0.016	0
406L44	LINDE 80	0.27	0.6	0.015	0.021
D55733	YF-200	0.09	0.65	0.014	0.005
		0.11	0.5	0.01	0.015
		0.13	0.51	0.012	0.014

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.14	0.55	0.007	0.011
		0.16	0.52	0.008	0.013
		0.16	0.52	0.008	0.013
		0.17	0.48	0.008	0.015
UNKNOWN	ESW	0.24	0.37	0.016	0
D55733 & D51852	YF-200	0.09	0.67	0.013	0.006
		0.1	0.48	0.007	0.007
		0.13	0.51	0.01	0.015
		0.13	0.58	0.009	0.015
		0.13	0.6	0.007	0.017
		0.14	0.66	0.009	0.013
		0.15	0.52	0.015	0.015
UNKNOWN	ESW	0.24	0.37	0.016	0
S3986	LINDE 124	0.05	0.96	0.019	0.016
1P4218	LINDE 124	0.06	0.87	0.015	0.012
		0.11	0.6	0.01	0.014
		0.12	0.56	0.01	0.015
		0.12	0.58	0.012	0.015
		0.16	0.82	0	0
		0.16	0.82	0	0
		0.19	0.58	0.013	0.016
3P4000	LINDE 124	0.02	0.9	0.01	0.015
S3986	LINDE 124	0.05	0.96	0.019	0.016
		0.11	0.6	0.01	0.014
		0.12	0.57	0.009	0.015
		0.12	0.6	0	0
		0.15	0.54	0.012	0.016
		0.16	0.82	0	0
		0.16	0.82	0	0
442011	LINDE 80	0.03	0.67	0.012	0.015
442002	LINDE 80	0.04	0.63	0.004	0.016
		0.04	0.64	0.014	0.009
		0.04	0.74	0.01	0.009
		0.05	0.72	0.01	0.009
31401	LINDE 80	0.193	0.58	0.011	0.019
		0.01	0.7	0.007	0.007
442011	LINDE 80	0.03	0.67	0.012	0.01
442002	LINDE 80	0.04	0.63	0.01	0.013
		0.05	0.74	0.014	0.007
		0.06	0.73	0.008	0.009
31401	LINDE 80	0.193	0.58	0.015	0.015
90077	LINDE 0091	0.04	0.06	0.005	0
90077	LINDE 0091	0.04	0.06	0.005	0.016
90077	LINDE 124	0.04	0.06	0.005	0.016
		0.05	0.58	0.008	0
		0.06	0.57	0.007	0
		0.06	0.61	0.008	0
		0.06	0.62	0.01	0
		0.07	0.58	0.006	0.016
		0.08	0.62	0.006	0
		0.11	0.53	0.008	0.014
		0.11	0.55	0.011	0.014
		0.11	0.56	0.009	0.014
		0.12	0.64	0.011	0.014
		0.12	0.64	0.011	0.016
		0.13	0.54	0.01	0.016
21935	LINDE 1092	0.18	0.72	0.015	0.011
20291 & 12008	LINDE 1092	0.22	0.83	0.01	0.008
33A277	LINDE 0091	0.24	0.16	0.014	0.011
		0.11	0.56	0.007	0.018
		0.11	0.74	0.006	0.012

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.14	0.55	0.005	0.017
		0.14	0.66	0.005	0.01
		0.15	0.56	0.006	0.015
		0.15	0.6	0.005	0.011
A8746	LINDE 124	0.16	0.1	0.012	0.018
10137	LINDE 0091	0.21	0.06	0.014	0.009
33A277	LINDE 0091	0.24	0.16	0.014	0.011
895075	GRAU LO	0.04	0.72	0.01	0.01
		0.05	0.83	0.008	0.008
		0.09	0.86	0.004	0.006
83648	LINDE 0091	0.042	0.153	0.005	0
83648	LINDE 0091	0.042	0.153	0.005	0
		0.045	0.6	0.01	0
		0.057	0.56	0.009	0
		0.057	0.593	0.006	0
		0.057	0.593	0.007	0
		0.08	0.61	0.009	0
		0.082	0.62	0.012	0.013
3P4955 & 3478	LINDE 124	0.02	0.97	0.014	0.01
3P4955 & 0342	LINDE 124	0.023	0.95	0.016	0.01
3P4955 & 0342	LINDE 124	0.025	0.9	0.016	0.011
3P4955 & 0951	LINDE 124	0.03	0.89	0.012	0.011
3P4955 & 3478	LINDE 124	0.03	0.9	0.015	0.01
3P4955 & 0951	LINDE 124	0.03	0.93	0.014	0.016
431T1831	UNKNOWN	0.03	0.98	0.013	0.015
		0.05	0.64	0.012	0.015
		0.06	0.62	0.013	0.011
		0.07	0.63	0.013	0.011
5P6756	UNKNOWN	0.08	0.96	0.008	0.012
		0.1	0.64	0.011	0
76492	UNKNOWN	0.1	1.08	0.016	0.013
		0.11	0.66	0.012	0
88112	LINDE 0091	0.045	0.2	0.004	0.006
88112	LINDE 0091	0.045	0.2	0.004	0.006
88112	LINDE 0091	0.045	0.2	0.004	0.006
		0.05	0.59	0.006	0.012
		0.05	0.68	0.007	0
		0.06	0.64	0.01	0
		0.06	0.65	0.01	0
		0.07	0.64	0.008	0
		0.08	0.64	0.008	0
		0.03	0.65	0	0
		0.04	0.63	0	0
89833	LINDE 124	0.046	0.059	0	0
89833	LINDE 0091	0.046	0.059	0	0
89833	LINDE 0091	0.046	0.059	0	0
		0.05	0.59	0	0
		0.05	0.6	0	0
		0.06	0.64	0	0
		0.06	0.64	0	0
		0.12	0.52	0.016	0.025
		0.12	0.59	0.012	0.014
		0.14	0.45	0.006	0.018
		0.14	0.46	0.007	0.018
		0.14	0.48	0.008	0.013
		0.14	0.5	0.01	0.014
		0.14	0.55	0.01	0.014
		0.15	0.49	0.008	0.015
		0.15	0.49	0.009	0.015
13253 & 12008	LINDE 1092	0.21	0.873	0.013	0.015
13253 & 12008	LINDE 1092	0.21	0.873	0.013	0.015

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
13253 & 12008	LINDE 1092	0.21	0.873	0.013	0.015
20291	LINDE 1092	0.216	0.737	0.008	0.009
1P3571	LINDE 1092	0.283	0.755	0.017	0.009
S3986	LINDE 124	0.05	0.937	0.019	0.015
S3986	LINDE 124	0.05	0.937	0.019	0.015
S3986	LINDE 124	0.05	0.937	0.019	0.015
		0.11	0.64	0.011	0.015
		0.125	0.58	0.013	0.015
		0.14	0.59	0.012	0.014
		0.15	0.57	0.014	0.014
		0.13	0.65	0.01	0.016
		0.17	0.58	0.01	0.017
		0.2	0.68	0.009	0.017
		0.2	0.68	0.01	0.018
21935	LINDE 1092	0.2	0.69	0.016	0.01
		0.21	0.73	0.009	0.015
		0.21	0.73	0.01	0.014
27204 & 12008	LINDE 1092	0.219	0.996	0.013	0.007
12420	LINDE 1092	0.27	1.035	0	0
		0.12	0.58	0.013	0.015
		0.12	0.58	0.013	0.015
		0.13	0.72	0.007	0.016
8T1554	LINDE 80	0.18	0.63	0.016	0.016
8T1762	LINDE 80	0.19	0.57	0.009	0.009
8T1762	LINDE 80	0.19	0.57	0.015	0.013
		0.2	0.54	0.008	0.016
		0.2	0.54	0.008	0.016
71249	LINDE 80	0.23	0.59	0.02	0.014
72105	LINDE 80	0.32	0.58	0.018	0.009
		0.02	0.81	0.011	0.011
		0.04	0.68	0.007	0.009
		0.04	0.77	0.004	0.006
8T3914	LINDE 80	0.18	0.62	0.016	0.011
T29744	LINDE 80	0.21	0.65	0.021	0.015
821T44	LINDE 80	0.24	0.63	0.014	0.013
		0.1	0.46	0.011	0.012
		0.12	0.56	0.01	0.013
		0.12	0.56	0.01	0.013
		0.13	0.5	0.013	0.015
		0.13	0.56	0.011	0.014
		0.14	0.53	0.013	0.015
21935	LINDE 1092	0.183	0.704	0.015	0.01
27204	LINDE 1092	0.203	1.018	0.016	0.025
27204	LINDE 1092	0.203	1.018	0.016	0.025
27204	LINDE 1092	0.203	1.018	0.016	0.025
27204	LINDE 1092	0.203	1.018	0.016	0.025
10120	LINDE 0091	0.04	0.03	0.011	0.008
		0.1	0.62	0.01	0.014
		0.14	0.56	0.01	0.018
		0.14	0.56	0.011	0.018
		0.14	0.59	0.012	0.016
		0.15	0.62	0.01	0.015
		0.15	0.62	0.013	0.015
21935 & 12008	LINDE 1092	0.22	0.87	0.018	0.011
21935 & 12008	LINDE 1092	0.22	0.87	0.018	0.011
21935 & 12008	LINDE 1092	0.22	0.87	0.018	0.011
33A277	LINDE 124	0.258	0.165	0.015	0.011
33A277	LINDE 124	0.258	0.165	0.015	0.011
33A277	LINDE 124	0.258	0.165	0.015	0.011
		0.1	0.5	0.01	0.015
1P0815	LINDE 80	0.17	0.52	0.017	0.015

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
1P0815	LINDE 80	0.17	0.52	0.019	0.015
1P0661	LINDE 80	0.17	0.64	0.024	0.019
		0.18	0.51	0.016	0.04
		0.2	0.55	0.006	0.013
		0.2	0.55	0.007	0.017
		0.2	0.58	0.009	0.018
		0.2	0.59	0.009	0.015
		0.23	0.55	0.01	0.024
71249	LINDE 80	0.23	0.59	0.02	0.011
UNKNOWN	ESW	0.24	0.37	0	0
UNKNOWN	ESW	0.24	0.37	0.015	0.016
		0.11	0.5	0.01	0.019
		0.15	0.49	0.01	0.02
		0.22	0.49	0.008	0.018
		0.22	0.5	0.005	0.02
		0.23	0.49	0.006	0.017
UNKNOWN	ESW	0.24	0.37	0.015	0.017
		0.24	0.47	0.009	0.02
299L44/8650	LINDE 80	0.34	0.68	0.007	0.013
432Z4521	E 8018	0.01	0.98	0.018	0.017
CTY538	E 8018	0.03	0.83	0.02	0.018
09L853	SMAW	0.03	0.88	0.014	0.017
432Z0471	E 8018	0.03	0.91	0.017	0.019
07L669	SMAW	0.03	1.02	0.014	0.016
		0.09	0.51	0.012	0.012
		0.13	0.47	0.012	0.015
		0.15	0.61	0.011	0.014
		0.15	0.64	0.008	0.01
		0.12	0.56	0.014	0.015
		0.13	0.6	0.011	0.013
		0.14	0.55	0.015	0.015
		0.14	0.56	0.015	0.018
90099	LINDE 0091	0.197	0.06	0.022	0.012
6329637	LINDE 0091	0.205	0.105	0.011	0.014
33A277	LINDE 1092	0.258	0.165	0.015	0.01
BOLA	SMAW	0.027	0.913	0	0
HODA	SMAW	0.027	0.947	0.009	0.01
83640	LINDE 0091	0.051	0.096	0.006	0.011
		0.13	0.56	0.01	0.014
		0.14	0.57	0.015	0.015
		0.14	0.6	0.01	0.013
5P5622	LINDE 0091	0.153	0.077	0.016	0.018
		0.2	0.6	0.018	0.016
		0.08	0.62	0.01	0.01
		0.09	0.55	0.01	0.015
		0.1	0.55	0.014	0.016
		0.11	0.57	0.01	0.015
		0.12	0.56	0.011	0.018
		0.12	0.61	0.011	0.015
		0.12	0.61	0.012	0.016
10137	LINDE 0091	0.23	1	0.016	0.01
13253 & 12008	LINDE 1092	0.26	0.87	0.013	0
33A277	LINDE 124	0.32	0.5	0.016	0.011
		0.11	0.56	0.015	0.017
		0.11	0.6	0.011	0.016
		0.12	0.5	0.015	0.017
		0.13	0.6	0.015	0.017
		0.14	0.57	0.012	0.015
		0.18	0.57	0.008	0.015
13253 & 12008	LINDE 1092	0.21	0.873	0	0
27204 & 12008	LINDE 1092	0.219	0.996	0	0

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
305414	LINDE 1092	0.337	0.609	0	0
		0.1	0.48	0.009	0.014
		0.1	0.56	0.01	0.011
		0.1	0.56	0.01	0.013
		0.11	0.51	0.009	0.012
		0.12	0.56	0.011	0.015
		0.12	0.6	0.009	0.012
51989	LINDE 124	0.17	0.165	0.012	0.01
27204	LINDE 1092	0.203	1.018	0	0
13253 & 12008	LINDE 1092	0.21	0.873	0	0
20291	LINDE 1092	0.216	0.737	0.013	0.011
27204 & 12008	LINDE 1092	0.219	0.996	0.013	0.011
13253	LINDE 1092	0.221	0.732	0	0
		0.05	0.68	0.01	0.011
		0.07	0.68	0.01	0.006
61782	LINDE 80	0.25	0.56	0	0
61782	LINDE 80	0.25	0.56	0.012	0.012
71249	LINDE 80	0.26	0.61	0.021	0.014
		0.35	0.68	0.01	0.008
5P6214B	LINDE 124	0.02	0.82	0.013	0
626677	SMAW	0.03	1.04	0.015	0
		0.04	0.59	0.012	0.015
		0.04	0.63	0.012	0.012
		0.04	0.63	0.012	0.012
		0.04	0.65	0.007	0.014
627260	SMAW	0.06	1.08	0.02	0
		0.1	0.2	0.01	0.014
		0.1	0.2	0.016	0.016
		0.11	0.2	0.012	0.017
		0.11	0.2	0.013	0.015
		0.12	0.2	0.01	0.021
		0.12	0.2	0.012	0.02
		0.12	0.2	0.013	0.01
		0.14	0.2	0.015	0.02
		0.15	0.2	0.012	0.014
86054B	ARCOS B-5	0.22	0.1	0.016	0
9565 & 86054B	ARCOS B-5	0.22	0.1	0.016	0.017
86054B	ARCOS B-5	0.22	0.1	0.02	0
86054B	ARCOS B-5	0.22	0.1	0.02	0
1248	ARCOS B-5	0.22	0.2	0.02	0.02
		0.13	0.58	0.015	0.015
		0.13	0.64	0.011	0.014
		0.13	0.64	0.011	0.014
		0.13	0.7	0.01	0.013
		0.14	0.57	0.009	0.012
		0.17	0.62	0.011	0.013
90099	LINDE 0091	0.197	0.06	0.022	0.012
13253	LINDE 1092	0.221	0.732	0.023	0
33A277	LINDE 0091	0.258	0.165	0.017	0.012
1P2809	LINDE 1092	0.27	0.735	0.013	0
1P2815	LINDE 1092	0.316	0.724	0.013	0.009
4P6052	LINDE 0091	0.047	0.049	0.011	0.009
		0.08	0.53	0.012	0.019
		0.08	0.57	0.01	0.018
		0.08	0.58	0.01	0.016
		0.08	0.58	0.01	0.016
		0.08	0.58	0.01	0.017
		0.11	0.48	0.013	0.018
51874	LINDE 0091	0.147	0.037	0.009	0.006
10137	LINDE 0091	0.216	0.043	0.016	0.01
504-01205	SMAW	0.01	0.51	0	0

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
504-01205	UNKNOWN	0.01	0.51	0.011	0.005
519-01205	SMAW	0.01	0.53	0	0
519-01205	SMAW	0.01	0.53	0	0
001-01205	SMAW	0.02	0.51	0	0
		0.07	0.56	0.01	0.012
		0.07	0.58	0.009	0.008
		0.08	0.56	0.01	0.008
		0.08	0.57	0.008	0.01
D53040	YF-200	0.08	0.59	0.01	0.004
D53040	YF-200	0.08	0.59	0.01	0.004
D53040	YF-200	0.08	0.59	0.012	0.003
510-01205		0.09	0.54		
510-01205	SMAW	0.09	0.54	0	0
510-01205	SMAW	0.09	0.54	0	0
510-01205	SMAW	0.09	0.54	0	0
		0.09	0.54	0.01	0.011
		0.09	0.58	0.009	0.014
		0.09	0.64	0.012	0.008
		0.1	0.58	0.01	0.01
D53040	YF-200	0.1	0.68	0	0
D55733	YF-200	0.1	0.68	0.013	0.003
		0.12	0.8		
		0.14	0.82		
		0.15	0.71	0.012	0.009
		0.15	0.44	0.014	0.02
		0.19	0.48	0.01	0.021
34B009	LINDE 1092	0.192	1.007	0.01	0.017
		0.2	0.59	0.011	0.02
		0.2	0.66	0.011	0.025
		0.21	0.62	0.01	0.013
W5214	LINDE 1092	0.213	1.007	0.021	0.021
W5214	LINDE 1092	0.213	1.007	0.021	0.021
		0.19	0.47	0.012	0.026
34B009	LINDE 1092	0.192	1.007	0.012	0
34B009	LINDE 1092	0.192	1.007	0.012	0
		0.2	0.49	0.011	0.025
		0.2	0.5	0.01	0.023
		0.22	0.52	0.011	0.015
		0.22	0.53	0.015	0.019
13253	LINDE 1092	0.221	0.732	0.023	0
		0.24	0.52	0.012	0.024
		0.06	0.71	0.01	0.011
		0.06	0.75	0.01	0.009
1P3571	LINDE 1092	0.287	0.756	0.016	0.011
		0.11	0.58	0.012	0.013
		0.11	0.59	0.01	0.013
		0.12	0.51	0.012	0.014
		0.12	0.54	0.011	0.012
		0.12	0.66	0.014	0.013
		0.13	0.68	0.01	0.015
		0.15	0.49	0.011	0.015
		0.15	0.5	0.011	0.015
		0.15	0.51	0.012	0.014
4P6519	LINDE 1092	0.18	0.06	0.009	0.009
21935	LINDE 1092	0.21	0.68	0.016	0.011
12008	LINDE 1092	0.235	0.975	0.012	0.011
6329637	LINDE 1092	0.24	1	0.011	0.014
12008	LINDE 1092	0.27	1	0.008	0.009
305424	LINDE 1092	0.3	0.64	0.013	0.01
305414	LINDE 1092	0.337	0.609	0.012	0.01
1P3571	LINDE 1092	0.37	0.75	0.017	0.011

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
3P400	LINDE 124	0.02	0.93	0.012	0.01
3P4966	LINDE 124	0.03	0.92	0.011	0.014
5P6771	LINDE 124	0.04	0.94	0.013	0.011
		0.07	0.49	0.008	0.02
		0.09	0.51	0.013	0.015
		0.11	0.5	0.008	0.018
		0.12	0.5	0.015	0.019
		0.12	0.51	0.009	0.02
		0.12	0.51	0.009	0.02
3P4000	LINDE 124	0.02	0.928	0.015	0.012
662A746	SMAW	0.03	0.88	0.021	0.017
09M057 & C109A27A	SMAW	0.03	0.89	0.009	0.021
07L857 & B101A27A	SMAW	0.03	0.97	0.012	0.017
1P4218	LINDE 124	0.053	0.89	0.01	0.011
S3986	LINDE 124	0.054	0.969	0.019	0.016
5P6756	SMAW	0.083	0.943	0.008	0.012
640892 & J424B27AE	SMAW	0.09	1	0.015	0.018
		0.11	0.48	0.007	0.014
		0.11	0.48	0.01	0.014
		0.11	0.48	0.01	0.014
		0.11	0.5	0.016	0.016
		0.12	0.51	0.011	0.015
		0.12	0.51	0.011	0.015
03M014 & C118A27A	SMAW	0.01	0.94	0.012	0.015
661A746 & H013A27A	SMAW	0.03	0.88	0.021	0.017
09M057 & C109A27A	SMAW	0.03	0.89	0.009	0.021
07L857 & B101A27A	SMAW	0.03	0.97	0.012	0.017
432A2671 & H019A27A	SMAW	0.04	1.08	0.019	0.014
640892 & J424B27AE	SMAW	0.09	1	0.015	0.018
		0.11	0.51	0.009	0.018
		0.11	0.56	0.012	0.018
		0.11	0.56	0.012	0.018
		0.13	0.58	0.009	0.016
		0.14	0.65	0.009	0.015
		0.15	0.6	0.006	0.02
		0.12	0.62	0.01	0.013
		0.13	0.65	0.007	0.01
		0.15	0.59	0.013	0.013
51989	LINDE 124	0.17	0.17	0	0
		0.17	0.56	0.009	0.015
13253 & 12008	LINDE 1092	0.22	0.84	0	0
		0.23	0.62	0.007	0.01
		0.24	0.62	0.008	0.011
1P3571	LINDE 1092	0.31	0.76	0.015	0.012
83640	LINDE 0091	0.051	0.096	0.006	0
		0.1	0.51	0.009	0.015
		0.1	0.55	0.01	0.014
		0.11	0.61	0.01	0.016
		0.11	0.66	0.015	0.015
		0.14	0.58	0.009	0.016
		0.14	0.61	0.011	0.106
20291 & 12008	LINDE 1092	0.199	0.846	0.011	0.008
21935 & 12008	LINDE 1092	0.213	0.867	0.015	0
895075	GRAU LO	0.039	0.724	0.016	0.015
		0.15	0.88	0.004	0.007
		0.153	0.793	0.012	0.014
		0.19	0.51	0.008	0.025
		0.21	0.45	0.01	0.02
		0.21	0.49	0.011	0.023
34B009	LINDE 1092	0.21	1.03	0.018	0.014
W5214	LINDE 1092	0.21	1.2	0.021	0.012

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
W5214	LINDE 1092	0.21	1.2	0.021	0.012
		0.22	0.49	0.011	0.027
		0.23	0.44	0.01	0.018
		0.23	0.52	0.01	0.02
		0.13	0.61	0.006	0.015
		0.13	0.62	0.007	0.018
		0.13	0.62	0.008	0.015
		0.14	0.66	0.005	0.012
A8746	LINDE 124	0.15	0.13	0.018	0.012
A8746	LINDE 124	0.15	0.13	0.018	0.012
		0.15	0.6	0.006	0.014
		0.15	0.61	0.007	0.018
10137	LINDE 0091	0.22	0.04	0.013	0.009
10137	LINDE 0091	0.22	0.04	0.014	0.018
33A277	LINDE 0091	0.258	0.165	0	0
90136	LINDE 0091	0.27	0.07	0	0
4P6052	LINDE 0091	0.05	0.05	0.011	0.009
		0.05	0.64	0.01	0.01
		0.05	0.64	0.014	0.012
		0.05	0.65	0.009	0.01
		0.06	0.61	0.007	0.023
		0.07	0.6	0.008	0.018
		0.08	0.63	0.006	0.019
UNKNOWN	SMAW	0.1	0.99	0	0
		0.14	0.56	0.01	0.016
		0.17	0.5	0.01	0.01
		0.17	0.65	0.01	0.014
		0.17	0.65	0.01	0.014
		0.178	0.573	0.018	0.022
		0.178	0.573	0.018	0.022
		0.2	0.48	0.018	0.034
86054B	ARCOS B-5	0.214	0.046	0.015	0.02
86054B	ARCOS B-5	0.214	0.046	0.015	0.02
1248	ARCOS B-5	0.214	0.076	0.015	0.02
		0.22	0.51	0.018	0.026
		0.236	0.503	0.031	0.026
		0.27	0.53	0.019	0.03
5P6214B	LINDE 124	0.014	0.7	0.011	0.014
4P7465	LINDE 124	0.02	0.8	0.012	0.014
4P7465	LINDE 124	0.02	0.82	0.01	0.013
5P6214B	LINDE 124	0.02	0.82	0.013	0.017
4P7216	LINDE 124	0.035	0.82	0.011	0.012
5P5657	LINDE 124	0.04	0.89	0.016	0.02
4P7216	LINDE 124	0.045	0.8	0.011	0.011
		0.06	0.63	0.01	0.015
		0.06	0.63	0.01	0.015
		0.07	0.64	0.012	0.015
5P5657	LINDE 124	0.07	0.71	0.015	0.021
		0.09	0.65	0.012	0.015
		0.11	0.63	0.012	0.015
		0.11	0.63	0.012	0.015
25531	SMIT 89	0.098	0.124	0.02	0.012
4278	SMIT 89	0.12	0.11	0.02	0
		0.12	0.82	0.01	0.019
		0.16	0.74	0.013	0.012
		0.16	0.83	0.009	0.014
25295	SMIT 89	0.35	0.13	0.02	0
716126	LW 320	0.069	0.051	0.017	0.011
		0.08	0.77	0.01	0.013
		0.1	0.845	0.018	0.011
4278	SMIT 89	0.12	0.11	0	0

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.13	0.83	0.013	0.017
801	SMIT 89	0.18	0.11	0.012	0.012
		0.1	0.5	0.015	0.015
		0.11	0.63	0.012	0.017
		0.11	0.63	0.012	0.017
		0.12	0.6	0.01	0.016
		0.15	0.5	0.008	0.01
		0.16	0.65	0.006	0.01
8T1762	LINDE 80	0.19	0.57	0.017	0.01
8T1762	LINDE 80	0.19	0.57	0.017	0.013
8T1762	LINDE 80	0.19	0.57	0.017	0.015
1P0962	LINDE 80	0.21	0.64	0.025	0.017
72445	LINDE 80	0.22	0.54	0.016	0.016
61782	LINDE 80	0.23	0.52	0.011	0.013
71249	LINDE 80	0.23	0.59	0.021	0.012
72445	LINDE 80	0.34	0.68	0	0
		0.02	0.8	0.01	0.01
		0.04	0.75	0.006	0.012
		0.13	0.76	0.006	0.009
406L44	LINDE 80	0.27	0.59	0.013	0.016
299L44	LINDE 80	0.34	0.68	0.015	0.016
		0.01	0.73	0.011	0.015
		0.02	0.76	0.014	0.012
		0.13	0.91	0.009	0.012
821T44	LINDE 80	0.24	0.63	0.01	0.015
72442	LINDE 80	0.26	0.6	0.021	0.016
8T1554	LINDE 80	0.32	0.58	0.016	0.016
		0.17	0.11	0.011	0.022
		0.17	0.11	0.011	0.022
		0.18	0.46	0.006	0.024
		0.2	0.51	0.013	0.026
		0.21	0.48	0.019	0.021
1248	ARCOS B-5	0.22	0.2	0.015	0.02
		0.27	0.53	0.019	0.03
86054B	ARCOS B-5	0.35	0.2	0.013	0.02
86054B	ARCOS B-5	0.35	0.2	0.015	0.02
		0.12	0.55	0.01	0.01
		0.19	0.48	0.016	0.022
		0.19	0.5	0.015	0.02
34B009	LINDE 1092	0.192	0.98	0	0
27204	LINDE 124	0.203	1.018	0.013	0.012
W5214	LINDE 1092	0.213	1.01	0.019	0.016
W5214	LINDE 1092	0.213	1.01	0.019	0.016
		0.24	0.5	0.011	0.02
		0.24	0.51	0.009	0.02
		0.24	0.52	0.01	0.023
		0.03	0.62	0.005	0.007
		0.03	0.64	0.004	0.005
4P7869	LINDE 124	0.031	0.096	0.013	0.009
90071	LINDE 0091	0.035	0.079	0.005	0.006
		0.04	0.65	0.004	0.003
4P6052	LINDE 0091	0.047	0.049	0.01	0.008
		0.06	0.61	0.004	0.016
		0.06	0.61	0.004	0.017
		0.07	0.66	0.005	0.018
		0.03	0.65	0.004	0.007
		0.03	0.67	0.003	0.005
		0.03	0.67	0.003	0.008
4P7869	LINDE 124	0.031	0.096	0.012	0.009
		0.04	0.64	0.003	0.008
		0.04	0.67	0.002	0.004

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
MIL B-4	LINDE 124	0.046	0.059	0.008	0.012
		0.05	0.66	0.004	0.009
3P7317	LINDE 124	0.074	0.067	0.009	0.011
4P7869	LINDE 124	0.031	0.096	0.008	0.011
4P7869	LINDE 124	0.031	0.096	0.008	0.012
4P7869	LINDE 124	0.031	0.096	0.01	0.008
		0.04	0.61	0.002	0.004
		0.04	0.62	0.002	0.005
		0.04	0.64	0.004	0.007
		0.04	0.65	0.004	0.013
		0.04	0.66	0.007	0.018
		0.05	0.61	0.002	0.005
S3986	LW 320	0.056	0.96	0.019	0.015
		0.11	0.54	0.011	0.015
		0.11	0.54	0.011	0.015
		0.12	0.52	0.01	0.018
		0.12	0.57	0.01	0.018
		0.12	0.57	0.01	0.018
		0.13	0.42	0.013	0.018
37C065	ESW	0.182	0.181	0.015	0.013
3P4000	LINDE 124	0.02	0.934	0.015	0.014
1P4217	LINDE 124	0.102	0.942	0.017	0.018
		0.11	0.55	0.01	0.015
		0.12	0.55	0.011	0.015
		0.12	0.56	0.011	0.016
		0.12	0.56	0.011	0.016
		0.12	0.57	0.015	0.016
		0.13	0.46	0.01	0.018
		0.13	0.58	0.013	0.016
		0.14	0.6	0.011	0.016
		0.15	0.49	0.012	0.018
37C065	ESW	0.182	0.181	0.015	0.013
626677 & C301A27AF	SMAW	0.01	0.85	0.015	0.022
627069 & C312A27A	SMAW	0.01	0.94	0.013	0.019
5P6214B & 0331	LINDE 124	0.02	0.82	0.013	0.017
624063 & D228A27A	SMAW	0.03	1	0.009	0.018
		0.06	0.61	0.01	0.025
		0.06	0.63	0.01	0.013
		0.06	0.63	0.012	0.015
627260 & B322A27AE	SMAW	0.06	1.08	0.02	0.022
		0.1	0.47	0.011	0.017
		0.1	0.48	0.007	0.017
		0.1	0.65	0.013	0.013
		0.1	0.66	0.014	0.012
		0.11	0.63	0.012	0.018
		0.14	0.6	0.012	0.015
21935	LINDE 1092	0.183	0.704	0.012	0
27204 & 12008	LINDE 1092	0.219	0.996	0.01	0
27204 & 12008	LINDE 1092	0.219	0.996	0.01	0
13253	LINDE 1092	0.221	0.732	0.013	0
		0.11	0.82	0.01	0.008
		0.12	0.07	0.016	0.02
1P0815	LINDE 80	0.17	0.52	0.017	0.015
1P0661	LINDE 80	0.17	0.64		
8T1762	LINDE 80	0.19	0.57	0.017	0.013
		0.2	0.06	0.01	0.02
61782	LINDE 80	0.23	0.52	0.012	0.012
71249	LINDE 80	0.23	0.59	0.021	0.014
		0.05	0.72	0.01	0.008
		0.09	0.7	0.01	0.008
		0.11	0.73	0.01	0.01

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
21935	LINDE 1092	0.18	0.7	0	0
72442	LINDE 80	0.26	0.6	0.018	0.015
		0.07	0.66	0.012	0.006
		0.07	0.8	0.013	0.005
		0.08	0.68	0.012	0.009
1752	UM89	0.13	0.13	0.017	0.014
2269		0.15	0.15	0.017	0.012
		0.07	0.73	0.008	0.01
		0.07	0.75	0.01	0.014
		0.08	0.67	0.011	0.013
2721	UM89	0.09	0.11	0.019	0.014
	UM 89	0.13	0.13	0.019	0.013
		0.14	0.51	0.01	0.015
		0.17	0.5	0.015	0.023
		0.18	0.52	0.008	0.02
		0.21	0.51	0.01	0.023
72445	LINDE 80	0.22	0.54	0.01	0.012
		0.23	0.5	0.01	0.022
UNKNOWN	ESW	0.24	0.37	0	0
UNKNOWN	ESW	0.24	0.37	0.015	0.017
		0.27	0.57	0.012	0.024
406L44	LINDE 80	0.27	0.59	0.024	0.006
S3986	LINDE 124	0.05	0.96	0.019	0.016
		0.08	0.48	0.013	0.015
		0.08	0.5	0.009	0.014
		0.12	0.55	0.01	0.016
		0.14	0.54	0.008	0.01
		0.16	0.46	0.009	0.022
		0.18	0.49	0.018	0.02
UNKNOWN	ESW	0.24	0.37	0.015	0.017
492L4871 & A421B27AF	SMAW	0.03	0.98	0.02	0.02
492L4871 & A421B27AE	SMAW	0.04	0.95	0.018	0.025
		0.08	0.63	0.012	0.015
		0.09	0.7	0.007	0.012
		0.09	0.7	0.007	0.02
5P6756/0342	LINDE 124	0.09	0.92	0.01	0.012
5P6756/0342	LINDE 124	0.09	0.93	0.01	0.011
		0.09	0.09	0.01	0.015
		0.1	0.12	0.01	0.021
		0.11	0.08	0.006	0.019
		0.12	0.09	0.007	0.019
		0.12	0.1	0.012	0.02
		0.13	0.11	0.01	0.017
		0.14	0.15	0.015	0.02
		0.15	0.1	0.012	0.014
		0.15	0.25	0.009	0.017
34B009	LINDE 1092	0.19	0.98	0	0
W5214	LINDE 1092	0.208	1.01	0.021	0.014
86054B	ARCOS B-5	0.22	0.054	0.016	0.017
86054B	ARCOS B-5	0.22	0.054	0.016	0.017
86054B	ARCOS B-5	0.22	0.054	0.016	0.017
30B196/34B009	LINDE 1092	0.176	1.038	0.016	0.016
39B196 & 34B009	LINDE 1092	0.176	1.038	0.016	0.016
		0.19	0.48	0.01	0.018
		0.19	0.48	0.011	0.018
		0.19	0.49	0.012	0.018
34B009	LINDE 1092	0.192	1.038	0.012	0.016
34B009	LINDE 1092	0.192	1.038	0.012	0.016
		0.22	0.51	0.011	0.025
13253	LINDE 1092	0.221	0.732	0.023	0.014
		0.24	0.53	0.01	0.013

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.24	0.53	0.01	0.014
		0.11	0.57	0.01	0.016
		0.12	0.57	0.01	0.015
		0.12	0.58	0.012	0.014
		0.12	0.6	0.01	0.015
		0.12	0.62	0.015	0.011
		0.13	0.56	0.012	0.016
90099	LINDE 0091	0.197	0.06	0.021	0.013
21935 & 12008	LINDE 1092	0.213	0.867	0.015	0.011
21935 & 12008	LINDE 1092	0.213	0.867	0.015	0.011
13253 & 20291	LINDE 1092	0.219	0.735	0.019	0.012
13253 & 20291	LINDE 1092	0.219	0.735	0.019	0.012
4P6052	LINDE 0091	0.037	0.057	0.008	0.007
4P6052	LINDE 0091	0.037	0.057	0.008	0.007
4P6052	LINDE 0091	0.037	0.057	0.008	0.007
		0.045	0.61	0.012	0.012
		0.06	0.58	0.005	0.01
		0.06	0.58	0.007	0.012
		0.06	0.64	0.007	0.009
		0.07	0.59	0.007	0.01
		0.075	0.63	0.007	0.012
		0.13	0.76	0.02	0.016
		0.15	0.86	0.011	0.019
25295	SMIT 89	0.35	0.11	0.021	0.009
4278	SMIT 89	0.13	0.11	0.016	0.013
		0.13	0.74	0.018	0.018
		0.14	0.76	0.012	0.014
5P6771	LINDE 124	0.03	0.94	0.013	0.011
4P4784	LINDE 124	0.05	0.91	0.012	0.013
		0.08	0.47	0.005	0.014
		0.08	0.47	0.005	0.015
		0.09	0.46	0.007	0.015
		0.09	0.5	0.006	0.017
BOLA	SMAW	0.03	0.9	0.009	0.017
BOLA	SMAW	0.03	0.91	0.009	0.016
BOLA	SMAW	0.03	0.95	0.01	0.016
83637	LINDE 0091	0.04	0.06	0.01	0.011
83637	LINDE 0091	0.05	0.12	0.011	0.011
83637	LINDE 0091	0.06	0.11	0.01	0.011
90130	LINDE 0091	0.07	0.29	0.009	0.007
		0.1	0.56	0.008	0.014
		0.1	0.56	0.009	0.013
		0.1	0.58	0.008	0.012
		0.1	0.59	0.01	0.015
		0.1	0.62	0.013	0.013
		0.11	0.64	0.015	0.013
10137	LINDE 0091	0.23	1	0.012	0.01
90136	LINDE 0091	0.31	1	0	0
83650	LINDE 0091	0.04	0.08	0.006	0.01
83650	LINDE 0091	0.04	0.17	0.006	0.01
88114	LINDE 0091	0.04	0.19	0.007	0.005
88114	LINDE 0091	0.04	0.21	0.007	0.005
88114	LINDE 0091	0.04	0.21	0.007	0.005
		0.04	0.55	0.012	0.013
		0.04	0.57	0.01	0.013
90144	LINDE 124	0.05	0.04	0	0
88118	LINDE 0091	0.05	0.17	0	0
83650	LINDE 0091	0.05	0.21	0.006	0.01
		0.05	0.56	0.011	0.013
90069	LINDE 124	0.06	0.04	0.01	0.009
		0.06	0.58	0.011	0.012

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.06	0.58	0.011	0.013
		0.06	0.62	0.011	0.014
89476	LINDE 0091	0.022	0.071	0.004	0
89476	LINDE 0091	0.022	0.071	0.004	0.01
89476	LINDE 124	0.022	0.071	0.007	0
		0.04	0.61	0.008	0.013
		0.04	0.63	0.009	0
		0.05	0.61	0.006	0
		0.05	0.62	0.007	0
		0.05	0.66	0.007	0
		0.07	0.64	0.006	0
		0.03	0.63	0.002	0
		0.04	0.6	0.004	0
		0.04	0.61	0.003	0
		0.04	0.65	0.006	0
90209	LINDE 0091	0.044	0.126	0.009	0.006
90209	LINDE 124	0.044	0.126	0.01	0.011
90209	LINDE 124	0.044	0.126	0.01	0.011
		0.05	0.61	0.005	0
		0.05	0.64	0.006	0
		0.11	0.58	0.004	0.012
		0.11	0.64	0.004	0.01
		0.11	0.64	0.004	0.013
		0.12	0.58	0.004	0.01
		0.15	0.56	0.006	0.01
		0.15	0.57	0.006	0.01
A8746 & 34B009	LINDE 124	0.19	0.09	0.018	0.017
90136	LINDE 0091	0.27	0.07	0.013	0.012
305424	LINDE 1092	0.27	0.63	0.016	0.008
83637	LINDE 0091	0.05	0.07	0	0
83637	LINDE 0091	0.05	0.07	0	0
83637	LINDE 124	0.05	0.07	0	0
83642	LINDE 0091	0.05	0.09	0	0
		0.06	0.57	0	0
3P7317	LINDE 124	0.07	0.07	0	0
		0.07	0.6	0	0
		0.07	0.6	0	0
		0.11	0.61	0	0
		0.11	0.61	0	0
		0.13	0.62	0	0
4P4784	LINDE 124	0.05	0.91	0.013	0.012
		0.08	0.41	0.005	0.014
		0.08	0.41	0.005	0.015
		0.09	0.45	0.006	0.016
		0.1	0.51	0.009	0.015
		0.11	0.5	0.014	0.014
		0.11	0.5	0.014	0.014
		0.11	0.55	0.008	0.015
		0.11	0.55	0.008	0.015
		0.11	0.74	0.01	0.011
8T1554	LINDE 80	0.16	0.57	0.015	0.012
8T1554	LINDE 80	0.16	0.57	0.015	0.012
72445	LINDE 80	0.22	0.54	0.016	0.016
72445	LINDE 80	0.22	0.54	0.018	0.014
25017	LINDE 80	0.33	0.1	0	0
299L44	LINDE 80	0.34	0.68	0.013	0.017
		0.11	0.54	0.009	0.015
		0.11	0.54	0.012	0.014
		0.11	0.72	0.01	0.01
		0.12	0.6	0.012	0.014
		0.15	0.55	0.008	0.013

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
0227	LINDE 80	0.19	0.55	0.017	0.016
8T1762	LINDE 80	0.19	0.57	0.017	0.011
8T1762	LINDE 80	0.19	0.57	0.017	0.011
72445	LINDE 80	0.22	0.54	0.016	0.016
4275	LINDE 80	0.35	0.1	0	0
402C4371 & C115A27A	SMAW	0.02	0.92	0.009	0.014
412P3611 & J417B27AF	SMAW	0.03	0.93	0.016	0.019
411L3071 & L311A27AF	SMAW	0.03	0.93	0.016	0.019
402K9171 & K315A27AE	SMAW	0.03	0.98	0.005	0.016
401S0371 & B504B27AE	SMAW	0.03	1.04	0.013	0.012
629616 & L320A27AG	SMAW	0.04	0.99	0.015	0.018
494K2351 & L307A27AD	SMAW	0.04	1.1	0.015	0.017
		0.09	0.53	0.009	0.019
		0.1	0.63	0.009	0.015
		0.12	0.48	0.01	0.01
		0.13	0.51	0.011	0.016
		0.14	0.48	0.01	0.019
		0.14	0.5	0.008	0.016
402C4371 & C115A27A	SMAW	0.02	0.92	0.009	0.014
09M057 & C109A27A	LINDE 124	0.03	0.89	0.009	0.021
412P3611 & J417B27AF	SMAW	0.03	0.93	0.016	0.019
411L3071 & L311A27AF	SMAW	0.03	0.93	0.016	0.019
402K9171 & K315A27AE	SMAW	0.03	0.98	0.015	0.016
401S0371 & B504B27AE	SMAW	0.03	1.04	0.013	0.012
629616 & L320A27AG	SMAW	0.04	0.99	0.015	0.018
659N315 & F414B27AF	SMAW	0.04	1	0.015	0.013
494K2351 & L307A27AD	SMAW	0.04	1.1	0.015	0.017
624263 & E204A27A	SMAW	0.06	0.89	0.01	0.023
		0.1	0.56	0.011	0.006
		0.1	0.58	0.012	0.01
		0.1	0.63	0.009	0.015
		0.11	0.55	0.012	0.006
		0.13	0.64	0.006	0.015
		0.13	0.68	0.007	0.011
		0.08	0.72	0.006	0.008
		0.09	0.57	0.01	0.017
		0.09	0.57	0.01	0.017
		0.11	0.5	0.012	0.013
		0.12	0.55	0.01	0.016
8T1762	LINDE 80	0.19	0.57	0.009	0.009
72105	LINDE 80	0.32	0.58	0.018	0.009
299L44	LINDE 80	0.34	0.68	0.013	0.017
299L44	LINDE 80	0.34	0.68	0.015	0.016
299L44	LINDE 80	0.34	0.68	0.015	0.016
		0.06	0.7	0.01	0.01
		0.08	0.68	0.01	0.008
		0.11	0.68	0.01	0.013
71249	LINDE 80	0.23	0.59	0.021	0.014
72442	LINDE 80	0.26	0.6	0.018	0.015
		0.05	0.68	0.01	0.01
		0.06	0.74	0.01	0.009
		0.11	0.7	0.01	0.012
71249	LINDE 80	0.23	0.59	0.021	0.014
72442	LINDE 80	0.26	0.6	0.021	0.016
72105	LINDE 80	0.32	0.58		
UNKNOWN	SMAW	0.04	1	0	0
		0.11	0.63	0.014	0
		0.12	0.61	0	0
		0.13	0.59	0	0
		0.14	0.66	0	0
83653	LINDE 0091	0.042	0.102	0.008	0.009

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.053	0.593	0.005	0.01
		0.057	0.6	0.009	0.016
		0.062	0.598	0.01	0.013
		0.067	0.623	0.007	0.012
		0.083	0.597	0.004	0.011
		0.083	0.61	0.004	0.011
		0.05	0.59	0.009	0.014
		0.05	0.6	0.009	0.012
87005	LINDE 0091	0.054	0.151	0.007	0.011
87005	LINDE 124	0.054	0.151	0.008	0.012
		0.06	0.61	0.009	0.009
		0.06	0.62	0.006	0.014
		0.07	0.63	0.007	0.012
		0.07	0.63	0.009	0.01
		0.02	0.67	0.006	0.007
		0.02	0.7	0.007	0.009
		0.02	0.71	0.004	0.01
BOLA & HODA	SMAW	0.02	0.96	0.01	0.016
83653	LINDE 0091	0.03	0.2	0.007	0.009
		0.03	0.58	0.005	0.005
		0.03	0.62	0.006	0.008
		0.03	0.62	0.007	0.007
88114	LINDE 0091	0.05	0.16	0.008	0.008
895075	GRAU LO	0.05	0.7	0.01	0.01
		0.08	0.83	0.006	0.01
		0.17	0.8	0.012	0.016
3P4966	LINDE 124	0.02	0.92	0.011	0.014
3P4966	LINDE 124	0.02	0.92	0.011	0.014
3P4955	LINDE 124	0.023	0.95	0	0
3P4966	LINDE 124	0.03	0.88	0.011	0.014
3P4955	LINDE 124	0.03	0.9	0	0
3P4966	LINDE 124	0.03	0.9	0.011	0.014
5P6756	LINDE 124	0.08	0.93	0	0
5P6756	LINDE 124	0.09	0.92	0	0
		0.13	0.5	0.017	0.013
		0.14	0.5	0.017	0.014
		0.14	0.6	0.014	0.018
		0.14	0.6	0.014	0.018
		0.15	0.51	0.018	0.013
		0.15	0.51	0.018	0.013
		0.15	0.6	0.013	0.02
		0.15	0.6	0.013	0.02
90146	LINDE 0091	0.04	0.08	0.005	0.011
90146	LINDE 124	0.04	0.08	0.007	0.011
		0.04	0.64	0.007	0
		0.04	0.66	0.008	0
		0.05	0.63	0.007	0
		0.06	0.64	0.008	0
		0.07	0.62	0.008	0.01
		0.09	0.67	0.009	0
		0.06	0.35	0	0.012
		0.12	0.49	0.01	0.011
		0.12	0.49	0.01	0.015
		0.13	0.48	0.013	0.016
		0.15	0.5	0.01	0.014
8T1762	LINDE 80	0.2	0.55	0.009	0.009
8T1762	LINDE 80	0.2	0.55	0.017	0.011
406L44	LINDE 80	0.31	0.59	0.013	0.016
72105	LINDE 80	0.35	0.59	0.018	0.009
		0.09	0.66	0.008	0.005
		0.12	0.51	0.01	0.014

HEATWIRE	FLUXTYPE	%Cu	%Ni	%P	%S
		0.12	0.53	0.01	0.016
		0.12	0.54	0.01	0.015
		0.14	0.52	0.008	0.014
821T44	LINDE 80	0.24	0.63	0.01	0.015
72102	LINDE 80	0.25	0.63	0	0
71249	LINDE 80	0.26	0.61	0.02	0.014
72105	LINDE 80	0.35	0.59	0.018	0.009

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
20	64.8	0.476	0.79	3	86.48
105.6	34	0.517	0.858	0	135.06
105.6	34	0.525	0.871	-10	125.48
122.75	34	0.517	0.858	-10	141.47
122.75	34	0.525	0.871	-10	141.96
152.35	68.47	0.365	0.606	-5	194.49
152.35	68.47	0.366	0.607	-5	194.49
158.3	48.34	0.476	0.79	-5	191.19
182.55	68.47	0.504	0.835	-5	236.71
34.13	56	3.278	5.26	-10	94.19
33.97	65.51	3.278	5.26	-56	57.48
33.97	65.51	3.278	5.26	-56	57.48
51	34	3.278	5.26	-30	76.01
53.1	34	3.278	5.26	-28	80.98
54.5	34	3.278	5.26	12	122.95
54.5	34	3.278	5.26	0	110.95
62.2	34	3.278	5.26	0	121.83
63.64	34	3.278	5.26	-26	97.86
98.31	56	0.447	0.717	-60	85.17
98.65	34	1.885	3.024	20	181.55
100.5	34	1.952	3.132	43	207.75
100.5	34	1.952	3.132	73	237.75
159.86	34	1.885	3.024	27	267.7
123.72	65.51	1.885	3.024	-56	169.48
198.42	44.05	0.449	0.721	-56	168.22
209.11	65.51	0.449	0.721	-56	199.38
15.17	16	0.754	1.21	-30	1.97
15.17	20.4	2.4	3.85	-30	10.85
35.46	17	2.4	3.85	40	104.8
44	34	2.4	3.85	60	153.31
44	34	2.4	3.85	33	126.31
51	34	2.4	3.85	28	130.75
80.72	38.01	3.622	5.011	30	181.26
80.72	38.01	3.622	5.011	30	181.26
80.72	38.01	3.622	5.011	30	181.26
87.97	38.01	3.622	5.011	30	191.43
138	65.51	3.622	5.011	-56	203.12
138	65.51	3.622	5.011	-56	203.12
21.15	18.9	1.345	2.239	40	84.66
26	20.9	0.299	0.498	10	51.83
22.02	17	1.345	2.239	-20	23.82
56.66	45.6	0.299	0.498	-25	66.21
31	34	1.345	2.239	-30	41.76
154.8	17	0.006	0.01	-40	-5.969999
21.15	18.8	1.32	2.199	40	84.48
20	24.3	1.32	2.199	-30	18.58
51.4	5.7	0.006	0.01	-16	-4.65
26	20	0.261	0.435	30	69.99
56.66	43.6	0.261	0.435	-25	62.17
34.6	34	1.32	2.199	-30	46
51	18.6	0.052	0.0762	2	39.22
58	21.2	0.052	0.0762	30	72.37
81.6	29.8	0.052	0.0762	14	73.58
95.5	34	0.052	0.0762	-10	58.86
100	34	0.052	0.0762	-20	50.5
101.2	34	0.052	0.0762	-20	50.94
140.55	57.5	0.052	0.0762	23.1	131.9
184	59.5	0.052	0.0762	20	146.66
116.75	50.9	0.076	0.11	-40	61.8
73	31.8	0.076	0.11	-10	53.63
88.3	34	0.076	0.11	0	72.5

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
97.75	34	0.076	0.11	-10	66.62
112.4	34	0.076	0.11	-20	63.01
112.4	34	0.076	0.11	-10	73.00999
116.8	34	0.076	0.11	-20	64.92
140.55	59.46	0.076	0.11	23.1	143.84
117.45	51.2	0.076	0.11	-40	62.41
65	28.3	0.076	0.11	-20	36.64
88.3	34	0.076	0.11	-20	52.5
90.4	34	0.076	0.11	-20	53.41
91	34	0.076	0.11	-20	53.68
101.5	34	0.076	0.11	-4	74.25
105.6	34	0.076	0.11	10	90.04
140.55	59.46	0.076	0.11	23.1	143.84
68	27.3	0.067	0.09263	10	64.64
82	35.2	0.077	0.10619	10	80.38
74	31.8	0.077	0.10619	10	73.55
82.2	34	0.099	0.13556	10	83.46
82.6	34	0.077	0.10619	34	103.44
123.2	34	0.038	0.05196	48	118.84
123.2	34	0.038	0.05196	48	118.84
139.8	34	0.099	0.13556	10	111.1
27	11.4	0.074	0.102	10	32.77
68	26.8	0.065	0.08899	10	63.59
74	31.2	0.074	0.10201	10	72.35
82.4	34	0.095	0.13022	10	82.89
83	34	0.095	0.13022	10	83.18
106.7	34	0.074	0.10201	10	88.92
123.2	34	0.036	0.04992	40	109.97
123.2	34	0.036	0.04992	40	109.97
15.48	13.1	0.35	0.583	10	36.24
54.78	28	1.171	1.95	-30	62.75
26	30.7	1.171	1.95	10	71.43
30.31	34	1.171	1.95	40	109.83
31	26.3	0.35	0.583	30	82.62
154.8	17	0.006	0.01	10	44.03
20	23.8	1.195	1.99	-20	27.56
15.48	12.5	0.302	0.503	40	65.01
54.78	28	1.177	1.96	10	102.86
31	25	0.302	0.503	10	60.05
37	34	1.195	1.99	-20	57.96
154.8	17	0.006	0.01	40	74.03
43.65	56	1.226	2.042	-60	48.16
43.65	56	0.701	1.167	-60	41.53
43.65	56	1.245	2.074	-60	48.34
31	34	1.245	2.074	40	111.17
37	34	1.245	2.074	10	88.36
37	34	1.245	2.074	10	88.36
37	34	1.245	2.074	-10	68.36
26.26	17	1.245	2.074	50	98.49
51	34	1.245	2.074	20	115.15
73.3	34	2.949	4.95	-20	116.62
73.5	34	2.949	4.95	20	156.9
73.6	34	2.949	4.95	-10	127.04
83.54	17	2.949	4.95	-30	103.96
83.54	17	2.949	4.95	10	143.96
89.2	34	2.949	4.95	10	168.88
173.8	65.51	2.949	4.95	-56	252.83
169.3	56	2.949	4.95	-50	243.02
75	28	2.949	4.95	-80	53
73.6	34	3.44	5.77	10	149.25
76.1	34	3.44	5.77	-16	126.82

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
97.75	34	3.44	5.77	5	178.78
91.03	17	3.44	5.77	20	167.17
107.8	34	3.44	5.77	10	198.15
110	34	3.44	5.77	-8	183.3
79	65.51	3.44	5.77	-56	122.48
76.91	28	3.44	5.77	-60	77.98
75	28	3.44	5.77	-80	55.25
16.99	20.2	1.192	1.98	-51	-10.65
31	34	1.192	1.98	-13	57.77
28.39	17	1.192	1.98	-8	42.67
35.14	28	1.21	2.01	-80	-10.18
35.14	28	1.21	2.01	-80	-10.18
28.5	34	1.21	2.01	12	79.92
35.2	34	1.21	2.01	6	81.89
35.2	34	1.21	2.01	8	83.89
35.2	34	1.21	2.01	-10	65.89
51	34	1.21	2.01	33	127.69
44	17	1.21	2.01	15	84.36
27	24.192	0.493	0.69	-60	-11.618
31.2	28	0.493	0.69	-20	35.96
34	30.5	0.493	0.69	-20	40.96
41	36.736	0.493	0.69	-60	13.476
41	36.736	0.493	0.69	-60	13.476
41	36.736	0.493	0.69	-50	23.476
41	36.7	0.493	0.69	-40	33.44
31	27.776	0.493	0.69	-20	35.556
37	33.152	0.493	0.69	-30	36.302
44	34	0.493	0.69	-20	53.42
108	56	0.493	0.69	-60	92.77
65.4	21.974	0.046	0.065	-10	33.944
135	56	0.493	0.69	-30	146.96
74.9	25.166	0.046	0.065	-30	20.336
46	59.5	1.811	3.04	-70	49.02
46	59.5	1.811	3.04	-70	49.02
46	59.5	1.811	3.04	-70	49.02
31	34	1.811	3.04	20	94.11
31	34	1.811	3.04	10	84.11
37	34	1.811	3.04	-10	71.88
37	34	1.811	3.04	10	91.88
44	34	1.811	3.04	0	90.94
51	34	1.811	3.04	0	99.99
20	25.88	1.811	3.04	0	51.76
26	33.6	1.811	3.04	-40	27.24
31.51	40.8	1.811	3.04	-60	21.57
31.51	40.8	1.811	3.04	-50	31.57
31.51	40.8	1.811	3.04	-50	31.57
31	34	1.811	3.04	-30	44.11
31	34	1.811	3.04	-20	54.11
37	34	1.811	3.04	-20	61.88
37	34	1.811	3.04	10	91.88
81.4	34	0.847	1.41	5	128.13
82.8	34	0.847	1.41	-12	112.67
93.25	34	0.066	0.11	34	108.66
93.7	34	0.066	0.11	2	76.85
94.6	34	0.066	0.11	40	115.25
95.5	34	0.847	1.41	38	176.57
97.75	34	0.847	1.41	28	169.04
104.76	17	0.847	1.41	40	171.71
104.76	17	0.847	1.41	40	171.71
208.68	65.51	0.066	0.11	-56	100.49
208.68	65.51	0.57	0.95	-56	215.27

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
208.68	65.51	0.57	0.95	-56	215.27
188.4	65.51	0.066	0.11	-56	91.65
216.57	44.05	0.847	1.41	-56	225.19
64.41	56	0.395	0.663	-35	78
64.41	56	0.537	0.902	-35	83.54
64.41	56	1.019	1.71	-35	94.94
74.6	34	1.019	1.71	-20	99.64
102.61	34	1.019	1.71	38	189.8
99.55	34	1.019	1.71	-20	128.28
108.35	34	1.019	1.71	58	216.39
92.25	34	0.115	0.16	-10	71.69
125.3	34	0.115	0.16	10	108.78
153	34	0.079	0.11	-8	92.71
153	34	0.079	0.11	14	114.71
175.3	56	0.079	0.11	-50	82.43
162.8	34	0.079	0.11	0	104.98
314.77	17	0.115	0.16	-20	159.74
231.06	56	0.115	0.16	-50	125.46
254.42	56	0.079	0.11	-50	116.93
82.6	34	0.639	1.06	-10	107.92
82.6	34	0.639	1.06	45	162.92
94	70.71	0.486	0.806	3	161.98
158.95	68.47			-5	
152.35	68.47	0.6	0.996	-5	215.67
152.35	68.47	0.536	0.89	-5	210.79
115.78	17	0.639	1.06	20	154.63
141.8	34	0.639	1.06	20	198.07
167.55	56	0.486	0.806	10	223.33
199.3	56	0.639	1.06	-26	232.49
20	20.4	0.645	1.07	50	90.78
26	13.078	0.09	0.15	50	76.158
26	26.494	0.645	1.07	20	72.984
157.3	68.47	0.09	0.15	-5	142.59
172.25	39.5			-5	
158.3	28	0.645	1.07	2	191.31
65	34	0.853	1.42	30	135.31
82.2	34	0.853	1.42	-22	102.17
82.2	34	0.853	1.42	20	144.17
88	34	0.853	1.42	-3	127.54
89.8	34	0.853	1.42	15	147.51
96.85	34	0.853	1.42	-10	130.24
172.22	65.51	0.853	1.42	-56	198.44
226.81	65.51	0.314	0.523	-56	195.27
226.81	65.51	0.485	0.808	-56	222.71
226.81	65.51	0.598	0.996	-56	236.09
226.81	65.51	0.853	1.42	-56	258.32
26.85	45.1	0.871	1.45	-56	18.72
65.2	34	0.871	1.45	15	120.92
98.2	34	0.871	1.45	-15	127.31
98.2	34	0.871	1.45	0	142.31
99.55	34	0.871	1.45	67	210.8
102.49	17	0.871	1.45	52	182.05
110.5	34	0.871	1.45	33	188.88
211.76	28	0.435	0.724	-50	170.49
211.76	28	0.462	0.77	-50	174.3
211.76	28	0.551	0.918	-50	184.68
126.26	65.51	0.435	0.724	-56	124.28
126.26	65.51	0.462	0.77	-56	126.55
126.26	65.51	0.551	0.918	-56	132.74
65	15.86	0.025	0.036	10	41.72
138.2	52.3	0.025	0.036	-5	81.02

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
138.2	52.3	0.025	0.036	-5	81.02
157.6	55.5	0.025	0.036	-5	88.95
125.45	30.6	0.025	0.036	12	73.21
143	34	0.025	0.036	10	78.89
143	34	0.025	0.036	30	98.89
146.6	34	0.025	0.036	-2	67.77
147.8	34	0.025	0.036	6	76.06
159.75	34	0.025	0.036	20	92.98
167.55	40.9	0.025	0.036	10	91.78
140.55	43	0.025	0.036	23.1	100.39
140.55	43	0.025	0.036	23.1	100.39
73	21.608	0.035	0.051	-10	33.218
103.95	30.769	0.035	0.051	10	71.539
146.15	34	0.035	0.051	10	87.25999
147.5	34	0.035	0.051	10	87.66
151.05	34	0.035	0.051	10	88.71
140.55	49.1	0.035	0.051	23.1	113.8
153.15	34	0.035	0.051	0	79.33
220.6	68.82	0.035	0.051	-5	129.12
21	15.1	0.275	0.36	-50	-19.82
43	26.8	0.191	0.25	-50	3.629999
43	26.8	0.191	0.25	-50	3.629999
43	28	0.275	0.36	-50	8.870001
43	26.8	0.191	0.25	-50	3.629999
86	17	0.191	0.25	40	110.66
130	17	0.191	0.25	40	138.12
164.76	17	0.275	0.36	10	145.3
165	17	0.275	0.36	10	145.47
82.2	34	2.705	4.34	10	156.94
91	34	2.705	4.34	0	159.03
97.75	34	2.705	4.34	15	183.31
98.2	34	2.705	4.34	5	173.93
91.39	65.51	0.841	1.35	-56	108.49
98.4	65.51	2.705	4.34	-56	144.71
121.06	44.05	0.841	1.35	-56	119.16
8.94	9.8	0.873	1.4	-60	-40.43
36.8	52.6	0.873	1.4	-56	36.82
37.34	40.8	0.873	1.4	-70	11.61
89.8	34	2.736	4.39	18	175.56
98.65	34	2.736	4.39	10	179.74
100	34	2.736	4.39	15	186.6
74.13	56	2.736	4.39	-40	118
143.84	17	2.736	4.39	-10	204.92
51	17.136	0.045	0.065	-10	24.276
58	19.488	0.045	0.065	-12	26.978
65	21.84	0.045	0.065	-16	27.68
73.7	24.763	0.045	0.065	-10	39.523
82.2	27.619	0.045	0.065	-10	45.239
83.15	27.938	0.045	0.065	-20	35.878
83.15	27.938	0.045	0.065	-12	43.878
236	56	0.045	0.065	-50	85.3
223.9	56	0.045	0.065	-44	87.23
188.5	56	0.045	0.065	-50	69.34
73.6	34	0.109	0.161	-10	62.2
29.35	16	0.123	0.181	-10	22.03
81	34	0.123	0.181	-10	68.23
91	34	0.109	0.161	24	105.23
98.65	34	0.109	0.161	-2	83.2
131.15	34	0.123	0.181	-18	87.61
208.68	56	0.123	0.181	-50	119.94
231.06	56	0.109	0.161	-48	127.92

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
209.11	56	0.109	0.161	-50	114.53
72.03	17	1.612	2.408	18	124.1
65	34	1.612	2.408	0	114.4
65	34	1.612	2.408	0	114.4
73.1	34	1.612	2.408	0	124.42
82.2	34	1.612	2.408	0	135.68
83	34	1.612	2.408	0	136.67
89.03	65.51	1.021	1.526	-56	108.96
226.81	65.51	1.021	1.526	-56	262.86
208.68	65.51	1.021	1.526	-56	242.61
188.4	65.51	1.612	2.408	-56	242.56
231.06	65.51	1.021	1.526	-56	267.6
189.05	65.51	1.021	1.526	-56	220.68
28.14	17	2.492	3.68	40	94.65
44	34	2.492	3.68	20	112.87
158.66	5.2	0.001	0.002	-4.8	5.639999
158.66	48.3	2.363	3.49	-4.8	253.88
181.6	56	0.252	0.372	10	198.02
223.6	34	0.25	0.369	30	225.89
27	16.8	0.172	0.25	-40	-6.35
41	25.6	0.172	0.25	-20	31.18
26	16.2	0.172	0.25	-30	2.42
26	16.2	0.172	0.25	-10	22.42
26	16.2	0.172	0.25	0	32.42
26	16.2	0.172	0.25	0	32.42
82	51.2	0.172	0.25	-30	72.37
50.24	17	5.054	9.65	-8	84.81
58	34	2.2	4.2	-20	93.29
62	34	2.2	4.2	10	128.75
62	34	2.2	4.2	34	152.75
68.68	17	5.054	9.65	10	130.64
67	34	2.111	4.03	20	144.99
51.89	17	5.054	9.65	10	105.3
75	34	2.111	4.03	8	143.85
80	34	2.111	4.03	10	152.64
104.5	65.51	2.2	4.2	-56	152.36
104.5	65.51	1.901	3.63	-56	149.02
104.5	65.51	1.828	3.49	-56	148.08
104.5	65.51	4.373	8.35	-56	165.22
112	65.51	2.111	4.03	-56	161.61
90.4	34	0.14	0.194	-20	64.8
92	34	0.096	0.132	8	85.7
92	34	0.096	0.132	10	87.7
245	34	0.14	0.194	-20	151.69
98.65	34	0.096	0.132	-10	70.86
127.5	34	0.14	0.194	-20	85.65
91.39	43.4	0.096	0.132	-10	76.81
189.05	56	0.096	0.132	-50	95.8
126.26	56	0.096	0.132	-50	65.97
205.6	56	0.14	0.194	-50	121.55
218.63	56	0.14	0.194	-50	128.87
30.74	14.9	0.101	0.139	-50	-20.16
51	24.8	0.101	0.139	0	49.59
51	30	0.157	0.217	-20	40.04
51	24.8	0.101	0.139	-20	29.59
51	30	0.157	0.217	-10	50.04
51	24.8	0.101	0.139	24	73.59
72.8	34	0.157	0.217	-4	72.88
67.83	40	0.157	0.217	-50	29.95
98.31	47.8	0.101	0.139	-50	45.58
20	5.8	0.034	0.0494	-31	-19.38

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
20	5.2	0.028	0.0405	-31	-20.58
20	5.2	0.028	0.0405	-49	-38.58
20	5.8	0.034	0.0494	-49	-37.38
27	7	0.028	0.0405	-40	-25.95
44	15.9	0.052	0.075	-10	21.83
44	15.9	0.052	0.075	-10	21.83
51	18.5	0.052	0.075	19	55.96
51	18.5	0.052	0.075	1	37.96
105.2	38.1	0.052	0.075	-30	46.18
105.2	38.1	0.052	0.075	-30	46.18
105.2	30.6	0.034	0.0494	-49	12.21
108.7	39.3	0.052	0.075	-40	38.65
108.7	31.6	0.034	0.0494	-40	23.23
108.7	31.6	0.034	0.0494	-40	23.23
108.7	39.3	0.052	0.075	-40	38.65
58	21	0.052	0.075	-11	31
58	16.9	0.034	0.0494	19	52.78
58	21	0.052	0.075	7	49
65	18.9	0.034	0.0494	19	56.82
126.4	36.8	0.034	0.0494	-49	24.58
126.4	36.8	0.034	0.0494	-40	33.58
86	22.4	0.028	0.0405	-20	24.85
105.1	27.4	0.028	0.0405	-20	34.83
112.75	32.8	0.034	0.0494	19	84.61
113.5	17	0.721	1.21	21	157.52
128.8	34	0.721	1.21	-20	149.63
221.26	65.51	0.722	1.211	-56	242.5
182.66	17	0.722	1.211	21	230.34
152	34	0.721	1.21	20	214.06
102.77	17	0.721	1.21	34	159.22
242.07	44.05	0.501	0.84	-56	218.26
242.07	44.05	0.509	0.853	-56	219.23
127.7	34	0.612	1.04	49	212.1
221.26	65.51	0.659	1.121	-56	237.85
221.26	65.51	0.659	1.121	-56	237.85
135.8	34	0.612	1.04	17	188.29
137	34	0.612	1.04	5	177.51
150.2	34	0.612	1.04	-5	180.85
151.55	34	0.612	1.04	-4	183.22
189.05	56	0.659	1.121	-54	197.1
168.19	17	0.659	1.121	74	264.57
37	34	2.261	3.34	60	142.69
37	34	2.261	3.34	20	102.69
219.8	44.05	2.261	3.34	-56	277.31
73.8	20.4	0.029	0.045	14	54.77
73.9	20.4	0.029	0.045	23	63.8
81.2	22.4	0.029	0.045	-20	24.81
81.8	22.6	0.029	0.045	-10	35.18
83.9	23.2	0.029	0.045	10	56.36
93	25.7	0.029	0.045	-10	41.37
103.95	28.7	0.029	0.045	-20	37.39
104.5	34	0.029	0.045	-10	52.84
105.05	34	0.029	0.045	-20	42.99
83.8	23.1	0.029	0.045	-60	-13.77
177.2	56	0.029	0.045	-50	54.91
233.38	56	0.029	0.045	-50	70.41
239	56	0.029	0.045	-50	71.96
249	56	0.029	0.045	-50	74.72
200.2	56	0.029	0.045	-50	61.26
209.11	56	0.029	0.045	-50	63.71
241	56	0.029	0.045	-30	92.52

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
27	9.018	0.044	0.064	-50	-31.962
41	13.694	0.044	0.064	-6	21.384
54	18.036	0.044	0.064	-34	2.076
44	14.696	0.044	0.064	52	81.396
58	19.372	0.044	0.064	10	48.742
73	24.382	0.044	0.064	10	58.762
81	27.054	0.044	0.064	10	64.104
81.2	27.121	0.044	0.064	30	84.241
81.2	27.121	0.044	0.064	32	86.241
27	15	0.13	0.188	-50	-20.01
41	22.8	0.13	0.188	-20	25.56
41	22.8	0.13	0.188	-36	9.559999
41	22.8	0.13	0.188	-6	39.56
72.2	40.1	0.13	0.188	-50	30.17
73.6	40.8	0.13	0.188	-42	39.65
112.2	56	0.13	0.188	-60	58.27
122	56	0.13	0.188	-60	63.71
72.8	34	0.13	0.188	10	84.4
72.8	34	0.13	0.188	10	84.4
72.8	34	0.13	0.188	10	84.4
73	34	0.13	0.188	20	94.52
81.2	34	0.13	0.188	10	89.07
81.2	34	0.13	0.188	10	89.07
20	11.1	0.13	0.188	-34	-11.8
41	22.8	0.13	0.188	-20	25.56
41	22.8	0.13	0.188	-36	9.559999
41	22.8	0.13	0.188	-6	39.56
54	30	0.13	0.188	-12	47.97
122	56	0.13	0.188	-60	63.71
73.1	34	0.13	0.188	10	84.57
73.6	34	0.13	0.188	10	84.85
73.6	34	0.13	0.188	10	84.85
90.4	34	0.13	0.188	10	94.17
101.25	34	0.13	0.188	40	130.19
110	34	0.13	0.188	22	117.05
83.3	34	1.073	1.8	0	130.71
92.25	34	1.073	1.8	0	141.1
119.52	17	1.073	1.8	-10	145.76
89.45	65.51	0.882	1.48	-56	108.71
123.6	34	1.073	1.8	0	177.5
206.4	65.51	0.882	1.48	-56	238.41
168.7	34	1.073	1.8	2	231.86
173.9	34	1.073	1.8	-20	215.9
240.99	44.05	1.073	1.8	-56	267.84
37.34	44.2	1.169	1.96	-70	18.41
65	34	1.169	1.96	30	140.96
65	34	1.169	1.96	15	125.96
62.63	17	1.169	1.96	34	125.15
74.9	34	1.169	1.96	-13	109.68
99.1	34	1.169	1.96	0	151.33
100.25	34	1.169	1.96	0	152.7
150.31	28	1.037	1.74	-50	151.16
209.22	28	1.037	1.74	-50	219.02
39.59	28	1.159	1.93	-68	6.720001
115.8	34	1.159	1.93	-30	140.64
84.68	17	1.159	1.93	-4	112.92
236.44	17	0.092	0.129	26	154.13
135.5	34	0.092	0.129	20	117.68
140.7	34	0.092	0.129	-4	96.13
200.8	28	0.092	0.129	-50	72.38
252	56	0.092	0.129	-20	154.44

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
252	56	0.092	0.129	-20	154.44
146.15	17	0.092	0.129	6	91.69
143.8	17	0.092	0.129	22	106.59
155.4	34	0.092	0.129	10	117.04
91.25	34	1.365	2.29	8.1	153.79
91.5	34	1.502	2.52	5	153.19
91.5	34	1.365	2.29	17.5	163.5
101.5	34	1.431	2.4	-19.2	140.25
77.7	65.51	1.163	1.95	-56	101.35
77.7	65.51	1.163	1.95	-56	101.35
110	34	1.431	2.4	7	176.96
110.25	34	1.431	2.4	-33.7	136.57
100	56	0.212	0.355	-60	67.4
100	56	1.431	2.4	-56.3	123.3
126.26	56	0.212	0.355	-80	66.15
124.25	56	1.431	2.4	-56.3	153.27
31.75	56	1.82	3.03	-50	47.05
31	34	1.82	3.03	60	134.08
31	34	1.82	3.03	6.2	80.28
31	34	1.82	3.03	-3.3	70.78
37	34	1.82	3.03	18.6	100.44
44	34	1.82	3.03	38.8	129.69
51	34	1.82	3.03	7	106.94
134.9	61.49	0.377	0.511	-65.6	105.56
98.2	34	0.377	0.511	0	113.84
118.5	34	0.377	0.511	6	136.34
128.25	34	0.377	0.511	27	165.27
128.25	34	0.377	0.511	27	165.27
130.09	34	0.088	0.135	-3	93.44
130.09	34	0.088	0.135	-3	93.44
134.6	34	0.131	0.201	28	138.86
97.59	56	0.131	0.201	-50	61.72
97.59	56	0.131	0.201	-50	61.72
99.93	56	0.131	0.201	-50	63.06
148.85	34	0.131	0.201	20	138.99
228.36	17	0.088	0.135	36	162.61
173.85	34	0.131	0.201	40	173.27
22.8	9	0.061	0.09	-40	-21.97
27	10.7	0.061	0.09	-60	-38.61
27	10.7	0.061	0.09	-60	-38.61
27	10.7	0.061	0.09	-50	-28.61
47.5	18.8	0.061	0.09	-80	-42.39
54	21.4	0.061	0.09	-60	-17.22
61	24.2	0.061	0.09	-50	-1.639999
37	14.7	0.061	0.09	-10	19.35
37	14.7	0.061	0.09	10	39.35
44	17.4	0.061	0.09	-20	14.82
95	37.6	0.061	0.09	-60	15.22
58	23	0.061	0.09	0	45.97
74.45	29.5	0.061	0.09	0	58.98
74.45	29.5	0.061	0.09	0	58.98
56.22	56	2.443	3.92	19	151.01
92.38	59.76	0.085	0.136	0	104.19
86	34	2.462	3.95	17	167.36
121.5	69	0.085	0.136	6	133.44
82.9	34	2.462	3.95	38	184.16
145.74	48.83	0.085	0.136	0	118.93
8.06	10.9	2.498	3.96	-48	-26.19
51	65.2	0.093	0.148	9	99.7
34.85	34	2.498	3.96	75	156.19
63	50.9	0.093	0.148	0	82.4

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
96	34	2.498	3.96	56	219.98
87.8	59.32	0.093	0.148	0	103.22
65	63.64	0.562	0.932	1	128.34
74.45	63.64	0.56	0.93	1	137.6
74.45	63.64	0.56	0.93	1	137.6
83	63.64	0.562	0.932	1	145.98
104.5	63.64	0.505	0.838	1	163.91
119.25	70.71	0.048	0.079	3	117.95
152.35	68.47	0.479	0.794	-5	205.92
152.35	68.47	0.462	0.767	-5	204.55
152.35	68.47	0.462	0.767	-5	204.55
170.6	68.47	0.395	0.655	-5	213.77
146	48.34	0.542	0.899	-5	184.96
142.6	48.34	0.048	0.079	-5	96.24001
167.55	56	0.509	0.844	10	225.51
220.6	69.52			-7	
20	19.4	0.538	0.893	20	58.76
26	25.2	0.544	0.902	20	70.45
95	70.71	0.503	0.835	3	163.87
182.55	68.47	0.503	0.835	-5	236.71
220.6	68.47	0.524	0.87	-7	273.47
47.38	34	0.536	0.89	40	119.82
32.55	17	0.535	0.888	40	88.48
96	70.71	0.486	0.807	3	163.95
158.4	48.34	0.486	0.807	-5	192.24
180	68.47	0.518	0.859	-5	235.73
199.3	56			-26	
79.45	42.3	0.244	0.374	30	130.14
79.45	44.3	0.244	0.374	21	123.14
120.7	42.6	0.244	0.374	8	138.47
138.2	42.4	0.244	0.374	31	174.01
139.4	40.2	0.244	0.374	17	158.68
112	56	0.244	0.374	-50	87.54
173.85	43.9	0.244	0.374	3	173.46
168	56	0.244	0.374	-8	170.3
168	56	0.244	0.374	-50	128.3
82	34	1.207	2.01	-25	106.58
128.8	34	1.207	2.01	0	187.27
131	34	1.207	2.01	-30	159.89
217.7	65.51	0.931	1.55	-56	253.55
226.81	65.51	1.249	2.08	-56	281.46
231.08	65.51	0.931	1.55	-56	268.55
231.08	65.51	0.931	1.55	-56	268.55
153.28	17	1.207	2.01	-5	194.4
153.28	17	1.207	2.01	-5	194.4
160.4	34	1.207	2.01	-30	194.88
20	26.24	1.681	3.29	-40	12.48
20	26.24	1.681	3.29	-20	32.48
28.73	37.74	1.681	3.29	-70	5.43
29.32	38.5	1.681	3.29	-80	-3.029999
26	34	1.681	3.29	-10	58.11
30.74	40.3	1.681	3.29	-50	30.63
37	34	1.681	3.29	40	122.54
37	34	1.681	3.29	40	122.54
44	34	1.681	3.29	30	121.73
20	26.24	1.681	3.29	10	62.48
20	26.24	1.681	3.29	-20	32.48
20	26.24	1.681	3.29	10	62.48
28.73	37.7	1.681	3.29	-30	45.39
26	34	1.681	3.29	0	68.11
26	34	1.681	3.29	10	78.11

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
31.51	41.3	1.681	3.29	-60	22.64
31	34	1.681	3.29	-60	14.67
41.17	54	1.681	3.29	-80	28.02
28.73	37.7	1.681	3.29	-70	5.389999
28.73	37.7	1.681	3.29	-50	25.39
28.73	37.7	1.681	3.29	-50	25.39
26	34	1.681	3.29	-20	48.11
26	34	1.681	3.29	-30	38.11
26	34	1.681	3.29	-40	28.11
26	34	1.681	3.29	0	68.11
26	34	1.681	3.29	-60	8.110001
31	34	1.681	3.29	-20	54.67
76.4	29.9	0.061	0.088	-32	27.85
73.4	28.8	0.061	0.088	-20	37.57
73.4	28.8	0.061	0.088	-14	43.57
81.4	31.9	0.061	0.088	-8	55.81
82.4	32.3	0.061	0.088	-20	44.6
82.4	32.3	0.061	0.088	-6	58.6
85.6	33.6	0.061	0.088	-20	47.16
94.46	49.4	0.061	0.088	-45	41.43
27	10	0.055	0.079	-50	-29.98
136.9	50.8	0.055	0.079	-50	51.59
73.5	27.3	0.055	0.079	10	64.57
82	30.4	0.055	0.079	10	70.82
82.2	30.5	0.055	0.079	-10	51
82.2	30.5	0.055	0.079	10	71
82.4	30.6	0.055	0.079	-20	41.17
86.8	32.2	0.055	0.079	10	74.4
90.4	33.5	0.055	0.079	-20	47.04
100	34	0.055	0.079	10	81.1
103.95	34	0.055	0.079	10	82.57
94.46	48.1	0.055	0.079	-45	38.14
20	16	0.34	0.49	-20	12.02
20	16	0.34	0.49	-60	-27.98
27	21.6	0.34	0.49	-40	3.23
41	32.8	0.34	0.49	-50	15.64
37	29.6	0.34	0.49	10	69.24
37	29.6	0.34	0.49	-10	49.24
37	29.6	0.34	0.49	-30	29.24
82	56	0.34	0.49	-30	91.68
65	31.59	0.099	0.139	-10	53.18
65	31.59	0.099	0.139	-10	53.18
65.5	31.833	0.099	0.139	-10	53.663
65.6	31.882	0.099	0.139	-10	53.762
74.45	34	0.099	0.139	-10	60.18
100	34	0.099	0.139	-10	72.6
172.22	56	0.098	0.138	-50	89.35
231.06	56	0.098	0.138	-48	119.83
231.06	56	0.098	0.138	-48	119.83
189.05	56	0.098	0.138	-50	97.5
77	34	0.37	0.547	50	147.99
35.84	56.42	1.666	2.46	1	101.93
138.2	68.47	1.266	1.87	-5	225.3
157.6	68.47			-5	
152.35	68.47	0.37	0.547	-5	190.07
79.32	56.42	1.97	2.91	1	159.19
163.3	48.34	1.124	1.66	-5	229.5
167.55	56	1.666	2.46	10	274.1
42.83	17	1.706	2.52	40	110.45
58	34	2.038	3.01	40	148.94
75.95	34	0.371	0.548	40	137.19

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
170.5	65.51	0.371	0.548	-56	151.37
180	68.47	1.686	2.49	-5	287.57
44	34	2.642	3.95	-4	89.53
54.7	34	2.642	3.95	14	122.01
51	34	1.472	2.2	-4	91.91
86.91	56	2.642	3.95	-13	160.59
79.5	66	1.472	2.2	0	162.51
44	34	1.592	2.38	-13	75.3
44	34	2.796	4.18	14	108.1
59.51	34	2.796	4.18	2	117.29
80.45	28	2.796	4.18	-31	106.89
86.92	56	1.592	2.38	-13	150.26
95.95	23.028	0.024	0.035	-20	26.058
118.5	28.44	0.024	0.035	-20	36.88
126.4	30.3	0.024	0.035	-6	54.64
143.3	34	0.024	0.035	-20	48.39
158	54.7	0.024	0.035	-5	87.62
152.5	34	0.024	0.035	-10	60.6
140.55	42.6	0.024	0.035	23.1	99.43
140.55	42.6	0.024	0.035	23.1	99.43
179.65	34	0.024	0.035	0	77.12
182.55	58.9	0.024	0.035	-5	97.71001
68	19.72	0.034	0.049	-32	7.439999
51	14.79	0.034	0.049	10	39.58
51	14.79	0.034	0.049	10	39.58
82	23.78	0.034	0.049	10	57.56
97.3	28.217	0.034	0.049	10	66.437
108.2	31.378	0.034	0.049	6	68.758
123.55	34	0.034	0.049	-10	59.83
140.55	48.3	0.034	0.049	23.1	112.16
41	36.2	0.477	0.66	-50	22.44
54	47.7	0.477	0.66	-60	35.44
51	34	0.477	0.66	9	88.08
58	34	0.477	0.66	2	87.27
58	34	0.477	0.66	-20	65.27
122	56	0.477	0.66	-50	113.85
122	56	0.477	0.66	-60	103.85
44.2	34	2.746	4.8	45	140.61
51.2	34	2.746	4.8	20	125.37
51.8	34	1.03	1.8	36	130.14
57.1	34	2.746	4.8	20	133.6
58	34	1.144	2	50	152.96
62.9	34	1.03	1.8	69	176.03
70.5	34	1.144	2	9	126.82
70.5	34	1.144	2	33	150.82
84.75	34	1.03	1.8	30	162.39
217.1	56	1.144	2	-77	237.13
230.23	44.05	1.03	1.8	-56	255.35
101.05	65.51	0.766	1.34	-56	118.75
101.05	65.51	1.144	2	-56	129.66
101.05	65.51	2.248	3.93	-56	146.13
214.09	65.51	0.435	0.73	-56	204.76
214.09	65.51	0.662	1.11	-56	229.81
128.8	34	0.805	1.35	38	211.49
128.8	34	0.805	1.35	23	196.49
129.9	34	0.805	1.35	30	204.68
224.17	65.51	0.692	1.16	-56	242.87
224.17	65.51	0.817	1.37	-56	253.18
107.81	17	0.835	1.4	18	152.84
189.05	65.51	0.817	1.37	-56	215.01
157.58	17	0.835	1.4	50	239.23

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
145.81	17	0.835	1.4	30	206.37
73.7	34	0.9	1.51	50	166.1
82.4	34	0.882	1.48	22	147.38
82.6	34	0.882	1.48	20	145.6
83	34	0.882	1.48	33	159.05
83.3	34	0.9	1.51	12	138.8
89.8	34	0.9	1.51	5	139.04
91.39	65.51	0.876	1.47	-56	110.68
208.62	65.51	0.435	0.73	-56	199.77
208.62	65.51	0.691	1.16	-56	226.68
211.77	28	0.429	0.72	-40	180.29
211.77	28	0.691	1.16	-40	208.45
11.24	28	1.413	2.37	-60	-18.14
11.24	28	1.413	2.37	-60	-18.14
11.24	28	1.413	2.37	-60	-18.14
28.5	34	1.413	2.37	40	109.14
37	34	1.413	2.37	40	119.62
37	34	1.413	2.37	10	89.62
37	34	1.413	2.37	0	79.62
40.78	17	1.413	2.37	40	107.28
47.5	34	1.413	2.37	10	102.57
95	34	2.288	3.838	73	234.97
115.6	34	2.288	3.838	40	229.71
161.25	56	2.288	3.838	-40	233.2
100.08	56	0.996	1.669	-4	166.19
94.5	34	0.996	1.669	10	151.82
104	34	0.996	1.669	-22	130.66
49.15	28	2.739	4.36	-20	75.58
68	56	1.043	1.66	-20	113.52
51	34	2.789	4.44	54	158.28
51	34	2.789	4.44	57	161.28
58	34	2.858	4.55	60	174.21
51.43	34	2.858	4.55	91	196.13
41	56	2.504	4.2	-60	52.05
41	56	2.504	4.2	-60	52.05
41	56	2.504	4.2	-60	52.05
29.7	40.6	2.504	4.2	-50	31.2
39.8	54.407	2.504	4.2	-50	58.817
41.65	56	2.504	4.2	-50	62.94
68.5	56	2.504	4.2	-60	89.64
65	34	2.504	4.2	20	142.85
65	34	2.504	4.2	20	142.85
65	34	2.504	4.2	-10	112.85
65	34	2.504	4.2	20	142.85
65.2	34	2.504	4.2	20	143.13
74.6	34	2.504	4.2	10	145.98
236	65.51	0.023	0.0389	-56	69.69
260	65.51	0.023	0.0389	-56	75.81001
31.6	56	2.504	4.2	-40	59.2
40.15	56	2.504	4.2	-40	70.89
42.05	56	2.504	4.2	-70	43.48
43.55	56	2.504	4.2	-70	45.53
43.55	56	2.504	4.2	-70	45.53
26	34	2.504	4.2	10	79.54
26	34	2.504	4.2	10	79.54
30.6	41.83	2.504	4.2	-50	33.66
45.55	11.57	0.023	0.0386	-70	-46.86
49.9	56	2.504	4.2	-40	84.21
31	34	2.504	4.2	10	86.38
33.6	45.931	2.504	4.2	-60	31.861
37	34	2.504	4.2	20	104.58

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
37	34	2.504	4.2	40	124.58
37	34	2.504	4.2	20	104.58
23.54	27.8	1.179	1.95	-50	5.619999
23.54	29.9	1.681	2.78	-50	9.84
39.38	50.5	1.754	2.9	-70	31.02
27.39	35.1	1.754	2.9	0	70.24
26	33.358	1.754	2.9	10	76.718
31	34	2.141	3.54	-30	45.2
31	34	1.754	2.9	10	83.77
31	34	2.141	3.54	-30	45.2
44	34	2.141	3.54	-30	62.48
20	26.58	2.135	3.53	-30	23.16
26	34	2.135	3.53	-40	28.55
26	34	2.135	3.53	-40	28.55
30	38.5	1.748	2.89	-10	66.96
37.78	44.6	1.173	1.94	-70	19.22
0	0	1.675	2.77	-70	-70
0	0	1.748	2.89	-70	-70
31	34	1.748	2.89	-40	33.74
31	34	1.748	2.89	-10	63.74
73.8	34	2.039	3.42	10	141.49
74.6	34	2.039	3.42	-10	122.55
74.6	34	2.039	3.42	0	132.55
82.6	34	2.039	3.42	0	143.11
107.8	34	2.039	3.42	20	196.4
79.53	17	2.039	3.42	20	142.06
90.65	65.51	1.353	2.27	-56	120.28
84.36	28	2.039	3.42	-60	79.44
195.16	28	1.353	2.27	-60	206.49
34.05	44.1	1.645	2.76	-50	37.38
34.05	44.1	1.645	2.76	-50	37.38
34.05	44.9	1.645	2.76	-70	18.18
36.35	57.4	1.645	2.76	-56	47.6
37	34	1.645	2.76	20	101.03
40.05	51.9	1.645	2.76	-80	22.8
44	34	1.645	2.76	20	109.92
44	34	1.645	2.76	20	109.92
74.15	34	1.645	2.76	0	128.24
74.15	34	1.645	2.76	30	158.24
91.5	34	1.645	2.76	10	160.3
28.51	28	2.431	3.87	-44	22.46
51	34	2.431	3.87	10	112.8
51	34	2.431	3.87	10	112.8
58	34	2.431	3.87	-20	92.24
31.04	17	2.431	3.87	30	88.87
73	34	2.178	3.53	0	131.02
84.98	17	2.178	3.53	20	149.94
73.5	34	2.178	3.53	0	131.68
73.5	34	2.178	3.53	10	141.68
76.1	34	0.189	0.307	40	125.44
143.9	68.47	0.333	0.54	-5	182.62
143.9	68.47	0.37	0.6	-5	186.79
131.44	68.47	1.974	3.2	-5	235.13
131.44	68.47	1.974	3.2	-5	235.13
152	68.82	0.189	0.307	0	171.57
220.6	69.52	0.333	0.54	-7	245.18
66.21	17	2.172	3.52	-10	94.93
73.4	34	2.172	3.52	-20	111.48
75.8	34	0.184	0.298	30	114.71
83	34	2.172	3.52	-10	134.22
107.25	34	2.172	3.52	-30	146.43

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
125.16	48.83	2.172	3.52	0	215.04
152.35	68.47	0.43	0.697	-5	200.43
152.35	68.47	0.43	0.697	-5	200.43
130.72	68.47	0.43	0.697	-5	180.99
160.5	68.82	0.184	0.298	0	176.19
27	9.8	0.052	0.076	-50	-30.37
41	14.9	0.052	0.076	-80	-50.18
41	14.9	0.052	0.076	-50	-20.18
41	14.9	0.052	0.076	-50	-20.18
41	14.9	0.052	0.076	-80	-50.18
54	19.7	0.052	0.076	-50	-10.64
54	19.7	0.052	0.076	-50	-10.64
58	21.1	0.052	0.076	-10	32.21
65.3	23.8	0.052	0.076	18	65.57
80.6	29.3	0.052	0.076	6	64.64
88.3	29	0.043	0.062	-20	37.96
94.6	31	0.043	0.062	-8	54.03
95.5	31.3	0.043	0.062	-20	42.62
27	9.963	0.054	0.078	-50	-30.077
41	15.129	0.054	0.078	-36	-5.741
41	15.129	0.054	0.078	-80	-49.741
41	15.129	0.054	0.078	-50	-19.741
41	15.129	0.054	0.078	-50	-19.741
41	15.129	0.054	0.078	-80	-49.741
54	19.926	0.054	0.078	-50	-10.144
54	19.926	0.054	0.078	-70	-30.144
54	19.926	0.054	0.078	-50	-10.144
82	30.258	0.054	0.078	-20	40.518
65	21.71	0.044	0.064	-20	23.42
65	21.71	0.044	0.064	10	53.42
65.3	24.096	0.054	0.078	2	50.196
73.5	24.549	0.044	0.064	-20	29.099
92	33.9	0.054	0.078	-20	47.85
93	34	0.054	0.078	-10	58.32
51	70.711	0.431	0.718	3	119.971
58	63.6	0.49	0.816	1	119.29
58	63.6	0.49	0.816	1	119.29
73	63.6	0.47	0.783	1	132.56
82	63.6	0.47	0.783	1	140.94
152.35	68.47	0.49	0.816	-5	207.14
199.3	56	0.431	0.718	-26	210.77
220.6	69.52	0.424	0.706	-7	261.5
220.6	69.52	0.424	0.706	-7	261.5
220.6	69.52	0.47	0.783	-7	267.9
14.56	17	1.597	2.74	40	75.48
42.7	17	1.597	2.74	30	101.19
75.2	34	0.192	0.329	50	136.19
167.55	56	1.597	2.74	10	278.62
180	68.47	0.192	0.329	-5	188.39
31	34	1.597	2.74	50	123.34
5.36	6.8	1.597	2.74	40	53.6
75.5	34	0.192	0.329	40	126.4
167.55	56	1.597	2.74	10	278.62
180	68.47	0.192	0.329	-5	188.39
199.3				-26	
54	27.892	0.017	0.023	-70	-32.008
74.45	13.922	0.017	0.023	40	67.842
83.15	15.5	0.017	0.023	30	61.05
90.7	16.961	0.017	0.023	30	63.921
101.5	18.981	0.017	0.023	30	67.961
3.04	3.7	1.297	2.176	-80	-72.62

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
32.8	34	1.297	2.176	20	93.72
35.2	34	1.297	2.176	20	96.63
27.11	17	1.297	2.176	30	79.83
41.9	34	1.297	2.176	10	94.74001
53.1	34	1.297	2.176	0	98.3
53.1	34	1.297	2.176	20	118.3
12.89	15.3	1.198	2.01	50	80.64
31	34	1.198	2.01	30	100.89
14.08	16.8	1.198	2.01	-10	23.56
14.08	16.8	1.198	2.01	-30	3.559999
37	34	1.198	2.01	10	88.03
37	34	1.198	2.01	40	118.03
44	34	1.198	2.01	40	126.36
44	34	1.198	2.01	10	96.36
20	26.76	2.194	3.68	-50	3.52
20	26.76	2.194	3.68	-42	11.52
20	26.76	2.194	3.68	-30	23.52
27	36.126	2.194	3.68	-60	12.256
35	46.83	2.194	3.68	-80	13.66
20	26.76	2.194	3.68	22	75.52
20	26.76	2.194	3.68	-15	38.52
20	26.76	2.194	3.68	-10	43.52
44.4	56	2.194	3.68	-70	45.41
68	56	1.913	3.18	-43	101.67
51	34	1.913	3.18	5	105.5
132	34	1.913	3.18	47	253.13
27	8.7	0.034	0.06	-48	-30.58
27	8.7	0.034	0.0605	-30	-12.55
31.2	10.1	0.034	0.0605	-16	4.21
41	14.876	0.042	0.0757	-26	3.756001
41	13.3	0.034	0.0605	-44	-17.42
41	14.9	0.042	0.0757	-6	23.78
108	34.9	0.034	0.06	-50	19.78
122	39.4	0.034	0.06	-50	28.81
88	34	0.042	0.0757	-8	57.94
95.5	34	0.042	0.0757	-20	48.67
100	34	0.034	0.0605	4	70.4
100	34	0.034	0.0605	20	86.4
105.05	34	0.042	0.0757	-20	52.13
105.05	34	0.042	0.0757	-20	52.13
110	34	0.034	0.0605	0	69.64
110	34	0.034	0.0605	28	97.64
28.36	28	1.3	2.18	-50	12.34
28.36	28	1.3	2.18	-50	12.34
26	31.5	1.3	2.18	-20	42.99
26	31.5	1.3	2.18	-20	42.99
31	34	1.3	2.18	-20	51.54
37	34	1.3	2.18	10	88.81
35.93	17	1.3	2.18	40	100.51
58	34	1.3	2.18	0	104.24
37	34	0.721	1.21	20	92.96
76.73	17	1.031	1.73	-20	85.32
80.8	34	1.031	1.73	-10	117
87.4	34	1.031	1.73	-20	114.6
104.5	34	1.031	1.73	-20	134.28
152.25	68.47	0.375	0.629	-5	195.93
152.25	68.47	0.375	0.629	-5	195.93
174.96	48.34	0.721	1.21	-5	227.57
198.04	56	1.031	1.73	-26	257.94
58	34	0.783	1.3	10	106.23
81.2	34	1.018	1.69	-10	116.89

%CF	MARGIN TERM	f at EOL 1/4T	ID Fluence at EOL	RTndt (u) [Initial RTndt]	RTpts @ EOL
88.09	17	1.018	1.69	10	127.77
81.8	34	1.018	1.69	10	137.58
96.4	34	1.018	1.69	-10	134.28
177.95	68.47	0.783	1.3	-5	254.41
174.1	68.47	0.364	0.604	-5	213.02
182	68.47	1.018	1.69	-5	271.68
198.04	56	0.364	0.604	-26	200.12

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
109	91.66	15.91	18.68
96	75.49	21.36	101.06
107	84.98	20.58	101.48
80	62.27	22.16	117.47
86	66.87	22.24	117.96
			131.02
			131.02
			147.85
			173.24
125	93.61	25.11	48.19
109	81.63	25.11	47.97
122	91.37	25.11	47.97
94	70.4	25.11	72.01
92	68.9	25.11	74.98
89	66.65	25.11	76.95
82	61.41	25.11	76.95
126	94.36	25.11	87.83
91	68.15	25.11	89.86
101	71.04	29.66	89.17
84	61.77	26.46	127.55
90	65.99	26.68	130.75
83	60.86	26.68	130.75
80	52.73	34.09	206.7
144	76.75	46.7	159.97
112	77.77	30.56	180.17
98	62.16	36.57	189.87
144.5	139.02	3.79	15.97
144.5	137.3	4.98	20.45
75.5	67.73	10.29	47.8
83	63.64	23.32	59.31
77.5	59.43	23.32	59.31
82	62.88	23.32	68.75
82	59.73	27.16	113.25
82	59.73	27.16	113.25
82	59.73	27.16	113.25
82	66.36	19.07	123.42
			193.61
			193.61
70	58.18	16.89	25.76
162	138.92	14.25	20.93
136	117.98	13.25	26.82
87	74.6	14.25	45.61
118	94	20.34	37.76
79	70.86	10.3	17.03
70	58.23	16.81	25.68
119	94.9	20.25	24.28
78	73.59	5.66	5.65
128	110.34	13.8	19.99
87	74.99	13.8	43.57
150	129.2	13.87	42
			18.62
94	85.15	9.42	21.17
76.7	68.73	10.39	29.78
			34.86
			36.5
			36.94
			51.3
			67.16
145	126.86	12.51	50.9
			31.83
			38.5

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
92	80.49	12.51	42.62
			49.01
			49.01
			50.92
			61.28
195	170.61	12.51	51.21
103	92.38	10.31	28.34
			38.5
			39.41
			39.68
			44.25
			46.04
			61.28
			27.34
			35.18
			31.75
			39.46
			35.44
			36.84
			36.84
			67.1
			11.37
			26.79
			31.15
			38.89
			39.18
			44.92
			35.97
			35.97
73	64	12.33	13.14
74	64.67	12.61	64.75
150	120.48	19.68	30.73
138	131.78	4.51	35.83
138	117.59	14.79	26.32
72	64.58	10.3	17.03
149	119.53	19.78	23.76
70	61.66	11.91	12.51
67	58.54	12.62	64.86
155	132.85	14.29	25.05
127	106.68	16	43.96
74	66.38	10.3	17.03
143	122.35	14.44	52.16
		12.65	45.53
112	95.77	14.49	52.34
78	62.42	19.97	37.17
105	84.03	19.97	44.36
100	80.03	19.97	44.36
99	79.23	19.97	44.36
82	70.16	14.44	31.49
101	80.83	19.97	61.15
81	60.24	25.63	102.62
90	66.93	25.63	102.9
90	66.93	25.63	103.04
81	59.32	26.77	116.96
112	82.02	26.77	116.96
77	55.39	28.07	124.88
109	64.26	41.05	243.32
110	55.09	49.92	237.02
160	100.16	37.4	105
74	54.34	26.57	105.25
84.5	62.05	26.57	108.82

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
75	52.16	30.45	139.78
115	80.41	30.08	130.17
77	52.47	31.86	154.15
83	56.56	31.86	157.3
84	50.49	39.89	112.97
140	92.9	33.64	109.98
160	98.03	38.73	107.25
128	119.74	6.45	20.15
134	107.51	19.77	36.77
134	122.32	8.72	33.67
146	131.36	10.03	41.82
146	131.36	10.03	41.82
92	73.75	19.84	33.92
83	66.53	19.84	41.89
105	84.17	19.84	41.89
102	81.76	19.84	41.89
82	65.73	19.84	60.69
96	90.07	6.18	52.36
111	93.2	16.04	24.19
90	75.56	16.04	27.96
95	79.76	16.04	30.46
80	67.17	16.04	36.74
104	87.32	16.04	36.74
93	78.08	16.04	36.74
109	91.52	16.04	36.74
93	78.08	16.04	27.78
105	88.16	16.04	33.15
102	85.64	16.04	39.42
126	102.73	18.47	96.77
67	60.87	9.15	21.97
97	77.33	20.28	120.96
72	65.08	9.61	25.17
125	97.73	21.82	59.52
125	97.73	21.82	59.52
125	97.73	21.82	59.52
78	60.98	21.82	40.11
88	68.8	21.82	40.11
103	80.53	21.82	47.88
94	73.49	21.82	47.88
98	76.62	21.82	56.94
85	66.45	21.82	65.99
106	82.87	21.82	25.88
108	84.43	21.82	33.64
96	75.05	21.82	40.77
172	134.47	21.82	40.77
172	134.47	21.82	40.77
107	83.65	21.82	40.11
105	82.09	21.82	40.11
108	84.43	21.82	47.88
101	78.96	21.82	47.88
83	66.39	20.01	89.13
126	100.79	20.01	90.67
92	80.86	12.11	40.66
87	76.46	12.11	40.85
80	70.31	12.11	41.25
108	84.28	21.96	104.57
103	80.38	21.96	107.04
96	69.57	27.53	114.71
98	71.02	27.53	114.71
107	86.85	18.83	90.98
107	73.99	30.85	205.76

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
107	73.99	30.85	205.76
105	84.89	19.15	82.14
105	61.47	41.46	237.14
77	71.69	6.9	57
77	71.29	7.42	62.54
77	70.35	8.64	73.94
110	88.05	19.95	85.64
86	66.96	22.14	117.8
103	79.38	22.93	114.28
90	68.39	24.01	124.39
84	72.96	13.14	47.69
72	60.75	15.63	64.78
72	60.41	16.1	66.71
73	61.25	16.1	66.71
			76.43
75	62.51	16.65	70.98
84	67.93	19.13	162.74
112	87.44	21.93	119.46
			110.93
119	96.71	18.73	83.92
86	69.89	18.73	83.92
109	88.93	18.41	88.27
			152.2
			147.32
88	67.23	23.6	117.63
88	65	26.14	144.07
			157.33
			202.49
122	117.53	3.66	20.38
132	117.84	10.73	13.08
140	116.07	17.09	26.49
			79.12
81	52.93	34.66	161.31
77	75.18	2.36	71.31
116	92.75	20.04	90.17
103	82.36	20.04	90.17
114	90.06	21	96.54
110	86.9	21	98.51
116	90.49	21.99	106.24
109	75.05	31.15	188.93
94	70.58	24.92	185.76
94	68.12	27.53	213.2
94	66.84	28.89	226.58
94	64.54	31.34	248.81
125	102.06	18.35	29.62
100	81.65	18.35	71.92
112	87.25	22.1	108.31
122	95.04	22.1	108.31
99	77.12	22.1	109.8
91	72.11	20.76	113.05
90	69.17	23.15	121.88
124	83.24	32.87	192.49
124	82.68	33.32	196.3
124	80.98	34.69	206.68
88	59.03	32.92	114.77
88	58.63	33.37	117.04
88	57.44	34.73	123.23
			15.86
			33.72

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
			33.72
			38.45
			30.61
			34.89
			34.89
			35.77
			36.06
			38.98
			40.88
			34.29
			34.29
			21.61
			30.77
			43.26
			43.66
			44.71
			41.6
			45.33
			65.3
			15.08
			26.83
			26.83
			30.87
			26.83
			53.66
			81.12
			118.3
			118.47
87	64.14	26.28	112.94
99	71.77	27.51	125.03
86	65.82	23.47	134.31
86	61.24	28.79	134.93
82.5	55.68	32.51	98.98
104	58.77	43.49	135.2
149	114.69	23.03	131.11
148	134.31	9.25	9.77
131	118.88	9.25	40.22
126	102.75	18.45	40.81
103	74.59	27.58	123.56
99	70.42	28.87	135.74
100	71.13	28.87	137.6
102	64.28	36.98	102
100	60.01	39.99	197.92
94	85.44	9.11	17.14
74	67.26	9.11	19.49
78	70.89	9.11	21.84
101	91.34	9.56	24.76
86	77.37	10.04	27.62
85	76.47	10.04	27.94
77	69.27	10.04	27.94
105	85.83	18.26	79.3
75	60.16	19.79	75.23
88	68.91	21.69	63.34
85.6	75.52	11.78	38.2
84.3	74.72	11.37	16.03
67	58.48	12.72	44.23
77.4	67.36	12.97	47.23
82.6	71.36	13.61	51.2
82.3	68.72	16.5	71.61
			113.94
			119.92

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
			108.53
121	86.93	28.16	89.1
90	70.89	21.23	80.4
87	68.53	21.23	80.4
77	59.88	22.23	90.42
75	57.55	23.27	101.68
86	65.99	23.27	102.67
75	51.67	31.11	99.45
94	61.48	34.6	253.35
			233.1
105	63.26	39.75	233.05
86	54.95	36.1	258.09
110	70.08	36.29	211.17
114	87.31	23.41	37.65
91	90.41	0.65	58.87
			5.24
			210.38
			132.02
117	79.54	32.02	161.89
91	79.62	12.51	16.85
95	83.12	12.51	25.58
102	89.24	12.51	16.22
100	87.49	12.51	16.22
102	89.24	12.51	16.22
119	104.11	12.51	16.22
121	105.12	13.12	51.17
85	53.04	37.6	75.81
105	81.01	22.85	79.29
90	68.47	23.92	84.75
65	51.71	20.45	84.75
92	77.83	15.4	103.64
78	58.66	24.79	90.99
82	76.19	7.08	78.3
77	56.08	27.17	101.85
74	52.95	28.44	108.64
106	60.28	43.13	142.85
106	61.79	41.71	139.51
106	62.18	41.34	138.57
106	52.52	50.45	155.71
102	58.43	42.72	152.1
			50.8
			43.7
			43.7
88.4	83.48	5.56	137.69
			46.86
			71.65
			43.41
			89.8
			59.97
			115.55
			122.87
126	112.1	11.03	14.94
71	63.17	11.03	24.79
90	78.98	12.24	30.04
95	84.52	11.03	24.79
93	81.62	12.24	30.04
85	75.62	11.03	24.79
70	61.01	12.84	42.88
89	72.39	18.66	39.95
108	85.2	21.11	47.78
125	114.35	8.52	5.82

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
125	114.82	8.14	5.22
109	100.13	8.14	5.22
109	99.71	8.52	5.82
109	100.13	8.14	7.05
121	109.6	9.42	15.93
102	92.39	9.42	15.93
86	77.9	9.42	18.46
97	87.86	9.42	18.46
95	84.64	10.91	38.08
135	120.27	10.91	38.08
135	121.66	9.88	30.61
92.5	81.91	11.45	39.35
92.5	82.91	10.37	31.63
92.5	82.91	10.37	31.63
92.5	81.91	11.45	39.35
107	96.92	9.42	21
75	68.61	8.52	16.88
76	68.84	9.42	21
75	68.61	8.52	18.92
95	84.65	10.89	36.78
68	60.59	10.89	36.78
79	71.91	8.98	22.45
70	63.06	9.91	27.43
75	66.83	10.89	32.81
75	59.63	20.5	119.52
88	65.24	25.86	135.63
82	56.68	30.88	232.99
74	50.13	32.26	192.34
71	51.92	26.88	160.06
76	61.68	18.84	108.22
121	74.6	38.35	230.21
121	74.49	38.44	231.18
72	54.07	24.9	129.1
112	78.13	30.24	228.34
112	78.13	30.24	228.34
95	70.41	25.88	137.29
102	75.6	25.88	138.51
94	68.02	27.64	151.85
97	70.19	27.64	153.22
111	74.55	32.84	195.1
68	54.59	19.72	173.57
92	85.34	7.24	48.69
97	93.99	3.1	48.69
126	66.3	47.38	289.26
			20.37
			20.4
			22.41
			22.58
			23.16
			25.67
			28.69
			28.84
			28.99
			23.13
			48.91
			64.41
			65.96
			68.72
			55.26
			57.71
			66.52

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
			9.02
			13.69
			18.04
			14.7
			19.37
			24.38
			27.05
			27.12
			27.12
			14.99
			22.76
			22.76
			22.76
			40.07
			40.85
			62.27
			67.71
			40.4
			40.4
			40.4
			40.52
			45.07
			45.07
			11.1
			22.76
			22.76
			22.76
			29.97
			67.71
			40.57
			40.85
			40.85
			50.17
			56.19
			61.05
90	70.97	21.15	96.71
82	63.84	22.15	107.1
115	80.43	30.06	138.76
75	52.44	30.08	99.2
84	61.95	26.25	143.5
107	69.54	35.01	228.9
82	55.33	32.52	195.86
86	57.1	33.6	201.9
107	61.04	42.95	279.79
126.3	101.33	19.77	44.21
96	77.12	19.67	76.96
85	68.28	19.67	76.96
89	82.33	7.49	74.15
100	79.39	20.61	88.68
84	64.12	23.67	117.33
89	67.93	23.67	118.7
111.5	66.84	40.05	173.16
103	61.72	40.08	241.02
140	135.79	3.01	46.72
97	73	24.74	136.64
100	78.6	21.4	99.92
65	51.03	21.5	111.13
68	56.27	17.25	63.68
72	59.58	17.25	66.13
111	77.92	29.8	94.38
112	89.24	20.32	118.44

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
112	89.24	20.32	118.44
67	55.04	17.85	68.69
75	61.16	18.46	67.59
67	54.63	18.46	73.04
88	67.37	23.44	111.69
95	72.23	23.97	114.19
89	68.14	23.44	112
88	66.16	24.82	125.45
73	51.08	30.03	91.84
73	51.08	30.03	91.84
108	66.32	38.59	135.96
86	63.65	25.99	136.27
130	97.14	25.28	71.4
130	79.17	39.1	123.6
160	115.23	27.98	90.15
130	84.54	34.97	153.57
144	112.54	21.85	41.05
113.3	88.54	21.85	40.08
90	70.33	21.85	40.08
106.3	83.07	21.85	40.08
79.3	61.97	21.85	47.84
76	59.39	21.85	56.89
76.7	59.94	21.85	65.94
			109.67
			79.84
			96.34
			104.27
71	47.8	32.67	104.27
64	54.3	15.15	62.44
64	54.3	15.15	62.44
65	53.23	18.1	76.86
75	58.29	22.28	55.72
75	58.29	22.28	55.72
75	58.29	22.28	57.06
63.1	50.88	19.36	84.99
			109.61
			99.27
96	86.6	9.79	9.03
110	99.23	9.79	10.69
102	92.01	9.79	10.69
88	79.38	9.79	10.69
98	88.41	9.79	18.81
88	79.38	9.79	21.38
89	80.29	9.79	24.16
94	84.8	9.79	14.65
83	74.87	9.79	14.65
80	72.17	9.79	17.42
85	75.83	10.79	37.62
71	64.05	9.79	22.97
70	62.81	10.27	29.48
86	77.17	10.27	29.48
102	78.52	23.02	76.01
105	84.51	19.51	44.43
92	68.35	25.71	116.36
74	63.63	14.01	58.44
85	58.1	31.65	112.16
111	85.99	22.53	70.1
107	70.19	34.4	10.91
74	66	10.81	25.5
74	51.84	29.95	47.19
105	89.38	14.88	31.5

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
80	58.4	27	129.98
			43.9
108	95.33	11.73	63.7
81	66.97	17.32	72.96
119	98.39	17.32	72.96
81	66.28	18.17	81.34
81	64.48	20.4	99.27
109	95.63	12.27	44.24
			142.45
			141.08
			141.08
			150.3
			141.62
			52.9
			159.51
138	115.4	16.38	19.36
133	109.99	17.3	25.25
109	88.78	18.55	90.16
			173.24
			212
112	97.52	12.93	45.82
144	112.97	21.55	31.48
109	88.93	18.41	90.24
			148.9
			172.26
64	52.09	18.61	57.84
			57.84
65	52.42	19.35	87.87
			100.61
			101.48
			81.54
			126.56
			122.3
			122.3
73	57.13	21.74	97.58
72	51.01	29.15	153.27
76	53.85	29.15	155.89
111	64.32	42.05	244.04
98	62.48	36.24	271.95
118	76.95	34.79	259.04
118	76.95	34.79	259.04
102	70.7	30.69	182.4
102	70.7	30.69	182.4
87	56.97	34.52	190.88
127	99.77	21.44	26.24
142	111.56	21.44	26.24
90	70.7	21.44	37.69
140	109.98	21.44	38.47
134	105.27	21.44	34.11
200	157.12	21.44	40.33
100	78.56	21.44	48.54
96	75.42	21.44	48.54
83	65.2	21.44	57.73
121	95.06	21.44	26.24
114	89.56	21.44	26.24
105	82.49	21.44	26.24
95	74.63	21.44	37.69
127	99.77	21.44	34.11
126	98.99	21.44	34.11

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
100	78.56	21.44	41.34
129	101.34	21.44	40.67
100	76.06	23.94	54.02
90	70.7	21.44	37.69
100	78.56	21.44	37.69
100	78.56	21.44	37.69
133	104.48	21.44	34.11
129	101.34	21.44	34.11
156	122.55	21.44	34.11
111	87.2	21.44	34.11
107	84.06	21.44	34.11
114	89.56	21.44	40.67
			29.95
82	73.58	10.27	28.77
			28.77
			31.91
			32.3
			32.3
			33.56
99	82.26	16.91	37.03
97	87.74	9.55	10.02
71	62.28	12.28	50.79
			27.27
			30.42
			30.5
			30.5
			30.57
			32.2
			33.54
89	78.68	11.6	37.1
			38.57
99	82.66	16.51	35.04
90	76.78	14.69	16.02
112	95.55	14.69	16.02
88	75.07	14.69	21.63
105	89.58	14.69	32.84
84	71.66	14.69	29.64
114	97.25	14.69	29.64
94	80.19	14.69	29.64
104	87.98	15.4	65.68
79	70.33	10.97	31.59
76	67.66	10.97	31.59
80	71.22	10.97	31.83
81	72.11	10.97	31.88
72	63.71	11.52	36.18
81	70.22	13.31	48.6
75	60.81	18.92	83.35
75	59.15	21.14	111.83
75	59.15	21.14	111.83
113	88.98	21.26	91.5
78	65.75	15.71	63.99
77	77	0	44.51
			161.83
			126.6
70	55.8	20.29	101.77
			186.16
			208.1
94	84.17	10.46	53.45
117	110.26	5.76	74.94
78	65.74	15.72	63.19

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
75	55.91	25.46	141.86
			224.1
134	102.03	23.86	59.53
143	125.91	11.95	74.01
84	66.54	20.78	61.91
78	74.84	4.05	117.59
84	57.36	31.72	96.51
85	67.01	21.17	54.3
112	84.92	24.18	60.1
106	88.01	16.97	81.29
103	92.21	10.48	109.89
78.5	75.67	3.6	107.26
			23.03
			28.44
			30.34
			34.39
			37.92
			36.6
			33.73
			33.73
			43.12
			43.81
			19.72
			14.79
			14.79
			23.78
			28.22
			31.38
			35.83
			40.76
130	109.3	15.92	36.24
157	132.01	15.92	47.74
79	66.42	15.92	45.08
95	79.88	15.92	51.27
93	78.19	15.92	51.27
96.7	78.12	19.21	107.85
91.3	73.76	19.21	107.85
74	68.78	7.05	61.61
64	61.88	3.32	71.37
62	49.6	20	60.14
			79.6
78	61.25	21.47	68.96
			73.03
77	58.87	23.55	83.82
74	55.74	24.67	83.82
80	60.74	24.07	98.39
106	69.85	34.1	258.13
112	64.53	42.38	267.3
105	69.4	33.9	109.24
105	65.99	37.15	120.15
105	59.49	43.34	136.62
96.2	70.1	27.13	195.25
96.2	67.45	29.89	220.3
85	62.45	26.53	139.49
93	68.33	26.53	139.49
83	60.98	26.53	140.68
112	77.75	30.58	233.36
112	76.42	31.77	243.67
104	87.76	15.62	117.84
111	72.72	34.49	205.5
91	69.62	23.49	172.23

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
98	83.35	14.95	159.37
107	86.27	19.37	82.1
103	82.19	20.2	91.38
121	96.56	20.2	91.6
98	78.2	20.2	92.05
97	82.52	14.93	92.8
106	83.46	21.26	100.04
99.7	66.98	32.82	101.17
114	80.68	29.23	190.26
114	76.95	32.5	217.17
96.2	65.03	32.4	192.29
96.2	61.44	36.13	220.45
156	111.68	28.41	13.86
156	111.68	28.41	13.86
156	111.68	28.41	13.86
82	65.12	20.58	35.14
78	61.95	20.58	45.62
77	61.15	20.58	45.62
102	81.01	20.58	45.62
78	64.52	17.28	50.28
115	91.33	20.58	58.57
72	53.64	25.5	127.97
79	56.11	28.98	155.71
111	57.64	48.07	217.2
105	69.34	33.96	114.19
88	70.54	19.84	107.82
100	77.2	22.8	118.66
80	59.12	26.1	67.58
94	76	19.15	77.52
98	74.31	24.17	70.28
88	66.73	24.17	70.28
83	62.82	24.31	80.21
71	54.37	23.42	71.13
93	71.09	23.56	56.05
93	71.09	23.56	56.05
93	71.09	23.56	56.05
136	103.96	23.56	40.6
136	103.96	23.56	54.41
136	102.46	24.66	56.94
145	107.58	25.81	93.64
99	75.68	23.56	88.85
119	90.96	23.56	88.85
124	94.79	23.56	88.85
113	86.38	23.56	88.85
104	79.5	23.56	89.13
118	88.9	24.66	101.98
105	88.54	15.68	60.18
113	91.96	18.62	66.3
136	103.96	23.56	43.2
136	103.96	23.56	54.89
161	123.07	23.56	57.48
161	123.07	23.56	59.53
161	123.07	23.56	59.53
116	88.67	23.56	35.54
115	87.91	23.56	35.54
91	69.56	23.56	41.83
125	115.29	7.77	11.57
136	103.96	23.56	68.21
118	90.2	23.56	42.38
123	92.67	24.66	45.93
105	80.26	23.56	50.58

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
95	72.62	23.56	50.58
92	70.32	23.56	50.58
158	158	0	27.82
158	158	0	29.94
100	100	0	50.52
94	82.48	12.26	35.14
110	86.17	21.66	33.36
111	85.8	22.7	41.2
106	83.04	21.66	39.77
127	98.17	22.7	41.2
122	94.31	22.7	58.48
124	95.86	22.69	26.58
123	95.09	22.69	34.55
118	91.23	22.69	34.55
109	104.65	3.99	38.46
146	135.55	7.16	44.62
101	93.13	7.79	0
101	93.05	7.87	0
122	95.6	21.64	39.74
129	101.08	21.64	39.74
76	58.15	23.49	97.49
82	62.74	23.49	98.55
82	62.74	23.49	98.55
88	66.36	24.59	109.11
82	58.86	28.22	142.4
103	69.1	32.91	105.06
102	65.85	35.44	110.77
144	84.79	41.12	111.44
112	68.03	39.26	238.49
136	106.99	21.33	43.28
136	106.99	21.33	43.28
115	90.47	21.33	43.28
116	91.26	21.33	46.2
91	71.59	21.33	47.03
96	73.56	23.38	50.9
100	78.67	21.33	55.92
105	82.6	21.33	55.92
113	87.77	22.33	94.24
105	81.55	22.33	94.24
113	85.34	24.48	116.3
84	77.76	7.43	38.46
106	81.21	23.39	68.8
92	70.48	23.39	68.8
107	81.97	23.39	78.24
81	74.09	8.53	41.87
83	63.2	23.86	97.02
103	74.45	27.72	112.94
94	71.57	23.86	97.68
115	87.56	23.86	97.68
83	71.87	13.41	51.44
			119.15
			123.32
77	43.61	43.36	171.66
			171.66
			102.75
70	48.3	31	182.66
84	66.24	21.14	87.93
83	63.21	23.84	97.48
104	90.14	13.33	50.71
105	78.79	24.96	110.22
94	67.09	28.63	142.43

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
90	65.03	27.74	166.21
			136.96
			136.96
77	52.25	32.14	117.52
			107.37
92	83.33	9.42	9.83
140	126.81	9.42	14.92
126	114.13	9.42	14.92
134	121.38	9.42	14.92
127	115.04	9.42	14.92
114	103.26	9.42	19.66
192	173.91	9.42	19.66
			21.11
88	79.71	9.42	23.77
			29.34
78	69.86	10.43	28.96
			31.03
			31.32
92	83.25	9.51	9.96
			15.13
140	126.69	9.51	15.13
126	114.02	9.51	15.13
134	121.26	9.51	15.13
127	114.92	9.51	15.13
114	103.16	9.51	19.93
137	123.97	9.51	19.93
192	173.74	9.51	19.93
73	65.71	9.98	30.26
94	85.48	9.06	21.71
76	69.11	9.06	21.71
			24.1
125	113.11	9.51	24.55
84	74.75	11.01	33.95
			34.32
109	92.06	15.54	46.26
81	68.02	16.02	54.69
98	83.67	14.62	54.69
81	67.54	16.62	67.96
112	92.49	17.42	76.34
			143.67
			180.77
			198.98
			198.98
			205.38
93	81.81	12.03	18.48
100	81.9	18.1	54.19
99	85.67	13.46	52.19
65	47.83	26.41	212.62
			124.92
88	69.36	21.18	39.34
86	82.6	3.95	6.8
103	89.14	13.46	52.4
65	38.25	41.15	212.62
			124.92
			10.1
89	82.24	7.6	13.92
			15.55
			16.96
			18.98
134	131.55	1.83	3.68

Unirradiated USE	USE @ EOL	% Drop USE	ΔRTndt
116	92.61	20.16	39.72
113	90.22	20.16	42.63
107	103.9	2.9	32.83
118	94.21	20.16	50.74
90	71.86	20.16	64.3
100	79.84	20.16	64.3
85	79.63	6.32	15.34
84	67.38	19.79	36.89
152	142.23	6.43	16.76
90	84.21	6.43	16.76
104	83.42	19.79	44.03
83	66.57	19.79	44.03
87	69.78	19.79	52.36
95	76.2	19.79	52.36
97	74.85	22.83	26.76
90	69.45	22.83	26.76
94	72.54	22.83	26.76
106	81.8	22.83	36.13
129	99.55	22.83	46.83
94	72.54	22.83	26.76
106	81.8	22.83	26.76
94	72.54	22.83	26.76
166	128.1	22.83	59.41
134	104.39	22.1	88.67
88	68.55	22.1	66.5
			172.13
			8.72
			8.75
90	82.33	8.52	10.11
			14.88
95	86.91	8.52	13.28
			14.88
91	82.01	9.88	34.88
97	86.94	10.37	39.41
			31.94
			34.67
			32.4
			32.4
			38.13
			38.13
			35.64
			35.64
149	132.7	10.94	34.34
98	87.28	10.94	34.34
127	101.38	20.17	31.49
127	101.38	20.17	31.49
135	107.77	20.17	37.54
100	79.83	20.17	44.81
89	79.24	10.97	43.51
87	69.45	20.17	70.24
87	71.73	17.55	38.96
117	90.7	22.48	88.32
85	67.19	20.95	93
89	69.46	21.95	100.6
83	63.01	24.08	120.28
			132.46
			132.46
			184.23
			227.94
109	89.49	17.9	62.23
81	64.08	20.89	92.89

Unirradiated USE	USE @ EOL	% Drop USE	Δ RTndt
96	76.83	19.97	100.77
89	70.41	20.89	93.58
92	70.91	22.92	110.28
			190.94
			149.55
			208.21
			170.12