



June 6, 1997
INS-97-2262

Integrated Nuclear Services

Mr. Barry J. Elliot, Senior Materials Engineer
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: Docket No. 99901300

Dear Mr. Elliot:

In accordance with your request at the exit meeting for the NRC Inspection of Cu/Ni composition of ASA copper-bearing Linde 80 weld material, held at our facility on May 21, 1997, we are providing the following information in this mailing:

- (1) Identification of "suspect" data
- (2) Traceability documentation included in data table
- (3) Inclusion of additional data
- (4) Effect of additional data on mean value

In addition, correspondence from FP&L regarding weld wire 71249 was reviewed and data found therein that had not been previously reported in the data tables were added.

Information concerning non-copper-coated weld wire heats will be forthcoming by June 23, 1997.

Very truly yours,

Matthew J. DeVan

cc: w/o enclosure:
K. E. Moore, OF50
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J. H. Taylor, OF56
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(99901300)

BAW-1500/BAW-2121P Copper and Nickel Content Best-Estimate Values

Weld Wire Heat Number	No. of Observ. Cu / Ni					Best-Estimate Evalaution
		Cu		Ni		
		x	σ	x	σ	
CATEGORY 1 WELD WIRES						
299L44	60 / 60	0.35	0.026	0.68	0.038	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
72105	51 / 51	0.35	0.059	0.59	0.011	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
71249	35 / 35	0.26	0.051	0.61	0.040	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
61782	41 / 41	0.25	0.053	0.56	0.045	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
72445	30 / 30	0.21	0.026	0.59	0.007	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
406L44	29 / 29	0.31	0.023	0.59	0.007	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
72442	31 / 31	0.24	0.051	0.60	0.009	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).
821T44	10 / 10	0.24	0.033	0.63	0.006	Best-estimate copper and nickel contents obtained from mean of analyses of archive weld metal (nozzle dropouts and reactor vessel surveillance program test blocks).

BAW-1500/BAW-2121P Copper and Nickel Content Best-Estimate Values

Weld Wire Heat Number	No. of Observ. Cu / Ni	Cu		Ni		Best-Estimate Evalaution
		x	σ	x	σ	
CATEGORY 2 WELD WIRES						
8T1554	1 / 1	0.18	0.07	0.63	---	Best-estimate copper content based on filler wire grouping and the change in concentration ($\Delta=0.07$ wt%) obtained from re-test of the weld qualification test sample (i.e., minimum WQ Cu content for weld wire + 0.07). Standard deviation for Cu content based on total Category 1 data set. Best-estimate nickel content based on the greatest reported value obtained from the re-test of weld qualification test sample.
72102	1 / 1	0.23	0.07	0.63	---	Best-estimate copper content based on filler wire grouping and the change in concentration ($\Delta=0.07$ wt%) obtained from re-test of the weld qualification test sample (i.e., minimum WQ Cu content for weld wire + 0.07). Standard deviation for Cu content based on total Category 1 data set. Best-estimate nickel content based on the greatest reported value obtained from the re-test of weld qualification test sample.
8T3914	1 / 1	0.18	---	0.64	---	Best-estimate copper and nickel contents obtained from re-test of the weld qualification test sample.
T29744	1 / 1	0.29	0.07	0.68	---	Best-estimate copper content based on filler wire grouping and the change in concentration ($\Delta=0.07$ wt%) obtained from re-test of the weld qualification test sample (i.e., WQ Cu content for weld wire + 0.07). Standard deviation for Cu content based on total Category 1 data set. Best-estimate nickel content based on the greatest reported value obtained from the re-test of weld qualification test sample.
CATEGORY 3 WELD WIRES						
8T1762	4 / 7	0.20	0.030	0.55	0.078	Best-estimate copper content obtained from the mean of all "SA" weld qualification data; best-estimate nickel content obtained from the mean of both "SA" and "WF" weld qualification data.
1P0962	1 / 1	0.21	---	0.64	---	Best-estimate copper and nickel contents obtained from weld qualification data.
1P0661	1 / 1	0.19	---	0.63	---	Best-estimate copper and nickel contents obtained from the values reported on the "SA-775" weld qualification data sheet.
1P0815	3 / 3	0.17	0.072	0.52	0.045	Best-estimate copper and nickel contents obtained from the mean of the weld qualification data.

Copper and Nickel Content Best-Estimate Values (Total Population Including All Credible Data)

Weld Wire Heat Number	No. of Observ. Cu / Ni					Best-Estimate Evalaution
		Cu		Ni		
		x	σ	x	σ	
CATEGORY 1 WELD WIRES						
299L44	144 / 143	0.34	0.034	0.68	0.037	Best-estimate copper and nickel contents obtained from mean of available data.
72105	260 / 260	0.32	0.073	0.57	0.024	Best-estimate copper and nickel contents obtained from mean of available data.
71249	77 / 77	0.24	0.058	0.61	0.038	Best-estimate copper and nickel contents obtained from mean of available data.
61782	61 / 61	0.24	0.048	0.54	0.051	Best-estimate copper and nickel contents obtained from mean of available data.
72445	40 / 41	0.22	0.026	0.58	0.036	Best-estimate copper and nickel contents obtained from mean of available data.
406L44	42 / 46	0.29	0.040	0.58	0.020	Best-estimate copper and nickel contents obtained from mean of available data.
72442	51 / 51	0.24	0.056	0.60	0.011	Best-estimate copper and nickel contents obtained from mean of available data.
821T44	16 / 19	0.24	0.028	0.63	0.012	Best-estimate copper and nickel contents obtained from mean of available data.
CATEGORY 2 WELD WIRES						
8T1554	6 / 6	0.16	0.018	0.61	0.016	Best-estimate copper and nickel contents obtained from mean of available data.
72102	4 / 3	0.21	0.008	0.59	0.053	Best-estimate copper and nickel contents obtained from mean of available data.
8T3914	2 / 2	0.18	0.001	0.64	0.000	Best-estimate copper and nickel contents obtained from mean of available data.
T29744	8 / 8	0.27	0.037	0.68	0.079	Best-estimate copper and nickel contents obtained from mean of available data.
CATEGORY 3 WELD WIRES						
8T1762	6 / 6	0.19	0.026	0.55	0.078	Best-estimate copper and nickel contents obtained from mean of available data.
1P0962	1 / 1	0.21	---	0.64	---	Best-estimate copper and nickel contents obtained from mean of available data.
1P0661	2 / 2	0.17	0.035	0.64	0.014	Best-estimate copper and nickel contents obtained from mean of available data.
1P0815	3 / 3	0.17	0.072	0.52	0.045	Best-estimate copper and nickel contents obtained from mean of available data.

Coil-to-Coil Weighted Average

Weld Wire Heat Number	Weld Number	Flux Lot No.	Source of Weldment	No. of Observ.	Cu wt% Mean	No. of Coils (Weight)	Cu*Wt	Weighted Mean Cu
299L44	SA-1526	8596	WQ	1	0.46	1	0.460	0.34
			CR3-NBD	13	0.37	3	1.110	
			S1 - RVSP	2	0.25	1	0.250	
	WF-19	8650	WQ	1	0.29	1	0.290	
	WF-25	8650	WQ	4	0.32	1	0.320	
			TMI1 - RVSP	10	0.33	1	0.330	
			TMI2 - NBD	111	0.33	7	2.310	
			OC3 - NBD	2	0.36	1	0.36	
			Sum			16	5.43	
72105	WF-70	8669	WQ	3	0.31	1	0.310	0.33
			MD1 - NBD	79	0.39	4	1.56	
			MD1 - BL	54	0.28	4	1.12	
	WF-113	8688	WQ	3	0.29	1	0.29	
	WF-209	8773	WQ	2	0.37	1	0.37	
	WF-209-1	8773	WQ	3	0.37	1	0.370	
			OC2 - RVSP	7	0.35	1	0.350	
			CR3 - RVSP	4	0.36	1	0.360	
			OC3 - RVSP	53	0.29	1	0.290	
			MD1 - RVSP	12	0.36	1	0.360	
			Z1 - RVSP	19	0.25	1	0.250	
			Z2 - RVSP	22	0.25	1	0.250	
			Sum			18	5.880	
71249	SA-1094	8457	WQ	1	0.23	1	0.230	0.22
			TP4 - RVSP	4	0.29	1	0.290	
	SA-1101	8445	WQ	1	0.21	1	0.210	
			OC1 - NBD	30	0.18	4	0.720	
			TP3 - RVSP	6	0.33	1	0.330	
	SA-1229	8492	WQ	1	0.20	1	0.200	
	SA-1344	8504	WQ	1	0.21	1	0.210	
	SA-1706	8669	WQ	1	0.21	1	0.210	
	SA-1769	8738	WQ	1	0.19	1	0.190	
			W - RVSP	31	0.28	1	0.280	
			Sum			13	2.870	

Coil-to-Coil Weighted Average

Weld Wire Heat Number	Weid Number	Flux Lot No.	Source of Weldment	No. of Observ.	Cu wt% Mean	No. of Coils (Weight)	Cu*Wt		Weighted Mean Cu
61782	SA-847	8350	WQ	1	0.20	1	0.200		0.24
	SA-848	8373	WQ	1	0.22	1	0.220		
	SA-948	8596	WQ	1	0.18	1	0.180		
	SA-1014	8436	WQ	1	0.23	1	0.230		
	SA-1036	8436	WQ	1	0.31	1	0.310		
			OC1 - NBD	12	0.20	4	0.800		
			REG - RVSP	10	0.24	1	0.240		
	SA-1118	8443	WQ	1	0.22	1	0.220		
	SA-1135	8457	WQ	1	0.17	1	0.170		
			OC2 - NBD	29	0.27	7	1.890		
	SA-1346	8504	WQ	1	0.20	1	0.200		
	SA-1779	8738	WQ	1	0.28	1	0.280		
	SA-1788	8754	WQ	1	0.29	1	0.290		
				Sum		22	5.230		
72445	SA-1263	8504	WQ	1	0.24	1	0.240		0.22
			PB1 - RVSP	2	0.23	1	0.230		
	SA-1471	8578	WQ	1	0.18	1	0.180		
						0.000			
	SA-1582	8596	WQ	1	0.25	1	0.250		
	SA-1585	8597	WQ	1	0.25	1	0.250		
	SA-1585	8597	ANO1 - NBD	32	0.22	7	1.540		
	SA-1650	8632	WQ	1	0.20	1	0.200		
	WF-9	8632	WQ	1	0.17	1	0.170		
	WF-101	8688	WQ	1	-----	1	-----		
				Sum		14	3.06		
406L44	WF-112	8668	WQ	3	0.30	1	0.300		0.26
			OC1 - RVSP	24	0.22	1	0.220		
	WF-154	8720	WQ	3	0.26	1	0.260		
	WF-183	8754	WQ	1	0.21	1	0.210		
	WF-193	8773	WQ	2	0.28	1	0.280		
			ANO1 - RVSP	9	0.27	1	0.270		
			PB2 - RVSP	1	0.25	1	0.250		
				Sum		7	1.790		

Coil-to-Coil Weighted Average

Weld Wire Heat Number	Weld Number	Flux Lot No.	Source of Weldment	No. of Observ.	Cu wt% Mean	No. of Coils (Weight)	Cu*Wt		Weighted Mean Cu
72442	SA-1450	8467	WQ	1	0.25	1	0.250		0.25
	SA-1484	8579	WQ	1	0.25	1	0.250		
			CR3 - NBD	18	0.26	5	1.300		
	WF-67	8669	WQ	4	0.32	1	0.320		
	WF-67	8669	MD1 - NBD	27	0.22	4	0.880		
	Sum	12	3.000						
821T44	WF-182	8754	WQ	3	0.26	1	0.260		0.25
	WF-182-1	8754	WQ	4	0.23	1	0.230		
			TMI2 - RVSP	4	0.28	1	0.280		
			DB1 - RVSP	6	0.22	1	0.220		
	WF-195	8773	WQ	1	----	1	----		
	WF-200	8773	WQ	1	0.26	1	0.260		
					Sum	5	1.250		
8T1554	SA-1174	8479	WQ	1	0.19	1	0.19		0.16
	SA-1413	8504	WQ	1	----	1	----		
	SA-1494	8579	WQ	1	0.14	1	0.14		
	WF-69	8669	WQ	1	0.15	1	0.15		
	WF-169-1	8754	WQ	3	0.16	1	0.16		
					Sum	4	0.64		
	72102	WF-29	8650	WQ	3	0.21	1		
SA-1187		8479	WQ	1	0.21	1	0.21		
					Sum	2	0.42		
8T3914	WF-232	8790	WQ	2	0.18	1	0.18		0.18
	WF-252	8806	WQ	1	----	1	----		
					Sum	1	0.18		
T29744	WF-233	8790	WQ	4	0.25	1	0.25		0.27
			KORI1 - RVSP	4	0.29	1	0.29		
	WF-282	8806	WQ	1	----	1	----		
					Sum	2	0.54		

Coil-to-Coil Weighted Average

Weld Wire Heat Number	Weld Number	Flux Lot No.	Source of Weldment	No. of Observ.	Cu wt% Mean	No. of Coils (Weight)	Cu*Wt		Weighted Mean Cu
8T1762	SA-1426	8553	WQ	1	0.18	1	0.18		0.19
	SA-1430	8553	WQ	1	0.16	1	0.16		
	SA-1493	8578	WQ	1	0.22	1	0.22		
	SA-1580	8596	WQ	1	0.22	1	0.22		
	WF-4	8597	WQ	1	0.17	1	0.17		
	WF-8	8632	WQ	1	0.2	1	0.20		
	WF-18	8650	WQ	1	-----	1	-----		
					Sum	6	1.15		
1P0962	SA-1073	8445	WQ	1	0.21	1	0.21		0.21
1P0661	SA-775	8304	WQ	1	0.19	1	0.19		0.17
	SA-1060	8446	WQ	1	0.14	1	0.14		
					Sum	2	0.33		
1P0815	SA-806	8304	WQ	1	0.25	1	0.25		0.17
	SA-812	8350	WQ	1	0.12	1	0.12		
	SA-1366	8544	WQ	1	0.13	1	0.13		
					Sum	3	0.50		

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	----	SA-1526	8596	Weld Qualification	Barberton WQ - Lab No. 67239	0.46	0.60					
1	---	----	WF-19	8650	Weld Qualification	Mt. Vernon WQ - Lab No. 5207	0.29	0.72					WQ test rejected
1	---	----	WF-25	8650	Weld Qualification	Mt. Vernon WQ - Lab No. 5396	0.29	0.71					
1	---	----	WF-25	8650	Weld Qualification	Retest of WQ sample	0.32	---	0.33	0.72	0.010	0.007	
2	---	----	WF-25	8650	Weld Qualification	Retest of WQ sample	0.34	0.71					
3	---	----	WF-25	8650	Weld Qualification	Retest of WQ sample	0.33	0.72					
1	---	TMI2	WF-25	8650	Nozzle Dropout	Mt. Vernon Lab No. 28819	0.35	0.69	0.35	0.70	0.000	0.007	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	TMI2	WF-25	8650	Nozzle Dropout		0.35	0.70					
1	---	OC3	WF-25	8650	Nozzle Dropout	Mt. Vernon Lab No. 28818	0.36	0.70	0.36	0.70	0.007	0.000	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	OC3	WF-25	8650	Nozzle Dropout		0.35	0.70					
1	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30538	0.27	0.63	0.30	0.63	0.025	0.005	Block 7, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30539	0.29	0.63					
3	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30540	0.29	0.63					
4	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30541	0.33	0.64					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
5	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30534	0.36	0.69	0.36	0.70	0.008	0.006	Block 20, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
6	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30535	0.37	0.70					
7	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30536	0.36	0.69					
8	---	TMI1	WF-25	8650	Surv. Weld Block	Mt Vernon Lab No. 30537	0.35	0.70					
1	ID	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30632	0.34	0.67	0.35	0.68	0.021	0.038	Weld 64W, Source Definition: Memo to C.E. Harris, NPGD from R.R. Seeley, ARC, "Weld Records for NSS-3 Through NSS-12," dated November 7, 1977.
2	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30631	0.36	0.70					
3	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30630	0.37	0.70					
4	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30629	0.38	0.70					
5	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30628	0.40	0.70					
6	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30627	0.38	0.71					
7	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30626	0.38	0.71					
8	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30625	0.36	0.67					
9	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30624	0.37	0.62					
10	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30623	0.34	0.60					
11	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30622	0.32	0.60					
12	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30621	0.33	0.64					
13	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30620	0.36	0.69					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
14	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30619	0.36	0.70					
15	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30618	0.36	0.70					
16	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30617	0.35	0.71					
17	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30616	0.34	0.66					
18	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30615	0.32	0.60					
19	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30614	0.31	0.60					
20	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30613	0.36	0.68					
21	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30612	0.37	0.70					
22	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30611	0.36	0.70					
23	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30610	0.34	0.70					
24	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30609	0.34	0.70					
25	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30608	0.36	0.70					
26	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30607	0.35	0.69					
27	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30606	0.38	0.69					
28	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30605	0.35	0.70					
29	OD	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 30604	0.33	0.71					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	ID	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29274	0.34	0.69	0.35	0.68	0.022	0.038	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29275	0.36	0.70					
3	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29276	0.37	0.70					
4	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29277	0.37	0.70					
5	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29278	0.40	0.71					
6	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29279	0.38	0.71					
7	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29280	0.36	0.70					
8	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29281	0.35	0.61					
9	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29282	0.34	0.60					
10	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29283	0.32	0.59					
11	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29284	0.31	0.62					
12	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29285	0.36	0.68					
13	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29286	0.36	0.69					
14	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29287	0.35	0.69					
15	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29288	0.35	0.71					
16	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29289	0.33	0.70					
17	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29290	0.30	0.61					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
18	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29291	0.30	0.62					
19	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29292	0.35	0.68					
20	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29293	0.35	0.70					
21	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29294	0.35	0.70					
22	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29295	0.34	0.70					
23	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29296	0.35	0.69					
24	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29297	0.36	0.70					
25	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29298	0.37	0.69					
26	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29299	0.35	0.69					
27	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29300	0.36	0.69					
28	---	TMI2	WF-25	8650	Nozzle Dropout	Mt Vernon Lab No. 29301	0.35	0.70					
1	ID	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section FF	0.33	0.69	0.31	0.67	0.019	0.039	Weld 63W, Source Definition: Memo to C.E. Harris, NPGD from R.R. Seeley, ARC, "Weld Records for NSS-3 Through NSS-12," dated November 7, 1977.
2	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section EE	0.34	0.69					
3	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section CC	0.33	0.69					
4	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section BB	0.34	0.69					
5	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section AA	0.32	0.69					
6	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section Z	0.32	0.70					


Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
7	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section Y	0.30	0.69					
8	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section X	0.32	0.63					
9	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section W	0.31	0.60					
10	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section V	0.31	0.60					
11	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section U	0.28	0.59					
12	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section T	0.30	0.69					
13	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section S	0.33	0.70					
14	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section R	0.33	0.70					
15	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section Q	0.32	0.71					
16	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section P	0.32	0.70					
17	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section O	0.33	0.70					
18	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section N	0.32	0.69					
19	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section M	0.27	0.60					
20	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section L	0.26	0.58					
21	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section K	0.31	0.65					
22	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section J	0.32	0.69					
23	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section I	0.33	0.70					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
24	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section H	0.31	0.69					
25	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section G	0.31	0.70					
26	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section F	0.29	0.69					
27	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section E	0.32	0.70					
28	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section D	0.34	0.70					
29	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section C	0.32	0.66					
30	---	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section B	0.30	0.65					
31	OD	TMI2	WF-25	8650	Nozzle Dropout	Barberton Analysis Section A	0.30	0.66					
1	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29818	0.36	0.70	0.37	0.70	0.010	0.018	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29819	0.37	0.70					
3	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29820	0.38	0.71					
4	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29821	0.39	0.71					
5	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29822	0.37	0.70					
6	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29823	0.39	0.71					
7	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29824	0.38	0.71					
8	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29825	0.37	0.71					
9	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29826	0.36	0.71					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
10	---	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29827	0.37	0.71					
11	OD	CR3	SA-1526	8596	Nozzle Dropout	Mt. Vernon Lab No. 29828	0.38	0.65					
1	---	CR3	SA-1526	8596	Nozzle Dropout Rerun	Mt. Vernon Lab No. 28793	0.36	0.70	0.36	0.70	0.000	0.000	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	CR3	SA-1526	8596	Nozzle Dropout Rerun		0.36	0.70					
1	---	S1	SA-1526	8596	Surv. Weld Block	RVSP baseline chemistry	0.25	0.68					Reference: WCAP-11415
1	---	S1	SA-1526	8596	Surv. Weld Block	CVN Specimen ID - W-10	0.24	0.64					Reference: WCAP-11415
1	---	TMI1	WF-25	8650	Surv. Weld Block	CVN Specimen ID - CC-018	0.34	0.43					Reference: BAW-1439 (Cu mean of 4 analyses & Ni mean of 3 analyses), Ni content suspect
1	---	TMI1	WF-25	8650	Surv. Weld Block	CVN Specimen ID - CC-018 Retest	0.35	0.71					
1	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis - Lab No. 28774	0.34	0.69	0.35	0.69	0.006	0.005	Weld 63W, Source Definition: Memo to C.E. Harris, NPGD, from R.R. Seeley, ARC, "Weld Records for NSS-3 Through NSS-12," dated November 7, 1977.
2	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis	0.34	0.68					
3	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis - Lab No. 28775	0.35	0.69					
4	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis	0.35	0.69					
1	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Barberton analysis	0.27	0.67	0.28	0.68	0.013	0.007	
2	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Barberton analysis	0.29	0.68					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.29	0.66	0.33	0.68	0.049	0.021	
2	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.36	0.69					
1	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.33	0.59	0.34	0.59	0.009	0.006	
2	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.35	0.58					
3	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.34	0.59					
1	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.34	0.70	0.34	0.69	0.007	0.014	
2	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample LRC analysis	0.33	0.68					
1	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample J&L Steel Co analysis	0.33	0.68					
1	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample ORNL analysis	0.28	0.65	0.25	0.68	0.023	0.038	
2	Top	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Y-12 analysis	0.24	0.72					
3	Btm	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample Y-12 analysis	0.24	0.66					
1	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample NBS analysis - 63W	0.31	0.68	0.31	0.68	0.003	0.006	Cu & Ni mean of 4 analyses
2	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample NBS analysis - 63W	0.31	0.69					Cu & Ni mean of 4 analyses
3	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample NBS analysis - 63W	0.31	0.69					Cu & Ni mean of 4 analyses
4	---	TMI2	WF-25	8650	Nozzle Dropout	Round Robin Sample NBS analysis - 63W	0.30	0.68					Cu & Ni mean of 4 analyses
1	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-258	0.28	0.57	0.29	0.65	0.040	0.166	Reference:
2	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-259	0.26	0.51					Unavailable (Data will not be used in best-estimate evaluation for this weld wire).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
3	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-262	0.34	0.58					
4	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-291R	0.24	0.46					
5	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-209	0.24	0.64					
6	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-209	0.29	0.66					
7	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-289	0.29	0.68					
8	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-291C	0.32	0.68					
9	---	HSST-63W	WF-25	8650	Nozzle Dropout	Specimen ID: 63W-291C	0.35	1.04					

 - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Weld Wire Heat 72105

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Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
1	---	----	WF-70	8669	Weld Qualification	Mt. Vernon WQ - Lab No. 6595	0.27	0.46					Ni content suspect
1	---	----	WF-70	8669	Weld Qualification	Retest of WQ sample	0.31	---	0.33	----	0.021	----	
2	---	----	WF-70	8669	Weld Qualification	Retest of WQ sample	0.34	0.58					
1	---	----	WF-113	8688	Weld Qualification	Mt. Vernon WQ - Lab No. 7277	0.21	0.59					Cu content suspect; WQ test rejected
1	---	----	WF-113	8688	Weld Qualification	Retest of WQ sample	0.28	---	0.29	0.60	0.012	0.014	
2	---	----	WF-113	8688	Weld Qualification	Retest of WQ sample	0.30	0.59					
3	---	----	WF-113	8688	Weld Qualification	Retest of WQ sample	0.30	0.61					
1	---	----	WF-209	8773	Weld Qualification	Mt. Vernon WQ - Lab No. 9837	0.32	0.59					
1	---	----	WF-209	8773	Weld Qualification	Retest of WQ sample	0.41	---					
1	---	----	WF-209-1	8773	Weld Qualification	Mt. Vernon WQ - Lab No. 10029	0.30	0.48					Ni content suspect
1	---	----	WF-209-1	8773	Weld Qualification	Retest of WQ sample	0.41	0.59	0.41	0.59	0.007	0.000	
2	---	----	WF-209-1	8773	Weld Qualification	Retest of WQ sample	0.40	0.59					
1	---	----	WF-353	8848	Weld Qualification	Mt. Vernon WQ - Lab No. 14433	0.08	0.44					Cu & Ni contents suspect
1	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30418	0.44	0.60	0.42	0.59	0.050	0.010	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30417	0.47	0.61					
3	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30416	0.49	0.61					
4	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30415	0.47	0.61					
5	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30414	0.47	0.60					
6	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30413	0.48	0.59					
7	---	MD1	WF-70	8669	Nozzie Dropout Rerun	Mt Vernon Lab No. 30412	0.36	0.59					
8	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30411	0.37	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
9	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30410	0.39	0.58					
10	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30409	0.35	0.58					
11	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30408	0.35	0.58					
12	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30407	0.39	0.59					
13	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30406	0.40	0.59					
14	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30405	0.42	0.59					
15	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30404	0.43	0.59					
1	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30050	0.35	0.59	0.35	0.58	0.006	0.006	Block 3, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30051	0.36	0.58					
3	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30052	0.35	0.58					
4	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30053	0.36	0.58	0.36	0.58	0.000	0.006	Block 6, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
5	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30054	0.36	0.58					
6	---	OC2	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30055	0.36	0.57					
1	---	CR3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30550	0.37	0.59	0.36	0.61	0.019	0.013	Block 23, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	CR3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30551	0.35	0.61					
3	---	CR3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30552	0.37	0.60					
4	---	CR3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30553	0.33	0.62					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30056	0.29	0.57	0.29	0.57	0.006	0.006	Block 12, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30057	0.30	0.58					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30058	0.29	0.57					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30014	0.29	0.58	0.29	0.58	0.010	0.000	Block 21, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30015	0.30	0.58					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30016	0.28	0.58					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30566	0.32	0.59	0.32	0.59	0.005	0.000	Block 15, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30567	0.32	0.59					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30568	0.31	0.59					
4	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30569	0.32	0.59					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30570	0.30	0.58	0.31	0.58	0.008	0.000	Block 17, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30571	0.31	0.58					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30572	0.32	0.58					
4	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30573	0.31	0.58					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30558	0.31	0.58	0.31	0.58	0.006	0.000	Block 18, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30559	0.30	0.58					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30560	0.31	0.58					
4	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30561	0.30	0.58					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30562	0.28	0.59	0.29	0.59	0.012	0.005	Block 22, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30563	0.28	0.59					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30564	0.30	0.58					
4	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30565	0.30	0.59					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30574	0.27	0.58	0.30	0.58	0.022	0.000	Block 29, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30575	0.30	0.58					
3	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30576	0.31	0.58					
4	---	OC3	WF-209-1	8773	Surv. Weld Block	Mt Vernon Lab No. 30577	0.32	0.58					
1	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28869	0.46	0.60	0.43	0.59	0.053	0.009	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28868	0.47	0.60					
3	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28867	0.49	0.60					
4	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28866	0.48	0.60					
5	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28865	0.50	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
6	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28864	0.37	0.59					
7	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28863	0.40	0.59					
8	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28862	0.38	0.58					
9	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28861	0.34	0.58					
10	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28860	0.38	0.58					
11	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28859	0.39	0.58					
12	---	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28858	0.46	0.58					
13	OD	MD1	WF-70	8669	Nozzle Dropout	Mt Vernon Lab No. 28857	0.41	0.58					
1	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.42	0.56	0.41	0.57	0.016	0.015	Block 12-28, Source Defin.: FTI Doc No. 02-1185134E-00
2	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.41	0.56					
3	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.41	0.56					
4	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.39	0.56					
5	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.39	0.56					
6	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.39	0.56					
7	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.44	0.56					
8	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.42	0.55					
9	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.42	0.56					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
10	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.42	0.56					
11	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.40	0.59					
12	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.40	0.59					
13	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.43	0.57					
14	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1AWC	0.42	0.60					
1	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.35	0.54	0.36	0.56	0.026	0.011	Block 12-28, Source Defin.: FTI Doc No. 02-1185134E-00
2	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.38	0.56					
3	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.38	0.56					
4	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.31	0.57					
5	Side 1	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.34	0.56					
6	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.37	0.57					
7	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.40	0.57					
8	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.38	0.56					
9	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.36	0.58					
10	Side 2	MD1	WF-70	8669	Nozzle Dropout	Barberton Analysis Blk ID: MS294-1BWC	0.35	0.57					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
1	Side 1	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.46	0.55	0.46	0.56	0.008	0.012	Block 12-28, Source Defin.: FTI Doc No. 02-1185134E-00
2	Side 1	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.45	0.55					
3	Side 1	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.45	0.56					
4	Side 2	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.45	0.56					
5	Side 2	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.46	0.57					
6	Side 2	MD1	WF-70	8669	Nozzle Dropout	Blk ID: MS294-1CWC	0.47	0.58					
1	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 28799	0.40	0.58	0.39	0.59	0.012	0.005	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-70	8669	Nozzle Dropout Rerun		0.40	0.59					
3	---	MD1	WF-70	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 28801	0.38	0.59					
4	---	MD1	WF-70	8669	Nozzle Dropout Rerun		0.38	0.59					
1	0.07T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.29	0.56	0.33	0.58	0.107	0.019	Reference: NUREG/CR-5914
2	0.2T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.20	0.58					
3	0.4T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.15	0.59					
4	0.5T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.37	0.61					
5	0.54T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.46	0.59					
6	0.7T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.37	0.56					
7	0.8T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.38	0.56					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
8	0.95T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-1	0.41	0.56					
1	0.07T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.30	0.56	0.30	0.57	0.105	0.014	Reference: NUREG/CR-5914
2	0.2T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.19	0.58					
3	0.4T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.14	0.58					
4	0.5T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.23	0.60					
5	0.54T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.42	0.58					
6	0.7T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.38	0.57					
7	0.8T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.39	0.56					
8	0.95T	MD1	WF-70	8669	Nozzle Dropout	ORNL Analysis Block No. 3-4	0.38	0.56					
1	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.26	0.56	0.26	0.57	0.005	0.005	Block 1-1, Source Defin.: FTI Doc No. 02-1185171E-00
2	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.26	0.57					
3	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.25	0.56					
4	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.26	0.57					
5	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.25	0.57					
6	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-1WC	0.25	0.57					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.27	0.55	0.27	0.56	0.005	0.006	Block 1-1, Source Defin.: FTI Doc No. 02-1185171E-00
2	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.27	0.56					
3	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.28	0.56					
4	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.27	0.56					
5	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.27	0.57					
6	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-3WC	0.28	0.56					
1	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.55	0.35	0.57	0.006	0.015	Block 1-1, Source Defin.: FTI Doc No. 02-1185171E-00
2	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.56					
3	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.56					
4	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.56					
5	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.58					
6	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.56					
7	Side 1	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.57					
8	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.56					
9	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.56					
10	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.59					
11	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.60					

Data Point	Loc.	Plant Source	Weid ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
12	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.35	0.58					
13	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.36	0.59					
14	Side 2	MD1	WF-70	8669	Beltline Weld	Barberton Analysis Blk ID: MS304-4WC	0.34	0.58					
1	1/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.24	0.58	0.26	0.58	0.044	0.019	Reference: NUREG/CR-5914
2	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.22	0.56					
3	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.27	0.57					
4	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.22	0.57					
5	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.22	0.62					
6	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.30	0.58					
7	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.27	0.56					
8	7/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-9	0.34	0.57					
1	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.23	0.57	0.26	0.57	0.029	0.008	Reference: NUREG/CR-5914
2	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.23	0.57					
3	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.24	0.58					
4	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.25	0.58					
5	5/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.26	0.56					
6	5/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.25	0.57					

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Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
7	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.29	0.57					
8	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-11	0.31	0.56					
1	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-13	0.24	0.58	0.25	0.60	0.043	0.018	Reference: NUREG/CR-5914
2	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-13	0.21	0.61					
3	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-13	0.22	0.63					
4	5/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-13	0.25	0.60					
5	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-13	0.32	0.60					
1	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.29	0.58	0.25	0.57	0.028	0.010	Reference: NUREG/CR-5914
2	1/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.28	0.57					
3	1/2T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.25	0.57					
4	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.22	0.56					
5	3/4T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.22	0.57					
6	7/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.27	0.55					
7	7/8T	MD1	WF-70	8669	Beltline Weld	ORNL Analysis Block ID: 1-15	0.25	0.57					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.30	0.53	0.29	0.54	0.019	0.009	Block 9-1, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976 & FTI Doc No. 02-1185133E-00 & 51-1174397-00
2	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.29	0.52					
3	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.30	0.53					
4	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.30	0.53					
5	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.30	0.54					
6	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.27	0.54					
7	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.26	0.54					
8	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-1	0.26	0.55					
1	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.30	0.54	0.28	0.54	0.018	0.012	Blk 9-34, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976 & FTI Doc No. 02-1185133E-00 & 51-1174397-00
2	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.29	0.54					
3	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.29	0.54					
4	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.30	0.55					
5	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.26	0.54					
6	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.29	0.56					
7	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.29	0.55					
8	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-2	0.25	0.52					


Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.30	0.55	0.30	0.55	0.008	0.006	Blk 9-34, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976 & FTI Doc No. 02-1185133E-00 & 51-1174397-00
2	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.29	0.55					
3	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.30	0.55					
4	Side 1	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.30	0.56					
5	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.29	0.54					
6	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.28	0.55					
7	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.30	0.56					
8	Side 2	OC3	WF-209-1	8773	Surv. Weld Block	Barberton Analysis Blk ID: MS293 WC-3	0.30	0.55					
1	---	OC3	WF-209-1	8773	Surv. Weld Block	GE Analysis Block ID:9-18	0.26	0.55	0.26	0.56	0.007	0.014	Reference: GE Supplemental Surv. Program & Letter to T. Caine, GE from J.F. Walters, FTI, "B&WOG's Supply of RV Surveillance Material," dated March 13, 1990.
2	---	OC3	WF-209-1	8773	Surv. Weld Block	GE Analysis Block ID:9-18	0.25	0.57					
1	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31585	0.32	0.58	0.36	0.58	0.031	0.005	Blk BN 6, Source Definition: Memo to C.E. Harris, NPGD, from R.A. Fearing, Mt. Vernon QA, "Surveillance Weld NSS-12," dated May 3, 1978.
2	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31586	0.34	0.59					
3	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31587	0.37	0.59					
4	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31588	0.37	0.58					
5	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31589	0.41	0.58					
6	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31590	0.35	0.58					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31591	0.36	0.59	0.36	0.59	0.012	0.000	Blk BN 10, Source Definition Memo to C.E. Harris, NPGD, from R.A. Fearing, Mt. Vernon QA, "Surveillance Weld NSS-12," dated May 3, 1978.
2	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31592	0.35	0.59					
3	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31593	0.38	0.59					
4	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31594	0.35	0.59					
5	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31595	0.37	0.59					
6	---	MD1	WF-209-1	8773	Surv. Weld Block	Mt. Vernon Analysis Lab No. 31596	0.36	0.59					
1	---	OC2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - EE-016	0.34	0.60	0.34	0.60	0.02	0.01	Reference: BAW-1437 (Cu mean of 4 analyses & Ni mean of 3 analyses)
1	---	OC3	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - JJ-091	0.29	0.58					Reference: BAW-1438
1	---	Z1	WF-209-1	8773	Surv. Weld Block	RVSP baseline chemistry	0.35	0.57					Reference: WCAP-8064
1	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-25	0.22	0.53	0.25	0.54	0.021	0.022	Reference: SwRI-7484-001/1
1	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-25	0.27	0.57					
2	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-28	0.22	0.55					
2	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-28	0.25	0.49					
3	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-26	0.26	0.56					
4	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-27	0.26	0.54					
5	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-29	0.24	0.55					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
6	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-30	0.26	0.53					
7	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-31	0.28	0.56					
8	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-32	0.25	0.54					
1	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-49	0.25	0.55	0.23	0.54	0.011	0.007	Reference: BAW-2082
2	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-50	0.22	0.55					
3	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-51	0.22	0.54					
4	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-52	0.23	0.54					
5	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-53	0.23	0.54					
6	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-54	0.22	0.54					
7	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-55	0.24	0.55					
8	---	Z1	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-56	0.24	0.53					
1	---	Z2	WF-209-1	8773	Surv. Weld Block	RVSP baseline chemistry	0.28	0.55					Reference: WCAP-8132
1	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-37A	0.19	0.52	0.24	0.52	0.034	0.028	Reference: SwRI-6901
2	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-37B	0.23	0.52					
2	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-37B	0.26	0.53					
3	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-38A	0.23	0.54					
4	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-38B	0.25	0.53					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
4	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-38B	0.31	0.52					
5	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-39A	0.27	0.53					
6	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-39B	0.21	0.46					
6	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-39B	0.28	0.55					
7	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-33A	0.26	0.54					
8	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-34A	0.23	0.47					
9	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-35A	0.22	0.52					
10	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-36A	0.20	0.56					
11	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-40A	0.17	0.53					Chemical analysis suspect, specimen may have been notched in the base metal. This data will not be used in best-estimate evaluation for this weld wire.
12	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-40B	0.10	0.74					
12	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-40B	0.09	0.76					
1	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-50	0.26	0.57	0.26	0.59	0.015	0.016	Reference: WCAP-12396
2	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-55	0.27	0.60					
3	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-49	0.26	0.59					
4	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-51	0.28	0.60					
5	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-52	0.26	0.60					
6	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-53	0.27	0.60					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
7	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-54	0.26	0.56					
8	---	Z2	WF-209-1	8773	Surv. Weld Block	CVN Specimen ID - W-56	0.23	0.59					

 - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
1	---	----	SA-1094	8457	Weld Qualification	Barberton WQ	0.23	0.55					
1	---	----	SA-1101	8445	Weld Qualification	Barberton WQ	0.21	0.57					
1	---	----	SA-1229	8492	Weld Qualification	Barberton WQ	0.20	0.57					
1	---	----	SA-1344	8504	Weld Qualification	Barberton WQ	0.21	0.62					
1	---	----	SA-1706	8669	Weld Qualification	Barberton WQ - Lab No. E-70325	0.21	0.55					
1	---	----	SA-1769	8738	Weld Qualification	Barberton WQ - Lab No. E-76488	0.19	0.66					
1	ID	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29652	0.29	0.63	0.29	0.63	0.020	0.008	Weld 61W, Source Definition: Memo to P.S. Ayres, ARC from R.R. Seeley, ARC, "Trip Report: Upper Shelf Irradiation Program," dated September 24, 1976 & Memo to R.E. Ham, NPGD, from H.S. Palme, NPGD, "NRL Irradiation Studies and WF- 25," dated June 24, 1976
2	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29651	0.31	0.63					
3	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29650	0.31	0.63					
4	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29649	0.27	0.63					
5	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29648	0.28	0.63					
6	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29647	0.28	0.62					
7	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29646	0.31	0.62					
8	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29645	0.29	0.62					
9	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29644	0.28	0.62					
10	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29643	0.34	0.63					
11	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29642	0.30	0.63					
12	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29641	0.29	0.63					
13	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29640	0.27	0.62					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
14	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29639	0.28	0.62					
15	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29638	0.28	0.62					
16	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29637	0.24	0.62					
17	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29636	0.26	0.62					
18	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29635	0.27	0.63					
19	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29634	0.28	0.63					
20	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29633	0.28	0.64					
21	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29632	0.31	0.64					
22	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29631	0.28	0.64					
23	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29630	0.28	0.64					
24	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29629	0.27	0.64					
25	---	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29628	0.27	0.64					
26	OD	W	SA-1769	8738	Surv. Weld Block	Mt Vernon Lab No. 29627	0.31	0.64					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. I	0.23	0.52	0.18	0.54	0.025	0.009	Reference & Source Defin.: EPRI NP-373 & Memo to R.R. Seeley, ARC, from R.A. Fearing, QA, "Weld Materials - 620-0003 Nozzle Belt," dated May 24, 1976 (compare Appendix D "Weld Process Control Information" with Mt. Vernon Weld Control Record contained in Memo).
2	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. H	0.20	0.54					
3	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. G	0.20	0.54					
4	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. F	0.17	0.54					
5	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. E	0.15	0.55					
6	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. D	0.19	0.54					
7	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. C	0.18	0.55					
8	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. B	0.15	0.54					
9	---	OC1	SA-1101	8445	Nozzle Dropout	Spec No. A	0.16	0.55					
1	---	TP3	SA-1101	8445	Surv. Weld Block	RVSP baseline chemistry	0.31	0.57					Reference: WCAP- 7656
1	---	TP4	SA-1094	8457	Surv. Weld Block	RVSP baseline chemistry	0.30	0.60					Reference: WCAP- 7660
1	---	TP3	SA-1101	8445	Surv. Weld Block	RVSP baseline chemistry retest	0.33	---	0.33	----	0.007	----	Reference: FP&L Letter L-77-113 to Uhrig, FP&L, "Turkey Point Unit 4,
1	---	TP3	SA-1101	8445	Surv. Weld Block	RVSP baseline chemistry retest	0.32	---					
1	---	TP4	SA-1094	8457	Surv. Weld Block	CVN Specimen	0.27	---	0.29	----	0.015	----	Docket No. 50-251, "Fracture Toughness Requirements," dated April 11, 1977.
2	---	TP4	SA-1094	8457	Surv. Weld Block	CVN Specimen	0.29	---					
3	---	TP4	SA-1094	8457	Surv. Weld Block	CVN Specimen	0.30	---					
1	---	TP3	SA-1101	8445	Surv. Weld Block	CVN Specimen ID - W-17	0.35	---	0.34	----	0.015	----	Reference: FP&L Letter L-77-196 to Uhrig, FP&L, "Turkey Point Unit 3, Docket No. 50-250, "Weld Metal Copper Data," dated June 30, 1977.
2	---	TP3	SA-1101	8445	Surv. Weld Block	CVN Specimen ID - W-19	0.34	---					
3	---	TP3	SA-1101	8445	Surv. Weld Block	CVN Specimen ID - W-20	0.32	---					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis - Lab No. 28772	0.19	0.63	0.18	0.62	0.010	0.008	62W, Source Definition: Memo to R.R. Seeley, ARC, from R.A. Fearing, QA, "Weld Materials - 620-0003 Nozzle Belt," dated May 24, 1976 (compare Appendix D "Weld Process Control Information" with Mt. Vernon Weld Control Record contained in Memo).
2	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis	0.19	0.61					
3	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis - Lab No. 28773	0.17	0.62					
4	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Mt. Vernon analysis	0.18	0.62					
1	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Barberton analysis	0.16	0.60	0.16	0.61	0.001	0.007	
2	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Barberton analysis	0.16	0.61					
1	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.18	0.62	0.24	0.65	0.078	0.035	
2	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.29	0.67					
1	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.18	0.54	0.19	0.54	0.003	0.005	
2	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.19	0.53					
3	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.18	0.54					
1	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.23	0.64	0.23	0.65	0.000	0.007	
2	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample LRC analysis	0.23	0.65					
1	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample J&L Steel Co analysis	0.17	0.62					
1	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample ORNL analysis	0.18	0.61	0.16	0.63	0.029	0.020	
2	Top	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Y-12 analysis	0.18	0.65					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
3	Btm	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample Y-12 analysis	0.13	0.63					Cu & Ni mean of 4 analyses Cu & Ni mean of 4 analyses Cu & Ni mean of 4 analyses Cu & Ni mean of 4 analyses
1	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample NBS analysis - 62W	0.17	0.62	0.17	0.62	0.004	0.003	
2	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample NBS analysis - 62W	0.17	0.61					
3	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample NBS analysis - 62W	0.17	0.62					
4	---	OC1	SA-1101	8445	Nozzle Dropout	Round Robin Sample NBS analysis - 62W	0.18	0.62					
1	ID	W	SA-1769	8738	Surv. Weld Block	Weld HSST-61W Westinghouse anal.	0.31	0.63	0.28	0.63	0.019	0.010	Data presented May 30, 1978 at Bethesda, MD
2	0.2T	W	SA-1769	8738	Surv. Weld Block	Weld HSST-61W Westinghouse anal.	0.28	0.62					
3	0.5T	W	SA-1769	8738	Surv. Weld Block	Weld HSST-61W Westinghouse anal.	0.26	0.62					
4	0.6T	W	SA-1769	8738	Surv. Weld Block	Weld HSST-61W Westinghouse anal.	0.28	0.64					
5	OD	W	SA-1769	8738	Surv. Weld Block	Weld HSST-61W Westinghouse anal.	0.27	0.64					
1	ID	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-232	0.39	0.47	0.28	0.56	0.068	0.159	Reference: Unavailable (Data will not be used in best-estimate evaluation for this weld wire).
2	0.2T	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-276	0.24	0.59					
3	0.2T	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-246	0.21	0.45					
4	0.5T	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-225	0.35	0.44					
5	0.6T	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-222	0.24	0.52					
6	OD	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-270	0.24	0.54					
7	OD	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-270	0.28	0.62					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
8	OD	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-270	0.26	0.59					
9	OD	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-270	0.36	0.97					
10	OD	HSST-61W	SA-1769	8738	Surv. Weld Block	Specimen ID: 61W-234	0.19	0.43					
1	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-309	0.17	0.52	0.19	0.63	0.057	0.184	Reference: Unavailable (Data will not be used in best-estimate evaluation for this weld wire).
2	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-359	0.17	0.48					
3	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-202	0.18	0.57					
4	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-223	0.18	0.58					
5	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-223	0.15	0.62					
6	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-276	0.19	0.59					
7	---	HSST-62W	SA-1101	8445	Nozzle Dropout	Specimen ID: 62W-276	0.32	1.03					

- Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	----	SA-847	8350	Weld Qualification	Barberton WQ	0.20	0.39					Ni content suspect
1	---	----	SA-848	8373	Weld Qualification	Barberton WQ	0.22	0.49					
1	---	----	SA-948	8596	Weld Qualification	Barberton WQ	0.18	0.55					
1	---	----	SA-1014	8435	Weld Qualification	Barberton WQ	0.23	0.46					
1	---	----	SA-1036	8436	Weld Qualification	Barberton WC	0.31	0.64					
1	---	----	SA-1118	8443	Weld Qualification	Barberton WQ	0.22	0.52					
1	---	----	SA-1135	8457	Weld Qualification	Barberton WQ	0.17	0.50					
1	---	----	SA-1346	8504	Weld Qualification	Barberton WQ	0.20	0.51					
1	---	----	SA-1779	8738	Weld Qualification	Barberton WQ - Lab No. E-77051	0.28	0.45					WQ test rejected
1	---	----	SA-1779	8754	Weld Qualification	Barberton WQ - Lab No. E-77355	0.29	0.47					
1	ID	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30691	0.17	0.59	0.27	0.59	0.043	0.007	Weld 67W, Source Definition: Memo to C.E. Harris, NPGD from R.R. Seeley, ARC, "Weld Records for NSS-3 Through NSS-12," dated November 7, 1977.
2	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30690	0.23	0.60					
3	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30689	0.21	0.59					
4	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30688	0.23	0.60					
5	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30687	0.22	0.60					
6	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30686	0.22	0.60					
7	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30685	0.26	0.58					
8	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30684	0.33	0.59					
9	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30683	0.34	0.59					
10	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30682	0.34	0.59					
11	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30681	0.31	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
12	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30680	0.32	0.58					
13	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30679	0.31	0.59					
14	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30678	0.22	0.58					
15	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30677	0.22	0.59					
16	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30676	0.25	0.58					
17	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30675	0.24	0.58					
18	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30674	0.29	0.58					
19	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30673	0.28	0.59					
20	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30672	0.29	0.58					
21	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30671	0.28	0.58					
22	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30670	0.27	0.58					
23	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30669	0.29	0.58					
24	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30668	0.28	0.58					
25	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30667	0.27	0.58					
26	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30666	0.27	0.58					
27	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30665	0.31	0.58					
28	---	OC2	SA-1135	8457	Nozzle Dropout	Mt Vernon Lab No. 30664	0.31	0.58					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
29	OD	OC2	SA-1135	8597	Nozzle Dropout	Mt Vernon Lab No. 30663	0.27	0.58					
1	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. U	0.15	0.49	0.20	0.49	0.045	0.005	Reference: EPRI NP-373 & Memo to R.R. Seeley, ARC, from R.A. Fearing, QA, "Weld Materials - 620-0003 Nozzle Belt," dated May 24, 1976 (compare Appendix D "Weld Process Control Information" with Mt. Vernon Weld Control Record contained in Memo).
2	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. T	0.15	0.49					
3	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. S	0.17	0.50					
4	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. R	0.16	0.49					
5	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. Q	0.16	0.49					
6	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. P	0.21	0.48					
7	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. O	0.22	0.48					
8	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. N	0.23	0.49					
9	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. M	0.22	0.49					
10	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. L	0.24	0.49					
11	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. K	0.27	0.49					
12	---	OC1	SA-1036	8436	Nozzle Dropout	Spec No. J	0.27	0.49					
1	---	REG	SA-1036	8436	Surv. Weld Block	RVSP baseline chemistry	0.23	0.56					Reference: WCAP-10086
1	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen ID - W-26	0.22	0.50					Reference: WCAP-10086

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.25	0.57	0.24	0.51	0.020	0.047	Reference: RG&E Letter, RGE-96-503, RD, Chemical Analysis of Eight Weld Metal Samples,* to Mr. Ron Jaquin (RGE) from Mr. S. M. Sconce (W), dated February 27, 1996.
2	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.25	0.52					
3	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.27	0.58					
4	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.22	0.45					
5	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.23	0.50					
6	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.23	0.50					
7	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.21	0.46					
8	---	REG	SA-1036	8436	Surv. Weld Block	CVN Specimen	0.25	0.53					

■ - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	----	SA-1263	8504	Weld Qualification	Barberton WQ	0.24	0.47					
1	---	----	SA-1471	8578	Weld Qualification	Barberton WQ	0.18	0.54					
1	---	----	SA-1582	8596	Weld Qualification	Barberton WQ - Lab No. E-68303	0.25	0.49					
1	---	----	SA-1585	8597	Weld Qualification	Barberton WQ - Lab No. E-68379	0.25	0.51					
1	---	----	SA-1650	8632	Weld Qualification	Barberton WQ - Lab No. E-70102	0.20	0.47					
1	---	----	WF-9	8632	Weld Qualification	Mt. Vernon WQ	0.17	0.60					
1	---	----	WF-101	8688	Weld Qualification	Mt. Vernon WQ - Lab No. 7040	0.10	0.60					Cu content suspect
1	ID	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30662	0.24	0.59	0.21	0.59	0.026	0.007	Weld 65W, Source Definition: Memo to C.E. Harris, NPGD, from R.R. Seeley, ARC, "Weld Records for NSS-3 Through NSS-12," dated November 7, 1977.
2	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30661	0.22	0.60					
3	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30660	0.26	0.60					
4	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30659	0.23	0.61					
5	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30658	0.20	0.61					
6	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30657	0.19	0.60					
7	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30656	0.24	0.59					
8	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30655	0.23	0.59					
9	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30654	0.22	0.60					
10	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30653	0.21	0.59					
11	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30652	0.21	0.59					
12	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30651	0.22	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
13	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30650	0.18	0.59					
14	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30649	0.18	0.60					
15	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30648	0.18	0.59					
16	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30647	0.19	0.59					
17	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30646	0.29	0.60					
18	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30645	0.21	0.60					
19	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30644	0.20	0.60					
20	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30643	0.18	0.59					
21	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30642	0.18	0.59					
22	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30641	0.20	0.59					
23	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30640	0.20	0.59					
24	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30639	0.21	0.59					
25	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30638	0.22	0.59					
26	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30637	0.21	0.58					
27	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30636	0.24	0.58					
28	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30635	0.23	0.59					
29	---	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30634	0.23	0.59					

Weld Wire Heat 72445

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Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
30	OD	ANO1	SA-1585	8597	Nozzle Dropout	Mt Vernon Lab No. 30633	0.23	0.59					
1	---	PB1	SA-1263	8504	Surv. Weld Block	RVSP baseline chemistry	0.24	0.57					Reference: WCAP-10736
1	---	PB1	SA-1263	8504	Surv. Weld Block	CVN Specimen ID - WW-23	0.22	0.66					Reference: WCAP-10736
1	---	ANO1	SA-1585	8597	Nozzle Dropout Rerun	Mt Vernon Lab No. 28798	0.24	0.58	0.24	0.59	0.000	0.007	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	ANO1	SA-1585	8597	Nozzle Dropout Rerun	Mt Vernon Lab No. 30043	0.24	0.59					


■ - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	----	WF-112	8688	Weld Qualification	Mt. Vernon WQ - Lab No. 7278	0.22	0.58					Cu content suspect
1	---	----	WF-112	8688	Weld Qualification	Retest of WQ sample	0.26	---	0.30	0.59	0.032	0.007	
2	---	----	WF-112	8688	Weld Qualification	Retest of WQ sample	0.32	0.58					
3	---	----	WF-112	8688	Weld Qualification	Retest of WQ sample	0.31	0.59					
1	---	----	WF-154	8720	Weld Qualification	Mt. Vernon WQ - Lab No. 8151	0.20	0.59					Cu content suspect
1	---	----	WF-154	8720	Weld Qualification	Retest of WQ sample	0.25	---	0.26	0.60	0.010	0.007	
2	---	----	WF-154	8720	Weld Qualification	Retest of WQ sample	0.27	0.59					
3	---	----	WF-154	8720	Weld Qualification	Retest of WQ sample	0.26	0.60					
1	---	----	WF-183	8754	Weld Qualification	Mt. Vernon WQ - Lab No. 9300	0.21	0.59					Cu content suspect; WQ test rejected
1	---	----	WF-193	8773	Weld Qualification	Mt. Vernon WQ - Lab No. 9374	0.19	0.59					Cu content suspect
1	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample	0.28	0.60	0.28	0.60	0.007	0.000	
2	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample	0.27	0.60					
1	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample - Lab No. 16451	0.016	0.91	0.016	0.91	0.002	0.006	Cu & Ni contents suspect for Linde 80 welds (I.e., Cu low & Ni high) Values will not be used in best-estimate evaluation
2	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample	0.014	---					
3	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample	0.018	0.90					
4	---	----	WF-193	8773	Weld Qualification	Retest of WQ sample	0.017	0.91					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30072	0.31	0.59	0.32	0.59	0.012	0.007	Block 1, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30073	0.32	0.59					
3	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30074	0.31	0.59					
4	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30075	0.33	0.60					
5	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30076	0.31	0.60					
6	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30077	0.32	0.59					
7	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30078	0.32	0.59					
8	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30079	0.34	0.59					
9	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30080	0.32	0.60					
10	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30081	0.31	0.60					
11	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30082	0.30	0.58					
12	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30483	0.30	0.58					
13	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30484	0.30	0.58					
14	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30485	0.31	0.58					
15	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30486	0.31	0.58					
16	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30487	0.32	0.58					
17	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30488	0.33	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
18	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30489	0.33	0.58					
19	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30490	0.34	0.59					
20	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30491	0.32	0.59					
21	---	OC1	WF-112	8688	Surv. Weld Block	Mt Vernon Lab No. 30492	0.32	0.58					
1	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30040	0.26	0.59	0.27	0.59	0.005	0.005	Block 4, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30041	0.27	0.60					
3	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30042	0.27	0.59					
4	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30043	0.27	0.59					
5	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30059	0.27	0.58	0.28	0.58	0.013	0.000	Block 15, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
6	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30060	0.30	0.58					
7	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30061	0.28	0.58					
8	---	ANO1	WF-193	8773	Surv. Weld Block	Mt Vernon Lab No. 30062	0.28	0.58					
1	---	OC1	WF-112	8688	Surv. Weld Block	CVN Specimen ID - OC1-025	0.16	0.47	0.16	0.47	0.02	0.01	Reference: BAW-1421, R1 (Cu mean of 4 analyses & Ni mean of 3 analyses)
1	---	OC1	WF-112	8688	Surv. Weld Block	CVN Specimen ID - OC1-034	0.17	0.56	0.17	0.56	0.02	0.01	Reference: BAW-1421, R1 (Cu mean of 4 analyses & Ni mean of 3 analyses)
1	---	OC1	WF-112	8688	Surv. Weld Block	CVN Specimen	0.32	0.59					Reference: BAW-1436

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	ANO1	WF-193	8773	Surv. Weld Block	CVN Specimen ID: GG-027	0.23	0.57	0.23	0.57	0.02	0.01	Reference: BAW-1440 (Cu mean of 4 analyses & Ni mean of 3 analyses)
1	---	PB2	WF-193	8773	Surv. Weld Block	RVSP baseline chemistry	0.25	0.59					Reference: WCAP-7712

 - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	----	SA-1450	8467	Weld Qualification	Barberton WQ	0.25	0.60					WQ test failed.
1	---	----	SA-1484	8579	Weld Qualification	Barberton WQ	0.25	0.64					
1	---	----	WF-67	8669	Weld Qualification	Mt. Vernon WQ - Lab No. 6556	0.27	0.57					
1	---	----	WF-67	8669	Weld Qualification	Retest of WQ sample	0.33	---	0.34	0.58	0.012	0.000	
2	---	----	WF-67	8669	Weld Qualification	Retest of WQ sample	0.35	0.58					
3	---	----	WF-67	8669	Weld Qualification	Retest of WQ sample	0.33	0.58					
1	ID	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30431	0.17	0.61	0.22	0.60	0.066	0.008	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30430	0.15	0.61					
3	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30429	0.15	0.60					
4	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30428	0.15	0.61					
5	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30427	0.18	0.61					
6	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30426	0.20	0.60					
7	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30425	0.25	0.60					
8	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30424	0.25	0.60					
9	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30423	0.23	0.62					
10	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30422	0.21	0.60					
11	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30421	0.26	0.60					
12	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30420	0.33	0.60					
13	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 30419	0.35	0.59					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	ID	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29799	0.24	0.57	0.26	0.59	0.028	0.008	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29800	0.23	0.60					
3	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29801	0.24	0.55					
4	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29802	0.24	0.60					
5	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29803	0.2	0.60					
6	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29804	0.22	0.60					
7	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29805	0.26	0.60					
8	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29806	0.27	0.59					
9	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29807	0.23	0.60					
10	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29808	0.28	0.59					
11	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29809	0.29	0.59					
12	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29810	0.29	0.59					
13	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29811	0.30	0.60					
14	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29812	0.31	0.60					
15	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29813	0.30	0.59					
16	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29814	0.26	0.59					
17	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29815	0.24	0.60					

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
18	---	CR3	SA-1484	8579	Nozzle Dropout	Mt Vernon Lab No. 29816	0.24	0.60					
1	ID	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28880	0.16	0.60	0.22	0.59	0.069	0.008	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28879	0.13	0.60					
3	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28878	0.15	0.60					
4	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28877	0.19	0.60					
5	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28876	0.21	0.60					
6	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28875	0.24	0.59					
7	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28874	0.22	0.60					
8	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28873	0.21	0.59					
9	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28872	0.32	0.58					
10	---	MD1	WF-67	8669	Nozzle Dropout	Mt Vernon Lab No. 28871	0.34	0.58					
1	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 28800	0.24	0.59	0.23	0.60	0.017	0.005	Source Definition: Memo to C.E. Harris, NPGD from G.N. Emmanuel, QA, "Weld Records for NSS-3 Through NSS-12," dated October 20, 1977.
2	---	MD1	WF-67	8669	Nozzle Dropout Rerun		0.25	0.60					
3	---	MD1	WF-67	8669	Nozzle Dropout Rerun	Mt Vernon Lab No. 28802	0.21	0.60					
4	---	MD1	WF-67	8669	Nozzle Dropout Rerun		0.23	0.60					


- Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	----	WF-182	8754	Weld Qualification	Mt. Vernon WQ - Lab No. 9261	0.18	0.59					Cu content suspect
1	---	----	WF-182	8754	Weld Qualification	Retest of WQ sample	0.25	---	0.26	0.62	0.012	0.014	
2	---	----	WF-182	8754	Weld Qualification	Retest of WQ sample	0.27	0.61					
3	---	----	WF-182	8754	Weld Qualification	Retest of WQ sample	0.27	0.63					
1	---	----	WF-182-1	8754	Weld Qualification	Mt. Vernon WQ - Lab No. 9376	0.19	0.63					Cu content suspect
1	---	----	WF-182-1	8754	Weld Qualification	Retest of WQ sample	0.22	---	0.23	0.63	0.012	0.014	
2	---	----	WF-182-1	8754	Weld Qualification	Retest of WQ sample	0.24	0.62					
3	---	----	WF-182-1	8754	Weld Qualification	Retest of WQ sample	0.24	0.64					
1	---	----	WF-182-1	8754	Weld Qualification	Mt. Vernon WQ - Lab No. 21956	0.21	0.61					
1	---	----	WF-195	8773	Weld Qualification	Mt. Vernon WQ	0.18	0.63					Cu content suspect
1	---	----	WF-200	8773	Weld Qualification	Mt Vernon WQ - Lab No. 9533	0.26	0.64					
1	---	TMI2	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30542	0.26	0.62	0.28	0.63	0.013	0.006	Block 20, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	TMI2	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30543	0.27	0.63					
3	---	TMI2	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30544	0.28	0.62					
4	---	TMI2	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30545	0.29	0.63					
1	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30047	0.21	0.63	0.22	0.63	0.010	0.004	Block 29, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
2	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30048	0.22	0.63					
3	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30049	0.23	0.63					

Weld Wire Heat 821T44

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
4	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30063	0.22	0.63					Block 52, Source Definition: Memo to W.L. Gilbert, NPGD from C.F. Zur Lippe, LRC, "RVSP Weld Metal Archive Material Inventory," dated November 23, 1976.
5	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30064	0.21	0.63					
6	---	DB1	WF-182-1	8754	Surv. Weld Block	Mt Vernon Lab No. 30065	0.20	0.64					

 - Data used to calculate best-estimate chemistry (BAW-1500 & BAW-2121P).

Weld Wire Heat 72102

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	-----	WF-29	8650	Weld Qualification	Mt. Vernon WQ - Lab No. 5467	0.16	0.27					Cu & Ni content suspect
1	---	-----	WF-29	8650	Weld Qualification	Retest of WQ sample	0.20	---	0.21	0.62	0.010	0.014	
2	---	-----	WF-29	8650	Weld Qualification	Retest of WQ sample	0.22	0.61					
3	---	-----	WF-29	8650	Weld Qualification	Retest of WQ sample	0.21	0.63					
1	---	-----	SA-1187	8479	Weld Qualification	Barberton WQ	0.21	0.53					WQ test failed

Weld Wire Heat 8T1554

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	-----	SA-1174	8479	Weld Qualification	Barberton WQ	0.19	0.60					
1	---	-----	SA-1413	8504	Weld Qualification	Barberton WQ	---	---					
1	---	-----	SA-1494	8579	Weld Qualification	Barberton WQ	0.14	0.45					Ni content suspect
1	---	-----	WF-69	8669	Weld Qualification	Mt. Vernon WQ - Lab No. 6596	0.15	0.61					
1	---	-----	WF-169-1	8754	Weld Qualification	Mt. Vernon WQ - Lab No. 9039	0.11	0.59					Cu content suspect
1	---	-----	WF-169-1	8754	Weld Qualification	Retest of WQ sample	0.15	---	0.16	0.63	0.010	0.007	
2	---	-----	WF-169-1	8754	Weld Qualification	Retest of WQ sample	0.17	0.62					
3	---	-----	WF-169-1	8754	Weld Qualification	Retest of WQ sample	0.16	0.63					

Weld Wire Heat 8T3914

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	-----	WF 232	8790	Weld Qualification	Mt. Vernon WQ - Lab No. 10368	0.14	0.69					Cu content suspect
1	---	-----	WF-232	8790	Weld Qualification	Retest of WQ sample	0.18	0.64	0.18	0.64	0.001	0.000	
2	---	-----	WF-232	8790	Weld Qualification	Retest of WQ sample	0.18	0.64					
1	---	-----	WF-252	8806	Weld Qualification	Mt. Vernon WQ - Lab No. 10925	0.10	0.59					Cu content suspect

Weld Wire Heat T29744

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
1	---	----	WF-233	8790	Weld Qualification	Mt. Vernon WQ - Lab No. 10274	0.22	0.55					
1	---	----	WF-233	8790	Weld Qualification	Retest of WQ sample	0.24	---	0.26	0.67	0.017	0.014	
2	---	----	WF-233	8790	Weld Qualification	Retest of WQ sample	0.27	0.66					
3	---	----	WF-233	8790	Weld Qualification	Retest of WQ sample	0.27	0.68					
1	---	KORI-1	WF-233	8790	Surv. Weld Block	RVSP baseline chemistry	0.23	0.61					Reference: WCAP-8586
1	---	KORI-1	WF-233	8790	Surv. Weld Block	CVN Specimen: ID - KW-39	0.28	0.78	0.30	0.76	0.025	0.015	Reference: SwRI 17-7517-219
2	---	KORI-1	WF-233	8790	Surv. Weld Block	CVN Specimen: ID - KW-43	0.33	0.75					
3	---	KORI-1	WF-233	8790	Surv. Weld Block	CVN Specimen: ID - KW-45	0.30	0.76					
1	---	----	WF-282	8806	Weld Qualification	Mt. Vernon WQ - Lab No. 12380	0.16	0.66					Cu content suspect

Weld Wire Heat 1P0661

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	Ni	Cu	Ni	
1	---	-----	SA-775	8304	Weld Qualification	Barberton WQ	0.19	0.63					
1	---	-----	SA-1060	8446	Weld Qualification	Barberton WQ	0.14	0.65					

Weld Wire Heat 1P0815

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	-----	SA-806	8304	Weld Qualification	Barberton WQ	0.25	0.48					
1	---	-----	SA-812	8350	Weld Qualification	Barberton WQ	0.12	0.52					
1	---	-----	SA-1366	8544	Weld Qualification	Barberton WQ	0.13	0.57					

Weld Wire Heat 1P0962

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	-----	SA-1073	8445	Weld Qualification	Barberton WQ	0.21	0.64					

Weld Wire Heat 8T1762

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	Ni	
1	---	-----	SA-1426	8553	Weld Qualification	Barberton WQ	0.18	0.61					
1	---	-----	SA-1430	8553	Weld Qualification	Barberton WQ	0.16	0.60					
1	---	-----	SA-1493	8578	Weld Qualification	Barberton WQ	0.22	0.43					
1	---	-----	SA-1580	8596	Weld Qualification	Barberton WQ - Lab No. E-68288	0.22	0.60					
1	---	-----	WF-4	8597	Weld Qualification	Mt. Vernon WQ	0.17	0.53					
1	---	-----	WF-8	8632	Weld Qualification	Mt. Vernon WQ	0.20	0.61					
1	---	-----	WF-18	8650	Weld Qualification	Mt. Vernon WQ - Lab No. 5206	0.11	0.45					Cu content is suspect.

Weld Wire Heat 8T1762

6/2/97

Data Point	Loc.	Plant Source	Weld ID	Flux Lot	Source	Source Reference	Cu	Ni	Source Mean		Source Std. Dev.		Notes
									Cu	NI	Cu	NI	
1	---	-----	SA-1426	8553	Weld Qualification	Barberton WQ	0.18	0.61					
1	---	-----	SA-1430	8553	Weld Qualification	Barberton WQ	0.16	0.60					
1	---	-----	SA-1493	8578	Weld Qualification	Barberton WQ	0.22	0.43					
1	---	-----	SA-1580	8596	Weld Qualification	Barberton WQ - Lab No. E-68288	0.22	0.60					
1	---	-----	WF-4	8597	Weld Qualification	Mt. Vernon WQ	0.17	0.53					
1	---	-----	WF-8	8632	Weld Qualification	Mt. Vernon WQ	0.20	0.61					
1	---	-----	WF-18	8650	Weld Qualification	Mt. Vernon WQ - Lab No. 5206	0.11	0.45					Cu content is suspect.