

Steam Generator Outage Summary Report

McGuire Unit 1 1995 Outage EOC 10

Location: Hwy. 73, Cowans Ford, North Carolina 28216

NRC Docket No. 50-369

National Board No. 44

Commercial Service Date: December 1, 1981

Owner: Duke Energy Corporation
526 South Church St.
Charlotte, N.C. 28201-1006

Revision 0

Prepared By: *Sheldal Crump* Date: *2/23/00*

Reviewed By: *DB Mays* Date: *2/24/00*

Approved By: *M/ous Sample* Date: *2/24/00*

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FORM NIS-1 OWNER'S DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner: Duke Energy Corporation, 526 S. Church St., Charlotte, NC 28201-1006
(Name and Address of Owner)
2. Plant: McGuire Nuclear Station, Highway 73, Cowans Ford, N. C. 28216
(Name and Address of Plant)
3. Plant Unit: 1 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date: December 1, 1981
6. National Board Number for Unit 44
7. Components Inspected:

<u>Component</u>	<u>Manufacturer</u>	<u>Manufacturer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
Steam Generator 1A	Westinghouse	1461	NC-178375	68-107
Steam Generator 1B	Westinghouse	1462	NC-178376	68-108
Steam Generator 1C	Westinghouse	1463	NC-178377	68-109
Steam Generator 1D	Westinghouse	1464	NC-178378	68-110

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8¹/₂ in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-1 (Back)

- 8. Examination Dates December 14, 1995 to January 24, 1996
- 9. Inspection Period Identification: 2nd Period of the 2nd Interval
- 10. Inspection Interval Identification: 2nd Interval
- 11. Applicable Edition of Section XI 1989 Addenda None
- 12. Date/Revision of Inspection Plan: Tech Spec 3-4.4.5 Steam Generator 11/6/95 Revision
Steam generator Maintenance Manual Rev. 2

- 13. Abstract of Examinations and Test. Reference attached NRC Inspection Report dated 1/18/96.
- 14. Abstract of Results of Examination and Tests. Reference attached NRC Inspection Report dated 1/18/96.
- 15. Abstract of Corrective Measures. Reference attached NRC Inspection Report dated 1/18/96.

We certify that a) the statements made in this report are correct b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) NA Expiration Date NA

Date 2-24 192000 Signed Duke Energy Corp. By Morris Sample
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of N. C. employed by *The HSBI&I Co. of
HARTFORD CT. have inspected the components described in this Owners' Report during the period 12-14-95 to 1-24-96, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in the Owners' Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, test, and corrective measures described in this Owners' Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

R. Klein Commissions NB 7728, NC 853, N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 2-25 192000

* The Hartford Steam Boiler Inspection & Insurance Co.
200 Ashford Center North
Suite 300
Atlanta, GA. 30338

Duke Power Company
McGuire Nuclear Generation Department
12700 Hagers Ferry Road (MGO1VP)
Huntersville, NC 28078-8985

T. C. MCMEEKIN
Vice President
(704)875-4800
(704)875-4809 Fax



DUKE POWER

January 18, 1996

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: McGuire Nuclear Station, Docket 50-369
Unit 1 Steam Generators
December 1995 EOC-10 Refueling Outage
F*, 15-Day and 12-Month NRC Inspection Report

Pursuant to Technical Specification 3/4.4.5.5, part a, b, and c the following information is submitted:

- a. The following quantity of tubes were inspected from either side of the generator:

<u>Steam Generator</u>	<u>Tubes Inspected Full Length</u>
A	3904
B	3957
C	4046
D	3829

- b. The following information is submitted regarding F* tubes: (The attached lists identify the F* tubes, their location, and the size of degradation.)

<u>Steam Generator</u>	<u>Attachment</u>
A	1
B	2
C	3
D	4

- c. The following information is submitted concerning tube indications of imperfections. (The attached lists identify the tubes with imperfections, their locations, and their size.)

<u>Steam Generator</u>	<u>Attachment</u>
A	5
B	6
C	7
D	8


011896B
110

- d. The following quantities of tubes were removed from service or repaired:
(The tubes are identified in the attached lists.)

<u>Steam Generator</u>	<u># of Tubes</u>	<u>Attachment</u>
A	49	9
B	88	10
C	70	11
D	100	12

Questions or problems should be directed to Kay Crane, Regulatory Compliance at
(704) 875-4306.

Very truly yours


T. C. McMeekin, Vice President
McGuire Nuclear Station

cc: Mr. Victor Nerses, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. S. D. Ebnetter, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW - Suite 2900
Atlanta, Georgia 30323

Mr. George Maxwell
Senior Resident Inspector
McGuire Nuclear Site

U. S. Nuclear Regulatory Commission
Document Control Desk
January 18, 1996
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cc: C. C. Dyer
ELL-EC050

BWNT TUBAN II (Version 2.1) 01/17/1996 10:49:47
 McGuire Nuclear Station - Unit One
 S/G A
 12/95 RFO
 Bobbin,C/L Tubesheet,H/L Tubesheet

F* QUERY

ATTACHMENT #1 - F*

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	2	24	NQI		4.25	P 1	34	TE-CL	+18.93
Bobbin	4	93	NQI		2.27	P 1	84	TE-HL	+11.65
Bobbin			NQI		13.00	P 1	68	TE-HL	+16.75
H/L Tubesheet			MAI		6.66	1	26	TTS-HL	-4.52
H/L Tubesheet			SAI		5.06	1	28	TTS-HL	-8.67
Bobbin	5	62	NQI		4.19	P 1	125	TE-HL	+15.78
Bobbin	5	108	NQI		3.97	P 1	117	TE-HL	+15.99
Bobbin	9	63	NQI		10.38	P 1	154	TE-HL	+17.03
Bobbin	9	66	NQI		4.71	P 1	22	TE-CL	+15.78
Bobbin	10	25	NQI		15.25	P 1	155	TE-HL	+16.44
H/L Tubesheet			MAI		0.66	1	19	TTS-HL	-4.36
Bobbin	13	48	NQI		7.63	P 1	60	TE-HL	+2.08
Bobbin	15	28	NQI		25.03	P 1	22	TE-HL	+3.79
Bobbin			NQI		30.68	P 1	34	TE-HL	+8.95
Bobbin	15	68	NQI		17.83	P 1	43	TE-HL	+0.77
Bobbin	16	84	NQI		12.37	P 1	27	TE-HL	+3.30
Bobbin	16	104	NQI		11.05	P 1	165	TE-HL	+3.06
Bobbin	18	92	NQI		6.39	P 1	162	TE-HL	+13.90
Bobbin	20	86	NQI		7.32	P 1	89	TE-HL	+12.73
H/L Tubesheet	22	86	MAI		2.45	1	41	TTS-HL	-3.89
Bobbin	26	46	NQI		6.27	P 1	110	TE-HL	+10.96
Bobbin	26	64	NQI		8.92	P 1	174	TE-HL	+13.86
Bobbin	26	82	NQI		14.14	P 1	68	TE-HL	+16.13
Bobbin	26	84	NQI		21.05	P 1	52	TE-HL	+15.13
Bobbin			NQI		50.26	P 1	47	TE-HL	+14.16
Bobbin	27	53	NQI		15.15	P 1	18	TE-HL	+4.49
Bobbin	27	74	NQI		8.57	P 1	12	TE-HL	+13.13
Bobbin			NQI		10.94	P 1	14	TE-HL	+8.18
Bobbin	29	65	NQI		2.54	P 1	60	TE-HL	+10.28
Bobbin	29	80	NQI		9.01	P 1	75	TE-HL	+13.27
Bobbin	30	73	NQI		2.58	P 1	41	TE-CL	+14.73
Bobbin	35	42	NQI		2.43	P 1	19	TE-HL	+6.30
Bobbin	37	29	NQI		11.25	P 1	37	TE-HL	+8.90
Bobbin	37	78	NQI		9.78	P 1	15	TE-HL	+13.24
Bobbin	41	30	NQI		2.74	P 1	31	TE-CL	+3.41
Bobbin			NQI		3.13	P 1	22	TE-CL	+17.17
Bobbin			NQI		3.49	P 1	29	TE-CL	+14.06
Bobbin			NQI		3.71	P 1	18	TE-CL	+6.38
Bobbin			NQI		3.85	P 1	17	TE-CL	+10.29
Bobbin	41	31	NQI		4.34	P 1	25	TE-CL	+17.05
Bobbin			NQI		4.74	P 1	21	TE-CL	+5.27
Bobbin	42	31	NQI		3.75	P 1	25	TE-CL	+8.43
Bobbin	42	32	NQI		5.22	P 1	20	TE-CL	+16.05
H/L Tubesheet	46	41	VOL		0.59	1	229	TTS-HL	-5.15
Bobbin	49	80	NQI		1.94	P 1	33	TE-CL	+17.06

Total Indications Found = 45
 Total Tubes Found = 33
 Total Tubes in Input File = 33

F* QUERY
 ATTACHMENT #2 - F*
 TEST TYPE

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	3	1	NQI		22.90	P 1	35	TE-HL	+8.83
Bobbin	3	5	NQI		78.03	P 1	42	TE-HL	+9.83
Bobbin	3	39	NQI		4.39	P 1	106	TE-HL	+4.95
Bobbin	3	47	NQI		6.30	P 1	34	TE-HL	+7.51
Bobbin	4	1	NQI		19.49	P 1	25	TE-HL	+9.21
Bobbin	4	98	NQI		1.19	P 1	129	TE-HL	+8.96
Bobbin	5	27	NQI		8.60	P 1	150	TE-HL	+15.86
Bobbin			NQI		9.25	P 1	166	TE-HL	+7.87
Bobbin	5	101	NQI		4.22	P 1	168	TE-HL	+13.11
Bobbin			NQI		13.68	P 1	25	TE-HL	+8.39
Bobbin	5	108	NQI		3.30	P 1	42	TE-HL	+12.34
Bobbin	6	34	NQI		9.50	P 1	64	TE-HL	+11.01
Bobbin	7	2	NQI		17.71	P 1	27	TE-HL	+9.05
Bobbin			NQI		27.57	P 1	40	TE-HL	+2.21
Bobbin	7	23	NQI		12.30	P 1	17	TE-HL	+17.07
Bobbin	7	29	NQI		24.33	P 1	30	TE-HL	+10.70
Bobbin	7	42	NQI		11.49	P 1	19	TE-HL	+17.03
Bobbin	8	46	NQI		19.41	P 1	32	TE-HL	+15.95
Bobbin	8	56	NQI		16.80	P 1	16	TE-HL	+14.36
Bobbin			NQI		18.15	P 1	22	TE-HL	+13.77
Bobbin	9	2	NQI		12.55	P 1	146	TE-HL	+10.88
Bobbin	9	3	NQI		18.94	P 1	64	TE-HL	+7.00
Bobbin	9	100	NQI		9.16	P 1	18	TE-HL	+12.04
Bobbin	10	21	NQI		11.62	P 1	23	TE-HL	+4.28
Bobbin	10	50	NQI		14.47	P 1	18	TE-HL	+15.01
H/L Tubesheet	10	62	SAI		0.92	1	25	TTS-HL	-6.56
H/L Tubesheet	11	26	MAI		0.43	1	44	TTS-HL	-4.28
Bobbin	11	30	NQI		12.99	P 1	55	TE-HL	+6.04
Bobbin	11	52	NQI		13.85	P 1	60	TE-HL	+11.01
Bobbin	11	86	NQI		42.37	P 1	60	TE-HL	+17.84
H/L Tubesheet			MAI		9.91	1	30	TTS-HL	-3.43
H/L Tubesheet	11	102	MAI		3.56	1	31	TTS-HL	-4.04
Bobbin	11	112	NQI		24.64	P 1	20	TE-HL	+3.22
Bobbin	12	18	NQI		12.95	P 1	65	TE-HL	+11.84
Bobbin	12	29	NQI		32.43	P 1	35	TE-HL	+2.49
Bobbin	12	72	NQI		19.45	P 1	19	TE-HL	+5.66
Bobbin	13	47	NQI		18.15	P 1	53	TE-HL	+4.30
Bobbin	14	41	NQI		8.85	P 1	64	TE-HL	+13.99
Bobbin	14	42	NQI		12.41	P 1	105	TE-HL	+17.00
H/L Tubesheet			SAI		7.62	1	23	TTS-HL	-4.36
Bobbin	14	109	NQI		3.17	P 1	33	TE-CL	+19.63
Bobbin	15	15	NQI		5.86	P 1	90	TE-HL	+13.92
Bobbin			NQI		4.34	P 1	73	TE-HL	+15.74
Bobbin	15	20	NQI		7.54	P 1	162	TE-HL	+11.93
Bobbin			NQI		9.29	P 1	164	TE-HL	+5.95
Bobbin			NQI		10.86	P 1	94	TE-HL	+4.94
Bobbin	15	32	NQI		9.56	P 1	138	TE-HL	+16.85
Bobbin	16	38	NQI		61.76	P 1	41	TE-HL	+17.07
H/L Tubesheet			MAI		4.09	1	76	TTS-HL	-4.02
Bobbin	16	44	NQI		4.43	P 1	22	TE-HL	+6.49
Bobbin	17	26	NQI		9.40	P 1	145	TE-HL	+13.95
Bobbin	17	38	NQI		6.71	P 1	8	TE-HL	+13.22
Bobbin			NQI		11.02	P 1	172	TE-HL	+13.93
Bobbin	17	68	NQI		6.43	P 1	94	TE-HL	+3.87
Bobbin	17	70	NQI		27.27	P 1	166	TE-HL	+7.55
Bobbin	17	80	NQI		32.16	P 1	128	TE-HL	+1.83
Bobbin	17	88	NQI		6.91	P 1	28	TE-CL	+19.10
Bobbin	18	37	NQI		9.29	P 1	164	TE-HL	+10.07
Bobbin	18	40	NQI		14.36	P 1	58	TE-HL	+9.43
Bobbin	19	31	NQI		6.85	P 1	148	TE-HL	+14.95
Bobbin	19	32	NQI		12.96	P 1	61	TE-HL	+16.82
H/L Tubesheet			SAI		9.93	1	29	TTS-HL	-4.28
Bobbin	20	32	NQI		11.08	P 1	70	TE-HL	+6.07
Bobbin	20	40	NQI		4.83	P 1	141	TE-HL	+3.02
Bobbin	20	61	NQI		36.43	P 1	173	TE-HL	+10.82

F* QUERY

ATTACHMENT #2 - F*
 TEST TYPE

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	21	11	NQI		2.65	P 1	127	TE-HL	+16.81
Bobbin			NQI		6.96	P 1	161	TE-HL	+14.95
H/L Tubesheet			MAI		0.33	2	45	TTS-HL	-6.58
H/L Tubesheet			SAI		4.12	1	26	TTS-HL	-4.30
Bobbin	21	12	NQI		5.86	P 1	102	TE-HL	+13.98
Bobbin	21	17	NQI		7.51	P 1	153	TE-HL	+10.23
Bobbin			NQI		10.67	P 1	154	TE-HL	+10.00
Bobbin	21	30	NQI		7.65	P 1	76	TE-HL	+14.04
Bobbin			NQI		15.68	P 1	35	TE-HL	+3.25
Bobbin			NQI		48.04	P 1	35	TE-HL	+2.25
Bobbin	21	31	NQI		15.22	P 1	58	TE-HL	+14.92
Bobbin	21	37	NQI		15.09	P 1	19	TE-HL	+1.23
Bobbin	21	42	NQI		9.15	P 1	75	TE-HL	+17.97
H/L Tubesheet			MAI		5.34	1	45	TTS-HL	-3.25
Bobbin	21	64	NQI		14.77	P 1	178	TE-HL	+7.93
Bobbin	22	10	NQI		6.21	P 1	87	TE-HL	+9.08
Bobbin	22	18	NQI		3.02	P 1	147	TE-HL	+16.92
Bobbin			NQI		7.80	P 1	85	TE-HL	+15.89
Bobbin			NQI		31.70	P 1	36	TE-HL	+5.27
Bobbin	22	20	NQI		19.84	P 1	11	TE-HL	+4.19
Bobbin	22	28	NQI		14.33	P 1	10	TE-HL	+4.22
Bobbin	22	35	NQI		9.35	P 1	171	TE-HL	+3.87
Bobbin	22	36	NQI		17.72	P 1	15	TE-HL	+3.37
Bobbin	22	52	NQI		8.08	P 1	89	TE-HL	+16.77
Bobbin	22	68	NQI		3.27	P 1	35	TE-HL	+10.89
Bobbin	23	19	NQI		13.22	P 1	72	TE-HL	+15.93
Bobbin	23	20	NQI		3.97	P 1	142	TE-HL	+15.02
Bobbin			NQI		4.72	P 1	92	TE-HL	+10.18
Bobbin			NQI		10.18	P 1	23	TE-HL	+3.55
Bobbin	23	26	NQI		8.90	P 1	80	TE-HL	+14.26
Bobbin	23	34	NQI		42.58	P 1	33	TE-HL	+2.22
Bobbin	23	36	NQI		6.70	P 1	41	TE-HL	+1.26
Bobbin	23	39	NQI		5.32	P 1	157	TE-HL	+14.11
Bobbin	23	41	NQI		22.84	P 1	30	TE-HL	+1.82
Bobbin			NQI		22.89	P 1	62	TE-HL	+15.08
Bobbin	23	42	NQI		7.51	P 1	169	TE-HL	+15.13
Bobbin	23	44	NQI		7.14	P 1	161	TE-HL	+5.03
Bobbin	23	45	NQI		4.35	P 1	145	TE-HL	+15.05
Bobbin			NQI		8.09	P 1	153	TE-HL	+11.04
Bobbin			NQI		10.12	P 1	146	TE-HL	+10.02
Bobbin			NQI		11.06	P 1	167	TE-HL	+16.88
Bobbin			NQI		22.73	P 1	13	TE-HL	+3.15
H/L Tubesheet			MAI		0.11	2	57	TTS-HL	-7.59
H/L Tubesheet			MAI		0.37	2	48	TTS-HL	-6.61
H/L Tubesheet			MAI		0.56	2	48	TTS-HL	-11.98
H/L Tubesheet			MAI		0.75	2	59	TTS-HL	-10.91
H/L Tubesheet			MAI		1.08	1	34	TTS-HL	-4.45
Bobbin	23	46	NQI		8.45	P 1	172	TE-HL	+5.01
Bobbin	23	48	NQI		6.90	P 1	138	TE-HL	+13.23
Bobbin			NQI		19.83	P 1	12	TE-HL	+2.35
Bobbin	24	16	NQI		9.07	P 1	156	TE-HL	+10.17
Bobbin	24	25	NQI		15.92	P 1	67	TE-HL	+17.96
H/L Tubesheet			SAI		12.10	1	30	TTS-HL	-3.04
Bobbin	24	28	NQI		23.88	P 1	28	TE-HL	+9.41
Bobbin	24	49	NQI		4.63	P 1	157	TE-HL	+14.99
Bobbin	24	50	NQI		17.78	P 1	59	TE-HL	+15.99
Bobbin	24	52	NQI		4.48	P 1	147	TE-HL	+16.03
Bobbin	25	33	NQI		8.78	P 1	125	TE-HL	+8.87
Bobbin	25	34	NQI		11.45	3	91	TE-HL	+5.93
Bobbin			NQI		15.27	3	97	TE-HL	+9.95
Bobbin			NQI		7.89	P 1	114	TE-HL	+3.27
Bobbin	25	44	NQI		4.18	P 1	87	TE-HL	+3.57
Bobbin	25	50	NQI		4.81	P 1	139	TE-HL	+8.13
Bobbin			NQI		8.32	P 1	145	TE-HL	+9.13
Bobbin	25	89	NQI		4.96	P 1	29	TE-CL	+18.84

F* QUERY

ATTACHMENT #2 - F*
 TEST TYPE

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	25	91	NQI		27.02	P 1	39	TE-HL	+1.46
Bobbin	25	92	NQI		18.19	P 1	97	TE-HL	+13.59
Bobbin	26	36	NQI		7.31	3	125	TE-HL	+4.07
Bobbin	26	73	NQI		3.36	P 1	124	TE-CL	+19.27
Bobbin	26	80	NQI		7.03	P 1	152	TE-HL	+17.62
H/L Tubesheet			SAI		2.31	1	43	TTS-HL	-3.38
Bobbin	26	94	NQI		4.71	P 1	147	TE-CL	+1.18
Bobbin	27	16	NQI		65.93	P 1	48	TE-HL	+11.09
Bobbin	27	42	NQI		5.10	P 1	132	TE-HL	+13.96
Bobbin			NQI		7.25	P 1	138	TE-HL	+8.88
Bobbin	27	66	NQI		7.14	P 1	77	TE-HL	+12.88
Bobbin			NQI		18.44	P 1	74	TE-HL	+16.77
H/L Tubesheet			MAI		3.54	2	42	TTS-HL	-4.67
Bobbin	28	90	NQI		10.15	P 1	187	TE-HL	+14.39
Bobbin	28	100	NQI		14.27	P 1	73	TE-HL	+10.63
Bobbin	29	28	NQI		4.62	P 1	126	TE-HL	+16.83
Bobbin	31	56	NQI		15.31	P 1	49	TE-HL	+15.00
Bobbin	31	59	NQI		12.48	P 1	53	TE-HL	+10.66
Bobbin	31	60	NQI		4.74	P 1	117	TE-HL	+15.83
H/L Tubesheet			MAI		4.14	1	196	TTS-HL	-5.42
Bobbin	31	66	NQI		6.86	P 1	138	TE-HL	+7.66
Bobbin	31	68	NQI		6.43	P 1	14	TE-HL	+12.21
Bobbin			NQI		7.13	P 1	158	TE-HL	+11.01
Bobbin	31	72	NQI		7.03	P 1	157	TE-HL	+15.96
Bobbin			NQI		23.58	P 1	36	TE-HL	+12.86
Bobbin	31	73	NQI		5.63	P 1	162	TE-HL	+9.86
Bobbin	32	56	NQI		8.96	P 1	91	TE-HL	+18.37
H/L Tubesheet			SAI		8.88	1	28	TTS-HL	-3.80
Bobbin	32	64	NQI		12.42	P 1	163	TE-HL	+16.80
H/L Tubesheet			MAI		2.81	1	207	TTS-HL	-4.35
Bobbin	32	103	NQI		9.39	P 1	18	TE-HL	+7.33
Bobbin	33	66	NQI		21.49	P 1	28	TE-HL	+5.44
Bobbin	34	24	NQI		21.65	P 1	40	TE-HL	+1.30
Bobbin	34	64	NQI		6.50	P 1	109	TE-HL	+10.90
Bobbin	35	35	NQI		6.21	P 1	121	TE-HL	+3.14
Bobbin	35	39	NQI		8.86	P 1	99	TE-HL	+14.06
Bobbin	35	99	NQI		41.91	P 1	19	TE-HL	+6.30
Bobbin	36	39	NQI		1.52	P 1	109	TE-HL	+2.20
H/L Tubesheet	36	69	SAI		2.80	1	16	TTS-HL	-4.57
Bobbin	36	100	NQI		28.62	P 1	18	TE-HL	+4.64
Bobbin	37	45	NQI		1.30	P 1	52	TE-HL	+5.32
Bobbin	37	57	NQI		10.03	P 1	114	TE-HL	+13.80
Bobbin	37	85	NQI		5.46	P 1	31	TE-HL	+8.64
Bobbin	38	30	NQI		25.96	P 1	59	TE-HL	+5.85
Bobbin	38	75	NQI		6.88	P 1	139	TE-HL	+5.69
H/L Tubesheet	39	67	MAI		2.76	1	16	TTS-HL	-4.73
Bobbin	40	88	NQI		7.32	P 1	141	TE-HL	+16.91
H/L Tubesheet			MAI		4.67	1	201	TTS-HL	-4.29
H/L Tubesheet	40	95	SAI		2.12	1	23	TTS-HL	-5.33
Bobbin	41	30	NQI		11.57	P 1	15	TE-HL	+14.09
Bobbin	42	77	NQI		6.00	P 1	79	TE-HL	+14.08
Bobbin	43	89	NQI		14.55	P 1	24	TE-HL	+17.22
H/L Tubesheet			MAI		3.37	1	35	TTS-HL	-4.39
Bobbin	44	64	NQI		0.80	P 1	71	TE-HL	+15.29
Bobbin	44	73	NQI		2.72	P 1	32	TE-HL	+13.69
Bobbin	44	83	NQI		1.82	P 1	135	TE-HL	+9.62
Bobbin	45	28	NQI		17.74	P 1	6	TE-HL	+6.37
Bobbin	46	28	NQI		20.65	P 1	4	TE-HL	+7.43
Bobbin	49	77	NQI		6.47	P 1	144	TE-CL	+1.31

Total Indications Found = 189
 Total Tubes Found = 140
 Total Tubes in Input File = 140

BWNT TUBAN II (Version 2.1) 01/17/1996 10:58:57
 McGuire Nuclear Station - Unit One
 S/G C
 12/95 RFO
 Bobbin, C/L Tubesheet, H/L Tubesheet

F* QUERY
 ATTACHMENT #3 - F*
 TEST TYPE

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	4	41	NQI		3.54	P 1	40	TE-CL	+10.18
Bobbin	4	54	NQI		10.24	P 1	8	TE-HL	+7.58
Bobbin	4	85	NQI		11.15	P 1	18	TE-HL	+7.13
Bobbin	5	31	NQI		3.45	P 1	38	TE-CL	+10.68
Bobbin	5	56	NQI		10.24	P 1	9	TE-HL	+15.96
Bobbin	5	94	NQI		14.17	P 1	23	TE-HL	+6.27
Bobbin	7	94	NQI		12.18	P 1	12	TE-HL	+13.14
Bobbin			NQI		16.00	P 1	53	TE-HL	+14.90
Bobbin	8	105	NQI		13.08	P 1	5	TE-HL	+6.22
Bobbin	9	99	NQI		9.85	P 1	21	TE-HL	+5.52
Bobbin	13	47	NQI		5.18	P 1	91	TE-HL	+14.42
Bobbin	14	23	NQI		2.93	P 1	155	TE-HL	+8.26
Bobbin	14	61	NQI		12.19	P 1	31	TE-HL	+6.55
Bobbin	14	69	NQI		16.76	P 1	26	TE-HL	+7.63
Bobbin	14	98	NQI		7.55	P 1	28	TE-HL	+14.20
H/L Tubesheet	15	56	VOL		0.67	1	138	TTS-HL	-4.24
Bobbin	17	55	NQI		2.04	P 1	136	TE-HL	+12.49
Bobbin	17	61	NQI		5.96	P 1	78	TE-HL	+12.02
Bobbin			NQI		10.56	P 1	22	TE-HL	+12.33
Bobbin	17	78	NQI		10.92	P 1	19	TE-HL	+15.80
Bobbin	18	69	NQI		11.78	P 1	18	TE-HL	+7.95
Bobbin	20	64	NQI		13.63	P 1	15	TE-HL	+8.12
Bobbin	24	82	NQI		8.92	P 1	16	TE-HL	+4.20
Bobbin	25	7	NQI		3.45	P 1	163	TE-HL	+9.85
Bobbin	27	31	NQI		1.21	P 1	61	TE-HL	+19.41
Bobbin	28	25	NQI		4.86	P 1	170	TE-HL	+11.30
Bobbin	32	27	NQI		13.86	P 1	13	TE-HL	+18.19
Bobbin	41	41	NQI		1.82	P 1	57	TE-HL	+16.06
Bobbin	42	22	NQI		7.83	P 1	37	TE-CL	+2.05
Bobbin	43	23	NQI		13.89	P 1	27	TE-CL	+4.25
Bobbin	44	83	NQI		4.74	P 1	133	TE-HL	+3.08

Total Indications Found = 31
 Total Tubes Found = 29
 Total Tubes in Input File = 29

F* QUERY												EXTENT1	
ATTACHMENT #4 - F*													
TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION					
Bobbin	2	29	NQI		11.30	P	1	23	TE-HL			+5.30	8TH TSP
Bobbin	2	30	NQI		1.80	P	1	93	TE-HL			+2.62	8TH TSP
Bobbin	2	39	NQI		3.16	P	1	81	TE-HL			+10.69	8TH TSP
Bobbin	2	40	NQI		3.32	P	1	108	TE-HL			+11.32	8TH TSP
Bobbin	2	61	NQI		1.10	P	1	58	TE-HL			+17.53	8TH TSP
Bobbin			NQI		3.60	P	1	141	TE-HL			+13.29	8TH TSP
Bobbin			NQI		7.15	P	1	46	TE-HL			+8.39	8TH TSP
Bobbin	2	62	NQI		3.95	P	1	129	TE-HL			+13.13	8TH TSP
Bobbin	2	76	NQI		3.73	P	1	101	TE-HL			+15.02	8TH TSP
Bobbin	2	80	NQI		8.91	P	1	12	TE-HL			+12.28	8TH TSP
Bobbin	2	97	NQI		1.63	P	1	31	TE-HL			+11.99	8TH TSP
Bobbin	3	27	NQI		1.99	P	1	129	TE-HL			+17.43	8TH TSP
H/L Tubesheet			MAI		2.55	I		27	TTS-HL			-3.89	TTS-HL
Bobbin	3	40	NQI		12.34	P	1	19	TE-HL			+16.27	8TH TSP
H/L Tubesheet			MAI		1.57	I		21	TTS-HL			-5.13	TTS-HL
Bobbin	3	48	NQI		8.35	P	1	23	TE-HL			+3.34	8TH TSP
Bobbin	3	110	NQI		3.66	P	1	22	TE-HL			+7.80	8TH TSP
Bobbin	4	33	NQI		7.27	P	1	27	TE-HL			+11.03	8TH TSP
Bobbin	4	66	NQI		3.60	P	1	66	TE-HL			+5.52	8TH TSP
Bobbin	4	68	NQI		5.36	P	1	18	TE-HL			+11.08	8TH TSP
Bobbin	4	71	NQI		1.86	P	1	29	TE-HL			+18.45	8TH TSP
Bobbin	4	73	NQI		16.94	P	1	52	TE-HL			+1.65	8TH TSP
Bobbin	4	78	NQI		2.01	P	1	32	TE-HL			+12.10	8TH TSP
Bobbin	4	84	NQI		5.73	P	1	124	TE-HL			+10.17	8TH TSP
Bobbin	4	94	NQI		14.06	P	1	14	TE-HL			+11.87	8TH TSP
Bobbin	4	97	NQI		1.38	P	1	64	TE-HL			+17.10	8TH TSP
H/L Tubesheet			SAI		2.43	I		24	TTS-HL			-4.06	TTS-HL
Bobbin	4	100	NQI		4.84	P	1	142	TE-HL			+5.25	8TH TSP
Bobbin	5	4	NQI		11.26	P	1	12	TE-HL			+15.24	8TH TSP
Bobbin	5	7	NQI		9.21	P	1	50	TE-HL			+11.73	8TH TSP
Bobbin	5	16	NQI		0.86	P	1	127	TE-CL			+6.66	8TH TSP
Bobbin	5	44	NQI		8.04	P	1	21	TE-HL			+5.98	8TH TSP
Bobbin	5	61	NQI		2.56	P	1	92	TE-HL			+14.24	8TH TSP
Bobbin			NQI		3.47	P	1	131	TE-HL			+3.09	8TH TSP
Bobbin	5	67	NQI		2.31	P	1	20	TE-HL			+12.98	8TH TSP
Bobbin	5	68	NQI		8.48	P	1	35	TE-HL			+9.86	8TH TSP
Bobbin	5	94	NQI		1.54	P	1	47	TE-HL			+7.77	8TH TSP
H/L Tubesheet	6	33	SAI		1.36	I		202	TTS-HL			-4.69	TTS-HL
Bobbin	6	35	NQI		4.15	P	1	102	TE-HL			+10.60	F/L
Bobbin			NQI		6.79	P	1	4	TE-HL			+3.01	F/L
Bobbin			NQI		9.24	P	1	9	TE-HL			+9.07	F/L
H/L Tubesheet			SAI		1.52	I		34	TTS-HL			-2.79	TTS-HL
Bobbin	6	70	NQI		13.12	P	1	15	TE-HL			+2.20	F/L
Bobbin	6	71	NQI		6.31	P	1	50	TE-HL			+16.27	F/L
Bobbin	6	74	NQI		10.23	P	1	27	TE-HL			+1.32	F/L
Bobbin	6	82	NQI		5.09	P	1	38	TE-HL			+14.37	F/L
Bobbin	6	85	NQI		7.09	P	1	50	TE-HL			+11.44	F/L
H/L Tubesheet	7	33	SAI		1.11	I		190	TTS-HL			-4.46	TTS-HL
Bobbin	7	61	NQI		6.40	P	1	91	TE-HL			+2.65	F/L
H/L Tubesheet			SAI		1.52	I		23	TTS-HL			-2.74	TTS-HL
Bobbin	7	66	NQI		5.85	P	1	7	TE-HL			+8.12	F/L
Bobbin	7	87	NQI		9.77	P	1	59	TE-HL			+8.88	F/L
Bobbin	8	23	NQI		8.05	P	1	113	TE-HL			+9.88	F/L
Bobbin			NQI		42.40	P	1	29	TE-HL			+2.33	F/L
Bobbin	8	59	NQI		1.69	P	1	99	TE-HL			+5.51	F/L
Bobbin	8	63	NQI		5.93	P	1	75	TE-HL			+16.02	F/L
Bobbin			NQI		10.01	P	1	142	TE-HL			+10.79	F/L
H/L Tubesheet			MAI		0.73	I		35	TTS-HL			-2.83	TTS-HL
H/L Tubesheet			MAI		4.85	I		18	TTS-HL			-5.56	TTS-HL
Bobbin	8	74	NQI		15.99	P	1	42	TE-HL			+6.11	F/L
H/L Tubesheet	8	83	MAI		0.76	I		21	TTS-HL			-4.12	TTS-HL
Bobbin	9	5	NQI		22.58	P	1	54	TE-HL			+14.81	F/L
Bobbin	9	6	NQI		3.62	P	1	72	TE-HL			+11.74	F/L
Bobbin	9	15	NQI		9.32	P	1	32	TE-CL			+15.31	F/L
H/L Tubesheet	9	18	SAI		0.39	I		78	TTS-HL			-3.55	TTS-HL

BWNT TUBAN II (Version 2.1) 01/17/1996 10:44:24
 McGuire Nuclear Station - Unit One
 S/G D
 12/95 RFO
 Bobbin,C/L Tubesheet,H/L Tubesheet

F* QUERY

ATTACHMENT #4 - F*

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
H/L Tubesheet	9	61	MAI		2.23	1	23	TTS-HL	-4.84
Bobbin	9	70	NQI		5.82	P 1	30	TE-HL	+9.55
Bobbin	9	81	NQI		5.45	P 1	56	TE-HL	+16.71
Bobbin			NQI		9.26	P 1	63	TE-HL	+7.48
Bobbin	9	85	NQI		10.89	P 1	16	TE-HL	+9.86
Bobbin	9	89	NQI		0.93	P 1	120	TE-HL	+12.67
Bobbin	9	98	NQI		3.97	P 1	333	TE-HL	+15.15
H/L Tubesheet			MAI		2.46	1	25	TTS-HL	-6.07
Bobbin	10	85	NQI		22.81	P 1	35	TE-HL	+11.84
Bobbin	10	87	NQI		6.30	P 1	59	TE-HL	+14.86
Bobbin	11	2	NQI		4.14	P 1	45	TE-HL	+12.77
Bobbin	11	13	NQI		16.70	P 1	28	TE-CL	+17.04
Bobbin	11	17	NQI		19.07	P 1	8	TE-HL	+11.07
Bobbin	11	40	NQI		4.81	P 1	103	TE-HL	+11.49
Bobbin	11	72	NQI		30.41	P 1	60	TE-HL	+13.73
Bobbin	11	84	NQI		12.56	P 1	55	TE-HL	+6.01
Bobbin			NQI		19.67	P 1	62	TE-HL	+14.17
Bobbin			NQI		23.88	P 1	52	TE-HL	+11.27
Bobbin	11	85	NQI		20.73	P 1	33	TE-HL	+9.48
Bobbin	11	89	NQI		4.44	P 1	31	TE-HL	+14.80
Bobbin	11	103	NQI		7.34	P 1	59	TE-HL	+14.07
Bobbin	13	11	NQI		17.54	P 1	12	TE-HL	+12.59
Bobbin			NQI		19.35	P 1	57	TE-HL	+13.79
Bobbin	13	64	NQI		5.75	P 1	47	TE-HL	+10.66
Bobbin	13	65	NQI		17.26	P 1	26	TE-HL	+7.55
Bobbin	13	66	NQI		22.49	P 1	43	TE-HL	+12.31
Bobbin	13	67	NQI		26.44	P 1	21	TE-HL	+4.08
Bobbin	13	72	NQI		8.39	P 1	33	TE-HL	+11.39
Bobbin	13	83	NQI		18.42	P 1	45	TE-HL	+9.91
Bobbin	13	87	NQI		3.06	P 1	40	TE-CL	+4.70
H/L Tubesheet			MAI		0.68	1	27	TTS-HL	-4.32
Bobbin	14	48	NQI		7.09	P 1	110	TE-HL	+6.89
Bobbin	14	65	NQI		7.22	P 1	156	TE-HL	+5.58
Bobbin	14	72	NQI		13.09	P 1	18	TE-HL	+13.57
Bobbin	15	16	NQI		7.92	P 1	23	TE-CL	+10.77
Bobbin	15	38	NQI		48.59	P 1	47	TE-HL	+15.66
Bobbin	15	59	NQI		74.54	P 1	46	TE-HL	+15.47
Bobbin	15	61	NQI		5.66	P 1	117	TE-HL	+9.03
Bobbin			NQI		6.02	P 1	153	TE-HL	+3.86
Bobbin			NQI		7.10	P 1	77	TE-HL	+12.60
Bobbin	15	64	NQI		2.30	P 1	117	TE-HL	+17.05
H/L Tubesheet			MAI		3.60	1	16	TTS-HL	-4.62
Bobbin	15	85	NQI		14.24	P 1	16	TE-HL	+10.54
Bobbin	16	11	NQI		65.20	P 1	50	TE-HL	+14.42
Bobbin	16	13	NQI		53.45	P 1	51	TE-HL	+12.72
Bobbin	16	17	NQI		19.06	P 1	69	TE-HL	+10.19
Bobbin	16	21	NQI		28.67	P 1	39	TE-HL	+17.71
H/L Tubesheet			MAI		11.97	1	28	TTS-HL	-3.84
Bobbin	16	41	NQI		6.97	P 1	61	TE-HL	+13.69
Bobbin	16	47	NQI		4.81	P 1	53	TE-HL	+6.73
Bobbin	16	97	NQI		2.54	P 1	18	TE-HL	+10.87
Bobbin			NQI		3.42	P 1	19	TE-HL	+9.91
Bobbin	17	15	NQI		20.13	P 1	53	TE-HL	+15.69
Bobbin	17	24	NQI		7.44	P 1	34	TE-HL	+13.59
Bobbin			NQI		10.16	P 1	61	TE-HL	+14.07
H/L Tubesheet	17	81	SAI		0.77	4	40	TTS-HL	-4.44
Bobbin	17	85	NQI		6.43	P 1	41	TE-HL	+15.60
Bobbin	17	94	NQI		16.37	P 1	20	TE-HL	+10.56
Bobbin	18	4	NQI		11.42	P 1	23	TE-HL	+9.75
Bobbin	18	16	NQI		15.08	P 1	48	TE-HL	+14.53
Bobbin	18	32	NQI		8.26	P 1	136	TE-HL	+6.68
Bobbin	18	34	NQI		25.02	P 1	54	TE-HL	+12.23
Bobbin	18	59	NQI		11.19	P 1	148	TE-HL	+5.99
Bobbin	18	76	NQI		3.25	P 1	117	TE-HL	+11.98
Bobbin	18	89	NQI		6.75	P 1	59	TE-HL	+11.86

BWNT TUBAN II (Version 2.1) 01/17/1996 10:44:24
 McGuire Nuclear Station - Unit One
 S/G D
 12/95 RFO
 Bobbin,C/L Tubesheet,H/L Tubesheet

F* QUERY

ATTACHMENT #4 - F*

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	18	92	NQI		2.88	P 1	56	TE-HL	+12.26
Bobbin	18	96	NQI		0.77	P 1	115	TE-HL	+10.90
Bobbin			NQI		2.64	P 1	68	TE-HL	+11.90
Bobbin			NQI		2.93	P 1	25	TE-HL	+17.12
Bobbin			NQI		6.18	P 1	17	TE-HL	+8.86
Bobbin			NQI		7.59	P 1	36	TE-HL	+13.95
Bobbin	18	101	NQI		2.67	P 1	30	TE-HL	+16.15
Bobbin	19	23	NQI		8.13	P 1	24	TE-HL	+10.06
Bobbin	19	52	NQI		4.40	P 1	97	TE-HL	+9.49
Bobbin	19	58	NQI		1.61	P 1	98	TE-CL	+18.31
Bobbin	19	87	NQI		5.40	P 1	112	TE-HL	+12.79
Bobbin	20	24	NQI		5.39	P 1	69	TE-HL	+8.18
Bobbin	20	31	NQI		1.67	P 1	124	TE-HL	+9.20
Bobbin	20	38	NQI		12.69	P 1	58	TE-HL	+9.91
H/L Tubesheet	20	64	SAI		0.22	1	26	TTS-HL	-4.11
H/L Tubesheet	20	85	SAI		0.83	1	9	TTS-HL	-5.15
Bobbin	20	92	NQI		10.77	P 1	42	TE-HL	+11.47
Bobbin	21	5	NQI		25.26	P 1	29	TE-HL	+0.70
Bobbin	21	21	NQI		3.41	P 1	85	TE-HL	+6.44
Bobbin	21	33	NQI		8.02	P 1	153	TE-HL	+11.54
Bobbin	21	34	NQI		18.52	P 1	69	TE-HL	+3.00
Bobbin	21	43	NQI		25.02	P 1	24	TE-HL	+9.11
Bobbin	21	109	NQI		5.23	P 1	33	TE-HL	+2.69
Bobbin	22	10	NQI		33.48	P 1	46	TE-HL	+16.38
H/L Tubesheet			MAI		14.84	1	28	TTS-HL	-4.63
Bobbin	22	13	NQI		25.24	P 1	33	TE-HL	+0.74
Bobbin	22	24	NQI		8.00	P 1	29	TE-HL	+12.50
Bobbin	22	30	NQI		7.55	P 1	46	TE-HL	+5.51
Bobbin	22	38	IDI	94	104.80	P 1	48	TE-HL	+14.92
H/L Tubesheet	22	58	SAI		1.59	1	13	TTS-HL	-3.21
Bobbin	23	56	NQI		9.05	P 1	13	TE-HL	+11.65
Bobbin	23	70	NQI		9.41	P 1	26	TE-HL	+5.30
Bobbin			NQI		46.77	P 1	25	TE-HL	+6.86
Bobbin	23	72	NQI		9.74	P 1	19	TE-HL	+12.09
Bobbin	23	81	NQI		14.73	P 1	20	TE-HL	+10.82
H/L Tubesheet	23	82	SAI		1.55	1	39	TTS-HL	-3.95
Bobbin	23	83	NQI		23.85	P 1	191	TE-HL	+2.55
Bobbin	23	90	NQI		2.82	P 1	119	TE-HL	+4.67
Bobbin	23	92	NQI		14.52	P 1	23	TE-HL	+7.59
Bobbin	23	93	NQI		6.48	P 1	151	TE-HL	+5.74
Bobbin	24	12	NQI		2.90	P 1	46	TE-CL	+13.31
Bobbin			NQI		5.47	P 1	44	TE-CL	+16.94
Bobbin	24	19	NQI		13.81	P 1	53	TE-HL	+17.41
H/L Tubesheet			MAI		7.35	1	37	TTS-HL	-3.67
Bobbin	24	20	NQI		6.19	P 1	61	TE-HL	+16.03
Bobbin			NQI		6.41	P 1	56	TE-HL	+15.54
Bobbin	24	23	NQI		28.20	P 1	182	TE-HL	+16.63
H/L Tubesheet			MAI		7.65	1	26	TTS-HL	-4.71
Bobbin	24	58	NQI		9.91	P 1	18	TE-HL	+8.78
Bobbin	24	77	NQI		2.19	P 1	48	TE-HL	+12.77
Bobbin	24	108	NQI		3.99	P 1	38	TE-HL	+17.53
Bobbin	25	20	NQI		10.91	P 1	119	TE-HL	+13.01
Bobbin	25	22	NQI		4.98	P 1	152	TE-HL	+14.68
Bobbin	25	43	NQI		4.73	P 1	152	TE-HL	+7.86
Bobbin	25	44	NQI		4.12	P 1	157	TE-HL	+7.28
Bobbin	25	54	NQI		25.56	P 1	22	TE-HL	+12.22
Bobbin	25	58	NQI		3.18	P 1	129	TE-HL	+6.03
Bobbin	25	79	NQI		3.25	P 1	146	TE-HL	+10.67
Bobbin	26	17	NQI		25.52	P 1	13	TE-HL	+11.35
Bobbin	26	40	NQI		9.92	P 1	30	TE-HL	+16.47
Bobbin	26	66	NQI		10.84	P 1	28	TE-HL	+10.45
Bobbin	26	70	NQI		2.42	P 1	145	TE-HL	+2.99
Bobbin	27	17	NQI		3.16	P 1	135	TE-HL	+10.70
Bobbin	27	18	NQI		3.13	P 1	61	TE-HL	+16.74
H/L Tubesheet			SAI		3.03	1	34	TTS-HL	-4.75

BWNT TUBAN II (Version 2.1) 01/17/1996 10:44:24
 McGuire Nuclear Station - Unit One
 S/G D
 12/95 RFO
 Bobbin,C/L Tubesheet,H/L Tubesheet

F* QUERY ATTACHMENT #4 - F* TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	27	30	NQI		15.45	P 1	16	TE-HL	+10.12	F/L
Bobbin	27	35	NQI		2.57	P 1	69	TE-HL	+16.55	F/L
H/L Tubesheet			MAI		2.39	1	26	TTS-HL	-4.89	TTS-HL
Bobbin	27	36	NQI		10.60	P 1	19	TE-HL	+8.25	F/L
Bobbin	27	69	NQI		30.95	P 1	27	TE-HL	+3.17	F/L
Bobbin	27	82	NQI		2.82	P 1	37	TE-HL	+11.01	F/L
Bobbin	27	86	NQI		10.20	P 1	7	TE-HL	+9.26	F/L
Bobbin	28	15	NQI		5.97	P 1	18	TE-HL	+9.20	F/L
Bobbin	28	24	NQI		5.31	P 1	8	TE-HL	+13.52	F/L
Bobbin	28	26	NQI		9.84	P 1	21	TE-HL	+10.44	F/L
Bobbin	28	81	NQI		10.93	P 1	8	TE-HL	+6.84	F/L
Bobbin	28	85	NQI		7.20	P 1	12	TE-HL	+10.02	F/L
H/L Tubesheet	29	21	MAI		1.05	1	25	TTS-HL	-5.22	TTS-HL
H/L Tubesheet	29	23	SAI		1.00	1	30	TTS-HL	-4.17	TTS-HL
Bobbin	29	34	NQI		13.46	P 1	53	TE-HL	+16.49	F/L
H/L Tubesheet			MAI		5.38	1	44	TTS-HL	-5.03	TTS-HL
Bobbin	29	36	NQI		8.67	P 1	13	TE-HL	+14.71	F/L
Bobbin	29	43	NQI		3.04	P 1	44	TE-HL	+17.42	F/L
H/L Tubesheet			SAI		2.25	1	33	TTS-HL	-4.14	TTS-HL
Bobbin	29	44	NQI		8.11	P 1	14	TE-HL	+15.23	F/L
Bobbin			NQI		14.23	P 1	16	TE-HL	+4.66	F/L
Bobbin			NQI		16.09	P 1	18	TE-HL	+1.66	F/L
Bobbin	29	45	NQI		13.50	P 1	16	TE-HL	+7.71	F/L
Bobbin	29	46	NQI		10.58	P 1	18	TE-HL	+12.33	F/L
Bobbin	29	47	NQI		12.16	P 1	21	TE-HL	+13.25	F/L
Bobbin	29	49	NQI		7.45	P 1	116	TE-HL	+16.61	F/L
H/L Tubesheet			MAI		6.21	1	22	TTS-HL	-4.69	TTS-HL
Bobbin	29	54	NQI		3.80	P 1	46	TE-HL	+10.65	F/L
Bobbin	29	65	NQI		5.28	P 1	54	TE-HL	+8.95	F/L
Bobbin	29	66	NQI		12.32	P 1	24	TE-HL	+10.55	F/L
Bobbin			NQI		12.47	P 1	38	TE-HL	+12.54	F/L
Bobbin	29	67	NQI		22.07	P 1	43	TE-HL	+11.41	F/L
Bobbin	29	75	NQI		7.94	P 1	28	TE-HL	+2.75	F/L
Bobbin	29	77	NQI		5.24	P 1	132	TE-HL	+11.42	F/L
Bobbin	30	39	NQI		14.33	P 1	33	TE-HL	+2.67	F/L
Bobbin	30	40	NQI		9.11	P 1	11	TE-HL	+9.97	F/L
Bobbin	30	61	NQI		4.67	P 1	59	TE-HL	+8.25	F/L
Bobbin			NQI		11.16	P 1	34	TE-HL	+6.01	F/L
Bobbin	30	64	NQI		6.87	P 1	57	TE-HL	+5.83	F/L
Bobbin	30	66	NQI		2.22	P 1	109	TE-HL	+15.56	F/L
Bobbin	30	68	NQI		8.91	P 1	48	TE-HL	+12.54	F/L
Bobbin	30	69	NQI		6.71	P 1	58	TE-HL	+6.55	F/L
Bobbin			NQI		10.66	P 1	20	TE-HL	+1.57	F/L
Bobbin	30	70	NQI		13.39	P 1	29	TE-HL	+3.00	F/L
Bobbin	30	76	NQI		6.16	P 1	18	TE-HL	+14.40	F/L
Bobbin			NQI		6.90	P 1	52	TE-HL	+6.24	F/L
Bobbin	30	77	NQI		27.67	P 1	23	TE-HL	+13.13	F/L
Bobbin	30	80	NQI		9.23	P 1	33	TE-HL	+14.43	F/L
Bobbin	30	85	NQI		3.72	P 1	45	TE-HL	+8.19	F/L
Bobbin	30	100	NQI		1.19	P 1	98	TE-HL	+15.39	F/L
H/L Tubesheet	31	37	MAI		1.69	1	30	TTS-HL	-5.07	TTS-HL
Bobbin	31	38	NQI		91.84	P 1	48	TE-HL	+15.65	F/L
H/L Tubesheet	31	42	SAI		0.40	1	27	TTS-HL	-2.88	TTS-HL
Bobbin	31	70	NQI		25.68	P 1	28	TE-HL	+4.28	F/L
Bobbin	31	100	NQI		5.18	P 1	38	TE-HL	+10.30	F/L
Bobbin	31	101	NQI		8.99	P 1	15	TE-HL	+8.73	F/L
H/L Tubesheet	32	19	SAI		1.57	1	194	TTS-HL	-5.22	TTS-HL
Bobbin	32	22	NQI		1.49	P 1	111	TE-CL	+15.65	F/L
Bobbin			NQI		2.18	P 1	87	TE-HL	+9.12	F/L
Bobbin	32	35	NQI		8.92	P 1	13	TE-HL	+15.88	F/L
H/L Tubesheet			MAI		1.66	1	204	TTS-HL	-6.09	TTS-HL
Bobbin	32	43	NQI		8.18	P 1	22	TE-HL	+8.30	F/L
Bobbin	32	62	NQI		13.00	P 1	25	TE-HL	+5.72	F/L
Bobbin	32	85	NQI		2.65	P 1	92	TE-CL	+0.87	F/L
H/L Tubesheet	33	54	SAI		0.99	1	29	TTS-HL	-3.71	TTS-HL

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 McGuire Nuclear Station - Unit One
 S/G D
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 Bobbin,C/L Tubesheet,H/L Tubesheet

F* QUERY

ATTACHMENT #4 - F*

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	33	77	NQI		5.94	P 1	154	TE-HL	+12.32
H/L Tubesheet	34	30	MAI		0.74	1	30	TTS-HL	-6.81
H/L Tubesheet	34	36	SAI		0.51	1	47	TTS-HL	-5.13
Bobbin	34	37	NQI		4.93	P 1	94	TE-HL	+7.56
Bobbin	34	73	NQI		18.43	P 1	55	TE-HL	+13.48
Bobbin	34	75	NQI		3.00	P 1	127	TE-HL	+13.03
Bobbin	34	81	NQI		3.26	P 1	49	TE-HL	+8.31
Bobbin	34	101	NQI		9.89	P 1	14	TE-HL	+8.74
Bobbin	35	17	NQI		8.34	P 1	30	TE-HL	+13.35
Bobbin	35	20	NQI		3.35	P 1	50	TE-HL	+3.13
Bobbin	35	26	NQI		8.15	P 1	26	TE-HL	+7.68
Bobbin	35	29	NQI		10.38	P 1	48	TE-HL	+13.74
Bobbin	35	38	NQI		3.14	P 1	89	TE-HL	+16.34
Bobbin	35	58	NQI		11.54	P 1	23	TE-HL	+13.51
Bobbin	35	60	NQI		2.79	P 1	66	TE-CL	+17.89
Bobbin	36	29	NQI		1.08	P 1	123	TE-HL	+6.65
H/L Tubesheet	36	35	SAI		0.65	1	211	TTS-HL	-4.85
Bobbin	36	80	NQI		5.71	P 1	143	TE-HL	+15.80
Bobbin	36	81	NQI		2.08	P 1	116	TE-HL	+11.21
Bobbin	37	26	NQI		21.18	P 1	22	TE-HL	+11.06
Bobbin	37	58	NQI		2.18	P 1	76	TE-HL	+10.69
Bobbin	37	86	NQI		12.51	P 1	29	TE-HL	+11.60
Bobbin	38	24	NQI		18.33	P 1	29	TE-HL	+14.05
Bobbin	38	66	NQI		7.69	P 1	52	TE-HL	+12.05
Bobbin	39	20	NQI		14.03	P 1	20	TE-HL	+14.23
Bobbin	39	52	NQI		23.39	P 1	40	TE-HL	+13.59
Bobbin	39	54	NQI		1.69	P 1	44	TE-HL	+4.46
Bobbin	39	67	NQI		8.36	P 1	55	TE-HL	+13.31
Bobbin	39	72	NQI		3.51	P 1	40	TE-HL	+15.42
Bobbin	39	75	NQI		11.53	P 1	31	TE-HL	+11.07
Bobbin	39	84	NQI		10.68	P 1	35	TE-HL	+11.62
Bobbin	40	38	NQI		3.69	P 1	147	TE-HL	+7.20
Bobbin	40	44	NQI		3.71	P 1	155	TE-CL	+19.19
Bobbin	40	52	NQI		11.18	P 1	63	TE-HL	+16.82
H/L Tubesheet			SAI		0.68	1	111	TTS-HL	-4.67
Bobbin	40	61	NQI		1.26	P 1	141	TE-HL	+8.98
Bobbin	40	62	NQI		7.06	P 1	48	TE-HL	+11.88
Bobbin	40	75	NQI		16.19	P 1	56	TE-HL	+8.75
Bobbin	41	53	NQI		9.51	P 1	49	TE-HL	+15.52
Bobbin	41	75	NQI		8.85	P 1	26	TE-HL	+2.93
Bobbin	42	25	NQI		16.49	P 1	22	TE-HL	+16.44
H/L Tubesheet			MAI		0.99	1	38	TTS-HL	-5.17
Bobbin	42	51	NQI		12.27	P 1	32	TE-HL	+14.60
Bobbin	42	70	NQI		7.52	P 1	21	TE-HL	+17.63
Bobbin	43	53	NQI		24.60	P 1	18	TE-HL	+5.48
Bobbin	43	60	NQI		39.07	P 1	28	TE-HL	+3.18
Bobbin	43	71	NQI		14.12	P 1	23	TE-HL	+6.47
Bobbin			NQI		16.43	P 1	16	TE-HL	+5.51
Bobbin	44	33	NQI		4.99	P 1	156	TE-HL	+10.28
Bobbin	44	37	NQI		20.71	P 1	71	TE-HL	+15.86
Bobbin	44	86	NQI		7.02	P 1	15	TE-HL	+15.93
Bobbin	44	90	NQI		9.29	P 1	11	TE-HL	+9.04
Bobbin	45	61	NQI		6.74	P 1	36	TE-HL	+11.65
Bobbin	45	67	NQI		6.68	P 1	55	TE-HL	+14.84
Bobbin	46	38	NQI		2.37	P 1	119	TE-HL	+16.51
Bobbin	46	48	NQI		27.54	P 1	42	TE-HL	+5.19
Bobbin	46	73	NQI		1.30	P 1	75	TE-HL	+9.93
Bobbin	47	35	NQI		7.18	P 1	148	TE-HL	+14.65
Bobbin	47	42	NQI		45.24	P 1	30	TE-HL	+1.33
Bobbin	49	36	NQI		17.37	P 1	28	TE-HL	+13.57
Bobbin	49	40	NQI		1.22	P 1	59	TE-HL	+17.38

Total Indications Found = 321
 Total Tubes Found = 269
 Total Tubes in Input File = 269

ATTACHMENT #5

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	2	3	NQI		0.68	P 1	95	8TH TSP	-0.54
Bobbin			NQI		1.01	P 1	40	8TH TSP	+0.64
Bobbin	2	8	ADI		1.09	6	61	9TH TSP	+35.46
C/L Special I			VOL		0.57	1	125	8TH TSP	-24.61
Bobbin	2	24	NQI		4.25	P 1	34	TE-CL	+18.93
Bobbin	2	33	NQI		0.36	3	113	10TH TSP	+25.23
U-Bend	2	69	NQI		0.67	1	100	7TH TSP	+0.03
U-Bend			VOL		0.65	1	143	7TH TSP	-0.14
H/L Tubesheet	2	81	NQI		0.20	1	19	TTS-HL	-0.25
Bobbin	2	100	NQI		0.88	3	101	9TH TSP	+41.88
Bobbin	3	48	NQI		10.44	3	19	8TH TSP	+2.38
H/L Tubesheet	3	60	SCI		0.15	3	62	TTS-HL	-0.12
H/L Tubesheet	3	63	SCI		0.12	3	43	TTS-HL	-0.24
Bobbin	3	76	NQI		0.44	P 1	145	5TH TSP	-0.11
H/L Special I			SAI		0.33	1	29	5TH TSP	-0.07
Bobbin	3	85	NQI		34.67	P 1	2	TTS-CL	-0.02
Bobbin	3	91	ODI	24	0.37	3	132	3RD TSP	+9.55
Bobbin	3	94	NQI		0.29	P 1	90	16TH TSP	+0.20
H/L Tubesheet	3	102	SAI		0.67	1	15	TTS-HL	-0.08
Bobbin	3	109	NQI		0.50	P 1	130	1ST TSP	+0.02
H/L Special I			MAI		0.20	P 1	79	1ST TSP	+0.02
Bobbin	4	23	NQI		1.12	P 1	41	1ST TSP	+0.06
H/L Special I			SAI		0.39	P 1	84	1ST TSP	+0.12
H/L Tubesheet	4	63	SCI		0.37	3	71	TTS-HL	-0.16
Bobbin	4	93	NQI		2.27	P 1	84	TE-HL	+11.65
Bobbin			NQI		13.00	P 1	68	TE-HL	+16.75
H/L Tubesheet			MAI		6.66	1	26	TTS-HL	-4.52
H/L Tubesheet			SAI		5.06	1	28	TTS-HL	-8.67
Bobbin	4	109	NQI		0.40	P 1	60	3RD TSP	-0.02
H/L Special I			MAI		0.22	P 1	39	3RD TSP	+0.01
Bobbin	5	36	NQI		0.84	P 1	113	5TH TSP	+0.00
H/L Tubesheet	5	52	SAI		0.63	1	17	TTS-HL	+0.08
Bobbin	5	62	NQI		4.19	P 1	125	TE-HL	+15.78
Bobbin	5	104	ODI	25	0.18	P 1	115	15TH TSP	-0.02
Bobbin	5	108	NQI		3.97	P 1	117	TE-HL	+15.99
Bobbin	6	58	ODI	17	0.42	3	130	6TH TSP	+33.86
H/L Special I			VOL		0.58	1	139	7TH TSP	-9.33
Bobbin	6	59	ODI	23	0.74	3	125	19TH TSP	-0.76
Bobbin	6	61	NQI		0.64	P 1	44	1ST TSP	+0.00
H/L Special I			SAI		0.53	1	50	1ST TSP	+0.07
Bobbin	6	69	NQI		0.73	3	85	12TH TSP	+13.02
C/L Special I			VOL		1.00	1	101	12TH TSP	+12.99
H/L Tubesheet	6	78	SAI		0.31	1	20	TTS-HL	-0.01
Bobbin	6	101	NQI		0.38	P 1	79	1ST TSP	-0.02
Bobbin			NQI		0.50	P 1	95	3RD TSP	+0.00
H/L Special I			MAI		0.60	1	149	1ST TSP	+0.01
H/L Special I			SAI		0.46	1	77	3RD TSP	+0.11
Bobbin	6	109	NQI		0.64	P 1	81	3RD TSP	-0.10
H/L Special I			SAI		0.36	1	131	3RD TSP	-0.01
Bobbin	7	10	NQI		0.46	P 1	61	1ST TSP	-0.06
Bobbin			NQI		0.87	P 1	49	4TH TSP	+0.04
H/L Special I			SAI		0.28	P 1	52	4TH TSP	+0.14
H/L Special I			SAI		0.36	P 1	49	1ST TSP	-0.15
Bobbin	7	65	ADI		1.22	6	63	5TH TSP	+17.35
Bobbin			ADI		1.72	6	68	4TH TSP	+34.73
H/L Special I			VOL		0.24	1	48	5TH TSP	+17.55
H/L Special I			VOL		1.00	1	18	5TH TSP	-9.48
Bobbin	7	75	NQI		0.24	P 1	45	1ST TSP	-0.02
Bobbin			NQI		0.57	P 1	53	2ND TSP	+0.00
H/L Special I			SAI		0.46	1	165	1ST TSP	+0.00
Bobbin	8	39	ODI	25	1.04	3	123	5TH TSP	+12.80
H/L Special I			VOL		0.79	1	66	5TH TSP	+12.81
Bobbin	8	55	NQI		0.27	P 1	113	4TH TSP	-0.02
H/L Tubesheet	8	80	SAI		0.39	1	15	TTS-HL	-0.21
Bobbin	9	4	ADI		2.32	6	71	TTS-CL	+14.05

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #5

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
C/L Special I			VOL		1.33	1	117	TTS-CL	+14.92
Bobbin	9	59	ADI		1.44	6	50	10TH TSP	+24.19
C/L Special I			VOL		0.32	1	98	9TH TSP	-21.46
Bobbin	9	63	NQI		10.38	P 1	154	TE-HL	+17.03
Bobbin	9	66	NQI		4.71	P 1	22	TE-CL	+15.78
Bobbin	10	9	ADI		1.89	6	72	9TH TSP	+12.72
Bobbin	10	22	NQI		0.41	P 1	93	1ST TSP	+0.08
H/L Special I			SAI		0.09	2	94	1ST TSP	+0.19
Bobbin	10	25	NQI		15.25	P 1	155	TE-HL	+16.44
H/L Tubesheet			MAI		0.66	1	19	TTS-HL	-4.36
Bobbin	10	63	NQI		0.29	3	84	14TH TSP	+9.57
Bobbin			NQI		0.50	3	82	14TH TSP	+8.95
Bobbin	10	65	NQI		0.55	P 1	119	3RD TSP	+0.05
Bobbin	10	67	NQI		0.60	P 1	68	3RD TSP	+0.00
Bobbin	10	84	NQI		0.17	P 1	102	14TH TSP	+0.05
Bobbin	10	87	WAR	17	0.19	P 4	0	4AVB	+0.00
H/L Special I			VOL		2.85	1	144	2ND TSP	-3.34
Bobbin	11	78	NQI		0.41	3	111	TTS-HL	+22.18
Bobbin	11	92	NQI		0.35	3	53	5TH TSP	+41.52
H/L Special I			VOL		0.74	1	174	6TH TSP	-2.67
Bobbin	11	108	NQI		0.16	P 1	81	5TH TSP	-0.02
Bobbin	12	20	NQI		0.33	3	162	5TH TSP	+8.61
U-Bend	12	75	VOL		0.20	1	24	7TH TSP	+5.80
U-Bend	12	80	VOL		0.16	1	47	7TH TSP	+6.02
Bobbin	13	48	NQI		7.63	P 1	60	TE-HL	+2.08
Bobbin	13	110	ODI	35	0.38	3	116	1ST TSP	+2.97
Bobbin	14	33	NQI		0.26	P 1	66	2ND TSP	+0.07
H/L Special I			SAI		0.30	P 1	58	2ND TSP	-0.07
Bobbin	14	52	ODI	5	0.98	3	139	14TH TSP	-1.38
H/L Tubesheet			SAI		0.49	1	56	TTS-HL	-0.03
Bobbin	14	72	NQI		0.31	3	111	13TH TSP	+1.96
Bobbin	14	75	ADI		1.38	6	96	11TH TSP	+41.65
C/L Special I			VOL		0.84	1	144	10TH TSP	-2.59
Bobbin	14	84	NQI		0.70	3	120	TTS-CL	+28.06
C/L Special I			VOL		0.69	1	88	TTS-CL	+26.07
Bobbin	14	110	NQI		0.32	3	111	2ND TSP	+30.39
Bobbin	15	28	NQI		25.03	P 1	22	TE-HL	+3.79
Bobbin			NQI		30.68	P 1	34	TE-HL	+8.95
Bobbin	15	32	NQI		0.40	P 1	47	16TH TSP	-0.35
Bobbin	15	38	NQI		0.49	P 1	148	17TH TSP	+0.09
Bobbin	15	39	NQI		0.30	3	97	9TH TSP	+16.23
C/L Special I			VOL		0.39	1	90	9TH TSP	+17.40
Bobbin	15	50	ODI	13	0.74	3	132	1ST TSP	+8.92
Bobbin			ODI	24	0.37	3	122	4TH TSP	+19.26
H/L Tubesheet			VOL		0.84	1	34	TTS-HL	+2.43
H/L Special I			VOL		0.37	1	139	4TH TSP	+18.04
H/L Special I			VOL		0.80	1	128	4TH TSP	+20.00
H/L Special I			VOL		0.92	1	145	1ST TSP	+9.26
Bobbin	15	55	ADI		4.52	6	75	9TH TSP	+33.49
C/L Special I			VOL		2.04	1	71	8TH TSP	-11.55
Bobbin	15	56	WAR	14	0.39	P 4	0	4AVB	+0.00
Bobbin	15	63	NQI		0.67	5	66	11TH TSP	+30.97
C/L Special I			VOL		0.29	1	207	11TH TSP	+30.82
Bobbin	15	68	NQI		17.83	P 1	43	TE-HL	+0.77
H/L Tubesheet			SAI		1.32	1	14	TTS-HL	+0.01
H/L Tubesheet			SAI		0.87	1	15	TTS-HL	-0.13
Bobbin	16	84	NQI		12.37	P 1	27	TE-HL	+3.30
Bobbin	16	104	NQI		11.05	P 1	165	TE-HL	+3.06
Bobbin	17	82	ADI		2.28	6	68	17TH TSP	+4.94
C/L Special I			VOL		1.26	1	110	17TH TSP	+5.31
Bobbin	17	87	ADI		1.37	6	55	11TH TSP	+39.18
Bobbin	17	89	ADI		2.22	6	79	10TH TSP	+25.26
Bobbin	18	92	NQI		6.39	P 1	162	TE-HL	+13.90
H/L Tubesheet			SAI		0.42	1	5	TTS-HL	-1.37
Bobbin	18	104	NQI		0.20	P 1	76	1ST TSP	+0.07

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #5		INDICATIONS OF IMPERFECTION										EXTENT1
TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION				
Bobbin	19	14	ODI	15	0.48	3	132	TTS-HL	+20.21			F/L
H/L Special I			VOL		2.47	1	126	1ST TSP	-9.10			1ST TSP
Bobbin	19	27	WAR	26	0.41	P 4	0	1AVB	+0.00			F/L
Bobbin	19	32	ODI	12	1.12	3	134	6TH TSP	+34.09			F/L
H/L Special I			VOL		0.42	6	102	6TH TSP	+34.13			7TH TSP
Bobbin	19	48	ODI	24	0.49	4	120	TTS-CL	+17.81			F/L
H/L Tubesheet	19	75	SAI		0.08	2	46	TTS-HL	+0.09			TTS-HL
Bobbin	20	17	ADI		1.13	6	71	6TH TSP	+37.13			F/L
H/L Special I			VOL		0.52	1	127	7TH TSP	-6.11			7TH TSP
H/L Tubesheet	20	26	MAI		0.45	1	30	TTS-HL	-4.22			TTS-HL
Bobbin	20	31	NQI		16.66	P 1	21	TTS-CL	-1.20			F/L
Bobbin	20	37	ODI	27	0.47	3	120	TTS-CL	+0.59			F/L
Bobbin	20	40	NQI		0.38	3	115	4TH TSP	+26.07			F/L
H/L Special I			VOL		0.35	1	93	4TH TSP	+26.52			4TH TSP
Bobbin	20	86	NQI		7.32	P 1	89	TE-HL	+12.73			F/L
Bobbin	20	94	ODI	46	0.40	3	106	TTS-CL	+19.37			F/L
C/L Special I			VOL		0.19	1	84	TTS-CL	+20.62			20TH TSP
Bobbin	20	97	NQI		0.30	3	125	2ND TSP	+29.37			F/L
H/L Special I			VOL		0.17	1	132	2ND TSP	+28.62			3RD TSP
H/L Special I			VOL		0.23	1	151	2ND TSP	+36.39			3RD TSP
H/L Special I			VOL		1.26	1	168	2ND TSP	+38.90			3RD TSP
Bobbin	21	54	ADI		4.60	6	90	9TH TSP	+13.11			F/L
Bobbin			NQI		0.38	3	136	9TH TSP	+18.71			F/L
Bobbin			ODI	6	0.63	4	133	9TH TSP	+17.60			F/L
C/L Special I			VOL		0.83	1	126	9TH TSP	+19.64			9TH TSP
C/L Special I			VOL		0.97	1	113	9TH TSP	+12.73			9TH TSP
C/L Special I			VOL		1.77	1	148	9TH TSP	+12.61			9TH TSP
H/L Special I	21	85	VOL		0.89	1	144	6TH TSP	+4.39			6TH TSP
Bobbin	21	95	NQI		0.50	3	88	1ST TSP	+12.46			F/L
H/L Special I			VOL		1.60	1	142	1ST TSP	+12.32			1ST TSP
H/L Tubesheet	21	101	MAI		1.53	1	38	TTS-HL	-4.33			TTS-HL
Bobbin	22	29	ODI	5	0.24	P 1	136	16TH TSP	+0.00			F/L
Bobbin	22	33	ODI	27	0.84	3	120	6TH TSP	+7.06			F/L
H/L Special I			VOL		1.27	1	139	6TH TSP	+7.37			6TH TSP
H/L Tubesheet	22	85	SAI		0.37	1	43	TTS-HL	-0.06			TTS-HL
Bobbin	22	86	ODI	9	0.89	3	139	2ND TSP	+29.46			F/L
H/L Tubesheet			MAI		2.45	1	41	TTS-HL	-3.89			TTS-HL
H/L Special I			VOL		0.92	1	268	2ND TSP	+29.90			3RD TSP
Bobbin	23	12	ODI	24	0.27	3	122	1ST TSP	+2.99			F/L
Bobbin	23	16	NQI		0.41	3	79	11TH TSP	+18.88			F/L
C/L Special I			VOL		0.62	1	82	11TH TSP	+20.63			11TH TSP
H/L Tubesheet	23	63	SAI		1.96	1	19	TTS-HL	+0.07			TTS-HL
Bobbin	23	64	WAR	11	0.27	P 4	0	1AVB	+0.00			F/L
Bobbin			WAR	15	0.41	P 4	0	2AVB	+0.00			F/L
Bobbin			WAR	16	0.45	P 4	0	3AVB	+0.00			F/L
Bobbin	24	37	NQI		1.26	3	8	9TH TSP	+24.66			F/L
Bobbin			NQI		1.96	3	8	9TH TSP	+12.58			F/L
Bobbin			NQI		2.78	3	10	9TH TSP	+15.46			F/L
Bobbin			NQI		3.78	3	14	9TH TSP	+17.46			F/L
Bobbin			NQI		4.73	3	15	9TH TSP	+35.21			F/L
Bobbin			NQI		4.85	3	12	9TH TSP	+26.01			F/L
Bobbin			NQI		4.94	3	13	9TH TSP	+22.53			F/L
Bobbin			NQI		8.18	3	16	9TH TSP	+19.87			F/L
Bobbin			NQI		8.38	3	18	9TH TSP	+28.13			F/L
Bobbin			NQI		10.26	3	18	9TH TSP	+32.70			F/L
Bobbin			NQI		0.79	3	13	17TH TSP	+3.15			F/L
Bobbin			NQI		1.04	3	9	13TH TSP	+3.36			F/L
Bobbin			NQI		1.34	3	9	17TH TSP	-0.82			F/L
Bobbin			NQI		1.45	3	9	18TH TSP	+3.42			F/L
Bobbin			NQI		1.46	3	11	10TH TSP	+24.26			F/L
Bobbin			NQI		1.54	3	9	10TH TSP	+14.17			F/L
Bobbin			NQI		1.76	3	7	19TH TSP	+5.34			F/L
Bobbin			NQI		2.03	3	10	10TH TSP	+16.09			F/L
Bobbin			NQI		3.44	3	12	10TH TSP	+19.21			F/L
Bobbin			NQI		4.01	3	12	10TH TSP	+19.48			F/L

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #5

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin			NQI		4.81	3	12	10TH TSP	+21.64	F/L
Bobbin			NQI		5.73	3	14	19TH TSP	+6.44	F/L
Bobbin	24	41	NQI		0.42	P 1	132	16TH TSP	+0.05	F/L
H/L Tubesheet	24	102	SAI		0.50	2	33	TTS-HL	-0.12	TTS-HL
Bobbin	25	36	ADI		5.46	6	71	9TH TSP	+21.96	F/L
C/L Special I			VOL		1.20	1	103	8TH TSP	-21.97	8TH TSP
H/L Tubesheet	25	48	SAI		0.38	1	8	TTS-HL	-0.04	TTS-HL
Bobbin	25	73	NQI		0.40	3	152	1ST TSP	+4.97	F/L
H/L Special I			VOL		0.69	1	118	1ST TSP	+5.24	1ST TSP
Bobbin	26	37	ADI		2.88	6	71	9TH TSP	+2.60	F/L
C/L Special I			VOL		1.27	1	86	9TH TSP	+2.29	9TH TSP
Bobbin	26	46	NQI		6.27	P 1	110	TE-HL	+10.96	F/L
Bobbin	26	64	NQI		8.92	P 1	174	TE-HL	+13.86	F/L
Bobbin	26	82	NQI		14.14	P 1	68	TE-HL	+16.13	F/L
Bobbin	26	84	NQI		21.05	P 1	52	TE-HL	+15.13	F/L
Bobbin			NQI		50.26	P 1	47	TE-HL	+14.16	F/L
Bobbin	27	53	NQI		15.15	P 1	18	TE-HL	+4.49	F/L
H/L Tubesheet	27	66	SAI		0.13	1	86	TTS-HL	+0.00	TTS-HL
Bobbin	27	74	NQI		8.57	P 1	12	TE-HL	+13.13	F/L
Bobbin			NQI		10.94	P 1	14	TE-HL	+8.18	F/L
Bobbin	28	43	WAR	19	0.64	P 4	0	2AVB	+0.00	F/L
H/L Tubesheet	28	80	MAI		0.64	1	16	TTS-HL	-0.30	TTS-HL
Bobbin	28	81	WAR	12	0.31	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	20	0.57	P 4	0	1AVB	+0.00	F/L
Bobbin	28	94	ODI	15	0.60	3	134	4TH TSP	+25.15	4TH TSP
H/L Special I			VOL		0.35	1	43	4TH TSP	+5.73	4TH TSP
H/L Special I			VOL		0.74	1	99	4TH TSP	+25.07	4TH TSP
Bobbin	29	52	WAR	10	0.31	P 4	0	2AVB	+0.00	F/L
Bobbin	29	65	NQI		2.54	P 1	60	TE-HL	+10.28	F/L
Bobbin	29	80	ADI		2.09	6	72	2ND TSP	+24.63	F/L
Bobbin			NQI		9.01	P 1	75	TE-HL	+13.27	F/L
H/L Special I			VOL		0.70	1	114	2ND TSP	+24.75	2ND TSP
Bobbin	30	41	WAR	17	0.58	P 4	0	3AVB	+0.00	F/L
H/L Tubesheet	30	58	SCI		0.28	1	53	TTS-HL	-0.06	TTS-HL
Bobbin	30	59	WAR	10	0.24	P 4	0	1AVB	+0.00	F/L
Bobbin	30	72	WAR	27	0.98	P 4	0	3AVB	+0.00	F/L
Bobbin	30	73	NQI		2.58	P 1	41	TE-CL	+14.73	F/L
H/L Special I	30	88	VOL		0.81	1	123	7TH TSP	+0.99	7TH TSP
Bobbin	30	97	ODI	11	0.52	3	136	TTS-HL	+15.12	F/L
H/L Special I			VOL		0.69	1	121	TTS-HL	+14.40	TTS-HL
Bobbin	31	41	WAR	17	0.83	P 4	0	2AVB	+0.00	F/L
Bobbin	31	44	WAR	19	0.70	P 4	0	3AVB	+0.00	F/L
Bobbin	31	46	WAR	8	0.33	P 4	0	4AVB	+0.00	F/L
Bobbin	31	62	WAR	12	0.29	P 4	0	1AVB	+0.00	F/L
Bobbin	31	87	ODI	16	0.30	3	133	17TH TSP	+3.21	F/L
Bobbin	32	12	WAR	11	0.48	P 4	0	2AVB	+0.00	F/L
Bobbin	32	19	WAR	13	0.41	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	16	0.53	P 4	0	2AVB	+0.00	F/L
Bobbin	32	48	NQI		1.37	3	148	5TH TSP	+11.14	F/L
H/L Special I			VOL		0.89	1	125	5TH TSP	+11.18	5TH TSP
Bobbin	32	92	ADI		1.35	6	85	2ND TSP	+25.50	F/L
Bobbin	33	14	WAR	11	0.34	P 4	0	1AVB	+0.00	F/L
Bobbin	33	27	ODI	7	0.62	4	137	9TH TSP	+35.56	F/L
Bobbin			ODI	10	0.31	3	137	19TH TSP	+2.98	F/L
C/L Special I			VOL		0.71	1	28	8TH TSP	-9.09	8TH TSP
C/L Special I			VOL		1.67	1	184	19TH TSP	+3.09	18TH TSP
H/L Tubesheet	33	92	SAI		0.60	1	8	TTS-HL	+0.14	TTS-HL
Bobbin	34	48	WAR	14	0.19	P 4	0	3AVB	+0.00	F/L
Bobbin	34	52	NQI		1.22	3	140	8TH TSP	+1.64	F/L
U-Bend			SAI		0.67	2	2	8TH TSP	+1.74	8TH TSP
Bobbin	34	53	WAR	15	0.52	P 4	0	1AVB	+0.00	F/L
Bobbin	34	56	WAR	15	0.50	P 4	0	1AVB	+0.00	F/L
Bobbin	34	69	NQI		0.94	P 1	158	8TH TSP	+1.49	F/L
Bobbin	34	73	NQI		0.25	3	121	6TH TSP	+11.08	F/L
H/L Special I			VOL		0.51	1	138	6TH TSP	+11.10	6TH TSP

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #5		INDICATIONS OF IMPERFECTION										EXTENT1
TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION				
Bobbin	34	95	ODI	12	0.92	3	136	17TH TSP	+14.99			F/L
C/L Special I			VOL		0.75	1	103	17TH TSP	+15.08			17TH TSP
Bobbin	35	15	NQI		0.41	P 1	65	1ST TSP	+0.00			F/L
Bobbin			WAR	6	0.21	P 4	0	1AVB	+0.00			F/L
C/L Special I	35	39	VOL		0.73	1	144	9TH TSP	-9.90			9TH TSP
Bobbin	35	40	WAR	11	0.37	P 4	0	3AVB	+0.00			F/L
Bobbin	35	42	NQI		2.43	P 1	19	TE-HL	+6.30			F/L
Bobbin	35	55	WAR	15	0.52	P 4	0	1AVB	+0.00			F/L
Bobbin	36	24	WAR	6	0.22	P 4	0	3AVB	+0.00			F/L
Bobbin	36	32	WAR	11	0.38	P 4	0	1AVB	+0.00			F/L
Bobbin	36	34	ADI		2.31	6	80	3RD TSP	+11.60			F/L
Bobbin			NQI		1.34	3	135	2ND TSP	+38.67			F/L
H/L Special I			VOL		2.79	1	101	3RD TSP	+12.17			3RD TSP
H/L Special I			VOL		9.33	1	144	3RD TSP	-4.18			3RD TSP
Bobbin	36	35	WAR	10	0.44	P 4	0	1AVB	+0.00			F/L
Bobbin			WAR	11	0.37	P 4	0	2AVB	+0.00			F/L
H/L Tubesheet	36	36	VOL		0.34	1	95	TTS-HL	-3.48			TTS-HL
H/L Tubesheet	36	45	SCI		0.46	1	35	TTS-HL	-0.08			TTS-HL
Bobbin	36	56	ADI		7.02	6	89	7TH TSP	+0.87			F/L
U-Bend			VOL		1.50	1	124	7TH TSP	+2.01			7TH TSP
Bobbin	36	89	ODI	26	0.77	3	124	TTS-HL	+2.14			F/L
H/L Tubesheet			VOL		0.47	1	88	TTS-HL	+2.42			TTS-HL
H/L Special I			VOL		0.63	1	113	TTS-HL	+2.15			1ST TSP
Bobbin	36	98	ODI	14	1.10	3	134	TTS-CL	+9.73			F/L
Bobbin	37	16	WAR	11	0.37	P 4	0	1AVB	+0.00			F/L
Bobbin			WAR	13	0.45	P 4	0	4AVB	+0.00			F/L
Bobbin			WAR	20	0.76	P 4	0	2AVB	+0.00			F/L
Bobbin			WAR	24	0.94	P 4	0	3AVB	+0.00			F/L
Bobbin	37	24	WAR	19	0.69	P 4	0	3AVB	+0.00			F/L
Bobbin	37	29	NQI		11.25	P 1	37	TE-HL	+8.90			F/L
Bobbin	37	36	NQI		3.07	3	170	7TH TSP	+9.99			F/L
U-Bend			VOL		1.04	1	140	7TH TSP	+9.76			7TH TSP
Bobbin	37	68	NQI		0.41	P 1	59	1ST TSP	-0.02			F/L
H/L Special I			SAI		0.13	P 1	71	1ST TSP	+0.06			1ST TSP
Bobbin	37	78	NQI		9.78	P 1	15	TE-HL	+13.24			F/L
Bobbin	38	17	ODI	30	0.48	P 1	117	16TH TSP	-0.29			F/L
C/L Special I			VOL		1.22	1	154	16TH TSP	-0.23			16TH TSP
Bobbin	38	40	ADI		1.43	6	54	10TH TSP	+10.73			F/L
Bobbin			ADI		1.57	6	65	10TH TSP	+17.74			F/L
Bobbin			ADI		1.63	6	57	10TH TSP	+13.87			F/L
C/L Special I			VOL		0.36	1	19	10TH TSP	+10.53			9TH TSP
C/L Special I			VOL		0.40	1	95	10TH TSP	+13.30			9TH TSP
C/L Special I			VOL		0.50	1	139	10TH TSP	+17.06			9TH TSP
Bobbin	38	47	WAR	17	0.60	P 4	0	2AVB	+0.00			F/L
Bobbin			WAR	18	0.63	P 4	0	1AVB	+0.00			F/L
Bobbin	38	49	NQI		0.27	3	101	5TH TSP	+14.04			F/L
H/L Special I			VOL		0.52	1	139	5TH TSP	+14.43			5TH TSP
Bobbin	38	55	WAR	17	0.60	P 4	0	1AVB	+0.00			F/L
Bobbin	38	82	WAR	10	0.26	P 4	0	2AVB	+0.00			F/L
Bobbin			WAR	12	0.32	P 4	0	1AVB	+0.00			F/L
Bobbin	38	95	ADI		2.04	6	80	18TH TSP	+3.87			F/L
C/L Special I			VOL		0.72	1	96	18TH TSP	+4.51			18TH TSP
Bobbin	38	97	NQI		0.30	3	96	3RD TSP	+35.69			F/L
H/L Special I			VOL		1.60	1	132	4TH TSP	-8.40			4TH TSP
Bobbin	39	55	NQI		0.30	P 1	51	1ST TSP	+0.02			F/L
Bobbin	39	94	NQI		0.67	3	113	9TH TSP	+27.00			F/L
C/L Special I			VOL		0.76	1	100	9TH TSP	+9.57			9TH TSP
C/L Special I			VOL		1.22	1	142	9TH TSP	+27.69			9TH TSP
Bobbin	40	23	ADI		1.55	6	52	6TH TSP	+13.00			F/L
H/L Special I			VOL		3.45	1	35	6TH TSP	+13.48			6TH TSP
Bobbin	40	27	WAR	7	0.24	P 4	0	1AVB	+0.00			F/L
Bobbin			WAR	10	0.32	P 4	0	2AVB	+0.00			F/L
Bobbin	40	50	NQI		0.30	3	120	12TH TSP	+10.29			F/L
C/L Special I			VOL		0.45	1	100	12TH TSP	+10.26			11TH TSP
Bobbin	40	51	WAR	28	1.21	P 4	0	1AVB	+0.00			F/L

ATTACHMENT #5

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
H/L Tubesheet	40	73	SCI		0.16	1	78	TTS-HL	-0.10
Bobbin	40	80	WAR	20	0.50	P 4	0	2AVB	+0.00
Bobbin	40	86	WAR	23	0.62	P 4	0	1AVB	+0.00
Bobbin			WAR	26	0.77	P 4	0	3AVB	+0.00
Bobbin			WAR	34	1.30	P 4	0	2AVB	+0.00
Bobbin	41	22	WAR	11	0.37	P 4	0	1AVB	+0.00
Bobbin	41	30	NQI		2.74	P 1	31	TE-CL	+3.41
Bobbin			NQI		3.13	P 1	22	TE-CL	+17.17
Bobbin			NQI		3.49	P 1	29	TE-CL	+14.06
Bobbin			NQI		3.71	P 1	18	TE-CL	+6.38
Bobbin			NQI		3.85	P 1	17	TE-CL	+10.29
Bobbin	41	31	NQI		4.34	P 1	25	TE-CL	+17.05
Bobbin			NQI		4.74	P 1	21	TE-CL	+5.27
Bobbin	41	44	WAR	8	0.27	P 4	0	1AVB	+0.00
Bobbin			WAR	12	0.42	P 4	0	2AVB	+0.00
Bobbin	41	54	WAR	17	0.61	P 4	0	1AVB	+0.00
Bobbin			WAR	26	1.07	P 4	0	2AVB	+0.00
Bobbin	41	56	NQI		2.76	3	14	8TH TSP	+19.68
U-Bend			VOL		2.25	2	8	8TH TSP	+19.95
Bobbin	41	59	WAR	14	0.28	P 4	0	2AVB	+0.00
Bobbin			WAR	31	1.01	P 4	0	1AVB	+0.00
Bobbin	41	61	WAR	20	0.44	P 4	0	1AVB	+0.00
Bobbin	41	77	NQI		1.69	P 1	164	3RD TSP	+0.15
Bobbin	42	24	WAR	11	0.38	P 4	0	3AVB	+0.00
Bobbin			WAR	15	0.50	P 4	0	2AVB	+0.00
Bobbin	42	31	NQI		3.75	P 1	25	TE-CL	+8.43
Bobbin	42	32	NQI		5.22	P 1	20	TE-CL	+16.05
Bobbin	42	39	NQI		0.61	P 1	25	1ST TSP	+0.23
Bobbin	42	42	WAR	14	0.48	P 4	0	1AVB	+0.00
Bobbin	42	43	WAR	9	0.30	P 4	0	2AVB	+0.00
Bobbin			WAR	12	0.39	P 4	0	1AVB	+0.00
Bobbin			WAR	15	0.53	P 4	0	3AVB	+0.00
Bobbin	42	51	WAR	12	0.41	P 4	0	1AVB	+0.00
Bobbin	42	57	ADI		1.42	6	52	TTS-CL	+21.14
Bobbin			WAR	8	0.28	P 4	0	4AVB	+0.00
Bobbin			WAR	15	0.53	P 4	0	1AVB	+0.00
Bobbin	43	22	WAR	12	0.40	P 4	0	1AVB	+0.00
Bobbin			WAR	12	0.40	P 4	0	2AVB	+0.00
Bobbin	43	24	WAR	9	0.29	P 4	0	2AVB	+0.00
Bobbin			WAR	16	0.57	P 4	0	3AVB	+0.00
Bobbin	43	32	NQI		1.09	3	46	4TH TSP	+22.07
H/L Special I			VOL		3.03	1	126	4TH TSP	+22.00
Bobbin	43	40	WAR	10	0.34	P 4	0	1AVB	+0.00
Bobbin	43	41	WAR	12	0.42	P 4	0	1AVB	+0.00
Bobbin	43	46	WAR	14	0.48	P 4	0	1AVB	+0.00
Bobbin	43	48	WAR	10	0.34	P 4	0	1AVB	+0.00
Bobbin	43	51	WAR	11	0.36	P 4	0	1AVB	+0.00
Bobbin	43	54	WAR	14	0.47	P 4	0	1AVB	+0.00
Bobbin	43	56	WAR	16	0.55	P 4	0	1AVB	+0.00
Bobbin	43	57	WAR	17	0.59	P 4	0	1AVB	+0.00
Bobbin	43	68	ODI	49	0.37	P 1	110	1ST TSP	-0.10
H/L Special I			SAI		0.73	1	166	1ST TSP	-0.07
Bobbin	44	28	ADI		2.13	6	51	2ND TSP	+13.94
Bobbin	44	40	NQI		0.92	3	128	8TH TSP	+1.95
U-Bend			VOL		1.79	1	147	8TH TSP	+2.04
Bobbin	44	44	NQI		0.30	P 1	128	1ST TSP	+0.02
H/L Special I			SAI		0.18	1	115	1ST TSP	+0.00
Bobbin	44	48	ODI	3	0.58	3	135	17TH TSP	+10.71
Bobbin	45	35	NQI		0.49	3	99	4AVB	+26.26
Bobbin			NQI		1.36	3	159	4AVB	+29.72
Bobbin			ODI	50	0.67	3	102	4AVB	+28.43
H/L Tubesheet	46	41	VOL		0.59	1	229	TTS-HL	-5.15
Bobbin	46	59	WAR	4	0.51	P 2	0	16TH TSP	+0.00
Bobbin	46	71	NQI		2.42	3	38	4AVB	+8.59
Bobbin	47	56	NQI		0.53	3	109	TTS-HL	+17.49

ATTACHMENT #5

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin			WAR	7	0.85	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	10	1.13	P 2	0	14TH TSP	+0.00 F/L
Bobbin			WAR	30	4.61	P 2	0	16TH TSP	+0.00 F/L
H/L Special I			VOL		1.01	1	88	TTS-HL	+17.16 1ST TSP
Bobbin	47	58	WAR	14	1.98	P 2	0	14TH TSP	+0.00 F/L
Bobbin	47	59	WAR	8	0.99	P 2	0	12TH TSP	+0.00 F/L
Bobbin			WAR	8	1.01	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	13	1.79	P 2	0	16TH TSP	+0.00 F/L
Bobbin			WAR	14	1.99	P 2	0	14TH TSP	+0.00 F/L
Bobbin	47	60	WAR	6	0.74	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	9	1.16	P 2	0	14TH TSP	+0.00 F/L
Bobbin			WAR	18	2.59	P 2	0	16TH TSP	+0.00 F/L
Bobbin	47	73	ODI	23	0.24	3	124	5TH TSP	+25.11 F/L
H/L Special I			VOL		1.05	1	131	6TH TSP	-20.35 6TH TSP
Bobbin	47	77	WAR	16	1.73	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	29	ODI	51	0.54	3	105	4AVB	+15.92 F/L
Bobbin	48	38	WAR	12	1.51	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	41	WAR	15	1.82	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	53	WAR	9	1.06	P 2	0	17TH TSP	+0.00 F/L
Bobbin	48	54	WAR	26	3.79	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	55	WAR	13	1.60	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	56	WAR	7	0.83	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	15	1.92	P 2	0	16TH TSP	+0.00 F/L
Bobbin			WAR	17	2.20	P 2	0	12TH TSP	+0.00 F/L
Bobbin			WAR	24	3.44	P 2	0	14TH TSP	+0.00 F/L
Bobbin	48	59	WAR	12	1.60	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	62	WAR	25	3.98	P 2	0	16TH TSP	+0.00 F/L
Bobbin	48	78	WAR	10	1.28	P 2	0	14TH TSP	+0.00 F/L
Bobbin	48	81	NOI		0.40	3	71	TTS-HL	+18.05 F/L
H/L Special I			VOL		0.48	1	101	1ST TSP	-11.09 1ST TSP
Bobbin	49	35	WAR	6	0.73	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	37	WAR	12	1.40	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	38	WAR	21	2.73	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	40	WAR	16	2.04	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	21	2.79	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	41	WAR	18	2.38	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	42	WAR	25	3.59	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	43	WAR	16	1.95	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	17	2.19	P 2	0	16TH TSP	+0.00 F/L
Bobbin			WAR	18	2.25	P 2	0	15TH TSP	+0.00 F/L
Bobbin	49	45	WAR	4	0.49	P 2	0	15TH TSP	+0.00 F/L
Bobbin			WAR	6	0.72	P 2	0	14TH TSP	+0.00 F/L
Bobbin			WAR	8	0.98	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	50	WAR	20	2.71	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	51	WAR	6	0.63	P 2	0	19TH TSP	+0.00 F/L
Bobbin	49	53	WAR	13	1.62	P 2	0	14TH TSP	+0.00 F/L
Bobbin			WAR	15	1.81	P 2	0	12TH TSP	+0.00 F/L
Bobbin			WAR	20	2.66	P 2	0	19TH TSP	+0.00 F/L
Bobbin			WAR	20	2.71	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	25	3.51	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	57	WAR	10	1.22	P 2	0	12TH TSP	+0.00 F/L
Bobbin			WAR	16	2.03	P 2	0	14TH TSP	+0.00 F/L
Bobbin			WAR	17	2.13	P 2	0	17TH TSP	+0.00 F/L
Bobbin			WAR	19	2.41	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	64	WAR	8	0.82	P 2	0	16TH TSP	+0.00 F/L
Bobbin			WAR	11	1.07	P 2	0	17TH TSP	+0.00 F/L
Bobbin	49	74	WAR	27	3.37	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	77	WAR	11	1.44	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	78	WAR	7	0.97	P 2	0	16TH TSP	+0.00 F/L
Bobbin	49	80	NOI		1.94	P 1	33	TE-CL	+17.06 F/L

Total Indications Found = 450
 Total Tubes Found = 265

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #6

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	2	4	NQI		0.32	3	43	TTS-CL	+1.31
Bobbin	2	22	ADI		1.63	6	57	9TH TSP	+12.78
Bobbin			ADI		2.07	6	81	18TH TSP	+1.51
C/L Special I			VOL		0.50	1	104	9TH TSP	+13.18
C/L Special I			VOL		0.41	1	68	18TH TSP	+1.60
Bobbin	2	25	ODI	9	1.70	4	136	10TH TSP	+30.82
C/L Special I			VOL		1.23	1	139	9TH TSP	-13.55
Bobbin	2	27	ODI	17	0.60	3	126	13TH TSP	+4.59
C/L Special I			VOL		0.41	1	104	13TH TSP	+4.64
Bobbin	2	52	ADI		1.29	6	66	12TH TSP	+8.44
C/L Special I			VOL		0.46	1	81	12TH TSP	+7.42
Bobbin	2	80	ADI		1.76	6	80	TTS-HL	+8.04
U-Bend	2	109	NQI		2.47	1	126	8TH TSP	+0.60
Bobbin	3	1	NQI		22.90	P 1	35	TE-HL	+8.83
Bobbin	3	5	NQI		78.03	P 1	42	TE-HL	+9.83
Bobbin	3	32	ODI	25	0.63	4	120	TTS-CL	+6.83
Bobbin	3	39	NQI		4.39	P 1	106	TE-HL	+4.95
Bobbin	3	47	ODI	10	0.84	4	135	14TH TSP	+3.62
Bobbin			NQI		6.30	P 1	34	TE-HL	+7.51
C/L Special I			VOL		0.41	1	140	14TH TSP	+1.75
C/L Special I			VOL		0.60	1	139	14TH TSP	+2.89
Bobbin	3	73	NQI		0.51	P 1	61	4TH TSP	+0.04
Bobbin	3	94	NQI		0.78	P 1	97	1ST TSP	+0.03
Bobbin	3	100	NQI		0.72	P 1	144	1ST TSP	-0.02
Bobbin	3	102	NQI		0.75	P 1	124	1ST TSP	+0.01
Bobbin	4	1	NQI		19.49	P 1	25	TE-HL	+9.21
Bobbin	4	4	ODI	8	0.99	4	138	3RD TSP	+6.31
H/L Special I			VOL		0.47	1	110	3RD TSP	+6.11
Bobbin	4	6	ADI		0.53	4	122	9TH TSP	+20.17
Bobbin	4	40	ODI	43	0.40	3	108	TTS-CL	+3.61
Bobbin	4	77	NQI		0.47	P 1	105	2ND TSP	+0.01
Bobbin	4	98	NQI		1.19	P 1	129	TE-HL	+8.96
Bobbin	5	9	NQI		1.16	P 1	34	12TH TSP	-0.06
Bobbin	5	27	NQI		8.60	P 1	150	TE-HL	+15.86
Bobbin			NQI		9.25	P 1	166	TE-HL	+7.87
Bobbin	5	95	NQI		0.29	3	113	2ND TSP	+7.23
Bobbin			ADI		1.60	6	63	12TH TSP	+3.31
H/L Special I			VOL		0.68	1	151	2ND TSP	+7.43
C/L Special I			VOL		0.97	1	98	12TH TSP	+3.01
Bobbin	5	101	NQI		4.22	P 1	168	TE-HL	+13.11
Bobbin			NQI		13.68	P 1	25	TE-HL	+8.39
Bobbin	5	108	NQI		3.30	P 1	42	TE-HL	+12.34
C/L Special I	6	2	VOL		2.30	1	149	9TH TSP	+12.50
Bobbin	6	4	NQI		0.17	P 1	150	2ND TSP	+0.08
Bobbin	6	11	NQI		0.41	P 1	114	1ST TSP	+0.00
Bobbin	6	27	NQI		0.39	3	82	11TH TSP	+33.55
Bobbin	6	32	ADI		2.80	6	73	3RD TSP	+40.92
H/L Special I			VOL		0.56	1	95	4TH TSP	-3.45
H/L Special I			VOL		0.83	1	104	4TH TSP	-0.34
Bobbin	6	34	NQI		9.50	P 1	64	TE-HL	+11.01
H/L Tubesheet	6	50	SAI		0.49	1	26	TTS-HL	-0.01
Bobbin	6	74	NQI		0.53	P 1	77	1ST TSP	+0.11
H/L Special I			SAI		0.40	1	165	1ST TSP	-0.06
Bobbin	6	101	NQI		0.34	P 1	98	1ST TSP	+0.00
Bobbin	7	2	NQI		17.71	P 1	27	TE-HL	+9.05
Bobbin			NQI		27.57	P 1	40	TE-HL	+2.21
Bobbin	7	23	NQI		12.30	P 1	17	TE-HL	+17.07
Bobbin	7	29	NQI		24.33	P 1	30	TE-HL	+10.70
H/L Tubesheet	7	33	MAI		0.20	1	74	TTS-HL	-2.94
Bobbin	7	42	NQI		11.49	P 1	19	TE-HL	+17.03
Bobbin	7	44	NQI		0.50	P 1	55	2ND TSP	-0.02
Bobbin	7	55	NQI		0.49	P 1	48	2ND TSP	+0.02
H/L Special I			SAI		2.49	1	89	2ND TSP	+0.00
Bobbin	7	70	ODI	47	0.41	P 1	103	2ND TSP	+0.13
Bobbin	7	109	ODI	73	0.73	P 1	80	1ST TSP	+0.11

ATTACHMENT #6

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
H/L Special I			SAI		0.56	1	22	1ST TSP	+0.10	1ST TSP
Bobbin	8	12	NQI		0.26	P 1	87	2ND TSP	+0.00	F/L
H/L Special I			SAI		0.50	P 1	15	2ND TSP	-0.09	2ND TSP
Bobbin	8	22	ADI		3.45	6	80	17TH TSP	+15.94	F/L
C/L Special I			VOL		0.82	1	103	16TH TSP	-6.04	16TH TSP
H/L Tubesheet	8	41	SAI		0.45	1	15	TTS-HL	-3.13	TTS-HL
Bobbin	8	46	NQI		19.41	P 1	32	TE-HL	+15.95	F/L
Bobbin	8	47	NQI		0.56	P 1	97	2ND TSP	-0.08	F/L
H/L Special I			MAI		0.49	1	61	2ND TSP	-0.13	2ND TSP
H/L Special I			MAI		0.64	1	49	2ND TSP	-0.08	2ND TSP
Bobbin	8	48	ODI	27	0.33	3	121	11TH TSP	+0.99	F/L
Bobbin	8	56	NQI		16.80	P 1	16	TE-HL	+14.36	F/L
Bobbin			NQI		18.15	P 1	22	TE-HL	+13.77	F/L
H/L Tubesheet	8	63	SAI		0.41	2	45	TTS-HL	-0.04	TTS-HL
Bobbin	8	74	NQI		0.88	3	111	2ND TSP	+0.08	F/L
Bobbin	9	2	NQI		12.55	P 1	146	TE-HL	+10.88	F/L
Bobbin	9	3	NQI		18.94	P 1	64	TE-HL	+7.00	F/L
Bobbin	9	4	ODI	4	0.72	3	150	TTS-CL	+11.78	F/L
C/L Special I			VOL		0.61	1	69	TTS-CL	+10.60	TTS-CL
Bobbin	9	6	ODI	27	0.44	P 1	119	1ST TSP	+0.05	F/L
Bobbin	9	28	ODI	17	1.16	3	134	2ND TSP	+1.22	F/L
H/L Special I			VOL		1.32	1	141	2ND TSP	+1.06	2ND TSP
Bobbin	9	48	ADI		0.42	6	70	TTS-HL	+10.12	F/L
Bobbin	9	49	ODI	27	0.47	4	129	4TH TSP	+11.61	F/L
H/L Special I			VOL		0.34	1	113	4TH TSP	+11.39	4TH TSP
Bobbin	9	96	ODI	19	0.86	3	126	9TH TSP	+5.86	F/L
C/L Special I			VOL		0.90	1	117	9TH TSP	+6.06	9TH TSP
Bobbin	9	100	NQI		9.16	P 1	18	TE-HL	+12.04	F/L
Bobbin	10	21	NQI		11.62	P 1	23	TE-HL	+4.28	F/L
Bobbin	10	31	NQI		0.98	P 1	39	12TH TSP	-0.02	F/L
Bobbin	10	43	ODI	19	0.81	3	133	10TH TSP	+28.49	F/L
C/L Special I			VOL		1.47	1	80	10TH TSP	+27.47	10TH TSP
Bobbin	10	50	NQI		14.47	P 1	18	TE-HL	+15.01	F/L
Bobbin			ODI	10	0.37	3	144	12TH TSP	+4.45	F/L
H/L Tubesheet	10	62	SAI		0.92	1	25	TTS-HL	-6.56	TTS-HL
Bobbin	11	6	NQI		0.31	P 1	45	2ND TSP	-0.03	F/L
Bobbin	11	8	ODI	10	0.50	3	145	17TH TSP	+15.82	F/L
C/L Special I			VOL		0.43	1	104	17TH TSP	+15.08	16TH TSP
Bobbin	11	15	ODI	18	0.45	3	134	10TH TSP	+30.38	F/L
C/L Special I			VOL		0.83	1	153	9TH TSP	-12.57	9TH TSP
Bobbin	11	25	ODI	17	0.63	4	135	9TH TSP	+33.70	F/L
C/L Special I			VOL		0.37	1	74	8TH TSP	-10.36	8TH TSP
H/L Tubesheet	11	26	MAI		0.43	1	44	TTS-HL	-4.28	TTS-HL
Bobbin	11	30	NQI		12.99	P 1	55	TE-HL	+6.04	F/L
Bobbin	11	39	NQI		0.56	P 1	124	3RD TSP	+0.03	F/L
H/L Special I			SAI		0.37	P 1	55	3RD TSP	+0.02	3RD TSP
Bobbin	11	52	NQI		13.85	P 1	60	TE-HL	+11.01	F/L
H/L Tubesheet	11	64	SAI		1.46	1	17	TTS-HL	-3.51	TTS-HL
Bobbin	11	85	WAR	12	0.44	P 4	0	4AVB	+0.00	F/L
H/L Tubesheet			SAI		0.58	1	51	TTS-HL	-3.57	TTS-HL
Bobbin	11	86	NQI		42.37	P 1	60	TE-HL	+17.84	F/L
H/L Tubesheet			MAI		9.91	1	30	TTS-HL	-3.43	TTS-HL
H/L Tubesheet	11	102	MAI		3.56	1	31	TTS-HL	-4.04	TTS-HL
Bobbin	11	106	ODI	8	0.50	3	134	9TH TSP	+4.56	F/L
C/L Special I			VOL		0.27	1	96	9TH TSP	+4.69	9TH TSP
Bobbin	11	112	NQI		24.64	P 1	20	TE-HL	+3.22	F/L
Bobbin	12	10	ODI	15	0.95	3	138	6TH TSP	+2.18	F/L
H/L Special I			VOL		1.94	1	133	6TH TSP	+2.26	6TH TSP
Bobbin	12	12	NQI		0.42	P 1	116	3RD TSP	+0.03	F/L
Bobbin			NQI		0.65	P 1	47	1ST TSP	-0.10	F/L
H/L Special I			SAI		0.17	1	34	1ST TSP	-0.17	1ST TSP
Bobbin	12	17	ADI		1.11	6	82	3RD TSP	+6.22	F/L
H/L Special I			VOL		0.57	1	103	3RD TSP	+5.88	3RD TSP
Bobbin	12	18	NQI		0.65	P 1	56	11TH TSP	+0.00	F/L
Bobbin			NQI		12.95	P 1	65	TE-HL	+11.84	F/L

ATTACHMENT #6		INDICATIONS OF IMPERFECTION										EXTENT1
TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION				
Bobbin	12	29	NQI		32.43	P 1	35	TE-HL		+2.49		F/L
H/L Special I			VOL		0.31	1	70	1ST TSP		+7.95		1ST TSP
Bobbin	12	34	NQI		0.50	P 1	150	3RD TSP		-0.03		F/L
H/L Special I			SAI		0.32	1	68	3RD TSP		-0.03		3RD TSP
Bobbin	12	37	NQI		0.46	P 1	127	3RD TSP		-0.24		F/L
H/L Special I			SAI		0.60	1	122	3RD TSP		-0.08		3RD TSP
Bobbin	12	72	NQI		19.45	P 1	19	TE-HL		+5.66		F/L
H/L Tubesheet	12	84	SAI		1.22	1	27	TTS-HL		-3.35		TTS-HL
Bobbin	13	4	NQI		0.20	P 1	67	2ND TSP		-0.03		F/L
H/L Special I			SAI		0.12	1	115	2ND TSP		+0.05		2ND TSP
Bobbin	13	33	NQI		0.28	P 1	111	3RD TSP		+0.03		F/L
Bobbin	13	37	ODI	4	0.70	3	150	18TH TSP		+4.04		F/L
C/L Special I			VOL		0.77	1	119	18TH TSP		+3.87		17TH TSP
Bobbin	13	40	NQI		0.50	P 1	55	3RD TSP		+0.05		F/L
H/L Special I			SAI		0.79	1	160	3RD TSP		-0.01		3RD TSP
Bobbin	13	47	NQI		18.15	P 1	53	TE-HL		+4.30		F/L
Bobbin	13	53	NQI		1.17	P 1	51	3RD TSP		+0.03		F/L
H/L Special I			SAI		0.58	1	80	3RD TSP		+0.07		3RD TSP
Bobbin	13	67	NQI		0.37	P 1	123	11TH TSP		-0.05		F/L
Bobbin	13	88	NQI		0.65	3	137	9TH TSP		+5.34		F/L
Bobbin			NQI		0.50	3	140	12TH TSP		+1.37		F/L
Bobbin			ODI	3	0.70	P 1	114	1ST TSP		-0.02		F/L
C/L Special I			SAI		0.33	1	121	9TH TSP		+5.12		9TH TSP
C/L Special I			SAI		0.51	1	153	9TH TSP		+3.90		9TH TSP
H/L Special I			SAI		0.19	1	129	1ST TSP		+0.00		1ST TSP
C/L Special I			SAI		0.20	1	120	12TH TSP		+1.37		12TH TSP
Bobbin	13	92	ODI	5	0.87	3	129	4TH TSP		+36.00		F/L
Bobbin			NQI		0.32	P 1	69	18TH TSP		+0.30		F/L
H/L Special I			VOL		1.06	1	114	5TH TSP		-8.77		5TH TSP
Bobbin	13	93	NQI		0.35	P 1	90	6TH TSP		-0.19		F/L
H/L Tubesheet	13	112	VOL		0.82	1	73	TTS-HL		-0.36		TTS-HL
Bobbin	14	41	NQI		8.85	P 1	64	TE-HL		+13.99		F/L
Bobbin	14	42	NQI		12.41	P 1	105	TE-HL		+17.00		F/L
H/L Tubesheet			SAI		7.62	1	23	TTS-HL		-4.36		TTS-HL
Bobbin	14	51	ODI	12	1.02	4	144	3RD TSP		+29.50		F/L
H/L Special I			VOL		0.71	1	146	3RD TSP		+28.61		4TH TSP
H/L Special I			VOL		0.79	1	152	3RD TSP		+28.95		4TH TSP
H/L Tubesheet	14	78	MAI		2.84	1	28	TTS-HL		-3.15		TTS-HL
Bobbin	14	97	NQI		0.36	P 1	74	3RD TSP		-0.31		F/L
H/L Special I			SAI		0.30	1	80	3RD TSP		+0.11		3RD TSP
Bobbin	14	106	NQI		0.31	P 1	53	2ND TSP		-0.24		F/L
Bobbin	14	109	NQI		3.17	P 1	33	TE-CL		+19.63		F/L
Bobbin	15	15	NQI		5.86	P1	90	TE-HL		+13.92		F/L
Bobbin			NQI		4.34	P 1	73	TE-HL		+15.74		F/L
Bobbin	15	20	NQI		7.54	P 1	162	TE-HL		+11.93		F/L
Bobbin			NQI		9.29	P 1	164	TE-HL		+5.95		F/L
Bobbin			NQI		10.86	P 1	94	TE-HL		+4.94		F/L
Bobbin	15	32	NQI		9.56	P 1	138	TE-HL		+16.85		F/L
Bobbin	15	96	ADI		1.57	6	143	11TH TSP		+40.70		F/L
C/L Special I			VOL		0.68	1	86	10TH TSP		-2.93		10TH TSP
Bobbin	16	38	NQI		61.76	P 1	41	TE-HL		+17.07		F/L
H/L Tubesheet			MAI		4.09	1	76	TTS-HL		-4.02		TTS-HL
Bobbin	16	43	NQI		0.46	P 1	59	3RD TSP		-0.05		F/L
H/L Special I			SAI		0.41	1	60	3RD TSP		-0.10		3RD TSP
Bobbin	16	44	NQI		4.43	P 1	22	TE-HL		+6.49		F/L
Bobbin	16	50	NQI		0.68	P 1	35	1ST TSP		+0.00		F/L
H/L Special I			SAI		0.40	1	32	1ST TSP		+0.00		1ST TSP
Bobbin	16	51	NQI		0.23	P 1	95	18TH TSP		+0.43		F/L
Bobbin	16	91	ODI	26	1.32	3	122	10TH TSP		+30.71		F/L
C/L Special I			VOL		2.07	1	143	9TH TSP		-12.09		9TH TSP
Bobbin	16	107	NQI		0.29	3	63	4TH TSP		+22.57		F/L
Bobbin			ADI		1.23	6	17	10TH TSP		+10.18		F/L
C/L Special I			VOL		0.67	1	93	10TH TSP		+10.04		10TH TSP
Bobbin	16	108	ODI	19	1.64	4	132	10TH TSP		+35.04		F/L
C/L Special I			VOL		0.82	1	126	9TH TSP		-9.10		9TH TSP

ATTACHMENT #6	INDICATIONS OF	IMPERFECTION	TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	17	18	ADI					1.47	6	98	9TH TSP	+5.35	F/L
C/L Special I			VOL					0.29	1	73	9TH TSP	+5.35	9TH TSP
Bobbin	17	26	NQI					9.40	P 1	145	TE-HL	+13.95	F/L
Bobbin	17	38	NQI					6.71	P 1	8	TE-HL	+13.22	F/L
Bobbin			NQI					11.02	P 1	172	TE-HL	+13.93	F/L
Bobbin	17	59	ODI	5				0.73	3	137	3RD TSP	+40.52	F/L
H/L Special I			VOL					1.00	1	143	4TH TSP	-3.49	4TH TSP
Bobbin	17	65	ODI	27				0.56	3	122	4TH TSP	+42.79	F/L
H/L Special I			SAI					0.17	1	96	5TH TSP	-1.62	5TH TSP
Bobbin	17	68	NQI					6.43	P 1	94	TE-HL	+3.87	F/L
Bobbin	17	70	NQI					27.27	P 1	166	TE-HL	+7.55	F/L
Bobbin	17	73	NQI					0.42	P 1	72	3RD TSP	-0.23	F/L
Bobbin	17	80	NQI					32.16	P 1	128	TE-HL	+1.83	F/L
Bobbin	17	88	NQI					6.91	P 1	28	TE-CL	+19.10	F/L
Bobbin	17	106	ODI	7				1.01	4	140	11TH TSP	+8.25	F/L
C/L Special I			VOL					0.49	1	131	11TH TSP	+7.47	11TH TSP
Bobbin	17	108	ODI	8				1.12	4	139	2ND TSP	+2.59	F/L
Bobbin			ODI	21				1.01	4	130	2ND TSP	+3.89	F/L
Bobbin	17	109	ADI					2.49	6	79	3RD TSP	+20.62	F/L
Bobbin	18	5	NQI					0.39	3	121	11TH TSP	+36.73	F/L
C/L Special I			VOL					1.32	1	327	10TH TSP	-7.28	10TH TSP
Bobbin	18	37	NQI					9.29	P 1	164	TE-HL	+10.07	F/L
Bobbin			ODI	12				0.29	P 1	135	17TH TSP	+0.11	F/L
Bobbin	18	40	NQI					14.36	P 1	58	TE-HL	+9.43	F/L
Bobbin	18	90	NQI					8.55	P 1	16	TTS-HL	-1.31	F/L
Bobbin	19	31	NQI					6.85	P 1	148	TE-HL	+14.95	F/L
Bobbin	19	32	NQI					12.96	P 1	61	TE-HL	+16.82	F/L
H/L Tubesheet			SAI					1.20	1	11	TTS-HL	-0.01	TTS-HL
H/L Tubesheet			SAI					9.93	1	29	TTS-HL	-4.28	TTS-HL
Bobbin	19	61	NQI					0.37	P 1	50	11TH TSP	-0.08	F/L
Bobbin	19	62	NQI					0.28	P 1	71	4TH TSP	+0.03	F/L
Bobbin			NQI					0.56	P 1	97	1ST TSP	-0.08	F/L
Bobbin			NQI					0.89	P 1	52	11TH TSP	+0.05	F/L
H/L Special I			SAI					0.48	1	80	1ST TSP	-0.14	1ST TSP
Bobbin	19	65	NQI					0.75	P 1	163	1ST TSP	+0.16	F/L
Bobbin	19	68	NQI					0.35	P 1	58	4TH TSP	+0.19	F/L
Bobbin			NQI					0.58	P 1	89	3RD TSP	+0.22	F/L
Bobbin			NQI					0.77	P 1	26	11TH TSP	+0.16	F/L
Bobbin	19	70	NQI					0.43	P 1	76	5TH TSP	-0.11	F/L
Bobbin			NQI					0.47	P 1	32	1ST TSP	+0.16	F/L
Bobbin	19	110	NQI					4.19	P 1	151	TTS-CL	-0.71	F/L
Bobbin	20	8	NQI					0.30	P 1	97	11TH TSP	-0.03	F/L
H/L Tubesheet	20	25	SAI					2.13	1	33	TTS-HL	-4.22	TTS-HL
Bobbin	20	32	NQI					11.08	P 1	70	TE-HL	+6.07	F/L
Bobbin	20	40	NQI					4.83	P 1	141	TE-HL	+3.02	F/L
Bobbin	20	61	NQI					36.43	P 1	173	TE-HL	+10.82	F/L
Bobbin	20	100	ODI	32				0.64	3	114	6TH TSP	+4.75	F/L
H/L Special I			VOL					0.32	1	21	6TH TSP	+4.90	6TH TSP
Bobbin	21	6	ODI	5				1.49	4	143	9TH TSP	+27.58	F/L
C/L Special I			VOL					0.52	1	124	9TH TSP	+26.96	9TH TSP
Bobbin	21	11	NQI					2.65	P 1	127	TE-HL	+16.81	F/L
Bobbin			NQI					6.96	P 1	161	TE-HL	+14.95	F/L
H/L Tubesheet			MAI					0.33	2	45	TTS-HL	-6.58	TTS-HL
H/L Tubesheet			SAI					4.12	1	26	TTS-HL	-4.30	TTS-HL
Bobbin	21	12	NQI					5.86	P 1	102	TE-HL	+13.98	F/L
Bobbin	21	16	ODI	9				0.80	3	144	5TH TSP	+18.46	F/L
Bobbin			NQI					0.49	P 1	81	1ST TSP	+0.08	F/L
H/L Special I			SAI					0.53	1	27	1ST TSP	+0.08	1ST TSP
H/L Special I			VOL					1.22	1	107	5TH TSP	+18.39	5TH TSP
Bobbin	21	17	NQI					7.51	P 1	153	TE-HL	+10.23	F/L
Bobbin			NQI					10.67	P 1	154	TE-HL	+10.00	7TH TSP
Bobbin	21	22	NQI					0.62	3	120	TTS-CL	+1.28	F/L
C/L Tubesheet			VOL					1.18	1	100	TTS-CL	+1.32	TTS-CL
Bobbin	21	30	NQI					7.65	P 1	76	TE-HL	+14.04	F/L
Bobbin			NQI					15.68	P 1	35	TE-HL	+3.25	F/L

ATTACHMENT #6

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin			NQI		48.04	P 1	35	TE-HL	+2.25
Bobbin	21	31	NQI		15.22	P 1	58	TE-HL	+14.92
Bobbin	21	37	NQI		15.09	P 1	19	TE-HL	+1.23
Bobbin	21	42	NQI		9.15	P 1	75	TE-HL	+17.97
H/L Tubesheet			MAI		5.34	1	45	TTS-HL	-3.25
Bobbin	21	51	NQI		0.28	P 1	97	17TH TSP	+0.14
Bobbin	21	64	NQI		14.77	P 1	178	TE-HL	+7.93
Bobbin	21	65	NQI		0.30	P 1	117	1ST TSP	+0.03
Bobbin	21	86	ADI		1.44	6	75	3RD TSP	+26.52
Bobbin			ADI		1.88	6	71	3RD TSP	+28.25
H/L Special I			VOL		0.55	1	94	3RD TSP	+26.38
H/L Special I			VOL		0.56	1	94	3RD TSP	+28.10
Bobbin	21	99	NQI		0.31	3	98	6TH TSP	+29.51
Bobbin	22	6	WAR	7	0.21	P 4	0	4AVB	+0.00
Bobbin	22	10	NQI		6.21	P 1	87	TE-HL	+9.08
Bobbin	22	18	NQI		3.02	P 1	147	TE-HL	+16.92
Bobbin			NQI		7.80	P 1	85	TE-HL	+15.89
Bobbin			NQI		31.70	P 1	36	TE-HL	+5.27
Bobbin	22	20	NQI		19.84	P 1	11	TE-HL	+4.19
Bobbin	22	28	NQI		14.33	P 1	10	TE-HL	+4.22
Bobbin	22	35	NQI		9.35	P 1	171	TE-HL	+3.87
Bobbin	22	36	NQI		17.72	P 1	15	TE-HL	+3.37
Bobbin	22	43	ODI	5	2.09	4	143	20TH TSP	+1.43
C/L Special I			VOL		0.33	1	103	20TH TSP	+1.68
Bobbin	22	46	NQI		35.60	P 1	183	TTS-HL	-0.16
Bobbin	22	52	NQI		8.08	P 1	89	TE-HL	+16.77
Bobbin	22	54	NQI		0.54	3	117	16TH TSP	+7.74
C/L Special I			VOL		0.40	1	86	16TH TSP	+4.25
C/L Special I			VOL		0.61	1	85	16TH TSP	+7.52
Bobbin	22	55	NQI		0.51	P 1	159	2ND TSP	+0.03
Bobbin	22	57	NQI		0.64	P 1	71	4TH TSP	+0.00
H/L Special I			SAI		0.46	1	71	4TH TSP	+0.06
Bobbin	22	68	NQI		0.49	P 1	61	11TH TSP	-0.03
Bobbin			NQI		3.27	P 1	35	TE-HL	+10.89
Bobbin	22	85	WAR	7	0.24	P 4	0	4AVB	+0.00
Bobbin			WAR	11	0.37	P 4	0	3AVB	+0.00
Bobbin	22	92	ODI	15	0.67	3	128	4TH TSP	+37.56
H/L Special I			VOL		0.31	1	110	5TH TSP	-6.44
Bobbin	23	14	ODI	12	1.15	3	140	6TH TSP	+12.80
H/L Special I			VOL		1.50	1	111	6TH TSP	+12.16
H/L Special I			VOL		1.55	1	111	6TH TSP	+13.33
Bobbin	23	19	NQI		13.22	P 1	72	TE-HL	+15.93
Bobbin	23	20	NQI		0.84	P 1	39	2ND TSP	-0.34
Bobbin			NQI		3.97	P 1	142	TE-HL	+15.02
Bobbin			NQI		4.72	P 1	92	TE-HL	+10.18
Bobbin			NQI		10.18	P 1	23	TE-HL	+3.55
Bobbin	23	21	NQI		0.17	P 1	42	1ST TSP	+0.05
Bobbin	23	26	NQI		8.90	P 1	80	TE-HL	+14.26
Bobbin	23	34	NQI		42.58	P 1	33	TE-HL	+2.22
Bobbin	23	36	NQI		6.70	P 1	41	TE-HL	+1.26
H/L Special I			SAI		0.75	1	163	6TH TSP	-0.07
Bobbin	23	39	NQI		5.32	P 1	157	TE-HL	+14.11
Bobbin	23	41	NQI		22.84	P 1	30	TE-HL	+1.82
Bobbin			NQI		22.89	P 1	62	TE-HL	+15.08
Bobbin	23	42	NQI		7.51	P 1	169	TE-HL	+15.13
Bobbin	23	44	NQI		7.14	P 1	161	TE-HL	+5.03
Bobbin	23	45	NQI		4.35	P 1	145	TE-HL	+15.05
Bobbin			NQI		8.09	P 1	153	TE-HL	+11.04
Bobbin			NQI		10.12	P 1	146	TE-HL	+10.02
Bobbin			NQI		11.06	P 1	167	TE-HL	+16.88
Bobbin			NQI		22.73	P 1	13	TE-HL	+3.15
H/L Tubesheet			MAI		0.11	2	57	TTS-HL	-7.59
H/L Tubesheet			MAI		0.37	2	48	TTS-HL	-6.61
H/L Tubesheet			MAI		0.56	2	48	TTS-HL	-11.98
H/L Tubesheet			MAI		0.75	2	59	TTS-HL	-10.91

ATTACHMENT #6		INDICATIONS OF IMPERFECTION										EXTENT1
TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION				
H/L Tubesheet			MAI		1.08	1	34	TTS-HL		-4.45	TTS-HL	
Bobbin	23	46	NQI		8.45	P 1	172	TE-HL		+5.01	F/L	
Bobbin	23	48	NQI		6.90	P 1	138	TE-HL		+13.23	F/L	
Bobbin			NQI		19.83	P 1	12	TE-HL		+2.35	F/L	
Bobbin	23	55	NQI		0.39	P 1	128	11TH TSP		+0.09	F/L	
Bobbin	23	109	ODI	19	0.34	3	128	6TH TSP		+39.00	F/L	
Bobbin	24	16	NQI		9.07	P 1	156	TE-HL		+10.17	F/L	
Bobbin			WAR	6	0.87	P 2	0	11TH TSP		+0.00	F/L	
Bobbin	24	25	NQI		15.92	P 1	67	TE-HL		+17.96	F/L	
H/L Tubesheet			SAI		12.10	1	30	TTS-HL		-3.04	TTS-HL	
Bobbin	24	28	NQI		23.88	P 1	28	TE-HL		+9.41	F/L	
Bobbin	24	34	NQI		0.50	P 1	42	3RD TSP		+0.03	F/L	
Bobbin	24	38	WAR	9	0.35	P 4	0	4AVB		+0.00	F/L	
Bobbin	24	49	NQI		4.63	P 1	157	TE-HL		+14.99	F/L	
Bobbin	24	50	NQI		17.78	P 1	59	TE-HL		+15.99	F/L	
Bobbin	24	52	NQI		4.48	P 1	147	TE-HL		+16.03	F/L	
Bobbin	25	12	NQI		0.82	P 1	52	1ST TSP		+0.05	F/L	
H/L Special I			MAI		0.68	1	52	1ST TSP		+0.02	1ST TSP	
Bobbin	25	13	ODI	26	0.37	3	123	10TH TSP		+9.52	F/L	
C/L Special I			VOL		0.94	1	11	10TH TSP		+9.52	10TH TSP	
Bobbin	25	33	NQI		8.78	P 1	125	TE-HL		+8.87	F/L	
Bobbin	25	34	NQI		11.45	3	91	TE-HL		+5.93	F/L	
Bobbin			NQI		15.27	3	97	TE-HL		+9.95	F/L	
Bobbin			NQI		7.89	P 1	114	TE-HL		+3.27	F/L	
H/L Tubesheet	25	42	SAI		0.09	2	45	TTS-HL		-0.02	TTS-HL	
H/L Tubesheet			SAI		0.34	1	32	TTS-HL		-4.25	TTS-HL	
Bobbin	25	44	NQI		4.18	P 1	87	TE-HL		+3.57	F/L	
Bobbin	25	50	NQI		4.81	P 1	139	TE-HL		+8.13	F/L	
Bobbin			NQI		8.32	P 1	145	TE-HL		+9.13	F/L	
Bobbin			ODI	29	0.17	P 1	115	19TH TSP		+0.02	F/L	
Bobbin	25	52	WAR	5	0.70	P 2	0	12TH TSP		+0.00	F/L	
Bobbin			WAR	6	0.83	P 2	0	13TH TSP		+0.00	F/L	
Bobbin	25	89	NQI		4.96	P 1	29	TE-CL		+18.84	F/L	
Bobbin	25	91	NQI		27.02	P 1	39	TE-HL		+1.46	F/L	
Bobbin	25	92	NQI		18.19	P 1	97	TE-HL		+13.59	F/L	
Bobbin	25	107	NQI		0.36	P 1	61	1ST TSP		-0.35	F/L	
Bobbin	26	8	WAR	19	0.81	P 4	0	2AVB		+0.00	F/L	
Bobbin	26	36	NQI		7.31	3	125	TE-HL		+4.07	F/L	
Bobbin	26	59	NQI		0.39	P 1	102	11TH TSP		-0.03	F/L	
Bobbin	26	73	NQI		3.36	P 1	124	TE-CL		+19.27	F/L	
Bobbin	26	80	NQI		7.03	P 1	152	TE-HL		+17.62	F/L	
H/L Tubesheet			SAI		2.31	1	43	TTS-HL		-3.38	TTS-HL	
Bobbin	26	94	NQI		4.71	P 1	147	TE-CL		+1.18	F/L	
Bobbin	26	97	ODI	26	0.71	3	121	3RD TSP		+16.77	F/L	
H/L Special I			VOL		0.50	1	78	3RD TSP		+19.65	3RD TSP	
H/L Special I			VOL		0.65	1	116	3RD TSP		+17.07	3RD TSP	
H/L Tubesheet	27	12	VOL		0.60	1	20	TTS-HL		+0.77	TTS-HL	
Bobbin	27	13	NQI		0.25	P 1	76	9TH TSP		+0.13	F/L	
Bobbin			ODI	88	0.38	P 1	49	2ND TSP		+0.00	F/L	
Bobbin			ODI	29	0.58	P 1	118	10TH TSP		-0.03	F/L	
C/L Special I			SAI		0.51	1	31	10TH TSP		-0.39	10TH TSP	
Bobbin	27	15	NQI		0.21	P 1	62	11TH TSP		-0.03	F/L	
Bobbin			NQI		0.53	P 1	43	12TH TSP		+0.00	F/L	
Bobbin	27	16	NQI		0.55	P 1	33	2ND TSP		-0.08	F/L	
Bobbin			NQI		65.93	P 1	48	TE-HL		+11.09	F/L	
Bobbin	27	19	NQI		0.42	P 1	39	11TH TSP		+0.13	F/L	
Bobbin			ODI	42	1.00	P 1	104	1ST TSP		+0.32	F/L	
H/L Special I			MAI		0.15	2	57	1ST TSP		-0.11	1ST TSP	
Bobbin	27	24	ODI	8	1.00	3	145	1ST TSP		+15.94	F/L	
H/L Special I			VOL		1.36	1	134	1ST TSP		+15.68	2ND TSP	
Bobbin	27	27	ODI	8	0.67	3	146	4TH TSP		+38.68	F/L	
H/L Special I			VOL		1.43	1	118	5TH TSP		-5.15	5TH TSP	
Bobbin	27	42	NQI		5.10	P 1	132	TE-HL		+13.96	F/L	
Bobbin			NQI		7.25	P 1	138	TE-HL		+8.88	F/L	
Bobbin			WAR	18	1.33	P 4	0	2AVB		+0.00	F/L	

ATTACHMENT #6

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	27	66	NQI		7.14	P 1	77	TE-HL	+12.88
Bobbin			NQI		18.44	P 1	74	TE-HL	+16.77
Bobbin			WAR	10	0.37	P 4	0	3AVB	+0.00
H/L Tubesheet			MAI		3.54	2	42	TTS-HL	-4.67
Bobbin	27	67	ODI	14	0.96	4	126	13TH TSP	+2.84
C/L Special I			VOL		0.61	1	26	13TH TSP	+2.84
H/L Tubesheet	27	70	MAI		0.78	1	25	TTS-HL	-4.50
Bobbin	27	89	ADI		0.56	6	122	2ND TSP	+25.30
H/L Special I			VOL		0.71	1	107	2ND TSP	+5.29
Bobbin	28	47	NQI		2.42	3	24	11TH TSP	+0.10
Bobbin	28	65	NQI		1.56	3	149	8TH TSP	+8.90
Bobbin	28	69	ODI	13	0.74	3	130	TTS-HL	+9.57
Bobbin	28	73	NQI		0.90	3	37	1ST TSP	+4.48
H/L Special I			VOL		0.65	1	131	1ST TSP	+1.77
H/L Special I			VOL		2.43	1	146	1ST TSP	+4.50
Bobbin	28	90	NQI		10.15	P 1	187	TE-HL	+14.39
Bobbin	28	100	NQI		14.27	P 1	73	TE-HL	+10.63
Bobbin	29	28	NQI		4.62	P 1	126	TE-HL	+16.83
Bobbin	29	40	WAR	11	0.39	P 4	0	3AVB	+0.00
Bobbin	29	41	NQI		0.44	P 1	31	11TH TSP	-0.03
Bobbin	29	52	NQI		0.20	P 1	95	18TH TSP	+0.13
Bobbin	29	72	ADI		2.52	6	76	9TH TSP	+13.36
C/L Special I			VOL		1.05	1	105	9TH TSP	+12.90
H/L Tubesheet	30	14	NQI		0.78	1	5	TTS-HL	+0.62
H/L Tubesheet			VOL		0.30	1	66	TTS-HL	+0.88
Bobbin	30	18	ODI	7	1.25	3	148	12TH TSP	+10.01
C/L Special I			VOL		1.13	1	90	12TH TSP	+9.72
Bobbin	30	19	NQI		0.69	P 1	54	1ST TSP	-0.32
H/L Special I			SAI		0.68	1	43	1ST TSP	-0.11
Bobbin	30	23	NQI		0.75	P 1	69	1ST TSP	+0.29
Bobbin			NQI		0.68	P 1	91	11TH TSP	+0.00
H/L Special I			SAI		0.59	1	34	1ST TSP	+0.00
Bobbin	30	35	WAR	10	0.31	P 4	0	1AVB	+0.00
Bobbin			WAR	15	0.52	P 4	0	2AVB	+0.00
Bobbin	30	37	WAR	10	0.34	P 4	0	3AVB	+0.00
Bobbin	30	38	WAR	10	0.34	P 4	0	4AVB	+0.00
H/L Tubesheet	30	59	VOL		1.30	1	108	TTS-HL	+3.25
Bobbin	30	60	WAR	6	0.21	P 4	0	1AVB	+0.00
H/L Tubesheet	30	77	MAI		2.00	1	19	TTS-HL	-4.27
Bobbin	30	78	ODI	24	0.48	3	122	12TH TSP	+14.98
C/L Special I			VOL		0.84	1	102	11TH TSP	-7.52
Bobbin	30	80	WAR	8	0.28	P 4	0	2AVB	+0.00
Bobbin	30	81	WAR	23	0.98	P 4	0	1AVB	+0.00
Bobbin	31	31	NQI		0.58	P 1	56	1ST TSP	+0.08
H/L Special I			SAI		0.43	1	64	1ST TSP	+0.02
Bobbin	31	36	ODI	10	0.43	3	145	3RD TSP	+32.33
H/L Special I			VOL		0.67	1	124	3RD TSP	+31.76
Bobbin	31	43	NQI		0.48	P 1	49	4TH TSP	-0.41
Bobbin			NQI		0.61	P 1	50	1ST TSP	+0.10
H/L Special I			MAI		0.14	1	121	4TH TSP	-0.04
H/L Special I			SAI		0.51	1	63	1ST TSP	+0.12
Bobbin	31	56	NQI		15.31	P 1	49	TE-HL	+15.00
Bobbin	31	59	NQI		12.48	P 1	53	TE-HL	+10.66
Bobbin	31	60	NQI		4.74	P 1	117	TE-HL	+15.83
H/L Tubesheet			MAI		4.14	1	196	TTS-HL	-5.42
Bobbin	31	66	NQI		6.86	P 1	138	TE-HL	+7.66
Bobbin	31	68	NQI		6.43	P 1	14	TE-HL	+12.21
Bobbin			NQI		7.13	P 1	158	TE-HL	+11.01
Bobbin	31	72	NQI		7.03	P 1	157	TE-HL	+15.96
Bobbin			NQI		23.58	P 1	36	TE-HL	+12.86
Bobbin	31	73	NQI		5.63	P 1	162	TE-HL	+9.86
Bobbin	31	78	NQI		0.71	P 1	75	12TH TSP	+0.11
Bobbin	31	102	ODI	28	0.54	3	119	3RD TSP	+7.38
Bobbin			ODI	37	0.42	3	112	3RD TSP	+2.92
Bobbin			ODI	37	0.79	3	112	2ND TSP	+28.86

ATTACHMENT #6

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
H/L Special I					0.54	1	89	3RD TSP	+9.17	3RD TSP
H/L Special I					0.59	1	84	3RD TSP	+2.92	3RD TSP
H/L Special I					0.65	1	82	3RD TSP	+7.38	3RD TSP
H/L Special I					1.75	1	109	3RD TSP	-13.72	3RD TSP
Bobbin	32	24	NQI		0.37	P 1	80	1ST TSP	+0.15	F/L
Bobbin	32	26	NQI		0.29	P 1	84	1ST TSP	-0.05	F/L
Bobbin	32	27	NQI		0.41	P 1	85	11TH TSP	+0.06	F/L
Bobbin	32	38	ODI	18	0.44	3	131	3RD TSP	+20.42	F/L
Bobbin	32	41	WAR	13	0.44	P 4	0	3AVB	+0.00	F/L
Bobbin	32	56	NQI		8.96	P 1	91	TE-HL	+18.37	F/L
H/L Tubesheet			SAI		8.88	1	28	TTS-HL	-3.80	TTS-HL
Bobbin	32	59	NQI		0.38	P 1	94	2ND TSP	-0.30	F/L
H/L Special I			SAI		0.54	1	49	2ND TSP	-0.06	2ND TSP
Bobbin	32	64	NQI		12.42	P 1	163	TE-HL	+16.80	F/L
H/L Tubesheet			MAI		2.81	1	207	TTS-HL	-4.35	TTS-HL
H/L Tubesheet	32	96	VOL		0.41	1	266	TTS-HL	-3.61	TTS-HL
Bobbin	32	101	NQI		3.69	P 1	113	TTS-CL	-0.69	F/L
Bobbin	32	103	NQI		9.39	P 1	18	TE-HL	+7.33	F/L
Bobbin	33	14	WAR	9	0.30	P 4	0	4AVB	+0.20	F/L
Bobbin	33	16	NQI		7.22	P 1	95	TE-HL	+9.16	F/L
H/L Special I			SAI		9.62	1	23	TE-HL	+9.14	TTS-HL
Bobbin	33	36	NQI		0.29	P 1	96	12TH TSP	+0.05	F/L
Bobbin	33	63	NQI		0.56	P 1	51	1ST TSP	+0.13	F/L
Bobbin			NQI		0.40	P 1	77	11TH TSP	-0.08	F/L
C/L Special I			SAI		0.15	P 1	98	11TH TSP	-0.03	11TH TSP
Bobbin	33	66	NQI		21.49	P 1	28	TE-HL	+5.44	F/L
Bobbin	33	77	NQI		0.49	3	63	16TH TSP	+7.50	F/L
C/L Special I			VOL		0.08	1	61	16TH TSP	+7.82	15TH TSP
Bobbin	33	86	NQI		2.03	3	142	2AVB	+6.07	F/L
U-Bend			VOL		1.04	1	84	2AVB	+6.07	1AVB
Bobbin	33	88	WAR	12	0.44	P 4	0	2AVB	+0.00	F/L
Bobbin	33	96	WAR	6	0.20	P 4	0	3AVB	+0.00	F/L
Bobbin	33	100	WAR	20	0.83	P 4	0	2AVB	+0.00	F/L
Bobbin	34	13	WAR	12	0.41	P 4	0	3AVB	+0.00	F/L
Bobbin	34	16	WAR	11	0.36	P 4	0	3AVB	+0.00	F/L
Bobbin	34	19	ODI	84	2.91	P 1	54	2ND TSP	-0.33	F/L
H/L Special I			SAI		3.64	1	23	2ND TSP	+0.00	2ND TSP
Bobbin	34	24	NQI		21.65	P 1	40	TE-HL	+1.30	F/L
Bobbin	34	30	WAR	18	0.67	P 4	0	2AVB	+0.00	F/L
H/L Tubesheet	34	48	SAI		1.16	1	19	TTS-HL	+0.17	TTS-HL
Bobbin	34	57	NQI		7.01	P 1	145	TE-HL	+13.97	F/L
H/L Special I			MAI		1.13	1	42	TE-HL	+13.93	TTS-HL
Bobbin	34	64	NQI		6.50	P 1	109	TE-HL	+10.90	F/L
Bobbin	34	77	NQI		1.02	P 1	24	2ND TSP	-0.03	F/L
H/L Special I			SAI		0.55	1	58	2ND TSP	-0.18	2ND TSP
Bobbin	34	91	WAR	7	0.46	P 4	0	2AVB	+0.00	F/L
Bobbin	35	14	ODI	22	0.48	3	127	1ST TSP	+21.84	F/L
H/L Tubesheet	35	15	SAI		0.23	1	19	TTS-HL	+0.13	TTS-HL
Bobbin	35	35	NQI		6.21	P 1	121	TE-HL	+3.14	F/L
Bobbin	35	39	NQI		8.86	P 1	99	TE-HL	+14.06	F/L
Bobbin			WAR	7	0.23	P 4	0	1AVB	+0.00	F/L
Bobbin	35	53	WAR	26	1.17	P 4	0	2AVB	+0.00	F/L
Bobbin	35	60	WAR	8	0.26	P 4	0	1AVB	+0.00	F/L
Bobbin	35	73	NQI		1.15	P 1	25	2ND TSP	-0.03	F/L
H/L Special I			SAI		0.67	1	54	2ND TSP	-0.08	2ND TSP
Bobbin	35	75	WAR	15	0.56	P 4	0	3AVB	+0.00	F/L
Bobbin	35	78	WAR	26	1.25	P 4	0	3AVB	+0.00	F/L
Bobbin	35	82	WAR	8	0.27	P 4	0	1AVB	+0.00	F/L
Bobbin	35	99	NQI		41.91	P 1	19	TE-HL	+6.30	F/L
Bobbin	36	19	NQI		0.29	P 1	51	2ND TSP	-0.35	F/L
Bobbin	36	21	ODI	7	0.81	3	145	20TH TSP	+5.92	F/L
C/L Special I			VOL		0.65	1	116	20TH TSP	+6.36	19TH TSP
Bobbin	36	22	NQI		0.79	P 1	29	2ND TSP	-0.51	F/L
Bobbin	36	38	WAR	10	0.29	P 4	0	3AVB	+0.00	F/L
Bobbin	36	39	NQI		1.52	P 1	109	TE-HL	+2.20	F/L

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #6

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION		EXTENT1
Bobbin			WAR	17	0.54	P 4	0	1AVB	+0.00	F/L
Bobbin	36	42	WAR	7	0.18	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	10	0.27	P 4	0	2AVB	+0.00	F/L
Bobbin			WAR	11	0.31	P 4	0	1AVB	+0.00	F/L
Bobbin	36	50	NQI		0.25	P 1	87	2ND TSP	-0.03	F/L
Bobbin	36	54	ODI	44	0.41	P 1	97	2ND TSP	-0.15	F/L
H/L Special I			SAI		0.63	1	47	2ND TSP	-0.15	2ND TSP
Bobbin	36	55	ODI	53	0.45	P 1	87	2ND TSP	+0.00	F/L
H/L Special I			SAI		0.89	1	28	2ND TSP	+0.05	2ND TSP
Bobbin	36	65	WAR	9	0.33	P 4	0	1AVB	+0.00	F/L
Bobbin			WAR	14	0.53	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	17	0.68	P 4	0	4AVB	+0.00	F/L
Bobbin	36	69	WAR	20	0.84	P 4	0	3AVB	+0.00	F/L
H/L Tubesheet			SAI		2.80	1	16	TTS-HL	-4.57	TTS-HL
Bobbin	36	72	WAR	14	0.52	P 4	0	2AVB	+0.00	F/L
Bobbin	36	100	NQI		28.62	P 1	18	TE-HL	+4.64	F/L
Bobbin	37	27	ODI	3	3.74	4	146	16TH TSP	-1.06	F/L
C/L Special I			VOL		0.92	1	129	16TH TSP	-0.71	16TH TSP
Bobbin	37	32	ODI	8	2.05	3	140	19TH TSP	+4.24	F/L
C/L Special I			VOL		1.10	1	144	19TH TSP	+4.33	19TH TSP
H/L Tubesheet	37	40	SAI		0.57	1	14	TTS-HL	-0.07	TTS-HL
Bobbin	37	43	NQI		0.18	P 1	86	4TH TSP	-0.03	F/L
Bobbin	37	45	ODI	4	0.62	3	145	12TH TSP	+4.18	F/L
Bobbin			NQI		1.30	P 1	52	TE-HL	+5.32	F/L
C/L Special I			VOL		0.31	1	197	12TH TSP	+3.97	12TH TSP
Bobbin	37	46	WAR	12	0.35	P 4	0	1AVB	+0.00	F/L
Bobbin	37	54	WAR	10	0.29	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	13	0.40	P 4	0	2AVB	+0.00	F/L
Bobbin	37	55	NQI		0.15	3	74	9TH TSP	+32.22	F/L
Bobbin			NQI		0.29	3	73	9TH TSP	+39.04	F/L
Bobbin			NQI		0.36	3	97	9TH TSP	+24.13	F/L
Bobbin			ODI	14	0.27	3	133	9TH TSP	+36.81	F/L
Bobbin			ODI	25	0.23	3	119	9TH TSP	+35.43	F/L
C/L Special I			VOL		0.14	1	328	9TH TSP	+22.63	8TH TSP
C/L Special I			VOL		0.18	1	194	9TH TSP	+31.71	8TH TSP
C/L Special I			VOL		0.25	1	304	9TH TSP	+37.78	8TH TSP
Bobbin	37	57	NQI		10.03	P 1	114	TE-HL	+13.80	F/L
Bobbin	37	68	NQI		0.45	P 1	58	1ST TSP	+0.15	F/L
Bobbin	37	85	NQI		5.46	P 1	31	TE-HL	+8.64	F/L
Bobbin	37	88	NQI		0.36	3	99	17TH TSP	+5.85	F/L
C/L Special I			VOL		0.33	1	110	17TH TSP	+5.83	16TH TSP
Bobbin	37	98	ODI	35	0.40	3	113	6TH TSP	+24.69	F/L
H/L Special I			VOL		0.50	1	129	6TH TSP	+25.46	6TH TSP
Bobbin	38	17	WAR	9	0.28	P 4	0	1AVB	+0.00	F/L
Bobbin	38	24	ODI	1	0.35	3	150	17TH TSP	+1.67	F/L
Bobbin	38	30	NQI		25.96	P 1	59	TE-HL	+5.85	F/L
Bobbin	38	45	WAR	8	0.22	P 4	0	3AVB	+0.00	F/L
Bobbin	38	48	WAR	8	0.20	P 4	0	1AVB	+0.00	F/L
Bobbin	38	54	WAR	11	0.30	P 4	0	2AVB	+0.00	F/L
Bobbin			WAR	12	0.33	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	21	0.70	P 4	0	1AVB	+0.00	F/L
U-Bend	38	58	VOL		2.02	1	75	3AVB	+0.00	2AVB
Bobbin			WAR	12	0.43	P 4	0	1AVB	+0.00	F/L
Bobbin			WAR	43	3.93	P 4	0	3AVB	+0.00	F/L
Bobbin	38	59	NQI		0.46	P 1	84	2ND TSP	-0.23	F/L
Bobbin			WAR	15	0.60	P 4	0	1AVB	+0.00	F/L
Bobbin			WAR	18	0.73	P 4	0	3AVB	+0.00	F/L
Bobbin			WAR	26	1.31	P 4	0	2AVB	+0.00	F/L
Bobbin	38	65	ODI	23	0.57	3	126	2ND TSP	+7.35	F/L
Bobbin			WAR	11	0.39	P 4	0	3AVB	+0.00	F/L
H/L Special I			VOL		0.50	1	84	2ND TSP	+7.69	2ND TSP
Bobbin	38	69	WAR	8	0.28	P 4	0	1AVB	+0.00	F/L
Bobbin			WAR	15	0.56	P 4	0	3AVB	+0.00	F/L
Bobbin	38	75	NQI		6.88	P 1	139	TE-HL	+5.69	F/L
Bobbin	39	18	WAR	12	0.37	P 4	0	3AVB	+0.00	F/L

ATTACHMENT #6	INDICATIONS OF IMPERFECTION										EXTENT1
TEST TYPE	ROW	COL	IND	*TW	VOLTS	CHN	DEG	LOCATION			
Bobbin	39	20	ODI	13	0.56	3	138	3RD TSP	+22.77		F/L
Bobbin	39	36	WAR	12	0.33	P 4	0	1AVB	+0.00		F/L
Bobbin	39	43	WAR	10	0.28	P 4	0	3AVB	+0.00		F/L
H/L Tubesheet	39	67	MAI		2.76	1	16	TTS-HL	-4.73		TTS-HL
Bobbin	39	80	WAR	6	0.21	P 4	0	4AVB	+0.00		F/L
Bobbin			WAR	30	1.62	P 4	0	2AVB	+0.00		F/L
Bobbin			WAR	31	1.75	P 4	0	3AVB	+0.00		F/L
Bobbin	39	96	NQI		0.49	3	135	10TH TSP	+17.55		F/L
C/L Special I			VOL		1.29	1	154	10TH TSP	+16.35		10TH TSP
Bobbin	40	19	WAR	8	0.26	P 4	0	3AVB	+0.00		F/L
Bobbin			WAR	12	0.37	P 4	0	1AVB	+0.00		F/L
H/L Tubesheet			VOL		0.26	1	27	TTS-HL	+0.53		TTS-HL
Bobbin	40	21	WAR	10	0.26	P 4	0	1AVB	+0.00		F/L
Bobbin	40	38	WAR	23	0.85	P 4	0	3AVB	+0.00		F/L
H/L Tubesheet	40	40	SAI		0.49	1	23	TTS-HL	-0.03		TTS-HL
Bobbin	40	44	WAR	10	0.28	P 4	0	1AVB	+0.00		F/L
Bobbin	40	47	WAR	13	0.37	P 4	0	1AVB	+0.00		F/L
Bobbin	40	54	NQI		0.31	P 1	58	3RD TSP	-0.10		F/L
Bobbin			WAR	9	0.24	P 4	0	1AVB	+0.00		F/L
Bobbin	40	62	WAR	9	0.33	P 4	0	1AVB	+0.00		F/L
Bobbin	40	70	WAR	25	1.16	P 4	0	3AVB	+0.00		F/L
Bobbin	40	88	NQI		7.32	P 1	141	TE-HL	+16.91		F/L
H/L Tubesheet			MAI		4.67	1	201	TTS-HL	-4.29		TTS-HL
Bobbin	40	95	NQI		0.64	3	147	9TH TSP	+15.11		F/L
H/L Tubesheet			SAI		2.12	1	23	TTS-HL	-5.33		TTS-HL
Bobbin	41	24	ODI	30	0.57	3	115	TTS-HL	+0.48		F/L
Bobbin	41	30	NQI		11.57	P 1	15	TE-HL	+14.09		F/L
Bobbin	41	44	WAR	18	0.57	P 4	0	4AVB	+0.00		F/L
Bobbin			WAR	20	0.66	P 4	0	3AVB	+0.00		F/L
Bobbin			WAR	27	1.09	P 4	0	2AVB	+0.00		F/L
Bobbin	41	45	WAR	14	0.42	P 4	0	1AVB	+0.00		F/L
H/L Tubesheet	41	56	SAI		0.68	1	37	TTS-HL	-0.15		TTS-HL
Bobbin	41	57	WAR	17	0.52	P 4	0	3AVB	+0.00		F/L
Bobbin			WAR	21	0.69	P 4	0	1AVB	+0.00		F/L
Bobbin	41	58	WAR	22	1.00	P 4	0	1AVB	+0.00		F/L
U-Bend	41	64	VOL		1.18	1	64	3AVB	+0.00		3AVB
Bobbin			WAR	26	1.25	P 4	0	1AVB	+0.00		F/L
Bobbin			WAR	28	1.43	P 4	0	2AVB	+0.00		F/L
Bobbin			WAR	35	2.18	P 4	0	3AVB	+0.00		F/L
Bobbin	41	65	WAR	12	0.46	P 4	0	1AVB	+0.00		F/L
Bobbin			WAR	23	1.07	P 4	0	3AVB	+0.00		F/L
Bobbin			WAR	34	2.10	P 4	0	2AVB	+0.00		F/L
Bobbin	41	66	WAR	17	0.67	P 4	0	1AVB	+0.00		F/L
Bobbin	41	68	WAR	8	0.28	P 4	0	3AVB	+0.00		F/L
Bobbin			WAR	13	0.47	P 4	0	1AVB	+0.00		F/L
Bobbin	41	71	WAR	10	0.34	P 4	0	1AVB	+0.00		F/L
Bobbin	41	72	WAR	10	0.38	P 4	0	1AVB	+0.00		F/L
Bobbin	42	21	WAR	10	0.27	P 4	0	1AVB	+0.00		F/L
Bobbin	42	45	ODI	7	1.21	3	144	13TH TSP	+6.05		F/L
Bobbin			WAR	12	0.33	P 4	0	1AVB	+0.00		F/L
C/L Special I			VOL		0.88	1	108	13TH TSP	+6.01		13TH TSP
Bobbin	42	54	ODI	18	0.60	3	130	2ND TSP	+31.90		F/L
H/L Special I			VOL		2.22	1	165	2ND TSP	+31.96		3RD TSP
H/L Tubesheet	42	61	SAI		0.49	1	16	TTS-HL	+0.08		TTS-HL
Bobbin	42	64	WAR	22	0.98	P 4	0	1AVB	+0.00		F/L
Bobbin	42	77	NQI		6.00	P 1	79	TE-HL	+14.08		F/L
Bobbin	42	89	NQI		0.44	P 1	144	16TH TSP	-0.11		F/L
Bobbin	43	22	WAR	18	0.62	P 4	0	2AVB	+0.00		F/L
Bobbin			WAR	23	0.90	P 4	0	1AVB	+0.00		F/L
Bobbin	43	23	WAR	10	0.32	P 4	0	2AVB	+0.00		F/L
Bobbin	43	39	ODI	11	0.35	3	138	17TH TSP	+12.92		F/L
H/L Tubesheet	43	54	SAI		0.85	1	23	TTS-HL	+0.12		TTS-HL
Bobbin	43	56	NQI		0.45	P 1	131	2ND TSP	+0.03		F/L
Bobbin	43	57	NQI		0.33	P 1	76	3RD TSP	+0.03		F/L
Bobbin	43	88	NQI		5.22	P 1	95	TE-HL	+15.07		F/L

ATTACHMENT #6

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
H/L Special I			MAI		6.02	1	29	TTS-HL	-6.16
Bobbin	43	89	NQI		14.55	P 1	24	TE-HL	+17.22
H/L Tubesheet			MAI		3.37	1	35	TTS-HL	-4.39
H/L Tubesheet	44	40	SAI		0.36	1	29	TTS-HL	+0.12
Bobbin	44	43	WAR	10	0.07	P 4	0	1AVB	+0.00
Bobbin	44	46	WAR	12	0.08	P 4	0	1AVB	+0.00
Bobbin	44	47	WAR	10	0.66	P 2	0	15TH TSP	+0.00
Bobbin	44	48	WAR	22	0.18	P 4	121	3AVB	+0.00
Bobbin	44	62	WAR	15	0.59	P 4	0	1AVB	+0.00
Bobbin	44	63	WAR	13	0.46	P 4	0	1AVB	+0.00
Bobbin	44	64	NQI		0.80	P 1	71	TE-HL	+15.29
Bobbin	44	72	ADI		0.73	6	39	10TH TSP	+2.24
Bobbin			ADI		2.12	6	58	10TH TSP	+6.15
C/L Special I			VOL		0.46	1	126	10TH TSP	+2.32
C/L Special I			VOL		0.84	1	128	10TH TSP	+6.16
C/L Special I			VOL		1.69	1	111	10TH TSP	-0.61
Bobbin	44	73	NQI		2.72	P 1	32	TE-HL	+13.69
Bobbin	44	79	ADI		1.50	6	64	19TH TSP	+9.83
C/L Special I			VOL		0.17	1	105	19TH TSP	+9.48
Bobbin	44	83	NQI		1.82	P 1	135	TE-HL	+9.62
Bobbin	45	28	NQI		17.74	P 1	6	TE-HL	+6.37
Bobbin	45	40	WAR	19	0.49	P 4	0	1AVB	+0.00
Bobbin	45	86	NQI		0.87	P 1	82	2ND TSP	+0.03
H/L Special I			SAI		1.00	1	48	2ND TSP	-0.10
Bobbin	45	87	ODI	31	0.28	P 1	117	16TH TSP	+0.00
Bobbin	46	28	NQI		20.65	P 1	4	TE-HL	+7.43
Bobbin	46	67	NQI		2.48	3	159	9TH TSP	+33.52
Bobbin	47	51	NQI		0.32	3	56	3RD TSP	+14.56
H/L Tubesheet	47	57	MAI		0.72	1	38	TTS-HL	-3.01
Bobbin	48	36	NQI		0.69	P 1	67	1ST TSP	+0.00
Bobbin	48	42	NQI		0.23	P 1	118	2ND TSP	-0.03
H/L Tubesheet	48	55	MAI		0.26	1	82	TTS-HL	+0.11
Bobbin	48	82	NQI		0.93	P 1	31	1ST TSP	+0.00
Bobbin	48	84	ODI	17	0.31	3	128	TTS-HL	+5.98
Bobbin	48	85	ODI	25	0.74	3	122	TTS-HL	+5.07
H/L Special I			VOL		0.30	1	132	TTS-HL	+4.91
Bobbin	49	39	WAR	7	0.84	P 2	0	17TH TSP	+0.00
Bobbin	49	40	WAR	14	1.71	P 2	0	17TH TSP	+0.00
Bobbin	49	47	WAR	7	0.82	P 2	0	15TH TSP	+0.00
Bobbin	49	77	NQI		6.47	P 1	144	TE-CL	+1.31

Total Indications Found = 690
 Total Tubes Found = 429

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	2	20	NQI		13.20	3	6	8TH TSP	+4.17
H/L Tubesheet	2	85	SAI		0.44	2	18	TTS-HL	+0.01
Bobbin	2	88	ODI	16	1.01	3	130	15TH TSP	+17.96
C/L Special I			VOL		0.80	1	110	13TH TSP	-4.02
H/L Tubesheet	2	99	SAI		0.68	2	34	TTS-HL	+0.04
C/L Tubesheet	3	16	VOL		0.19	1	100	TTS-CL	+0.77
H/L Tubesheet	3	89	SAI		0.40	1	31	TTS-HL	-0.08
H/L Tubesheet	3	91	SCI		0.20	3	82	TTS-HL	-0.11
H/L Tubesheet	3	94	SCI		0.31	3	109	TTS-HL	-0.11
H/L Tubesheet	3	96	SCI		0.17	3	85	TTS-HL	-0.06
Bobbin	4	3	NQI		5.07	P 1	160	TTS-CL	-0.95
Bobbin	4	4	NQI		0.31	3	86	11TH TSP	+29.15
C/L Special I			VOL		0.43	1	98	11TH TSP	+29.34
H/L Tubesheet	4	20	VOL		0.18	1	102	TTS-HL	-0.32
Bobbin	4	41	NQI		3.54	P 1	40	TE-CL	+10.18
Bobbin	4	54	NQI		10.24	P 1	8	TE-HL	+7.58
Bobbin	4	85	NQI		11.15	P 1	18	TE-HL	+7.13
H/L Tubesheet	4	114	SAI		0.76	2	36	TTS-HL	-4.42
Bobbin	5	31	NQI		3.45	P 1	38	TE-CL	+10.68
Bobbin	5	56	NQI		10.24	P 1	9	TE-HL	+15.96
Bobbin	5	61	ODI	34	0.93	3	115	10TH TSP	+24.14
C/L Special I			VOL		1.38	1	45	10TH TSP	+24.69
Bobbin	5	94	NQI		14.17	P 1	23	TE-HL	+6.27
Bobbin	6	8	ADI		2.43	6	78	16TH TSP	+2.64
Bobbin			ODI	1	1.45	3	140	4TH TSP	+15.48
Bobbin			ODI	2	1.06	3	139	9TH TSP	+17.08
Bobbin			ODI	23	0.96	3	124	4TH TSP	+13.62
Bobbin			ODI	37	0.94	3	112	2ND TSP	+32.92
Bobbin			NQI		1.01	P 1	13	8TH TSP	+6.70
C/L Special I			VOL		0.55	1	137	9TH TSP	+17.64
C/L Special I			VOL		0.43	1	166	16TH TSP	+2.52
Bobbin	6	78	NQI		0.51	P 1	70	2ND TSP	+0.08
H/L Special I			SAI		0.16	P 1	63	2ND TSP	+0.07
H/L Tubesheet	6	86	SCI		0.22	1	45	TTS-HL	-0.13
Bobbin	6	93	ADI		1.70	6	84	1ST TSP	+20.97
H/L Special I			VOL		1.66	1	120	1ST TSP	+21.65
Bobbin	6	94	NQI		0.75	P 1	38	5TH TSP	+0.09
H/L Special I			SAI		0.11	P 1	57	5TH TSP	+0.00
Bobbin	6	104	ADI		2.00	6	62	11TH TSP	+6.37
C/L Special I			VOL		0.98	1	85	11TH TSP	+5.97
Bobbin	7	6	NQI		0.28	P 1	157	11TH TSP	-0.02
Bobbin	7	75	ODI	2	0.73	3	137	1ST TSP	+10.02
H/L Special I			VOL		0.20	1	152	1ST TSP	+10.00
H/L Tubesheet	7	93	SAI		0.94	1	23	TTS-HL	+0.03
Bobbin	7	94	NQI		12.18	P 1	12	TE-HL	+13.14
Bobbin			NQI		16.00	P 1	53	TE-HL	+14.90
H/L Tubesheet	7	109	SAI		0.37	1	28	TTS-HL	+0.14
Bobbin	8	5	NQI		0.43	3	113	11TH TSP	+17.11
C/L Special I			VOL		0.91	1	112	11TH TSP	+17.61
Bobbin	8	21	ADI		2.45	6	78	11TH TSP	+11.19
C/L Special I			VOL		0.48	1	104	11TH TSP	+11.39
Bobbin	8	22	ADI		1.51	6	74	11TH TSP	+8.14
Bobbin			ODI	17	0.66	3	131	12TH TSP	+15.10
C/L Special I			VOL		0.19	1	126	11TH TSP	+9.14
C/L Special I			VOL		0.26	1	111	11TH TSP	+11.19
C/L Special I			VOL		1.01	1	57	12TH TSP	+15.10
Bobbin	8	81	NQI		0.31	P 1	60	17TH TSP	+0.33
Bobbin	8	105	ODI	6	0.41	3	137	11TH TSP	+24.19
Bobbin			NQI		13.08	P 1	5	TE-HL	+6.22
C/L Special I			VOL		0.24	1	30	11TH TSP	+23.83
Bobbin	9	10	ADI		1.50	6	83	3RD TSP	+25.51
Bobbin	9	16	ADI		0.99	6	56	10TH TSP	+23.64
Bobbin	9	20	NQI		0.94	3	140	12TH TSP	+19.65
C/L Special I			VOL		0.68	1	106	11TH TSP	-2.55
H/L Tubesheet	9	42	VOL		0.44	1	64	TTS-HL	+4.20

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	*TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	9	77	ADI		1.94	6	73	10TH TSP	+34.18	F/L
Bobbin			ODI	20	0.48	3	124	10TH TSP	+33.39	F/L
Bobbin			ODI	22	0.88	3	122	10TH TSP	+34.48	F/L
C/L Special I			VOL		0.62	1	83	9TH TSP	-10.33	9TH TSP
C/L Special I			VOL		0.90	1	91	9TH TSP	-8.04	9TH TSP
C/L Special I			VOL		1.38	1	106	9TH TSP	-9.32	9TH TSP
Bobbin	9	99	NQI		9.85	P 1	21	TE-HL	+5.52	F/L
Bobbin	10	43	NQI		0.53	3	77	2ND TSP	+34.88	F/L
Bobbin	10	53	NQI		0.20	3	83	3RD TSP	+21.41	F/L
Bobbin	10	95	ODI	25	0.74	3	122	2ND TSP	+26.23	F/L
H/L Special I			VOL		1.14	1	132	2ND TSP	+26.56	2ND TSP
Bobbin	11	8	ADI		2.04	6	85	15TH TSP	+6.64	F/L
C/L Special I			VOL		0.30	1	79	15TH TSP	+7.53	15TH TSP
Bobbin	11	63	ADI		1.50	6	51	9TH TSP	+16.61	F/L
Bobbin			ODI	11	0.96	4	142	9TH TSP	+26.41	F/L
Bobbin			ODI	13	0.88	4	140	9TH TSP	+26.89	F/L
Bobbin			ODI	35	0.64	4	111	9TH TSP	+16.64	F/L
C/L Special I			VOL		0.42	1	50	9TH TSP	+26.60	9TH TSP
C/L Special I			VOL		0.87	1	30	9TH TSP	+16.61	9TH TSP
Bobbin	11	66	NQI		0.42	P 1	53	1ST TSP	-0.07	F/L
H/L Special I			SAI		0.22	P 1	63	1ST TSP	+0.02	1ST TSP
H/L Tubesheet	11	86	SAI		0.42	1	24	TTS-HL	+0.00	TTS-HL
Bobbin	11	111	ODI	12	1.40	3	132	14TH TSP	+1.78	F/L
C/L Special I			VOL		0.86	1	104	14TH TSP	+2.03	14TH TSP
Bobbin	12	16	NQI		0.22	P 1	123	17TH TSP	-0.06	F/L
Bobbin	12	100	NQI		0.22	P 1	72	10TH TSP	+0.11	F/L
Bobbin	13	3	ADI		1.34	6	73	10TH TSP	+19.41	F/L
Bobbin			ADI		1.61	6	82	10TH TSP	+22.57	F/L
Bobbin	13	39	ADI		0.88	6	66	2ND TSP	+14.63	F/L
H/L Special I			VOL		0.47	1	154	2ND TSP	+14.76	2ND TSP
Bobbin	13	47	NQI		5.18	P 1	91	TE-HL	+14.42	F/L
H/L Tubesheet	13	65	SAI		0.94	1	32	TTS-HL	+0.04	TTS-HL
Bobbin	13	67	NQI		0.50	P 1	115	3RD TSP	-0.08	F/L
H/L Special I			MAI		0.14	P 1	91	3RD TSP	+0.00	3RD TSP
H/L Tubesheet	13	72	MAI		0.55	2	25	TTS-HL	+0.02	TTS-HL
Bobbin	13	76	NQI		0.92	P 1	52	4TH TSP	-0.12	F/L
H/L Special I			MAI		0.14	P 1	81	4TH TSP	-0.04	4TH TSP
H/L Tubesheet	13	109	SAI		0.59	2	35	TTS-HL	-0.02	TTS-HL
Bobbin	14	11	NQI		0.16	P 1	71	14TH TSP	-0.06	F/L
Bobbin	14	23	NQI		2.93	P 1	155	TE-HL	+8.26	F/L
Bobbin	14	53	ADI		1.23	6	82	11TH TSP	+7.32	F/L
C/L Special I			VOL		0.47	1	116	11TH TSP	+7.05	11TH TSP
Bobbin	14	61	NQI		12.19	P 1	31	TE-HL	+6.55	F/L
Bobbin	14	69	NQI		16.76	P 1	26	TE-HL	+7.63	F/L
Bobbin	14	84	ODI	13	0.78	3	132	3RD TSP	+5.52	F/L
H/L Special I			VOL		0.88	1	118	3RD TSP	+5.46	3RD TSP
Bobbin	14	98	NQI		7.55	P 1	28	TE-HL	+14.20	F/L
Bobbin	14	100	NQI		0.26	P 1	111	3RD TSP	+0.00	F/L
Bobbin	14	106	ODI	4	0.44	4	158	3RD TSP	+11.95	F/L
H/L Special I			VOL		0.36	1	109	3RD TSP	+11.82	3RD TSP
Bobbin	15	4	ADI		2.62	6	91	9TH TSP	+10.76	F/L
Bobbin			NQI		0.41	3	137	9TH TSP	+2.64	F/L
Bobbin			ODI	4	0.65	3	142	9TH TSP	+10.19	F/L
C/L Special I			VOL		0.56	1	59	9TH TSP	+8.74	9TH TSP
C/L Special I			VOL		0.73	1	85	9TH TSP	+9.92	9TH TSP
Bobbin	15	6	NQI		0.17	P 1	61	11TH TSP	-0.05	F/L
Bobbin	15	11	ODI	26	0.92	3	124	12TH TSP	+7.59	F/L
C/L Special I			VOL		1.08	1	97	12TH TSP	+7.81	12TH TSP
Bobbin	15	14	NQI		0.18	P 1	124	2ND TSP	+0.16	F/L
Bobbin	15	15	NQI		0.42	3	91	9TH TSP	+8.32	F/L
Bobbin	15	20	ADI		1.27	6	81	6TH TSP	+26.10	F/L
H/L Special I			VOL		0.22	1	149	7TH TSP	-18.28	7TH TSP
Bobbin	15	22	NQI		0.57	3	115	TTS-CL	+2.23	F/L
Bobbin			NQI		0.24	3	87	13TH TSP	+6.08	F/L
C/L Special I			VOL		0.99	1	149	TTS-CL	+2.57	TTS-HL

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
C/L Special I			VOL		0.58	1	74	13TH TSP	+6.05
Bobbin	15	26	NQI		0.21	P 1	53	4TH TSP	-0.05
Bobbin	15	33	ODI	24	0.53	3	125	6TH TSP	-0.90
Bobbin	15	38	ODI	10	0.70	3	137	TTS-CL	+7.42
Bobbin			ODI	37	0.44	3	113	TTS-CL	+16.32
Bobbin			ODI	10	0.47	3	137	3RD TSP	+35.64
H/L Special I			VOL		1.11	1	155	4TH TSP	-8.21
Bobbin	15	48	ADI		2.52	6	81	14TH TSP	+3.84
C/L Special I			VOL		0.59	1	95	14TH TSP	+3.98
H/L Tubesheet	15	56	VOL		0.67	1	138	TTS-HL	-4.24
H/L Tubesheet	15	64	SCI		0.23	1	34	TTS-HL	+0.00
Bobbin	15	101	NQI		0.40	P 1	57	3RD TSP	-0.04
Bobbin			NQI		0.58	P 1	69	1ST TSP	+0.02
H/L Special I			SAI		0.49	1	40	3RD TSP	+0.00
H/L Special I			SAI		1.35	P 1	25	1ST TSP	-0.03
Bobbin	16	7	ADI		0.85	6	77	10TH TSP	+5.04
C/L Special I			VOL		0.32	1	132	10TH TSP	+4.98
Bobbin	16	11	NQI		0.32	3	116	11TH TSP	+38.00
C/L Special I			VOL		0.88	1	119	10TH TSP	-16.92
Bobbin	16	13	NQI		0.34	3	83	11TH TSP	+24.16
C/L Special I			VOL		0.35	1	128	11TH TSP	+21.18
C/L Special I			VOL		0.56	1	92	11TH TSP	+24.35
Bobbin	16	33	ODI	34	1.06	3	116	10TH TSP	+29.38
C/L Special I			VOL		0.60	1	103	10TH TSP	+29.39
H/L Tubesheet	16	57	SAI		1.63	1	32	TTS-HL	+0.14
Bobbin	16	105	NQI		2.33	P 1	21	3RD TSP	-0.10
H/L Special I			SAI		0.21	P 1	75	3RD TSP	+0.01
Bobbin	17	8	NQI		0.78	3	72	10TH TSP	+9.17
C/L Special I			VOL		1.13	1	46	10TH TSP	+9.31
Bobbin	17	10	ADI		2.53	6	70	11TH TSP	+16.02
C/L Special I			VOL		0.77	1	106	11TH TSP	+15.62
H/L Tubesheet	17	30	SAI		0.42	1	80	TTS-HL	-3.29
Bobbin	17	55	NQI		2.04	P 1	136	TE-HL	+12.49
Bobbin	17	61	NQI		5.96	P 1	78	TE-HL	+12.02
Bobbin			NQI		10.56	P 1	22	TE-HL	+12.33
Bobbin	17	72	NQI		0.57	3	72	9TH TSP	+26.71
C/L Special I			VOL		0.83	1	116	8TH TSP	-18.04
Bobbin	17	78	NQI		10.92	P 1	19	TE-HL	+15.80
Bobbin	17	87	ODI	31	0.77	3	116	3RD TSP	+1.48
H/L Special I			VOL		1.25	1	146	3RD TSP	+1.72
H/L Special I			VOL		1.31	1	174	3RD TSP	+13.73
Bobbin	17	95	ADI		0.92	6	64	3RD TSP	+37.30
Bobbin			ODI	33	0.26	3	114	3RD TSP	+27.81
Bobbin			ODI	35	0.44	3	112	3RD TSP	+24.02
Bobbin	17	111	NQI		0.76	3	117	6TH TSP	+35.23
Bobbin			ODI	29	1.13	3	118	6TH TSP	+38.03
H/L Special I			VOL		0.49	1	130	7TH TSP	-9.30
H/L Special I			VOL		1.31	1	143	7TH TSP	-6.27
Bobbin	18	13	ODI	3	0.35	P 1	138	17TH TSP	-0.03
Bobbin	18	27	ODI	10	0.88	3	138	6TH TSP	+32.95
Bobbin			ODI	5	0.20	P 1	137	17TH TSP	+0.05
H/L Special I			VOL		1.38	1	115	7TH TSP	-11.07
Bobbin	18	69	NQI		11.78	P 1	18	TE-HL	+7.95
H/L Tubesheet	18	76	SAI		0.46	1	23	TTS-HL	-1.29
Bobbin	18	77	ODI	9	1.20	3	138	10TH TSP	+17.19
C/L Special I			VOL		1.31	1	81	10TH TSP	+16.96
Bobbin	18	78	ADI		1.15	6	76	10TH TSP	+31.71
C/L Special I			VOL		0.82	1	118	9TH TSP	-11.87
Bobbin	18	92	NQI		0.65	3	60	3RD TSP	+9.15
H/L Special I			VOL		0.42	1	97	3RD TSP	+9.04
Bobbin	19	46	NQI		0.60	3	124	10TH TSP	+16.24
Bobbin			ODI	14	0.50	3	132	10TH TSP	+18.45
C/L Special I			VOL		0.49	1	56	10TH TSP	+18.53
C/L Special I			VOL		0.59	1	91	10TH TSP	+16.22
Bobbin	19	53	NQI		0.31	P 1	103	2ND TSP	+0.03

ATTACHMENT #7

INDICATIONS OF TEST TYPE	IMPERFECTION		VOLTS	CHN	DEG	LOCATION		EXTENT1
	ROW	COL						
H/L Special I		SAI	0.23	1	103	2ND TSP	-0.12	2ND TSP
Bobbin	19	63	NQI	0.35	P 1	52 1ST TSP	-0.10	F/L
H/L Special I		VOL	0.39	1	109	1ST TSP	-3.65	1ST TSP
H/L Special I		SAI	0.22	P 1	42	1ST TSP	-0.03	1ST TSP
Bobbin	19	71	NQI	0.33	3	140 15TH TSP	+9.27	F/L
Bobbin	19	80	ODI	10	0.43	3 137 3RD TSP	+16.82	F/L
Bobbin	19	86	NQI	0.26	3	83 6TH TSP	+1.65	F/L
Bobbin		ODI	10	0.37	3	137 5TH TSP	+22.22	F/L
Bobbin	19	95	ADI	2.50	6	61 10TH TSP	+13.52	F/L
C/L Special I		VOL	0.51	1	124	10TH TSP	+13.48	9TH TSP
Bobbin	20	23	WAR	9	0.23	P 4 0 4AVB	+0.00	F/L
Bobbin	20	34	NQI	3.18	3	19 4AVB	+2.25	F/L
U-Bend		VOL	0.67	1	72	4AVB	+1.67	4AVB
Bobbin	20	64	NQI	13.63	P 1	15 TE-HL	+8.12	F/L
Bobbin	20	104	NQI	0.49	3	64 17TH TSP	+21.17	F/L
Bobbin	20	107	ADI	2.33	6	57 4TH TSP	+37.79	F/L
H/L Special I		VOL	0.74	1	98	5TH TSP	-6.59	5TH TSP
Bobbin	21	23	WAR	4	0.12	P 4 0 1AVB	+0.00	F/L
Bobbin	21	26	ODI	31	0.20	P 1 112 19TH TSP	+0.03	F/L
Bobbin	21	43	ADI	1.32	6	74 12TH TSP	+10.81	F/L
C/L Special I		VOL	0.56	1	78	12TH TSP	+11.01	12TH TSP
Bobbin	22	9	ODI	5	0.79	3 138 5TH TSP	+38.79	F/L
H/L Special I		VOL	0.85	1	110	6TH TSP	-5.69	6TH TSP
Bobbin	22	25	NQI	0.63	3	86 6TH TSP	+30.12	F/L
H/L Special I		SAI	0.26	1	140	7TH TSP	-13.53	7TH TSP
Bobbin	22	28	NQI	0.26	P 1	92 1ST TSP	+0.00	F/L
H/L Special I		SAI	0.32	1	72	1ST TSP	-0.17	1ST TSP
Bobbin	22	29	NQI	0.26	P 1	102 1ST TSP	+0.35	F/L
H/L Special I		SAI	0.27	1	64	1ST TSP	+0.00	1ST TSP
Bobbin	22	30	WAR	11	0.30	P 4 0 4AVB	+0.11	F/L
Bobbin	22	43	ODI	20	0.67	3 128 3RD TSP	+33.92	F/L
H/L Special I		VOL	0.80	1	123	4TH TSP	-9.30	4TH TSP
Bobbin	22	56	NQI	0.30	P 1	84 2ND TSP	+0.16	F/L
H/L Special I		SAI	0.25	1	49	2ND TSP	-0.13	2ND TSP
H/L Tubesheet	22	79	SAI	0.25	1	153 TTS-HL	+0.07	TTS-HL
H/L Special I	22	88	VOL	0.77	1	112 5TH TSP	+17.15	6TH TSP
H/L Special I		VOL	1.10	1	124	5TH TSP	+25.45	6TH TSP
Bobbin	23	106	ODI	6	0.62	3 137 9TH TSP	+36.55	F/L
C/L Special I		VOL	0.34	1	118	8TH TSP	-7.48	8TH TSP
Bobbin	23	108	NQI	0.28	P 1	81 1ST TSP	-0.08	F/L
Bobbin	24	16	WAR	14	0.44	P 4 0 2AVB	+0.00	F/L
H/L Tubesheet	24	64	NQI	0.82	1	13 TTS-HL	-0.01	TTS-HL
H/L Tubesheet	24	79	VOL	0.95	1	122 TTS-HL	+3.50	TTS-HL
Bobbin	24	82	NQI	8.92	P 1	16 TE-HL	+4.20	F/L
Bobbin	24	91	NQI	0.78	3	70 9TH TSP	+19.91	F/L
C/L Special I		VOL	0.88	1	101	9TH TSP	+19.36	8TH TSP
Bobbin	25	7	NQI	3.45	P 1	163 TE-HL	+9.85	F/L
Bobbin	25	44	ADI	1.20	6	76 11TH TSP	+31.55	F/L
C/L Special I		VOL	0.43	1	127	11TH TSP	+31.32	11TH TSP
H/L Tubesheet	25	88	SAI	0.27	1	38 TTS-HL	+0.08	TTS-HL
Bobbin	26	28	WAR	7	0.17	P 4 0 2AVB	+0.00	F/L
Bobbin	26	29	ODI	62	0.39	P 1 96 2ND TSP	+0.08	F/L
H/L Special I		SAI	0.59	1	37	2ND TSP	+0.04	2ND TSP
Bobbin	26	54	WAR	14	0.65	P 4 0 1AVB	+0.00	F/L
Bobbin	26	58	ADI	1.83	6	67 5TH TSP	+6.68	F/L
H/L Special I		VOL	0.59	1	123	5TH TSP	+6.66	5TH TSP
Bobbin	26	69	ADI	1.80	6	63 2ND TSP	+20.70	F/L
Bobbin	26	83	NQI	0.43	3	101 2ND TSP	+2.45	F/L
Bobbin		ODI	2	0.77	3	146 2ND TSP	+2.97	F/L
H/L Special I		VOL	0.36	1	88	2ND TSP	+2.49	2ND TSP
H/L Special I		VOL	0.52	1	85	2ND TSP	+3.00	2ND TSP
Bobbin	27	8	WAR	19	0.54	P 4 0 3AVB	+0.00	F/L
Bobbin	27	9	WAR	13	0.32	P 4 0 1AVB	+0.00	F/L
Bobbin	27	20	ODI	18	0.31	P 1 137 15TH TSP	-0.03	F/L
Bobbin	27	21	ODI	25	0.41	3 124 2ND TSP	+20.94	F/L

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
H/L Special I			VOL		0.37	1	149	2ND TSP	+21.08
Bobbin	27	31	NQI		1.21	P 1	61	TE-HL	+19.41
Bobbin			WAR	25	0.83	P 4	0	3AVB	+0.00
Bobbin	27	32	WAR	14	0.37	P 4	0	1AVB	+0.00
Bobbin			WAR	26	0.86	P 4	0	4AVB	+0.00
Bobbin	27	33	WAR	9	0.41	P 4	0	2AVB	+0.00
Bobbin	27	51	ODI	18	0.65	3	129	12TH TSP	+17.65
C/L Special I			VOL		0.68	1	91	12TH TSP	+17.85
Bobbin	27	58	ODI	18	2.51	4	131	12TH TSP	+14.68
C/L Special I			VOL		0.76	1	94	12TH TSP	+13.48
Bobbin	27	69	ADI		1.60	6	68	2ND TSP	+40.38
H/L Special I			VOL		0.66	1	34	3RD TSP	-4.05
Bobbin	27	81	ADI		2.10	6	66	4TH TSP	+39.25
H/L Special I			VOL		0.51	1	123	5TH TSP	-5.13
Bobbin	27	88	NQI		0.32	3	107	13TH TSP	+1.86
C/L Special I			NQI		0.10	3	37	13TH TSP	+1.71
Bobbin	28	25	NQI		4.86	P 1	170	TE-HL	+11.30
Bobbin	28	37	WAR	17	0.92	P 4	0	4AVB	+0.00
Bobbin	28	43	WAR	10	0.48	P 4	0	2AVB	+0.00
Bobbin	29	14	ODI	24	0.27	3	122	TTS-CL	+16.86
Bobbin	29	52	WAR	17	0.92	P 4	0	4AVB	+0.00
Bobbin	29	78	NQI		0.35	P 1	62	1ST TSP	+0.13
H/L Special I			SAI		0.25	P 1	41	1ST TSP	-0.03
Bobbin	29	105	WAR	15	0.37	P 4	0	3AVB	+0.00
Bobbin	30	51	WAR	12	0.58	P 4	0	1AVB	+0.00
Bobbin	30	52	WAR	6	0.30	P 4	0	1AVB	+0.00
Bobbin	30	53	WAR	18	0.98	P 4	0	1AVB	+0.00
Bobbin	30	69	ODI	4	0.91	3	141	2ND TSP	+34.52
H/L Special I			VOL		0.86	1	89	3RD TSP	-9.58
Bobbin	30	87	WAR	12	0.29	P 4	0	1AVB	+0.00
Bobbin	30	105	WAR	20	0.55	P 4	0	2AVB	+0.00
Bobbin			WAR	24	0.74	P 4	0	3AVB	+0.00
Bobbin	31	35	WAR	8	0.36	P 4	0	1AVB	+0.00
Bobbin	31	36	WAR	15	0.78	P 4	0	2AVB	+0.00
Bobbin	31	38	WAR	12	0.60	P 4	0	2AVB	+0.00
Bobbin	31	39	WAR	8	0.38	P 4	0	3AVB	+0.00
Bobbin	31	41	ODI	21	2.15	4	126	11TH TSP	+36.68
C/L Special I			VOL		0.68	1	54	10TH TSP	-7.37
Bobbin	31	42	WAR	18	1.00	P 4	0	3AVB	+0.00
Bobbin	31	44	WAR	12	0.61	P 4	0	3AVB	+0.00
Bobbin	31	46	NQI		0.38	3	63	17TH TSP	+10.63
C/L Special I			VOL		0.26	1	61	17TH TSP	+10.92
Bobbin	31	49	WAR	11	0.50	P 4	0	2AVB	+0.00
Bobbin	31	50	WAR	9	0.44	P 4	0	1AVB	+0.00
Bobbin	31	67	WAR	13	0.30	P 4	0	1AVB	+0.00
Bobbin			WAR	24	0.76	P 4	0	3AVB	+0.00
Bobbin	31	85	NQI		0.54	3	87	TTS-HL	+3.93
H/L Tubesheet	31	87	SAI		0.23	1	34	TTS-HL	+0.08
Bobbin	32	27	NQI		13.86	P 1	13	TE-HL	+18.19
Bobbin	32	34	NQI		0.73	3	77	9TH TSP	+14.10
Bobbin	32	47	WAR	8	0.40	P 4	0	1AVB	+0.00
Bobbin	32	51	WAR	11	0.53	P 4	0	1AVB	+0.00
Bobbin	32	103	NQI		28.53	P 1	9	TTS-CL	+0.08
Bobbin	33	12	WAR	17	0.91	P 4	0	1AVB	+0.00
Bobbin	33	15	WAR	6	0.26	P 4	0	3AVB	+0.00
Bobbin	33	17	WAR	9	0.43	P 4	0	2AVB	+0.00
Bobbin	33	33	WAR	10	0.48	P 4	0	2AVB	+0.00
Bobbin			WAR	26	1.73	P 4	0	3AVB	+0.00
Bobbin	33	46	WAR	24	1.49	P 4	0	2AVB	+0.00
Bobbin	33	51	WAR	13	0.67	P 4	0	1AVB	+0.00
Bobbin	33	102	WAR	23	0.68	P 4	0	2AVB	+0.00
Bobbin			WAR	25	0.73	P 4	0	3AVB	+0.00
Bobbin	34	41	WAR	20	0.24	P 4	0	2AVB	+0.00
Bobbin	34	49	NQI		0.75	P 1	36	17TH TSP	-0.21
Bobbin	34	56	NQI		0.49	P 1	37	3RD TSP	+0.00

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin			WAR	15	0.80	P 4	0	2AVB	+0.00
Bobbin			WAR	16	0.82	P 4	0	1AVB	+0.00
Bobbin	34	62	WAR	15	0.42	P 4	0	1AVB	+0.00
Bobbin	34	71	NQI		0.80	P 1	47	2ND TSP	-0.08
H/L Special I			VOL		0.70	1	22	2ND TSP	-0.01
U-Bend	34	98	VOL		2.46	1	335	3AVB	+0.16
Bobbin			ODI	16	0.80	P 4	0	3AVB	+0.00
Bobbin	34	101	WAR	20	0.55	P 4	0	3AVB	+0.00
Bobbin			WAR	22	0.62	P 4	0	2AVB	+0.00
Bobbin	35	19	WAR	24	1.24	P 4	0	2AVB	+0.00
Bobbin	35	29	WAR	11	0.55	P 4	0	3AVB	+0.00
Bobbin			WAR	19	1.03	P 4	0	2AVB	+0.00
Bobbin	35	46	WAR	18	0.98	P 4	0	1AVB	+0.00
Bobbin	35	48	WAR	12	0.59	P 4	0	2AVB	+0.00
Bobbin			WAR	15	0.79	P 4	0	1AVB	+0.00
Bobbin	35	49	WAR	9	0.44	P 4	0	2AVB	+0.00
Bobbin			WAR	11	0.50	P 4	0	1AVB	+0.00
Bobbin	35	52	WAR	11	0.52	P 4	0	1AVB	+0.00
Bobbin	35	53	WAR	22	1.31	P 4	0	1AVB	+0.00
Bobbin	35	56	WAR	19	1.06	P 4	0	1AVB	+0.00
Bobbin	35	62	WAR	7	0.15	P 4	0	1AVB	+0.00
Bobbin	35	67	ADI		0.60	6	55	12TH TSP	+16.55
Bobbin	35	81	ADI		2.28	6	66	2ND TSP	+38.15
H/L Special I			VOL		0.78	1	100	3RD TSP	-6.59
Bobbin	35	86	NQI		0.24	P 1	81	1ST TSP	+0.03
H/L Special I			SAI		0.26	P 1	70	1ST TSP	+0.06
Bobbin	35	97	WAR	12	0.36	P 4	0	3AVB	+0.00
Bobbin			WAR	18	0.50	P 4	0	2AVB	+0.00
Bobbin	35	100	WAR	11	0.34	P 4	0	3AVB	+0.00
Bobbin	36	15	ODI	32	0.93	3	117	TTS-HL	+1.07
Bobbin	36	22	WAR	9	0.42	P 4	0	1AVB	+0.00
Bobbin	36	23	ODI	5	0.38	P 1	136	5TH TSP	-0.15
Bobbin			WAR	18	0.95	P 4	0	3AVB	+0.00
Bobbin	36	25	WAR	14	0.73	P 4	0	3AVB	+0.00
Bobbin	36	26	ODI	1	0.46	3	137	TTS-CL	+24.88
Bobbin	36	47	WAR	16	0.85	P 4	0	1AVB	+0.00
Bobbin	36	55	WAR	10	0.46	P 4	0	2AVB	+0.00
Bobbin			WAR	15	0.80	P 4	0	1AVB	+0.00
Bobbin	36	63	NQI		0.65	P 1	66	2ND TSP	+0.32
Bobbin	36	75	ODI	29	0.47	3	116	2ND TSP	+23.16
Bobbin	36	78	WAR	11	0.25	P 4	0	3AVB	+0.00
Bobbin	36	96	WAR	15	0.36	P 4	0	4AVB	+0.00
Bobbin	36	99	ODI	16	1.27	3	129	1ST TSP	+2.76
H/L Special I			VOL		1.01	1	84	1ST TSP	+2.75
Bobbin	36	100	ODI	11	1.15	3	134	1ST TSP	+2.10
Bobbin			WAR	22	0.67	P 4	0	3AVB	+0.00
H/L Special I			VOL		1.05	1	81	7TH TSP	+1.94
Bobbin	37	44	WAR	17	0.94	P 4	0	1AVB	+0.00
Bobbin	37	47	WAR	7	0.31	P 4	0	2AVB	+0.00
Bobbin			WAR	15	0.78	P 4	0	1AVB	+0.00
Bobbin	37	51	WAR	20	1.18	P 4	0	1AVB	+0.00
Bobbin	37	52	WAR	13	0.66	P 4	0	1AVB	+0.00
Bobbin	37	53	NQI		0.78	P 1	60	2ND TSP	+0.00
H/L Special I			SAI		0.36	1	59	2ND TSP	-0.10
Bobbin	37	57	WAR	15	0.77	P 4	0	1AVB	+0.00
Bobbin	37	60	WAR	20	0.49	P 4	0	1AVB	+0.00
Bobbin	37	97	WAR	13	0.32	P 4	0	3AVB	+0.00
Bobbin			WAR	18	0.48	P 4	0	2AVB	+0.00
H/L Tubesheet	37	98	SAI		0.63	1	10	TTS-HL	-0.03
Bobbin	38	18	WAR	9	0.10	P 4	0	3AVB	+0.00
Bobbin	38	20	WAR	12	0.58	P 4	0	3AVB	+0.00
Bobbin	38	25	WAR	13	0.15	P 4	0	1AVB	+0.00
Bobbin			WAR	15	0.17	P 4	0	3AVB	+0.00
Bobbin			WAR	18	0.22	P 4	0	2AVB	+0.00
Bobbin	38	31	WAR	9	0.42	P 4	0	1AVB	+0.00

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin			WAR	24	1.51	P	4	0 4AVB	+0.00
Bobbin			WAR	32	2.59	P	4	0 3AVB	+0.00
Bobbin	38	48	WAR	13	0.15	P	4	0 1AVB	+0.00
Bobbin	38	51	WAR	26	0.37	P	4	0 2AVB	+0.00
Bobbin	38	52	WAR	14	0.16	P	4	0 1AVB	+0.00
Bobbin	38	57	WAR	15	0.17	P	4	0 1AVB	+0.00
Bobbin	38	58	WAR	20	0.52	P	4	0 3AVB	+0.00
Bobbin	38	83	WAR	14	0.29	P	4	0 3AVB	+0.00
H/L Tubesheet	38	97	VOL		0.29	1		143 TTS-HL	+1.37
Bobbin	39	28	WAR	15	0.17	P	4	0 2AVB	+0.00
Bobbin			WAR	15	0.17	P	4	0 3AVB	+0.00
Bobbin	39	29	WAR	11	0.55	P	4	0 3AVB	+0.00
Bobbin			WAR	33	2.77	P	4	0 2AVB	+0.00
Bobbin	39	30	WAR	14	0.73	P	4	0 1AVB	+0.00
Bobbin			WAR	17	0.88	P	4	0 2AVB	+0.00
Bobbin			WAR	20	1.18	P	4	0 3AVB	+0.00
Bobbin	39	32	WAR	16	0.82	P	4	0 2AVB	+0.00
Bobbin	39	39	WAR	22	1.31	P	4	0 3AVB	+0.00
Bobbin	39	42	WAR	11	0.55	P	4	0 3AVB	+0.00
Bobbin			WAR	16	0.84	P	4	0 2AVB	+0.00
Bobbin	39	49	WAR	16	0.18	P	4	0 1AVB	+0.00
Bobbin	39	50	WAR	23	0.31	P	4	0 1AVB	+0.00
Bobbin	39	52	WAR	26	0.37	P	4	0 1AVB	+0.00
Bobbin	39	58	WAR	18	0.43	P	4	0 3AVB	+0.00
Bobbin			WAR	21	0.56	P	4	0 1AVB	+0.00
Bobbin	39	61	WAR	18	0.43	P	4	0 1AVB	+0.00
Bobbin	39	63	WAR	17	0.40	P	4	0 1AVB	+0.00
Bobbin	39	64	WAR	17	0.41	P	4	0 1AVB	+0.00
Bobbin	39	65	WAR	10	0.21	P	4	0 1AVB	+0.00
Bobbin	39	80	WAR	17	0.39	P	4	0 1AVB	+0.00
Bobbin	39	81	WAR	12	0.26	P	4	0 1AVB	+0.00
Bobbin	39	82	WAR	30	1.09	P	4	0 2AVB	+0.00
Bobbin	39	83	WAR	18	0.45	P	4	0 2AVB	+0.00
Bobbin			WAR	20	0.49	P	4	0 1AVB	+0.00
Bobbin	39	84	WAR	14	0.31	P	4	0 3AVB	+0.00
Bobbin			WAR	16	0.37	P	4	0 2AVB	+0.00
Bobbin	39	90	WAR	12	0.26	P	4	0 3AVB	+0.00
Bobbin	39	91	WAR	14	0.30	P	4	0 3AVB	+0.00
Bobbin	39	92	WAR	19	0.46	P	4	0 1AVB	+0.00
Bobbin			WAR	20	0.49	P	4	0 3AVB	+0.00
H/L Tubesheet			VOL		0.27	1		54 TTS-HL	+0.18
Bobbin	39	93	WAR	18	0.45	P	4	0 3AVB	+0.00
Bobbin	40	20	WAR	11	0.54	P	4	0 3AVB	+0.00
Bobbin			WAR	12	0.58	P	4	0 4AVB	+0.00
Bobbin			WAR	14	0.73	P	4	0 2AVB	+0.00
Bobbin	40	26	WAR	22	1.30	P	4	0 1AVB	+0.06
Bobbin	40	28	WAR	19	1.03	P	4	0 2AVB	+0.00
Bobbin	40	31	WAR	18	0.93	P	4	0 1AVB	+0.00
Bobbin	40	33	WAR	8	0.40	P	4	0 3AVB	+0.00
Bobbin			WAR	18	0.95	P	4	0 2AVB	+0.00
Bobbin	40	39	WAR	12	0.56	P	4	0 2AVB	+0.00
Bobbin	40	41	WAR	11	0.50	P	4	0 3AVB	+0.00
Bobbin			WAR	14	0.70	P	4	0 1AVB	+0.00
Bobbin			WAR	35	3.19	P	4	0 2AVB	+0.00
U-Bend			VOL		0.73	1		123 2AVB	+0.00
Bobbin	40	42	WAR	19	1.06	P	4	0 3AVB	+0.00
Bobbin			WAR	26	1.74	P	4	0 2AVB	+0.00
Bobbin	40	43	WAR	13	0.62	P	4	0 1AVB	+0.00
Bobbin			WAR	23	1.44	P	4	0 4AVB	+0.00
Bobbin			WAR	28	1.95	P	4	0 2AVB	+0.00
Bobbin			WAR	32	2.65	P	4	0 3AVB	+0.00
Bobbin	40	46	WAR	15	0.79	P	4	0 1AVB	+0.00
Bobbin	40	48	WAR	18	0.98	P	4	0 1AVB	+0.00
Bobbin	40	50	WAR	13	0.15	P	4	0 3AVB	+0.00
Bobbin	40	52	WAR	15	0.17	P	4	0 2AVB	+0.00

ATTACHMENT #7

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION		EXTENT1
Bobbin	40	56	WAR	14	0.16	P	4	0 1AVB	+0.00	F/L
Bobbin			WAR	15	0.17	P	4	0 2AVB	+0.00	F/L
Bobbin	40	60	WAR	17	0.39	P	4	0 1AVB	+0.00	F/L
Bobbin	40	61	WAR	28	0.73	P	4	0 2AVB	+0.00	F/L
Bobbin	40	64	WAR	15	0.68	P	4	0 1AVB	+0.00	F/L
Bobbin	40	65	WAR	20	0.43	P	4	0 1AVB	+0.00	F/L
Bobbin	40	67	WAR	9	0.16	P	4	0 3AVB	+0.00	F/L
Bobbin			WAR	10	0.18	P	4	0 2AVB	+0.00	F/L
Bobbin	40	71	WAR	15	0.29	P	4	0 1AVB	+0.00	F/L
Bobbin	40	80	WAR	21	0.44	P	4	0 1AVB	+0.00	F/L
Bobbin	40	81	WAR	12	0.21	P	4	0 1AVB	+0.00	F/L
Bobbin			WAR	19	0.39	P	4	0 2AVB	+0.00	F/L
Bobbin	40	82	WAR	25	0.58	P	4	0 2AVB	+0.00	F/L
Bobbin	40	83	WAR	11	0.20	P	4	0 1AVB	+0.00	F/L
Bobbin			WAR	18	0.35	P	4	0 3AVB	+0.00	F/L
Bobbin			WAR	23	0.54	P	4	0 2AVB	+0.00	F/L
Bobbin	40	92	WAR	19	0.40	P	4	0 3AVB	+0.00	F/L
Bobbin	41	21	WAR	11	0.52	P	4	0 1AVB	+0.00	F/L
Bobbin	41	24	WAR	28	0.44	P	4	0 2AVB	+0.00	F/L
Bobbin	41	33	WAR	13	0.67	P	4	0 2AVB	+0.00	F/L
Bobbin	41	39	WAR	30	0.50	P	4	0 2AVB	+0.00	F/L
Bobbin	41	41	NOI		1.82	P	1	57 TE-HL	+16.06	F/L
Bobbin	41	49	WAR	12	0.13	P	4	0 4AVB	+0.00	F/L
Bobbin	41	55	WAR	12	0.14	P	4	0 3AVB	+0.00	F/L
Bobbin			WAR	27	0.41	P	4	0 2AVB	+0.00	F/L
Bobbin	41	74	WAR	12	0.26	P	4	0 2AVB	+0.00	F/L
Bobbin	42	22	NOI		7.83	P	1	37 TE-CL	+2.05	F/L
Bobbin	42	59	ADI		1.19	4		30 1ST TSP	+12.97	F/L
H/L Special I			VOL		0.75	1		125 1ST TSP	+12.73	1ST TSP
Bobbin	42	60	ODI	9	1.10	4		141 4TH TSP	+7.87	F/L
Bobbin			ODI	29	0.49	3		118 4TH TSP	+6.99	F/L
Bobbin	42	87	WAR	16	0.36	P	4	0 2AVB	+0.00	F/L
Bobbin			WAR	17	0.41	P	4	0 1AVB	+0.00	F/L
Bobbin			WAR	21	0.45	P	4	0 1AVB	+0.00	F/L
Bobbin			WAR	26	0.81	P	4	0 3AVB	+0.00	F/L
Bobbin			WAR	29	0.78	P	4	0 3AVB	+0.00	F/L
H/L Tubesheet	42	90	VOL		0.19	1		68 TTS-HL	+0.21	TTS-HL
Bobbin	43	22	WAR	11	0.52	P	4	0 2AVB	+0.00	F/L
Bobbin			WAR	23	1.41	P	4	0 1AVB	+0.00	F/L
Bobbin	43	23	NOI		13.89	P	1	27 TE-CL	+4.25	F/L
Bobbin	43	33	WAR	22	1.36	P	4	0 2AVB	+0.00	F/L
Bobbin			WAR	28	1.98	P	4	0 3AVB	+0.00	F/L
Bobbin	43	40	ODI	12	1.51	4		124 3RD TSP	+18.63	F/L
Bobbin			WAR	13	0.62	P	4	0 2AVB	+0.00	F/L
Bobbin			WAR	17	0.20	P	4	0 3AVB	+0.00	F/L
H/L Special I			VOL		0.42	1		86 3RD TSP	+18.18	4TH TSP
Bobbin	43	47	WAR	31	0.55	P	4	0 1AVB	+0.00	F/L
Bobbin	43	48	WAR	19	0.23	P	4	0 1AVB	+0.00	F/L
Bobbin	43	50	WAR	22	0.28	P	4	0 1AVB	+0.00	F/L
Bobbin	43	53	WAR	20	0.24	P	4	0 1AVB	+0.00	F/L
Bobbin	43	54	WAR	23	0.30	P	4	0 1AVB	+0.00	F/L
Bobbin	43	55	WAR	20	0.25	P	4	0 1AVB	+0.00	F/L
Bobbin	43	56	ODI	11	1.47	4		123 4TH TSP	+11.12	F/L
Bobbin			WAR	28	0.43	P	4	0 1AVB	+0.00	F/L
H/L Special I			VOL		1.11	1		90 4TH TSP	+14.55	4TH TSP
Bobbin	43	60	ODI	16	0.38	3		131 2ND TSP	+22.63	F/L
H/L Special I			VOL		0.76	1		132 3RD TSP	-21.28	3RD TSP
Bobbin	43	73	ODI	3	0.45	3		144 3RD TSP	+31.97	F/L
Bobbin	43	76	WAR	20	0.51	P	4	0 1AVB	+0.00	F/L
Bobbin	43	81	ODI	8	1.36	4		145 3RD TSP	+6.29	F/L
H/L Special I			VOL		0.29	1		126 3RD TSP	+5.42	3RD TSP
Bobbin	43	85	WAR	18	0.43	P	4	0 4AVB	+0.00	F/L
Bobbin	44	32	ADI		1.03	6		85 12TH TSP	+18.67	F/L
C/L Special I			VOL		0.30	1		66 12TH TSP	+18.29	11TH TSP
H/L Special I	44	38	SAI		1.24	P	1	10 1ST TSP	+0.04	1ST TSP

Bobbin,C/L Special Interest,C/L Tubesheet,H/L Special Interest,H/L Tubesheet,U-Bend

ATTACHMENT #7

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	44	44	NQI		0.36	3	98	15TH TSP	-1.51
C/L Special I			NQI		0.39	1	10	15TH TSP	-1.65
Bobbin	44	56	NQI		0.26	3	126	TTS-HL	+10.59
H/L Special I			VOL		0.82	1	165	TTS-HL	+10.69
Bobbin	44	59	ODI	17	0.54	3	129	11TH TSP	+17.90
C/L Special I			VOL		0.37	1	125	11TH TSP	+17.00
Bobbin	44	60	ODI	3	0.74	4	145	TTS-HL	+10.08
H/L Special I			VOL		0.37	1	98	TTS-HL	+9.63
Bobbin	44	66	ODI	4	0.81	4	144	10TH TSP	+37.79
Bobbin			ODI	12	0.73	4	137	10TH TSP	+41.33
C/L Special I			VOL		0.48	1	117	9TH TSP	-6.21
C/L Special I			VOL		0.58	1	126	9TH TSP	-4.42
C/L Special I			VOL		0.78	1	109	9TH TSP	-2.78
C/L Special I			VOL		0.79	1	155	9TH TSP	-8.23
Bobbin	44	83	NQI		4.74	P 1	133	TE-HL	+3.08
Bobbin	45	40	ADI		1.16	6	102	5TH TSP	+26.52
H/L Special I			VOL		0.47	1	128	5TH TSP	+26.41
Bobbin	45	56	WAR	17	0.20	P 4	0	1AVB	+0.00
Bobbin	45	63	ADI		1.57	6	99	4TH TSP	+6.53
H/L Special I			VOL		0.55	1	122	4TH TSP	+6.36
Bobbin	46	27	ADI		1.14	6	64	12TH TSP	+2.11
Bobbin	46	35	NQI		0.65	P 1	148	12TH TSP	-0.06
H/L Special I	46	78	VOL		0.72	1	151	1ST TSP	-0.10
Bobbin	47	38	NQI		1.10	P 1	24	1ST TSP	-0.08
Bobbin	48	60	ODI	35	0.47	3	111	6TH TSP	+13.58
Bobbin	48	66	ODI	4	0.41	3	141	11TH TSP	+39.85
C/L Special I			VOL		0.42	1	50	10TH TSP	-4.13
Bobbin	48	74	WAR	9	0.87	P 2	0	16TH TSP	+0.00
Bobbin	49	31	WAR	6	0.62	P 2	0	16TH TSP	+0.00
U-Bend	49	36	VOL		0.67	1	33	7TH TSP	+21.08
Bobbin	49	39	WAR	11	1.18	P 2	0	17TH TSP	+0.00
Bobbin			WAR	17	1.99	P 2	0	16TH TSP	+0.00
Bobbin	49	41	WAR	11	1.18	P 2	0	17TH TSP	+0.00
Bobbin			WAR	15	1.70	P 2	0	14TH TSP	+0.00
Bobbin			WAR	23	2.93	P 2	0	16TH TSP	+0.00
Bobbin	49	59	ODI	23	2.67	3	123	14TH TSP	+11.33
C/L Special I			VOL		0.80	P 3	54	14TH TSP	+11.11
Bobbin	49	61	ODI	11	0.77	3	135	14TH TSP	+11.38
C/L Special I			VOL		0.23	P 3	101	14TH TSP	+12.01
Bobbin	49	62	ODI	19	1.74	3	127	14TH TSP	+11.19
C/L Special I			VOL		0.35	P 3	98	14TH TSP	+11.07
Bobbin	49	66	ADI		1.30	6	108	4TH TSP	+36.38
Bobbin			ADI		1.96	6	96	3RD TSP	+9.88
H/L Special I			VOL		1.19	1	127	5TH TSP	-8.39
H/L Special I			VOL		1.76	1	131	3RD TSP	+9.71
Bobbin	49	69	WAR	8	0.79	P 2	0	15TH TSP	+0.00
Bobbin			WAR	8	0.82	P 2	0	18TH TSP	+0.00
Bobbin	49	70	NQI		2.44	3	142	12TH TSP	+1.29
Bobbin	49	73	WAR	10	1.00	P 2	0	16TH TSP	+0.00
Bobbin	49	74	WAR	12	1.23	P 2	0	14TH TSP	+0.00
Bobbin			WAR	29	3.79	P 2	0	16TH TSP	+0.00
Bobbin	49	76	WAR	6	0.65	P 2	0	16TH TSP	+0.00
Bobbin	49	79	WAR	18	2.02	P 2	0	16TH TSP	+0.00
Bobbin	49	81	WAR	8	0.80	P 2	0	16TH TSP	+0.00
H/L Tubesheet	49	84	SAI		1.08	2	24	TTS-HL	+0.18

Total Indications Found = 575
 Total Tubes Found = 361

ATTACHMENT #8	INDICATIONS OF IMPERFECTION	TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin			2	29	NQI		11.30	P	1	23 TE-HL	+5.30	8TH TSP
Bobbin			2	30	NQI		1.80	P	1	93 TE-HL	+2.62	8TH TSP
Bobbin			2	39	NQI		3.16	P	1	81 TE-HL	+10.69	8TH TSP
Bobbin			2	40	NQI		3.32	P	1	108 TE-HL	+11.32	8TH TSP
H/L Tubesheet					SAI		0.20	1		28 TTS-HL	+0.14	TTS-HL
Bobbin			2	61	NQI		1.10	P	1	58 TE-HL	+17.53	8TH TSP
Bobbin					NQI		3.60	P	1	141 TE-HL	+13.29	8TH TSP
Bobbin					NQI		7.15	P	1	46 TE-HL	+8.39	8TH TSP
Bobbin			2	62	NQI		3.95	P	1	129 TE-HL	+13.13	8TH TSP
Bobbin			2	70	ODI	17	1.57	4		144 TTS-HL	+23.10	8TH TSP
H/L Special I					VOL		0.54	1		132 TTS-HL	+22.07	1ST TSP
Bobbin			2	76	NQI		3.73	P	1	101 TE-HL	+15.02	8TH TSP
Bobbin			2	80	NQI		8.91	P	1	12 TE-HL	+12.28	8TH TSP
Bobbin			2	97	NQI		1.63	P	1	31 TE-HL	+11.99	8TH TSP
Bobbin			3	27	NQI		1.99	P	1	129 TE-HL	+17.43	8TH TSP
H/L Tubesheet					MAI		2.55	1		27 TTS-HL	-3.89	TTS-HL
Bobbin			3	36	NQI		2.83	P	1	67 TE-HL	+16.61	8TH TSP
H/L Tubesheet					SAI		3.06	1		28 TTS-HL	-4.71	TTS-HL
H/L Special I					SAI		3.28	1		26 TE-HL	+17.80	TTS-HL
Bobbin			3	40	NQI		12.34	P	1	19 TE-HL	+16.27	8TH TSP
H/L Tubesheet					MAI		1.57	1		21 TTS-HL	-5.13	TTS-HL
Bobbin			3	45	NQI		0.35	P	1	112 1ST TSP	-0.03	8TH TSP
Bobbin			3	48	NQI		8.35	P	1	23 TE-HL	+3.34	8TH TSP
Bobbin			3	86	ADI		0.28	6		87 18TH TSP	+27.37	8TH TSP
Bobbin			3	110	NQI		3.66	P	1	22 TE-HL	+7.80	8TH TSP
Bobbin			4	14	NQI		0.46	P	1	120 4TH TSP	+0.00	8TH TSP
Bobbin			4	33	NQI		7.27	P	1	27 TE-HL	+11.03	8TH TSP
H/L Tubesheet			4	39	SAI		0.42	1		44 TTS-HL	-0.05	TTS-HL
Bobbin			4	41	NQI		3.53	P	1	107 TE-HL	+8.61	9TH TSP
H/L Special I					MAI		0.65	1		29 TE-HL	+6.17	TTS-HL
H/L Special I					MAI		2.62	1		24 TE-HL	+9.09	TTS-HL
H/L Special I					MAI		2.81	1		33 TE-HL	+2.04	TTS-HL
Bobbin			4	43	NQI		0.56	P	1	69 1ST TSP	-0.04	8TH TSP
H/L Special I					SAI		0.47	1		70 1ST TSP	+0.04	1ST TSP
H/L Tubesheet			4	47	SAI		0.46	1		28 TTS-HL	+0.09	TTS-HL
Bobbin			4	66	NQI		3.60	P	1	66 TE-HL	+5.52	8TH TSP
Bobbin			4	68	NQI		5.36	P	1	18 TE-HL	+11.08	8TH TSP
Bobbin			4	71	ADI		1.56	6		92 6TH TSP	+30.23	8TH TSP
Bobbin					ADI		2.29	6		87 6TH TSP	+22.94	8TH TSP
Bobbin					ADI		4.48	6		89 6TH TSP	+26.72	8TH TSP
Bobbin					NQI		1.86	P	1	29 TE-HL	+18.45	8TH TSP
H/L Special I					VOL		0.16	5		108 6TH TSP	+29.57	6TH TSP
H/L Special I					VOL		0.25	5		113 6TH TSP	+31.04	6TH TSP
H/L Special I					VOL		0.77	1		143 6TH TSP	+12.69	6TH TSP
H/L Special I					VOL		0.79	1		111 6TH TSP	+14.81	6TH TSP
H/L Special I					VOL		0.88	1		144 6TH TSP	+28.35	6TH TSP
H/L Special I					VOL		1.57	1		140 6TH TSP	+22.65	6TH TSP
H/L Special I					VOL		2.43	1		121 6TH TSP	+26.25	6TH TSP
Bobbin			4	73	NQI		16.94	P	1	52 TE-HL	+1.65	8TH TSP
Bobbin			4	78	NQI		2.01	P	1	32 TE-HL	+12.10	8TH TSP
Bobbin			4	84	NQI		5.73	P	1	124 TE-HL	+10.17	8TH TSP
Bobbin			4	93	ODI	38	0.39	3		106 5TH TSP	+32.66	8TH TSP
H/L Special I					VOL		0.72	1		101 5TH TSP	+31.84	6TH TSP
Bobbin			4	94	NQI		14.06	P	1	14 TE-HL	+11.87	8TH TSP
Bobbin			4	97	NQI		1.38	P	1	64 TE-HL	+17.10	8TH TSP
H/L Tubesheet					SAI		2.43	1		24 TTS-HL	-4.06	TTS-HL
Bobbin			4	100	NQI		4.84	P	1	142 TE-HL	+5.25	8TH TSP
Bobbin			4	107	ADI		1.82	6		59 11TH TSP	+34.42	8TH TSP
Bobbin			5	4	NQI		11.26	P	1	12 TE-HL	+15.24	8TH TSP
H/L Tubesheet			5	6	SCI		0.16	1		43 TTS-HL	-0.06	TTS-HL
Bobbin			5	7	NQI		9.21	P	1	50 TE-HL	+11.73	8TH TSP
Bobbin			5	16	NQI		0.86	P	1	127 TE-CL	+6.66	8TH TSP
Bobbin			5	17	NQI		0.32	P	1	107 2ND TSP	-0.06	8TH TSP
H/L Special I					SAI		0.48	1		34 2ND TSP	-0.02	2ND TSP
Bobbin			5	31	NQI		3.66	P	1	93 TE-HL	+13.59	8TH TSP

ATTACHMENT #8

INDICATIONS OF IMPERFECTION							EXTENT1
TEST TYPE	ROW COL IND	*TW	VOLTS	CHN	DEG	LOCATION	
Bobbin			NQI	12.33	P 1	16 TE-HL	+3.15
H/L Special I			MAI	0.84	1	25 TE-HL	+4.19
H/L Special I			MAI	4.00	1	21 TE-HL	+14.93
H/L Tubesheet	5 43		SAI	0.43	1	37 TTS-HL	+0.00
Bobbin	5 44		NQI	8.04	P 1	21 TE-HL	+5.98
H/L Tubesheet			SCI	0.59	1	27 TTS HL	-0.06
Bobbin	5 51		NQI	0.45	P 1	111 1ST TSP	+0.10
H/L Special I			SAI	0.22	1	93 1ST TSP	+0.14
Bobbin	5 59		NQI	0.54	P 1	70 2ND TSP	-0.03
H/L Special I			SAI	0.36	1	44 2ND TSP	-0.05
Bobbin	5 61		NQI	2.56	P 1	92 TE-HL	+14.24
Bobbin			NQI	3.47	P 1	131 TE-HL	+3.09
Bobbin	5 67		NQI	2.31	P 1	20 TE-HL	+12.98
Bobbin	5 68		NQI	8.48	P 1	35 TE-HL	+9.86
Bobbin	5 94		NQI	1.54	P 1	47 TE-HL	+7.77
C/L Special I	5 104		SAI	0.58	1	28 10TH TSP	-5.81
Bobbin	6 16		NQI	0.15	P 1	77 2ND TSP	+0.04
H/L Tubesheet	6 33		SAI	1.36	1	202 TTS-HL	-4.69
Bobbin	6 35		NQI	4.15	P 1	102 TE-HL	+10.60
Bobbin			NQI	6.79	P 1	4 TE-HL	+3.01
Bobbin			NQI	9.24	P 1	9 TE-HL	+9.07
H/L Tubesheet			SAI	1.52	1	34 TTS-HL	-2.79
Bobbin	6 43		ADI	1.15	6	68 TTS-CL	+12.57
Bobbin	6 54		NQI	0.75	3	88 12TH TSP	+9.72
Bobbin	6 68		NQI	13.40	P 1	38 TE-HL	+17.31
H/L Tubesheet			MAI	6.12	1	25 TTS-HL	-3.98
H/L Special I			MAI	6.37	1	22 TTS-HL	-4.25
Bobbin	6 70		NQI	13.12	P 1	15 TE-HL	+2.20
Bobbin	6 71		NQI	6.31	P 1	50 TE-HL	+16.27
Bobbin	6 74		NQI	10.23	P 1	27 TE-HL	+1.32
Bobbin	6 82		NQI	5.09	P 1	38 TE-HL	+14.37
Bobbin	6 85		NQI	7.09	P 1	50 TE-HL	+11.44
H/L Tubesheet	6 87		SAI	0.29	2	21 TTS-HL	-0.07
Bobbin	6 109		NQI	0.40	P 1	59 1ST TSP	+0.00
H/L Special I			SAI	0.16	1	33 1ST TSP	-0.05
H/L Tubesheet	7 14		MAI	0.61	1	42 TTS-HL	-0.60
H/L Tubesheet	7 33		SAI	1.11	1	190 TTS-HL	-4.46
Bobbin	7 54	19	ODI	0.73	3	126 TTS-CL	+3.81
C/L Special I			VOL	1.03	1	94 TTS-CL	+3.85
Bobbin	7 61		NQI	6.40	P 1	91 TE-HL	+2.65
H/L Tubesheet			SAI	1.52	1	23 TTS-HL	-2.74
Bobbin	7 66		NQI	5.85	P 1	7 TE-HL	+8.12
Bobbin	7 81		NQI	0.39	P 1	0 15TH TSP	-0.35
Bobbin	7 82		NQI	0.29	P 1	92 15TH TSP	-0.35
Bobbin	7 87		NQI	9.77	P 1	59 TE-HL	+8.88
Bobbin	7 108		NQI	0.38	P 1	115 15TH TSP	-0.36
Bobbin	8 23		NQI	8.05	P 1	113 TE-HL	+9.88
Bobbin			NQI	42.40	P 1	29 TE-HL	+2.33
Bobbin	8 52		NQI	0.26	P 1	32 2ND TSP	+0.13
Bobbin	8 59		NQI	1.69	P 1	99 TE-HL	+5.51
Bobbin	8 63		NQI	5.93	P 1	75 TE-HL	+16.02
Bobbin			NQI	10.01	P 1	142 TE-HL	+10.79
H/L Tubesheet			MAI	0.73	1	35 TTS-HL	-2.83
H/L Tubesheet			MAI	4.85	1	18 TTS-HL	-5.56
Bobbin	8 74		NQI	15.99	P 1	42 TE-HL	+6.11
H/L Tubesheet	8 75		SAI	0.10	2	56 TTS-HL	-0.07
H/L Tubesheet			SAI	0.53	1	29 TTS-HL	+0.00
H/L Tubesheet			SAI	1.53	1	32 TTS-HL	-3.22
H/L Tubesheet	8 83		MAI	0.76	1	21 TTS-HL	-4.12
Bobbin	8 102		NQI	5.83	P 1	61 TE-HL	+16.84
Bobbin			NQI	1.00	3	20 TTS-CL	+3.93
H/L Tubesheet			SAI	5.55	1	24 TTS-HL	-4.79
H/L Tubesheet			SAI	0.05	P 2	29 TTS-HL	-0.04
Bobbin	8 104		ADI	1.68	6	63 11TH TSP	+19.03
C/L Special I			VOL	0.82	1	120 11TH TSP	+18.66

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	*TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	9	5	NQI		22.58	P 1	54	TE-HL	+14.81	F/L
Bobbin	9	6	NQI		3.62	P 1	72	TE-HL	+11.74	F/L
Bobbin	9	15	NQI		9.32	P 1	32	TE-CL	+15.31	F/L
H/L Tubesheet	9	18	SAI		0.39	1	78	TTS-HL	-3.55	TTS-HL
Bobbin	9	24	NQI		3.09	P 1	148	TE-HL	+16.21	F/L
H/L Tubesheet			SAI		2.38	1	32	TTS-HL	-5.01	TTS-HL
Bobbin	9	41	ODI	15	0.45	3	131	11TH TSP	+42.43	F/L
C/L Special I			VOL		2.01	1	141	10TH TSP	-1.02	10TH TSP
H/L Tubesheet	9	61	MAI		2.23	1	23	TTS-HL	-4.84	TTS-HL
Bobbin	9	70	NQI		5.82	P 1	30	TE-HL	+9.55	F/L
Bobbin	9	81	NQI		5.45	P 1	56	TE-HL	+16.71	F/L
Bobbin			NQI		9.26	P 1	63	TE-HL	+7.48	F/L
H/L Tubesheet			SAI		0.99	1	34	TTS-HL	-0.10	TTS-HL
H/L Tubesheet	9	82	SAI		0.43	1	25	TTS-HL	-1.79	TTS-HL
Bobbin	9	85	NQI		10.89	P 1	16	TE-HL	+9.86	F/L
Bobbin	9	89	NQI		0.93	P 1	120	TE-HL	+12.67	F/L
Bobbin	9	98	NQI		3.97	P 1	333	TE-HL	+15.15	F/L
H/L Tubesheet			MAI		2.46	1	25	TTS-HL	-6.07	TTS-HL
H/L Tubesheet			SAI		0.22	1	134	TTS-HL	-0.03	TTS-HL
H/L Tubesheet	9	101	SAI		0.71	1	24	TTS-HL	-0.10	TTS-HL
Bobbin	9	107	ODI	7	0.91	3	136	16TH TSP	-0.89	F/L
C/L Special I			VOL		0.24	1	74	16TH TSP	-0.88	16TH TSP
Bobbin	10	66	WAR	12	0.25	P 4	0	4AVB	+0.00	F/L
Bobbin	10	85	NQI		22.81	P 1	35	TE-HL	+11.84	F/L
Bobbin	10	87	NQI		6.30	P 1	59	TE-HL	+14.86	F/L
Bobbin	10	89	NQI		0.52	3	37	TTS-CL	+3.99	F/L
Bobbin	10	101	NQI		0.44	3	139	16TH TSP	-0.90	F/L
Bobbin	11	2	NQI		4.14	P 1	45	TE-HL	+12.77	F/L
Bobbin	11	12	ODI	13	0.58	4	148	12TH TSP	+11.66	F/L
C/L Special I			VOL		0.77	1	98	12TH TSP	+11.07	12TH TSP
Bobbin	11	13	NQI		16.70	P 1	28	TE-CL	+17.04	F/L
Bobbin	11	17	NQI		19.07	P 1	8	TE-HL	+11.07	F/L
Bobbin	11	35	ADI		1.30	6	75	11TH TSP	+12.89	F/L
Bobbin	11	40	NQI		4.81	P 1	103	TE-HL	+11.49	F/L
Bobbin	11	72	NQI		30.41	P 1	60	TE-HL	+13.73	F/L
Bobbin	11	84	NQI		12.56	P 1	55	TE-HL	+6.01	F/L
Bobbin			NQI		19.67	P 1	62	TE-HL	+14.17	F/L
Bobbin			NQI		23.88	P 1	52	TE-HL	+11.27	F/L
Bobbin	11	85	NQI		20.73	P 1	33	TE-HL	+9.48	F/L
Bobbin	11	89	NQI		4.44	P 1	31	TE-HL	+14.80	F/L
Bobbin	11	96	NQI		10.54	P 1	41	TE-HL	+17.41	F/L
H/L Tubesheet			MAI		7.64	1	29	TTS-HL	-4.12	TTS-HL
H/L Special I			MAI		6.29	1	36	TTS-HL	-3.92	TTS-HL
Bobbin	11	103	NQI		7.34	P 1	59	TE-HL	+14.07	F/L
Bobbin	11	107	ODI	5	0.49	3	133	15TH TSP	+0.89	F/L
C/L Special I			VOL		0.36	1	46	15TH TSP	+0.94	15TH TSP
H/L Special I	11	110	VOL		0.81	1	88	7TH TSP	-3.56	7TH TSP
Bobbin	12	14	ADI		1.45	6	79	18TH TSP	+4.73	F/L
C/L Special I			VOL		0.38	1	98	18TH TSP	+4.41	17TH TSP
Bobbin	12	28	ADI		1.87	6	60	10TH TSP	+6.87	F/L
Bobbin			ADI		2.30	6	77	19TH TSP	+2.18	F/L
Bobbin			WAR	16	1.09	P 4	0	1AVB	+0.00	F/L
C/L Special I			VOL		0.52	1	97	10TH TSP	+16.36	10TH TSP
Bobbin	12	30	NQI		4.41	P 1	58	TE-HL	+16.89	F/L
H/L Tubesheet			MAI		2.63	1	37	TTS-HL	-4.27	TTS-HL
H/L Special I			MAI		2.51	1	38	TE-HL	+17.47	TTS-HL
H/L Special I			SAI		1.29	1	23	TE-HL	+11.41	TTS-HL
Bobbin	12	70	WAR	13	0.26	P 4	0	1AVB	+0.00	F/L
Bobbin	12	76	WAR	16	0.34	P 4	0	4AVB	+0.00	F/L
Bobbin	12	96	ADI		3.00	6	50	4AVB	-2.47	F/L
U-Bend			VOL		0.86	1	55	4AVB	-2.84	4AVB
Bobbin	13	11	NQI		0.48	3	55	9TH TSP	+5.40	F/L
Bobbin			NQI		17.54	P 1	12	TE-HL	+12.59	F/L
Bobbin			NQI		19.35	P 1	57	TE-HL	+13.79	F/L
C/L Special I			VOL		0.65	1	149	9TH TSP	+5.46	9TH TSP

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	13	27	NQI		21.10	P	1	52 TE-HL	+16.05 F/L
H/L Special I			MAI		11.56	1	26 TE-HL	+16.71 TTS-HL	
Bobbin	13	64	NQI		5.75	P	1	47 TE-HL	+10.66 F/L
Bobbin	13	65	NQI		17.26	P	1	26 TE-HL	+7.55 F/L
Bobbin	13	66	NQI		22.49	P	1	43 TE-HL	+12.31 F/L
Bobbin	13	67	NQI		26.44	P	1	21 TE-HL	+4.08 F/L
H/L Tubesheet	13	71	VOL		0.87	1	152 TTS-HL	+1.75 TTS-HL	
Bobbin	13	72	NQI		8.39	P	1	33 TE-HL	+11.39 F/L
Bobbin	13	83	NQI		18.42	P	1	45 TE-HL	+9.91 F/L
H/L Tubesheet	13	85	SAI		0.50	1	54 TTS-HL	+0.12 TTS-HL	
Bobbin	13	87	NQI		3.06	P	1	40 TE-CL	+4.70 F/L
H/L Tubesheet			MAI		0.68	1	27 TTS-HL	-4.32 TTS-HL	
Bobbin	13	89	NQI		3.88	P	1	57 TE-HL	+14.59 F/L
H/L Tubesheet			MAI		5.31	1	30 TTS-HL	-4.24 TTS-HL	
H/L Tubesheet			SCI		0.34	1	71 TTS-HL	-0.14 TTS-HL	
Bobbin	14	38	NQI		4.90	P	1	130 TE-HL	+14.48 F/L
H/L Special I			MAI		3.43	1	37 TE-HL	+15.78 TTS-HL	
Bobbin	14	48	NQI		7.09	P	1	110 TE-HL	+6.89 F/L
Bobbin	14	55	NQI		0.35	P	1	82 2ND TSP	+0.04 F/L
H/L Special I			SAI		0.34	1	86 2ND TSP	-0.07 2ND TSP	
Bobbin	14	65	NQI		7.22	P	1	156 TE-HL	+5.58 F/L
Bobbin	14	72	NQI		13.09	P	1	18 TE-HL	+13.57 F/L
H/L Tubesheet	14	91	MAI		1.08	1	35 TTS-HL	-4.84 TTS-HL	
H/L Tubesheet			SAI		0.02	P	2	40 TTS-HL	-0.06 TTS-HL
Bobbin	14	93	ODI	15	1.13	4	139 TTS-HL	+11.61 F/L	
H/L Special I			VOL		0.70	1	101 TTS-HL	+12.05 TTS-HL	
Bobbin	14	94	NQI		13.69	P	1	21 TE-HL	+13.63 F/L
H/L Tubesheet			SAI		0.29	1	10 TTS-HL	-0.01 TTS-HL	
H/L Tubesheet			MAI		0.09	P	2	40 TTS-HL	-5.24 TTS-HL
Bobbin	15	16	NQI		7.92	P	1	23 TE-CL	+10.77 F/L
Bobbin	15	19	NQI		0.27	P	1	94 11TH TSP	+0.00 F/L
Bobbin	15	38	NQI		48.59	P	1	47 TE-HL	+15.66 F/L
H/L Tubesheet	15	42	SCI		0.26	1	45 TTS-HL	-0.15 TTS-HL	
Bobbin	15	59	NQI		74.54	P	1	46 TE-HL	+15.47 F/L
Bobbin	15	61	NQI		5.66	P	1	117 TE-HL	+9.03 F/L
Bobbin			NQI		6.02	P	1	153 TE-HL	+3.86 F/L
Bobbin			NQI		7.10	P	1	77 TE-HL	+12.60 F/L
Bobbin	15	64	NQI		2.30	P	1	117 TE-HL	+17.05 F/L
H/L Tubesheet			MAI		3.60	1	16 TTS-HL	-4.62 TTS-HL	
Bobbin	15	79	ODI	20	1.31	3	125 3RD TSP	+23.03 F/L	
H/L Special I			VOL		0.50	1	97 3RD TSP	+22.93 3RD TSP	
Bobbin	15	85	NQI		14.24	P	1	16 TE-HL	+10.54 F/L
Bobbin	15	91	NQI		0.36	P	1	130 2ND TSP	+0.07 F/L
H/L Tubesheet	15	94	VOL		0.66	1	98 TTS-HL	+3.89 TTS-HL	
Bobbin	16	11	NQI		0.55	3	81 17TH TSP	+14.38 F/L	
Bobbin			NQI		65.20	P	1	50 TE-HL	+14.42 F/L
C/L Special I			VOL		0.23	1	92 17TH TSP	+14.01 16TH TSP	
Bobbin	16	13	NQI		53.45	P	1	51 TE-HL	+12.72 F/L
Bobbin	16	17	NQI		19.06	P	1	69 TE-HL	+10.19 F/L
Bobbin	16	21	NQI		28.67	P	1	39 TE-HL	+17.71 F/L
H/L Tubesheet			MAI		11.97	1	28 TTS-HL	-3.84 TTS-HL	
Bobbin	16	29	NQI		0.67	3	42 11TH TSP	+21.00 F/L	
C/L Special I			VOL		0.36	1	103 11TH TSP	+21.05 11TH TSP	
Bobbin	16	32	ADI		1.52	6	88 19TH TSP	+4.48 F/L	
C/L Special I			VOL		0.40	1	109 19TH TSP	+4.33 18TH TSP	
Bobbin	16	33	NQI		0.95	3	137 6TH TSP	+24.18 F/L	
H/L Special I			VOL		1.39	1	34 6TH TSP	+24.85 6TH TSP	
H/L Special I			VOL		1.64	1	158 6TH TSP	+21.58 6TH TSP	
Bobbin	16	41	NQI		6.97	P	1	61 TE-HL	+13.69 F/L
Bobbin	16	47	NQI		4.81	P	1	53 TE-HL	+6.73 F/L
Bobbin	16	97	NQI		2.54	P	1	18 TE-HL	+10.87 F/L
Bobbin			NQI		3.42	P	1	19 TE-HL	+9.91 F/L
Bobbin	16	108	NQI		0.92	P	1	50 3RD TSP	+0.05 F/L
H/L Special I			SAI		0.10	1	38 3RD TSP	-0.08 3RD TSP	
Bobbin	16	110	NQI		1.44	3	133 9TH TSP	+38.67 F/L	

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
C/L Special I			VOL		0.75	1	128	8TH TSP	-13.00	8TH TSP
C/L Special I			VOL		0.91	1	54	8TH TSP	-5.93	8TH TSP
C/L Special I			VOL		1.10	1	164	8TH TSP	-6.45	8TH TSP
Bobbin	17	12	NQI		4.37	P 1	50	TE-HL	+17.55	F/L
H/L Tubesheet			MAI		0.80	1	43	TTS-HL	-3.53	TTS-HL
H/L Tubesheet			SCI		0.02	P 3	105	TTS-HL	-0.16	TTS-HL
Bobbin	17	15	NQI		20.13	P 1	53	TE-HL	+15.69	F/L
Bobbin	17	24	NQI		7.44	P 1	34	TE-HL	+13.59	F/L
Bobbin			NQI		10.16	P 1	61	TE-HL	+14.07	F/L
H/L Tubesheet	17	81	SAI		0.77	4	40	TTS-HL	-4.44	TTS-HL
Bobbin	17	85	NQI		6.43	P 1	41	TE-HL	+15.60	F/L
Bobbin	17	90	NQI		4.07	P 1	52	TE-HL	+15.50	F/L
H/L Tubesheet			SAI		0.07	2	36	TTS-HL	-1.75	TTS-HL
H/L Tubesheet			SCI		0.52	1	16	TTS-HL	+0.00	TTS-HL
Bobbin	17	94	NQI		16.37	P 1	20	TE-HL	+10.56	F/L
Bobbin	18	4	NQI		11.42	P 1	23	TE-HL	+9.75	F/L
Bobbin	18	16	NQI		15.08	P 1	48	TE-HL	+14.53	F/L
Bobbin	18	32	NQI		8.26	P 1	136	TE-HL	+6.68	F/L
Bobbin	18	34	NQI		25.02	P 1	54	TE-HL	+12.23	F/L
Bobbin	18	48	NQI		0.63	3	54	6TH TSP	+16.39	F/L
H/L Special I			VOL		0.39	1	79	6TH TSP	+16.43	6TH TSP
Bobbin	18	59	NQI		11.19	P 1	148	TE-HL	+5.99	F/L
Bobbin	18	76	NQI		3.25	P 1	117	TE-HL	+11.98	F/L
Bobbin	18	89	NQI		6.75	P 1	59	TE-HL	+11.86	F/L
Bobbin	18	92	NQI		2.88	P 1	56	TE-HL	+12.26	F/L
Bobbin	18	96	NQI		0.77	P 1	115	TE-HL	+10.90	F/L
Bobbin			NQI		2.64	P 1	68	TE-HL	+11.90	F/L
Bobbin			NQI		2.93	P 1	25	TE-HL	+17.12	F/L
Bobbin			NQI		6.18	P 1	17	TE-HL	+8.86	F/L
Bobbin			NQI		7.59	P 1	36	TE-HL	+13.95	F/L
Bobbin	18	101	NQI		2.67	P 1	30	TE-HL	+16.15	F/L
Bobbin	18	105	NQI		0.60	P 1	92	2ND TSP	-0.09	F/L
H/L Special I			SAI		0.41	1	78	2ND TSP	-0.08	2ND TSP
Bobbin	19	20	ODI	24	0.52	4	127	5TH TSP	+24.63	F/L
H/L Special I			VOL		0.93	1	144	5TH TSP	+25.16	5TH TSP
Bobbin	19	22	NQI		5.01	P 1	48	TE-HL	+17.41	F/L
H/L Tubesheet			MAI		2.44	1	31	TTS-HL	-3.90	TTS-HL
H/L Special I			MAI		3.81	1	27	TE-HL	+16.87	TE-HL
Bobbin	19	23	NQI		8.13	P 1	24	TE-HL	+10.06	F/L
Bobbin	19	36	ADI		1.45	4	105	6TH TSP	+32.62	F/L
H/L Special I			VOL		1.66	1	142	7TH TSP	-11.03	7TH TSP
Bobbin	19	52	NQI		4.40	P 1	97	TE-HL	+9.49	F/L
Bobbin	19	58	NQI		1.61	P 1	98	TE-CL	+18.31	F/L
H/L Tubesheet	19	66	SAI		0.37	1	15	TTS-HL	-0.06	TTS-HL
H/L Tubesheet	19	69	SAI		6.04	1	8	TTS-HL	-5.54	TTS-HL
Bobbin	19	76	NQI		3.24	P 1	97	TTS-HL	-0.58	F/L
Bobbin	19	87	NQI		5.40	P 1	112	TE-HL	+12.79	F/L
Bobbin	19	105	NQI		0.39	P 1	56	1ST TSP	+0.00	F/L
H/L Special I			SAI		0.33	P 1	40	1ST TSP	+0.00	1ST TSP
Bobbin	19	108	ODI	23	1.99	3	124	TTS-CL	+14.17	F/L
C/L Special I			VOL		2.43	1	114	TTS-CL	+14.20	20TH TSP
Bobbin	20	17	ODI	23	0.39	3	124	5TH TSP	+32.82	F/L
H/L Special I			VOL		0.80	1	161	5TH TSP	+33.15	5TH TSP
Bobbin	20	24	NQI		5.39	P 1	69	TE-HL	+8.18	F/L
Bobbin	20	26	ADI		3.46	6	87	5TH TSP	+17.08	F/L
Bobbin			ODI	8	1.04	4	139	10TH TSP	+8.65	F/L
H/L Special I			VOL		1.40	1	137	5TH TSP	+17.62	5TH TSP
C/L Special I			VOL		0.56	1	45	10TH TSP	+8.26	10TH TSP
Bobbin	20	30	ODI	13	0.70	3	131	12TH TSP	+6.73	F/L
C/L Special I			VOL		0.77	1	110	12TH TSP	+6.71	12TH TSP
Bobbin	20	31	NQI		1.67	P 1	124	TE-HL	+9.20	F/L
Bobbin	20	35	NQI		0.31	3	87	TTS-CL	+18.63	F/L
Bobbin	20	37	NQI		0.35	P 1	41	5TH TSP	+0.08	F/L
Bobbin	20	38	NQI		12.69	P 1	58	TE-HL	+9.91	F/L
C/L Special I			SAI		0.68	1	49	10TH TSP	-19.03	10TH TSP

ATTACHMENT #8

INDICATIONS OF TEST TYPE	IMPERFECTION			VOLTS	CHN	DEG	LOCATION		EXTENT1	
	ROW	COL	IND %TW							
H/L Tubesheet	20	62	SAI	0.58	1	2	TTS-HL	-0.07	TTS-HL	
H/L Tubesheet	20	64	SAI	0.22	1	26	TTS-HL	-4.11	TTS-HL	
Bobbin	20	65	NQI	0.59	3	118	17TH TSP	+8.05	F/L	
Bobbin	20	74	NQI	0.76	3	106	1ST TSP	+3.28	F/L	
Bobbin			NQI	0.56	3	116	13TH TSP	+4.20	F/L	
Bobbin			ODI	1.01	3	121	2ND TSP	+26.25	F/L	
Bobbin			ADI	1.97	6	55	2ND TSP	+3.16 to +38.15	F/L	
Bobbin			ADI	2.46	6	102	1ST TSP	+3.22 to +14.83	F/L	
H/L Special I			VOL	0.61	1	120	2ND TSP	+25.34	3RD TSP	
H/L Special I			VOL	0.65	1	76	1ST TSP	+14.26	1ST TSP	
H/L Special I			VOL	0.80	1	117	2ND TSP	+20.15	3RD TSP	
H/L Special I			VOL	0.84	1	36	2ND TSP	+23.05	3RD TSP	
H/L Special I			VOL	0.84	1	112	1ST TSP	+3.13	1ST TSP	
H/L Special I			VOL	1.26	1	40	1ST TSP	-1.40	1ST TSP	
C/L Special I			VOL	0.26	1	61	13TH TSP	+3.97	12TH TSP	
H/L Special I			VOL	0.77	1	134	1ST TSP	+0.00 to +14.03	1ST TSP	
H/L Special I			VOL	1.32	1	5	2ND TSP	+0.00 to +14.03	3RD TSP	
Bobbin	20	78	ADI	1.10	6	64	12TH TSP	+11.06	F/L	
H/L Tubesheet	20	85	SAI	0.83	1	9	TTS-HL	-5.15	TTS-HL	
Bobbin	20	86	NQI	12.03	P 1	45	TE-HL	+1.61	F/L	
H/L Tubesheet			SAI	0.52	1	8	TTS-HL	-0.02	TTS-HL	
Bobbin	20	90	NQI	7.15	P 1	61	TE-HL	+14.68	F/L	
H/L Special I			MAI	5.12	1	21	TTS-HL	-6.72	TTS-HL	
Bobbin	20	92	NQI	10.77	P 1	42	TE-HL	+11.47	F/L	
Bobbin	20	98	ADI	2.45	6	78	10TH TSP	+34.79	F/L	
C/L Special I			VOL	0.52	1	113	10TH TSP	+42.91	9TH TSP	
C/L Special I			VOL	0.80	1	98	10TH TSP	+35.04	9TH TSP	
Bobbin	20	106	ADI	1.88	6	74	12TH TSP	+2.21	F/L	
C/L Special I			VOL	1.42	1	113	12TH TSP	+2.25	12TH TSP	
Bobbin	21	5	NQI	25.26	P 1	29	TE-HL	+0.70	F/L	
Bobbin	21	7	ODI	0.54	3	136	5TH TSP	+40.71	F/L	
H/L Special I			VOL	0.47	1	102	6TH TSP	-2.50	6TH TSP	
Bobbin	21	10	ODI	0.59	P 1	78	11TH TSP	+0.00	F/L	
Bobbin	21	13	NQI	0.43	P 1	85	11TH TSP	-0.10	F/L	
Bobbin	21	16	NQI	0.36	P 1	51	11TH TSP	-0.05	F/L	
Bobbin	21	21	NQI	3.41	P 1	85	TE-HL	+6.44	F/L	
Bobbin	21	33	NQI	8.02	P 1	153	TE-HL	+11.54	F/L	
Bobbin	21	34	NQI	18.52	P 1	69	TE-HL	+3.00	F/L	
Bobbin	21	43	NQI	25.02	P 1	24	TE-HL	+9.11	F/L	
Bobbin	21	109	NQI	5.23	P 1	33	TE-HL	+2.69	F/L	
Bobbin	22	10	NQI	33.48	P 1	46	TE-HL	+16.38	F/L	
H/L Tubesheet			MAI	14.84	1	28	TTS-HL	-4.63	TTS-HL	
Bobbin	22	13	NQI	25.24	P 1	33	TE-HL	+0.74	F/L	
Bobbin	22	24	NQI	8.00	P 1	29	TE-HL	+12.50	F/L	
Bobbin	22	27	ODI	0.68	3	139	13TH TSP	+4.16	F/L	
C/L Special I			VOL	0.92	1	98	13TH TSP	+4.29	13TH TSP	
Bobbin	22	30	NQI	7.55	P 1	46	TE-HL	+5.51	F/L	
H/L Tubesheet			SAI	0.23	1	82	TTS-HL	-0.04	TTS-HL	
Bobbin	22	38	IDI	94	104.80	P 1	48	TE-HL	+14.92	F/L
H/L Tubesheet			SAI	1.59	1	13	TTS-HL	-3.21	TTS-HL	
H/L Tubesheet			SAI	0.05	2	43	TTS-HL	-0.06	TTS-HL	
H/L Tubesheet			SAI	0.44	1	16	TTS-HL	-3.34	TTS-HL	
Bobbin	22	81	WAR	27	0.91	P 4	0	3AVB	+0.00	F/L
Bobbin	23	11	NQI	2.89	P 1	57	TE-HL	+16.91	F/L	
H/L Tubesheet			MAI	1.02	1	12	TTS-HL	-4.39	TTS-HL	
H/L Special I			MAI	1.16	1	11	TE-HL	+16.47	TE-HL	
Bobbin	23	56	NQI	9.05	P 1	13	TE-HL	+11.65	F/L	
Bobbin	23	70	NQI	9.41	P 1	26	TE-HL	+5.30	F/L	
Bobbin			NQI	46.77	P 1	25	TE-HL	+6.86	F/L	
Bobbin	23	72	NQI	9.74	P 1	19	TE-HL	+12.09	F/L	
Bobbin	23	79	ODI	20	1.31	4	140	TTS-HL	+17.96	F/L
H/L Special I			VOL	1.99	1	148	TTS-HL	+16.90	TTS-HL	
Bobbin	23	81	NQI	14.73	P 1	20	TE-HL	+10.82	F/L	
H/L Tubesheet			SAI	1.55	1	39	TTS-HL	-3.95	TTS-HL	
Bobbin	23	83	NQI	23.85	P 1	191	TE-HL	+2.55	F/L	

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION		EXTENT1
Bobbin	23	87	WAR	17	0.43	P 4	0	3AVB	+0.00	F/L
Bobbin	23	90	NQI		2.82	P 1	119	TE-HL	+4.67	F/L
Bobbin	23	92	NQI		14.52	P 1	23	TE-HL	+7.59	F/L
Bobbin	23	93	NQI		6.48	P 1	151	TE-HL	+5.74	F/L
Bobbin	23	106	ODI	19	0.40	3	124	1ST TSP	+8.09	F/L
H/L Special I			VOL		0.35	1	90	1ST TSP	+0.97	1ST TSP
H/L Special I			VOL		0.46	1	106	1ST TSP	+3.71	1ST TSP
H/L Special I			VOL		0.50	1	105	1ST TSP	+2.36	1ST TSP
H/L Special I			VOL		0.52	1	104	1ST TSP	+9.48	1ST TSP
H/L Special I			VOL		0.57	1	94	1ST TSP	+6.59	1ST TSP
H/L Special I			VOL		0.78	1	131	1ST TSP	+7.62	1ST TSP
H/L Special I			VOL		0.81	1	152	1ST TSP	-1.90	1ST TSP
Bobbin	24	12	NQI		2.90	P 1	46	TE-CL	+13.31	F/L
Bobbin			NQI		5.47	P 1	44	TE-CL	+16.94	F/L
Bobbin	24	19	NQI		13.81	P 1	53	TE-HL	+17.41	F/L
H/L Tubesheet			MAI		7.35	1	37	TTS-HL	-3.67	TTS-HL
Bobbin	24	20	NQI		6.19	P 1	61	TE-HL	+16.03	F/L
Bobbin			NQI		6.41	P 1	56	TE-HL	+15.54	F/L
Bobbin	24	23	NQI		28.20	P 1	182	TE-HL	+16.63	F/L
H/L Tubesheet			MAI		7.65	1	26	TTS-HL	-4.71	TTS-HL
Bobbin	24	58	NQI		9.91	P 1	18	TE-HL	+8.78	F/L
Bobbin	24	77	NQI		2.19	P 1	48	TE-HL	+12.77	F/L
Bobbin	24	105	WAR	17	0.41	P 4	0	1AVB	+0.00	F/L
Bobbin	24	108	NQI		3.99	P 1	38	TE-HL	+17.53	F/L
Bobbin	25	20	NQI		10.91	P 1	119	TE-HL	+13.01	F/L
Bobbin	25	22	NQI		4.98	P 1	152	TE-HL	+14.68	F/L
H/L Special I			SAI		1.69	1	29	TE-HL	+15.49	TTS-HL
Bobbin	25	43	NQI		4.73	P 1	152	TE-HL	+7.86	F/L
Bobbin	25	44	NQI		4.12	P 1	157	TE-HL	+7.28	F/L
Bobbin	25	54	NQI		25.56	P 1	22	TE-HL	+12.22	F/L
Bobbin	25	58	NQI		3.18	P 1	129	TE-HL	+6.03	F/L
Bobbin	25	79	NQI		3.25	P 1	146	TE-HL	+10.67	F/L
Bobbin	25	94	NQI		0.49	3	108	TTS-HL	+24.08	F/L
Bobbin	25	104	ODI	14	1.00	4	153	2ND TSP	+4.66	F/L
Bobbin			ODI	17	0.83	4	147	2ND TSP	+2.72	F/L
H/L Special I			VOL		0.29	1	65	2ND TSP	+5.39	2ND TSP
H/L Special I			VOL		0.53	1	89	2ND TSP	+8.58	2ND TSP
Bobbin	26	17	NQI		25.52	P 1	13	TE-HL	+11.35	F/L
Bobbin	26	20	ADI		5.92	6	89	4AVB	+2.38	F/L
H/L Tubesheet	26	21	VOL		1.04	1	143	TTS-HL	+5.95	TTS-HL
Bobbin	26	30	ADI		2.91	6	59	11TH TSP	+28.07	F/L
C/L Special I			VOL		1.05	1	129	10TH TSP	-16.24	10TH TSP
Bobbin	26	40	NQI		9.92	P 1	30	TE-HL	+16.47	F/L
Bobbin	26	66	NQI		10.84	P 1	28	TE-HL	+10.45	F/L
Bobbin	26	70	NQI		2.42	P 1	145	TE-HL	+2.99	F/L
Bobbin	26	73	NQI		0.48	P 1	62	16TH TSP	-0.21	F/L
Bobbin	26	76	NQI		0.81	3	90	10TH TSP	+23.51	F/L
Bobbin	26	86	WAR	22	0.70	P 4	0	2AVB	+0.00	F/L
Bobbin	26	88	WAR	12	0.31	P 4	0	2AVB	+0.00	F/L
Bobbin	26	106	ODI	15	0.63	4	145	3RD TSP	+19.44	F/L
Bobbin	26	107	WAR	13	0.34	P 4	0	3AVB	+0.00	F/L
Bobbin	27	16	ADI		0.74	6	57	9TH TSP	+25.43	F/L
Bobbin	27	17	NQI		3.16	P 1	135	TE-HL	+10.70	F/L
Bobbin	27	18	NQI		3.13	P 1	61	TE-HL	+16.74	F/L
H/L Tubesheet			SAI		3.03	1	34	TTS-HL	-4.75	TTS-HL
Bobbin	27	30	NQI		15.45	P 1	16	TE-HL	+10.12	F/L
H/L Tubesheet			SAI		0.50	1	25	TTS-HL	-0.03	TTS-HL
Bobbin	27	35	NQI		2.57	P 1	69	TE-HL	+16.55	F/L
H/L Tubesheet			MAI		2.39	1	26	TTS-HL	-4.89	TTS-HL
Bobbin	27	36	NQI		10.60	P 1	19	TE-HL	+8.25	F/L
Bobbin	27	42	WAR	7	0.30	P 4	0	3AVB	+0.08	F/L
H/L Tubesheet	27	45	SAI		0.42	1	26	TTS-HL	+0.15	TTS-HL
Bobbin	27	69	NQI		30.95	P 1	27	TE-HL	+3.17	F/L
Bobbin	27	82	NQI		2.82	P 1	37	TE-HL	+11.01	F/L
Bobbin	27	84	WAR	21	0.69	P 4	0	1AVB	+0.00	F/L

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	27	86	NQI		10.20	P 1	7	TE-HL	+9.26	F/L
Bobbin	27	98	ADI		3.53	6	80	16TH TSP	+8.17	F/L
C/L Special I			VOL		0.61	1	110	16TH TSP	+8.14	15TH TSP
Bobbin	27	106	WAR	17	0.46	P 4	0	1AVB	+0.00	F/L
Bobbin	28	15	NQI		5.97	P 1	18	TE-HL	+9.20	F/L
Bobbin	28	24	NQI		5.31	P 1	8	TE-HL	+13.52	F/L
Bobbin	28	26	NQI		9.84	P 1	21	TE-HL	+10.44	F/L
Bobbin	28	43	ADI		4.10	6	74	TTS-CL	+13.34	F/L
Bobbin			ODI	9	0.51	4	145	TTS-CL	+5.56	F/L
C/L Special I			VOL		0.83	1	119	TTS-CL	+12.59	TTS-CL
Bobbin	28	70	NQI		52.50	P 1	49	TE-HL	+3.60	F/L
H/L Tubesheet			MAI		1.45	1	29	TTS-HL	-2.72	TTS-HL
Bobbin	28	81	NQI		10.93	P 1	8	TE-HL	+6.84	F/L
Bobbin	28	85	NQI		7.20	P 1	12	TE-HL	+10.02	F/L
Bobbin	28	99	ODI	23	2.89	4	138	TTS-HL	+13.11	F/L
H/L Special I			VOL		1.64	1	95	TTS-HL	+13.37	TTS-HL
H/L Tubesheet	29	11	MAI		1.99	1	29	TTS-HL	-4.11	TTS-HL
Bobbin	29	20	NQI		1.77	P 1	131	TE-HL	+16.85	F/L
H/L Tubesheet			SAI		0.10	2	49	TTS-HL	-0.05	TTS-HL
H/L Tubesheet			SAI		1.57	1	25	TTS-HL	-4.76	TTS-HL
H/L Tubesheet	29	21	MAI		1.05	1	25	TTS-HL	-5.22	TTS-HL
H/L Tubesheet	29	23	SAI		1.00	1	30	TTS-HL	-4.17	TTS-HL
H/L Tubesheet	29	30	VOL		1.12	1	137	TTS-HL	+6.13	TTS-HL
Bobbin	29	34	NQI		13.46	P 1	53	TE-HL	+16.49	F/L
H/L Tubesheet			MAI		5.38	1	44	TTS-HL	-5.03	TTS-HL
Bobbin	29	36	NQI		8.67	P 1	13	TE-HL	+14.71	F/L
Bobbin	29	43	NQI		3.04	P 1	44	TE-HL	+17.42	F/L
H/L Tubesheet			SAI		2.25	1	33	TTS-HL	-4.14	TTS-HL
Bobbin	29	44	NQI		8.11	P 1	14	TE-HL	+15.23	F/L
Bobbin			NQI		14.23	P 1	16	TE-HL	+4.66	F/L
Bobbin			NQI		16.09	P 1	18	TE-HL	+1.66	F/L
Bobbin	29	45	NQI		13.50	P 1	16	TE-HL	+7.71	F/L
Bobbin	29	46	NQI		10.58	P 1	18	TE-HL	+12.33	F/L
Bobbin	29	47	NQI		12.16	P 1	21	TE-HL	+13.25	F/L
Bobbin	29	49	NQI		7.45	P 1	116	TE-HL	+16.61	F/L
H/L Tubesheet			MAI		6.21	1	22	TTS-HL	-4.69	TTS-HL
Bobbin	29	54	NQI		3.80	P 1	46	TE-HL	+10.65	F/L
Bobbin	29	56	NQI		0.66	3	111	4TH TSP	+32.27	F/L
Bobbin	29	65	NQI		5.28	P 1	54	TE-HL	+8.95	F/L
Bobbin	29	66	NQI		12.32	P 1	24	TE-HL	+10.55	F/L
Bobbin			NQI		12.47	P 1	38	TE-HL	+12.54	F/L
Bobbin	29	67	NQI		22.07	P 1	43	TE-HL	+11.41	F/L
Bobbin			ODI	18	0.40	P 1	125	1ST TSP	+0.09	F/L
Bobbin	29	68	WAR	12	0.73	P 4	0	1AVB	+0.00	F/L
Bobbin	29	75	NQI		7.94	P 1	28	TE-HL	+2.75	F/L
Bobbin	29	77	NQI		5.24	P 1	132	TE-HL	+11.42	F/L
Bobbin	29	104	ADI		1.73	6	95	5TH TSP	+33.29	F/L
H/L Special I			VOL		0.97	1	162	6TH TSP	-11.19	6TH TSP
Bobbin	30	11	ODI	4	0.51	3	135	10TH TSP	+16.62	F/L
C/L Special I			VOL		1.26	1	144	10TH TSP	+16.50	10TH TSP
Bobbin	30	14	NQI		0.38	P 1	78	13TH TSP	-0.08	F/L
Bobbin	30	39	NQI		14.33	P 1	33	TE-HL	+2.67	F/L
Bobbin	30	40	NQI		9.11	P 1	11	TE-HL	+9.97	F/L
Bobbin	30	61	NQI		4.67	P 1	59	TE-HL	+8.25	F/L
Bobbin			NQI		11.16	P 1	34	TE-HL	+6.01	F/L
Bobbin	30	62	NQI		2.20	P 1	96	TE-HL	+17.68	F/L
H/L Tubesheet			SAI		1.42	1	38	TTS-HL	-3.72	TTS-HL
H/L Special I			MAI		2.35	1	15	TE-HL	+18.61	TTS-HL
Bobbin	30	64	NQI		6.87	P 1	57	TE-HL	+5.83	F/L
Bobbin	30	66	NQI		2.22	P 1	109	TE-HL	+15.56	F/L
Bobbin	30	68	NQI		8.91	P 1	48	TE-HL	+12.54	F/L
Bobbin	30	69	NQI		6.71	P 1	58	TE-HL	+6.55	F/L
Bobbin			NQI		10.66	P 1	20	TE-HL	+1.57	F/L
Bobbin	30	70	NQI		13.39	P 1	29	TE-HL	+3.00	F/L
Bobbin	30	73	WAR	10	0.55	P 4	0	1AVB	+0.00	F/L

ATTACHMENT #8

INDICATIONS OF TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin	30	76	NQI		6.16	P 1	18	TE-HL	+14.40
Bobbin			NQI		6.90	P 1	52	TE-HL	+6.24
Bobbin	30	77	NQI		27.67	P 1	23	TE-HL	+13.13
Bobbin	30	80	NQI		9.23	P 1	33	TE-HL	+14.43
Bobbin	30	81	WAR	13	0.69	P 4	0	1AVB	+0.00
Bobbin	30	85	NQI		3.72	P 1	45	TE-HL	+8.19
Bobbin	30	90	NQI		0.76	3	111	2ND TSP	+41.81
H/L Special I			VOL		1.13	1	96	3RD TSP	-2.90
Bobbin	30	100	NQI		1.19	P 1	98	TE-HL	+15.39
Bobbin	31	14	NQI		13.93	P 1	41	TE-HL	+12.82
H/L Special I			MAI		5.86	1	194	TE-HL	+13.22
H/L Tubesheet	31	37	MAI		1.69	1	30	TTS-HL	-5.07
Bobbin	31	38	NQI		91.84	P 1	48	TE-HL	+15.65
H/L Tubesheet	31	42	SAI		0.40	1	27	TTS-HL	-2.88
Bobbin	31	70	NQI		25.68	P 1	28	TE-HL	+4.28
Bobbin	31	86	ADI		1.10	6	91	2ND TSP	+17.89
H/L Special I			VOL		0.33	1	94	2ND TSP	+18.35
Bobbin	31	97	ODI	1	0.54	3	140	5TH TSP	+4.78
H/L Special I			VOL		0.66	1	132	5TH TSP	+5.41
Bobbin	31	100	NQI		5.18	P 1	38	TE-HL	+10.30
Bobbin	31	101	NQI		8.99	P 1	15	TE-HL	+8.73
Bobbin	32	19	NQI		0.28	P 1	71	1ST TSP	+0.15
H/L Tubesheet			SAI		1.57	1	194	TTS-HL	-5.22
Bobbin	32	22	NQI		1.49	P 1	111	TE-CL	+15.65
Bobbin			NQI		2.18	P 1	87	TE-HL	+9.12
H/L Tubesheet	32	27	SAI		0.37	1	22	TTS-HL	+0.11
Bobbin	32	35	NQI		8.92	P 1	13	TE-HL	+15.88
H/L Tubesheet			MAI		1.66	1	204	TTS-HL	-6.09
Bobbin	32	42	ODI	5	0.12	3	137	5TH TSP	+20.42
H/L Special I			VOL		0.71	1	83	5TH TSP	+21.26
Bobbin	32	43	NQI		8.18	P 1	22	TE-HL	+8.30
Bobbin	32	49	WAR	13	0.78	P 4	0	1AVB	+0.00
Bobbin	32	59	NQI		0.34	3	83	12TH TSP	+18.82
Bobbin			ODI	12	1.17	4	145	10TH TSP	+20.90
C/L Special I			VOL		0.35	1	21	10TH TSP	+23.93
C/L Special I			VOL		0.59	1	151	10TH TSP	+20.73
C/L Special I			VOL		1.57	1	10	11TH TSP	-3.23
Bobbin	32	62	NQI		13.00	P 1	25	TE-HL	+5.72
Bobbin	32	63	WAR	15	0.85	P 4	0	1AVB	+0.00
Bobbin	32	83	NQI		0.43	3	84	TTS-HL	+21.90
H/L Special I			SAI		2.52	1	15	TTS-HL	-13.39
Bobbin	32	85	NQI		2.65	P 1	92	TE-CL	+0.87
Bobbin	32	88	ADI		0.98	6	72	2ND TSP	+32.50
Bobbin			ADI		1.05	6	71	2ND TSP	+30.05
Bobbin			ADI		1.79	6	73	1ST TSP	+5.82
Bobbin			ADI		2.54	6	85	1ST TSP	+4.46
H/L Special I			VOL		0.49	1	83	2ND TSP	+33.24
H/L Special I			VOL		0.60	1	40	2ND TSP	+30.82
H/L Special I			VOL		1.09	1	115	1ST TSP	+6.02
H/L Special I			VOL		1.48	1	116	1ST TSP	+4.64
Bobbin	32	97	ADI		1.02	6	78	2ND TSP	+38.38
Bobbin			ADI		1.02	6	85	9TH TSP	+26.20
Bobbin			ADI		1.33	6	81	5TH TSP	+14.96
C/L Special I			VOL		1.03	1	146	8TH TSP	-19.08
H/L Special I			VOL		0.32	1	104	3RD TSP	-5.95
H/L Special I			VOL		0.98	1	125	5TH TSP	+15.61
Bobbin	32	98	ADI		2.51	6	54	2AVB	+5.20
U-Bend			VOL		1.38	1	110	2AVB	+5.43
Bobbin	33	12	NQI		0.19	3	108	1ST TSP	+1.75
Bobbin	33	20	NQI		15.70	P 1	29	TE-HL	+9.89
H/L Special I			MAI		7.25	1	7	TE-HL	+10.05
Bobbin	33	27	ODI	31	0.39	4	121	11TH TSP	+9.46
C/L Special I			VOL		0.84	1	134	11TH TSP	+9.02
Bobbin	33	33	NQI		6.61	P 1	26	TE-HL	+17.57
H/L Tubesheet			MAI		2.74	1	18	TTS-HL	-4.07

ATTACHMENT #8

INDICATIONS OF TEST TYPE	IMPERFECTION		ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
H/L Special I		MAI					3.43	1	5	TE-HL	+17.59	TTS-HL
H/L Special I		MAI					3.17	1	18	TTS-HL	-3.87	TTS-HL
Bobbin	33	51	ODI	12			0.18	3	132	9TH TSP	+31.66	F/L
H/L Tubesheet	33	54	SAI				0.99	1	29	TTS-HL	-3.71	TTS-HL
Bobbin	33	55	WAR	23			1.72	P 4	0	1AVB	+0.00	F/L
Bobbin	33	73	WAR	19			0.61	P 4	0	2AVB	+0.00	F/L
Bobbin	33	77	NQI				5.94	P 1	154	TE-HL	+12.32	F/L
Bobbin	33	84	WAR	13			0.70	P 4	0	2AVB	+0.00	F/L
Bobbin			WAR	17			0.49	P 4	0	1AVB	+0.47	F/L
Bobbin	33	93	NQI				0.35	3	71	9TH TSP	+32.65	F/L
Bobbin	33	98	ODI	4			0.73	4	155	13TH TSP	+5.63	F/L
C/L Special I			VOL				0.42	1	54	13TH TSP	+5.49	13TH TSP
Bobbin	33	102	WAR	17			0.49	P 4	0	1AVB	+0.00	F/L
Bobbin	34	15	NQI				1.88	P 1	68	TE-HL	+9.99	F/L
H/L Special I			MAI				3.10	1	23	TE-HL	+9.83	TTS-HL
H/L Tubesheet	34	30	MAI				0.74	1	30	TTS-HL	-6.81	TTS-HL
H/L Tubesheet	34	36	SAI				0.51	1	47	TTS-HL	-5.13	TTS-HL
Bobbin	34	37	NQI				4.93	P 1	94	TE-HL	+7.56	F/L
Bobbin	34	39	WAR	9			0.65	P 4	0	1AVB	+0.00	F/L
Bobbin	34	43	NQI				10.12	3	182	7TH TSP	+25.97	F/L
Bobbin	34	59	WAR	15			0.91	P 4	0	1AVB	+0.00	F/L
Bobbin	34	71	WAR	22			0.77	P 4	0	2AVB	+0.00	F/L
Bobbin	34	73	NQI				18.43	P 1	55	TE-HL	+13.48	F/L
Bobbin	34	75	NQI				3.00	P 1	127	TE-HL	+13.03	F/L
Bobbin	34	81	NQI				3.26	P 1	49	TE-HL	+8.31	F/L
Bobbin	34	84	ODI	24			0.83	3	121	16TH TSP	+4.81	F/L
C/L Special I			VOL				0.78	1	118	16TH TSP	+5.27	16TH TSP
Bobbin	34	99	WAR	11			0.32	P 4	0	1AVB	+0.00	F/L
Bobbin	34	101	NQI				9.89	P 1	14	TE-HL	+8.74	F/L
Bobbin	35	15	ODI	3			0.51	3	134	1ST TSP	+21.38	F/L
H/L Special I			VOL				0.26	1	63	2ND TSP	-2.22	2ND TSP
Bobbin	35	17	NQI				8.34	P 1	30	TE-HL	+13.35	F/L
Bobbin	35	20	NQI				3.35	P 1	50	TE-HL	+3.13	F/L
Bobbin	35	26	NQI				8.15	P 1	26	TE-HL	+7.68	F/L
Bobbin	35	28	NQI				0.51	P 1	60	2ND TSP	+0.00	F/L
Bobbin	35	29	NQI				10.38	P 1	48	TE-HL	+13.74	F/L
Bobbin			WAR	17			0.31	P 4	0	2AVB	+0.00	F/L
Bobbin	35	38	NQI				3.14	P 1	89	TE-HL	+16.34	F/L
Bobbin	35	56	ADI				4.15	6	77	10TH TSP	+35.50	F/L
C/L Special I			VOL				0.37	1	103	9TH TSP	-8.63	9TH TSP
Bobbin	35	58	NQI				11.54	P 1	23	TE-HL	+13.51	F/L
Bobbin	35	60	NQI				2.79	P 1	66	TE-CL	+17.89	F/L
H/L Tubesheet	35	61	SAI				0.82	1	20	TTS-HL	-3.38	TTS-HL
Bobbin	35	78	WAR	13			0.41	P 4	0	2AVB	+0.00	F/L
Bobbin	36	16	ADI				3.14	6	79	5TH TSP	+35.55	F/L
H/L Special I			VOL				2.08	1	122	6TH TSP	-7.17	6TH TSP
Bobbin	36	29	ADI				1.32	6	76	17TH TSP	+10.00	F/L
Bobbin			NQI				1.08	P 1	123	TE-HL	+6.65	F/L
C/L Special I			VOL				0.71	1	61	17TH TSP	+9.96	17TH TSP
H/L Tubesheet	36	33	SCI				0.14	1	74	TTS-HL	-0.02	TTS-HL
H/L Tubesheet	36	35	SAI				0.65	1	211	TTS-HL	-4.85	TTS-HL
Bobbin	36	37	ADI				1.81	6	66	17TH TSP	+7.08	F/L
Bobbin			ADI				1.98	6	66	17TH TSP	+9.46	F/L
C/L Special I			VOL				0.22	1	79	17TH TSP	+9.06	16TH TSP
C/L Special I			VOL				0.28	1	105	17TH TSP	+6.44	16TH TSP
Bobbin	36	54	WAR	9			0.19	P 4	0	1AVB	+0.00	F/L
Bobbin	36	78	NQI				0.10	P 1	90	5TH TSP	+0.09	F/L
Bobbin	36	80	NQI				5.71	P 1	143	TE-HL	+15.80	F/L
Bobbin	36	81	NQI				2.08	P 1	116	TE-HL	+11.21	F/L
U-Bend	36	93	SCI				0.76	P 3	59	8TH TSP	-1.21	8TH TSP
U-Bend			SCI				2.31	P 3	44	8TH TSP	-3.91	8TH TSP
C/L Special I			SCI				0.61	1	40	8TH TSP	-3.91	8TH TSP
Bobbin	37	23	WAR	5			0.14	P 4	0	4AVB	+0.00	F/L
Bobbin			WAR	15			0.28	P 4	0	3AVB	+0.00	F/L
Bobbin	37	26	NQI				1.00	P 1	64	2ND TSP	-0.07	F/L

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
Bobbin			NQI		21.18	P 1	22	TE-HL	+11.06
Bobbin	37	31	NQI		0.36	P 1	89	19TH TSP	+0.20
Bobbin	37	58	NQI		2.18	P 1	76	TE-HL	+10.69
Bobbin	37	66	WAR	22	0.77	P 4	0	1AVB	+0.00
Bobbin	37	68	WAR	13	0.38	P 4	0	1AVB	+0.00
Bobbin	37	75	WAR	12	0.33	P 4	0	1AVB	+0.00
Bobbin	37	79	ADI		1.50	6	84	11TH TSP	+12.66
C/L Special I			VOL		0.42	1	121	11TH TSP	+12.36
Bobbin	37	86	NQI		12.51	P 1	29	TE-HL	+11.60
Bobbin	37	92	WAR	19	0.36	P 4	0	1AVB	+0.00
Bobbin	38	24	NQI		18.33	P 1	29	TE-HL	+14.05
Bobbin	38	53	NQI		16.85	P 1	31	TE-HL	+12.46
Bobbin			WAR	13	0.44	P 4	0	1AVB	+0.00
H/L Special I			MAI		8.25	1	19	TE-HL	+13.84
Bobbin	38	63	NQI		11.45	P 1	74	TE-HL	+13.28
H/L Special I			MAI		7.37	1	15	TE-HL	+13.74
Bobbin	38	66	NQI		7.69	P 1	52	TE-HL	+12.05
Bobbin	38	67	WAR	25	0.95	P 4	0	1AVB	+0.00
Bobbin	38	71	ADI		2.04	6	79	TTS-CL	+3.32
Bobbin			ODI	7	0.69	3	133	10TH TSP	+9.86
C/L Tubesheet			VOL		0.53	1	38	TTS-CL	+3.36
C/L Special I			VOL		1.08	1	25	TTS-CL	+3.24
C/L Special I			VOL		0.44	1	111	10TH TSP	+10.11
Bobbin	38	98	ODI	13	0.75	3	135	1ST TSP	+22.52
H/L Special I			VOL		0.40	1	106	1ST TSP	+22.27
Bobbin	39	20	NQI		14.03	P 1	20	TE-HL	+14.23
Bobbin	39	32	WAR	10	0.35	P 4	0	3AVB	+0.00
Bobbin	39	34	NQI		2.02	P 1	43	TE-HL	+11.67
Bobbin			NQI		14.30	P 1	12	TE-HL	+8.22
Bobbin			NQI		14.41	P 1	55	TE-HL	+17.76
H/L Tubesheet			MAI		3.08	1	41	TTS-HL	-3.43
H/L Tubesheet			MCI		0.02	P 3	110	TTS-HL	-0.15
Bobbin	39	36	WAR	18	0.60	P 4	0	1AVB	+0.00
Bobbin	39	51	WAR	14	0.47	P 4	0	1AVB	+0.00
Bobbin	39	52	NQI		23.39	P 1	40	TE-HL	+13.59
Bobbin	39	54	NQI		1.69	P 1	44	TE-HL	+4.46
Bobbin	39	66	WAR	23	0.40	P 4	0	1AVB	+0.00
Bobbin	39	67	NQI		8.36	P 1	55	TE-HL	+13.31
Bobbin	39	72	NQI		3.51	P 1	40	TE-HL	+15.42
Bobbin	39	75	NQI		11.53	P 1	31	TE-HL	+11.07
H/L Tubesheet	39	76	SAI		0.37	1	22	TTS-HL	-0.10
H/L Tubesheet	39	78	VOL		0.87	1	137	TTS-HL	-0.09
Bobbin	39	84	NQI		10.68	P 1	35	TE-HL	+11.62
H/L Tubesheet	39	90	VOL		0.94	1	149	TTS-HL	-0.10
Bobbin	39	93	NQI		0.36	3	120	2ND TSP	+32.49
Bobbin	40	38	NQI		3.69	P 1	147	TE-HL	+7.20
Bobbin	40	44	NQI		3.71	P 1	155	TE-CL	+19.19
H/L Tubesheet	40	50	SCI		0.18	1	50	TTS-HL	-0.01
Bobbin	40	52	NQI		11.18	P 1	63	TE-HL	+16.82
H/L Tubesheet			SAI		0.68	1	111	TTS-HL	-4.67
H/L Tubesheet	40	56	MCI		0.68	1	13	TTS-HL	-0.09
Bobbin	40	61	NQI		1.26	P 1	141	TE-HL	+8.98
Bobbin			WAR	22	0.73	P 4	0	1AVB	+0.00
Bobbin	40	62	NQI		7.06	P 1	48	TE-HL	+11.88
Bobbin	40	66	WAR	21	0.69	P 4	0	1AVB	+0.00
H/L Tubesheet			SCI		0.67	1	49	TTS-HL	-0.07
Bobbin	40	75	NQI		16.19	P 1	56	TE-HL	+8.75
Bobbin	40	93	WAR	22	0.77	P 4	0	1AVB	+0.00
Bobbin	40	94	WAR	18	0.56	P 4	0	2AVB	+0.00
Bobbin			WAR	18	0.57	P 4	0	1AVB	+0.00
Bobbin	41	25	NQI		0.44	3	92	17TH TSP	+19.93
Bobbin	41	53	NQI		9.51	P 1	49	TE-HL	+15.52
Bobbin	41	56	NQI		5.69	P 1	140	TTS-HL	-1.17
Bobbin	41	70	NQI		0.75	P 1	132	2ND TSP	+0.00
Bobbin	41	75	NQI		8.85	P 1	26	TE-HL	+2.93

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1	
Bobbin	41	95	ODI	7	0.84	3	135	TTS-HL	+0.85	F/L
H/L Tubesheet	42	21	SAI		0.94	1	176	TTS-HL	+0.00	TTS-HL
Bobbin	42	24	WAR	10	0.23	P 4	0	1AVB	+0.00	F/L
Bobbin	42	25	NQI		16.49	P 1	22	TE-HL	+16.44	F/L
H/L Tubesheet			MAI		0.99	1	38	TTS-HL	-5.17	TTS-HL
Bobbin	42	51	NQI		12.27	P 1	32	TE-HL	+14.60	F/L
Bobbin	42	70	NQI		7.52	P 1	21	TE-HL	+17.63	F/L
Bobbin	42	89	WAR	24	0.84	P 4	C	3AVB	+0.00	F/L
Bobbin	43	37	WAR	28	0.93	P 4	0	3AVB	+0.00	F/L
Bobbin	43	38	WAR	13	0.31	P 4	0	2AVB	+0.00	F/L
Bobbin	43	46	WAR	15	0.37	P 4	0	1AVB	+0.00	F/L
Bobbin	43	52	ADI		3.76	6	83	2AVB	+10.91	F/L
U-Bend			VOL		3.87	1	117	2AVB	+11.64	2AVB
Bobbin	43	53	NQI		24.60	P 1	18	TE-HL	+5.48	F/L
Bobbin	43	60	NQI		39.07	P 1	28	TE-HL	+3.18	F/L
Bobbin	43	68	WAR	18	0.58	P 4	0	1AVB	+0.00	F/L
Bobbin	43	70	NQI		0.65	3	95	16TH TSP	+1.04	F/L
C/L Special I			VOL		0.28	1	126	16TH TSP	+1.16	16TH TSP
C/L Special I			VOL		0.34	1	101	16TH TSP	-0.91	16TH TSP
Bobbin	43	71	NQI		14.12	P 1	23	TE-HL	+6.47	F/L
Bobbin			NQI		16.43	P 1	16	TE-HL	+5.51	F/L
Bobbin	43	89	WAR	8	0.23	P 4	0	4AVB	+0.00	F/L
Bobbin	44	33	NQI		4.99	P 1	156	TE-HL	+10.28	F/L
Bobbin	44	37	ODI	4	1.14	3	134	2ND TSP	+23.98	F/L
Bobbin			NQI		20.71	P 1	71	TE-HL	+15.86	F/L
H/L Special I			VOL		1.67	1	121	2ND TSP	+23.96	2ND TSP
Bobbin	44	46	NQI		21.83	3	168	2ND TSP	+10.86	F/L
Bobbin	44	49	WAR	26	0.83	P 4	0	1AVB	+0.00	F/L
Bobbin	44	53	WAR	24	0.74	P 4	0	1AVB	+0.00	F/L
Bobbin	44	54	NQI		5.17	P 1	126	TE-HL	+11.45	F/L
H/L Special I			MAI		6.68	1	8	TE-HL	+11.75	TTS-HL
Bobbin	44	57	WAR	13	0.30	P 4	0	1AVB	+0.00	F/L
Bobbin	44	60	WAR	15	1.15	P 4	0	1AVB	+0.00	F/L
Bobbin	44	65	ADI		0.94	6	89	3RD TSP	+35.85	F/L
Bobbin	44	66	WAR	20	0.71	P 4	0	1AVB	+0.00	F/L
Bobbin	44	86	NQI		0.25	P 1	127	3RD TSP	+0.00	F/L
Bobbin			NQI		7.02	P 1	15	TE-HL	+15.93	F/L
Bobbin	44	90	ODI	32	0.64	3	117	2ND TSP	+1.04	F/L
Bobbin			NQI		9.29	P 1	11	TE-HL	+9.04	F/L
H/L Special I			VOL		0.36	1	71	2ND TSP	+1.02	2ND TSP
Bobbin	45	25	NQI		0.88	3	110	9TH TSP	+11.00	F/L
C/L Special I			VOL		1.67	1	128	9TH TSP	+11.06	9TH TSP
Bobbin	45	34	WAR	22	0.50	P 4	0	1AVB	+0.00	F/L
Bobbin	45	40	NQI		0.27	P 1	40	1ST TSP	+0.08	F/L
H/L Special I			SAI		0.27	P 1	23	1ST TSP	+0.01	1ST TSP
Bobbin	45	48	WAR	13	0.24	P 4	0	1AVB	+0.00	F/L
Bobbin	45	52	WAR	23	0.50	P 4	0	1AVB	+0.00	F/L
Bobbin	45	57	WAR	35	1.04	P 4	0	1AVB	+0.00	F/L
U-Bend			WAR	20	4.27	P 5	0	1AVB	+0.00	1AVB
Bobbin	45	58	WAR	26	0.98	P 4	0	1AVB	+0.00	F/L
Bobbin	45	59	WAR	34	1.75	P 4	0	1AVB	+0.00	F/L
Bobbin	45	60	NQI		5.41	P 1	93	TE-HL	+7.02	F/L
Bobbin			WAR	24	0.86	P 4	0	2AVB	+0.00	F/L
Bobbin			WAR	27	1.08	P 4	0	1AVB	+0.00	F/L
H/L Special I			MAI		4.82	1	9	TE-HL	+7.66	TTS-HL
Bobbin	45	61	NQI		6.74	P 1	36	TE-HL	+11.65	F/L
Bobbin	45	67	NQI		6.68	P 1	55	TE-HL	+14.84	F/L
Bobbin	46	33	ADI		2.43	6	69	3RD TSP	+27.05	F/L
H/L Special I			VOL		1.19	1	108	3RD TSP	+27.89	3RD TSP
Bobbin	46	38	NQI		2.37	P 1	119	TE-HL	+16.51	F/L
Bobbin	46	48	NQI		27.54	P 1	42	TE-HL	+5.19	F/L
Bobbin	46	60	NQI		0.33	3	107	10TH TSP	+9.14	F/L
C/L Special I			VOL		0.29	1	114	10TH TSP	+9.02	10TH TSP
Bobbin	46	73	ADI		2.35	6	86	13TH TSP	+2.44	F/L
Bobbin			NQI		1.30	P 1	75	TE-HL	+9.93	F/L

Bobbin, C/L Special Interest, C/L Tubesheet, H/L Special Interest, H/L Tubesheet, U-Bend

ATTACHMENT #8

INDICATIONS OF IMPERFECTION

TEST TYPE	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT1
C/L Special I					0.80	1	109	13TH TSP	+2.20
Bobbin	46	78	WAR	14	0.49	P 4	0	1AVB	+0.00
Bobbin	47	35	NQI		7.18	P 1	148	TE-HL	+14.65
Bobbin	47	36	NQI		0.80	3	137	14TH TSP	+12.37
C/L Special I					1.16	1	81	14TH TSP	+12.34
Bobbin	47	42	NQI		45.24	P 1	30	TE-HL	+1.33
H/L Tubesheet	47	61	SAI		0.78	1	17	TTS-HL	+0.23
Bobbin	47	71	WAR	25	0.97	P 4	0	1AVB	+0.00
Bobbin	47	78	WAR	22	0.79	P 4	0	1AVB	+0.00
Bobbin					0.82	P 4	0	2AVB	+0.00
Bobbin	47	85	WAR	7	0.88	P 2	0	16TH TSP	+0.00
Bobbin	48	29	ODI	12	0.32	3	132	9TH TSP	+38.03
Bobbin	48	52	NQI		6.86	P 1	40	TE-HL	+16.46
H/L Tubesheet					3.90	1	17	TTS-HL	-4.70
H/L Special I					2.32	1	12	TE-HL	+8.76
H/L Special I					5.52	1	7	TE-HL	+16.69
Bobbin	48	55	NQI		0.24	3	107	17TH TSP	+9.33
C/L Special I					0.09	1	94	17TH TSP	+9.21
Bobbin	48	67	WAR	8	1.00	P 2	0	18TH TSP	+0.00
Bobbin	48	69	WAR	9	1.13	P 2	0	18TH TSP	+0.00
Bobbin	48	70	WAR	9	1.12	P 2	0	15TH TSP	+0.00
U-Bend	48	74	NQI		2.53	1	31	7TH TSP	+11.59
U-Bend					2.91	1	19	7TH TSP	+11.05
H/L Tubesheet	49	34	SAI		0.22	2	164	TTS-HL	+0.29
Bobbin	49	36	NQI		17.37	P 1	28	TE-HL	+13.57
Bobbin	49	38	NQI		0.86	P 1	138	14TH TSP	+0.15
Bobbin					0.54	P 1	55	TTS-CL	-1.10
Bobbin				22	0.30	P 1	125	16TH TSP	-0.05
C/L Special I					0.36	P 1	152	14TH TSP	+0.00
C/L Special I					0.52	P 1	125	16TH TSP	+0.00
Bobbin	49	40	NQI		0.95	P 1	50	1ST TSP	+0.07
Bobbin					1.22	P 1	59	TE-HL	+17.38
H/L Special I					0.47	1	48	1ST TSP	+0.01
Bobbin	49	43	NQI		3.11	P 1	134	TE-HL	+17.64
Bobbin					3.70	P 1	52	TE-HL	+19.62
H/L Special I					8.42	1	25	TE-HL	+15.47
H/L Tubesheet	49	56	SAI		1.54	1	33	TTS-HL	-3.08
H/L Tubesheet					0.05	P 3	112	TTS-HL	-0.13
H/L Tubesheet	49	60	SAI		0.74	1	25	TTS-HL	+0.13
Bobbin	49	66	ADI		2.47	6	75	20TH TSP	+5.67
C/L Special I					0.55	1	80	20TH TSP	+5.08
Bobbin	49	78	WAR	13	1.57	P 2	0	17TH TSP	+0.00
Bobbin	49	79	WAR	12	1.51	P 2	0	17TH TSP	+0.00
Bobbin	49	80	WAR	13	1.57	P 2	0	17TH TSP	+0.00
Bobbin	49	81	WAR	14	1.75	P 2	0	17TH TSP	+0.00

Total Indications Found = 825

Total Tubes Found = 533

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ATTACHMENT #9 - TUBES PLUGGED 12/95 RFO

COUNT	ROW	COL	COUNT	ROW	COL
1.	2	81	47.	45	35
2.	3	60	48.	48	29
3.	3	63	49.	49	64
4.	3	76			
5.	3	102			
6.	3	109			
7.	4	23			
8.	4	63			
9.	4	109			
10.	5	52			
11.	6	61			
12.	6	78			
13.	6	101			
14.	6	109			
15.	7	10			
16.	7	75			
17.	8	80			
18.	10	22			
19.	12	75			
20.	12	80			
21.	14	33			
22.	14	58			
23.	15	95			
24.	15	98			
25.	17	89			
26.	18	96			
27.	19	75			
28.	20	26			
29.	20	94			
30.	21	101			
31.	22	85			
32.	23	63			
33.	24	102			
34.	25	48			
35.	27	66			
36.	28	80			
37.	30	58			
38.	33	92			
39.	34	52			
40.	36	36			
41.	36	45			
42.	37	68			
43.	39	71			
44.	40	73			
45.	43	68			
46.	44	44			

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ATTACHMENT #10 - TUBES PLUGGED 12/95 RFO
COUNT ROW COL

1. 2 109
2. 4 40
3. 5 95
4. 6 50
5. 6 74
6. 7 28
7. 7 33
8. 7 55
9. 7 70
10. 7 109
11. 8 12
12. 8 41
13. 8 47
14. 8 63
15. 10 43
16. 11 39
17. 11 44
18. 11 64
19. 11 85
20. 12 12
21. 12 29
22. 12 34
23. 12 37
24. 12 84
25. 13 4
26. 13 40
27. 13 53
28. 13 88
29. 13 112
30. 14 78
31. 14 97
32. 16 43
33. 16 50
34. 16 107
35. 17 65
36. 19 32
37. 19 62
38. 20 25
39. 20 100
40. 21 11
41. 21 16
42. 21 42
43. 22 57
44. 23 36
45. 24 25
46. 25 12

COUNT ROW COL
47. 25 42
48. 27 12
49. 27 13
50. 27 19
51. 27 70
52. 28 58
53. 28 59
54. 30 14
55. 30 18
56. 30 19
57. 30 23
58. 30 77
59. 31 31
60. 31 43
61. 32 59
62. 32 96
63. 33 16
64. 33 63
65. 34 19
66. 34 48
67. 34 57
68. 34 77
69. 35 15
70. 35 73
71. 36 54
72. 36 55
73. 37 40
74. 37 45
75. 37 55
76. 37 76
77. 38 58
78. 40 19
79. 40 40
80. 41 56
81. 42 61
82. 43 54
83. 43 88
84. 44 40
85. 45 86
86. 47 57
87. 48 55
88. 48 85

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ATTACHMENT #11 - TUBES PLUGGED 12/95 RFO

COUNT	ROW	COL	COUNT	ROW	COL
1.	2	85	47.	32	55
2.	2	88	48.	33	76
3.	2	99	49.	35	16
4.	3	89	50.	35	86
5.	3	91	51.	36	25
6.	3	94	52.	36	99
7.	3	96	53.	36	100
8.	4	20	54.	37	45
9.	4	114	55.	37	53
10.	5	32	56.	37	57
11.	5	61	57.	37	98
12.	6	78	58.	38	53
13.	6	86	59.	39	45
14.	6	94	60.	39	49
15.	7	93	61.	39	92
16.	7	109	62.	42	37
17.	8	105	63.	42	48
18.	9	77	64.	42	90
19.	11	66	65.	44	38
20.	11	86	66.	44	44
21.	13	65	67.	49	59
22.	13	67	68.	49	61
23.	13	72	69.	49	62
24.	13	76	70.	49	84
25.	13	109			
26.	15	64			
27.	15	101			
28.	16	57			
29.	16	105			
30.	17	30			
31.	18	76			
32.	19	53			
33.	19	63			
34.	21	42			
35.	22	25			
36.	22	28			
37.	22	29			
38.	22	56			
39.	22	79			
40.	24	64			
41.	25	88			
42.	26	29			
43.	27	88			
44.	29	78			
45.	31	87			
46.	32	34			

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ATTACHMENT #12 - TUBES PLUGGED 12/95 RFO
COUNT ROW COL

1.	2	40
2.	3	36
3.	4	39
4.	4	41
5.	4	43
6.	4	47
7.	4	71
8.	5	6
9.	5	17
10.	5	31
11.	5	43
12.	5	44
13.	5	51
14.	5	59
15.	5	104
16.	6	68
17.	6	87
18.	6	109
19.	7	14
20.	8	75
21.	8	102
22.	9	24
23.	9	81
24.	9	82
25.	9	98
26.	9	101
27.	9	107
28.	11	96
29.	12	30
30.	13	27
31.	13	85
32.	13	89
33.	14	38
34.	14	55
35.	14	91
36.	14	94
37.	15	42
38.	16	108
39.	17	12
40.	17	90
41.	18	105
42.	19	20
43.	19	22
44.	19	66
45.	19	69
46.	19	105

COUNT ROW COL

47.	20	38
48.	20	62
49.	20	74
50.	20	86
51.	20	90
52.	21	10
53.	22	37
54.	22	73
55.	23	11
56.	25	72
57.	26	60
58.	27	30
59.	27	45
60.	28	70
61.	29	11
62.	29	20
63.	29	82
64.	30	62
65.	30	85
66.	31	14
67.	32	27
68.	33	20
69.	33	33
70.	34	15
71.	34	70
72.	35	61
73.	36	33
74.	36	93
75.	38	53
76.	38	63
77.	39	34
78.	39	76
79.	39	78
80.	39	90
81.	40	50
82.	40	56
83.	40	64
84.	40	66
85.	42	21
86.	43	30
87.	43	70
88.	44	42
89.	44	54
90.	44	90
91.	45	40
92.	45	60

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ATTACHMENT #12 - TUBES PLUGGED 12/95 RFO
COUNT ROW COL

COUNT ROW COL

93.	47	61
94.	48	52
95.	48	55
96.	49	34
97.	49	40
98.	49	43
99.	49	56
100.	49	60

Total Data Items Found = 100
Total Tubes Found = 100