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FEB 10 1993

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

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority) Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) - RESPONSE TO NRC REQUEST FOR ADDITIONAL
INFORMATION - CONDUIT FIRE BARRIER FIRE ENDURANCE TESTING PROGRAM
(TAC M63648)

The purpose of this letter is to reply to NRC's letter dated
December 2, 1992, which requested additional information on the WBN
Thermo-Lag conduit fire test program and to provide additional test plans.
NRC's review is associated with TVA's program submittal of October 16, 1992.

Enclosure 1 provides a restatement of the concerns in NRC's letter dated
December 2, 1992, and the associated TVA response. Enclosure 2 provides the
Junction Box Fire Test Plan. Enclosure 3 provides the Cable Ampacity Test
Plan.

Should there be any questions regarding this information, please telephone
Paul Pace at (615) 365-1824.

Very truly yours,

William J. Museler

Enclosures
cc: See page 2

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50-390/391

WATTS BAR

TVA

Response to NRC Request for Addl Info re
Conduit Fire Barrier System Fire Endurance
Testing Program

Rec'd w/ltr 2/10/93.....9302190287

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-NOTICE-

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION (RAI) CONDUIT FIRE BARRIER SYSTEM FIRE ENDURANCE TESTING PROGRAM

NRC QUESTION NO. 1

The submittal did not provide a schedule which outlines the various phases of the program. In order to properly monitor and observe the various test program activities, we need the applicant to provide a schedule which covers the specimen construction and fire ampacity derating and cable functionality testing phases.

TVA RESPONSE

Test decks for the first phase of fire exposure tests (one-inch and five-inch conduit and two-inch air drops) were constructed at Omega Point Laboratories (OPL) from October 29 to November 18, 1992. Quality Control records documenting the construction of these decks have been made available for NRC review at TVA's Rockville office. Two of the three decks were subjected to a test fire on December 21 and 22, 1992. The third deck was tested January 7, 1993. NRC personnel observed three tests. Test decks for additional fire exposure tests are expected to be constructed beginning in early February 1993. As presented in the January 25, 1993 meeting, the installation of Thermo-Lag on the next test specimens will be done from February 3 through 20, 1993. The fire tests are scheduled March 18, 19, 24, 25, and 26, 1993. TVA will keep NRC apprised of any change to this schedule.

Construction of the test specimens for the ampacity testing was completed on February 2, 1993. Testing is scheduled to be conducted between February 22, 1993 and approximately March 10, 1993. The first tests will be baseline configurations, without Thermo-Lag enclosures. Testing of conduits wrapped with Thermo-Lag is expected to begin on March 1, 1993, but could begin as early as February 27, 1993.

NRC QUESTION NO. 2

Conduit Fire Test Plan, Section 3.1, Acceptance Criteria, states, "If the average temperature recorded by the exterior raceway thermocouples is less than 250°F (121°C) above their initial temperature and no individual thermocouple is in excess of 325°F (163°C) above its initial temperature, the fire barrier shall be acceptable for use with any type of cable." This thermal limit criteria appears consistent with the intent of the thermal limits established in Generic Letter 86-10 by measuring the temperatures on the external surfaces of the raceway. From this criteria, if the fire barrier system does not exceed the thermal limits, the barrier has successfully performed.

In order for us to fully assess the intent of this criteria, we would like the applicant to clarify its position with respect to when the barrier system does not meet the thermal limit acceptance criteria.

TVA RESPONSE

(Note: The Centigrade temperatures in parentheses corresponding to the allowable Fahrenheit temperature rise shown in the test plan were incorrect due to a conversion error.)

Three distinct types of tests are involved in the WBN test program: fire exposure tests, cable functionality tests, and ampacity tests. Tests conducted by other organizations such as Texas Utilities that are evaluated as appropriate for TVA installations may be utilized through information sharing agreements.

1. Fire exposure tests. All intended applications of Thermo-Lag will be subjected to fire exposure tests in accordance with UL Subject 1724. (All sizes of raceways to be protected will not be tested, but all will be enveloped by test specimens). If the average temperature recorded by thermocouples on the exterior of a tested raceway is less than 250°F (139°C) above their initial temperature and no individual thermocouple is in excess of 325°F (181°C) above its initial temperature, the barrier system is acceptable and no cable functionality tests are required.
2. Cable functionality tests. If external raceway temperatures exceed the criteria in 1 above, the functionality of cable types to be protected by the barrier at WBN will be demonstrated by test. Samples of the cables will be exposed to a temperature profile matching that obtained from the maximum temperature recorded on thermocouples within the raceway system (i.e., attached to the bare copper cable [8 AWG] within the raceway during the fire exposure test). The cable functionality testing will be performed using an air oven pursuant to Appendix B of UL Subject 1724 with enhancements as previously described to NRC (see Attachment 3 to this enclosure - "Test Plan for Circuit Functionality Testing).
3. Ampacity tests. Ampacity tests will be conducted for all intended Thermo-Lag applications regardless of temperatures recorded during fire exposure tests. (See Enclosure 3, Test Plan R1, "Development of Ampacity Derating Factors For Fire Wrapped Raceways.")

NRC QUESTION NO. 3

Section 3.2, states that a bare copper cable (8 AWG) will be installed inside the raceway and used to measure the internal temperature conditions. Is this conductor going to be solid or stranded? In addition, the proposed ASTM standard for the testing of electrical raceway fire barrier systems recommends that a 14 AWG copper conductor be used. In order to understand the thermal response of the 8 AWG copper conductor, we would like the applicant's view concerning the difference in thermal lag measured by the thermocouples installed on an 8 AWG compared to those installed on a 14 AWG copper conductor, and those installed on the external raceway surface.

TVA RESPONSE

A stranded copper conductor (8 AWG) is used within the tested raceways. This is the cable size specified by UL Subject 1724, an existing standard which has been used for fire barrier qualification testing. TVA considers it more appropriate

to follow this existing standard rather than a draft document which has not yet had final industry or agency review and approval. It is our engineering judgement that the difference in thermal response between 14 AWG and 8 AWG cable would be insignificant since these tests involve relatively long-duration exposures without rapidly varying temperatures.

NRC QUESTION NO. 4

Section 5.2.3 indicates that OPL is to provide, assemble, install, and document the installation of all cable trays, conduits, cables, etc. We request that the applicant verify that the materials being supplied by OPL (i.e., cable tray and conduit) have similar characteristics (e.g., mass) to that used at the WBN facility. This section references cabling, it is our understanding from the information the applicant presented at the October 7, 1992 meeting, that cables were not going to be installed in the test specimen during the fire test. Please clarify which cables TVA is referring to in this section.

TVA RESPONSE

Conduits used by OPL in constructing fire exposure specimens were steel conduits of similar physical dimensions and mass to those intended for use at WBN. TVA intends to rely upon fire exposure tests of cable trays conducted by OPL for Texas Utilities for qualification of cable tray barriers and has verified that raceways used during those tests are similarly representative of those used at WBN.

The cable referred to in the test plan is the instrumented bare copper conductor in accordance to UL 1724.

NRC QUESTION NO. 5

In Section 7.5.2, "Conduit Items," the applicant identified the sizes of conduits and the configurations to be tested. We noted that the applicant intends to test a conduit configuration consisting of two 5-inch and two 1-inch conduits. In order to determine if the proposed tests bound the sizes of conduits being protected by the Thermo-Lag fire barrier system at the WBN facility, we request that the applicant provide us with a list of conduits and cable trays being protected by these fire barriers. This list should identify the sizes of the raceway (conduit and cable tray) and the cable percent fill.

TVA RESPONSE

See Attachment 1.

NRC QUESTION NO. 6

In Section 7.8, the applicant discussed the placement of thermocouples on the test specimens. The applicant indicated that it intends to follow UL 1724 to determine the number and spacing of the thermocouples along the raceway. With respect to TVA's test configuration, we need additional information concerning the distribution of thermocouples on the raceway. In order to complete our review, we request details of the thermocouples on the test specimen. In

addition, we need the applicant to discuss how it intends to average the temperature readings of the thermocouple strings and apply this data to the acceptance criteria.

TVA RESPONSE

Attachment 2 provides drawings showing the location of thermocouples on conduits. OPL has agreed to provide the specimens in the upcoming tests with a spacing of 6 inches between thermocouples for those on the external surface of the conduits as agreed to in our January 25, 1993 meeting. We have included data sheets showing thermocouple placement for the upcoming tests in Attachment 4. The readings of all thermocouples on the exterior surface of a conduit will be averaged to obtain a value for comparison to the average 250°F temperature rise criterion. In addition, the maximum reading of any individual thermocouple on the exterior conduit surface will be compared to the 325°F maximum temperature rise criterion. If both of these criteria are met, a tested barrier is considered acceptable, and temperatures measured on the bare copper conductor inside the conduit will not be used. If the temperature rise criteria are not met, cable functionality tests will be performed using a maximum internal temperature profile obtained from the thermocouples on the bare copper conductor.

TVA no longer intends to perform testing of Thermo-Lag barriers around cable trays. This represents a change from the test program described in our October 7, 1992 meeting. Instead, TVA will rely on tests successfully performed since that date by Texas Utilities in support of use of Thermo-Lag at Comanche Peak. The Texas Utilities tests have been separately reviewed by TVA and NRC.

NRC QUESTION NO. 7

Section 8.2 specifies the conditions of the hose stream test except that it does not identify the duration of application. This same basic fog stream application was found acceptable for Texas Utilities Electric. This test protocol specified a five minute duration of application. We request that the applicant confirm that its hose stream method will apply the fog stream to the test specimen for a minimum duration of five minutes.

TVA RESPONSE

The hose stream will be applied for a duration of five minutes. An optional hose stream criteria of 75 gpm at 75 psig, and an angle of 30° at a distance of 5 feet for a duration of five minutes may also be used.

NRC QUESTION NO. 8

In Figure 3, the applicant provided an overview of its conduit test configuration. In this figure, the applicant identifies the use of a Unistrut trapeze support for these conduits. We request that the applicant confirm that this support configuration is representative of those installed at WBN.

TVA RESPONSE

The Unistrut support used in the test specimens is representative of one way in which conduit is supported in the plant. Conduits are also supported by tube steel of various sizes and by fastening directly to concrete. The potential effect of a support which is of importance during fire exposure tests is the transmission of heat to the inside of the fire barrier. TVA considers the tested Unistrut configuration, protected by Thermo-Lag to a distance of 18 inches from the conduit, to be a reasonable representation of the heat transfer which might occur because of plant installations. Additional tests for junction boxes will include installations of conduit mounted to concrete. A temperature profile of Thermo-Lag insulated tube steel (2-inch and 4-inch square tube) will also be obtained during these tests.

NRC QUESTION NO. 9

WBN Fire Barrier Installation Instructions, Revision A, Section 1.3, "Definitions," Item B, "18-Inch Rule," specifies variances in the rule. In order to confirm the performance of both the 18-inch and 6-inch minimum protection for penetrating objects into the fire barrier system, we request that the applicant confirm that its test program bounds the variances specified in the definition.

TVA RESPONSE

The 6-inch minimum is applied in those situations where penetrating objects fall between 12 and 18 inches from the protected raceway. In those instances, protection of the support must extend to a minimum of 6 inches beyond the penetrating object. For example, if two conduits were 16 inches apart on the same support and one required fire wrap, the support would be wrapped to a distance of 6 inches from the second conduit (i.e., the one not requiring protection). This is considered more conservative than a single-valued criterion which would require the support to be protected for only 2 inches from the penetrating conduit (i.e., 18 inches from the conduit being protected).

TVA's test program includes protection of all supports to a distance of 18 inches. No intermediate penetrating objects are included in the tests. The temperature profile obtained from the upcoming tests will provide the basis for how much of the support must be protected.

NRC QUESTION NO. 10

In reviewing Sections 5.2 and 5.3 of the applicant's installation procedure, we noted that various fastening and supporting techniques (e.g., bolting to Unistrut steel frames) are going to be used. During our review of the applicant's conduit test plans, we could not confirm that these alternative methods of enclosing raceway with Thermo-Lag barrier panels are included in the testing program. We request that the applicant confirm that these panel/wall-type fire barrier systems are going to be tested by the testing program. In addition, we request that the applicant review the applicability of other fire testing standards (i.e., ASTM E-119) when developing the acceptance criteria for these proposed fire barrier system applications.

TVA RESPONSE

See Response No. 8 above. TVA considers the acceptance criteria of UL 1724 to be most appropriate for tests of electrical raceway enclosures since this is the only standard specifically intended for that purpose.

NRC QUESTION NO. 11

Section 5.2.H addresses the protection of supports and indicates that the primary load-bearing supports for these fire barrier systems will be protected in the plant. It is our understanding the applicant will be testing the test specimen supports unprotected. We find this appropriate and that it demonstrates a conservative approach.

TVA RESPONSE

The test specimens will have the supports protected in accordance with the 18-inch rule. Additional testing will be performed to obtain data on the required protection for structural supports in the next series of fire tests.

NRC QUESTION NO. 12

In the October 7, 1992 meeting, the applicant indicated that all of the fire barrier configurations to be tested would consist of enhanced configurations. In order to get a better understanding of the scope of this program, we request that the applicant provide an overview which identifies, in some detail, the configurations being tested, the fire barrier system application being used, and the design enhancements or upgrades being applied to each configuration.

TVA RESPONSE

TVA's initial tests included a number of enhanced configurations of Thermo-Lag, as described in our October 16 submittal. The results of the December 21, 1993 tests have determined that a 5-inch conduit is adequately protected with the nominal 5/8-inch preformed conduit section supplied by Thermal Science, Inc., and that an additional minimum 1/4-inch upgrade will adequately protect conduits smaller than 5 inches. The upcoming tests will be used to determine what size conduits require additional upgrade and to qualify those upgrades to TVA's acceptance criteria.

NRC QUESTION NO. 13

At the October 7, 1992 meeting, the applicant indicated that it intends to follow the intent of air oven testing outlined in UL 1724, in conjunction with megger and high potential testing, to demonstrate cable functionality. In order to properly evaluate the applicant's approach for functionality, we request that the applicant submit, in a timely manner, their electrical cable testing acceptance criteria for review before its initiation of any functionality testing. In addition, this criteria should provide us with sufficient details on the configuration of the air oven and test specimen and the test methods for demonstrating cable functionality.

TVA RESPONSE

See Attachment 3 of this enclosure. If the fire tests meet the criteria of the average conduit temperature not exceeding 250°F above ambient, and no single thermocouple exceeding 325°F above ambient, then no circuit functionality testing will be done.

ATTACHMENT 1

ATTACHMENT 1

1. This attachment contains a preliminary list of electrical cable raceways (conduit and tray) which either are presently or may in the future be protected by fire wrap.
2. This is a conservative list in that it contains more raceways than are expected to require protection. The conservatism is necessary because implementation of several in-process design changes involve field routed conduits. The installed location will determine the actual fire wrap requirements.
3. Many of the listed raceways are already protected by 3-M fire barrier material which may at some time be replaced with Thermo-lag 330.
4. The percent fill listed for each raceway was calculated by summing the cross-sectional area of all cables in the raceway and dividing by the cross-sectional area of the raceway.

LEGEND

RACEWAY TYPE

- T - Cable Tray
- C - Conduit

RACEWAY SIZE

- ww x h TRAY - cable tray dimensions
- d.d I - Iron conduit diameter
- d.d A - Aluminum conduit diameter
- d.d FL - Flex conduit diameter

WATTS BAR NUCLEAR PLANT
PERCENT FILL OF CONDUITS AND TRAYS WITH CABLES THAT MAY NEED FIREWRAP
**** FOR INFORMATION ONLY ****

PAGE 1

RCWY ID	RCWY TYPE	RCWY VOLT	RCWY SIZE	PERCENT FILL
1	2	T	2D	12X4TRAY 31.34
1	2	T	2E	12X4TRAY 33.27
1	2	T	2F	12X4TRAY 11.67
1	2	T	2G	12X4TRAY 8.83
5	5	T	3A	18X4TRAY 19.71
6	22	T	3A	18X4TRAY 20.15
22	71	T	3A	18X4TRAY 20.15
35	35	T	3A	18X4TRAY 33.05
55	2191	T	3A	18X4TRAY 26.33
56	57	T	3A	18X4TRAY 29.17
57	53	T	3A	18X4TRAY 24.92
58	57	T	3A	18X4TRAY 23.72
59	60	T	3A	18X4TRAY 48.79
59	2171	T	3A	18X4TRAY 21.53
60	61	T	3A	18X4TRAY 65.73
61	62	T	3A	18X4TRAY 64.18
62	67	T	3A	18X4TRAY 53.37
67	2170	T	3A	18X4TRAY 55.33
68	69	T	3A	18X4TRAY 52.17
69	2190	T	3A	18X4TRAY 58.78
71	135	T	3A	18X4TRAY 12.93
96	97	T	3A	18X4TRAY 52.07
96	110	T	3A	18X4TRAY 64.03
97	98	T	3A	18X4TRAY 39.10
98	99	T	3A	18X4TRAY 33.72
99	100	T	3A	18X4TRAY 31.28
100	101	T	3A	18X4TRAY 32.01
101	102	T	3A	18X4TRAY 29.37
101	2226	T	3A	18X4TRAY 11.14
102	103	T	3A	18X4TRAY 30.49
103	104	T	3A	18X4TRAY 28.49
104	105	T	3A	18X4TRAY 27.21
105	112	T	3A	18X4TRAY 17.00
110	2223	T	3A	18X4TRAY 62.51
111	112	T	3A	18X4TRAY 12.40
134	135	T	3A	18X4TRAY 21.75
135	136	T	3A	18X4TRAY 16.13
200	201	T	3B	18X4TRAY 39.14
201	220	T	3B	18X4TRAY 31.61
202	203	T	3B	18X4TRAY 19.73
203	223	T	3B	18X4TRAY 19.23
204	205	T	3B	18X4TRAY 18.13
205	222	T	3B	18X4TRAY 17.14
220	221	T	3B	18X4TRAY 31.61
221	269	T	3B	18X4TRAY 31.61
222	270	T	3B	18X4TRAY 17.14
223	224	T	3B	18X4TRAY 19.23
224	272	T	3B	18X4TRAY 19.23
251	268	T	3B	18X4TRAY 21.15
254	255	T	3B	18X4TRAY 49.46

WATTS BAR NUCLEAR PLANT
PERCENT FILL OF CONDUITS AND TRAYS WITH CABLES THAT MAY NEED FIREWRAP
**** FOR INFORMATION ONLY ****

PAGE 2

RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
254 2182	T 38	18X4TRAY	28.59
255 256	T 38	18X4TRAY	37.77
255 269	T 38	18X4TRAY	17.91
256 257	T 38	18X4TRAY	25.73
257 258	T 38	18X4TRAY	23.56
258 259	T 38	18X4TRAY	24.30
259 260	T 38	18X4TRAY	26.14
260 2186	T 38	18X4TRAY	11.41
261 262	T 38	18X4TRAY	31.93
261 272	T 38	18X4TRAY	13.02
262 263	T 38	18X4TRAY	32.83
263 264	T 38	18X4TRAY	34.81
264 2190	T 38	18X4TRAY	21.53
268 2177	T 38	18X4TRAY	9.43
270 333	T 38	18X4TRAY	11.22
272 303	T 38	18X4TRAY	6.56
293 294	T 38	18X4TRAY	9.30
293 310	T 38	18X4TRAY	5.30
294 295	T 38	18X4TRAY	19.16
295 296	T 38	18X4TRAY	19.93
296 297	T 38	18X4TRAY	46.05
296 2231	T 38	18X4TRAY	39.24
297 298	T 38	18X4TRAY	36.07
298 299	T 38	18X4TRAY	22.84
298 2233	T 38	18X4TRAY	20.89
299 300	T 38	18X4TRAY	20.72
300 301	T 38	18X4TRAY	22.50
301 302	T 38	18X4TRAY	25.64
302 303	T 38	18X4TRAY	9.34
303 304	T 38	18X4TRAY	19.50
304 305	T 38	18X4TRAY	15.95
304 2237	T 38	18X4TRAY	8.18
305 306	T 38	18X4TRAY	19.66
306 2239	T 38	18X4TRAY	39.64
332 333	T 38	18X4TRAY	25.21
333 334	T 38	18X4TRAY	21.29
334 335	T 38	18X4TRAY	18.07
335 336	T 38	18X4TRAY	15.39
336 337	T 38	18X4TRAY	13.48
337 338	T 38	18X4TRAY	15.25
338 339	T 38	18X4TRAY	18.98
A 4081	C 2B	1.5 I	31.66
A 4082	C 2B	1.0 I	37.55
A 4085	C 2A	1.5 I	31.66
A 4086	C 2A	1.0 I	52.90
A 4087	C 2A	1.0 I	42.67
A 4095	C 2A	2.0 I	19.37
A 4096	C 2B	2.0 I	19.37
B 1088	C 4F	3.0 A	26.34
MC 340	C 3A	3.0 I	7.44

WATTS BAR NUCLEAR PLANT
PERCENT FILL OF CONDUITS AND TRAYS WITH CABLES THAT MAY NEED FIREWRAP
**** FOR INFORMATION ONLY ****

PAGE 3

RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
MC 341	C 3A 2.0 I	16.36	
MC 539	C 4A 5.0 I	4.34	
MC 556	C 5A 5.0 I	26.29	
MC 557	C 5A 5.0 I	26.29	
MC 632	C 4A 3.0 I	6.95	
MC 633	C 4A 2.0 I	15.29	
MC 634	C 4A 2.0 I	7.64	
MC 635	C 4A 2.0 I	7.54	
MC 672	C 3A 5.0 I	2.67	
MC 675	C 3B 2.0 I	21.54	
MC 677	C 4B 2.0 I	6.33	
MC 690	C 4B 2.0 I	5.33	
MC 691	C 3A 2.0 I	21.54	
MC 846	C 2A 3.0 I	8.80	
MC 847	C 2B 3.0 I	8.80	
MC 849	C 3B 3.0 I	5.95	
MC 850	C 3B 3.0 I	5.95	
MC 869	C 2B 3.0 I	18.87	
MC 870	C 2B 3.0 I	21.37	
MC 871	C 3B 3.0 I	8.29	
MC 875	C 2A 3.0 I	23.91	
MC 879	C 2A 3.0 I	29.36	
MC 880	C 2B 3.0 I	34.39	
MC 895	C 2A 3.0 I	34.39	
MC 896	C 2A 2.0 I	38.75	
MC 900	C 2A 3.0 I	16.35	
MC 906	C 2B 3.0 I	34.39	
MC 908	C 3B 3.0 I	8.13	
MC 913	C 2B 2.0 I	38.75	
MC 923	C 2A 3.0 I	26.52	
MC 924	C 2B 3.0 I	36.26	
MC 925	C 2A 3.0 I	36.26	
MC 940	C 2B 3.0 I	36.26	
MC 941	C 2A 3.0 I	26.52	
MC 943	C 2A 3.0 I	36.26	
MC 944	C 2A 3.0 I	17.19	
MC 946	C 2A 3.0 I	18.45	
MC 947	C 2B 3.0 I	16.77	
MC 1103	C 3B 3.0 I	13.19	
MC 1104	C 3B 2.0 I	29.01	
MC 1300	C 3B 3.0 I	3.97	
MC 1301	C 3B 3.0 I	13.19	
MC 2607	C 2A 3.0 I	30.62	
MC 2608	C 2A 1.5 I	37.99	
MC 2609	C 2A 1.5 I	37.99	
MC 2610	C 2A 2.0 I	23.06	
MC 2616	C 2B 3.0 I	36.91	
MC 2801	C 2A 3.0 I	34.39	
MC 3309	C 2A 3.0 I	11.32	
MC 3319	C 2A 3.0 I	11.32	

WATTS BAR NUCLEAR PLANT
 PERCENT FILL OF CONDUITS AND TRAYS WITH CABLES THAT MAY NEED FIREWRAP
 **** FOR INFORMATION ONLY ****

PAGE 4

RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
MC 3468	C 3A	3.0 I	34.87
MC 3492	C 2B	3.0 I	19.71
PLC 53	C 3B	2.0 I	11.69
PLC 58	C 3B	2.0 I	36.04
PLC 65	C 3A	2.0 I	35.59
PLC 66	C 3A	2.0 I	33.42
PLC 68	C 3A	1.5 I	33.23
PLC 69	C 3A	2.0 I	20.17
PLC 74	C 3B	2.0 I	30.41
PLC 75	C 3A	1.5 I	24.31
PLC 371	C 4B	2.0 I	27.97
PLC 1520	C 5A	4.0 I	33.08
PLC 1621	C 5A	4.0 I	33.08
PLC 1623	C 5A	4.0 I	33.08
PLC 1624	C 5A	4.0 I	33.08
PLC 1625	C 5B	4.0 I	33.08
PLC 1627	C 5B	4.0 I	33.08
PLC 1629	C 5B	4.0 I	33.08
PLC 1630	C 5B	4.0 I	33.08
PLC 1895	C 3B	1.0 I	11.04
PLC 1896	C 3B	1.5 I	4.65
PLC 2093	C 3B	1.5 I	37.64
PLC 2095	C 3A	1.5 I	13.52
PLC 2096	C 3A	1.5 I	10.78
PLC 2568	C 3B	1.0 I	25.58
PLC 2956	C 3B	2.0 I	12.41
PLC 3802	C 3B	2.0 I	33.89
PP 2541	C 5B	5.0 I	31.15
PP 2544	C 5B	5.0 I	31.90
PP 2547	C 5A	5.0 I	31.90
PP 2550	C 5A	5.0 I	62.30
PP 2570	C 3A	1.5 I	35.09
PP 2671	C 3A	3.0 I	16.49
PP 2672	C 3A	1.5 I	35.09
PP 2673	C 3A	1.5 I	24.65
PP 2674	C 3A	3.0 I	16.49
PP 2782	C 5B	4.0 I	33.08
PP 2783	C 5B	4.0 I	33.08
PP 2784	C 5A	4.0 I	38.64
PP 2785	C 5A	4.0 I	35.08
PP 2797	C 5A	4.0 I	33.08
PP 2788	C 5A	4.0 I	38.64
PP 2789	C 5B	4.0 I	38.64
PP 2790	C 5B	4.0 I	38.64
PP 2791	C 5B	4.0 I	38.64
PP 2792	C 5B	4.0 I	38.64
PP 2793	C 5B	4.0 I	38.64
PP 2794	C 5A	4.0 I	38.64
PP 2795	C 5A	4.0 I	38.64
PP 2795	C 5A	4.0 I	38.64

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
INM 3301	C 2D	3.0 I	10.21
INM 3303	C 2D	3.0 I	10.21
INM 3305	C 2D	3.0 I	10.21
INM 3307	C 2D	3.0 I	10.21
INM 3309	C 2D	3.0 I	10.21
INM 3311	C 2D	3.0 I	10.21
INM 3313	C 2D	3.0 I	10.21
INM 3389	C 2D	3.0 I	10.21
INM 3371	C 2D	3.0 I	10.21
INM 3376	C 2D	3.0 I	10.21
IPLC 9	C 4A	3.0 I	17.53
IPLC 9	C 4A	1.0 I	29.83
IPLC 10	C 3A	1.5 I	40.49
IPLC 13	C 4B	3.0 I	17.53
IPLC 14	C 4B	1.0 I	43.02
IPLC 15	C 3B	1.0 I	41.16
IPLC 17	C 3B	1.0 I	47.55
IPLC 18	C 4A	2.0 I	28.45
IPLC 19	C 4A	2.0 I	11.19
IPLC 20	C 3A	1.5 I	22.00
IPLC 21	C 3B	1.0 I	47.55
IPLC 23	C 4B	1.5 I	46.86
IPLC 24	C 4B	2.0 I	11.19
IPLC 25	C 3B	1.5 I	21.66
IPLC 26	C 2D	1.0 I	10.31
IPLC 28	C 2F	1.0 I	10.31
IPLC 46	C 4A	1.5 I	10.44
IPLC 47	C 4B	1.5 I	10.44
IPLC 48	C 4A	1.5 I	23.43
IPLC 49	C 3A	1.0 I	39.41
IPLC 52	C 4B	1.5 I	23.43
IPLC 60	C 2F	1.0 I	10.31
IPLC 61	C 2D	1.0 I	10.31
IPLC 80	C 2A	1.0 I	10.31
IPLC 82	C 2B	1.0 I	10.31
IPLC 243	C 4A	1.5 I	10.44
IPLC 244	C 4B	1.0 I	24.76
IPLC 255	C 3A	1.5 I	22.00
IPLC 282	C 4B	1.0 I	24.76
IPLC 285	C 3B	1.5 I	35.56
IPLC 287	C 3B	1.5 I	17.30
IPLC 288	C 3A	1.5 I	26.91
IPLC 582	C 4A	4.0 I	21.93
IPLC 583	C 4A	4.0 I	21.98
IPLC 588	C 4B	3.0 I	26.22
IPLC 589	C 4B	3.0 I	26.22
IPLC 598	C 4B	2.0 I	12.67
IPLC 599	C 3B	1.5 I	10.83
IPLC 721	C 3A	3.0 I	23.49
IPLC 722	C 4A	3.0 I	13.32

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PLC 727	C 3A	3.0 I	42.86
1PLC 737	C 3A	3.0 I	32.00
1PLC 742	C 4A	3.0 I	8.10
1PLC 752	C 3B	3.0 I	11.66
1PLC 760	C 3B	3.0 I	32.90
1PLC 762	C 3B	3.0 I	43.03
1PLC 785	C 3A	3.0 I	29.97
1PLC 795	C 3B	2.0 I	56.50
1PLC 797	C 3B	3.0 I	27.59
1PLC 811	C 3A	3.0 I	37.72
1PLC 812	C 4A	3.0 I	10.71
1PLC 813	C 3B	3.0 I	29.25
1PLC 836	C 3B	3.0 I	24.57
1PLC 837	C 4B	3.0 I	10.31
1PLC 838	C 3B	3.0 I	24.50
1PLC 848	C 3B	3.0 I	13.78
1PLC 849	C 4B	3.0 I	5.49
1PLC 941	C 3A	3.0 I	12.89
1PLC 943	C 3B	2.0 I	36.60
1PLC 986	C 3A	3.0 I	9.72
1PLC 1475	C 4A	3.0 I	26.88
1PLC 1918	C 4B	2.0 I	24.82
1PLC 1939	C 3A	2.0 I	19.67
1PLC 1940	C 4A	1.5 I	15.73
1PLC 1943	C 3A	0.75I	42.64
1PLC 1944	C 3A	0.75I	23.77
1PLC 1948	C 4B	1.5 I	15.73
1PLC 1970	C 4B	2.0 I	24.82
1PLC 1976	C 4B	2.0 I	31.51
1PLC 1977	C 3B	1.0 I	39.88
1PLC 2366	C 4A	3.0 I	22.25
1PLC 2482	C 4A	4.0 I	20.36
1PLC 2492	C 4A	5.0 I	37.12
1PLC 2493	C 4A	5.0 I	37.12
1PLC 2514	C 4A	3.0 I	17.53
1PLC 2515	C 4A	5.0 I	37.12
1PLC 2525	C 3B	2.0 I	35.32
1PLC 2533	C 4B	3.0 I	17.53
1PLC 2535	C 3B	1.0 I	22.09
1PLC 2552	C 4B	3.0 I	17.53
1PLC 2558	C 3B	1.0 I	22.09
1PLC 2607	C 4A	5.0 I	37.12
1PLC 2608	C 4A	5.0 I	37.12
1PLC 2620	C 4A	4.0 I	25.14
1PLC 2621	C 4A	4.0 I	25.14
1PLC 2622	C 4A	4.0 I	25.14
1PLC 2623	C 4A	4.0 I	25.14
1PLC 2629	C 4B	4.0 I	25.14
1PLC 2631	C 4B	4.0 I	25.14
1PLC 2645	C 4A	3.0 I	10.44

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
IPLC 2646	C 3A	3.0 I	29.55
IPLC 2653	C 3A	3.0 I	39.33
IPLC 2663	C 3B	3.0 I	25.25
IPLC 2664	C 4B	3.0 I	5.22
IPLC 2666	C 4B	3.0 I	10.44
IPLC 2697	C 4A	2.0 I	14.22
IPLC 2700	C 4A	3.0 I	12.04
IPLC 2701	C 3A	3.0 I	17.72
IPLC 2714	C 3A	2.0 I	24.19
IPLC 2719	C 3A	1.5 FL	61.27
IPLC 2726	C 4A	3.0 I	18.18
IPLC 2728	C 3A	1.5 I	10.83
IPLC 2729	C 4A	3.0 I	34.50
IPLC 2732	C 3A	2.0 I	16.27
IPLC 2733	C 3B	2.0 I	38.06
IPLC 2737	C 3A	2.0 I	37.41
IPLC 2738	C 3A	2.0 I	30.62
IPLC 2753	C 4B	2.0 I	41.84
IPLC 2754	C 3B	3.0 I	25.40
IPLC 2763	C 4B	3.0 I	18.02
IPLC 2764	C 3B	3.0 I	31.52
IPLC 2775	C 3B	2.0 I	28.36
IPLC 2777	C 3B	1.5 I	13.23
IPLC 2778	C 3B	1.5 I	15.33
IPLC 2780	C 4B	2.0 I	27.38
IPLC 2797	C 3B	2.0 I	17.88
IPLC 2800	C 4A	4.0 I	24.65
IPLC 2801	C 4A	4.0 I	24.65
IPLC 2803	C 4A	3.0 I	25.65
IPLC 2804	C 4A	3.0 I	25.65
IPLC 2805	C 4B	3.0 I	25.65
IPLC 2806	C 4B	3.0 I	25.65
IPLC 2807	C 4B	3.0 I	25.65
IPLC 2808	C 4B	3.0 I	43.31
IPLC 2809	C 4B	3.0 I	25.65
IPLC 2810	C 4B	3.0 I	43.31
IPLC 2811	C 4B	3.0 I	25.65
IPLC 2812	C 4B	3.0 I	43.31
IPLC 2813	C 4B	3.0 I	25.65
IPLC 2814	C 4B	3.0 I	43.31
IPLC 2817	C 4A	3.0 I	43.31
IPLC 2818	C 4A	3.0 I	43.31
IPLC 2850	C 4A	3.0 I	32.31
IPLC 2858	C 4A	3.0 I	32.90
IPLC 3245	C 4A	3.0 I	17.25
IPLC 3322	C 4A	1.5 I	9.85
IPLC 3323	C 4A	3.0 FL	34.50
IPLC 3324	C 3B	1.5 I	21.76
IPLC 3325	C 3B	1.0 I	26.39
IPLC 3328	C 4B	1.5 I	9.85

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PLC 3329	C 48	4.0 I	20.03
1PLC 3353	C 48	3.0 I	25.65
1PLC 3354	C 48	3.0 I	25.65
1PLC 3358	C 38	2.0 I	19.13
1PLC 3359	C 48	2.0 I	31.51
1PLC 3362	C 48	3.0 I	17.25
1PLC 3363	C 48	4.0 I	32.00
1PLC 3365	C 48	4.0 I	32.00
1PLC 3367	C 48	4.0 I	32.00
1PLC 3395	C 4A	3.0 I	32.90
1PLC 3595	C 48	2.0 I	13.98
1PLC 3596	C 38	1.0 I	25.58
1PLC 3659	C 3A	2.0 I	27.02
1PLC 3772	C 48	5.0 I	24.01
1PLC 3773	C 48	5.0 I	24.01
1PLC 3777	C 48	5.0 I	24.01
1PLC 3782	C 4A	2.0 I	37.94
1PLC 3783	C 48	2.0 I	37.94
1PLC 3784	C 4A	2.0 I	37.94
1PLC 3785	C 48	2.0 I	37.94
1PLC 3791	C 48	4.0 I	32.66
1PLC 3802	C 4A	4.0 I	20.36
1PLC 3803	C 48	4.0 I	20.36
1PLC 3804	C 48	4.0 I	20.36
1PLC 3805	C 4A	2.0 I	38.57
1PLC 3806	C 48	2.0 I	38.57
1PLC 3807	C 48	2.0 I	38.57
1PLC 3808	C 4A	4.0 I	20.36
1PLC 3809	C 4A	4.0 I	20.36
1PLC 3810	C 48	4.0 I	20.36
1PLC 3811	C 48	4.0 I	20.36
1PLC 3824	C 4A	2.0 I	25.36
1PLC 3825	C 4A	3.0 FL	17.25
1PLC 3826	C 4A	3.0 FL	17.25
1PLC 3829	C 38	2.0 I	18.48
1PLC 3832	C 38	1.0 FL	38.48
1PLC 3835	C 38	3.0 I	26.35
1PLC 3863	C 3A	3.0 I	4.58
1PLC 3864	C 3A	2.5 I	12.46
1PLC 3941	C 4A	3.0 I	18.13
1PLC 3942	C 4A	3.0 I	17.53
1PLC 3945	C 48	3.0 I	34.50
1PLC 3946	C 48	3.0 I	34.50
1PLC 3947	C 48	3.0 I	34.50
1PLC 3948	C 48	3.0 I	34.50
1PLC 3949	C 48	3.0 I	34.50
1PLC 4008	C 48	3.0 I	17.25
1PLC 4009	C 48	3.0 I	17.25
1PLC 4015	C 4A	4.0 I	25.14
1PLC 4017	C 48	5.0 I	15.58

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RCWY ID	RCWY MODE	TYPE	VOLT	RCWY SIZE	PERCENT FILL
PP 2797	C	5A	4.0	I	38.64
PP 2798	C	5A	4.0	I	38.64
PP 2799	C	5A	4.0	I	38.64
PP 2800	C	5A	4.0	I	38.64
PP 2801	C	5A	4.0	I	38.64
PP 2802	C	5A	4.0	I	38.64
PP 2803	C	5A	4.0	I	38.64
PP 2804	C	5A	4.0	I	38.64
PP 2805	C	5B	4.0	I	38.64
PP 2806	C	5B	4.0	I	38.64
PP 2807	C	5B	4.0	I	38.64
PP 2808	C	5B	4.0	I	38.64
PP 2809	C	5B	4.0	I	38.64
PP 2810	C	5B	4.0	I	38.64
PP 2811	C	5B	4.0	I	38.64
VC 1750	C	3A	2.0	I	32.35
Z 7	T	2B	18X4	TRAY	19.13
Z 11	T	2A	18X4	TRAY	31.06
Z 19	T	3A	18X4	TRAY	21.42
Z 23	T	3B	18X4	TRAY	32.85
Z 40	T	3A	12X4	TRAY	11.21
Z 45	T	3A	18X4	TRAY	36.82
Z 47	T	3B	18X4	TRAY	36.73
Z 48	T	3B	18X4	TRAY	36.92
Z 62	T	3A	18X4	TRAY	10.14
1AC 2001	C	2	3.0	I	5.03
1B 1040	C	4D	1.0	I	24.88
1B 1042	C	4D	1.0	I	24.88
1B 1044	C	4D	2.0	I	25.47
1B 1046	C	4F	1.0	I	24.88
1B 1048	C	4F	1.0	I	24.88
1B 1049	C	4F	2.0	I	25.47
1B 1051	C	4G	1.0	I	24.88
1B 1053	C	4G	1.0	I	24.88
1B 1054	C	4G	2.0	I	25.47
1B 1055	C	4E	1.0	I	24.88
1B 1057	C	4E	1.0	I	24.88
1B 1059	C	4E	2.0	I	25.47
1B 1225	C	4G	2.0	I	25.47
1B 1229	C	4G	2.0	I	25.47
1B 1237	C	4E	2.0	I	25.47
1B 1238	C	4E	2.0	I	25.47
1NM 3143	C	2D	3.0	I	10.21
1NM 3145	C	2D	3.0	I	10.21
1NM 3147	C	2D	3.0	I	10.21
1NM 3149	C	2D	3.0	I	10.21
1NM 3150	C	2D	3.0	I	10.21
1NM 3152	C	2D	3.0	I	10.21
1NM 3154	C	2D	3.0	I	10.21
1NM 3292	C	2D	3.0	I	10.21

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RCWY ID	RCWY TYPE	NODE VOLT	RCWY SIZE	PERCENT FILL
IPLC 4033	C	3B	1.5 I	16.17
IPLC 4034	C	3B	1.5 I	32.35
IPLC 4035	C	3B	1.5 I	32.35
IPLC 4036	C	3B	1.5 I	10.78
IPLC 4037	C	3B	1.5 I	21.56
IPLC 4038	C	3B	1.5 I	15.17
IPLC 4048	C	4B	5.0 I	15.68
IPLC 4049	C	4A	4.0 I	25.14
IPLC 4056	C	3A	1.5 I	7.94
IPLC 4057	C	3A	1.5 I	15.88
IPLC 4058	C	3A	1.5 I	7.94
IPLC 4059	C	3A	1.5 I	7.94
IPLC 4063	C	3B	1.5 I	7.94
IPLC 4064	C	3B	1.5 I	15.88
IPLC 4065	C	3B	1.5 I	15.88
IPLC 4066	C	3B	1.5 I	15.88
IPLC 4067	C	3B	1.5 I	7.94
IPLC 4068	C	3B	1.5 I	7.94
IPM 100	C	2D	0.75FL	17.54
IPM 101	C	2D	0.75FL	17.54
IPM 102	C	2E	0.75FL	17.54
IPM 103	C	2E	0.75FL	17.54
IPM 5540	C	2F	3.0 I	35.27
IPM 5541	C	2D	3.0 I	34.34
IPM 5542	C	2D	3.0 I	30.62
IPM 5551	C	2E	3.0 I	26.00
IPM 5552	C	2E	3.0 I	34.13
IPM 5553	C	2G	3.0 I	26.53
IPM 5554	C	2F	1.5 I	13.67
IPM 5558	C	2A	3.0 I	36.58
IPM 5560	C	2G	3.0 I	19.71
IPM 5562	C	2E	3.0 I	2.51
IPM 5563	C	2	1.0 I	10.81
IPM 5565	C	2	1.0 I	10.81
IPM 6126	C	3B	2.0 I	23.39
IPM 6133	C	2G	3.0 I	23.97
IPM 6155	C	2G	3.0 I	8.80
IPM 6161	C	2F	3.0 I	44.97
IPM 6163	C	2F	3.0 I	14.35
IPM 6164	C	2F	3.0 I	27.60
IPM 6166	C	2F	3.0 I	11.32
IPM 6186	C	2D	3.0 I	30.04
IPM 6188	C	2D	3.0 I	29.07
IPM 6190	C	2D	3.0 I	29.85
IPM 6195	C	2D	3.0 I	32.32
IPM 6207	C	2E	3.0 I	30.28
IPM 6209	C	2E	3.0 I	32.55
IPM 6211	C	2E	3.0 I	29.85
IPM 6213	C	2E	3.0 I	8.80
IPM 6215	C	2E	3.0 I	33.58

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PM 6216	C 2E 3.0 I	26.00	
1PM 6217	C 2E 3.0 I	35.60	
1PM 6218	C 2G 3.0 I	6.29	
1PM 6219	C 2G 3.0 I	27.72	
1PM 6220	C 2F 3.0 I	34.08	
1PM 6221	C 2F 3.0 I	5.03	
1PM 6222	C 2D 3.0 I	32.67	
1PM 6223	C 2D 3.0 I	30.62	
1PM 6249	C 2B 2.0 I	13.93	
1PM 6330	C 2B 3.0 I	28.29	
1PM 6331	C 2B 3.0 I	26.88	
1PM 6332	C 2B 3.0 I	23.01	
1PM 6333	C 2B 3.0 I	11.69	
1PM 6344	C 2A 1.5 I	22.79	
1PM 6345	C 2B 1.5 I	27.35	
1PM 6350	C 2G 3.0 I	19.71	
1PM 6351	C 2G 3.0 I	26.42	
1PM 6352	C 2G 3.0 I	27.72	
1PM 6360	C 2F 3.0 I	27.26	
1PM 6361	C 2F 3.0 I	32.71	
1PM 6362	C 2F 3.0 I	32.71	
1PM 6363	C 2F 3.0 I	35.27	
1PM 6367	C 2F 3.0 I	2.51	
1PM 6368	C 2F 3.0 I	2.51	
1PM 6369	C 2F 3.0 I	2.51	
1PM 6378	C 2B 3.0 I	5.03	
1PM 6379	C 2B 3.0 I	16.04	
1PM 6382	C 2E 3.0 I	31.04	
1PM 6383	C 2E 3.0 I	31.04	
1PM 6384	C 2E 3.0 I	31.04	
1PM 6388	C 2F 3.0 I	26.00	
1PM 6389	C 2F 3.0 I	25.00	
1PM 6390	C 2F 3.0 I	26.00	
1PM 6395	C 2G 3.0 I	18.45	
1PM 6396	C 2G 3.0 I	18.45	
1PM 6397	C 2G 3.0 I	18.45	
1PM 6398	C 2D 3.0 I	29.78	
1PM 6399	C 2D 3.0 I	29.78	
1PM 6420	C 2D 3.0 I	29.78	
1PM 6439	C 2D 0.75 I	23.39	
1PM 6440	C 2E 3.0 I	32.30	
1PM 6442	C 2E 3.0 I	21.39	
1PM 6443	C 2E 3.0 I	32.62	
1PM 6444	C 2E 3.0 I	38.95	
1PM 6445	C 2E 3.0 I	35.60	
1PM 6446	C 2E 3.0 I	7.55	
1PM 6447	C 2E 3.0 I	2.51	
1PM 6448	C 2E 3.0 I	2.51	
1PM 6449	C 2E 1.0 I	21.62	
1PM 6461	C 2A 3.0 I	25.62	

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PM 6466	C 2D	0.75I	17.54
1PM 6467	C 2A	3.0 I	27.78
1PM 6470	C 2D	3.0 I	29.78
1PM 6473	C 2D	3.0 I	31.36
1PM 6474	C 2D	3.0 I	31.36
1PM 6475	C 2D	3.0 I	34.34
1PM 6476	C 2D	3.0 I	20.97
1PM 6477	C 2D	3.0 I	2.51
1PM 6478	C 2D	3.0 I	2.51
1PM 6479	C 2D	0.75I	17.54
1PM 6493	C 2E	1.5 I	9.11
1PM 6495	C 2A	1.0 I	21.62
1PM 6498	C 2A	3.0 I	19.24
1PM 6499	C 2A	3.0 I	13.88
1PM 6502	C 2B	1.0 I	21.62
1PM 6504	C 2B	3.0 I	16.45
1PM 6530	C 2E	2.0 I	5.53
1PM 6561	C 2D	0.75I	23.39
1PM 6563	C 2E	0.75I	23.39
1PM 6564	C 2D	0.75I	23.39
1PM 6567	C 2D	0.75I	23.39
1PM 6584	C 2E	0.75I	23.39
1PM 6620	C 2G	1.0 I	21.62
1PM 6645	C 2B	3.0 I	15.10
1PM 6646	C 2B	2.0 I	38.75
1PM 6650	C 2A	2.0 I	38.75
1PM 6651	C 2A	2.0 I	38.75
1PM 6714	C 2D	1.0 I	21.62
1PM 6917	C 2B	1.5 I	9.11
1PM 6919	C 2B	1.5 I	9.11
1PM 6937	C 2E	0.75FL	17.54
1PM 6938	C 2E	0.75FL	17.54
1PM 7184	C 2B	2.0 I	16.60
1PM 7185	C 2A	2.0 I	11.07
1PM 7195	C 2B	2.0 I	16.60
1PM 7260	C 2D	3.0 I	30.62
1PM 7261	C 2E	3.0 I	26.00
1PM 7262	C 2F	3.0 I	5.03
1PM 7263	C 2G	3.0 I	6.29
1PM 7266	C 2D	1.0 I	21.62
1PM 7278	C 2A	1.0 I	10.81
1PM 7356	C 2A	2.0 I	19.37
1PM 7358	C 2B	2.0 I	19.37
1PM 7376	C 2B	2.0 I	11.07
1PM 7380	C 2A	2.0 I	19.37
1PM 7381	C 2B	1.0 I	10.81
1PM 7382	C 2B	1.0 I	10.81
1PM 7383	C 2B	2.0 I	13.83
1PM 7384	C 2B	2.0 I	21.22
1PM 7386	C 2B	2.0 I	23.98

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PM 7387	C 2A	2.0 I	21.22
1PM 7388	C 2A	2.0 I	21.22
1PM 7391	C 2B	1.0 I	10.81
1PM 7392	C 2A	1.0 I	10.81
1PM 7395	C 2G	0.50FL	31.00
1PM 7396	C 2G	0.50FL	31.00
1PM 7399	C 2B	0.50FL	31.00
1PM 7447	C 2D	0.75FL	17.54
1PM 7451	C 2E	0.75FL	17.54
1PM 7476	C 2	0.75FL	17.54
1PM 7502	C 2D	0.50FL	31.00
1PM 7503	C 2D	1.0 I	21.62
1PM 7506	C 2	1.0 I	21.62
1PM 7508	C 2E	1.0 I	21.62
1PM 7580	C 2F	1.0 I	32.44
1PM 7581	C 2F	1.0 I	21.62
1PM 7582	C 2F	0.75FL	17.54
1PM 7840	C 2A	2.0 I	19.37
1PM 7845	C 2B	2.0 I	19.37
1PM 7997	C 2B	2.0 I	16.60
1PM 8012	C 2B	1.5 I	9.11
1PM 8014	C 2B	1.0 I	10.81
1PM 8020	C 2D	2.0 I	22.14
1PM 8021	C 2D	1.5 I	30.39
1PM 8022	C 2D	1.5 I	24.31
1PM 8024	C 2D	1.5 I	18.23
1PM 8026	C 2E	1.0 I	23.33
1PM 8060	C 2	1.0 I	32.44
1PP 2000	C 5A	4.0 I	20.00
1PP 2002	C 5A	4.0 I	20.00
1PP 2004	C 5B	4.0 I	40.01
1PP 2005	C 5B	1.5 I	19.31
1PP 2006	C 5B	4.0 I	40.01
1PP 2181	C 5A	4.0 I	20.00
1PP 2188	C 5A	4.0 I	40.01
1PP 2230	C 5A	4.0 I	20.00
1PP 2291	C 5A	4.0 I	20.00
1PP 2285	C 5B	4.0 I	20.66
1PP 2286	C 5B	4.0 I	20.66
1PP 2294	C 5B	4.0 I	20.66
1PP 2322	C 5A	4.0 I	38.64
1PP 2327	C 3A	3.0 I	15.18
1PP 2329	C 5A	4.0 I	20.66
1PP 2333	C 5A	4.0 I	20.66
1PP 2353	C 3A	3.0 I	30.73
1PP 2356	C 5A	4.0 I	20.00
1PP 2357	C 3A	3.0 I	6.82
1PP 2358	C 3B	1.5 I	9.46
1PP 2370	C 5A	4.0 I	40.01
1PP 2572	C 5B	4.0 I	38.54

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1PP 2573	C 5B	4.0 I	38.64
1PP 2580	C 5B	4.0 I	20.66
1PP 2581	C 3B	2.0 I	24.58
1PP 2585	C 5B	4.0 I	20.66
1PP 2586	C 3B	2.0 I	24.58
1PP 2570	C 3B	4.0 I	33.12
1PP 2579	C 3B	2.0 I	33.69
1PP 2681	C 3B	3.0 I	34.46
1PP 2683	C 3B	1.5 I	15.39
1PP 2684	C 3B	3.0 I	34.46
1PP 2724	C 5B	5.0 I	26.29
1PP 2725	C 3A	1.5 I	30.98
1PV 730	C 4D	2.0 I	32.73
1PV 734	C 4F	2.0 I	32.73
1PV 786	C 4G	2.0 I	32.73
1PV 847	C 3A	1.5 I	23.72
1PV 945	C 3B	2.0 I	9.82
1PV 946	C 3B	1.5 I	10.19
1PV 1035	C 3A	1.5 I	13.52
1PV 1040	C 3A	1.5 I	13.52
1PV 1041	C 3A	0.75FL	26.03
1PV 1043	C 3B	0.75FL	25.03
1PV 1044	C 3B	1.0 I	16.04
1RM 503	C 2B	3.0 I	20.29
1RM 522	C 2B	3.0 I	20.29
1RM 523	C 2B	3.0 I	14.79
1RM 525	C 2A	3.0 I	42.88
1SG 670	C 3S	1.5 I	16.42
1SG 671	C 3S	1.5 I	25.98
1SG 672	C 3S	1.5 I	22.69
1SG 674	C 3S	2.0 I	9.79
1SG 676	C 3S	1.0 I	23.37
1SG 690	C 3S	2.0 I	18.27
1SG 691	C 3J	2.0 I	13.27
1SG 693	C 3B	1.0 I	13.50
1SG 694	C 3A	2.0 I	13.27
1SG 943	C 3A	2.0 I	18.27
1VC 9	C 3A	2.0 I	6.96
1VC 10	C 3A	1.5 I	11.47
1VC 12	C 3B	1.0 I	13.60
1VC 13	C 3B	2.0 I	3.48
1VC 523	C 4A	2.0 I	21.19
1VC 525	C 4A	1.0 I	18.60
1VC 768	C 3B	3.0 I	39.45
1VC 773	C 3B	3.0 I	18.34
1VC 978	C 3A	1.5 I	20.34
1VC 1019	C 3A	1.5 I	20.58
1VC 1063	C 3A	2.0 I	28.89
1VC 1086	C 3B	1.5 I	52.20
1VC 1087	C 3B	2.0 I	37.17

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1VC 1088	C 3B	2.0 I	41.36
1VC 1089	C 3B	3.0 I	29.22
1VC 1093	C 3A	2.0 I	34.13
1VC 1096	C 3A	3.0 I	22.25
1VC 1097	C 3A	1.5 I	23.87
1VC 1098	C 3A	3.0 I	27.87
1VC 1101	C 3A	1.5 I	27.25
1VC 1103	C 3B	1.5 I	31.36
1VC 1115	C 3A	1.5 I	18.97
1VC 1131	C 3B	2.0 FL	28.72
1VC 1136	C 3B	2.0 FL	25.39
1VC 1137	C 3A	1.5 I	18.97
1VC 1139	C 3A	1.5 I	18.97
1VC 1221	C 3A	1.5 I	18.97
1VC 1621	C 3A	1.5 I	10.58
1VC 1682	C 3A	3.0 I	39.52
1VC 1815	C 3A	0.75FL	22.07
1VC 1818	C 3A	2.0 I	34.91
1VC 1820	C 3A	3.0 I	21.43
1VC 1821	C 3A	1.5 I	24.70
1VC 1827	C 3A	1.0 I	32.44
1VC 1828	C 3A	1.5 I	19.90
1VC 1829	C 3A	0.75I	22.07
1VC 1830	C 3A	0.75I	44.33
1VC 1831	C 3A	0.75I	10.18
1VC 2317	C 3B	2.0 I	25.00
1VC 2367	C 3A	1.5 I	28.82
1VC 2560	C 3A	2.0 I	12.05
1VC 2869	C 3B	0.75I	35.84
1VC 2870	C 3B	2.0 I	30.65
1VC 2871	C 3B	2.0 I	39.58
1VC 2872	C 3B	3.0 I	19.58
1VC 2873	C 3B	3.0 I	20.97
1VC 2881	C 3A	0.75I	53.77
1VC 2883	C 3A	1.0 I	33.13
1VC 2885	C 3A	2.0 I	25.00
1VC 2912	C 3B	2.0 I	48.69
1VC 2921	C 3B	2.0 I	31.54
1VC 2925	C 3B	3.0 I	36.08
1VC 2926	C 3B	3.0 I	5.33
1VC 2927	C 3B	3.0 I	41.63
1VC 2929	C 3B	3.0 I	40.35
1VC 2930	C 3B	3.0 I	37.75
1VC 2932	C 3B	3.0 I	40.35
1VC 2945	C 3A	3.0 I	25.33
1VC 2946	C 3B	2.0 I	31.54
1VC 2947	C 3A	3.0 I	31.20
1VC 2950	C 3B	1.5 I	24.75
1VC 3095	C 3A	3.0 I	24.28
1VC 3099	C 3B	2.0 I	29.01

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1VC 3120	C 3A	3.0 I	39.20
1VC 3121	C 3B	3.0 I	29.47
1VC 3123	C 3A	3.0 I	28.32
1VC 3633	C 3A	2.0 I	17.50
1VC 4011	C 3B	1.0 I	27.32
1VC 4013	C 3B	1.0 I	27.32
1VC 4023	C 3B	1.5 I	23.03
1VC 4024	C 3B	1.5 I	22.99
1VC 4025	C 3B	1.5 I	29.65
1VC 4025	C 4B	1.5 I	29.85
1VC 4026	C 3B	3.0 I	17.71
1VC 4026	C 4B	3.0 I	17.71
1VC 4027	C 3B	3.0 I	17.71
1VC 4027	C 4B	3.0 I	17.71
1VC 4029	C 3B	1.5 I	23.03
1VC 4034	C 3B	1.0 I	27.32
1VC 4036	C 3B	1.5 I	5.73
1VC 4037	C 3A	1.5 I	5.73
1VC 4038	C 3A	1.5 I	21.51
1VC 4050	C 3A	1.0 FL	70.69
1VC 4051	C 3B	1.0 FL	70.69
1VC 4052	C 3B	1.0 I	27.32
1VC 4053	C 4B	1.5 I	18.13
1VC 4055	C 3B	2.0 I	35.47
1VC 4055	C 4B	2.0 I	35.47
1VC 4056	C 3A	1.0 FL	13.60
1VC 4057	C 3A	1.5 I	20.14
1VC 4067	C 3A	1.5 I	31.66
1VC 4070	C 3B	2.0 I	35.47
1VC 4070	C 4B	2.0 I	35.47
1VC 4071	C 3B	1.5 I	5.73
1VC 4074	C 3B	1.5 I	5.73
1VC 4075	C 3B	1.5 I	17.25
1VC 4077	C 3A	1.0 FL	13.60
1VC 4078	C 3A	1.0 FL	27.32
1VC 4081	C 3B	1.5 I	23.03
1VC 4295	C 3B	1.5 I	33.23
1VC 4297	C 3B	1.0 I	39.41
1VC 4478	C 3A	2.0 I	5.65
1VC 4479	C 3B	1.5 I	4.65
1VC 4548	C 3A	1.5 I	9.31
1VC 4549	C 2A	1.5 I	18.23
1VC 4559	C 2B	1.5 I	18.23
1VC 4562	C 3A	1.5 FL	10.39
1VC 4563	C 3B	1.5 FL	10.39
1VC 4920	C 3B	3.0 I	35.22
1VC 5002	C 3A	2.0 I	21.36
1VC 5118	C 3A	2.0 I	34.91
1VC 5119	C 3B	3.0 I	39.45
1VC 5180	C 4A	0.75 I	40.18

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1VC 5181	C 3A	1.5 I	24.65
1VC 5182	C 4B	0.75 I	40.18
1VC 5183	C 3B	2.0 I	29.94
1VC 5184	C 3B	1.5 I	24.65
1VC 5206	C 3B	3.0 I	34.76
1VC 5207	C 3B	3.0 I	22.04
1VC 5208	C 3B	3.0 I	35.95
1VC 5210	C 3A	3.0 I	25.16
1VC 5217	C 4A	2.0 I	20.20
1VC 6001	C 4B	1.0 I	24.76
1VC 6002	C 3B	2.0 I	12.17
1VC 6005	C 4A	1.0 I	24.76
1VC 6006	C 3A	2.0 I	12.17
1VC 6009	C 4B	1.0 I	24.76
1VC 6010	C 3B	2.0 I	12.17
1VC 6013	C 4A	1.0 I	24.76
1VC 6014	C 3A	2.0 I	12.17
1VC 7011	C 3B	2.0 I	24.46
1901 1902	T 3B	18X4TRAY	25.23
1901 1902	T 4A	18X4TRAY	24.03
1901 1921	T 3A	18X4TRAY	16.02
1901 1952	T 2	18X4TRAY	23.69
1901 2378	T 2	18X4TRAY	23.92
1901 2443	T 3A	18X4TRAY	17.32
1901 2443	T 3B	18X4TRAY	27.13
1901 2445	T 4A	18X4TRAY	24.03
1901 2379	C 3B	3.0 I	12.12
1902 1903	T 3A	18X4TRAY	15.06
1902 1903	T 3B	18X4TRAY	26.07
1902 1921	T 3A	12X4TRAY	22.50
1902 1945	T 4A	18X4TRAY	24.03
1902 1952	T 2	18X4TRAY	23.41
1902 2904	C 2	5.0 I	11.15
1903 1904	T 3A	18X4TRAY	15.06
1903 1904	T 4A	12X4TRAY	28.43
1903 1945	T 4A	18X4TRAY	18.95
1904 1905	T 3A	18X4TRAY	15.06
1904 1905	T 3B	18X4TRAY	14.57
1904 1922	T 4A	18X4TRAY	8.72
1904 2879	C 3B	3.0 I	10.05
1905 1906	T 3B	18X4TRAY	12.92
1906 1907	T 3A	18X4TRAY	24.72
1906 1907	T 3B	18X4TRAY	11.80
1906 2440	T 3A	18X4TRAY	23.63
1907 1908	T 3A	18X4TRAY	20.51
1907 1908	T 3B	18X4TRAY	11.62
1908 1909	T 3A	18X4TRAY	18.96
1908 1909	T 3B	18X4TRAY	12.10
1909 1910	T 3A	18X4TRAY	19.25
1911 1912	T 4B	18X4TRAY	24.18

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
1911 2439	T 4B	18X4TRAY	20.40
1912 1913	T 2	18X4TRAY	11.42
1912 1913	T 4A	18X4TRAY	18.08
1912 1913	T 4B	18X4TRAY	7.83
1912 1918	T 4B	18X4TRAY	16.35
1912 2451	T 4A	18X4TRAY	22.22
1912 2904	C 2	5.0 I	11.15
1913 1914	T 2	18X4TRAY	13.22
1913 1914	T 4A	18X4TRAY	18.08
1913 1914	T 4B	18X4TRAY	7.83
1914 1915	T 4B	18X4TRAY	7.83
1914 1919	T 4A	18X4TRAY	13.58
1915 1916	T 4B	18X4TRAY	7.83
1916 1917	T 4B	18X4TRAY	7.51
1919 1947	T 4A	18X4TRAY	13.58
1920 1921	T 4A	18X4TRAY	21.19
1920 1947	T 4A	18X4TRAY	13.58
2B 1041	C 4D	1.0 I	24.88
2B 1043	C 4D	1.0 I	24.88
2B 1044	C 4D	2.0 I	25.47
2B 1050	C 4G	1.0 I	24.88
2B 1052	C 4G	1.0 I	24.88
2B 1054	C 4G	2.0 I	25.47
2B 1056	C 4E	1.0 I	24.88
2B 1058	C 4E	1.0 I	24.88
2B 1059	C 4E	2.0 I	25.47
2B 1233	C 4E	2.0 I	25.47
2B 1234	C 4D	2.0 I	25.47
2B 1235	C 4D	2.0 I	25.47
2PLC 8	C 4A	3.0 I	17.53
2PLC 9	C 4A	1.0 I	24.76
2PLC 10	C 3A	1.5 I	40.49
2PLC 13	C 4B	3.0 I	17.53
2PLC 15	C 3B	1.5 I	40.49
2PLC 18	C 4A	2.0 I	17.52
2PLC 22	C 3A	1.5 I	22.00
2PLC 24	C 4B	2.0 I	11.19
2PLC 28	C 3B	1.5 I	21.17
2PLC 47	C 4A	1.5 I	20.38
2PLC 48	C 4B	1.5 I	10.44
2PLC 50	C 3A	1.0 I	39.41
2PLC 81	C 2A	1.0 I	10.81
2PLC 83	C 2B	1.0 I	10.81
2PLC 584	C 4B	4.0 I	29.01
2PLC 585	C 4B	4.0 I	29.01
2PLC 590	C 3B	1.5 I	9.46
2PLC 795	C 3A	3.0 I	24.77
2PLC 1267	C 3B	1.0 I	25.58
2PLC 1275	C 4A	3.0 I	43.31
2PLC 1276	C 4A	3.0 I	25.65

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2PLC 1286	C 4B	3.0 I	38.33
2PLC 1940	C 4A	1.5 I	9.85
2PLC 1941	C 3A	0.75I	44.33
2PLC 1942	C 3A	1.0 I	38.83
2PLC 1943	C 3A	0.75I	22.07
2PLC 1946	C 3A	1.5 I	11.51
2PLC 1971	C 4B	1.5 I	18.13
2PLC 1979	C 3B	1.5 I	8.23
2PLC 2541	C 3B	2.0 I	41.66
2PLC 2620	C 4A	4.0 I	25.14
2PLC 2621	C 4A	4.0 I	25.14
2PLC 2622	C 4A	4.0 I	25.14
2PLC 2623	C 4A	4.0 I	25.14
2PLC 2657	C 3B	3.0 I	32.16
2PLC 2692	C 3A	3.0 I	22.86
2PLC 2702	C 4A	3.0 I	12.04
2PLC 2703	C 3A	3.0 I	25.52
2PLC 2730	C 4A	3.0 I	21.00
2PLC 2731	C 3A	2.0 I	27.47
2PLC 2753	C 3B	2.0 FL	55.14
2PLC 2760	C 4A	3.0 I	25.65
2PLC 2761	C 4A	3.0 I	25.65
2PLC 2762	C 4A	3.0 I	25.65
2PLC 2763	C 4A	3.0 I	43.31
2PLC 2764	C 4A	3.0 I	25.65
2PLC 2765	C 4A	3.0 I	43.31
2PLC 2766	C 4A	3.0 I	25.65
2PLC 2767	C 4A	3.0 I	43.31
2PLC 2768	C 4A	3.0 I	25.65
2PLC 2769	C 4A	4.0 I	24.65
2PLC 2783	C 3B	3.0 I	26.95
2PLC 2801	C 4B	2.0 I	13.98
2PLC 2816	C 3B	2.0 I	11.30
2PLC 2817	C 4B	2.0 I	40.00
2PLC 2850	C 4A	3.0 I	25.65
2PLC 2851	C 4A	3.0 I	25.65
2PLC 2852	C 4A	3.0 I	25.65
2PLC 2853	C 4A	3.0 I	43.31
2PLC 2854	C 4A	3.0 I	25.65
2PLC 2855	C 4A	3.0 I	43.31
2PLC 2856	C 4A	3.0 I	25.65
2PLC 2857	C 4A	3.0 I	43.31
2PLC 2858	C 4A	3.0 I	25.65
2PLC 2859	C 4A	3.0 I	43.31
2PLC 3638	C 4A	4.0 I	24.65
2PLC 3639	C 4A	4.0 I	25.14
2PLC 3766	C 3B	1.0 I	22.55
2PLC 3767	C 3B	1.0 I	22.55
2PLC 4044	C 4B	4.0 I	29.01
2PLC 4045	C 4B	4.0 I	29.01

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RCWY ID	RCWY NOOE TYPE VOLT	RCWY SIZE	PERCENT FILL
2PLC 4059	C 3A	1.5 I	7.94
2PLC 4060	C 3A	1.5 I	7.94
2PLC 4063	C 3B	2.0 I	4.82
2PLC 4064	C 3B	1.0 I	18.83
2PLC 4067	C 3A	1.5 I	7.94
2PLC 4068	C 3A	1.5 I	15.38
2PLC 4069	C 3A	1.5 I	7.94
2PLC 4070	C 3A	1.5 I	7.94
2PLC 5000	C 4A	1.5 I	12.59
2PLC 5001	C 4A	1.5 I	13.13
2PM 1202	C 2B	1.5 I	13.67
2PM 1203	C 2B	1.5 I	13.67
2PM 1204	C 2B	1.5 I	4.55
2PM 6131	C 3A	2.0 I	29.64
2PM 6140	C 3B	2.0 I	32.41
2PM 7337	C 2A	2.0 I	21.22
2PP 2000	C 5B	4.0 I	40.67
2PP 2001	C 3B	1.5 I	19.31
2PP 2002	C 5B	4.0 I	40.67
2PP 2004	C 5A	4.0 I	20.00
2PP 2006	C 5A	4.0 I	20.00
2PP 2312	C 5A	4.0 I	38.64
2PP 2313	C 5A	4.0 I	38.64
2PP 2320	C 5A	4.0 I	20.66
2PP 2321	C 3A	3.0 I	17.80
2PP 2325	C 5A	4.0 I	20.66
2PP 2349	C 3A	2.0 I	24.01
2PP 2574	C 5B	4.0 I	38.64
2PP 2575	C 5B	4.0 I	38.64
2PP 2580	C 5B	4.0 I	20.66
2PP 2581	C 3B	2.0 I	40.02
2PP 2585	C 5B	4.0 I	20.66
2PP 2586	C 3B	2.0 I	40.02
2PP 2704	C 5B	5.0 I	26.29
2PP 2768	C 3B	1.5 I	30.98
2PP 3002	C 3B	1.5 I	11.47
2PV 782	C 4E	2.0 I	32.73
2PV 784	C 4F	2.0 I	32.73
2PV 786	C 4G	2.0 I	32.73
2PV 946	C 3A	5.0 I	44.41
2PV 950	C 3B	3.0 I	42.92
2VC 2229	C 3B	4.0 I	33.22
2VC 2278	C 3B	3.0 I	17.45
2VC 2790	C 3B	3.0 I	27.86
2VC 2851	C 3A	3.0 FL	18.63
2VC 5182	C 3A	2.5 I	31.50
2000 2001	T 3A	18X4TRAY	9.59
2000 2001	T 3B	18X4TRAY	14.69
2000 2045	T 3B	18X4TRAY	16.48
2000 2046	T 3A	18X4TRAY	9.59

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2001 2002	T 3A	18X4TRAY	7.93
2001 2002	T 3B	18X4TRAY	13.18
2002 2003	T 3A	18X4TRAY	6.21
2002 2003	T 3B	18X4TRAY	11.79
2003 2004	T 3A	18X4TRAY	5.19
2003 2004	T 3B	18X4TRAY	11.56
2004 2005	T 3B	18X4TRAY	11.32
2005 2005	T 3B	18X4TRAY	8.35
2006 2007	T 3B	18X4TRAY	8.35
2007 2008	T 3B	18X4TRAY	7.12
2007 2855	C 3B	5.0 I	4.16
2009 2009	T 4A	18X4TRAY	21.04
2009 2009	T 5A	18X4TRAY	18.86
2008 2049	T 5A	18X4TRAY	18.86
2008 2050	T 4A	18X4TRAY	20.27
2009 2010	T 3B	18X4TRAY	8.59
2009 2010	T 4A	18X4TRAY	19.40
2009 2010	T 5A	18X4TRAY	18.36
2009 2071	T 3B	18X4TRAY	11.24
2010 2011	T 3B	18X4TRAY	7.58
2010 2011	T 4A	18X4TRAY	17.48
2010 2011	T 5A	18X4TRAY	18.86
2011 2012	T 3B	18X4TRAY	7.44
2011 2012	T 4A	18X4TRAY	10.00
2011 2012	T 5A	18X4TRAY	11.32
2012 2013	T 3B	18X4TRAY	7.44
2012 2013	T 4A	18X4TRAY	10.00
2012 2013	T 5A	18X4TRAY	11.32
2013 2014	T 3B	18X4TRAY	7.44
2013 2014	T 4A	18X4TRAY	10.00
2013 2014	T 5A	18X4TRAY	11.32
2014 2015	T 4A	18X4TRAY	10.00
2014 2015	T 5A	18X4TRAY	11.32
2014 2855	C 3B	5.0 I	4.16
2015 2016	T 4A	18X4TRAY	11.22
2016 2017	T 4A	18X4TRAY	10.31
2026 2227	C 2	5.0 I	7.43
2026 2363	C 2	5.0 I	7.43
2028 2029	T 4B	18X4TRAY	29.37
2029 2030	T 4B	18X4TRAY	29.37
2030 2031	T 4B	18X4TRAY	10.38
2030 2031	T 5B	18X4TRAY	7.79
2030 2063	T 4B	18X4TRAY	14.14
2030 2064	T 4B	18X4TRAY	19.35
2030 2066	T 5B	18X4TRAY	20.24
2031 2032	T 4B	18X4TRAY	12.70
2031 2032	T 5B	18X4TRAY	7.79
2031 2044	T 4B	18X4TRAY	8.20
2031 2045	T 4B	18X4TRAY	6.43
2032 2033	T 4B	18X4TRAY	12.70

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2032 2033	T 5B	18X4TRAY	7.79
2033 2034	T 4B	18X4TRAY	12.70
2033 2034	T 5B	18X4TRAY	7.79
2034 2035	T 4B	18X4TRAY	12.70
2034 2035	T 5B	18X4TRAY	7.79
2035 2036	T 4B	18X4TRAY	13.27
2035 2036	T 5B	18X4TRAY	3.89
2035 2047	T 4B	18X4TRAY	6.43
2035 2048	T 4B	18X4TRAY	6.43
2036 2037	T 4B	18X4TRAY	14.22
2036 2037	T 5B	18X4TRAY	3.89
2036 2051	T 5A	18X4TRAY	18.36
2036 2052	T 4A	18X4TRAY	21.04
2036 2052	T 5A	18X4TRAY	3.77
2036 2053	T 4A	18X4TRAY	11.25
2036 2055	T 4A	18X4TRAY	19.59
2036 2067	T 4A	18X4TRAY	25.95
2036 2075	T 5A	18X4TRAY	22.64
2037 2038	T 4B	18X4TRAY	14.22
2037 2038	T 5B	18X4TRAY	3.89
2038 2039	T 4B	18X4TRAY	16.42
2038 2039	T 5B	18X4TRAY	3.89
2039 2040	T 4B	18X4TRAY	17.08
2039 2040	T 5B	18X4TRAY	7.67
2039 2050	T 4B	18X4TRAY	6.43
2039 2051	T 4B	18X4TRAY	6.72
2039 2056	T 4B	18X4TRAY	12.16
2040 2041	T 4B	18X4TRAY	22.24
2040 2054	T 5B	18X4TRAY	22.38
2041 2042	T 4B	18X4TRAY	5.22
2041 2051	T 4B	18X4TRAY	6.72
2041 2054	T 4B	18X4TRAY	25.56
2041 2055	T 4B	18X4TRAY	18.30
2041 2056	T 4A	18X4TRAY	14.75
2041 2057	T 4A	18X4TRAY	13.29
2042 2043	T 4B	18X4TRAY	5.22
2044 2065	T 4B	18X4TRAY	14.97
2045 2046	T 3B	18X4TRAY	18.11
2045 2046	T 4B	18X4TRAY	6.43
2046 2047	T 3A	18X4TRAY	9.02
2046 2047	T 3B	18X4TRAY	23.12
2046 2047	T 4B	18X4TRAY	6.43
2046 2060	T 4A	18X4TRAY	13.29
2046 2064	T 4A	18X4TRAY	25.28
2047 2048	T 3A	18X4TRAY	10.22
2047 2048	T 3B	18X4TRAY	25.14
2048 2049	T 3A	18X4TRAY	10.22
2048 2049	T 3B	18X4TRAY	4.64
2048 2049	T 4B	18X4TRAY	6.43
2048 2062	T 3B	18X4TRAY	26.22

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2048 2081	T 3B	18X4TRAY	32.53
2048 2082	T 3B	18X4TRAY	20.13
2049 2050	T 3B	18X4TRAY	3.59
2049 2050	T 4B	18X4TRAY	6.43
2049 2050	T 5A	18X4TRAY	18.86
2049 2062	T 3B	18X4TRAY	3.60
2049 2063	T 3B	18X4TRAY	4.80
2049 2079	T 3A	18X4TRAY	40.56
2049 2080	T 3A	18X4TRAY	28.31
2049 2085	T 3A	18X4TRAY	9.16
2049 2088	T 3A	18X4TRAY	17.65
2050 2051	T 3B	18X4TRAY	3.59
2050 2051	T 4A	18X4TRAY	21.04
2050 2051	T 5A	18X4TRAY	18.36
2051 2052	T 3B	18X4TRAY	3.59
2051 2052	T 4A	18X4TRAY	21.04
2052 2053	T 3B	18X4TRAY	3.59
2053 2054	T 3B	18X4TRAY	1.31
2053 2054	T 4A	18X4TRAY	10.96
2053 2065	T 3B	18X4TRAY	3.42
2053 2066	T 3B	18X4TRAY	7.10
2054 2055	T 3B	18X4TRAY	1.31
2054 2055	T 4A	18X4TRAY	10.48
2054 2103	T 5B	18X4TRAY	22.88
2054 2109	T 4B	18X4TRAY	25.56
2055 2056	T 3B	18X4TRAY	1.31
2055 2074	T 4A	18X4TRAY	10.48
2055 2108	T 4B	18X4TRAY	18.30
2056 2057	T 3B	18X4TRAY	2.08
2056 2057	T 4B	18X4TRAY	12.16
2056 2074	T 4A	18X4TRAY	14.75
2057 2058	T 3B	18X4TRAY	3.74
2057 2058	T 4A	18X4TRAY	13.29
2057 2068	T 3B	18X4TRAY	7.10
2057 2069	T 3B	18X4TRAY	12.90
2058 2059	T 3B	18X4TRAY	10.67
2058 2059	T 4A	18X4TRAY	13.29
2059 2060	T 3A	18X4TRAY	9.79
2059 2060	T 3B	18X4TRAY	5.74
2059 2060	T 4A	18X4TRAY	13.29
2059 2063	T 3A	18X4TRAY	20.94
2059 2069	T 3B	18X4TRAY	12.30
2059 2070	T 3B	18X4TRAY	10.82
2059 2072	T 3B	18X4TRAY	8.35
2060 2061	T 3A	18X4TRAY	9.79
2060 2061	T 3B	18X4TRAY	5.74
2062 2083	T 3B	18X4TRAY	23.64
2063 2064	T 3B	18X4TRAY	4.47
2063 2111	T 4B	18X4TRAY	14.64
2063 2168	T 3A	18X4TRAY	21.78

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2064 2065	T 3B	18X4TRAY	4.47
2064 2122	T 4B	18X4TRAY	17.32
2064 2148	T 4A	18X4TRAY	25.28
2065 2067	T 4B	18X4TRAY	13.29
2065 2068	T 4B	18X4TRAY	1.20
2066 2067	T 3B	18X4TRAY	7.10
2066 2153	T 4A	18X4TRAY	19.30
2067 2068	T 3B	18X4TRAY	7.10
2067 2154	T 4A	18X4TRAY	25.95
2068 2069	T 4B	18X4TRAY	1.20
2070 2071	T 3B	18X4TRAY	11.24
2072 2163	T 3B	18X4TRAY	9.65
2075 2119	T 5A	18X4TRAY	22.64
2079 2177	T 3A	18X4TRAY	40.56
2080 2178	T 3A	18X4TRAY	28.58
2081 2136	T 3B	18X4TRAY	32.57
2082 2155	T 3B	18X4TRAY	20.27
2083 2084	T 3B	18X4TRAY	14.20
2083 2085	T 3B	18X4TRAY	10.13
2084 2086	T 3B	18X4TRAY	14.20
2085 2086	T 3A	18X4TRAY	3.19
2085 2088	T 3B	18X4TRAY	3.07
2086 2087	T 3A	18X4TRAY	8.33
2086 2087	T 3B	18X4TRAY	12.04
2086 2105	T 5B	18X4TRAY	51.15
2087 2093	T 3A	18X4TRAY	7.30
2088 2089	T 3A	18X4TRAY	16.09
2088 2089	T 5A	18X4TRAY	39.65
2088 2103	T 5B	18X4TRAY	22.88
2088 2170	T 5A	18X4TRAY	37.65
2089 2090	T 3A	18X4TRAY	15.79
2089 2090	T 5A	18X4PRLL	24.52
2089 2102	T 5A	18X4TRAY	37.80
2090 2091	T 3A	18X4TRAY	15.79
2090 2119	T 5A	18X4TRAY	22.64
2091 2092	T 3A	18X4TRAY	15.79
2091 3873	T 5B	AIR SEG	10.35
2091 3879	T 5B	AIR SEG	10.35
2099 2104	T 5B	18X4TRAY	43.80
2102 2103	T 4B	18X4TRAY	9.09
2102 2107	T 4B	18X4TRAY	23.29
2102 2108	T 4B	18X4TRAY	13.30
2102 2109	T 4B	18X4TRAY	25.56
2102 2180	T 5A	18X4TRAY	37.80
2103 2104	T 4B	18X4TRAY	23.02
2103 3871	T 4B	AIR SEG	4.75
2104 2105	T 4B	18X4TRAY	19.23
2104 2205	T 5B	18X4TRAY	43.80
2105 2185	T 5B	18X4TRAY	51.15
2105 3878	T 4B	AIR SEG	5.26

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RCWY ID	RCWY NOOE TYPE VOLT	RCWY SIZE	PERCENT FILL
2105 3882	T 4B	AIR SEG	2.39
2106 2154	T 4B	18X4TRAY	22.01
2107 2154	T 4B	18X4TRAY	23.29
2111 2112	T 4B	18X4TRAY	22.12
2112 2113	T 4B	18X4TRAY	21.03
2113 2123	T 4B	18X4TRAY	13.33
2113 2147	T 4B	18X4TRAY	18.76
2113 2148	T 4B	18X4TRAY	24.41
2113 2217	T 3A	18X4TRAY	2.47
2114 2115	T 4B	18X4TRAY	15.64
2114 2355	C 4B	2.5 I	4.44
2120 2170	T 5B	18X4TRAY	11.69
2122 2123	T 4B	18X4TRAY	19.88
2124 2125	T 4A	18X4TRAY	21.43
2124 3870	T 4A	AIR SEG	4.85
2124 3871	T 4A	AIR SEG	4.75
2125 2126	T 4A	18X4TRAY	7.19
2125 3875	T 4A	AIR SEG	4.85
2126 2127	T 4A	18X4TRAY	8.72
2127 2128	T 4A	18X4PRLL	21.37
2127 2153	T 4A	18X4TRAY	19.30
2127 2154	T 4A	18X4TRAY	25.95
2128 2129	T 4A	18X4PRLL	27.48
2128 2155	T 4A	18X4TRAY	33.15
2129 2130	T 4A	18X4TRAY	22.93
2129 2140	T 4A	18X4TRAY	14.50
2129 2166	T 4A	18X4TRAY	27.45
2129 2167	T 4A	18X4TRAY	25.08
2130 2131	T 4A	18X4TRAY	23.22
2131 2132	T 4A	18X4TRAY	23.22
2132 2133	T 4A	18X4TRAY	23.22
2133 2134	T 4A	18X4TRAY	22.84
2134 2135	T 4A	18X4TRAY	22.84
2135 2136	T 4A	18X4TRAY	22.84
2136 2137	T 3B	18X4TRAY	31.45
2136 2137	T 4A	18X4TRAY	27.61
2136 2148	T 4A	18X4TRAY	21.69
2137 2133	T 3B	18X4PRLL	31.59
2137 2138	T 4A	18X4TRAY	32.36
2137 2155	T 3B	18X4TRAY	23.54
2138 2139	T 3B	18X4PRLL	32.72
2138 2139	T 4A	18X4TRAY	34.73
2138 2142	T 4B	18X4TRAY	27.89
2138 2175	T 3B	18X4TRAY	37.24
2138 2176	T 3B	18X4TRAY	47.71
2139 2140	T 3B	18X4PRLL	19.18
2139 2183	T 3B	18X4TRAY	27.73
2139 3878	T 4A	AIR SEG	4.07
2139 3882	T 4A	AIR SEG	2.83
2140 2141	T 3B	18X4TRAY	17.71

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2140 2141	T 4A	18X4TRAY	11.33
2140 2156	T 3B	18X4TRAY	22.61
2141 2142	T 3B	18X4TRAY	17.71
2141 2142	T 4A	18X4TRAY	10.76
2142 2143	T 3B	18X4TRAY	21.78
2142 2143	T 4A	18X4TRAY	9.04
2142 2143	T 4B	18X4TRAY	19.42
2142 2156	T 3B	18X4TRAY	22.61
2142 2157	T 3B	18X4TRAY	27.60
2142 2167	T 3B	18X4TRAY	12.83
2143 2144	T 3B	18X4TRAY	21.41
2144 2145	T 3B	18X4TRAY	23.15
2144 2189	T 3B	18X4TRAY	2.64
2144 2865	C 3B	510 I	3.06
2145 2146	T 3B	18X4TRAY	30.51
2145 2158	T 3B	18X4TRAY	27.60
2145 2159	T 3B	18X4TRAY	36.37
2145 2165	T 3B	18X4TRAY	18.63
2145 2191	T 3B	18X4TRAY	21.82
2146 2147	T 3B	18X4TRAY	31.42
2146 2162	T 3A	18X4TRAY	2.56
2146 2175	T 3A	18X4TRAY	13.96
2146 2176	T 3A	18X4TRAY	37.80
2146 2356	T 4A	18X4TRAY	23.48
2146 2865	C 3B	510 I	3.06
2146 9224	T 3A	18X4TRAY	4.68
2146 9225	T 3A	18X4TRAY	0.71
2147 2148	T 3A	18X4PRCL	36.46
2147 2154	T 3B	18X4TRAY	36.58
2147 2159	T 3B	18X4TRAY	36.37
2147 2161	T 3B	18X4TRAY	49.74
2147 2177	T 3A	18X4TRAY	40.56
2147 2178	T 3A	18X4TRAY	28.58
2147 2207	T 4B	18X4TRAY	24.44
2147 2855	C 4B	215 I	4.44
2147 9224	T 3A	18X4TRAY	4.68
2147 9225	T 3A	18X4TRAY	0.71
2147 9227	T 3A	18X4TRAY	1.29
2147 9231	T 3B	18X4TRAY	0.90
2148 2149	T 3A	18X4PRCL	37.56
2148 2149	T 3B	18X4TRAY	22.32
2148 2160	T 3B	18X4TRAY	37.57
2148 2179	T 3A	18X4TRAY	17.51
2148 2184	T 3A	18X4TRAY	7.53
2148 2194	T 4B	18X4TRAY	27.36
2148 9227	T 3A	18X4TRAY	1.29
2148 9231	T 3B	18X4TRAY	0.90
2149 2150	T 3A	18X4TRAY	13.02
2149 2150	T 3B	18X4TRAY	22.32
2149 2190	T 3A	18X4TRAY	52.98

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2149 2193	T 3A	18X4TRAY	31.53
2149 2194	T 3A	18X4TRAY	44.08
2149 2850	C 3A	5:0 I	14.86
2150 2151	T 3A	18X4TRAY	12.84
2150 2151	T 3B	18X4TRAY	20.15
2150 2154	T 3B	18X4TRAY	36.58
2150 2162	T 3B	18X4TRAY	9.51
2151 2152	T 3A	18X4PRLL	10.12
2151 2152	T 3B	18X4TRAY	14.08
2151 2192	T 3A	18X4TRAY	15.79
2151 2853	C 3A	5:0 I	29.42
2151 9338	T 3A	18X4TRAY	2.38
2152 2153	T 3A	18X4PRLL	7.45
2152 2153	T 3B	18X4TRAY	13.96
2152 9232	T 3A	18X4TRAY	1.51
2152 9233	T 3A	18X4TRAY	0.67
2152 9338	T 3A	18X4TRAY	2.38
2153 2154	T 3A	18X4TRAY	10.62
2153 2164	T 3A	18X4TRAY	24.09
2153 2172	T 3A	18X4TRAY	14.52
2153 3878	T 3B	AIR SEG	6.69
2153 9232	T 3A	18X4TRAY	1.51
2153 9233	T 3A	18X4TRAY	0.37
2154 2155	T 3A	18X4TRAY	10.52
2155 2156	T 3A	18X4TRAY	10.62
2155 2156	T 4A	18X4TRAY	33.15
2156 2157	T 3A	18X4TRAY	65.39
2156 2163	T 4A	18X4TRAY	31.59
2156 2170	T 3A	18X4TRAY	55.33
2157 2158	T 3A	18X4TRAY	15.55
2157 2158	T 3B	18X4TRAY	27.60
2157 2158	T 4B	18X4TRAY	8.57
2157 2165	T 3A	18X4TRAY	16.88
2157 2166	T 3A	18X4TRAY	43.49
2157 2167	T 3A	18X4TRAY	44.75
2158 2159	T 3A	18X4TRAY	15.55
2158 2159	T 4B	18X4TRAY	8.57
2159 2160	T 3A	18X4TRAY	15.25
2159 2160	T 4B	18X4TRAY	8.57
2160 2374	T 3B	18X4TRAY	37.31
2160 3878	T 3A	AIR SEG	7.12
2161 2162	T 3A	18X4TRAY	0.96
2161 2321	T 3B	18X4TRAY	49.74
2164 2165	T 3A	18X4TRAY	21.92
2165 2166	T 3B	18X4TRAY	19.73
2165 2167	T 3B	18X4TRAY	3.41
2166 2170	T 3B	18X4TRAY	12.67
2166 2267	T 4A	18X4TRAY	27.45
2166 2378	T 3A	18X4TRAY	43.49
2167 2168	T 3B	18X4TRAY	3.27

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2167 2269	T 4A	18X4TRAY	26.94
2167 2359	T 3A	18X4TRAY	44.33
2168 2169	T 3B	18X4TRAY	3.27
2168 2171	T 4A	18X4TRAY	5.56
2169 2170	T 5B	18X4TRAY	11.69
2169 2178	T 5B	18X4TRAY	15.46
2170 2171	T 3B	18X4TRAY	10.31
2171 2172	T 3A	18X4TRAY	20.33
2171 2172	T 3B	18X4TRAY	6.14
2171 2172	T 5A	18X4TRAY	39.65
2171 2174	T 3B	18X4TRAY	6.33
2172 2173	T 3B	18X4TRAY	0.93
2172 2173	T 5A	18X4TRAY	39.65
2173 2174	T 5A	18X4TRAY	39.65
2174 2175	T 5A	18X4TRAY	39.65
2174 2857	C 3B	5.0 I	21.25
2175 2176	T 5A	18X4TRAY	39.65
2175 2273	T 3B	18X4TRAY	37.24
2175 2298	T 3A	18X4TRAY	15.97
2176 2177	T 5A	18X4TRAY	35.88
2176 2177	T 5B	18X4TRAY	7.67
2176 2262	T 3A	18X4TRAY	38.02
2176 2302	T 3B	18X4TRAY	47.71
2176 2860	C 3A	5.0 I	33.18
2177 2178	T 3B	18X4TRAY	9.51
2177 2178	T 5A	18X4TRAY	30.81
2177 2178	T 5B	18X4TRAY	15.46
2178 2187	T 5A	18X4TRAY	37.30
2178 2189	T 5A	18X4TRAY	18.86
2179 2180	T 3A	18X4TRAY	17.21
2179 2863	C 3A	5.0 I	17.56
2180 2181	T 3A	18X4TRAY	9.28
2180 2181	T 5A	18X4TRAY	37.80
2180 2184	T 3A	18X4TRAY	8.05
2180 2186	T 3A	18X4TRAY	7.91
2181 2182	T 3A	18X4TRAY	9.50
2181 2182	T 5A	18X4TRAY	37.30
2182 2183	T 3B	18X4TRAY	27.37
2182 2183	T 4B	18X4TRAY	1.38
2182 2183	T 5A	18X4TRAY	37.80
2183 2184	T 4B	18X4TRAY	19.07
2183 2184	T 5A	18X4TRAY	37.80
2184 2185	T 4B	18X4TRAY	20.96
2184 2185	T 5A	18X4TRAY	37.30
2185 2186	T 4B	18X4TRAY	25.88
2185 2186	T 5A	18X4TRAY	37.80
2185 2213	T 4B	18X4TRAY	21.60
2185 2850	C 5B	5.0 I	26.29
2186 2187	T 3A	18X4TRAY	1.98
2186 2187	T 3B	18X4TRAY	12.54

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2186 2187	T 48	18X4TRAY	27.42
2186 2187	T 5A	18X4TRAY	37.80
2186 2189	T 3A	18X4TRAY	1.97
2187 2188	T 48	18X4TRAY	21.51
2187 2201	T 48	18X4TRAY	25.10
2187 2219	T 48	18X4TRAY	29.93
2187 2856	C 48	2.0 I	6.33
2188 2189	T 3B	18X4TRAY	12.06
2188 2189	T 48	18X4TRAY	21.61
2189 2190	T 48	18X4TRAY	21.61
2189 2190	T 5A	18X4TRAY	18.86
2189 2190	T 5B	18X4TRAY	58.70
2189 2850	C 5B	5.0 I	26.29
2190 2191	T 3B	18X4TRAY	22.99
2190 2191	T 48	18X4TRAY	21.61
2190 2191	T 5B	18X4TRAY	58.70
2190 2193	T 5A	18X4TRAY	30.18
2190 2860	C 3A	5.0 I	33.18
2190 2873	C 3A	5.0 I	17.32
2191 2192	T 3A	18X4TRAY	17.64
2191 2192	T 48	18X4TRAY	27.36
2191 2192	T 5B	18X4TRAY	58.70
2191 2873	C 3A	5.0 I	17.32
2192 2193	T 48	18X4TRAY	27.36
2192 2193	T 5B	18X4TRAY	58.70
2193 2194	T 48	18X4TRAY	27.36
2193 2194	T 5B	18X4TRAY	58.70
2193 2235	T 3A	18X4TRAY	41.42
2193 2863	C 3A	5.0 I	17.66
2194 2195	T 2	18X4TRAY	27.24
2194 2195	T 3B	18X4PRLL	21.57
2194 2195	T 5B	18X4TRAY	29.77
2194 2224	T 3B	18X4TRAY	8.39
2194 2225	T 3B	18X4TRAY	41.33
2194 2259	T 3A	18X4TRAY	48.49
2194 2850	C 3A	5.0 I	14.86
2195 2196	T 2	18X4TRAY	22.81
2195 2196	T 3B	18X4PRLL	1.64
2195 2196	T 5B	18X4TRAY	29.77
2195 2232	T 3B	18X4TRAY	39.14
2196 2197	T 2	18X4TRAY	20.39
2196 2197	T 3B	18X4TRAY	11.94
2196 2197	T 5B	18X4TRAY	7.67
2196 2216	T 5B	18X4TRAY	43.48
2196 2234	T 3B	18X4TRAY	20.57
2197 2198	T 2	18X4TRAY	22.04
2197 2198	T 3B	18X4TRAY	11.94
2197 2198	T 5B	18X4TRAY	30.68
2198 2199	T 2	18X4TRAY	21.35
2198 2199	T 5A	18X4TRAY	30.18

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2198 2199	T 5B	18X4TRAY	30.68
2198 2212	T 3B	18X4TRAY	26.24
2199 2200	T 2	18X4TRAY	21.35
2199 2200	T 5A	18X4TRAY	18.96
2199 9242	T 3A	18X4TRAY	4.25
2200 2201	T 2	18X4TRAY	21.76
2200 2201	T 3A	18X4TRAY	11.22
2200 2201	T 5A	18X4TRAY	15.09
2200 2212	T 3A	18X4TRAY	8.97
2200 2221	T 3A	18X4TRAY	48.48
2200 2222	T 3A	18X4TRAY	44.02
2200 2223	T 3A	18X4TRAY	62.31
2200 2238	T 3B	18X4TRAY	4.52
2200 9242	T 3A	18X4TRAY	4.25
2201 2202	T 2	18X4TRAY	21.81
2201 2202	T 3A	18X4TRAY	19.37
2201 2202	T 4B	18X4TRAY	25.10
2202 2203	T 2	18X4TRAY	22.08
2202 2203	T 3A	18X4PRLL	7.91
2202 2203	T 3B	18X4TRAY	54.53
2202 2203	T 4B	18X4TRAY	25.10
2202 2212	T 3A	18X4TRAY	11.55
2202 2213	T 3B	18X4TRAY	27.17
2202 2214	T 3B	18X4TRAY	36.67
2202 2240	T 3B	18X4TRAY	41.04
2202 2353	C 3A	5.0 I	29.42
2203 2204	T 2	18X4TRAY	21.94
2203 2204	T 3B	18X4TRAY	55.27
2203 2204	T 4B	18X4TRAY	24.72
2203 2227	T 3A	18X4TRAY	11.14
2204 2205	T 2	18X4TRAY	8.22
2204 2205	T 3B	18X4PRLL	16.21
2204 2205	T 4B	18X4TRAY	24.44
2204 2214	T 3B	18X4TRAY	36.57
2205 2206	T 2	18X4TRAY	19.29
2205 2205	T 4B	18X4TRAY	24.44
2205 2218	T 3B	18X4TRAY	38.57
2205 2351	C 5B	5.0 I	25.29
2206 2207	T 4B	18X4TRAY	23.15
2205 2908	C 2	5.0 I	3.25
2207 2208	T 3B	18X4TRAY	7.34
2208 2209	T 3B	18X4TRAY	7.00
2208 2215	T 3A	18X4TRAY	0.95
2208 2217	T 3A	18X4TRAY	2.99
2209 2227	T 2	18X4TRAY	52.85
2209 2909	C 2	5.0 I	6.04
2209 3871	T 3B	AIR SEG	0.32
2211 2212	T 5B	18X4TRAY	32.35
2211 2851	C 5B	5.0 I	26.29
2212 2213	T 3B	18X4TRAY	27.41

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2212 2213	T 43	18X4TRAY	19.96
2212 2213	T 5B	18X4TRAY	24.80
2215 2355	T 3A	18X4TRAY	1.43
2216 2217	T 5B	18X4TRAY	43.48
2217 2218	T 4B	18X4TRAY	14.84
2217 2218	T 5B	18X4TRAY	29.05
2218 2219	T 4B	18X4TRAY	26.55
2218 2395	T 3B	18X4TRAY	37.37
2219 2220	T 4A	18X4PRLL	25.06
2219 2266	T 4A	18X4TRAY	27.45
2219 2268	T 4A	18X4TRAY	26.94
2219 2274	T 4A	18X4TRAY	9.00
2219 9251	T 4A	18X4TRAY	13.25
2220 2221	T 4A	18X4TRAY	17.20
2220 2221	T 4B	18X4TRAY	21.84
2220 2222	T 4B	18X4TRAY	25.33
2220 2270	T 4A	18X4TRAY	25.68
2220 2271	T 4A	18X4TRAY	21.84
2220 9251	T 4A	18X4TRAY	13.25
2221 2222	T 4A	18X4TRAY	15.87
2221 2332	T 3A	18X4TRAY	48.48
2221 2412	T 4B	18X4TRAY	21.84
2222 2223	T 4A	18X4TRAY	15.84
2222 2330	T 3A	18X4TRAY	46.59
2222 2411	T 4B	18X4TRAY	26.87
2223 2224	T 4A	18X4TRAY	15.18
2224 2266	T 3B	18X4TRAY	8.39
2225 2260	T 3B	18X4TRAY	41.33
2226 2227	T 3A	18X4TRAY	11.14
2226 2227	T 4B	18X4TRAY	19.50
2227 2228	T 4B	18X4TRAY	19.50
2228 2410	T 4B	18X4TRAY	19.50
2230 2908	C 2	5.0 I	3.25
2230 2910	C 2	5.0 I	5.57
2231 2232	T 3B	18X4TRAY	39.45
2233 2234	T 3B	18X4TRAY	21.42
2233 2244	T 4B	18X4TRAY	22.78
2233 2245	T 4B	18X4PRLL	10.41
2237 2238	T 3B	18X4TRAY	7.14
2239 2240	T 3B	18X4TRAY	41.04
2244 2356	C 4B	2.0 I	6.33
2245 2246	T 4B	18X4TRAY	15.23
2246 2409	T 4B	18X4TRAY	15.23
2255 2256	T 3A	18X4TRAY	41.42
2256 2259	T 3A	18X4TRAY	48.30
2256 2260	T 3A	18X4TRAY	19.35
2256 2398	T 3A	18X4TRAY	58.72
2256 2399	T 3A	18X4TRAY	39.89
2256 2862	C 3A	5.0 I	19.68
2256 2870	C 3A	2.0 I	33.72

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2258 2424	T 3A	18X4TRAY	30.29
2258 2855	C 3A	5.0 I	13.51
2258 2879	C 3A	3.0 I	17.87
2260 2261	T 3A	18X4TRAY	18.69
2260 2261	T 3B	18X4TRAY	41.33
2261 2262	T 3B	18X4TRAY	41.33
2261 2425	T 3A	18X4TRAY	14.40
2261 2855	C 3A	5.0 I	13.51
2262 2263	T 3A	18X4TRAY	38.92
2262 2263	T 3B	18X4TRAY	41.33
2263 2264	T 3A	18X4TRAY	37.88
2263 2264	T 3B	18X4TRAY	41.33
2264 2265	T 3A	18X4TRAY	29.20
2264 2265	T 3B	18X4TRAY	41.39
2265 2266	T 3A	18X4TRAY	28.23
2265 2424	T 3B	18X4TRAY	42.57
2265 2870	C 3A	2.0 I	33.72
2266 2267	T 3A	18X4TRAY	27.17
2266 2267	T 3B	18X4TRAY	8.39
2266 2267	T 4A	18X4TRAY	27.45
2267 2268	T 3A	18X4TRAY	27.17
2267 2268	T 3B	18X4TRAY	8.11
2268 2269	T 3A	18X4TRAY	26.52
2268 2269	T 3B	18X4TRAY	8.20
2268 2269	T 4A	18X4TRAY	26.94
2269 2270	T 3A	18X4TRAY	26.24
2269 2853	C 3B	5.0 I	12.86
2270 2271	T 3A	18X4TRAY	26.24
2270 2414	T 4A	18X4TRAY	25.68
2271 2272	T 3A	18X4TRAY	49.81
2271 2306	T 3A	18X4TRAY	25.97
2271 2307	T 3A	18X4TRAY	29.92
2271 2339	T 3A	18X4TRAY	55.47
2271 2415	T 4A	18X4TRAY	21.84
2272 2273	T 3A	18X4TRAY	54.55
2273 2274	T 3A	18X4TRAY	49.45
2273 2274	T 3B	18X4TRAY	37.28
2273 2307	T 3A	18X4TRAY	35.76
2273 2308	T 3A	18X4TRAY	44.44
2274 2275	T 3A	18X4TRAY	48.97
2274 2275	T 3B	18X4TRAY	36.62
2274 2275	T 4A	18X4TRAY	9.00
2275 2276	T 3A	18X4TRAY	43.97
2275 2276	T 3B	18X4TRAY	36.52
2275 2418	T 4A	18X4TRAY	9.00
2276 2277	T 3A	18X4TRAY	48.97
2276 2277	T 3B	18X4TRAY	37.89
2277 2278	T 3A	18X4TRAY	48.97
2277 2278	T 3B	18X4TRAY	42.50
2277 2853	C 3B	5.0 I	12.86

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2278 2279	T 3A	18X4TRAY	48.97
2278 2279	T 3B	18X4TRAY	40.30
2278 2279	T 4A	18X4TRAY	15.21
2278 2285	T 3B	18X4TRAY	15.34
2278 2422	T 4A	18X4TRAY	15.21
2279 2280	T 3A	18X4PRLL	39.59
2279 2280	T 3B	18X4TRAY	16.94
2279 2280	T 4A	18X4TRAY	17.75
2279 2289	T 3B	18X4TRAY	8.92
2279 2292	T 3B	18X4TRAY	3.21
2279 2299	T 3B	18X4PRLL	11.76
2279 2312	T 3A	18X4TRAY	43.42
2279 2329	T 3A	18X4TRAY	46.59
2279 2331	T 3A	18X4TRAY	43.99
2279 2862	C 3A	5.0 I	19.68
2279 9254	T 3A	18X4TRAY	3.37
2279 9257	T 3B	18X4TRAY	5.56
2280 2281	T 3A	18X4TRAY	20.29
2280 2281	T 3B	18X4TRAY	12.03
2280 2281	T 4A	18X4TRAY	17.75
2280 2313	T 3A	18X4TRAY	10.28
2280 2334	T 3A	18X4TRAY	24.05
2280 9254	T 3A	18X4TRAY	3.37
2281 2282	T 3A	18X4TRAY	18.69
2281 2282	T 3B	18X4TRAY	8.66
2281 2282	T 4A	18X4TRAY	26.23
2281 2316	T 4A	18X4TRAY	11.37
2281 2879	C 3A	5.0 I	23.41
2282 2283	T 3A	18X4TRAY	18.69
2282 2283	T 3B	18X4TRAY	5.00
2282 2283	T 4A	18X4TRAY	23.69
2283 2284	T 3A	18X4TRAY	19.86
2283 2284	T 3B	18X4TRAY	3.62
2283 2284	T 4A	18X4TRAY	20.82
2283 2315	T 3A	18X4TRAY	8.38
2283 2401	T 3A	18X4TRAY	15.29
2284 2285	T 3A	18X4TRAY	17.13
2284 2285	T 4A	18X4TRAY	23.15
2284 2301	T 4A	18X4TRAY	25.01
2284 2302	T 4A	18X4TRAY	24.42
2285 2286	T 3A	18X4TRAY	11.69
2285 2286	T 3B	18X4TRAY	14.11
2285 2286	T 4A	18X4TRAY	23.15
2286 2287	T 3A	18X4TRAY	11.36
2286 2287	T 3B	18X4TRAY	9.37
2286 2287	T 4A	18X4TRAY	23.15
2287 2288	T 3A	18X4TRAY	11.22
2287 2288	T 4A	18X4TRAY	23.15
2288 2289	T 3A	18X4TRAY	9.20
2288 2289	T 4A	18X4TRAY	25.01

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2289 2290	T 3A	18X4TRAY	7.51
2289 2290	T 3B	18X4TRAY	6.53
2290 2291	T 3A	18X4TRAY	5.46
2290 2291	T 3B	18X4TRAY	1.13
2291 2292	T 3A	18X4TRAY	5.16
2292 2293	T 3A	18X4TRAY	4.74
2293 2294	T 3A	18X4TRAY	4.32
2294 2295	T 4A	18X4TRAY	25.01
2298 2299	T 3A	18X4TRAY	15.97
2298 2299	T 4A	18X4TRAY	25.01
2298 2421	T 4A	18X4TRAY	25.01
2299 2300	T 3A	18X4TRAY	15.97
2299 2300	T 3B	18X4TRAY	24.97
2299 2300	T 4A	18X4TRAY	25.01
2299 2301	T 3B	18X4TRAY	7.87
2299 9257	T 3B	18X4TRAY	5.56
2300 2301	T 3A	18X4TRAY	15.97
2300 2301	T 4A	18X4TRAY	25.01
2300 2425	T 3B	18X4TRAY	25.44
2301 2302	T 3A	18X4TRAY	15.10
2301 2426	T 3B	18X4TRAY	7.14
2302 2303	T 3A	18X4TRAY	16.33
2302 2303	T 3B	18X4TRAY	47.71
2302 2303	T 4A	18X4TRAY	24.42
2303 2304	T 3A	18X4TRAY	21.57
2303 2304	T 3B	18X4TRAY	47.30
2303 2304	T 4A	18X4TRAY	24.42
2304 2305	T 3A	18X4TRAY	22.33
2304 2305	T 3B	18X4TRAY	46.34
2304 2305	T 4A	18X4TRAY	27.98
2305 2306	T 3A	18X4TRAY	22.77
2305 2306	T 3B	18X4TRAY	46.34
2305 2306	T 4A	18X4TRAY	21.88
2306 2307	T 3B	18X4TRAY	44.89
2306 2307	T 4A	18X4TRAY	11.65
2307 2308	T 4A	18X4TRAY	19.99
2307 2427	T 3B	18X4TRAY	44.41
2308 2309	T 3A	18X4TRAY	46.32
2308 2309	T 4A	18X4TRAY	19.99
2309 2310	T 3A	18X4TRAY	46.01
2309 2310	T 4A	18X4TRAY	18.73
2310 2311	T 3A	18X4TRAY	45.91
2311 2312	T 3A	18X4TRAY	44.30
2315 2316	T 3A	18X4TRAY	8.38
2316 2317	T 3A	18X4TRAY	8.38
2316 2420	T 4A	18X4TRAY	11.37
2317 2318	T 3A	18X4TRAY	8.38
2318 2319	T 3A	18X4TRAY	8.38
2319 2320	T 3A	18X4TRAY	8.38
2320 2321	T 3A	18X4TRAY	8.38

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2321 2322	T 3A	18X4TRAY	6.16
2321 2322	T 3B	18X4TRAY	49.74
2322 2323	T 3A	18X4TRAY	5.74
2322 2323	T 3B	18X4TRAY	59.69
2322 2361	T 3B	18X4TRAY	62.70
2322 2394	T 3B	18X4TRAY	37.31
2322 2356	C 3B	5.0 I	9.22
2323 2324	T 3A	18X4TRAY	5.74
2323 2324	T 3B	18X4TRAY	59.69
2324 2325	T 3B	18X4TRAY	59.69
2325 2326	T 3B	18X4TRAY	59.69
2326 2327	T 3B	18X4TRAY	59.69
2327 2328	T 3B	18X4TRAY	59.69
2328 2329	T 3B	18X4TRAY	59.69
2329 2330	T 3A	18X4TRAY	46.59
2329 2330	T 3B	18X4TRAY	59.26
2330 2331	T 3B	18X4TRAY	59.72
2331 2332	T 3A	18X4TRAY	48.99
2331 2332	T 3B	18X4TRAY	57.30
2331 2351	T 3B	18X4TRAY	61.06
2331 2352	T 3B	18X4TRAY	52.41
2332 2333	T 3B	18X4TRAY	56.57
2332 2858	C 3B	3.0 I	17.23
2333 2334	T 3B	18X4TRAY	20.20
2333 2352	T 3B	18X4TRAY	50.16
2333 2353	T 3B	18X4TRAY	44.81
2334 2335	T 3B	18X4TRAY	16.15
2334 2427	T 3A	18X4TRAY	24.05
2335 2336	T 3B	18X4TRAY	15.37
2336 2337	T 3B	18X4TRAY	15.37
2337 2338	T 3B	18X4TRAY	15.87
2338 2339	T 3B	18X4TRAY	17.21
2339 2340	T 3A	18X4TRAY	55.47
2339 2340	T 3B	18X4TRAY	16.04
2340 2341	T 3B	18X4TRAY	15.49
2340 2343	T 3A	18X4TRAY	55.47
2341 2403	T 3B	18X4TRAY	14.52
2343 2344	T 3A	18X4TRAY	30.29
2343 2344	T 3B	18X4TRAY	60.92
2343 2361	T 3B	18X4TRAY	55.93
2343 2395	T 3B	18X4TRAY	35.12
2344 2345	T 3A	18X4TRAY	27.40
2344 2345	T 3B	18X4TRAY	60.92
2345 2346	T 3A	18X4TRAY	27.11
2345 2346	T 3B	18X4TRAY	61.36
2346 2347	T 3A	18X4TRAY	28.02
2346 2347	T 3B	18X4TRAY	60.88
2347 2348	T 3A	18X4TRAY	26.57
2347 2348	T 3B	18X4TRAY	59.76
2348 2349	T 3A	18X4TRAY	19.86

PERCENT FILL OF CONDUITS AND TRAYS WITH CABLES THAT MAY NEED FIREWRAP

**** FOR INFORMATION ONLY ****

RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2348 2349	T 38	18X4TRAY	59.29
2349 2350	T 3A	18X4TRAY	20.12
2349 2350	T 38	18X4TRAY	58.70
2350 2351	T 3A	18X4TRAY	8.61
2350 2351	T 38	18X4TRAY	58.62
2353 2354	T 38	18X4TRAY	42.82
2354 2355	T 38	18X4TRAY	36.81
2355 2356	T 3A	18X4TRAY	1.43
2355 2356	T 38	18X4TRAY	33.02
2356 2357	T 3A	18X4TRAY	0.82
2356 2357	T 38	18X4TRAY	25.62
2356 2357	T 4A	18X4TRAY	25.35
2357 2358	T 3A	18X4TRAY	0.34
2357 2358	T 38	18X4TRAY	15.00
2357 2358	T 4A	18X4TRAY	25.94
2358 2359	T 38	18X4TRAY	8.42
2358 2359	T 4A	18X4TRAY	24.05
2359 2360	T 3A	18X4TRAY	44.79
2360 2361	T 3A	18X4TRAY	36.35
2360 2379	T 3A	18X4TRAY	44.99
2360 2380	T 3A	18X4TRAY	53.60
2361 2362	T 3A	18X4TRAY	36.35
2361 2362	T 38	18X4TRAY	56.52
2361 2373	T 38	18X4TRAY	62.79
2361 2392	T 38	18X4TRAY	6.47
2361 2856	C 38	5.0 I	9.22
2362 2363	T 3A	18X4TRAY	36.35
2362 2363	T 38	18X4TRAY	55.54
2363 2364	T 3A	18X4TRAY	36.62
2363 2364	T 38	18X4TRAY	8.44
2363 2365	T 2	18X4TRAY	26.94
2363 2373	T 38	18X4TRAY	62.79
2363 2380	T 38	18X4TRAY	10.78
2363 2390	T 38	18X4TRAY	36.75
2364 2365	T 3A	18X4TRAY	37.59
2364 2365	T 38	18X4TRAY	8.44
2365 2366	T 3A	18X4TRAY	36.31
2365 2431	T 2	18X4TRAY	31.93
2365 9264	T 38	18X4TRAY	0.48
2366 2367	T 3A	18X4TRAY	36.13
2366 2374	T 38	18X4TRAY	4.92
2366 9264	T 38	18X4TRAY	0.48
2367 2368	T 3A	18X4TRAY	34.72
2368 2369	T 3A	18X4TRAY	34.72
2369 2370	T 3A	18X4TRAY	34.04
2370 2371	T 3A	18X4TRAY	3.53
2370 2376	T 3A	18X4TRAY	30.62
2370 2390	T 3A	18X4TRAY	6.19
2371 2372	T 3A	18X4TRAY	2.23
2372 2373	T 3A	18X4TRAY	0.90

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2373 2374	T 3A	18X4TRAY	0.90
2374 2375	T 3B	18X4TRAY	4.92
2375 2376	T 3B	18X4TRAY	4.43
2376 2377	T 3B	18X4TRAY	4.15
2376 2430	T 3A	18X4TRAY	31.92
2377 2378	T 3B	18X4TRAY	3.80
2378 2379	T 2	18X4TRAY	22.67
2379 2379	T 3A	18X4TRAY	45.13
2379 2380	T 2	18X4TRAY	22.28
2380 2381	T 3A	18X4TRAY	49.96
2380 2381	T 3B	18X4TRAY	7.19
2380 2385	T 2	18X4TRAY	41.49
2381 2382	T 3A	18X4TRAY	47.60
2381 2382	T 3B	18X4TRAY	5.08
2382 2383	T 3A	18X4TRAY	47.12
2382 2383	T 3B	18X4TRAY	5.08
2383 2867	C 3A	3.0 I	36.26
2385 2428	T 2	18X4TRAY	42.05
2390 2391	T 3A	18X4TRAY	6.19
2390 2429	T 3B	18X4TRAY	36.75
2391 2392	T 3A	18X4TRAY	4.84
2392 2393	T 3A	18X4TRAY	2.24
2392 2857	C 3B	5.0 I	21.84
2398 2422	T 3A	18X4TRAY	56.72
2399 2423	T 3A	18X4TRAY	39.89
2401 2429	T 3A	18X4TRAY	15.85
2402 2403	T 3B	18X4TRAY	14.92
2409 2448	T 4B	18X4TRAY	22.03
2411 2469	T 4B	18X4TRAY	29.12
2412 2568	T 4B	18X4TRAY	23.38
2414 2478	T 4A	18X4TRAY	25.68
2415 2457	T 4A	18X4TRAY	25.44
2418 2447	T 4A	18X4TRAY	24.03
2420 2533	T 4A	18X4TRAY	15.90
2421 2565	T 4A	18X4TRAY	25.01
2422 2453	T 4A	18X4TRAY	25.26
2422 2472	T 3A	18X4TRAY	58.72
2423 2451	T 3A	18X4TRAY	40.49
2424 2442	T 3A	18X4TRAY	30.29
2424 2452	T 3B	18X4TRAY	48.52
2424 2854	C 3B	3.0 I	54.38
2425 2445	T 3A	18X4TRAY	15.00
2425 2472	T 3B	18X4TRAY	25.44
2426 2451	T 3B	18X4TRAY	7.14
2427 2452	T 3B	18X4TRAY	45.20
2427 2900	T 3A	18X4TRAY	24.05
2428 2429	T 2	18X4TRAY	31.80
2428 2471	T 3B	18X4TRAY	35.78
2429 2533	T 3A	18X4TRAY	15.85
2430 2431	T 2	18X4TRAY	31.93

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RCWY ID	RCWY NO	TYPE	VOLT	RCWY SIZE	PERCENT FILL
2430	2471	T	3A	18X4TRAY	31.92
2435	2436	T	2	18X4TRAY	31.59
2439	2440	T	4B	18X4TRAY	24.16
2440	2441	T	3A	18X4TRAY	33.22
2440	2441	T	4B	18X4TRAY	25.10
2441	2442	T	3A	18X4TRAY	30.20
2441	2447	T	4B	18X4TRAY	25.10
2443	2444	T	2A	18X4TRAY	16.64
2443	2444	T	3B	18X4TRAY	28.49
2444	2445	T	3A	18X4TRAY	14.82
2444	2445	T	3B	18X4TRAY	25.38
2445	2446	T	4A	18X4TRAY	24.03
2445	2450	T	3B	18X4TRAY	25.38
2446	2447	T	4A	18X4TRAY	24.03
2447	2608	T	4B	18X4TRAY	25.10
2448	2449	T	4B	18X4TRAY	18.44
2449	2450	T	4B	18X4TRAY	23.60
2450	2451	T	4B	18X4TRAY	23.60
2450	2492	T	3B	18X4TRAY	25.38
2451	2452	T	3A	18X4TRAY	40.34
2451	2452	T	3B	18X4TRAY	6.97
2451	2452	T	4A	18X4TRAY	22.22
2452	2453	T	3A	18X4TRAY	40.34
2452	2453	T	3B	18X4TRAY	41.49
2452	2453	T	4A	18X4TRAY	22.22
2452	2472	T	3B	18X4TRAY	25.44
2452	2473	T	3B	18X4TRAY	56.20
2452	2359	C	3B	5.0 I	25.34
2453	2454	T	3B	18X4TRAY	43.32
2453	2474	T	3A	18X4PRLL	15.51
2454	2455	T	3B	18X4TRAY	42.16
2455	2456	T	3B	18X4TRAY	35.88
2456	2457	T	3B	18X4TRAY	33.77
2457	2458	T	3B	18X4TRAY	10.31
2457	2458	T	4A	18X4TRAY	24.01
2457	2477	T	3B	18X4PRLL	11.72
2457	9312	T	3B	18X4TRAY	0.17
2457	9313	T	3B	18X4TRAY	3.16
2458	2459	T	3B	18X4TRAY	10.29
2459	2460	T	3B	18X4TRAY	9.41
2460	2461	T	3B	18X4TRAY	9.41
2461	2462	T	3B	18X4TRAY	10.29
2462	2463	T	3B	18X4TRAY	11.76
2463	2464	T	3B	18X4TRAY	15.12
2464	2465	T	3A	18X4TRAY	40.21
2464	2465	T	3B	18X4TRAY	32.20
2464	2485	T	3A	18X4PRLL	18.03
2464	9311	T	3A	18X4TRAY	1.24
2464	9320	T	3B	18X4TRAY	2.42
2464	9321	T	3B	18X4TRAY	0.24

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2465 2466	T 3A	18X4TRAY	38.49
2455 2466	T 3B	18X4TRAY	36.98
2466 2467	T 3A	18X4TRAY	36.99
2466 2467	T 3B	18X4TRAY	36.98
2467 2468	T 3A	18X4TRAY	30.35
2467 2468	T 3B	18X4TRAY	37.25
2467 2867	C 3A	3.0 I	36.26
2468 2469	T 3A	18X4TRAY	30.35
2468 2469	T 3B	18X4TRAY	37.26
2469 2470	T 3A	18X4TRAY	30.35
2469 2470	T 3B	18X4TRAY	36.78
2469 2470	T 4B	18X4TRAY	29.12
2470 2471	T 3A	18X4TRAY	31.92
2470 2471	T 3B	18X4TRAY	35.78
2470 2471	T 4B	18X4TRAY	28.56
2471 2472	T 4B	18X4TRAY	28.46
2472 2473	T 3A	18X4TRAY	56.15
2472 2473	T 4B	18X4TRAY	27.69
2473 2474	T 3A	18X4TRAY	58.15
2473 2474	T 3B	18X4TRAY	56.20
2473 2474	T 4B	18X4TRAY	27.69
2474 2475	T 3B	18X4TRAY	56.20
2474 2475	T 4B	18X4TRAY	26.85
2474 2495	T 3A	18X4TRAY	26.37
2474 2496	T 3A	18X4TRAY	57.91
2475 2476	T 3B	18X4TRAY	56.20
2476 2477	T 3B	18X4TRAY	56.40
2477 2478	T 3B	18X4TRAY	21.38
2477 2499	T 3B	18X4PRLL	39.49
2477 9312	T 3B	18X4TRAY	0.17
2477 9313	T 3B	18X4TRAY	3.16
2477 9314	T 3B	18X4TRAY	1.14
2478 2479	T 3B	18X4TRAY	12.40
2478 2479	T 4A	18X4TRAY	25.68
2479 2480	T 3B	18X4TRAY	12.40
2479 2480	T 4A	18X4TRAY	18.68
2479 2545	T 4A	18X4TRAY	21.48
2480 2481	T 4A	18X4TRAY	15.04
2480 2877	C 3B	3.0 I	14.05
2481 2482	T 4A	18X4TRAY	13.61
2484 9320	T 3B	18X4TRAY	2.42
2484 9321	T 3B	18X4TRAY	0.24
2484 9322	T 3B	18X4TRAY	2.09
2484 9323	T 3B	18X4TRAY	0.55
2485 2486	T 3A	18X4TRAY	54.29
2485 2553	T 3A	18X4TRAY	43.56
2485 9311	T 3A	18X4TRAY	1.24
2485 2487	T 3A	18X4TRAY	59.83
2487 2488	T 3A	18X4TRAY	63.86
2492 2493	T 3B	18X4TRAY	25.38

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2493 2878	C 3B	3.0 I	30.06
2495 2495	T 3B	18X4TRAY	31.94
2495 2537	T 3A	18X4TRAY	26.37
2495 2354	C 3B	3.0 I	54.38
2495 2859	C 3B	5.0 I	25.34
2496 2497	T 3B	18X4TRAY	33.51
2496 2537	T 3A	18X4TRAY	57.91
2497 2498	T 3B	18X4TRAY	40.35
2498 2499	T 3B	18X4TRAY	50.72
2499 2500	T 3B	18X4TRAY	7.53
2499 9314	T 3B	18X4TRAY	1.14
2499 9317	T 3B	18X4TRAY	2.58
2500 2501	T 3A	18X4TRAY	24.13
2500 2501	T 3B	18X4TRAY	6.04
2501 2502	T 3A	18X4TRAY	23.58
2501 2502	T 3B	18X4TRAY	5.04
2502 2503	T 3A	18X4TRAY	22.60
2502 2503	T 3B	18X4TRAY	6.04
2502 2503	T 4A	18X4TRAY	27.02
2502 2518	T 3A	18X4PRLL	10.98
2502 9318	T 3A	18X4TRAY	2.22
2502 9319	T 3A	18X4TRAY	3.76
2503 2504	T 3A	18X4TRAY	6.98
2503 2504	T 3B	18X4TRAY	6.04
2503 2504	T 4A	18X4TRAY	29.57
2503 2545	T 4A	18X4TRAY	21.43
2504 2505	T 3A	18X4TRAY	3.71
2504 2505	T 3B	18X4TRAY	6.04
2504 2505	T 4A	18X4TRAY	10.50
2504 2528	T 4A	18X4TRAY	15.37
2505 2506	T 3B	18X4TRAY	6.04
2505 2507	T 3B	18X4TRAY	4.50
2506 2877	C 3B	3.0 I	14.05
2507 2358	C 3B	3.0 I	17.23
2513 9322	T 3B	18X4TRAY	2.09
2513 9323	T 3B	18X4TRAY	0.56
2513 9324	T 3B	18X4TRAY	1.08
2513 9325	T 3B	18X4TRAY	0.24
2516 2517	T 3B	18X4TRAY	22.61
2516 2578	C 3B	3.0 I	30.05
2517 2518	T 3B	18X4TRAY	23.61
2518 2519	T 3A	18X4TRAY	20.70
2518 2519	T 3B	18X4TRAY	25.39
2518 2543	T 3A	18X4TRAY	45.50
2518 2544	T 3A	18X4TRAY	16.31
2518 9318	T 3A	18X4TRAY	2.22
2518 9319	T 3A	18X4TRAY	0.76
2519 2520	T 3A	18X4TRAY	18.92
2519 2520	T 3B	18X4TRAY	27.87
2520 2521	T 3A	18X4TRAY	8.29

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2520 2521	T 3B	18X4TRAY	30.77
2521 2522	T 3A	18X4TRAY	6.70
2521 2522	T 3B	18X4TRAY	30.77
2522 2523	T 3A	18X4TRAY	6.70
2522 2523	T 3B	18X4TRAY	7.59
2522 9317	T 3B	18X4TRAY	2.68
2523 2524	T 3A	18X4TRAY	6.70
2523 2524	T 3B	18X4TRAY	7.12
2524 2525	T 3A	18X4TRAY	6.70
2524 2525	T 3B	18X4TRAY	4.31
2525 2526	T 3A	18X4TRAY	6.70
2525 2526	T 3B	18X4TRAY	4.31
2526 2527	T 3A	18X4TRAY	6.70
2526 2527	T 3B	18X4TRAY	4.31
2527 2528	T 3A	18X4TRAY	6.70
2527 2528	T 3B	18X4TRAY	4.31
2528 2529	T 3A	18X4TRAY	6.70
2528 2529	T 3B	18X4TRAY	4.31
2529 2530	T 3A	18X4TRAY	7.49
2529 2530	T 3B	18X4TRAY	4.31
2530 2531	T 3A	18X4TRAY	7.49
2530 2531	T 3B	18X4TRAY	3.30
2531 2532	T 3B	18X4TRAY	2.29
2531 2552	T 3A	18X4TRAY	4.33
2532 2533	T 3B	18X4TRAY	1.55
2533 2534	T 3A	18X4TRAY	15.27
2533 2534	T 3B	18X4TRAY	1.55
2534 2535	T 3A	18X4TRAY	17.53
2534 2535	T 3B	18X4TRAY	3.88
2535 2536	T 3A	18X4TRAY	25.01
2535 2536	T 3B	18X4TRAY	3.42
2536 2537	T 3A	18X4TRAY	67.50
2536 2537	T 3B	18X4TRAY	0.80
2536 2543	T 3A	18X4TRAY	45.60
2536 2544	T 3A	18X4TRAY	16.31
2536 9324	T 3B	18X4TRAY	1.08
2536 9325	T 3B	18X4TRAY	0.24
2547 2548	T 3A	18X4TRAY	51.20
2547 2553	T 3A	18X4TRAY	43.66
2548 2549	T 3A	18X4TRAY	32.12
2548 2552	T 3A	18X4TRAY	4.33
2565 2566	T 4A	18X4TRAY	8.33
2566 2567	T 4A	18X4TRAY	8.33
2567 2568	T 4A	18X4TRAY	8.33
2568 2569	T 4A	18X4TRAY	8.33
2568 2569	T 4B	18X4TRAY	23.68
2569 2570	T 4A	18X4TRAY	8.33
2569 2570	T 4B	18X4TRAY	23.58
2570 2571	T 4B	18X4TRAY	23.30
2571 2572	T 4B	18X4TRAY	23.30

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
2572 2573	T 48	18X4TRAY	23.30
2573 2574	T 48	18X4TRAY	10.30
2573 2515	T 48	18X4PRLL	11.37
2573 9288	T 48	18X4TRAY	13.78
2574 2575	T 48	18X4TRAY	2.46
2575 2576	T 48	18X4TRAY	2.16
2576 2577	T 48	18X4TRAY	2.16
2577 2578	T 48	18X4TRAY	2.16
2578 9300	T 48	18X4TRAY	5.70
2583 2584	T 4A	18X4TRAY	13.90
2584 2585	T 4A	18X4TRAY	13.90
2585 2628	T 4A	18X4TRAY	15.07
2591 2592	T 48	18X4TRAY	24.19
2592 9288	T 48	18X4TRAY	13.78
2608 2609	T 48	18X4TRAY	25.10
2609 2610	T 48	18X4TRAY	25.10
2610 2611	T 48	18X4TRAY	25.10
2611 2612	T 48	18X4TRAY	23.21
2612 2613	T 48	18X4TRAY	18.94
2613 2614	T 48	18X4TRAY	20.34
2614 2615	T 48	18X4TRAY	23.83
2615 2616	T 48	18X4TRAY	3.16
2616 2617	T 48	18X4TRAY	3.16
2617 2618	T 48	18X4TRAY	3.16
2618 2619	T 48	18X4TRAY	3.16
2619 2620	T 48	18X4TRAY	3.16
2620 2621	T 48	18X4TRAY	3.16
2621 2622	T 48	18X4TRAY	3.16
2622 2623	T 48	18X4TRAY	3.16
2623 2624	T 48	18X4TRAY	3.16
2624 2625	T 48	18X4TRAY	3.16
2625 2626	T 48	18X4TRAY	3.16
2626 2627	T 48	18X4TRAY	3.16
2627 9300	T 48	18X4TRAY	5.70
2882 3623	C 3A	5.0 I	33.82
2882 3623	C 3B	5.0 I	27.90
2882 3623	C 4A	5.0 I	13.57
2882 3623	C 4B	5.0 I	16.98
2882 3624	C 3A	5.0 I	35.79
2882 3624	C 3B	5.0 I	32.70
2882 3626	C 4A	5.0 I	18.34
2882 3626	C 4B	5.0 I	22.15
2892 3878	C 3A	5.0 A	35.58
2892 3878	C 3B	5.0 I	33.43
2892 3878	C 4A	5.0 I	19.30
2892 3878	C 4B	5.0 I	19.59
2909 2924	C 2	5.0 I	6.04
2910 2923	C 2	5.0 I	6.04
2923 2924	T 2	AIR SEG	1.20
3521 3522	T 3A	20X4TRAY	20.86

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3521 3522	T 33	19X4TRAY	23.57
3521 3522	T 4A	5X4 TRAY	10.92
3521 3522	T 4B	5X4 TRAY	14.74
3521 3522	T 5A	19X4TRAY	14.29
3521 3522	T 5B	19X4TRAY	28.83
3521 3671	T 3A	AIR SEG	4.16
3521 3672	T 3A	AIR SEG	3.68
3521 3677	T 33	AIR SEG	3.39
3521 3678	T 3B	AIR SEG	4.47
3521 3687	T 5A	AIR SEG	5.09
3521 3688	T 5A	AIR SEG	5.09
3521 3695	T 5B	AIR SEG	10.18
3521 3696	T 5B	AIR SEG	10.35
3521 3735	T 4A	AIR SEG	0.53
3521 3749	T 4B	AIR SEG	0.90
3522 3523	T 3A	20X4TRAY	8.64
3522 3523	T 3B	19X4TRAY	10.74
3522 3523	T 4B	5X4 TRAY	11.43
3522 3523	T 5A	19X4TRAY	7.14
3522 3523	T 5B	19X4TRAY	14.29
3523 3524	T 3A	20X4TRAY	1.76
3523 3524	T 3B	19X4TRAY	4.30
3523 3524	T 4B	5X4 TRAY	6.91
3523 3524	T 5A	19X4TRAY	3.57
3523 3524	T 5B	19X4TRAY	7.14
3525 3526	T 4A	24X4TRAY	21.46
3525 3526	T 4B	24X4TRAY	24.99
3525 3735	T 4A	AIR SEG	3.50
3525 3739	T 4A	AIR SEG	2.57
3525 3749	T 4B	AIR SEG	1.82
3525 3752	T 4B	AIR SEG	2.79
3525 3753	T 4B	AIR SEG	1.43
3526 3527	T 4A	24X4TRAY	8.25
3526 3527	T 4B	24X4TRAY	15.29
3527 3528	T 4A	24X4TRAY	0.80
3527 3528	T 4B	24X4TRAY	3.87
3551 3552	T 33	AIR SEG	0.32
3551 3552	T 4A	AIR SEG	4.75
3551 3552	T 4B	AIR SEG	4.75
3551 3553	T 3A	AIR SEG	0.32
3551 3553	T 5A	AIR SEG	4.09
3551 3553	T 5B	AIR SEG	4.09
3551 3554	T 5A	AIR SEG	4.09
3551 3554	T 5B	AIR SEG	4.09
3551 3559	T 3A	24X4TRAY	5.30
3551 3559	T 3B	24X4TRAY	5.07
3551 3559	T 4A	24X4TRAY	16.07
3551 3559	T 4B	24X4TRAY	21.36
3551 3559	T 5A	24X4TRAY	16.20
3551 3559	T 5B	24X4TRAY	19.92

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3551 3870	C 4A	5.0 I	31.99
3552 3871	C 3B	5.0 I	1.61
3552 3871	C 4A	5.0 I	31.36
3552 3871	C 4B	5.0 I	31.36
3553 3872	C 3A	5.0 I	1.61
3553 3872	C 5A	5.0 I	33.04
3553 3872	C 5B	5.0 I	33.04
3554 3873	C 5A	5.0 I	33.04
3554 3873	C 5B	5.0 I	33.04
3555 3555	T 4A	AIR SEG	4.85
3555 3557	T 3A	AIR SEG	0.32
3555 3557	T 5A	AIR SEG	4.09
3555 3557	T 5B	AIR SEG	4.09
3555 3559	T 5A	AIR SEG	4.09
3555 3558	T 5B	AIR SEG	4.13
3555 3563	T 3A	24X4TRAY	5.27
3555 3563	T 4A	24X4TRAY	10.78
3555 3563	T 5A	24X4TRAY	16.20
3555 3563	T 5B	24X4TRAY	16.42
3555 3874	C 4A	5.0 I	31.99
3556 3875	C 4A	5.0 I	31.99
3557 3876	C 3A	5.0 I	1.61
3557 3876	C 5A	5.0 I	33.04
3557 3876	C 5B	5.0 I	33.04
3558 3877	C 5A	5.0 I	33.04
3558 3877	C 5B	5.0 I	33.61
3559 3560	T 3A	AIR SEG	0.32
3559 3560	T 3B	AIR SEG	0.32
3559 3560	T 4A	AIR SEG	4.85
3559 3560	T 4B	AIR SEG	2.42
3559 3561	T 4B	AIR SEG	2.42
3559 3561	T 5A	AIR SEG	4.09
3559 3561	T 5B	AIR SEG	4.09
3559 3562	T 5A	AIR SEG	4.09
3559 3562	T 5B	AIR SEG	4.09
3559 3567	C 4A	5.0 I	31.99
3560 3568	C 3A	5.0 I	1.61
3560 3568	C 3B	5.0 I	1.61
3560 3568	C 4A	5.0 I	31.99
3560 3569	C 4B	5.0 I	15.99
3561 3569	C 4B	5.0 I	15.99
3561 3569	C 5A	5.0 I	33.04
3561 3569	C 5B	5.0 I	33.04
3562 3570	C 5A	5.0 I	33.04
3562 3570	C 5B	5.0 I	33.04
3563 3564	T 3A	AIR SEG	0.32
3563 3564	T 4A	AIR SEG	4.85
3563 3565	T 5A	AIR SEG	4.09
3563 3565	T 5B	AIR SEG	4.09
3563 3566	T 5A	AIR SEG	4.09

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3563 3566	T 50	AIR SEG	4.13
3563 3571	C 4A	5.0 I	31.99
3564 3572	C 3A	5.0 I	1.61
3564 3572	C 4A	5.0 I	31.99
3565 3573	C 5A	5.0 I	33.04
3565 3573	C 5B	5.0 I	33.04
3566 3574	C 5A	5.0 I	33.04
3566 3574	C 5B	5.0 I	33.51
3567 3568	T 3A	AIR SEG	0.32
3567 3568	T 3B	AIR SEG	0.32
3567 3568	T 4A	AIR SEG	4.85
3567 3568	T 4B	AIR SEG	2.42
3567 3569	T 4B	AIR SEG	2.42
3567 3569	T 5A	AIR SEG	4.09
3567 3569	T 5B	AIR SEG	4.09
3567 3570	T 5A	AIR SEG	4.09
3567 3570	T 5B	AIR SEG	4.09
3567 3575	T 3A	24X4TRAY	5.30
3567 3575	T 3B	24X4TRAY	5.07
3567 3575	T 4A	24X4TRAY	10.78
3567 3575	T 4B	24X4TRAY	10.78
3567 3575	T 5A	24X4TRAY	16.20
3567 3575	T 5B	18X4TRAY	26.57
3571 3572	T 3A	AIR SEG	0.32
3571 3572	T 4A	AIR SEG	4.85
3571 3573	T 5A	AIR SEG	4.09
3571 3573	T 5B	AIR SEG	4.09
3571 3574	T 5A	AIR SEG	4.09
3571 3574	T 5B	AIR SEG	4.13
3571 3579	T 3A	24X4TRAY	5.23
3571 3579	T 4A	24X4TRAY	10.78
3571 3579	T 5A	24X4TRAY	23.30
3571 3579	T 5B	24X4TRAY	16.42
3575 3576	T 3A	AIR SEG	0.32
3575 3576	T 3B	AIR SEG	0.32
3575 3576	T 4A	AIR SEG	4.85
3575 3576	T 4B	AIR SEG	2.42
3575 3577	T 4B	AIR SEG	2.42
3575 3577	T 5A	AIR SEG	4.09
3575 3577	T 5B	AIR SEG	4.09
3575 3578	T 5A	AIR SEG	4.09
3575 3578	T 5B	AIR SEG	4.09
3575 3583	C 4A	5.0 I	31.99
3576 3584	C 3A	5.0 I	1.61
3576 3584	C 3B	5.0 I	1.61
3576 3584	C 4A	5.0 I	31.99
3576 3584	C 4B	5.0 I	15.99
3577 3585	C 4B	5.0 I	15.99
3577 3585	C 5A	5.0 I	33.04
3577 3585	C 5B	5.0 I	33.04

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3578 3586	C 5A	5.0 I	33.04
3578 3586	C 5B	5.0 I	33.04
3579 3580	T 3A	AIR SEG	0.32
3579 3580	T 4A	AIR SEG	4.85
3579 3581	T 5A	AIR SEG	4.09
3579 3581	T 5B	AIR SEG	4.09
3579 3582	T 5A	AIR SEG	4.09
3579 3582	T 5B	AIR SEG	4.13
3579 3587	C 4A	5.0 I	31.99
3580 3588	C 3A	5.0 I	1.61
3580 3588	C 4A	5.0 I	31.99
3581 3589	C 5A	5.0 I	33.04
3581 3589	C 5B	5.0 I	33.04
3582 3590	C 5A	5.0 I	33.04
3582 3590	C 5B	5.0 I	33.61
3583 3584	T 3A	AIR SEG	0.32
3583 3584	T 3B	AIR SEG	0.32
3583 3584	T 4A	AIR SEG	4.85
3583 3584	T 4B	AIR SEG	2.42
3583 3585	T 4B	AIR SEG	2.42
3583 3585	T 5A	AIR SEG	4.09
3583 3585	T 5B	AIR SEG	4.09
3583 3586	T 5A	AIR SEG	4.09
3583 3586	T 5B	AIR SEG	4.09
3583 3591	T 3A	24X4TRAY	5.30
3583 3591	T 3B	24X4TRAY	5.07
3583 3591	T 4A	24X4TRAY	10.78
3583 3591	T 4B	24X4TRAY	10.78
3583 3591	T 5A	24X4TRAY	16.20
3583 3591	T 5B	24X4TRAY	19.92
3587 3588	T 3A	AIR SEG	0.32
3587 3588	T 4A	AIR SEG	4.85
3587 3589	T 5A	AIR SEG	4.09
3587 3589	T 5B	AIR SEG	4.09
3587 3590	T 5A	AIR SEG	4.09
3587 3590	T 5B	AIR SEG	4.13
3587 3595	T 3A	24X4TRAY	5.23
3587 3595	T 4A	24X4TRAY	10.78
3587 3595	T 5A	24X4TRAY	23.30
3587 3595	T 5B	24X4TRAY	16.42
3591 3592	T 3A	AIR SEG	0.32
3591 3592	T 3B	AIR SEG	0.32
3591 3592	T 4A	AIR SEG	4.85
3591 3592	T 4B	AIR SEG	2.42
3591 3593	T 4B	AIR SEG	2.42
3591 3593	T 5A	AIR SEG	4.09
3591 3593	T 5B	AIR SEG	4.09
3591 3594	T 5A	AIR SEG	4.09
3591 3594	T 5B	AIR SEG	4.09
3591 3599	C 4A	5.0 I	31.99

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3592 3600	C 3A	5.0 I	1.61
3592 3600	C 3B	5.0 I	1.61
3592 3600	C 4A	5.0 I	31.99
3592 3600	C 4B	5.0 I	15.99
3593 3601	C 4B	5.0 I	15.99
3593 3601	C 5A	5.0 I	33.04
3593 3601	C 5B	5.0 I	33.04
3594 3602	C 5A	5.0 I	33.04
3594 3602	C 5B	5.0 I	33.04
3595 3596	T 3A	AIR SEG	0.32
3595 3596	T 4A	AIR SEG	4.85
3595 3597	T 5A	AIR SEG	4.09
3595 3597	T 5B	AIR SEG	4.09
3595 3598	T 5A	AIR SEG	4.09
3595 3598	T 5B	AIR SEG	4.13
3595 3603	C 4A	5.0 I	31.99
3596 3604	C 3A	5.0 I	1.61
3596 3604	C 4A	5.0 I	31.99
3597 3605	C 5A	5.0 I	33.04
3597 3605	C 5B	5.0 I	33.04
3598 3606	C 5A	5.0 I	33.04
3598 3606	C 5B	5.0 I	33.61
3599 3602	T 4A	AIR SEG	4.85
3600 3602	T 3A	AIR SEG	0.32
3600 3602	T 3B	AIR SEG	0.32
3600 3602	T 4A	AIR SEG	4.85
3600 3602	T 4B	AIR SEG	2.42
3601 3602	T 4B	AIR SEG	2.42
3601 3602	T 5A	AIR SEG	4.09
3601 3602	T 5B	AIR SEG	4.09
3602 3610	T 3A	24X4TRAY	5.30
3602 3610	T 3B	24X4TRAY	5.07
3602 3610	T 4A	24X4TRAY	10.78
3602 3610	T 4B	24X4TRAY	10.78
3602 3610	T 5A	24X4TRAY	15.20
3602 3610	T 5B	24X4TRAY	19.92
3603 3604	T 3A	AIR SEG	0.32
3603 3604	T 4A	AIR SEG	4.85
3603 3605	T 5A	AIR SEG	4.09
3603 3605	T 5B	AIR SEG	4.09
3603 3606	T 5A	AIR SEG	4.09
3603 3606	T 5B	AIR SEG	4.13
3603 3611	T 3A	24X4TRAY	5.23
3603 3611	T 4A	24X4TRAY	10.78
3603 3611	T 5A	24X4TRAY	23.30
3603 3611	T 5B	24X4TRAY	15.42
3607 3610	T 4A	AIR SEG	4.85
3607 3615	C 4A	5.0 I	31.99
3608 3610	T 4A	AIR SEG	4.85
3608 3610	T 4B	AIR SEG	2.42

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3608 3616	C 4A	5.0 I	31.99
3608 3616	C 4B	5.0 I	15.99
3609 3610	T 4B	AIR SEG	2.42
3609 3610	T 5A	AIR SEG	4.09
3609 3610	T 5B	AIR SEG	4.09
3609 3617	C 4B	5.0 I	15.99
3609 3617	C 5A	5.0 I	33.04
3609 3617	C 5B	5.0 I	33.04
3610 3618	C 3A	5.0 I	1.61
3610 3618	C 3B	5.0 I	1.61
3610 3618	C 5A	5.0 I	33.04
3610 3618	C 5B	5.0 I	33.04
3611 3612	T 4A	AIR SEG	4.85
3611 3613	T 5A	AIR SEG	4.09
3611 3613	T 5B	AIR SEG	4.09
3611 3614	T 3A	AIR SEG	0.32
3611 3614	T 5A	AIR SEG	4.09
3611 3614	T 5B	AIR SEG	4.13
3611 3619	C 4A	5.0 I	31.99
3612 3620	C 4A	5.0 I	31.99
3613 3621	C 5A	5.0 I	33.04
3613 3621	C 5B	5.0 I	33.04
3614 3622	C 3A	5.0 I	1.61
3614 3622	C 5A	5.0 I	33.04
3614 3622	C 5B	5.0 I	33.61
3615 3962	T 4A	AIR SEG	4.85
3616 3962	T 4A	AIR SEG	4.85
3616 3963	T 4B	AIR SEG	2.42
3617 3963	T 4B	AIR SEG	2.42
3617 3996	T 5A	AIR SEG	4.09
3617 3997	T 5B	AIR SEG	4.09
3618 3934	T 3B	AIR SEG	0.32
3618 3935	T 3A	AIR SEG	0.32
3618 3996	T 5A	AIR SEG	4.09
3618 3997	T 5B	AIR SEG	4.09
3619 3963	T 4A	AIR SEG	4.85
3620 3963	T 4A	AIR SEG	4.35
3621 3996	T 5B	AIR SEG	4.09
3621 3997	T 5A	AIR SEG	4.09
3622 3934	T 3A	AIR SEG	0.32
3622 3996	T 5B	AIR SEG	4.13
3622 3997	T 5A	AIR SEG	4.09
3623 3625	T 3A	AIR SEG	6.87
3623 3625	T 3B	AIR SEG	5.58
3623 3626	T 5B	AIR SEG	10.35
3623 3628	T 4A	AIR SEG	2.02
3623 3628	T 4B	AIR SEG	3.39
3623 3878	C 5B	5.0 I	51.75
3624 3625	T 3A	AIR SEG	7.16
3624 3625	T 3B	AIR SEG	6.54

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3624 3626	T 5B	AIR SEG	10.35
3624 3679	C 5B	5.0 I	51.75
3625 3626	T 3A	8X4 TRAY	47.01
3625 3626	T 3B	6X4 TRAY	55.37
3626 3627	T 3A	AIR SEG	6.62
3626 3627	T 3B	AIR SEG	5.99
3626 3627	T 5A	16X4TRAY	16.98
3626 3627	T 5B	16X4TRAY	34.52
3626 3628	T 3A	AIR SEG	7.32
3626 3628	T 3B	AIR SEG	6.54
3626 3629	T 4A	AIR SEG	3.67
3626 3629	T 4B	AIR SEG	4.43
3627 3628	T 4A	AIR SEG	5.69
3627 3628	T 5A	AIR SEG	5.09
3627 3628	T 5B	AIR SEG	10.35
3627 3629	C 3A	5.0 I	31.95
3627 3629	C 3B	5.0 I	29.97
3627 3629	T 4A	AIR SEG	2.57
3627 3629	T 4B	AIR SEG	1.91
3627 3629	T 5A	AIR SEG	5.09
3627 3629	T 5B	AIR SEG	10.18
3627 3682	C 4A	5.0 I	14.15
3627 3682	C 4B	5.0 I	11.94
3628 3630	C 3A	5.0 I	39.10
3628 3630	C 3B	5.0 I	32.70
3628 3630	T 4A	16X4TRAY	24.46
3628 3630	T 4B	12X4TRAY	22.41
3628 3631	C 5A	5.0 I	25.45
3628 3631	C 5B	5.0 I	51.75
3629 3631	T 3A	AIR SEG	5.39
3629 3631	T 3B	AIR SEG	5.99
3629 3631	T 4A	8X4 TRAY	26.07
3629 3631	T 4B	8X4 TRAY	24.34
3629 3632	C 5A	5.0 I	25.45
3629 3632	C 5B	5.0 I	50.91
3630 3631	T 3A	AIR SEG	7.82
3630 3631	T 3B	AIR SEG	6.54
3630 3632	T 4A	AIR SEG	3.41
3630 3632	T 4B	AIR SEG	4.25
3631 3632	T 3A	7X4 TRAY	54.18
3631 3632	T 3B	6X4 TRAY	55.74
3631 3634	T 5A	AIR SEG	5.09
3631 3634	T 5B	AIR SEG	10.35
3631 3635	T 4A	AIR SEG	5.70
3631 3635	T 4B	AIR SEG	4.59
3631 3636	T 4A	AIR SEG	2.83
3631 3636	T 4B	AIR SEG	3.08
3632 3633	T 3A	AIR SEG	6.39
3632 3633	T 3B	AIR SEG	5.99
3632 3634	T 3A	AIR SEG	7.32

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3632 3634	T 3B	AIR SEG	6.54
3632 3634	T 5A	AIR SEG	5.09
3632 3634	T 5B	AIR SEG	10.18
3632 3637	C 4A	5.0 I	17.05
3632 3637	C 4B	5.0 I	21.28
3633 3635	C 3A	5.0 I	31.95
3633 3635	C 3B	5.0 I	29.97
3634 3635	T 5A	16X4TRAY	16.98
3634 3635	T 5B	16X4TRAY	34.24
3634 3635	C 3A	5.0 I	39.10
3634 3636	C 3B	5.0 I	32.70
3635 3636	T 5A	AIR SEG	5.09
3635 3636	T 5B	AIR SEG	10.21
3635 3637	T 3A	AIR SEG	6.39
3635 3637	T 3B	AIR SEG	5.99
3635 3637	T 5A	AIR SEG	5.09
3635 3637	T 5B	AIR SEG	10.18
3635 3640	C 4A	5.0 I	28.50
3635 3640	C 4B	5.0 I	22.97
3636 3637	T 3A	AIR SEG	7.82
3636 3637	T 3B	AIR SEG	6.54
3636 3639	C 5A	5.0 I	25.45
3636 3639	C 5B	5.0 I	51.05
3636 3641	C 4A	5.0 I	14.15
3636 3641	C 4B	5.0 I	15.42
3637 3638	T 3A	3X4 TRAY	47.39
3637 3638	T 3B	6X4 TRAY	55.74
3637 3640	C 5A	5.0 I	25.45
3637 3640	C 5B	5.0 I	50.91
3637 3642	T 4A	AIR SEG	3.41
3637 3642	T 4B	AIR SEG	4.25
3638 3639	T 3A	AIR SEG	6.39
3638 3639	T 3B	AIR SEG	5.99
3638 3640	T 3A	AIR SEG	7.32
3638 3640	T 3B	AIR SEG	6.54
3639 3641	C 3A	5.0 I	31.95
3639 3641	C 3B	5.0 I	29.97
3639 3642	T 5A	AIR SEG	5.09
3639 3642	T 5B	AIR SEG	10.21
3640 3642	C 3A	5.0 I	39.10
3640 3642	C 3B	5.0 I	32.70
3640 3642	T 5A	AIR SEG	5.09
3640 3642	T 5B	AIR SEG	10.18
3640 3643	T 4A	AIR SEG	5.70
3640 3643	T 4B	AIR SEG	4.59
3641 3643	T 3A	AIR SEG	5.39
3641 3643	T 3B	AIR SEG	5.99
3641 3643	T 4A	AIR SEG	2.83
3641 3643	T 4B	AIR SEG	3.08
3642 3643	T 3A	AIR SEG	7.82

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3642 3643	T 3B	AIR SEG	6.54
3642 3643	T 5A	16X4TRAY	16.98
3642 3643	T 5B	19X4TRAY	28.63
3642 3644	T 4A	17X4TRAY	22.96
3642 3644	T 4B	18X4TRAY	22.98
3643 3644	T 3A	7X4 TRAY	54.16
3643 3644	T 3B	16X4TRAY	22.79
3643 3644	T 5A	AIR SEG	5.09
3643 3644	T 5B	AIR SEG	10.18
3643 3645	T 4A	8X4 TRAY	28.45
3643 3645	T 4B	8X4 TRAY	25.61
3643 3645	T 5A	AIR SEG	5.09
3643 3645	T 5B	AIR SEG	10.35
3644 3645	T 3A	AIR SEG	6.39
3644 3645	T 3B	AIR SEG	5.99
3644 3646	T 3A	AIR SEG	7.32
3644 3646	T 4A	AIR SEG	3.41
3644 3646	T 4B	AIR SEG	4.25
3644 3647	C 5A	5.0 I	25.45
3644 3647	C 5B	5.0 I	50.91
3644 3654	T 3B	AIR SEG	4.82
3644 3656	T 3B	AIR SEG	2.85
3645 3647	C 3A	5.0 I	31.95
3645 3647	C 3B	5.0 I	29.97
3645 3648	C 5A	5.0 I	25.45
3645 3648	C 5B	5.0 I	51.75
3645 3649	T 4A	AIR SEG	5.70
3645 3649	T 4B	AIR SEG	4.59
3645 3650	T 4A	AIR SEG	2.33
3645 3650	T 4B	AIR SEG	3.58
3646 3648	C 3A	5.0 I	39.10
3646 3651	C 4A	5.0 I	17.06
3646 3651	C 4B	5.0 I	21.28
3647 3649	T 3A	AIR SEG	6.39
3647 3649	T 3B	AIR SEG	5.99
3647 3650	T 5A	AIR SEG	5.09
3647 3650	T 5B	AIR SEG	10.18
3648 3649	T 3A	AIR SEG	7.82
3648 3650	T 5A	AIR SEG	5.09
3648 3650	T 5B	AIR SEG	10.35
3649 3650	T 3A	7X4 TRAY	54.16
3649 3650	T 3B	14X4TRAY	25.04
3649 3654	C 4A	5.0 I	28.50
3649 3654	C 4B	5.0 I	22.77
3649 3657	T 3B	AIR SEG	4.82
3649 3698	T 3B	AIR SEG	2.85
3650 3651	T 3A	AIR SEG	6.39
3650 3651	T 3B	AIR SEG	5.99
3650 3651	T 5A	17X4TRAY	15.98
3650 3651	T 5B	24X4TRAY	22.82

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3650 3652	T 3A	AIR SEG	7.32
3650 3655	C 4A	5.0 I	14.15
3650 3655	C 4B	5.0 I	15.42
3650 3662	T 3B	AIR SEG	4.82
3650 3702	T 3B	AIR SEG	2.85
3651 3652	T 5A	AIR SEG	5.09
3651 3652	T 5B	AIR SEG	10.18
3651 3653	C 3A	5.0 I	31.95
3651 3653	C 3B	5.0 I	29.97
3651 3653	T 5A	AIR SEG	5.09
3651 3653	T 5B	AIR SEG	10.35
3651 3656	T 4A	AIR SEG	3.41
3651 3656	T 4B	AIR SEG	4.25
3652 3654	C 3A	5.0 I	39.10
3652 3655	C 5A	5.0 I	25.45
3652 3655	C 5B	5.0 I	50.91
3653 3655	T 3A	AIR SEG	6.39
3653 3655	T 3B	AIR SEG	5.99
3653 3656	C 5A	5.0 I	25.45
3653 3656	C 5B	5.0 I	51.75
3654 3655	T 3A	AIR SEG	7.82
3654 3657	C 3B	5.0 I	24.09
3654 3657	T 4A	AIR SEG	5.70
3654 3657	T 4B	AIR SEG	4.59
3655 3656	T 3A	7X4 TRAY	54.16
3655 3656	T 3B	15X4TRAY	21.15
3655 3657	T 4A	AIR SEG	2.83
3655 3657	T 4B	AIR SEG	3.08
3655 3658	T 5A	AIR SEG	5.09
3655 3658	T 5B	AIR SEG	10.18
3655 3665	T 3B	AIR SEG	4.82
3655 3704	T 3B	AIR SEG	2.85
3656 3657	T 3A	AIR SEG	6.39
3656 3657	T 3B	AIR SEG	5.91
3656 3658	T 3A	AIR SEG	7.32
3656 3658	T 3B	AIR SEG	6.54
3656 3658	T 4A	16X4TRAY	24.40
3656 3658	T 4B	18X4TRAY	22.98
3656 3658	T 5A	AIR SEG	5.09
3656 3658	T 5B	AIR SEG	10.35
3657 3659	C 3A	5.0 I	31.95
3657 3659	C 3B	5.0 I	29.55
3657 3659	T 4A	8X4 TRAY	28.45
3657 3659	T 4B	19X4TRAY	10.78
3658 3659	T 5A	15X4TRAY	18.11
3658 3659	T 5B	16X4TRAY	34.24
3658 3660	C 3A	5.0 I	39.10
3658 3660	C 3B	5.0 I	32.70
3658 3660	T 4A	AIR SEG	3.41
3658 3660	T 4B	AIR SEG	4.25

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3659 3660	T 5A	AIR SEG	5.09
3659 3660	T 5B	AIR SEG	10.18
3659 3661	T 3A	AIR SEG	6.39
3659 3661	T 3B	AIR SEG	5.91
3659 3661	T 5A	AIR SEG	5.09
3659 3661	T 5B	AIR SEG	10.35
3659 3663	T 4A	AIR SEG	5.70
3659 3663	T 4B	AIR SEG	4.59
3659 3664	T 4A	AIR SEG	2.83
3659 3664	T 4B	AIR SEG	3.08
3660 3661	T 3A	AIR SEG	7.32
3660 3661	T 3B	AIR SEG	6.54
3660 3663	C 5A	5.0 I	25.45
3660 3663	C 5B	5.0 I	50.91
3660 3665	C 4A	5.0 I	17.06
3660 3665	C 4B	5.0 I	21.28
3661 3662	T 3A	7X4 TRAY	54.16
3661 3662	T 3B	12X4 TRAY	23.77
3661 3664	C 5A	5.0 I	25.45
3661 3664	C 5B	5.0 I	51.75
3662 3663	T 3A	AIR SEG	6.39
3662 3663	T 3B	AIR SEG	5.91
3662 3664	T 3A	AIR SEG	7.82
3662 3664	T 3B	AIR SEG	4.64
3662 3665	C 3B	5.0 I	24.09
3662 3679	T 3B	AIR SEG	0.13
3663 3665	C 3A	5.0 I	31.95
3663 3665	C 3B	5.0 I	29.55
3663 3666	T 5A	AIR SEG	5.09
3663 3666	T 5B	AIR SEG	10.18
3663 3668	C 4A	5.0 I	28.50
3663 3668	C 4B	5.0 I	22.97
3664 3666	C 3A	5.0 I	39.10
3664 3666	C 3B	5.0 I	23.22
3664 3666	T 5A	AIR SEG	5.09
3664 3666	T 5B	AIR SEG	10.35
3664 3669	C 4A	5.0 I	14.15
3664 3669	C 4B	5.0 I	15.42
3665 3667	T 3A	AIR SEG	6.39
3665 3667	T 3B	AIR SEG	5.91
3665 3670	T 4A	AIR SEG	3.41
3665 3670	T 4B	AIR SEG	4.25
3666 3667	T 3A	AIR SEG	7.82
3666 3667	T 3B	AIR SEG	4.64
3666 3667	T 5A	17X4 TRAY	15.98
3666 3667	T 5B	17X4 TRAY	32.22
3667 3668	T 3A	7X4 TRAY	54.16
3667 3668	T 3B	15X4 TRAY	19.02
3667 3668	T 5A	AIR SEG	5.09
3667 3668	T 5B	AIR SEG	10.18

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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3667 3669	T 5A	AIR SEG	5.09
3667 3669	T 5B	AIR SEG	10.35
3667 3680	T 3B	AIR SEG	0.13
3668 3669	T 3A	AIR SEG	4.16
3668 3669	T 3B	AIR SEG	5.91
3668 3670	T 3A	AIR SEG	3.68
3668 3670	T 3B	AIR SEG	4.64
3668 3671	T 4A	AIR SEG	5.70
3668 3671	T 4B	AIR SEG	4.59
3668 3671	C 5A	5.0 I	25.45
3668 3671	C 5B	5.0 I	50.91
3668 3681	T 3B	AIR SEG	0.13
3669 3671	C 3A	5.0 I	20.82
3669 3671	C 3B	5.0 I	29.55
3669 3671	T 4A	AIR SEG	2.83
3669 3671	T 4B	AIR SEG	3.08
3669 3672	C 5A	5.0 I	25.45
3669 3672	C 5B	5.0 I	51.75
3670 3672	C 3A	5.0 I	18.43
3670 3672	C 3B	5.0 I	23.22
3670 3672	T 4A	17X4TRAY	22.96
3670 3672	T 4B	24X4TRAY	17.23
3671 3673	T 3B	AIR SEG	5.91
3671 3673	T 4A	7X4 TRAY	29.32
3671 3673	T 4B	8X4 TRAY	25.61
3671 3674	T 5A	AIR SEG	5.09
3671 3674	T 5B	AIR SEG	10.18
3672 3673	T 3B	AIR SEG	4.54
3672 3674	T 4A	AIR SEG	3.41
3672 3674	T 4B	AIR SEG	4.25
3672 3674	T 5A	AIR SEG	5.09
3672 3674	T 5B	AIR SEG	10.35
3673 3674	T 3B	12X4TRAY	23.77
3673 3677	T 4A	AIR SEG	5.70
3673 3677	T 4B	AIR SEG	4.59
3673 3678	T 4A	AIR SEG	2.83
3673 3678	T 4B	AIR SEG	3.08
3673 3682	T 3B	AIR SEG	0.13
3674 3675	T 3B	AIR SEG	3.39
3674 3675	T 5A	15X4TRAY	15.95
3674 3675	T 5B	16X4TRAY	34.24
3674 3676	T 3B	AIR SEG	4.47
3674 3679	C 4A	5.0 I	17.06
3674 3679	C 4B	5.0 I	21.28
3675 3676	T 5A	AIR SEG	5.09
3675 3676	T 5B	AIR SEG	10.18
3675 3677	C 3B	5.0 I	19.45
3675 3677	T 5A	AIR SEG	5.09
3675 3677	T 5B	AIR SEG	10.35
3676 3678	C 3B	5.0 I	22.34

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RCWY ID	RCWY NODE TYPE VCLT	RCWY SIZE	PERCENT FILL
3676 3679	C 5A	5.0 I	25.45
3676 3679	C 5B	5.0 I	50.91
3677 3680	C 5A	5.0 I	25.45
3677 3680	C 5B	5.0 I	51.75
3677 3682	C 4A	5.0 I	23.50
3677 3682	C 4B	5.0 I	22.97
3678 3683	C 4A	5.0 I	14.15
3678 3683	C 4B	5.0 I	15.42
3679 3680	C 3B	5.0 I	0.68
3679 3682	T 5A	AIR SEG	5.09
3679 3682	T 5B	AIR SEG	10.18
3679 3684	T 4A	AIR SEG	3.41
3679 3684	T 4B	AIR SEG	4.25
3680 3682	T 5A	AIR SEG	5.09
3680 3682	T 5B	AIR SEG	10.35
3681 3682	C 3B	5.0 I	0.68
3682 3683	T 5A	15X4TRAY	18.11
3682 3683	T 5B	16X4TRAY	34.24
3682 3685	T 4A	AIR SEG	5.70
3682 3685	T 4B	AIR SEG	4.59
3683 3684	T 5A	AIR SEG	5.09
3683 3684	T 5B	AIR SEG	10.18
3683 3685	T 4A	AIR SEG	2.83
3683 3685	T 4B	AIR SEG	3.08
3683 3685	T 5A	AIR SEG	5.09
3683 3685	T 5B	AIR SEG	10.35
3684 3686	T 4A	17X4TRAY	22.96
3684 3686	T 4B	18X4TRAY	41.37
3684 3687	C 5A	5.0 I	25.45
3684 3687	C 5B	5.0 I	50.91
3685 3687	T 4A	9X4 TRAY	25.29
3685 3687	T 4B	8X4 TRAY	25.61
3685 3688	C 5A	5.0 I	25.45
3685 3688	C 5B	5.0 I	51.75
3686 3688	T 4A	AIR SEG	3.41
3686 3688	T 4B	AIR SEG	4.25
3687 3690	T 5B	AIR SEG	10.18
3687 3691	T 4A	AIR SEG	5.70
3687 3691	T 4B	AIR SEG	4.59
3687 3692	T 4A	AIR SEG	2.83
3687 3692	T 4B	AIR SEG	3.08
3688 3690	T 5B	AIR SEG	10.35
3688 3693	C 4A	5.0 I	17.06
3688 3693	C 4B	5.0 I	21.28
3690 3691	T 5B	16X4TRAY	34.24
3691 3692	T 5B	AIR SEG	10.18
3691 3693	T 5B	AIR SEG	10.35
3691 3696	C 4A	5.0 I	23.50
3691 3696	C 4B	5.0 I	22.97
3692 3695	C 5B	5.0 I	50.91

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RCWY ID	RCWY NO	TYPE	VOLT	RCWY SIZE	PERCENT FILL
3692 3697	C	4A	5.0 I	14.15	
3692 3697	C	4B	5.0 I	15.42	
3693 3696	C	5B	5.0 I	51.75	
3693 3698	T	4A	AIR SEG	3.41	
3693 3698	T	4B	AIR SEG	4.25	
3695 3698	C	3B	5.0 I	14.27	
3696 3699	T	4A	AIR SEG	5.70	
3696 3699	T	4B	AIR SEG	4.59	
3697 3699	T	4A	AIR SEG	2.83	
3697 3699	T	4B	AIR SEG	3.08	
3698 3700	T	4A	17X4TRAY	22.96	
3698 3700	T	4B	9X4 TRAY	45.97	
3699 3701	T	4A	7X4 TRAY	29.82	
3699 3701	T	4B	7X4 TRAY	29.27	
3700 3702	T	4A	AIR SEG	3.41	
3700 3702	T	4B	AIR SEG	4.25	
3701 3705	T	4A	AIR SEG	5.70	
3701 3705	T	4B	AIR SEG	4.59	
3701 3706	T	4A	AIR SEG	2.83	
3701 3706	T	4B	AIR SEG	3.08	
3702 3704	C	3B	5.0 I	14.27	
3702 3707	C	4A	5.0 I	17.06	
3702 3707	C	4B	5.0 I	21.28	
3705 3710	C	4A	5.0 I	28.50	
3705 3710	C	4B	5.0 I	22.97	
3706 3711	C	4A	5.0 I	14.15	
3706 3711	C	4B	5.0 I	15.42	
3707 3712	T	4A	AIR SEG	3.41	
3707 3712	T	4B	AIR SEG	4.25	
3710 3713	T	4A	AIR SEG	5.70	
3710 3713	T	4B	AIR SEG	4.59	
3711 3713	T	4A	AIR SEG	2.83	
3711 3713	T	4B	AIR SEG	3.08	
3712 3714	T	4A	17X4TRAY	22.96	
3712 3714	T	4B	12X4TRAY	34.47	
3713 3715	T	4A	8X4 TRAY	28.45	
3713 3715	T	4B	8X4 TRAY	25.61	
3714 3716	T	4A	AIR SEG	3.41	
3714 3716	T	4B	AIR SEG	4.25	
3715 3719	T	4A	AIR SEG	5.70	
3715 3719	T	4B	AIR SEG	4.59	
3715 3720	T	4A	AIR SEG	2.83	
3715 3720	T	4B	AIR SEG	3.08	
3716 3721	C	4A	5.0 I	17.06	
3716 3721	C	4B	5.0 I	21.28	
3719 3724	C	4A	5.0 I	28.50	
3719 3724	C	4B	5.0 I	22.97	
3720 3725	C	4A	5.0 I	14.15	
3720 3725	C	4B	5.0 I	15.42	
3721 3725	T	4A	AIR SEG	3.41	

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ROWY ID	ROWY NODE	TYPE	VOLT	SIZE	PERCENT FILL
3721	3726	T	48	AIR SEG	4.25
3724	3727	T	4A	AIR SEG	4.87
3724	3727	T	4B	AIR SEG	4.59
3725	3727	T	4A	AIR SEG	2.33
3725	3727	T	4B	AIR SEG	3.08
3726	3728	T	4A	17X4TRAY	24.25
3726	3728	T	4B	9X4 TRAY	45.97
3727	3729	T	4A	9X4 TRAY	20.95
3727	3729	T	4B	18X4TRAY	11.38
3728	3730	T	4A	AIR SEG	1.67
3728	3730	T	4B	AIR SEG	4.25
3728	3734	T	4A	AIR SEG	0.21
3729	3730	T	4A	AIR SEG	2.37
3729	3733	T	4B	AIR SEG	4.59
3729	3734	T	4A	AIR SEG	2.57
3729	3734	T	4B	AIR SEG	3.08
3730	3735	C	4A	5.0 I	20.21
3730	3735	C	4B	5.0 I	21.28
3733	3738	C	4B	5.0 I	22.97
3734	3739	C	4A	5.0 I	13.93
3734	3739	C	4B	5.0 I	15.42
3735	3741	T	4B	AIR SEG	3.59
3738	3741	T	4B	AIR SEG	3.76
3739	3741	T	4B	AIR SEG	3.08
3741	3743	T	4B	16X4TRAY	17.41
3743	3744	T	4B	AIR SEG	2.24
3743	3747	T	4B	AIR SEG	2.79
3743	3748	T	4B	AIR SEG	1.43
3744	3749	C	4B	5.0 I	13.68
3747	3752	C	4B	5.0 I	13.96
3748	3753	C	4B	5.0 I	7.16
3925	3927	T	4B	18X4TRAY	10.78
3926	3959	T	4B	18X4TRAY	10.78
3927	3947	T	4B	24X4TRAY	8.09
3928	3929	T	4A	18X4TRAY	5.91
3928	3929	T	4B	18X4TRAY	4.64
3929	3930	T	4A	18X4TRAY	6.32
3929	3930	T	4B	18X4TRAY	4.35
3930	3931	T	4A	18X4TRAY	11.92
3930	3931	T	4B	18X4TRAY	11.54
3931	3932	T	4A	18X4TRAY	15.87
3931	3932	T	4B	18X4TRAY	4.35
3931	3959	T	4B	18X4TRAY	10.78
3931	3960	T	4A	18X4TRAY	4.50
3931	3960	T	4B	18X4TRAY	5.86
3932	3933	T	4A	18X4TRAY	14.91
3932	3933	T	4B	18X4TRAY	3.97
3933	3934	T	4A	18X4TRAY	14.38
3933	3934	T	4B	18X4TRAY	3.59
3934	3937	T	3A	24X4TRAY	2.86

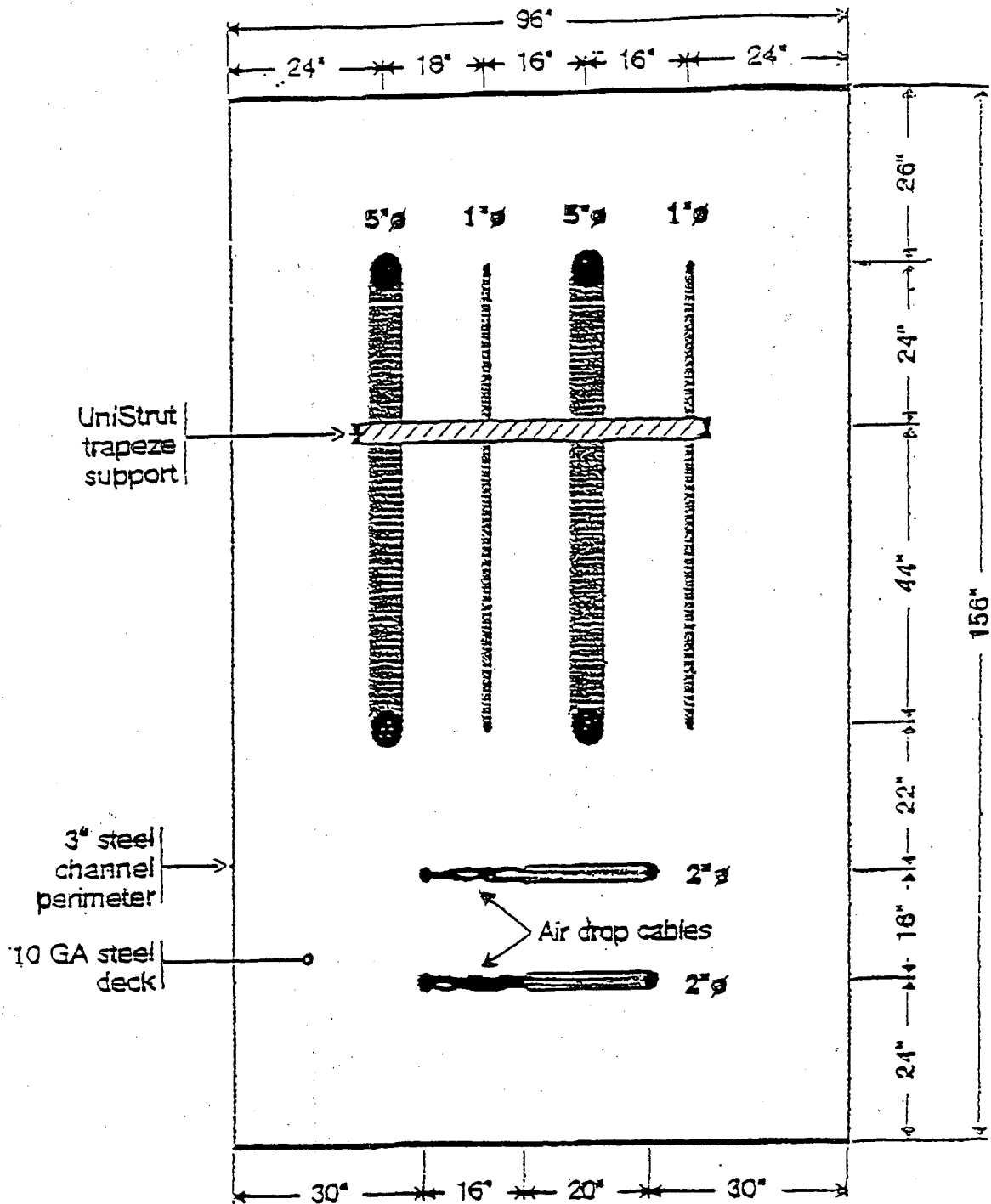
W A T T S B A R N U C L E A R P L A N T
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RCWY ID	RCWY NODE TYPE VOLT	RCWY SIZE	PERCENT FILL
3934 3937	T 3B	24X4TRAY	1.33
3934 3947	T 4A	24X4TRAY	10.78
3934 3947	T 4A	24X4TRAY	2.69
3935 3968	T 3A	24X4TRAY	2.40
3937 3938	T 3A	19X4TRAY	0.64
3937 3938	T 3B	24X4TRAY	0.48
3938 3939	T 3A	18X4TRAY	0.64
3938 3939	T 3B	19X4TRAY	0.64
3939 3940	T 3A	13X4TRAY	0.91
3939 3940	T 3B	18X4TRAY	0.80
3940 3946	T 3A	18X4TRAY	0.91
3940 3946	T 3B	19X4TRAY	0.80
3941 3942	T 3A	19X4TRAY	1.43
3941 3942	T 3B	18X4TRAY	1.31
3941 3946	T 3A	18X4TRAY	3.55
3941 3946	T 3B	19X4TRAY	3.13
3946 3947	T 3A	18X4TRAY	3.76
3946 3947	T 3B	19X4TRAY	3.17
3947 3948	T 3A	19X4TRAY	4.08
3947 3948	T 3B	19X4TRAY	3.03
3947 3963	T 4A	24X4TRAY	10.78
3947 3963	T 4B	24X4TRAY	11.20
3948 3949	T 3A	13X4TRAY	3.89
3948 3949	T 3B	18X4TRAY	3.01
3960 3961	T 4A	18X4TRAY	4.12
3962 3980	T 4A	24X4TRAY	10.78
3964 3965	T 4A	19X4TRAY	3.59
3965 3972	T 4A	18X4TRAY	3.97
3968 3974	T 3A	24X4TRAY	1.49
3970 3971	T 4A	18X4TRAY	6.24
3971 3972	T 4A	19X4TRAY	11.54
3972 3973	T 3A	18X4TRAY	3.05
3972 3973	T 4A	18X4TRAY	15.14
3972 3977	T 3A	18X4TRAY	3.02
3973 3974	T 4A	18X4TRAY	14.76
3974 3975	T 3A	19X4TRAY	1.98
3974 3975	T 4A	18X4TRAY	14.38
3975 3975	T 3A	19X4TRAY	2.67
3975 3988	T 4A	24X4TRAY	10.78
3976 3977	T 3A	18X4TRAY	2.96
3977 3978	T 3A	19X4TRAY	3.42
3978 3979	T 3A	19X4TRAY	3.88
3996 3998	T 5A	24X4TRAY	14.37
3996 3998	T 5B	24X4TRAY	14.54
3997 3999	T 5A	24X4TRAY	21.47
3997 3999	T 5B	24X4TRAY	18.09

ATTACHMENT 2

Attachment 2



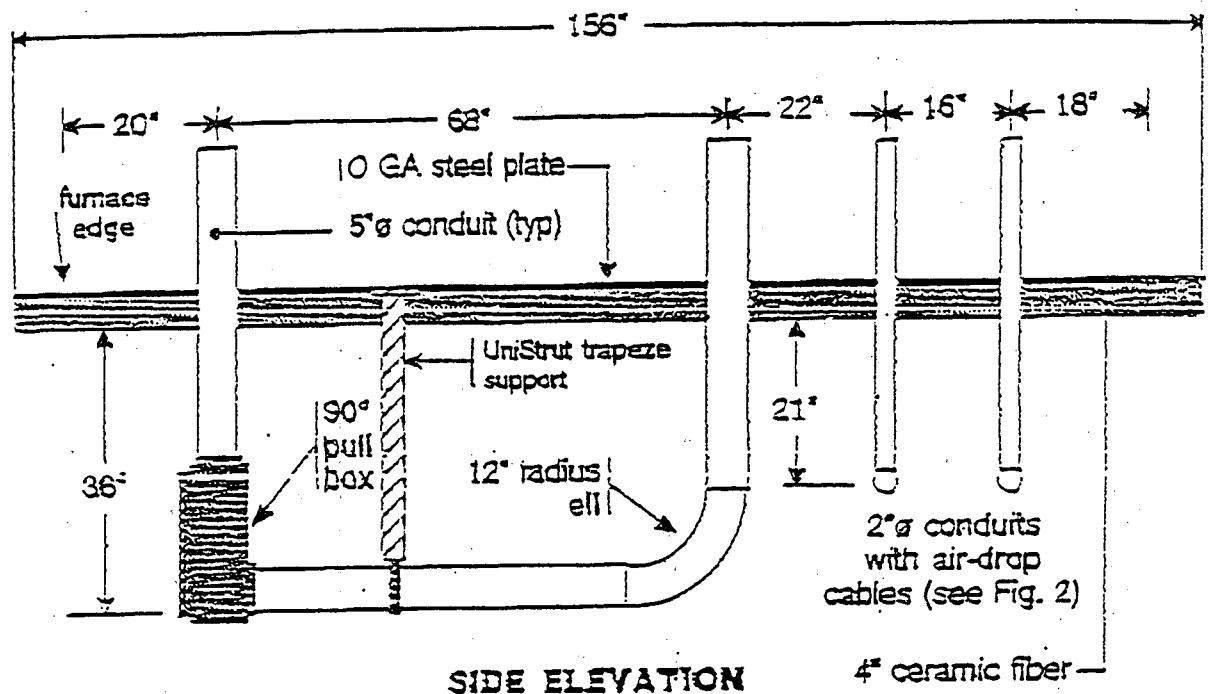
PLAN VIEW

NOTE:
 The conduits and air drops illustrated are located beneath the steel deck and extend up through the deck towards the viewers eye. All items formed a "U" shape, entering the furnace, turning horizontal for a distance and then turning upwards and out the top again.

TENNESSEE VALLEY AUTHORITY

Fig. 3 Plan View

Scale: 1/2"=1'



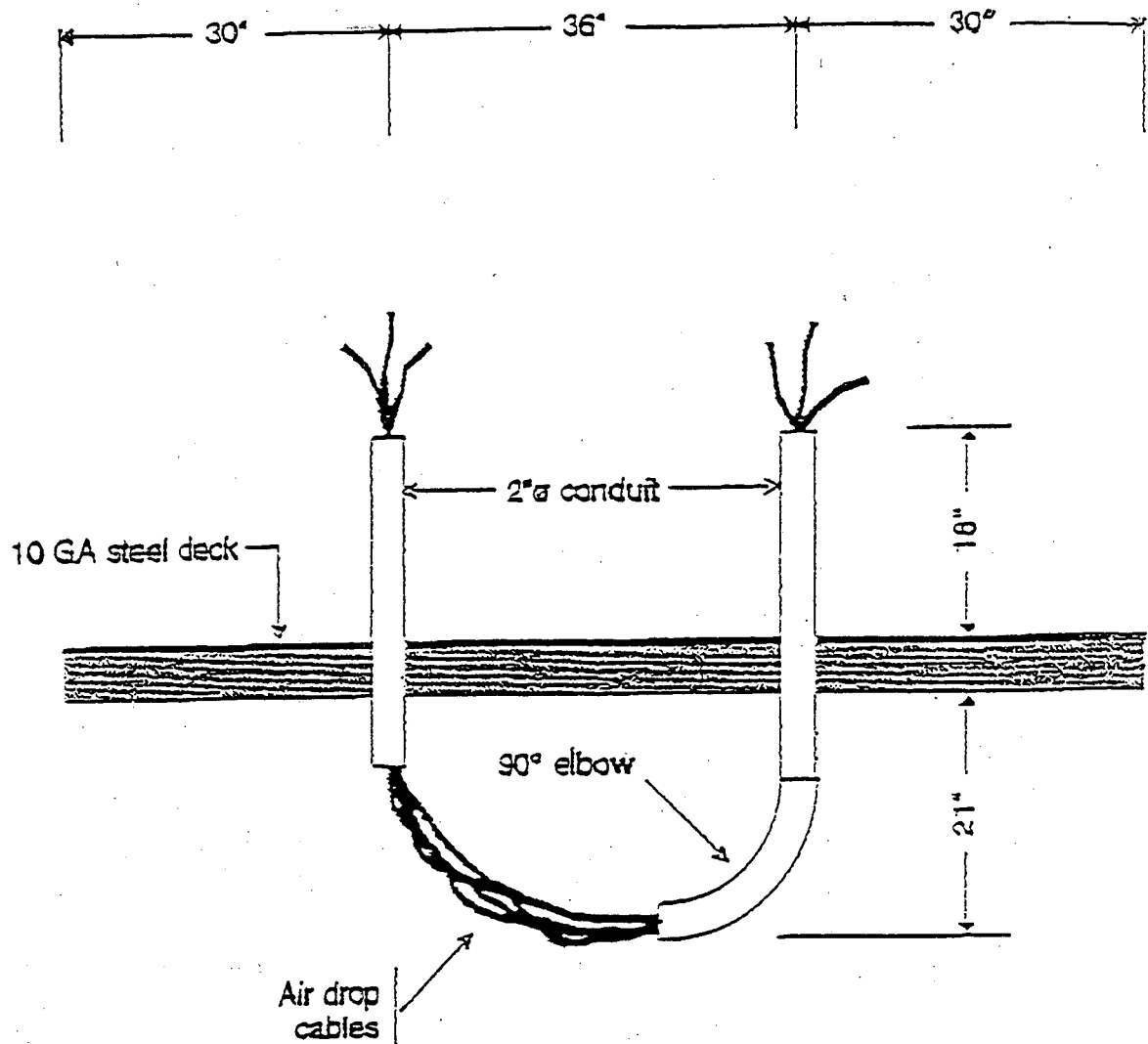
NOTE:

The test items shall be installed into an 8 ft x 13 ft 10 GA steel deck, supported around the perimeter and across the top (where appropriate to avoid warping or sagging) with 3 in. structural steel channel. Following the installation of the test items and Thermo-Lag protection system, the underside of the deck shall be insulated with a minimum of 4 inches of 6 pcf ceramic blanket, held in place with impaling pins 12 inches o.c.

TENNESSEE VALLEY AUTHORITY

Fig. 1 Side Elevation

Scale: 1/2" = 1'



NOTE:

The air-drop assemblies (2 each) consist of nominal 2 inch conduits which extend down through the deck and into the furnace 21 inches as shown. The bare copper conductor then passes through the conduit, through the free air and into the shorter piece of conduit to exit the furnace.

TENNESSEE VALLEY AUTHORITY

Fig. 2 End Elevation (Air Drops Only)

Scale: 3/4"=1'

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

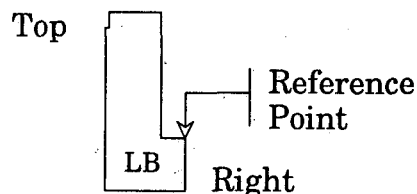
Project No: 11210-94554 Test A

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (5"Ø) BARE #8 COPPER

TC NO.	LOCATION
1	2" to the right of the reference point.
2	8" to the right of the reference point.
3	14" to the right of the reference point.
4	20" to the right of the reference point.
5	26" to the right of the reference point.
6	32" to the right of the reference point.
7	38" to the right of the reference point.
8	44" to the right of the reference point.
9	50" to the right of the reference point.
10	56" to the right of the reference point.
11	62" to the right of the reference point.
12	68" to the right of the reference point.
13	74" to the right of the reference point.
14	80" to the right of the reference point.
15	90" to the right of the reference point.
16	6" to the left (above) the reference point.
17	12" to the left (above) the reference point.
18	18" to the left (above) the reference point.
19	24" to the left (above) the reference point.
20	30" to the left (above) the reference point.
21	36" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

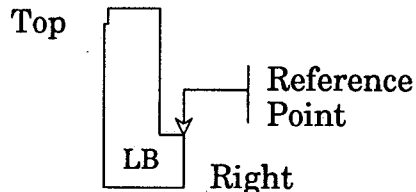
Project No: 11210-94554 Test A

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #2 (1"Ø) BARE #8 COPPER**

TC NO.	LOCATION
22	2" to the right of the reference point.
23	8" to the right of the reference point.
24	14" to the right of the reference point.
25	20" to the right of the reference point.
26	26" to the right of the reference point.
27	32" to the right of the reference point.
28	38" to the right of the reference point.
29	44" to the right of the reference point.
30	50" to the right of the reference point.
31	56" to the right of the reference point.
32	62" to the right of the reference point.
33	68" to the right of the reference point.
34	74" to the right of the reference point.
35	80" to the right of the reference point.
36	86" to the right of the reference point.
37	92" to the right of the reference point.
38	98" to the right of the reference point.
39	2" to the left (above) the reference point.
40	8" to the left (above) the reference point.
41	14" to the left (above) the reference point.
42	20" to the left (above) the reference point.
43	26" to the left (above) the reference point.
44	32" to the left (above) the reference point.
45	38" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

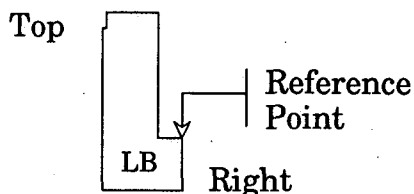
Project No: 11210-94554 Test A

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (5"Ø) BARE #8 COPPER**

TC NO.	LOCATION
46	2" to the right of the reference point.
47	8" to the right of the reference point.
48	14" to the right of the reference point.
49	20" to the right of the reference point.
50	26" to the right of the reference point.
51	32" to the right of the reference point.
52	38" to the right of the reference point.
53	44" to the right of the reference point.
54	50" to the right of the reference point.
55	56" to the right of the reference point.
56	62" to the right of the reference point.
57	68" to the right of the reference point.
58	74" to the right of the reference point.
59	80" to the right of the reference point.
60	90" to the right of the reference point.
61	6" to the left (above) the reference point.
62	12" to the left (above) the reference point.
63	18" to the left (above) the reference point.
64	24" to the left (above) the reference point.
65	30" to the left (above) the reference point.
66	36" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

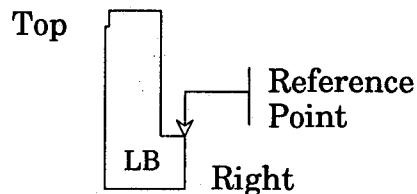
Project No: 11210-94554 Test A

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #4 (1"Ø) BARE #8 COPPER**

TC NO.	LOCATION
67	2" to the right of the reference point.
68	8" to the right of the reference point.
69	14" to the right of the reference point.
70	20" to the right of the reference point.
71	26" to the right of the reference point.
72	32" to the right of the reference point.
73	38" to the right of the reference point.
74	44" to the right of the reference point.
75	50" to the right of the reference point.
76	56" to the right of the reference point.
77	62" to the right of the reference point.
78	68" to the right of the reference point.
79	74" to the right of the reference point.
80	80" to the right of the reference point.
81	86" to the right of the reference point.
82	92" to the right of the reference point.
83	98" to the right of the reference point.
84	2" to the left (above) the reference point.
85	8" to the left (above) the reference point.
86	14" to the left (above) the reference point.
87	20" to the left (above) the reference point.
88	26" to the left (above) the reference point.
89	32" to the left (above) the reference point.
90	38" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

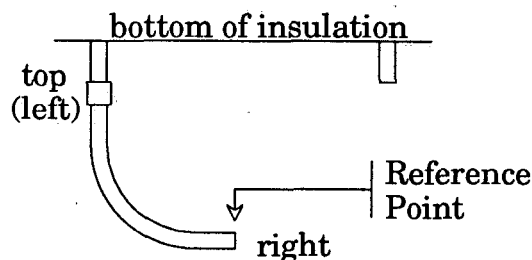
Project No: 11210-94554 Test A

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #5 (2"Ø) BARE #8 COPPER**

TC NO.	LOCATION
91	30" to the left of the reference point.
92	24" to the left of the reference point.
93	18" to the left of the reference point.
94	12" to the left of the reference point.
95	6" to the left of the reference point.
96	At the reference point.
97	6" to the right of the reference point.
98	12" to the right of the reference point.
99	18" to the right of the reference point.
100	24" to the right of the reference point.
101	30" to the right of the reference point.
102	36" to the right of the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

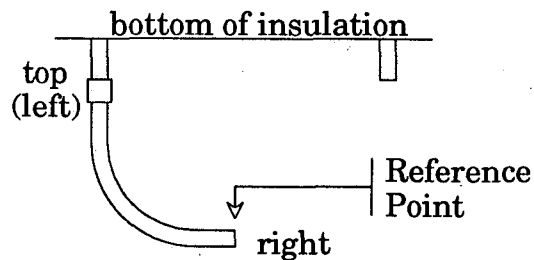
Project No: 11210-94554 Test A

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #6 (2"Ø) BARE #8 COPPER**

TC NO.	LOCATION
103	30" to the left of the reference point.
104	24" to the left of the reference point.
105	18" to the left of the reference point.
106	12" to the left of the reference point.
107	6" to the left of the reference point.
108	At the reference point.
109	6" to the right of the reference point.
110	12" to the right of the reference point.
111	18" to the right of the reference point.
112	24" to the right of the reference point.
113	30" to the right of the reference point.
114	36" to the right of the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94554 Test C

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #1 (5"Ø) CONDUIT STEEL**

TC NO.	LOCATION
1	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
2	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
3	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
4	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
5	On the "outside" surface of the conduit, at the middle of the elbow.
6	On the bottom of the conduit, 12" from the support, between the support and the elbow.
7	On the side of the conduit, between the support strap and the conduit.
8	On the bottom of the conduit, 12" from the support, between the support and the conduit.
9	On the center of the conduit cover.
10	On the vertical section of conduit, 2" above the top of the LB, located on the "outside."
11	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
12	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
13	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.
14	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

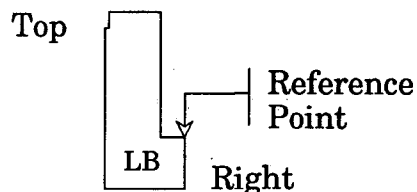
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #1 (5"Ø) BARE #8 COPPER**

TC NO.	LOCATION
15	2" to the right of the reference point.
16	14" to the right of the reference point.
17	26" to the right of the reference point.
18	38" to the right of the reference point.
19	50" to the right of the reference point.
20	62" to the right of the reference point.
21	74" to the right of the reference point.
22	90" to the right of the reference point.
23	6" to the left (above) the reference point.
24	18" to the left (above) the reference point.
25	30" to the left (above) the reference point.
26	36" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #2 (1"Ø) CONDUIT STEEL**

TC NO.	LOCATION
27	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
28	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
29	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the elbow side of the system.
30	On the "outside" surface of the conduit, at the middle of the elbow.
31	On the bottom of the conduit, 24" from the support, between the support and the elbow.
32	On the bottom of the conduit, 12" from the support, between the support and the elbow.
33	On the side of the conduit, between the support strap and the conduit.
34	On the bottom of the conduit, 12" from the support, between the support and the conduit.
35	On the center of the conduit cover.
36	On the vertical section of conduit, 2" above the top of the LB, located on the "outside."
37	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
38	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

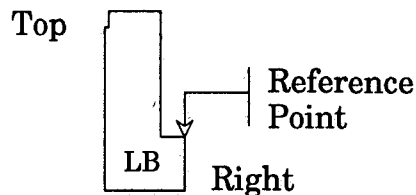
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #2 (1"Ø) BARE #8 COPPER**

TC NO.	LOCATION
39	2" to the right of the reference point.
40	8" to the right of the reference point.
41	14" to the right of the reference point.
42	20" to the right of the reference point.
43	26" to the right of the reference point.
44	32" to the right of the reference point.
45	38" to the right of the reference point.
46	44" to the right of the reference point.
47	50" to the right of the reference point.
48	56" to the right of the reference point.
49	62" to the right of the reference point.
50	68" to the right of the reference point.
51	74" to the right of the reference point.
52	80" to the right of the reference point.
53	86" to the right of the reference point.
54	92" to the right of the reference point.
55	98" to the right of the reference point.
56	2" to the left (above) the reference point.
57	8" to the left (above) the reference point.
58	14" to the left (above) the reference point.
59	20" to the left (above) the reference point.
60	26" to the left (above) the reference point.
61	32" to the left (above) the reference point.
62	38" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94554 Test C

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (5"Ø) CONDUIT STEEL**

TC NO.	LOCATION
63	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
64	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
65	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
66	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
67	On the "outside" surface of the conduit, at the middle of the elbow.
68	On the bottom of the conduit, 12" from the support, between the support and the elbow.
69	On the side of the conduit, between the support strap and the conduit.
70	On the bottom of the conduit, 12" from the support, between the support and the conduit.
71	On the center of the conduit cover.
72	On the vertical section of conduit, 2" above the top of the LB, located on the "outside."
73	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
74	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
75	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.
76	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

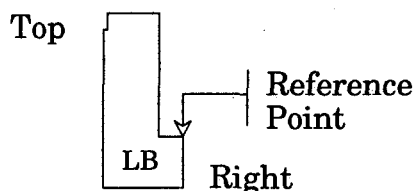
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (5"Ø) BARE #8 COPPER**

TC NO.	LOCATION
77	2" to the right of the reference point.
78	14" to the right of the reference point.
79	26" to the right of the reference point.
80	38" to the right of the reference point.
81	50" to the right of the reference point.
82	62" to the right of the reference point.
83	74" to the right of the reference point.
84	90" to the right of the reference point.
85	6" to the left (above) the reference point.
86	18" to the left (above) the reference point.
87	30" to the left (above) the reference point.
88	36" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94554 Test C

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #4 (1"Ø) CONDUIT STEEL**

TC NO.	LOCATION
89	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
90	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
91	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the elbow side of the system.
92	On the "outside" surface of the conduit, at the middle of the elbow.
93	On the bottom of the conduit, 24" from the support, between the support and the elbow.
94	On the bottom of the conduit, 12" from the support, between the support and the elbow.
95	On the side of the conduit, between the support strap and the conduit.
96	On the bottom of the conduit, 12" from the support, between the support and the conduit.
97	On the center of the conduit cover.
98	On the vertical section of conduit, 2" above the top of the LB, located on the "outside."
99	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the conduit side of the system.
100	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the conduit side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

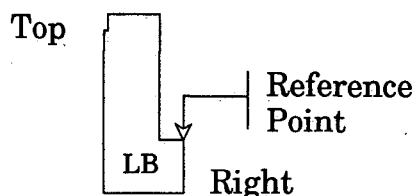
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #4 (1"Ø) BARE #8 COPPER**

TC NO.	LOCATION
101	2" to the right of the reference point.
102	8" to the right of the reference point.
103	14" to the right of the reference point.
104	20" to the right of the reference point.
105	26" to the right of the reference point.
106	32" to the right of the reference point.
107	38" to the right of the reference point.
108	44" to the right of the reference point.
109	50" to the right of the reference point.
110	56" to the right of the reference point.
111	62" to the right of the reference point.
112	68" to the right of the reference point.
113	74" to the right of the reference point.
114	80" to the right of the reference point.
115	86" to the right of the reference point.
116	92" to the right of the reference point.
117	98" to the right of the reference point.
118	2" to the left (above) the reference point.
119	8" to the left (above) the reference point.
120	14" to the left (above) the reference point.
121	20" to the left (above) the reference point.
122	26" to the left (above) the reference point.
123	32" to the left (above) the reference point.
124	38" to the left (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

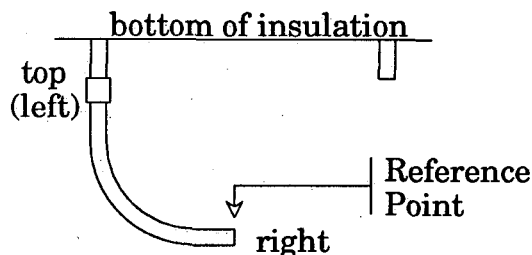
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #5 (2"Ø) CONDUIT STEEL**

TC NO.	LOCATION
125	On the top surface, 2" left of the reference point.
126	On the bottom (outside), at the center of the elbow left of the reference point.
127	On the "outside" surface of the conduit system, 6" above the previous thermocouple.
128	On the "outside" surface of the conduit, 1" below the insulated deck.
129	On the "outside" surface of the conduit, 7" below the insulated deck.
130	On the bottom surface of the conduit, 6" to the left of the reference point.
131	On the "outside" surface of the short vertical conduit, 1" below the insulated deck.
132	On the "outside" surface of the short vertical conduit, 4" below the insulated deck.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

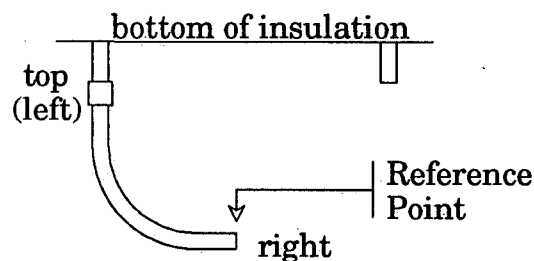
Project No: 11210-94554 Test C

Identification: Two 5"ø and two 1"ø conduits, and two 2"ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #5 (2"Ø) BARE #8 COPPER**

TC NO.	LOCATION
133	30" to the left of the reference point.
134	24" to the left of the reference point.
135	18" to the left of the reference point.
136	12" to the left of the reference point.
137	6" to the left of the reference point.
138	At the reference point.
139	6" to the right of the reference point.
140	12" to the right of the reference point.
141	18" to the right of the reference point.
142	24" to the right of the reference point.
143	30" to the right of the reference point.
144	36" to the right of the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

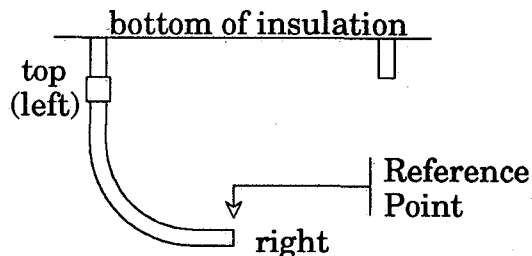
Project No: 11210-94554 Test C

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #6 (2"Ø) CONDUIT STEEL**

TC NO.	LOCATION
145	On the top surface, 2" left of the reference point.
146	On the bottom (outside), at the center of the elbow left of the reference point.
147	On the "outside" surface of the conduit system, 6" above the previous thermocouple.
148	On the "outside" surface of the conduit, 1" below the insulated deck.
149	On the "outside" surface of the conduit, 7" below the insulated deck.
150	On the bottom surface of the conduit, 6" to the left of the reference point.
151	On the "outside" surface of the short vertical conduit, 1" below the insulated deck.
152	On the "outside" surface of the short vertical conduit, 4" below the insulated deck.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

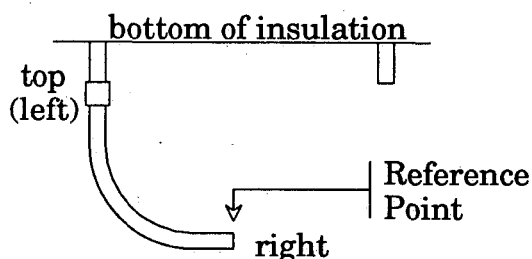
Project No: 11210-94554 Test C

Identification: Two 5"Ø and two 1"Ø conduits, and two 2"Ø conduit/air drop assemblies.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #6 (2"Ø) BARE #8 COPPER**

TC NO.	LOCATION
153	30" to the left of the reference point.
154	24" to the left of the reference point.
155	18" to the left of the reference point.
156	12" to the left of the reference point.
157	6" to the left of the reference point.
158	At the reference point.
159	6" to the right of the reference point.
160	12" to the right of the reference point.
161	18" to the right of the reference point.
162	24" to the right of the reference point.
163	30" to the right of the reference point.
164	36" to the right of the reference point.



ATTACHMENT 3

ATTACHMENT 3

TEST PLAN

CIRCUIT FUNCTIONALITY TESTING FOR CABLES PROTECTED WITH TSI THERMO-LAG 330 FIRE BARRIER SYSTEM

1.0 SCOPE

These requirements cover the testing of electrical cable for use in electrical circuit protective systems in which 8 AWG stranded bare copper conductors were used as heat transfer indicators during TVA's Conduit Fire Barrier System Fire Endurance Testing Program. Testing shall be conducted per Underwriter's Laboratories, Inc. Subject 1724-84, "Outline of Investigation For Fire Tests For Electrical Circuit Protective Systems", with clarifications as noted and with enhancements by Tennessee Valley Authority (TVA) for assessing cable performance.

2.0 OBJECTIVE

The method of testing insulated electrical cables specified by these requirements consists of exposing test samples to elevated temperatures in a circulating air oven with each wire and cable in compression.

The results obtained by use of this test method will assist in determining the acceptability, with reference to circuit integrity, of electrical cable for use in electrical circuit protective systems.

3.0 ACCEPTANCE CRITERIA

Cable test samples shall maintain circuit integrity while subjected to compressive loading during elevated temperature exposure as described in section 8.3. Cable test samples shall successfully pass wet megger and high potential tests as described in section 8.4.

4.0 REFERENCES

American Society for Testing and Materials,
ASTM D2436-85, "Specification for Forced-Convection
Laboratory Ovens for Electrical Insulation".

Institute of Electrical and Electronics Engineers,
Inc. Standard 690-1984, "IEEE Standard for the Design
and Installation of Cable Systems for Class 1E

Circuits in Nuclear Power Generating Stations".

Underwriter's Laboratories, Inc. Subject 1724-84,
"Outline of Investigation For Fire Tests For
Electrical Circuit Protective Systems".

5.0 RESPONSIBILITIES

5.1 TENNESSEE VALLEY AUTHORITY - NUCLEAR ENGINEERING

Establish the criteria, guidelines, drawings (as required), recommendations, etc., to govern the installation of the test items.

Supply personnel to witness assembly and test article raceway configurations.

5.2 TENNESSEE VALLEY AUTHORITY - CENTRAL LABORATORY

Prepare test items in accordance with Appendix B Quality Assurance and Quality Control Programs and other applicable procedures.

Supply QC personnel to witness and document assembly and test article raceway configurations.

Conduct all required testing.

Document the test parameters and provide formal detailed written report(s) of the test program and test results.

5.3 TENNESSEE VALLEY AUTHORITY - LAB QUALITY CONTROL

Verify and document that Nuclear Engineering's installation procedures are used in the installation of the test items.

Inspect and document the construction and instrumentation of the test items.

Provide written calibration documentation of all thermocouples, measuring devices, and data acquisition systems used in the test program.

6.0 SPECIAL PRECAUTIONS

Precautions shall be taken to prevent electric shock to test personnel during testing.

7.0 PREREQUISITES

7.1 TEST SAMPLE

A minimum of one nominal 24 inch length of each basic TVA type of electrical cable (utilizing specimens for each vendor/type as available) shall be tested.

7.2 APPARATUS

Raceway (Conduit Simulation)

The test fixture shall afford a degree of sample support representative of the support provided by standard conduits.

The raceway shall consist of a nominal 0.034 to 0.064 inch thick steel plate of appropriate size to cover the rungs of an open-ladder cable tray.

Air Oven

The oven used shall comply with the Standard Specification for Forced-Convection Laboratory Ovens for Electrical Insulation, ASTM D2436.

Exception: Nonair-circulating static ovens, forced-draft circulating-air convection ovens, or both, not capable of providing at least a 90 percent replacement of fresh air at the rate of 100 - 150 changes per hour may be employed provided that:

- A) The oven is capable of maintaining the temperature differential and uniformity described in ASTM D2436.

Thermocouples shall be placed in the oven at each corner and in the direct center for the determination of temperature uniformity. If calibrated thermocouples are not available, nine thermocouples made from the same spool of thermocouple wire may be used provided that they give values for temperatures that do not differ by more than 0.20 °C (0.36 °F) during calibration check outside the oven.

Air Oven/Sample Temperature

The oven temperature to which the test samples are exposed shall be the average temperature obtained from the reading of two thermocouples measuring the temperatures of an 8 AWG stranded medium or hard-drawn temper bare copper conductor

weighing 0.051 pound per foot. The conductor shall consist of seven 0.049 inch diameter strands.

A nominal 20 inch length of the 8 AWG conductor shall be installed in the direct center of the raceway, running parallel to the sample conductors. Each end of the bare copper conductor shall be secured to the raceway with a steel wire tie, or equivalent.

The two thermocouples measuring the temperatures of the bare conductor shall be located on the copper wire at equal distances from either end of the cable tray section and from each other and shall be held firmly against the conductor with steel wire ties, or equivalent. The thermocouple leads are not to be larger than 22 AWG and are to be electrically insulated with heat-sensitive coverings.

Temperatures shall be measured at intervals of 1 minute (minimum).

7.3 COMPRESSION LOADING

The compressive force which would normally be exerted upon the insulated electrical wire or cable when installed against the bearing surface of a horizontal raceway containing the maximum allowable fill of insulated electrical wire or cable shall be calculated by Nuclear Engineering and shall be simulated by a mechanically-applied compressive force on the test sample.

The mechanically-applied compressive force shall be transferred to the samples by a loading foot. The loading foot shall have no sharp edges which might damage the test sample.

The compressive force applied to the test sample shall remain constant if the test sample undergoes plastic deformation at elevated temperatures.

7.4 ELECTRICAL CIRCUIT INTEGRITY

Each test sample shall be energized at rated voltage and monitored for faults during the elevated temperature exposure using a test configuration similar to UL 1724, Appendix B, Figure B3.3.

The test samples shall be monitored during the

elevated temperature exposure to detect faults (1) between conductors within multiconductor cable constructions, (2) between adjacent electrical conductors, and (3) between the electrical conductors and the raceway or ground. Leakage current shall be monitored during the event. Measurement of leakage current shall be for margin assessment only.

Upon completion of the elevated temperature exposure the test samples shall be allowed to cool in place, with weight continuously applied, to ambient temperature, shall be immersed in water, and shall be megger tested (1) between conductors within multiconductor cable constructions, (2) between adjacent electrical conductors, and (3) between the electrical conductors and the raceway or ground.

DC high potential (Hi-Pot) testing shall be performed for 8 kV cables after the megger testing has been performed. Testing shall be performed for five minutes, with leakage current measured at one minute intervals. Measurement of leakage current shall be for margin assessment only.

8.0 PROCEDURE

8.1 PREPARATION OF TEST SAMPLE

The test sample(s) shall be installed on the bearing surface of the horizontal raceway and shall be secured to the horizontal raceway near each end with steel wire ties, or equivalent.

The test sample(s) shall be installed parallel with the bare copper conductor located at the center of the raceway. A minimum of 1 inch clearance is to be maintained between the test sample(s) and the bare copper conductor and between adjacent test samples in the raceway.

The calculated compressive force shall be applied to each test sample, and each conductor of each test sample is to be energized and monitored for faults.

The raceway, with test samples in place, shall be centered in the oven and supported near each corner with electrically-nonconductive supports.

8.2 MAXIMUM TEMPERATURE

The maximum temperature for the test shall be (1) for power cables - the sum of the rated conductor temperature (75°C, 90°C, etc.) and the maximum anticipated temperature rise at the desired rating period time as determined from TVA's Conduit Fire Barrier System Fire Endurance Testing Program or (2) for control cables - the sum of the maximum ambient temperature and the maximum anticipated temperature rise at the desired rating period time as determined from TVA's Conduit Fire Barrier System Fire Endurance Testing Program.

8.3 ELEVATED TEMPERATURE EXPOSURE

The temperature within the oven shall be increased to the rated temperature of the test sample conductor (75°C, 90°C, etc) or the maximum ambient temperature (as applicable for power or control cables), as determined by the average temperature reading of the bare conductor, and shall be stabilized at this temperature for a minimum of 60 minutes.

After stabilization for 60 minutes, the temperature within the oven shall be increased at a rate equal to the average temperature profile of the 8 AWG bare copper conductor as measured during TVA's Conduit Fire Barrier System Fire Endurance Test.

The test shall be continued until the predetermined temperature end point is attained on the bare conductor or until an electrical fault or ignition occurs on the test samples. Leakage current shall be monitored during the event. Measurement of leakage current shall be for margin assessment only.

If electrical fault or ignition occurs on the test sample before the predetermined temperature end point is attained, the average temperature of the bare conductor shall be recorded and the time noted.

If electrical fault or ignition does not occur on the test sample prior to attaining the predetermined temperature end point, the oven temperature shall be adjusted to stabilize the temperature of the bare conductor at the predetermined temperature end point for a minimum of 15 minutes.

8.4 MEGGER AND HIGH POTENTIAL TESTING

Upon completion of the elevated temperature exposure the test samples shall be allowed to cool in place, with weight continuously applied, to ambient temperature, shall be immersed in water, and shall be megger tested (1) between conductors within multiconductor cable constructions, (2) between adjacent electrical conductors, and (3) between the electrical conductors and the raceway or ground. Megger testing shall be performed at the following voltages:

Instrumentation and Control Cables	500 vdc
Low Voltage Power Cables	1500 vdc
Medium Voltage Power Cables	2500 vdc

Minimum acceptable insulation resistance, IR, using the above test voltages, shall be determined using the following expression:

IR (Mega-ohms) $\geq$

$$\frac{[(1 \text{ Mega-ohm per KV}) + 1] * 1000 \text{ (ft)}}{\text{Length (ft)}}$$

Optional dry megger testing of shielded cable r be performed as determined by TVA Nuclear Engineering at the time of testing.

DC high potential (Hi-Pot) testing shall be performed for 8 kV cables after the megger tests have been performed. The test shall be performed for a five minute duration at 20,000 vdc, with leakage current measured at one minute intervals. Measurement of leakage current shall be for margin assessment only.

9.0 DATA SYSTEMS

During elevated temperature exposure, thermocouples shall be scanned at one minute intervals or less. Data storage for reporting purposes shall be at one minute intervals (minimum). Printer output of all thermocouple data shall be done every thirty seconds.

10.0 TEST REPORT

The report of the performance of the samples during these tests shall include the following:

- A. A description of the assembly, materials, and installation of the raceway and electrical cables, including drawings depicting geometry and exact size (length, width, and thickness) and placement of thermocouples. Photographs shall also be included.
- B. Observations and significant details of the behavior of the test samples during the elevated temperature exposure.
- C. A tabulation of electrical fault or ignition times and temperatures for each test sample, if applicable.
- D. A tabulation of Megger and High Potential test results for each test sample.
- E. Description of anomalies and their disposition.

ATTACHMENT 4

Attachment 4

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #1 (3"Ø) CONDUIT STEEL**

TC NO.	LOCATION
1	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
2	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
3	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
4	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
5	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
6	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
7	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, near the top of the conduit elbow.
8	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the conduit elbow.
9	On the "outside" surface of the conduit system, 6" below the previous thermocouple, on the conduit elbow.
10	On the "outside" surface of the conduit system, 6" below the previous thermocouple, near the center of the conduit elbow.
11	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
12	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
13	On the "bottom" surface of the conduit system, 6" right of the previous thermocouple, near the end of the conduit elbow.
14	On the "bottom" surface of the conduit system, 24" left of the support member.
15	On the "bottom" surface of the conduit system, 18" left of the support member.
16	On the "bottom" surface of the conduit system, 12" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (3"Ø) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
17	On the "bottom" surface of the conduit system, 6" left of the support member.
18	On the side of the conduit system, between the support strap and the conduit.
19	On the "bottom" surface of the conduit system, 6" right of the support member.
20	On the "bottom" surface of the conduit system, 12" right of the support member.
21	On the "bottom" surface of the conduit system, 18" right of the support member.
22	On the "bottom" surface of the conduit system, 24" right of the support member.
23	On the "bottom" surface of the conduit system, 30" right of the support member.
24	On the "bottom" surface of the conduit system, 36" right of the support member.
25	On the "bottom" surface of the conduit system, 42" right of the support member.
26	On the "bottom" surface of the conduit system, 48" right of the support member.
27	On the center of the conduit cover.
28	On the vertical section of the top of the LB. located on the "outside."
29	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
30	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
31	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
32	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #1 (3"Ø) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
33	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
34	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
35	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
36	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

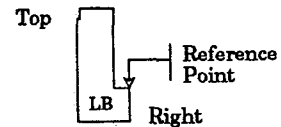
Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (3" ϕ) BARE #8 COPPER

TC NO.	LOCATION
37	2" to the left of the reference point.
38	8" to the left of the reference point.
39	14" to the left of the reference point.
40	20" to the left of the reference point.
41	26" to the left of the reference point.
42	32" to the left of the reference point.
43	38" to the left of the reference point.
45	44" to the left of the reference point.
46	50" to the left of the reference point.
47	56" to the left of the reference point.
48	62" to the left of the reference point.
49	68" to the left of the reference point.
50	74" to the left of the reference point.
51	80" to the left of the reference point.
52	86" to the left of the reference point.
53	92" to the left of the reference point.
54	98" to the left of the reference point.
55	104" to the left of the reference point.
56	110" to the left of the reference point.
57	116" to the left of the reference point.
58	122" to the left of the reference point.
59	128" to the left of the reference point.
60	4" to the right (above) the reference point.
61	10" to the right (above) the reference point.
62	16" to the right (above) the reference point.
63	22" to the right (above) the reference point.
64	28" to the right (above) the reference point.
65	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (2" ϕ) CONDUIT STEEL

TC NO.	LOCATION
66	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
67	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
68	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
69	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
70	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
71	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
72	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
73	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
74	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, near top of the conduit elbow.
75	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, near top of the conduit elbow.
76	On the "inside" surface of the conduit system, 30" below the surface of the insulated deck, on the conduit elbow.
78	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
79	On the "bottom" surface of the conduit system, 6" right of the previous thermocouple, near the end of the conduit elbow.
80	On the "bottom" surface of the conduit system, 42" left of the support member.
81	On the "bottom" surface of the conduit system, 36" left of the support member.
82	On the "bottom" surface of the conduit system, 30" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (2" ϕ) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
83	On the "bottom" surface of the conduit system, 24" left of the support member.
84	On the "bottom" surface of the conduit system, 18" left of the support member.
85	On the "bottom" surface of the conduit system, 12" left of the support member.
86	On the "bottom" surface of the conduit system, 6" left of the support member.
87	On the side of the conduit system, between the support strap and the conduit.
88	On the "bottom" surface of the conduit system, 6" right of the support member.
89	On the "bottom" surface of the conduit system, 12" right of the support member.
90	On the "bottom" surface of the conduit system, 18" right of the support member.
91	On the "bottom" surface of the conduit system, 24" right of the support member.
92	On the "bottom" surface of the conduit system, 30" right of the support member.
93	On the "bottom" surface of the conduit system, 36" right of the support member.
94	On the "bottom" surface of the conduit system, 42" right of the support member.
95	On the "bottom" surface of the conduit system, 48" right of the support member.
96	On the center of the conduit cover.
97	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.
98	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (2" ϕ) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
99	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
100	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
101	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
102	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
103	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
104	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
105	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
106	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

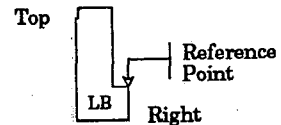
Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (2" ϕ) BARE #8 COPPER

TC NO.	LOCATION
107	2" to the left of the reference point.
108	8" to the left of the reference point.
109	14" to the left of the reference point.
110	20" to the left of the reference point.
111	26" to the left of the reference point.
112	32" to the left of the reference point.
113	38" to the left of the reference point.
114	44" to the left of the reference point.
115	50" to the left of the reference point.
116	56" to the left of the reference point.
117	62" to the left of the reference point.
118	68" to the left of the reference point.
119	74" to the left of the reference point.
120	80" to the left of the reference point.
121	86" to the left of the reference point.
122	92" to the left of the reference point.
123	98" to the left of the reference point.
124	104" to the left of the reference point.
125	110" to the left of the reference point.
126	116" to the left of the reference point.
127	122" to the left of the reference point.
128	128" to the left of the reference point.
129	134" to the left of the reference point.
130	4" to the right (above) the reference point.
131	10" to the right (above) the reference point.
132	16" to the right (above) the reference point.
133	22" to the right (above) the reference point.
134	28" to the right (above) the reference point.
135	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (1"Ø) CONDUIT STEEL**

TC NO.	LOCATION
136	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
137	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
138	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
139	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
140	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
141	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
142	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
143	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
144	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the elbow side of the system.
145	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, on the elbow side of the system.
146	On the "outside" surface of the conduit system, on the center of the conduit elbow.
147	On the "outside" surface of the conduit system, 6" below TC #144, on the conduit elbow.
148	On the "bottom" surface of the conduit system, 42" left of the support member.
149	On the "bottom" surface of the conduit system, 36" left of the support member.
150	On the "bottom" surface of the conduit system, 30" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (1" ϕ) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
151	On the "bottom" surface of the conduit system, 24" left of the support member.
152	On the "bottom" surface of the conduit system, 18" left of the support member.
153	On the "bottom" surface of the conduit system, 12" left of the support member.
154	On the "bottom" surface of the conduit system, 6" left of the support member.
155	On the side of the conduit system, between the support strap and the conduit.
156	On the "bottom" surface of the conduit system, 6" right of the support member.
157	On the "bottom" surface of the conduit system, 12" right of the support member.
158	On the "bottom" surface of the conduit system, 18" right of the support member.
159	On the "bottom" surface of the conduit system, 24" right of the support member.
160	On the "bottom" surface of the conduit system, 30" right of the support member.
161	On the "bottom" surface of the conduit system, 36" right of the support member.
162	On the "bottom" surface of the conduit system, 42" right of the support member.
163	On the "bottom" surface of the conduit system, 48" right of the support member.
164	On the center of the conduit cover.
165	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.
166	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" $\emptyset$ conduit, one 2" $\emptyset$ conduit, one 1" $\emptyset$ conduit and one 4" $\emptyset$ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (1" $\emptyset$) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
167	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
168	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
169	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
170	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
171	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
172	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
173	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
174	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

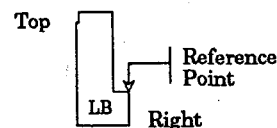
Project No: 11210-94943 Test A

Identification: One 3"ø conduit, one 2"ø conduit, one 1" ø conduit and one 4" ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (1"Ø) BARE #8 COPPER**

TC NO.	LOCATION
175	2" to the left of the reference point.
176	8" to the left of the reference point.
177	14" to the left of the reference point.
178	20" to the left of the reference point.
179	26" to the left of the reference point.
180	32" to the left of the reference point.
181	38" to the left of the reference point.
182	44" to the left of the reference point.
183	50" to the left of the reference point.
184	56" to the left of the reference point.
185	62" to the left of the reference point.
186	68" to the left of the reference point.
187	74" to the left of the reference point.
188	80" to the left of the reference point.
189	86" to the left of the reference point.
190	92" to the left of the reference point.
191	98" to the left of the reference point.
192	104" to the left of the reference point.
193	110" to the left of the reference point.
194	116" to the left of the reference point.
195	122" to the left of the reference point.
196	128" to the left of the reference point.
197	134" to the left of the reference point.
198	4" to the right (above) the reference point.
199	10" to the right (above) the reference point.
200	16" to the right (above) the reference point.
201	22" to the right (above) the reference point.
202	28" to the right (above) the reference point.
203	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #4 (4"Ø) CONDUIT STEEL**

TC NO.	LOCATION
204	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
205	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
206	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
207	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
208	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
209	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
210	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, near the top of the conduit elbow.
211	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the conduit elbow.
212	On the "outside" surface of the conduit system, 6" below the previous thermocouple, on the conduit elbow.
213	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
214	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
215	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
216	On the "bottom" surface of the conduit system, 24" left of the support member.
217	On the "bottom" surface of the conduit system, 18" left of the support member.
218	On the "bottom" surface of the conduit system, 12" left of the support member.
219	On the "bottom" surface of the conduit system, 6" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #4 (4" ϕ) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
220	On the side of the conduit system, between the support strap and the conduit.
221	On the "bottom" surface of the conduit system, 6" right of the support member.
222	On the "bottom" surface of the conduit system, 12" right of the support member.
223	On the "bottom" surface of the conduit system, 18" right of the support member.
224	On the "bottom" surface of the conduit system, 24" right of the support member.
225	On the "bottom" surface of the conduit system, 30" right of the support member.
226	On the "bottom" surface of the conduit system, 36" right of the support member.
227	On the "bottom" surface of the conduit system, 42" right of the support member.
228	On the "bottom" surface of the conduit system, 48" right of the support member.
229	On the center of the conduit cover.
230	On the vertical section of the top of the LB. located on the "outside."
231	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
232	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
233	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
234	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
235	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test A

Identification: One 3"Ø conduit, one 2"Ø conduit, one 1" Ø conduit and one 4" Ø conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #4 (4"Ø) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
236	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
237	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
238	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

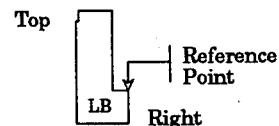
Project No: 11210-94943 Test A

Identification: One 3" ϕ conduit, one 2" ϕ conduit, one 1" ϕ conduit and one 4" ϕ conduit.

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #4 (4" ϕ) BARE #8 COPPER

TC NO.	LOCATION
239	2" to the left of the reference point.
240	8" to the left of the reference point.
241	14" to the left of the reference point.
242	20" to the left of the reference point.
243	26" to the left of the reference point.
244	32" to the left of the reference point.
245	38" to the left of the reference point.
246	44" to the left of the reference point.
247	50" to the left of the reference point.
248	56" to the left of the reference point.
249	62" to the left of the reference point.
250	68" to the left of the reference point.
251	74" to the left of the reference point.
252	80" to the left of the reference point.
253	86" to the left of the reference point.
254	92" to the left of the reference point.
255	98" to the left of the reference point.
256	104" to the left of the reference point.
257	110" to the left of the reference point.
258	116" to the left of the reference point.
259	122" to the left of the reference point.
260	128" to the left of the reference point.
261	4" to the right (above) the reference point.
262	10" to the right (above) the reference point.
263	16" to the right (above) the reference point.
264	22" to the right (above) the reference point.
265	28" to the right (above) the reference point.
266	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (3"Ø) CONDUIT STEEL

TC NO.	LOCATION
1	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
2	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
3	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
4	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
5	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
6	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
7	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, near the top of the conduit elbow.
8	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the conduit elbow.
9	On the "outside" surface of the conduit system, 6" below the previous thermocouple, on the conduit elbow.
10	On the "outside" surface of the conduit system, 6" below the previous thermocouple, near the center of the conduit elbow.
11	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
12	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
13	On the "bottom" surface of the conduit system, 6" right of the previous thermocouple, near the end of the conduit elbow.
14	On the "bottom" surface of the conduit system, 24" left of the support member.
15	On the "bottom" surface of the conduit system, 18" left of the support member.
16	On the "bottom" surface of the conduit system, 12" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (3"Ø) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
17	On the "bottom" surface of the conduit system, 6" left of the support member.
18	On the side of the conduit system, between the support strap and the conduit.
19	On the "bottom" surface of the conduit system, 6" right of the support member.
20	On the "bottom" surface of the conduit system, 12" right of the support member.
21	On the "bottom" surface of the conduit system, 18" right of the support member.
22	On the "bottom" surface of the conduit system, 24" right of the support member.
23	On the "bottom" surface of the conduit system, 30" right of the support member.
24	On the "bottom" surface of the conduit system, 36" right of the support member.
25	On the "bottom" surface of the conduit system, 42" right of the support member.
26	On the "bottom" surface of the conduit system, 48" right of the support member.
27	On the center of the conduit cover.
28	On the vertical section of the top of the LB. located on the "outside."
29	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
30	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
31	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
32	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #1 (3"Ø) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
33	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
34	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
35	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
36	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

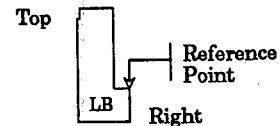
Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #1 (3"Ø) BARE #8 COPPER

TC NO.	LOCATION
37	2" to the left of the reference point.
38	8" to the left of the reference point.
39	14" to the left of the reference point.
40	20" to the left of the reference point.
41	26" to the left of the reference point.
42	32" to the left of the reference point.
43	38" to the left of the reference point.
45	44" to the left of the reference point.
46	50" to the left of the reference point.
47	56" to the left of the reference point.
48	62" to the left of the reference point.
49	68" to the left of the reference point.
50	74" to the left of the reference point.
51	80" to the left of the reference point.
52	86" to the left of the reference point.
53	92" to the left of the reference point.
54	98" to the left of the reference point.
55	104" to the left of the reference point.
56	110" to the left of the reference point.
57	116" to the left of the reference point.
58	122" to the left of the reference point.
59	128" to the left of the reference point.
60	4" to the right (above) the reference point.
61	10" to the right (above) the reference point.
62	16" to the right (above) the reference point.
63	22" to the right (above) the reference point.
64	28" to the right (above) the reference point.
65	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (1-1/2"Ø) CONDUIT STEEL

TC NO.	LOCATION
66	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
67	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
68	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
69	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
70	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
71	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
72	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
73	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the elbow side of the system.
74	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, near top of the conduit elbow.
75	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, near top of the conduit elbow.
76	On the "inside" surface of the conduit system, 30" below the surface of the insulated deck, on the conduit elbow.
78	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
79	On the "bottom" surface of the conduit system, 6" right of the previous thermocouple, near the end of the conduit elbow.
80	On the "bottom" surface of the conduit system, 36" left of the support member.
81	On the "bottom" surface of the conduit system, 30" left of the support member.
82	On the "bottom" surface of the conduit system, 24" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #2 (1-1/2"Ø) CONDUIT STEEL**

TC NO.	LOCATION (CONT.)
83	On the "bottom" surface of the conduit system, 18" left of the support member.
84	On the "bottom" surface of the conduit system, 12" left of the support member.
85	On the "bottom" surface of the conduit system, 6" left of the support member.
86	On the side of the conduit system, between the support strap and the conduit.
87	On the "bottom" surface of the conduit system, 6" right of the support member.
88	On the "bottom" surface of the conduit system, 12" right of the support member.
89	On the "bottom" surface of the conduit system, 18" right of the support member.
90	On the "bottom" surface of the conduit system, 24" right of the support member.
91	On the "bottom" surface of the conduit system, 30" right of the support member.
92	On the "bottom" surface of the conduit system, 36" right of the support member.
93	On the "bottom" surface of the conduit system, 42" right of the support member.
94	On the "bottom" surface of the conduit system, 48" right of the support member.
95	On the center of the conduit cover.
96	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.
97	On the "inside" surface of the conduit system, 24" below the surface of the insulated deck, on the LB side of the system.
98	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (1-1/2"Ø) CONDUIT STEEL

TC NO.	LOCATION (CONT.)
99	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
100	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
101	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
102	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
103	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
104	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
105	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

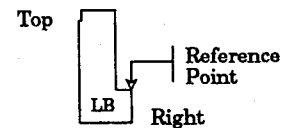
Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #2 (1-1/2"Ø) BARE #8 COPPER

TC NO.	LOCATION
106	2" to the left of the reference point.
107	8" to the left of the reference point.
108	14" to the left of the reference point.
109	20" to the left of the reference point.
110	26" to the left of the reference point.
111	32" to the left of the reference point.
112	38" to the left of the reference point.
113	44" to the left of the reference point.
114	50" to the left of the reference point.
115	56" to the left of the reference point.
116	62" to the left of the reference point.
117	68" to the left of the reference point.
118	74" to the left of the reference point.
119	80" to the left of the reference point.
120	86" to the left of the reference point.
121	92" to the left of the reference point.
122	98" to the left of the reference point.
123	104" to the left of the reference point.
124	110" to the left of the reference point.
125	116" to the left of the reference point.
126	122" to the left of the reference point.
127	128" to the left of the reference point.
128	134" to the left of the reference point.
129	4" to the right (above) the reference point.
130	10" to the right (above) the reference point.
131	16" to the right (above) the reference point.
132	22" to the right (above) the reference point.
133	28" to the right (above) the reference point.
134	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (3"Ø) CONDUIT ALUMINUM**

TC NO.	LOCATION
135	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
136	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the elbow side of the system.
137	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
138	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the elbow side of the system.
139	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
140	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the elbow side of the system.
141	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, near the top of the conduit elbow.
142	On the "outside" surface of the conduit system, 24" below the surface of the insulated deck, on the conduit elbow.
143	On the "outside" surface of the conduit system, 6" below the previous thermocouple, on the conduit elbow.
144	On the "outside" surface of the conduit system, 6" below the previous thermocouple, near the center of the conduit elbow.
145	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
146	On the "outside" surface of the conduit system, 6" right of the previous thermocouple, on the conduit elbow.
147	On the "bottom" surface of the conduit system, 6" right of the previous thermocouple, near the end of the conduit elbow.
148	On the "bottom" surface of the conduit system, 24" left of the support member.
149	On the "bottom" surface of the conduit system, 18" left of the support member.
150	On the "bottom" surface of the conduit system, 12" left of the support member.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (3"Ø) CONDUIT ALUMINUM**

TC NO.	LOCATION (CONT.)
151	On the "bottom" surface of the conduit system, 6" left of the support member.
152	On the side of the conduit system, between the support strap and the conduit.
153	On the "bottom" surface of the conduit system, 6" right of the support member.
154	On the "bottom" surface of the conduit system, 12" right of the support member.
155	On the "bottom" surface of the conduit system, 18" right of the support member.
156	On the "bottom" surface of the conduit system, 24" right of the support member.
157	On the "bottom" surface of the conduit system, 30" right of the support member.
158	On the "bottom" surface of the conduit system, 36" right of the support member.
159	On the "bottom" surface of the conduit system, 42" right of the support member.
160	On the "bottom" surface of the conduit system, 48" right of the support member.
161	On the center of the conduit cover.
162	On the vertical section of the top of the LB. located on the "outside."
163	On the "outside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
164	On the "inside" surface of the conduit system, 18" below the surface of the insulated deck, on the LB side of the system.
165	On the "outside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.
166	On the "inside" surface of the conduit system, 12" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"Ø and one 1-1/2"Ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **CONDUIT #3 (3"Ø) CONDUIT ALUMINUM**

TC NO.	LOCATION (CONT.)
167	On the "outside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
168	On the "inside" surface of the conduit system, 6" below the surface of the insulated deck, on the LB side of the system.
169	On the "outside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.
170	On the "inside" surface of the conduit system, 1" below the surface of the insulated deck, on the LB side of the system.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

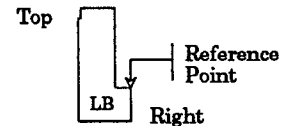
Project No: 11210-94943 Test B

Identification: Two 3"ø and one 1-1/2"ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: CONDUIT #3 (3"Ø) BARE #8 COPPER

TC NO.	LOCATION
171	2" to the left of the reference point.
172	8" to the left of the reference point.
173	14" to the left of the reference point.
174	20" to the left of the reference point.
175	26" to the left of the reference point.
176	32" to the left of the reference point.
177	38" to the left of the reference point.
178	44" to the left of the reference point.
179	50" to the left of the reference point.
180	56" to the left of the reference point.
181	62" to the left of the reference point.
182	68" to the left of the reference point.
183	74" to the left of the reference point.
184	80" to the left of the reference point.
185	86" to the left of the reference point.
186	92" to the left of the reference point.
187	98" to the left of the reference point.
188	104" to the left of the reference point.
189	110" to the left of the reference point.
190	116" to the left of the reference point.
191	122" to the left of the reference point.
192	128" to the left of the reference point.
193	4" to the right (above) the reference point.
194	10" to the right (above) the reference point.
195	16" to the right (above) the reference point.
196	22" to the right (above) the reference point.
197	28" to the right (above) the reference point.
198	34" to the right (above) the reference point.



THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"ø and one 1-1/2"ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **STEEL TUBE #1 (2" Tube Steel)**

TC NO.	LOCATION
199	12" to the left of the horizontal free end of tube steel, on top surface of tube.
200	14" to the left of the horizontal free end of tube steel, on top surface of tube.
201	16" to the left of the horizontal free end of tube steel, on top surface of tube.
202	18" to the left of the horizontal free end of tube steel, on top surface of tube.
203	20" to the left of the horizontal free end of tube steel, on top surface of tube.
204	22" to the left of the horizontal free end of tube steel, on top surface of tube.
205	24" to the left of the horizontal free end of tube steel, on top surface of tube.
206	26" to the left of the horizontal free end of tube steel, on top surface of tube.
207	28" to the left of the horizontal free end of tube steel, on top surface of tube, inside 90° bend.
208	36" below the surface of the insulated deck, on the "inside" of the steel tube.
209	30" below the surface of the insulated deck, on the "inside" of the steel tube.
210	24" below the surface of the insulated deck, on the "inside" of the steel tube.
211	18" below the surface of the insulated deck, on the "inside" of the steel tube.
212	12" below the surface of the insulated deck, on the "inside" of the steel tube.
213	6" below the surface of the insulated deck, on the "inside" of the steel tube.

THERMOCOUPLE PLACEMENT

Client: Tennessee Valley Authority

Project No: 11210-94943 Test B

Identification: Two 3"ø and one 1-1/2"ø conduits, and one 2" tube steel member and one 4" tube steel member

Thermocouple
Lot Numbers Used: _____

ITEM INSTRUMENTED: **STEEL TUBE #2 (4" Tube Steel)**

TC NO.	LOCATION
214	12" to the right of the horizontal free end of tube steel, on top surface of tube.
215	14" to the right of the horizontal free end of tube steel, on top surface of tube.
216	16" to the right of the horizontal free end of tube steel, on top surface of tube.
217	18" to the right of the horizontal free end of tube steel, on top surface of tube.
218	20" to the right of the horizontal free end of tube steel, on top surface of tube.
219	22" to the right of the horizontal free end of tube steel, on top surface of tube.
220	24" to the right of the horizontal free end of tube steel, on top surface of tube.
221	26" to the right of the horizontal free end of tube steel, on top surface of tube, inside 90° bend.
222	36" below the surface of the insulated deck, on the "inside" of the steel tube.
223	30" below the surface of the insulated deck, on the "inside" of the steel tube.
224	24" below the surface of the insulated deck, on the "inside" of the steel tube.
225	18" below the surface of the insulated deck, on the "inside" of the steel tube.
226	12" below the surface of the insulated deck, on the "inside" of the steel tube.
227	6" below the surface of the insulated deck, on the "inside" of the steel tube.

ENCLOSURE 2