Exelon Generation Company, LLC
Braidwood Station
35100 South Rt 53, Suite 84
Braceville, IL 60407-9619
Tel 815-417-2000

www.exeloncorp.com

Exelon Nuclear

April 09, 2003
Bw030030

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Braidwood Station, Unit 2
Facility Operating License No. NPF-77
NRC Docket No. STN 50-457

Subject: Braidwood Station, Unit 2 Ninth Refueling Outage Steam Generator Tube Inspection Report

In accordance with Technical Specification 5.6.9, "Steam Generator (SG) Tube Inspection Reports," item b requires the complete results of the SG tube in-service inspection to be submitted to the NRC within 12 months following completion of the inspection. The attached report includes the number and extent of tubes inspected, location and percentage of wall thickness penetration for each indication of an imperfection, and identification of tubes plugged or repaired. SG inspections and repairs were completed on April 25, 2002 during the Braidwood Station, Unit 2 ninth refueling outage.

Please direct any questions regarding this submittal to Kelly Root, Regulatory Assurance Manager, at (815) 417-2800.

Respectfully,

James D. von Suskil
Site Vice President
Braidwood Station

Attachment: Exelon Braidwood Station Unit 2 Ninth Refueling Outage Steam Generator Eddy Current Inspection Report

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Braidwood Station
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

A047

# EXELON

# BRAIDWOOD STATION UNIT 2

# NINTH REFUELING OUTAGE

# STEAM GENERATOR EDDY CURRENT INSPECTION REPORT

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## 1.0 INTRODUCTION

Braidwood Unit 2 is a four loop Pressurized Water Reactor (PWR) with Westinghouse Model D-5 recirculating steam generators. Each steam generator contains 4,570 thermally treated Inconel-600 U-tubes that have a nominal outside diameter of 0.750 inches and a nominal thickness of 0.043 inches. See Figure A.2 in Attachment A for a diagram of the D-5 Steam Generator tube support plate configuration.

In compliance with Braidwood Station Technical Specification 5.5.9 and ASME Section XI (IWB 2500-1, Exam Category B-Q, item B16.20), 1989 Edition, Steam Generator (SG) eddy current examinations were performed during the Braidwood Unit 2 ninth refueling outage. In addition, the inspections were performed in accordance with Revision 5 of the EPRI PWR Steam Generator Examination Guidelines and NEI 97-06. The inspections were conducted from April 22, 2002 through April 25, 2002. The following inspection scope was completed:

- 100% Full Length Bobbin Coil in SG 2A
- 100% Visual Inspection of Tube Plugs in SG 2A
- Visual Inspection of Secondary Side Tubesheet Region in all 4 SGs

## 2.0 SUMMARY

The requirements of Revision 5 of the EPRI PWR Steam Generator Examination Guidelines were implemented during this inspection. A degradation assessment was performed to ensure that only EPRI Appendix H qualified examination techniques were used to detect any pre-existing and potential modes of degradation. Each technique was evaluated to ensure that the detection and sizing capabilities were applicable to the Braidwood Unit 2 site specific conditions in accordance with Section 6.2.4 of the EPRI SG Examination Guidelines. All data analysts were qualified to Appendix G of the EPRI Guidelines (QDA). All data analyst and data acquisition personnel satisfactorily completed site specific training and testing prior to beginning examinations.

The only mode of tube degradation found during this inspection was anti-vibration bar (AVB) wear.

As a result of the eddy current inspections, a total of 2 tubes were repaired by mechanical tube plugging. The 2 tubes were removed from service for having AVB wear $\geq$ the 40% Technical Specification plugging limit. Pursuant to Technical Specification 5.5.9.c, "Inspection Results Classification," the results were classified as inspection category C-2 for SG 2A.

To date, there have been no tubes repaired by sleeving in Braidwood Unit 2. Table 2.1 provides a history of the total tubes plugged to date as well as equivalent tube plugging levels for each SG.

**TABLE 2.1 Equivalent Tube Plugging**

| | SG 2A | SG 2B | SG 2C | SG 2D | Total |
|---|---|---|---|---|---|
| **Previously Plugged** | 43 | 9 | 44 | 24 | 120 |
| **Plugged in Ninth Refueling Outage** | 2 | 0* | 0* | 0* | 2 |
| **Total Plugged** | 45 | 9 | 44 | 24 | 122 |
| **Total Plugged (%)** | 0.98% | 0.2% | 0.96% | 0.53% | 0.67% |

* SG 2A was the only SG inspected during the Braidwood Unit 2 Ninth Refueling Outage

## 3.0 CERTIFICATIONS

### 3.1 Procedures/Examinations/Equipment

3.1.1 The examination and evaluation procedures used during the eddy current inspection were approved by personnel qualified to Level III in accordance with the 1984 Edition of SNT-TC-1A, "Personnel Qualification and Certification in Nondestructive Testing." Exelon procedures SPPM NDT-E-2, "Multifrequency Eddy Current Data Acquisition of Steam Generator Tubing at Braidwood and Byron Nuclear Stations," Revision 4 and Exelon Procedure ER-AP-335-040, "Evaluation of Eddy Current Data for Steam Generator Tubing," Revision 0, were used for data acquisition and analysis.

3.1.2 The examinations, equipment, and personnel were in compliance with the requirements of the Exelon and Westinghouse Quality Assurance programs for Inservice Inspection, Braidwood Technical Specification 5.5.9, 1989 Edition of the ASME Boiler and Pressure Vessel Code Sections XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," and V, "Nondestructive Examination," Revision 5 of the EPRI PWR Steam Generator Examination Guidelines, NEI 97-06, "Steam Generator Program Guidelines," and industry standards.

3.1.3 Certification packages for examiners, data analysts, and equipment are available at Braidwood Station. Table A.1 of Attachment A lists personnel who performed data acquisition or analysis during this inspection.

3.1.4 Tecrad Inc. TC6700 Remote Data Acquisition Units (RDAUs) with Westinghouse ANSER 8.3 Rev 76 computer software were used to acquire the eddy current data. Analysis was performed with Westinghouse ANSER software. Primary analysis was performed using the Automated Data Screening feature of ANSER. Secondary data analysis was performed manually using ANSER software.

3.1.5 The bobbin coil examinations of the steam generator were performed with Westinghouse 0.610 inch diameter probes. For low row U-Bend tubing, a 0.590 inch diameter bobbin probe was utilized to achieve the complete full tube examination in tubes where there was difficulty using the 0.610 inch diameter probe.

3.1.6 The rotating coil examinations were performed with Zetec 0.610 inch or 0.580 inch diameter three coil plus-point probes.

## 3.2 Personnel

3.2.1 The personnel who performed the eddy current inspections were qualified to Level I and Level II in accordance with the 1984 Edition of SNT-TC-1A. The Level I personnel performed the inspections under the direct supervision of Level II or Level III personnel.

3.2.2 The personnel who performed the data analysis were qualified to a minimum of Level II, with special analysis training (IIA) in accordance with the 1984 Edition of SNT-TC-1A, and Article IV-2000 of ASME Section XI, 1989 Edition.

3.2.3 All eddy current data analysts were qualified in accordance with EPRI Appendix G for Qualified Data Analysts (QDAs). In addition, all data analysts were trained and tested in accordance with a site specific performance demonstration program in both the bobbin coil and plus-point inspection data analysis. Resolution analysts were also trained and tested specifically for the performance of data resolution. All analysts were required to achieve a score of 80% or greater on both the written and practical examinations prior to analyzing data.

3.2.6 All eddy current data acquisition personnel were trained and tested in accordance with a site specific performance demonstration program. The data acquisition operators were required to achieve a written test score of 80% or greater prior to acquiring data.

3.2.5 The eddy current analysis was subject to two independent analyses. The Primary Analysis was performed by Westinghouse and the Secondary Analysis was performed by Corestar. The following subcontractors were used to support data analysis at either primary or secondary analysis sites; Anatec, Quantum and NDE Technology. Discrepancies between primary and secondary analysis required Level III concurrence between both parties for the final resolution.

3.2.6 An independent SG eddy current Level III QDA was employed to serve as a process control reviewer, in accordance with EPRI Guidelines, Section 6.3.3.4, to randomly sample the data to ensure the resolution process was properly performed and that the field calls were properly reported. The Independent Level III QDA also provided data acquisition oversight to ensure that the data collection process was in compliance with appropriate procedures, that all essential variables were set in

accordance with the applicable Examination Technique Specification Sheet (ETSS) and to provide a data quality check of acquired data. The Independent Level III QDA reported directly to the Exelon Level III inspector.

## 4.0 EXAMINATION TECHNIQUE AND EXAMINATION SCOPE

All eddy current examination techniques used are qualified in accordance with Appendix H of the EPRI Steam Generator Examination Guidelines. Each examination technique was evaluated to be applicable to the tubing and conditions of the Braidwood Unit 2 steam generators.

### 4.1 Examination Techniques and Examination Scope

4.1.1 All inservice tubes in SG 2A were inspected full length utilizing a 0.610 inch diameter LLMC bobbin coil eddy current probe. Nominal probe inspection speed was 40 inches per second for rows 5 through 49 and 24 to 40 inches per second for rows 1 through 4 depending on tube conditions. Sufficient sampling rates were used to maintain a minimum of 30 samples per inch. The bobbin coil probes were operated at frequencies of 550 kHz, 300 kHz, 130 kHz, and 20 kHz operating in the differential and absolute test modes. In addition, suppression mixes were used to enhance the inspection. These mixes were as follows: 550/130 kHz differential mix and a 300/130 kHz absolute mix.

4.1.2 Non-quantifiable indications identified by an "I-Code" were examined with a rotating plus-point probe. The probe contained a mid-range plus-point coil, a 0.115 inch diameter pancake coil and a 0.080 inch diameter shielded high frequency coil. The nominal probe speed was 0.5 inches per second with a sampling rate to maintain a minimum of 30 samples per inch. The probe was operated at frequencies of 300 kHz, 200 kHz, 100 kHz and 20 kHz operating in the absolute test mode.

4.1.3 The SG eddy current examination techniques used during this inspection were equivalent to the EPRI Appendix H techniques listed in Table 4.1 below. Each Examination Technique Specification Sheet (ETSS) was evaluated and determined to be applicable to the site conditions.

**TABLE 4.1**
**EPRI APPENDIX H TECHNIQUES**

| EPRI Technique ETSS | Probe | Description |
|---|---|---|
| 96004.3 | Bobbin | AVB / Pre-Heater / TSP / Foreign Object Wear, Freespan Flaws |
| 96007.1 | Bobbin | ODSCC at Tube Support Plates |
| 96910.1 | Plus-Point | Foreign Object Wear / Freespan Flaw Sizing |
| 20511.1<br>20510.1 | Plus-Point | TTS Expansion / Pre-Heater Expansion / Dent / Ding – PWSCC |
| 20409.1 | Plus-Point | TTS Expansion / Dent / Ding / U-Bend / Pre-Heater Expansion ODSCC |
| 96511.1 | Plus-Point | U-Bend PWSCC |
| 96703.1 | Plus-Point | Dent / Ding / PWSCC Sizing |

PWSCC – Primary Water Stress Corrosion Cracking
ODSCC – Outer Diameter Stress Corrosion Cracking
TSP – Tube Support Plate
TTS – Top of Tubesheet
AVB – Anti-Vibration Bar

4.1.4 See Attachment B for tubesheet maps detailing the inspection scope for the inspection program.

### 4.2 Recording of Examination Data

Results of the eddy current data analysis were recorded on optical disks. The data was then loaded into the Westinghouse ST2000 Eddy Current Data Management System. This system was used to track the proper examination of all tubes and it was also used to generate the final eddy current report summaries.

### 4.3 Witness and Verification of Examination

Eddy current inspections were witnessed and/or verified by the Authorized Nuclear Inservice Inspector Mr. Lee Malabanan of the Hartford Steam Boiler Inspection and Insurance Company of Hartford Connecticut, Chicago Branch, 2443 Warrenville Road, Suite 500, Lisle, Illinois 60532-9871.

## 5.0 EXAMINATION RESULTS

### 5.1 Indications Found

5.1.1 **Anti-Vibration Bar (AVB) Wear** - Tube degradation was found by the 100% bobbin coil examination of the 2A SG in the U-bend region due to

fretting of the Anti-Vibration Bars on the tube. A total of 343 indications of AVB wear were identified. The bobbin coil examination technique utilized in this inspection was EPRI Appendix H qualified for the depth sizing of AVB wear. Two tubes were removed from service as a result of AVB wear exceeding the ≥ 40% through wall (TW) repair limit. The largest of these indications was 40% TW. Attachment C contains tube lists with axial elevations of all imperfections that contain measurable through wall depth that were found during the inspection of the 2A SG.

### 5.2 Other Inspection

5.2.1 Visual Inspection of Previously Installed Plugs - All previously installed plugs on the hot leg and cold leg tube ends in SG 2A were visually inspected for signs of degradation and leakage. A total of 86 tube plugs were visually inspected. In addition, all plugs installed during this outage were also visually inspected. No degradation or abnormal leakage was found.

## 6.0 REPAIR SUMMARY

Repairs were conducted in accordance with ASME Section XI, 1989 Edition. All repairs were performed using Inconel-690 mechanical tube plugs. All repairs were performed in accordance with Westinghouse approved procedures.

## 7.0 DOCUMENTATION

All original optical disks have been provided to Exelon and are maintained at Braidwood Station. The final data sheets and pertinent tube sheet plots are contained in the Westinghouse Outage Report for Braidwood Unit 2, Ninth Refueling Outage, and are also maintained at Braidwood Station.

## 8.0 FIGURES/TABLES/ATTACHMENTS

**Attachment A Contents**

Table A.1 Data Acquisition and Analysis Personnel Certification List

Figure A.2 Westinghouse Model D-5 Tube Support Configuration

**Attachment B Contents**

Steam Generator 2A Inspection Maps

**Attachment C Contents**

Steam Generator 2A Anti-Vibration Bar Wear Indications

**Attachment D Contents**

Steam Generator 2A Tubes Repaired During Ninth Refueling Outage

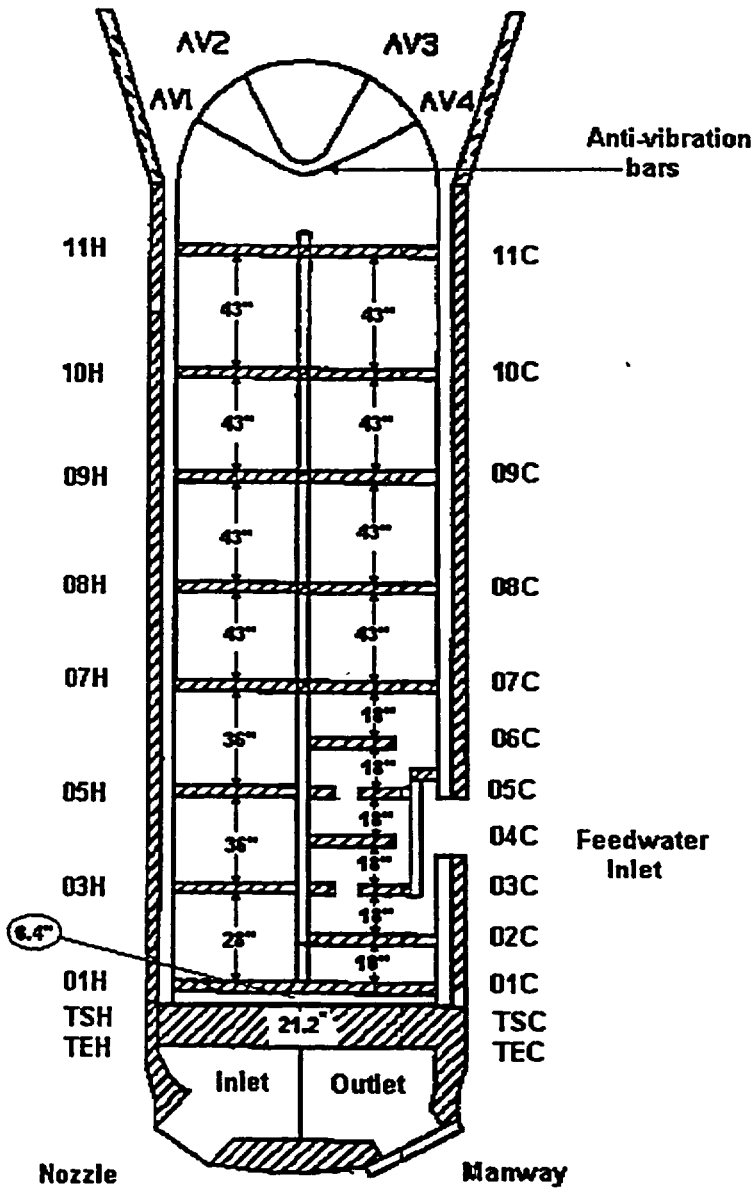
# ATTACHMENT A

TABLE A.1
Data Acquisition and Personnel

| Name | Company | Level | ANALYSIS (AN) ACQUISITION (AQ) | QDA |
|---|---|---|---|---|
| Estel, J. | Westinghouse | II | AQ | N |
| Evering, D. | Westinghouse | II | AQ | N |
| Hopper, J. | Westinghouse | II | AQ | N |
| Mains, P. | Westinghouse | II | AQ | N |
| Mardell, D. | Westinghouse | II | AQ | N |
| Parris, J. | Westinghouse | II | AQ | N |
| Pope, W. | Westinghouse | II | AQ | N |
| Popovich, R. | Westinghouse | III | AN | Y |
| Whalen, D. | Westinghouse | II | AQ | N |
| Croyle, R. | Corestar | III | AN | Y |
| Causby, G. | Corestar | III | AN | Y |
| Ives, D. | Corestar | III | AN | Y |
| McChesney, W. | Corestar | III | AN | Y |
| Miller, H. | Corestar | IIA | AN | Y |
| Overly, E. | Corestar | IIA | AN | Y |
| Spake, C. | Corestar | III | AN | Y |
| Stach, G. | Corestar | IIA | AN | Y |
| Lewis, D. | NDE Technology | III | AN | Y |
| Lohner, E. | NDE Technology | III | AN | Y |
| Seigel, R. | NDE Technology | III | AN | Y |
| Stokke, T. | NDE Technology | III | AN | Y |
| Currier, D. | Quantum | III | AN | Y |
| Morgan, B | Quantum | III | AN | Y |
| Prentice, R. | Quantum | IIA | AN | Y |
| Rogers, G. | Quantum | III | AN | Y |
| Barnes, R. | Anatec | III | AN | Y |

FIGURE A.2

MODEL D-5 TUBE SUPPORT PLATE LOCATIONS




Note: Tube Support Plate dimensions are centerline to centerline.

# ATTACHMENT B

# CDE-A HOT LEG BOBBIN INSPECTION PROGRAM

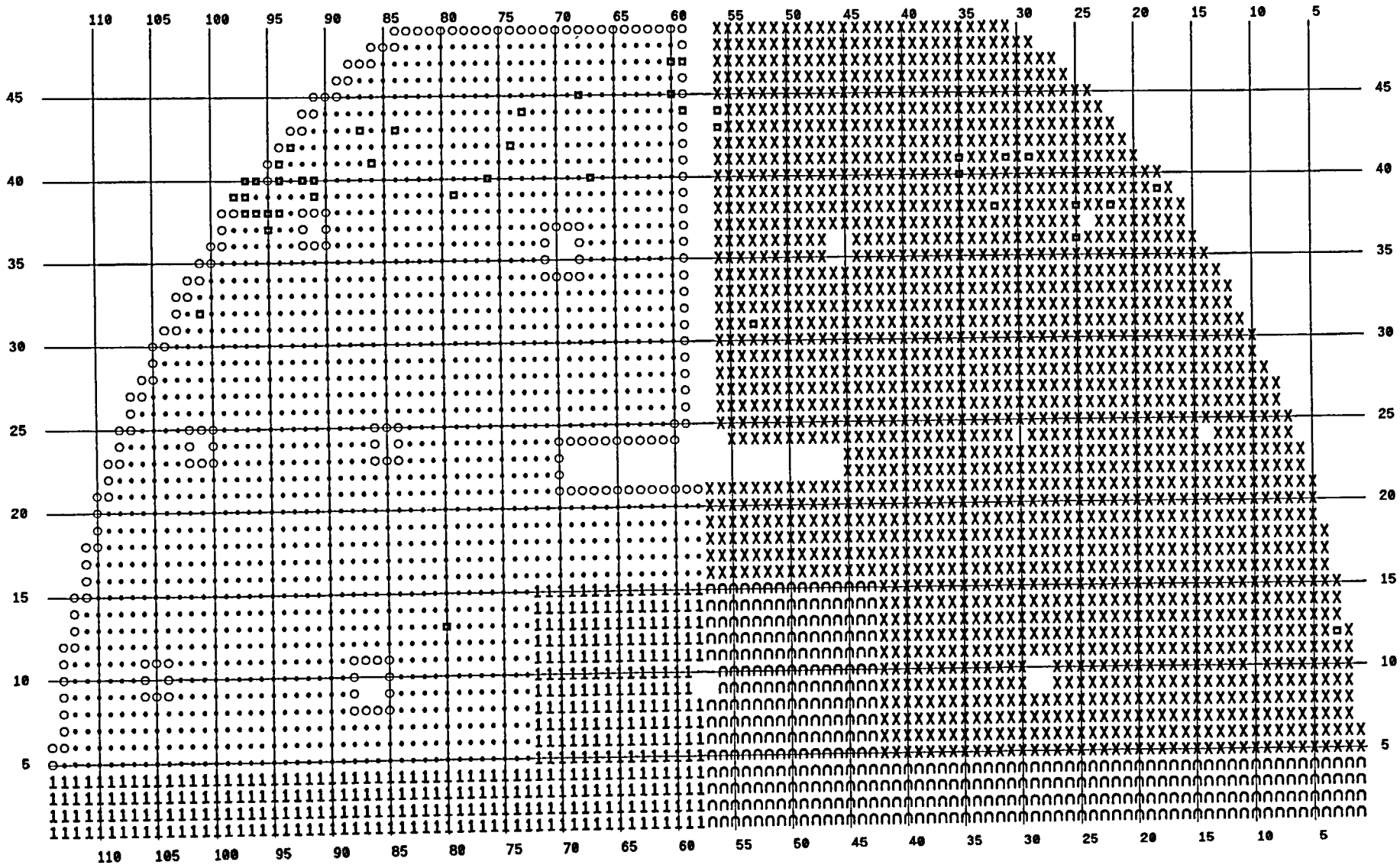
Braidwood A2R09 CDE D5

X 1881 TEST FULL LENGTH

∩ 391 TEST 11C THROUGH TEH

1 391 TEST 11H THROUGH TEH

◘ 43 PLUGGED TUBE




Westinghouse Electric Company LLC - NSBU ST2000 04/25/2002 13:25:45

# CDE-A COLD LEG BOBBIN INSPECTION PROGRAM

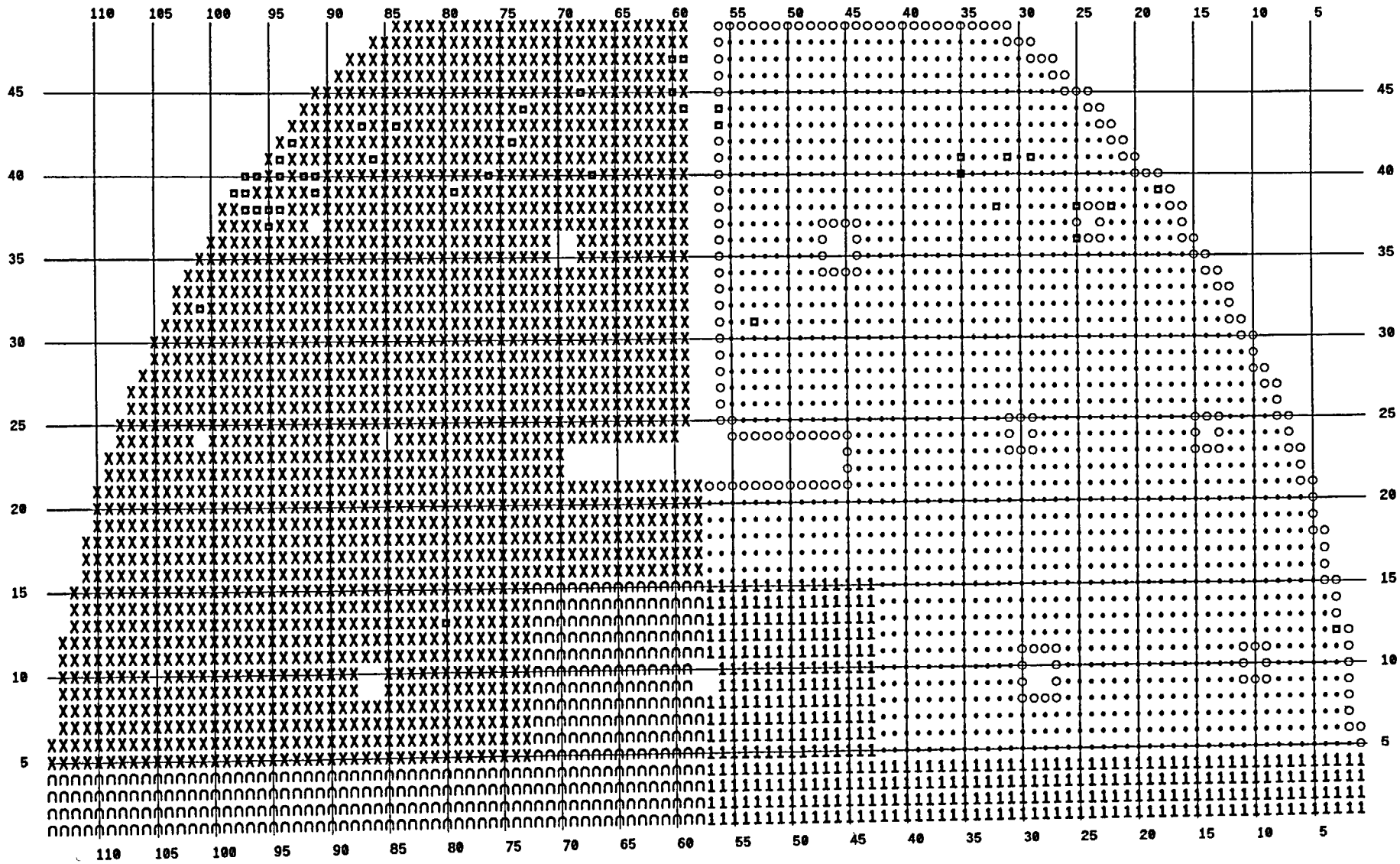
Braidwood A2R09 CDE D5

X 1864 TEST FULL LENGTH

∩ 391 TEST 11H THROUGH TEC

1 391 TEST 11C THROUGH TEC

◘ 43 PLUGGED TUBE




Westinghouse Electric Company LLC - NSSU ST2000 04/25/2002 13:26:25

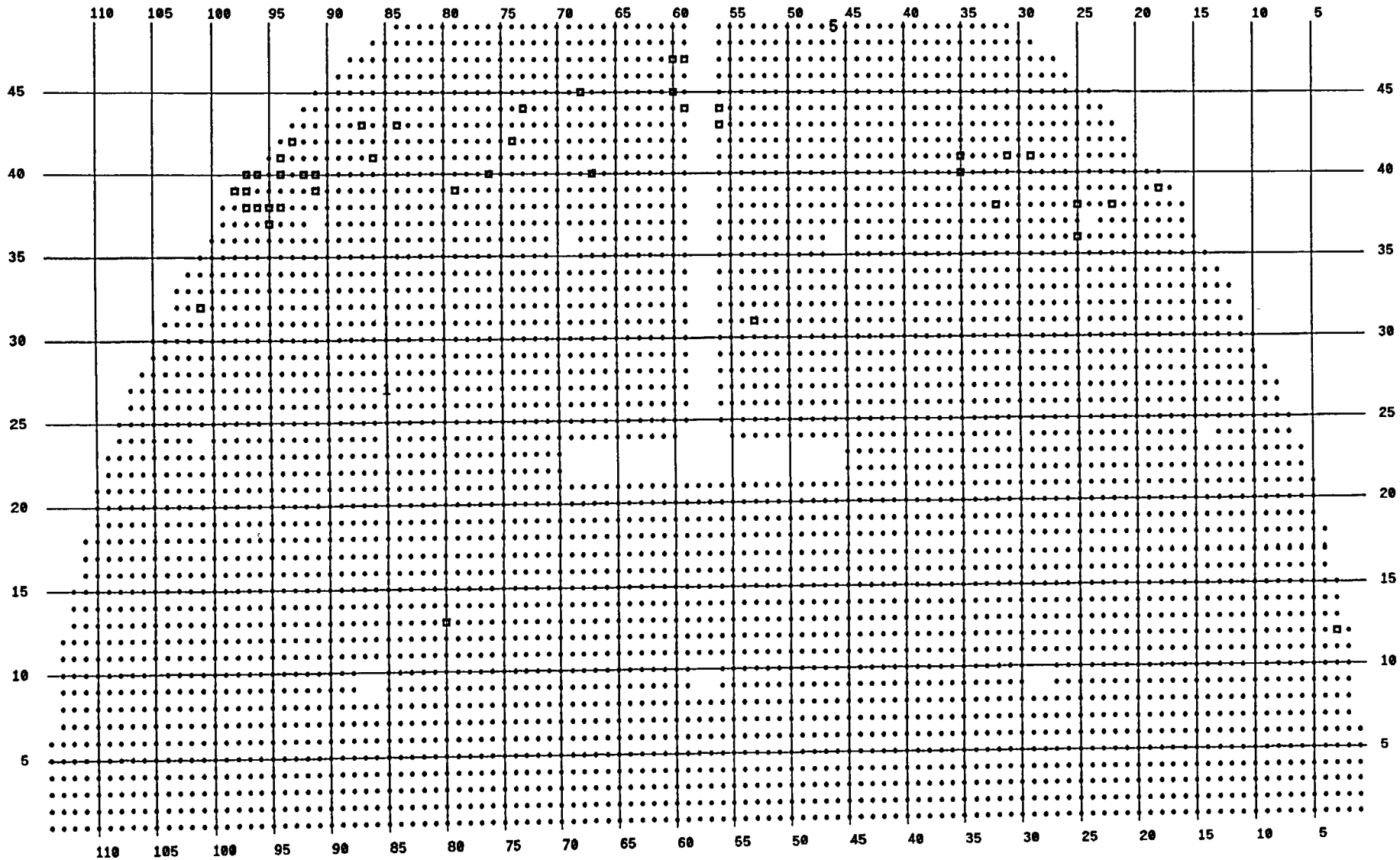
# CDE-A SPECIAL INTEREST +POINT INSPECTION PROGRAMS

BOTH LEGS
Braidwood A2R09 CDE D5

5 1 TESTED 5C -/+ 2 INCHES

1 1 TESTED 11H -/+ 2 INCHES

◻ 43 PLUGGED TUBE




Westinghouse Electric Company LLC - NSBU ST2000 04/25/2002 14:13:22

# ATTACHMENT C

# CDE-A TUBES WITH AVB WEAR INDICATIONS

MOST SEVERE INDICATION PER TUBE

Braidwood A2R09 CDE D5

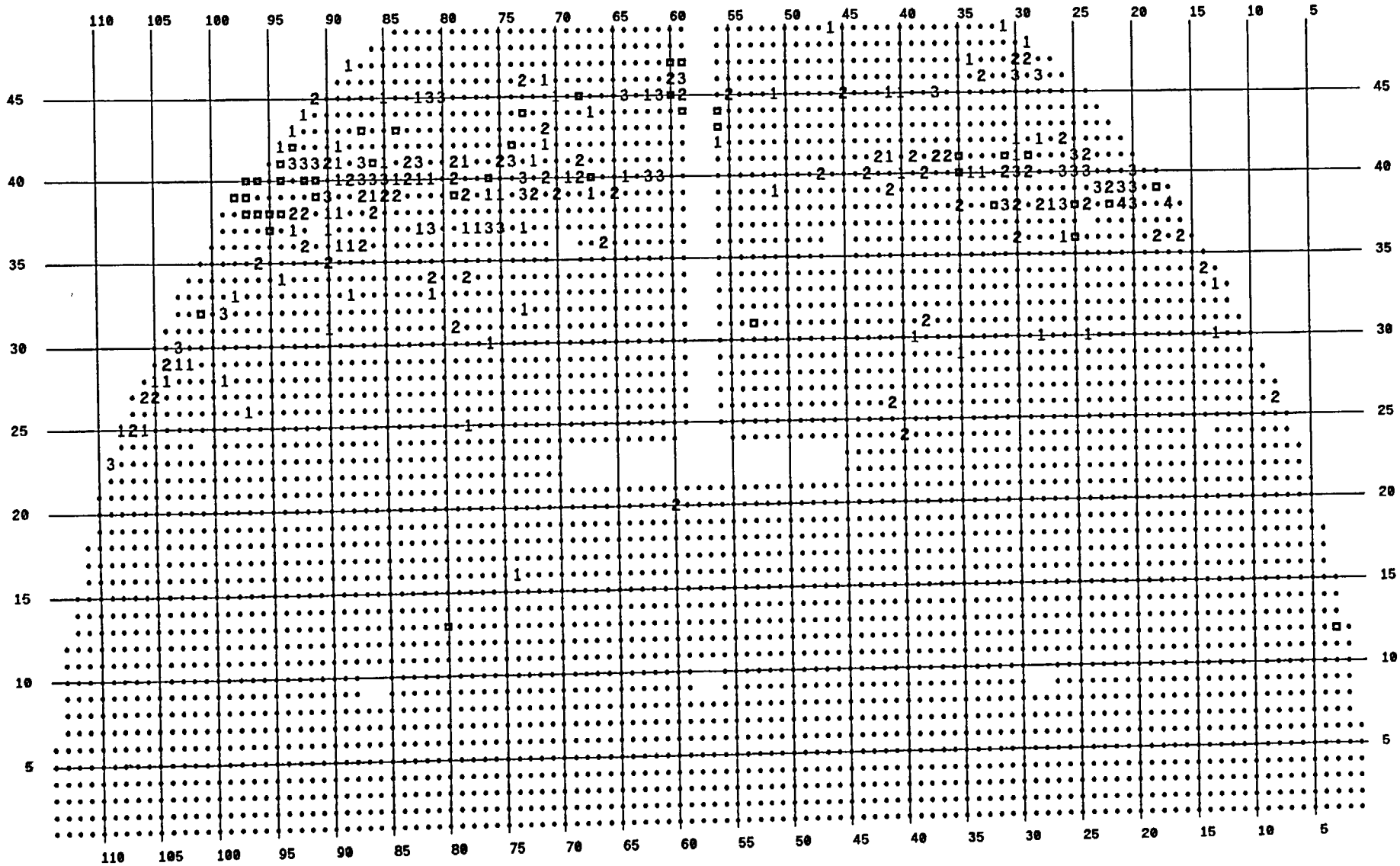
1 77 INDICATION 15% TO 19%

2 68 INDICATION 20% TO 29%

3 40 INDICATION 30% TO 39%

4 2 INDICATION 40% TO 49%

□ 43 PLUGGED TUBE




Westinghouse Electric Company LLC - NSBU ST2000 04/25/2002 12:02:30

CDE - A Indications 15% To 19%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:44:48

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 13 | 1.46 | 0 | PCT | 19 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 33 | 13 | 1.03 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 34 | 14 | .93 | 0 | PCT | 17 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 34 | 14 | 1.00 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 36 | 18 | 1.07 | 0 | PCT | 18 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 39 | 21 | 1.19 | 0 | PCT | 17 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 21 | 1.25 | 0 | PCT | 17 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 22 | 1.15 | 0 | PCT | 19 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 30 | 24 | .89 | 0 | PCT | 16 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 24 | 1.08 | 0 | PCT | 17 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 40 | 25 | 1.22 | 0 | PCT | 19 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 25 | .92 | 0 | PCT | 15 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 41 | 25 | .99 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 36 | 26 | 1.16 | 0 | PCT | 19 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 26 | .77 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 26 | .93 | 0 | PCT | 17 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 27 | 1.15 | 0 | PCT | 16 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 38 | 27 | 1.47 | 0 | PCT | 19 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 30 | 28 | .82 | 0 | PCT | 15 | P2 | AV3 | -.14 | | TEC | TEH | .610 | MBART | 7 | H |
| 42 | 28 | .91 | 0 | PCT | 17 | P2 | AV2 | -.05 | | TEC | TEH | .610 | MBART | 3 | H |
| 42 | 28 | .97 | 0 | PCT | 18 | P2 | AV3 | -.06 | | TEC | TEH | .610 | MBART | 3 | H |
| 42 | 28 | .91 | 0 | PCT | 17 | P2 | AV4 | -.19 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 29 | .83 | 0 | PCT | 16 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 48 | 29 | 1.03 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 36 | 30 | .89 | 0 | PCT | 16 | P2 | AV2 | .16 | | TEC | TEH | .610 | MBART | 7 | H |
| 41 | 30 | .86 | 0 | PCT | 17 | P2 | AV2 | .14 | | TEC | TEH | .610 | MBART | 3 | H |
| 42 | 30 | .78 | 0 | PCT | 16 | P2 | AV3 | -.14 | | TEC | TEH | .610 | MBART | 3 | H |
| 38 | 31 | 1.06 | 0 | PCT | 15 | P2 | AV4 | -.03 | | TEC | TEH | .610 | MBART | 5 | H |
| 40 | 31 | 1.16 | 0 | PCT | 18 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 49 | 31 | 1.17 | 0 | PCT | 18 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 33 | .82 | 0 | PCT | 16 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 34 | 1.07 | 0 | PCT | 19 | P2 | AV2 | .06 | | TEC | TEH | .610 | MBART | 3 | H |
| 47 | 34 | .85 | 0 | PCT | 17 | P2 | AV4 | .03 | | TEC | TEH | .610 | MBART | 3 | H |
| 29 | 35 | 1.46 | 0 | PCT | 19 | P2 | AV4 | -.03 | | TEC | TEH | .610 | MBART | 5 | H |
| 31 | 38 | .87 | 0 | PCT | 16 | P2 | AV2 | -.03 | | TEC | TEH | .610 | MBART | 7 | H |
| 40 | 38 | .89 | 0 | PCT | 17 | P2 | AV1 | .08 | | TEC | TEH | .610 | MBART | 3 | H |
| 30 | 39 | 1.23 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 30 | 39 | 1.30 | 0 | PCT | 18 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 24 | 40 | .81 | 0 | PCT | 16 | P2 | AV1 | -.20 | | TEC | TEH | .610 | MBART | 17 | H |
| 24 | 40 | 1.11 | 0 | PCT | 19 | P2 | AV2 | .26 | | TEC | TEH | .610 | MBART | 17 | H |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A Indications 15% To 19%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:44:48

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 40 | .85 | 0 | PCT | 17 | P2 | AV2 | .16 | | TEC | TEH | .610 | MBART | 3 | H |
| 45 | 40 | .94 | 0 | PCT | 16 | P2 | AV2 | .25 | | TEC | TEH | .610 | MBART | 3 | H |
| 41 | 41 | .86 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 41 | 1.13 | 0 | PCT | 18 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 41 | 42 | .89 | 0 | PCT | 17 | P2 | AV2 | -.03 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 43 | .80 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 45 | .96 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 49 | 46 | .74 | 0 | PCT | 15 | P2 | AV4 | -.31 | | TEC | TEH | .610 | MBART | 3 | H |
| 39 | 51 | .90 | 0 | PCT | 15 | P2 | AV3 | -.11 | | TEC | TEH | .610 | MBART | 9 | H |
| 45 | 51 | 1.25 | 0 | PCT | 19 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 42 | 56 | .97 | 0 | PCT | 16 | P2 | AV2 | .11 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 59 | .94 | 0 | PCT | 18 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 2 | C |
| 46 | 59 | .81 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 46 | 59 | .82 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 45 | 61 | .87 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 45 | 61 | 1.02 | 0 | PCT | 15 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 45 | 61 | .96 | 0 | PCT | 15 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 45 | 62 | .72 | 0 | PCT | 15 | P2 | AV3 | .11 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 64 | .86 | 0 | PCT | 17 | P2 | AV3 | .06 | | TEH | TEC | .610 | MBART | 2 | C |
| 45 | 64 | 1.07 | 0 | PCT | 18 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 39 | 67 | 1.15 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 44 | 67 | 1.21 | 0 | PCT | 17 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 41 | 68 | 1.05 | 0 | PCT | 18 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 69 | 1.18 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 45 | 70 | .82 | 0 | PCT | 15 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 45 | 70 | .82 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 71 | 1.33 | 0 | PCT | 18 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 42 | 71 | 1.08 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 43 | 71 | 1.06 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 46 | 71 | 1.30 | 0 | PCT | 17 | P2 | AV2 | .21 | | TEH | TEC | .610 | MBART | 4 | C |
| 41 | 72 | 1.26 | 0 | PCT | 19 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 32 | 73 | 1.36 | 0 | PCT | 19 | P2 | AV1 | -.14 | | TEH | TEC | .610 | MBART | 8 | C |
| 32 | 73 | 1.22 | 0 | PCT | 18 | P2 | AV3 | .09 | | TEH | TEC | .610 | MBART | 8 | C |
| 32 | 73 | 1.11 | 0 | PCT | 17 | P2 | AV4 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 73 | 1.03 | 0 | PCT | 16 | P2 | AV1 | -.06 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 73 | 1.33 | 0 | PCT | 19 | P2 | AV2 | .09 | | TEH | TEC | .610 | MBART | 8 | C |
| 16 | 74 | 1.34 | 0 | PCT | 19 | P2 | AV4 | -.17 | | TEH | TEC | .610 | MBART | 26 | C |
| 37 | 75 | 1.30 | 0 | PCT | 19 | P2 | AV3 | .09 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 75 | 1.25 | 0 | PCT | 18 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A  Indications 15% To 19%

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| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 76 | .83 | 0 | PCT | 15 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 30 | 76 | .94 | 0 | PCT | 16 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 76 | 1.14 | 0 | PCT | 18 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 76 | 1.00 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 77 | 1.10 | 0 | PCT | 17 | P2 | AV2 | .14 | | TEH | TEC | .610 | MBART | 8 | C |
| 25 | 78 | .83 | 0 | PCT | 15 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 78 | .84 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 78 | .85 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 31 | 79 | 1.09 | 0 | PCT | 17 | P2 | AV1 | .20 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 79 | 1.23 | 0 | PCT | 18 | P2 | AV2 | .15 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 79 | 1.12 | 0 | PCT | 17 | P2 | AV1 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 79 | 1.29 | 0 | PCT | 19 | P2 | AV2 | .14 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 80 | 1.10 | 0 | PCT | 18 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 33 | 81 | 1.05 | 0 | PCT | 16 | P2 | AV2 | .12 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 81 | .92 | 0 | PCT | 15 | P2 | AV1 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 81 | 1.24 | 0 | PCT | 18 | P2 | AV2 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 81 | 1.17 | 0 | PCT | 17 | P2 | AV1 | .20 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 82 | 1.03 | 0 | PCT | 17 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 82 | 1.01 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 82 | .99 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 45 | 82 | .85 | 0 | PCT | 15 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 83 | 1.28 | 0 | PCT | 19 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 83 | 1.17 | 0 | PCT | 17 | P2 | AV4 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 84 | .89 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 84 | 1.08 | 0 | PCT | 17 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 84 | 1.06 | 0 | PCT | 17 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 85 | 1.22 | 0 | PCT | 18 | P2 | AV3 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 85 | 1.26 | 0 | PCT | 18 | P2 | AV1 | .23 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 85 | 1.10 | 0 | PCT | 17 | P2 | AV2 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 85 | .96 | 0 | PCT | 15 | P2 | AV3 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 85 | 1.22 | 0 | PCT | 18 | P2 | AV1 | .12 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 85 | 1.13 | 0 | PCT | 17 | P2 | AV2 | .06 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 86 | .90 | 0 | PCT | 16 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 86 | .89 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 86 | .90 | 0 | PCT | 15 | P2 | AV4 | .25 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 87 | 1.23 | 0 | PCT | 18 | P2 | AV1 | -.29 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 87 | 1.26 | 0 | PCT | 18 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 33 | 88 | 1.05 | 0 | PCT | 17 | P2 | AV2 | .06 | | TEH | TEC | .610 | MBART | 6 | C |
| 36 | 88 | 1.04 | 0 | PCT | 17 | P2 | AV2 | .17 | | TEH | TEC | .610 | MBART | 6 | C |
| 36 | 88 | 1.09 | 0 | PCT | 18 | P2 | AV3 | .03 | | TEH | TEC | .610 | MBART | 6 | C |
| 47 | 88 | .85 | 0 | PCT | 15 | P2 | AV4 | -.06 | | TEH | TEC | .610 | MBART | 6 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A Indications 15% To 19%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:44:48

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 89 | 1.10 | 0 | PCT | 17 | P2 | AV1 | .23 | | TEH | TEC | .610 | MBART | 8 | C |
| 36 | 89 | 1.19 | 0 | PCT | 18 | P2 | AV2 | .20 | | TEH | TEC | .610 | MBART | 8 | C |
| 36 | 89 | 1.13 | 0 | PCT | 17 | P2 | AV3 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 38 | 89 | 1.45 | 0 | PCT | 19 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 38 | 89 | 1.23 | 0 | PCT | 18 | P2 | AV3 | .09 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 89 | 1.27 | 0 | PCT | 18 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 89 | 1.00 | 0 | PCT | 16 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 89 | 1.19 | 0 | PCT | 18 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 8 | C |
| 42 | 89 | 1.33 | 0 | PCT | 19 | P2 | AV3 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 31 | 90 | 1.20 | 0 | PCT | 19 | P2 | AV1 | .06 | | TEH | TEC | .610 | MBART | 6 | C |
| 31 | 90 | 1.12 | 0 | PCT | 18 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 6 | C |
| 35 | 90 | .82 | 0 | PCT | 15 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 90 | .83 | 0 | PCT | 15 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 90 | 1.16 | 0 | PCT | 18 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 90 | .99 | 0 | PCT | 17 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 90 | .90 | 0 | PCT | 15 | P2 | AV4 | -.03 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 91 | 1.43 | 0 | PCT | 19 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 36 | 92 | 1.15 | 0 | PCT | 18 | P2 | AV2 | .20 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 92 | .85 | 0 | PCT | 17 | P2 | AV2 | .03 | | TEH | TEC | .610 | MBART | 6 | C |
| 44 | 92 | 1.25 | 0 | PCT | 19 | P2 | AV4 | -.03 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 93 | .93 | 0 | PCT | 15 | P2 | AV3 | -.14 | | TEH | TEC | .610 | MBART | 8 | C |
| 43 | 93 | 1.17 | 0 | PCT | 17 | P2 | AV4 | .11 | | TEH | TEC | .610 | MBART | 8 | C |
| 34 | 94 | .88 | 0 | PCT | 15 | P2 | AV2 | .03 | | TEH | TEC | .610 | MBART | 6 | C |
| 42 | 94 | .85 | 0 | PCT | 15 | P2 | AV3 | -.08 | | TEH | TEC | .610 | MBART | 6 | C |
| 26 | 97 | 1.15 | 0 | PCT | 17 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 12 | C |
| 33 | 98 | 1.00 | 0 | PCT | 16 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 10 | C |
| 33 | 98 | .91 | 0 | PCT | 15 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 10 | C |
| 28 | 99 | 1.14 | 0 | PCT | 18 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 12 | C |
| 32 | 99 | 1.09 | 0 | PCT | 17 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 12 | C |
| 29 | 102 | 1.03 | 0 | PCT | 16 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 14 | C |
| 29 | 103 | 1.26 | 0 | PCT | 15 | P2 | AV1 | -.03 | | TEH | TEC | .610 | MBART | 16 | C |
| 28 | 104 | 1.00 | 0 | PCT | 15 | P2 | AV2 | -.17 | | TEH | TEC | .610 | MBART | 14 | C |
| 29 | 104 | .96 | 0 | PCT | 15 | P2 | AV1 | .08 | | TEH | TEC | .610 | MBART | 14 | C |
| 27 | 105 | 1.48 | 0 | PCT | 18 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 16 | C |
| 28 | 105 | 1.36 | 0 | PCT | 16 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 16 | C |
| 25 | 106 | 1.17 | 0 | PCT | 17 | P2 | AV2 | .17 | | TEH | TEC | .610 | MBART | 14 | C |
| 27 | 106 | 1.24 | 0 | PCT | 18 | P2 | AV2 | .08 | | TEH | TEC | .610 | MBART | 14 | C |
| 27 | 106 | 1.00 | 0 | PCT | 15 | P2 | AV4 | .31 | | TEH | TEC | .610 | MBART | 14 | C |
| 25 | 108 | 1.18 | 0 | PCT | 15 | P2 | AV4 | -.06 | | TEH | TEC | .610 | MBART | 16 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A Indications 15% To 19%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:44:48

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 109 | 1.32 | 0 | PCT | 16 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 16 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

Tubes: 126 Records: 160

CDE - A Indications 20% To 29%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:54:51

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 8 | 1.88 | 0 | PCT | 22 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 26 | 8 | 1.94 | 0 | PCT | 23 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 34 | 14 | 1.40 | 0 | PCT | 21 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 36 | 16 | 2.16 | 0 | PCT | 27 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 17 | 1.65 | 0 | PCT | 21 | P2 | AV1 | -.03 | | TEC | TEH | .610 | MBART | 5 | H |
| 36 | 18 | 1.29 | 0 | PCT | 20 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 20 | 1.33 | 0 | PCT | 21 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 20 | 1.98 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 39 | 20 | 1.51 | 0 | PCT | 22 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 39 | 20 | 1.43 | 0 | PCT | 22 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 39 | 20 | 1.83 | 0 | PCT | 25 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 21 | 1.53 | 0 | PCT | 20 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 38 | 21 | 2.43 | 0 | PCT | 27 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 21 | 1.74 | 0 | PCT | 22 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 22 | 1.80 | 0 | PCT | 25 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 24 | 1.92 | 0 | PCT | 26 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 24 | 1.89 | 0 | PCT | 25 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 41 | 24 | 1.73 | 0 | PCT | 25 | P2 | AV2 | .08 | | TEC | TEH | .610 | MBART | 3 | H |
| 41 | 24 | 1.54 | 0 | PCT | 24 | P2 | AV3 | -.22 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 25 | 1.89 | 0 | PCT | 25 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 41 | 25 | 2.17 | 0 | PCT | 27 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 42 | 26 | 1.57 | 0 | PCT | 24 | P2 | AV3 | .11 | | TEC | TEH | .610 | MBART | 3 | H |
| 38 | 28 | 1.33 | 0 | PCT | 21 | P2 | AV3 | -.06 | | TEC | TEH | .610 | MBART | 7 | H |
| 46 | 28 | 2.36 | 0 | PCT | 29 | P2 | AV4 | .06 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 29 | 2.54 | 0 | PCT | 29 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 29 | 2.09 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 47 | 29 | 2.42 | 0 | PCT | 29 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 47 | 29 | 2.04 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 36 | 30 | 1.68 | 0 | PCT | 24 | P2 | AV1 | -.03 | | TEC | TEH | .610 | MBART | 7 | H |
| 36 | 30 | 1.33 | 0 | PCT | 21 | P2 | AV3 | -.08 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 30 | 1.60 | 0 | PCT | 23 | P2 | AV2 | .14 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 30 | 2.47 | 0 | PCT | 29 | P2 | AV3 | -.14 | | TEC | TEH | .610 | MBART | 7 | H |
| 46 | 30 | 1.53 | 0 | PCT | 23 | P2 | AV3 | -.11 | | TEC | TEH | .610 | MBART | 3 | H |
| 47 | 30 | 1.25 | 0 | PCT | 21 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 3 | H |
| 38 | 31 | 2.21 | 0 | PCT | 26 | P2 | AV2 | .03 | | TEC | TEH | .610 | MBART | 5 | H |
| 40 | 31 | 2.10 | 0 | PCT | 26 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 31 | 2.11 | 0 | PCT | 27 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 31 | 1.36 | 0 | PCT | 20 | P2 | AV4 | -.14 | | TEC | TEH | .610 | MBART | 1 | H |
| 46 | 33 | 1.38 | 0 | PCT | 21 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 38 | 35 | 2.54 | 0 | PCT | 28 | P2 | AV2 | -.08 | | TEC | TEH | .610 | MBART | 5 | H |
| 41 | 36 | 1.14 | 0 | PCT | 20 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 3 | H |
| 41 | 36 | 2.09 | 0 | PCT | 28 | P2 | AV3 | -.08 | | TEC | TEH | .610 | MBART | 3 | H |
| 41 | 37 | 1.84 | 0 | PCT | 25 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 37 | 1.35 | 0 | PCT | 20 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 31 | 38 | 1.44 | 0 | PCT | 22 | P2 | AV3 | .03 | | TEC | TEH | .610 | MBART | 7 | H |
| 40 | 38 | 1.23 | 0 | PCT | 21 | P2 | AV3 | -.11 | | TEC | TEH | .610 | MBART | 3 | H |
| 41 | 39 | 1.28 | 0 | PCT | 20 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 24 | 40 | 1.39 | 0 | PCT | 22 | P2 | AV3 | .15 | | TEC | TEH | .610 | MBART | 17 | H |
| 26 | 41 | 1.91 | 0 | PCT | 23 | P2 | AV3 | .33 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 41 | 1.57 | 0 | PCT | 20 | P2 | AV2 | .11 | | TEC | TEH | .610 | MBART | 5 | H |
| 41 | 42 | 2.07 | 0 | PCT | 27 | P2 | AV3 | .06 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 43 | 1.49 | 0 | PCT | 22 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 45 | 1.67 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 40 | 47 | 1.37 | 0 | PCT | 20 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 55 | 1.63 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 55 | 2.35 | 0 | PCT | 28 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 45 | 59 | 1.50 | 0 | PCT | 24 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 46 | 59 | 1.59 | 0 | PCT | 24 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 20 | 60 | 2.42 | 0 | PCT | 28 | P2 | AV1 | .06 | | TEH | TEC | .610 | MBART | 14 | C |
| 46 | 60 | 1.11 | 0 | PCT | 20 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 46 | 60 | 2.00 | 0 | PCT | 28 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 61 | 1.83 | 0 | PCT | 22 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 40 | 62 | 1.13 | 0 | PCT | 20 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 45 | 64 | 1.82 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 39 | 65 | 1.68 | 0 | PCT | 21 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 39 | 65 | 2.35 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 36 | 66 | 1.83 | 0 | PCT | 26 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 68 | 1.89 | 0 | PCT | 27 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 41 | 68 | 2.30 | 0 | PCT | 29 | P2 | AV3 | .06 | | TEH | TEC | .610 | MBART | 2 | C |
| 39 | 70 | 1.67 | 0 | PCT | 25 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 71 | 2.52 | 0 | PCT | 27 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 40 | 71 | 1.55 | 0 | PCT | 20 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 43 | 71 | 1.39 | 0 | PCT | 20 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 43 | 71 | 1.88 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 39 | 72 | 1.53 | 0 | PCT | 22 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 73 | 2.52 | 0 | PCT | 28 | P2 | AV4 | -.14 | | TEH | TEC | .610 | MBART | 8 | C |
| 46 | 73 | 1.62 | 0 | PCT | 22 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 46 | 73 | 2.37 | 0 | PCT | 27 | P2 | AV2 | .06 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 74 | 1.39 | 0 | PCT | 21 | P2 | AV1 | .09 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 74 | 2.48 | 0 | PCT | 29 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 75 | 1.84 | 0 | PCT | 23 | P2 | AV1 | .09 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 75 | 2.40 | 0 | PCT | 27 | P2 | AV3 | .06 | | TEH | TEC | .610 | MBART | 8 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A Indications 20% To 29%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:54:51

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | 76 | 1.56 | 0 | PCT | 22 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 76 | 1.38 | 0 | PCT | 20 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 34 | 78 | 1.29 | 0 | PCT | 20 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 78 | 1.63 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 78 | 1.53 | 0 | PCT | 22 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 31 | 79 | 1.65 | 0 | PCT | 22 | P2 | AV2 | .15 | | TEH | TEC | .610 | MBART | 8 | C |
| 31 | 79 | 2.72 | 0 | PCT | 29 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 79 | 1.59 | 0 | PCT | 21 | P2 | AV3 | .03 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 79 | 1.93 | 0 | PCT | 24 | P2 | AV3 | .06 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 80 | 1.65 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 34 | 81 | 1.81 | 0 | PCT | 23 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 81 | 2.54 | 0 | PCT | 28 | P2 | AV3 | -.14 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 82 | 1.59 | 0 | PCT | 22 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 82 | 1.40 | 0 | PCT | 21 | P2 | AV4 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 83 | 2.41 | 0 | PCT | 27 | P2 | AV1 | -.12 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 83 | 1.68 | 0 | PCT | 22 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 83 | 1.63 | 0 | PCT | 22 | P2 | AV2 | .35 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 84 | 1.41 | 0 | PCT | 21 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 85 | 1.53 | 0 | PCT | 21 | P2 | AV2 | -.06 | | TEH | TEC | .610 | MBART | 8 | C |
| 38 | 86 | 1.61 | 0 | PCT | 23 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 86 | 1.29 | 0 | PCT | 20 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 86 | 1.69 | 0 | PCT | 23 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 36 | 87 | 1.54 | 0 | PCT | 21 | P2 | AV3 | .11 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 87 | 2.40 | 0 | PCT | 27 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 88 | 2.04 | 0 | PCT | 26 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 88 | 1.40 | 0 | PCT | 21 | P2 | AV3 | -.17 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 88 | 1.32 | 0 | PCT | 20 | P2 | AV4 | -.28 | | TEH | TEC | .610 | MBART | 6 | C |
| 35 | 90 | 1.88 | 0 | PCT | 25 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 39 | 90 | 2.15 | 0 | PCT | 27 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 90 | 1.62 | 0 | PCT | 23 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 6 | C |
| 45 | 91 | 1.46 | 0 | PCT | 22 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 36 | 92 | 1.85 | 0 | PCT | 25 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 92 | 1.80 | 0 | PCT | 24 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 92 | 1.36 | 0 | PCT | 20 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 38 | 93 | 1.58 | 0 | PCT | 21 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 8 | C |
| 35 | 96 | 2.20 | 0 | PCT | 25 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 10 | C |
| 30 | 103 | 2.20 | 0 | PCT | 24 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 16 | C |
| 30 | 103 | 2.46 | 0 | PCT | 26 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 16 | C |
| 29 | 104 | 2.37 | 0 | PCT | 28 | P2 | AV2 | .14 | | TEH | TEC | .610 | MBART | 14 | C |
| 29 | 104 | 2.47 | 0 | PCT | 29 | P2 | AV3 | .03 | | TEH | TEC | .610 | MBART | 14 | C |
| 27 | 105 | 2.45 | 0 | PCT | 26 | P2 | AV1 | -.03 | | TEH | TEC | .610 | MBART | 16 | C |
| 27 | 105 | 1.85 | 0 | PCT | 21 | P2 | AV2 | -.06 | | TEH | TEC | .610 | MBART | 16 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A  Indications 20% To 29%

Braidwood 2  A2R09  CDE 20020401  04/25/2002 12:54:51

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 106 | 1.52 | 0 | PCT | 21 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 14 | C |
| 27 | 106 | 1.72 | 0 | PCT | 23 | P2 | AV3 | -.03 | | TEH | TEC | .610 | MBART | 14 | C |
| 25 | 107 | 2.70 | 0 | PCT | 28 | P2 | AV1 | .06 | | TEH | TEC | .610 | MBART | 16 | C |

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

Tubes: 92  Records: 127

CDE - A Indications 30% To 39%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:55:36

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 17 | 4.81 | 0 | PCT | 39 | P2 | AV2 | -.16 | | TEC | TEH | .610 | MBART | 5 | H |
| 38 | 17 | 4.12 | 0 | PCT | 36 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 38 | 20 | 2.75 | 0 | PCT | 31 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 38 | 20 | 2.73 | 0 | PCT | 31 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 39 | 20 | 2.88 | 0 | PCT | 31 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 40 | 20 | 4.59 | 0 | PCT | 39 | P2 | AV2 | -.11 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 20 | 2.64 | 0 | PCT | 31 | P2 | AV3 | .06 | | TEC | TEH | .610 | MBART | 3 | H |
| 39 | 21 | 3.33 | 0 | PCT | 33 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 23 | 4.50 | 0 | PCT | 38 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 39 | 23 | 3.11 | 0 | PCT | 31 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 40 | 24 | 2.93 | 0 | PCT | 32 | P2 | AV2 | -.11 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 25 | 2.91 | 0 | PCT | 31 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 41 | 25 | 4.69 | 0 | PCT | 39 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 38 | 26 | 2.81 | 0 | PCT | 31 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 7 | H |
| 40 | 26 | 3.17 | 0 | PCT | 33 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 3 | H |
| 46 | 28 | 3.47 | 0 | PCT | 35 | P2 | AV2 | -.14 | | TEC | TEH | .610 | MBART | 3 | H |
| 46 | 28 | 3.31 | 0 | PCT | 34 | P2 | AV3 | .11 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 30 | 3.17 | 0 | PCT | 33 | P2 | AV2 | -.11 | | TEC | TEH | .610 | MBART | 3 | H |
| 40 | 30 | 3.31 | 0 | PCT | 34 | P2 | AV3 | .11 | | TEC | TEH | .610 | MBART | 3 | H |
| 46 | 30 | 3.15 | 0 | PCT | 33 | P2 | AV2 | -.14 | | TEC | TEH | .610 | MBART | 3 | H |
| 38 | 31 | 2.89 | 0 | PCT | 30 | P2 | AV3 | -.03 | | TEC | TEH | .610 | MBART | 5 | H |
| 45 | 37 | 2.61 | 0 | PCT | 30 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 1 | H |
| 46 | 59 | 2.71 | 0 | PCT | 32 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 40 | 61 | 3.57 | 0 | PCT | 33 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 45 | 61 | 3.39 | 0 | PCT | 32 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 4 | C |
| 40 | 62 | 3.71 | 0 | PCT | 36 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 45 | 64 | 2.44 | 0 | PCT | 30 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 2 | C |
| 39 | 73 | 4.32 | 0 | PCT | 37 | P2 | AV2 | .14 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 73 | 3.74 | 0 | PCT | 35 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 73 | 3.65 | 0 | PCT | 34 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 74 | 2.75 | 0 | PCT | 31 | P2 | AV2 | .09 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 74 | 3.75 | 0 | PCT | 36 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 75 | 3.41 | 0 | PCT | 33 | P2 | AV2 | .15 | | TEH | TEC | .610 | MBART | 8 | C |
| 37 | 76 | 3.52 | 0 | PCT | 35 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 45 | 80 | 2.89 | 0 | PCT | 32 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 37 | 81 | 3.20 | 0 | PCT | 32 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 81 | 3.89 | 0 | PCT | 35 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 45 | 81 | 2.83 | 0 | PCT | 30 | P2 | AV3 | -.06 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 82 | 3.10 | 0 | PCT | 33 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 85 | 3.29 | 0 | PCT | 33 | P2 | AV2 | -.03 | | TEH | TEC | .610 | MBART | 8 | C |
| 40 | 85 | 4.77 | 0 | PCT | 39 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

CDE - A Indications 30% To 39%

Braidwood 2 A2R09 CDE 20020401 04/25/2002 12:55:36

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 86 | 2.71 | 0 | PCT | 30 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 86 | 3.41 | 0 | PCT | 34 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 40 | 87 | 3.98 | 0 | PCT | 36 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 87 | 3.58 | 0 | PCT | 34 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 87 | 3.19 | 0 | PCT | 32 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 8 | C |
| 39 | 90 | 2.60 | 0 | PCT | 30 | P2 | AV3 | -.03 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 91 | 3.90 | 0 | PCT | 36 | P2 | AV2 | .12 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 92 | 2.47 | 0 | PCT | 30 | P2 | AV3 | .00 | | TEH | TEC | .610 | MBART | 6 | C |
| 41 | 93 | 4.09 | 0 | PCT | 36 | P2 | AV2 | .11 | | TEH | TEC | .610 | MBART | 8 | C |
| 41 | 93 | 3.33 | 0 | PCT | 33 | P2 | AV3 | -.09 | | TEH | TEC | .610 | MBART | 8 | C |
| 32 | 99 | 3.24 | 0 | PCT | 32 | P2 | AV2 | .00 | | TEH | TEC | .610 | MBART | 12 | C |
| 30 | 103 | 3.00 | 0 | PCT | 30 | P2 | AV1 | .00 | | TEH | TEC | .610 | MBART | 16 | C |
| 23 | 109 | 3.95 | 0 | PCT | 35 | P2 | AV4 | .03 | | TEH | TEC | .610 | MBART | 16 | C |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

Tubes: 41 Records: 54

CDE - A Indications 40% And Greater

Braidwood 2 A2R09 CDE 20020401 04/25/2002 13:00:29

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 17 | 5.04 | 0 | PCT | 40 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H |
| 38 | 21 | 4.91 | 0 | PCT | 40 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H |

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L |

Tubes: 2 Records: 2

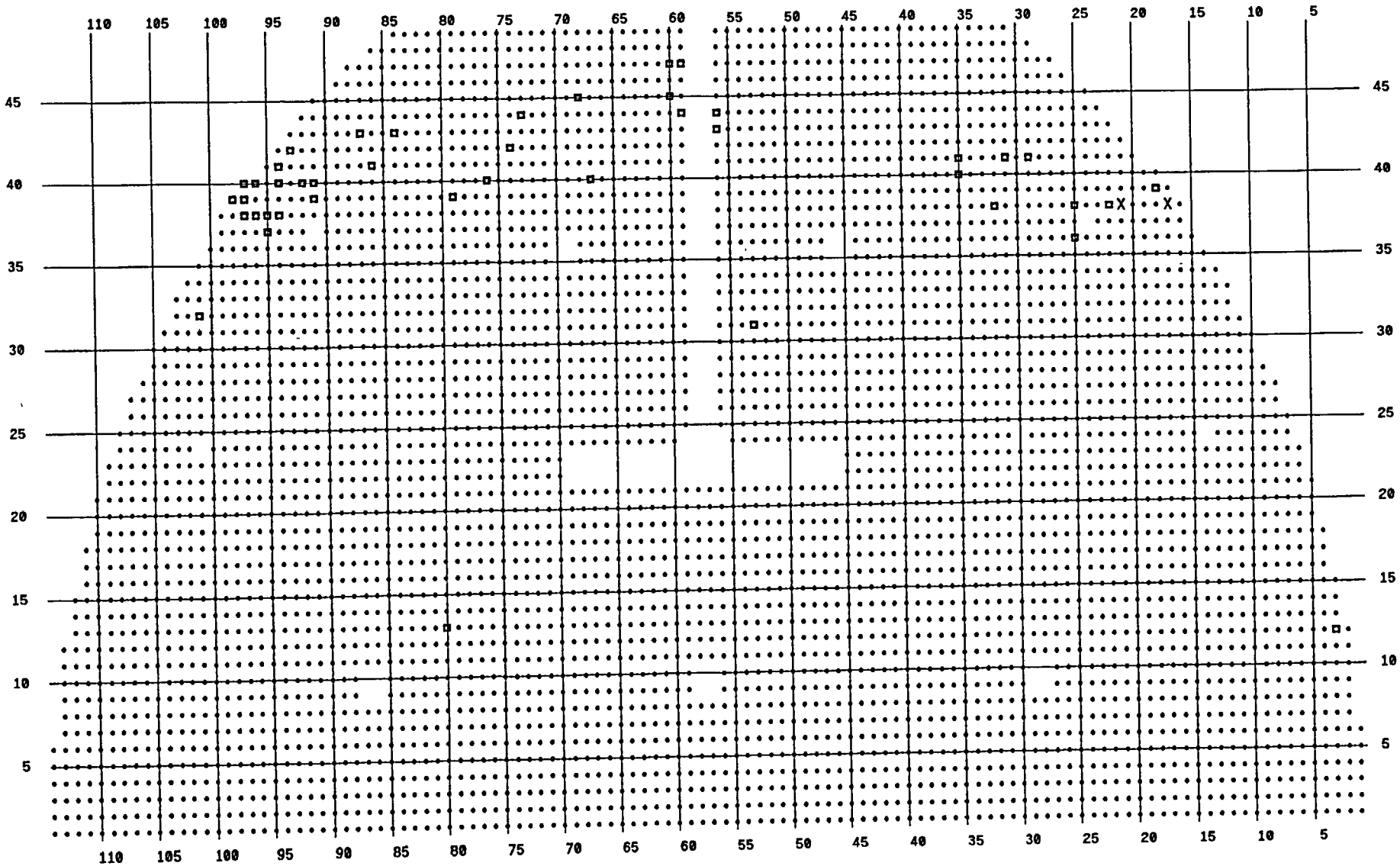
# ATTACHMENT D

# CDE-A TUBES PLUGGED DURING A2R09

Braidwood A2R09 CDE D5

X 2 TUBE PLUGGED DURING A2R09

□ 43 EXISTING PLUGGED TUBE




Westinghouse Electric Company LLC - NSBU ST2000 04/25/2002 14:43:34

CDE - A Tubes Plugged During A2R09

Braidwood 2 A2R09 CDE 20020401 04/25/2002 14:45:18

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | COM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 17 | 1.65 | 0 | PCT | 21 | P2 | AV1 | -.03 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 17 | 2.79 | 72 | MBM | | 6 | AV1 | 7.24 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 17 | 4.81 | 0 | PCT | 39 | P2 | AV2 | -.16 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 17 | 5.04 | 0 | PCT | 40 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H | RESULT OF RESOLUTION PROCESS |
| 38 | 17 | 4.12 | 0 | PCT | 36 | P2 | AV4 | .00 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 17 | 1.54 | 74 | MBM | | 6 | 10C | 29.70 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 17 | 4.73 | 0 | PID | | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 25 | H | RESULT OF RESOLUTION PROCESS |
| 38 | 21 | 1.53 | 0 | PCT | 20 | P2 | AV1 | .00 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 21 | 4.91 | 0 | PCT | 40 | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 5 | H | RESULT OF RESOLUTION PROCESS |
| 38 | 21 | 2.43 | 0 | PCT | 27 | P2 | AV3 | .00 | | TEC | TEH | .610 | MBART | 5 | H | |
| 38 | 21 | 4.22 | 0 | PID | | P2 | AV2 | .00 | | TEC | TEH | .610 | MBART | 25 | H | RESULT OF RESOLUTION PROCESS |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | COM |

Tubes: 2 Records: 11