2RE05 INSERVICE INSPECTION SUMMARY REPORT FOR STEAM GENERATOR TUBING

of the

SOUTH TEXAS PROJECT

ELECTRIC GENERATING STATION - UNIT 2

P.O. BOX 289

WADSWORTH, TEXAS 77483

Owner:	Houston Lighting and Power Company City Public Service Board of San Antonio Central Power and Light Company City of Austin
Address:	P.O. Box 1700 Houston, Texas 77001
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SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

UNIT 2

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Approved By: S E T — 5/8/97
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Manager - Design Engineering Department

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STEAM GENERATOR TUBE EXAMINATIONS

1.0 Introduction

This Summary Report describes Houston Lighting & Power Company's (HL&P's) Inservice Inspection (ISI) of the Steam Generator (S/G) tubing at South Texas Project Electric Generating Station, Unit 2 (STPEGS-2) during the 2REO5 refueling outage.

The steam generator tube ISI is required by Sections 3/4.4.5 and 4.0.5 of the Technical Specifications to be performed in accordance with the edition and addenda of the American Society of Mechanical Engineers (ASME) Section XI Code "Inservice Inspection of Nuclear Power Plant Components" prescribed by Title 10 of the Code of Federal Regulations, Part 50, Section 50.55a(g). Therefore, the ISI is required to meet the 1983 Edition of the ASME Code Section XI with addenda through the Summer 1983. The first ten year inspection interval of STPEGS-2 began June 19, 1989. Because STPEGS-2 was out of service continuously for 16 months, the inspection interval was extended for an equivalent period in accordance with IWA-2400(c) of the ASME Code Section XI. This extended the inspection interval to October 19, 2000. The ISI summarized herein constitutes the fifth ISI performed during the first ten year inspection interval. The 2RE05 steam generator tubing ISI commenced on February 11, 1997 and was completed on February 22, 1997.

The STPEGS-2 ISI program for the first inspection interval is described in the Ten Year ISI Plan previously filed with the Nuclear Regulatory Commission (NRC) and the State Of Texas. The STPEGS-2 program was developed and is being implemented in accordance with 10CFR50.55a, IWB (Examination Category B-Q) of the 1983 Edition of Section XI Code with the Summer 1983 Addenda, STPEGS Technical Specification 4.4.5, and other regulatory and Code bases as specified in the Ten Year ISI Plan.

This Summary Report satisfies the reporting requirements of ASME Code Section XI, IWA-6000 and 4.4.5.5 of the STPEGS Technical Specification.

The STPEGS-2 plant design contains four (4) Westinghouse recirculating design model E2 steam generators. Each model E2 steam generator was designed and fabricated by Westinghouse Electric Corporation of Tampa, Florida. Each steam generator contains 4864 drilled holes in the tubesheet. Of these holes, thirteen (13) were plugged to permit the installation of additional stay rods in the preheater section of each unit. Therefore, each steam generator design contains 4851 inservice tubes. The tubing material is low temperature mill annealed ASTM SB-163 Inconel having a nominal outer diameter (OD) of 0.750 inch and nominal wall thickness of 0.043 inch. The nominal thickness of the tubesheet is 22.65 inches.

The examination agency for the 2REO5 outage was Westinghouse Nuclear Services Division (WNSD).

2.0 Scope of Examinations

The STPEGS-2 Ten Year ISI Plan describes the ISI program for examination of steam generator tubing. Additionally, an auxiliary ISI plan (ISI Outage Plan) entitled, "1997 Outage Plan for the In-service Inspection of Steam Generator Tubing at the South Texas Project Electric Generating Station Unit 2" was prepared by WNSD and approved by HL&P. The ISI Outage Plan identified the steam generator tube areas expected to be examined by eddy current testing (ET) and the ET procedures expected to be used during the ISI.

The initial scope consisted of the following planned examinations:

Bobbin coil ET of all in-service tubing over its full length, in each steam generator.

Motorized Rotating Pancake Coil (MRPC) ET of the hot leg top of the tubesheet (TSH) for each inservice tube in each steam generator. The area of interest to be examined extended one (1) inch above to two (2) inches below the secondary face of the tubesheet.

MRPC of 108 examination areas in 62 tubes. These examination areas consisted of top of the tubesheets, tube support plates, tight radius U-bends, baffle plates in the pre-heater region, and free-span regions where previous indications existed or where experience indicated a higher potential for degradation. All of these inspections would extend over an approximate length of four (4) inches, as a minimum.

This scope exceeded the requirements for the first ISI sample of tubes specified in 4.4.5.2 of the STPEGS technical specification (NUREG - 1346). The ISI Outage Plan is consistent with the requirements of the Ten Year ISI Plan.

3.0 Personnel, Procedures, and Equipment

3.1 Personnel Qualifications

The personnel who performed the ET acquisition and analysis during the 2REO5 outage were employed by WNSD, NDE Technology, AJB Technology, Quantum NDE Services, Core Star International and Zetec. They were certified in accordance with the requirements of IWA-2300 of ASME Code Section XI and the certification practices of their respective employers. One hundred (100) percent of the ET analysts were certified as Qualified Data Analysts (QDA's) for the steam generator work performed. A QDA is a Level IIA or III who has passed rigorous testing of his ability to analyze a random selection of expertly-judged indications, from the Electric Power Research Institute NP-6201 Appendix G Performance Demonstration Database for various steam generator designs and all types of known defects.

Before the 2REO5 examinations were performed all ET data analysts were required to successfully complete a STPEGS plant site specific steam generator ET data analysis training program. The analyst training program consisted of (1) ET data analysis course and (2) site specific laboratory or practical training. The ET data analysis course consisted of a classroom lecture (or video tape) and reading of a training manual and analysis guidelines. The course addressed the specific STP steam generator design, operating history, previous ET results, the data acquisition procedure, and analysis guideline to be used for the STPEGS Unit 2 ET examinations. The site specific laboratory or practical training included hands on review of the flaw indications of the types that have been identified at STPEGS or at other plants of similar design to STPEGS.

Successful completion of the site specific course required the passing of the written and practical (hands on) test . The ET data analysis training program was administered by Messieurs Steve Brown, David Chizmar and Daniel Federico of Aptech Engineering Services, Inc..

For personnel involved in the performance of the ET acquisition and/or data analysis, their certification levels and identification numbers are listed in Appendix A. The identification numbers of the personnel that acquired or analyzed the ET data for a specific examination are recorded on the optical disks and data sheets. The identification number consists of the first letter of the persons last name and the last four digits of their social security number.

3.2 Examination and Analysis Procedures

All ET inspections were performed in accordance with the WNSD procedure MRS 2.4.2 GEN-35, Revision 6 entitled, "Eddy Current Inspection of Preservice and Inservice Heat Exchanger Tubing", with Field Change Request No. 1. This procedure, with the change authorization, is STPEGS document no. 120(0S)000036AWN..

The bobbin coil examination technique was performed using inspection frequencies of 550, 300, 130, and 20 kHz in both the differential and absolute modes for each tube. The WNSD bobbin coil procedure is an alternative to the technique described in ASME Code Section V, Article 8, I-4.., which requires that the probe pull speed not exceed 14 inches per second, without being

demonstrated to the satisfaction of the Authorized Nuclear Inservice Inspection (ANII). A nominal pull speed of 40 inches per second with a digital signal sampling rate of 1400 samples per second, as defined Table 2 of Para. 7.4.13 of MRS 2.4.2 GEN-35, was used during the 2REO5 ET examination. The Acquisition Technique (ACT) Sheet THX-01 authorizes the higher pull speed and was signed by the WNSD Level III representative and the STPEGS representative. The faster probe pull speed was demonstrated to the satisfaction of the ANII in accordance with IWA-2240 of Section XI. An additional ACT Sheet THX-01A was used for the testing of the U-bends and straight lengths of the cold leg section of the Rows 1 & 2 tubes. This permitted a slower pull speed to reduce the effects of probe snap through the U-bend.

The MRPC ET examination techniques were performed using the examination frequencies of 300, 200, 100, and 10 kHz in the absolute mode. All combinations of possible MRPC probe configurations and/or locations, including contingencies, that could have been encountered are covered on ACT Sheets THX-02, THX-03, THX-04, THX-05 and THX-06.

The ET data analysts performed the examinations to HL&P Engineering Instruction EI-8.01, entitled, "Steam Generator Eddy Current Data Analysis Guidelines", Revision 5 including the Analysis Guideline Change Form Numbers 1 and 2 which were generated and used during the ET examinations.
The data for each steam generator tube was subjected to two (2) separate independent analyses in accordance with HL&P Engineering Instruction EI-8.02, entitled "Steam Generator Eddy Current Data Control", Revision 1. The bobbin coil probe ET data was performed by a primary and secondary evaluation. The primary evaluation was performed manually by an analyst using the Westinghouse ANSER software. The secondary evaluation was performed using the Zetec Inc. Eddynet Computer Data Screening (CDS) software. The MRPC ET data was evaluated manually by two independent analysts also using ANSER and Eddynet95 software. The ET primary and secondary data analysis was performed in separate facilities. The primary analysts were located at the WNSD Remote Eddy current Data Analysis Center (REDAC) in Waltz Mill, Pa. The secondary analysts were located at Zetec Inc. in Issaquah, Washington.

Results of all of the eddy current examinations were recorded on a digital rewritable optical disk and the final resolution data sheets. These data sheets for each examination are stored as records. Each disk contains the raw ET signals, secondary, and resolution results for each calibration group. The optical disks also contain the system calibration and calibration verification with the dates and times for each calibration and verification. The unique number of the digital rewritable optical disk and the calibration group number have been recorded on the data sheets and optical disks. Therefore, the system calibration and calibration verification of the raw signals for each tube examined can be easily recalled.

3.3 Equipment

WNSD used the MIZ-30A ET instruments. WNSD also used the Eddynet '95 (Version 3.0) software to acquire the ET data. The secondary and resolution analysis was performed using Eddynet '95 (Version 3.0-Patch 11 (prototype)) software. The MIZ-30 instruments and Eddynet software are manufactured and produced by Zetec, Inc. The primary analysis was performed using ANSER software, Release # 96.A.1.1c of ANSER 8.1 Rev 64. This software is produced

by WNSD. The MIZ-30 instrument and software store and process the ET data in a digital format and have a significantly improved dynamic range and signal-to-noise ratio as compared to analog systems. The MIZ-30 is capable of being operated at locations remote from the steam generators (e.g., in low radiation areas).

The ASME Boiler and Pressure Vessel Code, Nuclear Components Code Case N-401, "Eddy Current Examination-Section XI, Division 1", was used after the digital equipment and the ET technique used were demonstrated to the STPEGS ANII in accordance with Case N-401.

Tubes in rows 1 and 2 were examined from the cold leg tube end using a 0.590 inch diameter magnetic-biased bobbin coil ET probe to the uppermost hot leg support plate (10H) and from the hot leg tube end using the 0.610 inch diameter magnetic-biased probe also to the same 10H support plate, to complete the full length examination. For all other tubes, the bobbin ET examinations were performed with a 0.610 inch diameter magnetic-biased probe.

In conducting MRPC ET in the straight sections of tubing, WNSD used 0.610 inch diameter three (3) coil MRPC probes. The MRPC probe contained one 0.115 inch diameter pancake coil, one coil sensitive to axially oriented flaws and one coil sensitive to circumferentially oriented flaws.

3.4 Calibration Standards

The ET calibration standards used for both the bobbin coil and MRPC inspections were guide tube standards. The design of the standard incorporated both flat bottom holes and electro discharge machined (EDM) notches to calibrate the bobbin coil probe and the MRPC probe for the ET examinations. The standards were fabricated from UNS Alloy N06600 of the same material specification and same nominal size as that of the tubes examined in the steam generators. The U-bend areas of the Row 1 and 2 tubes in each steam generator have received an in-situ heat treatment to improve their resistance to stress corrosion cracking. The ET calibration standards used were not subjected to that heat treatment; however, ASME Boiler and Pressure Vessel Code, Nuclear Components Code Case N-402-1, "Eddy Current Calibration Standards, Section XI, Division 1" permits use of non-heat treated standards if the other properties are the same. Otherwise, the design and material of the ET calibration standards used meet the requirements of the ASME Code Section XI.

In addition to the above, in-line probe wear standards were used, for information only, during the bobbin coil examination; however, no probe changes were made, even if a probe exhibited an out of tolerance condition. Also, a baffle plate wear scar standard was used to size indications found at cold leg baffle plates.

4.0 Summary of Examinations

Bobbin coil ET testing techniques were performed on one hundred(100) percent of all in-service tubes in each of Steam Generators A, B, C, and D. All of these tubes were examined over their full length (from tube end to tube end). The numbers of tubes which were examined by the bobbin coil ET technique are as follows:

Steam Generator	Number Examined
A	4843
B	4847
C	4840
D	4845

All distorted and non-quantifiable bobbin coil ET indications of possible flaws were examined by MRPC. The MRPC probe was used to verify whether or not degradation existed at the locations of many bobbin coil ET indications. MRPC was also used to characterize tube degradation.

MRPC ET examinations were conducted at all of the hot leg top of the tubesheet (TSH) tube areas in all steam generators during 2REO5. MRPC ET was also conducted at the various other tube locations listed in Appendix B.

5.0 Examination Results and Corrective Actions

The location of the indications were recorded relative to the adjacent tube support, baffle plate and/or anti-vibration bar. The tube support plates and baffle plates were numbered consecutively from 01H to 10H (on the hot leg) and from 11C to 23C (on the cold leg) starting on the hot leg side, over the U-bends, and down the cold leg side of the steam generator. The anti-vibration bars were numbered AV1, AV2, AV3, and AV4 from the hot leg to the cold leg side, respectively. Indications in the tubesheet area were recorded relative to TEH or TSH (hot leg) or TEC or TSC (cold leg) depending on whether the indications were at the tube end (E) or secondary face (S). In addition, the vertical distances from these landmarks to flaws were recorded.

Some ET indications reported in this report were assigned three letter codes. The indication codes reflect the suspected nature of the discontinuity. Some of the codes used are as follows:

DNG - ding
DNT - dent
DSI - distorted support with possible flaw indication
MAI - multiple axial indication
MBM - manufacturing burnishing marks
MCI - multiple circumferential indications
MVI - multiple volumetric indication
NQI - non-quantifiable indication
ODI - outer diameter indication
SAI - single axial indication
SCI - single circumferential indication
SVI - single volumetric indication

Lists, including the locations and depths, of all flaw indications which were characterized as reductions in the tube wall thickness are included in Appendix C. Included in Appendix C are the SAI and MAI indications detected by MRPC ET. No SCI or MCI indications were detected. SAI and MAI indications are expected to be the result of cracks which may be considered to be reductions in the tube wall thickness. All SAI and MAI indications were plugged regardless of depth.

No copper deposits, circumferential cracks at tube support plates, or axial cracks extending beyond the edge of the tube support plates were detected by ET.

In January 1997, a review of previously called free span indications was performed to establish tracibility of these already identified signals to the baseline bobbin coil data. In addition, during the 2R05 outage, any free span call which did not have a corresponding record of a baseline call was also subjected to a review of the baseline data. The purpose of this effort was let those tubes with corresponding signals in the baseline which had not changed to remain in service. The great majority of these imperfections, when tested by MRPC are shown to be volumetric. Those MRPC volumetric indications which could not be found in the baseline data remained as SVI/MVI and were ultimately removed from service. As a result of these efforts, only 14 tubes

with this type of indications were removed from service. These tubes are also listed in Appendix C.

Lists of all dents and dings detected in each steam generator are included in Appendix D.

The total numbers of degraded and defective tubes detected during the bobbin coil ET and MRPC ET are as follows:

5.1 Steam Generator A

One hundred thirty seven (137) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in one hundred twenty three (123) tubes. Of these indications of degradation, all were defective as defined by the Technical Specification 4.4.5.4.

Steam Generator A had one hundred thirty seven (137) areas of degradation detected by bobbin coil/MRPC at locations other than in the TSH transition in one hundred twenty three (123) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than the TSH transition, one hundred thirty seven (137) were considered to be defective.

Steam Generator A had no areas of degradation or defective tubes detected by MRPC in the TSH transition.

5.2 Steam Generator B

One hundred seventy seven (177) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in one hundred sixty nine (169) tubes. Of these indications of degradation, one hundred seventy six (176) areas of one hundred sixty eight (168) tubes were defective as defined by the Technical Specification 4.4.5.4. It is noted that one degraded tube, although the indication was more than 20%, it had not grown more than 10% during the cycle.

Steam Generator B had one hundred seventy seven (177) areas of degradation detected by bobbin coil/MRPC at locations other than in the TSH transition in one hundred sixty nine (169) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than the TSH transition, one hundred seventy six (176) were considered to be defective.

Steam Generator B had no areas of degradation or defective tubes detected by MRPC in the TSH transition.

5.3 Steam Generator C

One hundred sixty seven (167) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in one hundred forty six (146) tubes. Of these indications of degradation, one hundred sixty seven (167) areas of one hundred forty six (146) tubes were defective as defined by the Technical Specification 4.4.5.4.

Steam Generator C had one hundred sixty seven (167) areas of degradation detected by bobbin coil/MRPC at locations other than in the TSH transition in one hundred forty six (146) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than the TSH transition, one hundred sixty seven (167) were considered to be defective.

Steam Generator C had no areas of degradation or defective tubes detected by MRPC in the TSH transition.

5.4 Steam Generator D

One hundred seventy three (173) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in one hundred sixty two (162) tubes. Of these indications of degradation, one hundred seventy two (172) areas of one hundred sixty one (161) tubes were defective as defined by the Technical Specification 4.4.5.4. It is noted that one degraded tube, although the indication was more than 20%, it had not grown more than 10% during the cycle.

Steam Generator D had one hundred seventy three (173) areas of degradation detected by bobbin coil/MRPC at locations other than in the TSH transition in one hundred sixty two (162) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than the TSH transition, one hundred seventy two (172) were considered to be defective.

Steam Generator D had no areas of degradation or defective tubes detected by MRPC in the TSH transition.

The numbers of tubes examined in the bobbin coil Technical Specification inspection sample and by MRPC at the TSH which contain degradation and/or defects along with the appropriate Result Categories are summarized as follows:

	Tubes Examined	Degraded Tubes	Defective Tubes	Category
Steam Generator A				
1st Sample ET	4843	123	123	C-3
Steam Generator B				
1st Sample ET	4847	169*	168	C-3
Steam Generator C				
1st Sample ET	4840	146	146	C-3
Steam Generator D				
1st Sample ET	4845	162*	161	C-3

* Each S/G had one degraded tube greater than 20% through-wall but neither exhibited more than 10% growth during the cycle.

The minimum required size of the initial ISI sample is defined in Technical Specification 3/4.4.5 Table 4.4-2. It requires that the minimum initial sample for inspecting four (4) steam generators be three (3) percent of the total tubes installed in each generator. The "1997 Outage Plan for the

In-service Inspection of Steam Generator Tubing at the South Texas Project Electric Generating Station Unit 2" required one hundred (100) percent of the tubes be examined by the bobbin coil method of ET and MRPC at TSH in the initial sample. Since one hundred (100) percent of the steam generator tubes in-service were inspected, the initial sample requirements of Technical Specification 3/4.4.5 Table 4.4-2 were met.

Category C-3 is defined in the Technical Specification as follows:

"More than 10% of the total tubes inspected are degraded tubes or more than 1% of the inspected tubes are defective."

All four S/G's reached the C-3 category. One hundred (100) percent of the steam generator tubes in-service were inspected; therefore, since no additional tubes could be examined, the sample expansion criteria of Technical Specification 3/4.4.5 Table 4.4-2 were met. The results of steam generator inspections which fell into the Category C-3 were reported to the NRC in a Special Report No. ST-HL-AE-5586 on February 21, 1997, within 30 days and prior to resumption of power, as required by Technical Specification 3/4.4.5 and 6.9.2.

The tubes which were removed from service by plugging prior to this ISI and as a result of this ISI are identified on tubesheet maps, one for each steam generator, in Appendix E. The symbol X on each map represents those tubes plugged during this outage and "box symbol" ("Existing Plugs") are those locations removed from service prior to 2RE05.

Tube 1-81 in steam generator B was preventatively plugged because of dings located just above the TSH. Also, tube 27-8 in steam generator A was preventatively plugged because of a distorted ding indication at 05H + 22.68". No other corrective actions were performed as a result of dings or dents detected during this ISI.

6.0 Certification of Inspections

A Section XI NIS-1 form, "Owner's Report for Inservice Inspections," has been prepared to certify the STPEGS Unit 2 ISI examinations described in this Summary Report. The STPEGS Unit 2 ISI examinations have been certified by our ANII, Arkwright Mutual Insurance Company, on the NIS-1 form included in Appendix F.

APPENDIX A

LISTING OF CERTIFIED PERSONNEL

ACQUISITION PERSONNEL

NAME	LEVEL	Company	USER ID
BRADLEY, G.D.	II	W	B8909
CHIPLASKEY, G.A.	II	W	C2990
CRIMBLY, M.M.	I	W	C9087
GLENN, W.D.	II	W	G8167
HORVATH, J.I.	II	W	H6479
JOHNSON, J.R.	I	W	J6831
LORENZI, J.P.	II	W	L6076
MARDELL, D.M.	II	W	M6037
MILLER, K.C.	II	W	M2186
MOORHEAD, G.C.	I	W	M9898
PARRIS, J.R.	II	W	P9773
PARRIS, T.B.	II	W	P2305
SCHACHTE, D.M.	I	W	S7963
SCOTT, A.W.	II	W	S6645
SCOTT, K.L.	II	W	S5229
SEKERAS, C.J.	I	W	S3527
SMITH, A.O.	II	W	S1703
TUCKER, R.L.	II	W	T8828
TURNER, D.G.	II	W	T7095
COPPINGER, M.F.	II	Z	C7001
HOROCHIWSKY, A.J.	IIA	Z	H4599
LEUENBERGER, A.M.	II	Z	L9213
MARTIN, E.L.	II	Z	M4088
McLEOD, E.J.	II	Z	M1158
TERHAAR, M.A.	II	Z	T7451
ROSSI, W.M.	II	AJB	R1651
SMITH, J.S.	II	AJB	S1429

SITE RESOLUTION/HISTORY PERSONNEL

NAME	Company	Level	USER ID
INGRAHAM, R.H.	NDE	IIIA	I2164
LOOPER, V.R.	NDE	IIIA	L5914
SPENCE, W.J.	W	III	S1253
KRASNEVICH, J.V.	W	III	K5782
BOWSER, G.C.	CSI	III	B9540
BROWN, M.E.	NDE	IIIA	B2687
WHEELER, C.K.	NDE	IIA	W1424
SIEGEL, R.A.	NDE	IIA	S5760
STOKKE, T.F.	NDE	IIA	S0558
ANDERSON, P.A.	Z	III	A9608
CRITTENDEN, J.G.	Z	III	C5184
DARRAGH, J.L.	Z	III	D9674
GINTHER, C.E.	Z	III	G5937
MORRIS, T.	Z	IIA	M0945
NELSON, D.E.	Z	III	N7035
ROBERTS, K.R.	Z	IIA	R6391
WETTENGEL, T.L.	Z	III	W9098

PRIMARY ANALYSTS AT WALTZ MILL

NAME	Company	Level	USER ID
POPOVICH, R.A.	W	III	P6444
HAGOOD, J.C.	NDE	III	H1517
GOOTZ, T.E.	W	III	G7810
DYE, J.E.	W	IIA	D4816
POCRATSKY, R. J.	W	III	P4536
TAYLOR, S.H.	W	III	T9093
BEIERS, T.S.	NDE	III	B5052
CASE, J.M.	NDE	IIA	C9055
ETHRIDGE, G.J.	NDE	III	E2505
HAYNES, W.R.	NDE	IIA	H6377
HICKS, O.L.	NDE	IIA	H6561
HOOLAHAN, K.P.	NDE	III	H5526
JERINA, F.J.	NDE	III	J1771
LEWIS, D.A.	NDE	IIA	L3237
LOHNER, E.T.	NDE	IIA	L1342
MAST, M.S.	NDE	III	M8713
RICHMOND, M.A.	NDE	III	R2495
RUSCITTI, S.F.	NDE	IIA	R3716
SHELDEN, J.T.	NDE	IIA	S8046
AKERLIND, B.E.	QTM	III	A6567
McCHESNEY, W.D.	QTM	IIA	M7080
WRUBLESKI, A.J.	QTM	IIA	W1758
CHAPLA, J.J.	AJB	III	C1299
TOMMARELLO, D.J.	AJB	III	T4395
CORADI, M.D.	CSI	III	C7529
STASIK, F.	CSI	IIA	S1867
EGLON-HARRIS, R.	CSI	III	E1620

Appendix A

SECONDARY ANALYSTS AT ZETEC IN ISSAQUAH

NAME	Company	Level	USER ID
AKRE, M.S.	Z	IIA	A6997
ALSPAUGH, K.S.	Z	III	A9574
BENTZEN, J.T.	Z	IIA	B1666
CARLSON, C.D.	Z	IIA	C9162
DARST, D.R.	Z	III	D4576
DRIESSEN, N.E.	Z	IIA	D5318
DRUMM, R.L.	Z	IIA	D8661
FERDINAND, M.	Z	IIA	F0075
ISAKSON, M.C.	Z	IIA	I3805
KRUYT, D.R.	Z	IIA	K9738
MANLEY, M.G	Z	III	M0950
MERRIMAN, S.P.	Z	IIA	M2655
NOTCH, P.L.	Z	IIA	N5877
PALMER, R.K.	Z	IIA	P6179
POSCHMAN, A.L.	Z	IIA	P4634
SCHMITZ, K.J.	Z	IIA	S5339
SILUS, G.K.	Z	IIA	S0607
SUMRALL, B.O.	Z	IIA	S1008
WEBB, J.F.	Z	IIA	W6489
WEBER, J.L.	Z	IIA	W4881

APPENDIX B

TUBES EXAMINED BY MRPC

AT LOCATIONS OTHER THAN TSH

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
1	4	23C	22C	610-ZC
18	8	10H	10H	610-ZC
27	8	05H	06H	610-ZC
10	9	02H	02H	610-ZC
26	17	14C	13C	610-ZC
26	18	03H	03H	610-ZC
8	19	02H	02H	610-ZC
19	19	02H	02H	610-ZC
17	20	03H	03H	610-ZC
32	20	02H	02H	610-ZC
20	21	03H	03H	610-ZC
24	22	04H	04H	610-ZC
16	23	02H	02H	610-ZC
21	23	02H	02H	610-ZC
12	24	02H	02H	610-ZC
18	24	14C	13C	610-ZC
21	24	04H	04H	610-ZC
24	24	03H	03H	610-ZC
43	24	10H	10H	610-ZC
21	25	02H	02H	610-ZC
21	25	03H	03H	610-ZC
21	25	04H	04H	610-ZC
18	26	02H	02H	610-ZC
18	27	10H	10H	610-ZC
30	27	10H	10H	610-ZC
20	29	04H	04H	610-ZC
21	29	06H	06H	610-ZC
23	29	02H	02H	610-ZC
35	29	02H	02H	610-ZC
13	30	02H	02H	610-ZC
38	30	08H	09H	610-ZC
4	31	19C	18C	610-ZC
13	31	05H	05H	610-ZC
14	31	08H	09H	610-ZC
20	31	03H	03H	610-ZC
20	31	17C	16C	610-ZC
36	31	15C	14C	610-ZC
38	31	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
14	32	23C	22C	610-ZC
30	32	17C	16C	610-ZC
33	32	04H	04H	610-ZC
26	33	04H	04H	610-ZC
17	34	02H	02H	610-ZC
17	35	05H	05H	610-ZC
18	35	22C	21C	610-ZC
20	35	02H	02H	610-ZC
32	35	17C	16C	610-ZC
11	36	09H	10H	610-ZC
11	36	09H	10H	610-ZC
14	36	08H	09H	610-ZC
16	36	02H	02H	610-ZC
26	36	09H	10H	610-ZC
33	37	04H	04H	610-ZC
39	38	03H	03H	610-ZC
20	39	02H	02H	610-ZC
23	39	02H	02H	610-ZC
38	39	15C	14C	610-ZC
6	40	09H	10H	610-ZC
22	40	03H	03H	610-ZC
8	42	11C	11C	610-ZC
24	43	02H	02H	610-ZC
43	43	02H	02H	610-ZC
23	45	03H	03H	610-ZC
27	45	03H	03H	610-ZC
23	46	04H	04H	610-ZC
19	47	02H	02H	610-ZC
23	47	05H	05H	610-ZC
23	48	03H	03H	610-ZC
23	49	03H	03H	610-ZC
25	50	02H	02H	610-ZC
23	51	03H	03H	610-ZC
23	51	14C	13C	610-ZC
35	51	05H	05H	610-ZC
41	52	02H	02H	610-ZC
46	53	02H	02H	610-ZC
10	54	10H	10H	610-ZC
38	55	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
24	59	03H	03H	610-ZC
25	59	02H	02H	610-ZC
31	59	03H	03H	610-ZC
5	62	11C	11C	610-ZC
20	62	09H	09H	610-ZC
20	62	10H	10H	610-ZC
40	62	03H	03H	610-ZC
25	63	03H	03H	610-ZC
26	63	03H	03H	610-ZC
26	63	05H	05H	610-ZC
28	63	03H	03H	610-ZC
24	64	03H	03H	610-ZC
24	64	04H	04H	610-ZC
26	64	05H	05H	610-ZC
31	64	02H	02H	610-ZC
34	64	19C	18C	610-ZC
7	65	11C	11C	610-ZC
28	65	03H	03H	610-ZC
30	65	04H	04H	610-ZC
32	65	02H	02H	610-ZC
36	65	04H	04H	610-ZC
33	66	02H	02H	610-ZC
43	66	02H	02H	610-ZC
43	66	TSC	23C	610-ZC
27	67	03H	03H	610-ZC
27	67	04H	04H	610-ZC
32	67	03H	03H	610-ZC
32	67	04H	04H	610-ZC
25	68	02H	02H	610-ZC
32	68	03H	03H	610-ZC
32	68	04H	04H	610-ZC
33	68	02H	02H	610-ZC
33	68	03H	03H	610-ZC
45	68	02H	02H	610-ZC
32	70	02H	02H	610-ZC
32	70	03H	03H	610-ZC
46	71	01H	02H	610-ZC
2	72	11C	11C	610-ZC
28	72	13C	12C	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
31	72	04H	04H	610-ZC
35	72	03H	03H	610-ZC
36	72	11C	11C	610-ZC
37	72	03H	03H	610-ZC
42	72	10H	10H	610-ZC
2	73	05H	06H	610-ZC
29	73	04H	04H	610-ZC
33	73	04H	06H	610-ZC
33	73	05H	05H	610-ZC
34	73	04H	06H	610-ZC
34	73	12C	11C	610-ZC
35	73	03H	03H	610-ZC
22	74	15C	14C	610-ZC
24	74	03H	03H	610-ZC
26	74	03H	03H	610-ZC
28	74	03H	03H	610-ZC
30	74	02H	02H	610-ZC
21	75	04H	04H	610-ZC
24	75	03H	03H	610-ZC
31	75	03H	03H	610-ZC
21	77	03H	03H	610-ZC
24	77	03H	03H	610-ZC
25	77	03H	03H	610-ZC
33	77	02H	02H	610-ZC
46	77	11C	11C	610-ZC
20	78	02H	02H	610-ZC
23	78	03H	03H	610-ZC
27	78	02H	02H	610-ZC
28	79	04H	04H	610-ZC
24	80	04H	04H	610-ZC
29	80	02H	02H	610-ZC
33	80	03H	03H	610-ZC
34	80	02H	02H	610-ZC
21	81	03H	03H	610-ZC
24	81	03H	03H	610-ZC
20	82	02H	02H	610-ZC
22	82	03H	03H	610-ZC
32	82	04H	04H	610-ZC
19	83	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
20	83	03H	03H	610-ZC
23	83	05H	05H	610-ZC
24	83	03H	03H	610-ZC
28	83	01H	02H	610-ZC
20	84	03H	03H	610-ZC
30	84	03H	03H	610-ZC
16	85	06H	06H	610-ZC
20	85	02H	02H	610-ZC
21	85	03H	03H	610-ZC
33	85	03H	03H	610-ZC
26	86	02H	02H	610-ZC
26	86	03H	03H	610-ZC
26	86	04H	04H	610-ZC
28	86	02H	02H	610-ZC
30	86	03H	03H	610-ZC
35	86	02H	02H	610-ZC
23	87	02H	02H	610-ZC
16	88	02H	02H	610-ZC
20	88	03H	03H	610-ZC
21	88	05H	06H	610-ZC
34	88	04H	04H	610-ZC
20	89	03H	03H	610-ZC
20	89	04H	04H	610-ZC
22	89	02H	02H	610-ZC
22	89	05H	05H	610-ZC
40	89	18C	18C	610-ZC
19	90	03H	03H	610-ZC
20	91	03H	03H	610-ZC
22	91	04H	04H	610-ZC
22	91	05H	05H	610-ZC
24	91	09H	10H	610-ZC
26	91	04H	04H	610-ZC
18	92	02H	02H	610-ZC
18	92	04H	04H	610-ZC
19	92	03H	03H	610-ZC
24	92	02H	02H	610-ZC
26	92	03H	03H	610-ZC
26	92	04H	04H	610-ZC
16	93	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
18	93	02H	02H	610-ZC
18	93	03H	03H	610-ZC
24	93	03H	03H	610-ZC
28	93	03H	03H	610-ZC
28	93	04H	04H	610-ZC
1	94	07H	08H	610-ZC
16	94	02H	02H	610-ZC
16	94	03H	03H	610-ZC
18	94	03H	03H	610-ZC
21	94	04H	04H	610-ZC
34	94	03H	03H	610-ZC
11	95	02H	02H	610-ZC
19	95	03H	03H	610-ZC
20	95	03H	03H	610-ZC
22	95	03H	03H	610-ZC
22	95	04H	04H	610-ZC
22	95	05H	05H	610-ZC
25	95	04H	04H	610-ZC
26	95	03H	03H	610-ZC
28	95	03H	03H	610-ZC
20	96	03H	03H	610-ZC
26	96	03H	03H	610-ZC
28	96	03H	03H	610-ZC
8	97	11C	11C	610-ZC
10	97	02H	02H	610-ZC
20	97	02H	02H	610-ZC
20	97	03H	03H	610-ZC
24	97	03H	03H	610-ZC
1	98	09H	10H	610-ZC
11	98	02H	02H	610-ZC
17	98	04H	04H	610-ZC
19	98	02H	03H	610-ZC
29	98	03H	03H	610-ZC
11	99	02H	02H	610-ZC
23	99	02H	02H	610-ZC
25	99	03H	03H	610-ZC
22	100	02H	02H	610-ZC
22	100	03H	03H	610-ZC
43	100	03H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G A

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
1	101	01H	02H	610-ZC
1	101	06H	07H	610-ZC
22	101	02H	02H	610-ZC
22	102	03H	03H	610-ZC
24	102	03H	03H	610-ZC
27	102	03H	03H	610-ZC
16	103	02H	02H	610-ZC
16	103	03H	03H	610-ZC
25	103	03H	03H	610-ZC
16	104	03H	03H	610-ZC
20	104	03H	03H	610-ZC
22	104	03H	03H	610-ZC
31	111	17C	16C	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
13	3	11C	11C	610-ZC
18	5	11C	11C	610-ZC
7	7	05H	05H	610-ZC
12	9	03H	03H	610-ZC
13	10	05H	05H	610-ZC
20	10	03H	03H	610-ZC
21	12	11C	11C	610-ZC
14	13	03H	03H	610-ZC
9	14	02H	02H	610-ZC
16	14	03H	03H	610-ZC
20	14	02H	02H	610-ZC
23	14	02H	02H	610-ZC
13	15	02H	02H	610-ZC
13	15	04H	04H	610-ZC
15	15	03H	03H	610-ZC
19	15	03H	03H	610-ZC
20	15	02H	02H	610-ZC
9	16	02H	02H	610-ZC
9	16	03H	03H	610-ZC
16	16	02H	02H	610-ZC
16	16	04H	04H	610-ZC
9	17	02H	02H	610-ZC
11	17	02H	02H	610-ZC
13	17	03H	03H	610-ZC
16	17	02H	02H	610-ZC
22	17	03H	03H	610-ZC
24	17	02H	02H	610-ZC
24	17	03H	03H	610-ZC
6	18	05H	05H	610-ZC
17	18	21C	21C	610-ZC
19	18	02H	02H	610-ZC
19	18	04H	04H	610-ZC
20	18	02H	02H	610-ZC
9	19	02H	02H	610-ZC
12	19	02H	02H	610-ZC
23	19	02H	02H	610-ZC
23	19	03H	03H	610-ZC
23	19	04H	04H	610-ZC
9	20	02H	02H	610-ZC

Appendix B

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
14	20	04H	04H	610-ZC
19	20	03H	03H	610-ZC
19	20	04H	04H	610-ZC
37	20	02H	02H	610-ZC
9	21	04H	04H	610-ZC
10	21	02H	02H	610-ZC
11	21	02H	02H	610-ZC
14	21	03H	03H	610-ZC
18	21	04H	04H	610-ZC
20	21	04H	04H	610-ZC
21	21	02H	02H	610-ZC
28	21	02H	02H	610-ZC
29	21	02H	02H	610-ZC
37	21	02H	02H	610-ZC
6	22	04H	04H	610-ZC
11	22	02H	02H	610-ZC
11	22	03H	03H	610-ZC
15	22	02H	02H	610-ZC
18	22	02H	02H	610-ZC
27	22	02H	02H	610-ZC
27	22	04H	04H	610-ZC
28	22	02H	02H	610-ZC
11	23	02H	02H	610-ZC
11	23	17C	16C	610-ZC
11	23	18C	17C	610-ZC
15	23	04H	04H	610-ZC
16	23	04H	04H	610-ZC
17	23	02H	02H	610-ZC
20	23	03H	03H	610-ZC
21	23	03H	03H	610-ZC
21	23	04H	04H	610-ZC
25	23	03H	03H	610-ZC
29	23	03H	03H	610-ZC
14	24	02H	02H	610-ZC
14	24	03H	03H	610-ZC
16	24	03H	03H	610-ZC
16	24	04H	04H	610-ZC
21	24	02H	02H	610-ZC
21	24	04H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
24	24	04H	04H	610-ZC
12	25	02H	02H	610-ZC
12	25	04H	04H	610-ZC
19	25	05H	05H	610-ZC
13	26	03H	03H	610-ZC
16	26	02H	02H	610-ZC
32	26	04H	04H	610-ZC
37	26	03H	03H	610-ZC
39	26	02H	02H	610-ZC
14	27	04H	04H	610-ZC
15	27	04H	04H	610-ZC
18	27	04H	04H	610-ZC
40	27	03H	03H	610-ZC
40	27	05H	05H	610-ZC
48	27	21C	20C	610-ZC
14	28	03H	03H	610-ZC
19	28	02H	02H	610-ZC
24	28	02H	02H	610-ZC
24	28	03H	03H	610-ZC
36	28	01H	02H	610-ZC
40	28	01H	02H	610-ZC
41	28	11C	11C	610-ZC
43	28	11C	11C	610-ZC
46	28	11C	11C	610-ZC
48	28	21C	21C	610-ZC
48	28	22C	22C	610-ZC
15	29	04H	04H	610-ZC
18	29	02H	02H	610-ZC
36	29	02H	02H	610-ZC
37	29	02H	02H	610-ZC
38	29	04H	04H	610-ZC
41	29	05H	05H	610-ZC
15	30	02H	02H	610-ZC
22	30	02H	02H	610-ZC
28	30	03H	03H	610-ZC
39	30	15C	14C	610-ZC
40	30	13C	12C	610-ZC
13	31	02H	02H	610-ZC
15	31	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
15	31	04H	04H	610-ZC
48	31	21C	21C	610-ZC
48	31	22C	22C	610-ZC
19	32	03H	03H	610-ZC
14	33	09H	10H	610-ZC
15	33	02H	02H	610-ZC
15	33	03H	03H	610-ZC
15	33	04H	04H	610-ZC
20	33	15C	14C	610-ZC
21	33	14C	13C	610-ZC
21	33	14C	13C	610-ZC
21	33	14C	13C	610-ZC
22	33	03H	03H	610-ZC
22	33	14C	13C	610-ZC
35	33	04H	05H	610-ZC
38	33	13C	12C	610-ZC
43	33	02H	02H	610-ZC
19	34	03H	03H	610-ZC
19	34	04H	04H	610-ZC
19	34	05H	05H	610-ZC
11	35	04H	04H	610-ZC
19	35	02H	02H	610-ZC
35	35	04H	04H	610-ZC
41	35	02H	02H	610-ZC
11	36	03H	03H	610-ZC
11	36	05H	05H	610-ZC
13	36	02H	02H	610-ZC
19	36	01H	02H	610-ZC
19	36	01H	02H	610-ZC
22	36	03H	03H	610-ZC
26	36	02H	02H	610-ZC
26	36	05H	05H	610-ZC
11	37	04H	04H	610-ZC
16	37	02H	02H	610-ZC
18	37	02H	02H	610-ZC
18	37	11C	11C	610-ZC
21	37	02H	02H	610-ZC
22	37	03H	03H	610-ZC
23	37	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
25	37	05H	05H	610-ZC
27	37	02H	02H	610-ZC
33	37	04H	04H	610-ZC
35	37	02H	04H	610-ZC
35	37	02H	04H	610-ZC
35	37	02H	04H	610-ZC
41	37	03H	03H	610-ZC
42	37	02H	02H	610-ZC
15	38	02H	02H	610-ZC
19	38	02H	02H	610-ZC
22	38	02H	02H	610-ZC
22	38	03H	03H	610-ZC
39	38	11C	11C	610-ZC
40	38	02H	02H	610-ZC
40	38	03H	03H	610-ZC
23	39	02H	02H	610-ZC
29	39	03H	03H	610-ZC
29	39	04H	04H	610-ZC
31	39	02H	02H	610-ZC
33	39	03H	03H	610-ZC
39	39	11C	11C	610-ZC
40	39	02H	02H	610-ZC
23	40	05H	05H	610-ZC
27	40	02H	02H	610-ZC
27	40	03H	03H	610-ZC
29	40	15C	14C	610-ZC
34	40	02H	02H	610-ZC
43	40	03H	03H	610-ZC
14	41	TSC	23C	610-ZC
21	41	02H	02H	610-ZC
22	41	03H	03H	610-ZC
28	41	05H	05H	610-ZC
36	41	02H	02H	610-ZC
40	41	03H	03H	610-ZC
41	41	01H	01H	610-ZC
41	41	01H	01H	610-ZC
41	41	02H	02H	610-ZC
8	42	07H	08H	610-ZC
21	42	22C	21C	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
23	42	04H	04H	610-ZC
25	42	03H	03H	610-ZC
27	42	02H	02H	610-ZC
43	42	03H	03H	610-ZC
43	42	04H	04H	610-ZC
48	42	11C	11C	610-ZC
18	43	02H	02H	610-ZC
21	43	05H	05H	610-ZC
27	43	03H	03H	610-ZC
36	43	03H	03H	610-ZC
42	43	02H	02H	610-ZC
47	43	21C	21C	610-ZC
47	43	22C	22C	610-ZC
9	44	09H	10H	610-ZC
9	44	09H	10H	610-ZC
9	44	09H	10H	610-ZC
10	44	04H	05H	610-ZC
10	44	04H	05H	610-ZC
14	44	17C	16C	610-ZC
20	44	02H	02H	610-ZC
24	44	04H	04H	610-ZC
24	44	08H	09H	610-ZC
19	45	04H	04H	610-ZC
20	45	02H	02H	610-ZC
20	45	04H	04H	610-ZC
21	45	03H	03H	610-ZC
22	45	04H	04H	610-ZC
30	45	02H	02H	610-ZC
31	45	02H	02H	610-ZC
35	45	04H	04H	610-ZC
19	47	02H	02H	610-ZC
19	47	03H	03H	610-ZC
21	47	04H	04H	610-ZC
22	47	04H	04H	610-ZC
25	47	03H	03H	610-ZC
27	47	02H	02H	610-ZC
27	47	04H	04H	610-ZC
28	47	03H	03H	610-ZC
29	47	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
29	47	02H	02H	610-ZC
30	47	04H	04H	610-ZC
32	47	04H	04H	610-ZC
34	47	04H	04H	610-ZC
37	47	03H	03H	610-ZC
47	47	21C	21C	610-ZC
47	47	22C	22C	610-ZC
19	48	02H	02H	610-ZC
42	48	03H	03H	610-ZC
18	49	02H	02H	610-ZC
26	49	02H	02H	610-ZC
28	49	02H	02H	610-ZC
48	49	21C	21C	610-ZC
48	49	22C	22C	610-ZC
12	50	03H	04H	610-ZC
28	50	01H	01H	610-ZC
28	50	01H	01H	610-ZC
26	51	03H	03H	610-ZC
39	51	03H	03H	610-ZC
46	51	03H	03H	610-ZC
24	53	03H	03H	610-ZC
24	53	04H	04H	610-ZC
29	53	04H	04H	610-ZC
36	53	04H	04H	610-ZC
40	53	03H	03H	610-ZC
44	53	03H	03H	610-ZC
45	53	03H	03H	610-ZC
24	54	04H	04H	610-ZC
26	54	02H	02H	610-ZC
26	55	03H	03H	610-ZC
28	55	05H	05H	610-ZC
30	55	01H	01H	610-ZC
36	55	03H	03H	610-ZC
45	55	03H	03H	610-ZC
48	55	21C	21C	610-ZC
48	55	22C	22C	610-ZC
35	56	04H	04H	610-ZC
47	56	21C	20C	610-ZC
47	56	22C	22C	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
47	56	22C	22C	610-ZC
47	56	22C	22C	610-ZC
15	57	01H	02H	610-ZC
15	57	01H	02H	610-ZC
24	57	04H	04H	610-ZC
35	57	03H	03H	610-ZC
37	57	03H	03H	610-ZC
39	57	03H	03H	610-ZC
41	57	04H	04H	610-ZC
25	58	03H	03H	610-ZC
25	58	04H	04H	610-ZC
29	58	02H	02H	610-ZC
39	58	03H	03H	610-ZC
2	59	06H	07H	610-ZC
36	59	21C	21C	610-ZC
36	59	22C	22C	610-ZC
43	62	22C	22C	610-ZC
43	62	21C	21C	610-ZC
43	62	21C	21C	620-ZM
23	63	03H	03H	610-ZC
34	63	04H	04H	610-ZC
40	63	04H	04H	610-ZC
28	64	02H	02H	610-ZC
28	64	03H	03H	610-ZC
28	64	02H	02H	610-ZC
32	64	04H	04H	610-ZC
40	64	04H	04H	610-ZC
40	64	04H	04H	610-ZC
40	64	04H	04H	610-ZC
35	65	02H	02H	610-ZC
37	65	04H	04H	610-ZC
38	65	02H	02H	610-ZC
42	65	02H	02H	610-ZC
25	66	03H	03H	610-ZC
23	67	02H	02H	610-ZC
12	68	13C	11C	610-ZC
12	68	13C	11C	610-ZC
14	68	15C	14C	610-ZC
24	68	04H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
37	68	03H	03H	610-ZC
39	68	03H	03H	610-ZC
40	68	04H	04H	610-ZC
42	68	02H	02H	610-ZC
42	68	04H	04H	610-ZC
28	69	02H	02H	610-ZC
28	69	04H	04H	610-ZC
38	69	04H	04H	610-ZC
44	69	10H	10H	610-ZC
44	69	10H	10H	610-ZC
46	69	10H	10H	610-ZC
27	71	02H	02H	610-ZC
32	71	TSC	23C	610-ZC
41	72	04H	04H	610-ZC
44	72	03H	03H	610-ZC
44	72	04H	04H	610-ZC
48	74	21C	20C	610-ZC
28	75	02H	02H	610-ZC
28	75	03H	03H	610-ZC
41	75	03H	03H	610-ZC
16	76	05H	05H	610-ZC
16	76	05H	06H	610-ZC
26	77	04H	04H	610-ZC
26	77	05H	05H	610-ZC
27	77	03H	03H	610-ZC
16	78	TSC	23C	610-ZC
23	78	03H	03H	610-ZC
35	81	02H	02H	610-ZC
35	81	03H	03H	610-ZC
20	82	03H	03H	610-ZC
32	82	11C	11C	610-ZC
20	83	03H	03H	610-ZC
22	83	03H	03H	610-ZC
22	83	04H	04H	610-ZC
38	83	03H	03H	610-ZC
39	83	10H	10H	610-ZC
34	84	02H	02H	610-ZC
16	85	02H	02H	610-ZC
38	85	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
38	85	04H	04H	610-ZC
45	85	11C	11C	610-ZC
23	86	02H	02H	610-ZC
10	89	01H	01H	610-ZC
10	89	01H	01H	610-ZC
10	89	02H	02H	610-ZC
36	89	04H	04H	610-ZC
20	90	04H	04H	610-ZC
38	90	03H	03H	610-ZC
41	90	11C	11C	610-ZC
48	90	21C	21C	610-ZC
48	90	22C	22C	610-ZC
9	91	01H	02H	610-ZC
9	91	21C	20C	610-ZC
9	91	21C	20C	610-ZC
17	91	TSH	01H	610-ZC
17	91	TSH	01H	610-ZC
36	91	11C	11C	610-ZC
8	92	20C	20C	610-ZC
15	92	02H	02H	610-ZC
15	92	04H	04H	610-ZC
21	92	02H	02H	610-ZC
12	93	02H	02H	610-ZC
20	93	02H	02H	610-ZC
30	93	11C	11C	610-ZC
12	94	02H	02H	610-ZC
15	94	04H	04H	610-ZC
18	94	02H	02H	610-ZC
18	94	03H	03H	610-ZC
18	94	04H	04H	610-ZC
20	94	04H	04H	610-ZC
38	94	02H	02H	610-ZC
38	94	03H	03H	610-ZC
43	94	10H	10H	610-ZC
43	94	11C	11C	610-ZC
19	95	03H	03H	610-ZC
20	95	02H	02H	610-ZC
20	95	04H	04H	610-ZC
26	95	04H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
47	95	21C	21C	610-ZC
47	95	22C	22C	610-ZC
12	96	02H	02H	610-ZC
12	96	04H	04H	610-ZC
18	96	04H	04H	610-ZC
23	96	02H	02H	610-ZC
25	96	03H	03H	610-ZC
35	96	03H	03H	610-ZC
38	96	02H	02H	610-ZC
11	97	02H	02H	610-ZC
11	97	03H	03H	610-ZC
12	97	02H	02H	610-ZC
15	97	02H	02H	610-ZC
20	97	03H	03H	610-ZC
23	97	01H	01H	610-ZC
46	97	11C	11C	610-ZC
11	98	02H	02H	610-ZC
12	98	02H	02H	610-ZC
16	98	03H	03H	610-ZC
17	98	03H	03H	610-ZC
11	99	02H	02H	610-ZC
13	99	02H	02H	610-ZC
21	99	03H	03H	610-ZC
15	100	02H	02H	610-ZC
16	100	06H	07H	610-ZC
18	100	02H	02H	610-ZC
20	100	03H	03H	610-ZC
20	100	04H	04H	610-ZC
34	100	04H	04H	610-ZC
35	100	10H	10H	610-ZC
43	100	10H	10H	610-ZC
19	101	03H	03H	610-ZC
35	101	11C	11C	610-ZC
8	102	02H	02H	610-ZC
11	102	02H	02H	610-ZC
15	102	03H	03H	610-ZC
15	102	04H	04H	610-ZC
17	102	03H	03H	610-ZC
19	102	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G B

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
25	102	10H	10H	610-ZC
30	102	03H	03H	610-ZC
8	103	08H	09H	610-ZC
15	104	02H	02H	610-ZC
15	104	03H	03H	610-ZC
16	104	03H	03H	610-ZC
22	104	03H	03H	610-ZC
33	104	02H	02H	610-ZC
14	105	02H	02H	610-ZC
15	105	02H	02H	610-ZC
17	105	03H	03H	610-ZC
21	105	03H	03H	610-ZC
7	106	04H	05H	610-ZC
15	106	03H	03H	610-ZC
17	106	03H	03H	610-ZC
9	107	02H	02H	610-ZC
12	107	02H	02H	610-ZC
17	107	03H	03H	610-ZC
23	107	02H	02H	610-ZC
23	107	11C	11C	610-ZC
15	108	03H	03H	610-ZC
12	109	03H	03H	610-ZC
14	109	03H	03H	610-ZC
15	109	03H	03H	610-ZC
16	109	03H	03H	610-ZC
13	110	03H	03H	610-ZC
15	111	03H	03H	610-ZC
10	112	02H	02H	610-ZC
28	112	01H	01H	610-ZC

Appendix B

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
4	1	22C	22C	610-ZC
5	1	22C	22C	610-ZC
6	1	22C	22C	610-ZC
7	1	22C	22C	610-ZC
2	7	17C	16C	610-ZC
2	7	22C	21C	610-ZC
19	11	12C	12C	610-ZC
34	12	10H	10H	610-ZC
7	13	04H	04H	610-ZC
13	13	02H	02H	610-ZC
15	13	02H	02H	610-ZC
23	13	02H	02H	610-ZC
26	14	10H	10H	610-ZC
27	14	10H	10H	610-ZC
27	14	11C	11C	610-ZC
7	15	02H	02H	610-ZC
4	16	05H	05H	610-ZC
9	17	02H	02H	610-ZC
13	17	02H	02H	610-ZC
13	17	04H	04H	610-ZC
20	18	03H	03H	610-ZC
9	19	02H	02H	610-ZC
14	19	02H	02H	610-ZC
16	19	03H	03H	610-ZC
23	19	02H	02H	610-ZC
37	20	02H	02H	610-ZC
11	21	04H	04H	610-ZC
16	21	03H	03H	610-ZC
8	22	05H	05H	610-ZC
9	23	07H	08H	610-ZC
13	23	03H	03H	610-ZC
15	24	04H	04H	610-ZC
13	25	03H	03H	610-ZC
14	25	04H	04H	610-ZC
16	25	04H	04H	610-ZC
19	25	03H	03H	610-ZC
26	25	03H	03H	610-ZC
36	25	04H	04H	610-ZC
45	25	22C	22C	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
45	25	11C	11C	610-ZC
45	26	05H	04H	610-ZC
41	27	10H	10H	610-ZC
12	28	02H	02H	610-ZC
12	28	04H	04H	610-ZC
13	28	04H	04H	610-ZC
21	28	03H	03H	610-ZC
33	28	03H	03H	610-ZC
36	28	03H	03H	610-ZC
14	29	04H	04H	610-ZC
15	29	02H	02H	610-ZC
15	29	03H	03H	610-ZC
15	29	04H	04H	610-ZC
15	29	05H	05H	610-ZC
16	29	02H	02H	610-ZC
26	29	03H	03H	610-ZC
35	29	04H	04H	610-ZC
35	29	04H	04H	620-ZM
48	29	21C	21C	610-ZC
48	29	22C	22C	610-ZC
40	30	02H	02H	610-ZC
48	30	21C	21C	610-ZC
48	30	22C	22C	610-ZC
37	31	03H	03H	610-ZC
37	31	04H	04H	610-ZC
40	31	02H	02H	610-ZC
30	32	03H	03H	610-ZC
15	33	02H	02H	610-ZC
16	33	02H	02H	610-ZC
16	33	05H	05H	610-ZC
16	33	07H	07H	610-ZC
29	33	02H	02H	610-ZC
29	33	04H	04H	610-ZC
29	33	05H	05H	610-ZC
20	34	04H	04H	610-ZC
26	34	03H	03H	610-ZC
39	34	04H	04H	610-ZC
19	35	02H	02H	610-ZC
19	35	04H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
29	35	05H	05H	610-ZC
37	35	03H	03H	610-ZC
39	35	03H	03H	610-ZC
25	36	03H	03H	610-ZC
36	36	03H	03H	610-ZC
38	36	02H	02H	610-ZC
40	36	03H	03H	610-ZC
23	37	03H	03H	610-ZC
24	37	04H	04H	610-ZC
38	37	03H	03H	610-ZC
28	38	03H	03H	610-ZC
39	38	02H	02H	610-ZC
21	39	04H	04H	610-ZC
26	39	03H	03H	610-ZC
26	39	07H	07H	610-ZC
30	39	04H	04H	610-ZC
22	40	03H	03H	610-ZC
32	40	04H	04H	610-ZC
48	40	21C	21C	610-ZC
48	40	22C	22C	610-ZC
27	41	03H	03H	610-ZC
28	41	04H	04H	610-ZC
29	41	03H	03H	610-ZC
29	41	04H	04H	610-ZC
29	41	07H	07H	610-ZC
32	41	02H	02H	610-ZC
25	42	03H	03H	610-ZC
41	42	03H	03H	610-ZC
29	43	04H	04H	610-ZC
30	44	04H	04H	610-ZC
39	44	03H	03H	610-ZC
31	45	03H	03H	610-ZC
34	45	03H	03H	610-ZC
27	46	03H	03H	610-ZC
38	46	03H	03H	610-ZC
27	47	03H	03H	610-ZC
31	48	02H	02H	610-ZC
31	48	04H	04H	610-ZC
32	48	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
32	48	04H	04H	610-ZC
33	48	03H	03H	610-ZC
33	48	04H	04H	610-ZC
46	48	11C	11C	610-ZC
27	49	02H	02H	610-ZC
40	49	03H	03H	610-ZC
42	50	03H	03H	610-ZC
27	51	03H	03H	610-ZC
27	51	04H	04H	610-ZC
30	51	04H	04H	610-ZC
31	51	02H	02H	610-ZC
31	51	03H	03H	610-ZC
31	51	04H	04H	610-ZC
32	51	03H	03H	610-ZC
32	51	02H	02H	610-ZC
32	51	04H	04H	610-ZC
32	51	05H	05H	610-ZC
24	52	05H	05H	610-ZC
31	52	06H	06H	610-ZC
32	52	06H	06H	610-ZC
48	52	21C	21C	610-ZC
48	52	22C	22C	610-ZC
35	53	03H	03H	610-ZC
41	53	03H	03H	610-ZC
36	55	04H	04H	610-ZC
36	56	03H	03H	610-ZC
31	57	02H	02H	610-ZC
31	57	03H	03H	610-ZC
31	57	06H	06H	610-ZC
47	57	21C	21C	610-ZC
47	57	22C	22C	610-ZC
18	58	04H	04H	610-ZC
26	58	06H	06H	610-ZC
27	58	03H	03H	610-ZC
33	58	03H	03H	610-ZC
46	58	21C	21C	610-ZC
46	58	22C	22C	610-ZC
26	59	03H	03H	610-ZC
4	64	05H	06H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
48	64	21C	21C	610-ZC
48	64	22C	22C	610-ZC
41	65	06H	06H	610-ZC
19	66	04H	04H	610-ZC
35	67	03H	03H	610-ZC
39	67	03H	03H	610-ZC
27	68	02H	02H	610-ZC
27	68	03H	03H	610-ZC
31	68	02H	02H	610-ZC
41	68	03H	03H	610-ZC
26	70	03H	03H	610-ZC
28	70	03H	03H	610-ZC
33	70	03H	03H	610-ZC
47	70	21C	21C	610-ZC
47	70	22C	22C	610-ZC
46	71	21C	21C	610-ZC
46	71	22C	22C	610-ZC
16	72	02H	02H	610-ZC
17	72	04H	04H	610-ZC
35	72	04H	04H	610-ZC
38	72	04H	04H	610-ZC
40	73	04H	04H	610-ZC
17	74	02H	02H	610-ZC
21	74	03H	03H	610-ZC
27	74	02H	02H	610-ZC
28	74	06H	06H	610-ZC
29	74	03H	03H	610-ZC
33	74	04H	04H	610-ZC
34	74	04H	04H	610-ZC
38	74	02H	02H	610-ZC
14	75	01H	01H	610-ZC
21	75	03H	03H	610-ZC
25	75	04H	04H	610-ZC
27	75	04H	04H	610-ZC
28	75	02H	02H	610-ZC
31	75	04H	04H	610-ZC
33	75	03H	03H	610-ZC
35	75	03H	03H	610-ZC
20	76	04H	04H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
22	76	03H	03H	610-ZC
23	76	03H	03H	610-ZC
25	76	02H	02H	610-ZC
28	76	03H	03H	610-ZC
29	76	02H	02H	610-ZC
37	76	03H	03H	610-ZC
38	76	03H	03H	610-ZC
22	77	03H	03H	610-ZC
24	77	03H	03H	610-ZC
28	77	02H	02H	610-ZC
29	77	04H	04H	610-ZC
34	77	04H	04H	610-ZC
37	77	03H	03H	610-ZC
26	78	02H	02H	610-ZC
34	78	02H	02H	610-ZC
37	78	02H	02H	610-ZC
42	78	02H	02H	610-ZC
25	79	03H	03H	610-ZC
48	79	21C	21C	610-ZC
48	79	22C	22C	610-ZC
22	80	03H	03H	610-ZC
28	80	03H	03H	610-ZC
30	80	03H	03H	610-ZC
27	81	03H	03H	610-ZC
28	81	03H	03H	610-ZC
28	81	04H	04H	610-ZC
29	81	03H	03H	610-ZC
33	81	03H	03H	610-ZC
22	82	03H	03H	610-ZC
34	82	04H	04H	610-ZC
39	82	11C	11C	610-ZC
28	84	02H	02H	610-ZC
39	84	02H	02H	610-ZC
39	84	03H	03H	610-ZC
26	85	03H	03H	610-ZC
30	85	04H	04H	610-ZC
34	85	04H	04H	610-ZC
25	86	04H	04H	610-ZC
27	86	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
37	86	03H	03H	610-ZC
23	87	04H	04H	610-ZC
46	87	10H	10H	610-ZC
20	88	04H	04H	610-ZC
31	88	04H	04H	610-ZC
15	89	02H	02H	610-ZC
18	89	04H	04H	610-ZC
18	90	03H	03H	610-ZC
18	90	04H	04H	610-ZC
19	90	04H	04H	610-ZC
26	90	02H	02H	610-ZC
26	90	02H	02H	620-ZM
29	90	03H	03H	610-ZC
21	91	04H	04H	610-ZC
22	91	03H	03H	610-ZC
26	91	03H	03H	610-ZC
26	91	11C	11C	610-ZC
21	92	04H	04H	610-ZC
23	92	11C	11C	610-ZC
24	92	11C	11C	610-ZC
35	92	04H	04H	610-ZC
35	92	04H	04H	620-ZM
25	94	03H	03H	610-ZC
25	94	05H	05H	610-ZC
25	94	05H	05H	620-ZM
26	94	03H	03H	610-ZC
18	95	03H	03H	610-ZC
22	95	04H	04H	610-ZC
26	95	03H	03H	610-ZC
29	95	02H	02H	610-ZC
13	96	02H	02H	610-ZC
16	96	02H	02H	610-ZC
21	96	02H	02H	610-ZC
21	96	04H	04H	610-ZC
23	96	02H	02H	610-ZC
23	96	05H	05H	610-ZC
24	96	02H	02H	610-ZC
22	97	02H	02H	610-ZC
22	97	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
22	97	04H	04H	610-ZC
27	97	02H	02H	610-ZC
29	97	02H	02H	610-ZC
29	97	04H	04H	610-ZC
32	97	04H	04H	610-ZC
21	98	02H	02H	610-ZC
21	98	03H	03H	610-ZC
22	98	02H	02H	610-ZC
22	98	03H	03H	610-ZC
23	98	02H	02H	610-ZC
23	98	03H	03H	610-ZC
25	98	02H	02H	610-ZC
25	98	03H	03H	610-ZC
25	98	04H	04H	610-ZC
31	98	03H	03H	610-ZC
18	99	02H	02H	610-ZC
18	99	03H	03H	610-ZC
20	99	03H	03H	610-ZC
36	99	11C	11C	610-ZC
16	100	03H	03H	610-ZC
18	100	02H	02H	610-ZC
25	100	02H	02H	610-ZC
25	100	03H	03H	610-ZC
24	101	04H	04H	610-ZC
28	101	03H	03H	610-ZC
34	101	10H	10H	610-ZC
34	101	11C	11C	610-ZC
12	102	13C	12C	610-ZC
15	102	16C	15C	610-ZC
18	102	02H	02H	610-ZC
26	102	02H	02H	610-ZC
32	102	03H	03H	610-ZC
19	103	03H	03H	610-ZC
30	103	03H	03H	610-ZC
11	104	02H	02H	610-ZC
22	104	03H	03H	610-ZC
22	104	04H	04H	610-ZC
9	105	02H	02H	610-ZC
17	105	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G C

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
25	105	03H	03H	610-ZC
26	105	10H	10H	610-ZC
26	105	11C	11C	610-ZC
27	105	04H	04H	610-ZC
30	106	19C	18C	610-ZC
26	107	04H	04H	610-ZC
34	107	10H	10H	610-ZC
20	108	03H	03H	610-ZC
22	108	15C	14C	610-ZC
10	109	02H	02H	610-ZC
16	111	12C	11C	610-ZC
26	111	06H	06H	610-ZC
9	116	22C	21C	620-ZM
10	117	07H	08H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
26	8	11C	11C	610-ZC
1	10	11C	10H	580-ZZ
13	10	10H	10H	610-ZC
2	11	TSH	01H	610-ZC
21	11	02H	02H	610-ZC
10	12	02H	02H	610-ZC
10	12	06H	06H	610-ZC
12	12	02H	02H	610-ZC
18	13	03H	03H	610-ZC
23	13	10H	10H	610-ZC
27	13	10H	10H	610-ZC
15	14	03H	03H	610-ZC
22	14	02H	02H	610-ZC
30	14	10H	10H	610-ZC
30	15	10H	10H	610-ZC
11	16	03H	03H	610-ZC
14	16	03H	03H	610-ZC
18	16	03H	03H	610-ZC
25	16	02H	02H	610-ZC
30	16	02H	02H	610-ZC
31	16	02H	02H	610-ZC
13	17	03H	03H	610-ZC
18	17	02H	02H	610-ZC
25	17	02H	02H	610-ZC
26	17	02H	02H	610-ZC
27	17	02H	02H	610-ZC
28	17	02H	02H	610-ZC
31	17	02H	02H	610-ZC
20	18	03H	03H	610-ZC
22	18	03H	03H	610-ZC
23	18	02H	02H	610-ZC
23	18	03H	03H	610-ZC
29	18	11C	11C	610-ZC
15	19	11C	11C	610-ZC
22	19	02H	02H	610-ZC
16	20	03H	03H	610-ZC
17	20	02H	02H	610-ZC
18	20	02H	02H	610-ZC
19	20	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
23	20	02H	02H	610-ZC
19	21	02H	02H	610-ZC
19	21	03H	03H	610-ZC
34	21	02H	02H	610-ZC
19	22	02H	02H	610-ZC
19	22	03H	03H	610-ZC
20	22	02H	02H	610-ZC
20	22	04H	04H	610-ZC
20	22	02H	02H	610-ZC
22	22	03H	03H	610-ZC
28	22	03H	03H	610-ZC
43	22	11C	11C	610-ZC
15	23	03H	03H	610-ZC
20	23	02H	02H	610-ZC
22	23	04H	04H	610-ZC
29	23	02H	02H	610-ZC
30	23	03H	03H	610-ZC
33	23	02H	02H	610-ZC
45	23	11C	11C	610-ZC
16	24	02H	02H	610-ZC
16	24	03H	03H	610-ZC
18	24	02H	02H	610-ZC
20	24	02H	02H	610-ZC
20	24	03H	03H	610-ZC
31	24	02H	02H	610-ZC
33	24	03H	03H	610-ZC
39	24	10H	10H	610-ZC
43	24	11C	11C	610-ZC
43	24	10H	10H	610-ZC
44	24	11C	11C	610-ZC
16	25	03H	03H	610-ZC
20	25	03H	03H	610-ZC
20	25	05H	05H	610-ZC
24	25	03H	03H	610-ZC
25	25	02H	02H	610-ZC
27	25	02H	02H	610-ZC
29	25	02H	02H	610-ZC
43	25	11C	11C	610-ZC
14	26	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
17	26	03H	03H	610-ZC
18	26	03H	03H	610-ZC
20	26	02H	02H	610-ZC
20	26	03H	03H	610-ZC
23	26	02H	02H	610-ZC
13	27	02H	02H	610-ZC
16	27	03H	03H	610-ZC
16	27	05H	05H	610-ZC
17	27	02H	02H	610-ZC
17	27	03H	03H	610-ZC
19	27	02H	02H	610-ZC
19	27	03H	03H	610-ZC
20	27	02H	02H	610-ZC
24	27	03H	03H	610-ZC
26	27	03H	03H	610-ZC
27	27	02H	02H	610-ZC
28	27	02H	02H	610-ZC
28	27	03H	03H	610-ZC
30	27	02H	02H	610-ZC
30	27	04H	04H	610-ZC
36	27	02H	02H	610-ZC
37	27	02H	02H	610-ZC
12	28	02H	02H	610-ZC
17	28	03H	03H	610-ZC
19	28	03H	03H	610-ZC
20	28	02H	02H	610-ZC
24	28	02H	02H	610-ZC
30	28	02H	02H	610-ZC
31	28	02H	02H	610-ZC
31	28	04H	04H	610-ZC
37	28	02H	02H	610-ZC
40	28	06H	07H	610-ZC
17	29	02H	02H	610-ZC
17	29	03H	03H	610-ZC
18	29	02H	02H	610-ZC
21	29	03H	03H	610-ZC
25	29	02H	02H	610-ZC
28	29	03H	03H	610-ZC
29	29	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
34	29	02H	02H	610-ZC
35	29	02H	02H	610-ZC
35	29	03H	03H	610-ZC
36	29	02H	02H	610-ZC
19	30	03H	03H	610-ZC
24	30	02H	02H	610-ZC
24	30	03H	03H	610-ZC
35	30	03H	03H	610-ZC
38	30	02H	02H	610-ZC
13	31	03H	03H	610-ZC
15	31	03H	03H	610-ZC
19	31	03H	03H	610-ZC
20	31	02H	02H	610-ZC
23	31	02H	02H	610-ZC
35	31	03H	03H	610-ZC
13	32	03H	03H	610-ZC
15	32	02H	02H	610-ZC
20	32	03H	03H	610-ZC
24	32	02H	02H	610-ZC
24	32	03H	03H	610-ZC
31	32	02H	02H	610-ZC
31	32	03H	03H	610-ZC
46	32	06H	07H	610-ZC
24	33	03H	03H	610-ZC
28	34	02H	02H	610-ZC
33	34	02H	02H	610-ZC
33	34	03H	03H	610-ZC
36	34	02H	02H	610-ZC
36	34	04H	04H	610-ZC
40	34	02H	02H	610-ZC
18	35	03H	03H	610-ZC
26	35	02H	02H	610-ZC
26	35	03H	03H	610-ZC
35	35	03H	03H	610-ZC
25	36	02H	02H	610-ZC
26	36	02H	02H	610-ZC
26	36	03H	03H	610-ZC
35	36	03H	03H	610-ZC
20	37	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
25	37	03H	03H	610-ZC
20	38	03H	03H	610-ZC
21	38	02H	02H	610-ZC
24	38	03H	03H	610-ZC
26	38	03H	03H	610-ZC
27	38	02H	02H	610-ZC
24	39	02H	02H	610-ZC
26	39	03H	03H	610-ZC
48	39	21C	21C	610-ZC
48	39	22C	22C	610-ZC
23	40	03H	03H	610-ZC
28	40	03H	03H	610-ZC
27	41	02H	02H	610-ZC
1	42	18C	17C	610-ZC
21	42	03H	03H	610-ZC
26	42	03H	03H	610-ZC
47	43	21C	21C	610-ZC
47	43	22C	22C	610-ZC
25	44	02H	02H	610-ZC
30	44	05H	05H	610-ZC
32	44	02H	02H	610-ZC
28	46	02H	02H	610-ZC
27	47	02H	02H	610-ZC
35	47	05H	05H	610-ZC
23	48	02H	02H	610-ZC
25	49	02H	02H	610-ZC
1	50	16C	15C	610-ZC
31	50	02H	02H	610-ZC
34	50	02H	02H	610-ZC
28	51	04H	04H	610-ZC
30	51	03H	03H	610-ZC
34	51	03H	03H	610-ZC
10	52	17C	16C	610-ZC
32	52	04H	04H	610-ZC
46	52	21C	21C	610-ZC
46	52	22C	22C	610-ZC
28	53	04H	04H	610-ZC
28	53	06H	06H	610-ZC
42	53	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
28	54	02H	02H	610-ZC
28	54	04H	04H	610-ZC
30	54	03H	03H	610-ZC
40	54	05H	05H	610-ZC
26	55	02H	02H	610-ZC
26	56	02H	02H	610-ZC
35	56	03H	03H	610-ZC
35	56	04H	04H	610-ZC
38	56	04H	04H	610-ZC
39	56	02H	02H	610-ZC
25	57	02H	02H	610-ZC
30	57	02H	02H	610-ZC
35	57	04H	04H	610-ZC
44	57	02H	02H	610-ZC
48	57	21C	21C	610-ZC
48	57	22C	22C	610-ZC
40	58	04H	04H	610-ZC
40	59	02H	02H	610-ZC
44	59	21C	21C	610-ZC
44	59	22C	22C	610-ZC
47	59	21C	21C	610-ZC
47	59	22C	22C	610-ZC
33	62	01H	02H	610-ZC
41	62	21C	21C	610-ZC
41	62	22C	22C	610-ZC
37	63	03H	03H	610-ZC
48	63	21C	21C	610-ZC
48	63	22C	22C	610-ZC
11	64	01H	01H	610-ZC
27	64	02H	02H	610-ZC
32	64	02H	02H	610-ZC
34	64	10H	10H	610-ZC
24	65	02H	02H	610-ZC
24	66	03H	03H	610-ZC
25	67	03H	03H	610-ZC
26	67	02H	02H	610-ZC
26	67	03H	03H	610-ZC
36	67	02H	02H	610-ZC
36	67	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
25	68	08H	09H	610-ZC
31	68	01H	02H	610-ZC
35	68	15C	14C	610-ZC
37	68	07H	08H	610-ZC
47	68	21C	21C	610-ZC
47	68	22C	22C	610-ZC
26	69	03H	03H	610-ZC
36	69	02H	02H	610-ZC
26	70	02H	02H	610-ZC
40	71	05H	05H	610-ZC
13	72	01H	02H	610-ZC
38	72	02H	02H	610-ZC
39	73	03H	03H	610-ZC
23	74	02H	02H	610-ZC
19	75	03H	03H	610-ZC
23	75	03H	03H	610-ZC
26	75	02H	02H	610-ZC
26	75	03H	03H	610-ZC
30	75	02H	02H	610-ZC
19	76	03H	03H	610-ZC
30	79	03H	03H	610-ZC
27	80	04H	04H	610-ZC
42	80	03H	03H	610-ZC
48	81	21C	21C	610-ZC
48	81	22C	22C	610-ZC
22	82	03H	03H	610-ZC
40	82	03H	03H	610-ZC
47	82	19C	19C	610-ZC
35	83	03H	03H	610-ZC
41	83	03H	03H	610-ZC
27	85	03H	03H	610-ZC
26	86	03H	03H	610-ZC
37	86	03H	03H	610-ZC
42	86	02H	02H	610-ZC
42	86	03H	03H	610-ZC
15	88	03H	03H	610-ZC
42	88	02H	02H	610-ZC
44	88	02H	02H	610-ZC
15	89	03H	03H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
17	89	03H	03H	610-ZC
24	89	03H	03H	610-ZC
31	89	03H	03H	610-ZC
38	90	03H	03H	610-ZC
15	91	03H	03H	610-ZC
16	91	03H	03H	610-ZC
21	91	02H	02H	610-ZC
23	91	17C	16C	610-ZC
24	91	02H	02H	610-ZC
24	91	03H	03H	610-ZC
27	91	02H	02H	610-ZC
18	93	04H	04H	610-ZC
13	94	03H	03H	610-ZC
16	94	03H	03H	610-ZC
19	94	02H	02H	610-ZC
30	95	04H	04H	610-ZC
15	96	03H	03H	610-ZC
22	96	03H	03H	610-ZC
30	96	06H	06H	610-ZC
14	97	03H	03H	610-ZC
16	97	03H	03H	610-ZC
18	97	03H	03H	610-ZC
16	98	03H	03H	610-ZC
18	98	03H	03H	610-ZC
18	98	05H	05H	610-ZC
16	99	03H	03H	610-ZC
16	99	05H	05H	610-ZC
17	100	03H	03H	610-ZC
16	101	03H	03H	610-ZC
23	102	02H	02H	610-ZC
28	102	03H	03H	610-ZC
9	103	15C	14C	610-ZC
25	103	03H	03H	610-ZC
16	104	02H	02H	610-ZC
14	105	03H	03H	610-ZC
20	105	03H	03H	610-ZC
16	106	02H	02H	610-ZC
17	106	03H	03H	610-ZC
18	106	02H	02H	610-ZC

Tubes Examined by MRPC at
Locations Other Than TSH

S/G D

ROW	COLUMN	BEGIN TEST	END TEST	PROBE
18	107	02H	02H	610-ZC
26	107	02H	02H	610-ZC

APPENDIX C

TUBES WITH TUBE WALL

THICKNESS REDUCTION

Tubes with Tube Wall
Thickness Reduction

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
16	3	6	AV1 .00	4
10	9	SAI	02H .01	71
26	18	SAI	03H .12	71
8	19	SAI	02H -.03	71
19	19	SAI	02H .06	71
17	20	SAI	03H .08	71
32	20	SAI	02H .06	71
20	21	SAI	03H .00	71
24	22	SAI	04H -.14	71
16	23	SAI	02H .02	79
21	23	SAI	02H .07	71
21	24	SAI	04H .03	71
24	24	SAI	03H -.03	71
44	24	7	AV3 -.11	10
44	24	5	AV4 -.30	10
21	25	SAI	02H .00	71
21	25	SAI	03H -.12	71
21	25	SAI	04H -.08	71
23	29	SAI	02H .03	71
35	29	SAI	02H -.11	71
13	30	SAI	02H .06	71
20	31	SAI	03H .06	71
38	31	SAI	02H .08	71
33	32	SAI	04H .03	71
26	33	SAI	04H -.06	71
17	34	SAI	02H .11	71
20	35	SAI	02H .11	71
40	35	16	AV2 .00	14
16	36	SAI	02H .14	71
33	37	SAI	04H .03	71
39	38	SAI	03H .06	71
20	39	SAI	02H .06	71
23	39	SAI	02H -.11	71
22	40	SAI	03H .11	71
24	43	SAI	02H -.05	71
23	45	SAI	03H .11	71

Tubes with Tube Wall
Thickness Reduction

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
23	46	SAI	04H .06	71
19	47	SAI	02H .03	71
23	47	SAI	05H .00	71
23	48	SAI	03H -.02	71
23	51	SAI	03H .05	71
23	51	SVI	14C 37.28	88
35	51	SAI	05H .01	71
41	52	SAI	02H .02	71
40	62	SAI	03H .00	69
45	62	15	AV1 .03	38
25	63	SAI	03H .04	69
26	63	SAI	03H .08	69
26	63	SAI	05H .00	69
28	63	SAI	03H .00	69
24	64	SAI	03H .06	69
24	64	SAI	04H .00	69
26	64	SAI	05H -.07	69
34	64	SAI	19C 14.47	88
32	65	SAI	02H .00	69
27	67	SAI	03H .02	69
32	67	SAI	03H .01	69
32	67	SAI	04H -.04	69
25	68	SAI	02H .00	81
32	68	SAI	03H .03	75
32	68	SAI	04H -.03	75
33	68	SAI	03H .00	69
45	68	SAI	02H .00	69
32	70	SAI	03H -.02	69
35	72	SAI	03H .10	69
37	72	SAI	03H .01	69
33	73	SAI	05H .00	67
24	74	SAI	03H -.02	69
28	74	SAI	03H .01	69
24	75	SAI	03H .04	69
21	77	SAI	03H .13	69
33	77	SAI	02H .07	69
27	78	SAI	02H .06	69

Tubes with Tube Wall
Thickness Reduction

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
28	79	SAI	04H .01	69
29	80	SAI	02H -.04	69
33	80	SAI	03H .11	69
34	80	SAI	02H -.07	69
21	81	SAI	03H -.07	69
24	81	SAI	03H .00	69
20	82	SAI	02H -.13	69
32	82	SAI	04H -.06	69
20	83	SAI	03H .00	67
23	83	SAI	05H .00	69
24	83	SAI	03H -.01	69
20	84	SAI	03H .00	67
21	85	SAI	03H .00	67
33	85	SAI	03H -.04	69
26	86	SAI	03H .08	69
28	86	SAI	02H .08	69
30	86	SAI	03H .00	69
35	86	SAI	02H .01	69
23	87	SAI	02H .00	67
20	88	SAI	03H .00	67
20	89	SAI	04H .00	67
22	89	SAI	02H -.04	67
19	90	SAI	03H .11	67
20	91	SAI	03H .00	67
22	91	SAI	04H .00	67
26	91	SAI	04H .00	67
19	92	MAI	03H .00	67
24	92	SAI	02H .00	67
26	92	SAI	03H -.03	67
26	92	SAI	04H -.05	67
18	93	SAI	02H .00	79
18	93	SAI	03H .19	79
24	93	SAI	03H .08	79
28	93	SAI	03H .00	79
16	[illegible]	SAI	02H .05	79
16	94	SAI	03H -.03	79
18	94	SAI	03H .05	79

Tubes with Tube Wall
Thickness Reduction

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
21	94	SAI	04H .00	79
34	94	SAI	03H .00	81
11	95	SAI	02H .08	79
19	95	SAI	03H .14	79
20	95	SAI	03H .00	79
22	95	SAI	03H .11	79
22	95	SAI	04H .00	79
25	95	SAI	04H .00	79
26	95	SAI	03H -.03	75
26	96	SAI	03H -.03	75
28	96	SAI	03H .00	75
10	97	SAI	02H -.03	79
20	97	SAI	02H .14	75
24	97	SAI	03H .14	75
19	98	SAI	02H .11	75
19	98	SAI	03H .06	75
29	98	SAI	03H .00	75
11	99	SAI	02H .05	79
23	99	SAI	02H -.06	75
25	99	SAI	03H .00	75
22	100	SAI	02H .00	75
22	100	SAI	03H .06	75
36	100	14	AV3 .00	58
22	101	SAI	02H .19	75
22	102	SAI	03H -.03	75
24	102	SAI	03H .00	75
16	103	SAI	02H .05	75
16	103	SAI	03H .00	75
25	103	SAI	03H -.03	67
16	104	SAI	03H .03	67
20	104	SAI	03H .00	67
22	104	SAI	03H -.08	67
37	106	7	AV2 .00	84
35	107	10	AV2 .00	84
31	111	SAI	17C 32.48	88

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
26	12	SVI	TSH -.17	29
14	13	SAI	03H .03	67
9	14	SAI	02H .06	67
16	14	MAI	03H -.03	67
20	14	SAI	02H .03	67
13	15	SAI	02H -.03	67
19	15	SAI	03H .00	67
20	15	SAI	02H .08	67
9	16	SAI	02H .08	67
9	17	SAI	02H .00	67
11	17	SAI	02H .03	67
13	17	SAI	03H .03	67
22	17	SAI	03H -.03	67
24	17	SAI	02H .03	67
24	17	SAI	03H -.17	67
19	18	SAI	02H .11	67
19	18	SAI	04H .03	67
9	19	SAI	02H .03	67
12	19	SAI	02H .11	67
23	19	SAI	02H .03	67
23	19	SAI	03H -.08	67
19	20	SAI	03H .03	67
11	21	SAI	02H .00	67
28	21	SAI	02H .06	67
11	22	MAI	02H .14	67
28	22	SAI	02H .17	67
11	23	SVI	18C 5.58	94
16	23	SAI	04H .00	67
17	23	SAI	02H .08	67
25	23	SAI	03H .03	67
29	23	SAI	03H .08	67
19	25	SAI	05H -.17	67
15	27	SAI	04H .03	67
19	28	SAI	02H .06	67
18	29	SAI	02H .08	67
36	29	SAI	02H .08	67
28	30	SAI	03H -.06	67

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
13	31	SAI	02H .11	67
19	32	SAI	03H .11	67
15	33	SAI	03H .00	67
22	33	SAI	03H .07	75
19	34	SAI	03H -.08	67
19	34	SAI	04H -.08	67
19	34	SAI	05H .00	67
19	35	SAI	02H .01	75
13	36	SAI	02H .00	75
19	36	MAI	02H .07	75
22	36	SAI	03H .12	75
26	36	SAI	02H -.01	75
26	36	SAI	05H .00	75
16	37	SAI	02H -.06	75
23	37	SAI	03H .00	75
25	37	SAI	05H .00	75
35	37	MAI	02H .06	85
42	37	SAI	02H .03	75
15	38	SAI	02H .14	75
19	38	SAI	02H .03	75
22	38	SAI	02H .03	75
22	38	SAI	03H .11	75
40	38	SAI	02H -.03	75
40	38	SAI	03H -.03	75
33	39	SAI	03H .08	75
40	39	SAI	02H -.01	85
23	40	SAI	05H .03	75
27	40	SAI	02H .11	75
27	40	SAI	03H .08	75
34	40	SAI	02H -.05	75
43	40	SAI	03H .08	75
14	41	SVI	TSC 2.39	88
21	41	SAI	02H .00	75
22	41	SAI	03H -.03	75
40	41	SAI	03H .03	75
25	42	SAI	03H .08	75
43	42	SAI	03H .11	75

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
43	42	SAI	04H -.06	75
27	43	SAI	03H -.05	75
42	43	SAI	02H .00	75
9	44	SVI	09H 38.17	81
10	44	SVI	04H 24.71	75
10	44	SVI	04H 43.97	75
14	44	SVI	17C 28.54	88
24	44	SVI	08H 17.37	75
22	45	SAI	04H .06	75
19	47	SAI	03H .03	75
22	47	SAI	04H .00	75
37	47	SAI	03H .16	75
42	48	SAI	03H .03	75
18	49	SAI	02H .11	75
26	51	SAI	03H .06	75
46	51	SAI	03H .11	75
24	53	SAI	03H -.06	75
24	53	SAI	04H .08	75
36	53	SAI	04H .07	75
44	53	SAI	03H -.03	75
45	53	SAI	03H .05	75
24	54	SAI	04H .00	75
28	55	SAI	05H .03	75
36	55	SAI	03H .00	75
40	55	15	AV2 .00	28
40	55	19	AV3 .00	28
42	55	18	AV2 .00	28
42	55	18	AV3 .00	28
45	55	MAI	03H .08	85
35	56	SAI	04H .03	75
47	56	SVI	22C .57	92
24	57	SAI	04H .06	75
39	57	SAI	03H -.03	75
25	58	SAI	04H -.11	75
44	59	23	AV2 -.03	32
23	63	SAI	03H .00	75
28	64	MAI	03H -.11	77

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
32	64	SAI	04H .05	77
40	64	SAI	04H .00	75
40	64	SAI	04H .00	79
44	64	10	AV1 .00	38
44	64	14	AV2 .00	38
44	64	12	AV3 .00	38
35	65	SAI	02H .11	77
37	65	SAI	04H .00	77
38	65	SAI	02H .03	77
42	65	SAI	02H .07	77
23	67	SAI	02H .03	77
24	68	SAI	04H .00	77
37	68	SAI	03H .08	77
39	68	SAI	03H .00	77
40	68	SAI	04H .14	77
42	68	SAI	02H .00	77
42	68	SAI	04H .06	77
28	69	SAI	04H .05	77
41	72	SAI	04H .03	77
44	72	SAI	03H .03	77
44	72	SAI	04H .03	77
41	75	SAI	03H .16	77
23	78	SAI	03H .00	77
35	81	SAI	03H .05	77
20	82	SAI	03H .00	77
20	83	SAI	03H .05	77
22	83	SAI	03H .05	77
22	83	SAI	04H .08	77
38	83	SAI	03H .08	77
34	84	SAI	02H .00	77
16	85	SAI	02H .11	77
38	85	SAI	02H .03	77
38	85	SAI	04H .00	77
23	86	MAI	02H .00	77
38	86	SVI	TSH 1.21	41
36	89	SAI	04H .00	77
20	90	SAI	04H -.08	77

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
38	90	MAI	03H -.08	77
15	92	SAI	04H .05	77
21	92	SAI	02H .03	77
12	93	SAI	02H -.03	77
20	93	SAI	02H .03	77
15	94	SAI	04H .00	77
18	94	SAI	03H .06	77
18	94	SAI	04H .00	77
38	94	SAI	03H .00	77
48	94	11	AV1 .19	82
19	95	SAI	03H .00	77
26	95	SAI	04H .03	77
18	96	SAI	04H .00	77
23	96	SAI	02H .08	77
11	97	SAI	03H .00	77
12	97	SAI	02H .06	77
15	97	SAI	02H .03	77
20	97	SAI	03H .06	77
11	98	SAI	02H -.02	77
16	98	SAI	03H .03	77
17	98	SAI	03H .06	77
11	99	SAI	02H .00	77
13	99	SAI	02H .11	77
21	99	SAI	03H .08	77
15	100	SAI	02H .03	77
16	100	SVI	06H 18.65	77
18	100	SAI	02H .06	77
20	100	SAI	03H .06	77
20	100	SAI	04H .00	77
15	102	MAI	03H -.02	79
17	102	SAI	03H .14	79
19	102	SAI	03H .03	79
15	104	SAI	02H .00	79
15	104	SAI	03H .14	79
16	104	SAI	03H .14	79
22	104	SAI	03H .05	79
33	104	SAI	02H .02	79

Tubes with Tube Wall
Thickness Reduction

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
14	105	SAI	02H -.11	79
15	105	SAI	02H .03	79
17	105	SAI	03H .03	79
21	105	SAI	03H .05	79
15	106	SAI	03H .03	79
17	106	SAI	03H .14	79
37	106	12	AV2 .00	82
12	107	SAI	02H .11	79
17	107	SAI	03H .03	79
14	109	SAI	03H .05	85
15	109	MAI	03H .08	79
13	110	SAI	03H .00	79
31	111	12	AV2 .03	82
10	112	SAI	02H -.03	79

Tubes with Tube Wall
Thickness Reduction

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
2	7	SVI	17C 35.34	94
2	7	SVI	17C 37.03	94
2	7	SVI	17C 39.83	94
2	7	SVI	17C 41.91	94
2	7	SVI	22C 8.83	94
15	13	SAI	02H .05	69
7	15	SAI	02H .08	69
9	17	SAI	02H .05	69
13	17	SAI	02H -.03	69
13	17	SAI	04H .13	69
20	18	SAI	03H -.03	69
14	19	SAI	02H .03	69
37	20	SAI	02H .00	69
16	21	MAI	03H .15	69
13	25	SAI	03H .05	69
14	25	SAI	04H .05	69
16	25	SAI	04H .00	69
19	25	SAI	03H .11	69
26	25	SAI	03H .00	69
36	25	SAI	04H -.05	69
45	25	SVI	11C .17	98
13	28	SAI	04H -.03	69
33	28	SAI	03H .05	69
14	29	SAI	04H .11	69
15	29	SAI	02H .00	69
26	29	SAI	03H .03	69
35	29	SAI	04H -.03	75
47	29	7	21C -.40	92
40	30	SAI	02H .11	69
37	31	SAI	03H .03	69
37	31	SAI	04H -.11	69
30	32	SAI	03H .03	69
15	33	SAI	02H .00	69
29	33	SAI	02H .00	69
29	33	SAI	04H -.03	69

Tubes with Tube Wall
Thickness Reduction

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
29	33	SAI	05H -.03	69
20	34	SAI	04H .03	69
26	34	SAI	03H .03	69
39	34	SAI	04H .00	69
19	35	SAI	02H .08	69
19	35	SAI	04H .00	69
37	35	SAI	03H .13	69
39	35	SAI	03H .08	69
44	35	16	AV4 .00	16
25	36	SAI	03H -.03	69
36	36	SAI	03H .09	69
38	36	SAI	02H .03	69
40	36	SAI	03H -.03	69
23	37	SAI	03H .00	69
24	37	SAI	04H -.05	69
38	37	SAI	03H .08	69
28	38	SAI	03H -.03	69
39	38	SAI	02H .16	69
26	39	SAI	03H -.05	69
30	39	SAI	04H .00	69
22	40	SAI	03H .00	71
32	40	SAI	04H .00	69
28	41	SAI	04H -.03	69
29	41	SAI	03H .00	69
29	41	SAI	04H .00	69
32	41	SAI	02H .00	69
41	42	SAI	03H .13	69
29	43	SAI	04H .00	69
34	45	SAI	03H .11	71
38	46	SAI	03H .15	71
32	48	MAI	02H .00	71
32	48	SAI	04H .06	71
33	48	SAI	03H .00	71
33	48	SAI	04H .00	71
27	49	SAI	02H -.04	71
40	49	SAI	03H .08	71
42	50	SAI	03H .10	71

Tubes with Tube Wall
Thickness Reduction

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
30	51	SAI	04H .01	71
31	51	SAI	03H .00	71
32	51	SAI	04H .00	71
31	52	SAI	06H -.01	71
35	53	SAI	03H .00	71
41	53	SAI	03H .02	71
36	55	SAI	04H .00	71
36	56	SAI	03H .04	71
31	57	SAI	02H .00	71
31	57	MAI	03H .00	71
27	58	SAI	03H .01	71
26	59	SAI	03H .00	71
44	59	15	AV1 .00	36
19	66	SAI	04H .02	71
35	67	SAI	03H .00	71
39	67	SAI	03H .01	71
27	68	SAI	02H .00	71
28	70	SAI	03H .00	71
35	72	SAI	04H .01	71
38	72	SAI	04H .03	71
40	73	SAI	04H .00	71
33	74	SAI	04H .03	73
34	74	SAI	04H .08	73
25	75	SAI	04H .11	73
27	75	SAI	04H .00	73
31	75	SAI	04H .03	73
35	75	SAI	03H .08	73
22	76	SAI	03H .03	73
23	76	SAI	03H .08	73
28	76	SAI	03H .00	73
37	76	SAI	03H .05	73
37	77	SAI	03H .00	73
25	79	SAI	03H .03	73
22	80	SAI	03H .10	73
28	80	SAI	03H -.05	73
30	80	SAI	03H -.05	73
22	82	SAI	03H .03	73

Tubes with Tube Wall
Thickness Reduction

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
29	82	12	AV1 .00	54
39	84	SAI	02H .03	73
39	84	SAI	03H .00	73
26	85	SAI	03H .00	73
30	85	SAI	04H .00	73
34	85	SAI	04H -.08	73
25	86	SAI	04H .00	73
27	86	SAI	03H .00	73
37	86	SAI	03H -.03	73
23	87	SAI	04H .03	73
20	88	SAI	04H .05	73
31	88	SAI	04H .08	73
15	89	SAI	02H .03	73
18	89	SAI	04H .00	73
18	90	SAI	03H .03	73
18	90	SAI	04H .00	79
19	90	SAI	04H .00	73
26	90	SAI	02H .00	73
21	91	SAI	04H .05	73
26	91	SAI	03H .08	73
21	92	SAI	04H .03	73
35	92	SAI	04H .03	73
25	94	SAI	03H .05	73
25	94	SAI	05H .03	73
26	94	SAI	03H .05	73
18	95	SAI	03H .08	73
22	95	SAI	04H .00	73
29	95	SAI	02H .08	73
13	96	SAI	02H .13	73
16	96	SAI	02H .05	73
21	96	SAI	04H .08	73
22	97	SAI	02H -.05	73
22	97	SAI	03H .05	73
22	97	SAI	04H .16	73
27	97	SAI	02H -.08	73
29	97	SAI	04H .03	73
21	98	SAI	02H .08	73

Tubes with Tube Wall
Thickness Reduction

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
21	98	SAI	03H .00	73
22	98	MAI	02H .00	73
23	98	MAI	02H .05	73
23	98	SAI	03H .08	73
25	98	SAI	02H .05	73
25	98	SAI	03H .05	73
25	98	SAI	04H .03	73
31	98	SAI	03H -.05	73
18	99	SAI	02H .08	73
18	99	SAI	03H .11	73
20	99	SAI	03H .05	73
16	100	SAI	03H .00	73
18	100	SAI	02H .00	73
25	100	SAI	02H -.03	73
25	100	SAI	03H .11	73
28	101	SAI	03H -.03	73
18	102	MAI	02H .03	73
26	102	SAI	02H -.03	73
32	102	SAI	03H .08	73
41	102	10	AV1 .00	62
19	103	SAI	03H .05	73
30	103	SAI	03H .08	73
11	104	SAI	02H .05	73
22	104	SAI	03H .03	73
9	105	SAI	02H .11	73
17	105	SAI	02H .18	73
25	105	SAI	03H .00	73
20	108	SAI	03H .00	73
10	109	SAI	02H .00	73
22	116	11	AV1 .00	88

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
10	12	SAI	02H .14	95
22	14	SAI	02H .00	95
30	16	SAI	02H .03	95
31	16	SAI	02H .11	95
18	17	SAI	02H .08	95
27	17	SAI	02H .06	95
28	17	SAI	02H .06	95
20	18	SAI	03H .11	95
23	18	SAI	02H .11	95
22	19	SAI	02H .14	95
16	20	SAI	03H .14	95
17	20	SAI	02H .08	95
18	20	MAI	02H .11	95
19	20	SAI	02H .00	95
19	21	SAI	02H .00	95
34	21	SAI	02H .14	95
28	22	SAI	03H .00	95
22	23	SAI	04H .06	95
29	23	SAI	02H .00	95
30	23	SAI	03H .06	95
16	24	SAI	03H .03	95
18	24	SAI	02H .06	95
20	24	SAI	03H .06	95
31	24	SAI	02H .11	95
16	25	SAI	03H .00	95
20	25	SAI	03H -.02	95
24	25	SAI	03H .09	95
25	25	SAI	02H .00	95
29	25	SAI	02H .00	95
20	26	MAI	02H .03	95
20	26	SAI	03H .06	95
17	27	SAI	02H -.02	95
17	27	SAI	03H -.03	95
19	27	SAI	02H .03	95
19	27	SAI	03H .14	95
20	27	SAI	02H .00	95

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
24	27	MAI	03H .06	95
27	27	SAI	02H .03	95
28	27	SAI	02H .03	95
28	27	SAI	03H .06	95
30	27	SAI	04H -.04	95
37	27	SAI	02H .00	95
12	28	SAI	02H .06	95
17	28	SAI	03H .11	95
19	28	SAI	03H .00	95
24	28	SAI	02H .03	95
37	28	MAI	02H .06	95
17	29	SAI	02H -.03	95
17	29	SAI	03H .08	95
18	29	SAI	02H .06	99
21	29	SAI	03H .08	95
25	29	SAI	02H .08	95
28	29	SAI	03H .08	95
35	29	SAI	03H .06	95
19	30	SAI	03H .06	95
24	30	SAI	02H .03	95
38	30	SAI	02H .06	95
19	31	SAI	03H .08	95
23	31	SAI	02H .06	95
35	31	SAI	03H .06	95
13	32	SAI	03H .11	95
15	32	SAI	02H -.08	95
24	32	SAI	03H -.06	95
28	34	SAI	02H .17	93
33	34	SAI	02H .11	93
33	34	SAI	03H .10	93
36	34	SAI	02H -.03	93
36	34	SAI	04H .06	93
40	34	SAI	02H .08	93
26	35	SAI	03H -.03	93
35	35	SAI	03H .11	93
25	36	SAI	02H .08	93
26	36	SAI	02H .00	93

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
26	36	SAI	03H .11	93
20	37	SAI	03H .06	93
25	37	SAI	03H .06	93
20	38	SAI	03H .11	93
21	38	SAI	02H .03	93
26	38	SAI	03H .00	93
27	38	SAI	02H .08	93
24	39	SAI	02H .03	93
23	40	SAI	03H .03	93
28	40	SAI	03H .00	93
27	41	SAI	02H -.03	93
1	42	SVI	18C 13.45	78
21	42	SAI	03H .17	93
26	42	SAI	03H .00	93
25	44	SAI	02H .03	93
30	44	SAI	05H .00	93
32	44	SAI	02H .11	93
28	46	SAI	02H .03	93
41	46	14	AV2 -.08	32
41	46	17	AV3 -.06	32
20	47	8	AV2 .00	26
23	48	SAI	02H .05	93
1	50	SVI	16C 32.64	78
31	50	SAI	02H .11	93
34	50	SAI	02H .08	93
28	51	SAI	04H .00	93
30	51	SAI	03H .03	93
34	51	SAI	03H .00	93
32	52	SAI	04H .03	99
28	53	SAI	04H -.03	93
42	53	SAI	02H .11	93
28	54	SAI	02H -.05	93
40	54	SAI	05H .03	93
35	56	SAI	03H .03	93
38	56	SAI	04H .11	93
25	57	SAI	02H .00	93
30	57	SAI	02H .06	93

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
35	57	SAI	04H -.08	93
40	58	SAI	04H .08	93
45	58	9	AV2 -.22	36
45	58	12	AV3 -.05	36
45	58	9	AV4 .14	36
43	59	18	AV1 .00	34
43	59	21	AV2 .14	34
43	59	19	AV3 -.06	34
43	59	19	AV4 -.08	34
44	59	17	AV3 .11	34
37	63	SAI	03H -.03	91
32	64	SAI	02H -.03	91
24	65	SAI	02H -.05	91
24	66	SAI	03H .06	91
25	67	SAI	03H .06	91
26	69	SAI	03H -.03	91
36	69	SAI	02H .11	91
26	70	SAI	02H -.08	91
40	71	SAI	05H .00	91
38	72	SAI	02H .07	91
39	73	SAI	03H .02	91
19	75	SAI	03H .00	91
23	75	SAI	03H .06	91
19	76	MAI	03H .06	91
35	78	8	AV3 .03	46
30	79	SAI	03H .00	91
27	80	MAI	04H -.08	91
42	80	SAI	03H .03	91
41	81	7	AV3 -.08	46
22	82	MAI	03H .11	91
40	82	SAI	03H .03	91
47	82	12	19C -.03	84
35	83	SAI	03H .08	91
41	83	SAI	03H .08	91
40	84	14	AV2 .06	46
40	84	19	AV3 -.11	46
27	85	MAI	03H .03	91

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
26	86	SAI	03H .00	91
37	86	SAI	03H -.05	91
42	86	SAI	02H .06	91
42	86	MAI	03H .06	91
15	88	SAI	03H -.03	91
42	88	MAI	02H .00	91
44	88	SAI	02H .11	91
15	89	SAI	03H -.08	91
17	89	SAI	03H .03	91
24	89	SAI	03H -.03	91
31	89	SAI	03H -.03	91
20	90	8	AV3 .00	76
38	90	SAI	03H -.06	91
15	91	SAI	03H -.05	91
16	91	SAI	03H .08	91
24	91	SAI	02H .00	91
24	91	SAI	03H -.03	91
18	93	SAI	04H .03	91
13	94	SAI	03H .11	91
16	94	SAI	03H -.03	91
30	95	SAI	04H -.06	91
15	96	SAI	03H -.11	91
22	96	SAI	03H .08	91
14	97	SAI	03H .03	91
16	97	SAI	03H -.08	91
18	97	SAI	03H .02	91
16	98	SAI	03H .14	91
18	98	SAI	03H .00	91
18	98	SAI	05H -.11	91
16	99	SAI	03H -.03	91
16	99	SAI	05H -.03	91
26	101	SAI	02H .03	99
23	102	MAI	02H .00	91
28	102	SAI	03H .05	91
25	103	SAI	03H .06	91
16	104	SAI	02H .11	91
14	105	SAI	03H .00	91

Tubes with Tube Wall
Thickness Reduction

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
20	105	SAI	03H .00	91
16	106	SAI	02H .14	99
17	106	SAI	03H -.03	91
18	106	SAI	02H .05	91
18	107	SAI	02H .11	91
26	107	SAI	02H .03	91

APPENDIX D

DINGS AND DENTS

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
8	1	DNG	TSH 1.00	2
18	5	DNG	09H 38.74	4
18	8	DNT	10H .00	4
18	8	DNT	11C .46	4
26	8	DNG	09H 42.48	4
30	12	DNG	15C 25.73	8
30	12	DNG	15C 18.77	8
30	12	DNG	16C 36.28	8
28	13	DNG	08H 24.30	8
28	13	DNG	19C 1.20	8
5	14	DNG	09H 22.49	6
17	15	DNG	13C 29.69	6
39	16	DNG	12C 10.38	8
39	16	DNG	TSC 1.00	8
9	18	DNG	09H 33.51	8
9	18	DNG	09H 34.65	8
9	18	DNG	09H 36.06	8
16	19	DNG	02H 7.58	8
35	21	DNG	08H 38.40	12
28	22	DNG	02H 3.93	12
7	23	DNG	03H 26.32	12
30	23	DNG	15C 19.28	10
43	24	DNT	10H .47	12
29	25	DNG	12C 11.28	12
33	25	DNT	10H .58	12
43	25	DNT	10H .53	12
9	26	DNG	AV1 1.27	10
32	26	DNG	03H 7.85	12
32	26	DNG	03H 9.35	12
32	26	DNG	03H 21.84	12
32	26	DNG	03H 23.40	12
9	27	DNG	AV1 1.16	12
18	27	DNT	10H .45	10
30	27	DNT	10H .51	10
43	27	DNG	12C 36.22	12
29	28	DNG	19C 10.69	12
31	28	DNG	06H -1.09	12

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
40	28	DNG	TSH 5.92	10
43	28	DNT	10H .50	12
43	28	DNG	21C 3.34	12
14	29	DNG	10H 11.24	10
16	29	DNG	10H 8.20	10
45	29	DNG	16C 37.02	12
16	30	DNG	10H 7.93	14
43	30	DNG	19C 10.61	16
7	31	DNG	15C 25.93	16
7	31	DNG	15C 19.74	16
7	31	DNG	16C 40.57	16
8	31	DNG	10H 3.61	14
19	32	DNG	08H 28.45	16
19	32	DNG	08H 35.17	16
19	32	DNG	09H 31.27	16
26	33	DNG	18C .89	14
39	33	DNG	19C 12.28	16
43	33	DNG	22C 15.22	16
48	34	DNG	02H 15.92	14
42	36	DNG	20C 4.56	14
4	38	DNT	16C .03	18
40	38	DNG	TSC 5.81	18
23	39	DNT	04H .36	20
24	39	DNG	03H 33.38	18
31	40	DNG	19C 9.04	20
3	41	DNG	10H 12.27	24
4	41	DNG	10H 15.46	22
27	41	DNT	10H .48	24
8	42	DNG	09H 30.18	24
8	42	DNG	09H 42.20	24
8	42	DNT	11C .41	24
20	42	DNG	09H 17.48	24
20	42	DNG	09H 18.00	24
3	44	DNG	01H 2.29	24
41	46	DNG	03H 23.45	24
10	47	DNG	04H 29.93	22
22	47	DNG	10H 2.92	22
4	51	DNG	17C 38.26	30

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
29	53	DNG	07H 30.54	32
31	53	DNT	10H .14	32
46	53	DNT	02H -.30	34
4	54	DNG	05H 9.81	34
10	54	DNT	10H -.39	34
10	54	DNT	10H .75	34
15	54	DNG	AV1 10.47	32
36	54	DNG	05H 42.42	34
12	56	DNG	AV4 13.17	34
11	57	DNG	10H 5.91	32
24	57	DNG	17C 1.95	34
48	57	DNG	AV4 26.84	34
19	60	DNG	22C 8.90	36
5	62	DNT	11C -.06	50
5	62	DNG	11C -1.08	50
10	62	DNG	01H 10.20	48
10	62	DNG	13C 4.77	48
20	62	DNT	09H -.14	48
20	62	DNT	10H -.69	48
20	62	DNG	21C 7.73	48
40	62	DNG	02H 10.58	36
9	64	DNG	22C 9.83	50
23	64	DNG	14C 2.65	36
5	65	DNG	11C -1.05	50
7	65	DNT	11C .57	50
11	65	DNG	04H 30.82	50
26	65	DNG	09H 40.55	40
15	67	DNG	02H 32.83	50
9	68	DNG	10H 3.22	50
10	68	DNG	02H 1.28	48
35	69	DNG	12C 29.00	40
35	69	DNG	12C 20.29	40
35	71	DNG	09H 20.36	40
1	72	DNT	10H .45	1
1	72	DNT	10H 1.07	68
2	72	DNT	11C .46	68
7	72	DNT	11C .57	46
8	72	DNT	11C .48	44

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
28	72	DNG	16C 17.35	42
36	72	DNT	11C -.28	42
42	72	DNT	10H -.29	42
45	72	DNG	12C 40.46	40
46	72	DNT	10H .39	42
3	73	DNG	06H 19.48	46
3	73	DNG	06H 33.53	46
17	76	DNG	14C 15.72	46
37	76	DNT	11C -.19	44
38	76	DNT	11C .51	46
46	77	DNT	11C .45	46
33	79	DNG	13C 23.21	44
34	79	DNT	11C .42	46
2	81	DNG	10H 16.08	68
4	82	DNG	03H 21.11	48
17	82	DNG	15C 16.08	54
2	84	DNG	02H 18.06	1
32	84	DNG	02H 16.78	52
1	85	DNG	13C 41.91	68
9	85	DNG	04H 14.97	54
22	85	DNT	11C .45	52
22	85	DNG	12C 44.48	52
23	85	DNG	09H 43.50	54
17	86	DNG	10H 6.16	54
17	86	DNG	10H 13.06	54
17	86	DNG	AV1 13.59	54
17	86	DNG	AV4 3.24	54
17	86	DNG	AV4 10.23	54
20	86	DNG	16C 42.13	52
39	86	DNG	18C 6.06	54
7	87	DNG	03H 20.50	54
20	87	DNG	16C 4.66	52
22	87	DNG	08H 43.47	54
22	87	DNG	13C 44.10	54
11	88	DNG	09H 43.21	54
11	88	DNG	09H 44.34	54
11	88	DNG	12C 42.92	54
29	88	DNT	11C -.41	54

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
32	89	DNG	17C 11.84	52
34	89	DNG	01H 16.49	52
35	89	DNG	19C 9.00	54
4	90	DNG	TSC 2.32	52
17	90	DNG	TSC 2.64	54
7	91	DNT	AV1 -.11	54
29	91	DNG	01H 4.22	54
17	92	DNG	15C 4.56	54
17	92	DNG	16C 43.07	54
17	92	DNG	16C 22.41	54
17	92	DNG	16C 8.38	54
17	92	DNG	16C 1.43	54
17	92	DNG	17C 18.98	54
17	92	DNG	17C 39.90	54
17	92	DNG	17C 33.00	54
17	92	DNG	17C 25.94	54
23	94	DNT	11C .40	58
29	94	DNG	15C 7.33	58
34	94	DNG	02H 1.89	56
16	96	DNG	07H 42.98	56
8	97	DNG	AV4 11.48	56
8	97	DNG	AV4 13.05	56
8	97	DNT	11C .47	56
1	98	DNG	21C 13.66	68
1	98	DNG	22C 13.30	68
1	98	DNG	22C 7.06	68
19	98	DNG	02H 9.41	56
19	98	DNG	02H 10.26	56
24	98	DNG	14C 29.81	58
18	99	DNG	TSH 6.96	56
30	100	DNG	09H 41.58	58
40	100	DNG	TSC 2.34	58
43	100	DNG	03H 24.76	56
24	101	DNG	22C 7.95	58
16	103	DNG	02H 28.39	56
1	105	DNG	17C 6.13	70
1	107	DNG	17C 8.09	70
1	107	DNG	18C 7.88	70

Dings and Dents

S/G A

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
33	107	DNG	01H 7.25	64
32	108	DNG	17C 42.73	66
18	111	DNG	17C 35.02	64
27	111	DNG	21C 7.46	66
1	114	DNG	08H 38.03	1
1	114	DNG	10H 9.08	70
2	114	DNG	22C 4.26	70
2	114	DNG	TSC 5.39	70
6	114	DNG	08H 12.94	64
3	115	DNG	10H 6.44	66
24	115	DNG	TSH 1.91	64
9	119	DNG	15C 23.42	66

Appendix D

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
13	3	DNG	04H 3.06	16
13	3	DNT	11C -.56	16
13	3	DNG	12C 44.22	16
13	3	DNG	12C 43.16	16
16	3	DNG	12C 42.53	14
8	4	DNG	10H 3.48	14
8	4	DNG	AV4 3.95	14
8	4	DNG	12C 28.75	14
16	5	DNG	12C 42.64	14
18	5	DNT	11C .43	14
6	6	DNG	02H 5.23	10
20	6	DNG	20C 9.22	10
15	9	DNG	TSC 3.20	10
18	9	DNG	12C 14.66	12
2	10	DNG	10H 6.10	74
8	10	DNG	10H 3.26	10
8	10	DNG	10H 12.43	10
8	10	DNG	AV4 1.89	10
8	10	DNG	AV4 14.09	10
21	12	DNG	09H 43.49	12
21	12	DNT	10H -.40	12
21	12	DNT	11C .51	12
8	15	DNG	10H 3.16	12
18	15	DNG	17C 44.60	12
23	16	DNG	10H 4.55	12
31	17	DNG	03H 6.42	12
40	17	DNG	04H 32.25	10
17	18	DNT	21C .00	12
39	19	DNG	09H 36.17	12
38	21	DNT	11C .40	8
43	21	DNT	11C .37	6
12	22	DNG	09H 26.37	6
12	22	DNG	09H 27.87	6
14	22	DNG	16C 32.39	6
15	22	DNG	21C 14.89	8
15	22	DNT	23C .25	8
15	22	DNG	TSC 3.43	8

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
35	22	DNG	12C 43.49	8
37	22	DNG	04H 28.49	8
7	24	DNG	10H 7.66	8
7	24	DNG	10H 20.11	8
7	24	DNG	18C 3.90	8
46	24	DNG	16C 34.12	6
41	25	DNT	10H -.25	8
43	26	DNT	11C .43	8
41	28	DNG	09H 44.36	2
41	28	DNT	11C .55	2
43	28	DNT	11C .50	2
46	28	DNT	11C .43	2
38	29	DNG	14C 25.77	16
10	31	DNG	19C 2.57	16
10	31	DNG	20C 6.01	16
35	31	DNG	12C 42.05	16
34	33	DNG	09H 43.97	20
30	34	DNG	03H 4.43	18
35	34	DNG	10H 12.02	18
35	34	DNG	10H 12.34	18
36	34	DNT	21C .06	18
42	34	DNG	17C 7.85	18
38	35	DNG	09H 42.44	20
38	35	DNG	09H 42.69	20
2	36	DNT	08H .55	5
14	36	DNG	03H 23.25	18
38	36	DNG	12C 24.69	18
38	36	DNG	12C 23.64	18
44	36	DNT	13C .53	18
18	37	DNT	11C .40	20
14	38	DNT	11C -.06	18
16	38	DNG	12C 43.68	18
16	38	DNG	12C 42.65	18
31	38	DNT	10H -.11	18
39	38	DNT	11C .43	18
48	38	DNT	10H .57	18
48	38	DNT	11C .37	18
39	39	DNT	11C .45	20

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
27	40	DNG	15C 12.03	18
48	40	DNT	11C .37	18
36	41	DNT	11C .31	24
33	42	DNT	11C .49	22
46	42	DNG	13C 37.21	22
48	42	DNT	11C .34	22
48	43	DNT	11C .08	24
1	44	DNG	TSH 8.56	3
34	44	DNG	09H 44.22	22
40	44	DNG	22C 15.55	22
40	44	DNG	22C 14.24	22
42	47	DNT	11C .42	24
44	48	DNG	17C 24.35	22
47	48	DNG	23C 4.32	22
39	49	DNG	09H 41.60	24
42	50	DNG	02H 7.53	22
42	50	DNG	02H 7.47	22
43	52	DNG	13C 19.36	22
43	53	DNG	14C 42.50	28
7	54	DNG	12C 37.26	26
19	56	DNG	09H 40.29	82
19	56	DNG	09H 41.17	82
37	56	DNG	AV1 9.16	26
44	58	DNG	15C 1.31	30
48	58	DNT	09H 44.82	30
46	59	DNT	11C .42	32
20	61	DNT	10H .31	38
4	62	DNT	10H -.43	84
40	62	DNG	05H 12.11	30
40	62	DNG	06H 5.97	30
43	63	DNG	12C 43.02	32
35	64	DNG	12C 42.04	38
40	64	DNT	19C .41	38
42	64	DNG	TSH 7.51	38
35	66	DNG	12C 41.85	82
38	66	DNG	09H 38.99	42
40	66	DNG	09H 38.65	82
46	67	DNT	10H .36	44

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
43	69	DNT	10H .49	44
44	69	DNT	10H .44	44
44	69	DNT	10H .38	44
44	69	DNT	10H -.66	44
46	69	DNT	10H -.72	44
48	69	DNG	01H 14.87	44
48	69	DNG	02H 14.68	44
2	70	DNG	10H 12.68	76
6	70	DNG	19C 15.86	46
27	70	DNG	09H 44.62	46
46	70	DNT	10H -.11	46
23	71	DNT	08H .82	48
40	71	DNT	03H .44	48
40	71	DNG	05H 15.74	48
46	71	DNG	09H 43.96	48
6	72	DNG	04H 40.64	46
6	72	DNG	05H 7.42	46
20	72	DNG	09H 44.26	46
35	72	DNG	12C 43.16	46
35	73	DNG	09H 43.64	48
38	73	DNT	10H .47	48
44	73	DNT	10H .47	48
5	74	DNG	15C 23.63	46
15	74	DNG	02H 22.65	46
15	74	DNG	22C 12.86	46
15	74	DNG	22C 5.20	46
15	74	DNG	22C 3.75	46
15	74	DNG	22C 2.29	46
44	74	DNT	10H .43	46
16	75	DNG	04H 3.42	48
23	75	DNG	16C 17.98	48
28	75	DNG	06H 31.03	48
5	76	DNG	19C 6.68	46
1	79	DNT	03H -.16	3
8	79	DNG	AV4 10.93	52
9	79	DNG	AV4 11.45	52
26	79	DNG	01H 15.80	52
33	80	DNG	22C 1.50	50

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
1	81	DNG	TSH 2.70	69
1	81	DNG	TSH 2.90	71
32	82	DNT	11C .45	50
48	82	DNT	11C .06	50
19	83	DNG	10H 77.55	52
39	83	DNT	10H .22	52
45	83	DNG	05H 1.53	52
40	84	DNT	10H .11	50
30	85	DNG	14C 33.61	52
45	85	DNT	10H .41	52
45	85	DNT	11C .39	52
41	86	DNT	10H .65	50
10	87	DNG	AV4 11.81	52
46	87	DNT	10H .47	52
40	90	DNT	10H .53	54
41	90	DNT	11C .42	54
48	90	DNG	TSH 2.75	50
36	91	DNT	11C .33	56
47	91	DNT	11C .39	56
8	92	DNT	20C -.50	54
45	92	DNG	14C 41.01	54
30	93	DNT	11C .50	56
34	93	DNG	12C 28.65	56
47	93	DNT	10H .43	56
43	94	DNT	11C .50	54
48	94	DNT	11C .40	82
40	95	DNT	11C .50	56
47	95	DNT	11C .35	56
10	96	DNG	AV4 11.27	58
8	97	DNG	03H 11.94	60
14	97	DNG	10H 2.97	60
27	97	DNG	21C 15.33	60
34	97	DNG	09H 42.29	60
34	97	DNT	11C .42	60
46	97	DNT	11C .42	60
6	98	DNG	17C 36.42	62
36	98	DNT	10H .66	62
37	99	DNT	10H .36	64

Dings and Dents

S/G B

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
34	100	DNG	15C 26.83	62
34	100	DNG	17C 38.53	62
34	100	DNT	17C .82	62
34	100	DNG	18C 13.28	62
35	100	DNT	10H -.67	62
43	100	DNT	10H -.64	64
4	101	DNG	TSH 1.30	68
4	101	DNG	10H 7.10	68
9	101	DNG	01H 13.46	68
35	101	DNT	11C .56	64
40	101	DNT	10H .50	64
25	102	DNT	10H .28	66
28	102	DNT	10H .54	66
30	102	DNT	10H .90	66
3	103	DNG	04H 14.76	68
3	103	DNG	05H 17.46	68
7	103	DNG	04H 12.49	68
14	103	DNG	03H 27.01	68
35	104	DNG	09H 42.57	66
31	106	DNG	18C 7.89	66
13	107	DNG	03H 9.21	68
23	107	DNT	11C .54	68
24	108	DNG	15C 18.41	70
24	108	DNG	15C 12.36	70
34	109	DNG	TSC 1.30	72
32	110	DNG	01H 14.34	70
3	112	DNG	04H 13.69	70
28	112	DNG	09H 38.17	70
8	115	DNT	TSH .22	72
5	116	DNG	10H 10.43	70
13	117	DNG	12C 32.93	72
12	118	DNG	09H 37.64	70
12	118	DNG	09H 39.73	70
12	118	DNG	12C 39.26	70
12	118	DNG	12C 38.63	70
12	118	DNG	12C 37.44	70
12	118	DNG	12C 35.65	70
7	119	DNG	01H 10.67	72

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
3	1	DNT	22C -.41	8
4	1	DNT	22C -.41	8
5	1	DNT	22C -.44	8
6	1	DNT	22C -.60	8
7	1	DNT	22C -.46	8
18	4	DNG	17C 19.44	88
5	5	DNG	17C 15.68	8
11	5	DNG	18C 12.40	8
6	6	DNG	13C 18.23	6
23	8	DNT	10H .50	2
24	8	DNG	10H 3.18	2
8	9	DNG	09H 43.59	2
12	10	DNT	10H .11	2
28	10	DNT	10H .44	2
30	10	DNG	20C 11.57	2
34	12	DNT	10H .51	8
9	14	DNG	10H 1.41	6
9	14	DNG	AV4 11.07	6
18	14	DNG	22C 10.35	6
20	14	DNG	14C 43.10	6
26	14	DNT	10H .51	6
26	14	DNT	11C .25	6
27	14	DNT	10H .55	6
27	14	DNT	10H -.60	6
27	14	DNT	11C .36	6
21	15	DNG	06H 39.58	8
7	16	DNG	AV4 10.54	6
16	17	DNG	06H 30.44	8
1	18	DNT	16C .00	74
23	18	DNG	TSH 7.11	6
2	21	DNG	17C 23.43	74
2	21	DNT	20C -.39	74
14	21	DNG	02H 6.91	12
37	21	DNT	10H .35	12
37	21	DNT	11C .49	12
9	23	DNG	22C 7.58	12

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
38	23	DNT	11C .35	12
45	23	DNT	10H .32	88
46	24	DNT	10H .33	12
27	25	DNG	01H 14.15	12
27	25	DNG	01H 21.18	12
27	25	DNG	04H 5.22	12
14	26	DNG	TSH 2.26	10
45	26	DNT	10H .52	14
33	27	DNG	19C 3.78	16
41	27	DNT	10H .48	16
41	27	DNT	11C -.34	16
44	27	DNG	01H 15.56	16
44	27	DNG	01H 16.33	16
48	28	DNG	06H 40.10	14
23	29	DNG	13C 22.44	16
44	29	DNT	10H .46	16
45	29	DNT	10H .48	16
48	30	DNG	07H 14.98	14
28	31	DNG	03H 27.87	16
43	31	DNG	15C 7.75	16
46	31	DNT	23C .58	16
47	31	DNT	10H .54	16
22	32	DNG	02H 16.75	14
26	32	DNG	12C 8.37	14
30	33	DNG	TSC 6.71	16
42	33	DNG	20C 16.73	16
23	35	DNT	19C .18	16
22	36	DNG	07H 42.16	14
43	36	DNG	02H 10.98	14
2	37	DNG	01H 26.89	3
44	37	DNT	TSH -.08	43
29	39	DNG	TSH 2.42	90
41	39	DNG	01H 5.37	24
43	39	DNG	04H 9.03	24
1	40	DNG	03H 34.83	3
15	40	DNG	17C 18.50	22
21	40	DNG	07H 27.01	22
13	41	DNG	21C 6.21	22

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
13	41	DNG	21C 4.88	22
39	41	DNG	AV3 27.64	22
48	41	DNG	AV4 .00	24
18	42	DNT	22C .47	22
34	42	DNG	06H 35.15	22
48	42	DNG	AV4 .00	22
30	43	DNG	06H 36.70	24
7	44	DNT	TSH .00	37
26	44	DNG	03H 2.73	22
26	44	DNG	03H 30.43	22
39	44	DNG	AV3 27.59	24
22	45	DNG	17C 19.57	24
33	45	DNG	14C 25.87	24
35	45	DNG	20C 13.71	24
39	45	DNG	AV3 27.76	24
8	46	DNG	08H 31.05	34
8	46	DNG	AV1 5.97	34
39	46	DNG	AV3 27.86	22
12	47	DNT	20C -.76	24
23	47	DNT	11C .38	24
39	47	DNG	AV3 27.78	24
30	48	DNT	05H .19	22
40	48	DNT	11C .43	22
46	48	DNT	11C .52	22
6	50	DNG	23C 4.58	34
1	51	DNT	10H -.05	3
3	51	DNG	15C 1.13	36
11	53	DNG	06H 43.63	28
19	53	DNG	04H 4.59	28
19	53	DNG	04H 40.94	28
6	55	DNG	AV4 11.90	34
40	55	DNT	TSH -.06	43
7	56	DNG	09H 40.85	36
8	56	DNG	01H 3.45	36
8	56	DNG	07H 36.82	36
8	56	DNG	12C 2.56	36
37	56	DNT	10H .48	34
37	56	DNG	12C 39.58	34

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
37	56	DNG	12C 38.15	34
18	58	DNG	03H 18.00	34
18	58	DNG	03H 24.04	34
18	58	DNT	04H -.03	34
24	58	DNT	TSH -.10	34
24	58	DNG	04H 4.15	34
19	60	DNG	10H 4.53	34
20	61	DNG	18C 10.40	38
45	62	DNT	11C .49	38
2	63	DNG	10H 10.29	74
4	63	DNG	03H 20.88	72
4	63	DNG	03H 31.31	72
12	63	DNT	TSH -.13	45
35	63	DNG	18C 13.26	40
8	64	DNG	AV4 10.73	70
40	64	DNG	01H 8.74	38
37	65	DNG	12C 12.37	40
37	65	DNG	13C 43.88	40
37	65	DNG	13C 38.74	40
37	65	DNG	13C 37.73	40
6	66	DNG	09H 18.16	70
6	66	DNG	09H 19.45	70
6	66	DNG	09H 20.37	70
6	66	DNG	09H 21.50	70
6	66	DNG	09H 22.06	70
6	66	DNG	09H 22.31	70
6	66	DNG	09H 23.25	70
6	66	DNG	09H 24.40	70
20	66	DNG	07H 13.30	38
40	68	DNG	16C 32.51	42
40	68	DNG	16C 33.52	42
40	68	DNG	16C 34.38	42
8	69	DNG	07H 19.56	72
10	69	DNG	01H 20.13	40
2	70	DNG	TSH 7.71	3
5	71	DNG	20C -.49	68
9	71	DNG	09H 16.14	68
9	71	DNG	09H 29.57	68

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
15	71	DNG	03H 24.34	44
4	72	DNG	10H 2.35	66
5	72	DNG	10H 4.44	66
5	72	DNG	AV3 .66	66
6	72	DNG	10H 4.25	66
6	72	DNG	AV4 .94	66
7	72	DNG	10H 4.11	66
8	72	DNG	10H 4.13	66
8	72	DNG	AV4 9.85	66
45	72	DNG	02H 15.88	42
7	73	DNG	10H 3.99	66
9	73	DNG	10H 4.56	66
10	73	DNG	07H 11.47	44
15	73	DNG	08H 26.48	44
15	73	DNG	08H 32.77	44
30	73	DNG	10H 9.51	44
35	73	DNG	01H 17.95	44
45	73	DNG	19C 3.19	44
45	73	DNG	22C 14.59	44
27	75	DNG	18C 6.92	48
45	75	DNG	05H 38.03	48
5	77	DNG	07H 35.68	66
30	77	DNG	TSC 4.49	48
37	79	DNG	20C 1.15	48
13	81	DNG	10H 3.77	48
29	81	DNG	15C 1.30	52
46	81	DNG	AV4 25.83	56
39	82	DNT	11C .56	54
39	82	DNT	11C -.74	54
31	83	DNG	03H 6.62	56
10	84	DNG	01H 1.89	54
13	84	DNG	02H 21.66	54
16	85	DNG	04H 32.60	56
37	86	DNT	11C .46	54
42	86	DNG	12C 40.67	54
42	86	DNG	21C .95	54
12	87	DNT	02H .54	56
17	87	DNG	22C 10.67	56

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
46	87	DNT	10H .63	56
4	88	DNG	08H 1.42	68
13	88	DNG	22C 4.50	54
10	89	DNG	12C 33.81	56
15	90	DNG	15C 5.36	54
25	90	DNG	04H 17.15	54
11	91	DNG	21C 13.96	56
26	91	DNT	11C .50	56
33	91	DNG	16C 12.03	56
23	92	DNT	11C .35	54
24	92	DNG	09H 41.32	54
24	92	DNT	11C -.74	54
29	93	DNT	11C .47	56
8	94	DNG	19C 13.16	68
18	94	DNG	17C 33.29	58
18	94	DNG	17C 32.40	58
18	94	DNG	17C 31.59	58
18	94	DNG	17C 29.25	58
24	94	DNG	18C 11.31	58
38	94	DNG	21C 1.84	54
4	95	DNG	16C -1.09	66
29	96	DNT	10H .51	58
30	96	DNG	21C 13.37	58
30	96	DNG	22C 13.32	58
11	97	DNG	TSC 2.35	60
28	97	DNG	18C 6.04	60
34	97	DNG	03H 13.30	60
46	97	DNT	11C .42	60
36	99	DNT	11C .47	60
34	101	DNT	10H .49	64
34	101	DNT	11C .45	64
12	102	DNG	13C 39.37	62
31	103	DNG	03H 23.61	64
31	103	DNG	03H 24.94	64
31	103	DNG	03H 26.24	64
31	103	DNG	03H 27.57	64
31	103	DNG	05H 27.49	64
31	103	DNG	05H 28.83	64

Dings and Dents

S/G C

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
31	103	DNG	05H 30.17	64
31	103	DNG	05H 31.48	64
12	104	DNG	06H 32.91	62
26	104	DNT	10H .41	62
18	105	DNG	12C 20.56	64
26	105	DNT	10H .46	64
26	105	DNT	11C .42	64
21	106	DNT	11C -.19	62
21	106	DNT	23C .00	62
30	106	DNG	19C 4.67	62
2	107	DNG	04H 44.63	5
28	107	DNT	10H .49	64
28	107	DNT	11C .47	64
34	107	DNT	10H .49	64
3	108	DNG	17C 21.17	68
28	108	DNT	10H .49	62
29	108	DNT	11C .46	62
2	110	DNG	10H 8.34	78
9	110	DNG	01H 16.71	68
28	113	DNG	09H 43.01	64
25	114	DNG	10H -1.10	64
25	114	DNT	10H -.08	64
25	114	DNT	11C .47	64
9	116	DNG	TSC 2.53	72
15	117	DNG	10H 4.97	64
1	118	DNG	02H 18.24	5
1	118	DNG	02H 16.31	5

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
12	2	DNG	06H 1.57	4
1	3	DNG	16C 3.52	66
15	3	DNG	06H 3.64	4
16	3	DNG	02H 9.23	2
16	3	DNT	10H .46	2
1	4	DNG	21C 2.19	66
9	5	DNG	16C 3.45	4
12	5	DNG	05H 4.10	2
12	6	DNG	09H 42.58	2
16	6	DNT	10H -.71	2
16	6	DNG	12C 44.43	2
8	8	DNG	02H 25.51	6
9	8	DNG	09H 15.80	8
14	8	DNG	09H 39.57	6
15	8	DNG	09H 34.59	8
25	8	DNT	10H .50	4
26	8	DNT	11C .43	2
2	9	DNG	08H 1.88	3
10	9	DNG	05H 2.78	6
10	9	DNG	16C 3.79	6
13	9	DNG	01H 9.14	8
14	9	DNT	10H .03	6
24	9	DNG	05H 2.05	6
6	10	DNG	16C 3.52	8
12	10	DNG	16C 2.76	8
13	10	DNG	09H 40.90	6
13	10	DNG	09H 43.73	6
13	10	DNT	10H .03	6
13	10	DNG	12C 40.43	6
16	10	DNG	12C 41.70	8
16	10	DNG	12C 42.65	8
30	12	DNG	12C 37.55	6
20	13	DNT	11C .52	6
20	13	DNG	12C 15.77	6
21	13	DNT	11C .40	8
23	13	DNT	10H -.61	8
23	13	DNT	10H .45	8

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
27	13	DNT	10H .48	8
14	14	DNG	15C 3.74	6
23	14	DNT	10H .48	8
27	14	DNT	10H .46	8
30	14	DNT	10H .54	6
17	15	DNG	09H 40.91	8
17	15	DNG	09H 41.99	8
23	15	DNT	10H .41	8
23	15	DNT	10H .43	76
30	15	DNT	10H .11	6
36	15	DNG	16C 3.54	6
36	15	DNG	16C 2.62	6
36	15	DNG	20C 11.50	6
14	16	DNG	12C 13.10	8
18	16	DNG	09H 42.04	8
31	16	DNG	02H 1.04	6
32	16	DNT	23C -.38	8
2	17	DNG	16C 3.88	68
9	17	DNG	09H 28.19	8
9	17	DNG	09H 33.25	8
9	17	DNG	12C 32.11	8
14	17	DNG	12C 43.04	6
29	18	DNT	11C .43	6
2	19	DNG	TSH 3.70	3
15	19	DNT	11C -.52	12
15	19	DNG	12C 43.87	12
38	19	DNT	11C .40	10
10	20	DNG	05H 3.78	12
2	21	DNG	09H 41.24	3
2	21	DNG	12C 16.85	68
11	21	DNT	11C -.42	10
43	21	DNT	11C -.75	10
10	22	DNG	09H 37.35	10
31	22	DNT	11C .42	12
43	22	DNT	11C -.66	12
44	22	DNT	11C .43	10
44	22	DNT	11C -.64	10
43	23	DNT	11C -.65	10

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
44	23	DNT	11C -.66	12
45	23	DNT	11C -.75	10
39	24	DNT	10H .56	12
40	24	DNG	12C 27.59	10
41	24	DNT	11C -.63	12
41	24	DNG	12C 36.66	12
43	24	DNT	10H .51	12
43	24	DNT	11C -.69	12
44	24	DNT	11C .51	10
44	24	DNT	11C -.62	10
46	24	DNT	11C .37	10
46	24	DNT	11C -.70	10
40	25	DNG	18C 6.52	14
43	25	DNT	11C -.69	16
44	25	DNT	11C -.62	14
45	25	DNT	11C .40	16
45	25	DNT	11C -.64	16
46	25	DNT	11C .37	14
46	25	DNT	11C -.68	14
10	26	DNG	21C 13.00	14
25	26	DNG	06H 11.73	16
41	26	DNG	22C 1.83	16
45	26	DNT	11C -.64	16
47	26	DNT	11C -.70	14
13	27	DNG	17C 42.03	16
47	29	DNG	09H 35.38	14
5	34	DNT	11C .62	24
5	35	DNG	14C 20.45	22
31	35	DNG	22C 5.56	22
47	40	DNT	10H .48	24
27	42	DNG	01H 8.17	28
27	42	DNG	01H 18.29	28
27	42	DNT	10H .54	28
27	42	DNT	11C -.66	28
41	42	DNT	04H .11	28
46	43	DNT	10H .43	26
40	44	DNG	06H 1.90	28
45	44	DNG	07H 36.22	28

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
38	45	DNG	14C 39.88	26
42	45	DNG	04H 26.99	26
19	47	DNG	18C 4.62	26
38	48	DNG	09H 16.44	32
13	51	DNG	01H 20.01	30
7	52	DNG	08H 28.10	32
7	52	DNG	08H 33.91	32
7	52	DNG	08H 36.21	32
23	53	DNG	TSH 2.48	30
34	53	DNG	09H 26.58	30
23	54	DNG	TSH 2.45	32
1	55	DNG	10H .80	3
23	56	DNG	TSH 2.53	36
23	57	DNG	TSH 2.46	34
1	58	DNT	10H .05	5
1	58	DNG	10H 1.33	68
10	58	DNG	10H 3.26	38
8	64	DNG	05H 23.11	38
8	64	DNG	05H 29.16	38
34	64	DNT	10H .68	38
38	66	DNG	06H 4.52	38
38	66	DNG	07H 4.25	38
42	66	DNG	05H 4.57	38
1	67	DNG	10H 1.01	5
23	67	DNG	TSH 2.31	40
47	67	DNT	10H .51	40
23	69	DNG	TSH 2.48	42
8	70	DNG	01H 6.31	44
23	70	DNG	TSH 2.46	44
23	71	DNG	TSH 2.39	42
23	72	DNG	TSH 2.45	44
46	72	DNG	12C 32.30	44
13	73	DNG	17C 19.04	42
18	74	DNG	04H 9.25	44
43	74	DNT	11C .48	44
40	76	DNT	10H .54	76
14	81	DNG	10H 3.13	48
14	81	DNG	10H 4.42	48

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
14	81	DNG	AV4 13.12	48
16	82	DNG	10H 4.56	46
16	82	DNG	AV4 13.66	46
47	82	DNG	AV4 27.15	48
15	83	DNG	14C 37.21	48
28	83	DNG	22C 14.83	46
47	85	DNG	AV4 27.01	48
12	86	DNG	10H 49.77	46
12	86	DNG	10H 4.35	46
25	86	DNG	13C 38.04	48
6	87	DNG	10H 3.97	46
10	87	DNG	AV4 12.44	46
4	89	DNG	10H 2.08	50
10	90	DNG	AV4 12.30	50
19	90	DNG	AV3 4.28	52
24	90	DNT	11C -.72	50
34	90	DNG	14C 28.28	50
14	91	DNG	TSH 1.13	50
35	92	DNG	22C 17.17	52
47	94	DNG	10H 24.30	56
46	96	DNT	AV4 .45	54
5	97	DNG	09H 28.07	56
33	97	DNG	03H 14.56	56
17	98	DNG	14C 7.96	54
7	100	DNG	19C 2.95	58
43	100	DNG	10H 126.17	58
11	101	DNG	09H 31.66	58
40	101	DNG	12C 39.83	60
41	101	DNT	11C .57	58
41	102	DNG	13C 21.22	60
35	104	DNT	11C .40	76
39	104	DNG	12C 32.19	60
3	107	DNG	10H 1.47	60
27	107	DNG	03H 5.27	60
15	108	DNG	12C 38.10	58
29	108	DNT	10H .59	58
23	111	DNG	09H 33.59	60
18	114	DNG	12C 35.42	62

Dings and Dents

S/G D

ROW	COLUMN	INDICATION	LOCATION	CAL NUMBER
15	115	DNG	06H 31.92	64
16	117	DNT	12C -.53	62
17	117	DNT	12C -.55	64
15	118	DNT	12C -.64	64
16	118	DNT	12C -.61	62

APPENDIX E

TUBES REMOVED FROM SERVICE

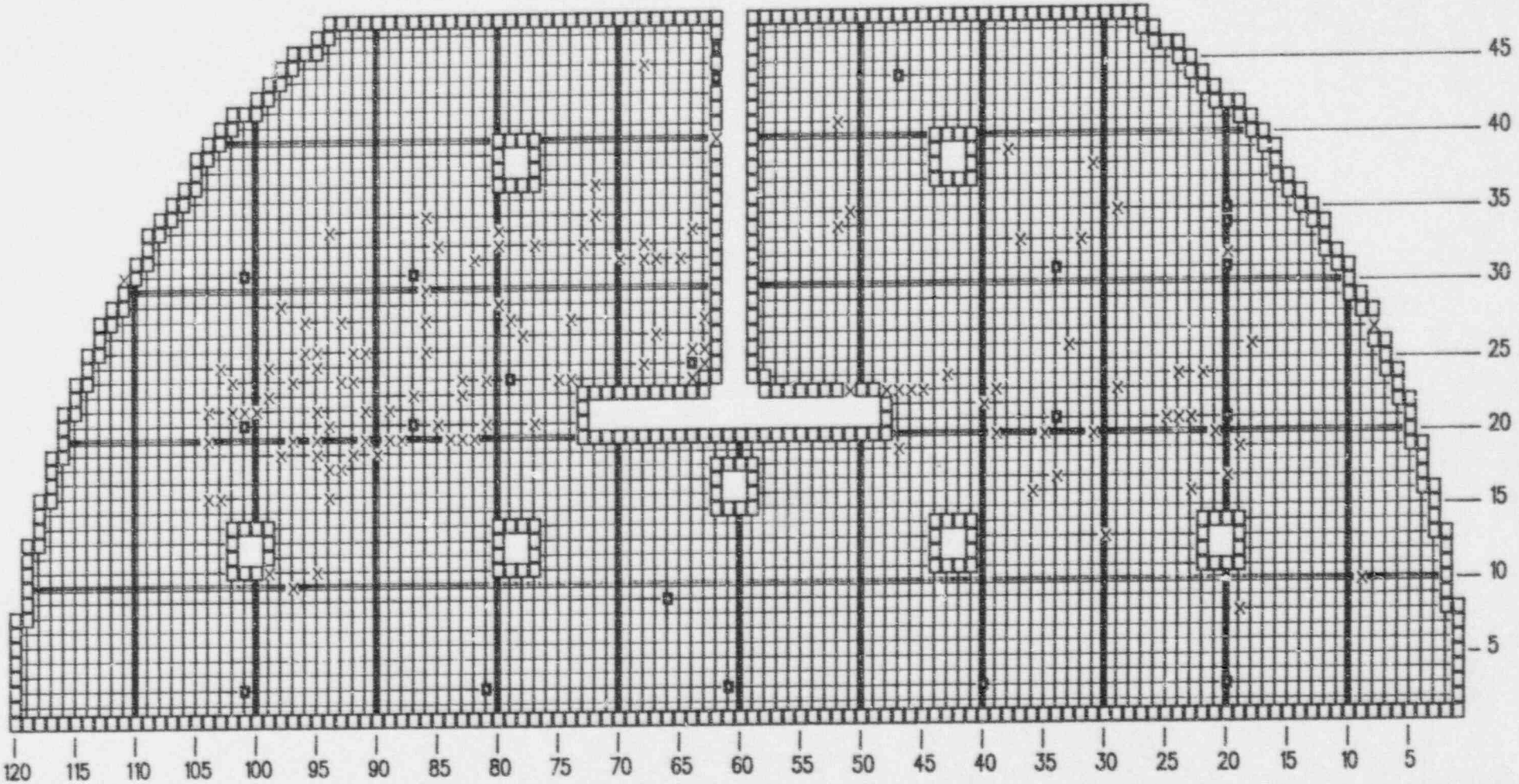
PRIOR TO AND DURING 2REO5

SG-A TUBES PLUGGED

BOTH LEGS
STP U2RE05

× : 125 TUBE PLUGGED DURING 2RE05

□ : 21 EXISTING PLUGGED TUBE

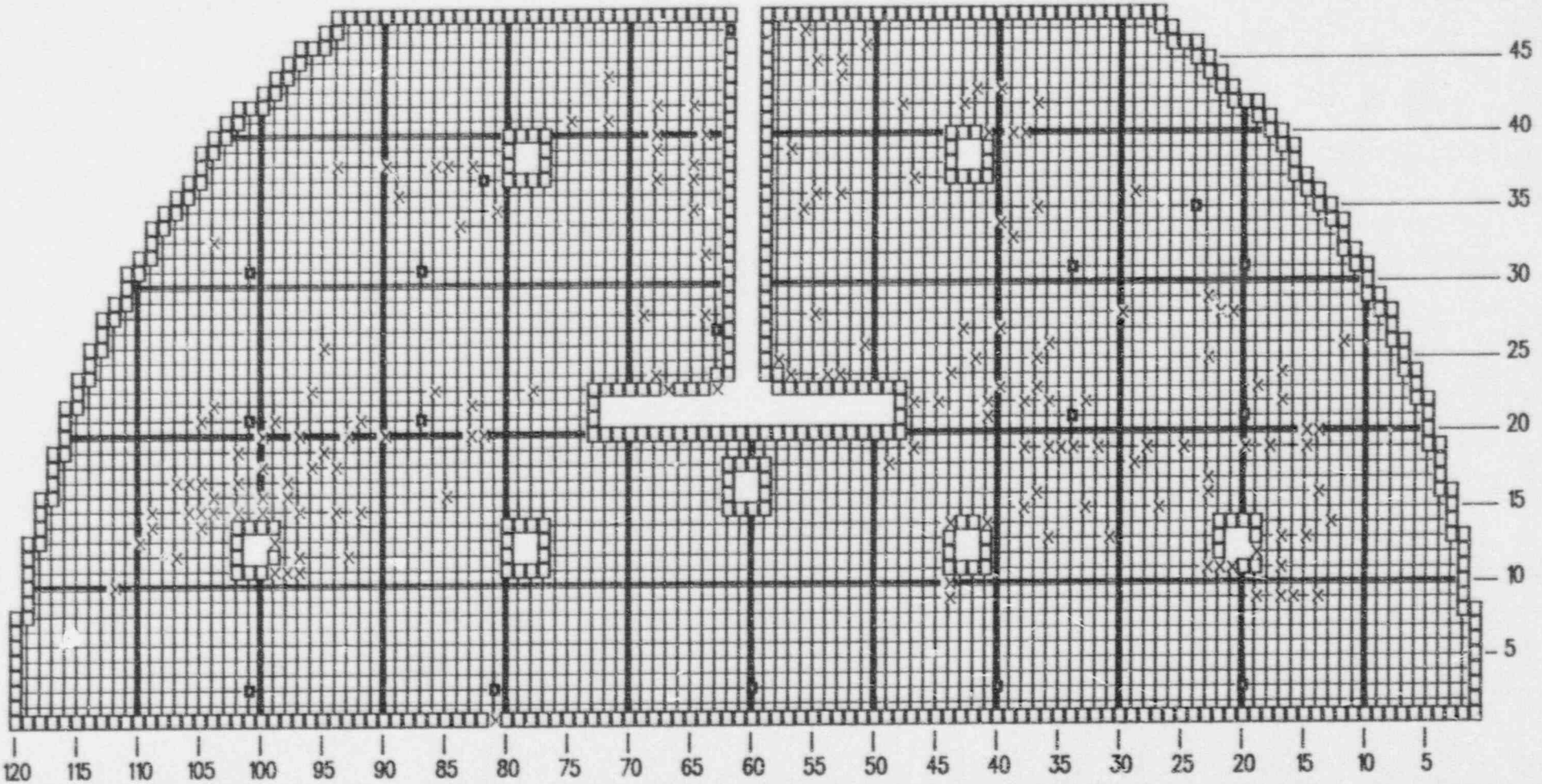


SG-B TUBES PLUGGED

BOTH LEGS
STP U2RE05

× : 169 TUBE PLUGGED DURING 2RE05

□ : 17 EXISTING PLUGGED TUBE

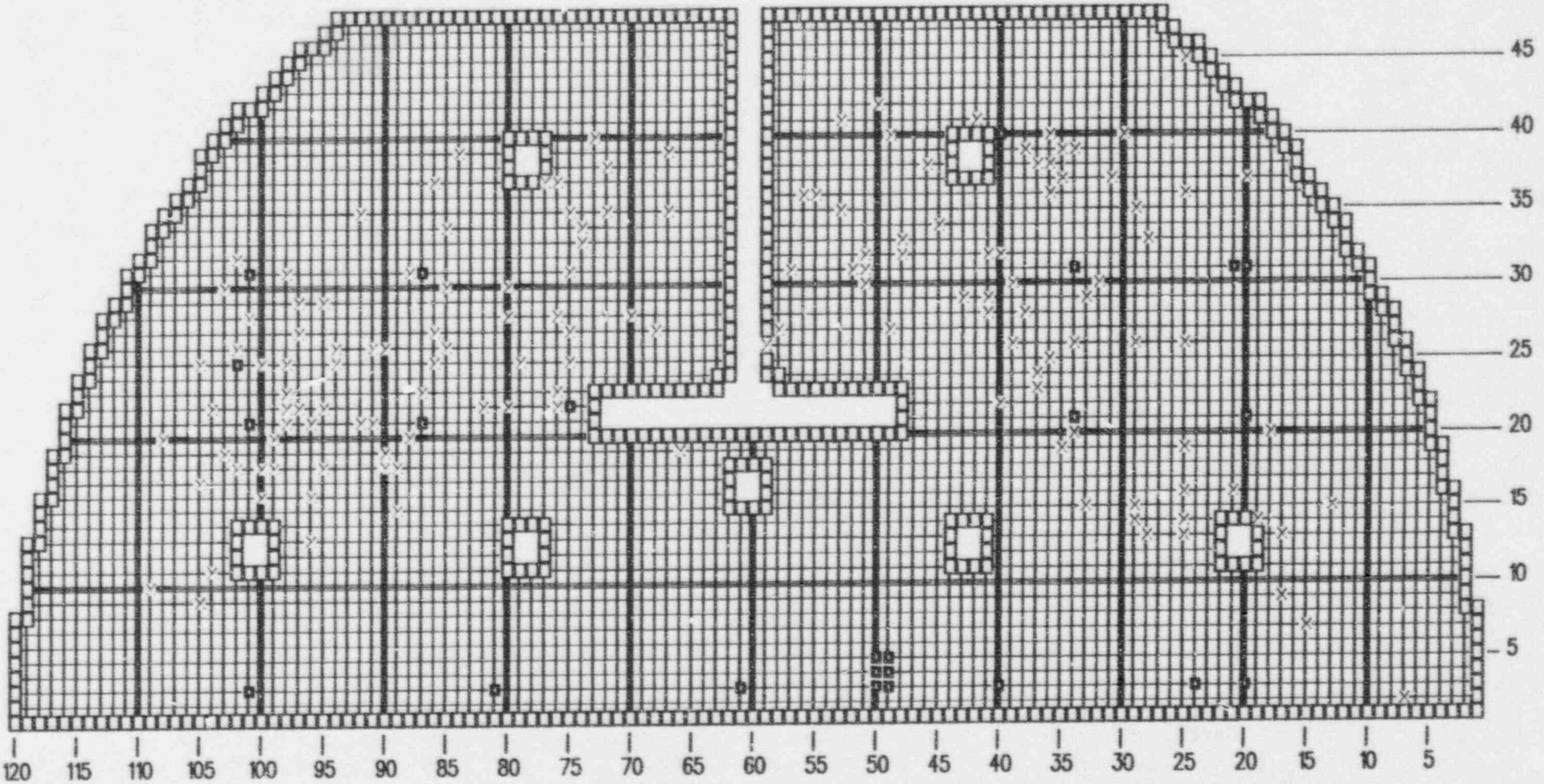


SG-C TUBES PLUGGED

BOTH LEGS
STP U2RE05

× : 146 TUBE PLUGGED DURING 2RE05

□ : 24 EXISTING PLUGGED TUBE

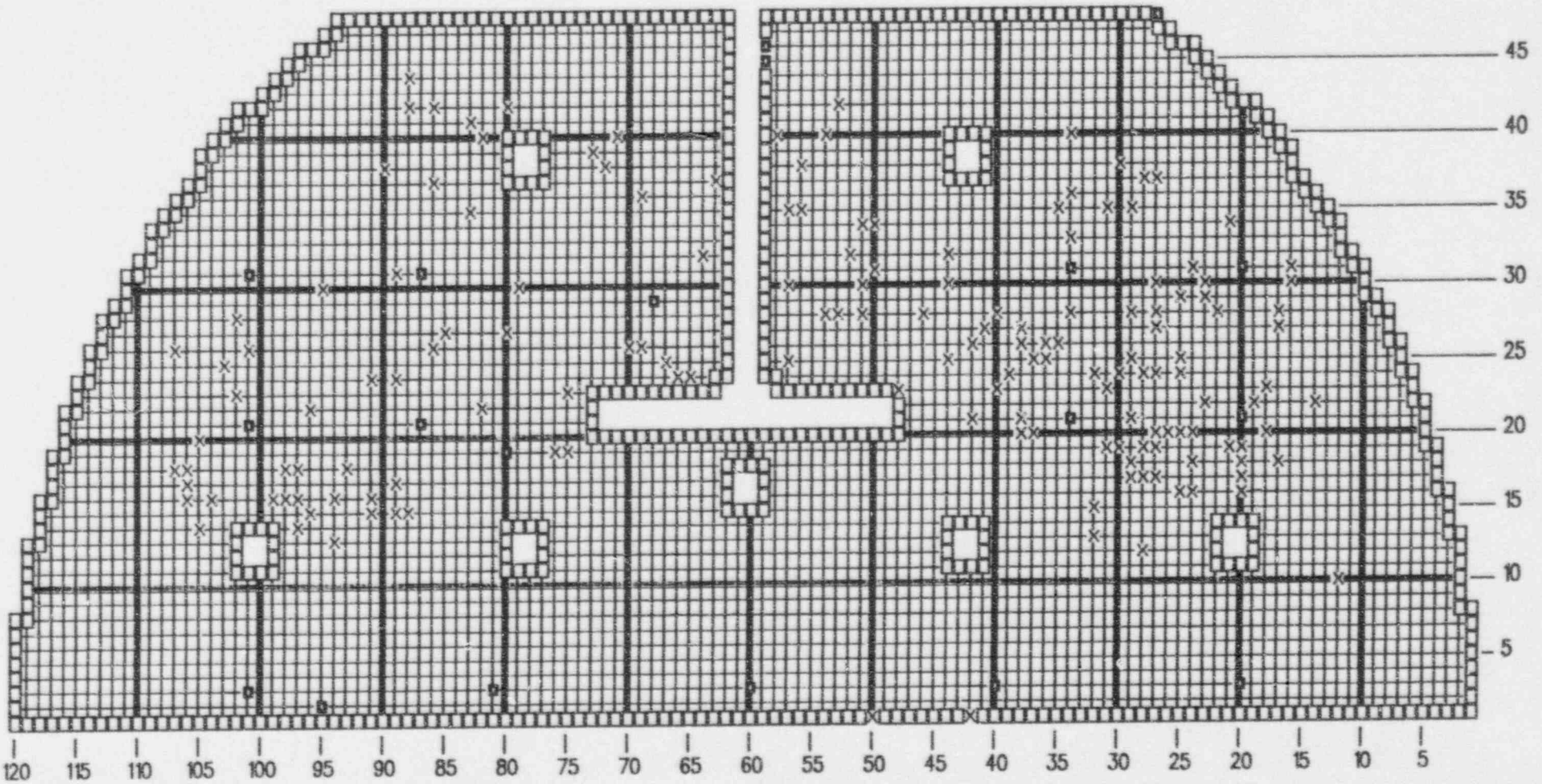


SG-D TUBES PLUGGED

BOTH LEGS
STP U2RE05

X : 161 TUBE PLUGGED DURING 2RE05

□ : 19 EXISTING PLUGGED TUBE



APPENDIX F

OWNERS REPORT
FOR
INSERVICE INSPECTIONS

NIS-1 FORM

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 1 (IWB) Items - Steam Generator Tubes**

Component or Appurtenance	Manufacture or Installer	Manufacturer or Installer Serial No.		National Board No.
Steam Generator 2A	Westinghouse (M)	2151		29
Steam Generator 2B	Westinghouse (M)	2152		30
Steam Generator 2C	Westinghouse (M)	2153		31
Steam Generator 2D	Westinghouse (M)	2154		32

HL&P by A C McIntyre Date 5-5-97 Arkwright Mutual Insurance Co. by B R Russell Date 5-12-97
A. C. McIntyre B. R. Russell, ANII

FORM NIS-1 (Back)

8. Examination Dates 2-11-97 to 2-22-97 9. Inspection Interval from 6-19-89 to 10-19-00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 1 (IWB) Items - Steam Generator Tubes)**
See Section 4.0 of the 2RE05 Inservice Inspection Summary Report for Steam Generator Tubing.

11. Abstract of Conditions Noted.
See Section 5.0 of the 2RE05 Inservice Inspection Summary Report for Steam Generator Tubing.

12. Abstract of Corrective Measures Recommended and Taken.
See Section 5.0 of the 2RE05 Inservice Inspection Summary Report for Steam Generator Tubing.

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of ASME Code, Section XI.

Certificate of Authorization No.(if applicable) N.A. Expiration Date N.A.

Date May 5 19 97 Signed Houston Lighting & Power Co. By A C McIntyre
Owner A. C. McInytre

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 2-11-97 to 5-12-97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

B. Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 5-12-1997