

REACTOR CONTAINMENT BUILDING
INTEGRATED LEAK RATE TEST
(SEPTEMBER 12 TO NOVEMBER 16 1991)

BRAIDWOOD UNIT TWO

JANUARY 17, 1992

UNIT 2 ILRT FINAL REPORT

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1.0 ABSTRACT

This report describes the first Type A containment leakage rate test conducted after the initiation of commercial service for the Braidwood Nuclear Power Station Unit 2 containment building. This report is prepared pursuant to the requirements of 10 CFR 50 Appendix J, Section V.B.3. The test was conducted through the performance of Braidwood Procedure 2BwVS 6.1.2.a-1, "Unit 2 Primary Containment Type A Integrated Leakage Rate Test (ILRT)" between September 12 and November 16, 1991. Final Leakage Rate Testing required to determine final values of containment leakage were performed between September 23 through November 16, 1992. Also included in this report is a summary analysis of all periodic Type B and Type C Local Leakage Rate Tests (LLRT) that were performed since the pre-operational Type A ILRT performed on September 6 to September 11, 1987.

The Type A test was performed at the beginning of the refueling outage to test the containment in an "As Found" condition without any repairs or adjustments.

The test was performed in accordance with 10 CFR 50 Appendix J, and the Braidwood Station Technical Specifications. The test method that was used was the Mass Plot Method.

During pressurization an unknown source of leakage was observed which was above the test acceptance criteria. The source of the leakage was attributed to the 2B Steam Generator. The leakage was blocked and the "As Found" ILRT test for the containment was subsequently declared a failure. This failure is attributed to a leak in one of the 2B Steam Generator's manway covers. During the restoration of the ILRT, the 2B upper manway cover was found to have its seating surface damaged by steam cuts. The manway cover was repaired and leaktightness was verified.

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Using the Mass Plot Method the total primary containment leak rate was calculated to be less than the allowable leak rate of 0.075 wt%/day (0.75La). The leakage rate was calculated to be 0.0527 wt %/day at a test pressure greater than 44.4 psig (Pa). The associated 95% Upper Confidence Limit (UCL) was 0.05359 wt %/day.

The supplemental induced leakage test result was measured at 0.1471 wt %/day. This value compared with the sum of the measured leak rate phase result 0.0527 wt %/day and the induced leak of 7.66 scfm (0.09928 wt %/day). The composite leak rate of 0.1471 wt %/day lies within the allowable tolerance band of 0.15198 wt %/day \pm 0.025 wt %/day.

After the ILRT, during the unit's refueling outage, LLRTs were performed. The results from these tests are added to the final ILRT total as the corrective leak rate. These are added for the systems that were not properly challenged during the ILRT. The "As Found" minpath leakage for all corrections was 8.63 scfh or 0.0018 wt %/day. Adding this leakage to the ILRT 95% UCL yields a total of 0.0554 wt %/day which is less than the 0.075 wt %/day acceptance criteria.

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2.0 TEST PREPARATION

2.1 TYPE A TEST PROCEDURE

The ILRT was performed in accordance with Braidwood Procedure 2BwVS 6.1.2.a-1, Revision 0. Temporary Procedure Change 6002 was written, approved and incorporated into the test. Changes incorporated included those to evaluate the leakage observed from 2B Steam Generator and minor changes which corrected, added or deleted steps to ensure proper execution of the test.

The Computer code used for calculations during the ILRT was the CECO Generic ILRT Computer Code, Software Product ID# GN01405-0.0.

2.2 PRE-TEST CONTAINMENT STRUCTURAL EXAMINATION

Prior to the containment pressurization, a visual examination of all accessible interior and exterior surfaces was performed. This inspection was accomplished by the performance of BwVS 6.1.6.3-1, "Visual Inspection of the Containment Surfaces prior to the Type A Leak Test". The results of this inspection were compared to the findings of the Preoperational Structural Integrity Test. No degradation of the containment structure or apparent changes occurred in the visual appearance of the interior and exterior surfaces of the containment structure since the previous inspection was noted.

2.3 TYPE A TEST INSTRUMENTATION

Twenty-five thermistors (THM's), ten dewcells (DEW's), and two absolute pressure gauges connected to the Volumetrics Dual Multiplexor Scanner and Data Acquisition System (DAS) were the main instrumentation used in the ILRT. Additional instrumentation used included ambient pressure and temperature gauges, and a flowmeter used to measure the induced leakage during the supplemental verification test. All instrumentation used was calibrated using standards traceable to the National Bureau of Standards (NBS).

Appendix A contains specifications for the test instrumentation including values for accuracy, repeatability, sensitivity and resolution for the THM's, dewcells and pressure sensors. The quality and quantity of sensors chosen were such that the Instrument Selection Guide (ISG as defined in ANSI 56.8-1981) would be less than 0.25La assuming failure of several THM's or dewcells and one pressure sensor.

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2.4 TYPE A TEST DATA PROCESSING

Containment parameters were acquired by the DAS in 10 minute intervals. This included time, date, THM temperatures, dewcell temperatures, and absolute pressure sensor readings. The data was sent electronically to the Prime Computer through a RS232 serial port. The Prime Computer was loaded with the ILRT computer code, which stored the incoming raw data into a permanent file from which it drew one data set at a time to compute the leakage rate. The data transfer and calculations were monitored by plant personnel from a Prime Computer User Terminal. Data collection occurred every 10 minutes for the duration of the test. Leakage rates, pressures, temperatures and calculation summaries were plotted in both tabular and graphic forms at regular intervals. This facilitated the identification and real time analysis of trends as they developed.

2.5 TYPE A TEST SUBVOLUME DETERMINATION

The containment has been divided into 9 discrete subvolumes. Subvolume demarcation, size and weighting factors are indicated on Figures 2.5.1. through 2.5.3. The subvolume partitioning scheme was changed from the Pre-Operations ILRT, which had only 5 subvolumes. This added to the test's accuracy by better monitoring the thermal stratification in the containment.

Figures 2.5.1 through 2.5.3 also show sensor placement in each of the subvolumes. In addition to the THM's and dewcells, the Multiplexor Scanner was located inside containment. The two Precision Pressure Monitors, the flowmeter for the induced leakage test and the DAS were located outside containment inside the auxiliary building.

2.6 PRE-TEST CONTAINMENT TEMPERATURE SURVEY

A temperature survey of the containment was performed prior to the pressurization of the containment. Each subvolume was surveyed in at least one location with a maximum of three temperatures taken per subvolume. Subvolumes three, five, six, seven and eight showed a differential in readings from 0.2 to 2.5 °F. This was determined by onsite NRC inspectors as abnormally high. The temperature survey was determined to be acceptable as long as; 1) when the next ILRT is performed, additional readings are taken per subvolume (if area is accessible), 2) these readings are within a to be determined acceptance band, and 3) the values are compared against ILRT instrumentation for consistency.

It should be noted that the Unit 1 ILRT temperature survey performed in February of 1991 is considered an existing valid temperature survey for the Braidwood type of containment. Although it was valid to use the Unit 1 survey for the Unit 2 test, it was considered prudent to perform the additional non-required temperature survey for the Unit 2 test.

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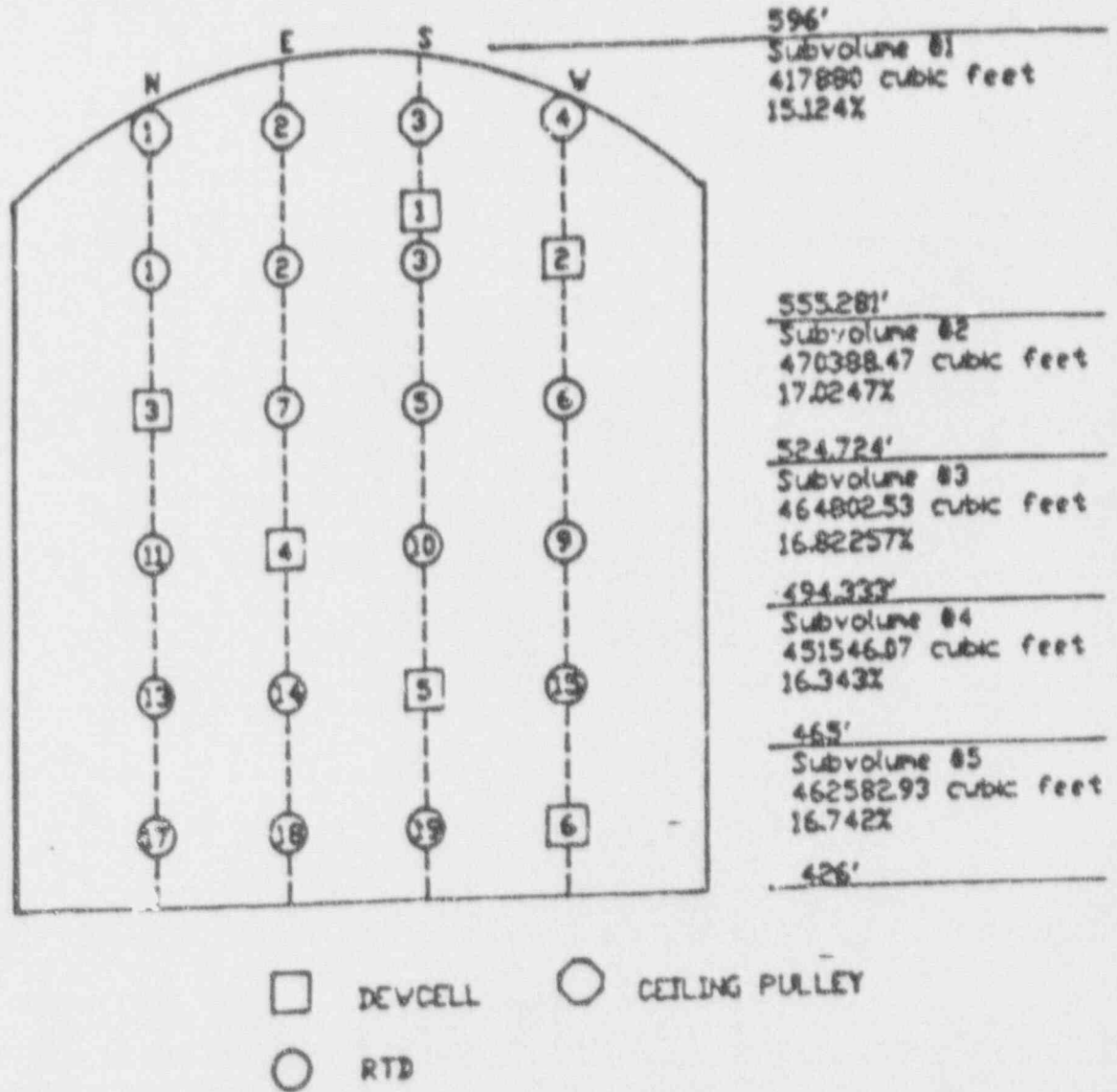
2.7 ILRT PLANT EQUIPMENT LINEUP

The valve and equipment lineups were detailed and specific, i.e. component by component with individual signoffs. This ensured containment integrity conditions as close as possible to those which would exist after a design basis Loss of Coolant Accident (LOCA). It also assured penetrations were properly drained and vented.

2.8 TYPE A TEST PRESSURIZATION

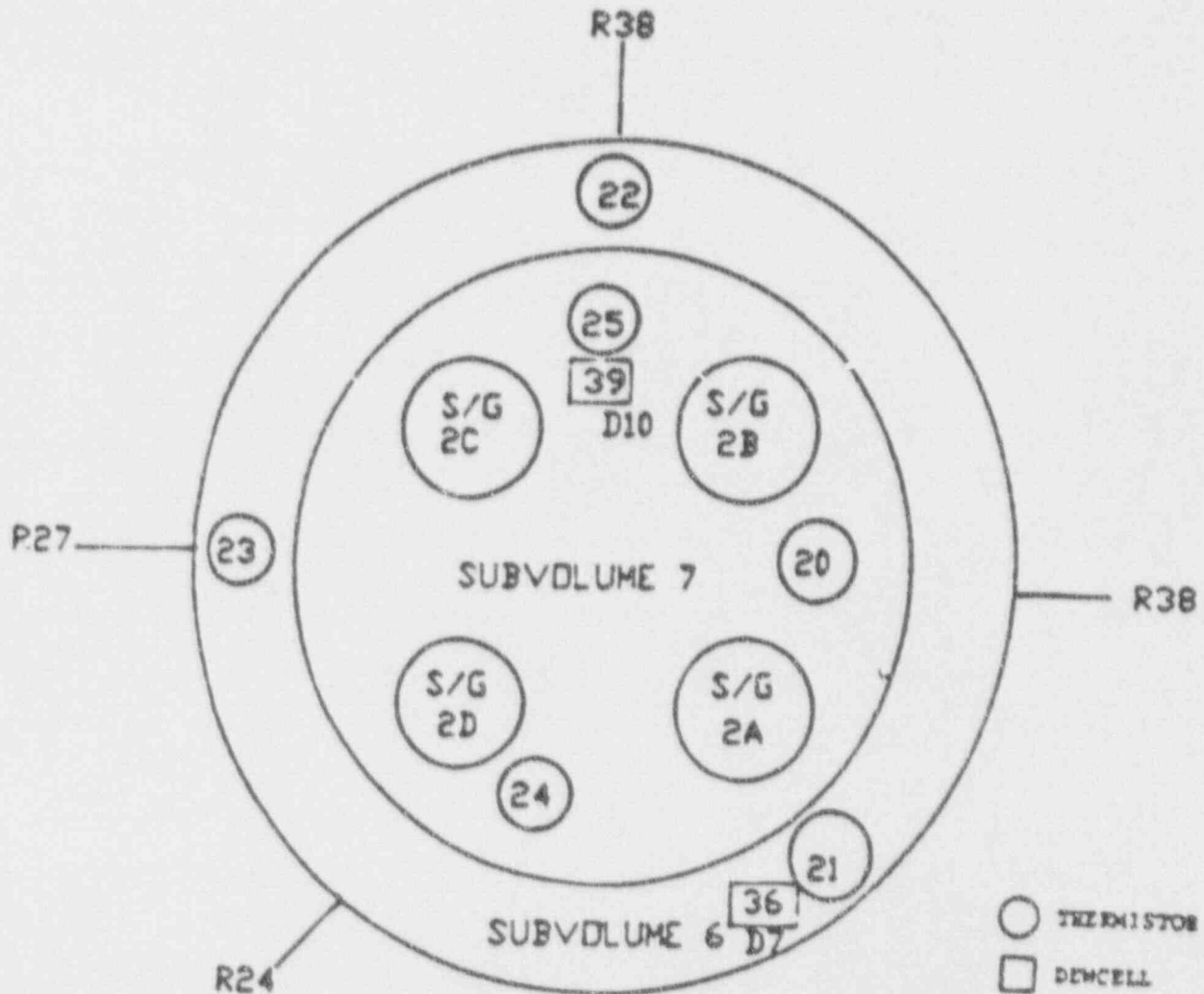
To pressurize containment to full test pressure, a system of 10 diesel driven, oil free compressors were used. The compressors were located outside on the northeast side of the containment building. Pressurization was accomplished through a six inch header which penetrates containment at penetration P-4. Once containment was pressurized, the pressurization header was isolated. A LLRT was performed on this penetration prior to the ILRT and the "As Found" leakage rate was included in the Type A Test Corrections (See Section 6).

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2.5.1 Containment Building Sensor Placement and Subvolume Identification (Elevation View)

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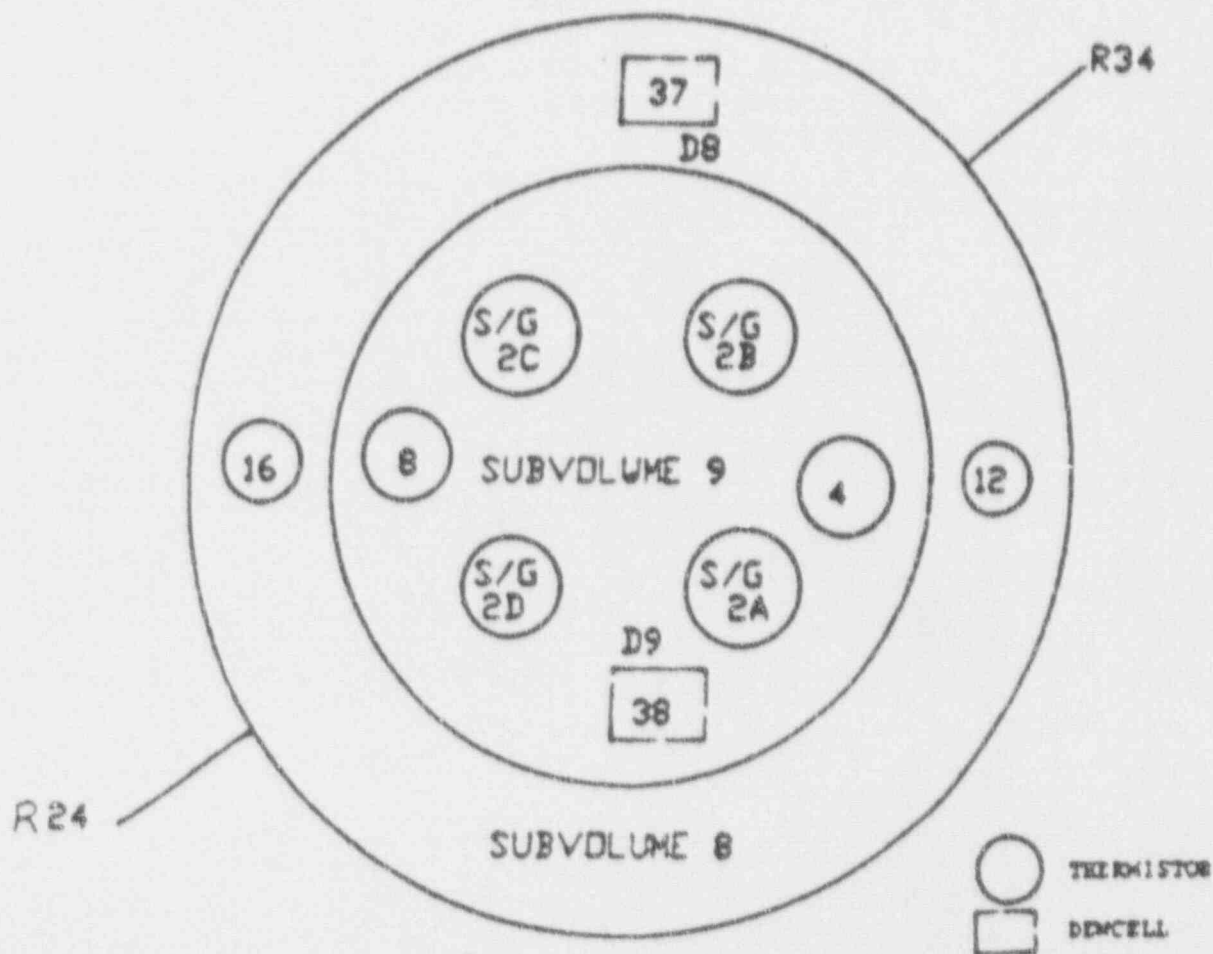
Subvolume 6: 154,567.28 ft³, 5.594%

Subvolume 7: 123,668.76 ft³, 4.476%

2.5.2

Containment Building Sens: Placement and Subvolume Identification for Elevators 398.5 to 426 (Plan View)

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Subvolume 8: 120.845.72 ft³. 4.374%

Subvolume 9: 96.688.24 ft³. 3.5%

2.5.3

Containment Building Sensor Placement and Subvolume Identification for Elevations 377 to 398.5 (Plan View)

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Table 2.6-1

Temperature Survey Data

<u>SUBVOLUME</u> <u>NUMBER</u>	<u>OBSERVED</u> <u>TEMPERATURE, °F</u>		
1	91.6	91.4	
2	91.5	91.4	
3	90.9	92.0	
4	90.1	91.5	
5	87.3	88.3	89.3
6	84.1	85.3	86.6
7	85.7	86.4	87.1
8	87.0	86.0	85.2
9	83.6	83.4	83.2

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3.0 TEST METHOD

3.1 STATISTICAL ANALYSIS TECHNIQUE

The absolute method of leak rate determination was used. The absolute method uses the ideal gas laws to calculate the measured leak rate. The inputs to the measured leak rate calculation include subvolume weighted containment temperature and vapor pressure, and total absolute air pressure. Computational methods used the perfect gas law and equations of state for a twenty-four hour test period. A least squares regression line for the measured total time leak rates versus time since the start of the test is calculated after each new data set is scanned.

Associated with the statistically averaged leak rate was the upper confidence limit.

3.2 SUPPLEMENTAL VERIFICATION TEST

The supplemental verification test superimposes a known leak of approximately the same magnitude as L_a (7.72 SCFM or 0.1 wt %/day as defined in the Technical Specifications). The degree of detectability of the composite leak rate (containment calculated leak rate plus the superimposed, induced leak rate) provides the basis for determining the certainty associated with the measured leak rate phase of the test. As the Mass Plot Method was the official test method used, the induced leak rate test was performed in a period of time until the statistical leak rate was both stable and within the acceptable band. The acceptance criterion for the test is that the statistically averaged composite leak rate be within $\pm 0.25L_a$ of the sum of the statistically averaged ILRT leak rate and the flowmeter induced leak rate. The requirements are not to use the upper confidence limit to evaluate the acceptability of the induced leakage phase of the ILRT.

3.3 INSTRUMENT ERROR ANALYSIS

An instrument error analysis was performed prior to the test and at the end of the measured leak rate and induced leak rate phases of the test. The analysis was performed in accordance with the definition of the Instrument Selection Guide (ISG) referenced in ANSI/ANS-56.8-1987. The inputs to the calculation include sensor sensitivity, repeatability and resolution for the pressure sensors, THM's and dewcells. A mathematical formula employed to determine the ISG can be found in Appendix B.

The ISG was calculated prior to the start of the test using the existing instrumentation configuration and expected values for containment parameters. Based on an anticipated 24 hour duration test, the maximum expected value for the ISG was 0.0022 wt%/day. The calculated ISG was 0.00289 wt%/day at the end of the measured leak rate test, and 0.00257 wt%/day at the end of the induced leak rate test. These are all within the acceptance criterion of $0.25L_a$ specified in ANSI/ANS-56.8-1987.

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The ISG is used only to demonstrate the system's ability to measure the required parameters to calculate the containment leak rate. The ISG is not based on a statistical analysis of the leak rate calculations, and does not affect these calculations. The computed ISG is not added to the value of the calculated leak rate.

One sensor (Dew #2, DAS Channel #42) was deleted from all calculations prior to the test due to erratic response characteristics. The locking out of the sensor did not cause the ISG to rise above the allowable value. The remaining eight dew cell sensors sufficiently modeled the containment for calculation of a volume weighted dew temperature.

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4.0 SEQUENCE OF EVENTS

The following narrative describes the sequence of events associated with the ILRT.

4.1 PRETEST PREPARATION

09/12/91

1600 Commenced 2BwVS 5.1.2.a-1, initiated sequence of events log. Activities include verifying prerequisites and hanging out-of-services associated with data sheets for Section F.1.0.

09/16/91

1730 Satisfactorily completed 1BwVS 5.1.6.3-1, "Visual inspection of the containment surfaces prior to the Type A Leak Test". No apparent changes have occurred in the visual appearance of the interior and exterior surfaces of the containment structure.

4.2 CONTAINMENT PRESSURIZATION

09/19/91

0500 Valve lineups completed, all pre-pressurization checks complete. Commenced pressurization of containment.

1400 Upper seal for inner personnel emergency hatch door operating mechanism leaking excessively. The leakage was blocked and the pathway will be considered an ILRT penalty.

1623 Upper and lower seal for inner equipment hatch door operating mechanism leaking excessively. The leakage was blocked and the pathway will be considered an ILRT penalty.

1630 Inspection of appropriate penetrations produced observed leakage from the following system vent paths:

- 1) 2PS-133 (medium)
- 2) 2PS9355B, packing leak
- 3) 2SA032, packing leak
- 4) 2RY8025, packing leak
- 5) 2RY8035, packing leak
- 6) 2RE9170, packing leak
- 7) 2PS9356B, packing leak
- 8) 2MS023B (slight)
- 9) 2SI-056 (small)
- 10) Emergency hatch door seal, upper seal
- 11) Equipment hatch door seal, upper and lower seal

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1700 Containment pressurization complete, following are observed conditions:

DAS #1 Pressure = 61.014 psia,

DAS #2 Pressure = 61.013 psia,

Ambient pressure = 14.6 psia.

Resultant Containment pressure information:

$P_1=46.414$ psig

$P_2=46.413$ psig

4.3 TEMPERATURE STABILIZATION

09/19/91

1719 Commenced start of temperature stabilization period with data set #145.

09/20/91

0800 Significant leak rate calculated using the computer program. Suspect leakage through 2B Steam Generator manway.

1225 Temporary procedure change approved to close the vent on 2B Steam Generator and pressurize the steam generator to slightly less than containment pressure.

1239 Commenced to pressurize 2B Steam Generator main steam piping void up to the Main Steam Isolation Valve with air.

1438 2B Steam Generator piping volume pressurized.

1725 Instrument channel #42 locked out due to erratic readings.

2345 Commenced to hourly log air pressure in 2B Steam Generator using a precision pressure monitor.

4.4 STATISTICAL LEAKAGE RATE TEST/INDUCED LEAKAGE TEST

09/21/91

0315 Commenced statistical leak rate test.

0319 Initial data set for statistical leak rate test collected. Initial data set is #349.

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09/22/91

- 0459 Completed statistical leak rate test with data set #503.
- 0519 Commenced induced leak rate stabilization period with data set #505.
- 0619 Completed induced leak rate stabilization period with data set #511.
- 0809 Completed induced leak rate test with data set #522.

4.5 DEPRESSURIZATION AND POST-TEST ACTIVITIES

09/22/91

- 1030 Commenced depressurization of the containment.

09/23/91

- 0300 Containment depressurized, inner door opened to facilitate post test containment inspection.
- 0400 Post test inspection satisfactory. No major observable damage to equipment or containment structure has occurred, no abnormal conditions exist. Minor damage to: 1) RCDT level indicator, 2) RCDT Pressure indicator, 3) 2TI-SX 111, 114, 116 and 119 shattered. 2B Steam Generator inspected (which is pressurized with air) and leakage can be heard near the large manway cover. ILRT instrumentation visually inspected, no abnormal conditions noted. Restoration of system valve lineups and local leak rate testing commencing.
- 1200 Major leak identified on 2B Steam Generator secondary manway, dwg. #PG-2C-2RC01BB. Work request written to repair.

11/13/91

- 1300 Post maintenance leak check of 2B Steam Generator manway which leaked during the ILRT complete. No observable leakage.

11/15/91

- 1500 Completed 1BwVS 6.1.2.a-1.

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5.0 ILRT DATA

The following report sections present computer data for the three main sections of the ILRT.

5.1 TEMPERATURE STABILIZATION PHASE DATA

The temperature stabilization phase demonstrated proper temperature stability prior to the beginning of the test. The thermal parameters are graphically shown in Figures 5.1.1 and 5.1.2. A summary of the computer data can be found in Appendix C.

5.2 MEASURED LEAK RATE PHASE DATA

Graphic results of the measured leak rate test are found in Figures 5.2.1 through 5.2.7. A summary of the computed data using the Mass Plot Method can be found in Appendix D.

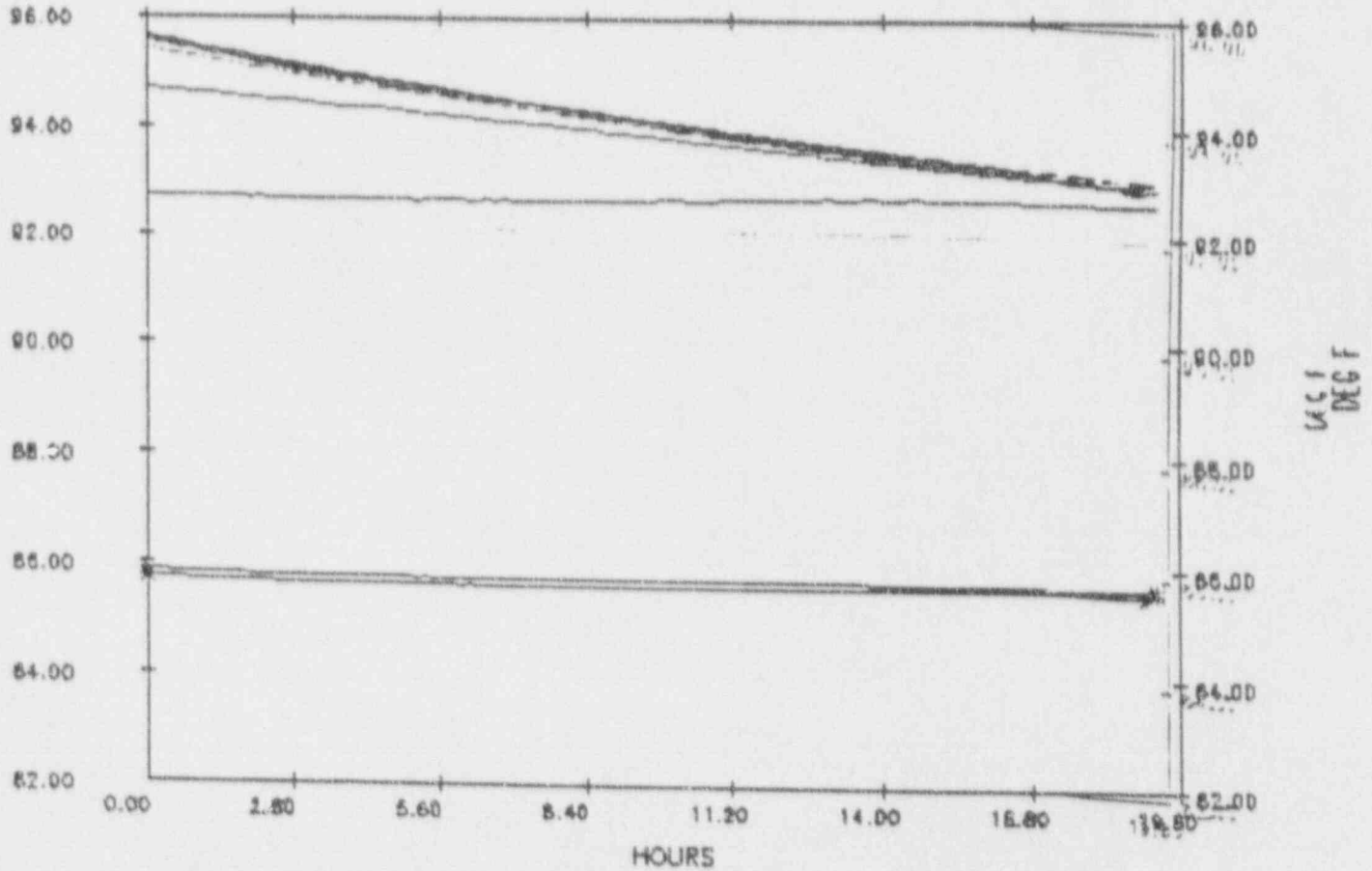
5.3 INDUCED LEAKAGE PHASE DATA

The calculated leak rate and target value leak rates associated with the induced leakage test are shown in Figure 5.3.1. Containment conditions during this phase of the test are shown in Figures 5.3.2 through 5.3.6. A summary of the Induced Leakage Phase data of the ILRT can be found in Appendix E.

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AVE SUBVOLUME RTD TEMPERATURES VS TIME

SV 1 SV 4 SV 7 Normal Test
SV 2 SV 5 SV 8
SV 3 SV 9



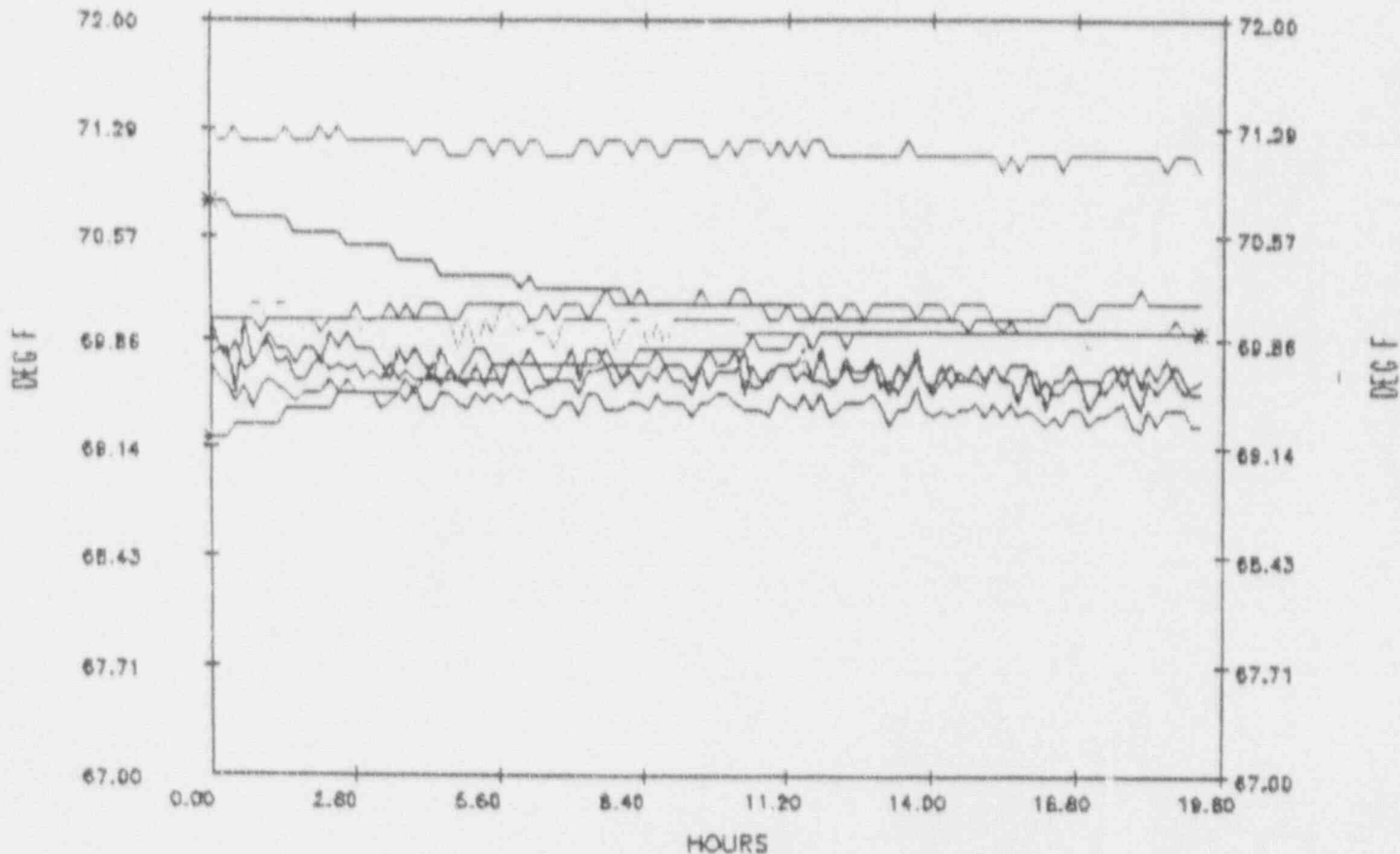
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5.1.1 Average Subvolume Temperature, Stabilization

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AVE SUBVOLUME DEWCELL TEMPERATURES VS TIME

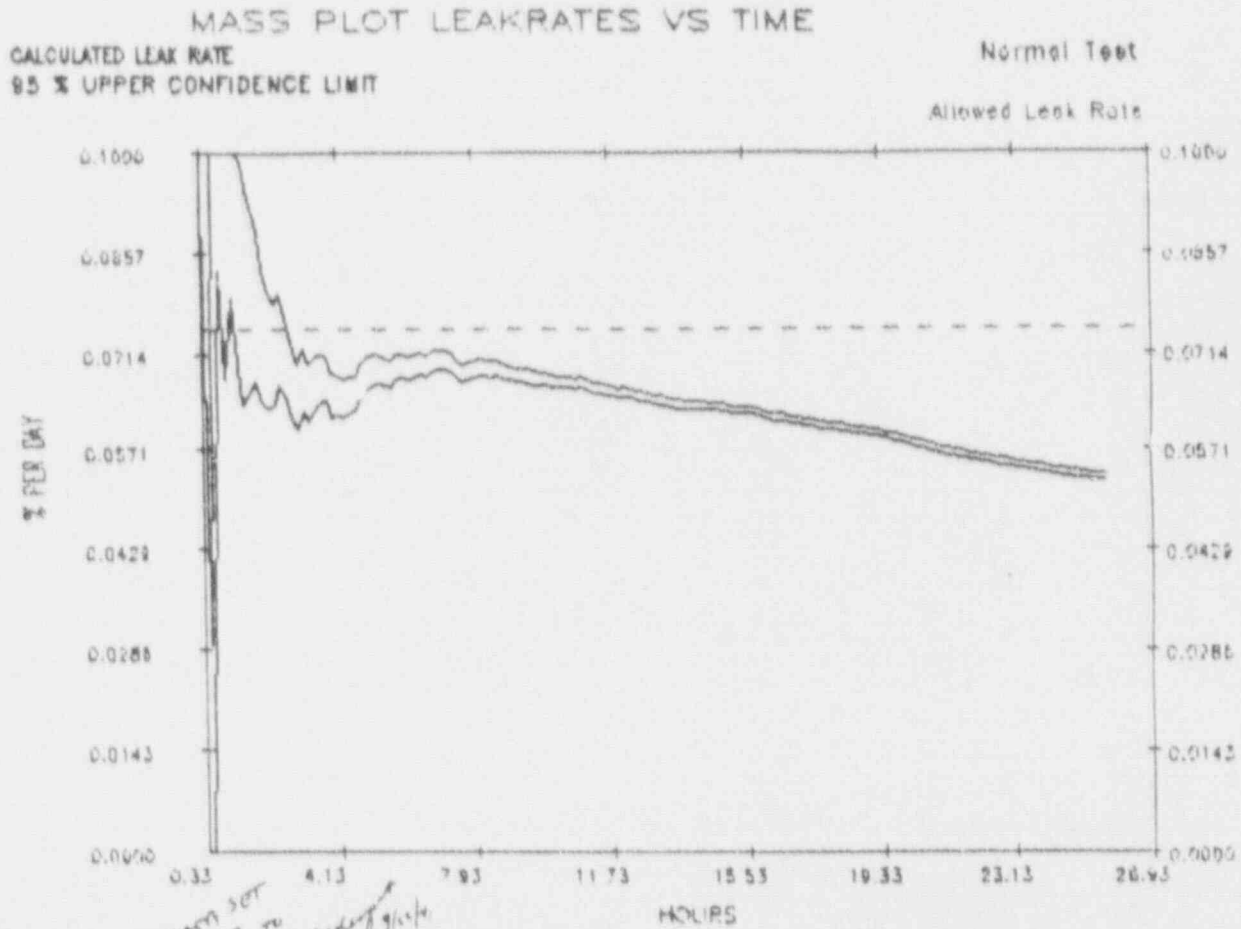
SV 1 SV 4 SV 7 Normal Test
SV 2 SV 5 SV 8
SV 3 SV 9



SOFTWARE ID NUMBER: GNO1405-00

5.1.2 Average Subvolume Dewcell Temperature, Stabilization

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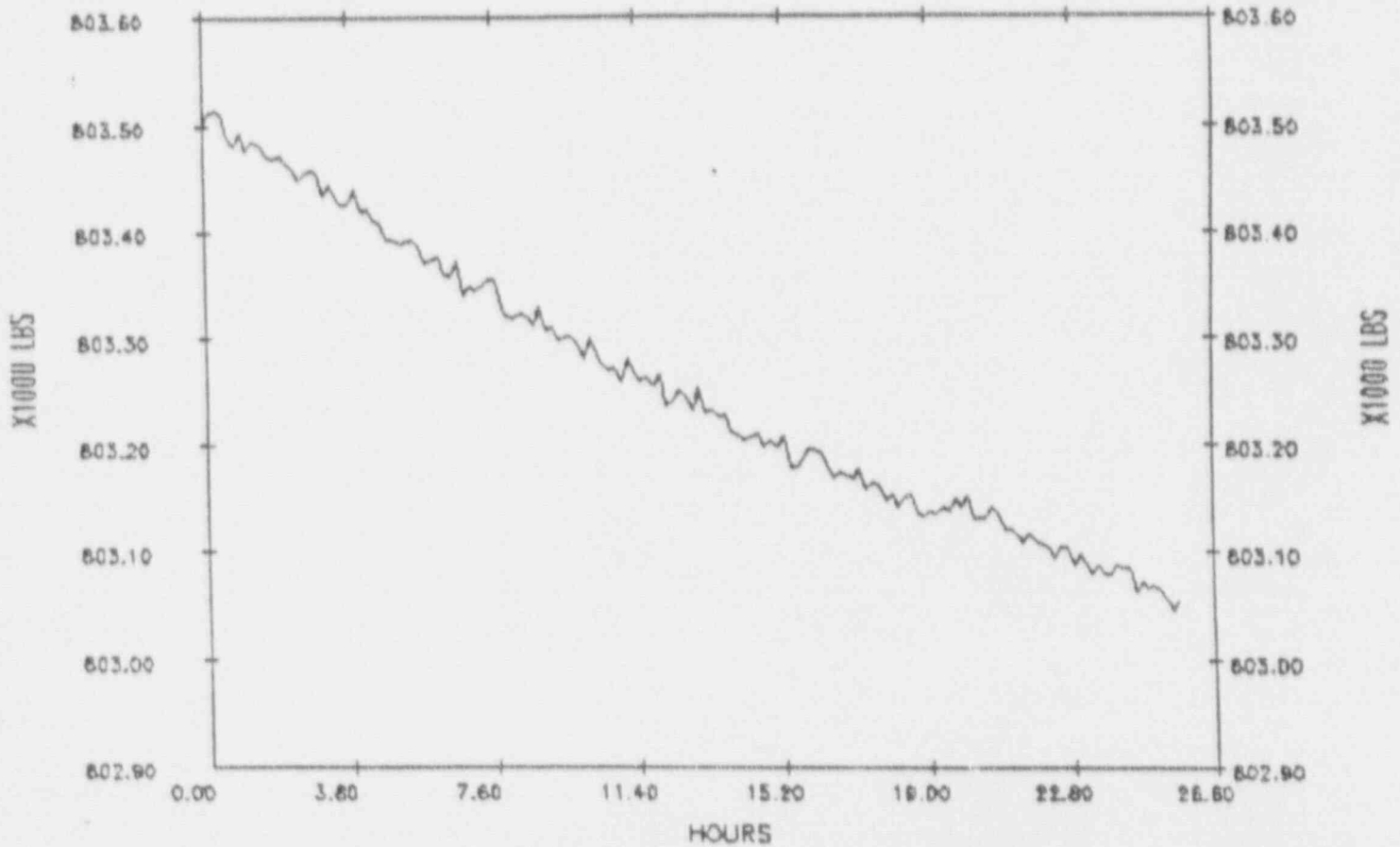
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5.2.1 Mass Plot Leak Rate Statistical Test

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CONTAINMENT DRY AIR MASS VS TIME

Normal Test



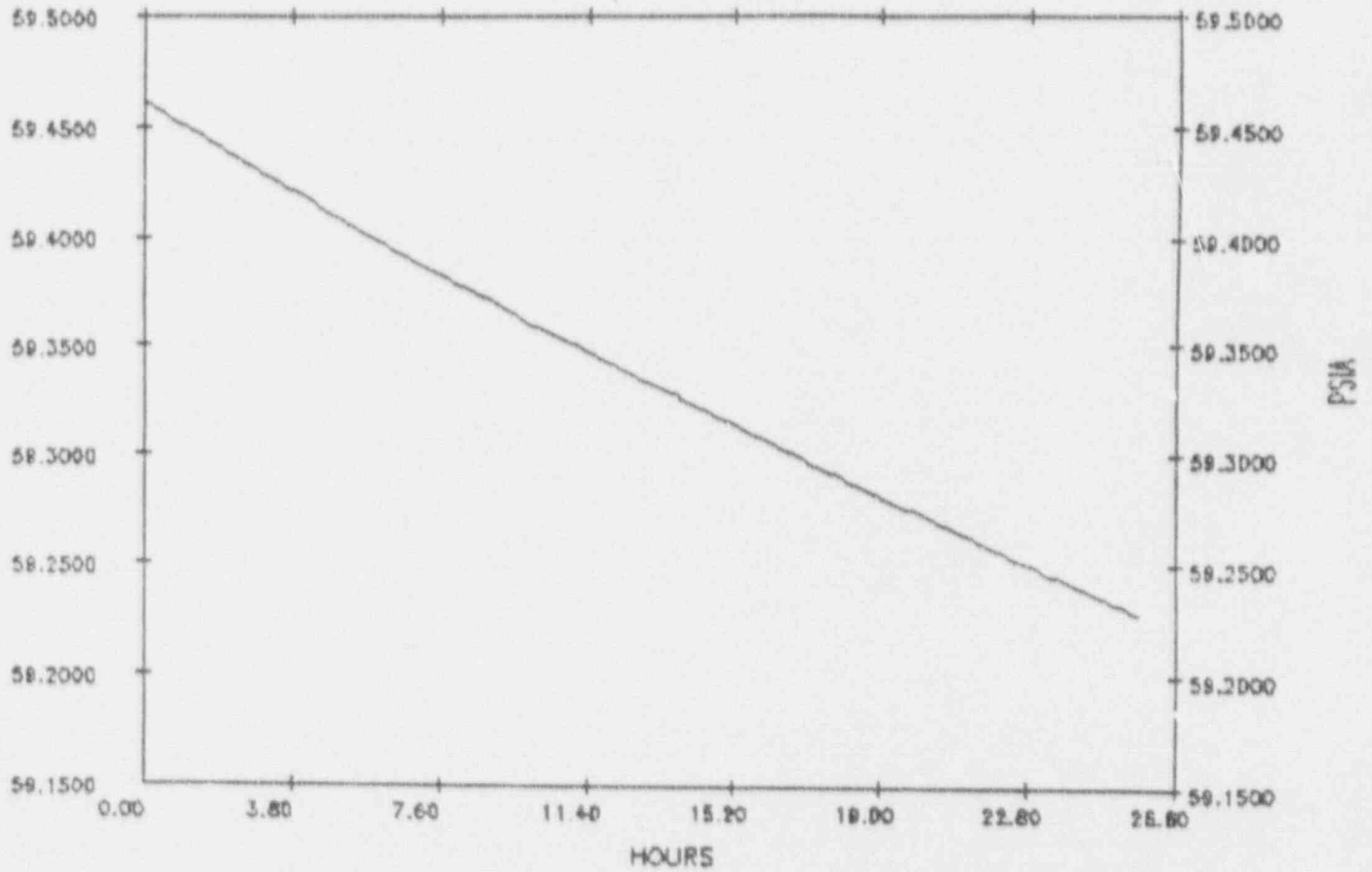
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5.2.2 Containment Dry Air Mass-Statistical Test

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CONTAINMENT DRY AIR PRESSURE VS TIME

Normal Test



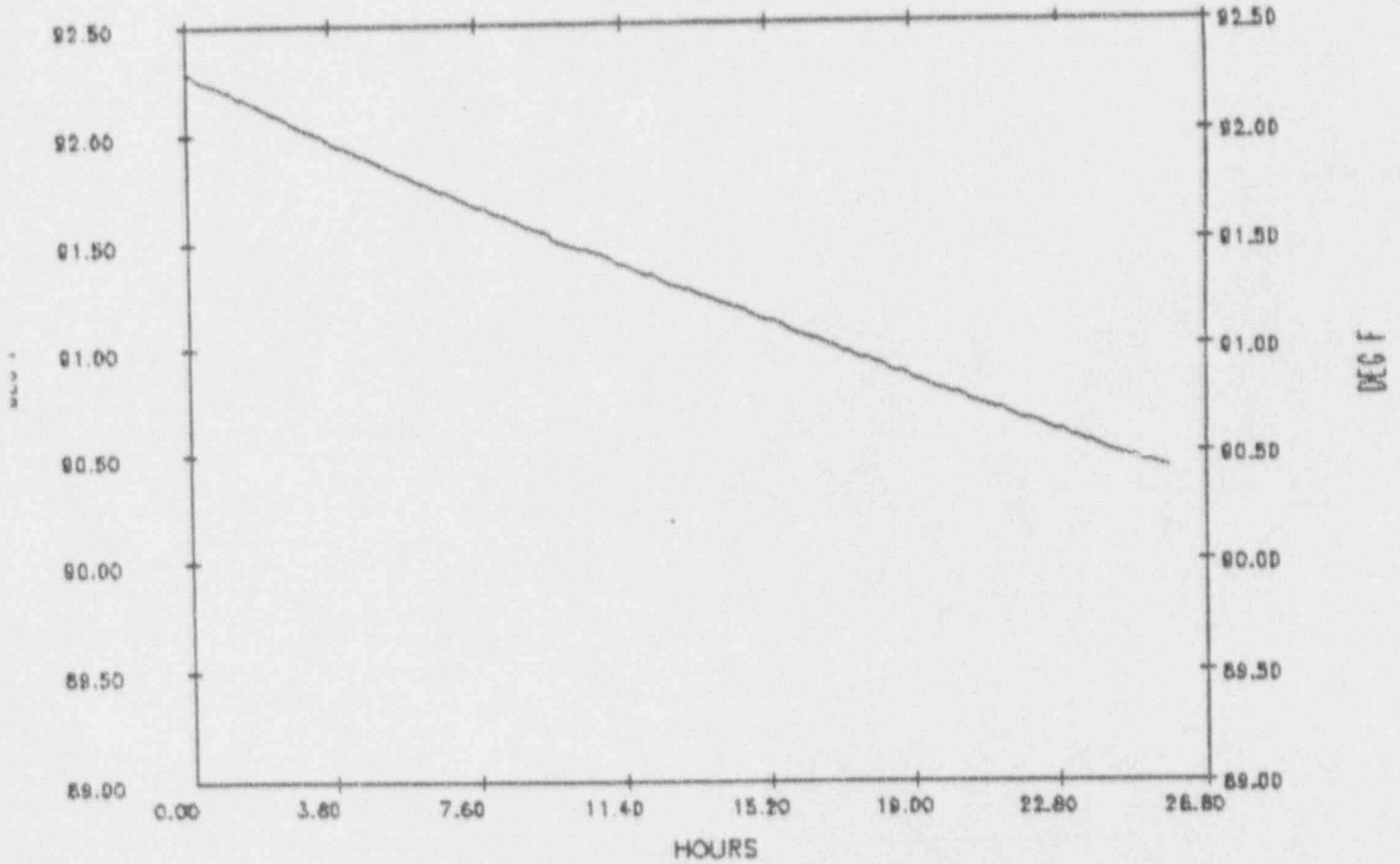
SOFTWARE ID NUMBER: GN01405-0.0

5.2.3 Containment Dry Air Pressure-Statistical Test

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CONTAINMENT AIR TEMPERATURE VS TIME

Normal Test



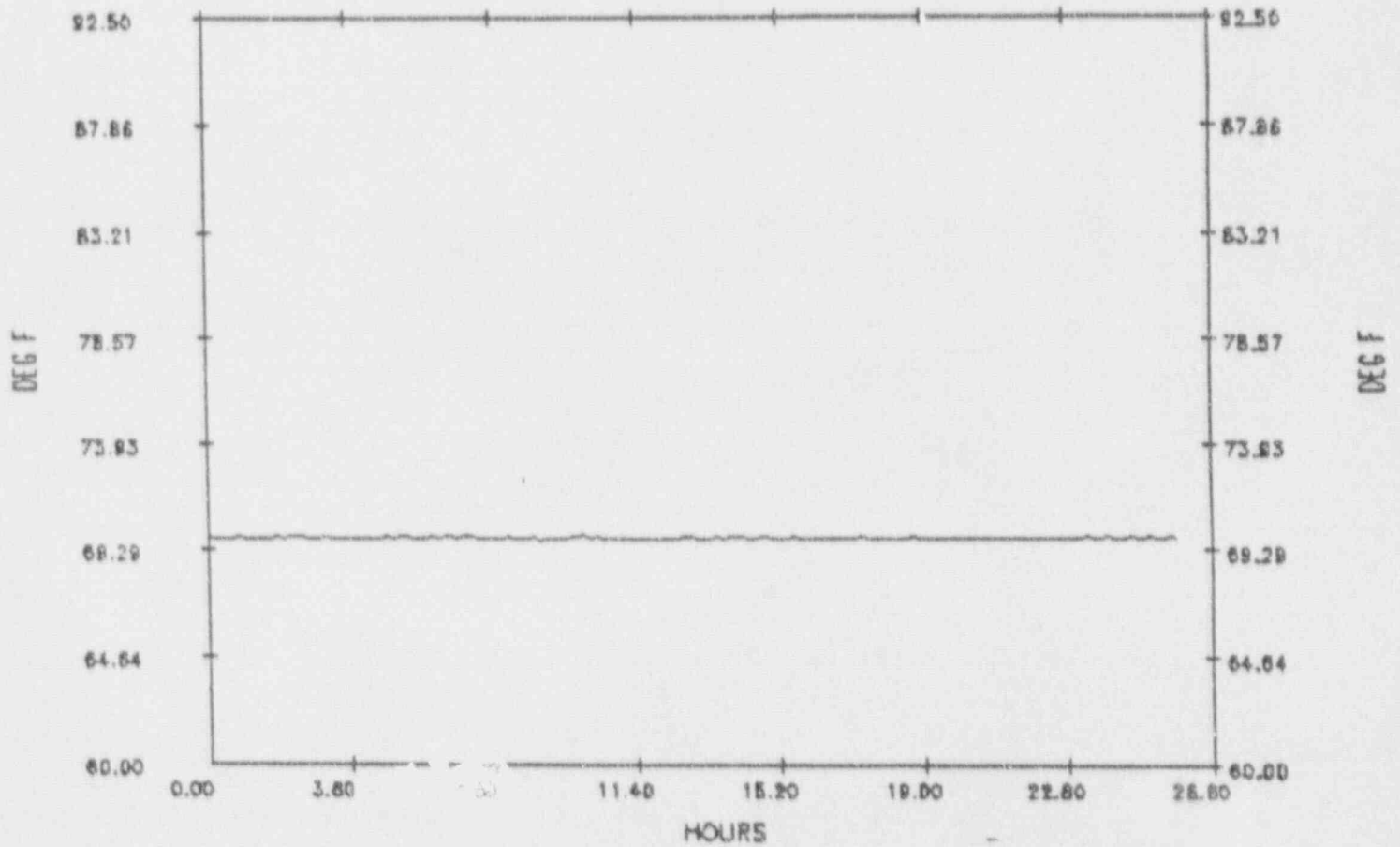
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5.2.4 Containment Air Temperature-Statistical Test

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CONTAINMENT DEWCELL TEMPERATURE VS TIME

Normal Test



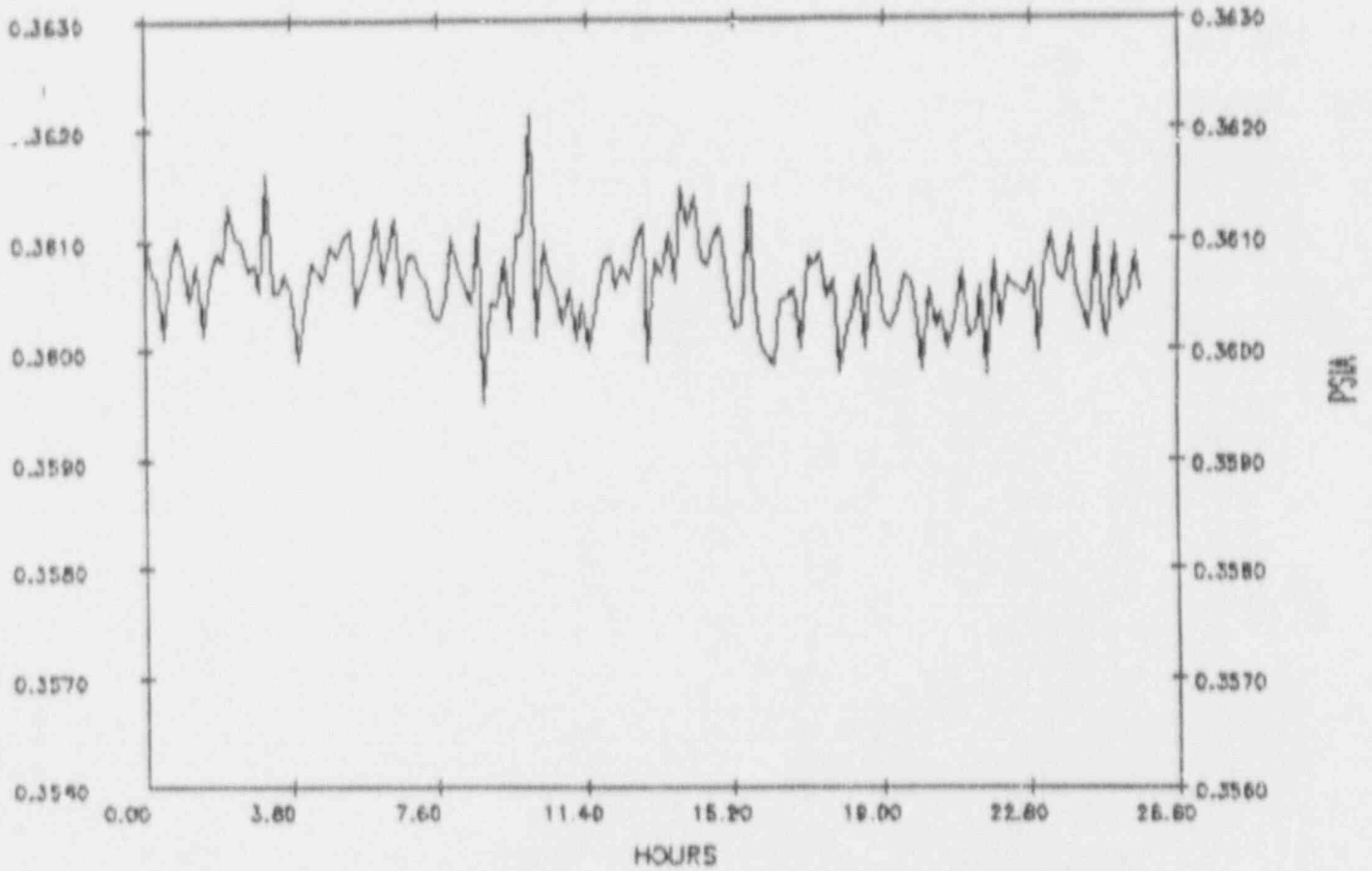
SOFTWARE ID NUMBER: GN01405-0.0

5.2.5 Containment Dewcell Temperature-Statistical Test

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CONTAINMENT VAPOR PRESSURE VS TIME

Normal Test



SOFTWARE ID NUMBER: GN01405-0.0

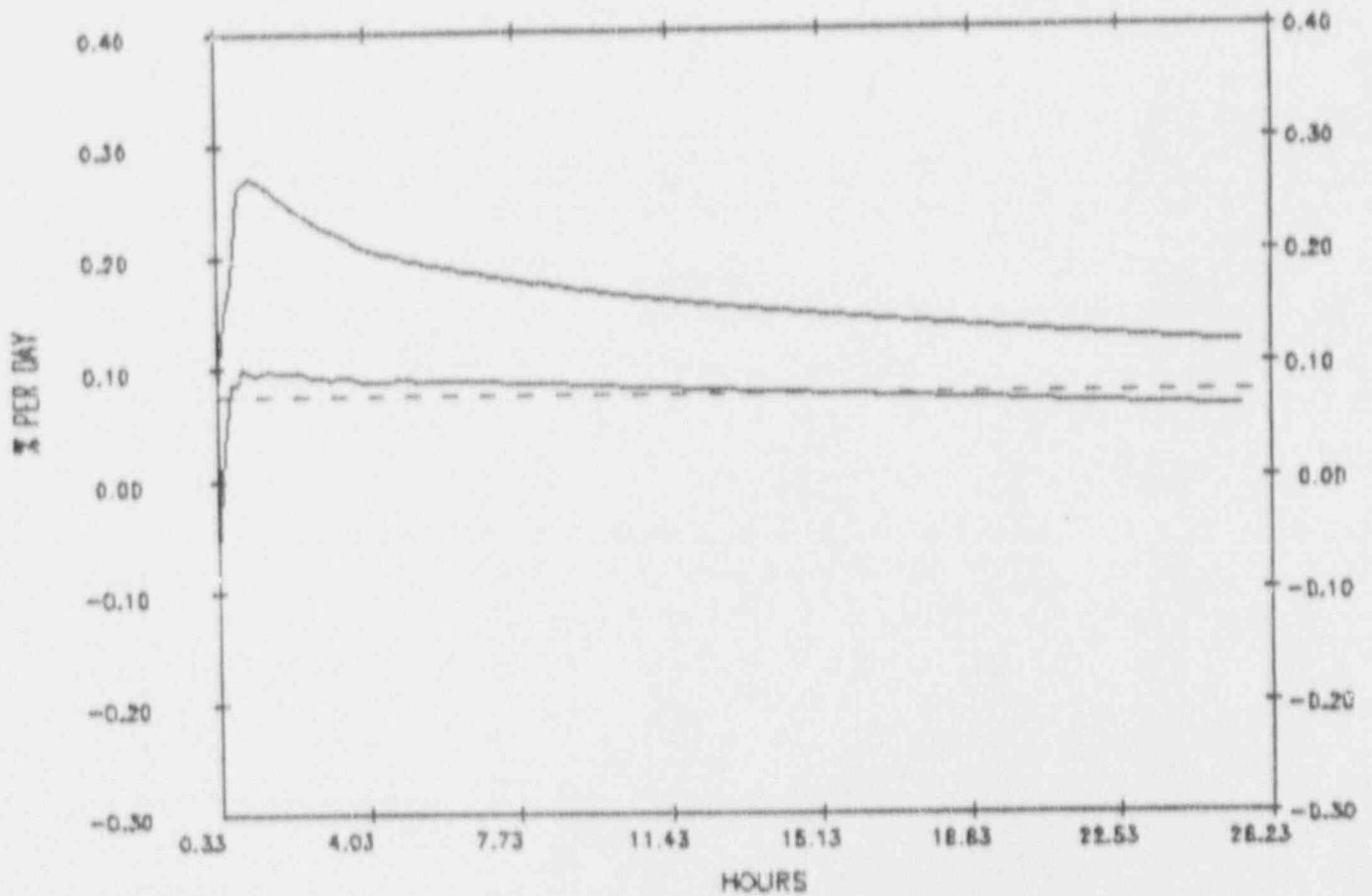
5.2.6 Containment Vapor Pressure-Statistical Test

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BN-TOP-1 LEAKRATES VS TIME

CALCULATED LEAK RATE
95 % UPPER CONFIDENCE LIMIT

Normal Test
Allowed Leak Rate

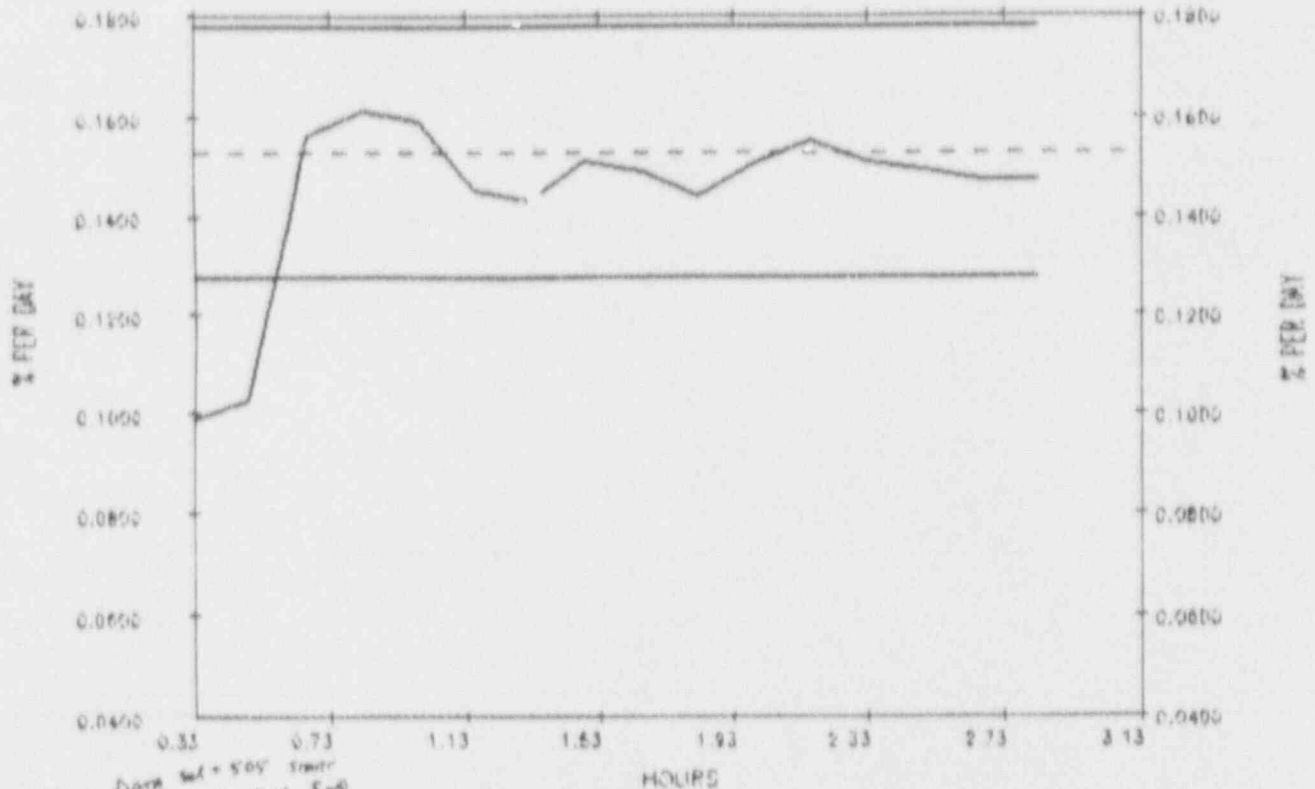


SOFTWARE ID NUMBER: GN01405-0.0

5.2.7 BN-TOP-1 Leak Rates-Statistical Test (Information Only)

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MASS PLOT LEAKRATES VS TIME
CALCULATED LEAK RATE
UPPER AND LOWER BOUNDS
Verification Test
Target Leak Rate



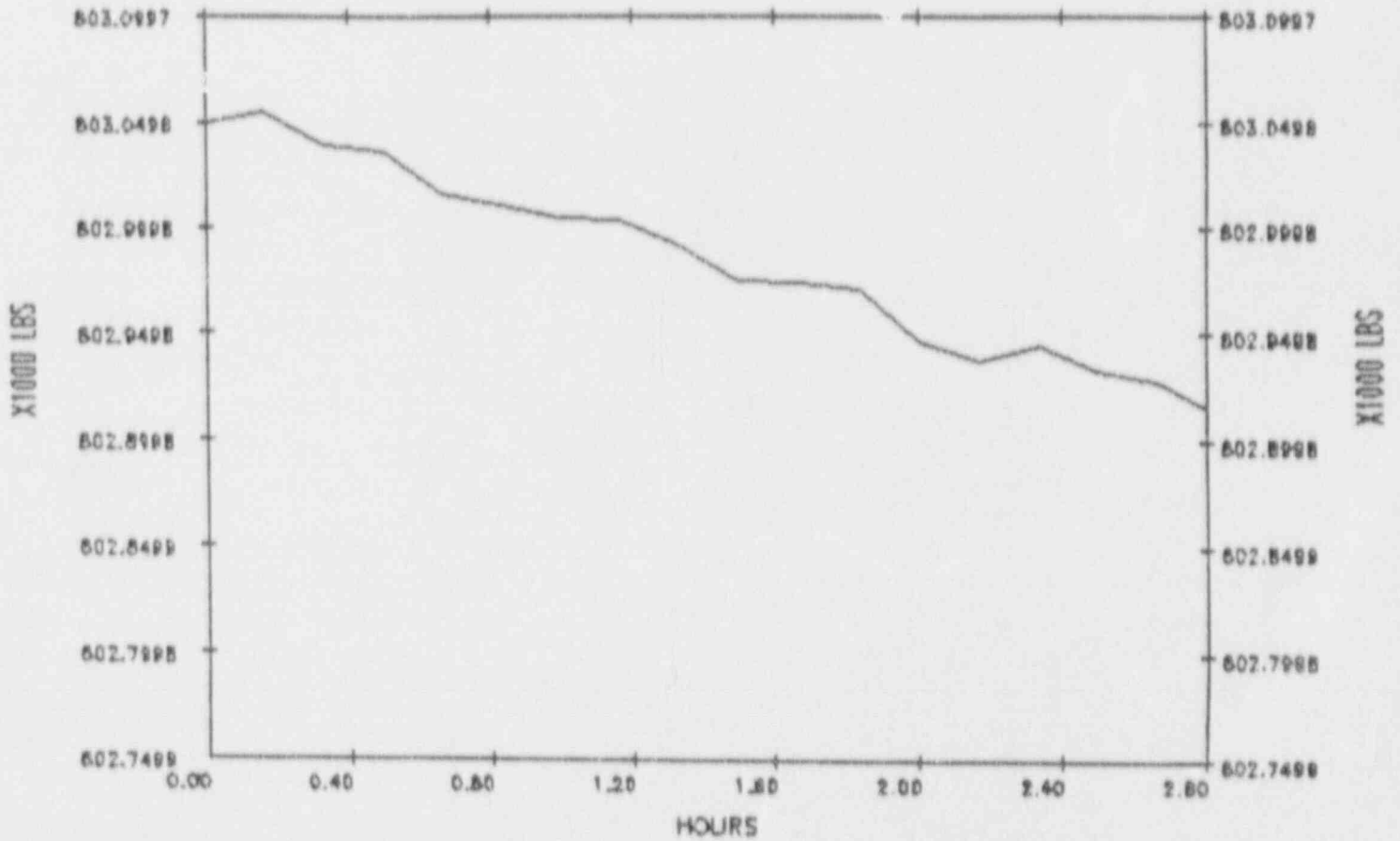
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5.3.1 Mass Plot Leak Rates-Verification Test

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CONTAINMENT DRY AIR MASS VS TIME

Normal Test



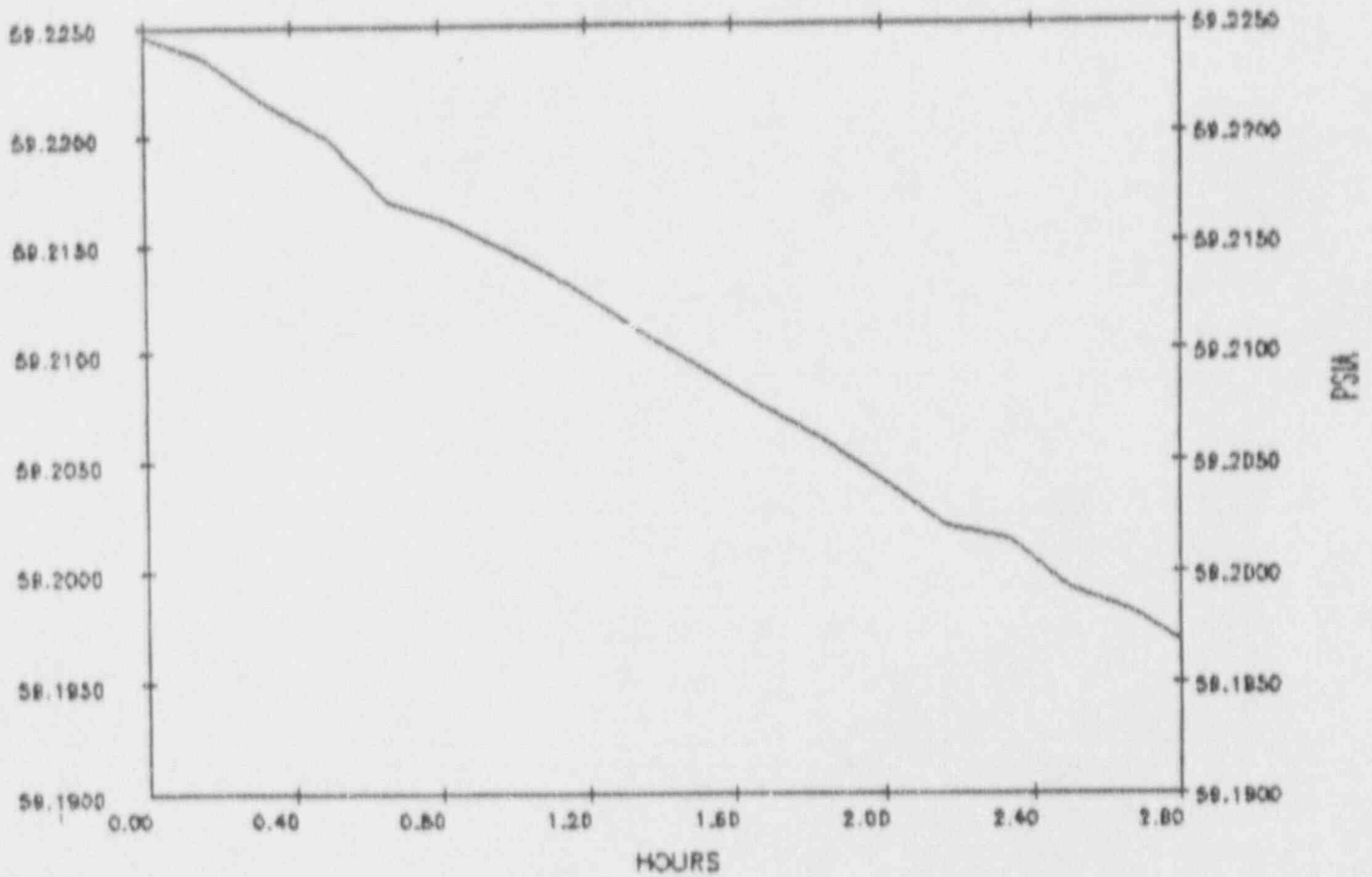
SOFTWARE ID NUMBER: GN01405-0.0

5.3.2 Containment Dry Air Mass-Verification Test

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CONTAINMENT DRY AIR PRESSURE VS TIME

Normal Test



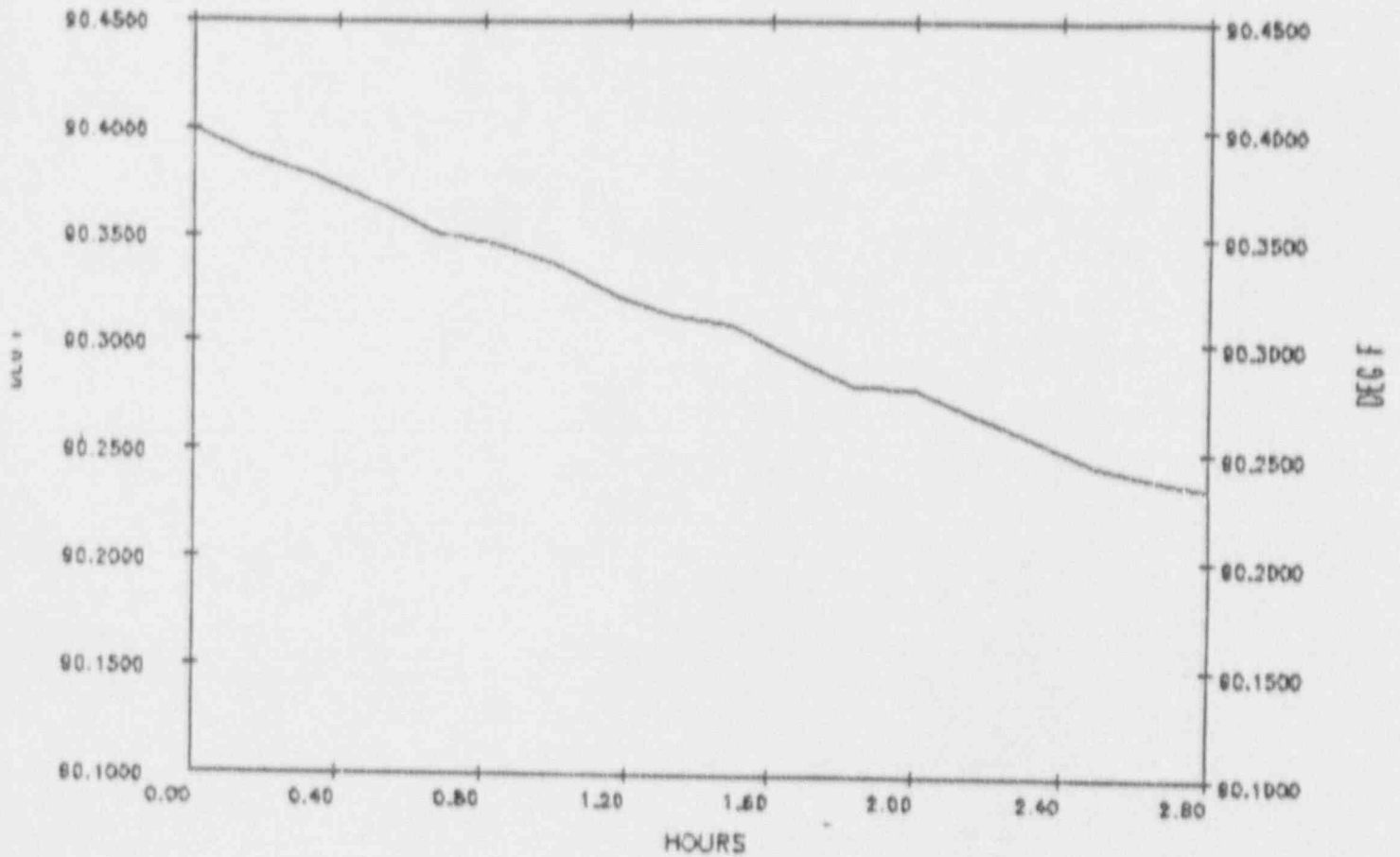
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5.3.3 Containment Dry Air Pressure-Verification Test

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CONTAINMENT AIR TEMPERATURE VS TIME

Normal Test



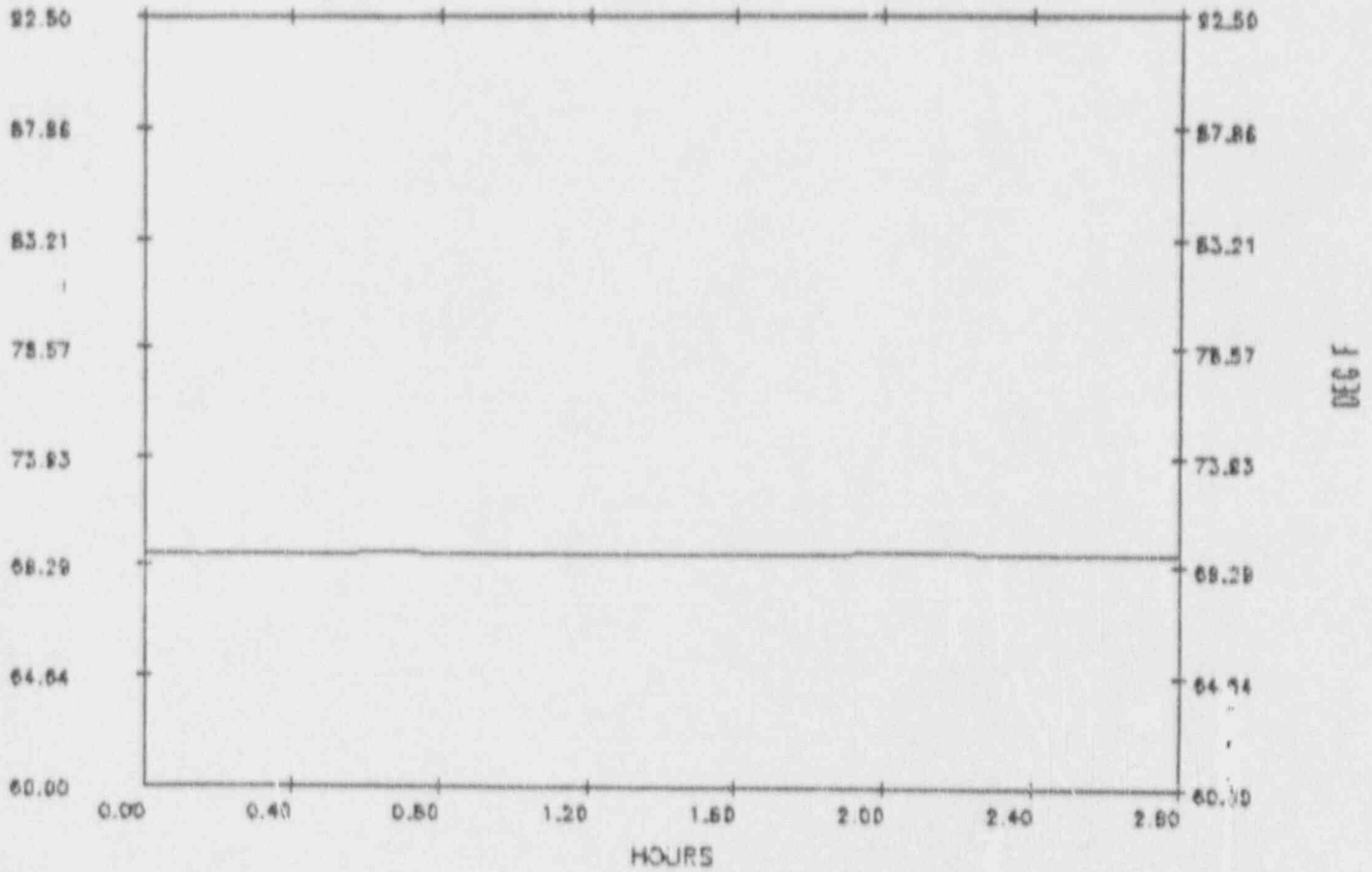
SOFTWARE ID NUMBER: GN01405-0.0

5.3.4 Containment Air Temperature-Verification Test

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CONTAINMENT DEWCELL TEMPERATURE VS TIME

Normal Test



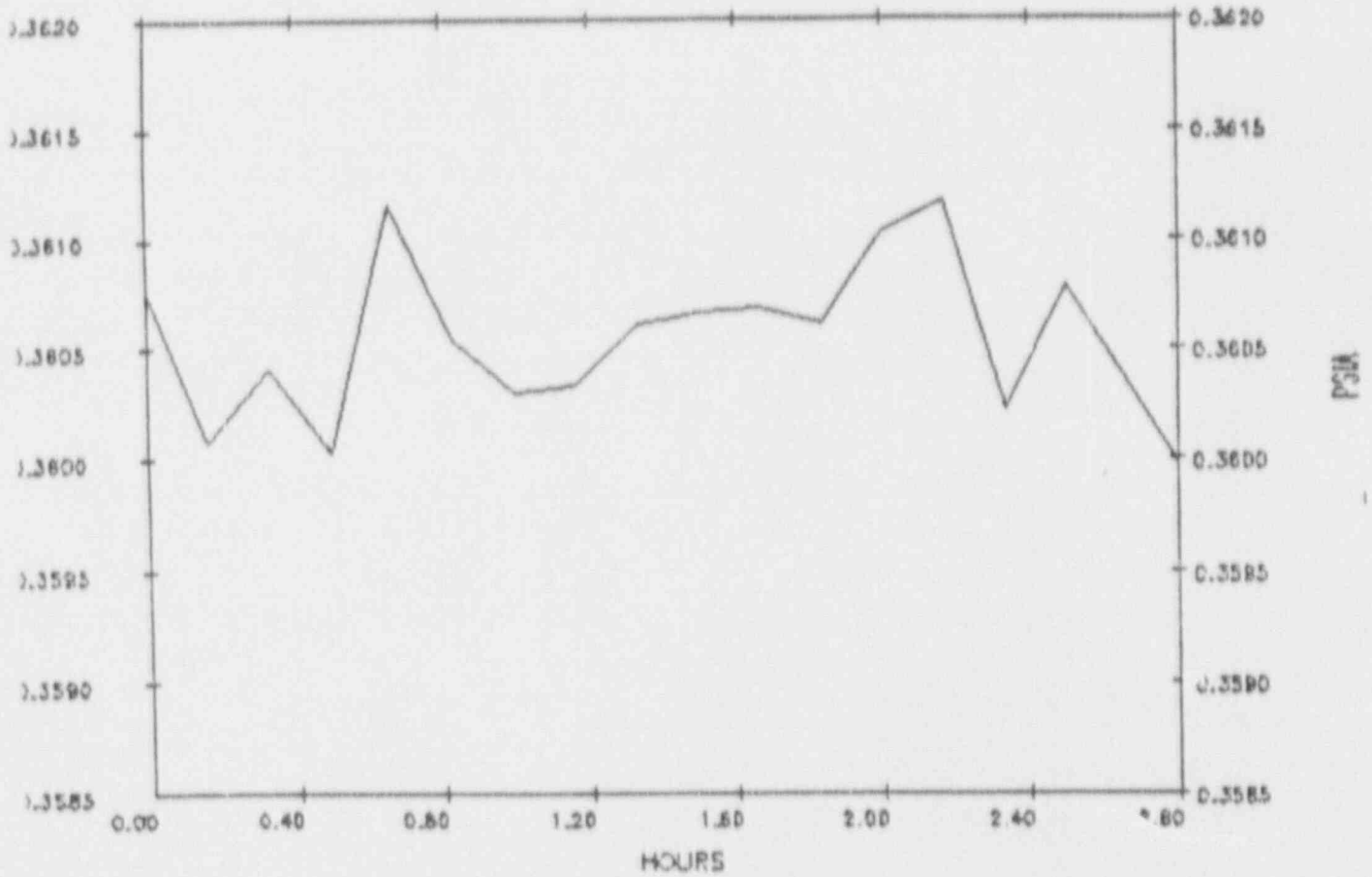
SOFTWARE ID NUMBER: GNG1405-0.0

5.3.5 Containment Dewcell Temperature-Verification Test

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CONTAINMENT VAPOR PRESSURE VS TIME

Normal Test



SOFTWARE ID NUMBER: GN01405-0.0

5.3.6 Containment Vapor Pressure-Verification Test

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6.0 TYPE A TEST CORRECTIONS

During the Type A Test, there were penetrations that were not properly challenged by full containment pressure. These penetrations (P-4, I-3) are in use during the performance of the ILRT. Local leak rate tests were performed prior to the ILRT for each leakage path. The minpath leak rate was then calculated for each of these penetrations and added to the ILRT Test 95% UCL.

The total leakage to be added to the "As Found" ILRT result is 8.63 SCFH or 0.0018 wt %/day. When added to the 95% UCL (0.05359 wt %/day), the final composite leakage rate is 0.0554 wt %/day. This leakage is acceptable being less than 0.75La. Appendix F provides leak rate correction data in tabular format.

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7.0 INTERPRETATION OF TEST RESULTS

7.1 MEASURED LEAK RATE TEST RESULTS

This test is considered an "As Found" failure due to the leaking 2B Steam Generator manway cover. The manway cover presented a leakage path that was not able to be quantified but caused a leakage rate from containment above the acceptance limit for the ILRT. This leakage was observed during the temperature stabilization period. Once the steam generator's leak pathway was blocked, conditions in the containment appeared to stabilize and the statistical leak rate test commenced. The test occurred over a twenty-four hour period and an acceptable "As Left" leak rate was observed and measured by the ILRT instrumentation.

The "As Left" statistically averaged leak rate (95% UCL) after corrections was 0.0554 wt %/day.

Containment dry air temperature and dewcell temperature trended downward throughout the test. This is indicative of a stable containment with no major heat sources as the reactor coolant was kept constant throughout the test. Measured tank and containment sump levels were not significantly changed from pre-test to post test levels.

One instrument, (Dewcell #2, DAS channel 42) was locked out for the duration of the test.

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7.1.1 Observed Leakage from the Equipment Hatch and
Emergency Hatch Airlock Shaft Seal

Prior to the performance of the statistical leak rate test, during the temperature stabilization period, leakage was observed from the Equipment Hatch airlock shaft seal and the Emergency Hatch airlock shaft seal. The leakage was evident, as during the test the hatch is aligned with the interior door closed and the exterior door open to facilitate inspection of the seals. The leakage was blocked and the stabilization period was continued. The pathway was then considered as an isolated pathway for the ILRT.

The airlocks had been "As Found" tested following the start of the refueling outage, prior to performance of the Type A test. That test showed the leakage to be small. The Type B test results indicate that under Post LOCA conditions, any leakage past the inner door would be stopped by the outer door. Thus, the minimum pathway leakage calculations of this pathway is not affected by the leak or the isolation of the leak from the inner door. Thus, no penalty is required to be added to the ILRT results as a result of this pathway isolation though it was added as a result of CECO's conservative approach to ILRT testing.

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7.1.2 Observed Leakage from 2B Steam Generator Vent Line 2MS023B

Prior to the performance of the statistical leak rate test, during the temperature stabilization period, leakage was observed to be coming from valve 2MS-023B. This valve was the vent line established to vent the 2B Steam Generator. The leakage was evaluated as "slight" and was observed eleven and one half hours into the pressurization phase. The observed leakage from 2MS-023B was one of eleven minor leaks identified prior to pressurization. Upon pressurization, the ILRT computer code showed a significant leak. The slight amount of air observed from 2MS-023B was not initially considered to be the source of the high containment leak rate. Activities were initiated to identify additional leak pathways but no significant leak paths were located. Fourteen hours after the containment reached test pressure, it was decided that the high leak rate from containment was due to an unknown leakage path associated with the 2B Steam Generator. A temporary procedure change was developed which would pressurize the main steam piping volume at the top of the 2B Steam Generator up to the Main Steam Isolation Valve. The main steam piping volume was then pressurized with air to a pressure slightly less than the containment. This arrangement would effectively block the leakage path from containment into the steam generator. Conditions inside the containment appeared to stabilize and the leakage rate then appeared to decrease. Logging of the pressure inside the main steam piping commenced using a precision pressure monitor. Makeup air was required to be valved into the pressurization rig due to apparent air leakage past the Main Steam Isolation Valve. Makeup air to the pressurization rig was then maintained during the test. Periodic logging of the pressure inside the main steam piping verified the containment pressure remained greater than the steam generator pressure. Once conditions inside the containment appeared to stabilize the statistical leak rate test commenced and continued to conclusion. Personnel entered the containment upon depressurization and attempted to identify the source of containment leakage. Leakage from one of the top secondary manways on the 2B Steam Generator was observed and efforts to repair the manway were initiated. Repairs were completed and the steam generator was available for leak testing on November 13, 1991. The steam generator was again pressurized in a manner consistent with that during the ILRT. No leakage was observed on the repaired manway. The ILRT leak path was considered fixed and the ILRT procedure was closed out.

The leakage from the 2B Steam Generator was from manway 24A, one of two secondary manways at the top of the steam generator. The manway seating surface was steam cut for approximately three inches of its outside circumference. This provided a leak path from containment into the steam generator and out of the 2MS-023B valve. This pathway provided the high leak rate above acceptance criteria observed prior to the start of the statistical leak rate test.

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7.2 SUPPLEMENTAL VERIFICATION TEST RESULTS

The supplemental/verification test was performed following the 24 hour mass plot leak rate test. The starting data set was number 505 at 0519 on 9/22/91. After a sixty minute stabilization period, the induced leak rate test commenced and was completed at 0809 with data set 522. The statistically averaged composite leak rate was verified to be stable and within $+0.25L_a$ of the sum of the statistically averaged measured leak rate and the average flowmeter induced leak rate. No abnormal containment response or significant events occurred during this test.

7.3 COMPARISON TO PREVIOUS TEST RESULTS

This was the second ILRT performed at Braidwood Unit 2. The previous test was the pre-operational ILRT performed on 09/06/87 to 09/11/87.

7.3.1 Pre-Operational Measured Leak Rate Test Results (1987 ILRT)

The statistically averaged containment leakage rate (L_{am} - weight percent per 24 hours) during the 1987 test was 0.0435%/day after 24 hours and 112 data sets. The 95% upper confidence limit of the containment leakage rate, L_{aucl} was 0.0490%/day. With no Reactor Containment Fan Coolers producing heat, the containment building cooled during the test resulting in a downward trend of the containment average pressure and temperature plots. The plot of containment leakage was well below the allowable limit and at the termination of the test was still decreasing.

The total local leakage rate addition as a result of LLRT's performed subsequent to the ILRT was 0.035 SCFM or 0.00046%/day. The overall integrated Leak Rate was 0.0435%/day (3.36 SCFM) which is less than the acceptance criteria of $0.75L_a$ (0.075%/day) or 5.79 SCFM.

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7.3.2 Pre-Operational Supplemental Verification Test Results (1986 ILRT)

The statistically averaged composite leakage rate (Lc) during the 1987 test was 0.1576%/day after 4.75 hours and 25 data sets. This was within 0.25 of La of the sum of the statistically averaged full pressure leakage rate and the average flowmeter induced leakage rate.

January 17, 1992

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8.0 REFERENCES

- 8.1 December 7, 1987, Letter from S. C. Hunsader to T. E. Murley transmitting Commonwealth Edison Company Report entitled "Reactor Containment Building Integrated Leakage Rate Test, Braidwood Nuclear Station Unit Two Preoperational Test, September 6 - September 11, 1987."

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Appendix A - INSTRUMENTATION SPECIFICATIONSData Acquisition System, Volumetrics A-100

A/D Conversion:	Dual slope integration 16 BIT A/D 202 sample per second conversion factor
Display:	5+Digit, Polarity, Decimal & Legend.
Sampling Rate:	10 channels/second
Common Mode Rejection:	DC-140 db, 1000 ohm unbalance AC -140 db at 50-60 hz
Normal Mode Rejection:	80-db
Input Impedance:	1000 megaohms/volt
Ambient Temp Range:	32-125 deg. F
Zero Offset:	Recalibrate before each reading automatically
Full Scale Temp Compensation:	± 5 PPM/C or 0.005%/C
Accuracy:	$\pm 0.005\%$ F.S., $\pm 0.0-05\%$ of reading at 25 deg C with $\pm 10\%$ AC Power variation
Time Accuracy:	± 1 minute/24 hours
Time Resolution	1 second

Dry Bulb Temperature

Number of sensors:	25
Type of sensor:	Thermistor, Glass encapsulated YSI Model 46043
Configuration	3 wire
Accuracy: 55-135 deg F	± 0.25 deg F
Repeatability:	± 0.01 deg F
Resolution:	0.1 deg F

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Dew Point Temperature

Number of sensors:	10
Type of sensor:	Lithium Chloride
Configuration:	5 wire
Range:	40 - 100 deg F dew temperature
Accuracy:	± 1.5 deg F
Repeatability:	± 0.5 deg F
Resolution:	0.1 deg F

Pressure

Number of sensors:	2
Type of sensor:	Precision Pressure Monitor (Solid State Electronic)
Manufacturer:	Volumetrics, Inc.
Range:	0 - 100 psia
Accuracy:	$\pm 0.02\%$ of reading
	± 0.005 psig
Repeatability:	± 0.001 psia
Sensitivity:	± 0.001 psia
Resolution:	0.0001 psia

Verification Flow System

Number of sensors:	1
Type of sensor:	Rotometer
Range:	0 - 10 SCFM
Accuracy:	$\pm 1\%$ F.S.
Corrections:	Corrected for temperature and discharge pressure
Hardware:	Metering valve

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Appendix B - STATISTICAL ANALYSIS METHODS

Total Time Calculations

This method calculates the rate of change with respect to time of dry air mass using the Total Time Method.

Initially, a reference time (t_r) is chosen. For every data set the rate of change of dry air mass between t_r and the most recent time, t_i is calculated using the two point method shown below.

$$M_i = \frac{2400}{(t_i - t_r)} (1 - M_i/M_r)$$

Then the least squares fit and 95% UCL of the total time leak rates are calculated as shown below:

$$B = \frac{\sum M_i \sum (t_i)^2 - \sum t_i \sum M_i t_i}{N \sum (t_i)^2 - (\sum t_i)^2}$$

$$A = \frac{(N \sum t_i M_i - \sum t_i \sum M_i)}{N \sum (t_i)^2 - (\sum t_i)^2}$$

$$L = B + At$$

$$T = \frac{1.6559 (N-1) + 3.5283 + 0.85602/(N-2)}{(N-1) + 1.2209 - 1.5162/(N-2)}$$

Note: N is the number of data sets minus one.

$$F = \frac{1}{N} + \frac{(t_p - \sum(t_i) / N)^2}{\sum(t_i)^2 - (\sum t_i)^2 / N}$$

$$\sigma = \frac{F}{N} \sum (M_i)^2 - B \sum M - A \sum M_i t_i$$

$$UCL = L + T\sigma$$

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Calculation of Instrument Selection Guide. (ISG)

$$ISG = \frac{2400}{t} \sqrt{\frac{2(e_p/p)^2}{N_p} + \frac{2(e_r/T)^2}{N_r} + \frac{2(e_d/p)^2}{N_d}}$$

where: t is the test time in hours

p is test pressure, psia

T is the volume weighed average cmnt. temp. °R

N_p is the number of pressure transmitters

N_r is the number of RTDs

N_d is the number of dewcells

e_p is the combined pressure transmitters' error, psia

e_r is the combined RTDs' error, °R

e_d is the combined dewcells' error, °R

$$e_p = (S_p)^2 + (RP_p + RS_p)^2$$

where: S_p is the sensitivity of a pressure transmitter

RP_p is the repeatability of a pressure transmitter

RS_p is the resolution of a pressure transmitter

$$e_r = (S_r)^2 + (RP_r + RS_r)^2$$

where: S_r is the sensitivity of an RTD

RP_r is the repeatability of an RTD

RS_r is the resolution of an RTD

$$e_d = -P_v T_d (S_d)^2 + (RP_d + RS_d)^2$$

where: S_d is the sensitivity of a dewcell

RP_d is the repeatability of a dewcell

RS_d is the resolution of a dewcell

$-P_v T_d$ = change in vapor pressure

$-T_v$ change in saturation temperature

The above ratio is from ASME steam tables and evaluated at the containment's saturation temperature at that time.

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Appendix C - TEMPERATURE STABILIZATION DATA

The following tables present the data for the temperature stabilization phase of the ILRT. The temperature stabilization phase is defined as data collected from data sets 233 to 348 inclusive. The following data is included:

<u>TABLE</u>	<u>TITLE</u>
C.1	Summary of Temperatures
C.2	Summary of Dewcell Temperatures

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Table C.1
SUMMARY OF TEMPERATURES

SOFTWARE PRODUCT ID NUMBER: 0N01405-E.0

***** SUMMARY TABLE OF TEMPERATURES *****

BRAIDWOOD UNIT 2 14:40:14 WED, 29 JAN 1992

DATA SET#	DATA SET TIME				AVERAGE TEMP. (DEG F)	AVERAGE SUBVOLUME TEMPERATURES, (DEG F)								
	DAY	HH	MM	SS		#1	#2	#3	#4	#5	#6	#7	#8	#9
233	263	07:59:45			94.3	95.6	95.6	95.7	95.4	94.7	92.1	92.7	85.8	85.9
234	263	08:09:45			94.3	95.5	95.6	95.6	95.4	94.7	92.1	92.7	85.7	85.9
235	263	08:19:45			94.3	95.5	95.6	95.6	95.4	94.7	92.1	92.7	85.7	85.9
236	263	08:29:45			94.3	95.5	95.6	95.6	95.3	94.6	92.1	92.7	85.7	85.9
237	263	08:39:45			94.2	95.5	95.5	95.5	95.3	94.6	92.1	92.7	85.7	85.9
238	263	08:49:45			94.2	95.4	95.5	95.5	95.3	94.6	92.1	92.7	85.7	85.9
239	263	08:59:45			94.2	95.4	95.4	95.4	95.3	94.6	92.1	92.7	85.7	85.9
240	263	09:09:45			94.1	95.3	95.4	95.4	95.2	94.6	92.1	92.7	85.7	85.9
241	263	09:19:45			94.1	95.3	95.4	95.4	95.2	94.6	92.1	92.7	85.7	85.9
242	263	09:29:45			94.1	95.3	95.3	95.4	95.2	94.6	92.1	92.7	85.7	85.9
243	263	09:39:45			94.1	95.3	95.4	95.3	95.1	94.6	92.1	92.7	85.7	85.9
244	263	09:49:45			94.1	95.2	95.3	95.3	95.1	94.5	92.1	92.7	85.7	85.9
245	263	09:59:45			94.1	95.2	95.3	95.3	95.1	94.5	92.1	92.7	85.7	85.9
246	263	10:09:45			94.0	95.2	95.2	95.3	95.1	94.5	92.1	92.7	85.7	85.9
247	263	10:19:45			94.0	95.1	95.2	95.2	95.0	94.5	92.1	92.7	85.7	85.9
248	263	10:29:45			94.0	95.1	95.2	95.2	95.0	94.5	92.1	92.7	85.7	85.9
249	263	10:39:45			94.0	95.1	95.1	95.2	95.0	94.5	92.1	92.7	85.7	85.9
250	263	10:49:45			93.9	95.0	95.1	95.1	95.0	94.5	92.1	92.7	85.7	85.9
251	263	10:59:45			93.9	95.0	95.1	95.1	94.9	94.4	92.1	92.7	85.7	85.9
252	263	11:09:45			93.9	95.0	95.1	95.1	94.9	94.4	92.1	92.7	85.7	85.9
253	263	11:19:45			93.9	95.0	95.0	95.1	94.8	94.4	92.1	92.7	85.7	85.9
254	263	11:29:45			93.9	95.0	95.0	95.0	94.8	94.4	92.1	92.7	85.7	85.9
255	263	11:39:45			93.9	94.9	95.0	95.0	94.7	94.4	92.1	92.7	85.7	85.9
256	263	11:49:45			93.9	94.9	95.0	95.0	94.7	94.4	92.1	92.7	85.7	85.9
257	263	11:59:45			93.9	94.9	94.9	94.9	94.8	94.4	92.1	92.7	85.7	85.9
258	263	12:09:45			93.9	94.8	94.9	94.9	94.8	94.3	92.1	92.7	85.7	85.9
259	263	12:19:45			93.9	94.8	94.9	94.9	94.7	94.3	92.1	92.7	85.7	85.9
260	263	12:29:45			93.9	94.7	94.9	94.8	94.7	94.3	92.1	92.7	85.7	85.9
261	263	12:39:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
262	263	12:49:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
263	263	12:59:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
264	263	13:09:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
265	263	13:19:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
266	263	13:29:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
267	263	13:39:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
268	263	13:49:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
269	263	13:59:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
270	263	14:09:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
271	263	14:19:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
272	263	14:29:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
273	263	14:39:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
274	263	14:49:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
275	263	14:59:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
276	263	15:09:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9
277	263	15:19:45			93.9	94.7	94.8	94.8	94.7	94.3	92.1	92.7	85.7	85.9

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Table C.1
SUMMARY OF TEMPERATURES
 (Cont'd)

SOFTWARE PRODUCT ID NUMBER: 0N01405-0.0

278	263	15:29:45	93.4	94.3	94.4	94.4	94.3	94.1	92.1	92.6	85.6	85.8
279	263	15:30:45	93.4	94.3	94.4	94.4	94.3	94.0	92.1	92.6	85.6	85.8
280	263	15:49:45	93.4	94.3	94.4	94.3	94.3	94.0	92.1	92.7	85.6	85.8
281	263	15:59:45	93.4	94.3	94.3	94.3	94.2	94.0	92.1	92.7	85.6	85.8
282	263	16:09:45	93.4	94.2	94.3	94.3	94.2	94.0	92.1	92.7	85.6	85.8
283	263	16:19:45	93.3	94.2	94.3	94.3	94.2	94.0	92.1	92.7	85.6	85.8
284	263	16:29:45	93.3	94.2	94.3	94.3	94.2	94.0	92.1	92.6	85.6	85.7
285	263	16:39:45	93.3	94.2	94.2	94.3	94.2	93.9	92.1	92.6	85.6	85.8
286	263	16:49:45	93.3	94.1	94.2	94.2	94.1	93.9	92.1	92.6	85.6	85.8
287	263	16:59:45	93.3	94.1	94.2	94.2	94.1	93.9	92.1	92.6	85.6	85.8
288	263	17:09:45	93.2	94.1	94.2	94.2	94.1	93.9	92.1	92.6	85.6	85.8
289	263	17:19:45	93.2	94.1	94.1	94.1	94.1	93.9	92.1	92.6	85.6	85.8
290	263	17:29:45	93.2	94.1	94.2	94.1	94.1	93.9	92.1	92.6	85.6	85.8
291	263	17:39:45	93.2	94.0	94.1	94.1	94.0	93.8	92.1	92.7	85.6	85.7
292	263	17:49:45	93.2	94.0	94.1	94.1	94.0	93.8	92.1	92.7	85.6	85.8
293	263	17:59:45	93.2	94.0	94.1	94.1	94.0	93.8	92.1	92.7	85.6	85.8
294	263	18:09:45	93.1	93.9	94.0	94.0	94.0	93.8	92.1	92.7	85.6	85.7
295	263	18:19:45	93.1	93.9	94.0	94.0	94.0	93.8	92.1	92.7	85.6	85.7
296	263	18:29:45	93.1	93.9	94.0	94.0	93.9	93.7	92.1	92.7	85.6	85.7
297	263	18:39:45	93.1	93.9	94.0	94.0	93.9	93.7	92.1	92.7	85.6	85.7
298	263	18:49:45	93.1	93.9	94.0	94.0	93.9	93.7	92.1	92.7	85.6	85.7
299	263	18:59:45	93.1	93.8	93.9	93.9	93.9	93.7	92.1	92.7	85.6	85.7
300	263	19:09:45	93.0	93.8	93.9	93.9	93.9	93.7	92.1	92.7	85.6	85.7
301	263	19:19:45	93.0	93.8	93.9	93.9	93.9	93.7	92.1	92.7	85.6	85.7
302	263	19:29:45	93.0	93.8	93.8	93.9	93.9	93.7	92.1	92.7	85.6	85.7
303	263	19:39:45	93.0	93.8	93.8	93.9	93.8	93.6	92.1	92.7	85.6	85.7
304	263	19:49:45	93.0	93.8	93.8	93.8	93.8	93.6	92.1	92.7	85.6	85.7
305	263	19:59:45	93.0	93.7	93.8	93.8	93.8	93.6	92.1	92.7	85.6	85.7
306	263	20:09:45	92.9	93.7	93.8	93.8	93.8	93.6	92.1	92.7	85.6	85.7
307	263	20:19:45	92.9	93.7	93.8	93.8	93.7	93.6	92.1	92.7	85.6	85.7
308	263	20:29:45	92.9	93.7	93.7	93.8	93.7	93.6	92.1	92.7	85.6	85.7
309	263	20:39:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
310	263	20:49:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
311	263	20:59:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
312	263	21:09:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
313	263	21:19:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
314	263	21:29:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
315	263	21:39:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
316	263	21:49:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
317	263	21:59:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
318	263	22:09:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
319	263	22:19:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
320	263	22:29:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
321	263	22:39:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
322	263	22:49:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
323	263	22:59:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
324	263	23:09:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
325	263	23:18:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
326	263	23:29:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
327	263	23:39:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
328	263	23:49:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
329	263	23:59:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
330	264	00:09:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
331	264	00:19:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
332	264	00:29:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
333	264	00:39:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
334	264	00:49:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
335	264	00:59:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
336	264	01:09:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7
337	264	01:19:45	92.9	93.6	93.7	93.7	93.7	93.6	92.1	92.7	85.6	85.7

UNIT 2 ILRT FINAL REPORT

Table C.1
SUMMARY OF TEMPERATURES
 (Cont'd)

SOFTWARE PRODUCT ID NUMBER: 0N01405-0.0

338	264	01:29:45	92.4	93.1	93.2	93.2	93.2	93.0	92.0	92.6	85.0	85.7
339	264	01:39:45	92.4	93.1	93.2	93.2	93.1	93.0	92.0	92.7	85.6	85.7
340	264	01:49:45	92.4	93.0	93.1	93.1	93.1	93.0	91.0	92.6	85.6	85.7
341	264	01:59:45	92.4	93.0	93.1	93.1	93.1	93.0	91.9	92.6	85.6	85.7
342	264	02:09:45	92.4	93.0	93.1	93.1	93.1	93.0	91.9	92.6	85.6	85.7
343	264	02:19:45	92.4	93.0	93.1	93.1	93.0	93.0	91.9	92.6	85.6	85.7
344	264	02:29:45	92.4	93.0	93.1	93.1	93.0	92.9	91.9	92.6	85.6	85.7
345	264	02:39:45	92.3	93.0	93.1	93.1	93.0	92.9	91.9	92.6	85.6	85.7
346	264	02:49:45	92.3	92.9	93.0	93.0	93.0	92.9	91.9	92.6	85.6	85.7
347	264	02:59:45	92.3	92.9	93.0	93.0	93.0	92.9	91.9	92.6	85.6	85.7
348	264	03:09:45	92.3	92.9	93.0	93.0	93.0	92.9	91.9	92.6	85.6	85.7

 NO PRESSURE CHANNELS ARE LOCKED OUT

DAS CHANNEL # 42 IS LOCKED OUT FROM DSN 1

UNIT 2 ILRT FINAL REPORT

TABLE C.2
SUMMARY OF DEWCELL TEMPERATURES

SOFTWARE PRODUCT ID NUMBER: GND1405-R.0

***** SUMMARY TABLE OF DEW TEMPERATURES *****

BRAIDWOOD UNIT 2 14:41:25 WED, 29 JAN 1992

DATA SET#	DATA SET TIME			AVERAGE DEW TEMP. (DEG F)	AVERAGE SUBVOLUME TEMPERATURES, (DEG F)								
	DAY	HH	MM SS		#1	#2	#3	#4	#5	#6	#7	#8	#9
233	263	07:59:45		70.1	69.8	69.7	70.0	70.1	71.3	68.2	70.0	70.8	69.2
234	263	08:09:45		70.0	69.8	69.6	69.8	70.0	71.7	68.2	70.0	70.8	69.2
235	263	08:19:45		70.0	69.7	69.5	69.8	70.0	71.7	68.4	70.0	70.8	69.2
236	263	08:29:45		69.9	69.7	69.4	69.5	70.0	71.9	68.3	70.0	70.7	69.3
237	263	08:39:45		70.0	69.6	69.6	70.0	70.0	71.2	69.4	70.0	70.7	69.3
238	263	08:49:45		69.9	69.7	69.4	69.7	70.1	71.3	68.4	70.0	70.7	69.2
239	263	08:59:45		70.0	69.9	69.6	69.8	70.1	71.2	68.3	69.9	70.7	69.3
240	263	09:09:45		70.0	69.7	69.6	69.9	69.9	71.2	68.4	70.0	70.7	69.3
241	263	09:19:45		70.0	69.7	69.6	69.8	70.1	71.2	68.4	70.0	70.7	69.3
242	263	09:29:45		70.0	69.8	69.5	69.8	70.1	71.3	68.4	70.0	70.7	69.4
243	263	09:39:45		69.9	69.6	69.4	69.7	70.0	71.7	68.4	70.0	70.6	69.4
244	263	09:49:45		69.9	69.6	69.5	69.8	69.9	71.2	68.4	70.0	70.6	69.4
245	263	09:59:45		70.0	69.7	69.5	69.8	70.0	71.2	68.2	70.0	70.6	69.4
246	263	10:09:45		70.0	69.8	69.5	69.7	70.0	71.3	68.4	69.9	70.6	69.4
247	263	10:19:45		70.0	69.6	69.6	69.9	70.0	71.2	68.3	70.0	70.6	69.4
248	263	10:29:45		70.0	69.7	69.5	69.8	69.9	71.3	68.5	70.0	70.6	69.5
249	263	10:39:45		70.0	69.6	69.6	69.9	70.0	71.2	68.5	70.0	70.5	69.5
250	263	10:49:45		70.0	69.7	69.5	69.8	70.0	71.2	68.5	70.1	70.5	69.5
251	263	10:59:45		69.9	69.6	69.5	69.8	69.9	71.2	68.4	70.0	70.5	69.5
252	263	11:09:45		69.9	69.5	69.5	69.8	70.0	71.2	68.4	70.0	70.5	69.5
253	263	11:19:45		69.9	69.4	69.4	69.7	70.0	71.1	68.4	70.0	70.5	69.5
254	263	11:29:45		69.9	69.7	69.4	69.7	70.0	71.2	68.5	70.1	70.5	69.5
255	263	11:39:45		69.9	69.5	69.5	69.7	70.0	71.7	68.4	70.0	70.5	69.5
256	263	11:49:45		69.9	69.4	69.4	69.7	70.0	71.2	68.4	70.1	70.4	69.5
257	263	11:59:45		69.9	69.5	69.6	69.8	70.0	71.1	68.5	70.0	70.4	69.5
258	263	12:09:45		69.9	69.6	69.4	69.7	70.0	71.2	68.5	70.1	70.4	69.6
259	263	12:19:45		69.9	69.7	69.4	69.7	70.0	71.2	68.5	70.1	70.4	69.6
260	263	12:29:45		69.9	69.5	69.5	69.7	70.0	71.2	68.6	70.1	70.2	69.6
261	263	12:39:45		69.9	69.4	69.5	69.7	70.0	71.1	68.4	70.0	70.2	69.6
262	263	12:49:45		69.8	69.7	69.4	69.7	69.9	71.1	68.4	70.0	70.2	69.6
263	263	12:59:45		69.9	69.6	69.4	69.7	70.0	71.1	68.5	70.1	70.2	69.5
264	263	13:09:45		69.9	69.7	69.5	69.8	69.8	71.2	68.5	70.1	70.2	69.5
265	263	13:19:45		69.9	69.4	69.4	69.7	70.0	71.7	68.5	70.1	70.2	69.5
266	263	13:29:45		69.9	69.7	69.5	69.7	69.9	71.1	68.4	70.1	70.2	69.6
267	263	13:39:45		69.9	69.5	69.4	69.7	70.1	71.2	68.5	70.1	70.3	69.6
268	263	13:49:45		70.0	69.5	69.5	69.7	70.0	71.2	68.6	70.1	70.3	69.7
269	263	13:59:45		69.9	69.4	69.4	69.7	69.9	71.1	68.5	70.1	70.2	69.7
270	263	14:09:45		69.9	69.5	69.4	69.7	70.0	71.2	68.5	70.0	70.1	69.7
271	263	14:19:45		69.9	69.5	69.4	69.7	69.9	71.2	68.5	70.0	70.1	69.7
272	263	14:29:45		69.9	69.4	69.4	69.7	69.9	71.1	68.5	70.1	70.2	69.7
273	263	14:39:45		69.9	69.4	69.4	69.7	69.9	71.1	68.5	70.0	70.2	69.7
274	263	14:49:45		69.9	69.6	69.4	69.7	70.0	71.1	68.5	70.1	70.2	69.7
275	263	14:59:45		69.9	69.5	69.4	69.7	70.0	71.1	68.5	70.1	70.2	69.7
276	263	15:09:45		69.9	69.5	69.4	69.6	70.0	71.2	68.5	70.1	70.2	69.7
277	263	15:19:45		70.0	69.6	69.5	69.7	70.0	71.2	68.6	70.0	70.2	69.7

UNIT 2 ILRT FINAL REPORT

TABLE C.2
SUMMARY OF DEWCELL TEMPERATURES
 (Cont'd)

SOFTWARE PRODUCT ID NUMBER: GN61405-0.0

278	263	15:29:45	69.9	69.6	69.5	69.8	70.0	71.1	68.5	70.1	70.2	69.7
279	263	15:39:45	69.9	69.7	69.4	69.7	70.0	71.2	68.5	70.2	70.2	69.8
280	263	15:49:45	69.9	69.6	69.4	69.7	69.8	71.2	68.5	70.1	70.2	69.7
281	263	15:59:45	69.9	69.6	69.4	69.6	69.9	71.2	68.5	70.1	70.2	69.7
282	263	16:09:45	69.9	69.6	69.4	69.7	70.0	71.1	68.4	70.1	70.1	69.7
283	263	16:19:45	69.9	69.5	69.4	69.7	70.0	71.2	68.4	70.1	70.2	69.8
284	263	16:29:45	69.9	69.6	69.4	69.7	69.8	71.2	68.5	70.1	70.1	69.8
285	263	16:39:45	69.9	69.6	69.5	69.8	70.0	71.1	68.6	70.1	70.1	69.8
286	263	16:49:45	69.9	69.7	69.4	69.7	69.8	71.1	68.6	70.1	70.1	69.8
287	263	16:59:45	69.9	69.6	69.4	69.7	70.0	71.2	68.4	70.1	70.1	69.8
288	263	17:09:45	69.9	69.6	69.4	69.7	70.0	71.2	68.5	70.1	70.1	69.8
289	263	17:19:45	69.9	69.5	69.4	69.6	70.0	71.2	68.5	70.1	70.1	69.8
290	263	17:29:45	69.9	69.7	69.4	69.7	70.0	71.2	68.5	70.2	70.1	69.8
291	263	17:39:45	69.9	69.6	69.4	69.8	70.0	71.1	68.5	70.1	70.1	69.8
292	263	17:49:45	69.9	69.6	69.5	69.7	70.0	71.1	68.5	70.1	70.1	69.8
293	263	17:59:45	69.9	69.6	69.5	69.7	70.0	71.2	68.5	70.1	70.1	69.8
294	263	18:09:45	69.9	69.6	69.4	69.8	70.0	71.1	68.5	70.2	70.1	69.8
295	263	18:19:45	69.9	69.5	69.4	69.5	69.9	71.2	68.6	70.2	70.1	69.8
296	263	18:29:45	69.9	69.6	69.4	69.7	69.9	71.2	68.5	70.1	70.1	69.9
297	263	18:39:45	69.9	69.5	69.4	69.6	69.9	71.2	68.5	70.1	70.1	69.8
298	263	18:49:45	69.9	69.6	69.4	69.6	69.9	71.1	68.6	70.0	70.1	69.8
299	263	18:59:45	69.9	69.7	69.5	69.7	69.9	71.2	68.5	70.0	70.1	69.8
300	263	19:09:45	69.9	69.7	69.4	69.7	69.9	71.1	68.4	70.1	70.1	69.8
301	263	19:19:45	69.9	69.6	69.4	69.7	69.9	71.2	68.6	70.1	70.0	69.9
302	263	19:29:45	69.9	69.6	69.5	69.8	69.7	71.1	68.6	70.1	70.0	69.9
303	263	19:39:45	69.9	69.6	69.4	69.6	70.0	71.2	68.4	70.0	70.0	69.8
304	263	19:49:45	69.9	69.6	69.5	69.8	70.0	71.2	68.4	70.1	70.0	69.9
305	263	19:59:45	69.9	69.6	69.4	69.6	70.0	71.1	68.4	70.1	70.0	69.9
306	263	20:09:45	69.9	69.6	69.4	69.6	69.9	71.1	68.6	70.0	70.0	69.9
307	263	20:19:45	69.9	69.8	69.4	69.7	69.9	71.1	68.7	70.1	70.0	69.8
308	263	20:29:45	69.9	69.6	69.4	69.6	69.9	71.1	68.5	70.1	70.0	69.9
309	263	20:39:45	69.9	69.6	69.4	69.6	70.0	71.1	68.4	70.0	70.0	69.9
310	263	20:49:45	69.9	69.8	69.5	69.7	69.9	71.1	68.5	70.1	70.0	69.9
311	263	20:59:45	69.9	69.7	69.4	69.7	69.9	71.1	68.6	70.1	70.0	69.9
312	263	21:09:45	69.9	69.5	69.4	69.5	69.9	71.1	68.5	70.1	70.0	69.9
313	263	21:19:45	69.9	69.5	69.4	69.7	69.9	71.1	68.5	70.1	70.0	69.9
314	263	21:29:45	69.9	69.7	69.4	69.6	70.0	71.2	68.7	70.1	70.0	69.9
315	263	21:39:45	69.9	69.7	69.4	69.8	70.0	71.1	68.4	70.0	70.0	69.9
316	263	21:49:45	69.9	69.6	69.4	69.6	70.0	71.1	68.6	70.1	70.0	69.9
317	263	21:59:45	69.9	69.7	69.3	69.5	69.9	71.1	68.7	70.1	70.0	69.9
318	263	22:09:45	69.9	69.7	69.4	69.6	70.0	71.1	68.4	70.1	70.0	69.9
319	263	22:19:45	69.9	69.6	69.4	69.7	70.0	71.1	68.4	70.0	70.0	69.9
320	263	22:29:45	69.9	69.6	69.4	69.6	69.9	71.2	68.7	70.1	70.0	69.9
321	263	22:39:45	69.9	69.6	69.4	69.6	69.9	71.1	68.4	70.1	69.9	69.9
322	263	22:49:45	69.9	69.6	69.4	69.7	69.9	71.1	68.6	70.1	70.0	69.9
323	263	22:59:45	69.9	69.6	69.4	69.6	69.9	71.1	68.6	70.1	70.0	69.9
324	263	23:09:45	69.9	69.7	69.4	69.7	69.9	71.1	68.5	70.0	70.0	69.9
325	263	23:19:45	69.9	69.6	69.4	69.6	69.9	71.0	68.5	70.0	69.9	69.9
326	263	23:29:45	69.9	69.6	69.4	69.7	69.9	71.1	68.5	70.0	70.0	69.9
327	263	23:39:45	69.9	69.4	69.3	69.7	69.9	71.0	68.1	70.0	69.9	69.9
328	263	23:49:45	69.9	69.8	69.4	69.7	69.9	71.1	68.2	70.0	69.9	69.9
329	263	23:59:45	69.9	69.6	69.3	69.5	69.9	71.1	68.2	70.0	69.9	69.9
330	264	00:09:45	69.9	69.4	69.3	69.6	69.9	71.1	68.5	70.0	69.9	69.9
331	264	00:19:45	69.9	69.6	69.3	69.5	69.9	71.1	68.6	70.1	69.9	69.9
332	264	00:29:45	69.9	69.5	69.2	69.5	70.0	71.0	68.5	70.1	69.9	69.9
333	264	00:39:45	69.9	69.7	69.4	69.6	69.9	71.1	68.5	70.1	69.9	69.9
334	264	00:49:45	69.9	69.6	69.4	69.6	69.9	71.1	68.4	70.0	69.9	69.9
335	264	00:59:45	69.9	69.4	69.3	69.6	69.9	71.1	68.7	70.0	69.9	69.9
336	264	01:09:45	69.9	69.5	69.4	69.6	69.9	71.1	68.4	70.1	69.9	69.9
337	264	01:19:45	69.9	69.5	69.3	69.5	69.9	71.1	68.4	70.1	69.9	69.9

UNIT 2 ILRT FINAL REPORT

TABLE C.2
SUMMARY OF DEWCELL TEMPERATURES
(Cont'd)

SOFTWARE PRODUCT ID NUMBER: 0N01405-0.0

338	264	01:29:45	69.9	69.7	69.4	69.6	69.9	71.1	68.5	70.1	69.9	69.9
339	264	01:30:45	69.9	69.5	69.4	69.7	69.9	71.1	68.4	70.1	69.9	69.9
340	264	01:49:45	69.8	69.7	69.3	69.5	69.9	71.1	68.8	70.1	69.9	69.9
341	264	01:59:45	69.8	69.6	69.7	69.4	69.9	71.1	68.1	70.2	69.9	69.9
342	264	02:09:45	69.9	69.7	69.4	69.5	69.9	71.1	68.6	70.1	69.9	69.9
343	264	02:19:45	69.8	69.6	69.3	69.5	69.9	71.1	68.6	70.1	69.9	69.9
344	264	02:29:45	69.9	69.8	69.4	69.6	69.9	71.0	68.6	70.1	69.9	69.9
345	264	02:39:45	69.9	69.6	69.4	69.7	69.9	71.1	68.5	70.1	69.9	70.0
346	264	02:49:45	69.9	69.5	69.4	69.6	69.9	71.1	68.7	70.1	69.9	69.9
347	264	02:59:45	69.8	69.6	69.3	69.5	69.9	71.1	68.6	70.1	69.9	69.9
348	264	03:09:45	69.8	69.6	69.3	69.5	69.8	71.0	68.7	70.1	69.9	69.9

 NO PRESSURE CHANNELS ARE LOCKED OUT
 DAS CHANNEL # 42 IS LOCKED OUT FROM DSN 1

UNIT 2 ILRT FINAL REPORT

Appendix D - MEASURED LEAK RATE TEST DATA

The following tables present the data for the leak test phases of the ILRT using the Mass Plot Method. The measured leak test is defined as the interval between data sets 349 and 503 inclusive. This corresponds to a 24 hour and 40 minute test duration. The following data is included:

<u>TABLE</u>	<u>TITLE</u>
D.1	Summary of Mass Plot Leak Rates
D.2	Summary of Pressures
D.3	Summary of Temperatures
D.4	Summary of Dewcell Temperatures

UNIT 2 ILRT FINAL REPORT

Table D.1

SUMMARY OF MASS FLOT LEAK RATES

LEAIEWOOD UNIT 2 10105127 SUN, 20 SEP 1991

1/3

DATA SET 349 THROUGH 500

STATISTICAL LEAKRATE RESULTS CALCULATED USING THE MASS FLOT METHOD

DATA SET #	DATA SET TIME DAY HR MM SS	TEST TIME, (HR)	DRY AIR MASS, (LEM)	LEAK RATE, (%/D)	95% UP CONF LIMIT, (%/D)
349	264 03:19:45	0.000	0.80349937E+06		
350	264 03:29:45	0.166	0.80351075E+06		
351	264 03:39:45	0.333	0.80351300E+06	-0.1221E+00	0.2840E+00
352	264 03:49:45	0.500	0.80351237E+06	-0.7384E-01	0.2908E-01
353	264 03:59:45	0.666	0.80348925E+06	0.3336E-01	0.1868E+00
354	264 04:09:45	0.833	0.80347967E+06	0.8328E-01	0.1930E+00
355	264 04:19:45	1.000	0.80349262E+06	0.6767E-01	0.1432E+00
356	264 04:29:45	1.166	0.80347075E+06	0.7926E-01	0.1351E+00
357	264 04:39:45	1.333	0.80348487E+06	0.6967E-01	0.1131E+00
358	264 04:49:45	1.500	0.80348212E+06	0.6366E-01	0.9829E-01
359	264 04:59:45	1.666	0.80347250E+06	0.6535E-01	0.9328E-01
360	264 05:09:45	1.833	0.80346737E+06	0.6734E-01	0.9041E-01
361	264 05:19:45	2.000	0.80347137E+06	0.6395E-01	0.8359E-01
362	264 05:29:45	2.166	0.80346525E+06	0.6314E-01	0.7985E-01
363	264 05:39:45	2.333	0.80345887E+06	0.6388E-01	0.7828E-01
364	264 05:49:45	2.500	0.80344900E+06	0.6688E-01	0.7976E-01
365	264 05:59:45	2.666	0.80345600E+06	0.6519E-01	0.7661E-01
366	264 06:09:45	2.833	0.80345812E+06	0.6215E-01	0.7272E-01
367	264 06:19:45	3.000	0.80345400E+06	0.6017E-01	0.6980E-01
368	264 06:29:45	3.166	0.80343387E+06	0.6303E-01	0.7213E-01
369	264 06:39:45	3.333	0.80344575E+06	0.6156E-01	0.6990E-01
370	264 06:49:45	3.500	0.80343037E+06	0.6299E-01	0.7068E-01
371	264 06:59:45	3.666	0.80342650E+06	0.6416E-01	0.7126E-01
372	264 07:09:45	3.833	0.80342550E+06	0.6459E-01	0.7110E-01
373	264 07:19:45	4.000	0.80344000E+06	0.6193E-01	0.6846E-01
374	264 07:29:45	4.166	0.80342000E+06	0.6237E-01	0.6840E-01
375	264 07:39:45	4.333	0.80342125E+06	0.6205E-01	0.6764E-01
376	264 07:49:45	4.500	0.80341062E+06	0.6274E-01	0.6796E-01
377	264 07:59:45	4.666	0.80340837E+06	0.6315E-01	0.6803E-01
378	264 08:09:45	4.833	0.80339250E+06	0.6490E-01	0.6976E-01
379	264 08:19:45	5.000	0.80339212E+06	0.6599E-01	0.7065E-01
380	264 08:29:45	5.166	0.80338000E+06	0.6693E-01	0.7139E-01
381	264 08:39:45	5.333	0.80339100E+06	0.6706E-01	0.7125E-01
382	264 08:49:45	5.500	0.80339312E+06	0.6664E-01	0.7060E-01
383	264 08:59:45	5.666	0.80338550E+06	0.6663E-01	0.7035E-01
384	264 09:09:45	5.833	0.80336987E+06	0.6757E-01	0.7121E-01
385	264 09:19:45	6.000	0.80337287E+06	0.6785E-01	0.7130E-01

UNIT 2 ILRT FINAL REPORT

Table D.1

SUMMARY OF MASS PLOT LEAK RATES

386	264	09:29:45	6.166	0.80337600E+06	0.6759E-01	0.7087E-01
387	264	09:39:45	6.333	0.80336187E+06	0.6809E-01	0.7123E-01
388	264	09:49:45	6.500	0.80335725E+06	0.6856E-01	0.7158E-01
	264	09:59:45	6.666	0.80337062E+06	0.6790E-01	0.7084E-01
	264	10:09:45	6.833	0.80334075E+06	0.6887E-01	0.7183E-01
391	264	10:19:45	7.000	0.80334925E+06	0.6902E-01	0.7184E-01
392	264	10:29:45	7.166	0.80334537E+06	0.6915E-01	0.7184E-01
393	264	10:39:45	7.333	0.80334887E+06	0.6888E-01	0.7146E-01
394	264	10:49:45	7.500	0.80335412E+06	0.6819E-01	0.7075E-01
395	264	10:59:45	7.666	0.80335562E+06	0.6733E-01	0.6992E-01
	264	11:09:45	7.833	0.80332760E+06	0.6769E-01	0.7019E-01
397	264	11:19:45	8.000	0.80332075E+06	0.6905E-01	0.7077E-01
	264	11:29:45	8.166	0.80332037E+06	0.6831E-01	0.7055E-01
	264	11:39:45	8.333	0.80332237E+06	0.6826E-01	0.7051E-01
	264	11:49:45	8.500	0.80332337E+06	0.6811E-01	0.7028E-01
	264	11:59:45	8.666	0.80331730E+06	0.6820E-01	0.7022E-01
401	264	12:09:45	8.833	0.80332900E+06	0.6755E-01	0.6965E-01
402	264	12:19:45	9.000	0.80332837E+06	0.6755E-01	0.6958E-01
403	264	12:29:45	9.166	0.80331175E+06	0.6732E-01	0.6929E-01
404	264	12:39:45	9.333	0.80329837E+06	0.6740E-01	0.6932E-01
405	264	12:49:45	9.500	0.80330350E+06	0.6723E-01	0.6907E-01
406	264	12:59:45	9.666	0.80330300E+06	0.6696E-01	0.6876E-01
407	264	13:09:45	9.833	0.80329675E+06	0.6680E-01	0.6854E-01
408	264	13:19:45	10.000	0.80328112E+06	0.6698E-01	0.6868E-01
409	264	13:29:45	10.166	0.80330062E+06	0.6651E-01	0.6821E-01
410	264	13:39:45	10.333	0.80328512E+06	0.6640E-01	0.6805E-01
411	264	13:49:45	10.500	0.80327787E+06	0.6639E-01	0.6799E-01
412	264	13:59:45	10.666	0.80327237E+06	0.6642E-01	0.6797E-01
413	264	14:09:45	10.833	0.80327362E+06	0.6633E-01	0.6784E-01
414	264	14:19:45	11.000	0.80326062E+06	0.6647E-01	0.6794E-01
415	264	14:29:45	11.166	0.80328100E+06	0.6604E-01	0.6752E-01
416	264	14:39:45	11.333	0.80327350E+06	0.6574E-01	0.6721E-01
417	264	14:49:45	11.500	0.80326150E+06	0.6564E-01	0.6707E-01
418	264	14:59:45	11.666	0.80326450E+06	0.6541E-01	0.6681E-01
419	264	15:09:45	11.833	0.80325600E+06	0.6530E-01	0.6667E-01
420	264	15:19:45	12.000	0.80326712E+06	0.6490E-01	0.6628E-01
421	264	15:29:45	12.166	0.80323912E+06	0.6500E-01	0.6638E-01
422	264	15:39:45	12.333	0.80324212E+06	0.6493E-01	0.6631E-01
423	264	15:49:45	12.500	0.80325075E+06	0.6471E-01	0.6602E-01
424	264	15:59:45	12.666	0.80324700E+06	0.6448E-01	0.6578E-01
425	264	16:09:45	12.833	0.80323437E+06	0.6442E-01	0.6569E-01
426	264	16:19:45	13.000	0.80325425E+06	0.6398E-01	0.6528E-01
427	264	16:29:45	13.166	0.80323062E+06	0.6389E-01	0.6517E-01
428	264	16:39:45	13.333	0.80323462E+06	0.6369E-01	0.6495E-01
429	264	16:49:45	13.500	0.80322725E+06	0.6357E-01	0.6480E-01

Table D.1

SUMMARY F MASS PLOT LEAK RATES

431	264	16:59:45	12.660	0.80323000E+06	0.6335E-01	0.6458E-01
432	264	17:09:45	13.833	0.80321337E+06	0.6335E-01	0.6455E-01
433	264	17:19:45	14.000	0.80321125E+06	0.6333E-01	0.6450E-01
434	264	17:29:45	14.166	0.80320462E+06	0.6336E-01	0.6449E-01
435	264	17:39:45	14.333	0.80320900E+06	0.6327E-01	0.6438E-01
436	264	17:49:45	14.500	0.80321000E+06	0.6310E-01	0.6422E-01
437	264	17:59:45	14.666	0.80319850E+06	0.6309E-01	0.6417E-01
438	264	18:09:45	14.833	0.80320350E+06	0.6290E-01	0.6401E-01
439	264	18:19:45	15.000	0.80319000E+06	0.6284E-01	0.6390E-01
440	264	18:29:45	15.166	0.80320812E+06	0.6257E-01	0.6362E-01
441	264	18:39:45	15.333	0.80317987E+06	0.6262E-01	0.6365E-01
442	264	18:49:45	15.500	0.80317887E+06	0.6264E-01	0.6365E-01
443	264	18:59:45	15.666	0.80318575E+06	0.6254E-01	0.6353E-01
444	264	19:09:45	15.833	0.80319675E+06	0.6228E-01	0.6328E-01
445	264	19:19:45	16.000	0.80319625E+06	0.6199E-01	0.6301E-01
446	264	19:29:45	16.166	0.80319137E+06	0.6174E-01	0.6277E-01
447	264	19:39:45	16.333	0.80318387E+06	0.6155E-01	0.6257E-01
448	264	19:49:45	16.500	0.80316925E+06	0.6149E-01	0.6250E-01
449	264	19:59:45	16.666	0.80317612E+06	0.6133E-01	0.6232E-01
450	264	20:09:45	16.833	0.80317137E+06	0.6119E-01	0.6217E-01
451	264	20:19:45	17.000	0.80316850E+06	0.6105E-01	0.6202E-01
452	264	20:29:45	17.166	0.80317725E+06	0.6080E-01	0.6178E-01
453	264	20:39:45	17.333	0.80315775E+06	0.6072E-01	0.6169E-01
454	264	20:49:45	17.500	0.80316437E+06	0.6055E-01	0.6151E-01
455	264	20:59:45	17.666	0.80316362E+06	0.6036E-01	0.6132E-01
456	264	21:09:45	17.833	0.80314812E+06	0.6030E-01	0.6122E-01
457	264	21:19:45	18.000	0.80315437E+06	0.6015E-01	0.6109E-01
458	264	21:29:45	18.166	0.80314275E+06	0.6008E-01	0.6101E-01
459	264	21:39:45	18.333	0.80315112E+06	0.5991E-01	0.6094E-01
460	264	21:49:45	18.500	0.80315425E+06	0.5970E-01	0.6083E-01
461	264	21:59:45	18.666	0.80313525E+06	0.5963E-01	0.6055E-01
462	264	22:09:45	18.833	0.80313387E+06	0.5955E-01	0.6045E-01
463	264	22:19:45	19.000	0.80313700E+06	0.5942E-01	0.6032E-01
464	264	22:29:45	19.166	0.80313612E+06	0.5928E-01	0.6017E-01
465	264	22:39:45	19.333	0.80314112E+06	0.5908E-01	0.5998E-01
466	264	22:49:45	19.500	0.80313050E+06	0.5888E-01	0.5978E-01
467	264	22:59:45	19.666	0.80315025E+06	0.5859E-01	0.5952E-01
468	264	23:09:45	19.833	0.80314187E+06	0.5834E-01	0.5928E-01
469	264	23:19:45	20.000	0.80315325E+06	0.5800E-01	0.5898E-01
470	264	23:29:45	20.166	0.80313137E+06	0.5781E-01	0.5879E-01
471	264	23:39:45	20.333	0.80313112E+06	0.5761E-01	0.5859E-01
472	264	23:49:45	20.500	0.80313187E+06	0.5739E-01	0.5838E-01
473	264	23:59:45	20.666	0.80314112E+06	0.5709E-01	0.5811E-01
474	265	00:09:45	20.833	0.80313550E+06	0.5683E-01	0.5786E-01
475	265	00:19:45	21.000	0.80312075E+06	0.5665E-01	0.5768E-01
476	265	00:29:45	21.166	0.80312175E+06	0.5646E-01	0.5749E-01
477	265	00:39:45	21.333	0.80311525E+06	0.5629E-01	0.5732E-01

Table D.1

SUMMARY OF MASS %LOT LEAK RATES

478	205	00:49:45	21.500	0.80310875E+06	0.5616E-01	0.5718E-01
479	265	00:53:45	21.666	0.80311712E+06	0.5595E-01	0.5698E-01
480	205	01:03:45	21.833	0.80310987E+06	0.5579E-01	0.5681E-01
481	205	01:13:45	22.000	0.80310600E+06	0.5563E-01	0.5665E-01
482	265	01:23:45	22.166	0.80310375E+06	0.5548E-01	0.5649E-01
483	265	01:33:45	22.333	0.80309362E+06	0.5537E-01	0.5637E-01
484	265	01:43:45	22.500	0.80310462E+06	0.5519E-01	0.5619E-01
485	265	01:53:45	22.666	0.80310375E+06	0.5501E-01	0.5601E-01
486	205	02:03:45	22.833	0.80308712E+06	0.5490E-01	0.5590E-01
487	265	02:13:45	23.000	0.80309712E+06	0.5473E-01	0.5572E-01
488	265	02:23:45	23.166	0.80308987E+06	0.5459E-01	0.5558E-01
489	265	02:33:45	23.333	0.80307887E+06	0.5450E-01	0.5548E-01
490	265	02:43:45	23.500	0.80308675E+06	0.5435E-01	0.5533E-01
491	265	02:53:45	23.666	0.80308037E+06	0.5423E-01	0.5520E-01
492	265	03:03:45	23.833	0.80307912E+06	0.5411E-01	0.5507E-01
493	265	03:13:45	24.000	0.80308762E+06	0.5393E-01	0.5489E-01
494	265	03:23:45	24.166	0.80308512E+06	0.5375E-01	0.5471E-01
495	265	03:33:45	24.333	0.80308575E+06	0.5356E-01	0.5453E-01
496	265	03:43:45	24.500	0.80306325E+06	0.5348E-01	0.5444E-01
497	265	03:53:45	24.666	0.80307375E+06	0.5334E-01	0.5429E-01
498	265	04:03:45	24.833	0.80306625E+06	0.5322E-01	0.5417E-01
499	265	04:13:45	25.000	0.80306975E+06	0.5308E-01	0.5402E-01
500	265	04:23:45	25.166	0.80306412E+06	0.5295E-01	0.5389E-01
501	265	04:33:45	25.333	0.80305675E+06	0.5285E-01	0.5376E-01
502	265	04:43:45	25.500	0.80304600E+06	0.5279E-01	0.5371E-01
503	265	04:53:45	25.666	0.80305512E+06	0.5267E-01	0.5359E-01

 NO PRESSURE CHANNELS ARE LOCKED OUT

CHANNEL # 42 IS LOCKED OUT FROM DSN 1

UNIT 2 ILRT FINAL REPORT

TABLE D.2

SUMMARY OF PRESSURES

FRIDWOOD

UNIT 1

10:00:00

SUN, 22 SEP 1991

DATA SET DATE #	DATA SET TIME			PRESSURE #1, (PSIA)	PRESSURE #2 (PSIA)	AVERAGE PRESSURE , (PSIA)	VAPOR PRESSURE , (PSIA)	DRY AIR PRESSURE , (PSIA)
	DAY	HH	MM SS					
349	264	03:19:45	59.8209	59.8230	59.8219	0.3611	59.4609	
350	264	03:29:45	59.8191	59.8213	59.8202	0.3607	59.4595	
351	264	03:39:45	59.8175	59.8196	59.8185	0.3606	59.4579	
352	264	03:49:45	59.8158	59.8179	59.8168	0.3601	59.4567	
353	264	03:59:45	59.8138	59.8159	59.8148	0.3608	59.4541	
354	264	04:09:45	59.8120	59.8141	59.8130	0.3610	59.4520	
355	264	04:19:45	59.8105	59.8126	59.8115	0.3607	59.4508	
356	264	04:29:45	59.8089	59.8107	59.8098	0.3605	59.4493	
357	264	04:39:45	59.8068	59.8089	59.8078	0.3608	59.4471	
358	264	04:49:45	59.8051	59.8071	59.8061	0.3601	59.4460	
359	264	04:59:45	59.8033	59.8056	59.8044	0.3607	59.4438	
360	264	05:09:45	59.8017	59.8039	59.8028	0.3609	59.4419	
361	264	05:19:45	59.7999	59.8021	59.8010	0.3608	59.4402	
362	264	05:29:45	59.7982	59.8004	59.7993	0.3613	59.4380	
363	264	05:39:45	59.7965	59.7987	59.7976	0.3610	59.4365	
364	264	05:49:45	59.7947	59.7968	59.7957	0.3610	59.4348	
365	264	05:59:45	59.7929	59.7950	59.7939	0.3607	59.4332	
366	264	06:09:45	59.7910	59.7931	59.7920	0.3609	59.4315	
367	264	06:19:45	59.7896	59.7917	59.7906	0.3605	59.4301	
368	264	06:29:45	59.7879	59.7899	59.7889	0.3616	59.4273	
369	264	06:39:45	59.7861	59.7882	59.7871	0.3605	59.4266	
370	264	06:49:45	59.7842	59.7864	59.7853	0.3605	59.4248	
371	264	06:59:45	59.7824	59.7845	59.7834	0.3607	59.4227	
372	264	07:09:45	59.7807	59.7826	59.7815	0.3605	59.4210	
373	264	07:19:45	59.7789	59.7809	59.7799	0.3599	59.4200	
374	264	07:29:45	59.7772	59.7792	59.7782	0.3604	59.4178	
375	264	07:39:45	59.7756	59.7773	59.7764	0.3608	59.4156	
376	264	07:49:45	59.7740	59.7757	59.7740	0.3607	59.4141	
377	264	07:59:45	59.7723	59.7738	59.7730	0.3606	59.4124	
378	264	08:09:45	59.7706	59.7721	59.7713	0.3609	59.4104	
379	264	08:19:45	59.7689	59.7703	59.7690	0.3608	59.4087	
380	264	08:29:45	59.7672	59.7685	59.7678	0.3610	59.4065	
381	264	08:39:45	59.7652	59.7667	59.7659	0.3611	59.4049	
382	264	08:49:45	59.7630	59.7652	59.7644	0.3604	59.4040	
383	264	08:59:45	59.7618	59.7634	59.7626	0.3606	59.4020	
384	264	09:09:45	59.7602	59.7617	59.7609	0.3608	59.4001	
385	264	09:19:45	59.7587	59.7600	59.7593	0.3612	59.3981	

UNIT 2 ILRT FINAL REPORT

TABLE D.2

SUMMARY OF PRESSURES

386	264	09:29:45	59.7572	59.7584	59.7578	0.3606	59.3972
387	264	09:39:45	59.7553	59.7566	59.7559	0.3609	59.3951
388	264	09:49:45	59.7537	59.7548	59.7542	0.3612	59.3930
389	264	09:59:45	59.7522	59.7532	59.7527	0.3605	59.3922
0	264	10:09:45	59.7504	59.7514	59.7509	0.3609	59.3900
1	264	10:19:45	59.7489	59.7497	59.7493	0.3609	59.3884
392	264	10:29:45	59.7474	59.7482	59.7478	0.3607	59.3871
393	264	10:39:45	59.7458	59.7465	59.7461	0.3606	59.3855
394	264	10:49:45	59.7442	59.7451	59.7446	0.3603	59.3843
395	264	10:59:45	59.7427	59.7437	59.7432	0.3603	59.3829
396	264	11:09:45	59.7409	59.7420	59.7414	0.3605	59.3810
397	264	11:19:45	59.7394	59.7402	59.7398	0.3610	59.3792
398	264	11:29:45	59.7378	59.7387	59.7381	0.3608	59.3775
399	264	11:39:45	59.7361	59.7372	59.7365	0.3606	59.3761
400	264	11:49:45	59.7344	59.7356	59.7349	0.3604	59.3740
401	264	11:59:45	59.7327	59.7339	59.7332	0.3612	59.3721
402	264	12:09:45	59.7312	59.7324	59.7318	0.3595	59.3711
403	264	12:19:45	59.7296	59.7308	59.7303	0.3604	59.3699
404	264	12:29:45	59.7282	59.7292	59.7287	0.3604	59.3683
405	264	12:39:45	59.7266	59.7275	59.7270	0.3608	59.3661
406	264	12:49:45	59.7250	59.7260	59.7255	0.3602	59.3653
407	264	12:59:45	59.7234	59.7243	59.7238	0.3610	59.3610
408	264	13:09:45	59.7218	59.7226	59.7222	0.3611	59.3611
409	264	13:19:45	59.7203	59.7210	59.7206	0.3621	59.3585
410	264	13:29:45	59.7189	59.7197	59.7193	0.3601	59.3592
411	264	13:39:45	59.7175	59.7182	59.7178	0.3610	59.3569
412	264	13:49:45	59.7161	59.7168	59.7164	0.3607	59.3557
413	264	13:59:45	59.7143	59.7151	59.7147	0.3605	59.3541
414	264	14:09:45	59.7127	59.7135	59.7131	0.3602	59.3529
415	264	14:19:45	59.7111	59.7120	59.7115	0.3606	59.3510
416	264	14:29:45	59.7100	59.7106	59.7103	0.3601	59.3502
417	264	14:39:45	59.7084	59.7090	59.7087	0.3604	59.3483
418	264	14:49:45	59.7069	59.7076	59.7072	0.3600	59.3472
419	264	14:59:45	59.7053	59.7059	59.7056	0.3604	59.3452
420	264	15:09:45	59.7039	59.7045	59.7042	0.3600	59.3434
421	264	15:19:45	59.7024	59.7031	59.7027	0.3606	59.3419
422	264	15:29:45	59.7006	59.7016	59.7011	0.3605	59.3405
423	264	15:39:45	59.6993	59.7000	59.6996	0.3608	59.3389
424	264	15:49:45	59.6979	59.6988	59.6982	0.3606	59.3377
425	264	15:59:45	59.6965	59.6973	59.6969	0.3610	59.3359
426	264	16:09:45	59.6950	59.6957	59.6957	0.3611	59.3342
427	264	16:19:45	59.6936	59.6944	59.6940	0.3599	59.3341
428	264	16:29:45	59.6924	59.6931	59.6927	0.3608	59.3319
429	264	16:39:45	59.6908	59.6916	59.6912	0.3607	59.3305
430	264	16:49:45	59.6897	59.6904	59.6900	0.3611	59.3290

UNIT 2 ILRT FINAL REPORT

TABLE D.2

SUMMARY OF PRESSURES

431	264	16:59:45	59.6860	59.6889	59.6885	0.3606	59.327
432	264	17:09:45	59.6867	59.6875	59.6871	0.3615	59.325
433	264	17:19:45	59.6853	59.6861	59.6857	0.3611	59.324
434	264	17:29:45	59.6835	59.6845	59.6840	0.3614	59.322
435	264	17:39:45	59.6818	59.6829	59.6823	0.3608	59.321
436	264	17:49:45	59.6806	59.6816	59.6811	0.3608	59.320
437	264	17:59:45	59.6768	59.6799	59.6793	0.3610	59.318
438	264	18:09:45	59.6771	59.6782	59.6776	0.3611	59.316
439	264	18:19:45	59.6760	59.6769	59.6764	0.3609	59.315
440	264	18:29:45	59.6745	59.6753	59.6749	0.3609	59.314
441	264	18:39:45	59.6731	59.6738	59.6734	0.3602	59.313
442	264	18:49:45	59.6716	59.6724	59.6720	0.3615	59.310
443	264	18:59:45	59.6701	59.6708	59.6704	0.3606	59.309
444	264	19:09:45	59.6685	59.6691	59.6688	0.3600	59.308
445	264	19:19:45	59.6670	59.6679	59.6674	0.3599	59.307
446	264	19:29:45	59.6655	59.6663	59.6659	0.3599	59.306
447	264	19:39:45	59.6641	59.6648	59.6644	0.3604	59.304
448	264	19:49:45	59.6626	59.6635	59.6630	0.3605	59.302
449	264	19:59:45	59.6611	59.6619	59.6615	0.3605	59.300
450	264	20:09:45	59.6600	59.6607	59.6603	0.3600	59.300
451	264	20:19:45	59.6588	59.6593	59.6590	0.3608	59.298
452	264	20:29:45	59.6570	59.6577	59.6573	0.3608	59.296
453	264	20:39:45	59.6556	59.6563	59.6559	0.3609	59.295
454	264	20:49:45	59.6540	59.6549	59.6544	0.3605	59.294
455	264	20:59:45	59.6525	59.6534	59.6529	0.3606	59.292
456	264	21:09:45	59.6510	59.6518	59.6514	0.3598	59.291
457	264	21:19:45	59.6495	59.6503	59.6498	0.3602	59.289
458	264	21:29:45	59.6481	59.6487	59.6484	0.3603	59.288
459	264	21:39:45	59.6466	59.6473	59.6471	0.3607	59.286
460	264	21:49:45	59.6453	59.6457	59.6456	0.3600	59.285
461	264	21:59:45	59.6437	59.6443	59.6441	0.3609	59.283
462	264	22:09:45	59.6424	59.6431	59.6428	0.3606	59.282
463	264	22:19:45	59.6408	59.6417	59.6412	0.3602	59.281
464	264	22:29:45	59.6395	59.6403	59.6398	0.3603	59.279
465	264	22:39:45	59.6381	59.6387	59.6384	0.3604	59.278
466	264	22:49:45	59.6366	59.6374	59.6372	0.3607	59.276
467	264	22:59:45	59.6360	59.6366	59.6363	0.3606	59.275
468	264	23:09:45	59.6348	59.6355	59.6351	0.3604	59.274
469	264	23:19:45	59.6335	59.6342	59.6338	0.3598	59.274
470	264	23:29:45	59.6321	59.6329	59.6325	0.3606	59.271
471	264	23:39:45	59.6306	59.6315	59.6310	0.3602	59.270
472	264	23:49:45	59.6293	59.6301	59.6297	0.3603	59.269
473	264	23:59:45	59.6279	59.6286	59.6282	0.3600	59.268
474	265	00:09:45	59.6264	59.6271	59.6267	0.3603	59.266
475	265	00:19:45	59.6251	59.6258	59.6254	0.3607	59.264

UNIT 2 ILRT FINAL REPORT

TABLE D.2

SUMMARY OF PRESSURES

476	265	00:29:45	59.6238	59.6246	59.6242	0.3601	59.2641
477	265	00:39:45	59.6222	59.6232	59.6227	0.3602	59.2625
478	265	00:49:45	59.6208	59.6217	59.6212	0.3606	59.2607
479	265	00:59:45	59.6193	59.6202	59.6197	0.3598	59.2600
480	265	01:09:45	59.6178	59.6188	59.6183	0.3608	59.2575
481	265	01:19:45	59.6165	59.6174	59.6169	0.3602	59.2567
482	265	01:29:45	59.6153	59.6160	59.6156	0.3607	59.2550
483	265	01:39:45	59.6140	59.6146	59.6143	0.3606	59.2537
484	265	01:49:45	59.6130	59.6136	59.6133	0.3605	59.2527
485	265	01:59:45	59.6114	59.6121	59.6117	0.3605	59.2513
486	265	02:09:45	59.6099	59.6107	59.6103	0.3607	59.2490
487	265	02:19:45	59.6087	59.6094	59.6090	0.3600	59.2490
488	265	02:29:45	59.6073	59.6082	59.6077	0.3607	59.2470
489	265	02:39:45	59.6058	59.6068	59.6063	0.3610	59.2452
490	265	02:49:45	59.6047	59.6056	59.6051	0.3607	59.2445
491	265	02:59:45	59.6036	59.6044	59.6040	0.3606	59.2434
492	265	03:09:45	59.6022	59.6030	59.6026	0.3610	59.2415
493	265	03:19:45	59.6009	59.6018	59.6013	0.3606	59.2407
494	265	03:29:45	59.5996	59.6006	59.6001	0.3604	59.2397
495	265	03:39:45	59.5982	59.5992	59.5987	0.3602	59.2385
496	265	03:49:45	59.5966	59.5977	59.5971	0.3611	59.2361
497	265	03:59:45	59.5952	59.5965	59.5959	0.3603	59.2356
498	265	04:09:45	59.5939	59.5952	59.5945	0.3601	59.2344
499	265	04:19:45	59.5928	59.5939	59.5933	0.3609	59.2324
500	265	04:29:45	59.5917	59.5928	59.5922	0.3604	59.2319
501	265	04:39:45	59.5905	59.5916	59.5910	0.3605	59.2306
502	265	04:49:45	59.5890	59.5900	59.5895	0.3619	59.2286
503	265	04:59:45	59.5877	59.5889	59.5883	0.3605	59.2278

NO PRESSURE CHANNELS ARE LOCKED OUT

DAS CHANNEL # 42 IS LOCKED OUT FROM DSN 1

UNIT 2 ILRT FINAL REPORT

TABLE D.3

SUMMARY OF TEMPERATURES

0041DWD9D

UNIT 2

10:00:42

SUN, 22 SEP 1991

DATA SET#	DATA SET			AVERAGE TEMP, (DEG F)	AVERAGE SUBVOLUME TEMPERATURES, (DEG F)								
	DAY	HH	MM		#1	#2	#3	#4	#5	#6	#7	#8	#9
349	204	03:19:45		92.3	92.9	93.0	93.0	92.2	92.9	91.9	92.6	85.6	85.7
350	204	03:29:45		92.3	92.9	93.0	93.0	92.9	92.8	91.9	92.6	85.6	85.7
351	204	03:39:45		92.2	92.8	93.0	92.9	92.8	92.8	91.9	92.6	85.6	85.6
352	204	03:49:45		91.7	92.8	92.9	92.9	92.9	92.8	91.9	92.6	85.6	85.6
353	204	03:59:45		92.2	92.8	92.9	92.9	92.9	92.8	91.9	92.6	85.6	85.6
354	204	04:09:45		92.2	92.8	92.9	92.9	92.9	92.8	91.9	92.6	85.6	85.6
355	204	04:19:45		92.2	92.8	92.9	92.9	92.9	92.8	91.9	92.6	85.6	85.6
356	204	04:29:45		92.2	92.8	92.9	92.9	92.8	92.8	91.9	92.6	85.6	85.6
357	204	04:39:45		92.2	92.8	92.9	92.8	92.8	92.7	91.8	92.6	85.6	85.6
358	204	04:49:45		92.2	92.7	92.8	92.8	92.8	92.7	91.8	92.6	85.6	85.6
359	204	04:59:45		92.1	92.7	92.8	92.8	92.8	92.7	91.8	92.5	85.6	85.6
360	204	05:09:45		92.1	92.7	92.8	92.8	92.8	92.7	91.8	92.5	85.6	85.6
361	204	05:19:45		92.1	92.7	92.8	92.8	92.7	92.7	91.8	92.5	85.6	85.6
362	204	05:29:45		92.1	92.7	92.8	92.8	92.7	92.7	91.8	92.5	85.6	85.6
363	204	05:39:45		92.1	92.7	92.8	92.7	92.7	92.6	91.8	92.5	85.6	85.6
364	204	05:49:45		92.1	92.7	92.8	92.7	92.7	92.6	91.8	92.5	85.6	85.6
365	204	05:59:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
366	204	06:09:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
367	204	06:19:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
368	204	06:29:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
369	204	06:39:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
370	204	06:49:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
371	204	06:59:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
372	204	07:09:45		92.0	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
373	204	07:19:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
374	204	07:29:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
375	204	07:39:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
376	204	07:49:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
377	204	07:59:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
378	204	08:09:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
379	204	08:19:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
380	204	08:29:45		91.9	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
381	204	08:39:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
382	204	08:49:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
383	204	08:59:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
384	204	09:09:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
385	204	09:19:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
386	204	09:29:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
387	204	09:39:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
388	204	09:49:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
389	204	09:59:45		91.8	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
390	204	10:09:45		91.7	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
391	204	10:19:45		91.7	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
392	204	10:29:45		91.7	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6
393	204	10:39:45		91.7	92.7	92.7	92.7	92.7	92.6	91.8	92.5	85.6	85.6

UNIT 2 ILRT FINAL REPORT

TABLE D.3

SUMMARY OF TEMPERATURES

394	264	10:49:45	91.7	92.2	92.3	92.3	92.3	92.2	92.2	91.6	92.3	85.5	85.5
395	264	10:59:45	91.7	92.1	92.3	92.3	92.2	92.2	92.2	91.6	92.3	85.5	85.5
396	264	11:09:45	91.7	92.2	92.3	92.3	92.2	92.2	92.2	91.6	92.3	85.5	85.5
397	264	11:19:45	91.6	92.1	92.3	92.2	92.2	92.2	92.2	91.6	92.3	85.5	85.5
398	264	11:29:45	91.6	92.1	92.3	92.2	92.2	92.2	92.2	91.6	92.3	85.5	85.5
399	264	11:39:45	91.6	92.1	92.2	92.2	92.2	92.2	92.2	91.6	92.2	85.5	85.5
400	264	11:49:45	91.6	92.1	92.2	92.2	92.2	92.2	92.1	91.6	92.2	85.5	85.4
401	264	11:59:45	91.6	92.1	92.2	92.2	92.2	92.2	92.1	91.6	92.2	85.5	85.4
402	264	12:09:45	91.6	92.1	92.2	92.2	92.1	92.1	92.1	91.5	92.2	85.5	85.4
403	264	12:19:45	91.6	92.1	92.2	92.2	92.1	92.1	92.1	91.5	92.2	85.5	85.4
404	264	12:29:45	91.6	92.0	92.1	92.1	92.1	92.1	92.1	91.5	92.2	85.5	85.4
405	264	12:39:45	91.5	92.0	92.1	92.1	92.1	92.1	92.1	91.5	92.2	85.5	85.4
406	264	12:49:45	91.5	92.0	92.1	92.1	92.1	92.1	92.1	91.5	92.2	85.5	85.4
407	264	12:59:45	91.5	92.0	92.1	92.1	92.1	92.1	92.1	91.5	92.1	85.5	85.4
408	264	13:09:45	91.5	92.0	92.1	92.1	92.0	92.0	92.0	91.5	92.1	85.5	85.4
409	264	13:19:45	91.5	92.0	92.1	92.1	92.0	92.0	92.0	91.5	92.1	85.5	85.4
410	264	13:29:45	91.5	92.0	92.0	92.0	92.0	92.0	92.0	91.5	92.1	85.5	85.4
411	264	13:39:45	91.5	91.9	92.0	92.0	92.0	92.0	92.0	91.5	92.1	85.5	85.4
412	264	13:49:45	91.5	91.9	92.0	92.0	92.0	92.0	92.0	91.5	92.1	85.5	85.4
413	264	13:59:45	91.4	91.9	92.0	92.0	92.0	92.0	92.0	91.5	92.1	85.5	85.4
414	264	14:09:45	91.4	91.9	92.0	92.0	92.0	92.0	91.9	91.5	92.1	85.5	85.4
415	264	14:19:45	91.4	91.9	92.0	92.0	92.0	92.0	91.9	91.5	92.1	85.5	85.4
416	264	14:29:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
417	264	14:39:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.1	85.5	85.4
418	264	14:49:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
419	264	14:59:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
420	264	15:09:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
421	264	15:19:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
422	264	15:29:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
423	264	15:39:45	91.4	91.9	92.0	92.0	92.0	91.9	91.9	91.4	92.0	85.5	85.4
424	264	15:49:45	91.4	91.9	92.0	92.0	92.0	91.9	91.8	91.4	92.0	85.5	85.4
425	264	15:59:45	91.4	91.9	92.0	92.0	92.0	91.8	91.8	91.4	91.9	85.5	85.4
426	264	16:09:45	91.4	91.9	92.0	92.0	92.0	91.8	91.8	91.4	91.9	85.5	85.4
427	264	16:19:45	91.4	91.9	92.0	92.0	92.0	91.8	91.8	91.4	92.0	85.6	85.5
428	264	16:29:45	91.4	91.9	92.0	92.0	92.0	91.8	91.8	91.4	91.9	85.6	85.5
429	264	16:39:45	91.4	91.9	92.0	92.0	92.0	91.8	91.8	91.4	91.9	85.6	85.5
430	264	16:49:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.4	91.9	85.6	85.5
431	264	16:59:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
432	264	17:09:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
433	264	17:19:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
434	264	17:29:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
435	264	17:39:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
436	264	17:49:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5
437	264	17:59:45	91.4	91.9	92.0	92.0	92.0	91.7	91.7	91.3	91.9	85.6	85.5

UNIT 2 ILRT FINAL REPORT

TABLE D.3

SUMMARY OF TEMPERATURES

438	264	18:03:45	91.1	91.6	91.7	91.7	91.7	91.7	91.3	91.8	85.6	85.5
439	264	18:13:45	91.1	91.6	91.7	91.7	91.7	91.6	91.3	91.8	85.6	85.5
440	264	18:23:45	91.1	91.5	91.7	91.6	91.7	91.6	91.3	91.8	85.6	85.5
441	264	18:33:45	91.1	91.6	91.7	91.6	91.7	91.6	91.3	91.8	85.6	85.5
442	264	18:43:45	91.1	91.5	91.6	91.6	91.6	91.6	91.3	91.8	85.6	85.5
443	264	18:53:45	91.1	91.5	91.6	91.6	91.6	91.6	91.3	91.8	85.6	85.5
444	264	19:03:45	91.1	91.5	91.6	91.6	91.6	91.6	91.3	91.8	85.6	85.5
445	264	19:13:45	91.1	91.5	91.6	91.6	91.6	91.6	91.2	91.8	85.6	85.5
446	264	19:23:45	91.1	91.5	91.6	91.6	91.6	91.5	91.2	91.8	85.6	85.5
447	264	19:33:45	91.0	91.5	91.6	91.6	91.5	91.5	91.2	91.7	85.6	85.5
448	264	19:43:45	91.0	91.4	91.6	91.5	91.5	91.5	91.2	91.7	85.6	85.5
449	264	19:53:45	91.0	91.4	91.5	91.5	91.5	91.5	91.2	91.7	85.6	85.5
450	264	20:03:45	91.0	91.4	91.6	91.5	91.5	91.5	91.2	91.7	85.6	85.5
451	264	20:13:45	91.0	91.4	91.5	91.5	91.5	91.5	91.2	91.7	85.6	85.5
452	264	20:23:45	91.0	91.4	91.5	91.5	91.5	91.5	91.2	91.7	85.6	85.5
453	264	20:33:45	91.0	91.4	91.5	91.5	91.5	91.5	91.2	91.7	85.6	85.5
454	264	20:43:45	91.0	91.4	91.5	91.5	91.5	91.4	91.2	91.6	85.6	85.5
455	264	20:53:45	91.0	91.4	91.5	91.4	91.5	91.4	91.1	91.6	85.6	85.5
456	264	21:03:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.5
457	264	21:13:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.5
458	264	21:23:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.5
459	264	21:33:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.5
460	264	21:43:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
461	264	21:53:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
462	264	22:03:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
463	264	22:13:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
464	264	22:23:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
465	264	22:33:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
466	264	22:43:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
467	264	22:53:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
468	264	23:03:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
469	264	23:13:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
470	264	23:23:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
471	264	23:33:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
472	264	23:43:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
473	264	23:53:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
474	264	00:03:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
475	264	00:13:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4
476	264	00:23:45	91.0	91.4	91.5	91.4	91.4	91.4	91.1	91.6	85.6	85.4

UNIT 2 ILRT FINAL REPORT

TABLE D.3

SUMMARY OF TEMPERATURES

477	7:55	00:34:45	90.7	91.0	91.0	91.1	91.3	91.2	90.9	91.4	85.6	85.4
478	8:05	00:49:45	90.7	91.0	91.0	91.1	91.2	91.1	90.9	91.4	85.6	85.4
479	8:15	00:59:45	90.7	91.0	91.0	91.1	91.2	91.1	90.9	91.4	85.6	85.4
480	8:27	01:09:45	90.7	91.0	91.1	91.1	91.2	91.1	90.9	91.4	85.6	85.4
481	8:35	01:19:45	90.7	91.0	91.1	91.1	91.2	91.1	90.9	91.3	85.6	85.4
482	8:45	01:29:45	90.6	91.0	91.1	91.1	91.2	91.1	90.9	91.4	85.6	85.4
483	8:55	01:39:45	90.6	90.9	91.1	91.1	91.2	91.1	90.9	91.4	85.6	85.4
484	9:05	01:49:45	90.6	90.9	91.1	91.1	91.2	91.1	90.9	91.3	85.6	85.4
485	9:15	01:59:45	90.6	90.9	91.1	91.1	91.1	91.1	90.9	91.3	85.6	85.4
486	9:25	02:09:45	90.6	90.9	91.1	91.0	91.1	91.0	90.9	91.3	85.6	85.4
487	9:35	02:19:45	90.6	90.9	91.1	91.0	91.1	91.0	90.9	91.3	85.6	85.4
488	9:45	02:29:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
489	9:55	02:39:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
490	10:05	02:49:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
491	10:15	02:59:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
492	10:25	03:09:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
493	10:35	03:19:45	90.6	90.9	91.0	91.0	91.1	91.0	90.8	91.3	85.6	85.4
494	10:45	03:29:45	90.6	90.9	91.0	90.9	91.1	91.0	90.8	91.3	85.6	85.4
495	10:55	03:39:45	90.6	90.9	91.0	90.9	91.1	91.0	90.8	91.3	85.6	85.4
496	11:05	03:49:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
497	11:15	03:59:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
498	11:25	04:09:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
499	11:35	04:19:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
500	11:45	04:29:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
501	11:55	04:39:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
502	12:05	04:49:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
503	12:15	04:59:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
504	12:25	05:09:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
505	12:35	05:19:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
506	12:45	05:29:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4
507	12:55	05:39:45	90.6	90.9	91.0	90.9	91.0	90.9	90.8	91.3	85.6	85.4

 ILRT - FUEL BURN CHANNELS 67, 208, 214
 100% - 100% - 45% - 100% - 100% - 100% - 100%

UNIT 2 ILRT FINAL REPORT

TABLE D.4

SUMMARY OF DEWCELL TEMPERATURES

1253230000 UNIT 2 0100:00 SUN, 23 SEP 1992

BROW	TANK	D. W. TEMP, DES (F)	SUBVOLUME TEMPERATURES, (DEG F)									
			#1	#2	#3	#4	#5	#6	#7	#8	#9	
347	264	01:19:45	69.3	69.4	69.3	69.4	69.9	71.1	68.5	70.2	69.9	69.9
348	264	01:29:45	69.9	69.6	69.3	69.5	69.9	71.1	68.4	70.1	69.9	69.9
349	264	01:39:45	69.8	69.8	69.3	69.5	69.9	71.1	68.2	70.1	69.9	69.9
350	264	01:49:45	69.8	69.5	69.3	69.5	69.9	71.2	68.4	70.0	69.9	69.9
351	264	01:59:45	69.8	69.5	69.4	69.7	69.9	71.0	68.3	70.0	69.9	69.9
352	264	02:09:45	69.8	69.8	69.4	69.6	69.9	71.1	68.3	70.1	69.9	69.9
353	264	02:19:45	69.8	69.8	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
354	264	02:29:45	69.9	69.5	69.3	69.5	70.0	71.0	68.2	70.1	69.9	69.9
355	264	02:39:45	69.8	69.6	69.4	69.5	69.9	71.0	68.5	70.0	69.9	69.9
356	264	02:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
357	264	02:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
358	264	03:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
359	264	03:19:45	69.9	69.7	69.3	69.5	70.0	71.0	68.4	70.1	69.9	69.9
360	264	03:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
361	264	03:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
362	264	03:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
363	264	03:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
364	264	04:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
365	264	04:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
366	264	04:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
367	264	04:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
368	264	04:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
369	264	04:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
370	264	05:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
371	264	05:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
372	264	05:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
373	264	05:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
374	264	05:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
375	264	05:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
376	264	06:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
377	264	06:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
378	264	06:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
379	264	06:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
380	264	06:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
381	264	06:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
382	264	07:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
383	264	07:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
384	264	07:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
385	264	07:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
386	264	07:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
387	264	07:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
388	264	08:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
389	264	08:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
390	264	08:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
391	264	08:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
392	264	08:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
393	264	08:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
394	264	09:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
395	264	09:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
396	264	09:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
397	264	09:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
398	264	09:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
399	264	09:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
400	264	10:09:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
401	264	10:19:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
402	264	10:29:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
403	264	10:39:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
404	264	10:49:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9
405	264	10:59:45	69.9	69.7	69.3	69.5	69.9	71.0	68.5	70.1	69.9	69.9

UNIT 2 ILRT FINAL REPORT

TABLE D.4

SUMMARY OF DEWCELL TEMPERATURES

386	264	11:49:45	69.8	69.8	69.3	69.5	69.9	71.1	68.4	69.8	69.9	69.9
388	264	11:50:45	69.8	69.6	69.3	69.4	70.0	71.0	68.3	69.9	69.9	69.9
390	264	11:51:45	69.8	69.5	69.4	69.6	69.9	71.0	68.5	69.8	69.9	69.9
392	264	11:52:45	69.9	69.6	69.4	69.6	70.0	71.1	68.5	69.9	69.8	69.9
394	264	11:53:45	69.9	69.5	69.3	69.5	70.0	71.0	68.7	69.9	69.9	69.9
397	264	11:54:45	69.8	69.7	69.7	69.5	69.6	71.0	68.7	69.9	69.8	69.9
400	264	11:55:45	69.8	69.6	69.3	69.5	69.9	71.1	68.4	69.9	69.8	69.9
401	264	11:56:45	69.9	69.6	69.4	69.6	69.9	71.1	68.6	69.9	69.8	69.9
402	264	11:57:45	69.7	69.6	69.6	69.4	69.8	71.0	68.3	69.9	69.8	69.9
403	264	11:58:45	69.8	69.6	69.3	69.5	69.9	71.1	68.2	69.8	69.8	69.9
406	264	12:00:45	69.8	69.6	69.3	69.5	69.9	71.0	68.7	69.9	69.8	69.9
405	264	12:01:45	69.8	69.8	69.3	69.4	70.0	71.0	68.6	69.8	69.8	69.9
408	264	12:03:45	69.8	69.6	69.3	69.5	69.9	71.0	68.3	69.8	69.8	69.9
407	264	12:04:45	69.9	69.6	69.4	69.6	70.0	71.0	68.3	69.9	69.8	69.9
409	264	12:05:45	69.9	69.6	69.4	69.7	69.9	71.0	68.4	69.8	69.8	69.9
409	264	12:06:45	69.9	69.8	69.5	69.7	70.0	71.1	68.7	69.9	69.8	69.9
410	264	12:07:45	69.8	69.5	69.2	69.5	69.9	71.0	68.5	69.8	69.8	69.9
411	264	12:08:45	69.8	69.6	69.4	69.6	69.9	71.0	68.8	69.9	69.8	69.9
412	264	12:09:45	69.8	69.6	69.3	69.5	69.9	71.1	68.5	69.8	69.8	69.9
413	264	12:10:45	69.9	69.6	69.4	69.5	69.9	71.0	68.4	69.8	69.8	69.9
416	264	12:12:45	69.9	69.4	69.4	69.6	69.8	71.0	68.5	69.8	69.8	69.9
415	264	12:13:45	69.8	69.8	69.3	69.4	69.9	71.0	68.6	69.8	69.8	69.9
416	264	12:14:45	69.8	69.5	69.3	69.3	69.9	71.0	68.5	69.8	69.8	69.9
417	264	12:15:45	69.8	69.5	69.4	69.5	69.8	71.0	68.5	69.8	69.8	69.9
418	264	12:16:45	69.8	69.5	69.4	69.4	69.9	71.0	68.7	69.9	69.8	69.9
419	264	12:17:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
420	264	12:18:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
421	264	12:19:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
422	264	12:20:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
423	264	12:21:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
424	264	12:22:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
425	264	12:23:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
426	264	12:24:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
427	264	12:25:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
428	264	12:26:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
429	264	12:27:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
430	264	12:28:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
431	264	12:29:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
432	264	12:30:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
433	264	12:31:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
434	264	12:32:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
435	264	12:33:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
436	264	12:34:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
437	264	12:35:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
438	264	12:36:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
439	264	12:37:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
440	264	12:38:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
441	264	12:39:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
442	264	12:40:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
443	264	12:41:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
444	264	12:42:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9
445	264	12:43:45	69.8	69.7	69.2	69.4	70.0	71.0	68.5	69.8	69.8	69.9

TABLE D.4

SUMMARY OF DEWCELL TEMPERATURES

443	264	18:49:45	69.9	69.8	69.5	69.7	70.0	71.0	68.4	69.8	69.7	69.9
443	264	18:50:45	69.8	69.6	69.4	69.6	69.8	71.0	68.6	69.9	69.7	69.9
444	264	18:51:45	69.8	69.5	69.3	69.5	69.9	71.0	68.4	69.8	69.7	70.0
445	264	18:52:45	69.8	69.7	69.5	69.3	69.8	71.0	68.6	69.9	69.8	70.0
446	264	18:53:45	69.8	69.4	69.3	69.4	70.0	71.0	68.5	69.8	69.7	69.9
447	264	18:54:45	69.8	69.4	69.3	69.4	70.0	71.0	68.4	69.9	69.7	69.9
447	264	18:55:45	69.8	69.5	69.3	69.5	69.9	71.0	68.5	69.9	69.7	70.0
448	264	18:56:45	69.8	69.5	69.3	69.5	69.9	71.0	68.1	69.8	69.7	69.9
449	264	18:57:45	69.8	69.7	69.4	69.6	69.9	71.0	68.4	69.9	69.7	69.9
450	264	18:58:45	69.8	69.7	69.4	69.5	69.9	71.0	68.4	69.9	69.7	69.9
451	264	18:59:45	69.8	69.7	69.4	69.6	70.0	71.0	68.4	69.9	69.7	69.9
452	264	19:00:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
453	264	19:01:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
454	264	19:02:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
455	264	19:03:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
456	264	19:04:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
457	264	19:05:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
458	264	19:06:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
459	264	19:07:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
460	264	19:08:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
461	264	19:09:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
462	264	19:10:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
463	264	19:11:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
464	264	19:12:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
465	264	19:13:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
466	264	19:14:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
467	264	19:15:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
468	264	19:16:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
469	264	19:17:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
470	264	19:18:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
471	264	19:19:45	69.8	69.5	69.3	69.5	70.0	71.0	68.4	69.9	69.7	70.0
472	264	19:20:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.8	69.9
473	264	19:21:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
474	264	19:22:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9

UNIT 2 ILRT FINAL REPORT

TABLE D.4

SUMMARY OF DEWCELL TEMPERATURES

474	01:11:45	69.8	69.5	69.4	69.6	69.9	71.0	68.5	69.9	69.7	69.9
475	01:12:45	69.8	69.5	69.3	69.5	69.9	71.0	68.4	69.8	69.7	69.9
476	01:13:45	69.8	69.5	69.3	69.5	69.9	71.0	68.5	69.8	69.7	69.9
477	01:14:45	69.8	69.5	69.4	69.6	69.9	71.0	68.5	70.0	69.7	69.9
478	01:15:45	69.7	69.4	69.3	69.3	69.9	71.0	68.4	69.8	69.7	69.9
479	01:16:45	69.8	69.5	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
480	01:17:45	69.8	69.5	69.3	69.5	69.9	71.0	68.5	69.7	69.7	69.9
481	01:18:45	69.8	69.5	69.3	69.5	69.9	71.0	68.5	69.7	69.7	69.9
482	01:19:45	69.8	69.6	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
483	01:20:45	69.8	69.6	69.4	69.6	69.9	71.0	68.4	69.8	69.7	69.9
484	01:21:45	69.8	69.7	69.3	69.5	69.9	71.0	68.5	69.8	69.7	69.9
485	01:22:45	69.8	69.5	69.4	69.6	69.9	71.0	68.5	69.8	69.7	69.9
486	01:23:45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
487	01:24:45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
488	01:25:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
489	01:26:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
490	01:27:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
491	01:28:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
492	01:29:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
493	01:30:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
494	01:31:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
495	01:32:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
496	01:33:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
497	01:34:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
498	01:35:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
499	01:36:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
500	01:37:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
501	01:38:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
502	01:39:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9
503	01:40:45	69.8	69.7	69.3	69.5	70.0	71.0	68.5	69.8	69.7	69.9

ALL PRESSURE CHANNELS ARE LOGGING

DWG CHANNEL # 42 IS LOGGING BUT NOT DATA

UNIT 2 ILRT FINAL REPORT

Appendix E - INDUCED LEAKAGE TEST DATA

The following tables present the data for the induced leakage phase of the ILRT. The induced leakage test is defined as the interval between data sets 505 and 522 inclusive. This corresponds to a 2 hour, 50 minute test duration. The following data is included:

TABLE	TITLE
E.1	Summary of Mass Plot Leak Rates
E.2	Summary of Pressures
E.3	Summary of Temperatures
E.4	Summary of Dewcell Temperatures

UNIT 2 ILRT FINAL REPORT

TABLE E.1

SUMMARY OF MASS PLOT LEAK RATES

SAFARI UNIT 2 08:00:00 JUN. 28 SEP 1991

DATA SET 505 THROUGH 521

LEAK RATE TEST RESULTS CALCULATED USING THE MASS PLOT METHOD

DATA SET #	DATA SET TIME	TEST TIME (HR)	DRY AIR MASS (LBM)	LEAK RATE (W/D)	95% UP CONF LIMIT (W/D)
505	05:12:45	0.000	0.00384075E+06		
506	05:19:45	0.100	0.80325513E+06		
507	05:29:45	0.200	0.80303875E+06	0.9891E-01	0.1062E+01
508	05:49:45	0.500	0.80303613E+06	0.1027E+00	0.2508E+00
509	05:59:45	0.666	0.80301575E+06	0.1561E+00	0.2559E+00
510	06:09:45	0.833	0.80301130E+06	0.1612E+00	0.2206E+00
511	06:19:45	1.000	0.80300600E+06	0.1591E+00	0.1989E+00
512	06:29:45	1.166	0.80300397E+06	0.1453E+00	0.1778E+00
513	06:39:45	1.333	0.80300300E+06	0.1430E+00	0.1690E+00
514	06:49:45	1.500	0.80300197E+06	0.1510E+00	0.1700E+00
515	06:59:45	1.666	0.80300150E+06	0.1490E+00	0.1661E+00
516	07:09:45	1.833	0.80300100E+06	0.1440E+00	0.1591E+00
517	07:19:45	2.000	0.80300075E+06	0.1505E+00	0.1640E+00
518	07:29:45	2.166	0.80300050E+06	0.1553E+00	0.1664E+00
519	07:39:45	2.333	0.80300025E+06	0.1511E+00	0.1633E+00
520	07:49:45	2.500	0.80300000E+06	0.1495E+00	0.1601E+00
521	07:59:45	2.666	0.80299975E+06	0.1473E+00	0.1568E+00
522	08:09:45	2.833	0.80299950E+06	0.1471E+00	0.1556E+00

SAFARI UNIT 2 08:00:00 JUN. 28 SEP 1991

UNIT 2 ILRT FINAL REPORT

TABLE E.2

SUMMARY OF PRESSURES

FRUITWOOD UNIT 2 10:11:00 SUN, 22 SEP 1991

DATA SET #	DATA SET TIME DAY HH MM SS	PRESSURE #1, (PSIA)	PRESSURE #2 (PSIA)	AVERAGE PRESSURE, (PSIA)	VAPOR PRESSURE, (PSIA)	DRY AIR PRESSURE, (PSIA)
505	265 05:19:45	59.5849	59.5800	59.5854	0.3608	59.2247
506	265 05:20:45	59.5832	59.5842	59.5837	0.3601	59.2236
507	265 05:29:45	59.5813	59.5825	59.5819	0.3604	59.2215
508	265 05:49:45	59.5793	59.5805	59.5799	0.3600	59.2199
509	265 05:59:45	59.5775	59.5787	59.5781	0.3612	59.2169
510	265 06:09:45	59.5760	59.5771	59.5765	0.3605	59.2160
511	265 06:19:45	59.5742	59.5755	59.5748	0.3603	59.2145
512	265 06:29:45	59.5727	59.5738	59.5732	0.3603	59.2129
513	265 06:39:45	59.5711	59.5722	59.5716	0.3600	59.2110
514	265 06:49:45	59.5695	59.5706	59.5700	0.3607	59.2094
515	265 06:59:45	59.5677	59.5689	59.5683	0.3607	59.2070
516	265 07:09:45	59.5662	59.5672	59.5667	0.3600	59.2001
517	265 07:19:45	59.5647	59.5657	59.5652	0.3610	59.2040
518	265 07:29:45	59.5631	59.5641	59.5633	0.3612	59.2021
519	265 07:39:45	59.5615	59.5625	59.5616	0.3600	59.2014
520	265 07:49:45	59.5600	59.5610	59.5601	0.3608	59.1990
521	265 07:54:45	59.5582	59.5592	59.5580	0.3603	59.1983
522	265 08:09:45	59.5566	59.5575	59.5568	0.3600	59.1969

.....
 NO PRESSURE CHANNELS ARE LOCKED OUT
 THE CHANNEL # 40 IS LOCKED OUT FROM DON 1

UNIT 2 ILRT FINAL REPORT

TABLE E.3

SUMMARY OF TEMPERATURES

PSA1D000 UNIT 2 10:11:31 SUN, 22 SEP 1991

DATA SET#	DATA SET TIME			AVERAGE TEMP, (DEG F)	AVERAGE SUBVOLUME TEMPERATURES, (DEG F)								
	DAY	HH	MM SS		#1	#2	#3	#4	#5	#6	#7	#8	#9
505	005	05:19:45		90.4	90.7	90.8	90.8	90.9	90.8	90.7	91.1	85.5	85.3
506	007	05:29:45		90.4	90.7	90.8	90.8	90.9	90.8	90.7	91.2	85.5	85.3
507	009	05:39:45		90.4	90.7	90.8	90.8	90.9	90.8	90.7	91.1	85.5	85.3
508	011	05:49:45		90.4	90.8	90.8	90.8	90.9	90.8	90.7	91.1	85.5	85.3
509	013	05:59:45		90.4	90.8	90.8	90.8	90.9	90.8	90.7	91.1	85.5	85.3
510	015	06:09:45		90.3	90.8	90.8	90.8	90.9	90.8	90.6	91.1	85.5	85.3
511	017	06:19:45		90.3	90.8	90.8	90.8	90.9	90.8	90.6	91.1	85.5	85.3
512	019	06:29:45		90.3	90.7	90.8	90.7	90.8	90.7	90.6	91.1	85.5	85.3
513	021	06:39:45		90.3	90.7	90.7	90.7	90.8	90.8	90.6	91.1	85.5	85.3
514	023	06:49:45		90.3	90.7	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
515	025	06:59:45		90.3	90.7	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
516	027	07:09:45		90.3	90.7	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
517	029	07:19:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
518	031	07:29:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
519	033	07:39:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
520	035	07:49:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
521	037	07:59:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3
522	039	08:09:45		90.3	90.6	90.7	90.7	90.8	90.7	90.6	91.0	85.5	85.3

 NO PRESSURE CHANNELS ARE LOCKED OUT

DAS CHANNEL # 40 IS LOCKED OUT FROM DSN 1

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TABLE E.4

SUMMARY OF DEWCELL TEMPERATURES

BRAIDWOOD UNIT 2 12:23:21 SUN, 22 SEP 1991

DATA SET#	DATA SET TIME				AVERAGE DEW TEMP, (DEG F)	AVERAGE SUBVOLUME TEMPERATURES, (DEG F)								
	DAY	HH	MM	SS		#1	#2	#3	#4	#5	#6	#7	#8	#9
505	265	05	19	45	69.8	69.7	69.4	69.5	69.9	71.0	68.6	69.9	69.7	69.9
506	265	05	29	45	69.8	69.6	69.3	69.3	69.9	71.0	68.7	69.8	69.7	69.9
507	265	05	39	45	69.8	69.5	69.3	69.6	70.0	71.0	68.4	69.8	69.7	69.9
508	265	05	49	45	69.8	69.5	69.3	69.4	70.0	71.0	68.3	69.8	69.7	69.9
509	265	05	59	45	69.8	69.7	69.4	69.6	70.0	71.0	68.5	70.0	69.7	69.9
510	265	06	09	45	69.8	69.7	69.3	69.5	69.9	71.0	68.5	69.8	69.7	69.9
511	265	06	19	45	69.8	69.6	69.3	69.4	69.9	71.0	68.5	69.9	69.7	69.9
512	265	06	29	45	69.8	69.8	69.3	69.4	69.9	71.0	68.7	69.9	69.7	69.9
513	265	06	39	45	69.8	69.6	69.4	69.6	69.9	71.0	68.5	69.8	69.7	69.9
514	265	06	49	45	69.8	69.7	69.4	69.5	69.9	71.0	68.4	69.8	69.7	69.9
515	265	06	59	45	69.8	69.7	69.3	69.5	69.9	71.1	68.4	69.8	69.7	69.9
516	265	07	09	45	69.8	69.6	69.3	69.5	70.0	71.0	68.5	69.9	69.7	69.9
517	265	07	19	45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
518	265	07	29	45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
519	265	07	39	45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
520	265	07	49	45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
521	265	07	59	45	69.8	69.6	69.4	69.6	70.0	71.0	68.5	69.9	69.7	69.9
522	265	08	09	45	69.8	69.6	69.4	69.6	70.0	71.0	68.6	69.9	69.7	69.9

NO REMAINING CHANNELS ARE LOCKED OUT

THIS CHANNEL # 41 IS LOCKED OUT FOR NON

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Appendix F - TYPE A TEST CORRECTIONS

The following table presents the Type A Test corrections for leakage pathways isolated during the ILRT.

TABLE F.1
TYPE A TEST CORRECTIONS

<u>Pen. No.</u>	<u>Description</u>	<u>Local Leak Test No.</u>	<u>MinPath Leak Rate.</u>
P-4	Pressurization Penetration	2BwVS 6.1.2.D-1.24	.081 SCFH
I-3	Instrumentation Test Line	2BwVS 6.1.2.D-1.7	.363 SCFH
--	Equipment Air Lock	2BwVS 6.1.3.B-1	3.04 SCFH
--	Emergency Air Lock	2BwVS 6.1.3.B-2	<u>5.15 SCFH</u>
		TOTAL	8.63 SCFH

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Appendix G - HISTORICAL LOCAL LEAK RATE DATA

Local Leak Rate Testing (LLRT) has been performed three times at Braidwood Unit 2. LLRT test results were obtained: (1) after the 1987 preoperational test; (2) during the first refuel outage (A2R01); (3) after the subject ILRT of the second refuel outage (A2R02). Results indicated for A2R2 are "As Left" LLRT values performed after the ILRT. Several containment penetrations, including the containment airlocks and purge valves, are tested at more frequent intervals, as specified by the plant's Technical Specifications. The results below represent the periodic Type B & C tests performed at month intervals to satisfy the requirements of 10CFR50 Appendix J.

TABLE G.1
HISTORICAL LOCAL LEAK RATE DATA

<u>PENETRATION</u>	<u>SYSTEM</u>	<u>LLRT RESULTS (SCCM)</u>		
		<u>PRE-OP 5/87</u>	<u>A2R01</u>	<u>A2R02 10/91</u>
ZONE 1	ELEC	97	154.6	164.3
ZONE 2	ELEC	108	45	483
ZONE 3	ELEC	400	236	49
ZONE 4	ELEC	370	34.3	85.6
FUEL X-FER TUBE		0	28.8	40.1
FUEL X-FER BELLOWS		35	756	3.4
EQUIP HATCH		3	5	46.1
I-3	VQ	15	10.2	161.3
I-3	VQ	12	42	10.4
P-70	PS	1	6.4	84
P-70	PS	146	6.5	340
P-70	PS	55	83.2	21.8
P-70	PS	35	3.6	187.9
P-45	PS	11.4	8.3	133.8
P-45	PS	58	563	179.6
P-36	PS	.	16.4	275
P-36	PS	.	160	7560
P-41	CV	80	6.4	2650
P-28	CV	31	1668	705
P-11	RE	1.0	66.7	295
P-65	RE	29	4.4	9.7
P-65	RE	33	4.4	9.5
P-27	RY	2.1	16	177
P-27	RY	320	1068	1130
P-44	RY	150	540	3.5
I-5	RY	20	9.6	299
P-21	CC	896	218	992
P-24	CC	400	13.2	3720
P-25	CC	460	493	2730
P-32	FC	6.5	3.0	.9
P-57	FC	10	47	2.2
P-1	CS	505	2700	9000
P-16	CS	48	340	52.2
P-39	IA	266	945	200.5

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TABLE G.1 (continued)

PENETRATION	SYSTEM	LLRT RESULTS (SCCM)		
		PRE-OP 5/87	A2R01	A2R02
P-56	SA	98	372	5800
P-30	WM	390	9810	8980
P-47	RF	15	3.0	.001
P-13	OG	46	19.8	345
P-69	OG	55	19.7	146.3
P-69	OG	152	5.1	36.1
P-13	OG	8	37.1	48.2
P-52	PR	501	3700	4100
P-52	PR	162	17.8	27.4
EQUIP. HATCH	PR	3.7	735	32.5
	PR	319	315	142.2
EMERG. HATCH	PR	12.5	96.3	60
	PR	455	673	660
P-5	WO	45	445	95.6
P-8	WO	157	65.4	943
P-6	WO	650	780	618
P-10	WO	530	785	58.9
P-55	SI	140	23.8	1693
P-55	SI	46	144.2	4.8
P-4	CPP	240	120.1	37
P-63	SPARE	N/A	24	6.3
P-64	SPARE	N/A	14	5.5
P-74	SPARE	N/A	13.4	12.9
P-97	VQ	1442	8010	4076
P-95	VQ	3290	3110	1910
P-96	VQ	450	325	567
P-94	VQ	976	787	1090
EQUIP. HATCH	PC	3730	1200	955
EQUIP. HATCH FLANGE	PC	2.2	1.0	8.7
EMERG. HATCH	PC	1030	5620	3030
FLANGE #1	PC	240	199.4	32.2
FLANGE #2	PC	12	46.8	3.4
P-82	SD	15	N/A	N/A*
P-83	SD	15	N/A	N/A*
P-80	SD	5	N/A	N/A*
P-81	SD	5	N/A	N/A*
P-88	SD	51	N/A	N/A*
P-89	SD	51	N/A	N/A*
P-90	SD	52	N/A	N/A*
P-91	SD	52	N/A	N/A*

* Steam Generator Blowdown Valves no longer required to be leak tested per Type C LLRT program.