POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NUCLEAR POWER PLANT
UNIT NO. 3

REACTOR CONTAINMENT BUILDING INTEGRATED LEAK RATE TEST

SUMMARY TECHNICAL REPORT

PREPARED FOR

POWER AUTHORITY OF THE STATE OF NEW YORK

PREPARED BY

EBASCO SERVICES INCORPORATED
PLANT OPERATIONS & BETTERMENT DEPARTMENT
SEPTEMBER 6, 1978

TABLE OF CONTENTS

I. INTRODUCTION

A periodic Type "A" Integrated Leakage Rate Test (ILRT) was performed on the containment structure of the Power Authority of the State of New York, Indian Point Nuclear Power Plant - Unit No. 3 pressurized water reactor in July and August of 1978 utilizing the "Absolute Method" of testing. This test was performed at a pressure in excess of the calculated peak containment internal pressure related to the design bases accident (P_a) and specified in the Technical Specifications.

This report describes and presents the results of this periodic Type "A" Leakage Rate Test including supplemental test method utilized for verification.

II. SUMMARY

Type "B" and "C" tests were performed by Power Authority of the State of New York station personnel and repairs/corrections were made where necessary.

At the start of the Type "A" test, all valves were to be in their normal position for accident conditions. Exceptions to this valve line-up were noted during the test and are documented in the official copy of the Integrated Leak Rate Test periodic test procedure which is on file at the Indian Point Station. The calculated total-time simple leakage rate was 0.007 %/day by weight at 58.396 psia (total containment pressure at the end of the test). A least squares statistical fit of the total time simple leakage rates gave a leakage rate of -0.003%/day by weight. The supplementary Controlled Leak Rate Test (CLRT) results verified the measur d leakage within the allowable acceptance band.

III. TEST DISCUSSION

A. Description of Containment

The reactor containment structure completely encloses the entire reactor and reactor coolant system to ensure no leakage of radioactive materials to the environment in the unlikely event of a loss of coolant accident.

The containment vessel is a reinforced concrete vertical right cylinder with a hemispherical dome and a generally flat base supported on rock. A welded steel liner with a minimum thickness of 1/4 inch is attached to the inside face of the concrete to ensure a high degree of leak tightness. Small steel channels are welded over all joints in the containment vessel liner forming leak tight air chambers. These chambers are continuously pressurized with air to serve as a leak prevention system. These channels also serve to identify any liner plate weld leakage.

The containment has side walls measuring 148 feet from the liner on the base to the spring line of the dome and has an inside diameter of 135 feet. The side walls of the cylinder and the dome are 4 1/2 feet and 3 1/2 feet thick, respectively. The inside radius of the dome is equal to the inside radius of the cylinder so that the discontinuity at the spring line due to the change in thickness is on the outer surface. The flat concrete base mat is 9 feet thick with the bottom liner plate located on top of this mat. The bottom liner plate is covered with 3 feet of concrete, the top of which forms the floor of the containment.

All penetrations made in the containment vessel were considered as potential leak sources and as such were designed with double barriers and treated by a leak prevention system. There are approximately 60 electrical penetration cannisters, 80 process piping penetrations, one personnel access airlock, one airlock/equipment hatch and one fuel transfer tube penetration.

Each process piping system which penetrates the containment vessel is designed to maintain the leak integrity of the containment vessel through the use of double leak tight barriers. The design of process piping isolation barriers is such that no single active failure degrades the leak tightness of the containment vessel. An Isolation Valve Seal Water System is provided as a leak prevention system.

The containment vessel, penetrations and isolation valves are aligned to simulate accident conditions for the performance of the Integrated Leak Rate Test. An extra degree of conservatism in testing is provided by not using the Isolation Valve Seal Water or the Channel Weld and Penetration Pressurizing Systems during the Integrated Leak Rate Test.

The containment vessel and all associated isolation valves, penetrations and support systems have been designed to limit leakage to 0.1% by weight of the contained air per day at 47 psig. The calculated peak accident pressure is 40.6 psig.

B. Description of Instrumentation

A 'state-of-the-art' ILRT instrumentation package was utilized to allow leakage rate determination by the "Absolute Method". The primary measurement variables include containment pressure, dewpoint and temperature as a function of time. Ancillary measurements include ambient outside pressure and temperature. During the supplemental CLRT, containment bleed-off flow is also measured. Instrument readings were output at 15 minute intervals automatically via a data logger and printer.

1. Temperature Instrumentation

Thirty precision Resistance Temperature Detectors (RTD's) were located throughout the containment to allow measurement of the volumetrically weighted average temperature. The location of the temperature detectors in the containment is depicted in Figure 1. The specified accuracy of the RTD's is $\pm$ .15° F. The repeatability of the sensor is quoted as $\pm$ .1°F.

2. Humidity Instrumentation

Ten Lithium-Chloride wetted dewcells were located throughout the containment to allow measurement of the volumetrically weighted average containment vapor pressure. The location of the dewcells in the containment is depicted in Figure 2. The specified accuracy of the dew cells is $\pm$1.0°F dewpoint. The repeatability of the sensor is quoted as $\pm$ .25°F.

3. Pressure Instrumentation

Two precision quartz bourdon tube pressure indicators were supplied in the instrumentation package for the determination of containment absolute pressure. One precision pressure indicator was used as the primary sensor while the second indicator was considered as a backup. The equipment manufacturer specification accuracy of the precision pressure indicators is $\pm$ .002 psia. The repeatability of the instrument is quoted as $\pm$ .001 psia.

4. Flow Instrumentation

One thermal mass flowmeter with a range of 1 to 10 scfm and an accuracy of + 0.1 scfm was used during the Supplemental CLRT. The repeatability of the instrument is quoted as $\pm$ 0.05 scfm.

5. Ancillary Instrumentation

The ambient outside temperature at the site was measured using a precision RTD with the same specifications as those given in 1. above. The ambient barometric pressure was measured with a strain gauge absolute pressure indicator with an accuracy of $\pm$ 0.017 psia. The repeatability of the instrument is quoted as $\pm$ 0.017 psia.

C. Description of the Computer Program

The Ebasco ILRT computer program is an interactive Fortran IV program written specifically for fast, easy utilization during all phases of the ILRT and CLRT. Data entry and modifications, if necessary, are readily accomplished by the data acquisition team. In addition to extensive data verification routines, the program calculates, on demand, point-to-point, total time and mass point leak rates as well as first order linear regressions for these leakage rate calculations. Computation of the 95% regression confidence interval for the leak rate calculations

is available on demand. Data rejection based upon the Chauvenet criterion may be utilized in the analysis.

Both a'priori and a' posteriori instrument error contribution to the leak rate are computed using the standard error approach. The a'priori error is based upon nominal pretest conditions whereas a' posteriori error is based upon actual test conditions.

Data evaluations are enhanced by the flexible display of either sensor variables or various computed values in tabular or graphical form on the computer terminal. Data is recorded on magnetic tape to prevent loss during the testing. All data is stored on the computer systems in use with retrieval capability to any desired data base throughout the testing.

Temperature, pressure and humidity data are entered interactively via the computer terminal at 15 minute intervals. Computer verification and checking routines supplement data verification by the data acquisition team. Modifications are promptly made when errors are detected. Prior to issuance of this report, further extensive data verification has been performed.

The computer generated reports based upon verified data substantiate for both the ILRT and CLRT that a successful test has been completed in accordance with 10 CFR 50, Appendix J.

D. Error Analysis

Three types of error analysis are performed using the Ebasco ILRT computer program. These types are a'priori instrument loop error, a' posteriori instrument loop error and a statistical regression confidence interval.

The a' priori instrument loop error is based upon the standard error approach in which individual contributions of the various sensors and display equipment are added to provide the worst possible error. Additional conservatism is added by not taking credit for any error cancelling terms generated by multiple sensors of the same variable. This error is computed

to a 95% confidence. Prior to the test, this a' priori loop error verifies that the instrumentation system is sufficiently sensitive to measure leakage rates in the range desired. The calculated a' priori instrument loop error is 0.052%/day at a 95% confidence level.

The a' posteriori instrument loop error is also based upon the standard error approach and is computed to a 95% confidence. No simplifying assumptions other than constant containment free volume are made in the derivative calculations for parameter sensitivity in the standard error formula. Instrument loop errors are computed from containment conditions once variable bias has been compensated. This leakage error due to instrumentation is then reported for both the ILRT and CLRT as the maximum probable instrument loop error. The calculated maximum probable instrument error is 0.021%/day at a 95% confidence level.

A statistical regression confidence interval is generated for the first order regression line of the simple total-time leak rates. The significance of this interval is that 95% of all analyzed leakage rates measured fall within this interval when transformed to frequency space. The 95% regression confidence interval for the ILRT is 0.014%/day.

E. Description of Tests

Interpretation of the final analysis of test data show results well within the specified limits for this containment as delineated in Section V (Conclusions) of this report.

The containment was made ready for the Integrated Leak Rate Test with the Containment Structural Integrity Inspection performed in accordance with procedure 3PT-A2 "Containment Structural Inspection" on July 26, 1978. The containment was closed for the ILRT on 2030 hours 7/26/78 with pressurization starting at 2130 hours. Pressurization was accomplished using up to nine (9) mobile air compressors with a total capacity of approximately 10000 scfm. These units were connected to the containment as shown in Figure 3. Four of nine compressors were secured at 0015 hours 7/27/78 to reduce the pressurization rate to allow containment entry for inspection purposes. At 0100 hours

the containment entry was made with no signs of abnormalities, oil carry-over, smoke or water vapor observed. During the containment entry it was noted that one of the personnel airlock inner bulkhead shaft seals was leaking. The outer door of the airlock and outer bulkhead was determined leak tight and this became the ILRT boundary. The containment entry was completed at 0200 hours with pressurization at a higher rate resumed. Pressurization was secured at 1500 hours with 45 psig pressure in the containment vessel. After an appropriate stabilization period, the apparent leakage rate was determined to be .14%/day, or about twice allowable, at 0000 hours 7/28/78 with active leak survey teams attempting to find the excess leakage. At this time, it was noted that two of the ten dewcells began to exhibit noisy signals.

During the next 48 hours, the leak survey teams continued to attempt to identify the excess leakage. Many systems were temporarily blanked-off to look for possible leaks with no apparent decrease in leakage rate. By 0400 hours 7/30/78, it was identified that the leak was somewhere in the #33 and #34 containment fan cooler service water supply and return lines inside the containment. Isolation of this leakage was started and most of the temporarily blanked systems were unblanked. Also during this time period, seven of the ten dewcells in the containment (numbers 1, 2, 3, 4, 5, 6 & 7) were exhibiting noise on the signal. The five dewcells exhibiting the worse noise were deleted from analysis of the leakage rate. It was also noted during this time that the primary pressure instrument did not exhibit as good repeatability as the backup sensor. The pressure drop sensed by the two instruments was identical over long periods of time (1-2 hours) but over 15 minute periods, the primary sensor appeared to occasionally stick on one value.

Isolation of the #33 and #34 containment fan cooler service water supply and return lines was completed on 1630 hours, 7/31/78 with the official start of the 24 hour ILRT initiated at that time. Data was accumulated for 24.25 hours and acceptable leakage was measured. The ILRT was completed at 1645 hrs on 8/1/78.

Chemistry and Health Physics sampled the containment air volume prior to initiation of the Controlled Leak Rate Test (CLRT). The mass flow meter was adjusted to 7 scfm bleedoff flow. This flow is approximately equal to the containment design leakage rate of 0.1%/day.

The CLRT commenced at 1830 hours on 8 /1/78 with stable conditions inside the containment. At the start of the CLRT, the backup pressure indicator was selected for use due to its better repeatability. The CLRT was completed at 0145 hrs on 8/2/78.

Depressurization of the containment commenced at 0255 hrs on 8/2/78. Atmospheric pressure was reached at 0015 hrs on 8/3/78. An internal inspection of the containment was completed at 1000 hours on 8/3/78. During the inspection it was noted that the motor cooler service water vent and drain valves on #33 and #34 Containment Fan Cooler Units were left open during the ILRT. This was the source of leakage in the service water system.

A summary of the Containment ILRT boundary changes and subsequent actions are given below:

a) The No. 31 Reactor Coolant Pump seal injection valve No. 250A was removed prior to the test and the line capped. Subsequent to the ILRT the valve was re-installed and a Type C leak rate test was performed. Zero leakage was detected.

b) The personnel lock boundary during the ILRT was the outer bulkhead due to a shaft seal leak on the inner bulkhead. Subsequent to the ILRT, a pre-repair Type B leak test was performed with 0.00893 scfm leakage detected. The mechanical stuffing box on the shaft seal was tightened with zero leakage detected in the post-repair Type B leak test.

c) The Weld Channel and Penetration Pressurization lines to the airlocks were capped in order to isolate the airlocks from other penetrations in the system. This was necessary since the Pressurization System was not in service during the ILRT and leakage was suspected through the personnel lock inner containment-side door seal. Capping of the Weld Channel supply lines to the airlocks allowed credit to be taken for the double door seals which would be the system boundary during normal and accident plant conditions. Isolation valves have been installed to allow this system to be aligned in this manner during future ILRTS.

d) The station air penetration ILRT boundary was moved to turbine hall isolation valves SA-10 due to air leakage detected at the bleedoff point that was attributed to the Containment Isolation Valves. Subsequent to the ILRT, this leakage was determined to be from the station air system via station air valve SA-11. No repairs on the Containment Isolation Valves SA-24 were made and zero leakage was detected.

e) The #33 and #34 Containment Fan Cooler Service Water supply and return lines were isolated outside of the containment due to a leak inside. This was performed by blanking off valves SWN 41 and 44 (service water supply and return isolation valves) and relief valve SWN42 (#34 Fan Cooler service water inlet relief). Subsequent to the ILRT, the motor cooler vent and drain valves were found open, thus explaining the leakage path. Relief valve SWN-42 was repaired and the service water leaders were tested with water in accordance with Technical Specifications with acceptable in-leakage determined.

IV. RESULTS AND VERIFICATION

The Type A Integrated Leakage Rate Test was conducted for a period of 24.25 hours with a total of 98 samples of data sets taken. The containment pressure at the end of the ILRT was 58.396 psia. Since the backup pressure indicator was used during the CLRT in an attempt to improve repeatability, the backup pressure indicator was used during final ILRT calculations. Changing from the primary to the backup pressure indicator did not change the calculated leakage rates but did improve pressure loop error from .0020 psia to .0012 psia. As noted in Section III.e), seven of the ten dewcells exhibited noisy signals subsequent to pressurization. The five worst dewcells (#1, #2, #3, #6 and #7) were deleted from the analysis as they all exhibited loop errors in excess of four times the quoted loop repeatability. Dewcells #4 and #5 exhibited loop errors approximately four times the quoted loop repeatability while Dewcells #8, #9 and #10 exhibited loop errors equal to the quoted loop repeatability. Dewcells #4 and #5 were not deleted as this would leave no humidity sensors active in the upper area of the containment. The Chauvenet Rejection criteria was applied to the 98 samples with samples 2 and 3 showing excessive deviation based upon total time leak rates These samples were rejected from analysis. The results of the computed total time least squares fit of the data revealed a leakage rate of -0.003%/day by weight, a total time simple leakage rate of 0.007%/day by weight and a fitted mass point leakage rate of -0.005%/day by weight. The maximum probable instrument loop error for the ILRT was 0.021%/day by weight with the largest contributor to this error caused by the Dewcells. The 95% statistical regression confidence interval for the ILRT was 0.014%/day by weight. For conservatism, these leakages rates are not corrected from test pressure to peak accident pressure.

Following satisfactory completion of the ILRT, a 7.25 hour CLRT was performed. This test was conducted by superimposing a known leak rate approximately equal to the containment design leakage rate of 0.1%/day by weight. The mass flow meter reading was recorded at 15 minute intervals and averaged over the duration of the test to give 7.12 scfm. This is equivalent to 0.103%/day by weight leakage for the given conditions of containment pressure and temperature during the test. The Chauvenet Rejection criteria was applied to the 30 samples with samples 2 and 3

showing excessive deviation based upon total time leakage rates. The measured total time least squares fit of the data was .103%/day by weight, a total time simple leakage rate of .097%/day by weight and a fitted mass point leakage rate of .130%/day by weight. Thus, the simple total time leakage rate and the least squares fit of the total time leakages give very good agreement with the calculated superimposed leakage. Agreement with the fitted mass point was not as good due to the noisy nature of the first few data sets caused by the dewcell sensor problems mentioned above and since the Chauvenet Rejection criteria was not used on mass point calculations.

V. CONCLUSIONS

The high containment leakage measured initially has been identified due to an improper valve lineup on a closed seismic Class I post-accident system inside the containment. During normal operation these service water vent and drain valves would be closed and the system would be in operation. During accident conditions any anomalies in the Containment Fan Cooler Service Water Supply System would result in service water leakage out of the system since the service water header pressure is higher than post-accident containment pressure.

The Integrated Leakage Rate Test at P_a (40.6 psig) provided acceptable results as evidenced by the computer printout and graphs in Appendix A of this report. The measured leak rate is well within the specified limits. The acceptance criteria for the ILRT is as follows:

a) The maximum allowable operational leak rate shall not exceed 75% of the Containment Design Leakage Rate of 0.1%/day by weight at a pressure of not less than 40.6 psig. This is equivalent to 0.075%/day by weight.

   As shown in Section IV, the measured leakage rate for the containment was -0.003%/day by weight at a test pressure of 43.6 psig. If the maximum probable instrument loop error is added to this value, the leakage rate including instrument error would be 0.018%/day by weight at a 95% confidence level. If the 95% statistical regression confidence interval is added to the measured leakage rate, the leakage rate would be 0.011%/day by weight at a 95% confidence interval. Both of the above values are less than the acceptance criteria of 0.075%/day by weight.

b) The accuracy of the ILRT shall be verified by a supplemental test which confirms the accuracy of the ILRT by verifying that the difference between the containment leakage rate measured during the supplementa est and the ILRT is within 25% of the containment design leakage rate of 0.1%/day by weight. This is equivalent to 0.025%/day by weight.

The measured leakage during the CLRT was 0.103%/day by weight with a superimposed leakage equivalent to 0.103%/day by weight. The measured net CLRT containment leakage was therefore 0.0%/day by weight. The measured ILRT leakage rate was -0.003%/day by weight, thus giving a difference between the CLRT and ILRT measurements of 0.003%/day by weight. This difference between the CLRT and ILRT measurements is within the acceptance criteria and the accuracy of the ILRT has been verified.

VI FIGURES

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT UNIT NO. 3 ILRT
RTD LOCATION/VOLUME

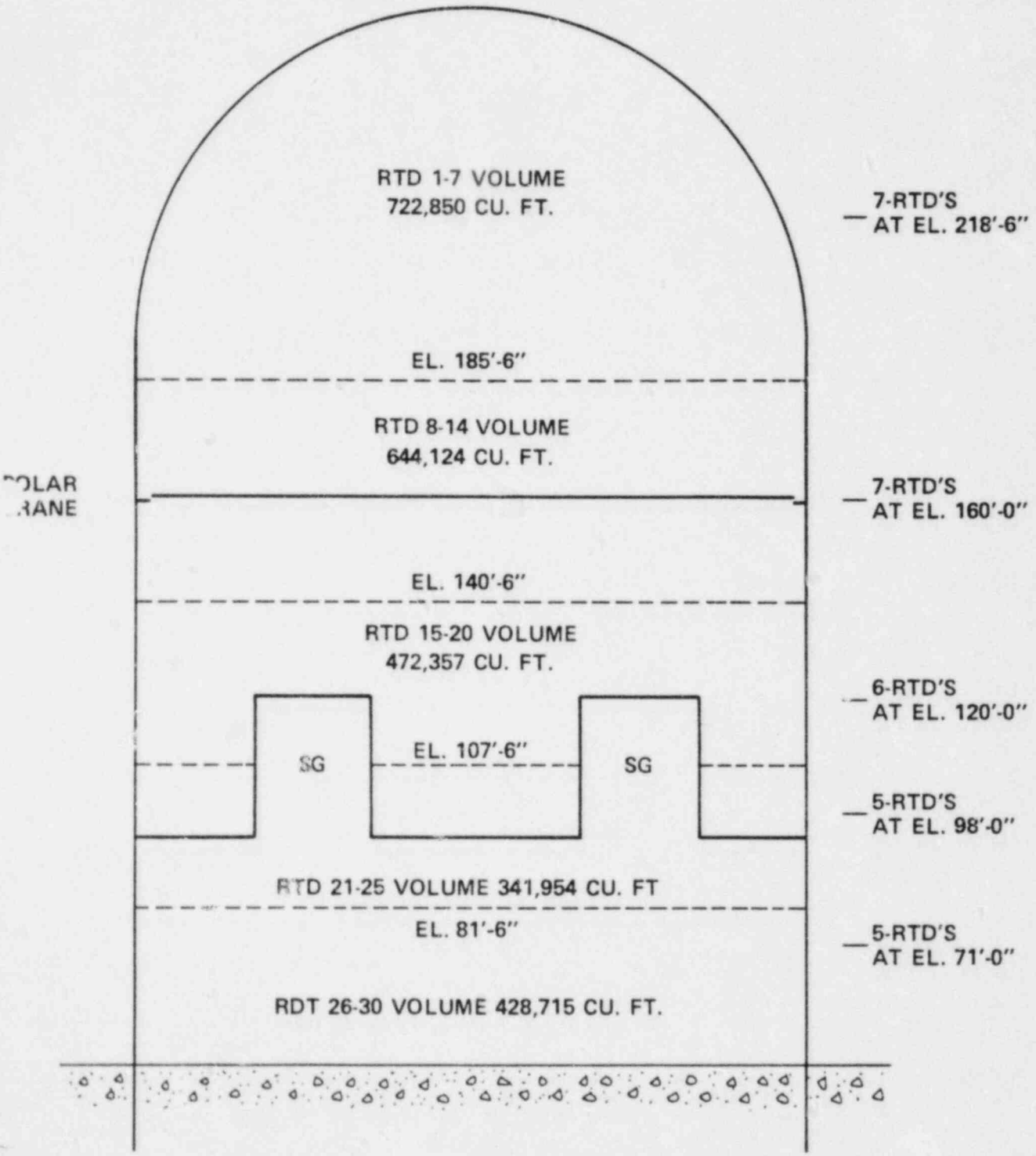


FIGURE 1

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT UNIT NO. 3 ILRT
DEWCELL LOCATION/VOLUME

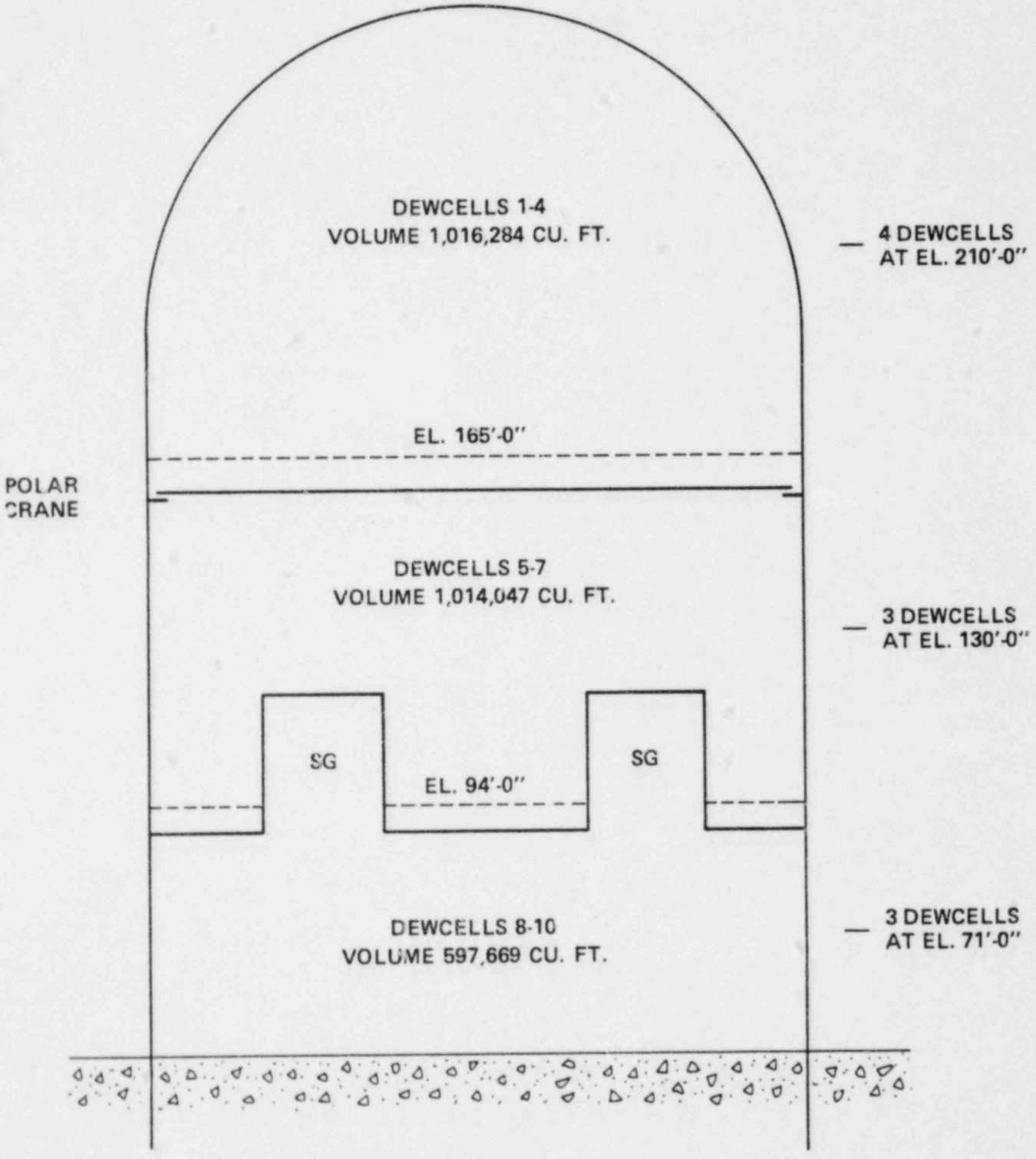


FIGURE 2

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT UNIT NO. 3 ILRT
CONTAINMENT PRESSURIZATION SYSTEM

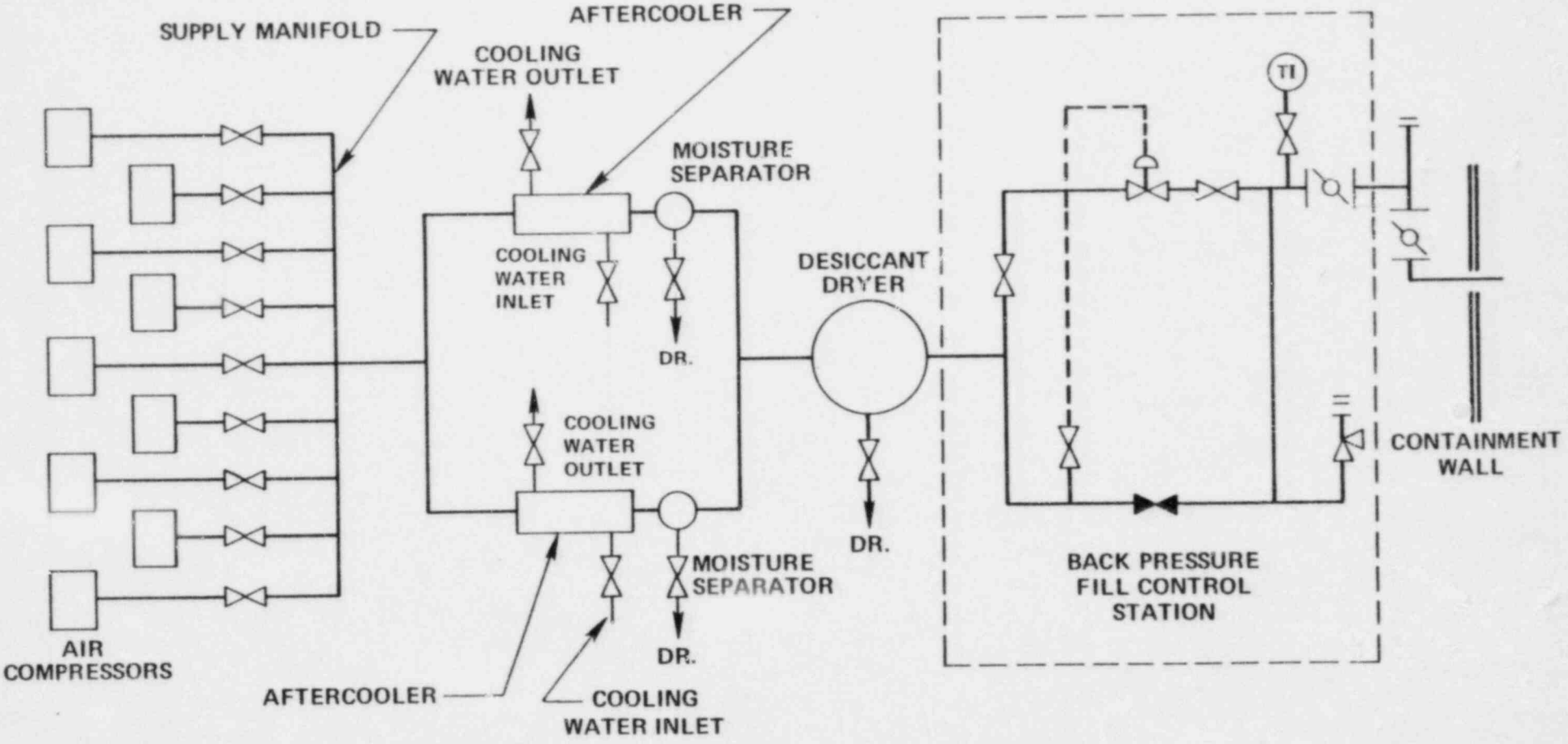


FIGURE 3

APPENDIX A

Computer-Generated Report

1.
INTEGRATED LEAK RATE TEST
(ILRT)

LEAK RATE COMPUTED USING TOTAL TIME METHOD
AS RECOMMENDED BY APPENDIX J FOR 10 CFR 50
(REACTOR CONTAINMENT LEAKAGE TESTING FOR WATER COOLED POWER REACTORS)

TEST PERIOD STARTED AT 1630 HOURS ON JULY 31,1978

A LEAST SQUARES FIRST ORDER FIT OF LEAK RATE TO TIME
SHOULD YIELD A SLOPE OF ZERO AND AN INTERCEPT EQUAL
TO THE LEAK RATE AS COMPUTED AT THE INITIAL START TIME
THE EQUATION HAS THE FORM - L=ST+R
WHERE L - CORRELATED LEAK RATE
S - SLOPE OF CORRELATION
T - TIME IN HOURS
R - INTERCEPT LEAK RATE

LEAK RATE = 0.000 HOURS + -0.004 PER CENT
MEAN = -0.003 PER CENT

INITIAL CONTAINMENT AIR WEIGHT = 747370 LBS.
FINAL CONTAINMENT AIR WEIGHT = 747320 LBS.
FITTED MASS POINT LEAK RATE IS -0.005 PER CENT PER DAY

MAXIMUM NRC LEAK RATE OF 0.075 PER CENT PER DAY
GIVEN FOR HIGH PRESSURE TEST AT 58.43 PSIA

MAXIMUM PROBABLE TEMPERATURE LOOP ERROR IS 0.003 DEGREES F.
MAXIMUM PROBABLE PRESSURE LOOP ERROR IS 0.0012 PSIA.
MAXIMUM PROBABLE HUMIDITY LOOP ERROR IS 1.353 PERCENT.

** MAXIMUM PROBABLE INSTRUMENT ERROR IS .0212 PERCENT PER DAY **
WITHIN A COMPUTED CONFIDENCE OF 95.00 PERCENT

*** NOTE FOR GRAPHS ***

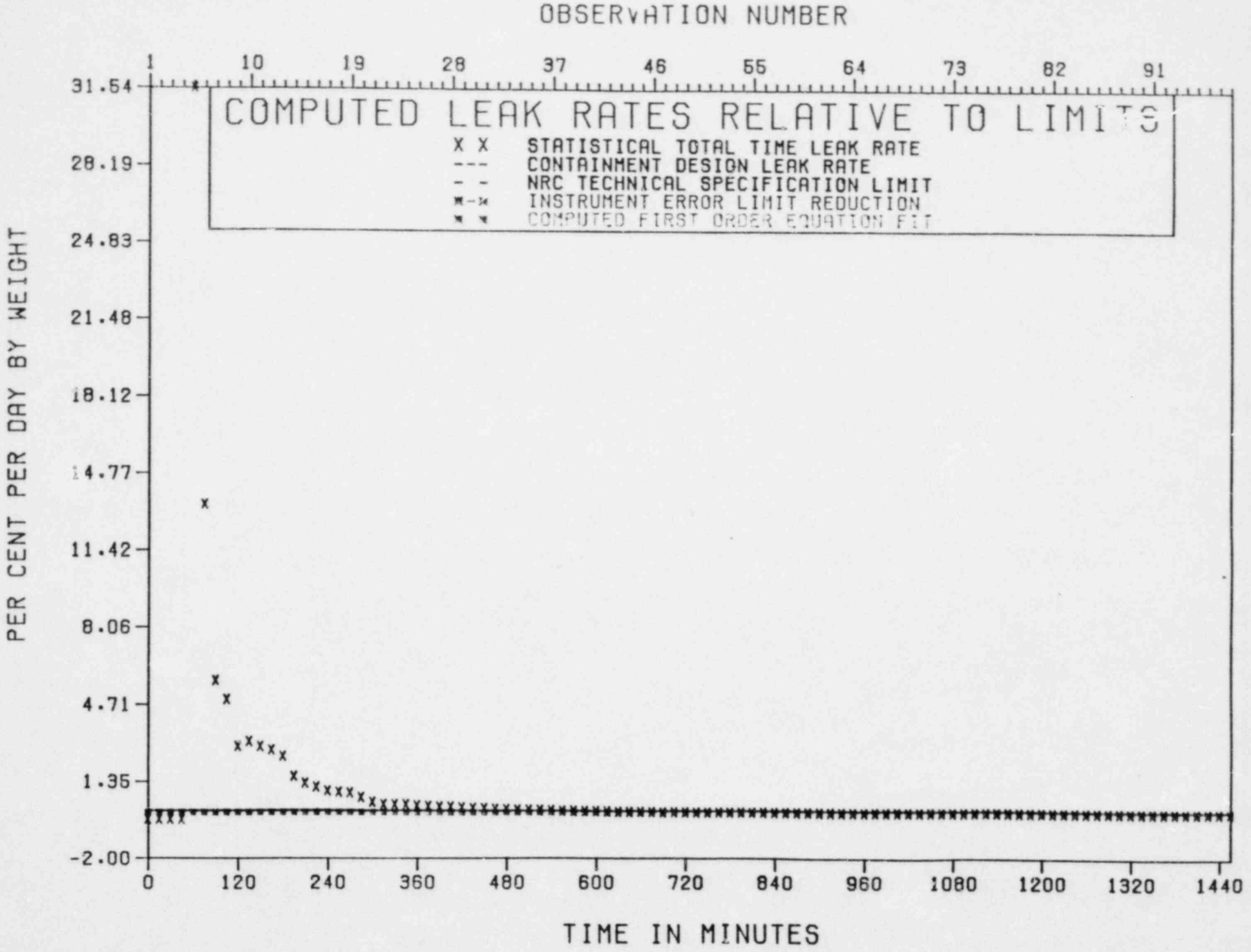
BOTH SAMPLE NUMBERS AND TIME ARE SHOWN

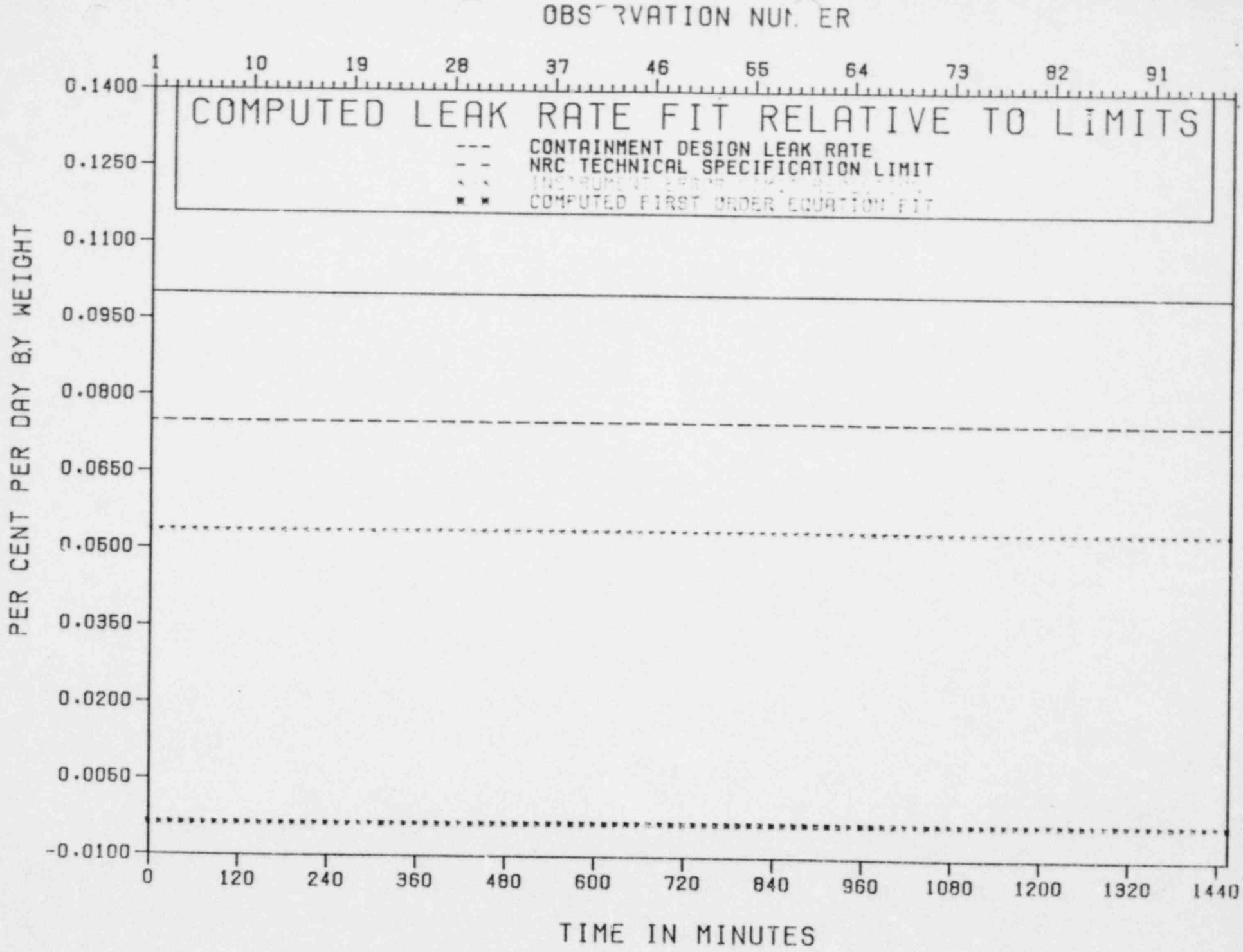
*** NOTE FOR TABULAR DATA ***

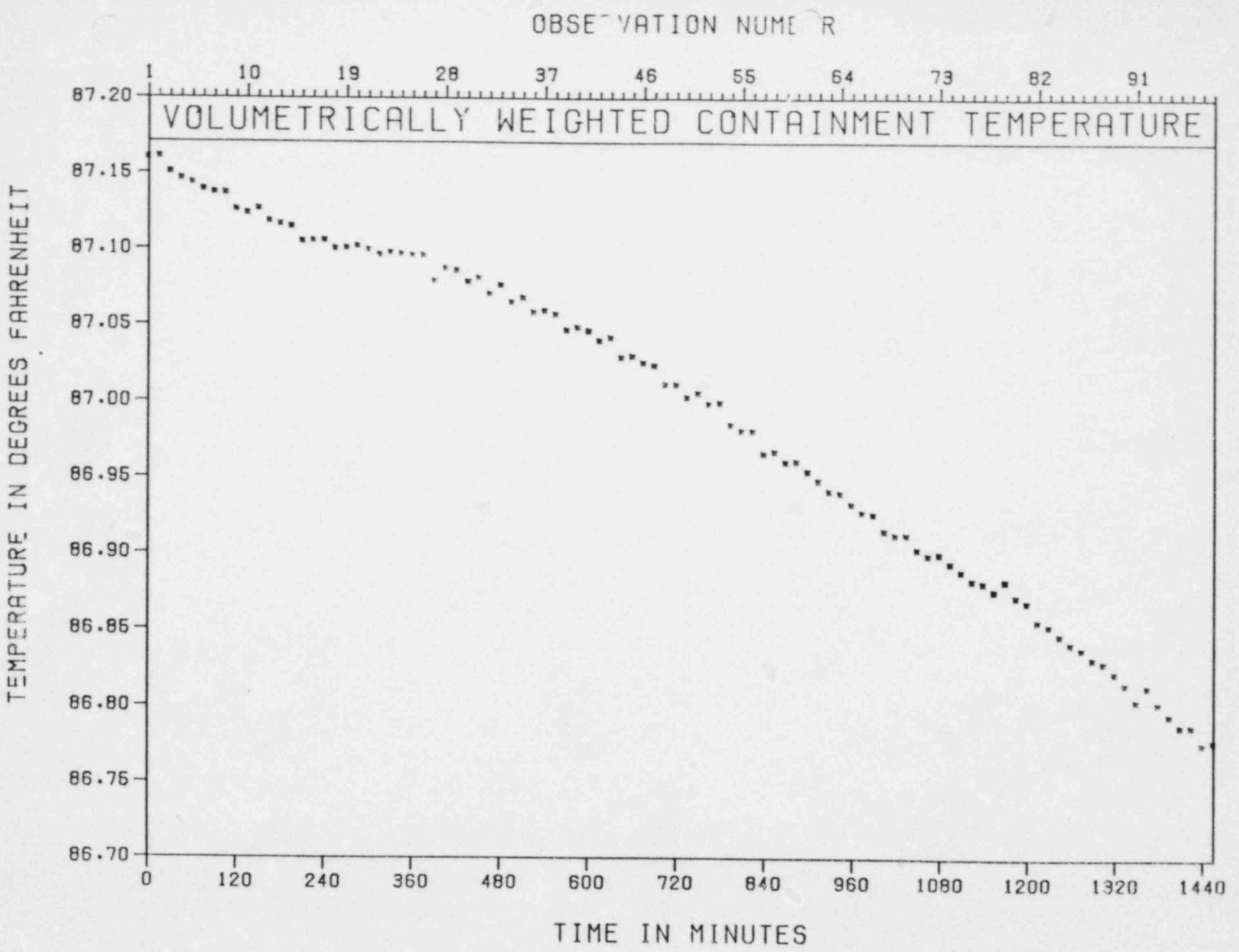
TABLE VALUES OF ZERO SIGNIFY THAT THE
DATA IS NOT APPLICABLE TO THE CALCULATION

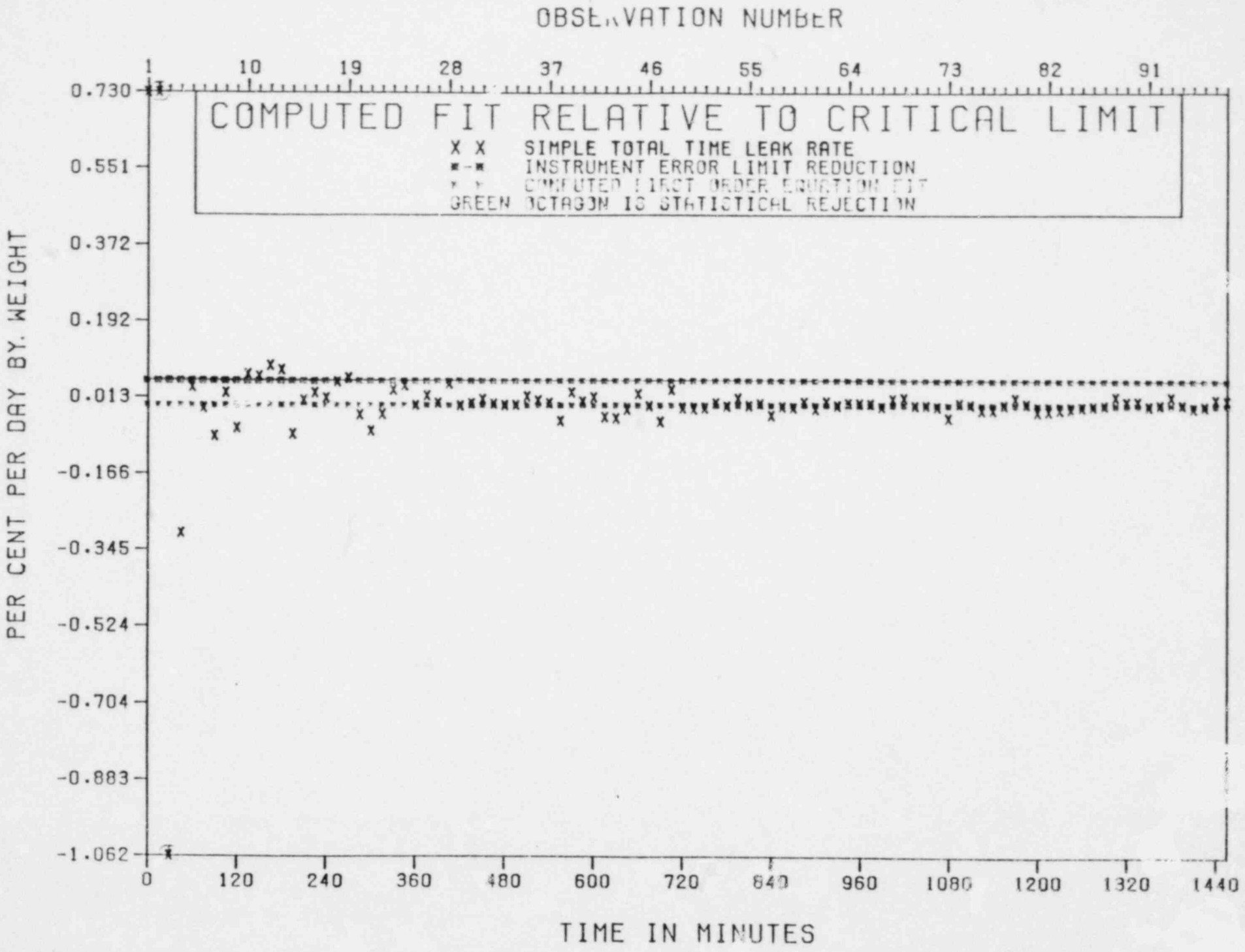
*** DESCRIPTION OF VARIABLES ***

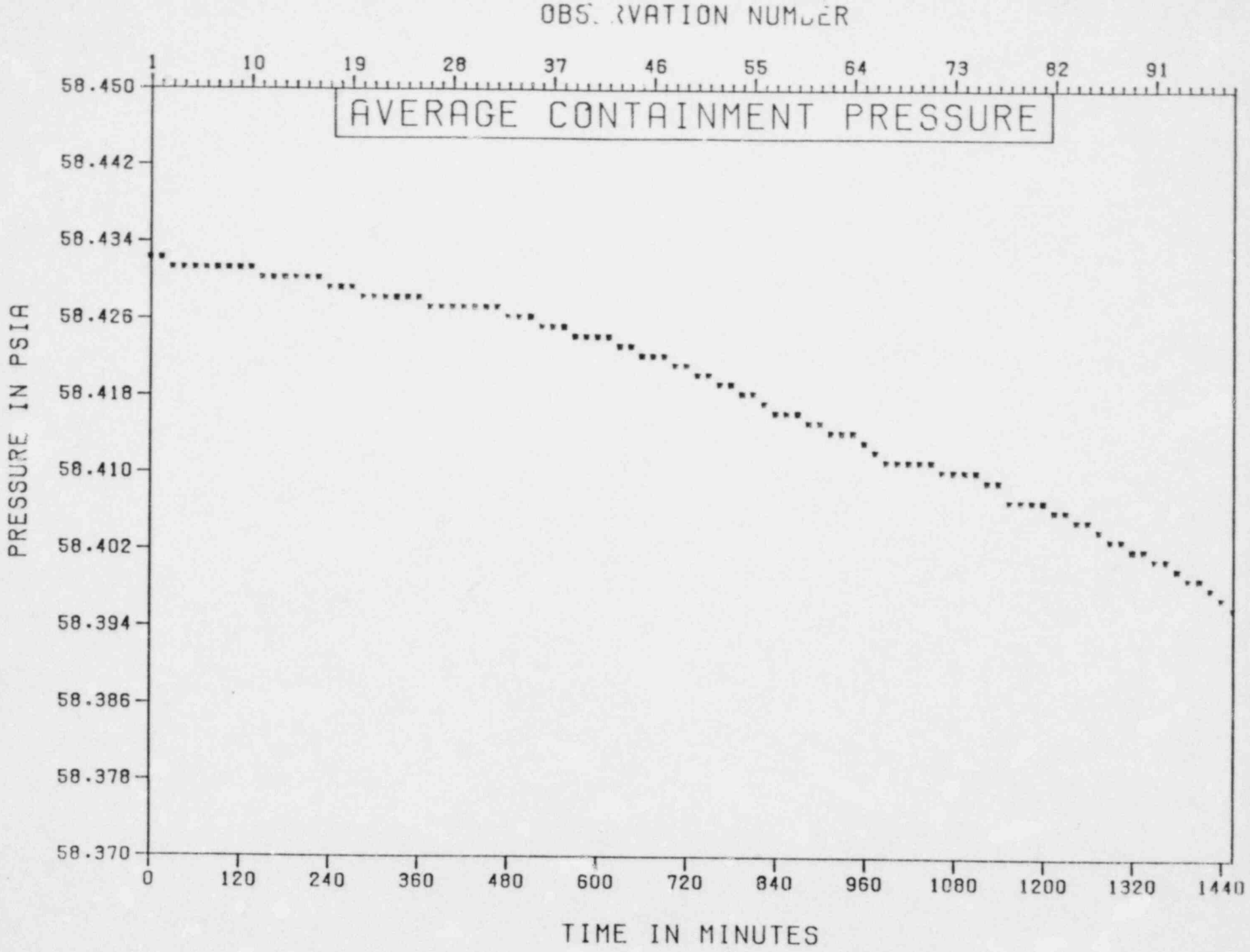
AVG TEM	VOLUMETRICALLY WEIGHTED TEMPERATURE
AVG PRE	AVERAGE PRESSURE
VAP PRE	VOLUMETRICALLY WEIGHTED VAPOR PRESSURE
LEA COM	FIRST ORDER COMPUTED LEAK RATE
LEA TRA	STATISTICAL TOTAL TIME LEAK RATE
LEA SIM	SIMPLE TOTAL TIME LEAK RATE
ERROR	STATISTICAL TOTAL TIME LEAK RATE ERROR

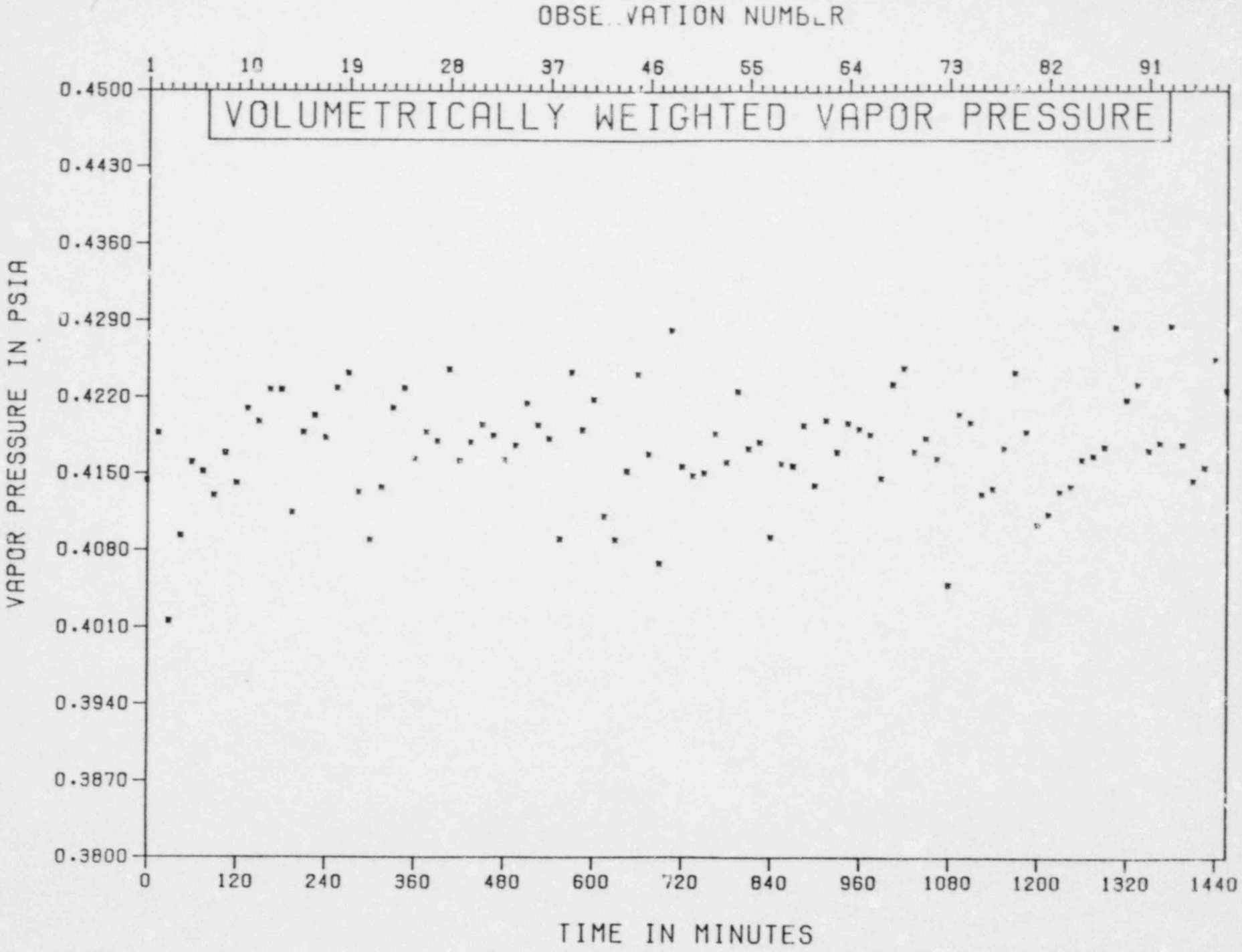

OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
COMPUTED LEAK RATES RELATIVE TO LIMITS
STATISTICAL TOTAL TIME LEAK RATE
CONTAINMENT DESIGN LEAK RATE
NRC TECHNICAL SPECIFICATION LIMIT
INSTRUMENT ERROR LIMIT REDUCTION
COMPUTED FIRST ORDER EQUATION FIT
PER CENT PER DAY BY WEIGHT
31.54
28.19
24.83
21.48
18.12
14.77
11.42
8.06
4.71
1.35
-2.00
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES


OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
COMPUTED LEAK RATE FIT RELATIVE TO LIMITS
CONTAINMENT DESIGN LEAK RATE
NRC TECHNICAL SPECIFICATION LIMIT
COMPUTED FIRST ORDER EQUATION FIT
PER CENT PER DAY BY WEIGHT
0.1400
0.1250
0.1100
0.0950
0.0800
0.0650
0.0500
0.0350
0.0200
0.0050
-0.0100
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES


OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
VOLUMETRICALLY WEIGHTED CONTAINMENT TEMPERATURE
TEMPERATURE IN DEGREES FAHRENHEIT
87.20
87.15
87.10
87.05
87.00
86.95
86.90
86.85
86.80
86.75
86.70
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES


OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
COMPUTED FIT RELATIVE TO CRITICAL LIMIT
X X SIMPLE TOTAL TIME LEAK RATE
INSTRUMENT ERROR LIMIT REDUCTION
COMPUTED FIRST ORDER EQUATION FIT
GREEN OCTAGON IS STATISTICAL REJECTION
PER CENT PER DAY BY WEIGHT
0.730
0.551
0.372
0.192
0.013
-0.166
-0.345
-0.524
-0.704
-0.883
-1.062
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES


OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
AVERAGE CONTAINMENT PRESSURE
58.450
58.442
58.434
58.426
58.418
58.410
58.402
58.394
58.386
58.378
58.370
PRESSURE IN PSIA
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES


OBSERVATION NUMBER
1
10
19
28
37
46
55
64
73
82
91
VOLUMETRICALLY WEIGHTED VAPOR PRESSURE
VAPOR PRESSURE IN PSIA
0.4500
0.4430
0.4360
0.4290
0.4220
0.4150
0.4080
0.4010
0.3940
0.3870
0.3800
0
120
240
360
480
600
720
840
960
1080
1200
1320
1440
TIME IN MINUTES

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	AVG. TEM DEG. F	AVG. PRE PSIA	VAP. PRE PSIA	LEAK COM PER CENT	LEAK TRA PER CENT	ERROR(T) PER CENT
1	0	87.161	58.432	0.414	-0.004	0.000	0.000
2	15	87.161	58.432	0.419	-0.004	0.000	0.000
3	30	87.151	58.431	0.402	-0.004	0.000	0.000
4	45	87.147	58.431	0.409	-0.004	-0.305	0.014
5	60	87.144	58.431	0.416	-0.004	31.537	0.014
6	75	87.140	58.431	0.415	-0.004	13.394	0.014
7	90	87.138	58.431	0.413	-0.004	5.726	0.014
8	105	87.137	58.431	0.417	-0.004	4.899	0.014
9	120	87.127	58.431	0.414	-0.004	2.862	0.014
10	135	87.124	58.431	0.421	-0.004	3.063	0.014
11	150	87.127	58.430	0.420	-0.004	2.853	0.014
12	165	87.119	58.430	0.423	-0.004	2.709	0.014
13	180	87.117	58.430	0.423	-0.004	2.436	0.014
14	195	87.116	58.430	0.411	-0.004	1.556	0.014
15	210	87.106	58.430	0.419	-0.004	1.262	0.014
16	225	87.106	58.430	0.420	-0.004	1.093	0.014
17	240	87.106	58.429	0.418	-0.004	0.924	0.014
18	255	87.101	58.429	0.423	-0.004	0.875	0.014
19	270	87.101	58.429	0.424	-0.004	0.842	0.014
20	285	87.103	58.428	0.413	-0.004	0.651	0.014
21	300	87.100	58.428	0.409	-0.004	0.448	0.014
22	315	87.097	58.428	0.414	-0.004	0.349	0.014
23	330	87.098	58.428	0.421	-0.004	0.343	0.014
24	345	87.097	58.428	0.423	-0.004	0.346	0.014
25	360	87.096	58.428	0.416	-0.004	0.296	0.014
26	375	87.096	58.427	0.419	-0.004	0.276	0.014
27	390	87.079	58.427	0.418	-0.004	0.243	0.014
28	405	87.088	58.427	0.425	-0.003	0.251	0.014
29	420	87.086	58.427	0.416	-0.003	0.217	0.014
30	435	87.079	58.427	0.418	-0.003	0.192	0.014
31	450	87.082	58.427	0.419	-0.003	0.177	0.014
32	465	87.071	58.427	0.418	-0.003	0.157	0.014
33	480	87.077	58.426	0.416	-0.003	0.138	0.014
34	495	87.065	58.426	0.418	-0.003	0.122	0.014
35	510	87.068	58.426	0.421	-0.003	0.118	0.014
36	525	87.058	58.425	0.419	-0.003	0.109	0.014
37	540	87.060	58.425	0.418	-0.003	0.099	0.014
38	555	87.057	58.425	0.409	-0.003	0.074	0.014
39	570	87.047	58.424	0.424	-0.003	0.077	0.014
40	585	87.048	58.424	0.419	-0.003	0.072	0.014
41	600	87.046	58.424	0.422	-0.003	0.070	0.014
42	615	87.040	58.424	0.411	-0.003	0.054	0.014
43	630	87.042	58.423	0.409	-0.003	0.040	0.014
44	645	87.029	58.423	0.415	-0.003	0.032	0.014
45	660	87.029	58.422	0.424	-0.003	0.036	0.014
46	675	87.025	58.422	0.417	-0.003	0.032	0.014
47	690	87.023	58.422	0.407	-0.003	0.019	0.014
48	705	87.011	58.421	0.428	-0.003	0.025	0.014
49	720	87.011	58.421	0.416	-0.003	0.021	0.014
50	735	87.002	58.420	0.415	-0.003	0.017	0.014

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	AVG. TEM DEG. F	AVG. PRE PSIA	VAP. PRE PSIA	LEAK COM PER CENT	LEAK TRA PER CENT	ERROR(T) PER CENT
51	750	87.005	58.420	0.415	-0.003	0.013	0.014
52	765	86.998	58.419	0.419	-0.003	0.013	0.014
53	780	86.999	58.419	0.416	-0.003	0.011	0.014
54	795	86.984	58.418	0.422	-0.003	0.012	0.014
55	810	86.980	58.418	0.417	-0.003	0.011	0.014
56	825	86.980	58.417	0.418	-0.003	0.010	0.014
57	840	86.965	58.416	0.409	-0.003	0.005	0.014
58	855	86.967	58.416	0.416	-0.003	0.004	0.014
59	870	86.960	58.416	0.416	-0.003	0.002	0.014
60	885	86.960	58.415	0.419	-0.003	0.003	0.014
61	900	86.954	58.415	0.414	-0.003	0.001	0.014
62	915	86.948	58.414	0.420	-0.003	0.001	0.014
63	930	86.941	58.414	0.417	-0.003	0.000	0.014
64	945	86.940	58.414	0.420	-0.003	0.001	0.014
65	960	86.932	58.413	0.419	-0.003	0.001	0.014
66	975	86.927	58.412	0.419	-0.003	0.001	0.014
67	990	86.925	58.411	0.415	-0.003	-0.000	0.014
68	1005	86.915	58.411	0.423	-0.003	0.001	0.014
69	1020	86.912	58.411	0.425	-0.003	0.002	0.014
70	1035	86.912	58.411	0.417	-0.003	0.002	0.014
71	1050	86.903	58.411	0.418	-0.003	0.001	0.014
72	1065	86.899	58.410	0.416	-0.003	0.000	0.014
73	1080	86.900	58.410	0.405	-0.003	-0.003	0.014
74	1095	86.894	58.410	0.420	-0.003	-0.002	0.014
75	1110	86.888	58.410	0.420	-0.003	-0.002	0.014
76	1125	86.882	58.409	0.413	-0.003	-0.003	0.014
77	1140	86.881	58.409	0.414	-0.003	-0.004	0.014
78	1155	86.876	58.407	0.417	-0.003	-0.004	0.014
79	1170	86.882	58.407	0.424	-0.003	-0.003	0.014
80	1185	86.872	58.407	0.419	-0.003	-0.003	0.014
81	1200	86.868	58.407	0.410	-0.003	-0.004	0.014
82	1215	86.856	58.406	0.411	-0.003	-0.005	0.014
83	1230	86.853	58.406	0.413	-0.003	-0.006	0.014
84	1245	86.847	58.405	0.414	-0.003	-0.006	0.014
85	1260	86.841	58.405	0.416	-0.003	-0.007	0.014
86	1275	86.838	58.404	0.417	-0.003	-0.007	0.014
87	1290	86.832	58.403	0.417	-0.003	-0.007	0.014
88	1305	86.829	58.403	0.428	-0.003	-0.005	0.014
89	1320	86.822	58.402	0.422	-0.003	-0.005	0.014
90	1335	86.815	58.402	0.423	-0.003	-0.005	0.014
91	1350	86.804	58.401	0.417	-0.003	-0.005	0.014
92	1365	86.813	58.401	0.418	-0.003	-0.005	0.014
93	1380	86.802	58.400	0.429	-0.003	-0.004	0.014
94	1395	86.794	58.399	0.418	-0.003	-0.004	0.014
95	1410	86.787	58.399	0.414	-0.003	-0.004	0.014
96	1425	86.787	58.398	0.416	-0.003	-0.004	0.014
97	1440	86.776	58.397	0.425	-0.003	-0.004	0.014
98	1455	86.778	58.396	0.423	-0.003	-0.003	0.014

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 1 DEG. F	TEMP 2 DEG. F	TEMP 3 DEG. F	TEMP 4 DEG. F	TEMP 5 DEG. F	TEMP 6 DEG. F
1	0	86.640	86.970	86.530	86.630	86.280	87.340
2	15	86.660	86.940	86.500	86.620	86.280	87.380
3	30	86.640	86.960	86.500	86.610	86.280	87.330
4	45	86.610	86.940	86.500	86.610	86.280	87.340
5	60	86.640	86.950	86.490	86.610	86.270	87.350
6	75	86.600	86.950	86.510	86.610	86.240	87.330
7	90	86.610	86.940	86.500	86.620	86.260	87.300
8	105	86.620	86.930	86.490	86.590	86.270	87.330
9	120	86.560	86.940	86.510	86.600	86.240	87.310
10	135	86.610	86.900	86.510	86.600	86.240	87.310
11	150	86.610	86.910	86.490	86.590	86.250	87.310
12	165	86.600	86.940	86.500	86.600	86.230	87.300
13	180	86.610	86.910	86.480	86.600	86.230	87.300
14	195	86.590	86.890	86.480	86.590	86.260	87.300
15	210	86.620	86.900	86.460	86.580	86.220	87.300
16	225	86.600	86.920	86.460	86.580	86.230	87.300
17	240	86.560	86.940	86.490	86.570	86.220	87.300
18	255	86.590	86.900	86.460	86.600	86.220	87.290
19	270	86.600	86.890	86.460	86.580	86.220	87.280
20	285	86.600	86.910	86.460	86.570	86.220	87.320
21	300	86.550	86.860	86.450	86.570	86.220	87.300
22	315	86.620	86.880	86.440	86.590	86.220	87.300
23	330	86.550	86.870	86.460	86.570	86.230	87.260
24	345	86.610	86.880	86.460	86.560	86.220	87.290
25	360	86.600	86.890	86.460	86.560	86.220	87.300
26	375	86.580	86.890	86.450	86.600	86.190	87.290
27	390	86.560	86.870	86.440	86.570	86.210	87.260
28	405	86.570	86.870	86.470	86.560	86.220	87.270
29	420	86.560	86.900	86.450	86.550	86.200	87.260
30	435	86.570	86.880	86.460	86.540	86.240	87.280
31	450	86.570	86.860	86.450	86.560	86.200	87.260
32	465	86.530	86.880	86.460	86.550	86.200	87.250
33	480	86.540	86.850	86.430	86.530	86.190	87.260
34	495	86.510	86.860	86.420	86.540	86.170	87.250
35	510	86.580	86.860	86.430	86.550	86.180	87.250
36	525	86.550	86.860	86.430	86.520	86.170	87.250
37	540	86.490	86.850	86.420	86.540	86.190	87.240
38	555	86.550	86.850	86.420	86.530	86.180	87.230
39	570	86.510	86.840	86.410	86.510	86.170	87.230
40	585	86.530	86.820	86.400	86.540	86.180	87.220
41	600	86.460	86.830	86.420	86.500	86.150	87.220
42	615	86.520	86.820	86.400	86.500	86.160	87.220
43	630	86.470	86.840	86.400	86.520	86.160	87.220
44	645	86.440	86.790	86.380	86.510	86.140	87.210
45	660	86.480	86.800	86.400	86.510	86.150	87.180
46	675	86.480	86.810	86.400	86.480	86.140	87.200
47	690	86.500	86.800	86.390	86.490	86.150	87.190
48	705	86.460	86.800	86.390	86.480	86.110	87.170
49	720	86.460	86.780	86.370	86.480	86.140	87.190
50	735	86.420	86.790	86.390	86.470	86.130	87.180

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 1 DEG. F	TEMP 2 DEG. F	TEMP 3 DEG. F	TEMP 4 DEG. F	TEMP 5 DEG. F	TEMP 6 DEG. F
51	750	86.440	86.790	86.380	86.470	86.120	87.160
52	765	86.390	86.780	86.360	86.460	86.100	87.170
53	780	86.420	86.780	86.370	86.450	86.060	87.170
54	795	86.440	86.760	86.360	86.460	86.080	87.150
55	810	86.400	86.760	86.330	86.460	86.070	87.150
56	825	86.470	86.750	86.330	86.450	86.080	87.150
57	840	86.380	86.750	86.330	86.440	86.070	87.150
58	855	86.450	86.760	86.330	86.450	86.080	87.140
59	870	86.420	86.740	86.350	86.420	86.060	87.130
60	885	86.400	86.720	86.290	86.420	86.080	87.130
61	900	86.370	86.750	86.300	86.430	86.050	87.120
62	915	86.350	86.730	86.300	86.430	86.080	87.120
63	930	86.350	86.750	86.310	86.400	86.060	87.120
64	945	86.330	86.710	86.300	86.400	86.050	87.110
65	960	86.370	86.710	86.300	86.370	86.020	87.090
66	975	86.340	86.690	86.270	86.390	86.030	87.070
67	990	86.330	86.700	86.270	86.360	85.990	87.100
68	1005	86.350	86.690	86.290	86.370	86.020	87.080
69	1020	86.360	86.700	86.270	86.360	86.000	87.090
70	1035	86.320	86.680	86.260	86.360	86.010	87.080
71	1050	86.310	86.690	86.270	86.350	86.000	87.070
72	1065	86.300	86.680	86.270	86.340	86.000	87.060
73	1080	86.320	86.670	86.240	86.360	85.990	87.060
74	1095	86.320	86.690	86.230	86.340	85.990	87.060
75	1110	86.290	86.660	86.250	86.380	85.990	87.050
76	1125	86.310	86.650	86.230	86.350	85.970	87.050
77	1140	86.340	86.630	86.230	86.350	85.970	87.040
78	1155	86.280	86.650	86.240	86.330	85.970	87.050
79	1170	86.320	86.670	86.230	86.340	85.990	87.040
80	1185	86.280	86.670	86.200	86.310	85.950	87.040
81	1200	86.290	86.640	86.220	86.310	85.990	87.010
82	1215	86.290	86.660	86.190	86.320	85.950	87.010
83	1230	86.300	86.640	86.210	86.310	85.960	87.000
84	1245	86.230	86.640	86.210	86.290	85.980	87.000
85	1260	86.270	86.590	86.210	86.320	85.960	87.000
86	1275	86.240	86.630	86.190	86.310	85.960	87.000
87	1290	86.240	86.610	86.200	86.290	85.930	87.010
88	1305	86.240	86.600	86.180	86.280	85.930	86.990
89	1320	86.250	86.620	86.180	86.260	85.930	86.980
90	1335	86.230	86.590	86.150	86.290	85.920	86.970
91	1350	86.220	86.580	86.140	86.240	85.920	86.960
92	1365	86.210	86.590	86.170	86.250	85.920	86.950
93	1380	86.270	86.590	86.160	86.250	85.880	86.950
94	1395	86.200	86.550	86.140	86.240	85.910	86.930
95	1410	86.180	86.560	86.130	86.230	85.890	86.940
96	1425	86.190	86.570	86.140	86.250	85.890	86.920
97	1440	86.190	86.560	86.140	86.220	85.890	86.930
98	1455	86.170	86.560	86.120	86.230	85.860	86.930

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 7 DEG. F	TEMP 8 DEG. F	TEMP 9 DEG. F	TEMP 10 DEG. F	TEMP 11 DEG. F	TEMP 12 DEG. F
1	0	86.620	87.480	87.030	87.330	87.110	87.460
2	15	86.610	87.470	87.110	87.370	87.110	87.410
3	30	86.620	87.450	87.020	87.330	87.100	87.440
4	45	86.600	87.480	87.000	87.330	87.100	87.430
5	60	86.610	87.500	87.040	87.320	87.090	87.380
6	75	86.610	87.460	87.030	87.330	87.100	87.370
7	90	86.590	87.480	87.030	87.330	87.090	87.400
8	105	86.590	87.430	87.030	87.320	87.110	87.450
9	120	86.590	87.460	87.010	87.310	87.060	87.350
10	135	86.600	87.420	87.030	87.320	87.070	87.430
11	150	86.560	87.430	87.020	87.280	87.080	87.400
12	165	86.580	87.430	87.070	87.270	87.060	87.370
13	180	86.570	87.420	87.010	87.290	87.060	87.380
14	195	86.570	87.430	87.000	87.280	87.060	87.410
15	210	86.560	87.470	86.980	87.290	87.050	87.370
16	225	86.570	87.410	87.000	87.280	87.060	87.350
17	240	86.550	87.420	87.040	87.300	87.050	87.390
18	255	86.560	87.410	86.990	87.280	87.060	87.330
19	270	86.540	87.420	86.970	87.290	87.060	87.380
20	285	86.550	87.440	86.970	87.290	87.060	87.350
21	300	86.550	87.410	87.060	87.280	87.060	87.350
22	315	86.550	87.410	86.980	87.260	87.040	87.290
23	330	86.550	87.400	87.050	87.280	87.060	87.370
24	345	86.560	87.410	86.970	87.250	87.050	87.380
25	360	86.540	87.400	86.990	87.300	87.060	87.330
26	375	86.530	87.410	87.010	87.250	87.040	87.350
27	390	86.530	87.410	86.970	87.240	87.030	87.300
28	405	86.520	87.380	86.990	87.290	87.050	87.370
29	420	86.520	87.410	86.980	87.250	87.030	87.370
30	435	86.520	87.390	86.970	87.250	87.040	87.350
31	450	86.520	87.390	87.030	87.270	87.030	87.360
32	465	86.500	87.380	86.960	87.250	87.030	87.300
33	480	86.500	87.400	87.000	87.270	87.020	87.380
34	495	86.500	87.390	86.960	87.200	87.000	87.350
35	510	86.530	87.390	86.980	87.240	87.010	87.320
36	525	86.500	87.380	86.950	87.230	87.000	87.320
37	540	86.510	87.370	86.980	87.240	87.010	87.310
38	555	86.480	87.350	87.000	87.210	87.010	87.330
39	570	86.490	87.350	86.940	87.230	87.000	87.320
40	585	86.490	87.350	86.930	87.200	87.000	87.370
41	600	86.480	87.360	86.940	87.210	87.000	87.360
42	615	86.480	87.340	86.970	87.220	86.980	87.280
43	630	86.480	87.370	86.940	87.200	86.970	87.340
44	645	86.480	87.330	86.880	87.190	86.980	87.330
45	660	86.490	87.330	86.900	87.240	87.000	87.270
46	675	86.480	87.340	86.920	87.170	86.960	87.300
47	690	86.460	87.330	86.920	87.220	86.960	87.310
48	705	86.450	87.310	86.910	87.180	86.970	87.310
49	720	86.440	87.320	86.870	87.190	86.960	87.320
50	735	86.440	87.310	86.930	87.160	86.950	87.310

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 7 DEG. F	TEMP 8 DEG. F	TEMP 9 DEG. F	TEMP 10 DEG. F	TEMP 11 DEG. F	TEMP 12 DEG. F
51	750	86.450	87.310	86.890	87.150	86.950	87.330
52	765	86.420	87.300	86.920	87.200	86.950	87.300
53	780	86.430	87.310	86.900	87.160	86.950	87.310
54	795	86.420	87.290	86.880	87.140	86.920	87.260
55	810	86.420	87.300	86.890	87.150	86.940	87.280
56	825	86.420	87.260	86.890	87.140	86.930	87.290
57	840	86.400	87.260	86.870	87.140	86.930	87.240
58	855	86.400	87.280	86.850	87.110	86.890	87.230
59	870	86.400	87.260	86.880	87.110	86.890	87.230
60	885	86.390	87.280	86.880	87.140	86.880	87.280
61	900	86.380	87.260	86.860	87.120	86.910	87.250
62	915	86.370	87.270	86.840	87.130	86.880	87.260
63	930	86.370	87.260	86.840	87.090	86.880	87.200
64	945	86.360	87.220	86.830	87.120	86.880	87.240
65	960	86.360	87.240	86.850	87.080	86.860	87.240
66	975	86.350	87.220	86.810	87.100	86.880	87.260
67	990	86.350	87.240	86.870	87.070	86.860	87.240
68	1005	86.340	87.210	86.820	87.080	86.850	87.220
69	1020	86.330	87.220	86.830	87.070	86.860	87.210
70	1035	86.340	87.190	86.810	87.080	86.870	87.210
71	1050	86.330	87.210	86.820	87.060	86.850	87.220
72	1065	86.330	87.190	86.790	87.060	86.840	87.250
73	1080	86.320	87.200	86.790	87.060	86.850	87.210
74	1095	86.310	87.190	86.790	87.070	86.820	87.220
75	1110	86.310	87.160	86.790	87.060	86.810	87.210
76	1125	86.310	87.180	86.810	87.060	86.820	87.200
77	1140	86.330	87.160	86.750	87.050	86.810	87.190
78	1155	86.310	87.170	86.790	87.060	86.810	87.200
79	1170	86.310	87.160	86.770	87.040	86.790	87.200
80	1185	86.300	87.170	86.780	87.050	86.800	87.180
81	1200	86.290	87.170	86.760	87.030	86.810	87.200
82	1215	86.290	87.200	86.740	87.000	86.800	87.170
83	1230	86.290	87.150	86.760	87.040	86.780	87.160
84	1245	86.270	87.150	86.730	86.990	86.790	87.130
85	1260	86.290	87.150	86.740	86.980	86.760	87.110
86	1275	86.260	87.140	86.710	87.000	86.770	87.170
87	1290	86.250	87.100	86.750	86.980	86.760	87.110
88	1305	86.240	87.120	86.720	87.010	86.760	87.100
89	1320	86.250	87.110	86.720	86.990	86.750	87.120
90	1335	86.240	87.130	86.710	86.990	86.730	87.120
91	1350	86.230	87.080	86.690	86.980	86.730	87.070
92	1365	86.240	87.110	86.730	86.980	86.750	87.120
93	1380	86.220	87.100	86.680	86.970	86.760	87.070
94	1395	86.220	87.100	86.710	86.970	86.730	87.100
95	1410	86.210	87.090	86.680	86.950	86.730	87.080
96	1425	86.200	87.060	86.690	86.950	86.710	87.110
97	1440	86.190	87.060	86.670	86.930	86.710	87.050
98	1455	86.200	87.050	86.690	86.930	86.700	87.110

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 13 DEG. F	TEMP 14 DEG. F	TEMP 15 DEG. F	TEMP 16 DEG. F	TEMP 17 DEG. F	TEMP 18 DEG. F
1	0	87.220	87.240	87.330	87.120	87.100	87.180
2	15	87.190	87.230	87.350	87.150	87.100	87.190
3	30	87.200	87.230	87.270	87.140	87.130	87.220
4	45	87.170	87.240	87.320	87.150	87.120	87.190
5	60	87.150	87.240	87.330	87.140	87.120	87.200
6	75	87.180	87.230	87.310	87.140	87.120	87.170
7	90	87.170	87.230	87.310	87.120	87.120	87.170
8	105	87.200	87.240	87.280	87.120	87.080	87.150
9	120	87.170	87.210	87.340	87.120	87.110	87.180
10	135	87.130	87.220	87.310	87.110	87.090	87.140
11	150	87.170	87.230	87.300	87.100	87.110	87.170
12	165	87.150	87.230	87.280	87.110	87.060	87.140
13	180	87.120	87.230	87.300	87.100	87.080	87.160
14	195	87.150	87.200	87.290	87.090	87.070	87.130
15	210	87.140	87.200	87.300	87.100	87.080	87.110
16	225	87.120	87.220	87.260	87.080	87.060	87.140
17	240	87.140	87.210	87.290	87.070	87.040	87.110
18	255	87.120	87.200	87.260	87.090	87.050	87.160
19	270	87.090	87.200	87.300	87.090	87.060	87.130
20	285	87.100	87.220	87.280	87.080	87.090	87.150
21	300	87.170	87.190	87.310	87.070	87.040	87.090
22	315	87.080	87.230	87.270	87.070	87.030	87.170
23	330	87.170	87.200	87.290	87.060	87.040	87.190
24	345	87.160	87.210	87.270	87.060	87.050	87.150
25	360	87.090	87.200	87.310	87.110	87.030	87.090
26	375	87.170	87.150	87.310	87.060	87.050	87.130
27	390	87.060	87.200	87.280	87.060	87.030	87.090
28	405	87.150	87.180	87.260	87.070	87.030	87.110
29	420	87.120	87.180	87.250	87.060	87.030	87.140
30	435	87.110	87.160	87.250	87.070	87.030	87.070
31	450	87.130	87.170	87.260	87.060	87.040	87.090
32	465	87.100	87.180	87.240	87.050	87.000	87.100
33	480	87.150	87.180	87.260	87.060	86.990	87.130
34	495	87.120	87.140	87.260	87.050	87.010	87.080
35	510	87.080	87.170	87.220	87.050	87.020	87.080
36	525	87.080	87.140	87.230	87.030	87.000	87.090
37	540	87.080	87.150	87.250	87.060	87.010	87.090
38	555	87.060	87.150	87.170	87.040	86.990	87.110
39	570	87.060	87.160	87.190	87.020	87.010	87.110
40	585	87.080	87.150	87.210	87.020	86.970	87.120
41	600	87.100	87.150	87.190	87.030	86.990	87.080
42	615	87.040	87.130	87.230	87.020	87.010	87.080
43	630	87.100	87.130	87.180	87.010	87.000	87.120
44	645	87.040	87.140	87.160	87.000	87.000	87.080
45	660	87.100	87.130	87.170	87.000	86.980	87.060
46	675	87.060	87.130	87.160	87.020	86.990	87.020
47	690	87.060	87.140	87.160	87.000	86.960	87.010
48	705	87.040	87.100	87.170	87.010	86.940	87.010
49	720	87.080	87.130	87.120	86.950	86.950	87.070
50	735	87.050	87.100	87.120	86.990	86.970	86.990

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 13 DEG. F	TEMP 14 DEG. F	TEMP 15 DEG. F	TEMP 16 DEG. F	TEMP 17 DEG. F	TEMP 18 DEG. F
51	750	87.060	87.120	87.160	86.960	86.940	87.020
52	765	87.020	87.100	87.130	86.960	86.950	87.050
53	780	87.080	87.090	87.140	86.980	86.950	87.010
54	795	87.050	87.100	87.120	86.960	86.950	86.980
55	810	86.980	87.080	87.120	86.960	86.940	86.990
56	825	87.010	87.080	87.110	86.950	86.920	87.000
57	840	87.040	87.050	87.140	86.920	86.920	87.000
58	855	87.010	87.050	87.090	86.960	86.910	87.000
59	870	87.010	87.060	87.090	86.940	86.910	86.970
60	885	86.980	87.060	87.090	86.940	86.900	86.980
61	900	86.990	87.040	87.100	86.930	86.900	87.020
62	915	87.010	87.050	87.090	86.920	86.890	86.990
63	930	87.000	87.060	87.060	86.910	86.900	86.930
64	945	87.030	87.050	87.090	86.880	86.880	86.990
65	960	86.980	87.020	87.080	86.900	86.880	86.990
66	975	86.970	87.040	87.050	86.930	86.870	86.990
67	990	86.970	87.020	87.070	86.910	86.870	86.970
68	1005	86.980	87.030	87.050	86.870	86.860	86.940
69	1020	86.980	87.030	87.090	86.880	86.870	86.960
70	1035	86.970	87.000	87.060	86.860	86.860	86.980
71	1050	86.940	87.010	87.060	86.890	86.860	86.890
72	1065	86.950	87.010	87.010	86.880	86.850	86.950
73	1080	86.950	87.000	87.020	86.870	86.850	86.960
74	1095	86.960	87.010	87.030	86.860	86.840	86.910
75	1110	86.950	87.010	87.000	86.840	86.840	86.910
76	1125	86.880	86.970	87.050	86.850	86.820	86.950
77	1140	86.900	86.970	86.990	86.850	86.830	86.940
78	1155	86.930	86.950	87.030	86.840	86.840	86.850
79	1170	86.950	86.970	87.010	86.850	86.820	86.890
80	1185	86.940	86.980	87.020	86.850	86.820	86.840
81	1200	86.940	86.980	86.990	86.820	86.810	86.860
82	1215	86.930	86.930	87.020	86.840	86.810	86.820
83	1230	86.910	86.950	86.990	86.840	86.810	86.860
84	1245	86.940	86.950	86.970	86.830	86.820	86.890
85	1260	86.900	86.910	86.970	86.840	86.830	86.850
86	1275	86.900	86.950	86.970	86.820	86.800	86.810
87	1290	86.900	86.940	86.990	86.810	86.790	86.800
88	1305	86.900	86.940	86.970	86.810	86.800	86.850
89	1320	86.900	86.890	87.000	86.800	86.800	86.820
90	1335	86.890	86.910	86.930	86.770	86.770	86.850
91	1350	86.850	86.920	86.910	86.780	86.800	86.790
92	1365	86.870	86.910	86.960	86.760	86.780	86.820
93	1380	86.880	86.910	86.940	86.750	86.760	86.770
94	1395	86.840	86.880	86.940	86.770	86.760	86.800
95	1410	86.850	86.900	86.930	86.750	86.760	86.800
96	1425	86.850	86.900	86.920	86.740	86.760	86.780
97	1440	86.820	86.880	86.880	86.740	86.740	86.780
98	1455	86.840	86.860	86.910	86.740	86.760	86.780

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 19 DEG. F	TEMP 20 DEG. F	TEMP 21 DEG. F	TEMP 22 DEG. F	TEMP 23 DEG. F	TEMP 24 DEG. F
1	0	87.050	87.560	87.100	87.790	87.740	87.540
2	15	87.120	87.610	87.110	87.760	87.600	87.490
3	30	87.040	87.550	87.080	87.770	87.620	87.540
4	45	87.030	87.600	87.090	87.750	87.570	87.510
5	60	87.130	87.540	87.090	87.730	87.530	87.500
6	75	87.110	87.540	87.090	87.750	87.540	87.500
7	90	87.040	87.560	87.100	87.730	87.550	87.530
8	105	87.040	87.550	87.060	87.750	87.590	87.500
9	120	87.020	87.560	87.060	87.710	87.590	87.500
10	135	87.020	87.500	87.040	87.750	87.570	87.480
11	150	87.030	87.510	87.060	87.740	87.700	87.490
12	165	87.050	87.520	87.060	87.710	87.540	87.470
13	180	87.070	87.550	87.070	87.730	87.530	87.460
14	195	87.010	87.530	87.060	87.750	87.600	87.460
15	210	87.000	87.530	87.040	87.730	87.550	87.450
16	225	87.030	87.510	87.030	87.750	87.530	87.470
17	240	86.990	87.470	87.030	87.720	87.600	87.470
18	255	86.980	87.500	87.040	87.720	87.520	87.430
19	270	87.030	87.520	87.040	87.720	87.500	87.450
20	285	87.020	87.530	87.030	87.720	87.470	87.450
21	300	86.990	87.520	87.040	87.720	87.510	87.480
22	315	87.050	87.520	87.020	87.700	87.520	87.450
23	330	86.980	87.490	87.010	87.700	87.520	87.460
24	345	87.010	87.510	87.020	87.750	87.530	87.450
25	360	86.980	87.550	87.030	87.700	87.530	87.450
26	375	87.000	87.540	87.020	87.710	87.550	87.450
27	390	86.990	87.520	86.980	87.700	87.510	87.450
28	405	86.980	87.520	87.010	87.710	87.490	87.420
29	420	87.020	87.480	87.020	87.720	87.570	87.410
30	435	86.950	87.500	87.010	87.720	87.520	87.410
31	450	86.950	87.480	87.010	87.710	87.540	87.410
32	465	86.950	87.460	87.000	87.710	87.610	87.400
33	480	86.940	87.500	86.990	87.690	87.540	87.440
34	495	86.950	87.480	86.970	87.710	87.610	87.410
35	510	87.000	87.500	86.980	87.710	87.480	87.400
36	525	86.950	87.470	86.980	87.690	87.530	87.400
37	540	86.950	87.460	86.990	87.690	87.490	87.400
38	555	86.990	87.500	86.960	87.670	87.590	87.390
39	570	86.940	87.460	86.970	87.710	87.460	87.400
40	585	86.960	87.460	86.970	87.700	87.520	87.390
41	600	86.960	87.420	86.970	87.720	87.580	87.390
42	615	86.900	87.430	86.960	87.690	87.530	87.380
43	630	86.950	87.450	86.980	87.710	87.510	87.380
44	645	86.910	87.450	86.950	87.700	87.640	87.360
45	660	86.900	87.430	86.960	87.700	87.550	87.360
46	675	86.920	87.430	86.930	87.680	87.610	87.320
47	690	86.900	87.420	86.940	87.680	87.630	87.350
48	705	86.910	87.420	86.930	87.640	87.570	87.340
49	720	86.890	87.400	86.940	87.660	87.580	87.340
50	735	86.900	87.410	86.940	87.660	87.540	87.330

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 19 DEG. F	TEMP 20 DEG. F	TEMP 21 DEG. F	TEMP 22 DEG. F	TEMP 23 DEG. F	TEMP 24 DEG. F
51	750	86.880	87.390	86.930	87.680	87.610	87.330
52	765	86.880	87.390	86.940	87.650	87.620	87.310
53	780	86.880	87.390	86.910	87.660	87.590	87.340
54	795	86.870	87.380	86.910	87.660	87.550	87.320
55	810	86.860	87.390	86.910	87.650	87.580	87.320
56	825	86.860	87.390	86.910	87.640	87.540	87.300
57	840	86.830	87.350	86.900	87.640	87.440	87.310
58	855	86.820	87.370	86.890	87.620	87.570	87.270
59	870	86.840	87.360	86.880	87.630	87.510	87.280
60	885	86.860	87.350	86.870	87.630	87.600	87.280
61	900	86.820	87.340	86.870	87.600	87.590	87.260
62	915	86.820	87.340	86.860	87.620	87.470	87.280
63	930	86.850	87.330	86.870	87.610	87.500	87.270
64	945	86.810	87.330	86.860	87.590	87.540	87.290
65	960	86.830	87.310	86.860	87.610	87.520	87.270
66	975	86.800	87.320	86.860	87.600	87.520	87.260
67	990	86.810	87.290	86.840	87.630	87.520	87.250
68	1005	86.810	87.300	86.850	87.600	87.490	87.240
69	1020	86.770	87.280	86.840	87.590	87.330	87.240
70	1035	86.790	87.340	86.820	87.590	87.500	87.250
71	1050	86.780	87.300	86.830	87.610	87.370	87.230
72	1065	86.760	87.270	86.820	87.570	87.460	87.210
73	1080	86.780	87.270	86.830	87.580	87.480	87.240
74	1095	86.770	87.260	86.810	87.570	87.480	87.210
75	1110	86.760	87.260	86.810	87.570	87.500	87.210
76	1125	86.750	87.260	86.810	87.550	87.460	87.200
77	1140	86.770	87.270	86.810	87.570	87.500	87.200
78	1155	86.750	87.250	86.800	87.560	87.430	87.180
79	1170	86.750	87.280	86.810	87.590	87.540	87.190
80	1185	86.740	87.260	86.790	87.570	87.470	87.190
81	1200	86.760	87.230	86.800	87.550	87.440	87.210
82	1215	86.720	87.200	86.770	87.570	87.290	87.210
83	1230	86.760	87.240	86.790	87.520	87.250	87.170
84	1245	86.750	87.220	86.770	87.470	87.450	87.160
85	1260	86.740	87.270	86.780	87.560	87.320	87.160
86	1275	86.710	87.210	86.760	87.550	87.400	87.170
87	1290	86.720	87.200	86.770	87.550	87.350	87.160
88	1305	86.750	87.200	86.740	87.540	87.360	87.150
89	1320	86.700	87.200	86.750	87.530	87.360	87.150
90	1335	86.680	87.170	86.740	87.500	87.400	87.140
91	1350	86.700	87.180	86.740	87.510	87.440	87.120
92	1365	86.700	87.170	86.720	87.520	87.470	87.130
93	1380	86.660	87.170	86.710	87.510	87.450	87.120
94	1395	86.670	87.170	86.710	87.480	87.420	87.110
95	1410	86.680	87.170	86.710	87.490	87.350	87.120
96	1425	86.650	87.160	86.720	87.520	87.400	87.100
97	1440	86.640	87.170	86.680	87.510	87.450	87.090
98	1455	86.670	87.170	86.700	87.480	87.430	87.090

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 25 DEG. F	TEMP 26 DEG. F	TEMP 27 DEG. F	TEMP 28 DEG. F	TEMP 29 DEG. F	TEMP 30 DEG. F
1	0	87.100	87.320	87.410	87.910	87.370	87.180
2	15	87.120	87.330	87.410	87.920	87.350	87.190
3	30	87.100	87.310	87.410	87.930	87.380	87.180
4	45	87.110	87.320	87.400	87.900	87.360	87.200
5	60	87.110	87.310	87.430	87.830	87.330	87.190
6	75	87.120	87.300	87.430	87.890	87.330	87.150
7	90	87.110	87.290	87.410	87.850	87.360	87.180
8	105	87.120	87.300	87.430	87.890	87.330	87.170
9	120	87.110	87.300	87.420	87.820	87.330	87.170
10	135	87.130	87.300	87.430	87.850	87.310	87.150
11	150	87.100	87.290	87.400	87.920	87.320	87.130
12	165	87.110	87.300	87.400	87.880	87.300	87.140
13	180	87.110	87.300	87.390	87.860	87.290	87.160
14	195	87.080	87.300	87.410	87.900	87.300	87.130
15	210	87.080	87.290	87.380	87.820	87.270	87.140
16	225	87.060	87.290	87.400	87.900	87.270	87.140
17	240	87.050	87.300	87.390	87.900	87.280	87.130
18	255	87.080	87.290	87.390	87.910	87.280	87.150
19	270	87.090	87.290	87.380	87.910	87.270	87.130
20	285	87.050	87.300	87.390	87.890	87.260	87.130
21	300	87.070	87.290	87.400	87.920	87.250	87.130
22	315	87.080	87.290	87.390	87.910	87.260	87.130
23	330	87.080	87.290	87.400	87.900	87.250	87.110
24	345	87.060	87.290	87.360	87.880	87.240	87.120
25	360	87.070	87.290	87.400	87.890	87.240	87.120
26	375	87.060	87.300	87.390	87.910	87.220	87.130
27	390	87.050	87.280	87.370	87.910	87.230	87.130
28	405	87.080	87.280	87.370	87.860	87.250	87.140
29	420	87.060	87.290	87.350	87.910	87.240	87.120
30	435	87.070	87.280	87.370	87.840	87.230	87.120
31	450	87.060	87.280	87.380	87.900	87.240	87.100
32	465	87.050	87.290	87.350	87.900	87.230	87.080
33	480	87.050	87.270	87.390	87.880	87.210	87.120
34	495	87.050	87.260	87.340	87.910	87.240	87.100
35	510	87.040	87.260	87.350	87.910	87.210	87.100
36	525	87.030	87.260	87.360	87.890	87.230	87.080
37	540	87.030	87.290	87.350	87.890	87.230	87.080
38	555	87.030	87.260	87.360	87.870	87.210	87.080
39	570	87.020	87.260	87.330	87.870	87.200	87.080
40	585	87.030	87.260	87.330	87.840	87.190	87.080
41	600	87.020	87.240	87.330	87.890	87.220	87.060
42	615	87.010	87.250	87.350	87.870	87.220	87.070
43	630	87.010	87.240	87.340	87.850	87.220	87.030
44	645	86.970	87.240	87.330	87.860	87.220	87.050
45	660	86.990	87.240	87.320	87.850	87.220	87.040
46	675	86.980	87.240	87.310	87.870	87.210	87.060
47	690	86.950	87.220	87.320	87.850	87.190	87.060
48	705	86.980	87.230	87.330	87.830	87.190	87.020
49	720	86.970	87.220	87.310	87.850	87.200	87.010
50	735	86.960	87.220	87.290	87.820	87.160	87.010

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 25 DEG. F	TEMP 26 DEG. F	TEMP 27 DEG. F	TEMP 28 DEG. F	TEMP 29 DEG. F	TEMP 30 DEG. F
51	750	86.980	87.220	87.280	87.840	87.180	87.020
52	765	86.970	87.210	87.310	87.830	87.180	87.000
53	780	86.960	87.210	87.310	87.840	87.170	87.040
54	795	86.930	87.200	87.300	87.820	87.160	86.990
55	810	86.940	87.190	87.280	87.810	87.160	87.000
56	825	86.940	87.190	87.300	87.830	87.140	87.010
57	840	86.920	87.180	87.280	87.810	87.160	86.980
58	855	86.920	87.190	87.270	87.810	87.150	87.000
59	870	86.900	87.200	87.260	87.800	87.160	86.970
60	885	86.920	87.190	87.250	87.790	87.150	86.980
61	900	86.910	87.180	87.230	87.800	87.160	86.970
62	915	86.900	87.170	87.250	87.770	87.140	86.970
63	930	86.880	87.170	87.250	87.780	87.140	86.960
64	945	86.890	87.170	87.250	87.800	87.130	86.960
65	960	86.890	87.150	87.240	87.790	87.120	86.950
66	975	86.860	87.170	87.210	87.780	87.130	86.940
67	990	86.870	87.150	87.240	87.780	87.150	86.960
68	1005	86.870	87.150	87.220	87.750	87.100	86.900
69	1020	86.870	87.160	87.220	87.780	87.110	86.920
70	1035	86.860	87.140	87.220	87.790	87.120	86.910
71	1050	86.860	87.150	87.210	87.770	87.100	86.920
72	1065	86.860	87.130	87.210	87.790	87.100	86.910
73	1080	86.840	87.140	87.210	87.790	87.100	86.920
74	1095	86.830	87.140	87.190	87.780	87.100	86.920
75	1110	86.830	87.130	87.200	87.760	87.110	86.890
76	1125	86.820	87.140	87.190	87.740	87.090	86.900
77	1140	86.810	87.120	87.210	87.760	87.090	86.890
78	1155	86.810	87.150	87.190	87.750	87.070	86.910
79	1170	86.840	87.120	87.190	87.750	87.080	86.890
80	1185	86.820	87.120	87.190	87.730	87.090	86.910
81	1200	86.810	87.130	87.180	87.750	87.090	86.870
82	1215	86.810	87.140	87.180	87.730	87.090	86.860
83	1230	86.800	87.100	87.170	87.730	87.060	86.880
84	1245	86.780	87.100	87.170	87.700	87.060	86.850
85	1260	86.810	87.100	87.150	87.670	87.060	86.830
86	1275	86.760	87.100	87.160	87.660	87.050	86.850
87	1290	86.800	87.090	87.180	87.660	87.050	86.870
88	1305	86.760	87.090	87.160	87.660	87.050	86.850
89	1320	86.770	87.090	87.130	87.640	87.040	86.830
90	1335	86.750	87.080	87.160	87.650	87.040	86.830
91	1350	86.740	87.080	87.120	87.650	87.040	86.820
92	1365	86.750	87.080	87.130	87.660	87.030	86.830
93	1380	86.760	87.070	87.130	87.640	87.020	86.820
94	1395	86.730	87.070	87.110	87.650	87.010	86.800
95	1410	86.730	87.070	87.150	87.610	87.010	86.800
96	1425	86.750	87.060	87.130	87.620	87.010	86.770
97	1440	86.730	87.040	87.120	87.630	86.980	86.790
98	1455	86.690	87.040	87.120	87.620	87.010	86.790

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	PRES 1 PSIA	HUM 1 FRACTION	HUM 2 FRACTION	HUM 3 FRACTION	HUM 4 FRACTION	HUM 5 FRACTION
1	0	58.432	DELETED	DELETED	DELETED	0.652	0.658
2	15	58.432	DELETED	DELETED	DELETED	0.637	0.691
3	30	58.431	DELETED	DELETED	DELETED	0.623	0.637
4	45	58.431	DELETED	DELETED	DELETED	0.640	0.650
5	60	58.431	DELETED	DELETED	DELETED	0.651	0.668
6	75	58.431	DELETED	DELETED	DELETED	0.660	0.658
7	90	58.431	DELETED	DELETED	DELETED	0.636	0.669
8	105	58.431	DELETED	DELETED	DELETED	0.654	0.666
9	120	58.431	DELETED	DELETED	DELETED	0.633	0.676
10	135	58.431	DELETED	DELETED	DELETED	0.655	0.683
11	150	58.430	DELETED	DELETED	DELETED	0.650	0.680
12	165	58.430	DELETED	DELETED	DELETED	0.672	0.673
13	180	58.430	DELETED	DELETED	DELETED	0.658	0.688
14	195	58.430	DELETED	DELETED	DELETED	0.629	0.674
15	210	58.430	DELETED	DELETED	DELETED	0.673	0.658
16	225	58.430	DELETED	DELETED	DELETED	0.665	0.672
17	240	58.429	DELETED	DELETED	DELETED	0.644	0.682
18	255	58.429	DELETED	DELETED	DELETED	0.662	0.682
19	270	58.429	DELETED	DELETED	DELETED	0.660	0.691
20	285	58.428	DELETED	DELETED	DELETED	0.652	0.657
21	300	58.428	DELETED	DELETED	DELETED	0.626	0.665
22	315	58.428	DELETED	DELETED	DELETED	0.637	0.673
23	330	58.428	DELETED	DELETED	DELETED	0.678	0.660
24	345	58.428	DELETED	DELETED	DELETED	0.665	0.682
25	360	58.428	DELETED	DELETED	DELETED	0.656	0.664
26	375	58.427	DELETED	DELETED	DELETED	0.659	0.670
27	390	58.427	DELETED	DELETED	DELETED	0.673	0.653
28	405	58.427	DELETED	DELETED	DELETED	0.657	0.697
29	420	58.427	DELETED	DELETED	DELETED	0.662	0.657
30	435	58.427	DELETED	DELETED	DELETED	0.649	0.677
31	450	58.427	DELETED	DELETED	DELETED	0.654	0.682
32	465	58.427	DELETED	DELETED	DELETED	0.645	0.683
33	480	58.426	DELETED	DELETED	DELETED	0.657	0.665
34	495	58.426	DELETED	DELETED	DELETED	0.655	0.672
35	510	58.426	DELETED	DELETED	DELETED	0.666	0.675
36	525	58.425	DELETED	DELETED	DELETED	0.668	0.666
37	540	58.425	DELETED	DELETED	DELETED	0.647	0.678
38	555	58.425	DELETED	DELETED	DELETED	0.632	0.658
39	570	58.424	DELETED	DELETED	DELETED	0.672	0.682
40	585	58.424	DELETED	DELETED	DELETED	0.651	0.680
41	600	58.424	DELETED	DELETED	DELETED	0.659	0.683
42	615	58.424	DELETED	DELETED	DELETED	0.647	0.656
43	630	58.423	DELETED	DELETED	DELETED	0.645	0.647
44	645	58.423	DELETED	DELETED	DELETED	0.650	0.669
45	660	58.422	DELETED	DELETED	DELETED	0.668	0.685
46	675	58.422	DELETED	DELETED	DELETED	0.665	0.659
47	690	58.422	DELETED	DELETED	DELETED	0.649	0.638
48	705	58.421	DELETED	DELETED	DELETED	0.686	0.685
49	720	58.421	DELETED	DELETED	DELETED	0.643	0.674
50	735	58.420	DELETED	DELETED	DELETED	0.642	0.674

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	PRES 1 PSIA	HUM 1 FRACTION	HUM 2 FRACTION	HUM 3 FRACTION	HUM 4 FRACTION	HUM 5 FRACTION
51	750	58.420	DELETED	DELETED	DELETED	0.647	0.672
52	765	58.419	DELETED	DELETED	DELETED	0.662	0.671
53	780	58.419	DELETED	DELETED	DELETED	0.652	0.671
54	795	58.418	DELETED	DELETED	DELETED	0.661	0.687
55	810	58.418	DELETED	DELETED	DELETED	0.652	0.678
56	825	58.417	DELETED	DELETED	DELETED	0.648	0.686
57	840	58.416	DELETED	DELETED	DELETED	0.647	0.649
58	855	58.416	DELETED	DELETED	DELETED	0.643	0.681
59	870	58.416	DELETED	DELETED	DELETED	0.674	0.646
60	885	58.415	DELETED	DELETED	DELETED	0.657	0.680
61	900	58.415	DELETED	DELETED	DELETED	0.643	0.674
62	915	58.414	DELETED	DELETED	DELETED	0.652	0.688
63	930	58.414	DELETED	DELETED	DELETED	0.654	0.673
64	945	58.414	DELETED	DELETED	DELETED	0.661	0.679
65	960	58.413	DELETED	DELETED	DELETED	0.650	0.688
66	975	58.412	DELETED	DELETED	DELETED	0.650	0.684
67	990	58.411	DELETED	DELETED	DELETED	0.647	0.673
68	1005	58.411	DELETED	DELETED	DELETED	0.664	0.690
69	1020	58.411	DELETED	DELETED	DELETED	0.689	0.670
70	1035	58.411	DELETED	DELETED	DELETED	0.669	0.661
71	1050	58.411	DELETED	DELETED	DELETED	0.667	0.666
72	1065	58.410	DELETED	DELETED	DELETED	0.656	0.671
73	1080	58.410	DELETED	DELETED	DELETED	0.632	0.650
74	1095	58.410	DELETED	DELETED	DELETED	0.652	0.692
75	1110	58.410	DELETED	DELETED	DELETED	0.686	0.657
76	1125	58.409	DELETED	DELETED	DELETED	0.669	0.647
77	1140	58.409	DELETED	DELETED	DELETED	0.648	0.672
78	1155	58.407	DELETED	DELETED	DELETED	0.660	0.671
79	1170	58.407	DELETED	DELETED	DELETED	0.687	0.671
80	1185	58.407	DELETED	DELETED	DELETED	0.659	0.678
81	1200	58.407	DELETED	DELETED	DELETED	0.654	0.650
82	1215	58.406	DELETED	DELETED	DELETED	0.665	0.646
83	1230	58.406	DELETED	DELETED	DELETED	0.640	0.677
84	1245	58.405	DELETED	DELETED	DELETED	0.662	0.656
85	1260	58.405	DELETED	DELETED	DELETED	0.670	0.661
86	1275	58.404	DELETED	DELETED	DELETED	0.648	0.683
87	1290	58.403	DELETED	DELETED	DELETED	0.658	0.677
88	1305	58.403	DELETED	DELETED	DELETED	0.677	0.700
89	1320	58.402	DELETED	DELETED	DELETED	0.663	0.690
90	1335	58.402	DELETED	DELETED	DELETED	0.671	0.688
91	1350	58.401	DELETED	DELETED	DELETED	0.657	0.676
92	1365	58.401	DELETED	DELETED	DELETED	0.671	0.663
93	1380	58.400	DELETED	DELETED	DELETED	0.685	0.696
94	1395	58.399	DELETED	DELETED	DELETED	0.651	0.686
95	1410	58.399	DELETED	DELETED	DELETED	0.663	0.664
96	1425	58.398	DELETED	DELETED	DELETED	0.660	0.667
97	1440	58.397	DELETED	DELETED	DELETED	0.677	0.693
98	1455	58.396	DELETED	DELETED	DELETED	0.674	0.685

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	HUM 6 FRACTION	HUM 7 FRACTION	HUM 8 FRACTION	HUM 9 FRACTION	HUM 10 FRACTION
1	0	DELETED	DELETED	0.621	0.633	0.631
2	15	DELETED	DELETED	0.619	0.633	0.631
3	30	DELETED	DELETED	0.616	0.633	0.631
4	45	DELETED	DELETED	0.617	0.632	0.635
5	60	DELETED	DELETED	0.617	0.634	0.629
6	75	DELETED	DELETED	0.620	0.623	0.627
7	90	DELETED	DELETED	0.625	0.634	0.634
8	105	DELETED	DELETED	0.621	0.635	0.638
9	120	DELETED	DELETED	0.621	0.641	0.633
10	135	DELETED	DELETED	0.624	0.631	0.632
11	150	DELETED	DELETED	0.623	0.645	0.636
12	165	DELETED	DELETED	0.623	0.634	0.633
13	180	DELETED	DELETED	0.622	0.635	0.627
14	195	DELETED	DELETED	0.619	0.624	0.631
15	210	DELETED	DELETED	0.621	0.633	0.628
16	225	DELETED	DELETED	0.620	0.633	0.633
17	240	DELETED	DELETED	0.627	0.641	0.635
18	255	DELETED	DELETED	0.620	0.637	0.644
19	270	DELETED	DELETED	0.619	0.642	0.632
20	285	DELETED	DELETED	0.617	0.635	0.633
21	300	DELETED	DELETED	0.621	0.637	0.627
22	315	DELETED	DELETED	0.626	0.632	0.634
23	330	DELETED	DELETED	0.625	0.634	0.637
24	345	DELETED	DELETED	0.621	0.634	0.633
25	360	DELETED	DELETED	0.626	0.635	0.632
26	375	DELETED	DELETED	0.628	0.635	0.635
27	390	DELETED	DELETED	0.626	0.639	0.635
28	405	DELETED	DELETED	0.621	0.639	0.628
29	420	DELETED	DELETED	0.626	0.635	0.636
30	435	DELETED	DELETED	0.623	0.637	0.640
31	450	DELETED	DELETED	0.615	0.633	0.631
32	465	DELETED	DELETED	0.622	0.634	0.643
33	480	DELETED	DELETED	0.621	0.637	0.633
34	495	DELETED	DELETED	0.619	0.636	0.631
35	510	DELETED	DELETED	0.621	0.639	0.638
36	525	DELETED	DELETED	0.626	0.638	0.629
37	540	DELETED	DELETED	0.623	0.643	0.647
38	555	DELETED	DELETED	0.625	0.644	0.633
39	570	DELETED	DELETED	0.625	0.634	0.635
40	585	DELETED	DELETED	0.628	0.643	0.634
41	600	DELETED	DELETED	0.624	0.636	0.644
42	615	DELETED	DELETED	0.622	0.631	0.632
43	630	DELETED	DELETED	0.620	0.638	0.640
44	645	DELETED	DELETED	0.625	0.632	0.637
45	660	DELETED	DELETED	0.622	0.641	0.640
46	675	DELETED	DELETED	0.625	0.637	0.638
47	690	DELETED	DELETED	0.625	0.619	0.638
48	705	DELETED	DELETED	0.628	0.635	0.632
49	720	DELETED	DELETED	0.633	0.650	0.636
50	735	DELETED	DELETED	0.627	0.640	0.641

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	NUM 6 FRACTION	NUM 7 FRACTION	NUM 8 FRACTION	NUM 9 FRACTION	NUM 10 FRACTION
51	750	DELETED	DELETED	0.623	0.635	0.637
52	765	DELETED	DELETED	0.625	0.634	0.642
53	780	DELETED	DELETED	0.623	0.641	0.635
54	795	DELETED	DELETED	0.627	0.640	0.638
55	810	DELETED	DELETED	0.621	0.639	0.635
56	825	DELETED	DELETED	0.627	0.629	0.632
57	840	DELETED	DELETED	0.624	0.637	0.643
58	855	DELETED	DELETED	0.619	0.636	0.641
59	870	DELETED	DELETED	0.631	0.644	0.638
60	885	DELETED	DELETED	0.626	0.641	0.638
61	900	DELETED	DELETED	0.626	0.639	0.635
62	915	DELETED	DELETED	0.627	0.634	0.647
63	930	DELETED	DELETED	0.627	0.648	0.639
64	945	DELETED	DELETED	0.619	0.645	0.638
65	960	DELETED	DELETED	0.626	0.639	0.636
66	975	DELETED	DELETED	0.629	0.647	0.640
67	990	DELETED	DELETED	0.627	0.635	0.639
68	1005	DELETED	DELETED	0.626	0.645	0.636
69	1020	DELETED	DELETED	0.631	0.639	0.648
70	1035	DELETED	DELETED	0.628	0.639	0.636
71	1050	DELETED	DELETED	0.630	0.643	0.644
72	1065	DELETED	DELETED	0.631	0.648	0.633
73	1080	DELETED	DELETED	0.628	0.636	0.637
74	1095	DELETED	DELETED	0.630	0.642	0.637
75	1110	DELETED	DELETED	0.626	0.644	0.631
76	1125	DELETED	DELETED	0.630	0.635	0.641
77	1140	DELETED	DELETED	0.624	0.635	0.639
78	1155	DELETED	DELETED	0.629	0.652	0.638
79	1170	DELETED	DELETED	0.632	0.645	0.641
80	1185	DELETED	DELETED	0.632	0.650	0.638
81	1200	DELETED	DELETED	0.629	0.643	0.641
82	1215	DELETED	DELETED	0.630	0.635	0.638
83	1230	DELETED	DELETED	0.629	0.643	0.638
84	1245	DELETED	DELETED	0.633	0.649	0.638
85	1260	DELETED	DELETED	0.627	0.646	0.630
86	1275	DELETED	DELETED	0.628	0.646	0.639
87	1290	DELETED	DELETED	0.635	0.643	0.631
88	1305	DELETED	DELETED	0.633	0.651	0.641
89	1320	DELETED	DELETED	0.635	0.643	0.640
90	1335	DELETED	DELETED	0.629	0.642	0.644
91	1350	DELETED	DELETED	0.631	0.651	0.644
92	1365	DELETED	DELETED	0.634	0.648	0.653
93	1380	DELETED	DELETED	0.630	0.645	0.638
94	1395	DELETED	DELETED	0.629	0.642	0.646
95	1410	DELETED	DELETED	0.630	0.638	0.635
96	1425	DELETED	DELETED	0.634	0.654	0.635
97	1440	DELETED	DELETED	0.626	0.647	0.638
98	1455	DELETED	DELETED	0.630	0.642	0.641

END OF TABLE

END OF REPORT ON CONTAINMENT LEAK RATE TEST TO NRC

2.
CONTROLLED LEAK RATE TEST
(CLRT)

LEAK RATE COMPUTED USING TOTAL TIME METHOD
AS RECOMMENDED BY APPENDIX J FOR 10 CFR 50
(REACTOR CONTAINMENT LEAKAGE TESTING FOR WATER COOLED POWER REACTORS)

TEST PERIOD STARTED AT 1830 HOURS ON AUGUST 1,1978

A LEAST SQUARES FIRST ORDER FIT OF LEAK RATE TO TIME
SHOULD YIELD A SLOPE OF 0 AND AN INTERCEPT EQUAL
TO THE LEAK RATE AS COMPUTED AT THE INITIAL START TIME
THE EQUATION HAS THE FORM - L=ST+R
WHERE L - CORRELATED LEAK RATE
S - SLOPE OF CORRELATION
T - TIME IN HOURS
R - INTERCEPT LEAK RATE

LEAK RATE = 0.005 HOURS + 0.069 PER CENT
MEAN = 0.087 PER CENT

INITIAL CONTAINMENT AIR WEIGHT = 747361 LBS.
FINAL CONTAINMENT AIR WEIGHT = 747143 LBS.
FITTED MASS POINT LEAK RATE IS 0.130 PER CENT PER DAY

CONTROLLED LEAK RATE TEST (CLRT)
SUPPLEMENTAL VERIFICATION FOR ILRT
LEAKAGE OF .075 % PER DAY AT 58.486 PSIA IS [illegible] ENT TO 5.20 SCFM.
SUPPLEMENTAL TEST (CLRT) DATA AND PREVIOUS ILRT RES[illegible] PLUS INJECTED LEAKAGE
MUST BE WITHIN 25% OF LA (1.73 SCFM [illegible] VERIFICATION

MAXIMUM PROBABLE TEMPERATURE LOOP ERROR IS 0.008 DEGREES F.
MAXIMUM PROBABLE PRESSURE LOOP ERROR IS 0.0012 PSIA.
MAXIMUM PROBABLE HUMIDITY LOOP ERROR IS 1.353 PERCENT.

** MAXIMUM PROBABLE INSTRUMENT ERROR IS .0212 PERCENT PER DAY **
WITHIN A COMPUTED CONFIDENCE OF 95.00 PERCENT

*** NOTE FOR GRAPHS ***

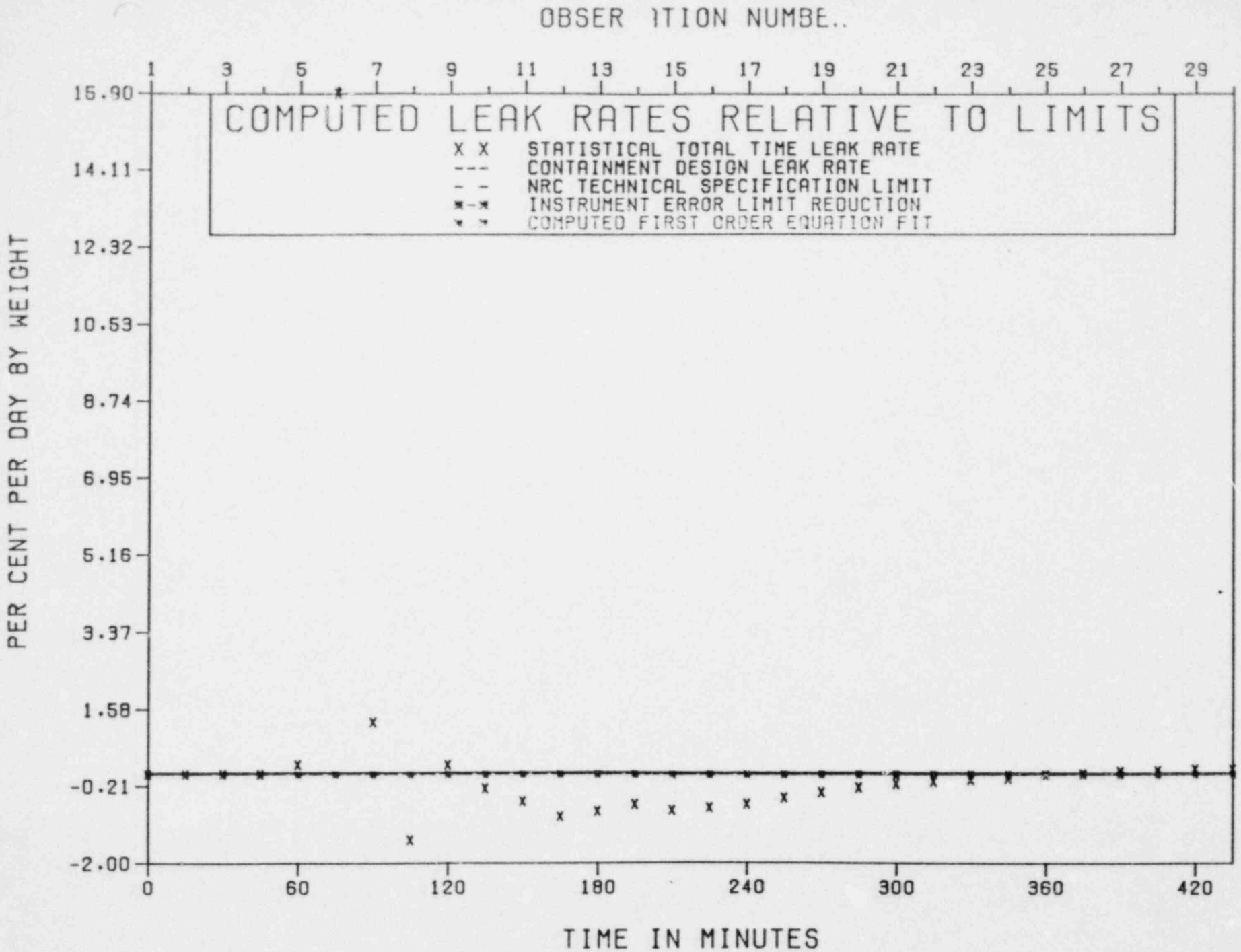
BOTH SAMPLE NUMBERS AND TIME ARE SHOWN

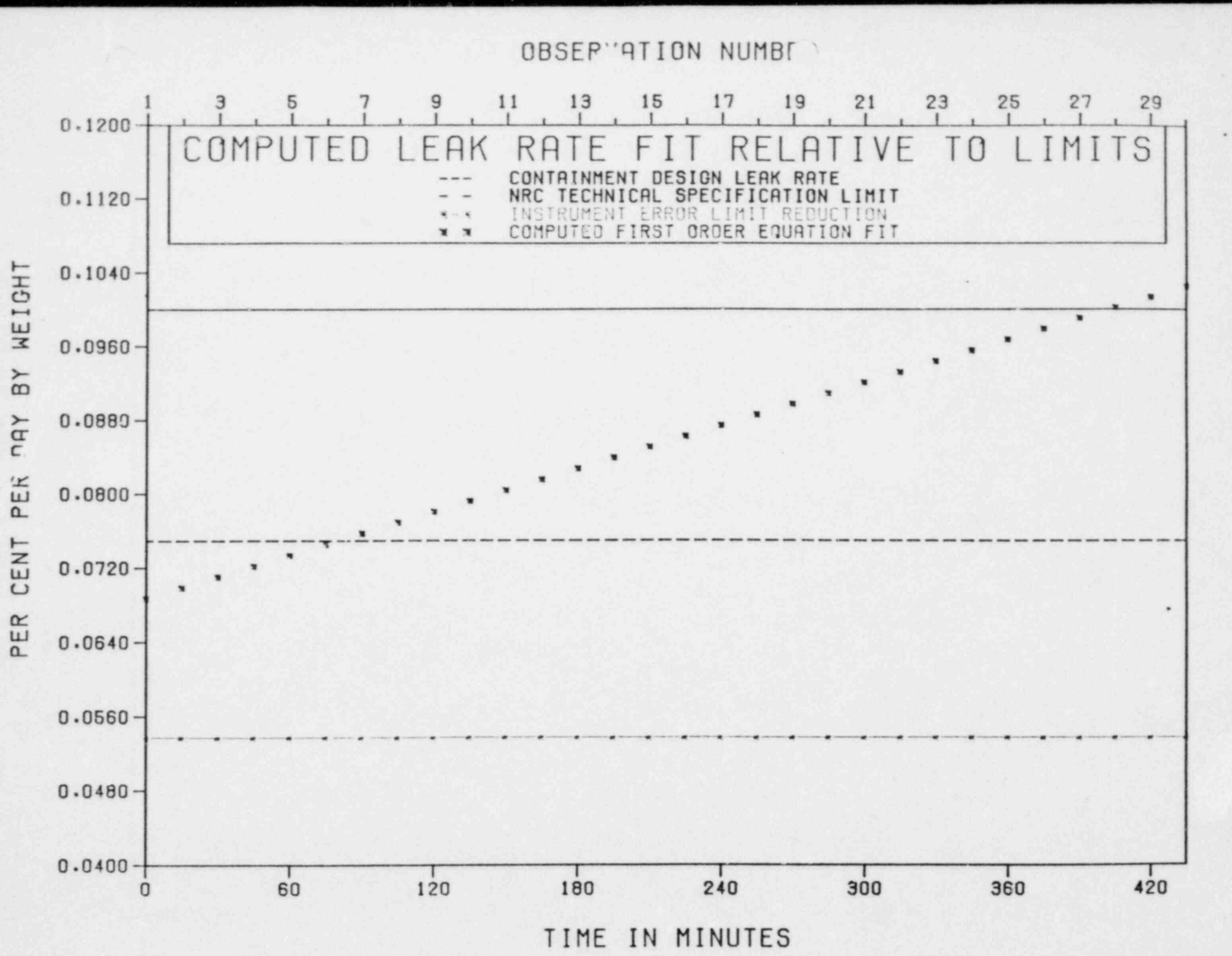
*** NOTE FOR TABULAR DATA ***

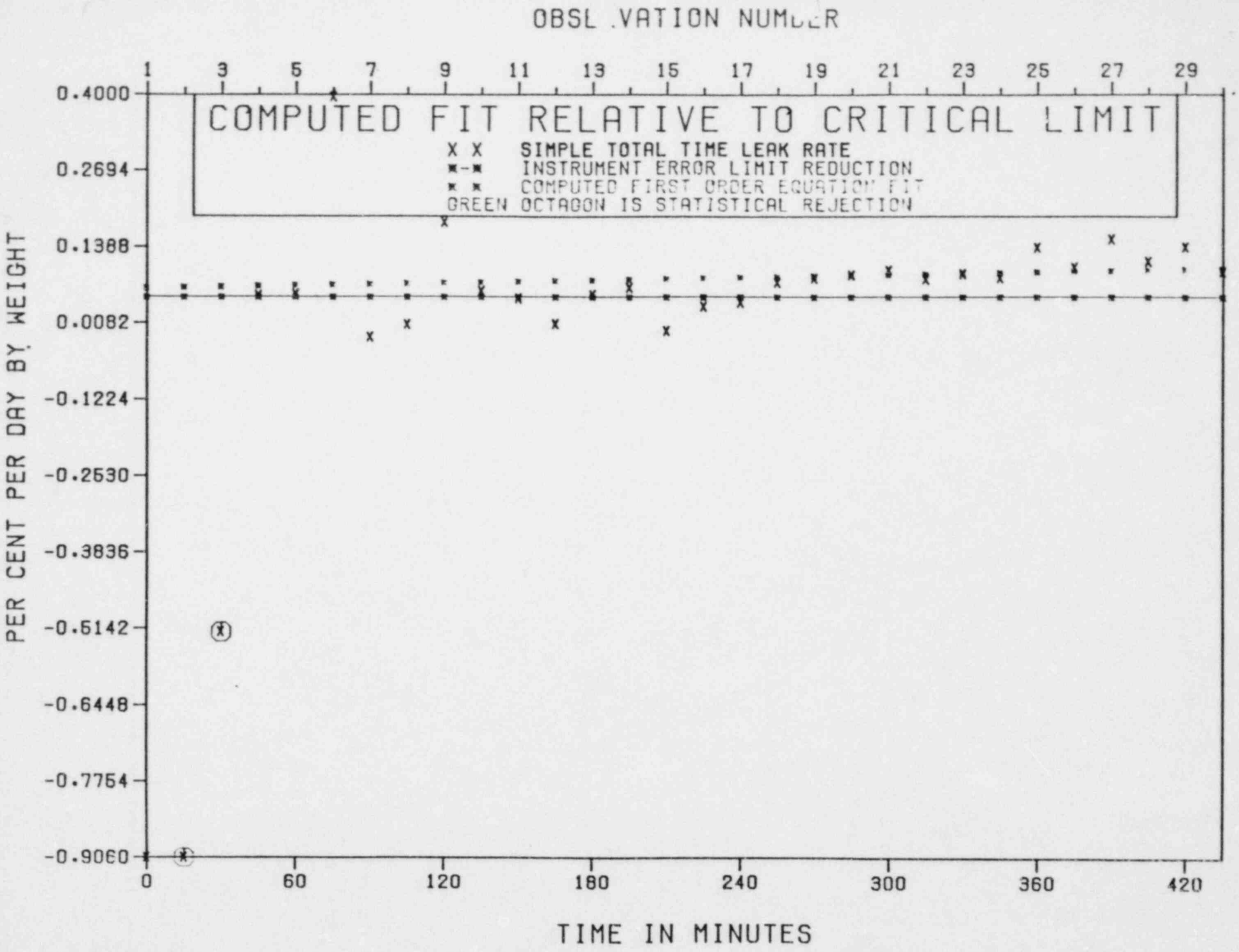
TABLE VALUES OF ZERO SIGNIFY THAT THE
DAT 'S NOT APPLICABLE TO THE CALCULATION

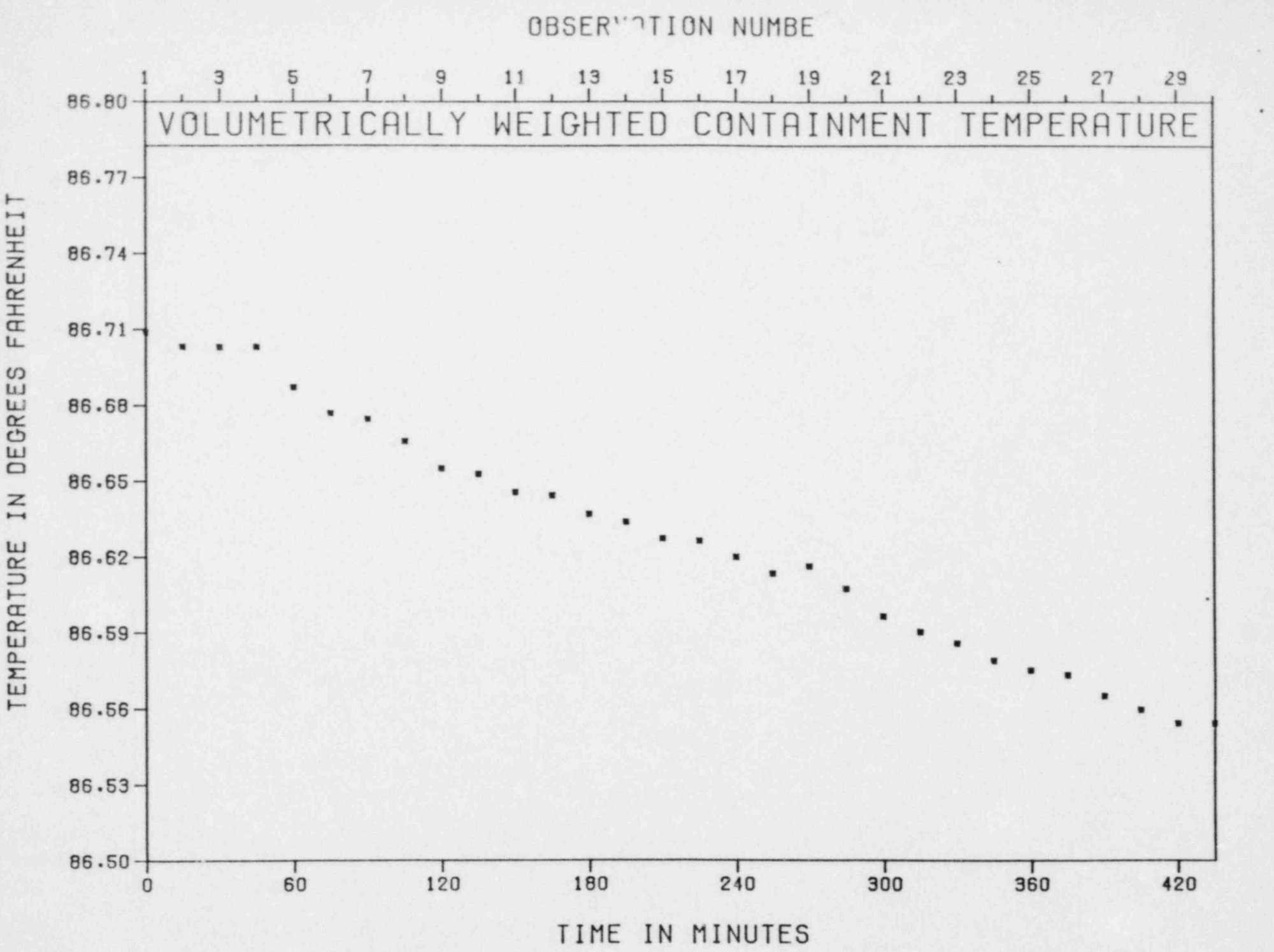
*** DESCRIPTION OF VARIABLES ***

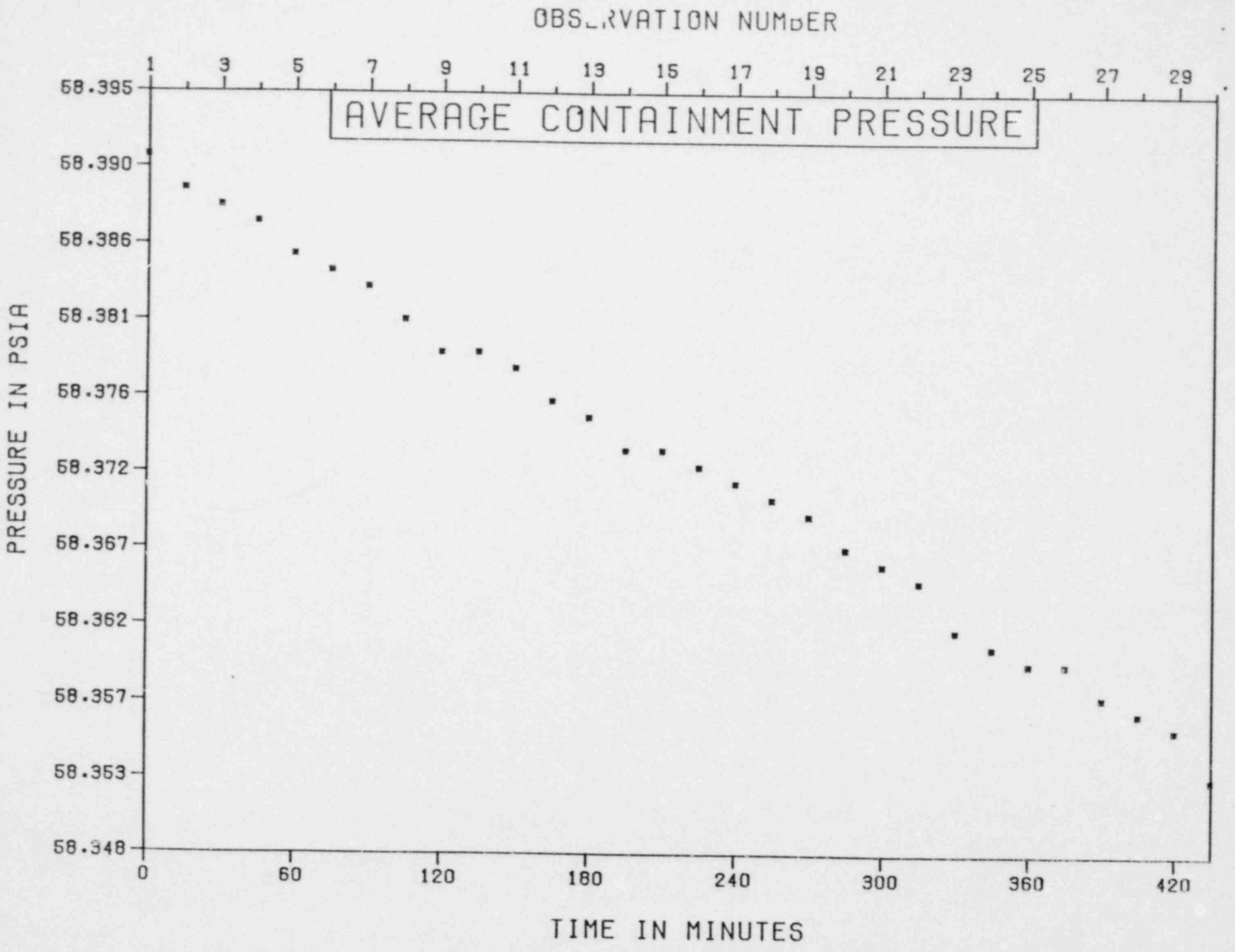
AVG TEM	VOLUMETRICALLY WEIGHTED TEMPERATURE
AVG PRE	AVERAGE PRESSURE
VAP PRE	VOLUMETRICALLY WEIGHTED VAPOR PRESSURE
LEA COM	FIRST ORDER COMPUTED LEAK RATE
LEA TRA	STATISTICAL TOTAL TIME LEAK RATE
LEA SIM	SIMPLE TOTAL TIME LEAK RATE
ERROR	STATISTICAL TOTAL TIME LEAK RATE ERROR

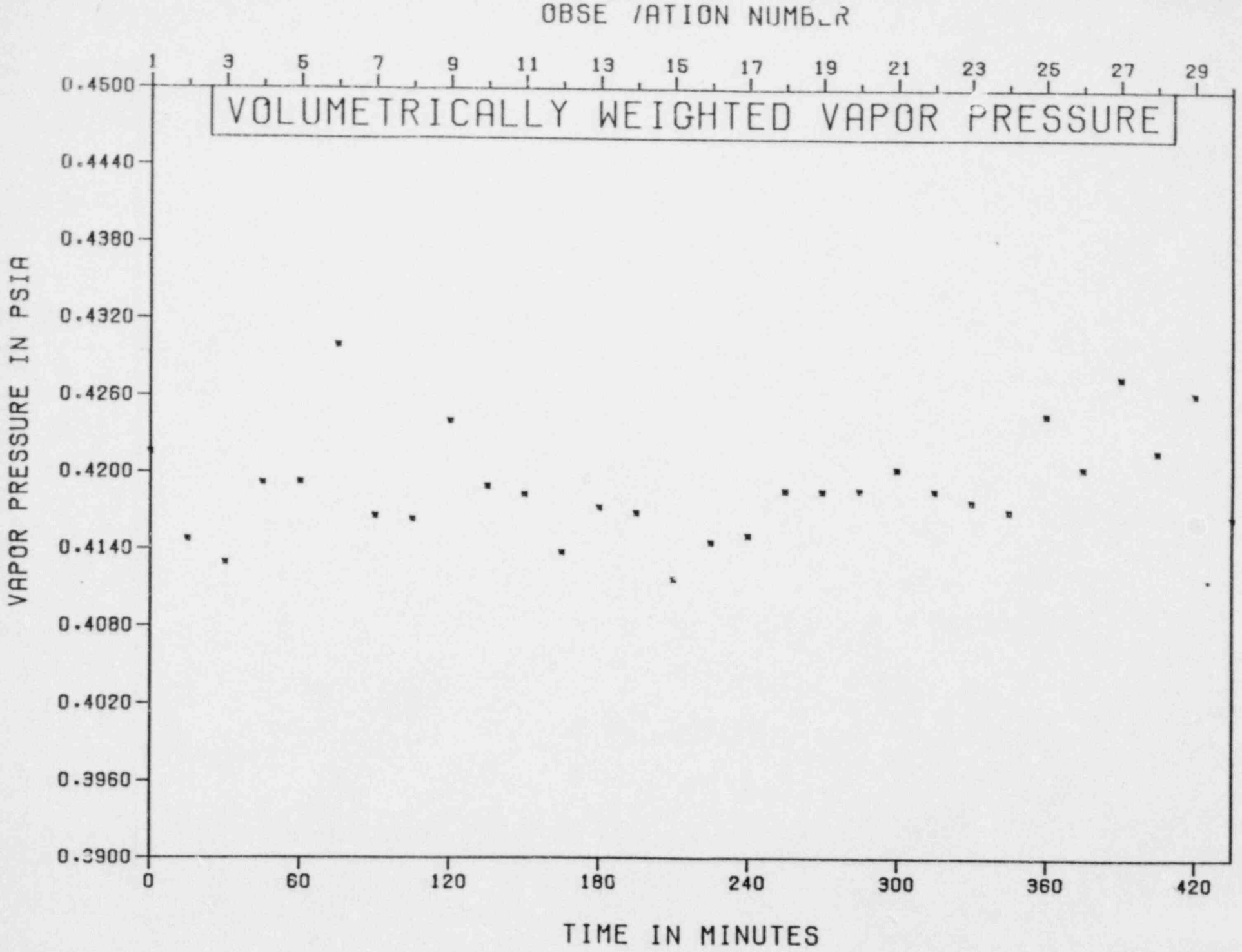

OBSER ITION NUMBE..
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
COMPUTED LEAK RATES RELATIVE TO LIMITS
X X STATISTICAL TOTAL TIME LEAK RATE
--- CONTAINMENT DESIGN LEAK RATE
- - NRC TECHNICAL SPECIFICATION LIMIT
INSTRUMENT ERROR LIMIT REDUCTION
COMPUTED FIRST ORDER EQUATION FIT
15.90
14.11
12.32
10.53
8.74
6.95
5.16
3.37
1.58
-0.21
-2.00
PER CENT PER DAY BY WEIGHT
0 60 120 180 240 300 360 420
TIME IN MINUTES


OBSERVATION NUMBER
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
COMPUTED LEAK RATE FIT RELATIVE TO LIMITS
CONTAINMENT DESIGN LEAK RATE
NRC TECHNICAL SPECIFICATION LIMIT
INSTRUMENT ERROR LIMIT REDUCTION
COMPUTED FIRST ORDER EQUATION FIT
0.1200
0.1120
0.1040
0.0960
0.0880
0.0800
0.0720
0.0640
0.0560
0.0480
0.0400
PER CENT PER DAY BY WEIGHT
0 60 120 180 240 300 360 420
TIME IN MINUTES


OBSL .VATION NUMBER
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
COMPUTED FIT RELATIVE TO CRITICAL LIMIT
X X SIMPLE TOTAL TIME LEAK RATE
- INSTRUMENT ERROR LIMIT REDUCTION
* * COMPUTED FIRST ORDER EQUATION FIT
GREEN OCTAGON IS STATISTICAL REJECTION
0.4000
0.2694
0.1388
0.0082
-0.1224
-0.2530
-0.3836
-0.5142
-0.6448
-0.7754
-0.9060
PER CENT PER DAY BY WEIGHT
0
60
120
180
240
300
360
420
TIME IN MINUTES


OBSERVATION NUMBE
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
VOLUMETRICALLY WEIGHTED CONTAINMENT TEMPERATURE
86.80
86.77
86.74
86.71
86.68
86.65
86.62
86.59
86.56
86.53
86.50
TEMPERATURE IN DEGREES FAHRENHEIT
0
60
120
180
240
300
360
420
TIME IN MINUTES


OBSERVATION NUMBER
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
AVERAGE CONTAINMENT PRESSURE
58.395
58.390
58.386
58.381
58.376
58.372
58.367
58.362
58.357
58.353
58.348
PRESSURE IN PSIA
0
60
120
180
240
300
360
420
TIME IN MINUTES


OBSE /ATION NUMB_R
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
VOLUMETRICALLY WEIGHTED VAPOR PRESSURE
0.4500
0.4440
0.4380
0.4320
0.4260
0.4200
0.4140
0.4080
0.4020
0.3960
0.3900
VAPOR PRESSURE IN PSIA
0
60
120
180
240
300
360
420
TIME IN MINUTES

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	AVG. TEM DEG. F	AVG. PRE PSIA	VAP. PRE PSIA	LEAK COM PER CENT	LEAK TRA PER CENT	ERROR(T) PER CENT
1	0	86.709	58.391	0.422	0.069	0.000	0.000
2	15	86.703	58.389	0.415	0.070	0.000	0.000
3	30	86.703	58.388	0.413	0.071	0.000	0.000
4	45	86.703	58.387	0.419	0.072	0.055	0.050
5	60	86.687	58.385	0.419	0.073	0.283	0.050
6	75	86.677	58.384	0.430	0.075	15.893	0.050
7	90	86.675	58.383	0.417	0.076	1.272	0.050
8	105	86.666	58.381	0.416	0.077	-1.472	0.050
9	120	86.655	58.379	0.424	0.078	0.278	0.050
10	135	86.653	58.379	0.419	0.079	-0.275	0.050
11	150	86.646	58.378	0.418	0.080	-0.569	0.050
12	165	86.644	58.376	0.414	0.082	-0.926	0.050
13	180	86.637	58.375	0.417	0.083	-0.802	0.050
14	195	86.634	58.373	0.417	0.084	-0.645	0.050
15	210	86.627	58.373	0.412	0.085	-0.781	0.050
16	225	86.626	58.372	0.415	0.086	-0.712	0.050
17	240	86.620	58.371	0.415	0.087	-0.629	0.050
18	255	86.613	58.370	0.419	0.089	-0.480	0.050
19	270	86.616	58.369	0.419	0.090	-0.354	0.050
20	285	86.607	58.367	0.419	0.091	-0.249	0.050
21	300	86.596	58.366	0.420	0.092	-0.158	0.050
22	315	86.590	58.365	0.419	0.093	-0.110	0.050
23	330	86.586	58.362	0.418	0.094	-0.061	0.050
24	345	86.579	58.361	0.417	0.096	-0.031	0.050
25	360	86.575	58.360	0.425	0.097	0.046	0.050
26	375	86.573	58.360	0.420	0.098	0.074	0.050
27	390	86.565	58.358	0.428	0.099	0.136	0.050
28	405	86.560	58.357	0.422	0.100	0.154	0.050
29	420	86.555	58.356	0.426	0.101	0.185	0.050
30	435	86.554	58.353	0.417	0.103	0.181	0.050

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 1 DEG. F	TEMP 2 DEG. F	TEMP 3 DEG. F	TEMP 4 DEG. F	TEMP 5 DEG. F	TEMP 6 DEG. F
1	0	86.100	86.460	86.030	86.160	85.790	86.870
2	15	86.100	86.490	86.030	86.150	85.800	86.860
3	30	86.090	86.460	86.040	86.160	85.800	86.850
4	45	86.120	86.460	86.040	86.140	85.790	86.840
5	60	86.070	86.470	86.030	86.140	85.790	86.830
6	75	86.070	86.450	86.030	86.110	85.760	86.820
7	90	86.050	86.470	86.010	86.120	85.770	86.820
8	105	86.060	86.430	86.000	86.110	85.750	86.820
9	120	86.050	86.450	85.990	86.110	85.740	86.790
10	135	86.030	86.400	85.980	86.110	85.730	86.790
11	150	86.030	86.410	85.990	86.090	85.730	86.790
12	165	86.040	86.420	85.970	86.090	85.720	86.800
13	180	86.040	86.400	85.990	86.070	85.720	86.780
14	195	86.010	86.400	85.980	86.060	85.730	86.780
15	210	86.000	86.400	85.960	86.080	85.710	86.780
16	225	86.020	86.390	85.960	86.070	85.700	86.770
17	240	86.040	86.390	85.960	86.060	85.700	86.760
18	255	85.960	86.400	85.960	86.050	85.700	86.770
19	270	86.000	86.360	85.950	86.050	85.710	86.770
20	285	86.000	86.380	85.940	86.020	85.670	86.750
21	300	85.990	86.360	85.940	86.050	85.680	86.730
22	315	85.970	86.350	85.930	86.050	85.660	86.740
23	330	86.000	86.330	85.900	86.020	85.680	86.740
24	345	85.990	86.350	85.910	86.040	85.670	86.720
25	360	85.970	86.350	85.930	86.020	85.660	86.720
26	375	85.960	86.330	85.920	86.020	85.640	86.720
27	390	85.970	86.350	85.920	86.010	85.670	86.700
28	405	85.950	86.320	85.890	86.010	85.650	86.700
29	420	85.950	86.330	85.910	85.990	85.620	86.690
30	435	85.940	86.320	85.890	86.000	85.620	86.700

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 7 DEG. F	TEMP 8 DEG. F	TEMP 9 DEG. F	TEMP 10 DEG. F	TEMP 11 DEG. F	TEMP 12 DEG. F
1	0	86.130	86.990	86.630	86.900	86.640	87.000
2	15	86.100	86.990	86.610	86.860	86.620	86.990
3	30	86.110	86.990	86.590	86.850	86.630	87.030
4	45	86.120	86.970	86.600	86.860	86.640	86.980
5	60	86.090	86.990	86.580	86.850	86.630	86.970
6	75	86.090	86.950	86.580	86.820	86.610	86.950
7	90	86.080	86.940	86.590	86.820	86.600	86.960
8	105	86.070	86.940	86.560	86.810	86.580	86.930
9	120	86.070	86.930	86.570	86.840	86.600	86.910
10	135	86.050	86.910	86.560	86.810	86.590	86.930
11	150	86.040	86.910	86.540	86.790	86.590	86.920
12	165	86.040	86.940	86.540	86.790	86.560	86.880
13	180	86.040	86.910	86.540	86.790	86.590	86.910
14	195	86.050	86.890	86.540	86.780	86.550	86.870
15	210	86.030	86.900	86.540	86.790	86.550	86.900
16	225	86.030	86.910	86.520	86.770	86.550	86.910
17	240	86.040	86.900	86.500	86.780	86.580	86.910
18	255	86.030	86.910	86.510	86.760	86.550	86.890
19	270	86.030	86.900	86.490	86.750	86.530	86.920
20	285	86.010	86.870	86.530	86.760	86.540	86.880
21	300	86.010	86.850	86.500	86.760	86.530	86.870
22	315	85.990	86.870	86.480	86.750	86.520	86.810
23	330	85.970	86.870	86.470	86.730	86.520	86.890
24	345	85.980	86.850	86.480	86.760	86.480	86.880
25	360	85.980	86.830	86.470	86.730	86.510	86.820
26	375	85.990	86.840	86.460	86.720	86.470	86.910
2	390	85.970	86.830	86.440	86.710	86.480	86.800
28	405	85.960	86.830	86.460	86.720	86.480	86.820
29	420	85.950	86.790	86.450	86.700	86.480	86.850
30	435	85.950	86.800	86.430	86.690	86.470	86.850

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 13 DEG. F	TEMP 14 DEG. F	TEMP 15 DEG. F	TEMP 16 DEG. F	TEMP 17 DEG. F	TEMP 18 DEG. F
1	0	86.760	86.810	86.850	86.670	86.670	86.720
2	15	86.790	86.800	86.850	86.670	86.670	86.730
3	30	86.750	86.820	86.860	86.660	86.690	86.680
4	45	86.770	86.790	86.850	86.670	86.670	86.710
5	60	86.720	86.790	86.810	86.630	86.660	86.710
6	75	86.740	86.770	86.810	86.630	86.650	86.650
7	90	86.750	86.770	86.810	86.630	86.640	86.630
8	105	86.720	86.790	86.790	86.640	86.650	86.650
9	120	86.710	86.770	86.770	86.610	86.640	86.630
10	135	86.730	86.790	86.770	86.620	86.640	86.660
11	150	86.710	86.750	86.790	86.600	86.630	86.680
12	165	86.740	86.750	86.760	86.610	86.610	86.640
13	180	86.680	86.710	86.770	86.610	86.620	86.660
14	195	86.700	86.740	86.760	86.600	86.620	86.630
15	210	86.660	86.730	86.790	86.590	86.610	86.650
16	225	86.680	86.710	86.770	86.600	86.620	86.630
17	240	86.690	86.710	86.760	86.560	86.620	86.600
18	255	86.700	86.710	86.730	86.590	86.600	86.590
19	270	86.710	86.710	86.750	86.580	86.590	86.600
20	285	86.680	86.720	86.700	86.550	86.590	86.580
21	300	86.660	86.710	86.720	86.570	86.570	86.570
22	315	86.660	86.680	86.730	86.560	86.570	86.570
23	330	86.610	86.690	86.720	86.560	86.580	86.600
24	345	86.620	86.670	86.720	86.520	86.550	86.590
25	360	86.630	86.670	86.670	86.530	86.550	86.570
26	375	86.640	86.660	86.680	86.540	86.560	86.530
27	390	86.600	86.650	86.690	86.540	86.540	86.570
28	405	86.630	86.680	86.660	86.520	86.530	86.520
29	420	86.610	86.650	86.670	86.520	86.550	86.590
30	435	86.610	86.640	86.650	86.520	86.540	86.540

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 19 DEG. F	TEMP 20 DEG. F	TEMP 21 DEG. F	TEMP 22 DEG. F	TEMP 23 DEG. F	TEMP 24 DEG. F
1	0	86.580	87.090	86.640	87.430	87.380	87.040
2	15	86.560	87.050	86.630	87.410	87.310	87.040
3	30	86.560	87.070	86.640	87.420	87.360	87.000
4	45	86.590	87.050	86.610	87.440	87.380	87.020
5	60	86.550	87.070	86.620	87.390	87.330	86.990
6	75	86.580	87.060	86.600	87.420	87.250	86.970
7	90	86.540	87.050	86.610	87.420	87.310	87.000
8	105	86.550	87.030	86.590	87.380	87.300	86.970
9	120	86.500	87.020	86.590	87.390	87.230	86.960
10	135	86.530	87.050	86.600	87.360	87.200	86.950
11	150	86.510	87.010	86.560	87.400	87.270	86.960
12	165	86.530	87.060	86.550	87.390	87.270	86.950
13	180	86.510	86.990	86.560	87.400	87.200	86.950
14	195	86.550	87.010	86.540	87.400	87.280	86.940
15	210	86.530	87.010	86.540	87.360	87.260	86.940
16	225	86.510	87.020	86.550	87.350	87.160	86.940
17	240	86.490	86.980	86.530	87.360	87.200	86.910
18	255	86.510	87.010	86.550	87.330	87.160	86.910
19	270	86.470	86.990	86.510	87.350	87.260	86.940
20	285	86.490	87.010	86.520	87.370	87.240	86.900
21	300	86.460	86.980	86.530	87.360	87.100	86.910
22	315	86.500	86.950	86.500	87.340	87.190	86.900
23	330	86.450	86.960	86.500	87.290	87.240	86.900
24	345	86.450	86.930	86.480	87.340	87.070	86.900
25	360	86.470	86.980	86.480	87.320	87.180	86.870
26	375	86.470	86.980	86.500	87.310	87.170	86.870
27	390	86.450	86.930	86.470	87.310	87.170	86.880
28	405	86.440	86.920	86.460	87.270	87.160	86.860
29	420	86.440	86.940	86.470	87.320	87.080	86.830
30	435	86.410	86.930	86.480	87.290	87.250	86.830

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	TEMP 25 DEG. F	TEMP 26 DEG. F	TEMP 27 DEG. F	TEMP 28 DEG. F	TEMP 29 DEG. F	TEMP 30 DEG. F
1	0	86.630	87.010	87.070	87.510	86.940	86.710
2	15	86.640	86.990	87.080	87.560	86.920	86.720
3	30	86.620	87.000	87.080	87.560	86.940	86.710
4	45	86.640	86.990	87.070	87.590	86.920	86.720
5	60	86.610	86.980	87.060	87.580	86.910	86.690
6	75	86.620	86.980	87.070	87.570	86.920	86.700
7	90	86.590	86.980	87.060	87.550	86.920	86.680
8	105	86.620	86.970	87.050	87.550	86.900	86.700
9	120	86.590	86.960	87.050	87.530	86.890	86.670
10	135	86.580	86.960	87.060	87.560	86.900	86.660
11	150	86.560	86.950	87.040	87.520	86.900	86.640
12	165	86.580	86.950	87.020	87.520	86.890	86.660
13	180	86.570	86.930	87.050	87.530	86.880	86.640
14	195	86.580	86.950	87.050	87.460	86.880	86.640
15	210	86.540	86.950	87.030	87.430	86.870	86.630
16	225	86.570	86.940	87.030	87.490	86.890	86.660
17	240	86.560	86.930	87.050	87.460	86.850	86.630
18	255	86.540	86.940	87.040	87.440	86.850	86.630
19	270	86.520	86.930	87.070	87.500	86.870	86.610
20	285	86.550	86.930	87.020	87.490	86.850	86.630
21	300	86.540	86.920	87.010	87.470	86.850	86.610
22	315	86.510	86.910	87.040	87.480	86.850	86.590
23	330	86.500	86.910	87.010	87.470	86.830	86.580
24	345	86.530	86.910	86.990	87.480	86.820	86.600
25	360	86.530	86.900	87.020	87.430	86.830	86.570
26	375	86.480	86.900	87.020	87.440	86.820	86.580
27	390	86.500	86.890	87.000	87.440	86.820	86.590
28	405	86.480	86.890	87.050	87.470	86.820	86.560
29	420	86.470	86.880	87.010	87.430	86.820	86.570
30	435	86.500	86.880	87.050	87.460	86.800	86.550

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	PRES 1 PSIA	HUM 1 FRACTION	HUM 2 FRACTION	HUM 3 FRACTION	HUM 4 FRACTION	HUM 5 FRACTION
1	0	58.391	DELETED	DELETED	DELETED	0.685	0.671
2	15	58.389	DELETED	DELETED	DELETED	0.649	0.678
3	30	58.388	DELETED	DELETED	DELETED	0.647	0.677
4	45	58.387	DELETED	DELETED	DELETED	0.684	0.663
5	60	58.385	DELETED	DELETED	DELETED	0.677	0.670
6	75	58.384	DELETED	DELETED	DELETED	0.679	0.713
7	90	58.383	DELETED	DELETED	DELETED	0.675	0.663
8	105	58.381	DELETED	DELETED	DELETED	0.653	0.685
9	120	58.379	DELETED	DELETED	DELETED	0.683	0.687
10	135	58.379	DELETED	DELETED	DELETED	0.658	0.691
11	150	58.378	DELETED	DELETED	DELETED	0.662	0.685
12	165	58.376	DELETED	DELETED	DELETED	0.647	0.678
13	180	58.375	DELETED	DELETED	DELETED	0.656	0.685
14	195	58.373	DELETED	DELETED	DELETED	0.659	0.681
15	210	58.373	DELETED	DELETED	DELETED	0.641	0.675
16	225	58.372	DELETED	DELETED	DELETED	0.651	0.678
17	240	58.371	DELETED	DELETED	DELETED	0.655	0.679
18	255	58.370	DELETED	DELETED	DELETED	0.653	0.695
19	270	58.369	DELETED	DELETED	DELETED	0.670	0.677
20	285	58.367	DELETED	DELETED	DELETED	0.659	0.687
21	300	58.366	DELETED	DELETED	DELETED	0.675	0.679
22	315	58.365	DELETED	DELETED	DELETED	0.674	0.672
23	330	58.362	DELETED	DELETED	DELETED	0.663	0.683
24	345	58.361	DELETED	DELETED	DELETED	0.665	0.680
25	360	58.360	DELETED	DELETED	DELETED	0.672	0.701
26	375	58.360	DELETED	DELETED	DELETED	0.664	0.693
27	390	58.358	DELETED	DELETED	DELETED	0.678	0.705
28	405	58.357	DELETED	DELETED	DELETED	0.666	0.696
29	420	58.356	DELETED	DELETED	DELETED	0.671	0.711
30	435	58.353	DELETED	DELETED	DELETED	0.672	0.672

END OF TABLE

VARIABLE TABLE SUMMARY

SAMPLE NUMBER	DELTA MINS	HUM 6 FRACTION	HUM 7 FRACTION	HUM 8 FRACTION	HUM 9 FRACTION	HUM 10 FRACTION
1	0	DELETED	DELETED	0.631	0.648	0.643
2	15	DELETED	DELETED	0.635	0.655	0.642
3	30	DELETED	DELETED	0.632	0.639	0.638
4	45	DELETED	DELETED	0.633	0.646	0.646
5	60	DELETED	DELETED	0.633	0.646	0.651
6	75	DELETED	DELETED	0.628	0.654	0.640
7	90	DELETED	DELETED	0.631	0.653	0.640
8	105	DELETED	DELETED	0.637	0.643	0.638
9	120	DELETED	DELETED	0.638	0.648	0.634
10	135	DELETED	DELETED	0.634	0.646	0.643
11	150	DELETED	DELETED	0.632	0.650	0.642
12	165	DELETED	DELETED	0.631	0.652	0.656
13	180	DELETED	DELETED	0.637	0.647	0.646
14	195	DELETED	DELETED	0.635	0.653	0.644
15	210	DELETED	DELETED	0.639	0.661	0.646
16	225	DELETED	DELETED	0.629	0.654	0.653
17	240	DELETED	DELETED	0.635	0.646	0.645
18	255	DELETED	DELETED	0.635	0.661	0.638
19	270	DELETED	DELETED	0.634	0.660	0.643
20	285	DELETED	DELETED	0.637	0.655	0.647
21	300	DELETED	DELETED	0.636	0.658	0.647
22	315	DELETED	DELETED	0.637	0.651	0.657
23	330	DELETED	DELETED	0.642	0.640	0.647
24	345	DELETED	DELETED	0.641	0.640	0.642
25	360	DELETED	DELETED	0.637	0.655	0.648
26	375	DELETED	DELETED	0.641	0.653	0.641
27	390	DELETED	DELETED	0.646	0.658	0.649
28	405	DELETED	DELETED	0.633	0.657	0.649
29	420	DELETED	DELETED	0.639	0.644	0.650
30	435	DELETED	DELETED	0.633	0.650	0.639

END OF TABLE

END OF REPORT ON CONTAINMENT LEAK RATE TEST TO NRC