

ENCLOSURE 1

REACTOR CONTAINMENT BUILDING  
SECOND INSERVICE INTEGRATED LEAK RATE TEST  
AND  
TYPE B & C  
SURVEILLANCE TEST

SALEM NUCLEAR GENERATING STATION  
UNIT 1

AUGUST 1984

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

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REFERENCES

1. 10 CFR50 Appendix J. Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors September 22, 1980
2. ANSI N 45.4 - 1972 Leakage Rate Testing of Containment Structures for Nuclear Reactors (Technical Specifications commitment)
3. ANSI 56.8 - 1981 Containment System Leakage Testing Requirements
4. Public Service Electric & Gas Company Nuclear Site Maintenance Department Procedure M9-ILP-CT-1 Rev. 04 Reactor Containment Building Integrated Leak Rate Test
5. Salem Unit No. 1 Technical Specification 4.6.1.2

## SECTION 1

### PURPOSE

The purpose of this report is to present a description and the results of the second inservice Type "A" Reactor Containment Building Integrated Leak Rate Test (CILRT). Also included is a summary of the Type "B" and "C" tests performed since the first inservice CILRT of Public Service Electric and Gas Company Salem Nuclear Generating Station Unit 1.

This report is submitted as required by 10 CFR 50, appendix J, paragraph VB (Reference 1) September 22, 1980.

The Type "A" Test was conducted over a 24 hour duration in accordance with ANSI N 45.5 - 1972.

## SECTION 2

### SUMMARY

#### 2.1 Type "A" Test

On August 9, 1984, at 1457, pressurization for the CILRT of Salem Unit 1 was started. During the initial hours of pressurization, a decrease of the Reactor Coolant level in the pressurizer was noticed. At the same time, the level in the Reactor Coolant Drain tank was increasing.

On August 9, 1984, at 2105 hours, the pressurization of containment was stopped to investigate the decline in reactor coolant inventory. After obtaining a radioactive gas release, on August 10, 1984, at 0625 hours, the depressurization of the Containment Building was started.

On August 10, 1984, at 1600 hours, the containment was at atmospheric pressure and a full investigation began to determine the cause of the pressurizer level decline.

A leak in the Charging System outside containment was identified and corrected. Containment sump level was measured and the increase in Reactor Coolant Drain tank reviewed. It was determined that the increase in Reactor Coolant Drain tank was due to operation of the

Reactor Coolant Pump Seal Supply System, subsequently, a procedural change was approved to eliminate the operation of this system. Most of the reactor coolant volume loss indicated by the drop in pressurizer level was accounted for and the remaining volume was attributed to the Charging System leak outside containment.

On August 11, 1984, at 0222 hours the pressurization was restarted. When containment pressure of 62.500 psia was reached, four of the eight compressors used for pressurization were secured to slow down the rate of pressurization.

On August 11, 1984, at 1728 hours, the pressurization of the containment of Salem Unit 1 was completed. Containment isolation valve 1VC5 was closed, all the air compressors were stopped and the pressurization facilities vented to the atmosphere. The average containment pressure was at 63.537 psia at completion of the pressurization.

On August 11, 1984, at 1737 hours, the data acquisition program to monitor and record the stabilization data was initiated. All stabilization criteria were satisfied in four hours.

On August 11, 1984, at 2300 hours, the data acquisition program to monitor and record the CILRT data was initiated. Containment absolute pressure, temperatures at each of the installed RTDs, and vapor pressure measured by the installed dewpoint sensors were recorded at 15 minute intervals. The installed micro-processor converts those data into the

containment absolute leakage rate. After 24 hours of data collection the calculated leak rate was 0.033% of containment volume per day. With 95% confidence level and other corrections shown in paragraph 5.7.b, this converts into 0.0411% of containment volume per day or 0.411 La. this is within the Technical Specification acceptance criteria of 0.75 La.

After securing an air release permit, the instrument verification test was performed in accordance with the mass step change method, and successfully completed on August 13, 1984, at 0321 hours.

Depressurization commenced upon completion of the instrument verification test and was completed on August 13, 1984, at 1552 hours.

## 2.2 Local Leak Rate Tests (Types B & C)

The local leakage tests (LLRTS) of the containment penetrations were performed by the methods described in the Salem Generating Station Maintenance Department Procedure No. M16E. Attachments 6 and 7 to this report summarize the data obtained from the LLRTs performed since the conductance of the first inservice Type "A" Test in accordance with 10CFR50, Appendix J.

SECTION 3

EDITED LOG OF EVENTS

August 9, 1984

- 1100 Start final containment walkdown and pretest liner inspection.
- 1500 Start pressurization.
- 1830 Notified by control room operator that there is a steady drop in pressurizer level and an increase in the Reactor Coolant Drain Tank.
- 2105 Pressurizer level down to 45% cold calibration level. Decision was made to depressurize to investigation the cause of loss of reactor coolant.

August 10, 1984

- 0542 Obtained air release permit.
- 0625 Commenced with depressurization.
- 1300 Start containment inspection.
- 1600 Containment at atmospheric pressure start of full investigation of the loss of reactor coolant.

August 11, 1984

- 0222 Restarted pressurization after pumping the Reactor Coolant Drain Tank down and a valve line up verification of those valves that had to be opened and/or closed for the pumpdown.

1728 Pressurization complete, stopped and vented  
air compressors vented temporary piping to  
LVC5 to atmosphere.  
1740 Start stabilization.  
2050 Temperature criteria for stabilization  
satisfied.  
2300 Commenced CILRT.

August 12, 1984

2300 Completed CILRT.

August 13, 1984

0200 Obtained an air release permit.  
0221 Start of instrument verification test.  
0325 Instrument verification test successfully  
completed.  
0405 Start depressurization.  
1552 Containment at atmospheric pressure and  
start of post CILRT containment inspection.

August 15, 1984

Terminated log of events.

## SECTION 4

### GENERAL TEST DESCRIPTION

Excerpted from PSE&G procedure no. M9-ILP-CT-1, Rev. 04

#### 4.1 PRECAUTIONS

- a. Except in the case of emergency depressurization, the Senior Shift Supervisor/Shift Supervisor is the only individual that may authorize the commencing of the pressurization and depressurization of containment.
- b. All areas within 30 feet of containment shall be restricted areas and only authorized test personnel and personnel that must perform supportive activities are permitted in the restricted area.
- c. All containment valves shall be positioned by their normal means; no torquing of handwheels or exercising of the valves shall be permitted.
- d. No leakage path shall be isolated without the prior approval of the Test Director. All pre-rework and post rework Local Leakage Rates shall be recorded.
- e. Several penetrations were, for practical reasons, not in the line up required for the performance of the Type "A" Test and Type "C" leakage of those penetrations must be added to the leakage measured during the Type "A" Test.

Penetration No. 40 is one of those penetrations. This vacuum/pressure relief path for containment atmosphere during operation is utilized for pressurization and depressurization of containment for the performance of the CILRT. The isolation valves for the penetration are 10" air operated butterfly valves that fail in the closed position. With the control air in containment isolated and vented to containment atmosphere, the isolation valve inside containment, 1VC6, is inoperable. For this reason valve 1VC6 was blocked in the open position, in essence a single failure condition. The outside containment isolation valve 1VC5 was the only isolation from containment during the performance of the CILRT. Based on the above information this penetrations Type C leakage rate was not added to the Containment leakage measured during the Type A Test.

4.2 A partial listing of the recorded prerequisites.

- a. All Type B & C Tests in accordance with PSE&G maintenance procedure M16E are current.
- b. All instrumentation used for the test has been calibrated no more than six months prior to the test and must be checked in place after installation at one or more points using a standard which is traceable to the National Bureau of Standards (NBS).
- c. Site Meteorology data recorded, at four hour intervals, at least three days prior to the CILRT (Recording will continue at one hour intervals during the test).

- d. General inspection of the accessible interior and exterior surfaces of the containment structure has been completed.
- e. An official log of events has been initiated.
- f. The valve line up has been completed and verified.
- g. Data acquisition system is energized and ready for test operation requirements.

#### 4.3 Equipment

4.3.1 Pressurization of the containment was achieved by eight (8) temporary diesel driven oil free air compressors manifolded into two (2) aftercoolers. From the aftercoolers the compressed air was routed through a refrigerated air drier and valving system for regulating back pressure into the containment building. The total capacity of the pressurization facility was rated at 10,000 standard cubic feet per minute (SCFM).

4.3.2 Instrument verification was achieved by installation of a precision gas meter in the piping system used for pressurization.

4.3.3 Depressurization was achieved by return flow through the piping system used for pressurization.

#### 4.4 Instrumentation

NOTE: The Instrumentation, Data Acquisition and Resolution for the test was performed by PSE&G Research Corporation.

4.4.1 Data Acquisition and Resolution was achieved by utilization of a microprocessor controlled data acquisition and recording system coupled to a computer which converts the raw data into the containment absolute leakage rate. The formulas and their derivation for computing the measured leakage rate and mass were taken from ANSI N45.5-1972 and are shown in Attachment 1.

#### 4.4.2 Installed Sensors

- a. Two (2) quartz manometers
- b. Six (6) dewpoint sensors
- c. Twenty four (24) Resistance Temperature Detectors (RTD)

All sensors installed were calibration checked prior to the test and immediately after completion of the test.

Attachment 2 contains a location sketch of sensors, sensor weighting factor, calibration check reports and instrument selection.

4.4.3 The instrumentation verification equipment consisted of:

- a. One (1) Dresser Ind. Inc. gas meter model 3 M-125 T.C. with a range of 0 - 3000 CFH and an accuracy of 100.75%.
- b. One (1) Matheson Pressure Gauge 63-5612 with a range of 0 - 100 psig and an accuracy of  $\pm 0.25$  psig.

## SECTION 5

### TEST RESULTS

5.1 Technical data for PSE&G Salem Unit 1 Containment:

- a. Containment Net Free Volume:  $2.62 \times 10^6$  cu. ft.
- b. Normal Operating Pressure: Between -1.5 and +0.3 psig.
- c. Calculated Accident Peak Pressure: 47 psig.
- d. Maximum Operating Temperature: 120° F average.
- e. Calculated Accident Peak Temperature: 271° F.

5.2 A computer printout of the data obtained during the stabilization are shown in Attachment 3.

5.3 Data obtained during the 24 hour test is indexed and tabulated in Attachment 4. The test started on August 11, 1984, at 2300 hours and was completed August 12, 1984, at 2300 hours.

5.4 The development of the mass step change instrument verification and the data are given in Attachment 5.

- 5.5 The levels of all liquid containing vessels in containment were recorded prior to the test and immediately after completion of the test. The only measurable level changes were:

Vessel	Pre Test	Post Test	Volume in cu. ft.
Pressurizer	71%	65%	Down 60 cu. ft.
RCDT	16%	100%	Up 37 cu. ft.
Accumulator #13	72%	77%	Up 15 cu. ft.
Containment Sump	1' 9"	2' 9"	Up 45 cu. ft.
Total Net Volume Change			Up 37 cu. ft.

There was little differential in the reactor coolant inventory in the reactor coolant system. The slight increase in the containment sump level can be attributed to some leakage of reactor coolant and some additional drainage, during depressurization, from those systems that were drained and vented for the test.

- 5.6 The following penetrations were not in the proper line-up required during containment isolation, therefore, a Type C (LLRT) penalty is required to be added to the Type A test results.

Penetration	Isolation Valves	Leakage SCCM
61	1SA268-270	0
61A	1SA265-267	0
61B	1SA262-264	0
66A	1WL190-1SF36	0
66	1WL191-1SF22	0
22A	1WR80-81	0
18	1SS33-104	15
37	1CV116-284	0
45	1WL16 - 17	<u>182</u>
	TOTAL	197 SCCM

5.7 Summary of the CILRT results at 48.5 psig (PAC 47.0).

- a. The total Type "B" and Type "C" local leak rate per latest surveillance

29521.7 SCCM = 0.1365 La

Maximum Allowable is 0.6 La

- b. The calculated leak rate was 0.033% or 0.33 La.  
(Attachment 4, page 2)

- c. The calculated leak rate at 95%

Confidence level (Attach. 4, page 2) 0.041 %

Water Level Correction Section 5.5 0.000014%

Type "C" Correction to be added Sec. 5.6 0.000091%

The Total Reportable Leakage is 0.041105%  
or 0.41105La

Technical Specification (4.6.1.2) Acceptance  
Criteria .75La.

5.8 Instrument Verification Test

The mass step change method was used for the instrument verification test a total of 2562.5 cu. ft. of air was released through a precision gas meter over an one hour period.

Calculated mass verification instrumentation	807	LBM
Calculated mass CILRT instrumentation	<u>700.3</u>	LBM
Differential	106.7	LBM

The differential must be less than 0.25 La or  
206.25 LBM.

CONCLUSION

All test results are within the required criteria.

### Leakage Rate Computations

The formula for measured leakage rate is:

$$LR = (2400/H) \cdot 1 - (T_0 (P_1 - P_{v1}) / T_1 (P_0 - P_{vo}))$$

where,

LR           =   Measured leak rate in weight percent  
               per day

H           =   Time interval in hours, from time "0"

$T_0, T_1$    =   Mean absolute temperature, °R, of the  
               containment atmosphere at the beginning  
               and the end of the test interval (H)  
               respectively.

$P_0, P_1$    =   Mean total absolute pressure, psia, of  
               the containment at the beginning and  
               end of the test interval (H)  
               respectively.

$P_{vo}, P_{v1}$    =   Mean total water vapor pressure, psia,  
               of the containment atmosphere at the  
               beginning and the end of the test  
               interval (H) respectively.

The formula for mass is as follows:

$$W_n = 144 (P_n - P_{vn})V/RT_n$$

Where,

$W_n$  = Mass of air in the containment structure at time n (lb)

$V$  = Total free volume of the containment structure (cu. ft.)

$R$  = Gas constant  
= 53.35 ft. lbf/lbm °F

$T_n$  = Mean total absolute pressure psia, of the containment atmosphere at time interval n

$P_{vn}$  = Mean total water vapor pressure, psia, of the containment atmosphere at time interval n

$P_n$  = Mean total absolute pressure (psia) of the containment atmosphere at time interval n

#### Calculated Leakage Rate

Since it is assumed that the leakage rate is constant during the testing period, a plot of the Measured Mass versus Time would ideally yield a straight line.

Obviously, sampling techniques and test conditions are not perfect and consequently the values of measured mass deviate from the ideal straight line plot situation.

The method of Least Squares was the statistical method used for determining the "best fit" straight line, commonly called a regression line. The function of the least squares fit is to minimize the sum of the deviations between the measured and calculated mass points.

After establishing the regression line, the values of Calculated Mass and Calculated Leak Rate can be determined. The regression line equation for the Least Squares "best fit" straight line is:

$$Y = AX + B$$

Where,

Y = Calculated Mass

X = Time interval of test

therefore, the calculated mass at some specific time (X) is expressed as:

$$Y_N = AX_N + B$$

The deviation of the measured mass ( $w$ ) from the calculated mass ( $y$ ) is:

$$\text{Deviation} = w_N - y_N$$

As mentioned previously, the minimization of the sum of the squares between the regression line (calculated mass) and the measured mass will yield the following equation:

$$SSQ = \sum (w_N - y_N)^2$$

where SSQ is the sum of the squares of the deviations and therefore can be written:

$$SSQ = \sum w_N - (Ax_N + B)^2$$

By the use of differential calculus the values for A and B that will minimize SSQ can be determined. The value for B will be the Y intercept and A will be the slope of the regression line. These values of A and B constitute the solutions to the following pair of simultaneous linear questions:

$$A = (x_N - \bar{x}) (w_N - \bar{w}) / (x_N - x)^2$$

$$A = [N \sum X_N W_N - (\sum X_N)(\sum W_N)]/[N \sum X_N^2 - (\sum X_N)^2]$$

$$\text{and } B = \bar{W} - A\bar{X}$$

$$\text{Where, } \bar{W} = \sum W_N / N$$

$$\bar{X} = \sum X_N / N$$

$$\text{and } N = 2\bar{X}$$

By substitution

$$B = [(\sum W_N)(\sum X_N^2) - (\sum X_N)(\sum X_N W_N)]/[N \sum X_N^2 - (\sum X_N)^2]$$

These equations are shown as the Least Square Equations and are used in a computer program to calculate mass for the mass point method of leakage rate computations.

Confidence Limits

Even though the regression line is statistically determined to minimize the sum of the squares of error, the values of the calculated mass cannot be considered to be exactly correct. If the containment integrated leak rate test were run a number of times, and under similar conditions, the values for calculated mass would be close in value but would not be the same for each run.

Therefore by using other statistical methods, a degree of confidence which is related to the regression can be determined. The method that was used to establish the confidence parameters is the student's "t" distribution. The limits to be used are 95% as specified in ANS N274. To determine the value of the confidence limits the following statistical information is required: The variance, standard deviation, and student's "t" distribution.

The procedure used to establish the 95% confidence limits was to find the variance by dividing the SSQ by N-2 which is the degrees of freedom.

$$\sigma^2 = \frac{SSQ}{N-2}$$

The standard deviation was then found by taking the square root of both sides of the equation.

$$\sigma = [\text{SSQ}/(N-2)]^{1/2}$$

The standard deviation has more practical significance because it returns the measure of variability to the original units of measurement and that given a normal distribution of measurements, approximately 95% of the measurements will fall within two (2) standard deviations of the mean. However, because we are dealing with a regression analysis an additional factor must be used for determining the standard deviation of the slope of the line.

$$\sigma = \frac{\sqrt{\frac{\sum X^2}{N} - (\frac{\sum X}{N})^2}}{N^{1/2}}$$

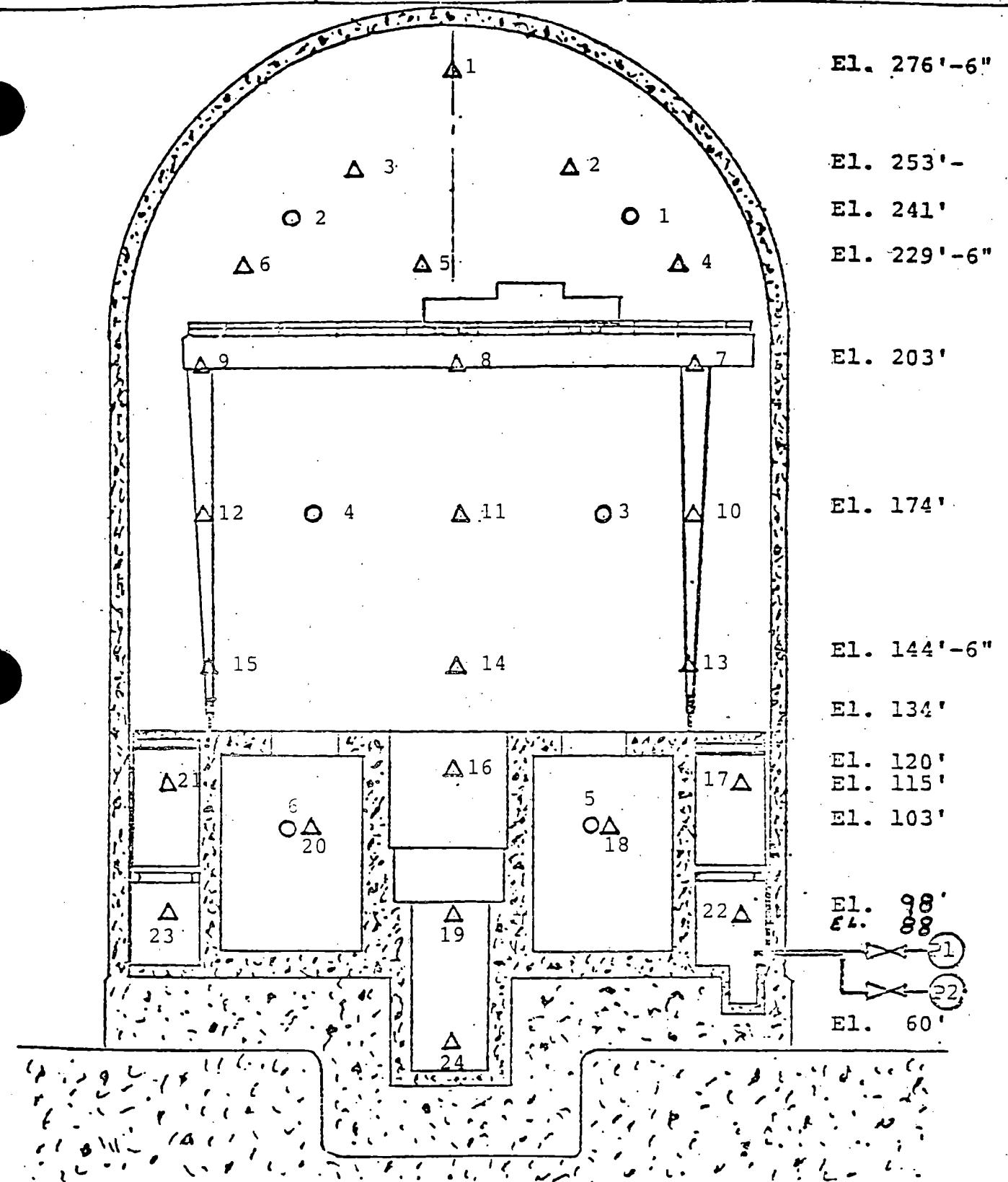
and because of the small sample size the number of standard deviations either side of the regression line to establish a 95% confidence interval are more accurately determined by using a student's "t" distribution.

$$t = 1.95996 + \frac{2.37226}{N-2} + \frac{2.8225}{(N-2)^2}$$

from which the confidence limits are obtained by

$$C.L. = t_{.95} \sigma$$

which were added to and subtracted from the various calculated mass points obtained from the regression analysis to determine the upper and lower confidence limits.



1

### RTD Location

○

### Dew Point Sensor Location

**INSTRUMENTATION LOCATION  
SALEM - CONTAINMENT ILRT  
PUBLIC SERVICE ELECTRIC and GAS CO.**

Attachment 2

Page 2 of 6

8/11/84

PSE&G RESEARCH CORP.  
RESEARCH & TESTING LABORATORY

**Salem Generating Station  
Weighting Factor Printout**

Reading Number 1

Temperature Sensor Weighting Factors

1	4.060000	2	5.121000	3	5.121000	4	4.372000
5	4.372000	6	4.372000	7	5.745000	8	5.745000
9	5.745000	10	5.745000	11	5.745000	12	5.745000
13	5.745000	14	5.745000	15	5.745000	16	1.027000
17	2.724000	18	3.767000	19	1.027000	20	3.767000
21	2.724000	22	2.407000	23	2.407000	24	1.027000

Pressure Sensor Weighting Factors  
PI-1 50                            PI-2 50

Dew Point Sensor Weighting Factors

1	13.709000	2	13.709000	3	35.852000
4	25.852000	5	10.439000	6	10.439000

## CALIBRATION CHECK

Pressure Standard <u>psia</u>	Quartz Manometer				<u>Post ILRT</u> <u>P2</u> <u>psia</u>	
	<u>Pre ILRT</u>		<u>Pressure</u> <u>Standard</u> <u>psia</u>	<u>P1</u> <u>psia</u>		
	<u>P1</u> <u>psia</u>	<u>P2</u> <u>psia</u>				
26.322	26.323	26.324	25.015	25.006	25.000	
35.022	35.027	35.010	35.017	35.011	34.991	
45.023	45.009	45.039	45.006	45.010	45.012	
55.008	54.995	55.007	55.002	54.977	54.993	
65.149	65.143	65.122	65.010	65.001	64.980	
75.035	75.066	75.035	75.033	75.053	75.021	

Pre ILRT Calibration Check 7-31-84

Post ILRT Calibration Check 8-13-84

Standard Pressure Gage Texas Instruments

PS. No. 5637 S/N 2686

Calibration Date 4-23-84

CALIBRATION CHECK

RTD No.	Channel No.	RTD Sensors			
		Pre ILRT		Post ILRT	
		Volumetric	Standard	Volumetric	Standard
1	10	82.47	82.51	82.63	82.89
2	11	82.42	83.20	82.33	82.68
3	12	82.68	81.84	82.60	83.61
4	13	82.47	83.20	82.37	82.54
5	14	83.21	83.28	83.01	82.91
6	15	82.35	83.38	82.72	82.15
7	16	83.24	83.07	83.13	82.68
8	17	83.01	83.13	83.07	83.81
9	18	83.02	82.73	82.91	82.46
10	19	83.06	83.26	82.93	82.80
11	20	83.35	82.77	83.60	83.53
12	21	83.00	83.43	82.85	82.64
13	22	83.28	82.98	82.90	82.90
14	23	82.74	83.34	83.02	83.63
15	24	83.17	82.98	83.17	82.92
16	25	82.93	83.63	83.05	83.74
17	26	83.12	82.78	82.40	81.78
18	27	83.80	83.63	84.61	84.78
19	28	82.69	82.60	82.96	82.82
20	29	83.51	83.40	83.69	83.37
21	30	83.10	82.85	83.26	82.38
22	31	83.40	83.00	82.41	82.68
23	32	82.42	82.05	82.19	82.19
24	33	83.20	83.03	83.34	82.82

Pre ILRT Calibration Check 8-9-84

Post ILRT Calibration Check 8-13-84

Type T thermocouple special  $\pm 0.75^{\circ}\text{F}$

Calibration Date 6-26-84

CALIBRATION CHECK

Sensor No.	Channel No.	Dew Point Sensors			
		Pre ILRT		Post ILRT	
		Volumetric °C	Standard °C	Volumetric °C	Standard °C
1	34	23.5	21.9	5.1	6.5
2	35	23.6	22.1	5.7	6.6
3	36	23.6	22.3	5.3	6.4
4	37	23.2	22.3	5.4	6.3
5	38	23.6	22.4	5.6	6.6
6	39	23.5	22.3	5.3	6.4

Pre ILRT Calibration Check 8-7-84

Post ILRT Calibration Check 8-13-84

Standard EG&G Model 660 S/N 0432

Calibration Date 4-27-84

PSE&G RESEARCH CORP.  
RESEARCH & TESTING LABORATORY**Instrumentation Selection Guide (ISG)**

<u>Instrument Parameter</u>	<u>Sensitivity Error</u>	<u>Number Sensor</u>	<u>Measurement Error</u>	<u>Error</u>
Pressure (% FS)	0.001	2	0.0010	0.00100
Dew Point Temp-F	0.100	6	0.0030	0.00037
RTD'S-F	0.010	24	0.0040	0.00219

Test Hours 24.00

Instrumentation Selection Guide (ISG) %/Day 0.0025

8/11/1984

SALEM GEN. STA.  
TEMPERATURE STABILITY

STARTING DAY 224

TIME t Hours	TEMP T Deg F	Avg Temp Diff For Last 3 Hrs	Avg Temp Diff For Last HR	Diff Avg Temp Diff Col3-Col4
0.00	84.80			
0.25	84.41			
0.50	84.25			
0.75	84.10			
1.00	84.02			
1.25	84.01			
1.50	83.96			
1.75	83.93			
2.00	83.87			
2.25	83.79			
2.50	83.73			
2.75	83.69			
3.00	83.65	-0.38	-0.03	-0.34
3.25	83.59	-0.27	-0.06	-0.20
3.50	83.54	-0.23	-0.05	-0.18
3.75	83.48	-0.20	-0.05	-0.15
4.00	83.44	-0.19	-0.04	-0.15

TEST STARTING TIME 17/40

TEST STARTING DAY 224

SALEM GEN S1  
INTEGRATED LEAK RATE TEST  
STABILITY DATA

TEST STARTING TIME 17/40

READ TIME	REAL TIME	JULIAN DAY	AMBIENT TEMP	AMBIENT PRESS	Avg TEMP	Avg DEW PT	Avg VAPOR PRESSURE	Avg CONDTN PRESSURE	CONT MASS
(Hrs)	(Hr/Min)		(Deg F)	(Psia)	(Deg F)	(Deg F)	(Psia)	(Psia)	(Lbm)
0.00	17 40	224	74.85	14.557	84.80	72.48	0.394	63.490	819454.6
0.25	17 55	224	75.76	14.551	84.41	72.37	0.393	63.537	820675.3
0.50	18 10	224	74.85	14.550	84.25	72.37	0.393	63.536	820907.1
0.75	18 25	224	75.47	14.551	84.10	72.36	0.393	63.524	820980.7
1.00	18 40	224	74.45	14.544	84.02	72.32	0.392	63.507	820874.6
1.25	18 55	224	76.31	14.554	84.01	72.30	0.392	63.502	820830.6
1.50	19 10	224	77.93	14.550	83.77	72.33	0.392	63.495	820818.0
1.75	19 25	224	76.87	14.547	83.93	72.32	0.392	63.491	820809.8
2.00	19 40	224	76.89	14.549	83.87	72.33	0.392	63.487	820840.1
2.25	19 55	224	77.17	14.552	83.79	72.33	0.392	63.476	820822.8
2.50	20 10	224	77.59	14.553	83.73	72.31	0.392	63.471	820863.5
2.75	20 25	224	78.04	14.554	83.69	72.31	0.392	63.466	820848.1
3.00	20 40	224	78.24	14.556	83.65	72.29	0.392	63.460	820832.9
3.25	20 55	224	79.29	14.554	83.59	72.26	0.391	63.453	820839.5
3.50	21 10	224	79.16	14.551	83.54	72.25	0.391	63.445	820819.9
3.75	21 25	224	79.06	14.553	83.48	72.30	0.392	63.438	820808.8
4.00	21 40	224	79.01	14.556	83.44	72.26	0.391	63.430	820769.2

SALEM GEN STA INTEGRATED LEAK RATE TEST STABILITY DATA												TEST STARTING TIME 17/40					
TEST TIME & DAY	READ TIME & DAY	AMBIENT PRESS			TEMPERATURE SENSORS (RTD)								DEW CELL SENSORS				
		PI-1	SENS	PI-2	1	2	3	4	5	6	7	8	1	2	3		
					17	18	19	20	21	22	23	24	4	5	6		
0.00	17 40	74.856	63.472		84.397	84.535	84.678	84.641	85.450	84.904	85.448	84.993	72.730	72.876	72.442		
	224	14.557	63.503		85.023	85.121	85.023	85.098	84.342	84.590	84.928	84.794	72.253	72.498	72.289		
					84.010	84.818	84.626	84.639	84.690	84.508	84.170	84.301					
0.25	17 55	75.765	63.525		83.906	83.886	83.984	84.049	85.048	84.264	84.918	84.522	72.509	72.750	72.394		
	224	14.551	63.550		84.522	84.620	84.673	84.566	84.242	84.291	84.556	84.474	72.153	72.298	72.295		
					84.000	84.708	84.316	84.669	84.551	84.439	84.071	84.201					
0.50	18 10	74.859	63.524		83.756	83.646	83.834	83.759	84.687	83.963	84.698	84.231	72.536	72.675	72.444		
	224	14.550	63.548		84.312	84.389	84.472	84.305	84.192	84.121	84.606	84.274	72.228	72.322	72.048		
					84.000	84.758	84.146	84.589	84.482	84.369	84.021	84.122					
0.75	18 25	75.471	63.511		83.586	83.486	83.673	83.558	84.386	83.903	84.478	84.081	72.473	72.640	72.448		
	224	14.551	63.537		84.142	84.219	84.322	84.085	84.172	83.981	84.415	84.143	72.153	72.419	72.140		
					83.931	84.658	84.016	84.559	84.383	84.309	83.931	84.042					
1.00	19 40	74.450	63.494		83.516	83.436	83.552	83.438	84.215	83.683	84.338	84.010	72.525	72.545	72.311		
	224	14.544	63.519		84.162	84.149	84.252	84.064	84.122	83.941	84.224	84.053	72.165	72.293	72.250		
					83.901	84.638	83.936	84.549	84.353	84.269	83.911	84.002					
1.25	18 55	76.312	63.489		83.526	83.356	83.512	83.488	84.366	83.683	84.328	84.000	72.352	72.534	72.381		
	224	14.554	63.514		84.112	84.149	84.272	83.994	84.142	83.951	84.103	84.063	72.115	72.334	72.169		
					83.891	84.638	83.946	84.539	84.353	84.229	83.881	83.992					
1.50	19 10	77.931	63.482		83.476	83.356	83.482	83.408	84.165	83.653	84.248	83.930	72.433	72.543	72.376		
	224	14.550	63.508		84.042	84.048	84.172	83.944	84.112	83.871	84.184	84.003	72.167	72.311	72.266		
					83.841	84.608	83.876	84.549	84.303	84.200	83.881	83.982					
1.75	19 25	76.879	63.478		83.436	83.286	83.462	83.358	84.185	83.633	84.208	83.890	72.487	72.541	72.347		
	224	14.547	63.503		83.981	83.998	84.162	83.924	84.052	83.832	84.154	83.943	72.147	72.388	72.104		
					83.821	84.628	83.866	84.539	84.294	84.170	83.841	83.932					
2.00	19 40	76.896	63.474		83.376	83.166	83.361	83.298	84.225	83.533	84.128	83.830	72.441	72.653	72.480		
	224	14.549	63.499		83.911	83.978	84.102	83.824	84.042	83.762	84.134	83.903	72.131	72.288	71.956		
					83.791	84.558	83.786	84.539	84.244	84.130	83.781	83.883					
2.25	19 55	77.171	63.463		83.236	83.126	83.261	83.248	83.954	83.473	84.128	83.740	72.509	72.653	72.428		
	224	14.552	63.489		83.771	83.888	84.021	83.764	83.981	83.672	84.033	83.793	72.124	72.239	72.050		
					83.731	84.568	83.686	84.519	84.185	84.090	83.722	83.823					
2.50	20 10	77.597	63.458		83.196	83.016	83.190	83.138	83.834	83.373	83.998	83.689	72.403	72.687	72.388		
	224	14.553	63.484		83.771	83.818	83.951	83.673	83.901	83.612	84.013	83.733	72.117	72.334	71.974		
					83.681	84.477	83.636	84.489	84.135	84.050	83.722	83.773					
2.75	20 25	78.043	63.453		83.176	82.986	83.170	83.088	83.824	83.353	84.008	83.649	72.390	72.640	72.486		
	224	14.554	63.479		83.671	83.778	83.931	83.643	83.911	83.592	83.842	83.723	72.005	72.291	72.113		
					83.661	84.467	83.626	84.499	84.135	84.010	83.672	83.773					

Attachment 3  
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Eng 9

FSEC RESEARCH C  
RESEARCH & TESTING LABORATORY  
SALEM GEN ST  
INTEGRATED LEAK RATE TEST

DATE 8/13/1984

TEST STARTING DAY 224

## STABILITY DATA

TEST STARTING TIME 17/40

READ TIME DAY	REAL TIME 8 & DAY	AMBIENT TEMP SENS PI-1 PRESS PI-2	PRESS 17	TEMPERATURE SENSORS (RTD'S)								DEW CELL SENSORS		
				1	2	3	4	5	6	7	8	1	2	3
				9	10	11	12	13	14	15	16	4	5	6
3.00	20 40	79.241	63.448	83.106	82.967	83.130	83.057	83.844	83.293	83.888	83.599	72.538	72.619	72.304
	224	14.556	63.472	83.681	83.718	83.891	83.403	83.861	83.542	83.842	83.653	72.030	72.367	72.066
				83.621	84.447	83.576	84.459	84.066	84.000	83.612	83.723			
3.25	20 55	79.299	63.441	83.026	82.867	83.030	83.007	83.803	83.243	83.868	83.539	72.405	72.592	72.313
	224	14.554	63.464	83.561	83.668	83.011	83.573	83.791	83.472	83.741	83.593	72.100	72.248	71.913
				83.591	84.367	83.406	84.469	84.616	83.941	83.562	83.653			
3.50	21 10	79.165	63.433	83.026	82.827	83.050	82.927	83.693	83.163	83.818	83.479	72.446	72.561	72.394
	224	14.551	63.457	83.490	83.578	83.751	83.493	83.731	83.422	83.731	83.553	71.978	72.264	71.971
				83.531	84.297	83.456	84.439	83.986	83.901	83.522	83.624			
3.75	21 25	79.064	63.427	82.935	82.747	82.929	82.897	83.653	83.133	83.768	83.409	72.471	72.502	72.433
	224	14.553	63.450	83.430	83.548	83.691	83.412	83.661	83.363	83.701	83.493	72.079	72.282	72.117
				83.501	84.277	83.396	84.309	83.927	83.861	83.502	83.604			
4.00	21 40	79.013	63.419	82.855	82.717	82.909	82.817	83.552	83.083	83.708	83.378	72.282	72.509	72.361
	224	14.556	63.441	83.420	83.497	83.661	83.372	83.641	83.303	83.651	83.453	72.154	72.174	72.046
				83.462	84.267	83.346	84.399	83.917	83.811	83.452	83.554			

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Index of CILRT Test Data

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SALEM GEN. STA.  
INTEGRATED LEAKAGE RATE

STARTING DAY 224

TEST STARTING TIME 23 : 0

READ TIME (Hrs)	REAL TIME (Hr/Mn)	AMBIENT TEMP (DegF)	AVG CONT TEMP (DegF)	AVG DEW PT (DegF)	AVG VAPOR TEMP (DegF)	AVG PRESS (Psia)	CONT MASS (Lbm)	CALC LEAK RATE (Lbm/Hr) (%/Day)	95 % CONFIDENCE LEVEL (Lbm/Hr) (%/Day)	CALC INITIAL MASS (Lbm)
0.00	23 0	79.53	14.56	83.260	72.254	0.391	63.403	820695.0		
0.25	23 15	79.61	14.56	83.226	72.259	0.391	63.403	820752.3		
0.50	23 30	79.59	14.57	83.209	72.273	0.392	63.403	820774.6		
0.75	23 45	79.34	14.57	83.201	72.183	0.390	63.402	820789.3		
1.00	0 0	79.57	14.58	83.210	72.223	0.391	63.400	820735.7		
1.25	0 15	79.33	14.58	83.192	72.228	0.391	63.398	820743.2		
1.50	0 30	79.37	14.59	83.185	72.247	0.391	63.399	820756.9		
1.75	0 45	78.98	14.58	83.134	72.241	0.391	63.396	820802.8		
2.00	1 0	78.95	14.58	83.073	72.165	0.390	63.384	820751.4		
2.25	1 15	79.81	14.58	83.058	72.220	0.391	63.376	820659.0		
2.50	1 30	80.14	14.57	83.074	72.146	0.390	63.373	820602.3		
2.75	1 45	79.24	14.56	83.080	72.188	0.390	63.375	820612.2		
3.00	2 0	79.59	14.56	83.070	72.277	0.392	63.376	820624.3	-62.826 0.183	-97.569 0.285 820819.1
3.25	2 15	79.05	14.56	83.064	72.231	0.391	63.376	820641.0	-59.383 0.173	-88.725 0.259 820815.1
3.50	2 30	78.73	14.55	83.045	72.266	0.391	63.376	820664.3	-52.864 0.154	-79.058 0.231 820806.9
3.75	2 45	77.92	14.56	83.042	72.217	0.391	63.377	820690.2	-44.717 0.130	-69.399 0.202 820796.1
4.00	3 0	78.31	14.57	83.062	72.209	0.391	63.377	820661.1	-40.843 0.119	-62.804 0.183 820790.6
4.25	3 15	78.29	14.57	83.074	72.183	0.390	63.382	820720.1	-32.756 0.095	-54.423 0.159 820778.4
4.50	3 30	77.26	14.57	83.073	72.288	0.392	63.384	820723.4	-26.272 0.076	-46.999 0.137 820768.2
4.75	3 45	76.95	14.58	83.070	72.190	0.390	63.379	820686.0	-23.580 0.068	-42.321 0.123 820763.7
5.00	4 0	77.18	14.58	83.068	72.257	0.391	63.378	820657.0	-22.939 0.067	-39.749 0.116 820762.6
5.25	4 15	76.98	14.58	83.061	72.198	0.391	63.378	820684.6	-20.733 0.060	-36.114 0.105 820758.5
5.50	4 30	77.91	14.59	83.064	72.237	0.391	63.378	820673.9	-19.343 0.056	-33.376 0.097 820755.9
5.75	4 45	78.42	14.59	83.066	72.251	0.391	63.378	820668.1	-18.321 0.053	-31.151 0.091 820753.8
6.00	5 0	78.12	14.59	83.079	72.270	0.392	63.379	820651.9	-18.005 0.052	-29.738 0.086 820753.2
6.25	5 15	77.90	14.59	83.086	72.234	0.391	63.379	820653.2	-17.540 0.051	-28.320 0.082 820752.2
6.50	5 30	78.10	14.59	83.078	72.333	0.392	63.379	820648.4	-17.191 0.050	-27.126 0.079 820751.4
6.75	5 45	77.68	14.59	83.059	72.248	0.391	63.379	820685.1	-15.610 0.045	-24.980 0.073 820747.7
7.00	6 0	77.32	14.59	83.028	72.202	0.391	63.378	820726.9	-12.998 0.038	-22.217 0.064 820741.4
7.25	6 15	78.17	14.59	82.982	72.248	0.391	63.375	820749.9	-10.162 0.029	-19.365 0.056 820734.3
7.50	6 30	78.55	14.60	82.958	72.241	0.391	63.371	820741.7	-8.003 0.023	-16.949 0.049 820728.7
7.75	6 45	78.37	14.60	82.941	72.294	0.392	63.366	820692.2	-7.386 0.021	-15.773 0.046 820727.1
8.00	7 0	78.44	14.60	82.930	72.195	0.391	63.364	820694.2	-6.789 0.019	-14.671 0.042 820725.4
8.25	7 15	79.62	14.60	82.907	72.185	0.390	63.360	820678.3	-6.599 0.019	-13.997 0.040 820724.9
8.50	7 30	79.12	14.60	82.892	72.303	0.392	63.357	820647.1	-7.037 0.020	-14.009 0.040 820726.1
8.75	7 45	78.71	14.60	82.872	72.304	0.392	63.356	820665.0	-7.029 0.020	-13.595 0.039 820726.1
9.00	8 0	80.09	14.60	82.861	72.261	0.391	63.356	820689.0	-6.557 0.019	-12.775 0.037 820724.7
9.25	8 15	79.91	14.60	82.852	72.258	0.391	63.355	820682.7	-6.239 0.018	-12.127 0.035 820723.7
9.50	8 30	80.36	14.61	83.029	72.271	0.392	63.362	820511.6	-8.713 0.025	-14.993 0.043 820731.7
9.75	8 45	80.46	14.60	82.977	72.320	0.392	63.371	820693.3	-7.996 0.023	-14.007 0.040 820729.3
10.00	9 0	81.71	14.60	82.901	72.233	0.391	63.364	820737.4	-6.707 0.019	-12.608 0.036 820724.9
10.25	9 15	81.32	14.61	82.952	72.291	0.392	63.358	820565.5	-7.971 0.023	-13.770 0.040 820729.3
10.50	9 30	82.51	14.61	82.979	72.314	0.392	63.359	820540.7	-9.365 0.027	-15.118 0.044 820734.3
10.75	9 45	81.93	14.61	83.018	72.263	0.391	63.369	820614.4	-9.610 0.028	-15.098 0.044 820735.2
11.00	10 0	83.00	14.61	83.045	72.295	0.392	63.370	820587.3	-10.121 0.029	-15.390 0.045 820737.1
11.25	10 15	82.74	14.61	82.976	72.263	0.391	63.369	820677.8	-9.488 0.027	-14.573 0.042 820734.7
11.50	10 30	83.75	14.61	82.964	72.306	0.392	63.367	820668.8	-9.009 0.026	-13.901 0.040 820732.8
11.75	10 45	83.88	14.61	82.927	72.240	0.391	63.361	820651.4	-8.749 0.025	-13.440 0.039 820731.8
12.00	11 0	84.53	14.60	82.916	72.275	0.392	63.360	820649.4	-8.519 0.024	-13.019 0.038 820730.9
12.25	11 15	84.01	14.60	82.917	72.241	0.391	63.360	820653.0	-8.259 0.024	-12.584 0.036 820729.8

Attachment 4  
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SALEM GEN. STA.  
INTEGRATED LEAKAGE RATE TEST

TEST STARTING DAY 224

TEST STARTING TIME 23 : 0

READ TIME (Hrs)	REAL TIME (Hr/Mn)	AMBIENT TEMP (DegF)	Avg CONT TEMP (DegF)	Avg DEW PT (DegF)	Avg VAPOR PRESS (Psia)	Avg CONT PRESS (Psia)	CONT MASS (Lbm)	CALC LEAK RATE (Lbm/Hr)	95 % CONFIDENCE LEVEL (%/Day)	CALC INITIAL MASS (Lbm)
12.50	11 30	84.03	14.50	82.906	72.316	0.392	63.340	820656.5	-7.977 0.023	-12.139 0.035
12.75	11 45	83.98	14.50	82.887	72.328	0.392	63.355	820618.7	-8.051 0.023	-12.049 0.035
13.00	12 0	84.44	14.59	82.859	72.274	0.392	63.347	820564.8	-8.568 0.025	-12.457 0.036
13.25	12 15	84.36	14.59	82.840	72.323	0.392	63.345	820558.8	-9.062 0.026	-12.845 0.037
13.50	12 30	82.36	14.59	82.849	72.317	0.392	63.339	820474.1	-10.169 0.029	-14.030 0.041
13.75	12 45	83.08	14.59	82.853	72.244	0.391	63.342	820520.1	-10.781 0.031	-14.567 0.042
14.00	13 0	82.56	14.59	82.871	72.317	0.392	63.347	820545.5	-11.118 0.032	-14.788 0.043
14.25	13 15	84.15	14.59	82.851	72.330	0.392	63.347	820566.9	-11.246 0.032	-14.788 0.043
14.50	13 30	83.42	14.59	82.849	72.299	0.392	63.343	820529.7	-11.605 0.033	-15.049 0.044
14.75	13 45	85.29	14.58	82.935	72.298	0.392	63.349	820471.2	-12.303 0.035	-15.725 0.045
15.00	14 0	85.37	14.58	83.426	72.393	0.393	63.383	820145.0	-14.921 0.043	-19.403 0.056
15.25	14 15	84.08	14.58	83.621	72.464	0.394	63.427	820432.8	-15.566 0.045	-19.964 0.058
15.50	14 30	82.79	14.58	83.663	72.458	0.394	63.444	820592.4	-15.147 0.044	-19.429 0.056
15.75	14 45	81.94	14.58	83.454	72.389	0.393	63.434	820783.1	-13.609 0.039	-18.118 0.052
16.00	15 0	83.23	14.58	83.395	72.414	0.393	63.419	820672.1	-12.832 0.037	-17.289 0.050
16.25	15 15	85.02	14.57	83.443	72.392	0.393	63.412	820518.5	-12.965 0.037	-17.287 0.050
16.50	15 30	85.86	14.57	83.526	72.430	0.394	63.419	820471.2	-13.325 0.038	-17.535 0.051
16.75	15 45	85.77	14.57	83.609	72.452	0.394	63.428	820460.0	-13.696 0.040	-17.801 0.052
17.00	16 0	86.03	14.56	83.684	72.497	0.395	63.430	820365.3	-14.502 0.042	-18.592 0.054
17.25	16 15	86.05	14.56	83.721	72.467	0.394	63.428	820288.8	-15.602 0.045	-19.770 0.057
17.50	16 30	85.98	14.56	83.748	72.461	0.394	63.435	820346.4	-16.313 0.047	-20.444 0.059
17.75	16 45	85.21	14.55	83.746	72.468	0.394	63.438	820381.7	-16.782 0.049	-20.830 0.060
18.00	17 0	85.83	14.54	83.734	72.423	0.394	63.445	820498.1	-16.661 0.048	-20.598 0.060
18.25	17 15	85.34	14.54	83.716	72.433	0.394	63.442	820490.7	-16.564 0.048	-20.395 0.059
18.50	17 30	86.25	14.55	83.719	72.464	0.394	63.447	820540.6	-16.241 0.047	-19.984 0.058
18.75	17 45	83.74	14.56	83.701	72.488	0.394	63.447	820562.7	-15.833 0.046	-19.507 0.057
19.00	18 0	81.16	14.56	83.688	72.508	0.395	63.464	820794.5	-14.490 0.042	-18.386 0.053
19.25	18 15	82.21	14.57	83.679	72.444	0.394	63.441	820532.5	-14.281 0.041	-18.083 0.052
19.50	18 30	79.89	14.57	83.658	72.485	0.394	63.438	820510.8	-14.159 0.041	-17.865 0.052
19.75	18 45	76.63	14.59	83.652	72.495	0.394	63.437	820511.6	-14.029 0.041	-17.643 0.051
20.00	19 0	78.54	14.59	83.647	72.491	0.394	63.435	820494.4	-13.959 0.040	-17.483 0.051
20.25	19 15	76.75	14.59	83.627	72.497	0.395	63.434	820510.4	-13.824 0.040	-17.264 0.050
20.50	19 30	77.51	14.59	83.615	72.454	0.394	63.448	820711.7	-12.977 0.037	-16.471 0.048
20.75	19 45	79.55	14.60	83.601	72.470	0.394	63.428	820475.8	-12.990 0.037	-16.399 0.047
21.00	20 0	80.73	14.60	83.638	72.556	0.395	63.426	820378.7	-13.318 0.038	-16.566 0.048
21.25	20 15	80.10	14.60	83.789	72.559	0.395	63.453	820490.0	-13.247 0.038	-16.517 0.048
21.50	20 30	78.75	14.60	83.659	72.482	0.394	63.441	820555.5	-12.960 0.037	-16.170 0.047
21.75	20 45	78.60	14.61	83.643	72.547	0.395	63.431	820430.8	-13.072 0.038	-16.211 0.047
22.00	21 0	79.49	14.60	83.642	72.531	0.395	63.450	820690.4	-12.372 0.036	-15.543 0.045
22.25	21 15	76.34	14.61	83.649	72.536	0.395	63.432	820443.4	-12.449 0.036	-15.549 0.045
22.50	21 30	78.63	14.61	83.655	72.537	0.395	63.432	820427.7	-12.558 0.036	-15.591 0.045
22.75	21 45	79.91	14.61	83.649	72.541	0.395	63.433	820456.0	-12.570 0.036	-15.536 0.045
23.00	22 0	79.81	14.61	83.627	72.578	0.396	63.434	820489.0	-12.479 0.036	-15.382 0.044
23.25	22 15	79.76	14.61	83.597	72.567	0.395	63.432	820510.3	-12.327 0.036	-15.173 0.044
23.50	22 30	80.63	14.61	83.569	72.535	0.395	63.427	820499.7	-12.205 0.035	-14.993 0.043
23.75	22 45	79.56	14.61	83.537	72.577	0.396	63.436	820657.9	-11.666 0.034	-14.464 0.042
24.00	23 0	80.02	14.61	83.510	72.507	0.395	63.419	820488.4	-11.481 0.033	-14.179 0.041

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TEST & TESTING LABORATORY  
SALEM GEN. S.  
INTEGRATED LEAK RATE TEST  
REGRESSION ANALYSIS DATA

TEST STARTING TIME 23/ 0

TEST STARTING DAY 224

REL. TIME Hours	CALC LEAK RATE Lbm/Hr	CALC INITIAL AIR MASS %/Day	STD DEV OF MASS Lbm	STD DEV OF SLOPE Lbm/Hr	STUDENT-T DIST. VALUE	95% CONF. FIGURE Lbm/Hr	%/Day	
3.00	-62.826	0.1836	820819.1	46.67	15.61	2.225	-97.569	0.2852
3.25	-59.383	0.1736	820815.1	45.00	13.34	2.198	-88.725	0.2594
3.50	-52.864	0.1545	820806.9	45.36	12.03	2.177	-79.058	0.2311
3.75	-44.717	0.1307	820796.1	47.82	11.43	2.159	-69.399	0.2029
4.00	-40.843	0.1194	820790.6	47.22	10.24	2.143	-62.804	0.1836
4.25	-32.756	0.0957	820778.4	51.35	10.16	2.130	-54.423	0.1591
4.50	-26.272	0.0768	820768.2	54.03	9.78	2.119	-46.999	0.1374
4.75	-23.580	0.0689	820763.7	53.03	8.88	2.109	-42.321	0.1237
5.00	-22.939	0.0670	820762.6	51.59	8.00	2.100	-39.749	0.1162
5.25	-20.733	0.0606	820758.5	50.00	7.34	2.092	-36.114	0.1056
5.50	-19.343	0.0565	820755.9	50.05	6.72	2.085	-33.376	0.0975
5.75	-18.321	0.0535	820753.8	49.02	6.17	2.079	-31.151	0.0910
6.00	-18.005	0.0526	820753.2	47.96	5.65	2.073	-29.738	0.0869
6.25	-17.540	0.0512	820752.2	46.97	5.21	2.068	-28.320	0.0828
6.50	-17.191	0.0502	820751.4	46.02	4.81	2.063	-27.126	0.0793
6.75	-15.610	0.0456	820747.7	46.03	4.54	2.059	-24.980	0.0730
7.00	-12.998	0.0380	820741.4	47.93	4.48	2.055	-22.217	0.0649
7.25	-10.162	0.0297	820734.3	50.52	4.48	2.051	-19.365	0.0566
7.50	-8.003	0.0234	820728.7	51.76	4.36	2.048	-16.949	0.0495
7.75	-7.386	0.0215	820727.1	51.05	4.10	2.045	-15.773	0.0461
8.00	-6.789	0.0198	820725.4	50.39	3.85	2.042	-14.671	0.0429
8.25	-6.599	0.0192	820724.9	49.60	3.62	2.039	-13.997	0.0409
8.50	-7.037	0.0205	820726.1	48.95	3.42	2.036	-14.009	0.0409
8.75	-7.029	0.0205	820726.1	48.20	3.22	2.034	-13.595	0.0397
9.00	-6.557	0.0191	820724.7	47.38	3.06	2.032	-12.775	0.0373
9.25	-6.239	0.0182	820723.7	47.09	2.90	2.030	-12.127	0.0354
9.50	-8.713	0.0254	820731.7	52.33	3.09	2.028	-14.993	0.0438
9.75	-7.996	0.0233	820729.3	52.12	2.96	2.026	-14.007	0.0409
10.00	-6.707	0.0196	820724.9	53.20	2.91	2.024	-12.608	0.0368
10.25	-7.971	0.0233	820729.3	54.30	2.86	2.022	-13.770	0.0402
10.50	-9.365	0.0273	820734.3	55.90	2.84	2.021	-15.118	0.0442
10.75	-9.610	0.0281	820735.2	55.28	2.71	2.019	-15.098	0.0441
11.00	-10.121	0.0295	820737.1	54.97	2.61	2.018	-15.390	0.0450
11.25	-9.488	0.0277	820734.7	54.91	2.52	2.016	-14.573	0.0426
11.50	-9.009	0.0263	820732.8	54.64	2.42	2.015	-13.901	0.0406
11.75	-8.749	0.0255	820731.8	54.14	2.32	2.014	-13.440	0.0393
12.00	-8.519	0.0249	820730.9	53.64	2.23	2.012	-13.019	0.0380
12.25	-8.259	0.0241	820729.8	53.20	2.14	2.011	-12.584	0.0367
12.50	-7.977	0.0233	820728.6	52.81	2.07	2.010	-12.139	0.0354
12.75	-8.051	0.0235	820728.9	52.28	1.98	2.009	-12.049	0.0352
13.00	-8.568	0.0250	820731.2	52.38	1.93	2.008	-12.457	0.0364
13.25	-9.062	0.0264	820733.4	52.47	1.89	2.007	-12.845	0.0375
13.50	-10.169	0.0297	820738.5	55.09	1.92	2.006	-14.030	0.0410
13.75	-10.781	0.0315	820741.3	55.55	1.88	2.005	-14.567	0.0425
14.00	-11.118	0.0325	820742.9	55.35	1.83	2.004	-14.788	0.0432
14.25	-11.246	0.0328	820743.6	54.89	1.76	2.004	-14.788	0.0432
14.50	-11.605	0.0339	820745.3	54.80	1.71	2.003	-15.049	0.0440
14.75	-12.303	0.0359	820748.8	55.89	1.70	2.002	-15.725	0.0459
15.00	-14.921	0.0436	820762.1	75.09	2.23	2.001	-19.403	0.0567
15.25	-15.566	0.0455	820765.5	75.55	2.19	2.000	-19.964	0.0583
15.50	-15.147	0.0442	820763.3	75.40	2.14	2.000	-19.429	0.0568

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RESEARCH & TESTING LABORATORY  
SALEM GEN STA  
INTEGRATED LEAK RATE  
REGRESSION ANALYSIS

DATE 8/13/1984

TEST DAY 224

TEST STARTING TIME 23/ 0

READ TIME	CALC LEAK RATE	CALC INITIAL AIR MASS	STD DEV OF MASS	STD DEV OF SLOPE	STUDENT-T DIST. VALUE	95% CONF. FIGURE	
Hours	Lbm/Hr	%/Day	Lbm	Lbm/Hr		Lbm/Hr	%/Day
15.75	-13.609	0.0397	820755.0	81.35	2.25	1.999	-18.118 0.0529
16.00	-12.832	0.0375	820750.9	82.38	2.22	1.998	-17.289 0.0505
16.25	-12.965	0.0379	820751.6	81.78	2.16	1.998	-17.287 0.0505
16.50	-13.325	0.0389	820753.6	81.53	2.10	1.997	-17.535 0.0512
16.75	-13.696	0.0400	820755.7	81.35	2.05	1.997	-17.801 0.0520
17.00	-14.502	0.0424	820760.3	81.99	2.04	1.996	-18.592 0.0543
17.25	-15.602	0.0456	820766.7	82.56	2.03	1.995	-19.770 0.0578
17.50	-16.313	0.0477	820770.9	82.47	2.04	1.995	-20.444 0.0597
17.75	-16.782	0.0490	820773.8	82.61	2.03	1.994	-20.830 0.0609
18.00	-16.661	0.0487	820773.0	82.04	1.97	1.994	-20.598 0.0602
18.25	-16.564	0.0484	820772.4	86.46	1.92	1.993	-20.395 0.0596
18.50	-16.241	0.0474	820770.4	86.28	1.87	1.993	-19.986 0.0584
18.75	-15.833	0.0463	820767.8	86.40	1.84	1.992	-19.507 0.0570
19.00	-14.490	0.0423	820759.2	93.48	1.95	1.992	-18.386 0.0537
19.25	-14.281	0.0417	820757.8	93.04	1.90	1.992	-18.083 0.0528
19.50	-14.159	0.0414	820757.0	92.49	1.86	1.991	-17.865 0.0522
19.75	-14.029	0.0410	820756.2	91.97	1.81	1.991	-17.643 0.0515
20.00	-13.959	0.0408	820755.7	91.40	1.77	1.990	-17.483 0.0511
20.25	-13.824	0.0404	820754.8	90.91	1.72	1.990	-17.264 0.0504
20.50	-12.977	0.0379	820748.9	94.07	1.75	1.990	-16.471 0.0481
20.75	-12.990	0.0379	820749.0	93.49	1.71	1.989	-16.399 0.0479
21.00	-13.318	0.0389	820751.3	93.51	1.68	1.989	-16.666 0.0487
21.25	-13.247	0.0387	820750.8	92.97	1.64	1.988	-16.517 0.0482
21.50	-12.960	0.0378	820748.7	92.91	1.61	1.988	-16.170 0.0472
21.75	-13.072	0.0382	820749.6	92.44	1.57	1.988	-16.211 0.0474
22.00	-12.372	0.0361	820744.4	95.00	1.59	1.987	-15.543 0.0454
22.25	-12.449	0.0364	820745.0	94.49	1.55	1.987	-15.549 0.0454
22.50	-12.558	0.0367	820745.8	94.03	1.52	1.987	-15.591 0.0455
22.75	-12.570	0.0367	820745.9	93.50	1.49	1.986	-15.536 0.0454
23.00	-12.479	0.0364	820745.2	93.04	1.46	1.986	-15.382 0.0449
23.25	-12.327	0.0360	820744.0	92.70	1.43	1.986	-15.173 0.0443
23.50	-12.205	0.0356	820743.0	92.31	1.40	1.986	-14.993 0.0438
23.75	-11.666	0.0341	820738.7	94.14	1.40	1.985	-14.464 0.0422
24.00	-11.481	0.0335	820736.3	93.69	1.35	1.985	-14.179 0.0414

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TEST STARTING DAY 224  
TEST STOPPING DAY 23/0  
SALEM GEN S  
INTEGRATED LEAK RATE TEST  
AVERAGE & MASS DATA

DATE 8/13/1984

REAL TIME (Hrs)	REAL TIME (Hr/Min)	JULIAN DATE	AMBIENT			AVG TEMP (DegF)	AVG PRESS (Psia)	CALC VAPOR DEW PT (DegF)	AVG PRESS (Psia)	CONTMT MASS (Lbm)	DIFF MASS (P-T-P) (Lbm)	DIFF MASS (TOT TIME) (Lbm)
			TEMP (DegF)	PRESS (Psia)	CONTMT (DegF)							
0.00	23 0	224	79.531	14.561	83.260	72.254	0.391	63.403	820695.	0.0	0.0	
0.25	23 15	224	79.619	14.565	83.226	72.259	0.391	63.403	820752.	57.2	57.2	
0.50	23 30	224	79.591	14.571	83.209	72.273	0.392	63.403	820774.	22.3	79.6	
0.75	23 45	224	79.343	14.578	83.201	72.183	0.390	63.402	820789.	14.6	94.3	
1.00	0 0	225	79.570	14.562	83.210	72.223	0.391	63.400	820735.	-53.5	40.7	
1.25	0 15	225	79.336	14.587	83.192	72.228	0.391	63.398	820743.	7.5	48.2	
1.50	0 30	225	79.370	14.591	83.181	72.241	0.391	63.399	820756.	13.5	61.8	
1.75	0 45	225	78.987	14.587	83.134	72.241	0.391	63.396	820802.	45.9	107.8	
2.00	1 0	225	78.956	14.586	83.073	72.241	0.390	63.384	820751.	-51.4	56.3	
2.25	1 15	225	79.819	14.580	83.050	72.146	0.391	63.376	820659.	-92.3	-36.0	
2.50	1 30	225	80.142	14.572	83.074	72.146	0.390	63.373	820602.	-56.6	-92.6	
2.75	1 45	225	79.249	14.563	83.080	72.183	0.390	63.375	820612.	9.8	-82.8	
3.00	2 0	225	79.594	14.560	83.070	72.277	0.392	63.376	820624.	12.1	-70.6	
3.25	2 15	225	79.050	14.561	83.064	72.231	0.391	63.376	820641.	16.6	-53.9	
3.50	2 30	225	78.734	14.554	83.045	72.266	0.391	63.376	820664.	23.2	-30.7	
3.75	2 45	225	77.924	14.565	83.042	72.217	0.391	63.377	820690.	25.8	-4.8	
4.00	3 0	225	78.316	14.570	83.062	72.209	0.391	63.377	820661.	-29.0	-33.8	
4.25	3 15	225	78.295	14.575	83.074	72.183	0.390	63.382	820720.	59.0	25.1	
4.50	3 30	225	77.268	14.576	83.023	72.288	0.392	63.384	820723.	3.3	28.4	
4.75	3 45	225	76.950	14.582	83.070	72.190	0.390	63.379	820686.	-37.4	-8.9	
5.00	4 0	225	77.184	14.586	83.068	72.257	0.391	63.378	820657.	-29.0	-37.9	
5.25	4 15	225	76.989	14.588	83.061	72.198	0.391	63.378	820684.	27.6	-10.3	
5.50	4 30	225	77.914	14.592	83.064	72.237	0.391	63.378	820673.	-10.8	-21.1	
5.75	4 45	225	78.429	14.592	83.066	72.251	0.391	63.378	820668.	-5.6	-26.8	
6.00	5 0	225	78.127	14.593	83.079	72.270	0.392	63.379	820651.	-16.3	-43.1	
6.25	5 15	225	77.906	14.594	83.086	72.234	0.391	63.379	820653.	1.4	-41.7	
6.50	5 30	225	78.105	14.595	83.078	72.333	0.392	63.379	820648.	-4.8	-46.6	
6.75	5 45	225	77.681	14.598	83.059	72.248	0.391	63.379	820685.	36.7	-9.8	
7.00	6 0	225	77.321	14.599	83.028	72.202	0.391	63.378	820726.	41.6	31.7	
7.25	6 15	225	78.176	14.599	82.982	72.248	0.391	63.375	820749.	23.1	54.9	
7.50	6 30	225	78.559	14.602	82.958	72.241	0.391	63.371	820741.	-8.2	46.7	
7.75	6 45	225	78.375	14.604	82.941	72.294	0.392	63.366	820692.	-49.5	-2.8	
8.00	7 0	225	78.446	14.604	82.930	72.195	0.391	63.364	820694.	2.0	-0.7	
8.25	7 15	225	79.423	14.602	82.907	72.185	0.390	63.360	820678.	-15.9	-16.7	
8.50	7 30	225	79.121	14.606	82.892	72.303	0.392	63.357	820647.	-31.1	-47.9	
8.75	7 45	225	78.712	14.602	82.872	72.304	0.392	63.356	820665.	17.9	-29.9	
9.00	8 0	225	80.095	14.603	82.861	72.261	0.391	63.356	820689.	24.0	-5.9	
9.25	8 15	225	79.916	14.606	82.852	72.258	0.391	63.355	820682.	-6.3	-12.3	
9.50	8 30	225	80.364	14.611	83.029	72.271	0.392	63.362	820511.	-171.0	-183.3	
9.75	8 45	225	80.465	14.606	82.977	72.320	0.392	63.371	820693.	181.6	-1.6	
10.00	9 0	225	81.712	14.608	82.901	72.233	0.391	63.364	820737.	44.1	42.4	
10.25	9 15	225	81.378	14.612	82.952	72.291	0.392	63.358	820565.	-171.9	-129.5	
10.50	9 30	225	82.511	14.616	82.979	72.314	0.392	63.359	820540.	-24.7	-154.2	
10.75	9 45	225	81.933	14.612	83.018	72.263	0.391	63.369	820614.	73.6	-80.5	
11.00	10 0	225	83.006	14.617	83.045	72.295	0.392	63.370	820587.	-27.0	-107.6	
11.25	10 15	225	82.742	14.617	82.976	72.263	0.391	63.369	820677.	90.5	-17.1	
11.50	10 30	225	83.756	14.616	82.964	72.306	0.392	63.367	820668.	-9.0	-26.2	
11.75	10 45	225	83.885	14.611	82.937	72.240	0.391	63.361	820651.	-17.3	-43.5	
12.00	11 0	225	84.536	14.606	82.916	72.275	0.392	63.360	820649.	-2.0	-45.6	
12.25	11 15	225	84.010	14.605	82.917	72.241	0.391	63.360	820653.	3.6	-41.9	
12.50	11 30	225	84.832	14.605	82.906	72.316	0.392	63.360	820656.	3.4	-38.4	

Attachment 4  
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RESEARCH & TESTING LABORATORY  
SALEM GEN STA  
INTEGRATED LEAK RATE TEST  
AVERAGE & MASS DATA

DATE 8/13/1984

TEST STARTING DAY 224

TEST STARTING TIME 23/ 0

READ TIME (Hrs)	REAL TIME (Hr/Min)	JULIAN DATE	AMBIENT			AVG TEMP (DegF)	AVG DEW PT (DegF)	CALC VAPOR PRESS (Psia)	AVG PRESS (Psia)	CONTMT MASS (Lbm)	DIFF MASS (F-T-P)	DIFF MASS (TOT TIME)
			TEMP (DegF)	PRESS (Psia)							(Lbm)	(Lbm)
12.75	11 45	225	83.988	14.605	82.887	72.328	0.392	63.355	820618.	-37.7	-76.2	
13.00	12 0	225	84.449	14.599	82.859	72.274	0.392	63.347	820564.	-53.9	-130.2	
13.25	12 15	225	84.368	14.597	82.840	72.323	0.392	63.345	820558.	-5.9	-136.1	
13.50	12 30	225	82.368	14.597	82.849	72.317	0.392	63.339	820474.	-84.7	-220.9	
13.75	12 45	225	83.089	14.596	82.853	72.244	0.391	63.342	820520.	46.0	-174.8	
14.00	13 0	225	82.564	14.590	82.871	72.317	0.392	63.347	820545.	25.4	-149.4	
14.25	13 15	225	84.156	14.590	82.851	72.300	0.392	63.347	820566.	21.3	-128.0	
14.50	13 30	225	83.422	14.585	82.849	72.299	0.392	63.343	820529.	-37.6	-165.7	
14.75	13 45	225	85.298	14.583	82.935	72.298	0.392	63.349	820471.	-57.9	-223.7	
15.00	14 0	225	85.470	14.580	83.426	72.393	0.393	63.383	820165.	-306.2	-529.9	
15.25	14 15	225	84.088	14.581	83.521	72.454	0.394	63.422	820432.	267.8	-262.1	
15.50	14 30	225	82.790	14.585	83.663	72.458	0.394	63.444	820592.	159.5	-102.5	
15.75	14 45	225	81.943	14.587	83.454	72.389	0.393	63.434	820783.	190.6	88.0	
16.00	15 0	225	83.235	14.583	83.395	72.414	0.393	63.419	820672.	-111.0	-22.9	
16.25	15 15	225	85.024	14.579	83.443	72.392	0.393	63.412	820518.	-153.5	-176.4	
16.50	15 30	225	85.864	14.575	83.526	72.430	0.394	63.419	820471.	-47.2	-223.7	
16.75	15 45	225	85.775	14.579	83.609	72.452	0.394	63.428	820460.	-11.2	-234.9	
17.00	16 0	225	86.038	14.569	83.684	72.497	0.395	63.430	820365.	-94.7	-329.7	
17.25	16 15	225	86.052	14.565	83.721	72.457	0.394	63.428	820288.	-76.4	-406.2	
17.50	16 30	225	85.981	14.560	83.748	72.461	0.394	63.435	820346.	57.5	-348.6	
17.75	16 45	225	85.218	14.553	83.746	72.468	0.394	63.438	820381.	35.3	-313.3	
18.00	17 0	225	85.836	14.549	83.734	72.423	0.394	63.445	820498.	116.4	-196.8	
18.25	17 15	225	85.347	14.547	83.716	72.433	0.394	63.442	820490.	-7.4	-204.3	
18.50	17 30	225	86.257	14.553	83.719	72.464	0.394	63.447	820540.	49.9	-154.3	
18.75	17 45	225	83.743	14.562	83.701	72.498	0.394	63.447	820562.	22.0	-132.2	
19.00	18 0	225	81.169	14.569	83.608	72.508	0.395	63.464	820794.	231.8	99.5	
19.25	18 15	225	82.217	14.573	83.679	72.444	0.394	63.441	820532.	-262.0	-162.4	
19.50	18 30	225	79.895	14.578	83.698	72.485	0.394	63.438	820510.	-21.6	-184.1	
19.75	18 45	225	76.634	14.590	83.652	72.495	0.394	63.437	820511.	0.8	-183.3	
20.00	19 0	225	78.548	14.592	83.647	72.491	0.394	63.435	820494.	-17.2	-200.6	
20.25	19 15	225	76.751	14.594	83.627	72.497	0.395	63.434	820510.	15.9	-184.6	
20.50	19 30	225	77.510	14.598	83.615	72.454	0.394	63.448	820711.	201.2	16.6	
20.75	19 45	225	79.553	14.605	83.601	72.470	0.394	63.428	820475.	-235.8	-219.1	
21.00	20 0	225	80.736	14.604	83.638	72.556	0.395	63.426	820378.	-97.1	-316.2	
21.25	20 15	225	80.108	14.607	83.789	72.559	0.395	63.453	820490.	111.2	-205.0	
21.50	20 30	225	78.753	14.609	83.659	72.482	0.394	63.441	820555.	65.5	-139.5	
21.75	20 45	225	78.609	14.611	83.643	72.547	0.395	63.431	820430.	-124.6	-264.1	
22.00	21 0	225	79.495	14.606	83.642	72.531	0.395	63.450	820690.	259.5	-4.6	
22.25	21 15	225	76.346	14.610	83.649	72.536	0.395	63.432	820443.	-246.9	-251.5	
22.50	21 30	225	78.634	14.614	83.655	72.537	0.395	63.432	820427.	-15.7	-267.3	
22.75	21 45	225	79.918	14.610	83.649	72.541	0.395	63.433	820456.	28.3	-238.9	
23.00	22 0	225	79.812	14.613	83.627	72.578	0.396	63.434	820489.	33.0	-205.9	
23.25	22 15	225	79.765	14.618	83.597	72.567	0.395	63.432	820510.	21.3	-184.6	
23.50	22 30	225	80.635	14.619	83.569	72.535	0.395	63.427	820499.	-10.6	-195.2	
23.75	22 45	225	79.569	14.618	83.537	72.577	0.396	63.436	820657.	158.2	-37.0	
24.00	23 0	225	80.020	14.619	83.510	72.507	0.395	63.419	820488.	-169.5	-206.6	

 Attachment 4  
 Page 6 of 23

RESEARCH & TESTING LABORATORY  
SALEM GEN S.  
INTEGRATED LEAK RATE TEST  
SENSOR READING

DATE 8/13/1984

TEST DAY 224

TEST STARTING TIME 23/ 0

READ TIME & DAY	REAL TIME & DAY	PRESS & PRESS	AMBIENT TEMP &	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				1	2	3	4	5	6	7	8	1	2	3
				PI-1 PI-2	9 17	10 18	11 19	12 20	13 21	14 22	15 23	4 5	5 6	
0.00 23 0 224	63.392 63.414	79.531 14.561	82.705 83.210 83.327 83.460 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	82.675 83.190 83.267 83.440 83.102 83.470 83.073 83.369 83.243 83.292 84.077 83.156 84.279 83.719 83.612 83.293 83.365	82.738 83.460 83.327 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	82.617 83.440 83.327 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	83.352 83.470 83.322 83.102 83.470 83.073 83.369 83.243 83.292 84.077 83.156 84.279 83.719 83.612 83.293 83.365	82.902 83.470 82.862 83.102 83.470 83.073 83.369 83.243 83.292 84.077 83.156 84.279 83.719 83.612 83.293 83.365	83.528 83.450 82.862 83.073 83.369 83.243 83.292 83.612 83.293 84.077 83.156 84.279 83.719 83.612 83.293 83.365	83.188 83.450 83.327 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	72.397 72.086 72.540 72.228 72.354 72.095 72.550 72.205 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	72.345 72.005 72.471 72.280 72.127 71.958 72.298 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298		
0.25 23 15 224	63.392 63.415	79.619 14.565	82.645 83.190 83.267 83.440 83.102 83.470 83.073 83.369 83.243 83.292 84.077 83.156 84.279 83.739 83.652 83.273 83.385	82.645 83.190 83.267 83.440 83.102 83.470 83.073 83.369 83.243 83.292 84.077 83.156 84.279 83.739 83.652 83.273 83.385	82.467 83.440 83.327 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	82.638 83.440 83.327 83.122 83.470 83.113 83.450 83.263 83.302 84.137 83.156 84.289 83.749 83.662 83.313 83.394	82.597 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.077 83.156 84.279 83.739 83.592 83.263 83.355	83.251 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.077 83.156 84.279 83.739 83.592 83.263 83.355	82.852 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.077 83.156 84.279 83.739 83.592 83.263 83.355	83.418 83.349 83.243 83.148 83.418 83.349 83.243 83.148 83.292 84.077 83.156 84.279 83.739 83.592 83.263 83.355	83.148 83.349 83.243 83.148 83.418 83.349 83.243 83.148 83.292 84.077 83.156 84.279 83.739 83.592 83.263 83.355	72.354 72.095 72.550 72.205 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	72.316 71.985 72.583 72.176 72.343 72.095 72.471 72.280 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	
0.50 23 30 224	63.392 63.415	79.591 14.571	82.665 83.100 83.237 83.430 83.122 83.470 83.073 83.369 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	82.665 83.100 83.237 83.430 83.122 83.470 83.073 83.369 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	82.447 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	82.607 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	83.342 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	83.072 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	83.448 83.349 83.243 83.148 83.448 83.349 83.243 83.148 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	83.148 83.349 83.243 83.148 83.448 83.349 83.243 83.148 83.292 84.037 83.156 84.279 83.719 83.612 83.293 83.365	72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	72.316 71.985 72.583 72.176 72.343 72.095 72.471 72.280 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298		
1.00 0 0 225	63.388 63.412	79.570 14.582	82.665 83.130 83.247 83.430 83.122 83.470 83.073 83.369 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	82.665 83.130 83.247 83.430 83.122 83.470 83.073 83.369 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	82.457 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	82.678 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	82.556 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	83.281 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	82.852 83.430 83.312 83.112 83.430 83.053 83.349 83.243 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	83.428 83.329 83.243 83.148 83.428 83.329 83.243 83.148 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	83.158 83.349 83.243 83.148 83.428 83.329 83.243 83.148 83.292 84.026 83.136 84.279 83.729 83.582 83.273 83.385	72.435 72.005 72.471 72.280 72.127 71.958 72.298 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	72.360 72.075 72.511 72.270 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	
1.25 0 15 225	63.387 63.410	79.336 14.587	82.635 83.140 83.217 83.440 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	82.635 83.140 83.217 83.440 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	82.447 83.440 83.312 83.112 83.440 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	82.630 83.440 83.312 83.112 83.440 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	82.536 83.430 83.312 83.112 83.430 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	83.241 83.430 83.312 83.112 83.430 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	82.812 83.430 83.312 83.112 83.430 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	83.448 83.349 83.243 83.148 83.448 83.349 83.243 83.148 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	83.158 83.349 83.243 83.148 83.448 83.349 83.243 83.148 83.292 83.976 83.136 84.219 83.739 83.552 83.233 83.385	72.316 71.985 72.583 72.176 72.343 72.095 72.471 72.280 72.127 71.958 72.298 72.095 72.376 72.095 72.554 72.295	72.360 72.075 72.511 72.270 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	
1.50 0 30 225	63.387 63.411	79.370 14.591	82.645 83.120 83.217 83.420 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	82.645 83.120 83.217 83.420 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	82.417 83.420 83.312 83.112 83.420 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	82.628 83.420 83.312 83.112 83.420 83.122 83.470 83.073 83.369 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	82.577 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	83.281 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	82.822 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	83.418 83.339 83.223 83.118 83.418 83.339 83.223 83.118 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	83.118 83.339 83.223 83.118 83.418 83.339 83.223 83.118 83.292 83.976 83.136 84.189 83.719 83.562 83.253 83.365	72.360 72.075 72.511 72.270 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	72.360 72.075 72.511 72.270 72.095 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.295 72.376 72.095 72.554 72.298	
1.75 0 45 225	63.385 63.408	78.987 14.587	82.565 83.070 83.187 83.360 83.041 83.340 82.983 83.319 83.163 83.182 83.916 83.056 83.679 83.522 83.193 83.305	82.565 83.070 83.187 83.360 83.041 83.340 82.983 83.319 83.163 83.182 83.916 83.056 83.679 83.522 83.193 83.305	82.377 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	82.577 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	82.516 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	82.762 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	83.388 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	83.078 83.430 83.312 83.112 83.430 83.056 83.349 83.243 83.292 83.976 83.136 84.199 83.679 83.522 83.193 83.305	72.252 72.086 72.428 72.264 7			

TEST STARTING DAY 224

SALEM GEN S  
INTEGRATED LEAK RATE TEST  
SENSOR READINGS

TEST STARTING TIME 23/ 0

READ TIME & DAY	PRESS SENS PI-1 PI-2	AMBIENT TEMP 8 PRESS	TEMPERATURE SENSORS RTD'S								DEW POINT SENSORS			
			1	2	3	4	5	6	7	8	1	2	3	
			9	10	11	12	13	14	15	16	4	5	6	
			17	18	19	20	21	22	23	24				
3.25	2 15	63.365	79.050	82.515	82.297	82.517	82.456	83.111	82.712	83.288	82.987	72.354	72.570	72.320
225		63.387	14.561	83.019	83.097	83.260	82.961	83.280	82.943	83.248	83.092	72.066	72.129	71.919
				83.162	83.946	82.986	84.039	83.590	83.492	83.143	83.265			
3.50	2 30	63.365	78.734	82.505	82.287	82.507	82.396	83.081	82.702	83.268	82.987	72.378	72.592	72.367
225		63.387	14.554	82.979	83.077	83.280	82.981	83.270	82.903	83.180	83.072	72.050	72.190	72.050
				83.142	83.866	83.067	83.079	83.580	83.482	83.123	83.275			
3.75	2 45	63.367	77.924	82.505	82.277	82.527	82.416	83.111	82.652	83.278	82.977	72.361	72.534	72.306
225		63.387	14.565	82.939	83.067	83.270	82.941	83.290	82.913	83.198	83.092	71.996	72.117	72.045
				83.112	83.866	82.986	84.029	83.600	83.482	83.133	83.275			
4.00	3 00	63.367	78.316	82.565	82.307	82.537	82.416	83.091	82.742	83.278	82.987	72.316	72.493	72.207
225		63.387	14.570	82.969	83.077	83.300	82.961	83.280	82.953	83.279	83.102	72.059	72.176	72.109
				83.102	83.846	83.036	84.039	83.620	83.462	83.153	83.275			
4.25	3 15	63.371	78.295	82.575	82.317	82.577	82.426	83.071	82.732	83.288	82.997	72.370	72.511	72.201
225		63.394	14.575	82.979	83.107	83.330	82.991	83.290	82.973	83.238	83.142	71.938	72.325	71.926
				83.112	83.916	83.046	84.009	83.630	83.462	83.163	83.305			
4.50	3 30	63.372	77.268	82.515	82.317	82.547	82.436	83.091	82.702	83.338	83.007	72.318	72.538	72.417
225		63.396	14.576	83.009	83.107	83.310	82.981	83.290	82.953	83.248	83.142	72.027	72.343	72.190
				83.122	83.916	83.046	84.009	83.620	83.462	83.173	83.275			
4.75	3 45	63.367	76.950	82.545	82.327	82.577	82.426	83.111	82.682	83.268	82.987	72.322	72.495	72.270
225		63.392	14.582	83.050	83.067	83.310	83.001	83.280	82.943	83.238	83.112	71.971	73.352	71.805
				83.122	83.936	83.016	84.000	83.640	83.453	83.163	83.275			
5.00	4 00	63.366	77.184	82.545	82.317	82.547	82.396	83.121	82.732	83.318	83.007	72.324	72.504	72.273
225		63.390	14.586	82.999	83.097	83.300	82.941	83.290	82.953	83.238	83.112	72.081	72.349	72.156
				83.132	83.936	83.026	83.990	83.620	83.462	83.143	83.285			
5.25	4 15	63.366	78.989	82.505	82.307	82.537	82.406	83.111	82.692	83.298	82.957	72.351	72.459	72.252
225		63.391	14.588	82.969	83.087	83.300	83.011	83.300	82.943	83.248	83.112	72.005	72.280	71.920
				83.112	83.956	83.016	83.970	83.610	83.453	83.143	83.295			
5.50	4 30	63.366	77.914	82.525	82.327	82.567	82.416	83.071	82.702	83.278	82.997	72.333	72.493	72.333
225		63.391	14.592	82.959	83.117	83.290	82.971	83.300	82.953	83.248	83.122	72.063	72.260	71.946
				83.112	83.936	83.006	83.990	83.620	83.443	83.153	83.285			
5.75	4 45	63.366	78.429	82.515	82.317	82.547	82.456	83.071	82.682	83.258	82.987	72.297	72.558	72.338
225		63.391	14.592	82.979	83.087	83.330	83.011	83.300	82.963	83.248	83.112	72.028	72.169	72.207
				83.122	83.906	83.036	83.980	83.630	83.472	83.163	83.305			
6.00	5 00	63.367	78.127	82.555	82.337	82.547	82.426	83.101	82.692	83.288	83.047	72.451	72.592	72.403
225		63.391	14.593	83.040	83.107	83.320	83.001	83.290	82.973	83.248	83.122	72.012	72.109	72.081
				83.122	83.946	83.046	83.980	83.640	83.453	83.163	83.335			
6.25	5 15	63.368	77.906	82.545	82.357	82.557	82.426	83.091	82.742	83.348	83.068	72.378	72.459	72.250
225		63.391	14.594	82.999	83.107	83.340	82.981	83.280	82.983	83.269	83.163	72.129	72.243	71.967
				83.112	83.936	83.046	83.970	83.649	83.462	83.203	83.305			

 Attachment  
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PAGE 5

RESEARCH & TESTING LABORATORY  
SALEM CENSUS  
INTEGRATED LEAK RATE TEST  
SENSOR READINGS

DATE 8/13/1984

TEST STARTING DAY 224

TEST STARTING TIME 23/ 0

READ TIME & DAY	REAL TIME 8 & DAY	PRESS SENS PI-1 PI-2	AMBIENT TEMP 8 17	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				1 9	2 10	3 11	4 12	5 13	6 14	7 15	8 16	1 4	2 5	3 6
				PRESS 14.595	83.096	83.056	83.970	83.659	83.462	83.143	83.315	72.441	72.619	72.394
6.50	5 30	63.368	78.105	82.535	82.357	82.537	82.436	83.121	82.732	83.308	83.007	72.367	72.468	72.473
	225	63.391	14.595	82.989	83.117	83.340	82.991	83.290	82.973	83.269	83.132	72.135	72.212	72.282
6.75	5 45	63.367	77.681	82.515	82.322	82.547	82.426	83.091	82.712	83.278	82.987	72.367	72.468	72.473
	225	63.391	14.598	82.969	83.097	83.300	82.991	83.270	82.943	83.218	83.112	71.935	72.171	72.099
7.00	6 0	63.366	77.321	82.465	82.267	82.477	82.316	83.061	82.612	83.263	82.977	72.327	72.513	72.225
	225	63.390	14.599	82.959	83.056	83.260	82.991	83.250	82.893	83.279	83.082	72.070	72.135	71.973
7.25	6 15	63.362	78.176	82.425	82.237	82.417	82.316	82.980	82.632	83.208	82.907	72.480	72.516	72.302
	225	63.388	14.599	82.869	83.036	83.220	82.931	83.210	82.873	83.148	83.022	71.989	72.304	72.043
7.50	6 30	63.358	78.559	82.375	82.187	82.397	82.286	82.960	82.582	83.168	82.887	72.345	72.439	72.426
	225	63.385	14.602	82.869	82.976	83.190	82.921	83.220	82.834	83.148	83.012	72.016	72.212	71.969
7.75	6 45	63.354	78.375	82.385	82.147	82.346	82.276	82.940	82.562	83.188	82.897	72.428	72.516	72.390
	225	63.379	14.604	82.869	82.956	83.170	82.861	83.190	82.814	83.138	83.012	72.037	72.289	72.232
8.00	7 0	63.352	78.446	82.355	82.187	82.376	82.296	82.950	82.562	83.138	82.827	72.298	72.491	72.169
	225	63.376	14.604	82.849	82.956	83.160	82.881	83.160	82.784	83.097	82.982	72.113	72.016	72.120
8.25	7 15	63.348	79.623	82.345	82.127	82.346	82.256	82.910	82.542	83.108	82.807	72.390	72.432	72.190
	225	63.372	14.602	82.869	82.976	83.150	82.801	83.170	82.784	83.128	82.952	72.081	72.189	71.832
8.50	7 30	63.345	79.121	82.355	82.177	82.346	82.256	82.880	82.542	83.098	82.787	72.354	72.534	72.385
	225	63.370	14.606	82.849	82.896	83.110	82.831	83.120	82.754	83.087	82.942	72.023	72.349	72.376
8.75	7 45	63.345	78.712	82.305	82.117	82.306	82.206	82.890	82.512	83.088	82.787	72.354	72.511	72.495
	225	63.368	14.602	82.809	82.806	83.120	82.811	83.090	82.724	83.087	82.902	72.075	72.255	72.113
9.00	8 0	63.345	80.095	82.295	82.087	82.286	82.196	82.870	82.512	83.078	82.807	72.316	72.523	72.401
	225	63.368	14.603	82.289	82.876	83.080	82.781	83.110	82.734	83.057	82.892	71.982	72.207	72.246
9.25	8 15	63.343	79.916	82.315	82.067	82.286	82.166	82.860	82.462	83.068	82.777	72.349	72.606	72.399
	225	63.367	14.606	82.779	82.886	83.100	82.771	83.100	82.734	83.027	82.902	72.072	72.268	71.789
9.50	8 30	63.351	80.364	82.565	82.267	82.547	82.346	83.010	82.652	83.198	82.977	72.397	72.469	72.358
	225	63.374	14.611	82.979	83.016	83.320	82.941	83.220	82.963	83.228	83.122	72.082	72.293	72.072

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RESEARCH & TESTING LABORATORY  
SALEM GEN S.  
INTEGRATED LEAK RATE TEST  
SENSOR READING

DATE 8/13/1984

TEST STARTING DAY 224

TEST STARTING TIME 23/ 0

READ TIME & DAY	REAL TIME SENS PI-1 & PI-2	PRESS TEMP & PRESS	AMBIENT 17	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				2	3	4	5	6	7	8	1	2	3	
				9	10	11	12	13	14	15	4	5	6	
9.75	8.45 225	63.360 63.382	80.465 14.606	82.425 82.919 83.016	82.267 83.240 82.861	82.437 83.200 82.844	82.326 83.138 83.022	82.960 83.138 83.022	82.612 83.138 83.022	83.228 83.138 83.022	82.937 83.064 83.225	72.414 72.118 72.262	72.666 72.262 72.023	72.432
10.00	9.0 225	63.352 63.377	81.712 14.608	82.375 82.799 82.926	82.117 83.140 82.811	82.366 83.140 82.774	82.246 83.140 82.774	82.900 83.128 82.972	82.532 83.128 82.972	83.108 83.024 83.145	82.837 83.024 83.145	72.342 72.072 72.163	72.541 72.163 71.946	72.316
10.25	9.15 225	63.346 63.370	81.378 14.612	82.445 82.889 82.966	82.157 83.220 82.861	82.417 83.100 82.864	82.266 83.100 82.864	82.960 83.158 83.012	82.572 83.158 83.012	83.128 83.113 83.215	82.897 83.113 83.215	72.403 72.127 72.135	72.594 72.135 72.064	72.390
10.50	9.30 225	63.347 63.372	82.511 14.616	82.455 82.899 82.996	82.237 83.260 82.911	82.417 83.200 82.873	82.336 83.200 83.158	82.980 83.158 83.042	82.612 83.158 83.042	83.208 83.093 83.235	82.897 83.093 83.235	72.448 72.147 72.268	72.523 72.268 72.270	72.334
10.75	9.45 225	63.358 63.380	81.933 14.612	82.515 82.949 83.046	82.257 83.280 82.921	82.507 83.250 82.943	82.346 83.250 82.943	82.990 83.218 83.102	82.642 83.218 83.102	83.208 83.093 83.285	82.947 83.183 83.285	72.376 72.041 72.295	72.518 72.295 72.198	72.304
11.00	10.0 225	63.360 63.381	83.006 14.617	82.505 82.999 83.077	82.307 83.320 82.981	82.517 83.240 83.240	82.386 83.240 82.933	83.030 83.228 83.092	82.672 83.228 83.092	83.258 83.228 83.153	82.987 83.153 83.305	72.480 72.057 72.257	72.615 72.257 72.129	72.347
11.25	10.15 225	63.357 63.381	82.742 14.617	82.435 82.849 82.996	82.217 83.250 82.901	82.427 83.200 82.854	82.306 83.200 83.178	83.010 83.200 83.042	82.622 83.178 83.042	83.228 83.093 83.245	82.927 83.093 83.245	72.316 72.133 72.167	72.520 72.167 72.061	72.349
11.50	10.30 225	63.356 63.379	83.756 14.616	82.405 82.879 82.986	82.217 83.200 82.881	82.386 83.210 82.824	82.306 83.210 83.148	82.980 83.540 83.012	82.642 83.423 83.012	83.228 83.093 83.215	82.867 83.093 83.215	72.468 72.090 72.309	72.615 72.309 72.331	72.261
11.75	10.45 225	63.348 63.374	83.885 14.611	82.405 82.849 82.936	82.177 83.160 82.801	82.386 83.150 82.814	82.266 83.150 82.814	82.930 83.082 83.082	82.602 83.082 83.082	83.168 83.082 83.082	82.847 82.962 83.185	72.383 72.041 72.050	72.586 72.050 72.318	72.226
12.00	11.0 225	63.348 63.372	84.536 14.606	82.385 82.899 82.946	82.147 83.130 82.861	82.376 83.130 82.861	82.286 83.130 82.794	82.890 83.160 82.794	82.522 83.077 82.952	83.088 83.077 82.952	82.837 82.099 82.190	72.437 72.099 72.190	72.560 72.099 72.084	72.322
12.25	11.15 225	63.348 63.372	84.010 14.605	82.385 82.849 82.946	82.157 83.130 82.841	82.376 83.130 82.841	82.246 83.150 82.814	82.900 83.150 83.087	82.522 83.087 82.932	83.158 83.087 82.932	82.847 82.932 83.165	72.376 72.041 72.057	72.534 72.057 71.947	72.406
12.50	11.30 225	63.348 63.372	84.832 14.605	82.345 82.829 82.916	82.157 83.130 82.831	82.346 83.130 82.831	82.256 83.150 82.804	82.920 83.150 83.077	82.562 83.077 82.932	83.088 83.077 82.932	82.827 82.077 82.176	72.451 72.077 72.307	72.561 72.307 72.176	72.414
12.75	11.45 225	63.343 63.367	83.988 14.605	82.355 82.849 82.906	82.147 83.100 82.841	82.336 83.120 82.764	82.206 83.120 82.764	82.880 83.120 83.047	82.492 83.120 82.892	83.098 83.047 82.892	82.817 82.059 82.160	72.468 72.059 72.329	72.550 72.329 72.160	72.471

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RESEARCH & TESTING LABORATORY  
SALEM GEN S  
INTEGRATED LEAK RATE TEST  
SENSOR READINGS

DATE 8/13/1984

TEST STARTING DAY 224

TEST STARTING TIME 23/ 0

READ TIME & DAY	REAL TIME	PRESS SENS PI-1 & PI-2	AMBIENT TEMP & PRESS	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				1 17	2 18	3 19	4 20	5 21	6 22	7 23	8 24	1 4	2 5	3 6
13.00	12 0	63.336	84.449	82.315	82.107	82.316	82.206	82.860	82.482	83.048	82.767	72.484	72.680	72.379
	225	63.357	14.599	82.789	82.866	83.059	82.771	83.130	82.734	83.047	82.862	71.964	72.271	71.973
				92.993	83.776	82.796	83.780	83.421	83.363	83.004	83.136			
13.25	12 15	63.334	84.368	82.285	82.117	82.246	82.206	82.840	82.462	83.018	82.747	72.352	72.642	72.477
	225	63.355	14.597	82.749	82.886	83.049	82.781	83.090	82.714	83.007	82.852	72.115	72.297	72.028
				82.973	83.766	82.	83.760	83.402	83.363	82.994	83.106			
13.50	12 30	63.328	82.368	82.285	82.057	82.306	82.196	82.870	82.452	83.078	82.767	72.473	72.561	72.406
	225	63.350	14.597	82.789	82.856	83.059	82.751	83.100	82.734	83.047	82.882	72.124	72.277	72.091
				82.943	83.746	82.796	83.780	83.431	83.353	83.004	83.106			
13.75	12 45	63.332	83.089	82.325	82.127	82.286	82.176	82.860	82.482	83.038	82.757	72.428	72.543	72.270
	225	63.352	14.596	82.769	82.856	83.070	82.791	83.110	82.744	83.017	82.882	72.050	72.217	72.057
				82.983	83.756	82.796	83.770	83.431	83.353	83.004	83.136			
14.00	13 0	63.336	82.564	82.345	82.107	82.336	82.216	82.870	82.492	83.048	82.787	72.358	72.640	72.309
	225	63.358	14.590	82.829	82.886	83.080	82.801	83.120	82.774	83.027	82.902	72.109	72.572	72.115
				82.983	83.776	82.826	83.770	83.431	83.353	83.004	83.175			
14.25	13 15	63.336	84.156	82.315	82.097	82.316	82.206	82.810	82.442	83.038	82.767	72.397	72.543	72.516
	225	63.357	14.590	82.809	82.876	83.070	82.771	83.090	82.744	83.017	82.862	72.109	72.354	72.021
				82.993	83.776	82.806	83.750	83.421	83.353	82.984	83.145			
14.50	13 30	63.333	83.422	82.305	82.097	82.306	82.256	82.870	82.482	83.038	82.767	72.358	72.513	72.347
	225	63.353	14.585	82.759	82.856	83.039	82.740	83.090	82.754	83.017	82.882	72.196	72.307	72.073
				82.993	83.736	82.796	83.740	83.431	83.343	83.034	83.165			
14.75	13 45	63.337	85.298	82.465	82.157	82.437	82.276	82.910	82.572	83.058	82.877	72.453	72.615	72.403
	225	63.360	14.583	82.839	82.936	83.230	82.821	83.150	82.923	83.097	82.992	72.122	72.316	71.839
				93.042	83.806	82.896	83.750	83.530	83.403	83.103	83.215			
15.00	14 0	63.373	85.670	83.136	82.727	83.050	82.787	83.462	83.123	83.578	83.429	72.538	72.687	72.451
	225	63.394	14.580	83.370	83.447	83.811	83.302	83.510	83.532	83.590	83.533	72.264	72.304	72.079
				93.382	84.137	83.436	83.900	83.967	83.632	83.273	83.773			
15.25	14 15	63.415	84.088	83.296	82.976	83.231	83.017	83.663	83.343	83.808	83.659	72.594	72.734	72.565
	225	63.440	14.581	83.561	83.668	84.011	83.563	83.691	83.702	83.761	83.723	72.264	72.365	72.286
				83.521	84.407	83.616	83.990	84.095	83.741	83.393	83.922			
15.50	14 30	63.433	82.790	83.276	83.026	83.261	83.068	83.693	83.393	83.878	83.669	72.561	72.709	72.565
	225	63.456	14.585	83.641	83.728	84.011	83.613	83.801	83.682	83.802	83.773	72.162	72.451	72.468
				83.551	84.497	83.646	84.039	84.115	83.781	83.452	83.952			
15.75	14 45	63.422	81.943	82.976	82.777	82.989	82.817	83.452	83.143	83.678	83.439	72.489	72.763	72.448
	225	63.446	14.582	83.440	83.507	83.721	83.423	83.641	83.392	83.590	83.533	72.203	72.318	72.149
				83.392	84.377	83.426	84.019	83.947	83.731	83.432	83.693			
16.00	15 0	63.406	83.235	82.935	82.677	82.929	82.747	83.422	83.053	83.598	83.338	72.547	72.709	72.547
	225	63.432	14.583	83.360	83.387	83.671	83.332	83.571	83.353	83.570	83.453	72.187	72.450	72.052
				83.402	84.347	83.346	84.009	83.937	83.731	83.432	83.643			

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RESEARCH & TESTING LABORATORY  
SALEM GEN STA  
INTEGRATED LEAK RATE  
SENSOR READINGS

DATE 07/23/79

TEST STARTING DAY 224

TEST STARTING TIME 23/ 0

READ TIME	REAL TIME & DAY	PRESS SENS PI-1 & PI-2	AMBIENT TEMP & PRESS	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				1 9 17	2 10 18	3 11 19	4 12 20	5 13 21	6 14 22	7 15 23	8 16 24	1 4	2 5	3 6
16.25	15 15 225	63.400 63.425	85.024 14.579	82.986 83.430 83.472	82.737 83.447 83.477	82.979 83.731 83.416	82.787 83.362 84.049	83.432 83.641 83.986	83.093 83.422 83.771	83.598 83.611 83.442	83.409 83.513 83.723	72.536 72.167 72.167	72.729 72.336 72.126	72.493
16.50	15 30 225	63.406 63.432	85.864 14.575	83.096 83.520 83.501	82.817 83.547 84.417	83.050 83.821 83.494	82.887 83.483 84.066	83.552 83.671 83.831	83.203 83.542 83.472	83.688 83.681 83.472	83.499 83.613 83.813	72.538 72.261 72.415	72.660 72.090 72.563	72.563
16.75	15 45 225	63.416 63.440	85.775 14.579	83.206 83.561 83.561	82.887 83.638 84.497	83.180 83.941 83.586	83.972 83.543 84.129	83.613 83.771 84.125	83.273 83.622 83.871	83.788 83.782 83.532	83.599 83.693 83.873	72.540 72.295 72.495	72.734 72.329 72.446	72.446
17.00	16 0 225	63.418 63.442	86.038 14.569	83.276 83.681 83.611	82.976 83.708 84.568	83.251 83.703 83.656	83.068 83.603 84.169	83.703 83.831 84.194	83.393 83.692 83.921	83.868 83.842 83.582	83.669 83.783 83.942	72.606 72.228 72.606	72.793 72.475 72.594	72.594
17.25	16 15 225	63.416 63.440	86.052 14.565	83.306 83.701 83.671	83.036 83.748 84.548	83.301 84.061 83.696	83.098 83.653 84.199	83.733 83.871 84.224	83.423 83.742 83.960	83.888 83.902 83.592	83.709 83.813 83.992	72.644 72.329 72.329	72.831 72.525 72.417	72.417
17.50	16 30 225	63.424 63.447	85.981 14.560	83.336 83.741 83.721	83.036 83.778 84.648	83.291 83.798 83.716	83.138 84.061 84.249	83.753 83.901 84.254	83.423 83.772 83.990	83.918 83.922 83.602	83.740 83.843 83.982	72.536 72.208 72.208	72.723 72.543 72.599	72.599
17.75	16 45 225	63.427 63.449	85.218 14.553	83.336 83.751 83.691	83.026 83.788 84.648	83.301 84.061 83.706	83.098 83.673 84.269	83.773 83.901 84.234	83.433 83.752 84.010	83.918 83.912 83.612	83.730 83.843 83.982	72.541 72.230 72.230	72.750 72.298 72.581	72.581
18.00	17 0 225	63.434 63.456	85.836 14.549	83.286 83.731 83.731	83.066 83.748 84.638	83.291 84.021 83.693	83.128 83.693 84.279	83.743 83.901 84.214	83.393 83.732 84.020	83.898 83.892 83.632	83.719 83.793 83.982	72.635 72.198 72.198	72.783 72.657 72.370	72.370
18.25	17 15 225	63.432 63.453	85.347 14.547	83.256 83.721 83.711	83.016 83.738 84.598	83.261 84.001 83.466	83.088 83.643 84.299	83.733 83.901 84.214	83.393 83.722 84.020	83.858 83.882 83.642	83.719 83.773 83.922	72.563 72.289 72.289	72.727 72.426 72.192	72.453
18.50	17 30 225	63.436 63.458	86.257 14.553	83.276 83.751 83.711	82.976 83.748 84.688	83.221 83.991 83.666	83.098 83.643 84.329	83.733 83.901 84.204	83.363 83.692 84.030	83.878 83.902 83.682	83.689 83.793 83.942	72.617 72.225 72.225	72.725 72.613 72.217	72.525
18.75	17 45 225	63.436 63.458	83.743 14.562	83.226 83.681 83.691	82.957 83.708 84.638	83.221 83.981 83.666	83.057 83.613 84.349	83.713 83.911 84.214	83.373 83.682 84.010	83.858 83.882 83.699	83.699 83.783 83.922	72.666 72.189 72.189	72.750 72.507 72.585	72.585
19.00	18 0 225	63.452 63.475	81.169 14.569	83.196 83.611 83.681	82.957 83.708 84.608	83.211 83.981 83.666	83.068 83.633 84.349	83.713 83.881 84.234	83.343 83.662 84.000	83.858 83.892 83.672	83.649 83.753 83.902	72.610 72.320 72.320	72.736 72.585 72.626	72.626
19.25	18 15 225	63.429 63.454	82.217 14.573	83.206 83.621 83.661	82.917 83.698 84.618	83.190 83.971 83.636	83.057 83.593 84.359	83.693 83.861 84.214	83.343 83.642 84.010	83.848 83.842 83.652	83.649 83.753 83.892	72.576 72.199 72.199	72.790 72.327 72.270	72.554

 Attachment 4  
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INTEGRATED & TESTING LABORATORY  
SALEM GEN S  
INTEGRATED LEAK RATE TEST  
SENSOR READING

DATE 8/13/1984

TEST DAY 224

TEST STARTING TIME 23/ 0

READ TIME 8 DAY	REAL TIME PT-1 PI-2	PRESS SENS TEMP PRESS	AMBIENT 6 17	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS		
				1	2	3	4	5	6	7	8	1	2	3
				9	10	11	12	13	14	15	16	4	5	6
19.50 18 30	63.426	79.895		83.166	82.897	83.170	82.997	83.663	83.313	83.838	83.619	72.612	72.723	72.581
225	63.450	14.578		83.611	83.668	83.951	83.563	83.861	83.602	83.892	83.723	72.297	72.417	72.307
				83.651	84.608	83.626	84.369	84.214	83.970	83.692	83.883			
19.75 18 45	63.425	76.634		83.126	82.897	83.160	83.037	83.663	83.293	83.848	83.609	72.597	72.716	72.570
225	63.450	14.590		83.601	83.658	83.941	83.553	83.821	83.592	83.872	83.733	72.320	72.473	72.345
				83.631	84.628	83.626	84.379	84.194	83.990	83.642	83.853			
20.00 19 0	63.423	78.548		83.146	82.857	83.150	82.997	83.643	83.303	83.848	83.599	72.646	72.772	72.633
225	63.448	14.592		83.621	83.668	83.931	83.563	83.841	83.582	83.852	83.733	72.270	72.460	72.144
				83.671	84.608	83.626	84.379	84.194	83.990	83.662	83.863			
20.25 19 15	63.422	76.751		83.126	82.857	83.120	82.977	83.643	83.283	83.798	83.589	72.579	72.801	72.684
225	63.447	14.594		83.571	83.648	83.901	83.533	83.851	83.572	83.822	83.693	72.192	72.493	72.289
				83.611	84.558	83.576	84.399	84.185	83.980	83.702	83.823			
20.50 19 30	63.435	77.510		83.096	82.857	83.100	82.977	83.613	83.243	83.798	83.579	72.705	72.766	72.599
225	63.461	14.598		83.581	83.628	83.901	83.513	83.781	83.562	83.842	83.683	72.243	72.487	71.845
				83.611	84.568	83.586	84.409	84.185	83.970	83.662	83.823			
20.75 19 45	63.416	79.553		83.076	82.857	83.060	82.947	83.633	83.243	83.788	83.559	72.599	72.712	72.426
225	63.441	14.605		83.531	83.628	83.861	83.513	83.801	83.542	83.812	83.663	72.340	72.549	72.333
				83.631	84.497	83.576	84.379	84.175	83.990	83.682	83.813			
21.00 20 0	63.414	80.736		83.176	82.837	83.140	82.967	83.633	83.283	83.818	83.589	72.626	72.801	72.712
225	63.439	14.604		83.571	83.638	83.951	83.553	83.801	83.632	83.842	83.733	72.318	72.599	72.304
				83.631	84.588	83.606	84.419	84.214	84.000	83.662	83.843			
21.25 20 15	63.440	80.108		83.326	83.086	83.321	83.158	83.803	83.463	83.968	83.760	72.657	72.849	72.675
225	63.465	14.607		83.741	83.828	84.082	83.713	83.961	83.752	84.003	83.863	72.291	72.513	72.473
				83.781	84.688	83.776	84.449	84.303	84.050	83.682	84.022			
21.50 20 30	63.429	78.753		83.146	82.907	83.160	83.027	83.683	83.313	83.868	83.599	72.666	72.833	72.570
225	63.454	14.609		83.601	83.698	83.921	83.563	83.851	83.582	83.842	83.733	72.225	72.412	72.266
				83.671	84.618	83.616	84.469	84.214	83.990	83.672	83.853			
21.75 20 45	63.418	78.609		83.126	82.887	83.130	83.007	83.683	83.283	83.828	83.589	72.585	72.786	72.640
225	63.444	14.611		83.541	83.648	83.901	83.533	83.841	83.592	83.872	83.713	72.410	72.574	72.262
				83.651	84.638	83.606	84.459	84.204	84.010	83.692	83.843			
22.00 21 0	63.438	79.495		83.146	82.877	83.110	83.007	83.653	83.313	83.818	83.619	72.646	72.774	72.597
225	63.463	14.606		83.581	83.668	83.921	83.533	83.821	83.592	83.862	83.713	72.284	72.527	72.518
				83.611	84.578	83.606	84.439	84.224	83.990	83.662	83.853			
22.25 21 15	63.420	76.346		83.156	82.887	83.120	82.997	83.663	83.283	83.838	83.589	72.633	72.871	72.554
225	63.445	14.610		83.561	83.658	83.931	83.583	83.851	83.592	83.872	83.713	72.396	72.603	72.208
				83.651	84.598	83.616	84.469	84.214	83.990	83.692	83.863			
22.50 21 30	63.419	78.634		83.156	82.907	83.140	83.017	83.653	83.283	83.868	83.599	72.675	72.748	72.556
225	63.445	14.614		83.601	83.678	83.921	83.543	83.821	83.602	83.862	83.733	72.365	72.554	72.442
				83.631	84.638	83.616	84.479	84.224	84.010	83.692	83.873			

Attachment 4  
Page 13 of 23

RESEARCH & TESTING LABORATORY  
SALEM GEN S.  
INTEGRATED LEAK RATE TEST  
SENSOR READING

DATE 8/13/1984

TEST STARTING DAY 224

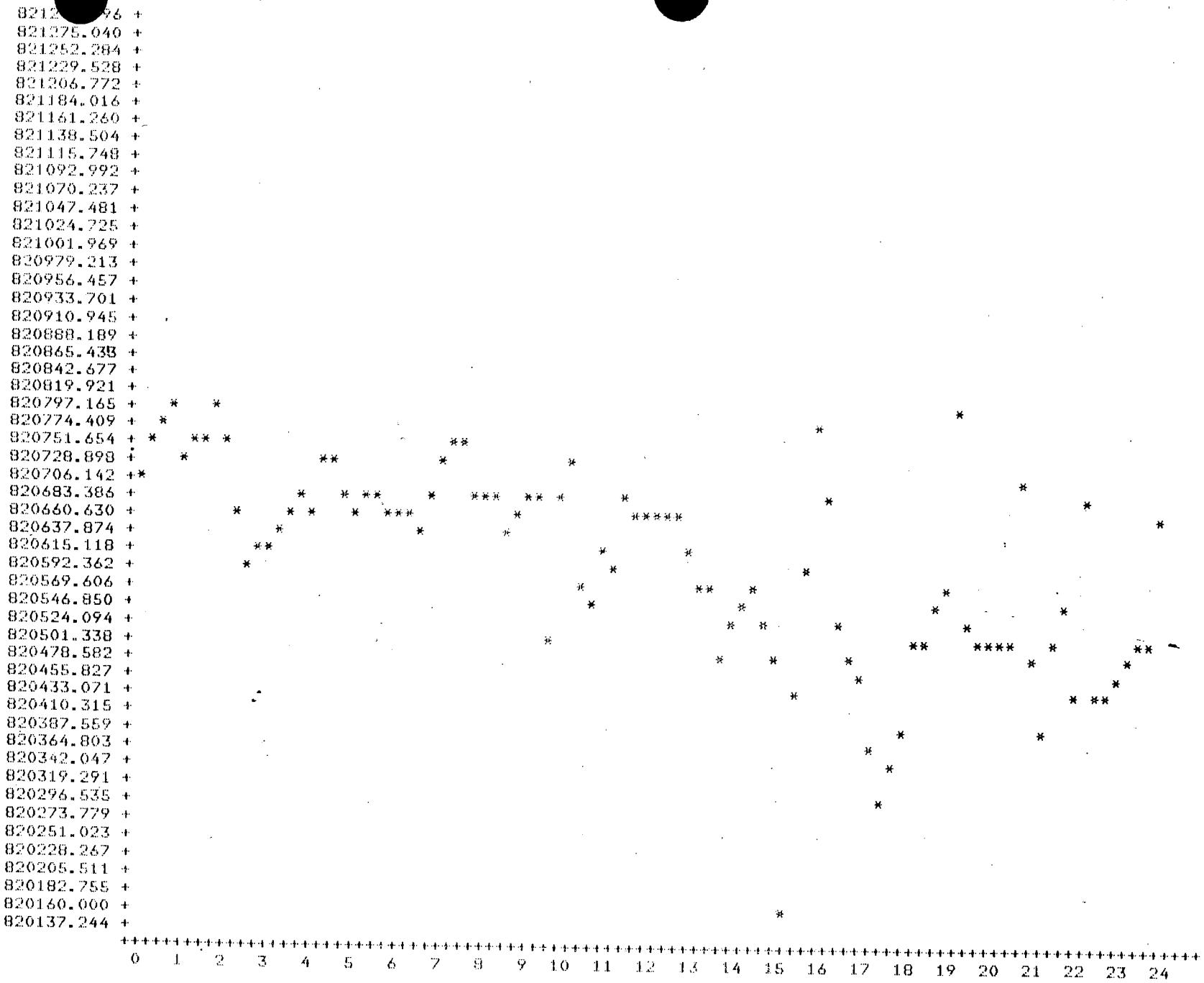
TEST STARTING TIME 23/ 0

READ TIME & DAY	REAL TIME SENS & PI-1 PI-2	PRESS TEMP & PRESS	AMBIENT	TEMPERATURE SENSORS (RTD'S)								DEW POINT SENSORS					
				1	2	3	4	5	6	7	8	1	2	3	4	5	6
				9	10	11	12	13	14	15	16	23	24				
22.75	21 45	63.421	79.918	83.156	82.897	83.140	82.997	83.653	83.293	83.848	83.609	72.649	72.772	72.658			
	225	63.446	14.610	83.541	83.638	83.951	83.543	83.831	83.582	83.852	83.723	72.381	72.572	72.169			
				83.651	84.628	83.626	84.489	84.214	84.000	83.702	83.892						
23.00	22 0	63.421	79.812	83.096	82.897	83.080	82.967	83.633	83.263	83.838	83.559	72.761	72.873	72.594			
	225	63.447	14.613	83.551	83.628	83.901	83.533	83.821	83.552	83.842	83.673	72.354	72.504	72.541			
				83.641	84.638	83.619	84.319	84.214	84.000	83.652	83.833						
23.25	22 15	63.420	79.765	83.076	82.797	83.060	82.927	83.583	83.213	83.818	83.529	72.761	72.903	72.592			
	225	63.444	14.618	83.531	83.608	83.841	83.503	83.811	83.522	83.802	83.673	72.370	72.543	72.316			
				83.621	84.618	83.546	84.499	84.155	84.000	83.692	83.793						
23.50	22 30	63.416	80.635	83.006	82.787	82.989	82.897	83.593	83.183	83.768	83.489	72.714	72.869	72.550			
	225	63.439	14.619	83.490	83.598	83.821	83.483	83.791	83.492	83.782	83.613	72.325	72.633	72.244			
				83.601	84.608	83.526	84.469	84.125	83.960	83.712	83.793						
23.75	22 45	63.423	79.569	83.006	82.757	83.000	82.877	83.522	83.163	83.748	83.459	72.664	72.817	72.727			
	225	63.450	14.618	83.430	83.537	83.791	83.453	83.751	83.452	83.741	83.593	72.378	72.552	72.295			
				83.551	84.558	83.486	84.469	84.125	83.951	83.642	83.743						
24.00	23 0	63.407	80.020	82.986	82.747	82.949	82.887	83.522	83.133	83.678	83.429	72.621	72.799	72.509			
	225	63.432	14.619	83.410	83.497	83.751	83.423	83.731	83.422	83.731	83.563	72.345	72.399	72.482			
				83.551	84.517	83.456	84.469	84.076	83.911	83.612	83.723						

 Attachment 4  
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RESEARCH & TESTING LABORATORY  
Salem CEN STA Integrated Peak Rate Test  
MASS PLOT

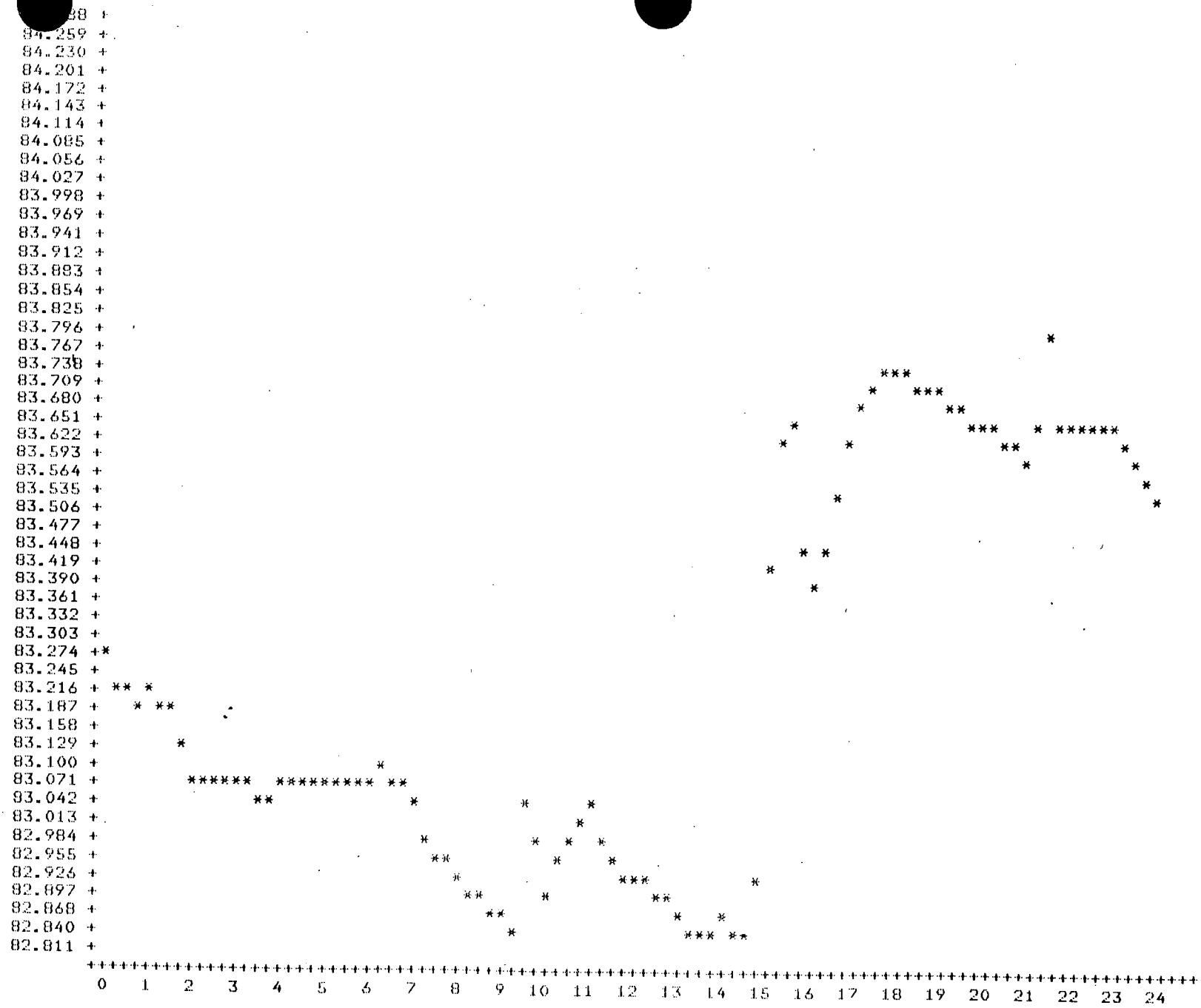
DATE 8 / 13 / 1984



Time (Hours)

RESEARCH & TESTING LABORATORY  
Salem GEN STA Integrated leak Rate Test  
TEMPERATURE DATA

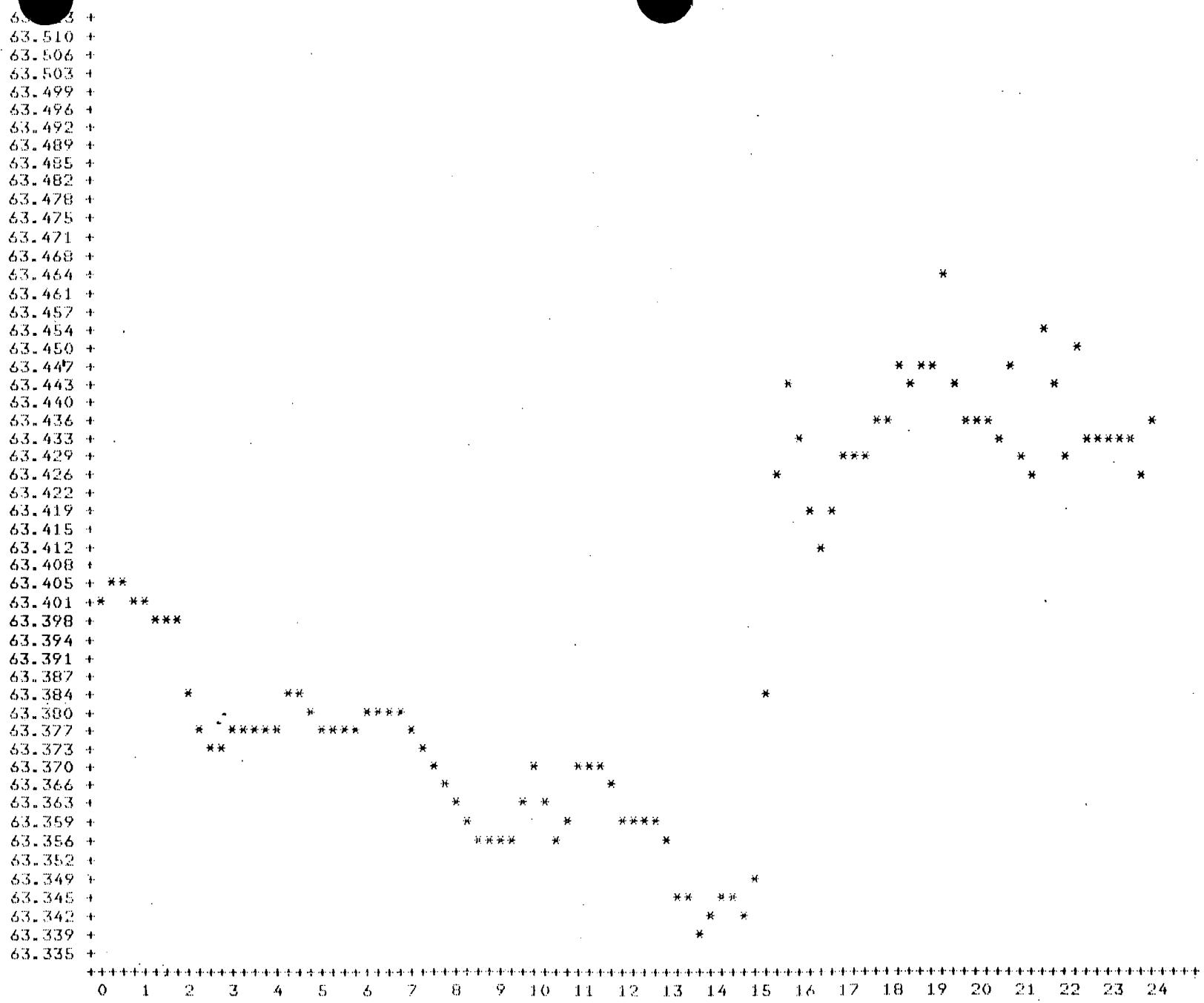
DATE 8 / 13 / 1984



RESEARCH & TESTING LABORATORY  
Salem GEN STA Integrated Peak Rate Test  
PRESSURE PLOT

DATE 8 / 13 / 1984

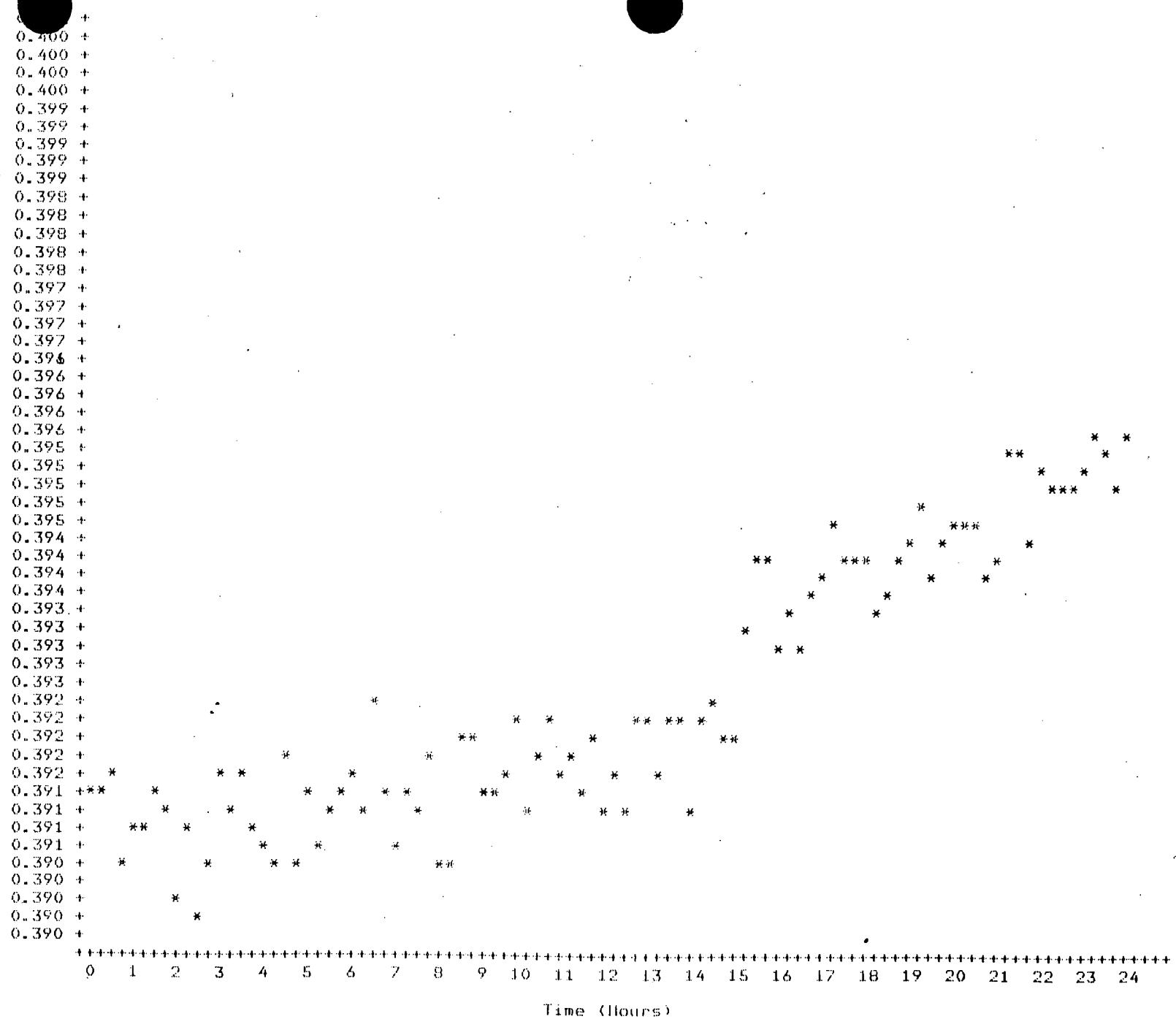
Attachment 4  
Page 17 of 23



RESEARCH & TESTING LABORATORY  
Salem CEN STA Integrated Vapor Rate Test  
VAPOR PRESSURE PI

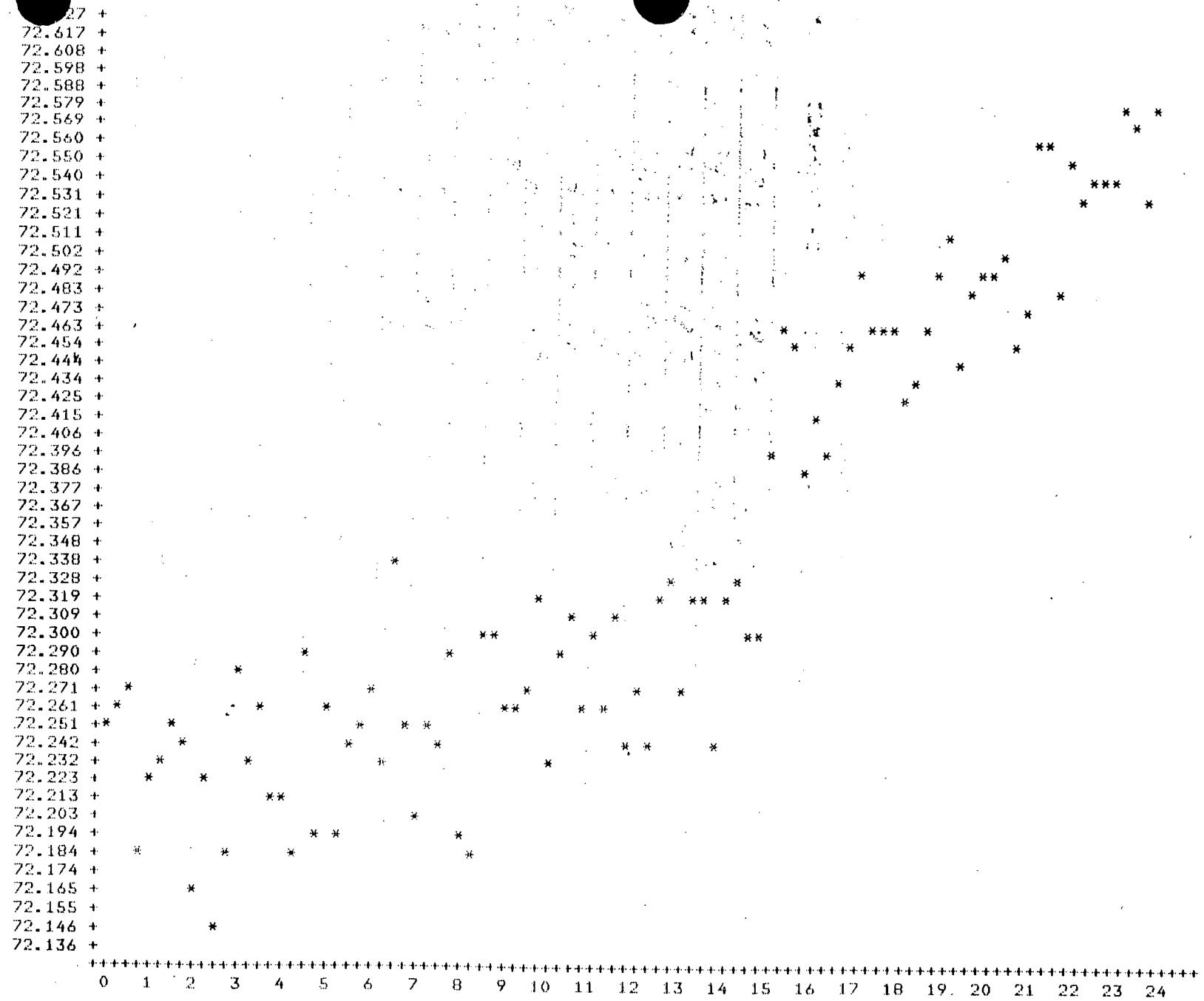
DATE 8 / 13 / 1984

Attachment 4  
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RESEARCH & TESTING LABORATORY  
Salem GEN STA Integrated leak Rate Test  
DEW POINT TEMPERATURE PLOT

DATE 8 / 13 / 1984



### 1.0 SITE METEOROLOGY PRIOR TO AND DURING CILRT

NOTE: Those data that are obtained and recorded by the installed CILRT data acquisition system does NOT have to be duplicated. A computer printout of those data shall be appended to the applicable sections of the data Sheets and serve as an official record.

DATE	DRY BULB TEMPERATURE F°	DEW POINT C	BAROMETRIC PRESSURE	REMARKS
213 7-31-84 2000	77.6	18.7	14.67	
214 8-1-84 0000	74.2	16.1	14.73	
214 8-1-84 0400	72.5	18.7	14.72	
214 8-1-84 0800	72.9	19.5	14.72	
214 8-1-84 1200	81.4	19.5	14.71	
214 8-1-84 1600	81.3	21.6	14.70	
214 8-1-84 2000	79.2	22.3	14.71	
215 8-2-84 0000	78.0	21.9	14.71	
215 8-2-84 0400	76.7	21.9	14.71	
215 8-2-84 0800	76.7	22.4	14.73	
215 8-2-84 1200	81.8	22.5	14.72	
215 8-2-84 1600	85.1	21.6	14.70	
215 8-2-84 2000	82.0	23.0	14.71	
216 8-3-84 0000	74.8	21.8	14.70	
216 8-3-84 0400	75.8	21.9	14.69	
216 8-3-84 0800	76.3	21.7	14.69	
216 8-3-84 1200	81.6	21.4	14.67	
216 8-3-84 1600	83.5	21.5	14.67	
216 8-3-84 2000	81.2	21.8	14.65	

### 1.0 SITE METEOROLOGY PRIOR TO AND DURING CILRT

NOTE: Those data that are obtained and recorded by the installed CILRT data acquisition system does NOT have to be duplicated. A computer printout of those data shall be appended to the applicable sections of the data Sheets and serve as an official record.

	DATE TIME	DRY BULB TEMPERATURE	DEW POINT	BAROMETRIC PRESSURE	REMARKS
217	8-4-84 0000	78.7	22.6	14.65	
217	8-4-84 0400	76.0	20.9	14.64	
217	8-4-84 0800	75.8	21.3	14.64	
217	8-4-84 1200	82.4	20.8	14.65	
217	8-4-84 1600	85.8	19.4	14.63	
217	8-4-84 2000	79.7	29.9*	14.65	
218	8-5-84 0000	76.3	22*	14.65	
218	8-5-84 0400	75.9	21*	14.65	
218	8-5-84 0800	75.8	21*	14.65	
218	8-5-84 1200	80.3	20.9	14.65	
218	8-5-84 1600	82.3	20.6	14.64	
218	8-5-84 2000	78.2	20.8	14.65	
219	8-6-84 0000	75.4	20.2	14.67	
219	8-6-84 0400	73.6	19.6	14.67	
219	8-6-84 0800	73.7	19.6	14.67	
219	8-6-84 1200	82.3	20.6	14.66	
219	8-6-84 1600	85.7	19.4	14.63	
219	8-6-84 2000	83.2	21.2*	14.63	
220	8-7-84 0000	79.6	21.8	14.63	

\* DEW POINT INSTRUMENT THERM. PINCHED G.D. *200*

1.0 SITE METEOROLOGY PRIOR TO AND DURING CILRT

NOTE: Those data that are obtained and recorded by the installed CILRT data acquisition system does NOT have to be duplicated. A computer printout of those data shall be appended to the applicable sections of the data Sheets and serve as an official record.

DATE TIME	DRY BULB TEMPERATURE	DEW POINT	BAROMETRIC PRESSURE	REMARKS
784) 220 0400	77.3	20.2	14.60	
0800	78.0	24.67	14.60	
1200	85.4	24.8	14.57	
1600	85.5	28.19	14.50	
2000	77.23	21.42	14.56	
2400	77.1	21.75	14.57	
784) 221 0400	74.8		14.57	
0800	75.2	19.7	14.58	
1200	83.4	19.3	14.6	
1600	88.2	18.7	14.6	
2000	84.4	21.3	14.6	
9, 222 0001	82.7	20.2	14.6	
0400	78.7	21.1	14.6	
0800	81.3	21.3	14.6	
1200				
1600	85.68	21.9	14.57	
2000	82.96	21.0	14.58	
0001	79.8	20.3	14.59	
0400	77.54	20.0	14.57	

1.0 SITE METEOROLOGY PRIOR TO AND DURING CILRT

NOTE: Those data that are obtained and recorded by the installed CILRT data acquisition system does NOT have to be duplicated. A computer printout of those data shall be appended to the applicable sections of the data Sheets and serve as an official record.

DATE	DRY BULB TEMPERATURE	DEW POINT	BAROMETRIC PRESSURE	REMARKS
223	0800 78.59	20.40	14.60	
	1200 81.24	20.44	14.62	
	1600 82.99	19.76	14.59	
	2000 79.88	22.23	14.61	
224	0000 78.01	21.22	14.59	
	0400 78.68	21.71	14.56	
	0800 77.00	20.04	14.56	
	1200 82.38	19.49	14.57	
225	1600 84.87	20.89	14.54	
	2000 77.60	22.21	14.55	
	0000 80.00	22.40	14.58	
	0400 77.61	21.36	14.59	
226	0800 80.53	23.23	14.60	
	1200 84.89	21.56	14.60	
	1600 86.48	21.36	14.57	
	2000 81.17	23.26	14.60	
227	0000 80.80	23.48	14.62	
	0400 79.63	22.14	14.63	
	0800 80.94	23.18	14.66	

**Instrument Verification Test  
Mass Step Change Method**

To verify the accuracy of the instrumentation employed to measure the leakage rate during the CILRT, 100% of the allowable leakage ( $L_a$ ) was removed thru a gas meter from the containment. The mass of air removed from the containment is calculated as follows:

$$M = 144 PV/RT$$

Where,

$V$  = Volume of air passing thru the gas meter during mass step change

$P$  = Gas meter inlet pressure - psia

$T$  = Absolute temperature of the air passing through the gas meter

459.69 + °F

$R$  = Gas constant

= 53.35 ft lbf/lbm °F

$M$  = Mass as determined by gas meter

Attachment 5

Page 2 of 5

The mass of contained air ( $M_2$ ) shall then be calculated using the method employed during the Integrated Leakage Rate Test. The air mass ( $M_1$ ) that had been in the containment before removing the air from the containment.

The difference between  $M_1$  and  $M_2$  will be the mass of air removed from the containment.

Acceptance Criteria

Results of this test will be considered acceptable provided the difference between the removed mass as measured by the Type A test instrumentation agrees with the removed mass as determined by the gas meter is within 25% of  $L_a$ .

$$\text{i.e. } M - (M_1 - M_2) \leq 0.25 L_a$$

The following is the computer printout of the verification test.

SALEM GEN STA  
VERIFICATION TEST  
MASS STEP CHANGE

Attachment 5  
Page 3 of 5

ILRT INSTRUMENTATION

FLOW METER

TIME hour	AIR f	D.P. f	PRES psia	MASS lbm	MASS lbm	GAS read	GAS cuf t	MASS lbm	MASS lbm
0225	83.45	72.54	63.43	820669.1	0.0	20853.3	0.0	0.0	0.0
0230	83.44	72.55	63.42	820659.1	-10.0	20995.0	141.7	44.7	-34.7
0235	83.44	72.53	63.42	820625.6	-43.5	21169.7	316.4	99.7	-56.2
0240	83.44	72.64	63.42	820562.7	-106.4	21405.0	551.7	173.9	-67.5
0245	83.43	72.60	63.41	820500.7	-168.4	21632.0	778.7	245.4	-77.0
0250	83.42	72.64	63.41	820434.9	-234.2	21848.0	994.7	313.5	-79.3
0255	83.42	72.57	63.40	820377.4	-291.7	22059.1	1205.8	379.9	-88.2
0300	83.42	72.63	63.40	820307.4	-361.7	22283.1	1429.8	450.5	-88.8
0305	83.43	72.58	63.39	820256.7	-412.4	22508.0	1654.7	521.3	-108.9
0310	83.43	72.58	63.39	820163.9	-505.2	22733.0	1879.7	592.2	-87.0
0315	83.43	72.59	63.38	820074.0	-595.1	22958.5	2105.2	663.1	-68.0
0320	83.43	72.57	63.38	820077.4	-591.7	23183.5	2330.2	734.0	-142.3
0325	83.43	72.58	63.37	819968.8	-700.3	23415.8	2562.5	807.0	-106.7

DATE 8/13/1984

TEST STARTING DAY 226

SALEM GEN. STA.  
INTEGRATED LEAKAGE RATE TEST  
Verification

TEST STARTING TIME 0 : 55

READ TIME (Hrs)	REAL TIME (Hr/Mn)	AMBIENT TEMP (DegF)	AUG CONT TEMP (DegF)	AUG DEW PT (DegF)	AUG VAPOR TEMP (DegF)	AUG CONT PRESS (Psia)	AUG CONT PRESS (Psia)	CONT MASS (Lbm)	CALC LEAK RATE (Lbm/Hr)	95 % CONFIDENCE LEVEL (%/Day)	CALC INITIAL MASS (Lbm)
0.60	0 55	80.11	14.62	83.453	72.567	0.395	63.411	820453.8			
0.25	1 0	80.48	14.61	83.458	72.605	0.396	63.410	820433.2			
0.50	1 5	79.70	14.61	83.463	72.580	0.396	63.411	820436.2			
0.25	1 10	79.94	14.62	83.457	72.541	0.395	63.412	820436.2			
1.00	1 15	80.00	14.61	83.462	72.544	0.395	63.411	820440.7			
1.25	1 20	80.41	14.62	83.463	72.571	0.396	63.411	820440.7			
1.50	1 25	80.08	14.61	83.459	72.582	0.396	63.410	820435.6			
1.75	1 30	79.84	14.61	83.443	72.568	0.395	63.410	820435.3			
2.00	1 35	79.82	14.62	83.438	72.595	0.396	63.417	820549.1			
2.25	1 40	79.22	14.62	83.426	72.595	0.396	63.410	820483.3			
2.50	1 45	78.99	14.61	83.407	72.581	0.396	63.408	820480.5			
2.75	1 50	79.66	14.62	83.406	72.590	0.396	63.405	820449.4			
3.00	1 55	79.65	14.61	83.397	72.521	0.395	63.404	820461.1			
3.25	2 0	79.73	14.61	83.401	72.610	0.396	63.414	820570.2	10.539 0.030	-58.252 0.232	820490.6
3.50	2 5	79.78	14.61	83.409	72.622	0.396	63.425	820499.6	16.529 0.048	-41.420 0.217	820483.6
3.75	2 10	79.72	14.62	83.423	72.627	0.396	63.428	820461.0	34.601 0.101	-19.531 0.259	820461.0
4.00	2 15	79.32	14.62	83.434	72.605	0.396	63.428	820416.7	47.197 0.138	-1.973 0.281	820444.2
4.25	2 20	79.66	14.62	83.445	72.627	0.396	63.422	820204.7	53.523 0.156	10.203 0.283	820435.2
4.50	2 25	80.14	14.62	83.455	72.548	0.395	63.422	820670.6	54.142 0.150	16.164 0.269	820434.3
4.75	2 30	79.49	14.62	83.444	72.551	0.395	63.425	820669.1	53.522 0.156	19.950 0.254	820435.3
5.00	2 35	80.07	14.62	83.448	72.632	0.396	63.424	820659.1	51.602 0.150	21.624 0.238	820438.5
5.25	2 40	80.77	14.62	83.441	72.642	0.396	63.419	820162.7	47.553 0.139	20.249 0.218	820445.6
5.50	2 45	80.77	14.62	83.435	72.600	0.396	63.413	820500.7	40.666 0.118	14.692 0.194	820458.2
5.75	2 50	80.90	14.62	83.426	72.645	0.396	63.407	820434.9	32.073 0.093	6.369 0.169	820474.7
6.00	2 55	80.64	14.62	83.429	72.573	0.396	63.402	820377.4	22.325 0.065	-3.831 0.141	820494.2
6.25	3 0	79.54	14.62	83.429	72.639	0.396	63.398	820302.4	12.297 0.035	-14.455 0.114	820515.1
6.50	3 5	80.10	14.62	83.430	72.595	0.396	63.393	820256.7	1.791 0.005	-25.776 0.085	820537.9
6.75	3 10	79.79	14.62	83.431	72.581	0.396	63.384	820163.9	-8.218 0.024	-36.266 0.106	820560.3
7.00	3 15	79.44	14.62	83.433	72.596	0.396	63.380	820074.0	-19.042 0.095	-47.974 0.140	820585.6
7.25	3 20	79.20	14.62	83.433	72.575	0.396	63.386	820077.4	-30.224 0.088	-60.139 0.175	820612.6
7.50	3 25	79.28	14.62	83.434	72.589	0.396	63.372	819960.6	-38.944 0.113	-68.601 0.200	820634.4
7.75	3 30	79.11	14.62	83.446	72.624	0.396	63.366	819971.7	-48.585 0.142	-78.475 0.229	820659.3
8.00	3 35	79.13	14.63	83.459	72.607	0.396	63.366	819955.1	-58.531 0.171	-88.818 0.259	820685.8
									-66.789 0.195	-96.737 0.282	820708.5

Attachment 5  
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Attachment 5

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Volume of air removed	2562.5 ft <sup>3</sup>
Mass of air removed (M)	807.-lbm
ILRT Instrumentation Calculated	
Air Mass after air removed (M <sub>1</sub> )	820669.1 lbm
ILRT Instrumentation Calculated	
Air Mass after air removed (M <sub>2</sub> )	819968.8 lbm
Difference in Mass of air M-(M <sub>1</sub> -M <sub>2</sub> )	106.7 lbm
Acceptance Criteria	
M(M <sub>1</sub> -M <sub>2</sub> ) 0.25 L <sub>a</sub>	206.7 lbm

Attachment 6

**Index of Type "C" As Found Summary**

	<u>Page</u>
1982 Outage	1-7
1984 Outage	8-14

As found leakage rates have been reviewed in relation to the results of the first inservice CILRT and at no time was the overall integrated leak rate of  $L_a$  exceeded.

The Generator Blowdown valves are listed in the Type "C" As Found Summary, however, their leak rate is not shown or considered in the totals. This is in accordance with 10CFR50 Appendix J requirements.

OCTOBER 19 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>	<u>OUTSIDE VALVES</u>	PEN.	SCCM AS FOUND	ALLOWABLE LEAKAGE	COMMENTS
1CS900	1CS901,1CS902,1CS903	56A	-0-	97.0	10-21-82
	11CA330	56	3660	518.0	11-28-82
	12CA330	23A	1803.0	518.0	11-4-82
	1CC113	35	10.0	777.0	10-27-82
	1CC215	34	20,000	777.0	Close sys. inside & out
	1CC117	1CC118	32	40.0	1554.0
1CC190 & 1CC208	1CC131	39	-0-	777.0	11-8-82
1CC187 & 1CC186	1CC136	33	1730	1554.0	11-27-82

OCTOBER 19 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1CV3 & 1CV4 & 1CV5							
		1CV7		17A	55	518.0	12-8-82
1CV74		(1CV68 <u>or</u> 1CV69)		36	2830	777.0	12-10-82
1CV284 & 1CV296		1CV116		37	117	1036.0	12-22-82
1DR30		1DR29		22	13.0	1036.0	10-28-82
1FP148		1FP147		57	1803.0	1554.0	11-27-82
		11GB4		14	-0-	777.0	Close Sys. inside 10-30-82
		12GB4		12	-0-	777.0	Close Sys. inside 10-30-82

OCTOBER 1982 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
			13GB4	15	-0-	777.0	Close Sys. inside 10-30-82
			14GB4	13	-0-	777.0	Close Sys. inside 10-30-82
1NT26			1NT25	21	150.0	194.0	11-4-82
1NT34			1NT32	21B	48.0	259.0	10-29-82
1PR17			1PR18	18C	104.0	97.0	10-21-82
1SJ123			1SJ53 & 1SJ60	25	-0-	194.0	11-3-82
1SS103			1SS27	25A	127.0	97.0	10-26-82
1SS107			1SS49	18A	1.0	97.0	10-26-82

OCTOBER 1982 OUTAGE  
OUTAGE TYPE "C" AND LEAK SUMMARY

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>	PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1SS110		1SS64	18B	4.0	97.0	10-26-82
11SS93		11SS94	62	93.0	97.0	11-6-82
12SS93		12SS94	62A	19.0	97.0	11-8-82
13SS93		13SS94	63	81.0	97.0	11-2-82
14SS93		14SS94	63A	435.0	97.0	10-21-82
11SS182		11SS181	E-36	350	194.0	11-11-82
11SS188		11SS189	E-36	243	194.0	11-9-82
11SS104		1SS33	18	6	97.0	11-5-82
13SS182		13SS181	E-30	150	194.0	11-11-82
13SS184		13SS185	E-30	18	194.0	11-10-82

OCTOBER 1982 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
		1SS901	1SS900	17	4	32.0	11-22-82
1SA119			1SA118	23B	539.0	777.0	10-20-82
1SA270			1SA268	61	143.0	259.0	10-21-82
1SA267			1SA265	61A	-0-	194.0	10-20-82
1SA264			1SA262	61B	-0-	194.0	10-20-82
1VC2			1VC1	19	-0-	2590.0	10-21-82
1VC3			1VC4	20	-0-	2590.0	10-21-82
1VC6			1VC5	40	-0-	2590.0	10-21-82

OCTOBER 19 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>	<u>OUTSIDE VALVES</u>	PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1VC7		1VC8	E-22	20,000	194.0
1VC11		1VC12	E-22	252.0	388.0
12VC19		12VC17	E-30		10-30-82
12VC20		12VC18	E-30	46.0	194.0
1VC9		1VC10	E-22	1,212.0	194.0
1VC13		1VC14	E-22	5.0	194.0
11VC19		11VC17	E-36	2.0	194.0
11VC20		11VC18	E-36	75.0	194.0
1WL12		1WL13	27	24.0	777.0
1WL16		1WL17	45	0.0	777.0
1WL96		1WL97	18D	5.0	194.0
1WL98		1WL99 & 1WL108	21A	-0-	259.0
					11-1-82

OCTOBER 1981 OUTAGE  
OUTAGE TYPE "C" AS FOUND SUMMARY

<u>INSIDE VALVES</u>	<u>OUTSIDE VALVES</u>		<u>SCCM AS FOUND</u>	<u>ALLOW LEAK</u>	<u>ALLOWABLE LEAKAGE</u>	<u>COMMENTS</u>
1WL190		1SF36	66A	-0-	777.0	11-5-82
1WL191		1SF22	66	-0-	777.0	11-5-82
1WL81		1WR80	22A	10.0	777.0	10-26-82
11CS48		11CS2	43	270.0	2072.0	11-24-82
12CS48		12CS2	44	1520.0	2072.0	11-24-82
			TOTAL	57,917		
	117 Valves					

**UNIT 1 198 OUTAGE**  
**OUTAGE TYPE "C" FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOWABLE LEAKAGE	COMMENTS
1CS900 (3)		1CS901, 1CS902, 1CS903 (0) (0) (0)		56A	0	97.0	4-25-84
11CA360 (26.4)			11CA330	56	26.4	518.0	3-13-84
12CA360 (293)			12CA330	23A	293	518.0	4-25-84
			1CC113	35	260	777.0	3-27-84
			1CC215	34	260	777.0	Close sys inside & out 3-27-84
1CC119 (0)		1CC117 (0)	1CC118 (76)	32	0	1554.0	
1CC190 & 1CC208 (1903)			1CC131 (175)	39	175	777.0	3-27-84
1CC187 & 1CC186 (1100)			1CC136 (14)	33	14	1554.0	3-26-84

Attachment 6  
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**UNIT 1 1984 OUTAGE**  
**OUTAGE TYPE "C" AS FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1CV3 & 1CV4 & 1CV5 (8150)			1CV7 (550)	17A	550	518.0	4-5-84
1CV74 (850)		1CV68 or 1CV69 (367)		36	367	777.0	6-12-84
1CV284 & 1CV296 (3200)		1CV116 (0)	37	0	1036.0		
							4-17-84
1DR30 (3)		1DR29 (6)	22	3	1036.0		6-3-84
1FP148 (118)		1FP147 (4950)	57	118	1554.0		4-26-84
		11GB4 (76350)	14	0	777.0	3-7-84 CLS. SYS. INSIDE	
		12GB4 (64700)	12	0	777.0	3-7-84 CLS. SYS. INSIDE	
		13GB4 (40200)	15	0	777.0	3-7-84 CLS. SYS. INSIDE	

**UNIT 1 1984 OUTAGE**  
**OUTAGE TYPE "C" AS FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
			14GB4 (4265)	13	0	777.0	Close sys. inside
1NT26 (2167)			1NT25 (55)	21	55	194.0	5-5-84
1NT34 (150)			1NT32 (61)	21B	61	259.0	3-19-84
1PR17 (0)			1PR18 (0)	18C	0	97.0	5-30-84
1SJ123 (0)			1SJ53 & 1SJ60 (0)	25	0	194.0	
							5-4-84
1SS103 (0)			1SS27 (14)	25A	0	97.0	5-2-84
1SS107 (19)			1SS49 (18)	18A	18	97.0	3-17-84
1SS110 (0)			1SS64 (0)	18B	0	97.0	5-16-84
11SS93 (0)			11SS94 (0)	62	0	97.0	3-16-84

**UNIT 1 1984 OUTAGE**  
**OUTAGE TYPE "C" AS FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
12SS93 (75)			12SS94 (76)	62A	75	97.0	3-15-84
13SS93 (0)			13SS94 (8)	63	0	97.0	3-16-84
14SS93 (11)			14SS94 (0)	63A	0	97.0	3-15-84
11SS182 (1630)			11SS181 (40)	E-36	40	194.0	3-24-84
11SS188 (0)			11SS189 (0)	E-36	0	194.0	6-6-84
11SS104 (15)			1SS33 (35)	18	15	97.0	5-22-84 6-6-84
13SS182 (11640)			13SS181 (12)	E-30	12	194.0	3-24-84
13SS184 (26)			13SS185 (5)	E-30	5	194.0	3-24-84
	1SS901 (0)		1SS900 (0)	17	0	32.0	5-24-84
1SA119 (>20,000)			1SA118 (3660)	23B	3660	777.0	3-6-84
1SA270 (250)			1SA268 (30)	61	30	259.0	4-23-84

**UNIT 1 1984 OUTAGE**  
**OUTAGE TYPE "C" / FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1SA267 (250)			1SA265 (30)	61A	30	194.0	4-23-84
1SA264 (250)			1SA262 (30)	61B	30	194.0	4-23-84
1VC2			1VC1	19	1300	2590.0	3-8-84
1VC3			1VC4	20	1120	2590.0	3-8-84
1VC6			1VC5	40	270	2590.0	3-8-84
1VC7 (68)			1VC8 (4465)	E-22	68	194.0	3-14-84 closed sys. out- side 3/14/84
1VC11 (14.2)			1VC12 (28.3)	E-22	14.2		
12VC19 (>20,000)			12VC17 (26.8)	E-30	26.8	388.0	3/14/84
12VC20 (11)			12VC18 (16,663)	E-30	11	194.0	3/14/84
1VC9 (0)			1VC10 (33)	E-22	0	194.0	3/10/84
1VC13 (0)			1VC14 (1)	E-22	0	194.0	3/10/84
11VC19 (0)			11VC17 (14.4)	E-36	0	194.0	3/12/84
11VC20 (4.5)			11VC18 (9.2)	E-36	4.5	194.0	3/12/84

**UNIT 1 1984 OUTAGE**  
**OUTAGE TYPE "C" - FOUND SUMMARY**

<u>INSIDE VALVES</u>		<u>OUTSIDE VALVES</u>		PEN.	SCCM AS FOUND	ALLOW LEAK	COMMENTS
1WL12 (60)			1WL13 (15)	27	15	777.0	5/30/84
1WL16 (887)			1WL17 182	45	182	777.0	6/22/84
1WL96 (94,500)			1WL97 0	18D	0	194.0	5/24/84
1WL98 (1)			1WL99 & 1WL108 (2)	21A	1	259.0	6/11/84
							6/11/84
1WL190 0			1SF36 0	66A	0	777.0	6/29/84
1WL191 0			1SF22 0	66	0	777.0	6/29/84
1WL81 8330			1WR80 58400	22A	8330	777.0	7/2/84
11CS48 (970)			11CS2 (989)	43	970	2072.0	5/31/84
12CS48 (20)			12CS2 (735)	44	20	2072.0	5/31/84

UNIT 1 1984 OUTAGE  
OUTAGE TYPE "C" ROUND SUMMARY

## MAINTENANCE PROCEDURE M16E

ENCLOSURE 7

UNITS 1 AND 2

## CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.

Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
5-31-84	11CS2	0	989	+989	989	
5-31-84	12CS2	2240	735	-1535	1724	
5-31-84	11CS48	320	970	+650	2694	
5-31-84	12CS48	370	20	-350	2714	
4-25-84	1CS900	0	3	+3	2717	
4-25-84	1CS901					
4-25-84	1CS902	0	0	0		
4-25-84	1CS903					
6-29-84	11CA330	2250	332	-1918	3049	
7-16-84	12CA330	1502	1848	+346	4897	
3-27-84	1CC113	10	260	+250	5157	
5-28-84	1CC117	31	0	-31	5157	
5-28-84	1CC118	36	76	+40	5233	
3-27-84	1CC131	0	175	+175	5408	

## MAINTENANCE PROCEDURES

M16E

ENCLOSURE 7

UNITS 1 AND 2

## CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.

Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
3-26-84	1CC136	1810	14	-1796	5422	
3-26-84	1CC186					
3-26-84	1CC187	1722	1100	-622	6522	
3-27-84	1CC190					
3-27-84	1CC208	8	1903	+1895	8425	
3-27-84	1CC215	9	260	+251	8685	
6-24-84	1CV3					
6-24-84	1CV4	185	17	-168	8702	
6-24-84	1CV5					
4-5-84	1CV7	44	550	+506	9252	
6-11-84	1CV68 or 69	59	367	+308	9619	
6-12-84	1CV74	1983	850	-1133	10469	
4-17-84	1CV116	251	0	-251	-	

## MAINTENANCE PROCEDURES M16E

ENCLOSURE 7

UNITS 1 AND 2

## CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.

Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
4-17-84	1CV284	116	3200	+3084	13669	
	1CV296					
6-13-84	1DR29	13	6	-7	13675	
6-13-84	1DR30	104	3	-101	13678	
6-9-84	1FP147	76	1980	+1904	15658	
4-26-84	1FP148	1800	118	-1682	15786	
6-24-84	11GB4	2	0	-2		
6-23-84	12GB4	350	5.1	-344.9	15781.1	
6-22-84	13GB4	112	23	-89	15804.1	
6-29-84	14GB4	202	0	-202		
5-5-84	1NT25	227	55	-172	15859.1	
6-15-84	1NT26	150	114	-36	15983.1	
3-19-84	1NT32	52	61	+9	16034.1	
3-19-84	1NT34	297	150	-147	16184.1	

MAINTENANCE PROCEDURE M16E  
 ENCLOSURE  
 UNITS 1 AND 2  
 CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
 Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
5-30-84	1PR17	752	0	-752	16184.1	
5-30-84	1PR18	71	0	-71	16184.1	
5-4-84	1SJ53	0	0	0	16184.1	
5-4-84	1SJ60					
5-4-84	1SJ123	0	0	0	16184.1	
5-2-84	1SS27	0	14	+14	16198.1	
6-6-84	1SS33	9	35	+26	16233.1	
3-17-84	1SS49	0	18	+18	16251.1	
5-16-84	1SS64	5	0	-5	16251.1	
3-16-84	11SS94	69	0	-69	16251.1	
3-15-84	12SS94	27	75	+48	16326.1	
3-16-84	13SS94	90	8	-82	16334.1	
3-15-84	14SS94	19	0	-19	16334.1	
5-2-84	1SS103	4	0	-4	16334.1	

MAINTENANCE PROCEDURE M16E  
 ENCLOSURE 7  
 UNITS 1 AND 2  
 CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
 Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
5-22-84	1SS104	14	15	+1	16349.1	
3-17-84	1SS107	1	20	+19	16369.1	
5-16-84	1SS110	4	0	-4	16369.1	
3-24-84	11SS181	5	40	+35	16409.1	
6-6-84	11SS182	105	220	+115	16629.1	
6-6-84	11SS188	64	0	-64	16629.1	
6-6-84	11SS189	8	0	-8	16629.1	
3-24-84	13SS181	0	12	+12	16641.1	
7-1-84	13SS182	49	158	+109	16799.1	
3-24-84	13SS184	0	26	+26	16825.1	
3-24-84	13SS185	17	5	-12	16830.1	
6-29-84	1SF22	0	0	0	16830.1	
6-29-84	1SF36	0	0	0	16830.1	
6-3-84	1SA118	634	731	+97	17561.1	

MAINTENANCE PROCEDURE M16E  
 ENCLOSURE 7  
 UNITS 1 AND 2  
 CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
 Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
7-7-84	1SA119	596	1554	+958	19115.1	
5-5-84	1SA270	25.6	0	-25.6	19115.1	
4-23-84	1SA268	39.3	30	-9.3	19145.1	
5-5-84	1SA267	25.6	0	-25.6	19145.1	
4-23-84	1SA265	39.3	30	-9.6	19175.1	
6-9-84	1SA264	25.6	0	-25.6	19175.1	
4-23-84	1SA262	39.3	30	-9.6	19205.1	
3-8-84	1VC1&2	810	1300	+490	20505.1	
3-8-84	1VC3&4	488	1120	+632	20625.1	
3-8-84	1VC5&6	238	270	+32	21895.1	
3-14-84	1VC7	29	68	+39	21963.1	
6-1-84	1VC8	43	0	-43	21963.1	
3-10-84	1VC9	38	0	-38	21963.1	
3-10-84	1VC10	42	33	-9	21996.1	

MAINTENANCE PROCEDURE M16E  
ENCLOSURE 7  
UNITS 1 AND 2  
CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
 Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
3-14-84	1VC11	188	14.2	-173.8	22010.3	
3-14-84	1VC12	1	28.3	+27.3	22038.6	
3-10-84	1VC13	1	0	-1	22038.6	
3-10-84	1VC14	3	1	-2	22039.6	
3-12-84	11VC17	0	14.4	+14.4	22054	
3-12-84	11VC18	6	9.2	+3.2	22073.2	
3-12-84	11VC19	0	0	0	22073.2	
3-12-84	11VC20	2	9.5	+7.5	22072.7	
3-14-84	12VC17	183	26.8	-156.2	22099.5	
6-1-84	12VC18	11	55	+44	22154.5	
6-1-84	12VC19	112	0	-112	22154.5	
3-14-84	12VC20	0	11	+11	22165.5	
5-30-84	1WL12	7	60	+43	22225.5	
5-30-84	1WL13	7	15	+8	22240.5	

MAINTENANCE PROCEDURE M16E  
 ENCLOSURE 7  
 UNITS 1 AND 2  
 CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
 Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
6-22-84	1WL16	0	887	+887	23127.5	
6-22-84	1WL17	0	182	+182	23309.5	
6-28-84	1WL96	0	0	0	23309.5	
5-24-84	1WL97	0	0	0	23309.5	
6-11-84	1WL98	0	1	+1	23310.5	
6-11-84	1WL99	87	2	-85	23312.5	
6-11-84	1WL108					
6-29-84	1WL190	0	0	0	23312.5	
6-29-84	1WL191	0	0	0	23312.5	
7-3-84	1WR80	17	80	+63	23392.5	
7-18-84	1WR81	0	0	0	23392.5	
7-31-84	11CA360	No. Prev Test	26.4	+26.4	23418.9	Added to Type "C" list 7-30-84 per Engineering re-evaluation
7-31-84	12CA360	No. Prev Test	293	+293	23711.9	
8-2-84	1CC119	No. Prev Test	0	0	23711.9	

MAINTENANCE PROCEDURE M16E  
ENCLOSURE 7  
UNITS 1 AND 2  
CONTAINMENT TYPE B AND C TOTAL LEAKAGE SUMMARY SHEET

Allowable Type B and C leakage (0.6 La) = 129,750 SCCM per unit.  
Allowable air lock leakage (0.05 La) = 10,812 SCCM per unit.

TEST DATE	COMPONENT(S) TESTED	PREVIOUS LEAKAGE SCCM	CURRENT LEAKAGE SCCM	DELTA LEAKAGE SCCM	PRESENT SUM B & C LEAKAGE (SCCM)	REMARKS
1-10-84	FUEL XFER BLANK FLANGE		2.9		23714.8	
6-27-84	11SJ VLV RM. CVR	10	1.9	-8.1	23716.7	
6-27-84	12SJ VLV RM. CVR	0	1	+1	23717.7	
8-3-84	100' AIRLOCK	12,190	2144	-10,046	25861.7	
7-26-84	130' AIRLOCK	3,620	1671	1,949	27532.7	
5-31-84	ALL ELECT. PENS	0	0	0	27532.7	
8-4-84	130' EQUIP HATCH	860	3.6		27536.3	
7-26-84	1VC1&2	1300	343	-957	26579.3	Retested after Cont. Purge & after mod for Type "A" Test.
7-26-84	1VC3&4	1120	202	-918	25661.3	
7-27-84	1VC5&6	270	4,133	+3863	29524.3	