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Enclosure 2

COOPER NUCLEAR STATION

NON-PROPRIETARY REPORT

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“Containment System Response
for
Net Positive Suction Head Analysis”
for
Cooper Nuclear Station

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Project Task Report

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Containment Analysis Project

Task 1: Containment System Response for NPSH Analysis

Principal Contributors:

P.S. Sohn
U.C. Saxena

Approval:



D.J. Robare

CNS Containment Project Manager

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ACRONYMS AND ABBREVIATIONS

ANS	American Nuclear Society
CNS	Cooper Nuclear Station
CRD	Control Rod Drive
CS	Core Spray
DBA	Design Basis Accident
DW	Drywell
ECCS	Emergency Core Cooling System
EOC	End-of-Cycle
FSAR	Final Safety Analysis Report
GE	GE Nuclear Energy
gpm	Gallons per Minute
HEM	Homogeneous Equilibrium Model
HPCI	High Pressure Coolant Injection
HWL	High Water Level
HX	Heat Exchanger
LOCA	Loss of Coolant Accident
LPCI	Low Pressure Coolant Injection
LWL	Low Water Level
MSIV	Main Steam Isolation Valve
MWd	Mega-Watt Days
MWt	Mega-Watts Thermal
NPPD	Nebraska Public Power District
NPSH	Net Positive Suction Head
NRC	Nuclear Regulatory Commission
OPL	Operating Parameters for Licensing
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RPV	Reactor Pressure Vessel
RWCU	Reactor Water Clean-up (System)
SP	Suppression Pool
ST	Short Ton
UHS	Ultimate Heat Sink
USAR	Updated Safety Analysis Report
WW	Wetwell

EXECUTIVE SUMMARY

Per Nebraska Public Power District's (NPPD) request (Reference 1), GE has performed a containment analysis for Cooper Nuclear Station (CNS) using a plant-unique decay heat curve generated with the ANS 5.1-1979 decay heat model with two standard deviations (2σ) of uncertainty (Reference 9) and the initial plant operating conditions specified in References 1 and 3.

The analysis performed is for the containment response of the Design Basis Accident – Loss of Coolant Accident (DBA-LOCA), corresponding to Case E described in Section XIV-6.3 of the Updated Safety Analysis Report (USAR). This case is analyzed with the minimum initial operating pressure to provide the most limiting wetwell (WW) airspace pressure and suppression pool temperature data for the Net-Positive-Suction-Head (NPSH) evaluation of the Emergency Core Cooling System (ECCS) pumps.

A benchmark analysis is performed to repeat the original Final Safety Analysis Report (FSAR) long-term containment analysis Case C using current methodology but with the same assumptions, initial conditions and containment data as the original analysis, including the May-Witt decay heat model. The benchmark analysis is to demonstrate the current containment analysis methodology can reasonably reproduce the peak suppression pool temperature obtained in the original FSAR analysis.

The analysis results are summarized below:

For the USAR Case E Net-Positive-Suction-Head analysis with the initial suppression pool (SP) temperature of 100°F and the UHS temperature of 95°F, the calculated peak suppression pool temperature is 207.8°F and the corresponding wetwell pressure at the time of the peak suppression pool temperature is 24.5 psia or 9.8 psig.

*

* Proprietary information to the General Electric Company has been deleted.

1. INTRODUCTION

1.1 Overview

Per NPPD request (Reference 1), GE has performed a containment analysis for CNS using a plant-unique decay heat curve generated using the ANS 5.1-1979 decay heat model with two standard deviations (2σ) of uncertainty (Reference 9), applicable to other GE fuel product lines, and with custom G-factor and the initial plant operating conditions specified in Reference 3. The normalized decay heat values are combined with additional heat sources (fuel relaxation energy and metal-water reaction energy), and the total energy is used in the containment analysis.

The analysis performed is for the containment response of the DBA-LOCA, corresponding to Case E described in Section XIV-6.3 of the USAR. This case is analyzed with the minimum initial operating pressure to provide the most limiting wetwell airspace pressure and suppression pool temperature data for the NPSH evaluation of the ECCS pumps.

1.2 Task Overview and Objective

1. Based on the newly established Operating Parameters for Licensing - 4A (OPL-4A) process, perform a benchmark analysis to repeat the original FSAR long-term containment analysis Case C using current methodology.
2. Generate time histories of containment pressure and temperature profiles for a DBA-LOCA with conservative initial containment conditions to evaluate the adequacy of NPSH for pumps taking suction from the suppression pool with the current conditions.

3. Perform sensitivity studies of the average vertical distance between drywell spray nozzles and bottom of drywell, and for different combinations of the initial SP temperature and the ultimate heat sink (UHS) temperature to the peak SP temperature and the peak WW airspace pressure at the time of peak SP temperature.

This report includes the inputs, assumptions, methods, results and conclusions of the thermal hydraulic analysis performed to calculate the containment pressure and temperature response for NPSH evaluation.

1.3 Task Evaluation Summary and Conclusions

1.3.1 Summary

The following summarizes the analysis results:

Summary of Benchmark Analysis Calculations (Refer to Appendix A).

The time histories of containment pressure and temperature profiles for all five cases considered for the NPSH evaluation were generated (Refer to Appendix B).

The results of sensitivity study show:

The sensitivity study of the average vertical distance between drywell spray nozzles and bottom of drywell shows negligible difference in the parameters of interest for NPSH evaluation.

The peak SP temperature limiting case is the case with the initial SP temperature of 100°F and the UHS temperature of 95°F.

The lowest peak WW airspace pressure at which the respective peak SP temperature occurs was obtained from the case with the initial SP temperature of 95°F and the UHS temperature of 93°F.

1.3.2 Conclusions

Based on the results described above, the following conclusions may be made:

The benchmark analysis of the original FSAR LOCA Case C produced suppression pool temperature response comparable to that reported in the original FSAR, and a slightly higher peak pool temperature.

For the long-term NPSH analysis corresponding to USAR Case E, the peak suppression pool temperature and the corresponding wetwell airspace pressure were calculated for the conditions specified in OPL-4A (Reference 3). The data from five different cases can be used by NPPD to perform the NPSH evaluation for the ECCS pumps (Appendix B).

For the DW spray nozzle height sensitivity study, there is negligible difference in the parameters of interest for NPSH evaluation. Appendix B shows the time histories of containment pressure and temperature profiles for all five cases considered for the NPSH evaluation.

2. EVALUATION

2.1 Method of Evaluation

2.1.1 GE SHEX Computer Code

2.2 Inputs and Assumptions

The assumptions, event sequences and key inputs given in this task report are based on those specified in Reference 3.

2.2.1 DBA-LOCA (FSAR Case C)

Case C of the original FSAR used for the benchmark analysis is presented and described in Appendix A.

2.2.2 Specific Assumptions for DBA-LOCA

The following assumptions are made for the DBA-LOCA analysis as stated in Appendix A of OPL-4A (Reference 3):

1. The reactor is operating at 102 % thermal rated power (2429 MWt) with an initial reactor pressure of 1060 psia. The reactor core power includes fission energy, fuel relaxation energy, metal-water reaction energy and ANS 5.1 + 2 σ decay heat for fuel applicable up to GE14 with Custom G-factor.
2. Reactor blowdown flow rates are based on Moody's HEM flow model.
3. The reactor vessel control volume includes the fluid and structural masses and energy of the primary system components including reactor vessel, recirculation loops, main steam lines to the inboard isolation valve, RCIC steam line, RHR shutdown line, LPCI line, core spray line, HPCI steam line and RWCU line.

4. Concurrent with the postulated LOCA, a loss of offsite power occurs. Also, only minimum diesel power is available. This results in only one RHR pump and one RHR Service Water pump available for containment cooling after 10 minutes. The RHR pump and RHR Service Water pump are aligned to the RHR heat exchanger at 10 minutes to initiate containment cooling.

5. The portion of the feedwater inventory

is injected into the vessel.

This assumption is used to maximize the suppression pool temperature.

6. For the DBA-LOCA with containment sprays modeled, heat and mass transfer from the suppression pool to the suppression chamber is determined mechanistically.
7. The DBA-LOCA is the instantaneous double-ended guillotine break of the recirculation suction line at the reactor vessel nozzle safe-end to pipe weld. The effective break area is 4.17 ft².
8. The initial suppression pool water volume corresponds to the T/S Low Water Level to maximize the suppression pool temperature response.
9. The suppression pool temperature is initially at 100°F. (Cases with 95°F are also analyzed.)
10. The RHR service water temperature is at the maximum value of 95°F to maximize the suppression pool temperature. (Cases with 93°F are also analyzed.)
11. Drywell fan coolers are inactive.
12. Control rod drive flow is zero.

13. All core spray and LPCI/RHR pumps have 100 % of their motor horsepower rating converted to pump heat which is added either to the RPV liquid or suppression pool water. This assumption is used to maximize the suppression pool temperature response.
14. MSIV closure starts at 0.5 seconds after the initiation of the event and full closure is achieved at 3.0 seconds after closure is initiated.
15. CST water inventory is not available for vessel makeup.

2.2.3 NPSH Evaluation Specific Assumptions

The following assumptions are made for the DBA-LOCA analysis for NPSH evaluation as stated in Appendix A of OPL-4a (Reference 3)

1. Minimum initial drywell and wetwell pressures and maximum initial drywell relative humidity are assumed.
2. Containment cooling is achieved by operating the RHR loop, with heat exchanger, in the containment spray mode (drywell and wetwell sprays) only.
3. Passive heat sinks in the drywell and suppression chamber airspace are modeled.
4. Containment leakage effects are considered. (From Item 3.j of Reference 3, the maximum allowable containment mass leakage for NPSH analysis is 5 %/day.)
5. For the DBA-LOCA for the short-term NPSH portion of the analysis (first 600 seconds), during which operator action is not credited, one of the two available LPCI pumps (corresponding to the LPCI injecting into the broken recirculation loop) and the CS pump are assumed to inject at higher than rated flow rates (See Tables 6 and 7 of Reference 3 for rated and higher than rated flow rates).

2.2.4 Event Sequence for DBA-LOCA for NPSH Evaluation

The event sequences for the DBA-LOCA for the NPSH evaluation correspond to those used for Case E of CNS FSAR as stated in Appendix A of OPL-4A.

1. The plant is operating at 102% of rated thermal power (i.e., 2429 MWt) when a double-ended recirculation suction line break occurs. There is also a concurrent loss of offsite power and loss of one diesel generator. Reactor scrams.
2. MSIV closure starts at 0.5 seconds after the initiation of the event and full closure is achieved at 3.0 seconds after closure is initiated.
3. For the first 10 minutes following the accident, two LPCI pumps inject into the vessel (one LPCI pump at the maximum runout flow rate of 8800 gpm; and one LPCI injects at the rated flow of 7700 gpm). One CS pump injects into the vessel at the maximum runout flow rate of 6500 gpm.
4. At 10 minutes, operator activates the RHR heat exchanger in the operating RHR loop. One LPCI pump is re-aligned to RHR mode so that flow (6500 gpm) goes through the heat exchanger before discharging to the drywell and wetwell in the form of drywell and wetwell sprays. The other LPCI pump is shutdown. This configuration is maintained throughout the remainder of the accident.
5. Of the total 6500 gpm RHR flow 6100 gpm goes to the drywell spray and 400 gpm goes to the wetwell spray.
6. With one RHR pump at 6500 gpm in containment spray mode and one service water pump (4000 gpm), the corresponding RHR heat exchanger K-value is 177 Btu/sec-°F.
7. After 10 minutes, the CS pump flow is reduced to 4720 gpm.

2.3 Decay Heat Models

2.4 Cases Analyzed

The base case for NPSH evaluation is the case with 100°F of initial SP temperature and 95°F of UHS temperature. A sensitivity study of the average vertical distance between drywell spray nozzles and bottom of drywell was made to compare against the base case. Additional three cases were run with different combinations of the initial SP temperature and the UHS temperature. Table 2-3 describes the five NPSH cases analyzed.

Table 2-1:
Key Input Parameters and Initial Conditions for Long-Term NPSH Analysis

Parameter	Unit	Value
Initial Core Thermal Power (102% of Rated Power)	MWt	2,429
Initial Dome Pressure	psia	1,060
Initial Drywell Free (Airspace) Volume	ft ³	132,250
Initial Wetwell Free (Airspace) Volume (Low Water Level)	ft ³	112,240
Initial Suppression Pool Volume (Low Water Level)	ft ³	87,650
Initial Drywell Pressure	psia	14.7
Initial Drywell Temperature	°F	160
Initial Drywell Relative Humidity	%	100
Initial Wetwell Pressure	psia	14.7
Initial Wetwell Temperature	°F	100
Initial Wetwell Relative Humidity	%	100
Initial Suppression Pool Temperature	°F	100
Break Area	ft ²	4.17
LPCI/Containment Cooling Pump Heat (per pump)	hp	1250 Before 600 sec. 1160 After 600 sec.
Core Spray Pump Heat (per pump)	hp	1325 Before 600 sec. 1150 After 600 sec.
RHR Heat Exchanger Initiation Time	sec	600.

Parameter	Unit	Value
UHS Temperature	°F	95.
RHR Heat Exchanger K-Value per Loop (Containment Spray, 1 RHR loop, 1 RHR pump (6500 gpm), 1 RHR SW pump (4000 gpm), 1 HX)	Btu/sec-°F	177
LPCI Flow Rate per Pump (Before 600 sec.)	gpm	1 at 8,800 1 at 7,700
RHR Flow to Drywell Spray in Spray Cooling Mode per Pump (After 600 sec.)	gpm	6,100
Minimum Time to Activate Drywell Spray	sec	600.
RHR Flow to Wetwell Spray in Spray Cooling Mode per Pump (After 600 sec.)	gpm	400.
Minimum Time to Activate Wetwell Spray	sec	600.
Core Spray Flow Rate per Pump	gpm	6,500 Before 600 sec. 4,720 After 600 sec.

Table 2-2

ANS 5.1 + 2 σ Shutdown Power Values for Cooper at Current Rated Power

Table 2-3
Description of Cases for NPSH Evaluation

Case Identification	Initial Suppression Pool Temp, °F	Initial WW Airspace Temperature, °F	UHS Temperature, °F	DW Spray Nozzle Height above DW Surface, ft
BASE CASE	100	100	95	39
CASE 1	95	95	95	39
CASE 2	95	95	93	39
CASE 3	100	100	93	39

3. RESULTS

3.1 Evaluation Results

The results of the DBA-LOCA analysis for NPSH evaluation are presented below.

3.1.1 DBA-LOCA (USAR Case C) – Benchmark Analysis

The results of DBA-LOCA (USAR Case C) benchmark analysis are discussed in Appendix A.

3.1.2 DBA-LOCA for NPSH Evaluation

The containment response analysis for NPSH evaluation was performed using the GE SHEX-04V code. The intent of the containment analysis for NPSH evaluation is to provide the most limiting wetwell pressure/suppression pool temperature conditions for NPPD to evaluate if adequate NPSH margins are available for the ECCS pumps at CNS in case of a LOCA. The long-term analysis considers the LOCA Case E scenario described in the USAR and is intended to provide the limiting conditions up to and past the time of peak suppression pool temperature several hours into the event.

The key analysis assumptions used for this case are described in Section 2.2 and key input parameters and initial conditions are summarized in Table 2-1. These assumptions and input parameters/initial conditions are consistent with those provided in Reference 3. These assumptions and initial conditions are selected to maintain the overall conservatism in the evaluation by maximizing the suppression pool temperature and minimizing the wetwell pressure and, therefore, minimizing the available NPSH.

A summary of the analysis results is presented in Table 3-1 for the long-term NPSH analysis for the base case and the drywell spray nozzle height sensitivity case. From Table 3-1, it is seen that the drywell spray nozzle height is insensitive for NPSH evaluation. Table 3-2 shows the result summary of the sensitivity cases with three different initial SP temperature and UHS temperature combinations. Tables 3-1 and 3-2 also show the peak values for other parameters of interest. A discussion of the event scenarios, case specific assumptions and the analysis results is provided below.

As mentioned before, Case E of the USAR LOCA analysis was selected for the long-term NPSH analysis because this case results in the maximum peak suppression pool temperature. For the first 600 seconds following the accident, two LPCIs are available with one pump for each LPCI for vessel injection. At 600 seconds into the accident, one LPCI pump is shut down, and one RHR heat exchanger is activated and one RHR pump is re-aligned from vessel injection to containment spray mode to remove energy from the containment. One CS pump is used for vessel injection throughout the event.

For the first 600 seconds following the accident, one LPCI pump injects into the vessel at the maximum runout flow rate of 8800 gpm and one LPCI pump injects at the rated flow of 7700 gpm. The CS pump flow is at 6500 gpm with one pump running. After 600 seconds, the CS pump flow rate is reduced to 4720 gpm and the LPCI pump with the runout maximum flow rate of 8800 gpm is shutdown. The other LPCI pump is re-aligned in the RHR containment spray mode. In the containment spray mode, it is assumed that 6100 gpm of the total RHR flow (6500 gpm) goes to the drywell spray and the remaining 400 gpm goes to the torus spray. With one RHR pump, one RHR service water pump and one RHR service water booster pump, the RHR heat exchanger K-value is assumed to be 177 Btu/sec-°F (Reference 3).

The key assumptions made for the NPSH analysis are presented in Section 2.2.3 and key initial conditions used are given in Table 2-1.

Appendix B shows the containment pressure and temperature responses for each of the five cases considered. It also includes the wetwell airspace pressure response with 5%/day of air leakage. For each case analyzed, the containment pressure and temperature response table, and two plots of the suppression pool temperature response, and the wetwell airspace pressure response with 5%/day of air leakage are included. For Base and Case 2 in Table 3-2, SHEX runs were made up to one million seconds per NPPD's request.

For the base case with the initial suppression pool temperature of 100°F and the UHS temperature of 95°F, Table 3-1 shows that the calculated peak suppression pool temperature is 207.8°F and that the corresponding wetwell pressure at the time of the peak suppression pool temperature is 24.5 psia. With 5%/day of air leakage, the WW pressure is reduced to 24.2 psia. The peak suppression pool temperature occurs at 34710 seconds

It should be noted that this wetwell pressure is obtained after adjustment for the effect of an assumed 5% containment leakage. The wetwell pressure response shown in Appendix B for each case considered is plotted with adjustment for the 5%/day air leakage.

3.2 Evaluation Conclusions

Histories of containment pressure and temperature responses for the DBA-LOCA for long-term NPSH evaluation are shown in Appendix B for evaluation of NPSH for the RHR and CS pumps. Appendix B includes the containment pressure and temperature histories for all five cases described in Table 2-3.

Table 3-1

Result Summary for NPSH Evaluation (DW Spray Nozzle Height Sensitivity)

Table 3-2
Result Summary NPSH Evaluation (SP & UHS Temp. Sensitivity)

Parameter	BASE	CASE1	CASE2	CASE3
Initial SP & WW airspace temperature, °F	100	95	95	100
UHS temperature, °F	95	95	93	93
DW spray drop nozzle height, ft	39	39	39	39
Maximum SP temperature, °F	207.8	205.9	204.6	206.7
Time at maximum SP temperature, sec.	34748	36717	36136	34137
WW pressure at maximum SP temperature, psia	24.5	24.2	23.8	24.2
WW overpressure (ΔP above 14.7 psia), psia	9.8	9.5	9.1	9.5
WW air pressure at max. SP temperature (P_a), psia	14.1	14.2	14.1	14.1
WW vapor press. at max. SP temperature (P_v), psia	10.4	10.0	9.7	10.1
WW pressure with leakage, psia	24.2	23.9	23.5	23.9
WW overpress. w/leakage (ΔP above 14.7 psia), psia	9.5	9.2	8.8	9.2
Other Parameters of Interest (Peak Values)				
Maximum DW Pressure, psia	43.3	43.2	43.2	43.3
At Time, sec	16.1	16.3	16.3	16.1
Maximum DW Temperature, °F	324.1	325.9	325.9	324.1
At Time, sec	31.1	30.3	30.3	31.1
Maximum WW Airspace Pressure, psia	33.2	33.0	33.0	33.2
At Time, sec	118.8	116.0	116.0	118.8
Maximum WW Airspace Temperature, °F	213.1	206.6	206.6	213.1
At time, sec	56.0	59.2	59.2	56.0

4. REFERENCES

1. M.C. Mohatt (NPPD) Letter to D. McGill, "Revision of the 1999 Net Positive Suction Head (NPSH) Calculations for Cooper Nuclear Station (General Services Agreement No. 86A-MS2, Task Authorization No. 435, Reference No. 4700000014)," October 19, 2000.
2. S.K. Nelson (NPPD), e-mail to D.J. Robare (GE), "Cooper Containment Work Impact Notice," January 17, 2001.
3. Resolved Form OPL-4A, "Containment Analysis Input Parameters for CNS," February 13, 2001.
- 4.
- 5.
6. "Maximum Discharge of Liquid-Vapor Mixtures from Vessels," NEDO-21052, General Electric Company, September 1975.
- 7.
8. "Decay Heat Power in Light Water Reactors," ANSI/ANS 5.1-1979, approved by American Standards Institute, August 29, 1979.
- 9.

APPENDIX A: SHEX-04V VALIDATION CALCULATIONS

Table A-1
Key Input Parameters and Initial Conditions for FSAR Case C Analysis

Table A-2

Normalized Total Decay Power Based on May Witt Decay Heat Model

Table A-3

SHEX-04V versus FSAR Results for Case C

Figure A-1: SHEX-04V Calculated Containment Pressure Response for FSAR Case C

Figure A-2: SHEX-04V Calculated Containment Temperature Response for FSAR Case C

Figure A-3: SHEX-04V Calculated Suppression Pool Temperature Response for FSAR Case C

A.5 References

A-1: Task Authorization Number 435, Agreement No. 86A-MS2, and GE Identification Number 523-JXOJQ-HP1; dated December 12, 2000.

A-2: NEDO-21888, "Mark I Containment Program, Load Definition Report", Rev. 2, November 1981.

A-3: CNS OPL-4A, February 13, 2001.

A-4:

APPENDIX B: CONTAINMENT PRESSURE AND TEMPERATURE RESPONSES

Case ID	Case Description	Table	Figures	DW Spray Nozzle Height, ft	Initial SP Temp., °F	UHS Temp., °F
Base Case	Base Case for NPSH	B-1	B-1 & 2	39	100	95
Case 1	Temperature Case 1	B-3	B-5 & 6	39	95	95
Case 2	Temperature Case 2	B-4	B-7 & 8	39	95	93
Case 3	Temperature Case 3	B-5	B-9 & 10	39	100	93

Table B-1

DBA-LOCA Analysis Results for Long-Term NPSH Evaluation (Base Case)

SHEX-04V Results

Initial SP temperature (deg-F)	100
UHS temperature (deg-F)	95
Drywell spray nozzle height (ft)	39

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
0.000	14.700	160.000	14.700	100.000	100.000	0.950	13.750	14.700
0.382	26.650	215.900	14.710	100.000	100.000	0.950	13.760	14.710
0.989	33.480	240.700	18.850	137.500	100.700	1.198	17.650	18.848
2.646	38.050	259.500	26.380	181.600	103.500	1.563	24.820	26.383
11.896	42.050	270.300	31.730	205.900	120.600	1.787	29.950	31.737
17.521	41.330	269.200	32.500	210.300	129.800	1.815	30.690	32.505
26.896	37.070	321.300	32.860	212.200	137.600	1.813	31.040	32.853
35.646	36.750	321.800	32.980	212.700	140.900	1.803	31.180	32.982
40.646	36.280	315.200	33.030	212.900	142.100	1.796	31.230	33.025
44.583	36.130	310.600	33.050	212.900	142.900	1.791	31.260	33.050
48.958	36.320	307.200	33.080	213.000	143.700	1.785	31.290	33.074
53.958	36.160	301.600	33.100	213.100	144.400	1.779	31.320	33.098
57.896	36.200	298.300	33.120	213.100	144.900	1.774	31.340	33.113
59.849	36.180	293.000	33.110	213.000	145.200	1.771	31.340	33.110
60.677	35.500	260.100	33.110	213.000	145.100	1.770	31.340	33.109
62.739	36.160	261.200	33.110	213.000	145.100	1.766	31.340	33.105

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
63.677	36.140	261.200	33.110	213.000	145.100	1.765	31.340	33.104
64.614	36.120	261.100	33.110	212.900	145.200	1.764	31.340	33.103
65.552	36.120	261.100	33.110	212.900	145.200	1.763	31.340	33.102
66.489	36.110	261.100	33.100	212.800	145.200	1.762	31.340	33.101
67.427	36.150	261.200	33.100	212.700	145.300	1.761	31.340	33.100
68.364	36.150	261.200	33.100	212.700	145.300	1.760	31.340	33.099
69.302	36.140	261.200	33.100	212.600	145.400	1.759	31.340	33.098
70.239	36.130	261.200	33.100	212.500	145.400	1.758	31.340	33.097
71.208	36.140	261.200	33.100	212.500	145.500	1.757	31.340	33.096
72.146	36.140	261.200	33.090	212.400	145.500	1.756	31.340	33.095
73.083	36.130	261.200	33.090	212.400	145.600	1.755	31.340	33.094
74.021	36.130	261.200	33.090	212.300	145.600	1.754	31.340	33.093
74.958	36.120	261.100	33.090	212.200	145.700	1.754	31.340	33.093
75.896	36.110	261.100	33.090	212.200	145.700	1.753	31.340	33.092
76.833	36.110	261.100	33.090	212.100	145.800	1.752	31.340	33.091
77.771	36.130	261.200	33.090	212.100	145.800	1.751	31.340	33.090
78.708	36.120	261.100	33.090	212.000	145.900	1.750	31.340	33.089
79.677	36.140	261.200	33.090	212.000	145.900	1.749	31.340	33.088
80.708	36.110	261.100	33.090	212.000	146.000	1.748	31.340	33.087
81.771	36.110	261.100	33.090	211.900	146.100	1.747	31.340	33.086
82.864	36.120	261.100	33.090	211.900	146.100	1.746	31.350	33.094
83.958	36.120	261.100	33.090	211.900	146.200	1.745	31.350	33.093
85.052	36.120	261.100	33.100	211.800	146.300	1.744	31.350	33.092
86.114	36.120	261.100	33.100	211.800	146.400	1.743	31.350	33.091
87.177	36.130	261.200	33.100	211.800	146.400	1.742	31.360	33.100
88.239	36.130	261.200	33.100	211.800	146.500	1.741	31.360	33.099
89.302	36.130	261.200	33.100	211.700	146.600	1.740	31.360	33.098
90.364	36.140	261.200	33.110	211.700	146.600	1.739	31.370	33.107
91.458	36.130	261.200	33.110	211.700	146.700	1.738	31.370	33.106

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
92.521	36.140	261.200	33.110	211.600	146.800	1.738	31.370	33.106
93.646	36.140	261.200	33.110	211.600	146.800	1.737	31.380	33.115
94.771	36.160	261.200	33.120	211.600	146.900	1.736	31.380	33.114
95.958	36.150	261.200	33.120	211.600	147.000	1.735	31.390	33.123
97.239	36.160	261.200	33.130	211.600	147.100	1.734	31.390	33.122
98.552	36.160	261.200	33.130	211.600	147.200	1.733	31.400	33.131
99.958	36.170	261.200	33.140	211.600	147.300	1.732	31.410	33.140
133.302	34.570	258.600	32.960	210.000	148.400	1.692	31.260	32.950
164.021	32.590	255.100	32.280	205.300	148.800	1.643	30.630	32.270
196.302	31.220	252.100	31.690	201.300	149.700	1.602	30.080	31.679
227.552	30.270	250.000	30.770	195.300	150.200	1.555	29.210	30.761
258.802	29.350	247.500	29.790	188.800	150.800	1.512	28.270	29.778
290.052	28.400	244.700	28.860	182.500	151.500	1.478	27.380	28.853
321.302	27.490	241.900	27.980	176.800	152.400	1.446	26.530	27.971
352.552	26.620	238.900	27.100	170.200	153.300	1.426	25.670	27.091
383.802	25.780	235.800	26.260	164.400	154.300	1.406	24.860	26.260
415.052	25.020	232.800	25.500	159.300	155.300	1.390	24.110	25.494
446.302	24.300	229.800	24.760	153.600	156.400	1.382	23.370	24.746
479.083	23.580	226.700	24.060	148.100	157.400	1.380	22.680	24.054
511.177	22.960	223.800	23.440	143.300	158.400	1.381	22.060	23.434
547.239	22.310	220.600	22.810	138.600	159.500	1.385	21.420	22.798
581.083	21.790	217.800	22.260	134.700	160.400	1.389	20.870	22.252
609.157	20.710	211.500	21.220	129.300	161.200	1.360	19.860	21.213
636.563	19.130	199.800	19.610	125.700	162.100	1.307	18.300	19.600
666.907	18.310	191.700	18.760	129.400	163.000	1.314	17.440	18.747
702.532	17.710	184.800	18.160	134.200	163.700	1.349	16.810	18.152
742.407	17.310	179.700	17.820	139.000	164.300	1.407	16.410	17.810
792.501	17.140	176.100	17.570	142.400	165.000	1.483	16.090	17.566
843.126	17.240	175.700	17.710	145.900	165.600	1.579	16.130	17.701

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
905.626	18.070	180.600	17.960	147.500	166.400	1.686	16.270	17.947
968.126	18.500	183.000	18.060	147.900	166.900	1.765	16.300	18.056
1121.814	19.030	185.700	18.250	148.800	167.900	1.920	16.330	18.239
1371.814	19.220	186.700	18.490	150.500	169.500	2.105	16.380	18.472
1622.439	19.160	186.300	18.710	151.900	171.100	2.278	16.430	18.693
1872.689	19.080	185.800	18.940	153.500	172.500	2.455	16.480	18.917
2132.939	18.980	185.300	19.180	154.500	173.900	2.667	16.520	19.167
2398.439	18.970	185.200	19.460	155.800	175.200	2.901	16.560	19.438
2668.439	19.080	185.000	19.550	157.300	176.500	3.118	16.430	19.523
2954.907	19.200	184.900	19.670	158.900	177.800	3.371	16.300	19.643
3230.751	19.310	184.700	19.790	159.900	179.000	3.637	16.150	19.757
3510.876	19.430	184.500	19.910	161.700	180.100	3.901	16.010	19.878
3789.939	19.530	184.300	20.000	162.900	181.100	4.126	15.880	19.971
4065.532	19.610	184.000	20.080	163.800	182.100	4.340	15.740	20.043
4344.376	19.730	184.100	20.220	164.700	183.000	4.567	15.650	20.178
4623.407	19.860	184.300	20.340	165.600	183.900	4.791	15.550	20.299
4901.407	20.000	184.500	20.480	166.800	184.700	5.016	15.470	20.442
5183.407	20.130	184.700	20.620	167.800	185.500	5.243	15.370	20.567
5458.407	20.250	184.800	20.740	168.800	186.200	5.462	15.280	20.694
5740.376	20.380	184.900	20.860	169.700	187.000	5.687	15.180	20.817
6019.782	20.570	185.500	20.990	169.400	187.700	5.910	15.080	20.937
6274.845	20.700	185.500	21.030	170.700	188.300	6.093	14.940	20.979
6541.564	20.760	185.400	21.250	172.500	188.900	6.339	14.910	21.193
6813.345	20.880	185.600	21.370	173.800	189.500	6.540	14.830	21.312
7084.501	21.010	185.800	21.490	175.100	190.100	6.735	14.760	21.434
7355.157	21.120	186.000	21.600	176.200	190.700	6.902	14.700	21.539
7629.939	21.220	186.200	21.700	177.200	191.200	7.049	14.650	21.634
7902.907	21.310	186.400	21.790	177.900	191.800	7.172	14.620	21.725
8177.907	21.390	186.700	21.880	178.600	192.300	7.284	14.600	21.815

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
8451.564	21.480	187.000	21.970	179.200	192.800	7.387	14.590	21.906
8727.470	21.560	187.300	22.050	179.800	193.200	7.480	14.570	21.976
9006.876	21.640	187.500	22.120	180.300	193.700	7.566	14.560	22.050
9282.907	21.720	187.800	22.200	180.900	194.200	7.656	14.540	22.118
9549.220	21.790	188.000	22.270	181.300	194.600	7.735	14.530	22.185
9824.032	21.850	188.300	22.340	181.800	195.000	7.813	14.530	22.260
10098.845	21.930	188.600	22.410	182.200	195.400	7.888	14.520	22.323
10379.157	22.000	188.800	22.480	182.600	195.800	7.964	14.510	22.387
10653.251	22.060	189.100	22.560	183.100	196.200	8.040	14.520	22.470
10925.688	22.130	189.400	22.610	183.400	196.600	8.105	14.510	22.523
11210.282	22.200	189.600	22.690	183.900	197.000	8.178	14.510	22.594
11483.126	22.270	189.900	22.760	184.200	197.300	8.247	14.510	22.661
11755.438	22.330	190.100	22.800	184.500	197.700	8.303	14.500	22.704
12036.032	22.400	190.400	22.880	185.000	198.000	8.378	14.500	22.777
12315.001	22.450	190.600	22.940	185.300	198.400	8.439	14.500	22.836
12593.345	22.520	190.900	23.000	185.600	198.700	8.495	14.500	22.889
12871.876	22.560	191.000	23.050	185.900	199.000	8.550	14.500	22.942
13154.095	22.620	191.300	23.110	186.200	199.300	8.605	14.500	22.995
13432.001	22.670	191.500	23.160	186.500	199.600	8.659	14.500	23.046
13707.063	22.720	191.600	23.200	186.700	199.900	8.707	14.490	23.082
13987.907	22.760	191.800	23.250	187.000	200.200	8.762	14.490	23.135
14262.720	22.810	191.900	23.290	187.200	200.500	8.807	14.480	23.167
14539.251	22.850	192.100	23.340	187.500	200.700	8.860	14.480	23.218
14814.188	22.890	192.200	23.380	187.700	201.000	8.903	14.470	23.249
15087.938	22.930	192.300	23.420	188.000	201.200	8.955	14.460	23.289
15362.532	22.970	192.500	23.460	188.300	201.500	9.001	14.460	23.332
15635.376	23.020	192.600	23.510	188.500	201.700	9.045	14.460	23.374
15916.813	23.060	192.800	23.530	188.700	201.900	9.081	14.450	23.398
16192.095	23.100	192.900	23.570	188.900	202.100	9.122	14.450	23.437

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
16468.221	23.130	193.100	23.630	189.100	202.400	9.172	14.450	23.484
16746.846	23.170	193.200	23.650	189.300	202.600	9.206	14.440	23.506
17022.314	23.200	193.300	23.690	189.500	202.800	9.250	14.440	23.548
17295.471	23.240	193.400	23.730	189.700	203.000	9.290	14.440	23.585
17570.158	23.270	193.500	23.750	189.800	203.100	9.316	14.430	23.599
17846.752	23.300	193.600	23.790	190.100	203.300	9.360	14.430	23.641
18122.002	23.340	193.700	23.810	190.200	203.500	9.394	14.420	23.663
18401.971	23.360	193.800	23.860	190.500	203.700	9.440	14.420	23.706
18677.471	23.390	193.900	23.890	190.700	203.800	9.479	14.410	23.733
18953.908	23.420	194.000	23.910	190.800	204.000	9.515	14.400	23.757
19230.689	23.450	194.000	23.920	191.000	204.100	9.542	14.380	23.762
19504.502	23.480	194.100	23.950	191.100	204.300	9.578	14.370	23.786
19782.189	23.500	194.100	23.990	191.400	204.400	9.623	14.370	23.828
20055.502	23.530	194.200	24.020	191.500	204.600	9.660	14.360	23.853
20329.189	23.550	194.300	24.040	191.700	204.700	9.695	14.350	23.876
20604.377	23.580	194.400	24.070	191.900	204.800	9.728	14.340	23.897
20881.314	23.610	194.500	24.090	192.000	205.000	9.762	14.330	23.919
21154.502	23.640	194.500	24.110	192.100	205.100	9.788	14.320	23.933
21427.346	23.660	194.600	24.140	192.300	205.200	9.826	14.320	23.968
21700.939	23.680	194.700	24.170	192.500	205.300	9.857	14.320	23.997
21971.533	23.700	194.700	24.200	192.600	205.400	9.886	14.310	24.014
22244.846	23.730	194.800	24.210	192.700	205.500	9.904	14.300	24.020
22519.689	23.750	194.900	24.240	192.900	205.600	9.938	14.300	24.052
22792.596	23.770	194.900	24.260	193.000	205.700	9.961	14.300	24.072
23068.814	23.790	195.000	24.280	193.100	205.900	9.984	14.290	24.083
23343.596	23.810	195.100	24.300	193.200	206.000	10.000	14.290	24.097
23614.439	23.830	195.100	24.310	193.300	206.000	10.020	14.290	24.115
23889.596	23.850	195.200	24.330	193.400	206.100	10.050	14.280	24.133
24162.752	23.870	195.200	24.350	193.500	206.200	10.060	14.280	24.140

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
24436.346	23.880	195.300	24.360	193.500	206.300	10.080	14.280	24.158
24713.814	23.900	195.300	24.380	193.600	206.400	10.100	14.270	24.166
24990.408	23.910	195.400	24.390	193.700	206.500	10.120	14.270	24.184
25261.377	23.920	195.400	24.400	193.800	206.600	10.140	14.270	24.201
25532.408	23.940	195.500	24.420	193.900	206.600	10.150	14.260	24.199
25801.314	23.950	195.500	24.420	193.900	206.700	10.170	14.260	24.217
26075.408	23.960	195.500	24.440	194.000	206.800	10.180	14.260	24.225
26352.002	23.970	195.500	24.460	194.100	206.800	10.200	14.250	24.233
26621.846	23.980	195.600	24.470	194.200	206.900	10.220	14.250	24.250
26899.064	23.990	195.600	24.490	194.300	207.000	10.240	14.250	24.268
27170.127	24.000	195.600	24.480	194.300	207.000	10.240	14.240	24.256
27439.596	24.010	195.600	24.490	194.300	207.100	10.260	14.230	24.264
27713.314	24.020	195.700	24.510	194.400	207.100	10.280	14.230	24.282
27983.908	24.020	195.600	24.520	194.500	207.200	10.290	14.230	24.290
28254.002	24.030	195.700	24.520	194.500	207.300	10.300	14.220	24.287
28524.189	24.050	195.700	24.520	194.500	207.300	10.300	14.210	24.275
28799.283	24.040	195.700	24.530	194.600	207.300	10.320	14.210	24.293
29070.689	24.050	195.700	24.540	194.700	207.400	10.330	14.210	24.301
29339.908	24.050	195.700	24.550	194.700	207.400	10.340	14.200	24.299
29609.471	24.060	195.700	24.540	194.700	207.500	10.350	14.190	24.297
29876.689	24.070	195.700	24.550	194.800	207.500	10.360	14.190	24.305
30146.533	24.060	195.700	24.560	194.800	207.500	10.370	14.190	24.312
30414.346	24.070	195.700	24.540	194.800	207.600	10.370	14.180	24.300
30685.189	24.070	195.600	24.560	194.900	207.600	10.380	14.170	24.298
30953.783	24.070	195.600	24.560	194.900	207.600	10.390	14.170	24.306
31220.502	24.070	195.600	24.560	195.000	207.700	10.400	14.170	24.314
31487.127	24.070	195.600	24.560	195.000	207.700	10.400	14.160	24.302
31755.596	24.070	195.600	24.560	195.000	207.700	10.410	14.150	24.300
32023.283	24.070	195.500	24.550	195.000	207.700	10.410	14.140	24.288

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
32285.002	24.070	195.500	24.560	195.100	207.700	10.420	14.140	24.296
32550.439	24.070	195.500	24.550	195.100	207.800	10.420	14.130	24.284
32813.406	24.070	195.500	24.560	195.100	207.800	10.430	14.130	24.292
33077.844	24.060	195.400	24.550	195.100	207.800	10.430	14.120	24.280
33338.063	24.060	195.400	24.550	195.100	207.800	10.440	14.120	24.288
33599.031	24.060	195.400	24.550	195.200	207.800	10.440	14.110	24.276
33857.594	24.050	195.300	24.540	195.100	207.800	10.440	14.100	24.264
34118.813	24.050	195.300	24.540	195.200	207.800	10.450	14.100	24.272
34382.000	24.050	195.300	24.530	195.200	207.800	10.440	14.090	24.250
34640.219	24.040	195.200	24.540	195.200	207.800	10.450	14.090	24.258
34898.031	24.040	195.200	24.520	195.200	207.800	10.440	14.080	24.236
35159.500	24.030	195.100	24.530	195.200	207.800	10.450	14.070	24.234
35415.563	24.030	195.100	24.510	195.200	207.800	10.450	14.070	24.232
35672.406	24.020	195.100	24.510	195.200	207.800	10.450	14.060	24.220
35931.344	24.010	195.000	24.500	195.200	207.800	10.450	14.050	24.208
36187.938	24.000	195.000	24.500	195.200	207.800	10.450	14.050	24.206
36444.750	24.000	194.900	24.490	195.200	207.800	10.450	14.040	24.194
36703.594	23.990	194.900	24.480	195.200	207.800	10.450	14.030	24.182
36960.906	23.980	194.800	24.460	195.100	207.700	10.440	14.020	24.160
37222.125	23.970	194.800	24.460	195.200	207.700	10.450	14.010	24.158
37480.563	23.940	194.600	24.430	195.100	207.700	10.440	14.000	24.136
37739.313	23.960	194.700	24.440	195.200	207.700	10.450	13.990	24.134
37997.688	23.960	194.700	24.440	195.200	207.700	10.450	13.990	24.132
38259.688	23.950	194.600	24.430	195.200	207.600	10.450	13.990	24.130
38518.188	23.940	194.600	24.430	195.200	207.600	10.450	13.980	24.118
38773.938	23.930	194.600	24.430	195.200	207.600	10.450	13.980	24.116
39033.938	23.930	194.600	24.420	195.200	207.600	10.450	13.970	24.104
39295.688	23.920	194.500	24.410	195.100	207.500	10.450	13.970	24.102
39554.875	23.920	194.500	24.400	195.100	207.500	10.450	13.960	24.090

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
39815.375	23.910	194.500	24.400	195.100	207.500	10.450	13.950	24.079
40075.625	23.900	194.400	24.390	195.100	207.400	10.450	13.950	24.076
40334.625	23.900	194.400	24.390	195.100	207.400	10.450	13.940	24.065
40592.625	23.890	194.400	24.380	195.100	207.400	10.440	13.940	24.053
40854.250	23.880	194.400	24.380	195.100	207.300	10.440	13.930	24.041
41114.625	23.880	194.300	24.370	195.100	207.300	10.440	13.930	24.039
41372.125	23.870	194.300	24.370	195.100	207.300	10.440	13.930	24.036
41631.344	23.870	194.300	24.360	195.100	207.300	10.440	13.920	24.025
41886.719	23.860	194.200	24.360	195.100	207.200	10.440	13.920	24.023
42146.719	23.850	194.200	24.350	195.100	207.200	10.440	13.910	24.011
42404.313	23.850	194.200	24.340	195.100	207.200	10.440	13.900	23.999
42659.188	23.840	194.200	24.340	195.100	207.100	10.440	13.900	23.997
42919.063	23.840	194.100	24.330	195.100	207.100	10.440	13.900	23.995
43177.906	23.830	194.100	24.320	195.100	207.100	10.440	13.890	23.983
43437.156	23.820	194.100	24.320	195.100	207.000	10.440	13.880	23.971
43693.125	23.820	194.100	24.300	195.000	207.000	10.420	13.880	23.949
43951.750	23.810	194.000	24.310	195.100	207.000	10.430	13.870	23.947
44210.250	23.810	194.000	24.300	195.100	206.900	10.430	13.870	23.945
44468.844	23.800	194.000	24.290	195.000	206.900	10.430	13.860	23.933
44729.219	23.790	193.900	24.290	195.100	206.900	10.430	13.860	23.931
44989.938	23.790	193.900	24.270	195.000	206.800	10.420	13.850	23.909
45247.688	23.780	193.900	24.280	195.000	206.800	10.430	13.850	23.917
45504.188	23.770	193.800	24.270	195.000	206.800	10.430	13.840	23.906
45759.344	23.770	193.800	24.260	195.000	206.700	10.420	13.840	23.894
46014.594	23.760	193.800	24.260	195.000	206.700	10.430	13.830	23.892
46271.063	23.760	193.700	24.240	195.000	206.700	10.420	13.820	23.870
46527.188	23.760	193.700	24.250	195.000	206.600	10.420	13.820	23.868
46786.813	23.750	193.700	24.240	195.000	206.600	10.420	13.820	23.866
47042.281	23.750	193.700	24.220	194.900	206.600	10.410	13.810	23.844

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
47299.406	23.740	193.700	24.230	195.000	206.500	10.420	13.810	23.852
47553.875	23.740	193.600	24.220	194.900	206.500	10.410	13.810	23.840
47810.125	23.730	193.600	24.220	195.000	206.500	10.410	13.810	23.838
48064.750	23.720	193.600	24.220	195.000	206.500	10.410	13.800	23.826
48320.719	23.720	193.500	24.200	194.900	206.400	10.400	13.800	23.814
48574.344	23.710	193.500	24.200	194.900	206.400	10.400	13.800	23.812
48831.563	23.710	193.500	24.190	194.900	206.400	10.400	13.790	23.800
49089.438	23.700	193.400	24.180	194.900	206.300	10.390	13.790	23.788
49345.563	23.690	193.400	24.180	194.800	206.300	10.390	13.790	23.786
49601.063	23.680	193.400	24.170	194.800	206.300	10.390	13.790	23.784
49856.313	23.670	193.300	24.160	194.800	206.200	10.380	13.780	23.762
50111.063	23.670	193.300	24.150	194.700	206.200	10.370	13.780	23.750
50365.063	23.660	193.300	24.140	194.700	206.100	10.360	13.780	23.738
50619.813	23.650	193.200	24.130	194.700	206.100	10.360	13.780	23.736
50875.188	23.640	193.200	24.120	194.600	206.100	10.350	13.770	23.715
51129.688	23.630	193.200	24.110	194.600	206.000	10.340	13.770	23.703
51385.063	23.630	193.200	24.100	194.600	206.000	10.330	13.770	23.691
51638.938	23.620	193.100	24.090	194.500	206.000	10.330	13.770	23.689
51894.688	23.610	193.100	24.080	194.500	205.900	10.320	13.760	23.667
52148.188	23.600	193.100	24.070	194.500	205.900	10.310	13.760	23.655
52403.938	23.600	193.000	24.060	194.400	205.900	10.300	13.760	23.643
52660.938	23.590	193.000	24.050	194.400	205.800	10.300	13.760	23.641
52917.313	23.580	193.000	24.040	194.400	205.800	10.290	13.750	23.619
53171.313	23.570	192.900	24.040	194.300	205.700	10.280	13.750	23.607
53425.188	23.560	192.900	24.030	194.300	205.700	10.280	13.750	23.605
53677.938	23.550	192.800	24.020	194.300	205.700	10.270	13.750	23.593
53931.688	23.550	192.800	24.010	194.200	205.600	10.260	13.740	23.571
54184.688	23.540	192.800	24.000	194.200	205.600	10.260	13.740	23.569
54438.938	23.530	192.700	23.990	194.200	205.600	10.250	13.740	23.557

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
54692.813	23.520	192.700	23.980	194.100	205.500	10.240	13.740	23.545
54947.438	23.520	192.700	23.970	194.100	205.500	10.230	13.730	23.523
55201.563	23.510	192.600	23.960	194.000	205.400	10.230	13.730	23.521
55454.688	23.500	192.600	23.950	194.000	205.400	10.220	13.730	23.509
55706.938	23.490	192.600	23.940	194.000	205.400	10.210	13.730	23.497
55960.438	23.480	192.500	23.930	193.900	205.300	10.200	13.720	23.476
56212.563	23.470	192.500	23.910	193.900	205.300	10.190	13.720	23.464
56467.188	23.470	192.500	23.900	193.800	205.200	10.180	13.720	23.452
56721.563	23.460	192.400	23.890	193.800	205.200	10.180	13.720	23.450
56973.063	23.450	192.400	23.880	193.800	205.200	10.170	13.710	23.428
57225.313	23.440	192.400	23.870	193.700	205.100	10.160	13.710	23.416
57480.313	23.430	192.300	23.860	193.700	205.100	10.150	13.710	23.404
57732.563	23.420	192.300	23.850	193.600	205.000	10.140	13.710	23.392
57985.563	23.410	192.200	23.840	193.600	205.000	10.130	13.700	23.370
58237.438	23.410	192.200	23.830	193.600	204.900	10.130	13.700	23.368
58491.313	23.400	192.200	23.810	193.500	204.900	10.120	13.700	23.356
58744.063	23.390	192.100	23.800	193.500	204.900	10.110	13.690	23.335
58996.813	23.380	192.100	23.790	193.400	204.800	10.100	13.690	23.323
59249.188	23.370	192.100	23.780	193.400	204.800	10.090	13.690	23.311
59501.688	23.360	192.000	23.770	193.400	204.700	10.080	13.690	23.299
59754.438	23.350	192.000	23.760	193.300	204.700	10.070	13.680	23.277
60007.313	23.340	191.900	23.750	193.300	204.600	10.060	13.680	23.265
60258.938	23.330	191.900	23.730	193.200	204.600	10.060	13.680	23.263
60510.438	23.320	191.800	23.720	193.200	204.600	10.050	13.680	23.251
60762.188	23.310	191.800	23.710	193.100	204.500	10.040	13.670	23.229
61016.688	23.300	191.800	23.710	193.100	204.500	10.040	13.670	23.227
61269.188	23.290	191.700	23.690	193.100	204.400	10.020	13.670	23.205
61521.438	23.280	191.700	23.670	193.000	204.400	10.010	13.660	23.184
61773.563	23.270	191.600	23.660	193.000	204.300	9.999	13.660	23.171

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
62027.188	23.260	191.600	23.650	192.900	204.300	9.990	13.660	23.160
62279.563	23.250	191.500	23.640	192.900	204.200	9.980	13.660	23.148
62531.438	23.240	191.500	23.620	192.800	204.200	9.971	13.650	23.127
62783.438	23.230	191.500	23.610	192.800	204.100	9.961	13.650	23.115
63035.438	23.220	191.400	23.600	192.700	204.100	9.951	13.650	23.103
63286.563	23.210	191.400	23.590	192.700	204.000	9.942	13.640	23.082
63539.063	23.200	191.300	23.570	192.600	204.000	9.932	13.640	23.070
63791.563	23.190	191.300	23.560	192.600	203.900	9.922	13.640	23.058
64042.688	23.180	191.200	23.550	192.500	203.900	9.912	13.630	23.037
64294.313	23.170	191.200	23.530	192.500	203.800	9.902	13.630	23.025
64546.313	23.160	191.100	23.520	192.400	203.800	9.892	13.630	23.013
64799.063	23.150	191.100	23.510	192.400	203.700	9.882	13.630	23.001
65051.063	23.140	191.100	23.490	192.300	203.700	9.872	13.620	22.979
65304.563	23.130	191.000	23.480	192.300	203.600	9.862	13.620	22.967
65557.188	23.120	191.000	23.470	192.200	203.600	9.852	13.620	22.955
65808.938	23.110	190.900	23.450	192.200	203.500	9.841	13.610	22.933
66060.688	23.100	190.900	23.440	192.100	203.500	9.831	13.610	22.921
66313.563	23.090	190.800	23.430	192.100	203.400	9.821	13.610	22.909
66567.188	23.070	190.800	23.410	192.000	203.400	9.810	13.600	22.886
66819.938	23.060	190.700	23.400	192.000	203.300	9.800	13.600	22.874
67071.063	23.050	190.700	23.390	191.900	203.300	9.790	13.600	22.862
67323.688	23.040	190.600	23.370	191.900	203.200	9.779	13.600	22.849
67574.938	23.030	190.600	23.360	191.800	203.200	9.769	13.590	22.828
67827.063	23.020	190.500	23.350	191.800	203.100	9.758	13.590	22.815
68079.188	23.010	190.500	23.330	191.700	203.000	9.748	13.590	22.803
68331.938	23.000	190.400	23.320	191.700	203.000	9.737	13.580	22.780
68585.188	22.990	190.400	23.310	191.600	202.900	9.727	13.580	22.768
68836.563	22.980	190.300	23.290	191.600	202.900	9.717	13.580	22.756
69087.938	22.970	190.300	23.280	191.500	202.800	9.706	13.570	22.733

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
69339.813	22.950	190.200	23.270	191.500	202.800	9.695	13.570	22.720
69592.813	22.940	190.200	23.250	191.400	202.700	9.684	13.570	22.707
69844.188	22.930	190.100	23.240	191.300	202.700	9.674	13.560	22.686
70095.438	22.920	190.100	23.220	191.300	202.600	9.663	13.560	22.673
70346.688	22.910	190.000	23.210	191.200	202.500	9.652	13.560	22.660
70599.563	22.900	190.000	23.200	191.200	202.500	9.641	13.560	22.647
70852.313	22.890	189.900	23.180	191.100	202.400	9.630	13.550	22.624
71105.188	22.880	189.900	23.170	191.100	202.400	9.619	13.550	22.611
71356.438	22.860	189.800	23.150	191.000	202.300	9.609	13.550	22.599
71607.938	22.850	189.800	23.140	191.000	202.300	9.598	13.540	22.577
71859.438	22.840	189.700	23.130	190.900	202.200	9.587	13.540	22.564
72112.688	22.830	189.700	23.110	190.900	202.100	9.576	13.540	22.551
72364.563	22.820	189.600	23.100	190.800	202.100	9.566	13.530	22.529
72616.813	22.810	189.600	23.080	190.700	202.000	9.555	13.530	22.516
72869.438	22.790	189.500	23.070	190.700	202.000	9.544	13.530	22.503
73122.438	22.780	189.500	23.060	190.600	201.900	9.534	13.520	22.482
73375.438	22.770	189.400	23.040	190.600	201.900	9.523	13.520	22.469
73627.063	22.760	189.400	23.030	190.500	201.800	9.512	13.520	22.456
73879.938	22.750	189.300	23.020	190.500	201.700	9.502	13.510	22.434
74132.563	22.740	189.300	23.000	190.400	201.700	9.492	13.510	22.422
74384.313	22.730	189.200	22.990	190.400	201.600	9.481	13.510	22.409
74636.813	22.710	189.200	22.980	190.300	201.600	9.471	13.510	22.397
74888.688	22.700	189.100	22.960	190.300	201.500	9.460	13.500	22.375
75140.313	22.690	189.100	22.950	190.200	201.400	9.450	13.500	22.363
75392.688	22.680	189.000	22.940	190.200	201.400	9.440	13.500	22.351
75645.688	22.670	188.900	22.920	190.100	201.300	9.429	13.490	22.328
75896.438	22.650	188.900	22.910	190.100	201.200	9.419	13.490	22.316
76149.688	22.640	188.800	22.900	190.000	201.200	9.409	13.490	22.305
76401.438	22.630	188.800	22.880	190.000	201.100	9.399	13.480	22.283

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
76654.688	22.620	188.700	22.870	189.900	201.100	9.389	13.480	22.271
76908.188	22.610	188.700	22.860	189.800	201.000	9.379	13.480	22.259
77160.688	22.590	188.600	22.840	189.800	200.900	9.369	13.470	22.238
77413.563	22.580	188.600	22.830	189.700	200.900	9.359	13.470	22.226
77666.438	22.570	188.500	22.820	189.700	200.800	9.349	13.470	22.214
77917.813	22.560	188.400	22.800	189.600	200.700	9.339	13.460	22.192
78169.688	22.540	188.400	22.790	189.600	200.700	9.328	13.460	22.179
78421.813	22.530	188.300	22.780	189.600	200.600	9.324	13.460	22.173
78674.938	22.520	188.300	22.760	189.500	200.600	9.305	13.460	22.152
78926.938	22.510	188.200	22.740	189.400	200.500	9.293	13.450	22.129
79178.688	22.500	188.200	22.730	189.300	200.400	9.281	13.450	22.115
79430.688	22.480	188.100	22.710	189.300	200.400	9.269	13.450	22.101
79683.313	22.470	188.100	22.700	189.200	200.300	9.257	13.440	22.077
79935.063	22.460	188.000	22.680	189.200	200.200	9.245	13.440	22.063
85030.188	22.220	186.900	22.390	187.900	198.900	9.009	13.380	21.731
91340.063	21.930	185.500	22.070	186.600	197.400	8.760	13.310	21.366
97641.938	21.660	184.200	21.740	185.200	195.800	8.498	13.240	20.990
103949.690	21.400	182.900	21.420	183.700	194.300	8.249	13.180	20.636
110254.190	21.180	181.800	21.150	182.500	193.000	8.033	13.120	20.316
116558.060	20.980	180.800	20.920	181.400	191.800	7.845	13.070	20.033
122868.440	20.810	179.900	20.710	180.400	190.700	7.680	13.030	19.784
129179.060	20.650	179.100	20.520	179.500	189.800	7.533	12.990	19.552
135487.440	20.510	178.300	20.360	178.600	188.900	7.401	12.950	19.336
141789.060	20.380	177.600	20.200	177.900	188.100	7.281	12.920	19.141
148090.940	20.260	176.900	20.060	177.100	187.300	7.171	12.890	18.956
154401.310	20.150	176.300	19.930	176.500	186.500	7.067	12.860	18.778
160708.440	20.040	175.700	19.830	176.000	185.800	6.992	12.830	18.629
167019.060	19.940	175.100	19.710	175.400	185.200	6.906	12.810	18.478
173322.440	19.850	174.600	19.600	174.800	184.600	6.820	12.780	18.318

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
179629.310	19.770	174.100	19.510	174.300	184.000	6.744	12.760	18.178
185930.810	19.720	173.800	19.450	173.900	183.600	6.699	12.750	18.077
192232.560	19.670	173.500	19.400	173.700	183.400	6.663	12.730	17.977
198537.190	19.570	172.900	19.280	173.100	182.700	6.577	12.700	17.818
204840.190	19.480	172.400	19.170	172.500	182.100	6.493	12.680	17.670
211143.940	19.380	171.800	19.070	171.900	181.400	6.412	12.650	17.516
217447.940	19.290	171.300	18.960	171.300	180.800	6.335	12.630	17.376
223758.810	19.210	170.800	18.870	170.800	180.200	6.260	12.610	17.237
230059.560	19.130	170.200	18.770	170.300	179.600	6.189	12.580	17.094
236369.310	19.040	169.700	18.680	169.700	179.000	6.118	12.560	16.960
242674.310	18.960	169.200	18.590	169.200	178.500	6.049	12.540	16.828
248980.810	18.880	168.700	18.500	168.700	177.900	5.982	12.520	16.698
255286.060	18.810	168.200	18.410	168.200	177.300	5.917	12.500	16.570
261588.560	18.730	167.700	18.330	167.700	176.800	5.852	12.480	16.443
267892.440	18.660	167.300	18.240	167.200	176.200	5.789	12.450	16.309
274195.560	18.580	166.800	18.160	166.700	175.700	5.726	12.430	16.184
280498.880	18.500	166.300	18.080	166.100	175.100	5.662	12.410	16.058
286802.880	18.430	165.800	17.990	165.600	174.600	5.600	12.390	15.934
293099.380	18.360	165.300	17.910	165.100	174.000	5.539	12.370	15.811
299408.750	18.290	164.800	17.830	164.600	173.500	5.477	12.360	15.695
305708.750	18.220	164.300	17.750	164.100	172.900	5.417	12.340	15.574
312010.000	18.150	163.800	17.670	163.600	172.400	5.358	12.320	15.453
318313.750	18.080	163.400	17.600	163.100	171.800	5.299	12.300	15.333
324616.880	18.010	162.900	17.520	162.600	171.300	5.241	12.280	15.214
330921.000	17.940	162.400	17.470	162.300	170.700	5.205	12.260	15.117
337224.380	17.880	161.900	17.390	161.800	170.200	5.147	12.250	15.006
343529.500	17.810	161.500	17.320	161.300	169.700	5.091	12.230	14.890
349826.380	17.750	161.000	17.250	160.800	169.100	5.036	12.210	14.774
356134.130	17.680	160.500	17.170	160.300	168.600	4.980	12.190	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
362444.500	17.620	160.000	17.100	159.800	168.000	4.924	12.170	14.700
368741.250	17.550	159.600	17.030	159.300	167.500	4.870	12.160	14.700
375042.500	17.490	159.100	16.960	158.800	167.000	4.816	12.140	14.700
381347.750	17.430	158.600	16.880	158.300	166.400	4.763	12.120	14.700
387655.380	17.360	158.100	16.810	157.800	165.900	4.709	12.100	14.700
393960.380	17.300	157.600	16.740	157.300	165.300	4.657	12.090	14.700
400264.880	17.240	157.100	16.670	156.800	164.800	4.605	12.070	14.700
406571.750	17.180	156.700	16.600	156.300	164.200	4.553	12.050	14.700
412886.250	17.110	156.200	16.540	155.800	163.700	4.502	12.030	14.700
419197.250	17.050	155.700	16.470	155.300	163.100	4.451	12.020	14.700
425498.250	16.990	155.200	16.400	154.800	162.600	4.401	12.000	14.700
431800.000	16.930	154.700	16.340	154.300	162.000	4.352	11.980	14.700
438114.940	16.870	154.300	16.270	153.800	161.500	4.304	11.970	14.700
444414.190	16.830	153.900	16.220	153.400	161.100	4.264	11.950	14.700
450723.440	16.780	153.500	16.170	153.000	160.600	4.228	11.940	14.700
457040.250	16.740	153.200	16.120	152.700	160.300	4.193	11.930	14.700
463336.750	16.710	152.900	16.080	152.300	159.900	4.163	11.920	14.700
469645.000	16.670	152.600	16.050	152.000	159.600	4.135	11.910	14.700
475956.380	16.640	152.300	16.010	151.700	159.300	4.107	11.900	14.700
482258.380	16.610	152.100	15.970	151.500	159.000	4.082	11.890	14.700
488561.880	16.580	151.800	15.940	151.200	158.700	4.058	11.880	14.700
494866.500	16.550	151.600	15.910	150.900	158.400	4.034	11.870	14.700
501162.250	16.530	151.300	15.880	150.700	158.200	4.012	11.860	14.700
507468.250	16.500	151.100	15.850	150.400	157.900	3.990	11.860	14.700
513769.500	16.470	150.900	15.820	150.200	157.600	3.968	11.850	14.700
520071.380	16.450	150.700	15.790	149.900	157.400	3.947	11.840	14.700
526372.750	16.420	150.500	15.760	149.700	157.200	3.927	11.830	14.700
532675.500	16.420	150.400	15.750	149.600	157.100	3.920	11.830	14.700
538983.500	16.400	150.200	15.720	149.400	156.900	3.902	11.820	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
545285.000	16.370	150.000	15.700	149.200	156.600	3.884	11.810	14.700
551593.630	16.350	149.800	15.670	149.000	156.400	3.867	11.810	14.700
557899.000	16.330	149.600	15.650	148.800	156.200	3.850	11.800	14.700
564202.380	16.300	149.400	15.630	148.600	156.000	3.834	11.790	14.700
570504.000	16.280	149.200	15.610	148.400	155.800	3.818	11.790	14.700
576812.380	16.260	149.100	15.580	148.200	155.600	3.802	11.780	14.700
583127.630	16.250	148.900	15.560	148.000	155.400	3.787	11.770	14.700
589435.750	16.230	148.700	15.540	147.900	155.200	3.773	11.770	14.700
595744.500	16.210	148.600	15.520	147.700	155.000	3.759	11.760	14.700
602049.130	16.190	148.400	15.500	147.500	154.800	3.745	11.760	14.700
608352.000	16.180	148.300	15.480	147.300	154.700	3.732	11.750	14.700
614660.500	16.160	148.100	15.470	147.200	154.500	3.719	11.750	14.700
620965.250	16.140	148.000	15.450	147.000	154.300	3.707	11.740	14.700
627268.130	16.130	147.800	15.430	146.900	154.200	3.695	11.740	14.700
633580.000	16.110	147.700	15.410	146.700	154.000	3.683	11.730	14.700
639888.880	16.090	147.500	15.400	146.600	153.800	3.671	11.720	14.700
646193.500	16.080	147.400	15.380	146.400	153.700	3.659	11.720	14.700
652498.500	16.070	147.200	15.360	146.300	153.500	3.648	11.710	14.700
658806.750	16.050	147.100	15.350	146.100	153.400	3.638	11.710	14.700
665107.500	16.040	147.000	15.330	146.000	153.200	3.629	11.710	14.700
671404.250	16.030	146.900	15.320	145.900	153.100	3.620	11.700	14.700
677708.380	16.010	146.800	15.310	145.800	153.000	3.611	11.700	14.700
684015.750	16.000	146.700	15.290	145.600	152.900	3.602	11.690	14.700
690321.380	15.990	146.600	15.280	145.500	152.700	3.594	11.690	14.700
696621.380	15.980	146.500	15.270	145.400	152.600	3.586	11.680	14.700
702935.250	15.970	146.300	15.260	145.300	152.500	3.578	11.680	14.700
709242.130	15.960	146.200	15.250	145.200	152.400	3.570	11.680	14.700
715548.250	15.950	146.100	15.240	145.100	152.300	3.563	11.670	14.700
721849.250	15.940	146.000	15.220	145.000	152.200	3.555	11.670	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
728154.130	15.920	145.900	15.210	144.900	152.000	3.548	11.670	14.700
734466.500	15.910	145.800	15.200	144.800	151.900	3.540	11.660	14.700
740770.500	15.900	145.700	15.190	144.700	151.800	3.533	11.660	14.700
747083.500	15.890	145.600	15.180	144.600	151.700	3.526	11.650	14.700
753389.750	15.880	145.500	15.170	144.500	151.600	3.518	11.650	14.700
759686.380	15.870	145.500	15.160	144.400	151.500	3.512	11.650	14.700
765991.000	15.860	145.400	15.160	144.400	151.400	3.511	11.650	14.700
772289.880	15.860	145.300	15.150	144.400	151.300	3.510	11.640	14.700
778594.880	15.850	145.200	15.150	144.300	151.200	3.507	11.640	14.700
784904.500	15.840	145.100	15.140	144.200	151.100	3.500	11.640	14.700
791211.130	15.830	145.000	15.130	144.100	151.000	3.492	11.640	14.700
797521.630	15.820	144.900	15.120	144.000	150.900	3.485	11.630	14.700
803818.500	15.810	144.800	15.110	144.000	150.800	3.477	11.630	14.700
810125.750	15.800	144.700	15.100	143.900	150.700	3.470	11.630	14.700
816431.380	15.790	144.600	15.080	143.800	150.600	3.462	11.620	14.700
822734.250	15.780	144.600	15.070	143.700	150.500	3.455	11.620	14.700
829035.500	15.770	144.500	15.060	143.600	150.400	3.447	11.620	14.700
835341.000	15.760	144.400	15.050	143.500	150.300	3.440	11.610	14.700
841645.380	15.750	144.300	15.040	143.400	150.200	3.432	11.610	14.700
847941.380	15.740	144.200	15.030	143.300	150.100	3.425	11.610	14.700
854250.380	15.730	144.100	15.020	143.200	150.000	3.417	11.600	14.700
860553.130	15.720	144.000	15.010	143.100	149.900	3.410	11.600	14.700
866857.750	15.710	143.900	15.000	143.000	149.800	3.402	11.600	14.700
873163.880	15.700	143.800	14.990	142.900	149.600	3.394	11.590	14.700
879469.630	15.690	143.700	14.980	142.800	149.500	3.387	11.590	14.700
885779.130	15.690	143.600	14.970	142.700	149.400	3.379	11.590	14.700
892085.000	15.680	143.500	14.960	142.600	149.300	3.372	11.580	14.700
898397.250	15.670	143.400	14.950	142.600	149.200	3.364	11.580	14.700
904697.000	15.660	143.300	14.930	142.500	149.100	3.357	11.580	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
910997.250	15.650	143.300	14.920	142.400	149.000	3.349	11.570	14.700
917300.500	15.640	143.200	14.910	142.300	148.900	3.342	11.570	14.700
923607.630	15.630	143.100	14.900	142.200	148.800	3.334	11.570	14.700
929910.750	15.620	143.000	14.890	142.100	148.700	3.327	11.570	14.700
936214.500	15.610	142.900	14.880	142.000	148.600	3.319	11.560	14.700
942521.250	15.600	142.800	14.870	141.900	148.500	3.312	11.560	14.700
948825.880	15.590	142.700	14.860	141.800	148.400	3.304	11.560	14.700
955130.630	15.580	142.600	14.850	141.700	148.300	3.297	11.550	14.700
961438.500	15.570	142.500	14.840	141.600	148.200	3.290	11.550	14.700
967738.750	15.560	142.400	14.830	141.500	148.000	3.282	11.550	14.700
974047.750	15.550	142.300	14.820	141.400	147.900	3.275	11.540	14.700
980353.130	15.540	142.200	14.810	141.300	147.800	3.268	11.540	14.700
986655.630	15.530	142.100	14.800	141.200	147.700	3.260	11.540	14.700
992956.130	15.530	142.000	14.790	141.100	147.600	3.253	11.530	14.700
999266.750	15.520	141.900	14.780	141.000	147.500	3.246	11.530	14.700
1000000.000	15.510	141.900	14.780	141.000	147.500	3.245	11.530	14.700

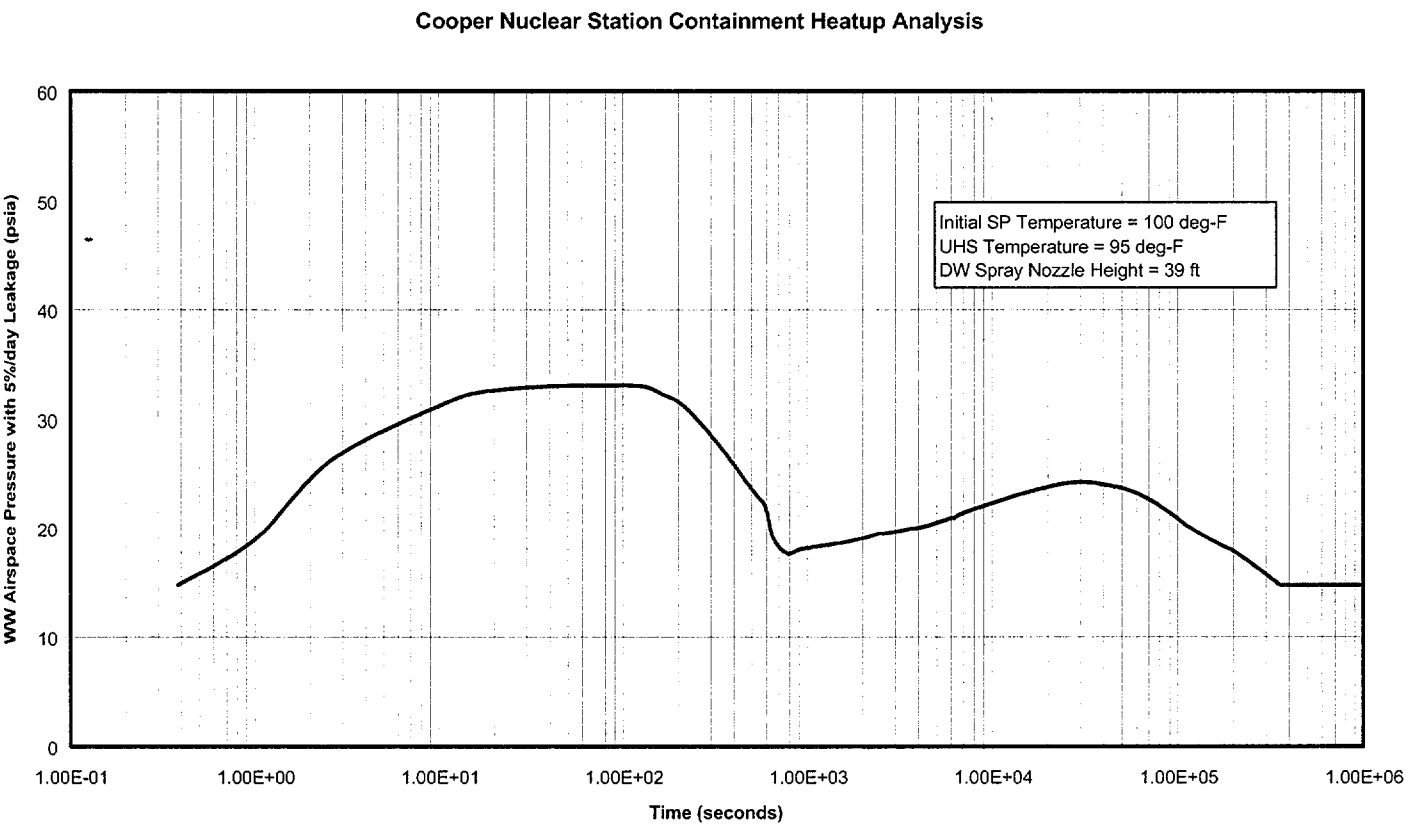


Figure B-1: Wetwell Airspace Pressure Response w/ Leakage For Long-Term NPSH (Base Case)

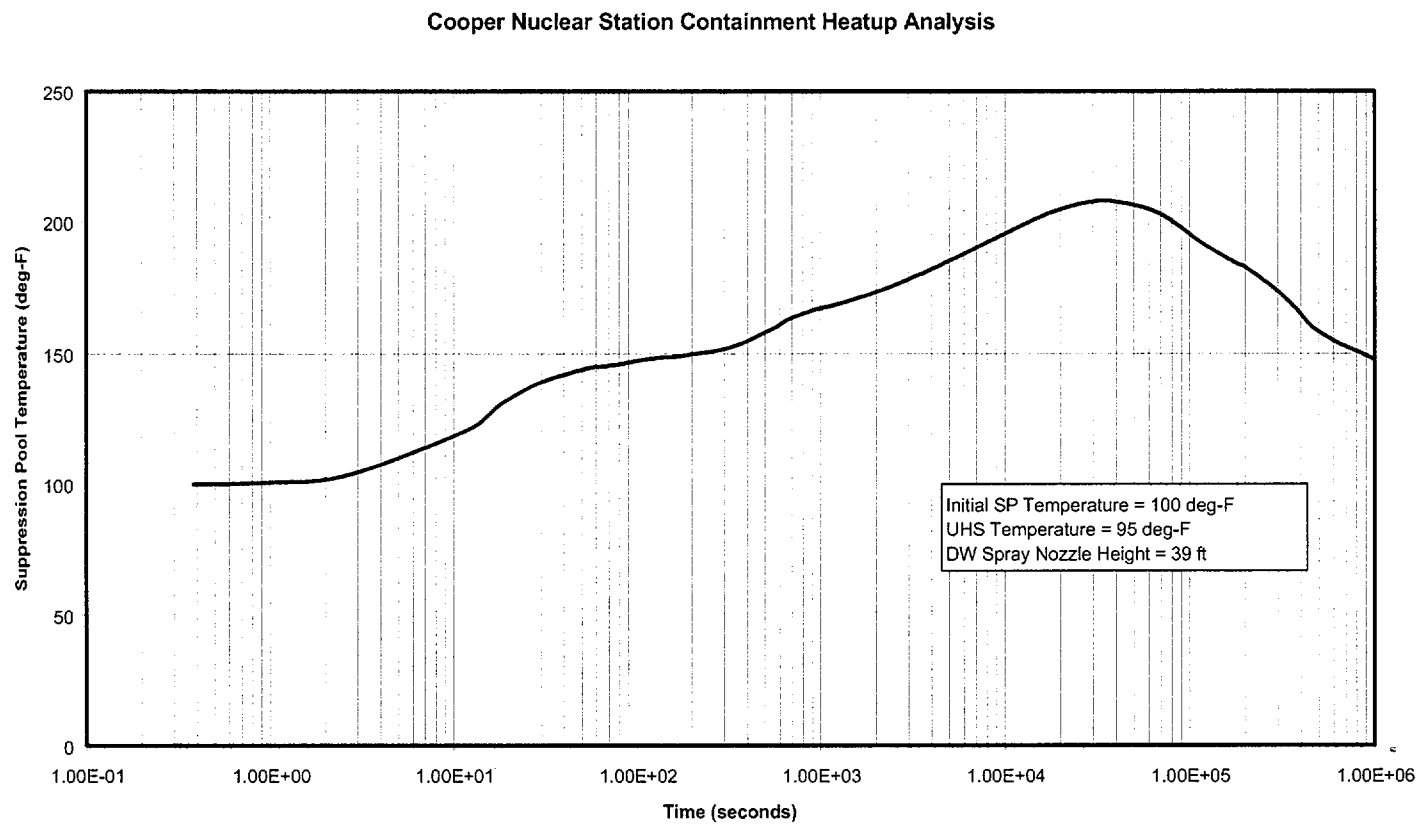


Figure B-2 Suppression Pool Temperature Response for Long Term NPSH (Base Case)

Table B-2

DBA-LOCA Analysis Results for Long-Term NPSH Evaluation (Nozzle Hgt. Sensitivity)

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Figure B-3: Wetwell Airspace Pressure Response w/ Leakage For Long-Term NPSH (DW Nozzle Hgt. Sensivity)

Figure B-4: Suppression Pool Temperature Response For Long-Term NPSH (DW Nozzle Hgt. Sensitivity)

Table B-3

DBA-LOCA Analysis Results for Long-Term NPSH Evaluation (Case 1)

SHEX-04V Results

Initial SP temperature (deg-F)	95
UHS temperature (deg-F)	95
Drywell spray nozzle height (ft)	39

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
0.000	14.700	160.000	14.700	95.000	95.000	0.815	13.880	14.695
0.501	30.150	226.000	14.720	95.190	95.070	0.816	13.900	14.716
2.007	36.780	254.900	24.280	165.800	97.370	1.267	23.010	24.277
13.632	41.880	270.000	31.780	200.800	119.000	1.543	30.230	31.773
22.507	37.520	302.800	32.500	204.900	130.300	1.559	30.940	32.499
33.007	36.070	321.500	32.710	205.900	135.500	1.551	31.160	32.710
39.257	35.880	315.600	32.780	206.200	137.200	1.545	31.230	32.774
43.382	35.880	311.500	32.810	206.300	138.100	1.541	31.270	32.810
47.319	36.100	308.600	32.830	206.400	138.800	1.537	31.300	32.836
51.882	35.930	303.200	32.860	206.500	139.500	1.533	31.330	32.862
56.257	36.000	299.500	32.880	206.600	140.100	1.528	31.350	32.877
59.194	36.030	297.000	32.890	206.600	140.500	1.526	31.370	32.895
60.194	35.260	268.100	32.880	206.600	140.500	1.524	31.360	32.883
62.382	35.920	260.800	32.880	206.500	140.500	1.522	31.360	32.881
63.319	35.890	260.800	32.880	206.500	140.500	1.521	31.360	32.880

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
64.257	35.890	260.800	32.880	206.400	140.500	1.520	31.360	32.879
65.194	35.930	260.800	32.880	206.400	140.600	1.519	31.360	32.878
66.132	35.930	260.800	32.880	206.400	140.600	1.518	31.360	32.877
67.069	35.930	260.800	32.880	206.300	140.600	1.517	31.360	32.876
68.007	35.930	260.800	32.880	206.300	140.700	1.516	31.360	32.875
68.944	35.920	260.800	32.880	206.300	140.700	1.516	31.360	32.875
69.882	35.920	260.800	32.880	206.200	140.800	1.515	31.360	32.874
70.819	35.920	260.800	32.880	206.200	140.800	1.514	31.360	32.873
71.757	35.920	260.800	32.880	206.200	140.900	1.513	31.370	32.882
72.694	35.910	260.800	32.880	206.200	140.900	1.512	31.370	32.881
73.632	35.910	260.800	32.880	206.100	141.000	1.511	31.370	32.880
74.569	35.900	260.800	32.880	206.100	141.000	1.511	31.370	32.880
75.507	35.920	260.800	32.880	206.100	141.100	1.510	31.370	32.879
76.444	35.910	260.800	32.880	206.100	141.100	1.509	31.370	32.878
77.382	35.900	260.800	32.880	206.100	141.200	1.508	31.380	32.887
78.351	35.910	260.800	32.890	206.100	141.300	1.507	31.380	32.886
79.413	35.940	260.900	32.890	206.000	141.300	1.506	31.380	32.885
80.444	35.910	260.800	32.890	206.000	141.400	1.506	31.380	32.885
81.507	35.910	260.800	32.890	206.000	141.500	1.505	31.390	32.894
82.601	35.940	260.900	32.890	206.000	141.500	1.504	31.390	32.892
83.663	35.930	260.800	32.900	206.000	141.600	1.503	31.390	32.891
84.757	35.940	260.900	32.900	206.000	141.700	1.502	31.400	32.900
85.819	35.930	260.800	32.900	206.000	141.700	1.501	31.400	32.899
86.882	35.940	260.800	32.910	206.000	141.800	1.501	31.400	32.899
87.944	35.940	260.800	32.910	206.000	141.900	1.500	31.410	32.908
89.007	35.950	260.900	32.910	206.000	141.900	1.499	31.410	32.907
90.069	35.940	260.900	32.920	206.000	142.000	1.498	31.420	32.916
91.163	35.950	260.900	32.920	206.000	142.100	1.497	31.420	32.915
92.257	35.960	260.900	32.930	206.100	142.200	1.497	31.430	32.925

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
93.444	35.960	260.900	32.930	206.100	142.200	1.496	31.430	32.924
94.632	35.960	260.900	32.940	206.100	142.300	1.495	31.440	32.933
95.913	35.970	260.900	32.940	206.100	142.400	1.494	31.450	32.942
97.257	35.990	260.900	32.950	206.200	142.500	1.493	31.460	32.951
98.632	36.000	260.900	32.960	206.200	142.600	1.492	31.470	32.960
103.132	36.010	261.000	32.980	206.300	142.900	1.490	31.490	32.978
136.038	34.000	257.600	32.660	203.600	143.800	1.458	31.200	32.656
167.382	32.030	254.100	32.150	200.300	144.200	1.422	30.730	32.149
198.882	30.820	251.300	31.270	194.500	145.000	1.379	29.890	31.266
230.132	29.920	249.200	30.380	188.900	145.500	1.340	29.040	30.376
261.382	28.930	246.500	29.420	182.500	146.100	1.306	28.120	29.422
292.632	27.950	243.600	28.430	175.700	146.800	1.274	27.160	28.429
323.882	26.990	240.400	27.490	169.500	147.700	1.245	26.240	27.480
355.132	26.070	237.100	26.560	162.900	148.700	1.224	25.340	26.559
386.382	25.220	233.800	25.660	156.300	149.800	1.207	24.460	25.662
417.632	24.400	230.500	24.870	150.700	150.900	1.194	23.680	24.868
449.319	23.660	227.200	24.110	145.500	151.900	1.182	22.920	24.096
480.569	22.970	224.000	23.430	140.600	153.000	1.177	22.260	23.431
513.663	22.310	220.700	22.750	135.000	154.000	1.180	21.570	22.744
546.632	21.690	217.600	22.170	130.400	155.000	1.186	20.980	22.159
582.976	21.100	214.400	21.590	126.100	156.100	1.193	20.400	21.586
612.093	19.880	206.400	20.350	120.500	157.000	1.160	19.190	20.343
636.093	18.650	196.300	19.110	120.500	157.700	1.127	17.980	19.100
668.624	17.820	187.500	18.300	126.000	158.600	1.139	17.160	18.292
705.562	17.240	180.300	17.720	131.300	159.300	1.175	16.550	17.718
745.812	16.880	175.100	17.350	135.400	159.900	1.226	16.130	17.349
797.593	16.680	171.400	17.190	139.500	160.600	1.303	15.890	17.186
856.655	16.670	169.900	17.180	141.900	161.200	1.387	15.790	17.169
912.093	17.090	172.400	17.440	144.200	162.000	1.471	15.970	17.433

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
974.593	17.720	176.400	17.540	144.200	162.600	1.538	16.010	17.539
1149.593	18.380	180.200	17.740	145.500	163.800	1.685	16.050	17.724
1399.593	18.600	181.400	17.960	147.000	165.500	1.856	16.100	17.943
1649.093	18.570	181.200	18.150	148.000	167.000	2.018	16.130	18.133
1903.968	18.480	180.700	18.350	149.200	168.500	2.181	16.170	18.333
2180.468	18.410	180.200	18.600	151.100	170.000	2.369	16.230	18.579
2465.343	18.420	180.200	18.870	153.200	171.400	2.573	16.300	18.850
2739.624	18.500	180.100	18.990	153.800	172.800	2.784	16.200	18.958
3012.937	18.600	179.900	19.100	155.500	174.000	3.006	16.090	19.068
3291.530	18.730	179.800	19.210	157.300	175.200	3.235	15.970	19.175
3566.687	18.820	179.600	19.320	158.600	176.300	3.466	15.850	19.283
3840.812	18.910	179.500	19.410	159.200	177.400	3.685	15.720	19.370
4109.468	19.000	179.300	19.480	160.400	178.300	3.882	15.600	19.445
4375.562	19.120	179.500	19.600	161.600	179.200	4.068	15.540	19.569
4644.530	19.240	179.700	19.710	162.300	180.100	4.257	15.460	19.675
4913.718	19.360	179.900	19.840	163.200	180.900	4.455	15.380	19.791
5185.655	19.480	180.100	19.970	163.800	181.700	4.665	15.300	19.919
5452.062	19.610	180.300	20.080	164.700	182.500	4.869	15.210	20.031
5716.187	19.750	180.700	20.240	166.100	183.200	5.078	15.160	20.188
5982.437	19.860	180.900	20.360	166.300	183.900	5.277	15.080	20.305
6247.780	19.960	180.800	20.440	167.300	184.600	5.477	14.970	20.393
6518.093	20.080	181.000	20.580	168.300	185.200	5.693	14.890	20.527
6782.937	20.210	181.200	20.700	169.300	185.800	5.899	14.800	20.641
7048.249	20.340	181.400	20.820	170.700	186.400	6.095	14.730	20.765
7311.718	20.460	181.600	20.950	172.100	187.000	6.284	14.670	20.892
7577.218	20.570	181.900	21.060	173.200	187.600	6.445	14.610	20.991
7839.530	20.660	182.100	21.150	174.100	188.100	6.578	14.570	21.082
8102.749	20.760	182.400	21.240	174.900	188.600	6.695	14.540	21.167
8364.280	20.840	182.700	21.340	175.600	189.100	6.807	14.530	21.267

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
8624.812	20.920	183.000	21.420	176.200	189.600	6.904	14.520	21.352
8886.343	21.010	183.300	21.490	176.800	190.100	6.991	14.500	21.416
9148.155	21.080	183.600	21.570	177.300	190.600	7.076	14.500	21.499
9411.593	21.150	183.800	21.640	177.800	191.000	7.152	14.490	21.563
9671.655	21.220	184.100	21.700	178.200	191.500	7.223	14.480	21.622
9934.093	21.280	184.400	21.770	178.700	191.900	7.292	14.470	21.679
10196.062	21.350	184.600	21.840	179.100	192.300	7.366	14.480	21.761
10455.124	21.410	184.900	21.900	179.500	192.700	7.431	14.470	21.813
10718.218	21.490	185.200	21.970	179.900	193.100	7.502	14.470	21.882
10980.062	21.560	185.500	22.040	180.300	193.500	7.570	14.470	21.948
11245.030	21.620	185.800	22.110	180.700	193.800	7.636	14.470	22.012
11506.843	21.680	186.000	22.160	181.100	194.200	7.694	14.460	22.058
11769.187	21.740	186.300	22.220	181.400	194.600	7.757	14.470	22.128
12031.155	21.800	186.500	22.290	181.800	194.900	7.820	14.470	22.189
12295.374	21.850	186.800	22.350	182.200	195.300	7.882	14.470	22.249
12558.062	21.920	187.000	22.390	182.500	195.600	7.934	14.460	22.289
12823.655	21.970	187.200	22.450	182.800	195.900	7.994	14.460	22.347
13084.874	22.020	187.400	22.510	183.100	196.200	8.051	14.460	22.402
13347.218	22.070	187.600	22.560	183.400	196.500	8.105	14.460	22.453
13608.905	22.120	187.800	22.600	183.700	196.800	8.152	14.450	22.488
13873.499	22.170	188.000	22.650	184.000	197.100	8.206	14.450	22.540
14141.968	22.210	188.100	22.710	184.300	197.400	8.259	14.450	22.591
14401.905	22.260	188.300	22.740	184.500	197.700	8.302	14.440	22.622
14663.499	22.300	188.500	22.790	184.800	197.900	8.353	14.440	22.670
14924.687	22.340	188.600	22.820	185.000	198.200	8.395	14.430	22.700
15187.155	22.380	188.800	22.870	185.300	198.400	8.444	14.430	22.747
15450.499	22.420	188.900	22.920	185.600	198.700	8.492	14.420	22.783
15713.843	22.470	189.100	22.950	185.800	198.900	8.533	14.420	22.822
15972.937	22.500	189.200	22.990	186.000	199.100	8.571	14.420	22.858

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
16233.405	22.540	189.400	23.020	186.200	199.300	8.606	14.420	22.891
16493.906	22.570	189.500	23.070	186.400	199.600	8.648	14.420	22.930
16753.625	22.610	189.700	23.100	186.600	199.800	8.682	14.420	22.962
17013.469	22.650	189.800	23.130	186.800	200.000	8.714	14.420	22.992
17274.625	22.690	190.000	23.160	186.900	200.200	8.747	14.410	23.013
17534.875	22.710	190.100	23.210	187.100	200.400	8.787	14.420	23.061
17794.094	22.740	190.200	23.240	187.300	200.500	8.818	14.420	23.090
18053.688	22.780	190.300	23.260	187.500	200.700	8.849	14.410	23.108
18313.156	22.800	190.400	23.290	187.600	200.900	8.880	14.410	23.137
18573.000	22.830	190.500	23.320	187.800	201.100	8.910	14.410	23.165
18835.344	22.850	190.600	23.350	187.900	201.200	8.940	14.410	23.193
19094.438	22.890	190.700	23.370	188.100	201.400	8.967	14.400	23.208
19354.156	22.910	190.800	23.390	188.200	201.600	8.991	14.400	23.230
19611.656	22.930	190.900	23.430	188.400	201.700	9.023	14.400	23.260
19871.875	22.950	190.900	23.450	188.500	201.900	9.047	14.400	23.281
20131.469	22.970	191.000	23.470	188.600	202.000	9.071	14.400	23.303
20389.313	23.000	191.100	23.480	188.700	202.100	9.092	14.390	23.312
20645.438	23.020	191.200	23.510	188.800	202.300	9.116	14.390	23.334
20907.188	23.040	191.300	23.540	188.900	202.400	9.140	14.400	23.366
21161.844	23.070	191.400	23.550	189.000	202.500	9.154	14.390	23.368
21422.344	23.090	191.500	23.580	189.200	202.600	9.182	14.400	23.403
21681.594	23.110	191.600	23.610	189.300	202.800	9.205	14.400	23.424
21942.094	23.130	191.700	23.630	189.400	202.900	9.228	14.400	23.445
22201.438	23.160	191.800	23.650	189.500	203.000	9.247	14.400	23.462
22458.188	23.180	191.900	23.670	189.600	203.100	9.269	14.400	23.482
22718.438	23.200	192.000	23.690	189.700	203.200	9.290	14.400	23.501
22977.719	23.220	192.000	23.710	189.800	203.300	9.307	14.400	23.516
23238.469	23.240	192.100	23.730	189.900	203.400	9.330	14.400	23.536
23496.188	23.260	192.200	23.740	190.000	203.600	9.342	14.400	23.546

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
23754.688	23.280	192.300	23.770	190.100	203.700	9.367	14.400	23.569
24015.563	23.300	192.400	23.790	190.200	203.800	9.389	14.400	23.589
24275.406	23.320	192.400	23.810	190.300	203.800	9.407	14.400	23.605
24536.406	23.340	192.500	23.830	190.400	203.900	9.427	14.400	23.623
24795.625	23.350	192.500	23.840	190.500	204.000	9.445	14.400	23.638
25053.969	23.380	192.600	23.850	190.500	204.100	9.454	14.400	23.645
25311.594	23.390	192.700	23.880	190.600	204.200	9.481	14.400	23.670
25570.188	23.400	192.700	23.890	190.700	204.300	9.495	14.390	23.672
25831.313	23.410	192.800	23.910	190.800	204.400	9.516	14.400	23.701
26090.031	23.430	192.800	23.920	190.900	204.500	9.532	14.390	23.705
26351.875	23.450	192.900	23.940	191.000	204.500	9.547	14.390	23.718
26611.469	23.460	192.900	23.950	191.000	204.600	9.562	14.390	23.730
26870.813	23.480	193.000	23.950	191.100	204.700	9.573	14.380	23.729
27128.938	23.480	193.000	23.980	191.200	204.800	9.596	14.380	23.750
27386.906	23.500	193.000	23.990	191.300	204.800	9.609	14.380	23.761
27645.625	23.510	193.100	24.000	191.300	204.900	9.621	14.380	23.771
27903.844	23.520	193.100	24.000	191.400	205.000	9.632	14.370	23.770
28163.438	23.530	193.100	24.010	191.400	205.000	9.641	14.370	23.777
28422.938	23.540	193.100	24.030	191.500	205.100	9.665	14.370	23.799
28680.156	23.550	193.200	24.040	191.600	205.200	9.678	14.370	23.809
28938.750	23.550	193.200	24.050	191.600	205.200	9.690	14.360	23.810
29196.219	23.560	193.200	24.060	191.700	205.300	9.702	14.360	23.819
29454.906	23.570	193.200	24.050	191.700	205.300	9.705	14.350	23.810
29712.625	23.580	193.200	24.070	191.800	205.400	9.725	14.340	23.818
29969.969	23.590	193.200	24.080	191.900	205.400	9.738	14.340	23.829
30225.813	23.590	193.200	24.090	191.900	205.500	9.750	14.340	23.839
30479.906	23.600	193.300	24.090	192.000	205.500	9.758	14.330	23.835
30735.500	23.600	193.300	24.090	192.000	205.500	9.766	14.330	23.841
30992.094	23.600	193.300	24.100	192.000	205.600	9.775	14.320	23.838

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
31247.563	23.610	193.200	24.100	192.100	205.600	9.785	14.320	23.846
31504.406	23.610	193.200	24.100	192.100	205.600	9.794	14.310	23.843
31761.969	23.620	193.200	24.100	192.200	205.700	9.798	14.300	23.835
32019.688	23.620	193.200	24.110	192.200	205.700	9.817	14.290	23.842
32276.031	23.630	193.300	24.100	192.200	205.700	9.817	14.280	23.830
32535.250	23.630	193.300	24.110	192.300	205.800	9.829	14.280	23.840
32794.844	23.640	193.300	24.120	192.400	205.800	9.846	14.270	23.845
33051.438	23.640	193.300	24.120	192.400	205.800	9.860	14.260	23.847
33308.313	23.640	193.300	24.140	192.500	205.800	9.877	14.260	23.862
33567.531	23.650	193.300	24.140	192.600	205.800	9.890	14.250	23.863
33824.375	23.650	193.300	24.150	192.600	205.800	9.901	14.250	23.872
34080.344	23.660	193.300	24.150	192.700	205.900	9.909	14.240	23.868
34338.438	23.660	193.300	24.150	192.700	205.900	9.920	14.230	23.867
34597.906	23.660	193.300	24.160	192.800	205.900	9.934	14.220	23.869
34854.000	23.670	193.300	24.160	192.900	205.900	9.946	14.220	23.879
35111.219	23.670	193.300	24.160	192.900	205.900	9.955	14.210	23.876
35368.313	23.670	193.300	24.160	192.900	205.900	9.962	14.200	23.871
35627.781	23.680	193.300	24.170	193.000	205.900	9.974	14.190	23.871
35890.844	23.680	193.300	24.170	193.000	205.900	9.988	14.180	23.873
36147.938	23.680	193.300	24.180	193.100	205.900	10.000	14.180	23.883
36405.781	23.680	193.300	24.180	193.200	205.900	10.010	14.170	23.881
36665.625	23.680	193.300	24.180	193.200	205.900	10.020	14.160	23.880
36924.344	23.690	193.300	24.180	193.200	205.900	10.030	14.150	23.878
37182.188	23.690	193.300	24.180	193.200	205.900	10.030	14.140	23.866
37440.063	23.680	193.200	24.180	193.300	205.900	10.040	14.140	23.874
37696.031	23.680	193.200	24.180	193.300	205.900	10.040	14.130	23.862
37954.031	23.680	193.200	24.180	193.300	205.900	10.050	14.130	23.870
38213.250	23.680	193.200	24.170	193.300	205.900	10.050	14.120	23.858
38471.625	23.680	193.200	24.180	193.400	205.900	10.060	14.120	23.866

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
38731.719	23.680	193.200	24.160	193.400	205.900	10.060	14.110	23.854
38989.844	23.670	193.200	24.160	193.400	205.900	10.060	14.100	23.842
39248.094	23.670	193.200	24.160	193.400	205.900	10.060	14.100	23.840
39504.844	23.670	193.100	24.150	193.400	205.900	10.060	14.090	23.828
39765.844	23.660	193.100	24.150	193.400	205.800	10.060	14.090	23.826
40024.469	23.660	193.100	24.140	193.400	205.800	10.060	14.080	23.814
40282.094	23.650	193.100	24.140	193.400	205.800	10.060	14.080	23.812
40539.969	23.660	193.100	24.130	193.400	205.800	10.060	14.070	23.800
40798.969	23.660	193.100	24.130	193.400	205.800	10.060	14.070	23.798
41054.219	23.660	193.100	24.130	193.400	205.800	10.060	14.070	23.796
41310.219	23.650	193.100	24.130	193.400	205.800	10.060	14.070	23.794
41565.219	23.650	193.100	24.130	193.300	205.700	10.060	14.070	23.792
41821.094	23.650	193.000	24.120	193.300	205.700	10.060	14.070	23.789
42076.594	23.640	193.000	24.120	193.300	205.700	10.060	14.070	23.787
42331.094	23.640	193.000	24.120	193.300	205.700	10.060	14.060	23.776
42585.469	23.640	193.000	24.120	193.300	205.700	10.060	14.060	23.774
42841.469	23.630	193.000	24.120	193.300	205.700	10.060	14.060	23.771
43094.969	23.630	193.000	24.120	193.300	205.700	10.060	14.060	23.769
43349.844	23.630	193.000	24.110	193.300	205.600	10.060	14.060	23.767
43605.719	23.620	192.900	24.110	193.300	205.600	10.060	14.060	23.765
43858.594	23.620	192.900	24.110	193.300	205.600	10.050	14.060	23.753
44113.469	23.610	192.900	24.110	193.300	205.600	10.050	14.050	23.741
44372.219	23.610	192.900	24.110	193.300	205.600	10.050	14.050	23.739
44630.750	23.610	192.900	24.090	193.300	205.600	10.050	14.050	23.737
44886.375	23.610	192.900	24.100	193.300	205.500	10.050	14.050	23.735
45142.125	23.600	192.800	24.100	193.300	205.500	10.050	14.050	23.733
45396.719	23.600	192.800	24.090	193.300	205.500	10.050	14.040	23.721
45652.594	23.590	192.800	24.090	193.300	205.500	10.050	14.040	23.719
45906.500	23.590	192.800	24.090	193.300	205.500	10.050	14.030	23.707

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
46160.625	23.590	192.800	24.080	193.300	205.400	10.050	14.030	23.705
46414.500	23.590	192.700	24.080	193.300	205.400	10.050	14.030	23.703
46668.875	23.580	192.700	24.080	193.300	205.400	10.050	14.030	23.701
46924.969	23.580	192.700	24.070	193.300	205.400	10.050	14.020	23.689
47180.594	23.570	192.700	24.070	193.300	205.300	10.050	14.020	23.687
47435.063	23.570	192.700	24.060	193.300	205.300	10.050	14.010	23.675
47690.188	23.570	192.600	24.060	193.300	205.300	10.050	14.010	23.673
47944.781	23.560	192.600	24.050	193.300	205.300	10.050	14.010	23.671
48198.906	23.560	192.600	24.050	193.300	205.300	10.050	14.010	23.669
48456.125	23.550	192.600	24.050	193.300	205.200	10.050	14.000	23.657
48710.125	23.550	192.500	24.050	193.300	205.200	10.050	14.000	23.655
48957.906	23.550	192.500	24.040	193.300	205.200	10.050	13.990	23.644
49211.906	23.540	192.500	24.040	193.300	205.200	10.050	13.990	23.642
49469.875	23.540	192.500	24.030	193.200	205.100	10.050	13.990	23.639
49725.656	23.530	192.400	24.030	193.200	205.100	10.040	13.980	23.618
49980.781	23.530	192.400	24.030	193.200	205.100	10.040	13.980	23.616
50235.375	23.520	192.400	24.020	193.200	205.100	10.040	13.980	23.614
50489.344	23.520	192.400	24.010	193.200	205.000	10.040	13.970	23.602
50743.719	23.520	192.300	24.010	193.200	205.000	10.040	13.970	23.600
50997.688	23.510	192.300	24.010	193.200	205.000	10.040	13.970	23.598
51253.281	23.510	192.300	23.990	193.200	204.900	10.030	13.960	23.576
51508.406	23.500	192.300	24.000	193.200	204.900	10.040	13.960	23.584
51763.750	23.500	192.200	23.990	193.200	204.900	10.040	13.950	23.572
52018.219	23.500	192.200	23.980	193.200	204.900	10.030	13.950	23.560
52271.969	23.490	192.200	23.990	193.200	204.800	10.040	13.950	23.568
52524.250	23.480	192.200	23.980	193.200	204.800	10.040	13.940	23.556
52780.219	23.480	192.100	23.970	193.200	204.800	10.030	13.940	23.544
53035.938	23.480	192.100	23.960	193.100	204.700	10.030	13.930	23.532
53291.781	23.480	192.100	23.950	193.100	204.700	10.020	13.930	23.520

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
53547.781	23.460	192.000	23.960	193.100	204.700	10.030	13.930	23.528
53802.875	23.460	192.000	23.940	193.100	204.700	10.020	13.920	23.507
54057.250	23.450	192.000	23.950	193.100	204.600	10.030	13.920	23.515
54314.125	23.440	191.900	23.940	193.100	204.600	10.020	13.920	23.502
54569.719	23.440	191.900	23.930	193.100	204.600	10.010	13.910	23.481
54824.844	23.430	191.900	23.920	193.100	204.500	10.010	13.910	23.479
55080.219	23.430	191.900	23.920	193.100	204.500	10.010	13.910	23.477
55335.719	23.420	191.800	23.920	193.000	204.500	10.010	13.910	23.475
55590.094	23.410	191.800	23.910	193.000	204.400	10.000	13.910	23.463
55843.844	23.410	191.800	23.900	193.000	204.400	9.995	13.900	23.446
56098.469	23.400	191.700	23.890	192.900	204.400	9.988	13.900	23.437
56352.844	23.390	191.700	23.880	192.900	204.300	9.982	13.900	23.429
56606.094	23.380	191.700	23.870	192.900	204.300	9.975	13.900	23.420
56860.219	23.380	191.600	23.860	192.800	204.300	9.968	13.890	23.401
57117.094	23.370	191.600	23.850	192.800	204.200	9.961	13.890	23.392
57371.469	23.360	191.600	23.840	192.800	204.200	9.955	13.890	23.384
57626.344	23.350	191.500	23.840	192.700	204.200	9.948	13.890	23.375
57880.719	23.350	191.500	23.830	192.700	204.100	9.941	13.890	23.366
58132.844	23.340	191.500	23.820	192.700	204.100	9.934	13.880	23.347
58390.219	23.330	191.400	23.810	192.700	204.000	9.930	13.880	23.341
58644.719	23.320	191.400	23.800	192.600	204.000	9.924	13.880	23.333
58897.469	23.320	191.400	23.790	192.600	204.000	9.916	13.880	23.323
59152.469	23.310	191.300	23.780	192.500	203.900	9.909	13.870	23.304
59407.844	23.300	191.300	23.770	192.500	203.900	9.901	13.870	23.294
59659.969	23.290	191.300	23.760	192.500	203.900	9.893	13.870	23.284
59915.719	23.280	191.200	23.750	192.400	203.800	9.886	13.870	23.275
60169.469	23.270	191.200	23.740	192.400	203.800	9.878	13.860	23.255
60422.969	23.270	191.200	23.730	192.400	203.700	9.870	13.860	23.245
60675.344	23.260	191.100	23.720	192.300	203.700	9.862	13.860	23.235

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
60927.844	23.250	191.100	23.710	192.300	203.700	9.855	13.860	23.226
61181.969	23.240	191.100	23.700	192.200	203.600	9.847	13.850	23.207
61434.219	23.230	191.000	23.690	192.200	203.600	9.839	13.850	23.197
61686.219	23.230	191.000	23.680	192.200	203.500	9.831	13.850	23.187
61939.594	23.220	190.900	23.670	192.100	203.500	9.822	13.840	23.166
62191.594	23.210	190.900	23.660	192.100	203.400	9.814	13.840	23.156
62443.219	23.200	190.900	23.650	192.000	203.400	9.806	13.840	23.146
62695.719	23.190	190.800	23.630	192.000	203.400	9.798	13.840	23.136
62947.469	23.180	190.800	23.620	192.000	203.300	9.790	13.830	23.116
63198.844	23.170	190.800	23.610	191.900	203.300	9.781	13.830	23.105
63451.719	23.160	190.700	23.600	191.900	203.200	9.773	13.830	23.095
63703.469	23.160	190.700	23.590	191.800	203.200	9.764	13.830	23.084
63954.969	23.150	190.600	23.580	191.800	203.200	9.756	13.820	23.065
64210.719	23.140	190.600	23.570	191.700	203.100	9.747	13.820	23.053
64464.969	23.130	190.600	23.560	191.700	203.100	9.738	13.820	23.042
64719.344	23.120	190.500	23.540	191.700	203.000	9.730	13.810	23.023
64970.969	23.110	190.500	23.530	191.600	203.000	9.721	13.810	23.012
65222.094	23.100	190.400	23.520	191.600	202.900	9.712	13.810	23.001
65474.719	23.090	190.400	23.510	191.500	202.900	9.703	13.810	22.990
65727.969	23.080	190.400	23.500	191.500	202.800	9.694	13.800	22.969
65979.219	23.070	190.300	23.490	191.400	202.800	9.685	13.800	22.958
66231.969	23.060	190.300	23.470	191.400	202.700	9.676	13.800	22.947
66483.594	23.050	190.200	23.460	191.300	202.700	9.667	13.800	22.936
66735.844	23.040	190.200	23.450	191.300	202.600	9.658	13.790	22.915
66989.844	23.030	190.100	23.440	191.300	202.600	9.649	13.790	22.904
67242.219	23.020	190.100	23.430	191.200	202.600	9.640	13.790	22.893
67493.344	23.020	190.100	23.410	191.200	202.500	9.630	13.780	22.872
67745.344	23.000	190.000	23.400	191.100	202.500	9.621	13.780	22.861
67998.969	22.990	190.000	23.390	191.100	202.400	9.612	13.780	22.850

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
68251.219	22.980	189.900	23.380	191.000	202.400	9.602	13.770	22.828
68503.094	22.970	189.900	23.360	191.000	202.300	9.593	13.770	22.817
68756.094	22.960	189.800	23.350	190.900	202.300	9.583	13.770	22.805
69008.969	22.950	189.800	23.340	190.900	202.200	9.573	13.770	22.793
69261.844	22.940	189.700	23.330	190.800	202.200	9.564	13.760	22.772
69515.344	22.930	189.700	23.310	190.800	202.100	9.554	13.760	22.760
69767.719	22.920	189.700	23.300	190.700	202.100	9.544	13.760	22.748
70021.219	22.910	189.600	23.290	190.700	202.000	9.534	13.750	22.727
70275.969	22.900	189.600	23.280	190.600	202.000	9.525	13.750	22.716
70528.344	22.890	189.500	23.260	190.600	201.900	9.515	13.750	22.704
70780.344	22.880	189.500	23.250	190.500	201.800	9.505	13.750	22.692
71030.969	22.870	189.400	23.240	190.500	201.800	9.495	13.740	22.670
71283.344	22.860	189.400	23.220	190.400	201.700	9.485	13.740	22.658
71536.094	22.850	189.300	23.210	190.400	201.700	9.475	13.740	22.646
71788.469	22.840	189.300	23.200	190.300	201.600	9.464	13.730	22.624
72040.344	22.830	189.200	23.180	190.300	201.600	9.454	13.730	22.612
72292.219	22.820	189.200	23.170	190.200	201.500	9.444	13.730	22.600
72545.594	22.810	189.100	23.160	190.200	201.500	9.434	13.720	22.578
72797.594	22.800	189.100	23.140	190.100	201.400	9.424	13.720	22.566
73051.219	22.790	189.000	23.130	190.100	201.400	9.413	13.720	22.553
73302.844	22.780	189.000	23.120	190.000	201.300	9.403	13.720	22.541
73555.719	22.760	188.900	23.110	190.000	201.300	9.393	13.710	22.519
73808.469	22.750	188.900	23.090	189.900	201.200	9.383	13.710	22.507
74061.594	22.740	188.800	23.080	189.800	201.100	9.373	13.710	22.495
74314.344	22.730	188.800	23.070	189.800	201.100	9.362	13.700	22.473
74566.719	22.720	188.700	23.050	189.700	201.000	9.352	13.700	22.461
74819.719	22.710	188.700	23.040	189.700	201.000	9.342	13.700	22.449
75071.219	22.700	188.600	23.030	189.600	200.900	9.332	13.690	22.427
75325.344	22.690	188.600	23.010	189.600	200.900	9.323	13.690	22.416

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
75576.844	22.680	188.500	23.000	189.500	200.800	9.313	13.690	22.404
75829.719	22.660	188.500	22.990	189.500	200.700	9.303	13.680	22.383
76081.594	22.650	188.400	22.970	189.400	200.700	9.293	13.680	22.371
76336.094	22.640	188.400	22.960	189.400	200.600	9.283	13.680	22.359
76588.344	22.630	188.300	22.950	189.300	200.600	9.273	13.680	22.347
76840.969	22.620	188.300	22.940	189.300	200.500	9.263	13.670	22.325
77093.094	22.610	188.200	22.920	189.200	200.500	9.254	13.670	22.314
77345.594	22.600	188.200	22.910	189.200	200.400	9.244	13.670	22.302
77596.969	22.590	188.100	22.900	189.100	200.300	9.234	13.660	22.281
77849.344	22.580	188.100	22.890	189.100	200.300	9.225	13.660	22.270
78101.219	22.560	188.000	22.870	189.000	200.200	9.215	13.660	22.258
78353.094	22.550	188.000	22.860	189.000	200.200	9.205	13.650	22.236
78606.469	22.540	187.900	22.850	188.900	200.100	9.196	13.650	22.225
78860.594	22.530	187.800	22.830	188.900	200.000	9.186	13.650	22.213
79114.094	22.520	187.800	22.820	188.800	200.000	9.177	13.650	22.202
79367.469	22.510	187.700	22.810	188.800	199.900	9.167	13.640	22.181
79620.094	22.490	187.700	22.800	188.700	199.900	9.158	13.640	22.170
79872.469	22.480	187.600	22.780	188.700	199.800	9.149	13.640	22.159
83155.469	22.330	186.900	22.600	187.900	199.000	9.006	13.600	21.952
89457.469	22.060	185.700	22.300	186.700	197.500	8.768	13.530	21.598
95767.844	21.790	184.300	21.970	185.200	196.000	8.511	13.460	21.225
102078.470	21.530	183.100	21.660	183.900	194.500	8.263	13.390	20.862
108390.720	21.310	181.900	21.380	182.600	193.200	8.043	13.340	20.546
114704.590	21.110	180.900	21.140	181.400	192.000	7.852	13.290	20.260
121008.720	20.930	180.000	20.930	180.400	190.900	7.685	13.240	19.998
127324.720	20.770	179.100	20.740	179.500	189.900	7.535	13.200	19.762
133631.840	20.630	178.400	20.570	178.700	189.000	7.403	13.170	19.555
139942.090	20.500	177.700	20.410	177.900	188.100	7.281	13.130	19.348
146249.340	20.370	177.000	20.270	177.200	187.400	7.169	13.100	19.160

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
152557.470	20.260	176.300	20.130	176.500	186.600	7.065	13.070	18.981
158859.590	20.150	175.700	20.010	175.800	185.900	6.968	13.040	18.809
165168.840	20.050	175.200	19.920	175.400	185.300	6.902	13.020	18.677
171472.340	19.960	174.700	19.810	174.800	184.600	6.818	12.990	18.519
177775.470	19.910	174.400	19.740	174.400	184.200	6.765	12.980	18.410
184086.090	19.870	174.100	19.700	174.200	184.000	6.730	12.970	18.318
190393.720	19.760	173.500	19.580	173.600	183.400	6.649	12.930	18.154
196696.590	19.670	172.900	19.470	173.000	182.700	6.563	12.910	18.003
203000.340	19.580	172.400	19.360	172.400	182.100	6.481	12.880	17.848
209300.340	19.490	171.800	19.260	171.800	181.400	6.402	12.860	17.704
215605.340	19.400	171.300	19.160	171.300	180.800	6.326	12.830	17.555
221908.220	19.310	170.800	19.060	170.700	180.300	6.253	12.810	17.418
228217.840	19.230	170.300	18.970	170.200	179.700	6.182	12.790	17.283
234526.970	19.150	169.800	18.870	169.700	179.100	6.112	12.760	17.140
240830.840	19.070	169.300	18.790	169.200	178.500	6.044	12.740	17.008
247137.470	18.990	168.800	18.700	168.700	178.000	5.977	12.720	16.878
253438.840	18.910	168.300	18.610	168.200	177.400	5.912	12.700	16.749
259741.590	18.840	167.800	18.530	167.600	176.900	5.848	12.680	16.622
266051.090	18.760	167.300	18.440	167.100	176.300	5.785	12.660	16.496
272355.470	18.690	166.800	18.360	166.600	175.800	5.723	12.640	16.371
278659.720	18.620	166.300	18.280	166.100	175.200	5.662	12.620	16.247
284960.840	18.540	165.900	18.200	165.700	174.700	5.602	12.600	16.124
291259.340	18.470	165.400	18.120	165.200	174.100	5.543	12.580	16.003
297565.340	18.400	164.900	18.040	164.700	173.600	5.484	12.560	15.881
303869.970	18.330	164.400	17.960	164.200	173.000	5.425	12.540	15.760
310174.090	18.260	163.900	17.880	163.700	172.500	5.366	12.520	15.639
316480.090	18.190	163.500	17.800	163.200	171.900	5.307	12.500	15.518
322787.090	18.120	163.000	17.730	162.700	171.400	5.248	12.480	15.397
329088.470	18.060	162.500	17.670	162.300	170.900	5.209	12.460	15.296

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
335391.470	17.990	162.000	17.600	161.800	170.300	5.155	12.440	15.180
341694.720	17.920	161.600	17.530	161.300	169.800	5.099	12.430	15.071
348006.470	17.860	161.100	17.450	160.800	169.200	5.042	12.410	14.953
354307.590	17.790	160.600	17.380	160.300	168.700	4.987	12.390	14.837
360613.470	17.730	160.100	17.300	159.900	168.200	4.931	12.370	14.720
366911.720	17.660	159.600	17.230	159.400	167.600	4.877	12.350	14.700
373220.970	17.600	159.200	17.160	158.900	167.100	4.823	12.340	14.700
379523.720	17.540	158.700	17.090	158.400	166.500	4.769	12.320	14.700
385833.470	17.470	158.200	17.020	157.900	166.000	4.716	12.300	14.700
392141.720	17.410	157.700	16.950	157.400	165.400	4.663	12.280	14.700
398439.970	17.350	157.200	16.880	156.900	164.900	4.612	12.260	14.700
404743.220	17.280	156.800	16.810	156.400	164.400	4.560	12.250	14.700
411053.090	17.220	156.300	16.740	155.900	163.800	4.509	12.230	14.700
417357.340	17.160	155.800	16.670	155.400	163.300	4.459	12.210	14.700
420000.090	17.140	155.600	16.640	155.200	163.000	4.438	12.200	14.700

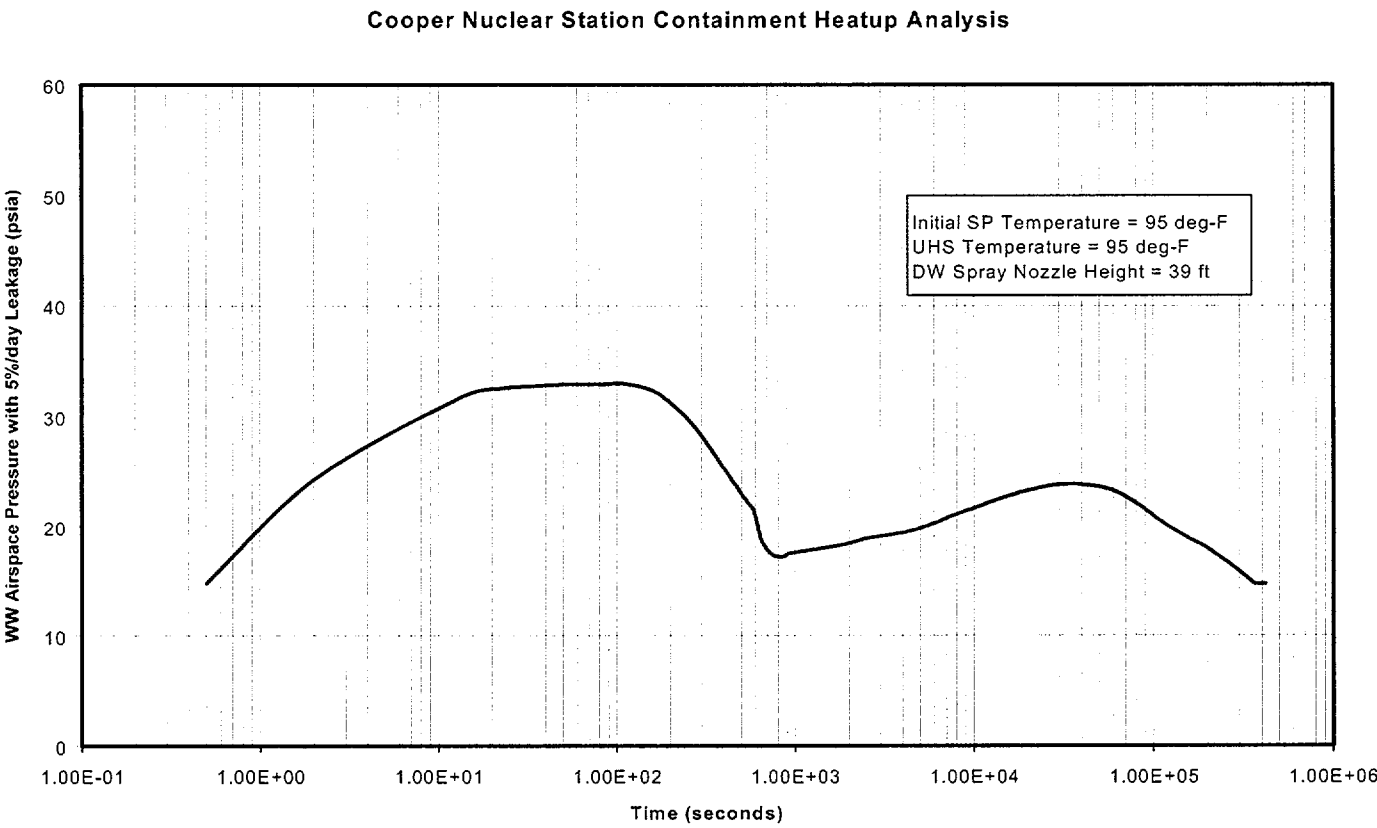


Figure B-5: Wetwell Airspace Pressure Response w/ Leakage For Long-Term NPSH (Case 1)

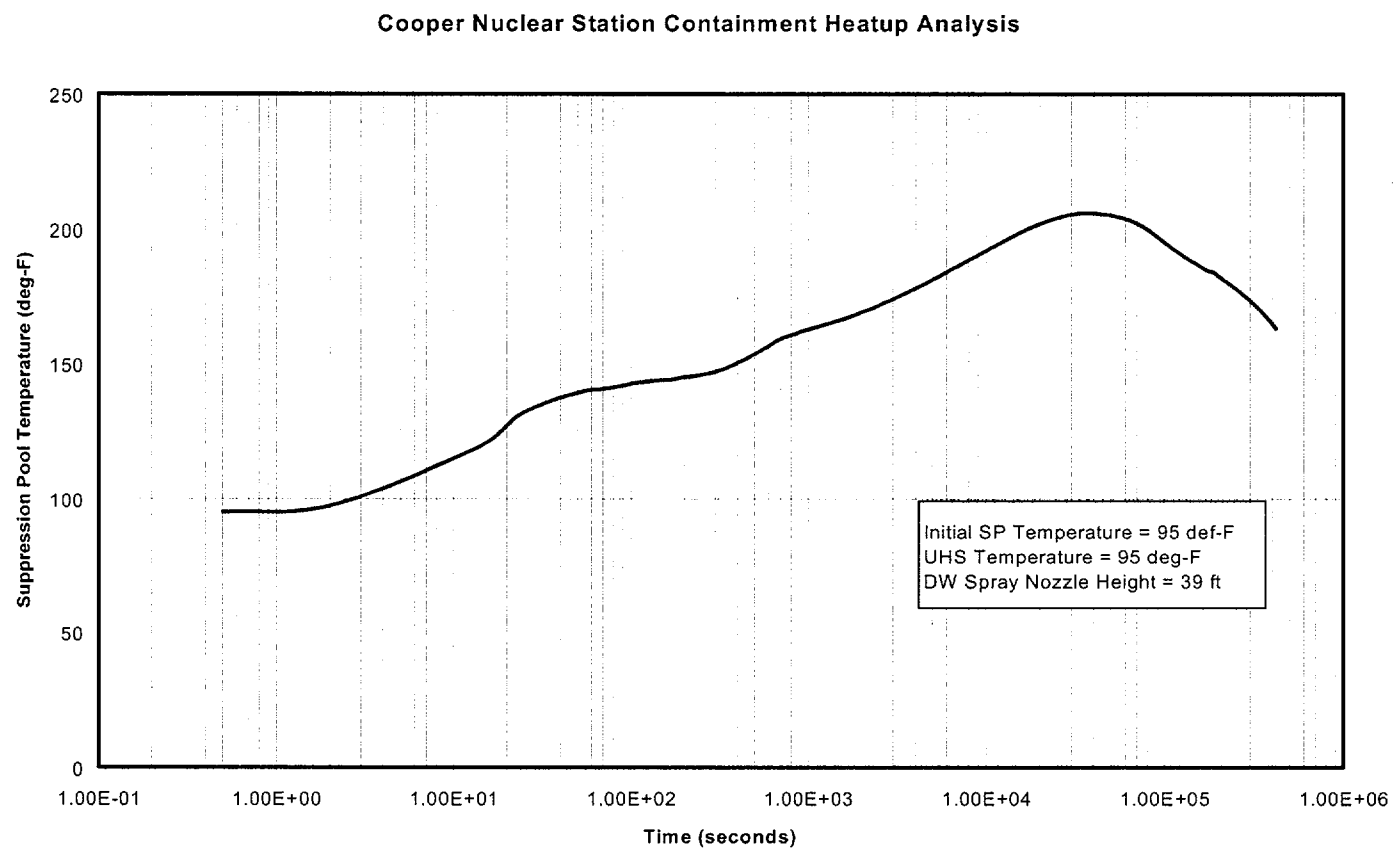


Figure B-6: Suppression Pool Temperature Response For Long-Term NPSH (Case 1)

Table B-4

DBA-LOCA Analysis Results for Long-Term NPSH Evaluation (Case 2)

SHEX-04V Results

Initial SP temperature (deg-F)	95
UHS temperature (deg-F)	93
Drywell spray nozzle height (ft)	39

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
0.000	14.700	160.000	14.700	95.000	95.000	0.815	13.880	14.695
0.501	30.150	226.000	14.720	95.190	95.070	0.816	13.900	14.716
2.007	36.780	254.900	24.280	165.800	97.370	1.267	23.010	24.277
13.632	41.880	270.000	31.780	200.800	119.000	1.543	30.230	31.773
22.507	37.520	302.800	32.500	204.900	130.300	1.559	30.940	32.499
33.007	36.070	321.500	32.710	205.900	135.500	1.551	31.160	32.710
39.257	35.880	315.600	32.780	206.200	137.200	1.545	31.230	32.774
43.382	35.880	311.500	32.810	206.300	138.100	1.541	31.270	32.810
47.319	36.100	308.600	32.830	206.400	138.800	1.537	31.300	32.836
51.882	35.930	303.200	32.860	206.500	139.500	1.533	31.330	32.862
56.257	36.000	299.500	32.880	206.600	140.100	1.528	31.350	32.877
59.194	36.030	297.000	32.890	206.600	140.500	1.526	31.370	32.895
60.194	35.260	268.100	32.880	206.600	140.500	1.524	31.360	32.883
62.382	35.920	260.800	32.880	206.500	140.500	1.522	31.360	32.881
63.319	35.890	260.800	32.880	206.500	140.500	1.521	31.360	32.880
64.257	35.890	260.800	32.880	206.400	140.500	1.520	31.360	32.879

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
65.194	35.930	260.800	32.880	206.400	140.600	1.519	31.360	32.878
66.132	35.930	260.800	32.880	206.400	140.600	1.518	31.360	32.877
67.069	35.930	260.800	32.880	206.300	140.600	1.517	31.360	32.876
68.007	35.930	260.800	32.880	206.300	140.700	1.516	31.360	32.875
68.944	35.920	260.800	32.880	206.300	140.700	1.516	31.360	32.875
69.882	35.920	260.800	32.880	206.200	140.800	1.515	31.360	32.874
70.819	35.920	260.800	32.880	206.200	140.800	1.514	31.360	32.873
71.757	35.920	260.800	32.880	206.200	140.900	1.513	31.370	32.882
72.694	35.910	260.800	32.880	206.200	140.900	1.512	31.370	32.881
73.632	35.910	260.800	32.880	206.100	141.000	1.511	31.370	32.880
74.569	35.900	260.800	32.880	206.100	141.000	1.511	31.370	32.880
75.507	35.920	260.800	32.880	206.100	141.100	1.510	31.370	32.879
76.444	35.910	260.800	32.880	206.100	141.100	1.509	31.370	32.878
77.382	35.900	260.800	32.880	206.100	141.200	1.508	31.380	32.887
78.351	35.910	260.800	32.890	206.100	141.300	1.507	31.380	32.886
79.413	35.940	260.900	32.890	206.000	141.300	1.506	31.380	32.885
80.444	35.910	260.800	32.890	206.000	141.400	1.506	31.380	32.885
81.507	35.910	260.800	32.890	206.000	141.500	1.505	31.390	32.894
82.601	35.940	260.900	32.890	206.000	141.500	1.504	31.390	32.892
83.663	35.930	260.800	32.900	206.000	141.600	1.503	31.390	32.891
84.757	35.940	260.900	32.900	206.000	141.700	1.502	31.400	32.900
85.819	35.930	260.800	32.900	206.000	141.700	1.501	31.400	32.899
86.882	35.940	260.800	32.910	206.000	141.800	1.501	31.400	32.899
87.944	35.940	260.800	32.910	206.000	141.900	1.500	31.410	32.908
89.007	35.950	260.900	32.910	206.000	141.900	1.499	31.410	32.907
90.069	35.940	260.900	32.920	206.000	142.000	1.498	31.420	32.916
91.163	35.950	260.900	32.920	206.000	142.100	1.497	31.420	32.915
92.257	35.960	260.900	32.930	206.100	142.200	1.497	31.430	32.925
93.444	35.960	260.900	32.930	206.100	142.200	1.496	31.430	32.924

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
94.632	35.960	260.900	32.940	206.100	142.300	1.495	31.440	32.933
95.913	35.970	260.900	32.940	206.100	142.400	1.494	31.450	32.942
97.257	35.990	260.900	32.950	206.200	142.500	1.493	31.460	32.951
98.632	36.000	260.900	32.960	206.200	142.600	1.492	31.470	32.960
103.132	36.010	261.000	32.980	206.300	142.900	1.490	31.490	32.978
136.038	34.000	257.600	32.660	203.600	143.800	1.458	31.200	32.656
167.382	32.030	254.100	32.150	200.300	144.200	1.422	30.730	32.149
198.882	30.820	251.300	31.270	194.500	145.000	1.379	29.890	31.266
230.132	29.920	249.200	30.380	188.900	145.500	1.340	29.040	30.376
261.382	28.930	246.500	29.420	182.500	146.100	1.306	28.120	29.422
292.632	27.950	243.600	28.430	175.700	146.800	1.274	27.160	28.429
323.882	26.990	240.400	27.490	169.500	147.700	1.245	26.240	27.480
355.132	26.070	237.100	26.560	162.900	148.700	1.224	25.340	26.559
386.382	25.220	233.800	25.660	156.300	149.800	1.207	24.460	25.662
417.632	24.400	230.500	24.870	150.700	150.900	1.194	23.680	24.868
449.319	23.660	227.200	24.110	145.500	151.900	1.182	22.920	24.096
480.569	22.970	224.000	23.430	140.600	153.000	1.177	22.260	23.431
513.663	22.310	220.700	22.750	135.000	154.000	1.180	21.570	22.744
546.632	21.690	217.600	22.170	130.400	155.000	1.186	20.980	22.159
582.976	21.100	214.400	21.590	126.100	156.100	1.193	20.400	21.586
612.218	19.850	206.300	20.350	120.500	157.000	1.161	19.190	20.344
636.374	18.600	196.100	19.110	120.500	157.800	1.128	17.990	19.111
668.155	17.800	187.500	18.300	125.800	158.600	1.138	17.160	18.291
703.593	17.240	180.500	17.730	130.800	159.300	1.171	16.560	17.724
743.374	16.880	175.100	17.340	134.800	159.900	1.220	16.120	17.333
793.999	16.680	171.400	17.160	138.800	160.500	1.295	15.860	17.148
851.968	16.660	169.700	17.130	141.200	161.200	1.377	15.750	17.119
914.593	17.100	172.300	17.410	143.900	162.000	1.471	15.940	17.403
977.218	17.730	176.300	17.500	143.900	162.600	1.537	15.960	17.488

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
1171.093	18.410	180.200	17.710	145.500	163.900	1.697	16.010	17.696
1421.093	18.570	181.100	17.920	146.700	165.600	1.867	16.060	17.914
1670.968	18.540	180.900	18.120	147.800	167.100	2.027	16.090	18.101
1926.218	18.450	180.300	18.320	149.000	168.500	2.192	16.130	18.304
2201.718	18.380	179.800	18.570	150.900	170.000	2.379	16.190	18.548
2487.343	18.390	179.800	18.840	153.000	171.400	2.584	16.250	18.811
2766.280	18.470	179.700	18.940	153.500	172.800	2.799	16.150	18.923
3034.624	18.570	179.500	19.050	155.100	174.000	3.016	16.030	19.018
3311.062	18.690	179.400	19.160	156.900	175.100	3.243	15.920	19.132
3593.218	18.790	179.200	19.270	158.100	176.300	3.477	15.790	19.234
3862.437	18.860	179.000	19.350	158.700	177.300	3.689	15.670	19.324
4127.062	18.950	178.800	19.440	160.100	178.200	3.877	15.560	19.400
4393.655	19.070	179.000	19.550	161.100	179.100	4.062	15.490	19.513
4655.218	19.180	179.200	19.660	162.000	179.900	4.242	15.410	19.610
4925.780	19.300	179.400	19.770	162.600	180.700	4.440	15.330	19.726
5196.874	19.420	179.600	19.910	163.400	181.500	4.649	15.260	19.863
5463.624	19.530	179.700	20.010	164.200	182.300	4.850	15.160	19.962
5731.780	19.690	180.200	20.170	165.700	183.000	5.060	15.110	20.120
5998.499	19.790	180.300	20.270	165.800	183.700	5.254	15.020	20.222
6266.343	19.880	180.200	20.380	166.800	184.300	5.459	14.920	20.325
6531.593	20.010	180.400	20.490	167.600	185.000	5.665	14.820	20.429
6795.780	20.130	180.600	20.620	169.100	185.600	5.868	14.750	20.560
7061.468	20.250	180.800	20.740	170.500	186.100	6.057	14.680	20.677
7321.187	20.370	181.000	20.860	171.700	186.700	6.234	14.620	20.792
7585.187	20.470	181.300	20.960	172.800	187.200	6.386	14.580	20.902
7848.749	20.560	181.500	21.050	173.600	187.800	6.510	14.540	20.984
8109.874	20.640	181.700	21.140	174.400	188.300	6.622	14.510	21.064
8370.249	20.730	182.000	21.210	175.000	188.800	6.718	14.490	21.138
8634.905	20.810	182.300	21.290	175.600	189.300	6.811	14.480	21.219

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
8898.218	20.880	182.600	21.370	176.200	189.700	6.897	14.470	21.292
9160.780	20.950	182.900	21.440	176.700	190.200	6.976	14.470	21.369
9424.343	21.020	183.200	21.510	177.200	190.600	7.052	14.460	21.433
9685.030	21.080	183.400	21.580	177.600	191.000	7.124	14.450	21.493
9945.093	21.150	183.600	21.640	178.000	191.500	7.192	14.450	21.559
10203.530	21.210	183.900	21.690	178.400	191.900	7.257	14.440	21.612
10467.374	21.280	184.200	21.770	178.900	192.200	7.329	14.440	21.682
10726.937	21.340	184.400	21.820	179.300	192.600	7.389	14.430	21.729
10988.905	21.410	184.700	21.890	179.700	193.000	7.455	14.430	21.793
11251.999	21.470	185.000	21.950	180.000	193.400	7.519	14.430	21.855
11510.468	21.530	185.200	22.020	180.400	193.700	7.581	14.430	21.915
11771.562	21.580	185.500	22.080	180.800	194.100	7.643	14.440	21.985
12034.124	21.640	185.700	22.120	181.100	194.400	7.697	14.430	22.027
12297.718	21.700	185.900	22.180	181.400	194.700	7.756	14.430	22.083
12560.062	21.750	186.100	22.240	181.800	195.000	7.812	14.430	22.137
12827.530	21.800	186.300	22.290	182.100	195.400	7.867	14.430	22.190
13088.968	21.850	186.500	22.330	182.300	195.700	7.913	14.420	22.224
13349.812	21.900	186.700	22.380	182.600	195.900	7.967	14.420	22.276
13611.405	21.940	186.900	22.440	182.900	196.200	8.019	14.420	22.325
13869.593	21.990	187.100	22.470	183.200	196.500	8.062	14.410	22.356
14130.687	22.030	187.200	22.520	183.500	196.800	8.113	14.410	22.405
14391.499	22.070	187.400	22.550	183.700	197.000	8.154	14.400	22.434
14651.343	22.110	187.500	22.600	184.000	197.300	8.203	14.390	22.471
14908.155	22.150	187.600	22.620	184.200	197.500	8.240	14.380	22.496
15169.624	22.190	187.800	22.670	184.400	197.800	8.287	14.380	22.541
15427.093	22.220	187.900	22.710	184.700	198.000	8.328	14.380	22.580
15684.312	22.260	188.100	22.740	184.900	198.200	8.363	14.380	22.612
15942.687	22.300	188.200	22.790	185.100	198.400	8.405	14.380	22.652
16199.655	22.330	188.400	22.820	185.300	198.600	8.439	14.380	22.684

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
16455.625	22.360	188.500	22.850	185.400	198.800	8.471	14.380	22.714
16713.219	22.400	188.600	22.880	185.600	199.000	8.503	14.380	22.744
16972.094	22.430	188.800	22.920	185.800	199.200	8.543	14.380	22.782
17230.938	22.460	188.900	22.950	186.000	199.400	8.575	14.380	22.812
17489.906	22.490	189.000	22.980	186.200	199.600	8.606	14.380	22.840
17747.250	22.520	189.100	23.010	186.300	199.800	8.635	14.370	22.857
18006.844	22.550	189.200	23.030	186.500	199.900	8.663	14.370	22.883
18264.688	22.570	189.300	23.050	186.600	200.100	8.689	14.370	22.907
18523.063	22.600	189.400	23.090	186.800	200.300	8.723	14.370	22.939
18779.656	22.620	189.500	23.120	186.900	200.400	8.749	14.370	22.963
19033.875	22.640	189.600	23.140	187.100	200.600	8.774	14.360	22.976
19292.094	22.660	189.600	23.160	187.200	200.700	8.798	14.360	22.998
19549.188	22.690	189.700	23.180	187.300	200.900	8.823	14.360	23.021
19807.031	22.710	189.800	23.200	187.400	201.000	8.846	14.350	23.032
20060.375	22.720	189.800	23.210	187.500	201.200	8.865	14.350	23.048
20316.500	22.740	189.900	23.240	187.700	201.300	8.888	14.350	23.069
20571.594	22.770	190.000	23.250	187.700	201.400	8.906	14.350	23.085
20828.219	22.780	190.100	23.280	187.900	201.500	8.928	14.350	23.105
21081.188	22.800	190.200	23.290	187.900	201.600	8.944	14.350	23.119
21335.563	22.820	190.200	23.320	188.100	201.800	8.967	14.350	23.140
21589.781	22.850	190.300	23.330	188.100	201.900	8.982	14.350	23.153
21844.531	22.870	190.400	23.350	188.200	202.000	9.005	14.350	23.174
22098.656	22.880	190.500	23.380	188.400	202.100	9.027	14.350	23.193
22355.000	22.900	190.600	23.390	188.400	202.200	9.043	14.350	23.207
22611.250	22.920	190.600	23.410	188.600	202.300	9.065	14.350	23.227
22867.344	22.940	190.700	23.430	188.600	202.400	9.081	14.350	23.241
23122.594	22.950	190.800	23.450	188.700	202.500	9.102	14.350	23.260
23377.563	22.980	190.800	23.460	188.800	202.600	9.117	14.340	23.263
23632.906	22.990	190.900	23.470	188.900	202.700	9.129	14.340	23.273

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
23886.781	23.000	190.900	23.490	189.000	202.800	9.152	14.340	23.294
24141.000	23.020	191.000	23.500	189.100	202.800	9.166	14.340	23.306
24396.500	23.030	191.000	23.530	189.200	202.900	9.186	14.340	23.324
24651.344	23.050	191.100	23.540	189.200	203.000	9.200	14.340	23.335
24906.938	23.060	191.200	23.540	189.300	203.100	9.206	14.330	23.329
25160.188	23.080	191.200	23.560	189.400	203.200	9.230	14.330	23.351
25415.781	23.090	191.300	23.570	189.400	203.200	9.242	14.330	23.361
25671.156	23.100	191.300	23.590	189.500	203.300	9.261	14.330	23.378
25927.625	23.110	191.300	23.600	189.600	203.400	9.274	14.330	23.389
26181.969	23.120	191.400	23.610	189.700	203.500	9.284	14.320	23.387
26436.594	23.130	191.400	23.630	189.700	203.500	9.302	14.330	23.413
26690.813	23.140	191.400	23.630	189.800	203.600	9.313	14.320	23.412
26946.156	23.150	191.500	23.630	189.800	203.600	9.319	14.310	23.406
27203.031	23.160	191.500	23.650	189.900	203.700	9.339	14.310	23.424
27457.250	23.170	191.500	23.660	190.000	203.800	9.347	14.310	23.430
27712.625	23.180	191.500	23.670	190.000	203.800	9.363	14.310	23.444
27968.469	23.190	191.600	23.680	190.100	203.900	9.373	14.300	23.442
28223.719	23.190	191.600	23.690	190.200	203.900	9.385	14.300	23.451
28479.438	23.200	191.600	23.690	190.200	204.000	9.393	14.300	23.457
28735.438	23.210	191.700	23.700	190.300	204.000	9.407	14.300	23.469
28990.188	23.220	191.700	23.710	190.300	204.100	9.418	14.300	23.478
29245.906	23.230	191.700	23.720	190.400	204.100	9.426	14.290	23.474
29503.281	23.230	191.700	23.730	190.400	204.100	9.438	14.290	23.484
29759.656	23.240	191.800	23.740	190.500	204.200	9.449	14.290	23.493
30013.500	23.250	191.800	23.740	190.500	204.200	9.455	14.280	23.487
30269.125	23.250	191.800	23.750	190.500	204.300	9.466	14.280	23.496
30527.375	23.260	191.800	23.750	190.600	204.300	9.475	14.280	23.503
30782.719	23.270	191.800	23.750	190.600	204.300	9.476	14.270	23.492
31037.969	23.270	191.900	23.760	190.700	204.400	9.492	14.270	23.506

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
31290.469	23.270	191.900	23.760	190.700	204.400	9.496	14.270	23.508
31545.719	23.270	191.900	23.770	190.700	204.400	9.504	14.260	23.504
31799.719	23.280	191.900	23.770	190.700	204.400	9.509	14.260	23.507
32055.563	23.280	191.900	23.760	190.700	204.500	9.506	14.250	23.492
32311.688	23.280	191.900	23.780	190.800	204.500	9.526	14.250	23.510
32567.688	23.290	191.900	23.780	190.900	204.500	9.534	14.250	23.515
32823.906	23.290	191.900	23.790	190.900	204.500	9.544	14.240	23.514
33082.000	23.300	191.900	23.790	191.000	204.500	9.555	14.240	23.522
33339.844	23.300	191.900	23.790	191.000	204.500	9.564	14.230	23.519
33595.094	23.300	191.900	23.800	191.100	204.600	9.574	14.220	23.518
33853.188	23.300	191.900	23.800	191.100	204.600	9.585	14.220	23.526
34107.281	23.310	191.900	23.800	191.200	204.600	9.593	14.210	23.523
34362.500	23.310	191.900	23.800	191.200	204.600	9.594	14.200	23.512
34618.500	23.310	191.900	23.810	191.200	204.600	9.609	14.200	23.525
34876.219	23.310	191.900	23.810	191.300	204.600	9.618	14.190	23.522
35134.313	23.320	191.900	23.810	191.300	204.600	9.629	14.180	23.521
35392.281	23.320	191.900	23.820	191.400	204.600	9.641	14.180	23.531
35648.250	23.320	191.900	23.820	191.400	204.600	9.650	14.170	23.528
35902.469	23.320	191.900	23.810	191.400	204.600	9.654	14.160	23.520
36157.188	23.330	191.900	23.800	191.400	204.600	9.654	14.150	23.508
36412.563	23.320	191.900	23.820	191.500	204.600	9.670	14.150	23.522
36670.906	23.320	191.900	23.820	191.600	204.600	9.679	14.140	23.519
36924.500	23.320	191.900	23.820	191.600	204.600	9.686	14.130	23.514
37180.469	23.330	191.900	23.810	191.600	204.600	9.684	14.120	23.500
37440.938	23.330	191.900	23.810	191.600	204.600	9.696	14.120	23.510
37696.688	23.320	191.900	23.820	191.700	204.600	9.710	14.110	23.512
37952.031	23.320	191.800	23.820	191.700	204.600	9.713	14.100	23.503
38207.125	23.330	191.800	23.810	191.700	204.600	9.714	14.100	23.502
38465.250	23.320	191.800	23.820	191.800	204.600	9.725	14.090	23.501

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
38721.719	23.330	191.800	23.810	191.800	204.600	9.727	14.090	23.501
38975.844	23.330	191.800	23.820	191.800	204.600	9.734	14.080	23.496
39232.438	23.330	191.800	23.810	191.800	204.600	9.735	14.080	23.495
39487.688	23.320	191.800	23.820	191.800	204.500	9.741	14.080	23.499
39742.063	23.320	191.800	23.820	191.900	204.500	9.742	14.080	23.498
39995.219	23.320	191.800	23.810	191.800	204.500	9.741	14.070	23.485
40250.594	23.320	191.800	23.810	191.900	204.500	9.743	14.070	23.485
40506.094	23.310	191.700	23.810	191.900	204.500	9.744	14.070	23.484
40759.844	23.310	191.700	23.810	191.900	204.500	9.745	14.060	23.473
41015.875	23.310	191.700	23.800	191.800	204.500	9.742	14.060	23.468
41270.625	23.310	191.700	23.800	191.900	204.500	9.744	14.060	23.468
41526.125	23.300	191.700	23.800	191.900	204.400	9.744	14.060	23.466
41781.500	23.300	191.700	23.800	191.800	204.400	9.744	14.050	23.454
42037.750	23.300	191.700	23.800	191.800	204.400	9.744	14.050	23.452
42295.094	23.300	191.600	23.790	191.800	204.400	9.740	14.050	23.446
42548.719	23.290	191.600	23.790	191.800	204.400	9.740	14.050	23.444
42802.094	23.290	191.600	23.790	191.800	204.400	9.740	14.040	23.432
43057.969	23.290	191.600	23.780	191.800	204.400	9.740	14.040	23.430
43312.313	23.290	191.600	23.770	191.800	204.300	9.728	14.040	23.416
43566.438	23.280	191.600	23.780	191.800	204.300	9.739	14.040	23.425
43822.563	23.280	191.500	23.770	191.800	204.300	9.739	14.040	23.423
44078.813	23.280	191.500	23.770	191.800	204.300	9.739	14.030	23.411
44333.656	23.270	191.500	23.770	191.800	204.300	9.738	14.030	23.408
44586.531	23.270	191.500	23.770	191.800	204.200	9.738	14.030	23.406
44842.125	23.270	191.500	23.750	191.800	204.200	9.733	14.020	23.389
45096.875	23.260	191.500	23.760	191.800	204.200	9.737	14.020	23.391
45352.281	23.260	191.500	23.740	191.800	204.200	9.727	14.010	23.369
45607.031	23.260	191.400	23.750	191.800	204.200	9.736	14.010	23.376
45859.781	23.250	191.400	23.750	191.800	204.100	9.736	14.010	23.374

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
46115.875	23.250	191.400	23.740	191.800	204.100	9.735	14.010	23.371
46369.500	23.250	191.400	23.740	191.800	204.100	9.735	14.010	23.369
46622.469	23.240	191.300	23.730	191.800	204.100	9.732	14.000	23.354
46875.219	23.240	191.300	23.730	191.800	204.100	9.734	14.000	23.354
47131.563	23.240	191.300	23.730	191.800	204.000	9.731	13.990	23.339
47385.313	23.230	191.300	23.730	191.800	204.000	9.733	13.990	23.339
47640.281	23.230	191.200	23.720	191.800	204.000	9.731	13.990	23.335
47894.281	23.220	191.200	23.720	191.800	204.000	9.732	13.990	23.334
48148.375	23.220	191.200	23.710	191.800	203.900	9.731	13.980	23.321
48401.000	23.210	191.200	23.710	191.800	203.900	9.731	13.980	23.319
48654.969	23.210	191.200	23.710	191.700	203.900	9.730	13.980	23.316
48906.563	23.210	191.100	23.690	191.700	203.900	9.723	13.970	23.298
49161.813	23.200	191.100	23.700	191.700	203.800	9.729	13.970	23.302
49416.656	23.200	191.100	23.690	191.700	203.800	9.726	13.960	23.287
49671.656	23.190	191.000	23.690	191.700	203.800	9.728	13.960	23.287
49925.563	23.190	191.000	23.690	191.700	203.800	9.727	13.960	23.284
50177.781	23.190	191.000	23.670	191.700	203.700	9.718	13.950	23.263
50433.031	23.180	191.000	23.680	191.700	203.700	9.725	13.950	23.268
50686.750	23.180	191.000	23.670	191.700	203.700	9.723	13.950	23.264
50939.469	23.180	190.900	23.660	191.700	203.700	9.716	13.940	23.245
51194.344	23.170	190.900	23.660	191.700	203.600	9.723	13.940	23.250
51449.313	23.170	190.900	23.660	191.700	203.600	9.722	13.940	23.247
51701.906	23.160	190.900	23.640	191.700	203.600	9.713	13.930	23.226
51955.906	23.150	190.800	23.650	191.700	203.500	9.721	13.930	23.232
52208.500	23.150	190.800	23.650	191.700	203.500	9.719	13.930	23.228
52463.219	23.150	190.800	23.630	191.600	203.500	9.714	13.920	23.211
52717.563	23.150	190.800	23.620	191.600	203.400	9.707	13.910	23.193
52970.313	23.140	190.700	23.630	191.700	203.400	9.717	13.910	23.201
53223.156	23.130	190.700	23.620	191.600	203.400	9.712	13.910	23.194

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
53477.375	23.130	190.700	23.610	191.600	203.400	9.705	13.900	23.175
53730.375	23.120	190.600	23.610	191.600	203.300	9.711	13.900	23.179
53982.094	23.120	190.600	23.600	191.600	203.300	9.700	13.900	23.166
54235.719	23.110	190.600	23.600	191.600	203.300	9.702	13.900	23.166
54490.594	23.100	190.500	23.600	191.600	203.200	9.702	13.890	23.154
54743.563	23.100	190.500	23.580	191.500	203.200	9.689	13.890	23.139
54997.688	23.090	190.500	23.580	191.500	203.200	9.689	13.890	23.137
55251.813	23.080	190.400	23.570	191.500	203.100	9.688	13.890	23.134
55504.063	23.080	190.400	23.570	191.500	203.100	9.683	13.880	23.117
55759.313	23.070	190.400	23.560	191.500	203.100	9.677	13.880	23.109
56012.063	23.060	190.300	23.550	191.400	203.000	9.671	13.880	23.101
56265.688	23.050	190.300	23.540	191.400	203.000	9.664	13.880	23.092
56519.813	23.050	190.300	23.530	191.400	203.000	9.658	13.870	23.074
56773.063	23.040	190.200	23.520	191.300	202.900	9.652	13.870	23.066
57026.938	23.030	190.200	23.510	191.300	202.900	9.646	13.870	23.058
57278.313	23.020	190.200	23.510	191.300	202.800	9.639	13.870	23.049
57531.313	23.020	190.100	23.500	191.200	202.800	9.633	13.860	23.032
57783.938	23.010	190.100	23.490	191.200	202.800	9.627	13.860	23.024
58036.313	23.000	190.100	23.480	191.200	202.700	9.621	13.860	23.016
58289.688	22.990	190.000	23.470	191.100	202.700	9.615	13.860	23.007
58541.563	22.990	190.000	23.460	191.100	202.700	9.609	13.850	22.990
58793.563	22.980	190.000	23.450	191.100	202.600	9.602	13.850	22.981
59045.563	22.970	189.900	23.450	191.000	202.600	9.596	13.850	22.973
59299.438	22.960	189.900	23.440	191.000	202.500	9.590	13.850	22.965
59553.563	22.960	189.900	23.430	191.000	202.500	9.583	13.840	22.946
59806.063	22.950	189.800	23.420	190.900	202.500	9.575	13.840	22.936
60060.438	22.940	189.800	23.410	190.900	202.400	9.568	13.840	22.927
60314.313	22.930	189.800	23.400	190.900	202.400	9.560	13.840	22.917
60567.313	22.920	189.700	23.380	190.800	202.300	9.549	13.830	22.894

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
60818.938	22.910	189.700	23.370	190.700	202.300	9.538	13.830	22.881
61070.438	22.900	189.600	23.360	190.700	202.300	9.529	13.830	22.870
61322.313	22.900	189.600	23.350	190.700	202.200	9.521	13.830	22.860
61573.938	22.890	189.600	23.340	190.600	202.200	9.513	13.820	22.841
61827.188	22.880	189.500	23.330	190.600	202.100	9.505	13.820	22.831
62079.563	22.870	189.500	23.310	190.500	202.100	9.497	13.820	22.821
62331.563	22.860	189.400	23.300	190.500	202.000	9.488	13.810	22.800
62584.688	22.850	189.400	23.290	190.400	202.000	9.480	13.810	22.790
62836.563	22.840	189.400	23.280	190.400	202.000	9.472	13.810	22.780
63088.313	22.840	189.300	23.270	190.400	201.900	9.463	13.810	22.769
63340.563	22.830	189.300	23.260	190.300	201.900	9.455	13.800	22.749
63593.063	22.820	189.200	23.250	190.300	201.800	9.446	13.800	22.738
63845.688	22.810	189.200	23.240	190.200	201.800	9.438	13.800	22.728
64097.688	22.800	189.200	23.220	190.200	201.700	9.429	13.800	22.717
64351.688	22.790	189.100	23.210	190.100	201.700	9.420	13.790	22.696
64605.188	22.780	189.100	23.200	190.100	201.600	9.411	13.790	22.685
64857.813	22.770	189.000	23.190	190.000	201.600	9.402	13.790	22.674
65109.938	22.760	189.000	23.180	190.000	201.500	9.393	13.780	22.654
65361.688	22.750	188.900	23.170	190.000	201.500	9.384	13.780	22.643
65614.688	22.740	188.900	23.150	189.900	201.500	9.375	13.780	22.632
65867.438	22.730	188.900	23.140	189.900	201.400	9.366	13.780	22.621
66120.438	22.720	188.800	23.130	189.800	201.400	9.357	13.770	22.600
66373.063	22.710	188.800	23.120	189.800	201.300	9.348	13.770	22.589
66626.938	22.700	188.700	23.110	189.700	201.300	9.338	13.770	22.577
66878.438	22.690	188.700	23.090	189.700	201.200	9.329	13.760	22.556
67130.688	22.680	188.600	23.080	189.600	201.200	9.320	13.760	22.545
67381.813	22.670	188.600	23.070	189.600	201.100	9.310	13.760	22.533
67634.688	22.660	188.500	23.060	189.500	201.100	9.301	13.760	22.522
67886.438	22.650	188.500	23.040	189.500	201.000	9.291	13.750	22.501

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
68139.313	22.640	188.500	23.030	189.400	201.000	9.282	13.750	22.490
68393.063	22.630	188.400	23.020	189.400	200.900	9.272	13.750	22.478
68644.188	22.620	188.400	23.010	189.300	200.800	9.263	13.740	22.457
68898.438	22.610	188.300	22.990	189.300	200.800	9.253	13.740	22.445
69150.438	22.600	188.300	22.980	189.200	200.700	9.243	13.740	22.433
69402.563	22.590	188.200	22.970	189.200	200.700	9.233	13.730	22.412
69653.438	22.580	188.200	22.960	189.100	200.600	9.224	13.730	22.401
69904.688	22.570	188.100	22.940	189.100	200.600	9.214	13.730	22.389
70158.313	22.560	188.100	22.930	189.000	200.500	9.204	13.730	22.377
70411.938	22.550	188.000	22.920	189.000	200.500	9.194	13.720	22.355
70665.063	22.540	188.000	22.900	188.900	200.400	9.184	13.720	22.343
70917.688	22.530	187.900	22.890	188.900	200.400	9.174	13.720	22.331
71169.313	22.520	187.900	22.880	188.800	200.300	9.164	13.710	22.309
71421.313	22.510	187.800	22.870	188.800	200.300	9.154	13.710	22.297
71674.063	22.500	187.800	22.850	188.700	200.200	9.145	13.710	22.286
71926.438	22.490	187.700	22.840	188.700	200.100	9.135	13.700	22.265
72179.938	22.480	187.700	22.830	188.600	200.100	9.125	13.700	22.253
72431.438	22.470	187.600	22.810	188.600	200.000	9.116	13.700	22.242
72685.563	22.450	187.600	22.810	188.500	200.000	9.112	13.700	22.236
72936.188	22.440	187.500	22.800	188.500	199.900	9.109	13.690	22.221
73187.938	22.430	187.500	22.800	188.500	199.900	9.105	13.690	22.215
73440.313	22.420	187.400	22.790	188.500	199.800	9.101	13.690	22.209
73692.688	22.410	187.400	22.780	188.400	199.800	9.091	13.690	22.197
73945.688	22.400	187.300	22.760	188.400	199.700	9.081	13.680	22.176
74198.188	22.390	187.300	22.750	188.300	199.600	9.070	13.680	22.163
74451.063	22.380	187.200	22.740	188.300	199.600	9.060	13.680	22.151
74702.438	22.370	187.200	22.720	188.200	199.500	9.049	13.670	22.128
74955.688	22.360	187.100	22.710	188.100	199.500	9.038	13.670	22.115
75207.063	22.340	187.100	22.690	188.100	199.400	9.027	13.670	22.102

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
75459.938	22.330	187.000	22.680	188.000	199.400	9.017	13.660	22.080
75712.563	22.320	187.000	22.670	188.000	199.300	9.006	13.660	22.067
75965.563	22.310	186.900	22.650	187.900	199.200	8.995	13.660	22.054
76216.813	22.300	186.900	22.640	187.900	199.200	8.985	13.650	22.033
76469.563	22.290	186.800	22.630	187.800	199.100	8.974	13.650	22.020
76720.938	22.280	186.800	22.610	187.700	199.100	8.963	13.650	22.007
76973.188	22.270	186.700	22.600	187.700	199.000	8.952	13.650	21.994
77226.813	22.250	186.600	22.580	187.600	198.900	8.941	13.640	21.971
77478.438	22.240	186.600	22.570	187.600	198.900	8.931	13.640	21.959
77730.438	22.230	186.500	22.560	187.500	198.800	8.920	13.640	21.946
77983.563	22.220	186.500	22.540	187.500	198.800	8.909	13.630	21.924
78234.813	22.210	186.400	22.530	187.400	198.700	8.898	13.630	21.911
78486.938	22.200	186.400	22.510	187.300	198.600	8.887	13.630	21.898
78741.438	22.190	186.300	22.500	187.300	198.600	8.875	13.620	21.874
78994.938	22.170	186.300	22.480	187.200	198.500	8.864	13.620	21.861
79246.688	22.160	186.200	22.470	187.200	198.400	8.853	13.620	21.848
79500.813	22.150	186.200	22.450	187.100	198.400	8.842	13.610	21.826
79752.813	22.140	186.100	22.440	187.000	198.300	8.830	13.610	21.812
80612.563	22.100	185.900	22.390	186.800	198.100	8.792	13.600	21.758
86920.063	21.820	184.600	22.080	185.500	196.500	8.548	13.530	21.397
93231.938	21.550	183.200	21.740	184.000	195.000	8.286	13.460	21.020
99535.813	21.280	181.900	21.430	182.600	193.500	8.036	13.390	20.655
105847.560	21.040	180.700	21.140	181.200	192.000	7.806	13.330	20.319
112162.690	20.840	179.600	20.880	180.000	190.700	7.607	13.280	20.025
118469.440	20.650	178.600	20.660	178.900	189.600	7.434	13.230	19.757
124779.440	20.490	177.700	20.470	178.000	188.500	7.282	13.190	19.520
131088.310	20.340	176.900	20.300	177.100	187.600	7.146	13.150	19.298
137403.940	20.210	176.100	20.140	176.300	186.700	7.022	13.110	19.090
143712.810	20.080	175.400	19.990	175.500	185.900	6.909	13.080	18.901

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
150019.560	19.970	174.800	19.860	174.800	185.100	6.805	13.050	18.722
156331.690	19.860	174.200	19.760	174.300	184.400	6.732	13.020	18.574
162638.190	19.760	173.600	19.640	173.700	183.700	6.643	13.000	18.419
168943.310	19.710	173.300	19.570	173.200	183.200	6.583	12.980	18.294
175244.190	19.670	173.000	19.520	173.000	183.000	6.548	12.970	18.203
181551.940	19.560	172.400	19.410	172.400	182.400	6.472	12.940	18.052
187858.940	19.460	171.800	19.290	171.800	181.700	6.384	12.910	17.890
194170.690	19.370	171.200	19.180	171.200	181.000	6.299	12.880	17.732
200471.810	19.280	170.700	19.080	170.600	180.400	6.219	12.860	17.587
206782.560	19.190	170.100	18.980	170.000	179.800	6.142	12.830	17.437
213090.810	19.100	169.600	18.880	169.500	179.100	6.068	12.810	17.298
219399.060	19.020	169.100	18.780	168.900	178.500	5.997	12.790	17.163
225708.440	18.940	168.500	18.690	168.400	178.000	5.928	12.760	17.021
232011.940	18.860	168.000	18.600	167.900	177.400	5.860	12.740	16.889
238317.940	18.780	167.500	18.510	167.300	176.800	5.795	12.720	16.761
244621.810	18.700	167.000	18.430	166.800	176.200	5.730	12.700	16.632
250924.560	18.630	166.500	18.340	166.300	175.700	5.667	12.680	16.506
257238.560	18.550	166.000	18.260	165.800	175.100	5.605	12.660	16.380
263544.440	18.480	165.600	18.180	165.300	174.600	5.544	12.630	16.248
269848.810	18.410	165.100	18.100	164.800	174.000	5.484	12.610	16.125
276158.310	18.340	164.600	18.020	164.300	173.500	5.425	12.590	16.003
282462.810	18.270	164.100	17.940	163.800	172.900	5.367	12.570	15.882
288772.810	18.200	163.600	17.860	163.300	172.400	5.309	12.560	15.770
295070.690	18.130	163.100	17.790	162.800	171.800	5.253	12.540	15.652
301379.190	18.060	162.600	17.710	162.300	171.300	5.195	12.520	15.531
307679.440	17.990	162.200	17.630	161.800	170.700	5.138	12.500	15.412
313985.940	17.920	161.700	17.560	161.300	170.200	5.081	12.480	15.293
320291.060	17.860	161.200	17.500	160.900	169.600	5.041	12.460	15.191
326590.310	17.790	160.700	17.430	160.500	169.100	4.991	12.440	15.080

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
332895.810	17.730	160.300	17.360	160.000	168.600	4.936	12.430	14.971
339194.190	17.660	159.800	17.290	159.500	168.000	4.882	12.410	14.856
345498.690	17.600	159.300	17.220	159.000	167.500	4.828	12.390	14.741
351806.940	17.540	158.800	17.150	158.500	167.000	4.774	12.370	14.700
358120.940	17.470	158.400	17.070	158.000	166.400	4.720	12.350	14.700
364437.060	17.410	157.900	17.000	157.500	165.900	4.666	12.340	14.700
370739.940	17.350	157.400	16.930	157.000	165.300	4.614	12.320	14.700
377043.940	17.290	156.900	16.860	156.500	164.800	4.563	12.300	14.700
383353.060	17.220	156.400	16.790	156.000	164.200	4.512	12.280	14.700
389663.190	17.160	155.900	16.720	155.500	163.700	4.461	12.260	14.700
395967.810	17.100	155.500	16.660	155.000	163.100	4.411	12.250	14.700
402274.310	17.040	155.000	16.590	154.500	162.600	4.361	12.230	14.700
408576.190	16.980	154.500	16.520	154.000	162.000	4.312	12.210	14.700
414882.190	16.920	154.000	16.460	153.500	161.500	4.264	12.190	14.700
421186.810	16.860	153.500	16.390	153.000	160.900	4.216	12.180	14.700
427489.810	16.810	153.000	16.330	152.500	160.400	4.169	12.160	14.700
433800.310	16.750	152.600	16.270	152.000	159.800	4.122	12.140	14.700
440099.190	16.700	152.100	16.210	151.600	159.300	4.079	12.130	14.700
446404.690	16.650	151.800	16.160	151.200	158.900	4.042	12.120	14.700
452711.940	16.610	151.400	16.110	150.800	158.500	4.009	12.100	14.700
459017.940	16.580	151.100	16.070	150.500	158.200	3.980	12.090	14.700
465325.440	16.540	150.800	16.030	150.100	157.800	3.951	12.080	14.700
471633.440	16.510	150.500	16.000	149.800	157.500	3.925	12.070	14.700
477942.060	16.480	150.200	15.960	149.600	157.200	3.899	12.060	14.700
484248.940	16.450	150.000	15.930	149.300	156.900	3.875	12.050	14.700
490554.810	16.450	150.000	15.900	149.100	156.800	3.857	12.040	14.700
496859.810	16.410	149.600	15.880	148.800	156.500	3.838	12.040	14.700
503170.690	16.380	149.300	15.840	148.500	156.200	3.813	12.030	14.700
509482.940	16.340	149.100	15.810	148.300	155.900	3.789	12.020	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
515783.940	16.320	148.800	15.780	148.000	155.600	3.767	12.010	14.700
522092.440	16.290	148.600	15.750	147.700	155.300	3.745	12.000	14.700
528400.060	16.260	148.300	15.720	147.500	155.000	3.725	11.990	14.700
534709.310	16.240	148.100	15.690	147.300	154.800	3.707	11.990	14.700
541011.690	16.220	147.900	15.670	147.000	154.600	3.689	11.980	14.700
547319.440	16.200	147.700	15.650	146.800	154.400	3.673	11.970	14.700
553627.190	16.170	147.500	15.620	146.600	154.100	3.657	11.970	14.700
559930.810	16.160	147.400	15.600	146.500	153.900	3.642	11.960	14.700
566237.560	16.140	147.200	15.580	146.300	153.800	3.628	11.950	14.700
572549.560	16.120	147.000	15.560	146.100	153.600	3.615	11.950	14.700
578856.560	16.100	146.900	15.540	145.900	153.400	3.601	11.940	14.700
585157.440	16.090	146.700	15.530	145.800	153.200	3.588	11.940	14.700
591463.810	16.070	146.600	15.510	145.600	153.000	3.576	11.930	14.700
597765.560	16.050	146.400	15.490	145.400	152.900	3.564	11.930	14.700
604071.190	16.040	146.300	15.470	145.300	152.700	3.552	11.920	14.700
610377.190	16.020	146.100	15.460	145.100	152.500	3.541	11.910	14.700
616679.940	16.010	146.000	15.440	145.000	152.400	3.530	11.910	14.700
622987.560	15.990	145.800	15.420	144.800	152.200	3.518	11.900	14.700
629291.440	15.980	145.700	15.410	144.700	152.100	3.508	11.900	14.700
635603.690	15.960	145.600	15.390	144.500	151.900	3.497	11.890	14.700
641909.690	15.950	145.400	15.370	144.400	151.700	3.486	11.890	14.700
648217.060	15.940	145.300	15.360	144.300	151.600	3.476	11.880	14.700
654523.190	15.920	145.200	15.350	144.100	151.400	3.466	11.880	14.700
660825.310	15.910	145.100	15.330	144.000	151.300	3.457	11.880	14.700
667130.190	15.900	144.900	15.320	143.900	151.200	3.448	11.870	14.700
673437.690	15.890	144.800	15.310	143.700	151.000	3.440	11.870	14.700
679740.440	15.870	144.700	15.290	143.600	150.900	3.432	11.860	14.700
686051.690	15.860	144.600	15.280	143.500	150.800	3.424	11.860	14.700
692364.310	15.850	144.500	15.270	143.400	150.700	3.417	11.850	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
698674.060	15.840	144.400	15.260	143.300	150.600	3.409	11.850	14.700
704982.190	15.830	144.300	15.250	143.200	150.400	3.402	11.850	14.700
711291.310	15.820	144.200	15.240	143.100	150.300	3.395	11.840	14.700
717592.690	15.810	144.100	15.230	143.000	150.200	3.387	11.840	14.700
723899.060	15.800	144.000	15.220	142.900	150.100	3.381	11.840	14.700
730206.560	15.790	143.900	15.210	142.800	150.000	3.374	11.830	14.700
736511.190	15.780	143.800	15.200	142.700	149.900	3.367	11.830	14.700
742809.940	15.770	143.700	15.180	142.600	149.800	3.360	11.820	14.700
749113.310	15.760	143.600	15.170	142.500	149.700	3.353	11.820	14.700
755421.690	15.750	143.500	15.160	142.400	149.600	3.347	11.820	14.700
761730.440	15.740	143.400	15.150	142.300	149.400	3.340	11.810	14.700
768039.060	15.730	143.300	15.140	142.200	149.300	3.333	11.810	14.700
774347.940	15.720	143.200	15.130	142.100	149.200	3.327	11.810	14.700
780656.440	15.710	143.100	15.120	142.000	149.100	3.320	11.800	14.700
786967.690	15.700	143.000	15.110	141.900	149.000	3.314	11.800	14.700
793270.310	15.690	142.900	15.100	141.800	148.900	3.307	11.800	14.700
799581.560	15.680	142.800	15.100	141.700	148.800	3.306	11.790	14.700
805883.940	15.670	142.700	15.100	141.700	148.700	3.305	11.790	14.700
812189.440	15.670	142.700	15.090	141.700	148.600	3.303	11.790	14.700
818504.060	15.660	142.600	15.080	141.600	148.500	3.296	11.790	14.700
824814.810	15.650	142.500	15.070	141.500	148.400	3.289	11.780	14.700
831122.940	15.640	142.400	15.060	141.400	148.300	3.282	11.780	14.700
837427.310	15.630	142.300	15.050	141.300	148.200	3.275	11.780	14.700
843744.310	15.620	142.200	15.040	141.300	148.100	3.268	11.780	14.700
850045.940	15.610	142.100	15.030	141.200	148.000	3.261	11.770	14.700
856356.810	15.600	142.000	15.020	141.100	147.900	3.254	11.770	14.700
862664.560	15.590	141.900	15.010	141.000	147.800	3.247	11.770	14.700
868969.940	15.580	141.800	15.000	140.900	147.700	3.239	11.760	14.700
875278.560	15.580	141.800	14.990	140.800	147.600	3.232	11.760	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
881588.190	15.570	141.700	14.980	140.700	147.500	3.225	11.760	14.700
887895.940	15.560	141.600	14.970	140.600	147.400	3.218	11.750	14.700
894201.810	15.550	141.500	14.960	140.500	147.300	3.211	11.750	14.700
900514.810	15.540	141.400	14.950	140.400	147.200	3.204	11.750	14.700
906826.060	15.530	141.300	14.940	140.300	147.000	3.196	11.740	14.700
913130.060	15.520	141.200	14.930	140.200	146.900	3.189	11.740	14.700
919434.940	15.510	141.100	14.920	140.100	146.800	3.182	11.740	14.700
925737.940	15.500	141.000	14.910	140.000	146.700	3.175	11.730	14.700
932046.310	15.490	140.900	14.900	139.900	146.600	3.168	11.730	14.700
938358.060	15.480	140.800	14.890	139.800	146.500	3.161	11.730	14.700
944668.310	15.470	140.700	14.880	139.700	146.400	3.153	11.730	14.700
950970.560	15.470	140.600	14.870	139.700	146.300	3.146	11.720	14.700
957279.560	15.460	140.500	14.860	139.600	146.200	3.139	11.720	14.700
963589.560	15.450	140.400	14.850	139.500	146.100	3.132	11.720	14.700
969899.310	15.440	140.300	14.840	139.400	146.000	3.125	11.710	14.700
976208.060	15.430	140.300	14.830	139.300	145.900	3.118	11.710	14.700
982517.060	15.420	140.200	14.820	139.200	145.800	3.111	11.710	14.700
988831.190	15.410	140.100	14.810	139.100	145.700	3.104	11.700	14.700
995132.560	15.400	140.000	14.800	139.000	145.600	3.097	11.700	14.700
1000000.100	15.390	139.900	14.790	138.900	145.500	3.092	11.700	14.700

Figure B-7: Wetwell Airspace Pressure Response w/ Leakage For Long-Term NPSH (Case 2)

Figure B-8: Suppression Pool Temperature Response For Long-Term NPSH (Case 2)

Table B-5

DBA-LOCA Analysis Results for Long-Term NPSH Evaluation (Case 3)

SHEX-04V Results

Initial SP temperature (deg-F)	100
UHS temperature (deg-F)	93
Drywell spray nozzle height (ft)	39

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
0.000	14.700	160.000	14.700	100.000	100.000	0.950	13.750	14.700
0.382	26.650	215.900	14.710	100.000	100.000	0.950	13.760	14.710
0.989	33.480	240.700	18.850	137.500	100.700	1.198	17.650	18.848
2.646	38.050	259.500	26.380	181.600	103.500	1.563	24.820	26.383
11.896	42.050	270.300	31.730	205.900	120.600	1.787	29.950	31.737
17.521	41.330	269.200	32.500	210.300	129.800	1.815	30.690	32.505
26.896	37.070	321.300	32.860	212.200	137.600	1.813	31.040	32.853
35.646	36.750	321.800	32.980	212.700	140.900	1.803	31.180	32.982
40.646	36.280	315.200	33.030	212.900	142.100	1.796	31.230	33.025
44.583	36.130	310.600	33.050	212.900	142.900	1.791	31.260	33.050
48.958	36.320	307.200	33.080	213.000	143.700	1.785	31.290	33.074
53.958	36.160	301.600	33.100	213.100	144.400	1.779	31.320	33.098
57.896	36.200	298.300	33.120	213.100	144.900	1.774	31.340	33.113
59.849	36.180	293.000	33.110	213.000	145.200	1.771	31.340	33.110
60.677	35.500	260.100	33.110	213.000	145.100	1.770	31.340	33.109
62.739	36.160	261.200	33.110	213.000	145.100	1.766	31.340	33.105

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
63.677	36.140	261.200	33.110	213.000	145.100	1.765	31.340	33.104
64.614	36.120	261.100	33.110	212.900	145.200	1.764	31.340	33.103
65.552	36.120	261.100	33.110	212.900	145.200	1.763	31.340	33.102
66.489	36.110	261.100	33.100	212.800	145.200	1.762	31.340	33.101
67.427	36.150	261.200	33.100	212.700	145.300	1.761	31.340	33.100
68.364	36.150	261.200	33.100	212.700	145.300	1.760	31.340	33.099
69.302	36.140	261.200	33.100	212.600	145.400	1.759	31.340	33.098
70.239	36.130	261.200	33.100	212.500	145.400	1.758	31.340	33.097
71.208	36.140	261.200	33.100	212.500	145.500	1.757	31.340	33.096
72.146	36.140	261.200	33.090	212.400	145.500	1.756	31.340	33.095
73.083	36.130	261.200	33.090	212.400	145.600	1.755	31.340	33.094
74.021	36.130	261.200	33.090	212.300	145.600	1.754	31.340	33.093
74.958	36.120	261.100	33.090	212.200	145.700	1.754	31.340	33.093
75.896	36.110	261.100	33.090	212.200	145.700	1.753	31.340	33.092
76.833	36.110	261.100	33.090	212.100	145.800	1.752	31.340	33.091
77.771	36.130	261.200	33.090	212.100	145.800	1.751	31.340	33.090
78.708	36.120	261.100	33.090	212.000	145.900	1.750	31.340	33.089
79.677	36.140	261.200	33.090	212.000	145.900	1.749	31.340	33.088
80.708	36.110	261.100	33.090	212.000	146.000	1.748	31.340	33.087
81.771	36.110	261.100	33.090	211.900	146.100	1.747	31.340	33.086
82.864	36.120	261.100	33.090	211.900	146.100	1.746	31.350	33.094
83.958	36.120	261.100	33.090	211.900	146.200	1.745	31.350	33.093
85.052	36.120	261.100	33.100	211.800	146.300	1.744	31.350	33.092
86.114	36.120	261.100	33.100	211.800	146.400	1.743	31.350	33.091
87.177	36.130	261.200	33.100	211.800	146.400	1.742	31.360	33.100
88.239	36.130	261.200	33.100	211.800	146.500	1.741	31.360	33.099
89.302	36.130	261.200	33.100	211.700	146.600	1.740	31.360	33.098
90.364	36.140	261.200	33.110	211.700	146.600	1.739	31.370	33.107
91.458	36.130	261.200	33.110	211.700	146.700	1.738	31.370	33.106

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
92.521	36.140	261.200	33.110	211.600	146.800	1.738	31.370	33.106
93.646	36.140	261.200	33.110	211.600	146.800	1.737	31.380	33.115
94.771	36.160	261.200	33.120	211.600	146.900	1.736	31.380	33.114
95.958	36.150	261.200	33.120	211.600	147.000	1.735	31.390	33.123
97.239	36.160	261.200	33.130	211.600	147.100	1.734	31.390	33.122
98.552	36.160	261.200	33.130	211.600	147.200	1.733	31.400	33.131
99.958	36.170	261.200	33.140	211.600	147.300	1.732	31.410	33.140
133.302	34.570	258.600	32.960	210.000	148.400	1.692	31.260	32.950
164.021	32.590	255.100	32.280	205.300	148.800	1.643	30.630	32.270
196.302	31.220	252.100	31.690	201.300	149.700	1.602	30.080	31.679
227.552	30.270	250.000	30.770	195.300	150.200	1.555	29.210	30.761
258.802	29.350	247.500	29.790	188.800	150.800	1.512	28.270	29.778
290.052	28.400	244.700	28.860	182.500	151.500	1.478	27.380	28.853
321.302	27.490	241.900	27.980	176.800	152.400	1.446	26.530	27.971
352.552	26.620	238.900	27.100	170.200	153.300	1.426	25.670	27.091
383.802	25.780	235.800	26.260	164.400	154.300	1.406	24.860	26.260
415.052	25.020	232.800	25.500	159.300	155.300	1.390	24.110	25.494
446.302	24.300	229.800	24.760	153.600	156.400	1.382	23.370	24.746
479.083	23.580	226.700	24.060	148.100	157.400	1.380	22.680	24.054
511.177	22.960	223.800	23.440	143.300	158.400	1.381	22.060	23.434
547.239	22.310	220.600	22.810	138.600	159.500	1.385	21.420	22.798
581.083	21.790	217.800	22.260	134.700	160.400	1.389	20.870	22.252
608.845	20.740	211.600	21.230	129.200	161.200	1.360	19.870	21.223
636.001	19.130	199.900	19.620	125.500	162.100	1.307	18.310	19.610
666.720	18.280	191.600	18.770	129.300	163.000	1.314	17.450	18.757
702.501	17.670	184.600	18.170	134.200	163.700	1.350	16.820	18.163
741.563	17.320	179.600	17.770	138.300	164.300	1.401	16.360	17.754
793.095	17.100	175.800	17.580	142.400	165.000	1.484	16.090	17.567
842.407	17.210	175.500	17.690	145.600	165.600	1.575	16.110	17.677

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
			w/o leakage					w/ leakage
sec.	psia	deg-F	psia	deg-F	deg-F	psia	psia	psia
905.407	18.050	180.400	17.940	147.200	166.300	1.683	16.250	17.924
967.720	18.480	182.800	18.040	147.600	166.800	1.762	16.280	18.033
1120.782	19.000	185.500	18.220	148.500	167.900	1.916	16.310	18.215
1371.032	19.180	186.400	18.460	150.100	169.500	2.101	16.360	18.448
1621.032	19.120	186.100	18.680	151.500	171.000	2.273	16.410	18.668
1871.532	19.030	185.600	18.910	153.200	172.400	2.450	16.460	18.892
2138.782	18.930	185.000	19.160	154.200	173.800	2.667	16.490	19.137
2405.189	18.940	184.900	19.420	155.300	175.200	2.899	16.520	19.396
2681.782	19.040	184.600	19.510	157.200	176.500	3.121	16.390	19.486
2964.751	19.140	184.400	19.630	158.500	177.700	3.371	16.260	19.603
3247.939	19.260	184.300	19.750	159.700	178.900	3.644	16.110	19.724
3531.095	19.380	184.000	19.860	161.500	180.000	3.901	15.960	19.828
3811.970	19.470	183.800	19.960	162.600	181.000	4.127	15.830	19.922
4090.095	19.560	183.600	20.040	163.400	182.000	4.343	15.700	20.006
4366.439	19.680	183.700	20.170	164.200	182.900	4.566	15.600	20.127
4643.595	19.800	183.900	20.290	165.200	183.700	4.787	15.510	20.255
4915.126	19.930	184.000	20.420	166.200	184.500	5.004	15.410	20.370
5192.001	20.070	184.200	20.550	167.100	185.300	5.225	15.320	20.499
5469.251	20.180	184.200	20.660	168.100	186.000	5.442	15.220	20.614
5747.095	20.300	184.400	20.790	169.200	186.700	5.664	15.130	20.744
6012.564	20.490	184.800	20.870	169.100	187.400	5.864	15.010	20.822
6266.782	20.560	184.800	21.010	170.600	188.000	6.071	14.940	20.957
6535.189	20.660	184.800	21.150	172.100	188.600	6.282	14.860	21.086
6800.501	20.790	185.000	21.270	173.400	189.200	6.482	14.790	21.214
7067.126	20.900	185.200	21.390	174.700	189.800	6.670	14.720	21.330
7338.439	21.010	185.400	21.490	175.700	190.300	6.827	14.660	21.425
7612.970	21.110	185.600	21.580	176.600	190.900	6.967	14.610	21.513
7886.345	21.200	185.800	21.670	177.400	191.400	7.084	14.580	21.597
8163.939	21.280	186.100	21.750	178.000	191.900	7.191	14.560	21.682

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
			w/o leakage					w/ leakage
sec.	psia	deg-F	psia	deg-F	deg-F	psia	psia	psia
8439.720	21.350	186.300	21.840	178.700	192.400	7.291	14.550	21.770
8713.501	21.440	186.600	21.910	179.200	192.800	7.379	14.530	21.836
8988.064	21.510	186.900	21.990	179.700	193.300	7.468	14.530	21.922
9262.689	21.580	187.100	22.060	180.200	193.700	7.553	14.510	21.985
9536.001	21.640	187.300	22.140	180.700	194.200	7.632	14.510	22.062
9813.189	21.710	187.600	22.210	181.200	194.600	7.708	14.500	22.126
10092.220	21.780	187.800	22.260	181.600	195.000	7.775	14.480	22.170
10372.188	21.850	188.100	22.340	182.000	195.400	7.854	14.480	22.247
10649.501	21.910	188.300	22.400	182.400	195.800	7.921	14.480	22.312
10929.220	21.980	188.600	22.470	182.800	196.100	7.992	14.480	22.380
11203.313	22.050	188.900	22.540	183.200	196.500	8.060	14.480	22.446
11483.001	22.110	189.100	22.590	183.500	196.900	8.118	14.470	22.492
11762.970	22.180	189.400	22.660	183.900	197.200	8.192	14.470	22.563
12040.313	22.230	189.600	22.720	184.300	197.500	8.253	14.470	22.622
12322.907	22.290	189.800	22.780	184.600	197.900	8.309	14.470	22.676
12597.501	22.340	190.000	22.830	184.900	198.200	8.361	14.470	22.726
12875.720	22.390	190.200	22.880	185.100	198.500	8.414	14.470	22.776
13149.657	22.440	190.400	22.920	185.400	198.800	8.457	14.460	22.807
13429.626	22.490	190.600	22.970	185.700	199.100	8.513	14.460	22.861
13707.720	22.530	190.700	23.020	186.000	199.300	8.565	14.460	22.910
13979.407	22.580	190.900	23.060	186.200	199.600	8.608	14.450	22.941
14255.876	22.620	191.000	23.110	186.500	199.900	8.660	14.450	22.991
14533.688	22.660	191.100	23.140	186.700	200.100	8.706	14.440	23.025
14807.626	22.700	191.300	23.190	187.000	200.400	8.755	14.430	23.061
15076.938	22.740	191.400	23.210	187.200	200.600	8.790	14.420	23.084
15349.782	22.770	191.500	23.250	187.400	200.800	8.836	14.420	23.128
15624.501	22.810	191.700	23.300	187.600	201.000	8.879	14.420	23.169
15899.720	22.840	191.800	23.330	187.800	201.300	8.919	14.410	23.196
16172.126	22.880	191.900	23.370	188.000	201.500	8.957	14.410	23.232

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
16447.221	22.920	192.100	23.410	188.200	201.700	8.996	14.410	23.269
16718.439	22.950	192.200	23.440	188.400	201.900	9.031	14.410	23.302
16992.408	22.980	192.300	23.470	188.600	202.000	9.068	14.410	23.336
17268.471	23.010	192.400	23.490	188.700	202.200	9.099	14.400	23.355
17543.314	23.040	192.500	23.530	188.900	202.400	9.139	14.390	23.383
17813.783	23.070	192.600	23.560	189.100	202.600	9.172	14.390	23.414
18089.471	23.100	192.700	23.580	189.200	202.700	9.196	14.380	23.425
18363.689	23.130	192.700	23.620	189.500	202.900	9.240	14.380	23.467
18636.627	23.160	192.900	23.630	189.600	203.100	9.267	14.370	23.482
18905.783	23.180	192.900	23.670	189.800	203.200	9.302	14.370	23.515
19178.221	23.200	193.000	23.690	189.900	203.300	9.330	14.360	23.531
19451.033	23.220	193.000	23.710	190.100	203.500	9.361	14.350	23.549
19723.596	23.240	193.100	23.730	190.200	203.600	9.392	14.340	23.568
19993.533	23.270	193.100	23.750	190.400	203.700	9.419	14.330	23.583
20269.846	23.290	193.200	23.780	190.500	203.900	9.457	14.320	23.609
20539.596	23.310	193.200	23.800	190.700	204.000	9.488	14.310	23.628
20808.189	23.330	193.300	23.830	190.900	204.100	9.522	14.310	23.660
21075.502	23.360	193.300	23.840	191.000	204.200	9.545	14.300	23.671
21349.064	23.380	193.400	23.860	191.100	204.300	9.570	14.290	23.683
21615.533	23.400	193.500	23.890	191.300	204.400	9.605	14.290	23.716
21888.596	23.420	193.500	23.900	191.400	204.500	9.627	14.280	23.726
22158.439	23.440	193.600	23.940	191.500	204.600	9.664	14.270	23.751
22429.627	23.470	193.700	23.950	191.600	204.700	9.681	14.260	23.756
22701.346	23.480	193.700	23.970	191.800	204.800	9.712	14.260	23.785
22968.064	23.500	193.800	23.990	191.900	204.900	9.735	14.260	23.805
23242.158	23.520	193.800	24.010	192.000	205.000	9.759	14.260	23.827
23508.408	23.540	193.900	24.020	192.100	205.100	9.773	14.250	23.829
23779.377	23.550	193.900	24.040	192.200	205.200	9.796	14.240	23.840
24054.221	23.570	194.000	24.060	192.300	205.300	9.818	14.240	23.860

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
24327.252	23.580	194.000	24.070	192.400	205.300	9.838	14.240	23.878
24596.221	23.600	194.000	24.090	192.500	205.400	9.856	14.230	23.883
24865.189	23.610	194.100	24.100	192.500	205.500	9.873	14.230	23.898
25136.533	23.620	194.100	24.120	192.600	205.600	9.890	14.220	23.903
25407.471	23.630	194.100	24.110	192.600	205.600	9.895	14.210	23.896
25676.627	23.650	194.200	24.120	192.700	205.700	9.911	14.210	23.910
25945.596	23.660	194.200	24.140	192.800	205.800	9.931	14.210	23.928
26215.189	23.660	194.200	24.150	192.900	205.800	9.946	14.200	23.931
26481.533	23.670	194.200	24.170	193.000	205.900	9.969	14.200	23.951
26747.002	23.680	194.200	24.170	193.000	205.900	9.977	14.200	23.957
27018.721	23.690	194.300	24.180	193.100	206.000	9.990	14.190	23.958
27285.658	23.700	194.300	24.180	193.100	206.100	9.993	14.180	23.949
27556.377	23.710	194.300	24.190	193.200	206.100	10.010	14.180	23.964
27818.221	23.710	194.300	24.200	193.200	206.200	10.020	14.180	23.972
28081.814	23.710	194.300	24.200	193.300	206.200	10.030	14.170	23.970
28347.658	23.720	194.300	24.210	193.300	206.200	10.040	14.170	23.978
28614.127	23.730	194.300	24.220	193.400	206.300	10.050	14.160	23.976
28876.721	23.730	194.300	24.220	193.400	206.300	10.060	14.160	23.983
29140.408	23.740	194.300	24.210	193.400	206.400	10.060	14.150	23.971
29408.689	23.740	194.300	24.220	193.500	206.400	10.080	14.150	23.989
29676.908	23.740	194.300	24.230	193.500	206.400	10.080	14.140	23.977
29941.127	23.740	194.200	24.230	193.600	206.400	10.090	14.140	23.985
30204.064	23.740	194.200	24.220	193.600	206.500	10.090	14.130	23.973
30467.658	23.740	194.200	24.230	193.600	206.500	10.100	14.130	23.981
30732.002	23.740	194.200	24.240	193.600	206.500	10.110	14.120	23.979
30991.939	23.740	194.200	24.230	193.600	206.500	10.110	14.110	23.967
31253.283	23.740	194.200	24.230	193.700	206.600	10.120	14.110	23.975
31517.002	23.740	194.100	24.240	193.700	206.600	10.130	14.110	23.983
31778.689	23.740	194.100	24.230	193.700	206.600	10.130	14.100	23.971

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
			w/o leakage					w/ leakage
sec.	psia	deg-F	psia	deg-F	deg-F	psia	psia	psia
32039.408	23.730	194.100	24.230	193.800	206.600	10.140	14.090	23.969
32300.971	23.730	194.100	24.220	193.800	206.600	10.140	14.090	23.967
32561.439	23.730	194.000	24.230	193.800	206.600	10.150	14.080	23.965
32819.906	23.730	194.000	24.230	193.800	206.600	10.150	14.080	23.963
33078.281	23.730	194.000	24.220	193.800	206.600	10.150	14.070	23.951
33337.500	23.720	193.900	24.220	193.800	206.700	10.150	14.060	23.939
33597.438	23.720	193.900	24.200	193.800	206.700	10.140	14.050	23.917
33856.531	23.710	193.900	24.210	193.800	206.700	10.150	14.050	23.925
34115.000	23.710	193.800	24.210	193.800	206.700	10.160	14.050	23.933
34371.688	23.710	193.800	24.190	193.800	206.700	10.150	14.040	23.911
34628.281	23.700	193.700	24.190	193.800	206.700	10.160	14.030	23.909
34885.500	23.690	193.700	24.190	193.800	206.600	10.160	14.030	23.907
35143.688	23.690	193.700	24.160	193.800	206.600	10.150	14.010	23.875
35401.563	23.680	193.600	24.170	193.800	206.600	10.160	14.010	23.883
35658.406	23.670	193.600	24.160	193.800	206.600	10.160	14.000	23.871
35916.094	23.660	193.500	24.150	193.800	206.600	10.160	13.990	23.859
36171.844	23.670	193.500	24.140	193.800	206.600	10.160	13.980	23.847
36430.219	23.660	193.500	24.140	193.800	206.600	10.160	13.980	23.845
36692.094	23.650	193.500	24.130	193.800	206.500	10.160	13.980	23.843
36948.719	23.650	193.500	24.130	193.800	206.500	10.160	13.970	23.831
37207.719	23.640	193.400	24.130	193.800	206.500	10.160	13.970	23.829
37470.594	23.640	193.400	24.120	193.800	206.500	10.160	13.960	23.817
37730.219	23.630	193.400	24.120	193.800	206.400	10.160	13.960	23.815
37989.969	23.620	193.300	24.110	193.800	206.400	10.160	13.950	23.803
38248.094	23.620	193.300	24.100	193.800	206.400	10.160	13.950	23.801
38504.844	23.610	193.300	24.100	193.800	206.400	10.160	13.940	23.789
38768.063	23.610	193.300	24.090	193.800	206.300	10.160	13.930	23.777
39026.188	23.600	193.200	24.080	193.800	206.300	10.150	13.930	23.765
39284.938	23.590	193.200	24.080	193.800	206.300	10.150	13.920	23.754

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
39542.938	23.580	193.200	24.070	193.800	206.300	10.150	13.920	23.751
39800.438	23.570	193.100	24.070	193.800	206.200	10.150	13.910	23.740
40060.938	23.570	193.100	24.060	193.800	206.200	10.150	13.910	23.738
40318.938	23.560	193.100	24.050	193.800	206.200	10.150	13.900	23.726
40577.438	23.550	193.000	24.050	193.800	206.100	10.150	13.900	23.724
40835.438	23.550	193.000	24.040	193.800	206.100	10.150	13.890	23.712
41094.063	23.540	193.000	24.040	193.800	206.100	10.150	13.890	23.710
41351.313	23.540	193.000	24.030	193.800	206.000	10.150	13.880	23.698
41611.094	23.530	192.900	24.010	193.700	206.000	10.140	13.870	23.676
41870.094	23.520	192.900	24.020	193.700	206.000	10.150	13.870	23.684
42125.344	23.520	192.900	24.010	193.700	205.900	10.150	13.870	23.682
42387.469	23.510	192.800	24.010	193.700	205.900	10.150	13.860	23.670
42643.313	23.510	192.800	24.000	193.700	205.900	10.140	13.860	23.658
42900.313	23.500	192.800	24.000	193.700	205.800	10.140	13.850	23.646
43157.281	23.500	192.800	23.970	193.700	205.800	10.130	13.840	23.624
43415.906	23.490	192.700	23.980	193.700	205.800	10.140	13.840	23.632
43673.406	23.480	192.700	23.980	193.700	205.700	10.140	13.840	23.630
43927.750	23.480	192.700	23.970	193.700	205.700	10.140	13.830	23.618
44184.750	23.480	192.700	23.970	193.700	205.700	10.140	13.830	23.616
44440.375	23.470	192.600	23.960	193.700	205.600	10.140	13.830	23.614
44696.719	23.470	192.600	23.950	193.600	205.600	10.130	13.820	23.593
44954.469	23.460	192.600	23.960	193.700	205.600	10.140	13.820	23.600
45210.438	23.460	192.500	23.940	193.700	205.500	10.130	13.810	23.579
45465.406	23.450	192.500	23.930	193.600	205.500	10.130	13.810	23.577
45719.156	23.440	192.500	23.940	193.700	205.500	10.130	13.810	23.575
45973.125	23.440	192.500	23.930	193.600	205.400	10.130	13.800	23.563
46227.719	23.440	192.400	23.920	193.600	205.400	10.120	13.800	23.551
46483.094	23.430	192.400	23.920	193.600	205.400	10.130	13.800	23.559
46737.563	23.420	192.400	23.910	193.600	205.400	10.120	13.790	23.537

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM.WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
46992.813	23.420	192.300	23.910	193.600	205.300	10.120	13.790	23.535
47248.656	23.410	192.300	23.900	193.600	205.300	10.110	13.780	23.513
47504.781	23.400	192.300	23.900	193.600	205.300	10.110	13.780	23.511
47758.750	23.400	192.300	23.890	193.500	205.200	10.110	13.780	23.509
48014.375	23.390	192.200	23.880	193.500	205.200	10.110	13.770	23.497
48269.000	23.390	192.200	23.880	193.500	205.200	10.110	13.770	23.495
48525.125	23.380	192.100	23.870	193.500	205.100	10.100	13.770	23.483
48778.500	23.370	192.100	23.860	193.500	205.100	10.090	13.770	23.471
49034.000	23.360	192.100	23.850	193.400	205.000	10.080	13.770	23.459
49289.750	23.350	192.100	23.840	193.400	205.000	10.080	13.760	23.448
49543.500	23.350	192.000	23.830	193.400	205.000	10.070	13.760	23.435
49797.250	23.340	192.000	23.820	193.300	204.900	10.060	13.760	23.423
50053.125	23.330	192.000	23.810	193.300	204.900	10.060	13.760	23.421
50307.375	23.320	191.900	23.800	193.200	204.900	10.050	13.750	23.400
50563.000	23.320	191.900	23.790	193.200	204.800	10.040	13.750	23.388
50820.000	23.310	191.900	23.780	193.200	204.800	10.030	13.750	23.376
51073.250	23.300	191.800	23.770	193.100	204.800	10.030	13.750	23.374
51327.250	23.290	191.800	23.760	193.100	204.700	10.020	13.740	23.352
51581.750	23.290	191.800	23.750	193.100	204.700	10.010	13.740	23.340
51836.500	23.280	191.700	23.740	193.000	204.600	10.010	13.740	23.338
52092.125	23.270	191.700	23.730	193.000	204.600	9.998	13.740	23.324
52346.500	23.260	191.700	23.720	193.000	204.600	9.991	13.730	23.305
52598.875	23.260	191.600	23.720	192.900	204.500	9.983	13.730	23.295
52853.375	23.250	191.600	23.710	192.900	204.500	9.976	13.730	23.286
53106.125	23.240	191.500	23.700	192.900	204.500	9.969	13.730	23.277
53360.250	23.230	191.500	23.690	192.800	204.400	9.962	13.720	23.258
53613.375	23.220	191.500	23.680	192.800	204.400	9.954	13.720	23.248
53867.125	23.210	191.400	23.670	192.700	204.300	9.947	13.720	23.239
54120.250	23.210	191.400	23.660	192.700	204.300	9.940	13.720	23.230

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
54373.250	23.200	191.400	23.650	192.700	204.300	9.933	13.710	23.212
54626.750	23.190	191.300	23.640	192.600	204.200	9.925	13.710	23.202
54879.875	23.180	191.300	23.630	192.600	204.200	9.916	13.710	23.191
55134.125	23.170	191.300	23.610	192.600	204.100	9.908	13.710	23.181
55386.125	23.160	191.200	23.600	192.500	204.100	9.900	13.700	23.161
55639.000	23.160	191.200	23.590	192.500	204.000	9.891	13.700	23.150
55891.125	23.150	191.100	23.580	192.400	204.000	9.883	13.700	23.140
56146.250	23.140	191.100	23.570	192.400	204.000	9.875	13.700	23.130
56398.500	23.130	191.100	23.560	192.300	203.900	9.866	13.690	23.109
56651.000	23.120	191.000	23.550	192.300	203.900	9.858	13.690	23.099
56903.875	23.110	191.000	23.540	192.300	203.800	9.849	13.690	23.088
57156.000	23.100	191.000	23.520	192.200	203.800	9.840	13.680	23.068
57409.125	23.090	190.900	23.510	192.200	203.700	9.831	13.680	23.057
57660.500	23.080	190.900	23.500	192.100	203.700	9.823	13.680	23.047
57912.500	23.070	190.800	23.490	192.100	203.700	9.814	13.680	23.036
58166.625	23.060	190.800	23.480	192.000	203.600	9.805	13.670	23.015
58417.750	23.050	190.700	23.470	192.000	203.600	9.796	13.670	23.004
58669.875	23.050	190.700	23.450	191.900	203.500	9.787	13.670	22.993
58922.625	23.040	190.700	23.440	191.900	203.500	9.778	13.660	22.972
59175.125	23.030	190.600	23.440	191.900	203.400	9.778	13.660	22.970
59426.500	23.020	190.600	23.430	191.800	203.400	9.766	13.660	22.956
59678.375	23.010	190.500	23.410	191.800	203.300	9.754	13.660	22.942
59931.000	23.000	190.500	23.390	191.700	203.300	9.742	13.650	22.919
60185.000	22.990	190.500	23.380	191.700	203.200	9.731	13.650	22.906
60437.125	22.980	190.400	23.370	191.600	203.200	9.722	13.650	22.895
60688.750	22.970	190.400	23.360	191.600	203.100	9.713	13.640	22.874
60941.500	22.960	190.300	23.340	191.500	203.100	9.703	13.640	22.862
61194.125	22.950	190.300	23.330	191.500	203.000	9.694	13.640	22.851
61446.500	22.940	190.200	23.320	191.400	203.000	9.684	13.640	22.839

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
61698.875	22.930	190.200	23.310	191.400	202.900	9.674	13.630	22.817
61951.000	22.920	190.100	23.290	191.300	202.900	9.665	13.630	22.806
62202.125	22.910	190.100	23.280	191.300	202.800	9.655	13.630	22.794
62453.625	22.900	190.100	23.270	191.200	202.800	9.645	13.620	22.773
62705.750	22.890	190.000	23.260	191.200	202.700	9.636	13.620	22.762
62958.750	22.880	190.000	23.240	191.100	202.700	9.626	13.620	22.750
63209.750	22.870	189.900	23.230	191.100	202.600	9.616	13.610	22.728
63462.250	22.860	189.900	23.220	191.000	202.600	9.606	13.610	22.716
63715.000	22.840	189.800	23.200	191.000	202.500	9.596	13.610	22.704
63967.625	22.840	189.800	23.190	190.900	202.500	9.586	13.610	22.692
64221.000	22.820	189.700	23.180	190.900	202.400	9.576	13.600	22.671
64473.125	22.810	189.700	23.170	190.800	202.400	9.566	13.600	22.659
64725.500	22.800	189.600	23.150	190.800	202.300	9.555	13.600	22.646
64976.875	22.790	189.600	23.140	190.700	202.300	9.545	13.590	22.624
65228.875	22.780	189.500	23.130	190.700	202.200	9.535	13.590	22.612
65481.500	22.770	189.500	23.110	190.600	202.200	9.525	13.590	22.600
65734.125	22.760	189.400	23.100	190.600	202.100	9.515	13.580	22.578
65986.625	22.750	189.400	23.090	190.500	202.100	9.505	13.580	22.566
66238.125	22.740	189.300	23.070	190.500	202.000	9.494	13.580	22.553
66489.125	22.730	189.300	23.060	190.400	201.900	9.484	13.580	22.541
66741.625	22.720	189.300	23.050	190.400	201.900	9.473	13.570	22.519
66993.500	22.710	189.200	23.030	190.300	201.800	9.463	13.570	22.507
67245.500	22.700	189.100	23.020	190.300	201.800	9.453	13.570	22.495
67497.875	22.680	189.100	23.000	190.200	201.700	9.442	13.560	22.472
67749.250	22.670	189.100	22.990	190.200	201.700	9.431	13.560	22.459
68002.875	22.660	189.000	22.980	190.100	201.600	9.421	13.560	22.447
68255.250	22.650	189.000	22.960	190.100	201.600	9.410	13.550	22.425
68506.125	22.640	188.900	22.950	190.000	201.500	9.400	13.550	22.413
68757.750	22.630	188.800	22.940	189.900	201.400	9.389	13.550	22.400

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
69010.750	22.620	188.800	22.920	189.900	201.400	9.379	13.540	22.378
69264.875	22.600	188.700	22.910	189.800	201.300	9.368	13.540	22.365
69516.875	22.600	188.700	22.900	189.800	201.300	9.358	13.540	22.353
69767.875	22.580	188.600	22.880	189.700	201.200	9.347	13.540	22.340
70020.875	22.570	188.600	22.870	189.700	201.200	9.337	13.530	22.319
70272.250	22.560	188.500	22.860	189.600	201.100	9.327	13.530	22.307
70524.250	22.550	188.500	22.840	189.600	201.000	9.317	13.530	22.295
70777.250	22.540	188.400	22.830	189.500	201.000	9.306	13.520	22.272
71028.500	22.530	188.400	22.820	189.500	200.900	9.296	13.520	22.260
71279.500	22.520	188.300	22.800	189.400	200.900	9.286	13.520	22.248
71530.250	22.500	188.300	22.790	189.400	200.800	9.276	13.510	22.227
71781.500	22.490	188.200	22.780	189.300	200.700	9.265	13.510	22.214
72035.250	22.480	188.200	22.760	189.300	200.700	9.255	13.510	22.202
72286.500	22.470	188.100	22.750	189.200	200.600	9.245	13.500	22.180
72538.375	22.460	188.100	22.740	189.100	200.600	9.235	13.500	22.168
72790.750	22.450	188.000	22.720	189.100	200.500	9.225	13.500	22.156
73043.000	22.430	188.000	22.710	189.000	200.400	9.215	13.500	22.144
73295.500	22.420	187.900	22.700	189.000	200.400	9.205	13.490	22.123
73547.500	22.410	187.800	22.680	188.900	200.300	9.195	13.490	22.111
73800.000	22.400	187.800	22.670	188.900	200.300	9.186	13.490	22.100
74053.250	22.390	187.700	22.660	188.800	200.200	9.176	13.480	22.078
74306.750	22.380	187.700	22.650	188.800	200.100	9.166	13.480	22.066
74558.500	22.360	187.600	22.630	188.700	200.100	9.156	13.480	22.054
74810.750	22.350	187.600	22.620	188.700	200.000	9.147	13.470	22.034
75063.500	22.340	187.500	22.610	188.600	199.900	9.137	13.470	22.022
75315.375	22.330	187.500	22.590	188.600	199.900	9.127	13.470	22.010
75567.375	22.320	187.400	22.580	188.500	199.800	9.116	13.460	21.987
75818.500	22.300	187.400	22.580	188.500	199.800	9.113	13.460	21.982
76071.250	22.290	187.300	22.550	188.400	199.700	9.094	13.460	21.961

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
76322.000	22.280	187.200	22.540	188.300	199.600	9.082	13.450	21.938
76574.125	22.270	187.200	22.520	188.300	199.600	9.070	13.450	21.924
76827.000	22.260	187.100	22.510	188.200	199.500	9.059	13.450	21.911
77079.250	22.240	187.100	22.490	188.200	199.400	9.047	13.440	21.887
77330.625	22.230	187.000	22.480	188.100	199.400	9.036	13.440	21.875
77582.125	22.220	187.000	22.460	188.000	199.300	9.024	13.440	21.861
77833.875	22.210	186.900	22.450	188.000	199.200	9.012	13.430	21.837
78085.500	22.200	186.800	22.430	187.900	199.200	9.000	13.430	21.823
78339.125	22.180	186.800	22.420	187.900	199.100	8.989	13.430	21.810
78590.875	22.170	186.700	22.400	187.800	199.100	8.977	13.420	21.787
78844.500	22.160	186.700	22.390	187.700	199.000	8.965	13.420	21.773
79096.125	22.140	186.600	22.370	187.700	198.900	8.953	13.420	21.759
79349.000	22.130	186.500	22.360	187.600	198.900	8.941	13.410	21.735
79601.625	22.120	186.500	22.340	187.500	198.800	8.929	13.410	21.721
79855.500	22.110	186.400	22.330	187.500	198.700	8.918	13.410	21.708
83133.500	21.950	185.700	22.130	186.600	197.900	8.764	13.370	21.491
89438.000	21.660	184.300	21.810	185.300	196.200	8.513	13.300	21.125
95757.750	21.380	182.900	21.470	183.800	194.600	8.246	13.230	20.743
102070.130	21.120	181.600	21.150	182.300	193.100	7.993	13.160	20.376
108367.250	20.890	180.400	20.870	181.000	191.700	7.770	13.100	20.048
114672.250	20.690	179.300	20.630	179.800	190.400	7.577	13.050	19.761
120974.500	20.510	178.400	20.420	178.800	189.300	7.410	13.010	19.509
127282.130	20.350	177.500	20.230	177.800	188.300	7.260	12.970	19.275
133594.250	20.210	176.700	20.060	176.900	187.300	7.127	12.930	19.057
139901.750	20.080	176.000	19.900	176.100	186.500	7.006	12.900	18.862
146206.130	19.950	175.300	19.760	175.400	185.700	6.895	12.860	18.667
152508.500	19.840	174.600	19.640	174.700	184.900	6.801	12.840	18.508
158820.750	19.740	174.000	19.530	174.200	184.200	6.723	12.810	18.356
165128.630	19.640	173.400	19.420	173.600	183.500	6.633	12.780	18.192

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
171435.130	19.560	173.000	19.320	173.000	182.900	6.557	12.760	18.051
177740.000	19.510	172.700	19.260	172.700	182.600	6.512	12.750	17.951
184043.880	19.450	172.300	19.200	172.400	182.300	6.470	12.730	17.844
190351.750	19.350	171.700	19.080	171.800	181.600	6.382	12.700	17.683
196650.000	19.250	171.100	18.970	171.200	180.900	6.299	12.670	17.527
202954.880	19.160	170.600	18.870	170.600	180.300	6.219	12.650	17.383
209253.630	19.080	170.000	18.770	170.000	179.600	6.143	12.620	17.235
215556.380	18.990	169.500	18.670	169.500	179.000	6.069	12.600	17.097
221861.500	18.910	169.000	18.580	168.900	178.400	5.998	12.580	16.963
228162.750	18.820	168.400	18.480	168.400	177.800	5.929	12.560	16.831
234466.000	18.750	167.900	18.400	167.800	177.300	5.861	12.530	16.691
240773.880	18.670	167.400	18.310	167.300	176.700	5.795	12.510	16.562
247078.380	18.590	166.900	18.220	166.800	176.100	5.731	12.490	16.435
253391.750	18.510	166.400	18.140	166.300	175.500	5.665	12.470	16.306
259700.380	18.440	165.900	18.050	165.800	175.000	5.602	12.450	16.181
266003.750	18.370	165.400	17.970	165.300	174.400	5.542	12.430	16.059
272313.500	18.290	164.900	17.890	164.800	173.900	5.481	12.410	15.935
278618.250	18.220	164.500	17.810	164.200	173.300	5.420	12.390	15.812
284922.000	18.150	164.000	17.730	163.700	172.800	5.360	12.370	15.690
291223.500	18.080	163.500	17.650	163.200	172.200	5.301	12.350	15.570
297525.000	18.010	163.000	17.570	162.700	171.700	5.243	12.330	15.450
303831.630	17.940	162.500	17.500	162.200	171.100	5.185	12.310	15.331
310127.000	17.880	162.000	17.420	161.700	170.600	5.128	12.290	15.212
316426.880	17.810	161.600	17.350	161.200	170.000	5.072	12.270	15.095
322734.130	17.740	161.100	17.300	160.900	169.500	5.036	12.260	15.006
329040.130	17.680	160.600	17.220	160.400	169.000	4.981	12.240	14.890
335341.630	17.620	160.100	17.150	159.900	168.400	4.926	12.220	14.775
341638.630	17.550	159.700	17.080	159.400	167.900	4.872	12.210	14.700
347936.750	17.490	159.200	17.010	158.900	167.300	4.819	12.190	14.700

TIME	DW PRESS	DW TEMP	WW PRESS	WW TEMP	SP TEMP	P STM WW	P AIR WW	WW PRESS
sec.	psia	deg-F	w/o leakage psia	deg-F	deg-F	psia	psia	w/ leakage psia
354236.250	17.430	158.700	16.940	158.400	166.800	4.765	12.170	14.700
360545.380	17.360	158.200	16.870	157.900	166.300	4.712	12.150	14.700
366852.500	17.300	157.700	16.790	157.400	165.700	4.659	12.140	14.700
373154.130	17.240	157.300	16.730	156.900	165.200	4.607	12.120	14.700
379465.380	17.180	156.800	16.660	156.400	164.600	4.555	12.100	14.700
385778.130	17.110	156.300	16.590	155.900	164.100	4.503	12.080	14.700
392081.250	17.050	155.800	16.520	155.400	163.500	4.453	12.070	14.700
398392.130	16.990	155.300	16.450	154.900	163.000	4.402	12.050	14.700
404696.380	16.930	154.800	16.380	154.400	162.400	4.353	12.030	14.700
411002.750	16.870	154.400	16.320	153.900	161.900	4.304	12.010	14.700
417299.750	16.810	153.900	16.250	153.400	161.300	4.256	12.000	14.700
420000.000	16.790	153.700	16.230	153.200	161.100	4.236	11.990	14.700

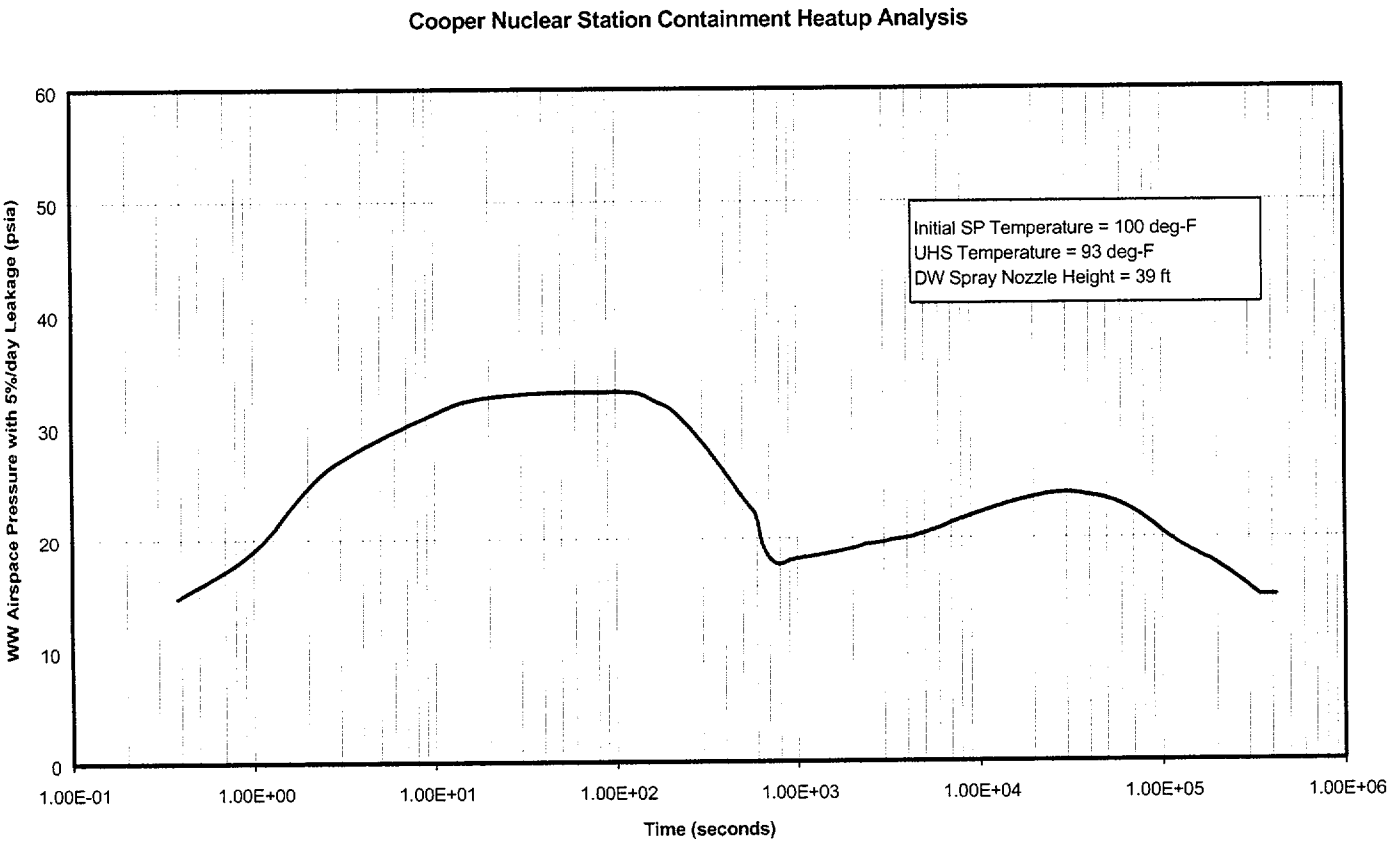


Figure B-9: Wetwell Airspace Pressure Response w/ Leakage For Long-Term NPSH (Case 3)

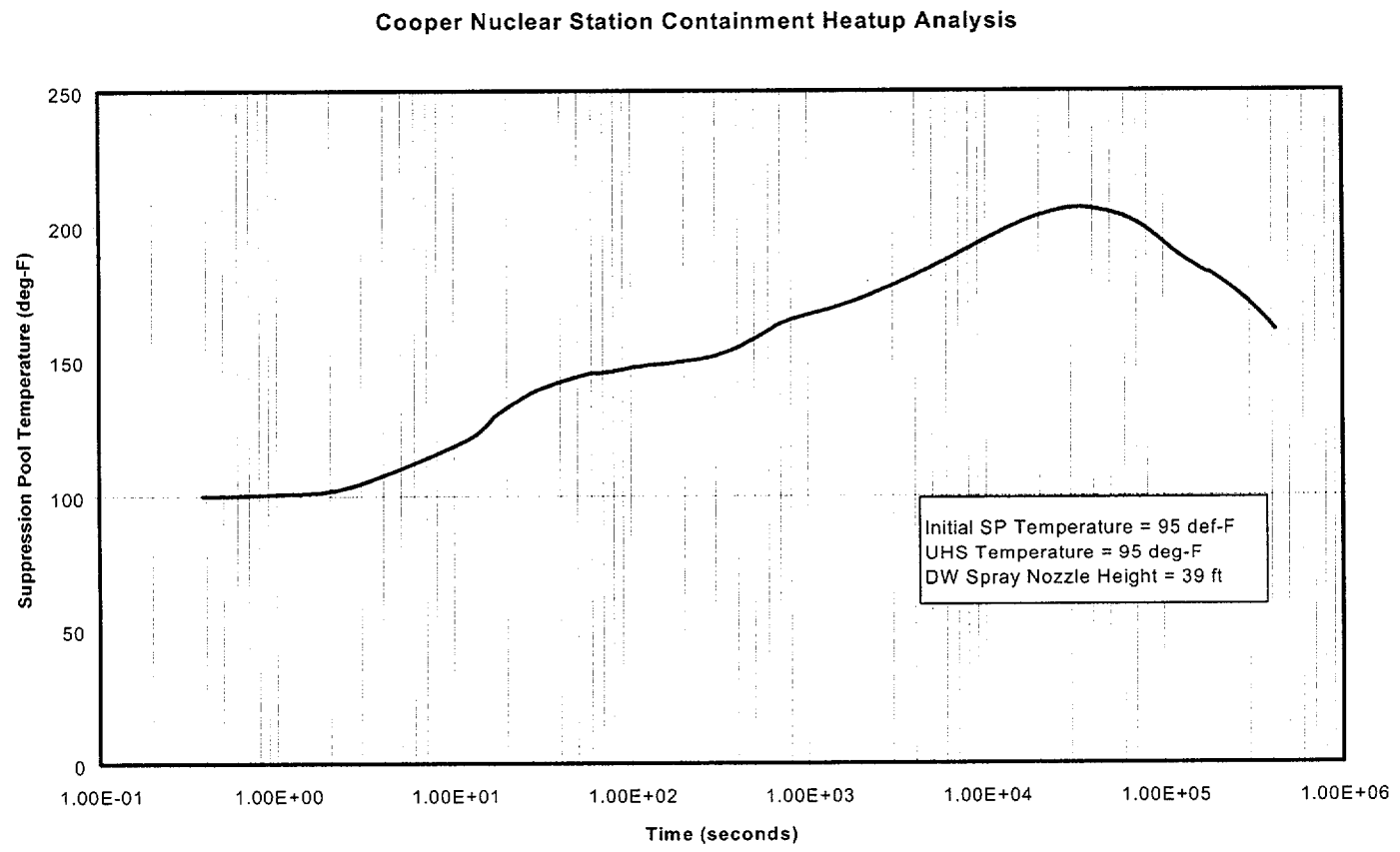


Figure B-10: Suppression Pool Temperature Response For Long-Term NPSH (Case 3)