

GEORGIA POWER COMPANY  
VOGTLE ELECTRIC GENERATING PLANT  
UNIT 2

FIRST PERIODIC  
REACTOR CONTAINMENT BUILDING  
INTEGRATED LEAKAGE RATE TEST  
JUNE 1992  
FINAL REPORT

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## 1.0 INTRODUCTION

The First Periodic Integrated Leakage Rate Test (ILRT) at Georgia Power Company's Vogtle Electric Generating Plant (VEGP) Unit 2 was performed on April 19-20, 1992. The ILRT was performed as required by 10CFR50 Appendix J (Reference 1) and the Vogtle Final Safety Analysis Report (FSAR) (Reference 4) to demonstrate that leakage through the containment boundary does not exceed the VEGP Technical Specification (Reference 2) limit. The test was performed in accordance with Procedure VEGP 28329-2 Revision 3 (Reference 3). The following documentation is retained at the site along with the official test copy of the procedure:

- o systems status (lineup)
- o event log
- o instrumentation validation (calibrations, Instrument Selection Guide, etc.)
- o temperature stabilization data
- o local leak rate tests
- o integrated leakage rate data
- o quality assurance
- o verification leakage rates

A summary of general plant information as related to the Integrated Leakage Rate Test is provided in Appendix IV.

## 2.0 SUMMARY

The First Periodic Integrated Leakage Rate Test for the VEGP Unit 2 containment was successfully completed at 10:45 p.m. (all times EST) on April 19, 1992. The duration of the test was 8.75 hours. The verification test was completed on April 20, 1992.

The results of the test follow:

### Leakage Rate (weight %/day)

#### Total Time Analysis

<u>95% Upper Confidence Limit (UCL) Total Time Leakage Rate</u>	<u>Acceptance Limit (0.75 La)</u>
0.137?	0.1500

<u>Extrapolated Total Time Calculated Leakage Rate</u>	<u>Acceptance Limit (0.75 La)</u>
< 0.0209	0.1500

<u>Mean of Measured Leakage Rates</u>	<u>Acceptance Limit (La - max allowable leakage rate)</u>
0.0740	0.2000

Leakage penalties are added to the above 95 percent total time leakage rate to account for penetrations in nonstandard alignment and for water inventory charge. Total penalties amounted to a leakage of 0.0037 weight percent/day. This results in a final as-left leakage rate of 0.1410 weight percent/day, which is less than the acceptance limit of 0.1500 weight percent/day.

To determine the as-found leakage rate, the 0.0097 weight percent/day minimum pathway improvement made during the local leakage rate testing program is added to the 0.1410 weight percent/day as-left UCL. This results in a final as-found leakage rate of 0.1507 weight percent/day which is less than the acceptance limit of 0.2000 weight percent/day.

### 3.0 METHODOLOGY

#### 3.1 Leakage Rate Calculations

Test methods and procedures are specified in ANSI N45.4-1972 (Reference 6) and in BN-TOP-1 (Reference 7). ANSI N45.4 is cited in 10CFR50 Appendix J, and BN-TOP-1 is an alternative method acceptable to the USNRC.

Reference 7 describes the total time test which is used for Type A tests of a duration less than 24 hours. Since the Type A test described in this report was less than 24 hours, the total time calculations were used to determine leakage rate.

Reference 1 allows leakage rate calculations to be performed using the mass point method defined in ANSI/ANS 56.8-1987 (Reference 5). The Type A test must have a duration of at least 24 hours to use this methodology per Reference 1. Mass point results are provided in this report for information only.

Data from the instrumented containment is reduced by direct application of the ideal gas law,  $PV = n RT$ , to calculate air mass at each data point. The change in air mass provides information to develop the leakage rate.

The total time data analysis technique is based on the premise that the leakage rate varies linearly with time. A measured leakage rate is calculated as the initial air mass minus current air mass divided by current time minus initial time. A straight line is then fitted to the measured rate versus time data. The calculated leakage rate is defined as the ordinate of this line at the end of the test.

The total time test has three acceptance criteria. First, the end-of-test leakage rate 95 percent UCL must be less than the acceptance leakage rate (0.75 La). Second, the calculated leakage rate extrapolated to a 24-hour test duration must be less than the acceptance leakage rate (0.75 La). Third, the mean of the measured leakage rates over the final 5 hours of the test must be less than the maximum allowable leakage rate (La).

#### 3.2 Test Measurements

Thirty dry-bulb and six dew point temperature sensors located inside containment were used to collect information for leakage rate calculations. These were located at approximately equally spaced elevations representing horizontally sliced volume fractions. Sensor locations and volume fractions (Table 1) were established by considering temperature/dew point distributions and the containment free volume.

Since both dry-bulb and dew point temperatures tend to exhibit a vertical stratification at the completion of pressurization and throughout the test, sensors were set at approximately equally spaced elevations. The volume associated with each sensor was taken as a horizontal slice through the containment with the sensor at its approximate vertical centroid. The possibility of an unusual in-plane temperature distribution was accounted for by arranging sensors in a spiral configuration. The bearing of each sensor was advanced approximately 90 degrees (dry-bulb) or 180 degrees (dew point) from that of the sensor above it. Above the refueling floor, the radius was set such that one-half of the horizontal slice area was inside the spiral surface and the other half outside. Below the refuel floor, sensors were positioned about midway between the secondary shield and the liner. One dry-bulb sensor was suspended in the refuel cavity. Sensors above the refuel floor were suspended from spray rings and structural steel. Those below the refuel floor were suspended from grating, piping, and structural steel.

Dry-bulb temperatures were measured using 100-Ohm platinum resistance temperature detectors (RTDs). Dew point temperatures were measured using optical chilled mirror dew point hygrometers. These devices use a direct-measuring sensor automatically held at the dew point temperature by an optical system. This technique is a primary measurement of the water vapor content of the air. The mirror temperature represents the true dew point temperature and is measured by an imbedded precision platinum resistance thermometer.

Absolute pressure was measured using a vibrating cylinder element sensor connected through tubing to a containment penetration. The change in pressure during an ILRT is quite small relative to the absolute pressure. The pressure device used has an accuracy of +/- 0.015 percent RDG, +/- 0.002 percent Full Scale and a repeatability of +/- 0.001 percent Full Scale.

A data logger was used to collect data at 15-minute intervals. Information from the RTDs, dew point sensors, and pressure indicators was transferred from the data logger to the ILRT computer for analysis. The data system generated a printed tape record of each data set transmitted to the computer.

The ILRT computer was an IBM PC compatible. A compiled Basic program as described in Appendix I was run on the computer.

The imposed leakage rate for the verification test was measured using a float type flowmeter.

All instrumentation was calibrated prior to the ILRT. Instrumentation characteristics and calibration information is summarized in Appendix III. Calibration documents are included with the official test copy of the procedure.

## 4.0 TEST PROCEDURE

### 4.1 Initial Conditions

A general inspection of the accessible interior and exterior surfaces of the containment building was performed prior to the ILRT. No repairs or adjustments were made to the containment after initiation of the inspection so that the building could be tested as close as practical to the "as is" condition. All Type B and C local leak rate tests (Appendix II) were completed prior to the inspection. The inspection uncovered no evidence of structural deterioration which would affect the containment structural integrity or leak-tightness.

Plant systems were aligned for the ILRT as specified in the plant procedure. Isolation valves, except those in systems required to maintain the plant in a safe condition and those systems used to conduct the ILRT, were set as close as possible to post-LOCA positions specified in the FSAR. Any valves deviating from FSAR positions are listed and justified in the ILRT procedure.

For those systems or penetrations that were in service or isolated during the test, a penalty addition must be made to the Type A test results. The penalty addition is the sum of the minimum pathway leakages for those penetrations. Penalties were added for the following nonstandard alignments: penetrations 31, 49, 68, 87 and the pressurization header.

Piping was vented and drained to expose valve seats per post-LOCA scenarios. All sources of gas at pressures above containment test pressure were isolated or vented to prevent leakage into the containment during the ILRT.

A temperature/dew point survey was performed, with fans off, to confirm the placement locations of the sensors. An in-situ test on the sensors was performed to demonstrate the proper functioning of the sensors and the data collection system. Resistance temperature detector (RTD) in-situ tests were done using an ice bath (32 degrees F) and verifying that temperature at the data system. Dew point in-situ tests were done using a calibrated dew point instrument (spare dew cell) to measure dew point temperature at each sensor and comparing the results with dew point temperature at the data system. The survey showed that all instruments were operating within the required degree of accuracy.

The official test copy of the procedure documents the completion of the prerequisites for the test, including all exceptions to specified conditions.

#### 4.2 Pressurization

The containment was pressurized using oil free compressors discharging through an after cooler/moisture separator and refrigerated air dryer. Twelve 1500-SCFM compressors were used. Compressor discharge to containment was routed through temporary piping to containment penetrations 68 and 87. Start of pressurization occurred at 10:39 p.m. on April 18, 1992. Pressurization was terminated when containment pressure reached 45.9 psig at 9:45 a.m. on April 19, 1992. This allowed a 0.9-psi margin for pressure drop to ensure the gage pressure would be at or above the 45-psig minimum pressure required for the test. Containment atmospheric condition data was recorded at 15-minute intervals.

#### 4.3 Stabilization

Upon reaching ILKT test pressure, the containment was allowed to stabilize. Containment conditions were recorded at 15-minute intervals. Stabilization criteria were met at 2:00 p.m. on April 19, 1992. (See Table 2.) Actual change rates and maximum allowable change rates are listed below:

<u>Rate</u>	<u>Actual</u>	<u>Maximum Allowable</u>
Rate of change of average temperature is less than 1.0 degree F/hour averaged over the last 2 hours	$dT = -0.469$	1.0 degree ( $-0.469 < 1.0$ )
Rate of change of temperature changes less than 0.5 degrees F/hour/hour averaged over the last 2 hours	$d(dT) = 0.089$	0.5 degrees ( $0.089 < 0.5$ )
Rate of change of temperature averaged over the last hour does not deviate by more than 0.5 degrees F/hour from the average rate of change over the last 4 hours	$dT_1 = -0.411$ $dT_4 = -0.804$ $dT_1 - dT_4 = 0.393$	0.5 degrees ( $0.393 < 0.5$ )

Containment temperature stabilization data is shown graphically in Figure 1.

#### 4.4 Type A Test

Upon meeting the stabilization criteria, start of the Type A test was declared. The Type A test was started at 2:00 p.m. on April 19, 1992. Containment conditions were recorded at 15-minute intervals. The test was successfully concluded at 10:45 p.m. on April 19, 1992. Results of the test are recorded in section 5.1 of this report.

#### 4.5 Verification

Following completion of the Type A test, a 14.88-SCFM verification leak was imposed, which is between the limits of 0.75 La and 1.25 La specified in Reference 7. This flow was calculated using the flowmeter calibration point closest to La, containment free air volume, and containment temperature and pressure at the end of the Type A test. Containment atmospheric conditions were allowed to stabilize for 1 hour. The verification test was then started at 12:00 midnight on April 30, 1992, and successfully completed at 4:30 a.m. on April 30, 1992. Results of the test are recorded in section 5.2.

Table 3 provides a summary of data collected during the stabilization, the Type A test, and the verification as discussed in sections 4.3, 4.4, and 4.5.

#### 4.6 Depressurization

Containment depressurization was started at 4:48 a.m. on April 20, 1992, at a rate of no more than 10 psi per hour. Depressurization was completed at 11:50 a.m. on April 20, 1992. Containment and other plant systems modified for the ILRT were restored to normal plant operation configuration following depressurization.

## 5.0 RESULTS AND ANALYSIS

### 5.1 Total Time Results

The end-of-test leakage rate was within the three acceptance criteria stated in References 2 and 3. The end-of-test leakage rate values and acceptance limits are listed below.

#### Leakage Rate (weight %/day)

##### Total Time Analysis

<u>95% UCL on Total Time Leakage Rate</u>	<u>Acceptance Limit (0.75 La)</u>
0.1373	0.1500

<u>Extrapolated Total Time Calculated Leakage Rate</u>	<u>Acceptance Limit (0.75 La)</u>
< 0.0209	0.1500

<u>Mean of Measured Leakage Rates</u>	<u>Acceptance Limit (La - max allowable leakage rate)</u>
0.0740	0.2000

Penalty additions and corrections must be applied to account for nonstandard alignment of valves and water level changes.

Penalty additions are the sum of the minimum pathway leakages determined for those penetrations which were not in a normal post-LOCA position. A summary of these penetrations and their contribution to the penalty addition are presented below.

<u>Penetration</u>	<u>Description</u>	<u>As-left leakage (SCCM)</u>
49	Seal Leakoff & Excess Letdown	74.4
68	ILRT Pressurization Line	6.0
87	ILRT Pressurization Line	6.0
31	Spare Electrical Penetration	0.0
-	Pressurization Header	7108.0
Total leakage (SCCM)		7194.4
Total leakage (weight percent/day)		0.00334

The penalty addition associated with the pressurization header is the result of an incorrect valve line-up on the header. The leakage recorded is a conservative calculation of the effect of this incorrect line-up. The calculation and its documentation are in the official test copy of the plant procedure.

A water inventory correction to account for the increase in sump water level has been calculated. The calculation and its documentation are in the official test copy of the plant procedure. The water inventory correction is 0.00036 weight percent/day.

The VEGP Technical Specifications specify a maximum allowable leakage rate of 0.200 weight percent/day. In addition, the VEGP Technical Specifications require an as-left leakage rate of less than 75 percent of the maximum allowable rate. This is to allow a margin for deterioration of the leakage boundary. The 95 percent UCL leakage rate, penalty addition, final as-left leakage rate, and acceptance limit are listed below:

95% UCL Leakage Rate	0.1373 weight percent/day
Penalty Addition	0.00334 weight percent/day
Water Inventory Correction	0.00036 weight percent/day
<u>Final As-Left Leakage Rate</u>	<u>0.1410 weight percent/day</u>
Acceptance Limit (0.75 La)	0.1500 weight percent/day

Table 4 lists air mass and leakage rates (measured, calculated, and UCL). The extrapolated rate is determined by extrapolating the final 21 calculated leakage rates out to 24 hours. These final 21 points show a falling trend. The extrapolated rate is less than 0.0209 weight percent/day which is less than 0.1500 weight percent/day. The mean of the measured rates is 0.0740, weight percent/day which is less than 0.2000 weight percent/day.

Figures 2 through 6 present a graphic demonstration of the data collected during the Type A test. The air mass plot (Figure 2) shows lines whose slopes represent leakage rates. A least squares fit line is plotted through the actual test data which must lie above a line representing the acceptance limit. As seen in the graph, the actual leakage rate was less than the allowable rate. The temperature plot (Figure 3) shows the weighted average dry-bulb temperature of the containment air mass. The total temperature change was 1.988 degrees F over the 8.75-hour test period. The pressure plot (Figure 4) shows the containment total pressure and a total change of 0.225 psi. The vapor pressure plot (Figure 5) shows a total change in vapor pressure of 0.0054 psi. Figure 6 shows a plot of total time leakage rate data from Table 4. The leakage rate UCL must be below a line representing the acceptance limit. As seen from the graph, the UCL is below the allowable limit.

The as-found leakage rate is calculated by adding the as-left leakage rate to the penetration minimum pathway improvements made during the local leakage rate testing program. The minimum pathway improvements and calculated as-found UCL leakage rate are listed below.

#### Minimum Pathway Leakage

<u>Penetration</u>	<u>As-found</u>	<u>As-left</u>
23	220 SCCM	72.3 SCCM
36	661 SCCM	62.3 SCCM
38	433 SCCM	232 SCCM
39	245 SCCM	84.5 SCCM
40	10930 SCCM	399 SCCM
49	74.4 SCCM	11.9 SCCM
50	19.4 SCCM	1.2 SCCM
77	57.6 SCCM	50.5 SCCM
80	5460 SCCM	340 SCCM
81	3850 SCCM	27 SCCM
83	310 SCCM	38.4 SCCM
90	10.6 SCCM	10.5 SCCM
100	64.7 SCCM	50.8 SCCM
EH	13.9 SCCM	11.1 SCCM
Sum	22349.6 SCCM	1391.5 SCCM

$$\begin{aligned} \text{Minimum pathway improvement} &= 22349.6 - 1391.5 = 20958.1 \text{ SCCM} \\ &= 0.0097 \text{ weight percent/day} \end{aligned}$$

As-Left Leakage Rate	0.1410 weight percent/day
Minimum Pathway Improvement	0.0097 weight percent/day
<u>Final As-Found Leakage Rate</u>	<u>0.1507 weight percent/day</u>
Acceptance Limit (La)	0.2000 weight percent/day

#### 5.2 Verification Results

The verification test introduced an additional leak of 14.88 SCFM. Verification test results are listed in Table 5 and graphed in Figures 7 and 8. The results of the verification are acceptable if the leakage rate calculated after imposition of the additional leak falls within the limits of Lam + Lo +/- 0.25 La (which satisfies VEGP Technical Specification 4.6.1.2.c), where Lam is the previously calculated leakage rate, Lo is the imposed leakage, and La is the maximum allowable leakage rate. The final results and acceptance limits are listed below:

Upper Limit Rate	0.2665 weight percent/day
Total Time Calculated Rate	0.2185 weight percent/day
Lower Limit Rate	0.1665 weight percent/day

### 5.3 Mass Point Results

Mass point results are included for information purposes in Tables 6 and 7. The mass point calculated rate is the slope of the line fitted to the air mass/time data by the method of least squares. The calculated mass point leakage rate is 0.0394 weight percent/day. The mass point UCL is 0.0473 weight percent/day < 0.1500 weight percent/day. Details on the mass point method are found in Reference 5.

## 6.0 REFERENCES

1. Code of Federal Regulations, Title 10, Part 50, Appendix J, Reactor Containment Leakage Testing for Water Cooled Power Reactors.
2. Vogtle Electric Generating Plant, Units 1 and 2, Technical Specifications.
3. Vogtle Electric Generating Plant, Procedure No. VEGP 28329-2 Revision 3, Containment Integrated Leak Rate Surveillance Test.
4. Vogtle Electric Generating Plant Units 1 and 2, Final Safety Analysis Report.
5. ANSI/ANS 56.8-1987, Containment System Leakage Testing Requirements.
6. ANSI N45.4-1972, Leakage Rate Testing of Containment Structures for Nuclear Reactors.
7. Bechtel Topical Report BN-TOP-1, Testing Criteria for Integrated Leakage Rate Testing of Primary Containment Structures for Nuclear Power Plants, Revision 1, 1972.

TABLES AND FIGURES

TABLE 1  
DRYBULB AND DEW POINT TEMPERATURE SENSOR LOCATIONS

DRYBULB SENSORS

<u>Sensor Number</u>	<u>Elevation (feet)</u>	<u>Azimuth (degrees)</u>	<u>Distance From Ctr of Ctmt (ft)</u>	<u>Volume Fractions</u>
1	387	135	24	0.018
2	377	225	24	0.026
3	368	315	24	0.032
4	359	45	24	0.037
5	351	180	49	0.038
6	343	270	49	0.039
7	336	0	49	0.037
8	329	90	49	0.037
9	322	180	49	0.038
10	315	270	49	0.038
11	308	0	49	0.038
12	301	90	49	0.038
13	294	180	49	0.038
14	287	270	49	0.038
15	280	0	49	0.038
16	273	90	49	0.038
17	266	180	49	0.037
18	259	270	49	0.036
19	252	0	49	0.034
20	245	90	49	0.033
21	238	180	49	0.033
22	231	270	49	0.033
23	224	0	49	0.036
24	202	270	12	0.017
25	216	180	58	0.022
26	208	285	60	0.029
27	200	0	59	0.029
28	192	90	63	0.029
29	184	195	60	0.029
30	176	310	62	0.035
				1.000

DEW POINT SENSORS

1	368	225	24	0.151
2	329	0	49	0.189
3	294	90	49	0.190
4	259	180	48	0.178
5	227	0	60	0.119
6	196	195	59	0.173
				1.000

TABLE 2

## TEMPERATURE STABILIZATION REPORT

Start Time = 1000 4/9/92

\* = stabilization criterion satisfied

	data set	elapsed time, hr	temp. deg F	dT <sub>1</sub> avg dT (1 hr)	dT <sub>4</sub> avg dT (4 hr)	dT <sub>1</sub> -dT <sub>4</sub>	dT avg (2 hr)	d(dT) avg (2 hr)
1		0.00	87.030					
2		0.25	86.490					
3		0.50	86.092					
4		0.75	85.771					
5		1.00	85.504	-1.527				
6		1.25	85.279	-1.211				
7		1.50	85.084	-1.008				
8		1.75	85.911	-0.860				
9		2.00	84.751	-0.753		-1.140	0.760	
10		2.25	84.611	-0.669		-0.940*	0.514	
11		2.50	84.474	-0.611		-0.809*	0.369*	
12		2.75	84.347	-0.564		-0.712*	0.281*	
13		3.00	84.225	-0.526		-0.640*	0.204*	
14		3.25	84.116	-0.494		-0.581*	0.173*	
15		3.50	84.012	-0.462		-0.536*	0.137*	
16		3.75	83.910	-0.437		-0.501*	0.117*	
17		4.00	83.813	-0.411	-0.804	0.393*	-0.469*	0.089*

TABLE 3 (STABILIZATION)

## DATA SUMMARY REPORT

data set	time	date	temperature deg F	pressure psia	vapor pressure psia	dry air mass lbm
1	1000	419	87.0303	60.4154	0.4450	814232.46
2	1015	419	86.4899	60.3634	0.4442	814341.87
3	1030	419	86.0924	60.3235	0.4450	814381.54
4	1045	419	85.7710	60.2913	0.4439	814437.92
5	1100	419	85.5037	60.2643	0.4458	814444.61
6	1115	419	85.2792	60.2407	0.4465	814448.73
7	1130	419	85.0844	60.2198	0.4467	814452.64
8	1145	419	84.9113	60.2011	0.4478	814441.77
9	1200	419	84.7510	60.1839	0.4485	814437.82
10	1215	419	84.6105	60.1681	0.4494	814420.42
11	1230	419	84.4738	60.1533	0.4497	814418.45
12	1245	419	84.3469	60.1395	0.4500	814415.97
13	1300	419	84.2246	60.1265	0.4513	814404.14
14	1315	419	84.1162	60.1140	0.4523	814381.86
15	1330	419	84.0115	60.1022	0.4526	814373.39
16	1345	419	83.9095	60.0911	0.4534	814363.74
17	1400	419	83.8135	60.0803	0.4539	814353.67

TABLE 3 (TYPE A TEST)

## DATA SUMMARY REPORT

data set	time	date	temperature deg F	pressure psia	vapor pressure psia	dry air mass lbm
1	1400	419	83.8135	60.0803	0.4539	814353.67
2	1415	419	83.7264	60.0701	0.4560	814315.60
3	1430	419	83.6367	60.0603	0.4540	814343.99
4	1445	419	83.5558	60.0508	0.4580	814280.25
5	1500	419	83.4621	60.0418	0.4580	814298.31
6	1515	419	83.3985	60.0328	0.4581	814269.47
7	1530	419	83.3209	60.0243	0.4586	814262.57
8	1545	419	83.2473	60.0159	0.4588	814255.68
9	1600	419	83.1817	60.0079	0.4595	814235.07
10	1615	419	83.1138	60.0000	0.4596	814227.69
11	1630	419	83.0532	59.9927	0.4597	814217.01
12	1645	419	82.9878	59.9857	0.4595	814221.47
13	1700	419	82.9296	59.9790	0.4599	814211.94
14	1715	419	82.8739	59.9724	0.4605	814197.33
15	1730	419	82.8071	59.9664	0.4602	814219.96
16	1745	419	82.7520	59.9602	0.4599	814221.03
17	1800	419	82.7030	59.9542	0.4602	814209.47
18	1815	419	82.6519	59.9484	0.4597	814212.37
19	1830	419	82.6038	59.9428	0.4595	814211.23
20	1845	419	82.5480	59.9372	0.4590	814225.03
21	1900	419	82.5000	59.9321	0.4598	814217.22
22	1915	419	82.4574	59.9269	0.4597	814210.69
23	1930	419	82.4104	59.9217	0.4595	814213.46
24	1945	419	82.3674	59.9165	0.4596	814204.87
25	2000	419	82.3246	59.9114	0.4596	814199.54
26	2015	419	82.2775	59.9066	0.4593	814208.54
27	2030	419	82.2272	59.9008	0.4595	814201.46
28	2045	419	82.1736	59.8948	0.4595	814200.31
29	2100	419	82.1230	59.8891	0.4599	814193.42
30	2115	419	82.0731	59.8836	0.4593	814201.02
31	2130	419	82.0300	59.8784	0.4596	814189.79
32	2145	419	81.9874	59.8735	0.4590	814194.99
33	2200	419	81.9373	59.8689	0.4594	814201.29
34	2215	419	81.0992	59.8643	0.4593	814197.51
35	2230	419	81.8630	59.8597	0.4595	814186.92
36	2245	419	81.8255	59.8553	0.4593	814184.63

TABLE 3 (VERIFICATION)

## DATA SUMMARY REPORT

data set		time	date	temperature deg F	pressure psia	vapor pressure psia	dry air mass lbm
1	C	420	81.6413	59.8269	0.4589	814105.24	
2	15	420	81.6074	59.8238	0.4584	814093.86	
3	30	420	81.5766	59.8187	0.4585	814068.69	
4	45	420	81.5497	59.8137	0.4583	814043.27	
5	100	420	81.5168	59.8089	0.4581	814030.12	
6	115	420	81.4826	59.8043	0.4581	814018.14	
7	130	420	81.4544	59.7995	0.4578	813997.85	
8	145	420	81.4240	59.7945	0.4578	813976.01	
9	200	420	81.3974	59.7902	0.4574	813961.94	
10	215	420	81.3690	59.7859	0.4575	813944.55	
11	230	420	81.3379	59.7813	0.4575	813928.88	
12	245	420	81.3145	59.7770	0.4574	813905.76	
13	300	420	81.2866	59.7726	0.4572	813890.35	
14	315	420	81.2612	59.7680	0.4566	813872.82	
15	330	420	81.2394	59.7636	0.4566	813846.36	
16	345	420	81.2115	59.7593	0.4566	813828.96	
17	400	420	81.1856	59.7546	0.4558	813814.86	
18	415	420	81.1592	59.7506	0.4558	813799.70	
19	430	420	81.1318	59.7460	0.4554	813782.72	

TABLE 4  
TOTAL TIME LEAKAGE RATE REPORT

data set	time	date	elapsed time (hrs)	dry air mass (lbm)	measured rate (%/day)	leakage rate (%/day)	UCL rate (%/day)
1	1400	419	0.00	814353.67	0.0000	0.0000	0.0000
2	1415	419	0.25	814315.60	0.4488	0.4488	0.4488
3	1430	419	0.50	814343.99	0.0571	0.0571	0.0571
4	1445	419	0.75	814280.25	0.2885	0.1846	2.6494
5	1500	419	1.00	814298.31	0.1632	0.1456	1.0562
6	1515	419	1.25	814269.47	0.1985	0.1523	0.7491
7	1530	419	1.50	814262.57	0.1790	0.1475	0.6032
8	1545	419	1.75	814255.68	0.1650	0.1396	0.5156
9	1600	419	2.00	814235.07	0.1748	0.1397	0.4668
10	1615	419	2.25	814227.69	0.1650	0.1369	0.4284
11	1630	419	2.50	814217.01	0.1611	0.1342	0.3992
12	1645	419	2.75	814221.47	0.1417	0.1266	0.3699
13	1700	419	3.00	814211.94	0.1392	0.1207	0.3468
14	1715	419	3.25	814197.33	0.1418	0.1173	0.3298
15	1730	419	3.50	814219.96	0.1126	0.1076	0.3076
16	1745	419	3.75	814221.03	0.1042	0.0982	0.2876
17	1800	419	4.00	814209.47	0.1062	0.0914	0.2720
18	1815	419	4.25	814212.37	0.0980	0.0844	0.2572
19	1830	419	4.50	814211.23	0.0933	0.0780	0.2439
20	1845	419	4.75	814225.03	0.0798	0.0703	0.2300
21	1900	419	5.00	814217.22	0.0804	0.0642	0.2184
22	1915	419	5.25	814210.69	0.0803	0.0592	0.2087
23	1930	419	5.50	814213.46	0.0751	0.0542	0.1995
24	1945	419	5.75	814204.87	0.0763	0.0504	0.1919
25	2000	419	6.00	814199.54	0.0757	0.0471	0.1855
26	2015	419	6.25	814208.54	0.0684	0.0433	0.1785
27	2030	419	6.50	814201.46	0.0690	0.0402	0.1727
28	2045	419	6.75	814200.31	0.0670	0.0374	0.1674
29	2100	419	7.00	814193.42	0.0675	0.0350	0.1629
30	2115	419	7.25	814201.02	0.0621	0.0324	0.1581
31	2130	419	7.50	814189.79	0.0644	0.0304	0.1544
32	2145	419	7.75	814194.95	0.0603	0.0283	0.1504
33	2200	419	8.00	814201.29	0.0561	0.0259	0.1464
34	2215	419	8.25	814197.51	0.0558	0.0239	0.1427
35	2230	419	8.50	814186.92	0.0578	0.0223	0.1399
36	2245	419	8.75	814184.63	0.0569	0.0209	0.1373

Allowable leakage rate, La = 0.2000 %/day  
 75% La = 0.1500 %/day  
 Total time leakage rate = 0.0209 %/day  
 Total time UCL = 0.1373 %/day

TABLE 5  
TOTAL TIME LEAKAGE RATE REPORT

VERIFICATION

data set	time	date	elapsed time (hrs)	dry air mass (lbm)	measured rate (%/day)	leakage rate (%/day)
1	0	420	0.00	814105.24	0.0000	0.0000
2	15	420	0.25	814093.86	0.1342	0.1342
3	30	420	0.50	814068.69	0.2155	0.2155
4	45	420	0.75	814043.27	0.2436	0.2524
5	100	420	1.00	814030.12	0.2215	0.2472
6	115	420	1.25	814018.14	0.2054	0.2337
7	130	420	1.50	813997.85	0.2111	0.2289
8	145	420	1.75	813976.01	0.2177	0.2288
9	200	420	2.00	813961.94	0.2112	0.2257
10	215	420	2.25	813944.55	0.2105	0.2232
11	230	420	2.50	813928.88	0.2080	0.2205
12	245	420	2.75	813905.76	0.2138	0.2203
13	300	420	3.00	813890.35	0.2112	0.2193
14	315	420	3.25	813872.82	0.2108	0.2183
15	330	420	3.50	813846.36	0.2181	0.2194
16	345	420	3.75	813828.96	0.2172	0.2201
17	400	420	4.00	813814.86	0.2140	0.2198
18	415	420	4.25	813799.70	0.2119	0.2191
19	430	420	4.50	813782.72	0.2113	0.2184

Upper limit on leakage rate = 0.2665 %/day  
 Mass point leakage rate = 0.2184 %/day  
 Lower limit on leakage rate = 0.1665 %/day

TABLE 6  
MASS POINT LEAKAGE RATE REPORT

data set	time	date	elapsed time (hrs)	dry air mass (lbm)	leakage rate (#/day)	UCL rate (%/day)
1	1400	419	0.00	814353.67	0.0000	0.0000
2	1415	419	0.25	814315.60	0.4488	0.4488
3	1430	419	0.50	814343.99	0.0571	1.9926
4	1445	419	0.75	814280.25	0.2262	0.6399
5	1500	419	1.00	814298.31	0.1722	0.3769
6	1515	419	1.25	814269.47	0.1807	0.3025
7	1530	419	1.50	814262.57	0.1731	0.2550
8	1545	419	1.75	814255.68	0.1623	0.2224
9	1600	419	2.00	814235.07	0.1626	0.2080
10	1615	419	2.25	814227.69	0.1587	0.1945
11	1630	419	2.50	814217.01	0.1550	.1841
12	1345	419	2.75	814221.47	0.1449	0.1711
13	1700	419	3.00	814211.94	0.1378	0.1609
14	1715	419	3.25	814197.33	0.1342	0.1542
15	1730	419	3.50	814219.96	0.1219	0.1432
16	1745	419	3.75	814221.03	0.1107	0.1325
17	1800	419	4.00	814209.47	0.1035	0.1240
18	1815	419	4.25	814212.37	0.0961	0.1157
19	1830	419	4.50	814211.23	0.0894	0.1081
20	1845	419	4.75	814225.03	0.0810	0.0998
21	1900	419	5.00	814217.22	0.0749	0.0929
22	1915	419	5.25	814210.69	0.0703	0.0872
23	1930	419	5.50	814213.46	0.0657	0.0818
24	1945	419	5.75	814204.87	0.0625	0.0776
25	2000	419	6.00	814199.54	0.0601	0.0741
26	2015	419	6.25	814208.54	0.0567	0.0701
27	2030	419	6.50	814201.46	0.0542	0.0668
28	2045	419	6.75	814200.31	0.0520	0.0638
29	2100	419	7.00	814193.42	0.0504	0.0615
30	2115	419	7.25	814201.02	0.0481	0.0587
31	2130	419	7.50	814189.79	0.0468	0.0568
32	2145	419	7.75	814194.99	0.0451	0.0546
33	2200	419	8.00	814201.29	0.0431	0.0522
34	2215	419	8.25	814197.51	0.0414	0.0501
35	2230	419	8.50	814186.92	0.0404	0.0487
36	2245	419	8.75	814184.63	0.0394	0.0473

Allowable leakage rate, La = 0.2000 %/day  
 75% La = 0.1500 %/day  
 Mass point leakage rate = 0.0394 %/day  
 Mass point UCL = 0.0473 %/day

TABLE 7  
MASS POINT LEAKAGE RATE REPORT

VERIFICATION

data set	time	date	elapsed time (hrs)	dry air mass (lbm)	leakage rate (%/day)
1	0	420	0.00	814105.24	0.0000
2	15	420	0.25	814053.86	0.1342
3	30	420	0.50	814068.69	0.2155
4	45	420	0.75	814043.27	0.3489
5	100	420	1.00	814030.12	0.2368
6	115	420	1.25	814C18.14	0.2197
7	130	420	1.50	813997.85	0.2157
8	145	420	1.75	813976.01	0.2175
9	200	420	2.00	813961.94	0.2149
10	215	420	2.25	813944.55	0.2131
11	230	420	2.50	813928.88	0.2108
12	245	420	2.75	813905.76	0.2118
13	300	420	3.00	813890.35	0.2115
14	315	420	3.25	813872.82	0.2111
15	330	420	3.50	813846.36	0.2134
16	345	420	3.75	813828.96	0.2147
17	400	420	4.00	813814.86	0.2147
18	415	420	4.25	813799.70	0.2141
19	430	420	4.50	813782.72	0.2134

Upper limit on leakage rate = 0.2850 %/day  
 Mass point leakage rate = 0.2134 %/day  
 Lower limit on leakage rate = 0.1850 %/day

VOGTLE UNIT 2 1992 ILRT  
TEMPERATURE DURING STABILIZATION

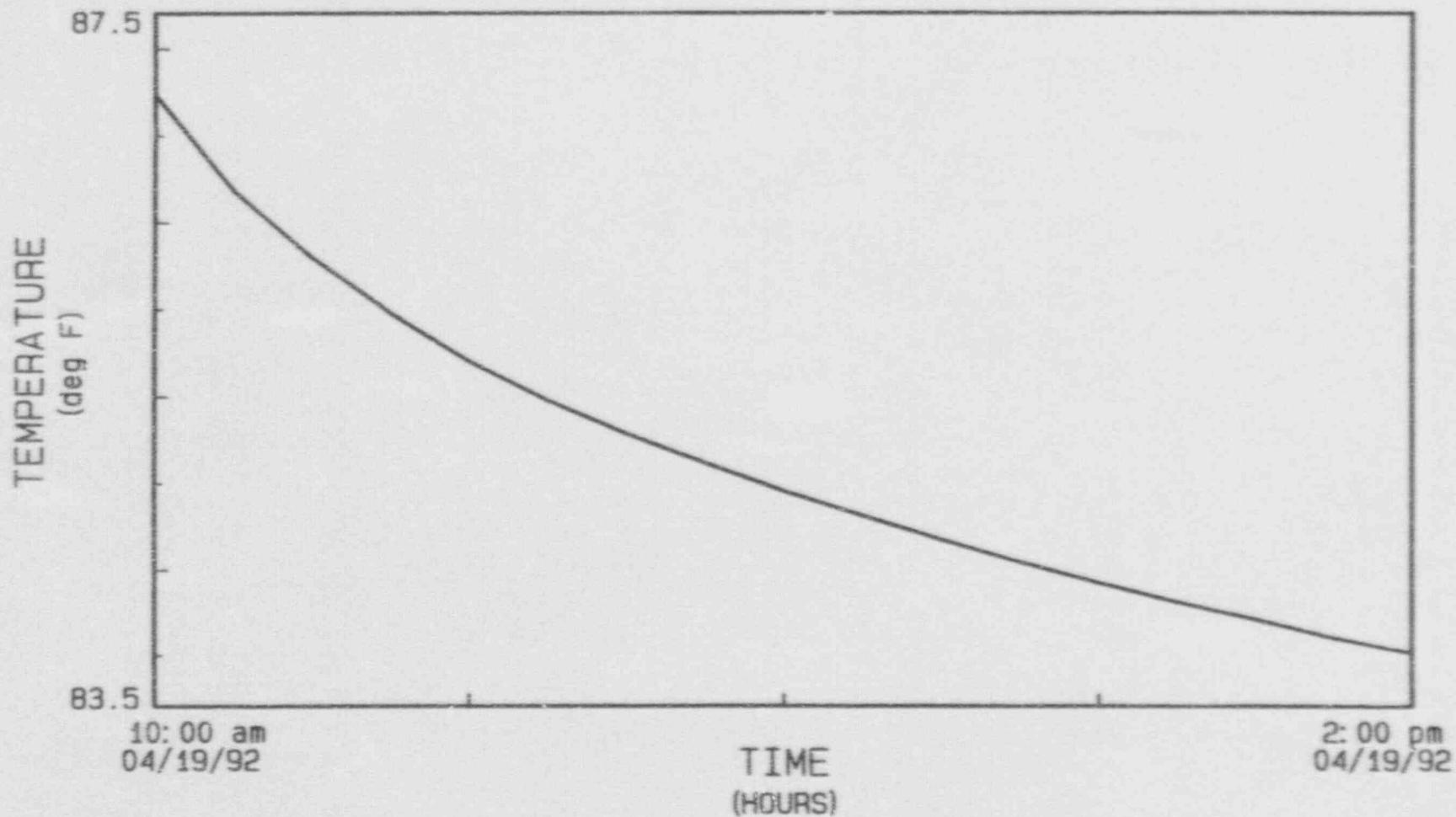


FIGURE 1

VOGTLE UNIT 2 1992 ILRT  
AIR MASS - TYPE A TEST

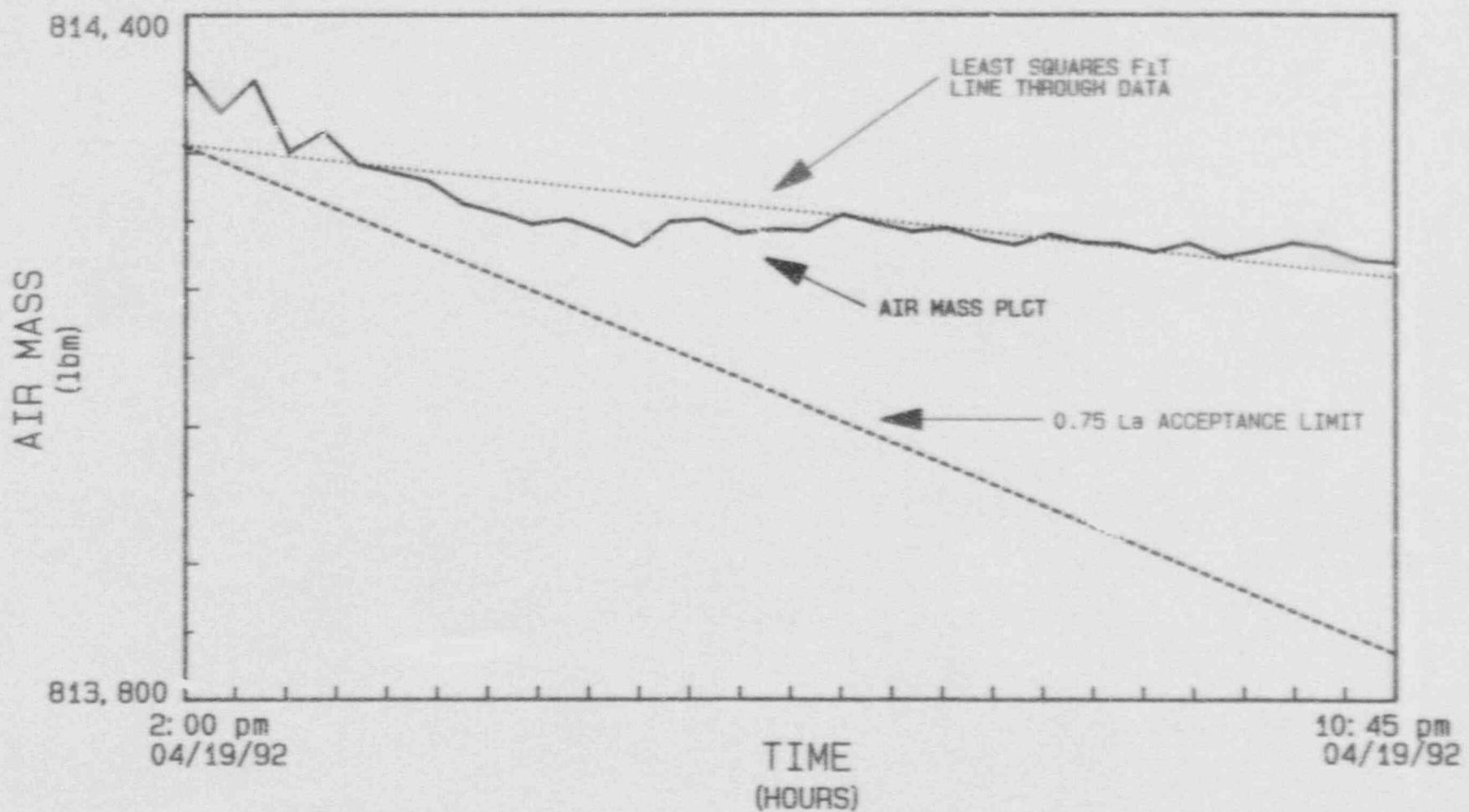


FIGURE 2

VOGTLE UNIT 2 1992 ILRT  
MEAN TEMPERATURE - TYPE A TEST

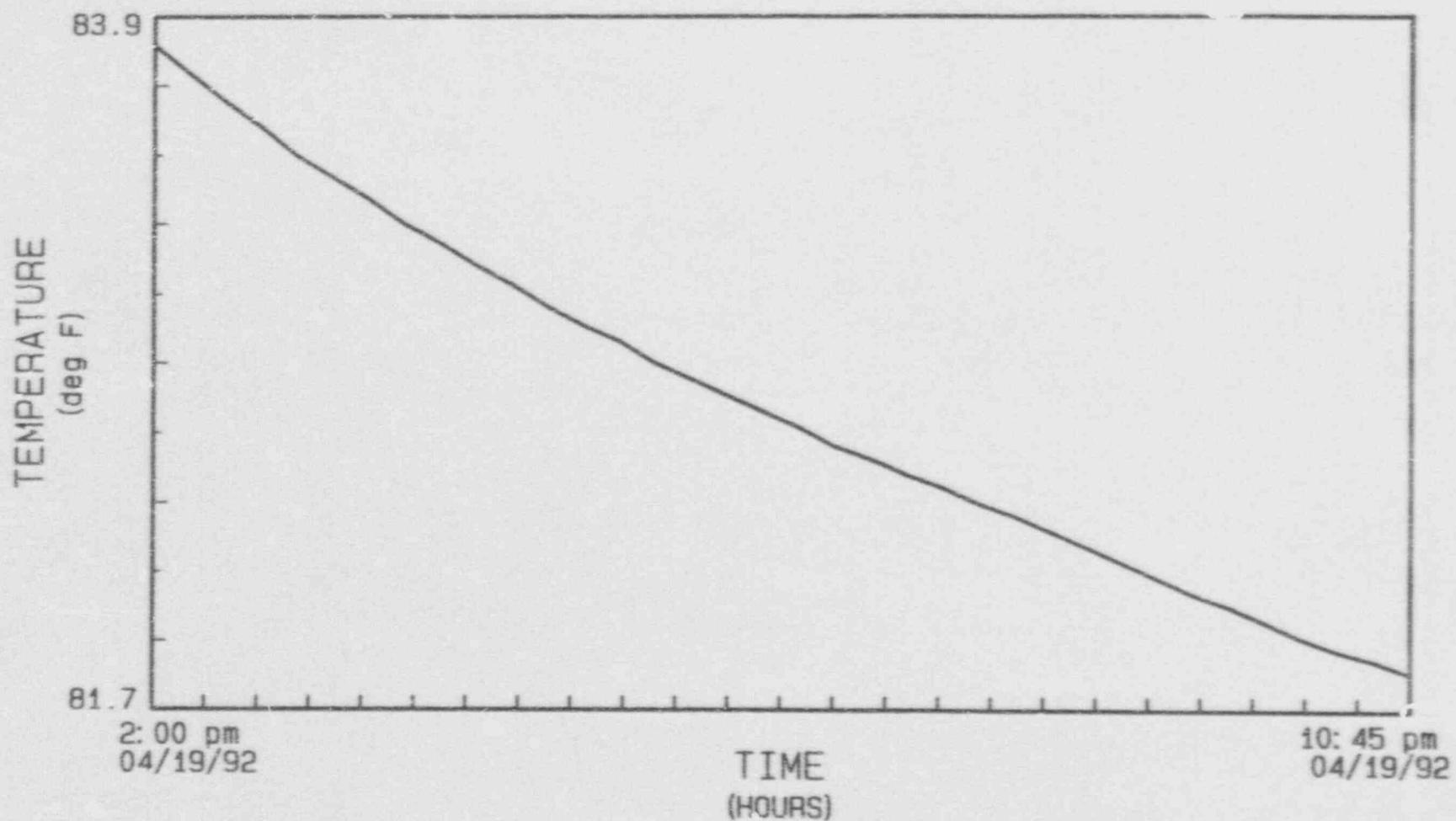


FIGURE 3

VOGTLE UNIT 2 1992 ILRT  
TOTAL PRESSURE - TYPE A TEST

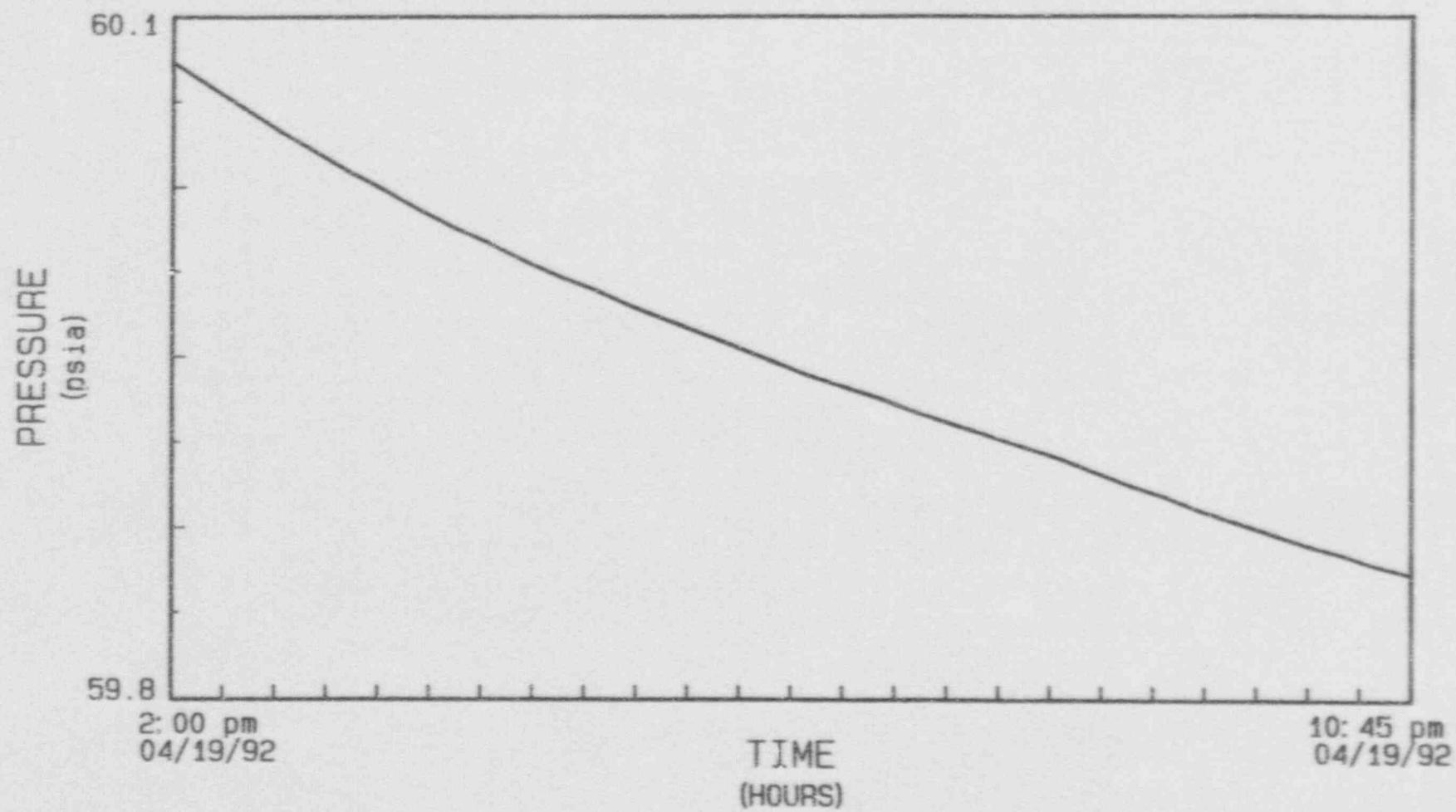


FIGURE 4

VOGTLE UNIT 2 1992 ILRT  
VAPOR PRESSURE - TYPE A TEST

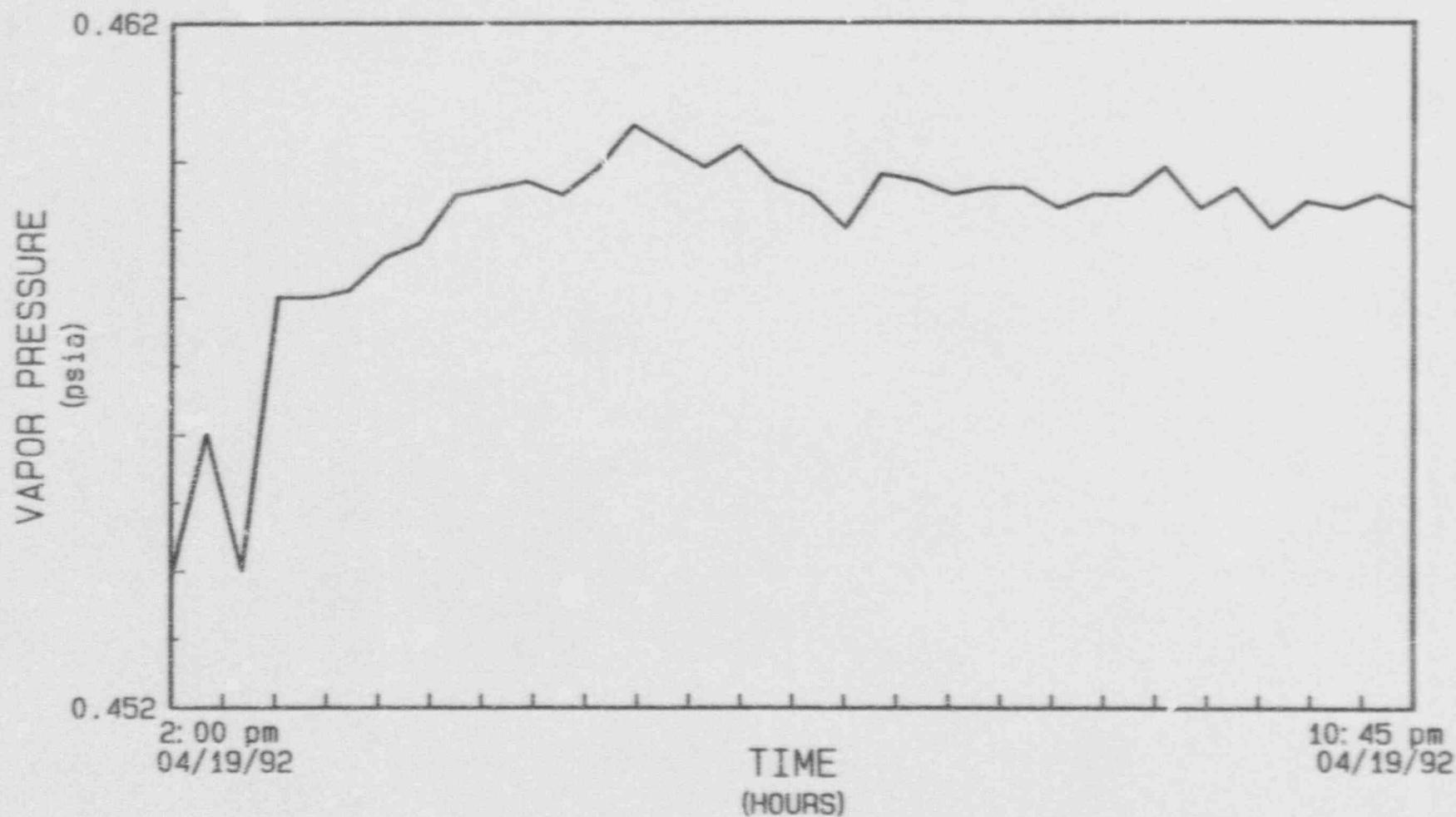


FIGURE 5

VOGTLE UNIT 2 1992 ILRT  
TOTAL TIME LEAKAGE RATE  
TYPE A TEST

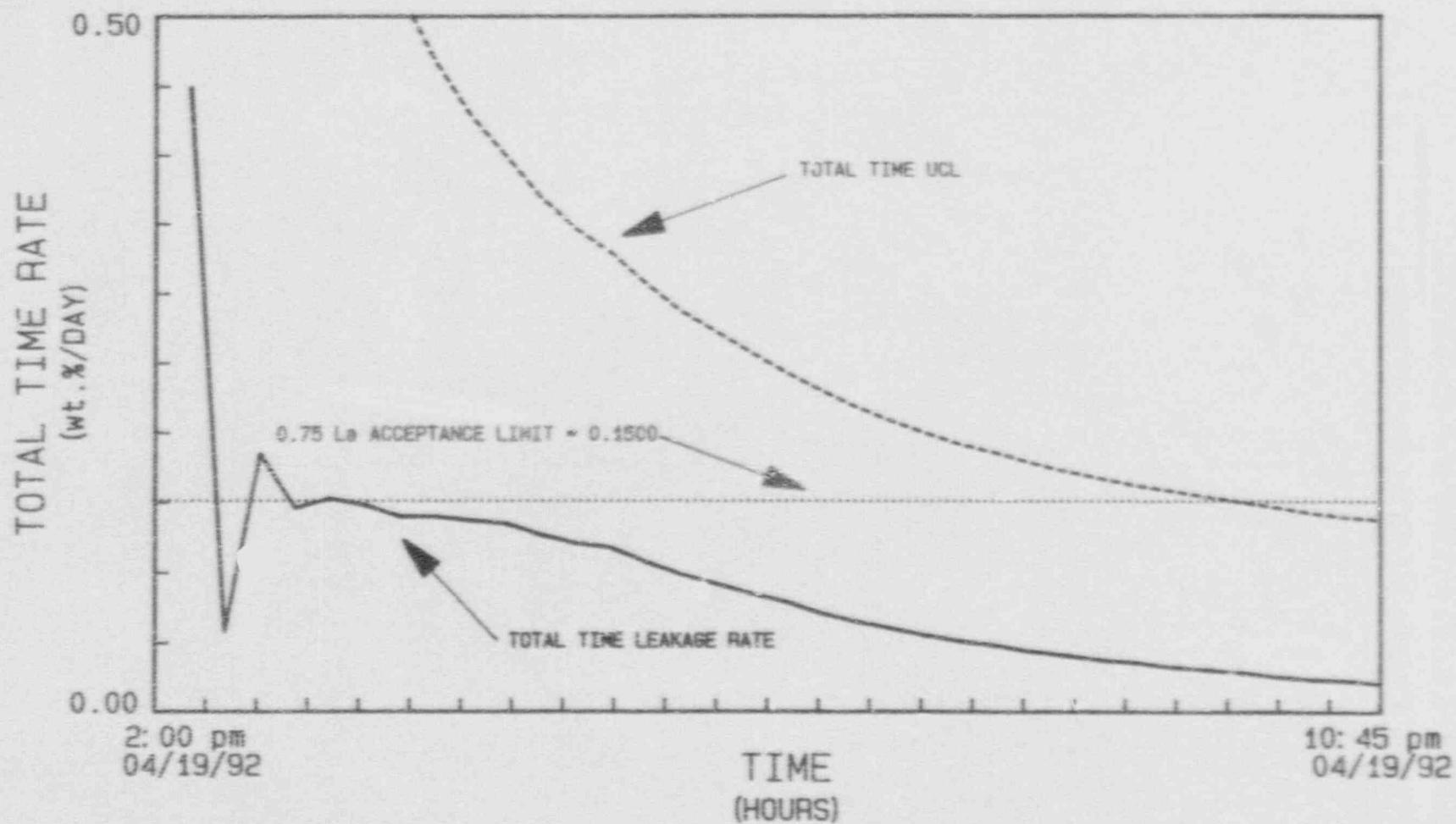


FIGURE 6

VOGTLER UNIT 2 1992 ILRT  
AIR MASS - VERIFICATION

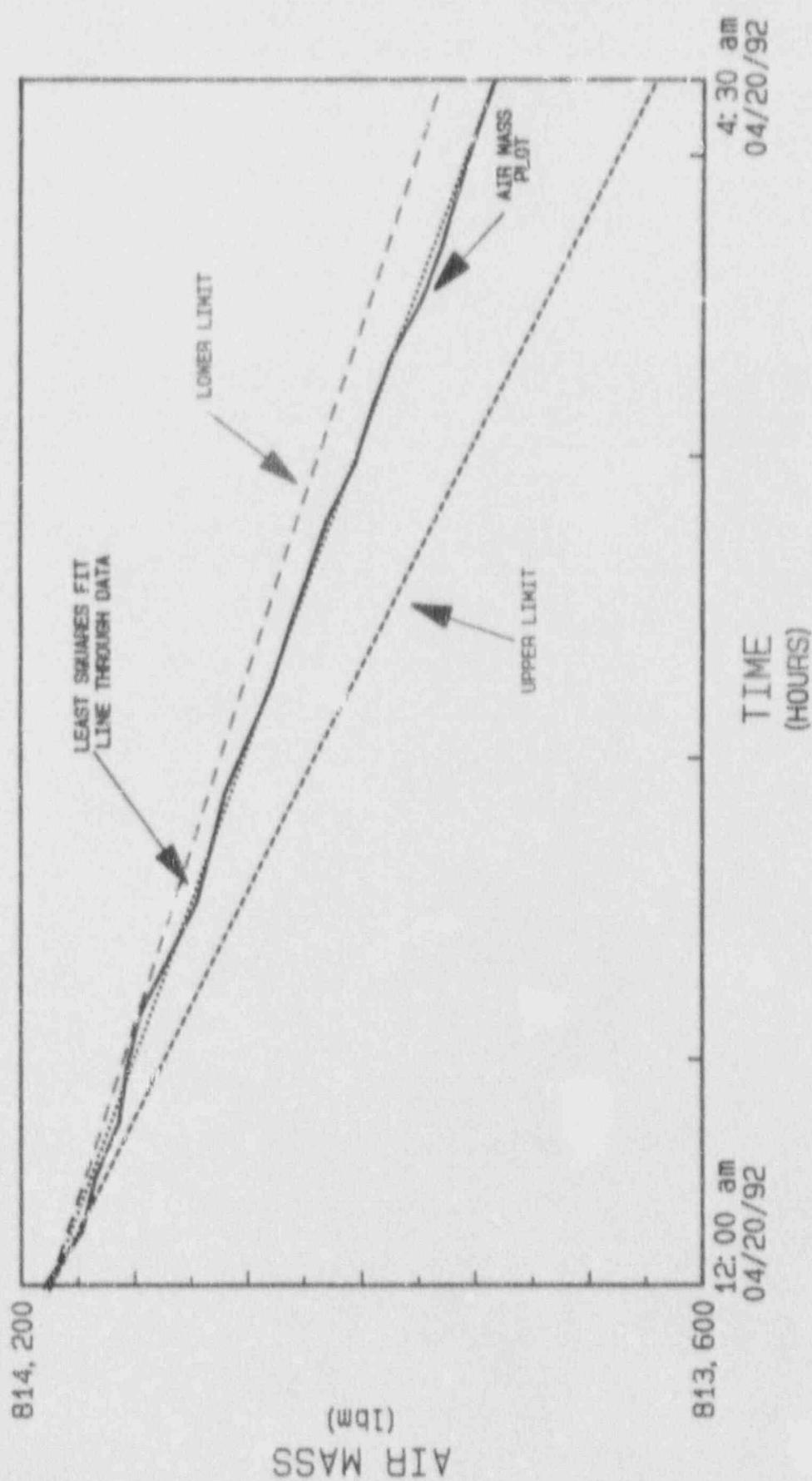


FIGURE 7

VOGTLE UNIT 2 1992 ILRT  
TOTAL TIME - VERIFICATION

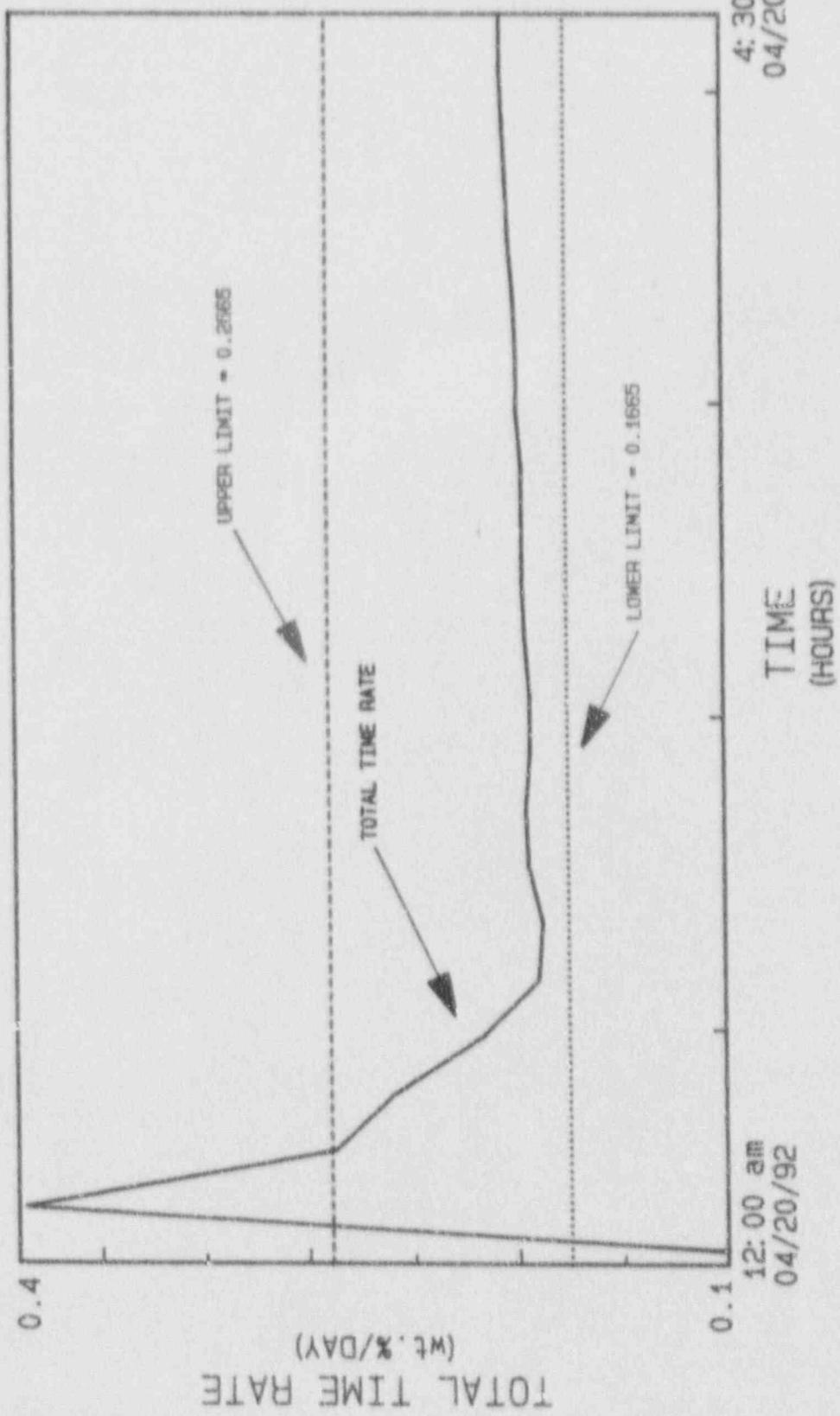


FIGURE 8

## APPENDIX I

### ILRT COMPUTER PROGRAM DESCRIPTION

The ILRT computer program used in this test was a program purchased by Southern Company Services (SCS) from BCP Technical Services. The program is a modified version of the BCP standard ILRT program prepared for specific use at VEGP. Complete verification of the VEGP version has been performed and documented. The program source code was included in the purchase of the software should there be the need to review the routines used to calculate the various ILRT parameters. The BCP ILRT program is written in Microsoft QuickBASIC, Version 4.5, for IBM Personal Computers and Compatibles.

Upon starting the program the user is prompted for the following predata:

Number of temperature sensors  
Number of dewpoint sensors  
Number of pressure sensors  
Containment free air volume  
Allowable leakage rate, La  
Sensor volume fractions

Once the test is started the following data is received from the data acquisition system during the test:

Time and date  
Containment atmosphere drybulb temperatures  
Containment atmosphere pressure  
Containment atmosphere dew point temperatures

Program options provide calculation of the following reports: DATA SUMMARY REPORT. Displays data set number, time, date, temperature, pressure, vapor pressure and dry air mass for all data sets.

DATA SET REPORT. Displays data set number, time, date, sensor data (raw data and calibrated values), weighted average temperature, pressure and vapor pressure, and volume and dry air mass.

MASS POINT LEAKAGE RATE REPORT. (ANSI/ANS 56.8 - 1987).

Displays data set number, time, date, elapsed time, dry air mass, mass point leakage rate and UCL for all data sets.

TOTAL TIME LEAKAGE RATE REPORT. (BN-TOP-1, rev. 1). Displays data set number, time, date, elapsed time, dry air mass, total time measured leakage rate, leakage rate (calculated) and UCL for all data sets.

TREND REPORT. Displays data set number, time, date, elapsed time, total time measured leakage rate, leakage rate (calculated) and UCL, and mass point leakage rate and UCL for

all data sets.

DATA REJECTION REPORT. (ANSI/ANS 56.8 - 1987). Displays data set number, time, air mass, linear least square fit (air mass), residual from least square fit, standard error of residual and standardized residual for all data sets.

TEMPERATURE STABILIZATION REPORT. (ANSI/ANS 56.8 - 1987 and BN-TOP-1, rev. 1). Displays start time and date, data set number, elapsed time, temperature, 1 hour and 4 hour average rates of temperature change and difference (ANSI criteria), and 2 hour average rate of temperature change and 2 hour average change in rate of temperature change, i.e., second derivative, (BN-TOP-1 criteria) for all data sets.

The following plots are available:

AIR MASS. Plots the air mass, regression line and 75% La line.

LEAK RATES. Plots the mass point and total time leakage rate, UCLs and 75% La line.

TEMPERATURE. Plots the weighted average temperature, temperature for one sensor, or temperature for all sensors.

PRESSURE. Plots the weighted average pressure, pressure for one sensor, or pressure for all sensors.

DEW POINT/VAPOR PRESSURE. Plots the weighted average vapor pressure, dew point temperature for one sensor, or dew point temperature for all sensors.

In addition the program allows for manual data entry, data correction, data set insertion, and deletion of a data set from calculations.

APPENDIX II

TYPE B AND C LOCAL LEAKAGE RATE TEST RESULTS

Results for Type B and C local leakage rate tests performed between the completion of the pre-operational ILRT and the start of the 1992 ILRT are presented herein.

## TYPE B AND C RESULTS - 1992 OUTAGE

PAGE 1

<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
5	N/A	3/11/92	9.1 SCCM	4/02/92	17.3 SCCM
11A	21411U4031	1/28/92	546.0 SCCM	1/28/92	546.0 SCCM
11A	2HV-5280	1/28/92	54.5 SCCM	1/28/92	54.5 SCCM
12A	21411U4029	1/30/92	8260.0 SCCM	4/16/92	809.0 SCCM
12A	2HV-5281	1/16/92	588.0 SCCM	4/16/92	588.0 SCCM
13A	2HV-12976	3/14/92	497.0 SCCM	3/14/92	497.0 SCCM
13A	2HV-12975	3/14/92	413.0 SCCM	3/14/92	413.0 SCCM
13B	2HV-12978	3/13/92	6.9 SCCM	3/13/92	6.9 SCCM
13B	2HV-12977	3/13/92	8.1 SCCM	3/13/92	8.1 SCCM
15	21213U6051	4/04/92	6.0 SCCM	4/07/92	47.3 SCCM
15	21213U6050	4/04/92	6.3 SCCM	4/07/92	40.3 SCCM
22	21418U4038	2/18/92	10.7 SCCM	2/18/92	10.7 SCCM
22	21418U4005	2/18/92	7.3 SCCM	2/18/92	7.3 SCCM
23	22401U4184	1/23/92	344000.0 SCCM	4/06/92	72.3 SCCM
23	22401U4211	4/06/92	220.0 SCCM	4/06/92	220.0 SCCM
24	2HV-3548	3/17/92	31.8 SCCM	4/22/92	112.0 SCCM
24	2HV-3502	3/17/92	767.0 SCCM	4/22/92	6.0 SCCM
24	2HV-8777	3/17/92	767.0 SCCM	4/22/92	6.0 SCCM
28	2HV-1973	3/24/92	49.1 SCCM	4/07/92	49.2 SCCM
28	2HV-1979	3/24/92	90.6 SCCM	4/07/92	69.7 SCCM
29	2HV-1974	3/24/92	29.1 SCCM	4/04/92	99.6 SCCM
29	21217U4113	3/24/92	29.1 SCCM	4/04/92	99.6 SCCM
29	2HV-1975	3/24/92	19.3 SCCM	4/04/92	136.3 SCCM
34	21206U6016	3/30/92	500.0 SCCM	4/06/92	695.0 SCCM
34	2HV-9001B	3/30/92	49.0 SCCM	4/06/92	55.2 SCCM
35	21206U6015	3/13/92	121.0 SCCM	3/19/92	87.0 SCCM
35	2HV-9001A	3/13/92	6.0 SCCM	3/19/92	245.3 SCCM
36	21205V4002	3/12/92	661.0 SCCM	4/04/92	62.3 SCCM
37	21205V4001	3/12/92	68.2 SCCM	4/04/92	78.2 SCCM
38	21206V4001	3/12/92	433.0 SCCM	3/22/92	232.0 SCCM
39	21206V4002	3/12/92	245.0 SCCM	3/26/92	84.5 SCCM
40	22301U4036	3/27/92	10930.0 SCCM	4/17/92	1922.0 SCCM
40	2HV-27901	3/27/92	>20000 <sup>a</sup> SCCM	4/17/92	399.0 SCCM
41	2HV-8871	3/23/92	137.6 SCCM	3/23/92	137.6 SCCM
41	2HV-8964	3/23/92	148.5 SCCM	3/23/92	148.5 SCCM
41	2HV-8888	3/23/92	148.5 SCCM	3/23/92	148.5 SCCM
42	22402U4017	3/12/92	232.0 SCCM	3/12/92	232.0 SCCM

(a) Leak rate exceeded range of leak rate monitor used.

## TYPE B AND C RESULTS - 1992 OUTAGE

PAGE 2

<u>PENETRATION</u>	<u>VALVE</u>	<u>AS-FOUND</u>		<u>AS-LEFT</u>	
		<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
42	2HV-8880	3/12/92	77.4 SCCM	3/12/92	77.4 SCCM
48	2HV-8160	3/17/92	6.0 SCCM	4/04/92	7.6 SCCM
48	2HV-8152	3/18/92	7.7 SCCM	4/04/92	14.5 SCCM
49	2HV-8112	3/31/92	117.0 SCCM	4/09/92	70.5 SCCM
49	21208U4021	3/31/92	117.0 SCCM	4/09/92	70.5 SCCM
49	2HV-8100	3/31/92	74.4 SCCM	4/09/92	11.9 SCCM
50	21208U6032	4/07/92	1124.0 SCCM	4/13/92	1617.0 SCCM
50	2HV-8105	4/07/92	19.4 SCCM	4/13/92	1.2 SCCM
55	N/A	3/11/92	6.3 SCCM	4/12/92	119.2 SCCM
62	2HV-8047	2/13/92	6.0 SCCM	2/13/92	6.0 SCCM
62	2HV-8033	2/13/92	12.0 SCCM	2/13/92	12.0 SCCM
63	21201U6112	3/20/92	25.2 SCCM	4/04/92	272.0 SCCM
63	2HV-8028	3/20/92	17.2 SCCM	4/04/92	595.0 SCCM
64A	N/A	3/14/92	8.8 SCCM	3/14/92	8.8 SCCM
64B	N/A	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
67A	2HV-3513	3/16/92	12.0 SCCM	3/16/92	12.0 SCCM
67A	2HV-3514	3/16/92	26.0 SCCM	3/16/92	26.0 SCCM
67B	2HV-3507	3/16/92	6.0 SCCM	4/09/92	7.3 SCCM
67B	2HV-3508	3/16/92	34.4 SCCM	4/09/92	16.8 SCCM
68	N/A	3/14/92	196.5 SCCM	4/23/92	6.0 SCCM
69A	21411U4043	1/30/92	340.0 SCCM	1/30/92	340.0 SCCM
69A	2HV-5278	1/30/92	7.6 SCCM	1/30/92	7.6 SCCM
69B	21411U4044	1/28/92	60.7 SCCM	1/28/92	60.7 SCCM
69B	2HV-5279	1/28/92	15.4 SCCM	1/28/92	15.4 SCCM
70A	2HV-2790A	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
70A	2HV-2791A	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
70A	2HV-2790B	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
70B	21513U4C01	3/13/92	18.1 SCCM	3/13/92	18.1 SCCM
70B	2HV-2793A	3/13/92	14.0 SCCM	3/13/92	14.0 SCCM
71A	2HV-2792A	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
71A	2HV-2791B	3/14/92	22.3 SCCM	3/14/92	22.3 SCCM
71A	2HV-2792B	3/14/92	6.0 SCCM	3/14/92	6.0 SCCM
71B	21513U4002	3/13/92	228.0 SCCM	3/13/92	228.0 SCCM
71B	2HV-2793B	3/13/92	6.8 SCCM	3/13/92	6.8 SCCM
72A	2HV-10950	3/13/92	123.3 SCCM	3/13/92	123.3 SCCM
72A	21204U4159	3/13/92	4.2 SCCM	3/13/92	4.2 SCCM
72B	2HV-10952	3/13/92	136.0 SCCM	3/13/92	136.0 SCCM

## TYPE B AND C RESULTS - 1992 OUTAGE

PAGE 3

<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>AS-FOUND</u> <u>LEAKAGE</u>	<u>DATE</u>	<u>AS-LEFT</u> <u>LEAKAGE</u>
72B	21204U4161	3/13/92	6.3 SCCM	3/13/92	6.3 SCCM
73A	2HV-10951	3/13/92	48.5 SCCM	3/13/92	48.5 SCCM
73A	21204U4160	3/13/92	29.3 SCCM	3/13/92	29.3 SCCM
73B	2HV-10953	3/13/92	331.0 SCCM	3/13/92	331.0 SCCM
73B	21204U4162	3/13/92	39.9 SCCM	3/13/92	39.9 SCCM
77	2HV-7699	4/14/92	50.5 SCCM	4/14/92	50.5 SCCM
77	2HV-7136	4/14/92	57.6 SCCM	4/14/92	57.6 SCCM
78	2HV-0780	3/31/92	137.1 SCCM	3/31/92	137.1 SCCM
78	2HV-0781	3/31/92	250.0 SCCM	3/31/92	250.0 SCCM
79	2HV-7126	3/12/92	8.5 SCCM	3/12/92	5 SCCM
79	2HV-7150	3/12/92	6.0 SCCM	3/12/92	6.0 SCCM
80	22401U4034	1/23/92	330000.0 SCCM	2/18/92	1781.0 SCCM
80	2HV-9385	3/10/92	340.0 SCCM	3/10/92	340.0 SCCM
81	22420U4049	3/27/92	3850.0 SCCM	3/29/92	588.0 SCCM
81	2HV-9378	3/27/92	>20000 <sup>a</sup> SCCM	3/29/92	27.0 SCCM
83	2HV-2626A	1/07/92	3120.0 SCCM	4/15/92	36.3 SCCM
83	2HV-2626B	1/07/92	2740.0 SCCM	4/15/92	255.0 SCCM
83	2HV-2627A/B	1/07/92	4550.0 SCCM	4/15/92	38.4 SCCM
84	2HV-2628A	1/08/92	526.0 SCCM	4/16/92	1186.0 SCCM
84	2HV-2628B	1/08/92	101.3 SCCM	4/16/92	85.4 SCCM
84	2HV-2629A/B	1/08/92	910.0 SCCM	4/16/92	519.0 SCCM
86A	2HV-8211	2/06/92	6.0 SCCM	2/06/92	6.0 SCCM
86A	2HV-8212	2/06/92	7.4 SCCM	2/06/92	7.4 SCCM
86C	2HV-8209	3/15/92	152.4 SCCM	3/15/92	152.4 SCCM
86C	2HV-8208	3/15/92	157.5 SCCM	3/15/92	157.5 SCCM
87	N/A	3/14/92	8.8 SCCM	4/23/92	6.0 SCCM
89	N/A	4/14/92	6.0 SCCM	4/14/92	6.0 SCCM
90	N/A	3/11/92	10.6 SCCM	4/02/92	10.5 SCCM
100	2HV-2624A	3/13/92	138.2 SCCM	3/21/92	25.8 SCCM
100	21508U4012	3/13/92	64.1 SCCM	3/21/92	33.9 SCCM
100	2HV-2624B	3/13/92	64.7 SCCM	3/21/92	50.8 SCCM
Personnel Airlock		3/10/92	271.0 SCCM	4/17/92	880.2 SCCM
Escape Airlock		4/14/92	779.0 SCCM	4/14/92	779.0 SCCM
Equipment Hatch		3/11/92	13.9 SCCM	4/18/92	11.1 SCCM
Electrical (1-72)		Various	Insignificant		

(a) Leak rate exceeded range of leak rate monitor used.

db#1147s(p3)

## TYPE B AND C RESULTS - 1990 OUTAGE

PAGE 1

<u>PENETRATION</u>	<u>VALVE</u>	<u>AS-FOUND</u>		<u>AS-LEFT</u>	
		<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
5	N/A	9/16/90	19.3 SCCM	10/11/90	7.0 SCCM
11A	21411U4031	8/30/90	242.0 SCCM	8/03/90	242.0 SCCM
11A	2HV-5280	8/03/90	78.2 SCCM	8/03/90	78.2 SCCM
12A	21411U4029	8/03/90	25.7 SCCM	8/03/90	25.7 SCCM
12A	2HV-5281	8/03/90	34.8 SCCM	8/03/90	34.8 SCCM
13A	2HV-12976	9/18/90	175.1 SCCM	9/18/90	175.1 SCCM
13A	2HV-12975	9/18/90	142.6 SCCM	9/18/90	142.6 SCCM
13B	2HV-12978	9/18/90	7.9 SCCM	9/18/90	7.9 SCCM
13B	2HV-12977	9/18/90	6.0 SCCM	9/18/90	6.0 SCCM
15	21213U6051	10/17/90	6.0 SCCM	10/17/90	6.0 SCCM
15	21213U6050	10/17/90	8.2 SCCM	10/17/90	8.2 SCCM
22	21418U4038	7/24/90	7.4 SCCM	7/24/90	7.4 SCCM
22	21418U4005	7/24/90	41.8 SCCM	7/24/90	41.8 SCCM
23	22401U4184	9/05/90	8.0 SCCM	9/05/90	8.0 SCCM
23	22401U4211	9/05/90	411.0 SCCM	9/05/90	411.0 SCCM
24	2HV-3548	9/19/90	31.6 SCCM	10/17/90	57.8 SCCM
24	2HV-3502	9/19/90	37.2 SCCM	10/17/90	95.5 SCCM
24	2HV-8220	9/19/90	37.2 SCCM	10/17/90	95.5 SCCM
28	2HV-1978	10/03/90	32.5 SCCM	10/08/90	30.3 SCCM
28	2HV-1979	10/03/90	53.2 SCCM	10/08/90	47.6 SCCM
29	2HV-1974	10/04/90	35.2 SCCM	10/04/90	35.2 SCCM
29	21217U4113	10/04/90	35.2 SCCM	10/04/90	35.2 SCCM
29	2HV-1975	10/04/90	24.4 SCCM	10/04/90	24.4 SCCM
34	21206U6016	10/03/90	368.0 SCCM	10/03/90	368.0 SCCM
34	2HV-9001B	10/03/90	39.2 SCCM	10/03/90	39.2 SCCM
35	21206U6015	9/18/90	334.0 SCCM	9/20/90	946.0 SCCM
35	2HV-9001A	9/18/90	25.1 SCCM	9/20/90	59.9 SCCM
36	21205V4002	9/18/90	11060.0 SCCM	10/27/90	682.0 SCCM
37	21205V4001	9/16/90	56.8 SCCM	10/29/80	319.0 SCCM
38	21206V4001	9/17/90	702.0 SCCM	10/24/90	360.0 SCCM
39	21206V4002	9/17/90	317.0 SCCM	10/24/90	152.1 SCCM
40	22301U4036	10/03/90	1306.0 SCCM	10/03/90	7.0 SCCM
40	2HV-27901	10/03/90	10170.0 SCCM	10/23/90	2450.0 SCCM
41	2HV-8871	10/03/90	149.0 SCCM	10/25/90	7.4 SCCM
41	2HV-9964	10/03/90	156.5 SCCM	10/25/90	10.9 SCCM
41	2HV-8888	10/03/90	156.5 SCCM	10/25/90	10.9 SCCM
42	22402U4017	9/26/90	127.0 SCCM	9/26/90	127.0 SCCM

## TYPE B AND C RESULTS - 1990 OUTAGE

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<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
42	2HV-8880	9/26/90	11.2 SCCM	9/26/90	11.2 SCCM
48	2HV-8160	9/19/90	470.0 SCCM	9/25/90	6.9 SCCM
48	2HV-8152	9/19/90	391.0 SCCM	9/25/90	6.0 SCCM
49	2HV-8112	10/03/90	110.7 SCCM	10/03/90	110.7 SCCM
49	21208U4021	10/03/90	110.7 SCCM	10/03/90	110.7 SCCM
49	2HV-8100	10/03/90	31.7 SCCM	10/03/90	31.7 SCCM
50	21208U6032	10/10/90	67.0 SCCM	10/10/90	67.0 SCCM
50	2HV-8105	10/10/90	6.0 SCCM	10/10/90	6.0 SCCM
55	N/A	9/16/90	242.0 SCCM	10/11/90	34.5 SCCM
62	2HV-8047	8/09/90	6.0 SCCM	8/09/90	6.0 SCCM
62	2HV-8033	8/09/90	6.0 SCCM	8/09/90	6.0 SCCM
63	21201U6112	9/21/50	74.4 SCCM	10/19/90	6.0 SCCM
63	2HV-8028	9/21/90	12.8 SCCM	10/19/90	6.0 SCCM
64A	N/A	9/24/90	120.2 SCCM	9/24/90	120.2 SCCM
64B	N/A	9/24/90	6.6 SCCM	9/24/90	6.6 SCCM
67A	2HV-3513	9/18/90	14970.0 SCCM	10/16/90	4.2 SCCM
67A	2HV-3514	9/18/90	14000.0 SCCM	10/16/90	4.2 SCCM
67B	2HV-3507	9/19/90	167.1 SCCM	11/01/90	6.0 SCCM
67B	2HV-3508	9/19/90	46.6 SCCM	11/01/90	24.5 SCCM
68	N/A	9/24/90	151.2 SCCM	9/24/90	151.2 SCCM
69A	21411U4043	8/02/90	1140.0 SCCM	8/02/90	1140.0 SCCM
69A	2HV-5278	8/02/90	1553.0 SCCM	8/02/90	1553.0 SCCM
69B	21411U4044	8/02/90	178.5 SCCM	8/02/90	178.6 SCCM
69B	2HV-5279	8/02/90	1172.0 SCCM	8/02/90	1172.0 SCCM
70A	2HV-2790A	9/04/90	6.0 SCCM	9/04/90	6.0 SCCM
70A	2HV-2791B	9/04/90	8.9 SCCM	9/04/90	8.9 SCCM
70A	2HV-2790B	9/04/90	6.0 SCCM	9/04/90	6.0 SCCM
70B	21513U4001	9/04/90	272.0 SCCM	9/04/90	272.0 SCCM
70B	2HV-2793A	9/04/90	8.9 SCCM	9/04/90	8.9 SCCM
71A	2HV-2792A	9/06/90	3.2 SCCM	9/06/90	3.2 SCCM
71A	2HV-2791B	9/06/90	3.9 SCCM	9/06/90	3.9 SCCM
71A	2HV-2792B	9/06/90	13.5 SCCM	9/06/90	13.5 SCCM
71B	21513U4002	9/06/90	24.2 SCCM	9/06/90	24.2 SCCM
71B	2HV-2793B	9/06/90	7.2 SCCM	9/06/90	7.2 SCCM
72A	2HV-10950	9/24/90	2010.0 SCCM	10/03/90	145.7 SCCM
72A	21204U4159	9/24/90	1856.0 SCCM	10/03/90	6.0 SCCM
72B	2HV-10952	9/24/90	366.0 SCCM	10/09/90	225.6 SCCM

## TYPE B AND C RESULTS - 1990 OUTAGE

PAGE 3

<u>PENETRATION</u>	<u>VALVE</u>	<u>AS-FOUND</u>		<u>AS-LEFT</u>	
		<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
72B	21204U4161	9/24/90	3370.0 SCCM	10/09/90	7.6 SCCM
73A	2HV-10951	9/25/90	789.0 SCCM	10/18/90	91.0 SCCM
73A	21204U4160	9/25/90	20.0 SCCM	10/18/90	13.8 SCCM
73B	2HV-10953	9/25/90	462.0 SCCM	10/10/90	465.0 SCCM
73B	21204U4162	9/25/90	29.0 SCCM	10/10/90	7.1 SCCM
77	2HV-7699	9/21/90	231.8 SCCM	9/21/90	231.8 SCCM
77	2HV-7136	9/21/90	147.3 SCCM	9/21/90	147.3 SCCM
78	2HV-0780	8/23/90	99.5 SCCM	8/23/90	99.5 SCCM
78	2HV-0781	8/23/90	162.5 SCCM	8/23/90	162.5 SCCM
79	2HV-7126	9/19/90	6.8 SCCM	9/19/90	6.8 SCCM
79	2HV-7150	9/19/90	7.2 SCCM	9/19/90	7.2 SCCM
80	22401U4034	7/26/90	2320.0 SCCM	7/26/90	2320.0 SCCM
90	2HV-9385	7/26/90	67.0 SCCM	7/26/90	67.0 SCCM
81	22420U4049	10/04/90	520.0 SCCM	10/04/90	520.0 SCCM
81	2HV-9378	10/04/90	166.0 SCCM	10/04/90	166.0 SCCM
83	2HV-2626A	10/22/90	178.4 SCCM	10/22/90	178.4 SCCM
83	2HV-2626B	10/22/90	46.9 SCCM	10/22/90	46.9 SCCM
83	2HV-2627A/B	10/22/90	23.0 SCCM	10/22/90	23.0 SCCM
84	2HV-2628A	10/22/90	3760.0 SCCM	10/23/90	578.0 SCCM
84	2HV-2628B	10/22/90	32.0 SCCM	10/23/90	108.0 SCCM
84	2HV-2629A/B	10/22/90	69.5 SCCM	10/23/90	672.0 SCCM
86A	2HV-8211	8/07/90	6.0 SCCM	8/07/90	6.0 SCCM
86A	2HV-8212	8/07/90	6.0 SCCM	8/07/90	6.0 SCCM
86C	2HV-8209	9/21/90	157.2 SCCM	9/21/90	157.2 SCCM
85C	2HV-3208	9/21/90	166.4 SCCM	9/21/90	166.4 SCCM
87	N/A	9/24/90	6.0 SCCM	9/24/90	6.0 SCCM
89	N/A	9/17/90	11.2 SCCM	10/20/90	14.0 SCCM
90	N/A	9/16/90	24.1 SCCM	10/11/90	18.2 SCCM
100	2HV-2624A	9/16/90	44.5 SCCM	9/16/90	44.5 SCCM
100	21508U4012	9/16/90	29.3 SCCM	9/16/90	29.3 SCCM
100	2HV-2624B	9/16/90	37.6 SCCM	9/16/90	37.6 SCCM
Personnel Airlock		8/30/90	50.9 SCCM	10/29/90	3766.0 SCCM
Escape Airlock		10/26/90	367.8 SCCM	10/26/90	367.8 SCCM
Equipment Hatch		9/15/90	145.2 SCCM	10/30/90	12.2 SCCM
Electrical (I-72)		Various	Insignificant	N/A	

## TYPE B AND C RESULTS - NONSCHEDULED TESTS

PAGE 1

<u>PENETRATION</u>	<u>VALVE</u>	<u>AS-FOUND</u>		<u>AS-LEFT</u>	
		<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
5	N/A	3/02/89	391.0 SCCM	3/02/89	391.0 SCCM
11A	21411U4031	2/25/89	1800.0 SCCM	2/25/89	1800.0 SCCM
11A	2HV-5280	2/14/89	291.0 SCCM	2/14/89	291.0 SCCM
12A	21411U4029	2/24/89	1580.0 SCCM	2/24/89	1580.0 SCCM
12A	2HV-5281	2/24/89	22.1 SCCM	2/24/89	22.1 SCCM
15	21213U6051	2/15/89	23.7 SCCM	2/15/89	23.7 SCCM
15	21213U6050	2/15/89	23.7 SCCM	2/15/89	23.7 SCCM
22	21418U4038	1/23/89	3.1 SCCM	1/23/89	3.1 SCCM
22	21418U4005	1/23/89	75.4 SCCM	1/23/89	75.4 SCCM
23	22401U4184	2/23/89	9065.0 SCCM	2/23/89	9065.0 SCCM
23	22401U4211	2/25/89	5205.0 SCCM	2/25/89	5205.0 SCCM
24	2HV-3548	2/27/89	29.1 SCCM	2/27/89	29.1 SCCM
24	2HV-3502	2/27/89	29.1 SCCM	2/27/89	29.1 SCCM
24	2HV-8220	2/27/89	29.1 SCCM	2/27/89	29.1 SCCM
28	2HV-1978	2/26/89	299.0 SCCM	2/26/89	299.0 SCCM
28	2HV-1979	2/26/89	125.1 SCCM	2/26/89	125.1 SCCM
34	21206U6016	1/30/89	871.0 SCCM	1/30/89	871.0 SCCM
34	2HV-9001B	1/30/89	31.6 SCCM	1/30/89	31.6 SCCM
35	21206U6015	2/02/89	186.0 SCCM	2/02/89	186.0 SCCM
35	2HV-9001A	2/02/89	16.5 SCCM	2/02/89	16.5 SCCM
36	21205V4002	1/25/89	1440.0 SCCM	1/25/89	1440.0 SCCM
37	21205V4001	2/02/89	1479.0 SCCM	2/02/89	1479.0 SCCM
38	21205V4001	2/03/89	670.0 SCCM	2/03/89	670.0 SCCM
39	21206V4002	2/04/89	960.0 SCCM	2/04/89	960.0 SCCM
40	22301U4036	2/04/89	306.0 SCCM	2/04/89	306.0 SCCM
40	2HV-27901	2/28/89	2950.0 SCCM	2/28/89	2950.0 SCCM
41	2HV-8871	2/23/89	29.6 SCCM	2/23/89	29.6 SCCM
41	2HV-8964	2/23/89	29.6 SCCM	2/23/89	29.6 SCCM
41	2HV-8888	2/23/89	29.6 SCCM	2/23/89	29.6 SCCM
42	22402U4017	2/15/89	363.0 SCCM	2/15/89	363.0 SCCM

## TYPE B AND C RESULTS - NONSCHEDULED TESTS

PAGE 2

<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>AS-FOUND</u>	<u>DATE</u>	<u>AS-LEFT</u>
			<u>LEAKAGE</u>		<u>LEAKAGE</u>
42	2HV-8880	2/15/89	29.6 SCCM	2/15/89	29.5 SCCM
48	2HV-3160	2/22/89	21.9 SCCM	2/22/89	21.9 SCCM
53	2HV-8152	2/22/89	21.9 SCCM	2/22/89	21.9 SCCM
49	2HV-8112	2/27/89	82.5 SCCM	2/27/89	82.5 SCCM
49	21208U4021	2/27/89	82.5 SCCM	2/27/89	82.5 SCCM
49	2HV-8100	2/27/89	11.5 SCCM	2/27/89	11.5 SCCM
50	21208U6032	2/03/89	2970.0 SCCM	2/03/89	2970.0 SCCM
50	2HV-8105	2/03/89	542.0 SCCM	2/03/89	542.0 SCCM
55	N/A	3/02/89	28.4 SCCM	3/02/89	28.4 SCCM
52	2HV-8047	2/10/89	29.6 SCCM	2/10/89	29.6 SCCM
62	2HV-8033	2/10/89	29.6 SCCM	2/10/89	29.6 SCCM
63	21201U6112	2/13/89	29.6 SCCM	2/13/89	29.6 SCCM
63	2HV-8028	2/13/89	29.6 SCCM	2/13/89	29.6 SCCM
64A	N/A	1/29/89	28.3 SCCM	1/29/89	28.3 SCCM
64B	N/A	1/29/89	28.4 SCCM	1/29/89	28.4 SCCM
67A	2HV-3513	2/14/89	1656.0 SCCM	2/14/89	1656.0 SCCM
67A	2HV-3514	2/14/89	1513.0 SCCM	2/14/89	1513.0 SCCM
67B	2HV-3507	2/01/89	397.0 SCCM	2/01/89	397.0 SCCM
67B	2HV-3508	2/01/89	435.0 SCCM	2/01/89	435.0 SCCM
68	N/A	2/02/89	292.0 SCCM	2/02/89	292.0 SCCM
69A	21411U4043	1/18/89	377.0 SCCM	1/18/89	377.0 SCCM
69A	2HV-5278	1/18/89	29.6 SCCM	1/18/89	29.6 SCCM
69B	21411U4044	2/27/89	90.6 SCCM	2/27/89	90.6 SCCM
69B	2HV-5279	2/22/89	29.6 SCCM	2/22/89	29.6 SCCM
71A	2HV-2792A	2/05/89	29.6 SCCM	2/05/89	29.6 SCCM
71A	2HV-2791B	2/05/89	29.6 SCCM	2/05/89	29.6 SCCM
71A	2HV-2792B	2/05/89	30.2 SCCM	2/05/89	30.2 SCCM
71B	21513U4002	2/04/89	62.3 SCCM	2/04/89	62.3 SCCM
71B	2HV-2793B	2/04/89	26.4 SCCM	2/04/89	26.4 SCCM
72A	2HV-10950	1/20/89	1667.0 SCCM	1/20/89	1667.0 SCCM
72A	21204U4159	1/20/89	29.6 SCCM	1/20/89	29.6 SCCM
72B	2HV-10952	1/31/89	29.6 SCCM	1/31/89	29.6 SCCM

## TYPE B AND C RESULTS - NONSCHEDULED TESTS

PAGE 3

<u>PENETRATION</u>	<u>VALVE</u>	<u>AS-FOUND</u>		<u>AS LEFT</u>	
		<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
72B	21204U4161	1/31/89	29.6 SCCM	1/31/89	29.6 SCCM
73A	2HV-10951	1/31/89	869.0 SCCM	1/31/89	869.0 SCCM
73A	21204U4160	1/31/89	2.9 SCCM	1/31/89	2.9 SCCM
73B	2HV-10953	1/31/89	807.0 SCCM	1/31/89	807.0 SCCM
73B	21204U4162	1/31/89	93.6 SCCM	1/31/89	93.6 SCCM
77	2HV-7699	1/26/89	25.8 SCCM	1/26/89	25.8 SCCM
77	2HV-7136	1/26/89	58.9 SCCM	1/26/89	58.9 SCCM
78	2HV-0780	2/16/89	1202.0 SCCM	2/16/89	1202.0 SCCM
78	2HV-0781	2/25/89	1150.0 SCCM	2/25/89	1150.0 SCCM
79	2HV-7126	2/10/89	29.6 SCCM	2/10/89	29.6 SCCM
79	2HV-7150	2/10/89	29.6 SCCM	2/10/89	29.6 SCCM
80	22401U4034	2/25/89	1323.0 SCCM	2/25/89	1323.0 SCCM
80	2HV-9385	2/25/89	362.0 SCCM	2/25/89	362.0 SCCM
81	22420U4049	2/21/89	1157.0 SCCM	2/21/89	1157.0 SCCM
81	2HV-9378	2/21/89	500.0 SCCM	2/21/89	500.0 SCCM
86A	2HV-8211	2/17/89	3.1 SCCM	2/17/89	3.1 SCCM
86A	2HV-8212	2/17/89	159.2 SCCM	2/17/89	159.2 SCCM
86C	2HV-8209	2/18/89	111.0 SCCM	2/18/89	111.0 SCCM
86C	2HV-8208	2/18/89	186.7 SCCM	2/18/89	186.7 SCCM
87	N/A	2/01/89	29.5 SCCM	2/01/89	29.5 SCCM
89	N/A	2/20/89	29.6 SCCM	2/20/89	29.6 SCCM
90	N/A	3/02/89	395.0 SCCM	3/02/89	395.0 SCCM
100	2HV-2624A	2/01/89	61.4 SCCM	2/01/89	61.4 SCCM
100	21508U4012	2/01/89	385.0 SCCM	2/01/89	385.0 SCCM
100	2HV-2624B	2/01/89	47.2 SCCM	2/01/89	47.2 SCCM

db#1147s(p9)

## TYPE B AND C RESULTS - QUARTERLY SURVEILLANCES

## PENETRATION 83

<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
83	2HV-2626A	8/10/89	638.0 SCCM	11/01/89	338.0 SCCM
83	2HV-2626B	8/10/89	34.1 SCCM	11/01/89	150.0 SCCM
83	2HV-2627A/B	8/10/89	700.0 SCCM	11/01/89	3500.0 SCCM
83	2HV-2626A	2/07/90	240.0 SCCM	4/18/90	269.0 SCCM
83	2HV-2626B	2/07/90	174.0 SCCM	4/18/90	244.0 SCCM
83	2HV-2627A/B	2/07/90	737.0 SCCM	4/18/90	138.0 SCCM
83	2HV-2626A	7/10/90	162.9 SCCM	10/22/90	178.4 SCCM
83	2HV-2626B	7/10/90	62.1 SCCM	10/22/90	46.9 SCCM
83	2HV-2627A/B	7/10/90	922.0 SCCM	10/22/90	23.0 SCCM
83	2HV-2626A	1/24/91	64.3 SCCM	4/17/91	334.0 SCCM
83	2HV-2626B	1/24/91	20.4 SCCM	4/17/91	30.0 SCCM
83	2HV-2627A/B	1/24/91	227.3 SCCM	4/17/91	433.0 SCCM
83	2HV-2626A	7/09/91	92.4 SCCM	10/02/91	259.0 SCCM
83	2HV-2626B	7/09/91	74.6 SCCM	10/02/91	81.0 SCCM
83	2HV-2627A/B	7/09/91	491.0 SCCM	10/02/91	783.0 SCCM
83	2HV-2626A	1/07/92	3120.0 SCCM	4/15/92	36.3 SCCM
83	2HV-2626B	1/07/92	2740.0 SCCM	4/15/92	255.0 SCCM
83	2HV-2627A/B	1/07/92	4550.0 SCCM	4/15/92	38.4 SCCM

db#1143s(p5)

## TYPE B AND C RESULTS - QUARTERLY SURVEILLANCES

## PENETRATION 84

<u>PENETRATION</u>	<u>VALVE</u>	<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
84	2HV-2628A	8/10/89	280.0 SCCM	11/02/89	335.0 SCCM
84	2HV-2628B	8/10/89	608.0 SCCM	11/02/89	91.9 SCCM
84	2HV-2629A/B	8/10/89	1562.0 SCCM	11/02/89	6010.0 SCCM
84	2HV-2628A	2/08/90	440.0 SCCM	4/20/90	1103.0 SCCM
84	2HV-2628B	2/08/90	108.0 SCCM	4/20/90	863.0 SCCM
84	2HV-2629A/B	2/08/90	191.0 SCCM	4/20/90	1008.0 SCCM
84	2HV-2628A	7/10/90	425.0 SCCM	10/23/90	578.0 SCCM
84	2HV-2628B	7/10/90	42.0 SCCM	10/23/90	108.0 SCCM
84	2HV-2629A/B	7/10/90	7.0 SCCM	10/23/90	672.0 SCCM
84	2HV-2628A	1/24/91	560.0 SCCM	4/17/91	284.0 SCCM
84	2HV-2628B	1/24/91	65.8 SCCM	4/17/91	68.8 SCCM
84	2HV-2629A/B	1/24/91	5700.0 SCCM	4/17/91	433.0 SCCM
*84	2HV-2629A/B	3/21/91	472.0 SCCM		
84	2HV-2628A	7/10/91	87.0 SCCM	10/04/91	435.0 SCCM
84	2HV-2628B	7/10/91	50.0 SCCM	10/04/91	29.0 SCCM
84	2HV-2629A/B	7/10/91	1150.0 SCCM	10/04/91	1796.0 SCCM
84	2HV-2628A	1/08/92	526.0 SCCM	4/16/92	1186.0 SCCM
84	2HV-2628B	1/08/92	101.3 SCCM	4/16/92	85.4 SCCM
84	2HV-2629A/B	1/08/92	910.0 SCCM	4/16/92	519.0 SCCM

\* Due to high leakage rate on 1/24/91, additional LLRT performed on outboard valves on 3/21/91.

db#1143s(p4)

TYPE B AND C RESULTS - PERSONNEL AIRLOCK  
COMPOSITE TESTS

<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
2/08/89	1411.6 SCCM	4/18/91	3956.0 SCCM
8/08/89	1018.0 SCCM	10/01/91	9686.1 SCCM
1/23/90	7316.0 SCCM	12/11/91	687.5 SCCM
6/15/90	101.8 SCCM	4/17/92	880.2 SCCM
10/29/90	3766.0 SCCM		

TYPE B AND C RESULTS - ESCAPE LOCK  
COMPOSITE TESTS

<u>DATE</u>	<u>LEAKAGE</u>	<u>DATE</u>	<u>LEAKAGE</u>
3/02/89	79.8 SCCM	10/26/90	367.8 SCCM
3/03/89	782.6 SCCM	4/13/91	1366.0 SCCM
8/14/89	485.3 SCCM	9/28/91	1091.3 SCCM
1/31/90	173.0 SCCM	2/28/92	375.6 SCCM
6/27/90	1669.2 SCCM	4/14/92	779.0 SCCM

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TYPE B AND C RESULTS - EQUIPMENT HATCH

DATE

LEAKAGE

2/25/89	23.2 SCCM
10/30/90	12.2 SCCM
4/18/92	11.1 SCCM

TYPE C RESULTS - ELECTRICAL PENETRATIONS

Total electrical penetration leakage for 72 electrical penetrations has been insignificant.

APPENDIX III  
INSTRUMENT CALIBRATION SUMMARY

<u>Parameter/Instrument</u>	<u>Data</u>
Pressure/ Volumetrics Model PPM-1000 Precision Pressure Gauge	Range: 0 - 100 psia Accuracy: +/-0.015% RDG +/-0.002% F.S. Repeatability: +/-0.001% F.S. Resolution: 0.001% F.S. Cal. Date: 1-27-92
Drybulb Temperature/ 100 OHM Platinum Resistance Temperature Detectors	Range: 0 to +150 degrees F Accuracy: +/-0.1 degrees F Sensitivity: 0.01 degrees F Repeatability: 0.01 degrees F Cal. Date: 3-5-92
Dew point Temperature/ EG&G Dewtrak Humidity Transmitter	Range: -40 to +140 degrees F Accuracy: +/-1 degrees F Cal. Date: 2-12-92
Flow/ Brooks Rotameter Model GT-1000	Range: 0 to 13.4 scfm Accuracy: +/-2.0% FS Cal. Date: 3-5-92

APPENDIX IV  
GENERAL INFORMATION

General Data

Owner - Georgia Power Company  
Plant Name - Vogtle Electric Generating Plant (VEGP)  
Unit - 2  
Outage Cycle - 2nd refueling  
Containment Description - steel lined prestressed concrete  
Date test was completed - April 19, 1992

Test Data

Test Method - absolute  
Test Duration - 8.75 hours  
Data Analysis Technique - total time  
Test Pressure 45.0 (+1.0 psig, -0 psig)  
Maximum Allowable Leakage Rate (La) 0.200 wt.%/day  
Acceptance Limit (0.75La) 0.150 wt.%/day  
Calculated Leakage Rate (Lam) 0.0209 wt.%/day  
Calculated leakage rate at upper confidence limit (UCL)  
0.1373 wt.%/day  
Final leakage rate (UCL + penalties) 0.1410 wt.%/day

Verification Test

Calibrated Leak Superimposed 0.1956 wt.%/day  
Upper limit rate 0.2665 wt.%/day  
Lower limit rate 0.1665 wt.%/day  
Total time calculated rate 0.2185 wt.%/day

Duration of Test Segments

Pressurization	11.1 hours
Stabilization	4 hours
Type A Test	8.75 hours
Verification	1 hour + 4.5 hours
Depressurization	7.03 hours
Total	36.38 hours

APPENDIX V

TEST DATA

Raw data for the Type A Test and the Verification Test are presented in this appendix.

## 1992 VEGP Unit 2 Type A Test

data set 1

time = 1400 date = 419

sensor	raw data	value
temperature 1	( 86.640 )	= 86.640 deg. F
temperature 2	( 86.020 )	= 86.020 deg. F
temperature 3	( 86.540 )	= 86.540 deg. F
temperature 4	( 86.520 )	= 86.520 deg. F
temperature 5	( 86.820 )	= 86.820 deg. F
temperature 6	( 86.680 )	= 86.680 deg. F
temperature 7	( 86.740 )	= 86.740 deg. F
temperature 8	( 87.540 )	= 87.540 deg. F
temperature 9	( 86.610 )	= 86.610 deg. F
temperature 10	( 86.410 )	= 86.410 deg. F
temperature 11	( 84.930 )	= 84.930 deg. F
temperature 12	( 86.440 )	= 86.440 deg. F
temperature 13	( 85.330 )	= 85.330 deg. F
temperature 14	( 85.850 )	= 85.850 deg. F
temperature 15	( 84.530 )	= 84.530 deg. F
temperature 16	( 84.470 )	= 84.470 deg. F
temperature 17	( 84.610 )	= 84.610 deg. F
temperature 18	( 84.340 )	= 84.340 deg. F
temperature 19	( 81.220 )	= 81.220 deg. F
temperature 20	( 83.940 )	= 83.940 deg. F
temperature 21	( 82.020 )	= 82.020 deg. F
temperature 22	( 80.800 )	= 80.800 deg. F
temperature 23	( 80.780 )	= 80.780 deg. F
temperature 24	( 79.160 )	= 79.160 deg. F
temperature 25	( 80.420 )	= 80.420 deg. F
temperature 26	( 79.750 )	= 79.750 deg. F
temperature 27	( 79.620 )	= 79.620 deg. F
temperature 28	( 78.470 )	= 78.470 deg. F
temperature 29	( 77.970 )	= 77.970 deg. F
temperature 30	( 75.780 )	= 75.780 deg. F
dewpoint 1	( 82.120 )	= 82.120 deg. F , 0.5430 psia
dewpoint 2	( 80.650 )	= 80.650 deg. F , 0.5177 psia
dewpoint 3	( 78.790 )	= 78.790 deg. F , 0.4871 psia
dewpoint 4	( 71.940 )	= 71.940 deg. F , 0.3876 psia
dewpoint 5	( 71.680 )	= 71.680 deg. F , 0.3843 psia
dewpoint 6	( 71.810 )	= 71.810 deg. F , 0.3859 psia
pressure 1	( 60.0803 )	= 60.0803 psia
pressure 2	( 60.0900 )	= 60.0900 psia

weighted averages, volume and air mass

temperature	=	83.81346 deg. F
pressure	=	60.08030 psia
vapor pressure	=	0.45389 psia
volume	=	2750000 cu. ft.
dry air mass	=	814353.67 lbm

## 1992 VEGP Unit 2 Type A Test

data set 2

time = 1415 date = 419

sensor	raw data	value
temperature 1	( 86.530 )	= 86.530 deg. F
temperature 2	( 85.920 )	= 85.920 deg. F
temperature 3	( 86.420 )	= 86.420 deg. F
temperature 4	( 86.410 )	= 86.410 deg. F
temperature 5	( 86.720 )	= 86.720 deg. F
temperature 6	( 86.550 )	= 86.550 deg. F
temperature 7	( 86.640 )	= 86.640 deg. F
temperature 8	( 87.430 )	= 87.430 deg. F
temperature 9	( 86.510 )	= 86.510 deg. F
temperature 10	( 86.270 )	= 86.270 deg. F
temperature 11	( 84.800 )	= 84.800 deg. F
temperature 12	( 86.320 )	= 86.320 deg. F
temperature 13	( 85.210 )	= 85.210 deg. F
temperature 14	( 85.730 )	= 85.730 deg. F
temperature 15	( 84.420 )	= 84.420 deg. F
temperature 16	( 84.360 )	= 84.360 deg. F
temperature 17	( 84.470 )	= 84.470 deg. F
temperature 18	( 84.240 )	= 84.240 deg. F
temperature 19	( 81.150 )	= 81.150 deg. F
temperature 20	( 83.820 )	= 83.820 deg. F
temperature 21	( 81.980 )	= 81.980 deg. F
temperature 22	( 80.780 )	= 80.780 deg. F
temperature 23	( 80.750 )	= 80.750 deg. F
temperature 24	( 79.130 )	= 79.130 deg. F
temperature 25	( 80.400 )	= 80.400 deg. F
temperature 26	( 79.720 )	= 79.720 deg. F
temperature 27	( 79.600 )	= 79.600 deg. F
temperature 28	( 78.460 )	= 78.460 deg. F
temperature 29	( 77.960 )	= 77.960 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 82.080 )	= 82.080 deg. F , 0.5423 psia
dewpoint 2	( 80.580 )	= 80.580 deg. F , 0.5165 psia
dewpoint 3	( 78.750 )	= 78.750 deg. F , 0.4865 psia
dewpoint 4	( 72.820 )	= 72.820 deg. F , 0.3993 psia
dewpoint 5	( 71.790 )	= 71.790 deg. F , 0.3857 psia
dewpoint 6	( 71.960 )	= 71.960 deg. F , 0.3879 psia
pressure 1	( 60.0701 )	= 60.0701 psia
pressure 2	( 60.0798 )	= 60.0798 psia

weighted averages, volume and air mass

temperature	=	83.72638 deg. F
pressure	=	60.07010 psia
vapor pressure	=	0.45603 psia
volume	=	2750000 cu. ft.
dry air mass	=	814315.60 lbm

## 1992 VEGP Unit 2 Type A Test

data set 3

time = 1430 date = 419

sensor	raw data	value
temperature 1	( 86.420 )	= 86.420 deg. F
temperature 2	( 85.810 )	= 85.810 deg. F
temperature 3	( 86.310 )	= 86.310 deg. F
temperature 4	( 86.270 )	= 86.270 deg. F
temperature 5	( 86.600 )	= 86.600 deg. F
temperature 6	( 86.440 )	= 86.440 deg. F
temperature 7	( 86.490 )	= 86.490 deg. F
temperature 8	( 87.300 )	= 87.300 deg. F
temperature 9	( 86.380 )	= 86.380 deg. F
temperature 10	( 86.170 )	= 86.170 deg. F
temperature 11	( 84.660 )	= 84.660 deg. F
temperature 12	( 86.190 )	= 86.190 deg. F
temperature 13	( 85.080 )	= 85.080 deg. F
temperature 14	( 85.610 )	= 85.610 deg. F
temperature 15	( 84.280 )	= 84.280 deg. F
temperature 16	( 84.220 )	= 84.220 deg. F
temperature 17	( 84.320 )	= 84.320 deg. F
temperature 18	( 84.120 )	= 84.120 deg. F
temperature 19	( 81.080 )	= 81.080 deg. F
temperature 20	( 83.730 )	= 83.730 deg. F
temperature 21	( 81.950 )	= 81.950 deg. F
temperature 22	( 80.760 )	= 80.760 deg. F
temperature 23	( 80.720 )	= 80.720 deg. F
temperature 24	( 79.110 )	= 79.110 deg. F
temperature 25	( 80.380 )	= 80.380 deg. F
temperature 26	( 79.720 )	= 79.720 deg. F
temperature 27	( 79.590 )	= 79.590 deg. F
temperature 28	( 78.460 )	= 78.460 deg. F
temperature 29	( 77.980 )	= 77.980 deg. F
temperature 30	( 75.780 )	= 75.780 deg. F
dewpoint 1	( 82.070 )	= 82.070 deg. F , 0.5422 psia
dewpoint 2	( 80.310 )	= 80.310 deg. F , 0.5120 psia
dewpoint 3	( 78.630 )	= 78.630 deg. F , 0.4846 psia
dewpoint 4	( 72.150 )	= 72.150 deg. F , 0.3904 psia
dewpoint 5	( 72.020 )	= 72.020 deg. F , 0.3887 psia
dewpoint 6	( 72.150 )	= 72.150 deg. F , 0.3904 psia
pressure 1	( 60.0603 )	= 60.0603 psia
pressure 2	( 60.0699 )	= 60.0699 psia

weighted averages, volume and air mass

temperature	=	83.63675 deg. F
pressure	=	60.06030 psia
vapor pressure	=	0.45399 psia
volume	=	2750000 cu. ft.
dry air mass	=	814343.99 lbm

## 1992 VEGP Unit 2 Type A Test

data set 4

time = 1445 date = 419

sensor	raw data	value
temperature 1	( 86.310 )	= 86.310 deg. F
temperature 2	( 85.700 )	= 85.700 deg. F
temperature 3	( 86.190 )	= 86.190 deg. F
temperature 4	( 86.160 )	= 86.160 deg. F
temperature 5	( 86.490 )	= 86.490 deg. F
temperature 6	( 86.340 )	= 86.340 deg. F
temperature 7	( 86.370 )	= 86.370 deg. F
temperature 8	( 87.190 )	= 87.190 deg. F
temperature 9	( 86.280 )	= 86.280 deg. F
temperature 10	( 86.060 )	= 86.060 deg. F
temperature 11	( 84.540 )	= 84.540 deg. F
temperature 12	( 86.110 )	= 86.110 deg. F
temperature 13	( 84.930 )	= 84.930 deg. F
temperature 14	( 85.490 )	= 85.490 deg. F
temperature 15	( 84.170 )	= 84.170 deg. F
temperature 16	( 84.110 )	= 84.110 deg. F
temperature 17	( 84.220 )	= 84.220 deg. F
temperature 18	( 84.000 )	= 84.000 deg. F
temperature 19	( 81.010 )	= 81.010 deg. F
temperature 20	( 83.640 )	= 83.640 deg. F
temperature 21	( 81.900 )	= 81.900 deg. F
temperature 22	( 80.740 )	= 80.740 deg. F
temperature 23	( 80.710 )	= 80.710 deg. F
temperature 24	( 79.090 )	= 79.090 deg. F
temperature 25	( 80.380 )	= 80.380 deg. F
temperature 26	( 79.710 )	= 79.710 deg. F
temperature 27	( 79.590 )	= 79.590 deg. F
temperature 28	( 78.460 )	= 78.460 deg. F
temperature 29	( 77.980 )	= 77.980 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 82.080 )	= 82.080 deg. F , 0.5423 psia
dewpoint 2	( 80.470 )	= 80.470 deg. F , 0.5147 psia
dewpoint 3	( 78.950 )	= 78.950 deg. F , 0.4897 psia
dewpoint 4	( 73.050 )	= 73.050 deg. F , 0.4024 psia
dewpoint 5	( 72.140 )	= 72.140 deg. F , 0.3903 psia
dewpoint 6	( 72.240 )	= 72.240 deg. F , 0.3916 psia
pressure 1	( 60.0508 )	= 60.0508 psia
pressure 2	( 60.0605 )	= 60.0605 psia

weighted averages, volume and air mass

temperature	=	83.55584 deg. F
pressure	=	60.05080 psia
vapor pressure	=	0.45803 psia
volume	=	2750000 cu. ft.
dry air mass	=	814280.25 lbm

## 1992 VEGP Unit 2 Type A Test

data set 5

time = 1500 date = 419

sensor	raw data	value
temperature 1	( 86.200 )	= 86.200 deg. F
temperature 2	( 85.580 )	= 85.580 deg. F
temperature 3	( 86.090 )	= 86.090 deg. F
temperature 4	( 86.030 )	= 86.030 deg. F
temperature 5	( 86.370 )	= 86.370 deg. F
temperature 6	( 86.210 )	= 86.210 deg. F
temperature 7	( 86.270 )	= 86.270 deg. F
temperature 8	( 87.090 )	= 87.090 deg. F
temperature 9	( 86.160 )	= 86.160 deg. F
temperature 10	( 85.900 )	= 85.900 deg. F
temperature 11	( 84.410 )	= 84.410 deg. F
temperature 12	( 85.990 )	= 85.990 deg. F
temperature 13	( 84.820 )	= 84.820 deg. F
temperature 14	( 85.350 )	= 85.350 deg. F
temperature 15	( 84.040 )	= 84.040 deg. F
temperature 16	( 83.980 )	= 83.980 deg. F
temperature 17	( 84.070 )	= 84.070 deg. F
temperature 18	( 83.880 )	= 83.880 deg. F
temperature 19	( 80.940 )	= 80.940 deg. F
temperature 20	( 83.520 )	= 83.520 deg. F
temperature 21	( 81.850 )	= 81.850 deg. F
temperature 22	( 80.700 )	= 80.700 deg. F
temperature 23	( 80.670 )	= 80.670 deg. F
temperature 24	( 79.060 )	= 79.060 deg. F
temperature 25	( 80.350 )	= 80.350 deg. F
temperature 26	( 79.680 )	= 79.680 deg. F
temperature 27	( 79.570 )	= 79.570 deg. F
temperature 28	( 78.440 )	= 78.440 deg. F
temperature 29	( 77.970 )	= 77.970 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.280 )	= 81.980 deg. F , 0.5406 psia
dewpoint 2	( 80.430 )	= 80.430 deg. F , 0.5140 psia
dewpoint 3	( 78.950 )	= 78.950 deg. F , 0.4897 psia
dewpoint 4	( 72.990 )	= 72.990 deg. F , 0.4016 psia
dewpoint 5	( 72.270 )	= 72.270 deg. F , 0.3920 psia
dewpoint 6	( 72.370 )	= 72.370 deg. F , 0.3933 psia
pressure 1	( 60.0418 )	= 60.0418 psia
pressure 2	( 60.0516 )	= 60.0516 psia

weighted averages, volume and air mass

temperature	=	83.46207 deg. F
pressure	=	60.04180 psia
vapor pressure	=	0.45800 psia
volume	=	2750000 cu. ft.
dry air mass	=	814298.31 lbm

## 1992 VEGP Unit 2 Type A Test

data set 6

time = 1515 date = 419

sensor	raw data	value
temperature 1	( 86.080 )	= 86.080 deg. F
temperature 2	( 85.490 )	= 85.490 deg. F
temperature 3	( 85.990 )	= 85.990 deg. F
temperature 4	( 85.940 )	= 85.940 deg. F
temperature 5	( 86.280 )	= 86.280 deg. F
temperature 6	( 86.120 )	= 86.120 deg. F
temperature 7	( 86.180 )	= 86.180 deg. F
temperature 8	( 87.000 )	= 87.000 deg. F
temperature 9	( 86.070 )	= 86.070 deg. F
temperature 10	( 85.830 )	= 85.830 deg. F
temperature 11	( 84.300 )	= 84.300 deg. F
temperature 12	( 85.930 )	= 85.930 deg. F
temperature 13	( 84.720 )	= 84.720 deg. F
temperature 14	( 85.240 )	= 85.240 deg. F
temperature 15	( 83.930 )	= 83.930 deg. F
temperature 16	( 83.890 )	= 83.890 deg. F
temperature 17	( 83.970 )	= 83.970 deg. F
temperature 18	( 83.800 )	= 83.800 deg. F
temperature 19	( 80.870 )	= 80.870 deg. F
temperature 20	( 83.460 )	= 83.460 deg. F
temperature 21	( 81.840 )	= 81.840 deg. F
temperature 22	( 80.700 )	= 80.700 deg. F
temperature 23	( 80.670 )	= 80.670 deg. F
temperature 24	( 79.060 )	= 79.060 deg. F
temperature 25	( 80.330 )	= 80.330 deg. F
temperature 26	( 79.670 )	= 79.670 deg. F
temperature 27	( 79.570 )	= 79.570 deg. F
temperature 28	( 78.460 )	= 78.460 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.960 )	= 81.960 deg. F , 0.5402 psia
dewpoint 2	( 80.310 )	= 80.310 deg. F , 0.5120 psia
dewpoint 3	( 78.670 )	= 78.670 deg. F , 0.4852 psia
dewpoint 4	( 73.330 )	= 73.330 deg. F , 0.4063 psia
dewpcint 5	( 72.440 )	= 72.440 deg. F , 0.3943 psia
dewpoint 6	( 72.490 )	= 72.490 deg. F , 0.3949 psia
pressure 1	( 60.0328 )	= 60.0328 psia
pressure 2	( 60.0428 )	= 60.0428 psia

weighted averages, volume and air mass

temperature	=	83.39849 deg. F
pressure	=	60.03280 psia
vapor pressure	=	0.45808 psia
volume	=	2750000 cu. ft.
dry air mass	=	814269.47 lbm

## 1992 VEGP Unit 2 Type A Test

data set 7

time = 1530 date = 419

sensor	raw data	value
temperature 1	( 86.000 )	= 86.000 deg. F
temperature 2	( 85.400 )	= 85.400 deg. F
temperature 3	( 85.890 )	= 85.890 deg. F
temperature 4	( 85.860 )	= 85.860 deg. F
temperature 5	( 86.160 )	= 86.160 deg. F
temperature 6	( 86.030 )	= 86.030 deg. F
temperature 7	( 86.070 )	= 86.070 deg. F
temperature 8	( 86.880 )	= 86.880 deg. F
temperature 9	( 85.990 )	= 85.990 deg. F
temperature 10	( 85.700 )	= 85.700 deg. F
temperature 11	( 84.190 )	= 84.190 deg. F
temperature 12	( 85.820 )	= 85.820 deg. F
temperature 13	( 84.580 )	= 84.580 deg. F
temperature 14	( 85.140 )	= 85.140 deg. F
temperature 15	( 83.850 )	= 83.850 deg. F
temperature 16	( 83.780 )	= 83.780 deg. F
temperature 17	( 83.870 )	= 83.870 deg. F
temperature 18	( 83.700 )	= 83.700 deg. F
temperature 19	( 80.810 )	= 80.810 deg. F
temperature 20	( 83.380 )	= 83.380 deg. F
temperature 21	( 81.770 )	= 81.770 deg. F
temperature 22	( 80.670 )	= 80.670 deg. F
temperature 23	( 80.650 )	= 80.650 deg. F
temperature 24	( 79.020 )	= 79.020 deg. F
temperature 25	( 80.330 )	= 80.330 deg. F
temperature 26	( 79.660 )	= 79.660 deg. F
temperature 27	( 79.560 )	= 79.560 deg. F
temperature 28	( 78.430 )	= 78.430 deg. F
temperature 29	( 77.980 )	= 77.980 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.940 )	= 81.940 deg. F , 0.5399 psia
dewpoint 2	( 80.270 )	= 80.270 deg. F , 0.5113 psia
dewpoint 3	( 78.740 )	= 78.740 deg. F , 0.4863 psia
dewpoint 4	( 73.380 )	= 73.380 deg. F , 0.4069 psia
dewpoint 5	( 72.540 )	= 72.540 deg. F , 0.3956 psia
dewpoint 6	( 72.580 )	= 72.580 deg. F , 0.3961 psia
pressure 1	( 60.0243 )	= 60.0243 psia
pressure 2	( 60.0344 )	= 60.0344 psia

weighted averages, volume and air mass

temperature	=	83.32086 deg. F
pressure	=	60.02430 psia
vapor pressure	=	0.45860 psia
volume	=	2750000 cu. ft.
dry air mass	=	814262.57 lbm

## 1992 VEGF Unit 2 Type A Test

data set 8

time = 1545 date = 419

senscr		raw data	=	value
temperature	1	( 85.900 )	=	85.900 deg. F
temperature	2	( 85.290 )	=	85.290 deg. F
temperature	3	( 85.800 )	=	85.800 deg. F
temperature	4	( 85.750 )	=	85.750 deg. F
temperature	5	( 86.070 )	=	86.070 deg. F
temperature	6	( 85.940 )	=	85.940 deg. F
temperature	7	( 85.960 )	=	85.960 deg. F
temperature	8	( 86.770 )	=	86.770 deg. F
temperature	9	( 85.870 )	=	85.870 deg. F
temperature	10	( 85.630 )	=	85.630 deg. F
temperature	11	( 84.090 )	=	84.090 deg. F
temperature	12	( 85.720 )	=	85.720 deg. F
temperature	13	( 84.470 )	=	84.470 deg. F
temperature	14	( 85.040 )	=	85.040 deg. F
temperature	15	( 83.750 )	=	83.750 deg. F
temperature	16	( 83.680 )	=	83.680 deg. F
temperature	17	( 83.780 )	=	83.780 deg. F
temperature	18	( 83.600 )	=	83.600 deg. F
temperature	19	( 80.740 )	=	80.740 deg. F
temperature	20	( 83.290 )	=	83.290 deg. F
temperature	21	( 81.740 )	=	81.740 deg. F
temperature	22	( 80.640 )	=	80.640 deg. F
temperature	23	( 80.640 )	=	80.640 deg. F
temperature	24	( 79.010 )	=	79.010 deg. F
temperature	25	( 80.310 )	=	80.310 deg. F
temperature	26	( 79.640 )	=	79.640 deg. F
temperature	27	( 79.550 )	=	79.550 deg. F
temperature	28	( 78.430 )	=	78.430 deg. F
temperature	29	( 77.980 )	=	77.980 deg. F
temperature	30	( 75.750 )	=	75.750 deg. F
dewpoint	1	( 81.830 )	=	81.830 deg. F , 0.5380 psia
dewpoint	2	( 80.300 )	=	80.300 deg. F , 0.5118 psia
dewpoint	3	( 78.700 )	=	78.700 deg. F , 0.4857 psia
dewpoint	4	( 73.390 )	=	73.390 deg. F , 0.4071 psia
dewpoint	5	( 72.670 )	=	72.670 deg. F , 0.3973 psia
dewpoint	6	( 72.690 )	=	72.690 deg. F , 0.3976 psia
pressure	1	( 60.0159 )	=	60.0159 psia
pressure	2	( 60.0263 )	=	60.0263 psia

weighted averages, volume and air mass

temperature	=	83.24734 deg. F
pressure	=	60.01590 psia
vapor pressure	=	0.45877 psia
volume	=	2750000 cu. ft.
dry air mass	=	814255.68 lbm

## 1992 VEGP Unit 2 Type A Test

data set 9

time = 1600 date = 419

sensor	raw data	value
temperature 1	( 85.800 )	= 85.800 deg. F
temperature 2	( 85.200 )	= 85.200 deg. F
temperature 3	( 85.700 )	= 85.700 deg. F
temperature 4	( 85.660 )	= 85.660 deg. F
temperature 5	( 85.980 )	= 85.980 deg. F
temperature 6	( 85.830 )	= 85.830 deg. F
temperature 7	( 85.850 )	= 85.850 deg. F
temperature 8	( 86.680 )	= 86.680 deg. F
temperature 9	( 85.790 )	= 85.790 deg. F
temperature 10	( 85.540 )	= 85.540 deg. F
temperature 11	( 83.980 )	= 83.980 deg. F
temperature 12	( 85.640 )	= 85.640 deg. F
temperature 13	( 84.370 )	= 84.370 deg. F
temperature 14	( 84.920 )	= 84.920 deg. F
temperature 15	( 83.660 )	= 83.660 deg. F
temperature 16	( 83.600 )	= 83.600 deg. F
temperature 17	( 83.700 )	= 83.700 deg. F
temperature 18	( 83.500 )	= 83.500 deg. F
temperature 19	( 80.690 )	= 80.690 deg. F
temperature 20	( 83.240 )	= 83.240 deg. F
temperature 21	( 81.720 )	= 81.720 deg. F
temperature 22	( 80.630 )	= 80.630 deg. F
temperature 23	( 80.610 )	= 80.610 deg. F
temperature 24	( 78.990 )	= 78.990 deg. F
temperature 25	( 80.310 )	= 80.310 deg. F
temperature 26	( 79.640 )	= 79.640 deg. F
temperature 27	( 79.550 )	= 79.550 deg. F
temperature 28	( 78.440 )	= 78.440 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.780 )	= 81.780 deg. F , 0.5371 psia
dewpoint 2	( 80.310 )	= 80.310 deg. F , 0.5120 psia
dewpoint 3	( 78.600 )	= 78.600 deg. F , 0.4841 psia
dewpoint 4	( 73.710 )	= 73.710 deg. F , 0.4115 psia
dewpoint 5	( 72.790 )	= 72.790 deg. F , 0.3989 psia
dewpoint 6	( 72.750 )	= 72.750 deg. F , 0.3984 psia
pressure 1	( 60.0079 )	= 60.0079 psia
pressure 2	( 60.0182 )	= 60.0182 psia

weighted averages, volume and air mass

temperature	=	83.18168 deg. F
pressure	=	60.00790 psia
vapor pressure	=	0.45948 psia
volume	=	2750000 cu. ft.
dry air mass	=	814235.07 lbm

## 1992 VEGP Unit 2 Type A Test

data set 10

time = 1615 date = 419

sensor	raw data	value
temperature 1	( 85.720 )	= 85.720 deg. F
temperature 2	( 85.110 )	= 85.110 deg. F
temperature 3	( 85.600 )	= 85.600 deg. F
temperature 4	( 85.560 )	= 85.560 deg. F
temperature 5	( 85.880 )	= 85.880 deg. F
temperature 6	( 85.760 )	= 85.760 deg. F
temperature 7	( 85.760 )	= 85.760 deg. F
temperature 8	( 86.600 )	= 86.600 deg. F
temperature 9	( 85.700 )	= 85.700 deg. F
temperature 10	( 85.470 )	= 85.470 deg. F
temperature 11	( 83.870 )	= 83.870 deg. F
temperature 12	( 85.540 )	= 85.540 deg. F
temperature 13	( 84.280 )	= 84.280 deg. F
temperature 14	( 84.820 )	= 84.820 deg. F
temperature 15	( 83.570 )	= 83.570 deg. F
temperature 16	( 83.490 )	= 83.490 deg. F
temperature 17	( 83.600 )	= 83.600 deg. F
temperature 18	( 83.400 )	= 83.400 deg. F
temperature 19	( 80.610 )	= 80.610 deg. F
temperature 20	( 83.170 )	= 83.170 deg. F
temperature 21	( 81.680 )	= 81.680 deg. F
temperature 22	( 80.620 )	= 80.620 deg. F
temperature 23	( 80.600 )	= 80.600 deg. F
temperature 24	( 78.970 )	= 78.970 deg. F
temperature 25	( 80.300 )	= 80.300 deg. F
temperature 26	( 79.630 )	= 79.630 deg. F
temperature 27	( 79.550 )	= 79.550 deg. F
temperature 28	( 78.430 )	= 78.430 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.760 )	= 81.760 deg. F , 0.5367 psia
dewpoint 2	( 80.230 )	= 80.230 deg. F , 0.5107 psia
dewpoint 3	( 78.640 )	= 78.640 deg. F , 0.4847 psia
dewpoint 4	( 73.630 )	= 73.630 deg. F , 0.4104 psia
dewpoint 5	( 72.920 )	= 72.920 deg. F , 0.4007 psia
dewpoint 6	( 72.860 )	= 72.860 deg. F , 0.3999 psia
pressure 1	( 60.0000 )	= 60.0000 psia
pressure 2	( 60.0104 )	= 60.0104 psia

weighted averages, volume and air mass

temperature	=	83.11382 deg. F
pressure	=	60.00000 psia
vapor pressure	=	0.45957 psia
volume	=	2750000 cu. ft.
dry air mass	=	814227.69 lbm

## 1992 VEGP Unit 2 Type A Test

data set 11

time = 1630 date = 419

sensor	raw data	value
temperature 1	( 85.680 )	= 85.680 deg. F
temperature 2	( 85.050 )	= 85.050 deg. F
temperature 3	( 85.560 )	= 85.560 deg. F
temperature 4	( 85.480 )	= 85.480 deg. F
temperature 5	( 85.800 )	= 85.800 deg. F
temperature 6	( 85.680 )	= 85.680 deg. F
temperature 7	( 85.670 )	= 85.670 deg. F
temperature 8	( 86.510 )	= 86.510 deg. F
temperature 9	( 85.620 )	= 85.620 deg. F
temperature 10	( 85.380 )	= 85.380 deg. F
temperature 11	( 83.790 )	= 83.790 deg. F
temperature 12	( 85.470 )	= 85.470 deg. F
temperature 13	( 84.180 )	= 84.180 deg. F
temperature 14	( 84.750 )	= 84.750 deg. F
temperature 15	( 83.500 )	= 83.500 deg. F
temperature 16	( 83.410 )	= 83.410 deg. F
temperature 17	( 83.510 )	= 83.510 deg. F
temperature 18	( 83.320 )	= 83.320 deg. F
temperature 19	( 80.560 )	= 80.560 deg. F
temperature 20	( 83.040 )	= 83.040 deg. F
temperature 21	( 81.630 )	= 81.630 deg. F
temperature 22	( 80.610 )	= 80.610 deg. F
temperature 23	( 80.580 )	= 80.580 deg. F
temperature 24	( 78.970 )	= 78.970 deg. F
temperature 25	( 80.290 )	= 80.290 deg. F
temperature 26	( 79.610 )	= 79.610 deg. F
temperature 27	( 79.530 )	= 79.530 deg. F
temperature 28	( 78.430 )	= 78.430 deg. F
temperature 29	( 77.980 )	= 77.980 deg. F
temperature 30	( 75.750 )	= 75.750 deg. F
dewpoint 1	( 81.730 )	= 81.730 deg. F , 0.5362 psia
dewpoint 2	( 80.170 )	= 80.170 deg. F , 0.5097 psia
dewpoint 3	( 78.740 )	= 78.740 deg. F , 0.4863 psia
dewpoint 4	( 73.570 )	= 73.570 deg. F , 0.4095 psia
dewpoint 5	( 72.980 )	= 72.980 deg. F , 0.4015 psia
dewpoint 6	( 72.920 )	= 72.920 deg. F , 0.4007 psia
pressure 1	( 59.9927 )	= 59.9927 psia
pressure 2	( 60.0030 )	= 60.0030 psia

weighted averages, volume and air mass

temperature	=	83.05324 deg. F
pressure	=	59.99270 psia
vapor pressure	=	0.45969 psia
volume	=	2750000 cu. ft.
dry air mass	=	814217.01 lbm

## 1992 VEGP Unit 2 Type A Test

data set 12

time = 1645 date = 419

sensor	raw data	value
temperature 1	( 85.560 )	= 85.560 deg. F
temperature 2	( 84.950 )	= 84.950 deg. F
temperature 3	( 85.490 )	= 85.490 deg. F
temperature 4	( 85.400 )	= 85.400 deg. F
temperature 5	( 85.720 )	= 85.720 deg. F
temperature 6	( 85.590 )	= 85.590 deg. F
temperature 7	( 85.590 )	= 85.590 deg. F
temperature 8	( 86.430 )	= 86.430 deg. F
temperature 9	( 85.530 )	= 85.530 deg. F
temperature 10	( 85.280 )	= 85.280 deg. F
temperature 11	( 83.690 )	= 83.690 deg. F
temperature 12	( 85.360 )	= 85.360 deg. F
temperature 13	( 84.090 )	= 84.090 deg. F
temperature 14	( 84.650 )	= 84.650 deg. F
temperature 15	( 83.410 )	= 83.410 deg. F
temperature 16	( 83.340 )	= 83.340 deg. F
temperature 17	( 83.410 )	= 83.410 deg. F
temperature 18	( 83.260 )	= 83.260 deg. F
temperature 19	( 80.500 )	= 80.500 deg. F
temperature 20	( 82.950 )	= 82.950 deg. F
temperature 21	( 81.600 )	= 81.600 deg. F
temperature 22	( 80.590 )	= 80.590 deg. F
temperature 23	( 80.560 )	= 80.560 deg. F
temperature 24	( 78.940 )	= 78.940 deg. F
temperature 25	( 80.280 )	= 80.280 deg. F
temperature 26	( 79.600 )	= 79.600 deg. F
temperature 27	( 79.530 )	= 79.530 deg. F
temperature 28	( 78.420 )	= 78.420 deg. F
temperature 29	( 77.980 )	= 77.980 deg. F
temperature 30	( 75.750 )	= 75.750 deg. F
dewpoint 1	( 81.710 )	= 81.710 deg. F , 0.5359 psia
dewpoint 2	( 80.130 )	= 80.130 deg. F , 0.5090 psia
dewpoint 3	( 78.580 )	= 78.580 deg. F , 0.4838 psia
dewpoint 4	( 73.680 )	= 73.680 deg. F , 0.4111 psia
dewpoint 5	( 72.990 )	= 72.990 deg. F , 0.4016 psia
dewpoint 6	( 73.020 )	= 73.020 deg. F , 0.4020 psia
pressure 1	( 59.9857 )	= 59.9857 psia
pressure 2	( 59.9959 )	= 59.9959 psia

weighted averages, volume and air mass

temperature	=	82.98775 deg. F
pressure	=	59.98570 psia
vapor pressure	=	0.45955 psia
volume	=	2750000 cu. ft.
dry air mass	=	814221.47 lbm

## 1992 VEGP Unit 2 Type A Test

data set 13

time = 1700 date = 419

sensor	raw data	value
temperature 1	( 85.480 )	= 85.480 deg. F
temperature 2	( 84.860 )	= 84.860 deg. F
temperature 3	( 85.410 )	= 85.410 deg. F
temperature 4	( 85.300 )	= 85.300 deg. F
temperature 5	( 85.640 )	= 85.640 deg. F
temperature 6	( 85.530 )	= 85.530 deg. F
temperature 7	( 85.490 )	= 85.490 deg. F
temperature 8	( 86.330 )	= 86.330 deg. F
temperature 9	( 85.450 )	= 85.450 deg. F
temperature 10	( 85.170 )	= 85.170 deg. F
temperature 11	( 83.600 )	= 83.600 deg. F
temperature 12	( 85.310 )	= 85.310 deg. F
temperature 13	( 84.000 )	= 84.000 deg. F
temperature 14	( 84.560 )	= 84.560 deg. F
temperature 15	( 83.320 )	= 83.320 deg. F
temperature 16	( 83.260 )	= 83.260 deg. F
temperature 17	( 83.340 )	= 83.340 deg. F
temperature 18	( 83.170 )	= 83.170 deg. F
temperature 19	( 80.440 )	= 80.440 deg. F
temperature 20	( 82.900 )	= 82.900 deg. F
temperature 21	( 81.590 )	= 81.590 deg. F
temperature 22	( 80.580 )	= 80.580 deg. F
temperature 23	( 80.560 )	= 80.560 deg. F
temperature 24	( 78.940 )	= 78.940 deg. F
temperature 25	( 80.280 )	= 80.280 deg. F
temperature 26	( 79.600 )	= 79.600 deg. F
temperature 27	( 79.520 )	= 79.520 deg. F
temperature 28	( 78.430 )	= 78.430 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.660 )	= 81.660 deg. F , 0.5350 psia
dewpoint 2	( 80.000 )	= 80.000 deg. F , 0.5068 psia
dewpoint 3	( 78.660 )	= 78.660 deg. F , 0.4850 psia
dewpoint 4	( 73.700 )	= 73.700 deg. F , 0.4113 psia
dewpoint 5	( 73.250 )	= 73.250 deg. F , 0.4052 psia
dewpoint 6	( 73.110 )	= 73.110 deg. F , 0.4033 psia
pressure 1	( 59.9790 )	= 59.9790 psia
pressure 2	( 59.9891 )	= 59.9891 psia

weighted averages, volume and air mass

temperature	=	82.92955 deg. F
pressure	=	59.97900 psia
vapor pressure	=	0.45993 psia
volume	=	2750000 cu. ft.
dry air mass	=	814211.94 lbm

## 1992 VEGP Unit 2 Type A Test

data set 14

time = 1715 date = 419

sensor	raw data	value
temperature 1	( 85.410 )	= 85.410 deg. F
temperature 2	( 84.790 )	= 84.790 deg. F
temperature 3	( 85.320 )	= 85.320 deg. F
temperature 4	( 85.240 )	= 85.240 deg. F
temperature 5	( 85.540 )	= 85.540 deg. F
temperature 6	( 85.450 )	= 85.450 deg. F
temperature 7	( 85.410 )	= 85.410 deg. F
temperature 8	( 86.250 )	= 86.250 deg. F
temperature 9	( 85.360 )	= 85.360 deg. F
temperature 10	( 85.110 )	= 85.110 deg. F
temperature 11	( 83.530 )	= 83.530 deg. F
temperature 12	( 85.220 )	= 85.220 deg. F
temperature 13	( 83.890 )	= 83.890 deg. F
temperature 14	( 84.480 )	= 84.480 deg. F
temperature 15	( 83.260 )	= 83.260 deg. F
temperature 16	( 83.180 )	= 83.180 deg. F
temperature 17	( 83.270 )	= 83.270 deg. F
temperature 18	( 83.090 )	= 83.090 deg. F
temperature 19	( 80.380 )	= 80.380 deg. F
temperature 20	( 82.870 )	= 82.870 deg. F
temperature 21	( 81.550 )	= 81.550 deg. F
temperature 22	( 80.580 )	= 80.580 deg. F
temperature 23	( 80.550 )	= 80.550 deg. F
temperature 24	( 78.930 )	= 78.930 deg. F
temperature 25	( 80.270 )	= 80.270 deg. F
temperature 26	( 79.600 )	= 79.600 deg. F
temperature 27	( 79.530 )	= 79.530 deg. F
temperature 28	( 78.420 )	= 78.420 deg. F
temperature 29	( 78.000 )	= 78.000 deg. F
temperature 30	( 75.760 )	= 75.760 deg. F
dewpoint 1	( 81.620 )	= 81.620 deg. F , 0.5343 psia
dewpoint 2	( 80.020 )	= 80.020 deg. F , 0.5072 psia
dewpoint 3	( 78.680 )	= 78.680 deg. F , 0.4854 psia
dewpoint 4	( 73.830 )	= 73.830 deg. F , 0.4131 psia
dewpoint 5	( 73.290 )	= 73.290 deg. F , 0.4057 psia
dewpoint 6	( 73.180 )	= 73.180 deg. F , 0.4042 psia
pressure 1	( 59.9724 )	= 59.9724 psia
pressure 2	( 59.9826 )	= 59.9826 psia

weighted averages, volume and air mass

temperature	=	82.87394 deg. F
pressure	=	59.97240 psia
vapor pressure	=	0.46050 psia
volume	=	2750000 cu. ft.
dry air mass	=	814197.33 lbm

## 1992 VEGP Unit 2 Type A Test

data set 15

time = 1730 date = 419

sensor	raw data	value
temperature 1	( 85.320 )	= 85.320 deg. F
temperature 2	( 84.720 )	= 84.720 deg. F
temperature 3	( 85.230 )	= 85.230 deg. F
temperature 4	( 85.150 )	= 85.150 deg. F
temperature 5	( 85.470 )	= 85.470 deg. F
temperature 6	( 85.360 )	= 85.360 deg. F
temperature 7	( 85.320 )	= 85.320 deg. F
temperature 8	( 86.160 )	= 86.160 deg. F
temperature 9	( 85.270 )	= 85.270 deg. F
temperature 10	( 85.030 )	= 85.030 deg. F
temperature 11	( 83.430 )	= 83.430 deg. F
temperature 12	( 85.130 )	= 85.130 deg. F
temperature 13	( 83.820 )	= 83.820 deg. F
temperature 14	( 84.400 )	= 84.400 deg. F
temperature 15	( 83.170 )	= 83.170 deg. F
temperature 16	( 83.100 )	= 83.100 deg. F
temperature 17	( 83.180 )	= 83.180 deg. F
temperature 18	( 83.020 )	= 83.020 deg. F
temperature 19	( 80.320 )	= 80.320 deg. F
temperature 20	( 82.760 )	= 82.760 deg. F
temperature 21	( 81.500 )	= 81.500 deg. F
temperature 22	( 80.540 )	= 80.540 deg. F
temperature 23	( 80.520 )	= 80.520 deg. F
temperature 24	( 78.910 )	= 78.910 deg. F
temperature 25	( 80.250 )	= 80.250 deg. F
temperature 26	( 79.570 )	= 79.570 deg. F
temperature 27	( 79.520 )	= 79.520 deg. F
temperature 28	( 78.420 )	= 78.420 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.740 )	= 75.740 deg. F
dewpoint 1	( 81.580 )	= 81.580 deg. F , 0.5336 psia
dewpoint 2	( 79.980 )	= 79.980 deg. F , 0.5065 psia
dewpoint 3	( 78.630 )	= 78.630 deg. F , 0.4846 psia
dewpoint 4	( 73.720 )	= 73.720 deg. F , 0.4116 psia
dewpoint 5	( 73.420 )	= 73.420 deg. F , 0.4075 psia
dewpoint 6	( 73.230 )	= 73.230 deg. F , 0.4049 psia
pressure 1	( 59.9664 )	= 59.9664 psia
pressure 2	( 59.9761 )	= 59.9761 psia

weighted averages, volume and air mass

temperature	=	82.80711 deg. F
pressure	=	59.96640 psia
vapor pressure	=	0.46018 psia
volume	=	2750000 cu. ft.
dry air mass	=	814219.96 lbm

## 1992 VEGP Unit 2 Type A Test

data set 16

time = 1745 date = 419

sensor	raw data	value
temperature 1	( 35.260 )	= 85.260 deg. F
temperature 2	( 84.650 )	= 84.650 deg. F
temperature 3	( 85.140 )	= 85.140 deg. F
temperature 4	( 85.070 )	= 85.070 deg. F
temperature 5	( 85.390 )	= 85.390 deg. F
temperature 6	( 85.290 )	= 85.290 deg. F
temperature 7	( 85.250 )	= 85.250 deg. F
temperature 8	( 86.090 )	= 86.090 deg. F
temperature 9	( 85.200 )	= 85.200 deg. F
temperature 10	( 84.940 )	= 84.940 deg. F
temperature 11	( 83.350 )	= 83.350 deg. F
temperature 12	( 85.030 )	= 85.030 deg. F
temperature 13	( 83.750 )	= 83.750 deg. F
temperature 14	( 84.310 )	= 84.310 deg. F
temperature 15	( 83.090 )	= 83.090 deg. F
temperature 16	( 83.020 )	= 83.020 deg. F
temperature 17	( 83.110 )	= 83.110 deg. F
temperature 18	( 82.960 )	= 82.960 deg. F
temperature 19	( 80.260 )	= 80.260 deg. F
temperature 20	( 82.720 )	= 82.720 deg. F
temperature 21	( 81.480 )	= 81.480 deg. F
temperature 22	( 80.530 )	= 80.530 deg. F
temperature 23	( 80.510 )	= 80.510 deg. F
temperature 24	( 78.890 )	= 78.890 deg. F
temperature 25	( 80.250 )	= 80.250 deg. F
temperature 26	( 79.570 )	= 79.570 deg. F
temperature 27	( 79.510 )	= 79.510 deg. F
temperature 28	( 78.410 )	= 78.410 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.740 )	= 75.740 deg. F
dewpoint 1	( 81.540 )	= 81.540 deg. F , 0.5329 psia
dewpoint 2	( 79.950 )	= 79.950 deg. F , 0.5060 psia
dewpoint 3	( 78.570 )	= 78.570 deg. F , 0.4836 psia
dewpoint 4	( 73.740 )	= 73.740 deg. F , 0.4119 psia
dewpoint 5	( 73.410 )	= 73.410 deg. F , 0.4074 psia
dewpoint 6	( 73.280 )	= 73.280 deg. F , 0.4056 psia
pressure 1	( 59.9602 )	= 59.9602 psia
pressure 2	( 59.9698 )	= 59.9698 psia

weighted averages, volume and air mass

temperature	=	82.75197 deg. F
pressure	=	59.96020 psia
vapor pressure	=	0.45995 psia
volume	=	2750000 cu. ft.
dry air mass	=	814221.03 lbm

## 1992 VEGF Unit 2 Type A Test

data set 17

time = 1800 date = 419

sensor raw data value

temperature	1	( 85.180 )	=	85.180 deg. F
temperature	2	( 84.560 )	=	84.560 deg. F
temperature	3	( 85.080 )	=	85.080 deg. F
temperature	4	( 84.990 )	=	84.990 deg. F
temperature	5	( 85.320 )	=	85.320 deg. F
temperature	6	( 85.240 )	=	85.240 deg. F
temperature	7	( 85.170 )	=	85.170 deg. F
temperature	8	( 86.020 )	=	86.020 deg. F
temperature	9	( 85.120 )	=	85.120 deg. F
temperature	10	( 84.890 )	=	84.890 deg. F
temperature	11	( 83.280 )	=	83.280 deg. F
temperature	12	( 84.960 )	=	84.960 deg. F
temperature	13	( 83.670 )	=	83.670 deg. F
temperature	14	( 84.240 )	=	84.240 deg. F
temperature	15	( 83.030 )	=	83.030 deg. F
temperature	16	( 82.960 )	=	82.960 deg. F
temperature	17	( 83.040 )	=	83.040 deg. F
temperature	18	( 82.880 )	=	82.880 deg. F
temperature	19	( 80.210 )	=	80.210 deg. F
temperature	20	( 82.660 )	=	82.660 deg. F
temperature	21	( 81.480 )	=	81.480 deg. F
temperature	22	( 80.520 )	=	80.520 deg. F
temperature	23	( 80.500 )	=	80.500 deg. F
temperature	24	( 78.880 )	=	78.880 deg. F
temperature	25	( 80.270 )	=	80.270 deg. F
temperature	26	( 79.560 )	=	79.560 deg. F
temperature	27	( 79.510 )	=	79.510 deg. F
temperature	28	( 78.410 )	=	78.410 deg. F
temperature	29	( 78.000 )	=	78.000 deg. F
temperature	30	( 75.740 )	=	75.740 deg. F

dewpoint	1	( 81.560 )	=	81.560 deg. F , 0.5333 psia
dewpoint	2	( 80.050 )	=	80.050 deg. F , 0.5077 psia
dewpoint	3	( 78.490 )	=	78.490 deg. F , 0.4823 psia
dewpoint	4	( 73.720 )	=	73.720 deg. F , 0.4116 psia
dewpoint	5	( 73.450 )	=	73.450 deg. F , 0.4079 psia
dewpoint	6	( 73.310 )	=	73.310 deg. F , 0.4060 psia

pressure	1	( 59.9542 )	=	59.9542 psia
pressure	2	( 59.9640 )	=	59.9640 psia

weighted averages, volume and air mass

temperature	=	82.70305 deg. F
pressure	=	59.95420 psia
vapor pressure	=	0.46016 psia
volume	=	2750000 cu. ft.
dry air mass	=	814209.47 lbm

## 1992 VEGP Unit 2 Type A Test

data set 18

time = 1815 date = 419

sensor	raw data	value
temperature 1	( 85.120 )	= 85.120 deg. F
temperature 2	( 84.500 )	= 84.500 deg. F
temperature 3	( 85.040 )	= 85.040 deg. F
temperature 4	( 84.920 )	= 84.920 deg. F
temperature 5	( 85.260 )	= 85.260 deg. F
temperature 6	( 85.160 )	= 85.160 deg. F
temperature 7	( 85.090 )	= 85.090 deg. F
temperature 8	( 85.930 )	= 85.930 deg. F
temperature 9	( 85.050 )	= 85.050 deg. F
temperature 10	( 84.810 )	= 84.810 deg. F
temperature 11	( 83.210 )	= 83.210 deg. F
temperature 12	( 84.910 )	= 84.910 deg. F
temperature 13	( 83.590 )	= 83.590 deg. F
temperature 14	( 84.170 )	= 84.170 deg. F
temperature 15	( 82.960 )	= 82.960 deg. F
temperature 16	( 82.880 )	= 82.880 deg. F
temperature 17	( 82.980 )	= 82.980 deg. F
temperature 18	( 82.810 )	= 82.810 deg. F
temperature 19	( 80.180 )	= 80.180 deg. F
temperature 20	( 82.610 )	= 82.610 deg. F
temperature 21	( 81.440 )	= 81.440 deg. F
temperature 22	( 80.510 )	= 80.510 deg. F
temperature 23	( 80.490 )	= 80.490 deg. F
temperature 24	( 78.870 )	= 78.870 deg. F
temperature 25	( 80.250 )	= 80.250 deg. F
temperature 26	( 79.550 )	= 79.550 deg. F
temperature 27	( 79.500 )	= 79.500 deg. F
temperature 28	( 78.410 )	= 78.410 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F
dewpoint 1	( 81.520 )	= 81.520 deg. F , 0.5326 psia
dewpoint 2	( 79.890 )	= 79.890 deg. F , 0.5050 psia
dewpoint 3	( 78.550 )	= 78.550 deg. F , 0.4833 psia
dewpoint 4	( 73.600 )	= 73.600 deg. F , 0.4100 psia
dewpoint 5	( 73.510 )	= 73.510 deg. F , 0.4087 psia
dewpoint 6	( 73.400 )	= 73.400 deg. F , 0.4072 psia
pressure 1	( 59.9484 )	= 59.9484 psia
pressure 2	( 59.9581 )	= 59.9581 psia

weighted averages, volume and air mass

temperature	=	82.65194 deg. F
pressure	=	59.94840 psia
vapor pressure	=	0.45975 psia
volume	=	2750000 cu. ft.
dry air mass	=	814212.37 lbm

## 1992 VEGS Unit 2 Type A Test

data set 19

time = 1830 date = 419

sensor	raw data	value
temperature 1	( 85.060 )	= 85.060 deg. F
temperature 2	( 84.430 )	= 84.430 deg. F
temperature 3	( 84.960 )	= 84.960 deg. F
temperature 4	( 84.840 )	= 84.840 deg. F
temperature 5	( 85.180 )	= 85.180 deg. F
temperature 6	( 85.100 )	= 85.100 deg. F
temperature 7	( 85.020 )	= 85.020 deg. F
temperature 8	( 85.850 )	= 85.850 deg. F
temperature 9	( 84.990 )	= 84.990 deg. F
temperature 10	( 84.760 )	= 84.760 deg. F
temperature 11	( 83.150 )	= 83.150 deg. F
temperature 12	( 84.820 )	= 84.820 deg. F
temperature 13	( 83.520 )	= 83.520 deg. F
temperature 14	( 84.110 )	= 84.110 deg. F
temperature 15	( 82.900 )	= 82.900 deg. F
temperature 16	( 82.830 )	= 82.830 deg. F
temperature 17	( 82.920 )	= 82.920 deg. F
temperature 18	( 82.760 )	= 82.760 deg. F
temperature 19	( 80.120 )	= 80.120 deg. F
temperature 20	( 82.550 )	= 82.550 deg. F
temperature 21	( 81.420 )	= 81.420 deg. F
temperature 22	( 80.510 )	= 80.510 deg. F
temperature 23	( 80.470 )	= 80.470 deg. F
temperature 24	( 78.860 )	= 78.860 deg. F
temperature 25	( 80.240 )	= 80.240 deg. F
temperature 26	( 79.550 )	= 79.550 deg. F
temperature 27	( 79.500 )	= 79.500 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 78.000 )	= 78.000 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F
dewpoint 1	( 81.470 )	= 81.470 deg. F , 0.5317 psia
dewpoint 2	( 79.800 )	= 79.800 deg. F , 0.5035 psia
dewpoint 3	( 78.420 )	= 78.420 deg. F , 0.4812 psia
dewpoint 4	( 73.720 )	= 73.720 deg. F , 0.4116 psia
dewpoint 5	( 73.620 )	= 73.620 deg. F , 0.4102 psia
dewpoint 6	( 73.440 )	= 73.440 deg. F , 0.4078 psia
pressure 1	( 59.9428 )	= 59.9428 psia
pressure 2	( 59.9524 )	= 59.9524 psia

weighted averages, volume and air mass

temperature	=	82.60378 deg. F
pressure	=	59.94280 psia
vapor pressure	=	0.45952 psia
volume	=	2750000 cu. ft.
dry air mass	=	814211.23 lbm

1992 VEGP Unit 2 Type est

data set 20

time = 1845 date = 419

sensor	raw data	value
temperature 1	( 84.990 )	= 84.990 deg. F
temperature 2	( 84.370 )	= 84.370 deg. F
temperature 3	( 84.890 )	= 84.890 deg. F
temperature 4	( 84.760 )	= 84.760 deg. F
temperature 5	( 85.100 )	= 85.100 deg. F
temperature 6	( 85.010 )	= 85.010 deg. F
temperature 7	( 84.950 )	= 84.950 deg. F
temperature 8	( 85.780 )	= 85.780 deg. F
temperature 9	( 84.900 )	= 84.900 deg. F
temperature 10	( 84.670 )	= 84.670 deg. F
temperature 11	( 83.080 )	= 83.080 deg. F
temperature 12	( 84.770 )	= 84.770 deg. F
temperature 13	( 83.440 )	= 83.440 deg. F
temperature 14	( 84.020 )	= 84.020 deg. F
temperature 15	( 82.820 )	= 82.820 deg. F
temperature 16	( 82.760 )	= 82.760 deg. F
temperature 17	( 82.850 )	= 82.850 deg. F
temperature 18	( 82.680 )	= 82.680 deg. F
temperature 19	( 80.060 )	= 80.060 deg. F
temperature 20	( 82.490 )	= 82.490 deg. F
temperature 21	( 81.380 )	= 81.380 deg. F
temperature 22	( 80.490 )	= 80.490 deg. F
temperature 23	( 80.470 )	= 80.470 deg. F
temperature 24	( 78.850 )	= 78.850 deg. F
temperature 25	( 80.240 )	= 80.240 deg. F
temperature 26	( 79.530 )	= 79.530 deg. F
temperature 27	( 79.500 )	= 79.500 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F
dewpoint 1	( 81.470 )	= 81.470 deg. F , 0.5317 psia
dewpoint 2	( 79.770 )	= 79.770 deg. F , 0.5030 psia
dewpoint 3	( 78.370 )	= 78.370 deg. F , 0.4804 psia
dewpoint 4	( 73.560 )	= 73.560 deg. F , 0.4094 psia
dewpoint 5	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 6	( 73.490 )	= 73.490 deg. F , 0.4084 psia
pressure 1	( 59.9372 )	= 59.9372 psia
pressure 2	( 59.9469 )	= 59.9469 psia

weighted averages, volume an' air mass

temperature	=	82.54795 deg. F
pressure	=	59.93720 psia
vapor pressure	=	0.15903 psia
volume	=	2750000 cu. ft.
dry air mass	=	814225.03 lbm

## 1992 VEGP Unit 2 Type A Test

data set 21

time = 1900 date = 419

sensor	raw data	value
temperature 1	( 84.930 )	= 84.930 deg. F
temperature 2	( 84.310 )	= 84.310 deg. F
temperature 3	( 84.830 )	= 84.830 deg. F
temperature 4	( 84.710 )	= 84.710 deg. F
temperature 5	( 85.040 )	= 85.040 deg. F
temperature 6	( 84.940 )	= 84.940 deg. F
temperature 7	( 84.870 )	= 84.870 deg. F
temperature 8	( 85.730 )	= 85.730 deg. F
temperature 9	( 84.830 )	= 84.830 deg. F
temperature 10	( 84.600 )	= 84.600 deg. F
temperature 11	( 83.000 )	= 83.000 deg. F
temperature 12	( 84.710 )	= 84.710 deg. F
temperature 13	( 83.380 )	= 83.380 deg. F
temperature 14	( 83.960 )	= 83.960 deg. F
temperature 15	( 82.760 )	= 82.760 deg. F
temperature 16	( 82.690 )	= 82.690 deg. F
temperature 17	( 82.780 )	= 82.780 deg. F
temperature 18	( 82.620 )	= 82.620 deg. F
temperature 19	( 80.010 )	= 80.010 deg. F
temperature 20	( 82.420 )	= 82.420 deg. F
temperature 21	( 81.360 )	= 81.360 deg. F
temperature 22	( 80.480 )	= 80.480 deg. F
temperature 23	( 80.450 )	= 80.450 deg. F
temperature 24	( 78.830 )	= 78.830 deg. F
temperature 25	( 80.220 )	= 80.220 deg. F
temperature 26	( 79.520 )	= 79.520 deg. F
temperature 27	( 79.490 )	= 79.490 deg. F
temperature 28	( 78.410 )	= 78.410 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F

dewpoint 1	( 81.420 )	= 81.420 deg. F , 0.5308 psia
dewpoint 2	( 79.770 )	= 79.770 deg. F , 0.5030 psia
dewpoint 3	( 78.430 )	= 78.430 deg. F , 0.4814 psia
dewpoint 4	( 73.730 )	= 73.730 deg. F , 0.4118 psia
dewpoint 5	( 73.740 )	= 73.740 deg. F , 0.4119 psia
dewpoint 6	( 73.530 )	= 73.530 deg. F , 0.4090 psia

pressure 1	( 59.9321 )	= 59.9321 psia
pressure 2	( 59.9416 )	= 59.9416 psia

weighted averages, volume and air mass

temperature	=	82.50003 deg. F
pressure	=	59.93210 psia
vapor pressure	=	0.45976 psia
volume	=	2750000 cu. ft.
dry air mass	=	814217.22 lbm

## 1992 VEGP Unit 2 Type A Test

data set 22

time = 1915 date = 419

sensor	raw data	value
temperature 1	( 84.880 )	= 84.880 deg. F
temperature 2	( 84.260 )	= 84.260 deg. F
temperature 3	( 84.760 )	= 84.760 deg. F
temperature 4	( 84.640 )	= 84.640 deg. F
temperature 5	( 84.990 )	= 84.990 deg. F
temperature 6	( 84.870 )	= 84.870 deg. F
temperature 7	( 84.820 )	= 84.820 deg. F
temperature 8	( 85.670 )	= 85.670 deg. F
temperature 9	( 84.770 )	= 84.770 deg. F
temperature 10	( 84.570 )	= 84.570 deg. F
temperature 11	( 82.950 )	= 82.950 deg. F
temperature 12	( 84.630 )	= 84.630 deg. F
temperature 13	( 83.320 )	= 83.320 deg. F
temperature 14	( 83.910 )	= 83.910 deg. F
temperature 15	( 82.710 )	= 82.710 deg. F
temperature 16	( 82.640 )	= 82.640 deg. F
temperature 17	( 82.720 )	= 82.720 deg. F
temperature 18	( 82.570 )	= 82.570 deg. F
temperature 19	( 79.960 )	= 79.960 deg. F
temperature 20	( 82.340 )	= 82.340 deg. F
temperature 21	( 81.340 )	= 81.340 deg. F
temperature 22	( 80.460 )	= 80.460 deg. F
temperature 23	( 80.440 )	= 80.440 deg. F
temperature 24	( 78.820 )	= 78.820 deg. F
temperature 25	( 80.230 )	= 80.230 deg. F
temperature 26	( 79.510 )	= 79.510 deg. F
temperature 27	( 79.490 )	= 79.490 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 77.990 )	= 77.990 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F
dewpoint 1	( 81.410 )	= 81.410 deg. F , 0.5307 psia
dewpoint 2	( 79.700 )	= 79.700 deg. F , 0.5019 psia
dewpoint 3	( 78.370 )	= 78.370 deg. F , 0.4804 psia
dewpoint 4	( 73.750 )	= 73.750 deg. F , 0.4120 psia
dewpoint 5	( 73.910 )	= 73.910 deg. F , 0.4143 psia
dewpoint 6	( 73.550 )	= 73.550 deg. F , 0.4093 psia
pressure 1	( 59.9269 )	= 59.9269 psia
pressure 2	( 59.9366 )	= 59.9366 psia

weighted averages, volume and air mass

temperature	=	82.45741 deg. F
pressure	=	59.92690 psia
vapor pressure	=	0.45971 psia
volume	=	2750000 cu. ft.
dry air mass	=	814210.69 lbm

## 1992 VEGP Unit 2 Type A Test

data set 23

time = 1930 date = 419

sensor	raw data	value
temperature 1	( 84.820 )	= 84.820 deg. F
temperature 2	( 84.190 )	= 84.190 deg. F
temperature 3	( 84.690 )	= 84.690 deg. F
temperature 4	( 84.580 )	= 84.580 deg. F
temperature 5	( 84.910 )	= 84.910 deg. F
temperature 6	( 84.810 )	= 84.810 deg. F
temperature 7	( 84.740 )	= 84.740 deg. F
temperature 8	( 85.580 )	= 85.580 deg. F
temperature 9	( 84.690 )	= 84.690 deg. F
temperature 10	( 84.490 )	= 84.490 deg. F
temperature 11	( 82.890 )	= 82.890 deg. F
temperature 12	( 84.560 )	= 84.560 deg. F
temperature 13	( 83.240 )	= 83.240 deg. F
temperature 14	( 83.850 )	= 83.850 deg. F
temperature 15	( 82.660 )	= 82.660 deg. F
temperature 16	( 82.580 )	= 82.580 deg. F
temperature 17	( 82.670 )	= 82.670 deg. F
temperature 18	( 82.520 )	= 82.520 deg. F
temperature 19	( 79.930 )	= 79.930 deg. F
temperature 20	( 82.300 )	= 82.300 deg. F
temperature 21	( 81.320 )	= 81.320 deg. F
temperature 22	( 80.460 )	= 80.460 deg. F
temperature 23	( 80.430 )	= 80.430 deg. F
temperature 24	( 78.810 )	= 78.810 deg. F
temperature 25	( 80.220 )	= 80.220 deg. F
temperature 26	( 79.500 )	= 79.500 deg. F
temperature 27	( 79.490 )	= 79.490 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 78.000 )	= 78.000 deg. F
temperature 30	( 75.730 )	= 75.730 deg. F
dewpoint 1	( 81.380 )	= 81.380 deg. F , 0.5302 psia
dewpoint 2	( 79.750 )	= 79.750 deg. F , 0.5027 psia
dewpoint 3	( 78.350 )	= 78.350 deg. F , 0.4801 psia
dewpoint 4	( 73.620 )	= 73.620 deg. F , 0.4102 psia
dewpoint 5	( 73.870 )	= 73.870 deg. F , 0.4137 psia
dewpoint 6	( 73.600 )	= 73.600 deg. F , 0.4100 psia
pressure 1	( 59.9217 )	= 59.9217 psia
pressure 2	( 59.9313 )	= 59.9313 psia

weighted averages, volume and air mass

temperature	=	82.41044 deg. F
pressure	=	59.92170 psia
vapor pressure	=	0.45946 psia
volume	=	2750000 cu. ft.
dry air mass	=	814213.46 lbm

## 1992 VEGP Unit 2 Type A Test

data set 24

time = 1945 date = 419

sensor	raw data	value
temperature 1	( 84.760 )	= 84.760 deg. F
temperature 2	( 84.140 )	= 84.140 deg. F
temperature 3	( 84.660 )	= 84.660 deg. F
temperature 4	( 84.530 )	= 84.530 deg. F
temperature 5	( 84.850 )	= 84.850 deg. F
temperature 6	( 84.750 )	= 84.750 deg. F
temperature 7	( 84.690 )	= 84.690 deg. F
temperature 8	( 85.520 )	= 85.520 deg. F
temperature 9	( 84.630 )	= 84.630 deg. F
temperature 10	( 84.450 )	= 84.450 deg. F
temperature 11	( 82.820 )	= 82.820 deg. F
temperature 12	( 84.500 )	= 84.500 deg. F
temperature 13	( 83.170 )	= 83.170 deg. F
temperature 14	( 83.780 )	= 83.780 deg. F
temperature 15	( 82.610 )	= 82.610 deg. F
temperature 16	( 82.530 )	= 82.530 deg. F
temperature 17	( 82.610 )	= 82.610 deg. F
temperature 18	( 82.450 )	= 82.450 deg. F
temperature 19	( 79.870 )	= 79.870 deg. F
temperature 20	( 82.260 )	= 82.260 deg. F
temperature 21	( 81.300 )	= 81.300 deg. F
temperature 22	( 80.450 )	= 80.450 deg. F
temperature 23	( 80.420 )	= 80.420 deg. F
temperature 24	( 78.800 )	= 78.800 deg. F
temperature 25	( 80.200 )	= 80.200 deg. F
temperature 26	( 79.500 )	= 79.500 deg. F
temperature 27	( 79.470 )	= 79.470 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 78.000 )	= 78.000 deg. F
temperature 30	( 75.710 )	= 75.710 deg. F
dewpoint 1	( 81.350 )	= 81.350 deg. F , 0.5296 psia
dewpoint 2	( 79.700 )	= 79.700 deg. F , 0.5019 psia
dewpoint 3	( 78.340 )	= 78.340 deg. F , 0.4800 psia
dewpoint 4	( 73.660 )	= 73.660 deg. F , 0.4108 psia
dewpoint 5	( 73.990 )	= 73.990 deg. F , 0.4154 psia
dewpoint 6	( 73.650 )	= 73.650 deg. F , 0.4107 psia
pressure 1	( 59.9165 )	= 59.9165 psia
pressure 2	( 59.9262 )	= 59.9262 psia

weighted averages, volume and air mass

temperature	=	82.36736 deg. F
pressure	=	59.91650 psia
vapor pressure	=	0.45961 psia
volume	=	2750000 cu. ft.
dry air mass	=	814204.87 lbm

## 1992 VEGP Unit 2 Type A Test

data set 25

time = 2000 date = 419

sensor	raw data	value
temperature 1	( 84.690 )	= 84.690 deg. F
temperature 2	( 84.090 )	= 84.090 deg. F
temperature 3	( 84.590 )	= 84.590 deg. F
temperature 4	( 84.470 )	= 84.470 deg. F
temperature 5	( 84.790 )	= 84.790 deg. F
temperature 6	( 84.700 )	= 84.700 deg. F
temperature 7	( 84.610 )	= 84.610 deg. F
temperature 8	( 85.460 )	= 85.460 deg. F
temperature 9	( 84.550 )	= 84.550 deg. F
temperature 10	( 84.370 )	= 84.370 deg. F
temperature 11	( 82.750 )	= 82.750 deg. F
temperature 12	( 84.420 )	= 84.420 deg. F
temperature 13	( 83.130 )	= 83.130 deg. F
temperature 14	( 83.730 )	= 83.730 deg. F
temperature 15	( 82.550 )	= 82.550 deg. F
temperature 16	( 82.470 )	= 82.470 deg. F
temperature 17	( 82.550 )	= 82.550 deg. F
temperature 18	( 82.400 )	= 82.400 deg. F
temperature 19	( 79.830 )	= 79.830 deg. F
temperature 20	( 82.220 )	= 82.220 deg. F
temperature 21	( 81.280 )	= 81.280 deg. F
temperature 22	( 80.440 )	= 80.440 deg. F
temperature 23	( 80.420 )	= 80.420 deg. F
temperature 24	( 78.800 )	= 78.800 deg. F
temperature 25	( 80.210 )	= 80.210 deg. F
temperature 26	( 79.500 )	= 79.500 deg. F
temperature 27	( 79.480 )	= 79.480 deg. F
temperature 28	( 78.400 )	= 78.400 deg. F
temperature 29	( 78.010 )	= 78.010 deg. F
temperature 30	( 75.720 )	= 75.720 deg. F
dewpoint 1	( 81.360 )	= 81.360 deg. F , 0.5298 psia
dewpoint 2	( 79.690 )	= 79.690 deg. F , 0.5017 psia
dewpoint 3	( 78.340 )	= 78.340 deg. F , 0.4809 psia
dewpoint 4	( 73.650 )	= 73.650 deg. F , 0.4107 psia
dewpoint 5	( 73.950 )	= 73.950 deg. F , 0.4148 psia
dewpoint 6	( 73.680 )	= 73.680 deg. F , 0.4111 psia
pressure 1	( 59.9114 )	= 59.9114 psia
pressure 2	( 59.9211 )	= 59.9211 psia

weighted averages, volume and air mass

temperature	=	82.32464 deg. F
pressure	=	59.91140 psia
vapor pressure	=	0.45959 psia
volume	=	2750000 cu. ft.
dry air mass	=	814199.54 lbm

## 1992 VEGP Unit 2 Type A Test

data set 26

time = 2015 date = 419

sensor	raw data	value
temperature 1	( 84.640 )	= 84.640 deg. F
temperature 2	( 84.030 )	= 84.030 deg. F
temperature 3	( 84.540 )	= 84.540 deg. F
temperature 4	( 84.400 )	= 84.400 deg. F
temperature 5	( 84.720 )	= 84.720 deg. F
temperature 6	( 84.650 )	= 84.650 deg. F
temperature 7	( 84.550 )	= 84.550 deg. F
temperature 8	( 85.390 )	= 85.390 deg. F
temperature 9	( 84.480 )	= 84.480 deg. F
temperature 10	( 84.330 )	= 84.330 deg. F
temperature 11	( 82.690 )	= 82.690 deg. F
temperature 12	( 84.340 )	= 84.340 deg. F
temperature 13	( 83.060 )	= 83.060 deg. F
temperature 14	( 83.660 )	= 83.660 deg. F
temperature 15	( 82.480 )	= 82.480 deg. F
temperature 16	( 82.400 )	= 82.400 deg. F
temperature 17	( 82.500 )	= 82.500 deg. F
temperature 18	( 82.360 )	= 82.360 deg. F
temperature 19	( 79.790 )	= 79.790 deg. F
temperature 20	( 82.150 )	= 82.150 deg. F
temperature 21	( 81.250 )	= 81.250 deg. F
temperature 22	( 80.430 )	= 80.430 deg. F
temperature 23	( 80.400 )	= 80.400 deg. F
temperature 24	( 78.790 )	= 78.790 deg. F
temperature 25	( 80.200 )	= 80.200 deg. F
temperature 26	( 79.490 )	= 79.490 deg. F
temperature 27	( 79.470 )	= 79.470 deg. F
temperature 28	( 78.390 )	= 78.390 deg. F
temperature 29	( 78.000 )	= 78.000 deg. F
temperature 30	( 75.710 )	= 75.710 deg. F
dewpoint 1	( 81.340 )	= 81.340 deg. F , 0.5295 psia
dewpoint 2	( 79.670 )	= 79.670 deg. F , 0.5014 psia
dewpoint 3	( 78.200 )	= 78.200 deg. F , 0.4778 psia
dewpoint 4	( 73.690 )	= 73.690 deg. F , 0.4112 psia
dewpoint 5	( 74.010 )	= 74.010 deg. F , 0.4156 psia
dewpoint 6	( 73.700 )	= 73.700 deg. F , 0.4113 psia
pressure 1	( 59.9066 )	= 59.9066 psia
pressure 2	( 59.9162 )	= 59.9162 psia

weighted averages, volume and air mass

temperature	=	82.27753 deg. F
pressure	=	59.90660 psia
vapor pressure	=	0.45930 psia
volume	=	2750000 cu. ft.
dry air mass	=	814208.54 lbm

## 1992 VEGP Unit 2 Type A Test

data set 27

time = 2030 date = 419

sensor	raw data	value
temperature 1	( 84.580 )	= 84.580 deg. F
temperature 2	( 83.980 )	= 83.980 deg. F
temperature 3	( 84.480 )	= 84.480 deg. F
temperature 4	( 84.360 )	= 84.360 deg. F
temperature 5	( 84.640 )	= 84.640 deg. F
temperature 6	( 84.570 )	= 84.570 deg. F
temperature 7	( 84.490 )	= 84.490 deg. F
temperature 8	( 85.340 )	= 85.340 deg. F
temperature 9	( 84.400 )	= 84.400 deg. F
temperature 10	( 84.240 )	= 84.240 deg. F
temperature 11	( 82.640 )	= 82.640 deg. F
temperature 12	( 84.250 )	= 84.250 deg. F
temperature 13	( 83.010 )	= 83.010 deg. F
temperature 14	( 83.580 )	= 83.580 deg. F
temperature 15	( 82.440 )	= 82.440 deg. F
temperature 16	( 82.350 )	= 82.350 deg. F
temperature 17	( 82.450 )	= 82.450 deg. F
temperature 18	( 82.310 )	= 82.310 deg. F
temperature 19	( 79.740 )	= 79.740 deg. F
temperature 20	( 82.070 )	= 82.070 deg. F
temperature 21	( 81.220 )	= 81.220 deg. F
temperature 22	( 80.420 )	= 80.420 deg. F
temperature 23	( 80.390 )	= 80.390 deg. F
temperature 24	( 78.770 )	= 78.770 deg. F
temperature 25	( 80.150 )	= 80.150 deg. F
temperature 26	( 79.480 )	= 79.480 deg. F
temperature 27	( 79.450 )	= 79.450 deg. F
temperature 28	( 78.380 )	= 78.380 deg. F
temperature 29	( 77.960 )	= 77.960 deg. F
temperature 30	( 75.690 )	= 75.690 deg. F
dewpoint 1	( 81.320 )	= 81.320 deg. F , 0.5291 psia
dewpoint 2	( 79.630 )	= 79.630 deg. F , 0.5007 psia
dewpoint 3	( 78.270 )	= 78.270 deg. F , 0.4789 psia
dewpoint 4	( 73.700 )	= 73.700 deg. F , 0.4113 psia
dewpoint 5	( 74.070 )	= 74.070 deg. F , 0.4165 psia
dewpoint 6	( 73.730 )	= 73.730 deg. F , 0.4118 psia
pressure 1	( 59.9008 )	= 59.9008 psia
pressure 2	( 59.9103 )	= 59.9103 psia

weighted averages, volume and air mass

temperature	=	82.22725 deg. F
pressure	=	59.90080 psia
vapor pressure	=	0.45953 psia
volume	=	2750000 cu. ft.
dry air mass	=	814201.46 lbm

## 1992 VEGP Unit 2 Type A Test

data set 28

time = 2045 date = 419

sensor	raw data	value
temperature 1	( 84.480 )	= 84.480 deg. F
temperature 2	( 83.890 )	= 83.890 deg. F
temperature 3	( 84.400 )	= 84.400 deg. F
temperature 4	( 84.280 )	= 84.280 deg. F
temperature 5	( 84.560 )	= 84.560 deg. F
temperature 6	( 84.510 )	= 84.510 deg. F
temperature 7	( 84.440 )	= 84.440 deg. F
temperature 8	( 85.270 )	= 85.270 deg. F
temperature 9	( 84.320 )	= 84.320 deg. F
temperature 10	( 84.170 )	= 84.170 deg. F
temperature 11	( 82.580 )	= 82.580 deg. F
temperature 12	( 84.210 )	= 84.210 deg. F
temperature 13	( 82.920 )	= 82.920 deg. F
temperature 14	( 83.530 )	= 83.530 deg. F
temperature 15	( 82.380 )	= 82.380 deg. F
temperature 16	( 82.290 )	= 82.290 deg. F
temperature 17	( 82.390 )	= 82.390 deg. F
temperature 18	( 82.250 )	= 82.250 deg. F
temperature 19	( 79.700 )	= 79.700 deg. F
temperature 20	( 82.010 )	= 82.010 deg. F
temperature 21	( 81.170 )	= 81.170 deg. F
temperature 22	( 80.390 )	= 80.390 deg. F
temperature 23	( 80.370 )	= 80.370 deg. F
temperature 24	( 78.770 )	= 78.770 deg. F
temperature 25	( 80.120 )	= 80.120 deg. F
temperature 26	( 79.460 )	= 79.460 deg. F
temperature 27	( 79.430 )	= 79.430 deg. F
temperature 28	( 78.360 )	= 78.360 deg. F
temperature 29	( 77.940 )	= 77.940 deg. F
temperature 30	( 75.670 )	= 75.670 deg. F
dewpoint 1	( 81.260 )	= 81.260 deg. F , 0.5281 psia
dewpoint 2	( 79.570 )	= 79.570 deg. F , 0.4997 psia
dewpoint 3	( 78.330 )	= 78.330 deg. F , 0.4798 psia
dewpoint 4	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 5	( 74.220 )	= 74.220 deg. F , 0.4186 psia
dewpoint 6	( 73.740 )	= 73.740 deg. F , 0.4119 psia
pressure 1	( 59.8948 )	= 59.8948 psia
pressure 2	( 59.9044 )	= 59.9044 psia

weighted averages, volume and air mass

temperature	=	82.17364 deg. F
pressure	=	59.89480 psia
vapor pressure	=	0.45950 psia
volume	=	2750000 cu. ft.
dry air mass	=	814200.31 lbm

## 1992 VEGP Unit 2 Type A Test

data set 29

time = 2100 date = 419

sensor	raw data	value
temperature 1	( 84.400 )	= 84.400 deg. F
temperature 2	( 83.790 )	= 83.790 deg. F
temperature 3	( 84.290 )	= 84.290 deg. F
temperature 4	( 84.210 )	= 84.210 deg. F
temperature 5	( 84.480 )	= 84.480 deg. F
temperature 6	( 84.430 )	= 84.430 deg. F
temperature 7	( 84.360 )	= 84.360 deg. F
temperature 8	( 85.210 )	= 85.210 deg. F
temperature 9	( 84.260 )	= 84.260 deg. F
temperature 10	( 84.080 )	= 84.080 deg. F
temperature 11	( 82.510 )	= 82.510 deg. F
temperature 12	( 84.110 )	= 84.110 deg. F
temperature 13	( 82.880 )	= 82.880 deg. F
temperature 14	( 83.470 )	= 83.470 deg. F
temperature 15	( 82.330 )	= 82.330 deg. F
temperature 16	( 82.250 )	= 82.250 deg. F
temperature 17	( 82.340 )	= 82.340 deg. F
temperature 18	( 82.190 )	= 82.190 deg. F
temperature 19	( 79.650 )	= 79.650 deg. F
temperature 20	( 81.990 )	= 81.990 deg. F
temperature 21	( 81.150 )	= 81.150 deg. F
temperature 22	( 80.380 )	= 80.380 deg. F
temperature 23	( 80.350 )	= 80.350 deg. F
temperature 24	( 78.750 )	= 78.750 deg. F
temperature 25	( 80.100 )	= 80.100 deg. F
temperature 26	( 79.460 )	= 79.460 deg. F
temperature 27	( 79.430 )	= 79.430 deg. F
temperature 28	( 78.350 )	= 78.350 deg. F
temperature 29	( 77.930 )	= 77.930 deg. F
temperature 30	( 75.660 )	= 75.660 deg. F
dewpoint 1	( 81.250 )	= 81.250 deg. F , 0.5279 psia
dewpoint 2	( 79.600 )	= 79.600 deg. F , 0.5002 psia
dewpoint 3	( 78.300 )	= 78.300 deg. F , 0.4793 psia
dewpoint 4	( 73.720 )	= 73.720 deg. F , 0.4116 psia
dewpoint 5	( 74.260 )	= 74.260 deg. F , 0.4191 psia
dewpoint 6	( 73.790 )	= 73.790 deg. F , 0.4126 psia
pressure 1	( 59.8891 )	= 59.8891 psia
pressure 2	( 59.8988 )	= 59.8988 psia

weighted averages, volume and air mass

temperature	=	82.12298 deg. F
pressure	=	59.88910 psia
vapor pressure	=	0.45986 psia
volume	=	2750000 cu. ft.
dry air mass	=	814193.42 lbm

## 1992 VEGP Unit 2 Type A Test

data set 30

time = 2115 date = 419

sensor	raw data	value
temperature 1	( 84.330 )	= 84.330 deg. F
temperature 2	( 83.720 )	= 83.720 deg. F
temperature 3	( 84.200 )	= 84.200 deg. F
temperature 4	( 84.150 )	= 84.150 deg. F
temperature 5	( 84.420 )	= 84.420 deg. F
temperature 6	( 84.360 )	= 84.360 deg. F
temperature 7	( 84.280 )	= 84.280 deg. F
temperature 8	( 85.150 )	= 85.150 deg. F
temperature 9	( 84.190 )	= 84.190 deg. F
temperature 10	( 84.000 )	= 84.000 deg. F
temperature 11	( 82.450 )	= 82.450 deg. F
temperature 12	( 84.060 )	= 84.060 deg. F
temperature 13	( 82.820 )	= 82.820 deg. F
temperature 14	( 83.410 )	= 83.410 deg. F
temperature 15	( 82.300 )	= 82.300 deg. F
temperature 16	( 82.190 )	= 82.190 deg. F
temperature 17	( 82.290 )	= 82.290 deg. F
temperature 18	( 82.150 )	= 82.150 deg. F
temperature 19	( 79.610 )	= 79.610 deg. F
temperature 20	( 81.920 )	= 81.920 deg. F
temperature 21	( 81.120 )	= 81.120 deg. F
temperature 22	( 80.350 )	= 80.350 deg. F
temperature 23	( 80.330 )	= 80.330 deg. F
temperature 24	( 78.740 )	= 78.740 deg. F
temperature 25	( 80.080 )	= 80.080 deg. F
temperature 26	( 79.430 )	= 79.430 deg. F
temperature 27	( 79.410 )	= 79.410 deg. F
temperature 28	( 78.320 )	= 78.320 deg. F
temperature 29	( 77.930 )	= 77.930 deg. F
temperature 30	( 75.630 )	= 75.630 deg. F
dewpoint 1	( 81.240 )	= 81.240 deg. F , 0.5277 psia
dewpoint 2	( 79.580 )	= 79.580 deg. F , 0.4999 psia
dewpoint 3	( 78.280 )	= 78.280 deg. F , 0.4790 psia
dewpoint 4	( 73.470 )	= 73.470 deg. F , 0.4082 psia
dewpoint 5	( 74.280 )	= 74.280 deg. F , 0.4194 psia
dewpoint 6	( 73.850 )	= 73.850 deg. F , 0.4134 psia
pressure 1	( 59.8836 )	= 59.8836 psia
pressure 2	( 59.8934 )	= 59.8934 psia

weighted averages, volume and air mass

temperature	=	82.07309 deg. F
pressure	=	59.88360 psia
vapor pressure	=	0.45927 psia
volume	=	2750000 cu. ft.
dry air mass	=	814201.02 lbm

## 1992 VEGP Unit 2 Type A Test

data set 31

time = 2130 date = 419

sensor	raw data	value
temperature 1	( 84.260 )	= 84.260 deg. F
temperature 2	( 83.650 )	= 83.650 deg. F
temperature 3	( 84.150 )	= 84.150 deg. F
temperature 4	( 84.080 )	= 84.080 deg. F
temperature 5	( 84.350 )	= 84.350 deg. F
temperature 6	( 84.290 )	= 84.290 deg. F
temperature 7	( 84.220 )	= 84.220 deg. F
temperature 8	( 85.090 )	= 85.090 deg. F
temperature 9	( 84.120 )	= 84.120 deg. F
temperature 10	( 83.960 )	= 83.960 deg. F
temperature 11	( 82.420 )	= 82.420 deg. F
temperature 12	( 83.990 )	= 83.990 deg. F
temperature 13	( 82.760 )	= 82.760 deg. F
temperature 14	( 83.360 )	= 83.360 deg. F
temperature 15	( 82.240 )	= 82.240 deg. F
temperature 16	( 82.140 )	= 82.140 deg. F
temperature 17	( 82.240 )	= 82.240 deg. F
temperature 18	( 82.110 )	= 82.110 deg. F
temperature 19	( 79.580 )	= 79.580 deg. F
temperature 20	( 81.890 )	= 81.890 deg. F
temperature 21	( 81.090 )	= 81.090 deg. F
temperature 22	( 80.330 )	= 80.330 deg. F
temperature 23	( 80.300 )	= 80.300 deg. F
temperature 24	( 78.740 )	= 78.740 deg. F
temperature 25	( 80.060 )	= 80.060 deg. F
temperature 26	( 79.420 )	= 79.420 deg. F
temperature 27	( 79.390 )	= 79.390 deg. F
temperature 28	( 78.320 )	= 78.320 deg. F
temperature 29	( 77.920 )	= 77.920 deg. F
temperature 30	( 75.630 )	= 75.630 deg. F
dewpoint 1	( 81.220 )	= 81.220 deg. F , 0.5274 psia
dewpoint 2	( 79.580 )	= 79.580 deg. F , 0.4999 psia
dewpoint 3	( 78.220 )	= 78.220 deg. F , 0.4781 psia
dewpoint 4	( 73.590 )	= 73.590 deg. F , 0.4098 psia
dewpoint 5	( 74.420 )	= 74.420 deg. F , 0.4214 psia
dewpoint 6	( 73.870 )	= 73.870 deg. F , 0.4137 psia
pressure 1	( 59.8784 )	= 59.8784 psia
pressure 2	( 59.8883 )	= 59.8883 psia

weighted averages, volume and air mass

temperature	=	82.03002 deg. F
pressure	=	59.87840 psia
vapor pressure	=	0.45962 psia
volume	=	2750000 cu. ft.
dry air mass	=	814189.79 lbm

## 1992 VEGP Unit 2 Type A Test

data set 32

time = 2145 date = 419

sensor	raw data	value
temperature 1	( 84.200 )	= 84.200 deg. F
temperature 2	( 83.590 )	= 83.590 deg. F
temperature 3	( 84.080 )	= 84.080 deg. F
temperature 4	( 84.000 )	= 84.000 deg. F
temperature 5	( 84.290 )	= 84.290 deg. F
temperature 6	( 84.220 )	= 84.220 deg. F
temperature 7	( 84.160 )	= 84.160 deg. F
temperature 8	( 85.040 )	= 85.040 deg. F
temperature 9	( 84.050 )	= 84.050 deg. F
temperature 10	( 83.910 )	= 83.910 deg. F
temperature 11	( 82.360 )	= 82.360 deg. F
temperature 12	( 83.910 )	= 83.910 deg. F
temperature 13	( 82.720 )	= 82.720 deg. F
temperature 14	( 83.310 )	= 83.310 deg. F
temperature 15	( 82.190 )	= 82.190 deg. F
temperature 16	( 82.090 )	= 82.090 deg. F
temperature 17	( 82.190 )	= 82.190 deg. F
temperature 18	( 82.050 )	= 82.050 deg. F
temperature 19	( 79.530 )	= 79.530 deg. F
temperature 20	( 81.840 )	= 81.840 deg. F
temperature 21	( 81.070 )	= 81.070 deg. F
temperature 22	( 80.340 )	= 80.340 deg. F
temperature 23	( 80.290 )	= 80.290 deg. F
temperature 24	( 78.730 )	= 78.730 deg. F
temperature 25	( 80.060 )	= 80.060 deg. F
temperature 26	( 79.410 )	= 79.410 deg. F
temperature 27	( 79.400 )	= 79.400 deg. F
temperature 28	( 78.330 )	= 78.330 deg. F
temperature 29	( 77.910 )	= 77.910 deg. F
temperature 30	( 75.620 )	= 75.620 deg. F
dewpoint 1	( 81.170 )	= 81.170 deg. F , 0.5265 psia
dewpoint 2	( 79.490 )	= 79.490 deg. F , 0.4984 psia
dewpoint 3	( 78.160 )	= 78.160 deg. F , 0.4771 psia
dewpoint 4	( 73.560 )	= 73.560 deg. F , 0.4094 psia
dewpoint 5	( 74.380 )	= 74.380 deg. F , 0.4208 psia
dewpoint 6	( 73.920 )	= 73.920 deg. F , 0.4144 psia
pressure 1	( 59.8735 )	= 59.8735 psia
pressure 2	( 59.8834 )	= 59.8834 psia

weighted averages, volume and air mass

temperature	=	81.98744 deg. F
pressure	=	59.87350 psia
vapor pressure	=	0.45901 psia
volume	=	2750000 cu. ft.
dry air mass	=	814194.99 lbm

## 1992 VEGP Unit 2 Type A Test

data set 33

time = 2200 date = 419

sensor	raw data	value
temperature 1	( 84.120 )	= 84.120 deg. F
temperature 2	( 83.520 )	= 83.520 deg. F
temperature 3	( 84.010 )	= 84.010 deg. F
temperature 4	( 83.950 )	= 83.950 deg. F
temperature 5	( 84.230 )	= 84.230 deg. F
temperature 6	( 84.170 )	= 84.170 deg. F
temperature 7	( 84.080 )	= 84.080 deg. F
temperature 8	( 84.950 )	= 84.950 deg. F
temperature 9	( 83.990 )	= 83.990 deg. F
temperature 10	( 83.820 )	= 83.820 deg. F
temperature 11	( 82.300 )	= 82.300 deg. F
temperature 12	( 83.850 )	= 83.850 deg. F
temperature 13	( 82.670 )	= 82.670 deg. F
temperature 14	( 83.250 )	= 83.250 deg. F
temperature 15	( 82.140 )	= 82.140 deg. F
temperature 16	( 82.040 )	= 82.040 deg. F
temperature 17	( 82.140 )	= 82.140 deg. F
temperature 18	( 81.990 )	= 81.990 deg. F
temperature 19	( 79.480 )	= 79.480 deg. F
temperature 20	( 81.790 )	= 81.790 deg. F
temperature 21	( 81.040 )	= 81.040 deg. F
temperature 22	( 80.300 )	= 80.300 deg. F
temperature 23	( 80.270 )	= 80.270 deg. F
temperature 24	( 78.720 )	= 78.720 deg. F
temperature 25	( 80.040 )	= 80.040 deg. F
temperature 26	( 79.390 )	= 79.390 deg. F
temperature 27	( 79.380 )	= 79.380 deg. F
temperature 28	( 78.310 )	= 78.310 deg. F
temperature 29	( 77.890 )	= 77.890 deg. F
temperature 30	( 75.600 )	= 75.600 deg. F
dewpoint 1	( 81.170 )	= 81.170 deg. F , 0.5265 psia
dewpoint 2	( 79.490 )	= 79.490 deg. F , 0.4984 psia
dewpoint 3	( 78.150 )	= 78.150 deg. F , 0.4770 psia
dewpoint 4	( 73.700 )	= 73.700 deg. F , 0.4113 psia
dewpoint 5	( 74.440 )	= 74.440 deg. F , 0.4217 psia
dewpoint 6	( 73.930 )	= 73.930 deg. F , 0.4145 psia
pressure 1	( 59.8689 )	= 59.8689 psia
pressure 2	( 59.8787 )	= 59.8787 psia

weighted averages, volume and air mass

temperature	=	81.93732 deg. F
pressure	=	59.86890 psia
vapor pressure	=	0.45945 psia
volume	=	2750000 cu. ft.
dry air mass	=	814201.29 lbm

## 1992 VEGP Unit 2 Type A Test

data set 34

time = 2215 date = 419

sensor	raw data	value
temperature 1	( 84.070 )	= 84.070 deg. F
temperature 2	( 83.460 )	= 83.460 deg. F
temperature 3	( 83.940 )	= 83.940 deg. F
temperature 4	( 83.880 )	= 83.880 deg. F
temperature 5	( 84.170 )	= 84.1 deg. F
temperature 6	( 84.110 )	= 84.1 deg. F
temperature 7	( 84.030 )	= 84.030 deg. F
temperature 8	( 84.900 )	= 84.900 deg. F
temperature 9	( 83.910 )	= 83.910 deg. F
temperature 10	( 83.760 )	= 83.760 deg. F
temperature 11	( 82.260 )	= 82.260 deg. F
temperature 12	( 83.800 )	= 83.800 deg. F
temperature 13	( 82.610 )	= 82.610 deg. F
temperature 14	( 83.210 )	= 83.210 deg. F
temperature 15	( 82.080 )	= 82.080 deg. F
temperature 16	( 81.990 )	= 81.990 deg. F
temperature 17	( 82.100 )	= 82.100 deg. F
temperature 18	( 81.950 )	= 81.950 deg. F
temperature 19	( 79.440 )	= 79.440 deg. F
temperature 20	( 81.760 )	= 81.760 deg. F
temperature 21	( 81.030 )	= 81.030 deg. F
temperature 22	( 80.300 )	= 80.300 deg. F
temperature 23	( 80.270 )	= 80.270 deg. F
temperature 24	( 78.710 )	= 78.710 deg. F
temperature 25	( 80.040 )	= 80.040 deg. F
temperature 26	( 79.390 )	= 79.390 deg. F
temperature 27	( 79.370 )	= 79.370 deg. F
temperature 28	( 78.310 )	= 78.310 deg. F
temperature 29	( 77.900 )	= 77.900 deg. F
temperature 30	( 75.600 )	= 75.600 deg. F
dewpoint 1	( 81.150 )	= 81.150 deg. F , 0.5262 psia
dewpoint 2	( 79.420 )	= 79.420 deg. F , 0.4973 psia
dewpoint 3	( 78.130 )	= 78.130 deg. F , 0.4767 psia
dewpoint 4	( 73.680 )	= 73.680 deg. F , 0.4111 psia
dewpoint 5	( 74.520 )	= 74.520 deg. F , 0.4228 psia
dewpoint 6	( 73.970 )	= 73.970 deg. F , 0.4151 psia
pressure 1	( 59.8643 )	= 59.8643 psia
pressure 2	( 59.8741 )	= 59.8741 psia

weighted averages, volume and air mass

temperature	=	81.89922 deg. F
pressure	=	59.86430 psia
vapor pressure	=	0.45930 psia
volume	=	2750000 cu. ft.
dry air mass	=	814197.51 lbm

## 1992 VEGP Unit 2 Type A Test

data set 35

time = 2230 date = 419

sensor	raw data	=	value
temperature 1	( 84.020 )	=	84.020 deg. F
temperature 2	( 83.410 )	=	83.410 deg. F
temperature 3	( 83.910 )	=	83.910 deg. F
temperature 4	( 83.830 )	=	83.830 deg. F
temperature 5	( 84.120 )	=	84.120 deg. F
temperature 6	( 84.060 )	=	84.060 deg. F
temperature 7	( 83.970 )	=	83.970 deg. F
temperature 8	( 84.870 )	=	84.870 deg. F
temperature 9	( 83.870 )	=	83.870 deg. F
temperature 10	( 83.700 )	=	83.700 deg. F
temperature 11	( 82.210 )	=	82.210 deg. F
temperature 12	( 83.740 )	=	83.740 deg. F
temperature 13	( 82.580 )	=	82.580 deg. F
temperature 14	( 83.170 )	=	83.170 deg. F
temperature 15	( 82.050 )	=	82.050 deg. F
temperature 16	( 81.950 )	=	81.950 deg. F
temperature 17	( 82.070 )	=	82.070 deg. F
temperature 18	( 81.910 )	=	81.910 deg. F
temperature 19	( 79.390 )	=	79.390 deg. F
temperature 20	( 81.710 )	=	81.710 deg. F
temperature 21	( 81.000 )	=	81.000 deg. F
temperature 22	( 80.290 )	=	80.290 deg. F
temperature 23	( 80.250 )	=	80.250 deg. F
temperature 24	( 78.690 )	=	78.690 deg. F
temperature 25	( 80.020 )	=	80.020 deg. F
temperature 26	( 79.370 )	=	79.370 deg. F
temperature 27	( 79.350 )	=	79.350 deg. F
temperature 28	( 78.300 )	=	78.300 deg. F
temperature 29	( 77.880 )	=	77.880 deg. F
temperature 30	( 75.500 )	=	75.500 deg. F
dewpoint 1	( 81.100 )	=	81.100 deg. F , 0.5253 psia
dewpoint 2	( 79.500 )	=	79.500 deg. F , 0.4986 psia
dewpoint 3	( 78.110 )	=	78.110 deg. F , 0.4763 psia
dewpoint 4	( 73.700 )	=	73.700 deg. F , 0.4113 psia
dewpoint 5	( 74.530 )	=	74.530 deg. F , 0.4229 psia
dewpoint 6	( 73.980 )	=	73.980 deg. F , 0.4152 psia
pressure 1	( 59.8597 )	=	59.8597 psia
pressure 2	( 59.8694 )	=	59.8694 psia

weighted averages, volume and air mass

temperature	=	81.86298 deg. F
pressure	=	59.85970 psia
vapor pressure	=	0.45945 psia
volume	=	2750000 cu. ft.
dry air mass	=	814186.92 lbm

## 1992 VEGP Unit 2 Type A Test

data set 36

time = 2245 date = 419

sensor	raw data	value
temperature 1	( 83.970 )	= 83.970 deg. F
temperature 2	( 83.370 )	= 83.370 deg. F
temperature 3	( 83.850 )	= 83.850 deg. F
temperature 4	( 83.790 )	= 83.790 deg. F
temperature 5	( 84.060 )	= 84.060 deg. F
temperature 6	( 84.000 )	= 84.000 deg. F
temperature 7	( 83.910 )	= 83.910 deg. F
temperature 8	( 84.790 )	= 84.790 deg. F
temperature 9	( 83.810 )	= 83.810 deg. F
temperature 10	( 83.680 )	= 83.680 deg. F
temperature 11	( 82.180 )	= 82.180 deg. F
temperature 12	( 83.660 )	= 83.660 deg. F
temperature 13	( 82.530 )	= 82.530 deg. F
temperature 14	( 83.120 )	= 83.120 deg. F
temperature 15	( 82.020 )	= 82.020 deg. F
temperature 16	( 81.910 )	= 81.910 deg. F
temperature 17	( 82.010 )	= 82.010 deg. F
temperature 18	( 81.880 )	= 81.880 deg. F
temperature 19	( 79.360 )	= 79.360 deg. F
temperature 20	( 81.660 )	= 81.660 deg. F
temperature 21	( 80.980 )	= 80.980 deg. F
temperature 22	( 80.280 )	= 80.280 deg. F
temperature 23	( 80.240 )	= 80.240 deg. F
temperature 24	( 78.680 )	= 78.680 deg. F
temperature 25	( 80.010 )	= 80.010 deg. F
temperature 26	( 79.360 )	= 79.360 deg. F
temperature 27	( 79.350 )	= 79.350 deg. F
temperature 28	( 78.300 )	= 78.300 deg. F
temperature 29	( 77.880 )	= 77.880 deg. F
temperature 30	( 75.580 )	= 75.580 deg. F
dewpoint 1	( 81.070 )	= 81.070 deg. F , 0.5248 psia
dewpoint 2	( 79.470 )	= 79.470 deg. F , 0.4981 psia
dewpoint 3	( 78.100 )	= 78.100 deg. F , 0.4762 psia
dewpoint 4	( 73.720 )	= 73.720 deg. F , 0.4116 psia
dewpoint 5	( 74.550 )	= 74.550 deg. F , 0.4232 psia
dewpoint 6	( 73.980 )	= 73.980 deg. F , 0.4152 psia
pressure 1	( 59.8553 )	= 59.8553 psia
pressure 2	( 59.8651 )	= 59.8651 psia

weighted averages, volume and air mass

temperature	=	81.82546 deg. F
pressure	=	59.85530 psia
vapor pressure	=	0.45933 psia
volume	=	2750000 cu. ft.
dry air mass	=	814184.63 lbm

## 1992 VEGP Unit 2 Verification

data set 1

time = 0 date = 420

sensor	raw data	value
temperature 1	( 83.720 )	= 83.720 deg. F
temperature 2	( 83.100 )	= 83.100 deg. F
temperature 3	( 83.590 )	= 83.590 deg. F
temperature 4	( 83.530 )	= 83.530 deg. F
temperature 5	( 83.780 )	= 83.780 deg. F
temperature 6	( 83.730 )	= 83.730 deg. F
temperature 7	( 83.640 )	= 83.640 deg. F
temperature 8	( 84.540 )	= 84.540 deg. F
temperature 9	( 83.520 )	= 83.520 deg. F
temperature 10	( 83.400 )	= 83.400 deg. F
temperature 11	( 81.940 )	= 81.940 deg. F
temperature 12	( 83.420 )	= 83.420 deg. F
temperature 13	( 82.290 )	= 82.290 deg. F
temperature 14	( 82.890 )	= 82.890 deg. F
temperature 15	( 81.800 )	= 81.800 deg. F
temperature 16	( 81.690 )	= 81.690 deg. F
temperature 17	( 81.800 )	= 81.800 deg. F
temperature 18	( 81.660 )	= 81.660 deg. F
temperature 19	( 79.180 )	= 79.180 deg. F
temperature 20	( 81.480 )	= 81.480 deg. F
temperature 21	( 80.880 )	= 80.880 deg. F
temperature 22	( 80.210 )	= 80.210 deg. F
temperature 23	( 80.180 )	= 80.180 deg. F
temperature 24	( 78.660 )	= 78.660 deg. F
temperature 25	( 79.970 )	= 79.970 deg. F
temperature 26	( 79.330 )	= 79.330 deg. F
temperature 27	( 79.330 )	= 79.330 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.880 )	= 77.880 deg. F
temperature 30	( 75.560 )	= 75.560 deg. F
dewpoint 1	( 81.010 )	= 81.010 deg. F , 0.5238 psia
dewpoint 2	( 79.380 )	= 79.380 deg. F , 0.4966 psia
dewpoint 3	( 78.030 )	= 78.030 deg. F , 0.4751 psia
dewpoint 4	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 5	( 74.700 )	= 74.700 deg. F , 0.4254 psia
dewpoint 6	( 74.050 )	= 74.050 deg. F , 0.4162 psia
pressure 1	( 59.8289 )	= 59.8289 psia
pressure 2	( 59.8387 )	= 59.8387 psia

weighted averages, volume and air mass

temperature	=	81.64133 deg. F
pressure	=	59.82890 psia
vapor pressure	=	0.45892 psia
volume	=	2750000 cu. ft.
dry air mass	=	814105.24 lbm

## 1992 VEGP Unit 2 Verification

data set 2

time = 15 date = 420

sensor	raw data	value
temperature 1	( 83.680 )	= 83.680 deg. F
temperature 2	( 33.050 )	= 83.050 deg. F
temperature 3	( 83.560 )	= 83.560 deg. F
temperature 4	( 83.490 )	= 83.490 deg. F
temperature 5	( 83.740 )	= 83.740 deg. F
temperature 6	( 83.680 )	= 83.680 deg. F
temperature 7	( 83.590 )	= 83.590 deg. F
temperature 8	( 84.480 )	= 84.480 deg. F
temperature 9	( 83.460 )	= 83.460 deg. F
temperature 10	( 83.340 )	= 83.340 deg. F
temperature 11	( 81.900 )	= 81.900 deg. F
temperature 12	( 83.360 )	= 83.360 deg. F
temperature 13	( 82.240 )	= 82.240 deg. F
temperature 14	( 82.860 )	= 82.860 deg. F
temperature 15	( 81.770 )	= 81.770 deg. F
temperature 16	( 81.660 )	= 81.660 deg. F
temperature 17	( 81.760 )	= 81.760 deg. F
temperature 18	( 81.620 )	= 81.620 deg. F
temperature 19	( 79.150 )	= 79.150 deg. F
temperature 20	( 81.440 )	= 81.440 deg. F
temperature 21	( 80.860 )	= 80.860 deg. F
temperature 22	( 80.200 )	= 80.200 deg. F
temperature 23	( 80.170 )	= 80.170 deg. F
temperature 24	( 78.640 )	= 78.640 deg. F
temperature 25	( 79.950 )	= 79.950 deg. F
temperature 26	( 79.320 )	= 79.320 deg. F
temperature 27	( 79.320 )	= 79.320 deg. F
temperature 28	( 78.280 )	= 78.280 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.550 )	= 75.550 deg. F
dewpoint 1	( 81.010 )	= 81.010 deg. F , 0.5238 psia
dewpoint 2	( 79.320 )	= 79.320 deg. F , 0.4957 psia
dewpoint 3	( 77.940 )	= 77.940 deg. F , 0.4737 psia
dewpoint 4	( 73.580 )	= 73.580 deg. F , 0.4097 psia
dewpoint 5	( 74.690 )	= 74.690 deg. F , 0.4252 psia
dewpoint 6	( 74.080 )	= 74.080 deg. F , 0.4166 psia
pressure 1	( 59.8238 )	= 59.8238 psia
pressure 2	( 59.8336 )	= 59.8336 psia

weighted averages, volume and air mass

temperature	=	81.60735 deg. F
pressure	=	59.82380 psia
vapor pressure	=	0.45838 psia
volume	=	2750000 cu. ft.
dry air mass	=	814093.86 lbm

## 1992 VEGP Unit 2 Verification

data set 3

time = 30 date = 420

sensor	raw data	value
temperature 1	( 83.630 )	= 83.630 deg. F
temperature 2	( 83.010 )	= 83.010 deg. F
temperature 3	( 83.520 )	= 83.520 deg. F
temperature 4	( 83.430 )	= 83.430 deg. F
temperature 5	( 83.690 )	= 83.690 deg. F
temperature 6	( 83.640 )	= 83.640 deg. F
temperature 7	( 83.550 )	= 83.550 deg. F
temperature 8	( 84.430 )	= 84.430 deg. F
temperature 9	( 83.400 )	= 83.400 deg. F
temperature 10	( 83.310 )	= 83.310 deg. F
temperature 11	( 81.870 )	= 81.870 deg. F
temperature 12	( 83.300 )	= 83.300 deg. F
temperature 13	( 82.210 )	= 82.210 deg. F
temperature 14	( 82.820 )	= 82.820 deg. F
temperature 15	( 81.730 )	= 81.730 deg. F
temperature 16	( 81.620 )	= 81.620 deg. F
temperature 17	( 81.740 )	= 81.740 deg. F
temperature 18	( 81.590 )	= 81.590 deg. F
temperature 19	( 79.140 )	= 79.140 deg. F
temperature 20	( 81.410 )	= 81.410 deg. F
temperature 21	( 80.830 )	= 80.830 deg. F
temperature 22	( 80.190 )	= 80.190 deg. F
temperature 23	( 80.160 )	= 80.160 deg. F
temperature 24	( 78.640 )	= 78.640 deg. F
temperature 25	( 79.940 )	= 79.940 deg. F
temperature 26	( 79.310 )	= 79.310 deg. F
temperature 27	( 79.310 )	= 79.310 deg. F
temperature 28	( 78.280 )	= 78.280 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.540 )	= 75.540 deg. F
dewpoint 1	( 80.930 )	= 80.930 deg. F , 0.5224 psia
dewpoint 2	( 79.290 )	= 79.290 deg. F , 0.4952 psia
dewpoint 3	( 77.910 )	= 77.910 deg. F , 0.4732 psia
dewpoint 4	( 73.700 )	= 73.700 deg. F , 0.4113 psia
dewpoint 5	( 74.780 )	= 74.780 deg. F , 0.4265 psia
dewpoint 6	( 74.100 )	= 74.100 deg. F , 0.4169 psia
pressure 1	( 59.8187 )	= 59.8187 psia
pressure 2	( 59.8286 )	= 59.8286 psia

weighted averages, volume and air mass

temperature	=	81.57660 deg. F
pressure	=	59.81870 psia
vapor pressure	=	0.45848 psia
volume	=	2750000 cu. ft.
dry air mass	=	814068.69 lbm

## 1992 VEGP Unit 2 Verification

data set 4

time = 45 date = 420

sensor	raw data	value
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temperature 1	( 83.600 )	= 83.600 deg. F
temperature 2	( 82.970 )	= 82.970 deg. F
temperature 3	( 83.480 )	= 83.480 deg. F
temperature 4	( 83.400 )	= 83.400 deg. F
temperature 5	( 83.650 )	= 83.650 deg. F
temperature 6	( 83.600 )	= 83.600 deg. F
temperature 7	( 83.510 )	= 83.510 deg. F
temperature 8	( 84.390 )	= 84.390 deg. F
temperature 9	( 83.360 )	= 83.360 deg. F
temperature 10	( 83.270 )	= 83.270 deg. F
temperature 11	( 81.830 )	= 81.830 deg. F
temperature 12	( 83.250 )	= 83.250 deg. F
temperature 13	( 82.160 )	= 82.160 deg. F
temperature 14	( 82.780 )	= 82.780 deg. F
temperature 15	( 81.710 )	= 81.710 deg. F
temperature 16	( 81.600 )	= 81.600 deg. F
temperature 17	( 81.700 )	= 81.700 deg. F
temperature 18	( 81.550 )	= 81.550 deg. F
temperature 19	( 79.100 )	= 79.100 deg. F
temperature 20	( 81.380 )	= 81.380 deg. F
temperature 21	( 80.820 )	= 80.820 deg. F
temperature 22	( 80.180 )	= 80.180 deg. F
temperature 23	( 80.160 )	= 80.160 deg. F
temperature 24	( 78.630 )	= 78.630 deg. F
temperature 25	( 79.950 )	= 79.950 deg. F
temperature 26	( 79.310 )	= 79.310 deg. F
temperature 27	( 79.310 )	= 79.310 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.880 )	= 77.880 deg. F
temperature 30	( 75.550 )	= 75.550 deg. F
dewpoint 1	( 80.900 )	= 80.900 deg. F , 0.5219 psia
dewpoint 2	( 79.320 )	= 79.320 deg. F , 0.4957 psia
dewpoint 3	( 77.940 )	= 77.940 deg. F , 0.4737 psia
dewpoint 4	( 73.550 )	= 73.550 deg. F , 0.4093 psia
dewpoint 5	( 74.810 )	= 74.810 deg. F , 0.4269 psia
dewpoint 6	( 74.110 )	= 74.110 deg. F , 0.4170 psia
pressure 1	( 59.8137 )	= 59.8137 psia
pressure 2	( 59.8235 )	= 59.8235 psia

weighted averages, volume and air mass

temperature	=	81.54965 deg. F
pressure	=	59.81370 psia
vapor pressure	=	0.45829 psia
volume	=	2750000 cu. ft.
dry air mass	=	814043.27 lbm

## 1992 VEGP Unit 2 Verification

data set 5

time = 100 date = 420

sensor	raw data	value
temperature 1	( 83.550 )	= 83.550 deg. F
temperature 2	( 82.920 )	= 82.920 deg. F
temperature 3	( 83.440 )	= 83.440 deg. F
temperature 4	( 83.350 )	= 83.350 deg. F
temperature 5	( 83.600 )	= 83.600 deg. F
temperature 6	( 83.560 )	= 83.560 deg. F
temperature 7	( 83.440 )	= 83.440 deg. F
temperature 8	( 84.330 )	= 84.330 deg. F
temperature 9	( 83.310 )	= 83.310 deg. F
temperature 10	( 83.240 )	= 83.240 deg. F
temperature 11	( 81.780 )	= 81.780 deg. F
temperature 12	( 83.210 )	= 83.210 deg. F
temperature 13	( 82.130 )	= 82.130 deg. F
temperature 14	( 82.740 )	= 82.740 deg. F
temperature 15	( 81.660 )	= 81.660 deg. F
temperature 16	( 81.560 )	= 81.560 deg. F
temperature 17	( 81.650 )	= 81.650 deg. F
temperature 18	( 81.520 )	= 81.520 deg. F
temperature 19	( 79.070 )	= 79.070 deg. F
temperature 20	( 81.360 )	= 81.360 deg. F
temperature 21	( 80.800 )	= 80.800 deg. F
temperature 22	( 80.170 )	= 80.170 deg. F
temperature 23	( 80.160 )	= 80.160 deg. F
temperature 24	( 78.630 )	= 78.630 deg. F
temperature 25	( 79.940 )	= 79.940 deg. F
temperature 26	( 79.300 )	= 79.300 deg. F
temperature 27	( 79.310 )	= 79.310 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.540 )	= 75.540 deg. F
dewpoint 1	( 80.910 )	= 80.910 deg. F , 0.5221 psia
dewpoint 2	( 79.270 )	= 79.270 deg. F , 0.4949 psia
dewpoint 3	( 77.890 )	= 77.890 deg. F , 0.4729 psia
dewpoint 4	( 73.580 )	= 73.580 deg. F , 0.4097 psia
dewpoint 5	( 74.790 )	= 74.790 deg. F , 0.4266 psia
dewpoint 6	( 74.110 )	= 74.110 deg. F , 0.4170 psia
pressure 1	( 59.8089 )	= 59.8089 psia
pressure 2	( 59.8185 )	= 59.8185 psia

weighted averages, volume and air mass

temperature	=	81.51676 deg. F
pressure	=	59.80890 psia
vapor pressure	=	0.45806 psia
volume	=	2750000 cu. ft.
dry air mass	=	814030.12 lbm

## 1992 VEGP Unit 2 Verification

data set 6

time = 115 date = 420

sensor	raw data	=	value
temperature 1	( 83.500 )	=	83.500 deg. F
temperature 2	( 82.880 )	=	82.880 deg. F
temperature 3	( 83.400 )	=	83.400 deg. F
temperature 4	( 83.310 )	=	83.310 deg. F
temperature 5	( 83.550 )	=	83.550 deg. F
temperature 6	( 83.520 )	=	83.520 deg. F
temperature 7	( 83.420 )	=	83.420 deg. F
temperature 8	( 84.290 )	=	84.290 deg. F
temperature 9	( 83.260 )	=	83.260 deg. F
temperature 10	( 83.160 )	=	83.160 deg. F
temperature 11	( 81.740 )	=	81.740 deg. F
temperature 12	( 83.160 )	=	83.160 deg. F
temperature 13	( 82.090 )	=	82.090 deg. F
temperature 14	( 82.690 )	=	82.690 deg. F
temperature 15	( 81.630 )	=	81.630 deg. F
temperature 16	( 81.510 )	=	81.510 deg. F
temperature 17	( 81.620 )	=	81.620 deg. F
temperature 18	( 81.490 )	=	81.490 deg. F
temperature 19	( 79.050 )	=	79.050 deg. F
temperature 20	( 81.310 )	=	81.310 deg. F
temperature 21	( 80.780 )	=	80.780 deg. F
temperature 22	( 80.140 )	=	80.140 deg. F
temperature 23	( 80.140 )	=	80.140 deg. F
temperature 24	( 78.620 )	=	78.620 deg. F
temperature 25	( 79.920 )	=	79.920 deg. F
temperature 26	( 79.280 )	=	79.280 deg. F
temperature 27	( 79.300 )	=	79.300 deg. F
temperature 28	( 78.270 )	=	78.270 deg. F
temperature 29	( 77.860 )	=	77.860 deg. F
temperature 30	( 75.530 )	=	75.530 deg. F
dewpoint 1	( 80.860 )	=	80.860 deg. F , 0.5213 psia
dewpoint 2	( 79.270 )	=	79.270 deg. F , 0.4949 psia
dewpoint 3	( 77.890 )	=	77.890 deg. F , 0.4729 psia
dewpoint 4	( 73.660 )	=	73.660 deg. F , 0.4108 psia
dewpoint 5	( 74.750 )	=	74.750 deg. F , 0.4267 psia
dewpoint 6	( 74.120 )	=	74.120 deg. F , 0.4111 psia
pressure 1	( 59.8043 )	=	59.8043 psia
pressure 2	( 59.8139 )	=	59.8139 psia

weighted averages, volume and air mass

temperature	=	81.48255 deg. F
pressure	=	59.80430 psia
vapor pressure	=	0.45808 psia
volume	=	2750000 cu. ft.
dry air mass	=	814018.14 lbm

## 1992 VEGP Unit 2 Verification

data set 7

time = 130 date = 420

sensor	raw data	value
temperature 1	( 83.470 )	= 83.470 deg. F
temperature 2	( 82.850 )	= 82.850 deg. F
temperature 3	( 83.350 )	= 83.350 deg. F
temperature 4	( 83.210 )	= 83.260 deg. F
temperature 5	( 83.510 )	= 83.510 deg. F
temperature 6	( 83.470 )	= 83.470 deg. F
temperature 7	( 83.410 )	= 83.410 deg. F
temperature 8	( 84.240 )	= 84.240 deg. F
temperature 9	( 83.200 )	= 83.200 deg. F
temperature 10	( 83.130 )	= 83.130 deg. F
temperature 11	( 81.700 )	= 81.700 deg. F
temperature 12	( 83.110 )	= 83.110 deg. F
temperature 13	( 82.060 )	= 82.060 deg. F
temperature 14	( 82.660 )	= 82.660 deg. F
temperature 15	( 81.590 )	= 81.590 deg. F
temperature 16	( 81.480 )	= 81.480 deg. F
temperature 17	( 81.580 )	= 81.580 deg. F
temperature 18	( 81.460 )	= 81.460 deg. F
temperature 19	( 79.020 )	= 79.030 deg. F
temperature 20	( 81.280 )	= 81.280 deg. F
temperature 21	( 80.760 )	= 80.760 deg. F
temperature 22	( 80.130 )	= 80.130 deg. F
temperature 23	( 80.140 )	= 80.140 deg. F
temperature 24	( 78.620 )	= 78.620 deg. F
temperature 25	( 79.920 )	= 79.920 deg. F
temperature 26	( 79.280 )	= 79.280 deg. F
temperature 27	( 79.290 )	= 79.290 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.860 )	= 77.860 deg. F
temperature 30	( 75.520 )	= 75.520 deg. F
dewpoint 1	( 80.830 )	= 80.830 deg. F , 0.5207 psia
dewpoint 2	( 79.230 )	= 79.230 deg. F , 0.4942 psia
dewpoint 3	( 77.920 )	= 77.920 deg. F , 0.4734 psia
dewpoint 4	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 5	( 74.690 )	= 74.690 deg. F , 0.4252 psia
dewpoint 6	( 74.130 )	= 74.130 deg. F , 0.4173 psia
pressure 1	( 59.7995 )	= 59.7995 psia
pressure 2	( 59.8091 )	= 59.8091 psia

weighted averages, volume and air mass

temperature	=	81.45444 deg. F
pressure	=	59.79950 psia
vapor pressure	=	0.45785 psia
volume	=	2750000 cu. ft.
dry air mass	=	813997.85 lbm

## 1992 VEGP Unit 2 Verification

data set 8

time = 145 date = 420

sensor	raw data	value
temperature 1	( 83.430 )	= 83.430 deg. F
temperature 2	( 82.810 )	= 82.810 deg. F
temperature 3	( 83.300 )	= 83.300 deg. F
temperature 4	( 83.230 )	= 83.230 deg. F
temperature 5	( 83.450 )	= 83.450 deg. F
temperature 6	( 83.430 )	= 83.430 deg. F
temperature 7	( 83.310 )	= 83.310 deg. F
temperature 8	( 84.190 )	= 84.190 deg. F
temperature 9	( 83.160 )	= 83.160 deg. F
temperature 10	( 83.090 )	= 83.090 deg. F
temperature 11	( 81.660 )	= 81.660 deg. F
temperature 12	( 83.080 )	= 83.080 deg. F
temperature 13	( 82.010 )	= 82.010 deg. F
temperature 14	( 82.610 )	= 82.610 deg. F
temperature 15	( 81.550 )	= 81.550 deg. F
temperature 16	( 81.450 )	= 81.450 deg. F
temperature 17	( 81.550 )	= 81.550 deg. F
temperature 18	( 81.410 )	= 81.410 deg. F
temperature 19	( 79.010 )	= 79.010 deg. F
temperature 20	( 81.250 )	= 81.250 deg. F
temperature 21	( 80.760 )	= 80.760 deg. F
temperature 22	( 80.130 )	= 80.130 deg. F
temperature 23	( 80.130 )	= 80.130 deg. F
temperature 24	( 78.610 )	= 78.610 deg. F
temperature 25	( 79.910 )	= 79.910 deg. F
temperature 26	( 79.280 )	= 79.280 deg. F
temperature 27	( 79.300 )	= 79.300 deg. F
temperature 28	( 78.260 )	= 78.260 deg. F
temperature 29	( 77.880 )	= 77.880 deg. F
temperature 30	( 75.530 )	= 75.530 deg. F
dewpoint 1	( 80.850 )	= 80.850 deg. F , 0.5211 psia
dewpoint 2	( 79.170 )	= 79.170 deg. F , 0.4932 psia
dewpoint 3	( 77.880 )	= 77.880 deg. F , 0.4727 psia
dewpoint 4	( 73.580 )	= 73.580 deg. F , 0.4097 psia
dewpoint 5	( 74.810 )	= 74.810 deg. F , 0.4269 psia
dewpoint 6	( 74.180 )	= 74.180 deg. F , 0.4180 psia
pressure 1	( 59.7945 )	= 59.7945 psia
pressure 2	( 59.8046 )	= 59.8046 psia

weighted averages, volume and air mass

temperature	=	81.42403 deg. F
pressure	=	59.79450 psia
vapor pressure	=	0.45777 psia
volume	=	2750000 cu. ft.
dry air mass	=	813976.01 lbm

## 1992 VEGP Unit 2 Verification

data b 9

time = 200 date = 420

sensor	raw data	value
temperature 1	( 83.380 )	= 83.380 deg. F
temperature 2	( 82.770 )	= 82.770 deg. F
temperature 3	( 83.270 )	= 83.270 deg. F
temperature 4	( 83.180 )	= 83.180 deg. F
temperature 5	( 83.420 )	= 83.420 deg. F
temperature 6	( 83.390 )	= 83.390 deg. F
temperature 7	( 83.310 )	= 83.310 deg. F
temperature 8	( 84.160 )	= 84.160 deg. F
temperature 9	( 83.110 )	= 83.110 deg. F
temperature 10	( 83.030 )	= 83.030 deg. F
temperature 11	( 81.630 )	= 81.630 deg. F
temperature 12	( 83.040 )	= 83.040 deg. F
temperature 13	( 81.970 )	= 81.970 deg. F
temperature 14	( 82.580 )	= 82.580 deg. F
temperature 15	( 81.530 )	= 81.530 deg. F
temperature 16	( 81.410 )	= 81.410 deg. F
temperature 17	( 81.510 )	= 81.510 deg. F
temperature 18	( 81.380 )	= 81.380 deg. F
temperature 19	( 78.990 )	= 78.990 deg. F
temperature 20	( 81.230 )	= 81.230 deg. F
temperature 21	( 80.730 )	= 80.730 deg. F
temperature 22	( 80.120 )	= 80.120 deg. F
temperature 23	( 80.120 )	= 80.120 deg. F
temperature 24	( 78.600 )	= 78.600 deg. F
temperature 25	( 79.910 )	= 79.910 deg. F
temperature 26	( 79.270 )	= 79.270 deg. F
temperature 27	( 79.290 )	= 79.290 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.530 )	= 75.530 deg. F
dewpoint 1	( 80.820 )	= 80.820 deg. F , 0.5206 psia
dewpoint 2	( 79.180 )	= 79.180 deg. F , 0.4934 psia
dewpoint 3	( 77.790 )	= 77.790 deg. F , 0.4713 psia
dewpoint 4	( 73.600 )	= 73.600 deg. F , 0.4100 psia
dewpoint 5	( 74.760 )	= 74.760 deg. F , 0.4262 psia
dewpoint 6	( 74.180 )	= 74.180 deg. F , 0.4180 psia
pressure 1	( 59.7902 )	= 59.7902 psia
pressure 2	( 59.8001 )	= 59.8001 psia

weighted averages, volume and air mass

temperature	=	81.39735 deg. F
pressure	=	59.79020 psia
vapor pressure	=	0.45742 psia
volume	=	2750000 cu. ft.
dry air mass	=	813961.94 lbm

## 1992 VEGP Unit 2 Verification

data set 10

time = 215 date = 420

sensor	raw data	value
temperature 1	( 83.340 )	= 83.340 deg. F
temperature 2	( 82.730 )	= 82.730 deg. F
temperature 3	( 83.240 )	= 83.240 deg. F
temperature 4	( 83.140 )	= 83.140 deg. F
temperature 5	( 83.380 )	= 83.380 deg. F
temperature 6	( 83.350 )	= 83.350 deg. F
temperature 7	( 83.240 )	= 83.240 deg. F
temperature 8	( 84.130 )	= 84.130 deg. F
temperature 9	( 83.060 )	= 83.060 deg. F
temperature 10	( 82.990 )	= 82.990 deg. F
temperature 11	( 81.590 )	= 81.590 deg. F
temperature 12	( 82.990 )	= 82.990 deg. F
temperature 13	( 81.940 )	= 81.940 deg. F
temperature 14	( 82.540 )	= 82.540 deg. F
temperature 15	( 81.490 )	= 81.490 deg. F
temperature 16	( 81.380 )	= 81.380 deg. F
temperature 17	( 81.490 )	= 81.490 deg. F
temperature 18	( 81.360 )	= 81.360 deg. F
temperature 19	( 78.950 )	= 78.950 deg. F
temperature 20	( 81.200 )	= 81.200 deg. F
temperature 21	( 80.710 )	= 80.710 deg. F
temperature 22	( 80.120 )	= 80.120 deg. F
temperature 23	( 80.120 )	= 80.120 deg. F
temperature 24	( 78.600 )	= 78.600 deg. F
temperature 25	( 79.910 )	= 79.910 deg. F
temperature 26	( 79.270 )	= 79.270 deg. F
temperature 27	( 79.290 )	= 79.290 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.510 )	= 75.510 deg. F
dewpoint 1	( 80.800 )	= 80.800 deg. F , 0.5202 psia
dewpoint 2	( 79.170 )	= 79.170 deg. F , 0.4932 psia
dewpoint 3	( 77.760 )	= 77.760 deg. F , 0.4709 psia
dewpoint 4	( 73.630 )	= 73.630 deg. F , 0.4104 psia
dewpoint 5	( 74.860 )	= 74.860 deg. F , 0.4276 psia
dewpoint 6	( 74.180 )	= 74.180 deg. F , 0.4180 psia
pressure 1	( 59.7859 )	= 59.7859 psia
pressure 2	( 59.7954 )	= 59.7954 psia

weighted averages, volume and air mass

temperature	=	81.36905 deg. F
pressure	=	59.78590 psia
vapor pressure	=	0.45750 psia
volume	=	2750000 cu. ft.
dry air mass	=	813944.55 lbm

## 1992 VEGP Unit 2 Verification

data set 11

time = 230 date = 420

sensor	raw data	value
temperature 1	( 83.310 )	= 83.310 deg. F
temperature 2	( 82.700 )	= 82.700 deg. F
temperature 3	( 83.210 )	= 83.210 deg. F
temperature 4	( 83.110 )	= 83.110 deg. F
temperature 5	( 83.330 )	= 83.330 deg. F
temperature 6	( 83.310 )	= 83.310 deg. F
temperature 7	( 83.180 )	= 83.180 deg. F
temperature 8	( 84.070 )	= 84.070 deg. F
temperature 9	( 83.020 )	= 83.020 deg. F
temperature 10	( 82.960 )	= 82.960 deg. F
temperature 11	( 81.560 )	= 81.560 deg. F
temperature 12	( 82.950 )	= 82.950 deg. F
temperature 13	( 81.890 )	= 81.890 deg. F
temperature 14	( 82.510 )	= 82.510 deg. F
temperature 15	( 81.450 )	= 81.450 deg. F
temperature 16	( 81.350 )	= 81.350 deg. F
temperature 17	( 81.450 )	= 81.450 deg. F
temperature 18	( 81.330 )	= 81.330 deg. F
temperature 19	( 78.920 )	= 78.920 deg. F
temperature 20	( 81.160 )	= 81.160 deg. F
temperature 21	( 80.680 )	= 80.680 deg. F
temperature 22	( 80.100 )	= 80.100 deg. F
temperature 23	( 80.110 )	= 80.110 deg. F
temperature 24	( 78.580 )	= 78.580 deg. F
temperature 25	( 79.890 )	= 79.890 deg. F
temperature 26	( 79.250 )	= 79.250 deg. F
temperature 27	( 79.280 )	= 79.280 deg. F
temperature 28	( 78.270 )	= 78.270 deg. F
temperature 29	( 77.860 )	= 77.860 deg. F
temperature 30	( 75.510 )	= 75.510 deg. F
dewpoint 1	( 80.790 )	= 80.790 deg. F , 0.5201 psia
dewpoint 2	( 79.110 )	= 79.110 deg. F , 0.4923 psia
dewpoint 3	( 77.850 )	= 77.850 deg. F , 0.4723 psia
dewpoint 4	( 73.650 )	= 73.650 deg. F , 0.4107 psia
dewpoint 5	( 74.800 )	= 74.800 deg. F , 0.4268 psia
dewpoint 6	( 74.160 )	= 74.160 deg. F , 0.4177 psia
pressure 1	( 59.7813 )	= 59.7813 psia
pressure 2	( 59.7909 )	= 59.7909 psia

weighted averages, volume and air mass

temperature	=	81.33791 deg. F
pressure	=	59.78130 psia
vapor pressure	=	0.45745 psia
volume	=	2750000 cu. ft.
dry air mass	=	813928.88 lbm

## 1992 EGP Unit 2 Verification

data set 12

time = 245 date = 420

sensor	raw data	value
temperature 1	( 83.260 )	= 83.260 deg. F
temperature 2	( 82.650 )	= 82.650 deg. F
temperature 3	( 83.170 )	= 83.170 deg. F
temperature 4	( 83.060 )	= 83.060 deg. F
temperature 5	( 83.290 )	= 83.290 deg. F
temperature 6	( 83.280 )	= 83.280 deg. F
temperature 7	( 83.180 )	= 83.180 deg. F
temperature 8	( 84.030 )	= 84.030 deg. F
temperature 9	( 82.980 )	= 82.980 deg. F
temperature 10	( 82.930 )	= 82.930 deg. F
temperature 11	( 81.530 )	= 81.530 deg. F
temperature 12	( 82.900 )	= 82.900 deg. F
temperature 13	( 81.860 )	= 81.860 deg. F
temperature 14	( 82.480 )	= 82.480 deg. F
temperature 15	( 81.430 )	= 81.430 deg. F
temperature 16	( 81.320 )	= 81.320 deg. F
temperature 17	( 81.420 )	= 81.420 deg. F
temperature 18	( 81.290 )	= 81.290 deg. F
temperature 19	( 78.900 )	= 78.900 deg. F
temperature 20	( 81.130 )	= 81.130 deg. F
temperature 21	( 80.680 )	= 80.680 deg. F
temperature 22	( 80.100 )	= 80.100 deg. F
temperature 23	( 80.110 )	= 80.110 deg. F
temperature 24	( 78.600 )	= 78.600 deg. F
temperature 25	( 79.900 )	= 79.900 deg. F
temperature 26	( 79.260 )	= 79.260 deg. F
temperature 27	( 79.270 )	= 79.270 deg. F
temperature 28	( 78.260 )	= 78.260 deg. F
temperature 29	( 77.870 )	= 77.870 deg. F
temperature 30	( 75.500 )	= 75.500 deg. F
dewpoint 1	( 80.760 )	= 80.760 deg. F , 0.5196 psia
dewpoint 2	( 79.130 )	= 79.130 deg. F , 0.4926 psia
dewpoint 3	( 77.850 )	= 77.850 deg. F , 0.4723 psia
dewpoint 4	( 73.620 )	= 73.620 deg. F , 0.4102 psia
dewpoint 5	( 74.810 )	= 74.810 deg. F , 0.4269 psia
dewpoint 6	( 74.170 )	= 74.170 deg. F , 0.4179 psia
pressure 1	( 59.7770 )	= 59.7770 psia
pressure 2	( 59.7866 )	= 59.7866 psia

weighted averages, volume and air mass

temperature	=	81.31451 deg. F
pressure	=	59.77700 psia
vapor pressure	=	0.45740 psia
volume	=	2750000 cu. ft.
dry air mass	=	813905.76 lbm

## 1992 VEGP Unit 2 Verification

data set 13

time = 300 date = 420

sensor	raw data	value
temperature 1	( 83.230 )	= 83.230 deg. F
temperature 2	( 82.630 )	= 82.630 deg. F
temperature 3	( 83.130 )	= 83.130 deg. F
temperature 4	( 83.020 )	= 83.020 deg. F
temperature 5	( 83.260 )	= 83.260 deg. F
temperature 6	( 83.230 )	= 83.230 deg. F
temperature 7	( 83.130 )	= 83.130 deg. F
temperature 8	( 83.990 )	= 83.990 deg. F
temperature 9	( 82.930 )	= 82.930 deg. F
temperature 10	( 82.890 )	= 82.890 deg. F
temperature 11	( 81.500 )	= 81.500 deg. F
temperature 12	( 82.860 )	= 82.860 deg. F
temperature 13	( 81.830 )	= 81.830 deg. F
temperature 14	( 82.450 )	= 82.450 deg. F
temperature 15	( 81.410 )	= 81.410 deg. F
temperature 16	( 81.300 )	= 81.300 deg. F
temperature 17	( 81.390 )	= 81.390 deg. F
temperature 18	( 81.260 )	= 81.260 deg. F
temperature 19	( 78.880 )	= 78.880 deg. F
temperature 20	( 81.090 )	= 81.090 deg. F
temperature 21	( 80.660 )	= 80.660 deg. F
temperature 22	( 80.080 )	= 80.080 deg. F
temperature 23	( 80.100 )	= 80.100 deg. F
temperature 24	( 78.580 )	= 78.580 deg. F
temperature 25	( 79.880 )	= 79.880 deg. F
temperature 26	( 79.240 )	= 79.240 deg. F
temperature 27	( 79.270 )	= 79.270 deg. F
temperature 28	( 78.250 )	= 78.250 deg. F
temperature 29	( 77.860 )	= 77.860 deg. F
temperature 30	( 75.500 )	= 75.500 deg. F
dewpoint 1	( 80.700 )	= 80.700 deg. F , 0.5185 psia
dewpoint 2	( 79.130 )	= 79.130 deg. F , 0.4926 psia
dewpoint 3	( 77.770 )	= 77.770 deg. F , 0.4710 psia
dewpoint 4	( 73.660 )	= 73.660 deg. F , 0.4108 psia
dewpoint 5	( 74.840 )	= 74.840 deg. F , 0.4274 psia
dewpoint 6	( 74.180 )	= 74.180 deg. F , 0.4180 psia
pressure 1	( 59.7726 )	= 59.7726 psia
pressure 2	( 59.7821 )	= 59.7821 psia

weighted averages, volume and air mass

temperature	=	81.28658 deg. F
pressure	=	59.77260 psia
vapor pressure	=	0.45719 psia
volume	=	2750000 cu. ft.
dry air mass	=	813890.35 lbm

## 1992 VEG) Unit 2 Verification

data set 14

time = 315 date = 420

sensor	raw data	value
temperature 1	( 83.200 )	= 83.200 deg. F
temperature 2	( 82.580 )	= 82.580 deg. F
temperature 3	( 83.100 )	= 83.100 deg. F
temperature 4	( 82.980 )	= 82.980 deg. F
temperature 5	( 83.220 )	= 83.220 deg. F
temperature 6	( 83.220 )	= 83.220 deg. F
temperature 7	( 83.110 )	= 83.110 deg. F
temperature 8	( 83.960 )	= 83.960 deg. F
temperature 9	( 82.910 )	= 82.910 deg. F
temperature 10	( 82.840 )	= 82.840 deg. F
temperature 11	( 81.470 )	= 81.470 deg. F
temperature 12	( 82.810 )	= 82.810 deg. F
temperature 13	( 81.800 )	= 81.800 deg. F
temperature 14	( 82.420 )	= 82.420 deg. F
temperature 15	( 81.390 )	= 81.390 deg. F
temperature 16	( 81.270 )	= 81.270 deg. F
temperature 17	( 81.360 )	= 81.360 deg. F
temperature 18	( 81.240 )	= 81.240 deg. F
temperature 19	( 78.860 )	= 78.860 deg. F
temperature 20	( 81.070 )	= 81.070 deg. F
temperature 21	( 80.650 )	= 80.650 deg. F
temperature 22	( 80.060 )	= 80.060 deg. F
temperature 23	( 80.040 )	= 80.040 deg. F
temperature 24	( 78.570 )	= 78.570 deg. F
temperature 25	( 79.880 )	= 79.880 deg. F
temperature 26	( 79.240 )	= 79.240 deg. F
temperature 27	( 79.270 )	= 79.270 deg. F
temperature 28	( 78.230 )	= 78.230 deg. F
temperature 29	( 77.860 )	= 77.860 deg. F
temperature 30	( 75.490 )	= 75.490 deg. F
dewpoint 1	( 80.720 )	= 80.720 deg. F , 0.5189 psia
dewpoint 2	( 79.060 )	= 79.060 deg. F , 0.4915 psia
dewpoint 3	( 77.660 )	= 77.660 deg. F , 0.4693 psia
dewpoint 4	( 73.620 )	= 73.620 deg. F , 0.4102 psia
dewpoint 5	( 74.880 )	= 74.880 deg. F , 0.4279 psia
dewpoint 6	( 74.170 )	= 74.170 deg. F , 0.4179 psia
pressure 1	( 59.7680 )	= 59.7680 psia
pressure 2	( 59.7773 )	= 59.7773 psia

weighted averages, volume and air mass

temperature	=	81.26124 deg. F
pressure	=	59.76800 psia
vapor pressure	=	0.45665 psia
volume	=	2750000 cu. ft.
dry air mass	=	813872.82 lbm

## 1992 VEGP Unit 2 Verification

data set 15

time = 330 date = 420

sensor	raw data	value
temperature 1	( 83.170 )	= 83.170 deg. F
temperature 2	( 82.550 )	= 82.550 deg. F
temperature 3	( 83.060 )	= 83.060 deg. F
temperature 4	( 82.970 )	= 82.970 deg. F
temperature 5	( 83.180 )	= 83.180 deg. F
temperature 6	( 83.180 )	= 83.180 deg. F
temperature 7	( 83.070 )	= 83.070 deg. F
temperature 8	( 83.950 )	= 83.950 deg. F
temperature 9	( 82.860 )	= 82.860 deg. F
temperature 10	( 82.810 )	= 82.810 deg. F
temperature 11	( 81.440 )	= 81.440 deg. F
temperature 12	( 82.760 )	= 82.760 deg. F
temperature 13	( 81.780 )	= 81.780 deg. F
temperature 14	( 82.400 )	= 82.400 deg. F
temperature 15	( 81.350 )	= 81.350 deg. F
temperature 16	( 81.240 )	= 81.240 deg. F
temperature 17	( 81.340 )	= 81.340 deg. F
temperature 18	( 81.210 )	= 81.210 deg. F
temperature 19	( 78.840 )	= 78.840 deg. F
temperature 20	( 81.060 )	= 81.060 deg. F
temperature 21	( 80.630 )	= 80.630 deg. F
temperature 22	( 80.030 )	= 80.030 deg. F
temperature 23	( 80.050 )	= 80.050 deg. F
temperature 24	( 78.580 )	= 78.580 deg. F
temperature 25	( 79.880 )	= 79.880 deg. F
temperature 26	( 79.240 )	= 79.240 deg. F
temperature 27	( 79.260 )	= 79.260 deg. F
temperature 28	( 78.250 )	= 78.250 deg. F
temperature 29	( 77.860 )	= 77.860 deg. F
temperature 30	( 75.490 )	= 75.490 deg. F
dewpoint 1	( 80.710 )	= 80.710 deg. F , 0.5187 psia
dewpoint 2	( 79.050 )	= 79.050 deg. F , 0.4913 psia
dewpoint 3	( 77.630 )	= 77.630 deg. F , 0.4689 psia
dewpoint 4	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 5	( 74.860 )	= 74.860 deg. F , 0.4276 psia
dewpoint 6	( 74.190 )	= 74.190 deg. F , 0.4182 psia
pressure 1	( 59.7636 )	= 59.7636 psia
pressure 2	( 59.7727 )	= 59.7727 psia

weighted averages, volume and air mass

temperature	=	81.23942 deg. F
pressure	=	59.76360 psia
vapor pressure	=	0.45657 psia
volume	=	2750000 cu. ft.
dry air mass	=	813846.36 lbm

## 199^ VEGP Unit 2 Verification

data set 16

time = 345 date = 420

sensor	raw data	value
temperature 1	( 83.130 )	= 83.130 deg. F
temperature 2	( 82.520 )	= 82.520 deg. F
temperature 3	( 83.020 )	= 83.020 deg. F
temperature 4	( 82.930 )	= 82.930 deg. F
temperature 5	( 83.160 )	= 83.160 deg. F
temperature 6	( 83.150 )	= 83.150 deg. F
temperature 7	( 83.050 )	= 83.050 deg. F
temperature 8	( 83.920 )	= 83.920 deg. F
temperature 9	( 82.820 )	= 82.820 deg. F
temperature 10	( 82.750 )	= 82.750 deg. F
temperature 11	( 81.410 )	= 81.410 deg. F
temperature 12	( 82.720 )	= 82.720 deg. F
temperature 13	( 81.750 )	= 81.750 deg. F
temperature 14	( 82.370 )	= 82.370 deg. F
temperature 15	( 81.330 )	= 81.330 deg. F
temperature 16	( 81.200 )	= 81.200 deg. F
temperature 17	( 81.320 )	= 81.320 deg. F
temperature 18	( 81.180 )	= 81.180 deg. F
temperature 19	( 78.820 )	= 78.820 deg. F
temperature 20	( 81.030 )	= 81.030 deg. F
temperature 21	( 80.610 )	= 80.610 deg. F
temperature 22	( 80.000 )	= 80.000 deg. F
temperature 23	( 80.020 )	= 80.020 deg. F
temperature 24	( 78.560 )	= 78.560 deg. F
temperature 25	( 79.860 )	= 79.860 deg. F
temperature 26	( 79.220 )	= 79.220 deg. F
temperature 27	( 79.250 )	= 79.250 deg. F
temperature 28	( 78.240 )	= 78.240 deg. F
temperature 29	( 77.850 )	= 77.850 deg. F
temperature 30	( 75.480 )	= 75.480 deg. F
dewpoint 1	( 80.740 )	= 80.740 deg. F , 0.5192 psia
dewpoint 2	( 79.100 )	= 79.100 deg. F , 0.4921 psia
dewpoint 3	( 77.600 )	= 77.600 deg. F , 0.4684 psia
dewpoint 4	( 73.640 )	= 73.640 deg. F , 0.4105 psia
dewpoint 5	( 74.820 )	= 74.820 deg. F , 0.4271 psia
dewpoint 6	( 74.170 )	= 74.170 deg. F , 0.4179 psia
pressure 1	( 59.7593 )	= 59.7593 psia
pressure 2	( 59.7685 )	= 59.7685 psia

weighted averages, volume and air mass

temperature	=	81.21155 deg. F
pressure	=	59.75930 psia
vapor pressure	=	0.45659 psia
volume	=	2750000 cu. ft.
dry air mass	=	813828.96 lbm

## 1992 VEGP Unit 2 Verification

data set 17

time = 400 date = 420

sensor	raw data	value
temperature 1	( 83.110 )	= 83.110 deg. F
temperature 2	( 82.480 )	= 82.480 deg. F
temperature 3	( 83.000 )	= 83.000 deg. F
temperature 4	( 82.900 )	= 82.900 deg. F
temperature 5	( 83.110 )	= 83.110 deg. F
temperature 6	( 83.110 )	= 83.110 deg. F
temperature 7	( 83.010 )	= 83.010 deg. F
temperature 8	( 83.880 )	= 83.880 deg. F
temperature 9	( 82.790 )	= 82.790 deg. F
temperature 10	( 82.720 )	= 82.720 deg. F
temperature 11	( 81.370 )	= 81.370 deg. F
temperature 12	( 82.690 )	= 82.690 deg. F
temperature 13	( 81.710 )	= 81.710 deg. F
temperature 14	( 82.330 )	= 82.330 deg. F
temperature 15	( 81.300 )	= 81.300 deg. F
temperature 16	( 81.180 )	= 81.180 deg. F
temperature 17	( 81.290 )	= 81.290 deg. F
temperature 18	( 81.170 )	= 81.170 deg. F
temperature 19	( 78.800 )	= 78.800 deg. F
temperature 20	( 81.010 )	= 81.010 deg. F
temperature 21	( 80.600 )	= 80.600 deg. F
temperature 22	( 79.980 )	= 79.980 deg. F
temperature 23	( 80.000 )	= 80.000 deg. F
temperature 24	( 78.560 )	= 78.560 deg. F
temperature 25	( 79.830 )	= 79.830 deg. F
temperature 26	( 79.210 )	= 79.210 deg. F
temperature 27	( 79.240 )	= 79.240 deg. F
temperature 28	( 78.240 )	= 78.240 deg. F
temperature 29	( 77.850 )	= 77.850 deg. F
temperature 30	( 75.460 )	= 75.460 deg. F
dewpoint 1	( 80.720 )	= 80.720 deg. F , 0.5189 psia
dewpoint 2	( 79.000 )	= 79.000 deg. F , 0.4905 psia
dewpoint 3	( 77.470 )	= 77.470 deg. F , 0.4664 psia
dewpoint 4	( 73.540 )	= 73.540 deg. F , 0.4091 psia
dewpoint 5	( 74.880 )	= 74.880 deg. F , 0.4279 psia
dewpoint 6	( 74.190 )	= 74.190 deg. F , 0.4182 psia
pressure 1	( 59.7546 )	= 59.7546 psia
pressure 2	( 59.7640 )	= 59.7640 psia

weighted averages, volume and air mass

temperature	=	81.18564 deg. F
pressure	=	59.75460 psia
vapor pressure	=	0.45576 psia
volume	=	2750000 cu. ft.
dry air mass	=	813814.86 lbm

## 1992 VEGP Unit 2 Verification

data set 18

time = 415 date = 420

sensor	raw data	value
temperature 1	( 83.070 )	= 83.070 deg. F
temperature 2	( 82.440 )	= 82.440 deg. F
temperature 3	( 82.970 )	= 82.970 deg. F
temperature 4	( 82.850 )	= 82.850 deg. F
temperature 5	( 83.080 )	= 83.080 deg. F
temperature 6	( 83.080 )	= 83.080 deg. F
temperature 7	( 82.980 )	= 82.980 deg. F
temperature 8	( 83.850 )	= 83.850 deg. F
temperature 9	( 82.740 )	= 82.740 deg. F
temperature 10	( 82.680 )	= 82.680 deg. F
temperature 11	( 81.350 )	= 81.350 deg. F
temperature 12	( 82.630 )	= 82.630 deg. F
temperature 13	( 81.690 )	= 81.690 deg. F
temperature 14	( 82.300 )	= 82.300 deg. F
temperature 15	( 81.270 )	= 81.270 deg. F
temperature 16	( 81.150 )	= 81.150 deg. F
temperature 17	( 81.270 )	= 81.270 deg. F
temperature 18	( 81.140 )	= 81.140 deg. F
temperature 19	( 78.760 )	= 78.760 deg. F
temperature 20	( 81.000 )	= 81.000 deg. F
temperature 21	( 80.570 )	= 80.570 deg. F
temperature 22	( 79.960 )	= 79.960 deg. F
temperature 23	( 79.990 )	= 79.990 deg. F
temperature 24	( 78.560 )	= 78.560 deg. F
temperature 25	( 79.830 )	= 79.830 deg. F
temperature 26	( 79.200 )	= 79.200 deg. F
temperature 27	( 79.220 )	= 79.220 deg. F
temperature 28	( 78.230 )	= 78.230 deg. F
temperature 29	( 77.850 )	= 77.850 deg. F
temperature 30	( 75.460 )	= 75.460 deg. F
dewpoint 1	( 80.720 )	= 80.720 deg. F , 0.5189 psia
dewpoint 2	( 78.980 )	= 78.980 deg. F , 0.4902 psia
dewpoint 3	( 77.560 )	= 77.560 deg. F , 0.4678 psia
dewpoint 4	( 73.540 )	= 73.540 deg. F , 0.4091 psia
dewpoint 5	( 74.760 )	= 74.760 deg. F , 0.4262 psia
dewpoint 6	( 74.190 )	= 74.190 deg. F , 0.4182 psia
pressure 1	( 59.7506 )	= 59.7506 psia
pressure 2	( 59.7599 )	= 59.7599 psia

weighted averages, volume and air mass

temperature	=	81.15923 deg. F
pressure	=	59.75060 psia
vapor pressure	=	0.45576 psia
volume	=	2750000 cu. ft.
dry air mass	=	813799.70 lbm

## 1992 VEGP Unit 2 Verification

data set 19

time = 430 date = 420

sensor	raw data	value
temperature 1	( 83.040 )	= 83.040 deg. F
temperature 2	( 82.410 )	= 82.410 deg. F
temperature 3	( 82.910 )	= 82.910 deg. F
temperature 4	( 82.820 )	= 82.820 deg. F
temperature 5	( 83.030 )	= 83.030 deg. F
temperature 6	( 83.050 )	= 83.050 deg. F
temperature 7	( 82.930 )	= 82.930 deg. F
temperature 8	( 83.800 )	= 83.800 deg. F
temperature 9	( 82.700 )	= 82.700 deg. F
temperature 10	( 82.660 )	= 82.660 deg. F
temperature 11	( 81.310 )	= 81.310 deg. F
temperature 12	( 82.590 )	= 82.590 deg. F
temperature 13	( 81.650 )	= 81.650 deg. F
temperature 14	( 82.270 )	= 82.270 deg. F
temperature 15	( 81.240 )	= 81.240 deg. F
temperature 16	( 81.120 )	= 81.120 deg. F
temperature 17	( 81.220 )	= 81.220 deg. F
temperature 18	( 81.100 )	= 81.100 deg. F
temperature 19	( 78.740 )	= 78.740 deg. F
temperature 20	( 80.960 )	= 80.960 deg. F
temperature 21	( 80.560 )	= 80.560 deg. F
temperature 22	( 79.950 )	= 79.950 deg. F
temperature 23	( 79.970 )	= 79.970 deg. F
temperature 24	( 78.560 )	= 78.560 deg. F
temperature 25	( 79.830 )	= 79.830 deg. F
temperature 26	( 79.200 )	= 79.200 deg. F
temperature 27	( 79.230 )	= 79.230 deg. F
temperature 28	( 78.230 )	= 78.230 deg. F
temperature 29	( 77.850 )	= 77.850 deg. F
temperature 30	( 75.470 )	= 75.470 deg. F
dewpoint 1	( 80.640 )	= 80.640 deg. F , 0.5175 psia
dewpoint 2	( 79.000 )	= 79.000 deg. F , 0.4905 psia
dewpoint 3	( 77.460 )	= 77.460 deg. F , 0.4662 psia
dewpoint 4	( 73.570 )	= 73.570 deg. F , 0.4095 psia
dewpoint 5	( 74.720 )	= 74.720 deg. F , 0.4256 psia
dewpoint 6	( 74.220 )	= 74.220 deg. F , 0.4186 psia
pressure 1	( 59.7460 )	= 59.7460 psia
pressure 2	( 59.7554 )	= 59.7554 psia

weighted averages, volume and air mass

temperature	=	81.13181 deg. F
pressure	=	59.74600 psia
vapor pressure	=	0.45540 psia
volume	=	2750000 cu. ft.
dry air mass	=	813782.72 lbm