DEC 1 1994

21

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 605522

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) Thermal & Fluid Mechanics Engineering		4. Related EDT No.: N/A	
5. Proj./Prog./Dept./Div.: MWTF		6. Cog. Engr.: E. R. Cramer		7. Purchase Order No.: N/A	
8. Originator Remarks: For approval and release.				9. Equip./Component No.: N/A	
				10. System/Bldg./Facility: N/A	
11. Receiver Remarks:				12. Major Assm. Dwg. No.: N/A	
				13. Permit/Permit Application No.: N/A	
				14. Required Response Date: October 31, 1994	

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	WHC-SD-W236A-ER-014		0	Computer Code Input for Thermal Hydraulic Analysis of Multi-Function Waste Tank Facility Title II Design	Q	2		

16. KEY					
Approval Designator (F)		Reason for Transmittal (G)		Disposition (H) & (I)	
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)		1. Approval	4. Review	1. Approved	4. Reviewed no/comment
		2. Release	5. Post-Review	2. Approved w/comment	5. Reviewed w/comment
		3. Information	6. Dist. (Receipt Acknow. Required)	3. Disapproved w/comment	6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)								(G)	(H)		
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1		Cog.Eng. E. R. Cramer	<i>ER Cramer</i>	11/3/94	H0-33						
1		Cog. Mgr. T. B. McCall	<i>T. B. McCall</i>	11/3/94	H0-33						
1		QA A. K. Sharma	<i>A. K. Sharma</i>	11/14/94	H5-60						
		Safety									
		Env.									

18. Signature of EDT Originator <i>ER Cramer</i> 11/3/94		19. J. M. Light Authorized Representative for Receiving Organization <i>J. M. Light</i>		20. T. B. McCall Cognizant Manager <i>T. B. McCall</i> 11/3/94		21. DOE APPROVAL (if required) Ctrl. No. [] Approved [] Approved w/comments [] Disapproved w/comments	
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Document Number: WHC-SD-W236A-ER-014, Rev. 0

Document Title: Computer Code Input for Thermal Hydraulic Analysis of Multi-Function Waste Tank Facility Title II Design

Release Date: 11/30/94

This document was reviewed following the procedures described in WHC-CM-3-4 and is:

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V. L. Birkland

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SUPPORTING DOCUMENT		1. Total Pages 517
2. Title Computer Code Input for Thermal Hydraulic Analysis of Multi-Function Waste Tank Facility Title II Design	3. Number WHC-SD-W236A-ER-014	4. Rev No. 0
5. Key Words MWTF, Thermal Hydraulic Analysis, Computer Code Input	6. Author Name: E. R. Cramer <i>ER Cramer</i> Signature Organization/Charge Code 71410/DTTC6	
7. Abstract The input files to the P/Thermal computer code are documented for the thermal hydraulic analysis of the Multi-Function Waste Tank Facility Title II design analysis.		
8. RELEASE STAMP <div style="border: 1px solid black; padding: 10px; text-align: center;"> OFFICIAL RELEASE (21) BY WHC DATE DEC 1 1994 <i>Str. 21</i> </div>		

**Computer Code Input for
Thermal Hydraulic Analysis
of Multi-Function Waste Tank
Facility Title II Design**

October 1994

**WESTINGHOUSE HANFORD COMPANY
Richland, Washington**

**for the
U.S. Department of Energy
Richland Operations Office
Richland, Washington**

Table of Contents

1.0	INTRODUCTION	1
2.0	INPUT FILES	1
2.1	Steady-State Case for Structural Analysis	2
2.2	Tank Filling Transient	68
2.3	Tank Drain Transient	134
2.4	Steady-State, Case 1	200
2.5	Steady-State, Case 2	266
2.6	Steady-State, Case 3	275
2.7	Steady-State, Case 4	284
2.8	Steady-State, Case 5	293
2.9	Steady-State, Case 6	302
2.10	Steady-State, Case 7	311
2.11	Steady-State, Case 8	320
2.12	Steady-State, Case 9	329
2.13	Loss of All Electric Power Transient	338
2.14	Loss of Tank Dome Flow Transient	403
2.15	Loss of Annulus Flow Transient	468
2.16	Postulated Earthquake Event	477
3.0	SESSION FILE TO CREATE MODEL	486
4.0	REFERENCES	514

**Computer Code Input for Thermal Hydraulic
Analysis of Multi-Function Waste Tank
Facility Title II Design**

1.0 INTRODUCTION

This document is supplementary to the final thermal hydraulic analysis report (Cramer, 1994) on the Multi-Function Waste Tank Facility (MWTF) Title II design. The purpose of this report is to document the input files to the P/THERMAL computer code that were used for the MWTF thermal hydraulic analysis.

The thermal model of MWTF was developed by the use of the PATRAN modeling program (PATRAN, 1990) and solved with the associated analysis program P/THERMAL (PATRAN, 1991). These programs are both proprietary products of PDA Engineering. A complete discussion of the computer model and of the analysis results are in Cramer, 1994. The file that creates the model is also listed here.

2.0 INPUT FILES

Sixteen cases were analyzed and reported in Cramer, 1994. The input to all 16 cases are recorded here. Three input files are required for each case. These are mat.dat, micro.dat, and template.dat. There is no change to template.dat for many of the 16 cases, so it is not repeated for each case.

2.1 Steady-State Case for Structural Analysis

```
$ MAT.DAT
$ STEADY STATE CASE FOR STRUCTURAL ANALYSIS INPUT
MPID 901 TABLE FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
REFERENCE: C-SI Medium Carbon Steel NSMH
MDATA 32.0 29.99
MDATA 70.0 29.89
MDATA 100.0 29.76
MDATA 200.0 29.22
MDATA 300.0 28.52
/
MPID 904 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
REFERENCE: AISI 1025 Carbon Steel
MDATA 489.0
/
MPID 905 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
REFERENCE: AISI 1025 Carbon Steel
MDATA 0.116
/
MPID 10001 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
References: Kreith
Data Quality: EXCELLENT
MDATA 0.000 0.0133
MDATA 32.0 0.0140
MDATA 100.0 0.0154
MDATA 200.0 0.0174
MDATA 300.0 0.0193
MDATA 400.0 0.0212
MDATA 500.0 0.0231
MDATA 600.0 0.0250
/
MPID 10002 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
References: Kreith Table A-3
Data Quality: EXCELLENT
MDATA 0.0 0.0400
MDATA 32.0 0.0419
MDATA 100.0 0.0463
MDATA 200.0 0.0518
MDATA 300.0 0.0580
MDATA 400.0 0.0630
MDATA 500.0 0.0680
MDATA 600.0 0.0720
/
MPID 10003 RECIPROCAL FAHRENHEIT 1.0
AIR (GAS) --> Coefficient of thermal expansion (1/F)
References: Kreith
Data Quality: EXCELLENT
MDATA 1.0 459.7
/
MPID 10004 TABLE FAHRENHEIT 1.0
```

AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.0860
MDATA	32.0	0.0810
MDATA	100.0	0.0710
MDATA	200.0	0.0600
MDATA	300.0	0.0520
MDATA	400.0	0.0460
MDATA	500.0	0.0412
MDATA	600.0	0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.239
MDATA	32.0	0.240
MDATA	100.0	0.240
MDATA	200.0	0.241
MDATA	300.0	0.243
MDATA	400.0	0.245
MDATA	500.0	0.247
MDATA	600.0	0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.35

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.23

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

MDATA 144.0

/

MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20

/

MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Thermal Conductivity (Btu/(Hr*ft*F))
References:
Data Quality: ???
MDATA 0.6

/

MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0

/

MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20

/

MPID 1402 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 119.765 0.000
MDATA 120.19 1.00
MDATA 200.0 1.00

/

MPID 1403 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 117.203 0.000
MDATA 117.703 1.00
MDATA 200.0 1.00

/

MPID 1404 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 114.306 0.000
MDATA 114.806 1.00
MDATA 200.0 1.00

/

MPID 1405 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 111.28 0.000
MDATA 111.78 1.00
MDATA 200.0 1.00

/

MPID 1406 TABLE TIME 0.65

```

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 108.188 0.000
MATA 108.688 1.00
MATA 200.0 1.00
/
MPID 1407 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 105.089 0.000
MATA 105.589 1.00
MATA 200.0 1.00
/
MPID 1408 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 101.88 0.000
MATA 102.38 1.00
MATA 200.0 1.00
/
MPID 1409 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 98.671 0.000
MATA 99.171 1.00
MATA 200.0 1.00
/
MPID 1410 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 95.462 0.000
MATA 95.962 1.00
MATA 200.0 1.00
/
MPID 1411 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 92.252 0.000
MATA 92.752 1.00
MATA 200.0 1.00
/
MPID 1412 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 89.043 0.000
MATA 89.543 1.00
MATA 200.0 1.00
/
MPID 1413 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F
MATA 0.0 0.000
MATA 85.834 0.000
MATA 86.334 1.00
MATA 200.0 1.00

```

/

MPID 1414 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 82.625 0.000
MDATA 83.125 1.00
MDATA 200.0 1.00

/

MPID 1415 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 79.182 0.000
MDATA 79.682 1.00
MDATA 200.0 1.00

/

MPID 1416 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 75.739 0.000
MDATA 76.239 1.00
MDATA 200.0 1.00

/

MPID 1417 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 72.297 0.000
MDATA 72.797 1.00
MDATA 200.0 1.00

/

MPID 1418 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 68.854 0.000
MDATA 69.354 1.00
MDATA 200.0 1.00

/

MPID 1419 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 65.411 0.000
MDATA 65.911 1.00
MDATA 200.0 1.00

/

MPID 1420 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 61.969 0.000
MDATA 62.469 1.00
MDATA 200.0 1.00

/

MPID 1421 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.526 0.000

```

M DATA      59.026      1.00
M DATA      200.0      1.00
/
M PID 1422 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 22 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      55.083      0.000
M DATA      55.583      1.00
M DATA      200.0      1.00
/
M PID 1423 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 23 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      51.641      0.000
M DATA      52.141      1.00
M DATA      200.0      1.00
/
M PID 1424 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 24 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      48.198      0.000
M DATA      48.698      1.00
M DATA      200.0      1.00
/
M PID 1425 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 25 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      44.755      0.000
M DATA      45.255      1.00
M DATA      200.0      1.00
/
M PID 1426 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 26 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      41.312      0.000
M DATA      41.812      1.00
M DATA      200.0      1.00
/
M PID 1427 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 27 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      37.87      0.000
M DATA      38.37      1.00
M DATA      200.0      1.00
/
M PID 1428 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 28 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      34.427      0.000
M DATA      34.927      1.00
M DATA      200.0      1.00
/
M PID 1429 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 29 AS F(TIME) BTU/HR/FT/F

```

```

MATA      0.0      0.000
MATA      30.984     0.000
MATA      31.484     1.00
MATA      200.0     1.00
/
MPID 1430 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 30 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      27.542     0.000
MATA      28.042     1.00
MATA      200.0     1.00
/
MPID 1431 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 31 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      24.099     0.000
MATA      24.599     1.00
MATA      200.0     1.00
/
MPID 1432 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 32 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      20.656     0.000
MATA      21.156     1.00
MATA      200.0     1.00
/
MPID 1433 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 33 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      17.213     0.000
MATA      17.713     1.00
MATA      200.0     1.00
/
MPID 1434 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 34 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      13.771     0.000
MATA      14.271     1.00
MATA      200.0     1.00
/
MPID 1435 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 35 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      10.328     0.000
MATA      10.828     1.00
MATA      200.0     1.00
/
MPID 1436 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 36 AS F(TIME) BTU/HR/FT/F
MATA      0.0      0.000
MATA      6.885      0.000
MATA      7.385      1.00
MATA      200.0     1.00
/

```

```

MPID 1437 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      3.4427    0.000
MDATA      3.9427    1.00
MDATA      200.0     1.00
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      120.19    1100.0
MDATA      120.64    .5
MDATA      200.0     .5
/
MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      119.765    1100.0
MDATA      120.19    0.000
MDATA      200.0     0.000
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      117.203    1100.0
MDATA      117.703    0.000
MDATA      200.0     0.000
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      114.306    1100.0
MDATA      114.806    0.000
MDATA      200.0     0.000
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      111.28     1100.0
MDATA      111.78     0.000
MDATA      200.0     0.000
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      108.188    1100.0
MDATA      108.688    0.000
MDATA      200.0     0.000
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      105.089    1100.0
MDATA      105.589    0.000

```

MDATA 200.0 0.000
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 101.88 1100.0
MDATA 102.38 0.000
MDATA 200.0 0.000
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 98.671 1100.0
MDATA 99.171 0.000
MDATA 200.0 0.000
/
MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 95.462 1100.0
MDATA 95.962 0.000
MDATA 200.0 0.000
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 92.252 1100.0
MDATA 92.752 0.000
MDATA 200.0 0.000
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 89.043 1100.0
MDATA 89.543 0.000
MDATA 200.0 0.000
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 85.834 1100.0
MDATA 86.334 0.000
MDATA 200.0 0.000
/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 82.625 1100.0
MDATA 83.125 0.000
MDATA 200.0 0.000
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0

```

M DATA      79.182      1100.0
M DATA      79.682      0.000
M DATA      200.0      0.000
/
M PID 1516 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      75.739      1100.0
M DATA      76.239      0.000
M DATA      200.0      0.000
/
M PID 1517 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      72.297      1100.0
M DATA      72.797      0.000
M DATA      200.0      0.000
/
M PID 1518 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      68.854      1100.0
M DATA      69.354      0.000
M DATA      200.0      0.000
/
M PID 1519 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      65.411      1100.0
M DATA      65.911      0.000
M DATA      200.0      0.000
/
M PID 1520 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      61.969      1100.0
M DATA      62.469      0.000
M DATA      200.0      0.000
/
M PID 1521 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      58.526      1100.0
M DATA      59.026      0.000
M DATA      200.0      0.000
/
M PID 1522 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      55.083      1100.0
M DATA      55.583      0.000
M DATA      200.0      0.000
/
M PID 1523 TABLE TIME 1.0

```



```

WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      51.641    1100.0
MDATA      52.141    0.000
MDATA      200.0     0.000
/
MPID 1524 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      48.198    1100.0
MDATA      48.698    0.000
MDATA      200.0     0.000
/
MPID 1525 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      44.755    1100.0
MDATA      45.255    0.000
MDATA      200.0     0.000
/
MPID 1526 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      41.312    1100.0
MDATA      41.812    0.000
MDATA      200.0     0.000
/
MPID 1527 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      37.87     1100.0
MDATA      38.37     0.000
MDATA      200.0     0.000
/
MPID 1528 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      34.427    1100.0
MDATA      34.927    0.000
MDATA      200.0     0.000
/
MPID 1529 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      30.984    1100.0
MDATA      31.484    0.000
MDATA      200.0     0.000
/
MPID 1530 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      27.542    1100.0
MDATA      28.042    0.000
MDATA      200.0     0.000

```

```

/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 24.099 1100.0
MDATA 24.599 0.000
MDATA 200.0 0.000
/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 20.656 1100.0
MDATA 21.156 0.000
MDATA 200.0 0.000
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 17.213 1100.0
MDATA 17.713 0.000
MDATA 200.0 0.000
/
MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 13.771 1100.0
MDATA 14.271 0.000
MDATA 200.0 0.000
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 10.328 1100.0
MDATA 10.828 0.000
MDATA 200.0 0.000
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 6.885 1100.0
MDATA 7.385 0.000
MDATA 200.0 0.000
/
MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 3.4427 1100.0
MDATA 3.9427 0.000
MDATA 200.0 0.000
/
MPID 1701 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 118.48 0.000

```

MDATA	118.58	1.0
MDATA	200.00	1.0
/		
MPID	1702	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 2 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	115.75	0.000
MDATA	115.85	1.0
MDATA	118.48	1.0
MDATA	118.58	0.000
MDATA	200.0	0.000
/		
MPID	1703	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 3 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	112.79	0.000
MDATA	112.89	1.0
MDATA	115.75	1.0
MDATA	115.85	0.000
MDATA	200.0	0.000
/		
MPID	1704	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 4 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	109.73	0.000
MDATA	109.83	1.0
MDATA	112.79	1.0
MDATA	112.89	0.000
MDATA	200.0	0.000
/		
MPID	1705	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 5 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	106.64	0.000
MDATA	106.74	1.0
MDATA	109.73	1.0
MDATA	109.83	0.000
MDATA	200.0	0.000
/		
MPID	1706	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 6 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	103.48	0.000
MDATA	103.58	1.0
MDATA	106.64	1.0
MDATA	106.74	0.000
MDATA	200.0	0.000
/		
MPID	1707	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 7 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	100.27	0.000
MDATA	100.37	1.0
MDATA	103.48	1.0

MDATA	103.58	0.000
MDATA	200.0	0.000
/		
MPID	1708	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	97.06	0.000
MDATA	97.16	1.0
MDATA	100.27	1.0
MDATA	100.37	0.000
MDATA	200.0	0.000
/		
MPID	1709	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	93.85	0.000
MDATA	93.95	1.0
MDATA	97.06	1.0
MDATA	97.16	0.000
MDATA	200.0	0.000
/		
MPID	1710	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	90.64	0.000
MDATA	90.74	1.0
MDATA	93.85	1.0
MDATA	93.95	0.000
MDATA	200.0	0.000
/		
MPID	1711	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	87.43	0.000
MDATA	87.53	1.0
MDATA	90.64	1.0
MDATA	90.74	0.000
MDATA	200.0	0.000
/		
MPID	1712	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	84.23	0.000
MDATA	84.33	1.0
MDATA	87.43	1.0
MDATA	87.53	0.000
MDATA	200.0	0.000
/		
MPID	1713	TABLE TIME 0.65
WASTE	CONVECTION h	IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
MDATA	0.0	0.000
MDATA	80.90	0.000
MDATA	81.00	1.0
MDATA	84.23	1.0

MDATA	84.33	0.000
MDATA	200.0	0.000
/		
MPID	1714	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	77.46	0.000
MDATA	77.56	1.0
MDATA	80.90	1.0
MDATA	81.00	0.000
MDATA	200.0	0.000
/		
MPID	1715	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	74.02	0.000
MDATA	74.12	1.0
MDATA	77.46	1.0
MDATA	77.56	0.000
MDATA	200.0	0.000
/		
MPID	1716	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	70.57	0.000
MDATA	70.67	1.0
MDATA	74.02	1.0
MDATA	74.12	0.000
MDATA	200.0	0.000
/		
MPID	1717	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	67.13	0.000
MDATA	67.23	1.0
MDATA	70.57	1.0
MDATA	70.67	0.000
MDATA	200.0	0.000
/		
MPID	1718	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	63.69	0.000
MDATA	63.79	1.0
MDATA	67.13	1.0
MDATA	67.23	0.000
MDATA	200.0	0.000
/		
MPID	1719	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 19 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	1.0
MDATA	63.69	1.0

WHC-SD-W236A-ER-014
Rev. 0

MDATA	63.79	0.000
MDATA	200.0	0.000
/		
MPID	1720	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 20 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	56.80	0.000
MDATA	56.90	1.0
MDATA	60.25	1.0
MDATA	60.35	0.000
MDATA	200.0	0.000
/		
MPID	1721	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 21 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	53.36	0.000
MDATA	53.46	1.0
MDATA	56.80	1.0
MDATA	56.90	0.000
MDATA	200.0	0.000
/		
MPID	1722	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 22 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	49.92	0.000
MDATA	50.02	1.0
MDATA	53.36	1.0
MDATA	53.46	0.000
MDATA	200.0	0.000
/		
MPID	1723	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 23 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	46.48	0.000
MDATA	46.58	1.0
MDATA	49.92	1.0
MDATA	50.02	0.000
MDATA	200.0	0.000
/		
MPID	1724	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 24 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	43.03	0.000
MDATA	43.13	1.0
MDATA	46.48	1.0
MDATA	46.58	0.000
MDATA	200.0	0.000
/		
MPID	1725	TABLE TIME 0.65
WASTE CONVECTION h	IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	39.59	0.000
MDATA	39.69	1.0
MDATA	43.03	1.0

```

MDATA      43.13      0.000
MDATA      200.0      0.000
/
MPID 1726 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      36.15     0.000
MDATA      36.25     1.0
MDATA      39.59     1.0
MDATA      39.69     0.000
MDATA      200.0     0.000
/
MPID 1727 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      32.71     0.000
MDATA      32.81     1.0
MDATA      36.15     1.0
MDATA      36.25     0.000
MDATA      200.0     0.000
/
MPID 1728 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      29.26     0.000
MDATA      29.36     1.0
MDATA      32.71     1.0
MDATA      32.81     0.000
MDATA      200.0     0.000
/
MPID 1729 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      25.82     0.000
MDATA      25.92     1.0
MDATA      29.26     1.0
MDATA      29.36     0.000
MDATA      200.0     0.000
/
MPID 1730 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      22.38     0.000
MDATA      22.48     1.0
MDATA      25.82     1.0
MDATA      25.92     0.000
MDATA      200.0     0.000
/
MPID 1731 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 31 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      18.93     0.000
MDATA      19.03     1.0
MDATA      22.38     1.0

```

```

MDATA      22.48      0.000
MDATA      200.0      0.000
/
MPID 1732 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 32 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      15.49     0.000
MDATA      15.59     1.0
MDATA      18.93     1.0
MDATA      19.03     0.000
MDATA      200.0     0.000.
/
MPID 1733 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 33 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      12.05     0.000
MDATA      12.15     1.0
MDATA      15.49     1.0
MDATA      15.59     0.000
MDATA      200.0     0.000
/
MPID 1734 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 34 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      8.61      0.000
MDATA      8.71      1.0
MDATA      12.05     1.0
MDATA      12.15     0.000
MDATA      200.0     0.000
/
MPID 1735 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 35 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      5.16      0.000
MDATA      5.26      1.0
MDATA      8.61      1.0
MDATA      8.71      0.000
MDATA      200.0     0.000
/
MPID 1736 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 36 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      1.72      0.000
MDATA      1.82      1.0
MDATA      5.16      1.0
MDATA      5.26      0.000
MDATA      200.0     0.000
/
MPID 1737 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 37 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      1.0
MDATA      1.72      1.0
MDATA      1.82      0.000
MDATA      200.0     0.000

```


/
MPID 1901 TABLE TIME 0.90
EMISSION FROM LAYER 1 AS f(TIME)
MDATA 0.0 0.000
MDATA 118.48 0.000
MDATA 118.58 1.0
MDATA 200.00 1.0

/
MPID 1902 TABLE TIME 0.90
EMISSION FROM LAYER 2 AS f(TIME)
MDATA 0.0 0.000
MDATA 115.75 0.000
MDATA 115.85 1.0
MDATA 118.48 1.0
MDATA 118.58 0.000
MDATA 200.0 0.000

/
MPID 1903 TABLE TIME 0.90
EMISSION FROM LAYER 3 AS f(TIME)
MDATA 0.0 0.000
MDATA 112.79 0.000
MDATA 112.89 1.0
MDATA 115.75 1.0
MDATA 115.85 0.000
MDATA 200.0 0.000

/
MPID 1904 TABLE TIME 0.90
EMISSION FROM LAYER 4 AS f(TIME)
MDATA 0.0 0.000
MDATA 109.73 0.000
MDATA 109.83 1.0
MDATA 112.79 1.0
MDATA 112.89 0.000
MDATA 200.0 0.000

/
MPID 1905 TABLE TIME 0.90
EMISSION FROM LAYER 5 AS f(TIME)
MDATA 0.0 0.000
MDATA 106.64 0.000
MDATA 106.74 1.0
MDATA 109.73 1.0
MDATA 109.83 0.000
MDATA 200.0 0.000

/
MPID 1906 TABLE TIME 0.90
EMISSION FROM LAYER 6 AS f(TIME)
MDATA 0.0 0.000
MDATA 103.48 0.000
MDATA 103.58 1.0
MDATA 106.64 1.0
MDATA 106.74 0.000
MDATA 200.0 0.000

/
MPID 1907 TABLE TIME 0.90

EMISSION FROM LAYER 7 AS f(TIME)

MDATA	0.0	0.000
MDATA	100.27	0.000
MDATA	100.37	1.0
MDATA	103.48	1.0
MDATA	103.58	0.000
MDATA	200.0	0.000

/

MPID 1908 TABLE TIME 0.90

EMISSION FROM LAYER 8 AS f(TIME)

MDATA	0.0	0.000
MDATA	97.06	0.000
MDATA	97.16	1.0
MDATA	100.27	1.0
MDATA	100.37	0.000
MDATA	200.0	0.000

/

MPID 1909 TABLE TIME 0.90

EMISSION FROM LAYER 9 AS f(TIME)

MDATA	0.0	0.000
MDATA	93.85	0.000
MDATA	93.95	1.0
MDATA	97.06	1.0
MDATA	97.16	0.000
MDATA	200.0	0.000

/

MPID 1910 TABLE TIME 0.90

EMISSION FROM LAYER 10 AS f(TIME)

MDATA	0.0	0.000
MDATA	90.64	0.000
MDATA	90.74	1.0
MDATA	93.85	1.0
MDATA	93.95	0.000
MDATA	200.0	0.000

/

MPID 1911 TABLE TIME 0.90

EMISSION FROM LAYER 11 AS f(TIME)

MDATA	0.0	0.000
MDATA	87.43	0.000
MDATA	87.53	1.0
MDATA	90.64	1.0
MDATA	90.74	0.000
MDATA	200.0	0.000

/

MPID 1912 TABLE TIME 0.90

EMISSION FROM LAYER 12 AS f(TIME)

MDATA	0.0	0.000
MDATA	84.23	0.000
MDATA	84.33	1.0
MDATA	87.43	1.0
MDATA	87.53	0.000
MDATA	200.0	0.000

/

MPID 1913 TABLE TIME 0.90

EMISSION FROM LAYER 13 AS f(TIME)

MDATA 0.0 0.000
MDATA 80.90 0.000
MDATA 81.00 1.0
MDATA 84.23 1.0
MDATA 84.33 0.000
MDATA 200.0 0.000

/

MPID 1914 TABLE TIME 0.90

EMISSION FROM LAYER 14 AS f(TIME)

MDATA 0.0 0.000
MDATA 77.46 0.000
MDATA 77.56 1.0
MDATA 80.90 1.0
MDATA 81.00 0.000
MDATA 200.0 0.000

/

MPID 1915 TABLE TIME 0.90

EMISSION FROM LAYER 15 AS f(TIME)

MDATA 0.0 0.000
MDATA 74.02 0.000
MDATA 74.12 1.0
MDATA 77.46 1.0
MDATA 77.56 0.000
MDATA 200.0 0.000

/

MPID 1916 TABLE TIME 0.90

EMISSION FROM LAYER 16 AS f(TIME)

MDATA 0.0 0.000
MDATA 70.57 0.000
MDATA 70.67 1.0
MDATA 74.02 1.0
MDATA 74.12 0.000
MDATA 200.0 0.000

/

MPID 1917 TABLE TIME 0.90

EMISSION FROM LAYER 17 AS f(TIME)

MDATA 0.0 0.000
MDATA 67.13 0.000
MDATA 67.23 1.0
MDATA 70.57 1.0
MDATA 70.67 0.000
MDATA 200.0 0.000

/

MPID 1918 TABLE TIME 0.90

EMISSION FROM LAYER 18 AS f(TIME)

MDATA 0.0 0.000
MDATA 63.69 0.000
MDATA 63.79 1.0
MDATA 67.13 1.0
MDATA 67.23 0.000
MDATA 200.0 0.000

/

MPID 1919 TABLE TIME 0.90

EMISSION FROM LAYER 19 AS f(TIME)

MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	1.0
MDATA	63.69	1.0
MDATA	63.79	0.000
MDATA	200.0	0.000

/

MPID 1920 TABLE TIME 0.90

EMISSION FROM LAYER 20 AS f(TIME)

MDATA	0.0	0.000
MDATA	56.80	0.000
MDATA	56.90	1.0
MDATA	60.25	1.0
MDATA	60.35	0.000
MDATA	200.0	0.000

/

MPID 1921 TABLE TIME 0.90

EMISSION FROM LAYER 21 AS f(TIME)

MDATA	0.0	0.000
MDATA	53.36	0.000
MDATA	53.46	1.0
MDATA	56.80	1.0
MDATA	56.90	0.000
MDATA	200.0	0.000

/

MPID 1922 TABLE TIME 0.90

EMISSION FROM LAYER 22 AS f(TIME)

MDATA	0.0	0.000
MDATA	49.92	0.000
MDATA	50.02	1.0
MDATA	53.36	1.0
MDATA	53.46	0.000
MDATA	200.0	0.000

/

MPID 1923 TABLE TIME 0.90

EMISSION FROM LAYER 23 AS f(TIME)

MDATA	0.0	0.000
MDATA	46.48	0.000
MDATA	46.58	1.0
MDATA	49.92	1.0
MDATA	50.02	0.000
MDATA	200.0	0.000

/

MPID 1924 TABLE TIME 0.90

EMISSION FROM LAYER 24 AS f(TIME)

MDATA	0.0	0.000
MDATA	43.03	0.000
MDATA	43.13	1.0
MDATA	46.48	1.0
MDATA	46.58	0.000
MDATA	200.0	0.000

/

MPID 1925 TABLE TIME 0.90

EMISSION FROM LAYER 25 AS f(TIME)

MDATA	0.0	0.000
MDATA	39.59	0.000
MDATA	39.69	1.0
MDATA	43.03	1.0
MDATA	43.13	0.000
MDATA	200.0	0.000

/

MPID 1926 TABLE TIME 0.90

EMISSION FROM LAYER 26 AS f(TIME)

MDATA	0.0	0.000
MDATA	36.15	0.000
MDATA	36.25	1.0
MDATA	39.59	1.0
MDATA	39.69	0.000
MDATA	200.0	0.000

/

MPID 1927 TABLE TIME 0.90

EMISSION FROM LAYER 27 AS f(TIME)

MDATA	0.0	0.000
MDATA	32.71	0.000
MDATA	32.81	1.0
MDATA	36.15	1.0
MDATA	36.25	0.000
MDATA	200.0	0.000

/

MPID 1928 TABLE TIME 0.90

EMISSION FROM LAYER 28 AS f(TIME)

MDATA	0.0	0.000
MDATA	29.26	0.000
MDATA	29.36	1.0
MDATA	32.71	1.0
MDATA	32.81	0.000
MDATA	200.0	0.000

/

MPID 1929 TABLE TIME 0.90

EMISSION FROM LAYER 29 AS f(TIME)

MDATA	0.0	0.000
MDATA	25.82	0.000
MDATA	25.92	1.0
MDATA	29.26	1.0
MDATA	29.36	0.000
MDATA	200.0	0.000

/

MPID 1930 TABLE TIME 0.90

EMISSION FROM LAYER 30 AS f(TIME)

MDATA	0.0	0.000
MDATA	22.38	0.000
MDATA	22.48	1.0
MDATA	25.82	1.0
MDATA	25.92	0.000
MDATA	200.0	0.000

/

MPID 1931 TABLE TIME 0.90

EMISSION FROM LAYER 31 AS f(TIME)

MDATA	0.0	0.000
MDATA	18.93	0.000
MDATA	19.03	1.0
MDATA	22.38	1.0
MDATA	22.48	0.000
MDATA	200.0	0.000

/

MPID 1932 TABLE TIME 0.90

EMISSION FROM LAYER 32 AS f(TIME)

MDATA	0.0	0.000
MDATA	15.49	0.000
MDATA	15.59	1.0
MDATA	18.93	1.0
MDATA	19.03	0.000
MDATA	200.0	0.000

/

MPID 1933 TABLE TIME 0.90

EMISSION FROM LAYER 33 AS f(TIME)

MDATA	0.0	0.000
MDATA	12.05	0.000
MDATA	12.15	1.0
MDATA	15.49	1.0
MDATA	15.59	0.000
MDATA	200.0	0.000

/

MPID 1934 TABLE TIME 0.90

EMISSION FROM LAYER 34 AS f(TIME)

MDATA	0.0	0.000
MDATA	8.61	0.000
MDATA	8.71	1.0
MDATA	12.05	1.0
MDATA	12.15	0.000
MDATA	200.0	0.000

/

MPID 1935 TABLE TIME 0.90

EMISSION FROM LAYER 35 AS f(TIME)

MDATA	0.0	0.000
MDATA	5.16	0.000
MDATA	5.26	1.0
MDATA	8.61	1.0
MDATA	8.71	0.000
MDATA	200.0	0.000

/

MPID 1936 TABLE TIME 0.90

EMISSION FROM LAYER 36 AS f(TIME)

MDATA	0.0	0.000
MDATA	1.50	0.0
MDATA	1.60	0.1
MDATA	1.72	0.20
MDATA	1.75	0.30
MDATA	1.79	0.70
MDATA	1.82	0.80
MDATA	1.90	0.90

MDATA	2.0	1.00
MDATA	4.94	1.00
MDATA	5.04	0.9
MDATA	5.16	0.8
MDATA	5.19	0.70
MDATA	5.23	0.30
MDATA	5.26	0.2
MDATA	5.34	0.10
MDATA	5.44	0.00
MDATA	200.0	0.00

/

MPID 1937 TABLE TIME 0.90
EMISSIVITY FROM LAYER 37 AS f(TIME)

MDATA	0.0	1.0
MDATA	1.50	1.0
MDATA	1.60	0.9
MDATA	1.72	0.80
MDATA	1.75	0.70
MDATA	1.79	0.30
MDATA	1.82	0.2
MDATA	1.90	0.10
MDATA	2.0	0.000
MDATA	200.0	0.000

/

MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24

/

MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0

/

MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0

/

MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0

/

```

$ MICRO.DAT
$ STEADY STATE CASE FOR STRUCTURAL ANALYSIS INPUT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT  77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT  77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT  77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT  55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT  4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT  199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT  118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT  115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT  112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT  109.73      200      0.0      1.0

```


/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR GAS SPACE = 15 FT BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.607	
MICDAT	125.0	-7.503	
MICDAT	150.0	-18.056	
MICDAT	170.0	-29.851	
MICDAT	190.0	-44.626	

MICDAT	200.0	-53.13
MICDAT	210.0	-62.382
MICDAT	225.0	-77.654
MICDAT	250.0	-106.833
MICDAT	500.0	-222.22

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.910	
MICDAT	125.0	-9.174	
MICDAT	150.0	-22.057	
MICDAT	170.0	-36.41	
MICDAT	190.0	-54.359	
MICDAT	200.0	-64.683	
MICDAT	210.0	-75.906	
MICDAT	225.0	-94.425	
MICDAT	250.0	-129.788	
MICDAT	500.0	-222.22	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions

* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	0.03874	
MICDAT	110	0.02763	
MICDAT	120	0.30672	
MICDAT	130	0.79331	
MICDAT	140	1.15798	
MICDAT	150	1.43031	
MICDAT	165	1.71299	
MICDAT	180	1.87847	
MICDAT	195	1.94773	
MICDAT	210	1.92002	
MICDAT	250	2.072	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0		1.0	0.0

/

MICRO	1802	0	15		
MICDAT	115.75	118.48		1.0	0.0

/

MICRO	1803	0	15		
MICDAT	112.79	115.75		1.0	0.0

/

MICRO	1804	0	15		
MICDAT	109.73	112.79		1.0	0.0

/

MICRO	1805	0	15		
MICDAT	106.64	109.73		1.0	0.0

/

MICRO	1806	0	15		
MICDAT	103.48	106.64		1.0	0.0

/

MICRO	1807	0	15		
MICDAT	100.27	103.48		1.0	0.0

/

MICRO	1808	0	15		
MICDAT	97.06	100.27		1.0	0.0

/

MICRO	1809	0	15		
MICDAT	93.85	97.06		1.0	0.0

/

MICRO	1810	0	15		
MICDAT	90.64	93.85		1.0	0.0

/

MICRO	1811	0	15		
MICDAT	87.43	90.64		1.0	0.0

/

MICRO	1812	0	15		
MICDAT	84.23	87.43		1.0	0.0

/

MICRO	1813	0	15		
MICDAT	80.90	84.23		1.0	0.0

/

MICRO	1814	0	15		
MICDAT	77.46	80.90		1.0	0.0

/

MICRO	1815	0	15		
MICDAT	74.02	77.46		1.0	0.0

/

MICRO	1816	0	15		
MICDAT	70.57	74.02		1.0	0.0

/

MICRO	1817	0	15		
MICDAT	67.13	70.57		1.0	0.0

/

MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	
/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					

MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		
MICDAT	1.0				
/					

```

; TEMPLATE.DAT
; STEADY STATE CASE FOR STRUCTURAL ANALYSIS INPUT
; STEADY STATE FULL TANK
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 100 901 901 901 904 905
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 150 10001 10001 10001 10004 10005
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 300 20001 20001 20001 20004 20005
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 303 20001 20001 20001 20004 20005
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 400 30001 30001 30001 30004 30005
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 401 30001 30001 30001 30004 30005
; *****
; *****
; MID Kx Ky Kz Density Cp PHID
; ----
MID 402 40001 40001 40001 40004 40005
; *****
; *****
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; ----
CONV 70 31 1 0
;
; The code supplies GP #1.
;
; GP #2
; ----
; 1.00

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft
;
;
;      TID      CFGF      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
; CONV      30      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.99
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft
;
;
;      TID      CFGF      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
; CONV      31      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.27
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft
;
;
;      TID      CFGF      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
; CONV      32      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.19
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus

```


; ventilation air and the tank walls (BTU/hr/ft^2/degf).
 ; Lower Section of Annulus
 ; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	40	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

 ; Convective heat transfer coefficient for heat transfer between the annulus
 ; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).
 ; Vertical Section of Annulus
 ; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	41	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

 ; Convective heat transfer coefficient for heat transfer between the annulus
 ; ventilation air and the tank walls (BTU/hr/ft^2/degf).
 ; Upper section of Primary Tank
 ; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	42	27	5	5

```
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
	-----	-----	-----	-----
CONV	43	27	5	5

```
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
	-----	-----	-----	-----
CONV	44	27	5	5

```
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
```

```

*****
*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC      60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
*****
*****
; Ambient air temperature for convection from ground surface
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
*****
*****
; Annulus inlet air temperature
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
*****
*****
; Tank dome inlet air temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
*****
*****
; Ground water temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----

```

```

MACRO 95          1          0          0          1.0
;
; MFID #1
; -----
; 1095
; *****
; *****
;
; 37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK
;
;      MID      Kx      Ky      Kz      Density      Cp      -----
;      ----      -
; MID      501      1501      1501      1501      1004      1005
; MID      502      1502      1502      1502      1004      1005
; MID      503      1503      1503      1503      1004      1005
; MID      504      1504      1504      1504      1004      1005
; MID      505      1505      1505      1505      1004      1005
; MID      506      1506      1506      1506      1004      1005
; MID      507      1507      1507      1507      1004      1005
; MID      508      1508      1508      1508      1004      1005
; MID      509      1509      1509      1509      1004      1005
; MID      510      1510      1510      1510      1004      1005
; MID      511      1511      1511      1511      1004      1005
; MID      512      1512      1512      1512      1004      1005
; MID      513      1513      1513      1513      1004      1005
; MID      514      1514      1514      1514      1004      1005
; MID      515      1515      1515      1515      1004      1005
; MID      516      1516      1516      1516      1004      1005
; MID      517      1517      1517      1517      1004      1005
; MID      518      1518      1518      1518      1004      1005
; MID      519      1519      1519      1519      1004      1005
; MID      520      1520      1520      1520      1004      1005
; MID      521      1521      1521      1521      1004      1005
; MID      522      1522      1522      1522      1004      1005
; MID      523      1523      1523      1523      1004      1005
; MID      524      1524      1524      1524      1004      1005
; MID      525      1525      1525      1525      1004      1005
; MID      526      1526      1526      1526      1004      1005
; MID      527      1527      1527      1527      1004      1005
; MID      528      1528      1528      1528      1004      1005
; MID      529      1529      1529      1529      1004      1005
; MID      530      1530      1530      1530      1004      1005
; MID      531      1531      1531      1531      1004      1005
; MID      532      1532      1532      1532      1004      1005
; MID      533      1533      1533      1533      1004      1005
; MID      534      1534      1534      1534      1004      1005
; MID      535      1535      1535      1535      1004      1005
; MID      536      1536      1536      1536      1004      1005
; MID      537      1537      1537      1537      1004      1005
; *****
; *****
; HEAT GENERATION TEMPLATES FOR WASTE
;
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 601      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 602      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 603      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 604      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 605      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 606      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 607      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;      MACRO 608      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600

```

;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
;	MACRO 616	1	0	0	1.0

```

;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 617      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 618      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 619      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 620      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 621      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 622      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 623      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

MACRO	624	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	625	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	626	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	627	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	628	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	629	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	630	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	---	---	-----
MACRO	631	1	0	0	1.0
;	Microfunction 1	Microfunction 2			
;		1600			
;					

45

; The code supplies GP #1.

; GP #2

; -----
1.00

; *****
; *****

; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	701	29	0	1
	MPID			

	-1701			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	702	29	0	1
	MPID			

	-1702			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	703	29	0	1
	MPID			

	-1703			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	704	29	0	1
	MPID			

	-1704			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	705	29	0	1
	MPID			

	-1705			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	706	29	0	1

;	MPID			
;	-----			
	-1706			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	707	29	0	1
;	MPID			
;	-----			
	-1707			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	708	29	0	1
;	MPID			
;	-----			
	-1708			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	709	29	0	1
;	MPID			
;	-----			
	-1709			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	710	29	0	1
;	MPID			
;	-----			
	-1710			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	711	29	0	1
;	MPID			
;	-----			
	-1711			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	712	29	0	1
;	MPID			
;	-----			
	-1712			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

WHC-SD-W236A-ER-014
Rev. 0

;				
CONV	713	29	0	1
;	MPID			
;	-1713			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	714	29	0	1
;	MPID			
;	-1714			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	715	29	0	1
;	MPID			
;	-1715			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	716	29	0	1
;	MPID			
;	-1716			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	717	29	0	1
;	MPID			
;	-1717			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	718	29	0	1
;	MPID			
;	-1718			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;				
CONV	719	29	0	1
;	MPID			
;	-1719			
;				

;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	720	29	0	1
;	MPID			
;	-----			
;	-1720			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	721	29	0	1
;	MPID			
;	-----			
;	-1721			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	722	29	0	1
;	MPID			
;	-----			
;	-1722			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	723	29	0	1
;	MPID			
;	-----			
;	-1723			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	724	29	0	1
;	MPID			
;	-----			
;	-1724			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	725	29	0	1
;	MPID			
;	-----			
;	-1725			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	726	29	0	1
;	MPID			
;	-----			

-1726				
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	727	29	0	1
;	MPID			
;	-----			
;	-1727			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	728	29	0	1
;	MPID			
;	-----			
;	-1728			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	729	29	0	1
;	MPID			
;	-----			
;	-1729			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	730	29	0	1
;	MPID			
;	-----			
;	-1730			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	731	29	0	1
;	MPID			
;	-----			
;	-1731			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	732	29	0	1
;	MPID			
;	-----			
;	-1732			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	733	29	0	1

```

;      MPID
;      -----
;      -1733
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----
;      CONV    734      29              0              1
;      MPID
;      -----
;      -1734
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----
;      CONV    735      29              0              1
;      MPID
;      -----
;      -1735
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----
;      CONV    736      29              0              1
;      MPID
;      -----
;      -1736
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----
;      CONV    737      29              0              1
;      MPID
;      -----
;      -1737
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----
;      CONV    402      29              0              1
;      MPID
;      -----
;      -1402
;
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----

```

WHC-SD-W236A-ER-014
Rev. 0

CONV	403	29	0	1
;	MPID			
;	-----			
	-1403			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	404	29	0	1
;	MPID			
;	-----			
	-1404			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	405	29	0	1
;	MPID			
;	-----			
	-1405			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	406	29	0	1
;	MPID			
;	-----			
	-1406			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	407	29	0	1
;	MPID			
;	-----			
	-1407			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	408	29	0	1
;	MPID			
;	-----			
	-1408			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	409	29	0	1
;	MPID			
;	-----			
	-1409			
;				
;				

;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	410	29	0	1
;	MPID			
;	-----			
;	-1410			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	411	29	0	1
;	MPID			
;	-----			
;	-1411			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	412	29	0	1
;	MPID			
;	-----			
;	-1412			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	413	29	0	1
;	MPID			
;	-----			
;	-1413			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	414	29	0	1
;	MPID			
;	-----			
;	-1414			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	415	29	0	1
;	MPID			
;	-----			
;	-1415			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	416	29	0	1
;	MPID			
;	-----			
;	-1416			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	417	29	0	1
MPID	-1417			
CONV	418	29	0	1
MPID	-1418			
CONV	419	29	0	1
MPID	-1419			
CONV	420	29	0	1
MPID	-1420			
CONV	421	29	0	1
MPID	-1421			
CONV	422	29	0	1
MPID	-1422			
CONV	423	29	0	1
MPID				

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	424	29	0	1
MPID				
	425	29	0	1
MPID				
	426	29	0	1
MPID				
	427	29	0	1
MPID				
	428	29	0	1
MPID				
	429	29	0	1
MPID				

WHC-SD-W236A-ER-014
Rev. 0

CONV	430	29	0	1
;	MPID			
;	-----			
	-1430			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	431	29	0	1
;	MPID			
;	-----			
	-1431			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	432	29	0	1
;	MPID			
;	-----			
	-1432			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	433	29	0	1
;	MPID			
;	-----			
	-1433			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	434	29	0	1
;	MPID			
;	-----			
	-1434			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	435	29	0	1
;	MPID			
;	-----			
	-1435			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	436	29	0	1
;	MPID			
;	-----			
	-1436			
;				
;				

```

;      TID      CFGI  Number of GP Values      Number of MPID's
;      ----      -
CONV    437      29              0              1
;      MPID
;      ----
;      -1437
;
;*****
;*****
;      EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    801              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1801              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    802              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1802              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    803              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1803              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    804              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1804              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    805              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1805              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      -
MACRO    806              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1806              1860              1870
;
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  807              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1807              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  808              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1808              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  809              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1809              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  810              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1810              1860              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  811              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1811              1850              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  812              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1812              1850              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  813              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1813              1850              1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  814              3              0              0              1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1814              1850              1870

```

59

```

;      Microfunction 1      Microfunction 2      Microfunction 3
;      1822                1850                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 823                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1823                1850                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 824                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1824                1850                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 825                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1825                1800                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 826                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1826                1800                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 827                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1827                1800                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 828                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1828                1800                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 829                3                0                0                1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1829                1800                1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```


MACRO	830	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1830	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	831	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1831	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	832	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1832	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	833	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1833	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	834	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1834	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	835	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1835	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	836	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1836	1800	1870		
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
---	---	-----	----	----	-----
MACRO	837	3	0	0	1.0
;	Microfunction 1	Microfunction 2	Microfunction 3		
;	1837	1800	1870		
;					

```

*****
*****
; Radiation heat transfer from waste surface.
;
;

```

```

;
;      TID      Nbands
;      -----
VFAC    901      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1901      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----
VFAC    902      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1902      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----
VFAC    903      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1903      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----
VFAC    904      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1904      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----
VFAC    905      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1905      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----
VFAC    906      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1906      0      0.0      0.0      0
;

```

```

;
;      TID      Nbands
;      -----

```

```

VFAC      907      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1907      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      908      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1908      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      909      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1909      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      910      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1910      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      911      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1911      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      912      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1912      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      913      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1913      0      0.0      0.0      0
;

```

;		TID		Nbands			
;		-----		-----			
;	VFAC	914		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1914	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	915		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1915	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	916		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1916	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	917		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1917	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	918		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1918	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	919		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1919	0	0.0	0.0	0
;							
;		TID		Nbands			
;		-----		-----			
;	VFAC	920		0			
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----

0.0	1.0	1920	0	0.0	0.0	0
;		TID	Nbands			
;		-----	-----			
VFAC	921	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1921	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	922	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1922	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	923	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1923	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	924	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1924	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	925	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1925	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	926	0				
;						
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1926	0	0.0	0.0
;						
;		TID	Nbands			
;		-----	-----			
VFAC	927	0				
;						

```

;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1927    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   928    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1928    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   929    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1929    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   930    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1930    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   931    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1931    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   932    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1932    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -
VFAC   933    0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   -   -   -   -   -   -
;   0.0   1.0   1933    0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -

```

```

VFAC      934      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1934      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      935      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1935      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      936      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1936      0      0.0      0.0      0
;
;      TID      Nbands
;      ---      ---
VFAC      937      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ---      ---      ---      ---      ---      ---      ---
;      0.0      1.0      1937      0      0.0      0.0      0
;
;

```

2.2 Tank Filling Transient


```

$ MAT.DAT
$ FILL TRANSIENT
MPID 901 TABLE FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
REFERENCE: C-SI Medium Carbon Steel NSMH
MDATA 32.0 29.99
MDATA 70.0 29.89
MDATA 100.0 29.76
MDATA 200.0 29.22
MDATA 300.0 28.52
/
MPID 904 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
REFERENCE: AISI 1025 Carbon Steel
MDATA 489.0
/
MPID 905 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
REFERENCE: AISI 1025 Carbon Steel
MDATA 0.116
/
MPID 10001 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
References: Kreith
Data Quality: EXCELLENT
MDATA 0.000 0.0133
MDATA 32.0 0.0140
MDATA 100.0 0.0154
MDATA 200.0 0.0174
MDATA 300.0 0.0193
MDATA 400.0 0.0212
MDATA 500.0 0.0231
MDATA 600.0 0.0250
/
MPID 10002 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
References: Kreith Table A-3
Data Quality: EXCELLENT
MDATA 0.0 0.0400
MDATA 32.0 0.0419
MDATA 100.0 0.0463
MDATA 200.0 0.0518
MDATA 300.0 0.0580
MDATA 400.0 0.0630
MDATA 500.0 0.0680
MDATA 600.0 0.0720
/
MPID 10003 RECIPROCAL FAHRENHEIT 1.0
AIR (GAS) --> Coefficient of thermal expansion (1/F)
References: Kreith
Data Quality: EXCELLENT
MDATA 1.0 459.7
/
MPID 10004 TABLE FAHRENHEIT 1.0

```

AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA 0.0 0.0860

MDATA 32.0 0.0810

MDATA 100.0 0.0710

MDATA 200.0 0.0600

MDATA 300.0 0.0520

MDATA 400.0 0.0460

MDATA 500.0 0.0412

MDATA 600.0 0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA 0.0 0.239

MDATA 32.0 0.240

MDATA 100.0 0.240

MDATA 200.0 0.241

MDATA 300.0 0.243

MDATA 400.0 0.245

MDATA 500.0 0.247

MDATA 600.0 0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.80

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.23

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

MDATA 144.0

```

/
MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))
References:
Data Quality: ???
MDATA 0.6
/
MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0
/
MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 1402 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1.000
MDATA      0.8789   1.000
MDATA      1.3789   0.000
MDATA      20000.0  0.000
/
MPID 1403 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1.000
MDATA      3.441    1.000
MDATA      3.94     0.000
MDATA      20000.0  0.000
/
MPID 1404 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1.000
MDATA      6.3379   1.000
MDATA      6.83     0.000
MDATA      20000.0  0.000
/
MPID 1405 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1.000
MDATA      9.364    1.000
MDATA      9.86     0.000
MDATA      20000.0  0.000
/
MPID 1406 TABLE TIME 1.00

```

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 12.4565 1.000

MDATA 12.95 0.000

MDATA 20000.0 0.000

/

MPID 1407 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 14.5549 1.000

MDATA 16.05 0.000

MDATA 20000.0 0.000

/

MPID 1408 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 18.7641 1.000

MDATA 19.26 0.000

MDATA 20000.0 0.000

/

MPID 1409 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 21.9733 1.000

MDATA 22.47 0.000

MDATA 20000.0 0.000

/

MPID 1410 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 25.1845 1.000

MDATA 25.28 0.000

MDATA 20000.0 0.000

/

MPID 1411 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 28.3917 1.000

MDATA 28.49 0.000

MDATA 20000.0 0.000

/

MPID 1412 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 31.6009 1.000

MDATA 31.7 0.000

MDATA 20000.0 0.000

/

MPID 1413 TABLE TIME 1.00

TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 1.000

MDATA 34.810 1.000

MDATA 34.91 0.000

MDATA 20000.0 0.000

/

MPID 1414 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 38.0193 1.000
MDATA 38.119 0.000
MDATA 20000.0 0.000

/

MPID 1415 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 41.462 1.000
MDATA 41.56 0.000
MDATA 20000.0 0.000

/

MPID 1416 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 44.9047 1.000
MDATA 45.0 0.000
MDATA 20000.0 0.000

/

MPID 1417 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 48.3474 1.000
MDATA 48.447 0.000
MDATA 20000.0 0.000

/

MPID 1418 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 51.7901 1.000
MDATA 51.89 0.000
MDATA 20000.0 0.000

/

MPID 1419 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 55.2328 1.000
MDATA 55.33 0.000
MDATA 20000.0 0.000

/

MPID 1420 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 58.6755 1.000
MDATA 58.775 0.000
MDATA 20000.0 0.000

/

MPID 1421 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1.000
MDATA 62.1182 1.000

```

M DATA      62.218      0.000
M DATA      20000.0     0.000
/
MPID 1422 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 22 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      65.5609    1.000
M DATA      65.66      0.000
M DATA      20000.0     0.000
/
MPID 1423 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 23 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      69.0036    1.000
M DATA      69.1       0.000
M DATA      20000.0     0.000
/
MPID 1424 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 24 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      72.4463    1.000
M DATA      72.546     0.000
M DATA      20000.0     0.000
/
MPID 1425 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 25 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      75.8890    1.000
M DATA      75.989     0.000
M DATA      20000.0     0.000
/
MPID 1426 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 26 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      79.3317    1.000
M DATA      79.43      0.000
M DATA      20000.0     0.000
/
MPID 1427 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 27 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      82.7744    1.000
M DATA      82.874     0.000
M DATA      20000.0     0.000
/
MPID 1428 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 28 AS F(TIME) BTU/HR/FT/F
M DATA      0.0        1.000
M DATA      86.2171    1.000
M DATA      86.317     0.000
M DATA      20000.0     0.000
/
MPID 1429 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 29 AS F(TIME) BTU/HR/FT/F

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M DATA      0.0      1.000
M DATA      89.6598   1.000
M DATA      89.76     0.000
M DATA      20000.0   0.000
/
MPID 1430 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 30 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      93.1025   1.000
M DATA      93.202    0.000
M DATA      20000.0   0.000
/
MPID 1431 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 31 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      96.5452    1.000
M DATA      96.645     0.000
M DATA      20000.0   0.000
/
MPID 1432 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 32 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      99.9879    1.000
M DATA      100.1      0.000
M DATA      20000.0   0.000
/
MPID 1433 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 33 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      103.4306    1.000
M DATA      103.5306    0.000
M DATA      20000.0   0.000
/
MPID 1434 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 34 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      106.8733    1.000
M DATA      106.973     0.000
M DATA      20000.0   0.000
/
MPID 1435 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 35 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      110.3160    1.000
M DATA      110.416     0.000
M DATA      20000.0   0.000
/
MPID 1436 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 36 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1.000
M DATA      113.7587    1.000
M DATA      113.858     0.000
M DATA      20000.0   0.000
/

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MPID 1437 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1.000
MDATA     117.2014      1.000
MDATA     117.301      0.000
MDATA     20000.0      0.000
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      0.50     100.0
MDATA     15.0     100.0
MDATA     15.5     1100.0
MDATA     20000.0     1100.0
/
MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA     0.8789      0.000
MDATA     1.3789     100.0
MDATA     15.0     100.0
MDATA     15.5     1100.0
MDATA     20000.0     1100.0
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA     3.441      0.000
MDATA     3.94     100.0
MDATA     15.0     100.0
MDATA     15.5     1100.0
MDATA     20000.0     1100.0
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA     6.3379      0.000
MDATA     6.83     100.0
MDATA     15.0     100.0
MDATA     15.5     1100.0
MDATA     20000.0     1100.0
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA     9.364      0.000
MDATA     9.86     100.0
MDATA     15.0     100.0
MDATA     15.5     1100.0
MDATA     20000.0     1100.0
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000

```


MDATA 12.4565 0.000
MDATA 12.95 100.0
MDATA 15.0 100.0
MDATA 15.5 1100.0
MDATA 20000.0 1100.0
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 15.5549 0.000
MDATA 16.05 1100.0
MDATA 20000.0 1100.0
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 18.7641 0.000
MDATA 19.26 1100.0
MDATA 20000.0 1100.0
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 21.9733 0.000
MDATA 22.47 1100.0
MDATA 20000.0 1100.0
/
MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 25.1845 0.000
MDATA 25.28 1100.0
MDATA 20000.0 1100.0
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 28.3917 0.000
MDATA 28.49 1100.0
MDATA 20000.0 1100.0
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 31.6009 0.000
MDATA 31.7 1100.0
MDATA 20000.0 1100.0
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 34.810 0.000
MDATA 34.91 1100.0
MDATA 20000.0 1100.0

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/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 38.0193 0.000
MDATA 38.119 1100.0
MDATA 20000.0 1100.0
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 41.462 0.000
MDATA 41.56 1100.0
MDATA 20000.0 1100.0
/
MPID 1516 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 44.9047 0.000
MDATA 45.0 1100.0
MDATA 20000.0 1100.0
/
MPID 1517 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 48.3474 0.000
MDATA 48.447 1100.0
MDATA 20000.0 1100.0
/
MPID 1518 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 51.7901 0.000
MDATA 51.89 1100.0
MDATA 20000.0 1100.0
/
MPID 1519 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 55.2328 0.000
MDATA 55.33 1100.0
MDATA 20000.0 1100.0
/
MPID 1520 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.6755 0.000
MDATA 58.775 1100.0
MDATA 20000.0 1100.0
/
MPID 1521 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 62.1182 0.000

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MDATA      62.218      1100.0
MDATA      20000.0     1100.0
/
MPID 1522 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      65.5609     0.000
MDATA      65.66       1100.0
MDATA      20000.0     1100.0
/
MPID 1523 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      69.0036     0.000
MDATA      69.1        1100.0
MDATA      20000.0     1100.0
/
MPID 1524 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      72.4463     0.000
MDATA      72.546      1100.0
MDATA      20000.0     1100.0
/
MPID 1525 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      75.8890     0.000
MDATA      75.989      1100.0
MDATA      20000.0     1100.0
/
MPID 1526 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      79.3317     0.000
MDATA      79.43       1100.0
MDATA      20000.0     1100.0
/
MPID 1527 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      82.7744     0.000
MDATA      82.874      1100.0
MDATA      20000.0     1100.0
/
MPID 1528 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA      0.0        0.000
MDATA      86.2171     0.000
MDATA      86.317      1100.0
MDATA      20000.0     1100.0
/
MPID 1529 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F

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M DATA      0.0      0.000
M DATA      89.6598    0.000
M DATA      89.76     1100.0
M DATA      20000.0    1100.0
/
MPID 1530 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      93.1025    0.000
M DATA      93.202     1100.0
M DATA      20000.0    1100.0
/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      96.5452    0.000
M DATA      96.645     1100.0
M DATA      20000.0    1100.0
/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      99.9879    0.000
M DATA      100.1      1100.0
M DATA      20000.0    1100.0
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      103.4306    0.000
M DATA      103.5306    1100.0
M DATA      20000.0    1100.0
/
MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      106.8733    0.000
M DATA      106.973     1100.0
M DATA      20000.0    1100.0
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      110.3160    0.000
M DATA      110.416     1100.0
M DATA      20000.0    1100.0
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      113.7587    0.000
M DATA      113.858     1100.0
M DATA      20000.0    1100.0
/

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MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA     117.2014      0.000
MDATA     117.301      1100.0
MDATA     20000.0      1100.0
/
MPID 1701 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      0.03      0.000
MDATA      0.53      1.0
MDATA      2.16      1.0
MDATA      2.26      0.000
MDATA     20000.0      0.000
/
MPID 1702 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 2 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      2.16      0.000
MDATA      2.26      1.0
MDATA      4.89      1.0
MDATA      4.99      0.000
MDATA     20000.0      0.000
/
MPID 1703 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 3 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      4.89      0.000
MDATA      4.99      1.0
MDATA      7.85      1.0
MDATA      7.95      0.000
MDATA     20000.0      0.000
/
MPID 1704 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 4 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      7.85      0.000
MDATA      7.95      1.0
MDATA     10.91      1.0
MDATA     11.01      0.000
MDATA     20000.0      0.000
/
MPID 1705 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 5 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     10.91      0.000
MDATA     11.01      1.0
MDATA     14.0      1.0
MDATA     14.1      0.000
MDATA     20000.0      0.000
/
MPID 1706 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 6 AS f(TIME) BTU/HR/FT**2/F

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MDATA      0.0      0.000
MDATA      14.0     0.000
MDATA      14.10    1.0
MDATA      17.16    1.0
MDATA      17.26    0.000
MDATA      20000.0   0.000
/
MPID 1707 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 7 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      17.16    0.000
MDATA      17.26    1.0
MDATA      20.37    1.0
MDATA      20.47    0.000
MDATA      20000.0   0.000
/
MPID 1708 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      20.37    0.000
MDATA      20.47    1.0
MDATA      23.58    1.0
MDATA      23.68    0.000
MDATA      20000.0   0.000
/
MPID 1709 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      23.58    0.000
MDATA      23.68    1.0
MDATA      26.79    1.0
MDATA      26.89    0.000
MDATA      20000.0   0.000
/
MPID 1710 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      26.79    0.000
MDATA      26.89    1.0
MDATA      30.00    1.0
MDATA      30.10    0.000
MDATA      20000.0   0.000
/
MPID 1711 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      30.00    0.000
MDATA      30.10    1.0
MDATA      33.21    1.0
MDATA      33.31    0.000
MDATA      20000.0   0.000
/
MPID 1712 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F

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MDATA      0.0      0.000
MDATA      33.21     0.000
MDATA      33.31      1.0
MDATA      36.41      1.0
MDATA      36.51     0.000
MDATA      20000.0    0.000
/
MPID 1713 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      36.41     0.000
MDATA      36.51      1.0
MDATA      39.74      1.0
MDATA      39.84     0.000
MDATA      20000.0    0.000
/
MPID 1714 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      39.74     0.000
MDATA      39.84      1.0
MDATA      43.18      1.0
MDATA      43.28     0.000
MDATA      20000.0    0.000
/
MPID 1715 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      43.18     0.000
MDATA      43.28      1.0
MDATA      46.63      1.0
MDATA      46.73     0.000
MDATA      20000.0    0.000
/
MPID 1716 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      46.63     0.000
MDATA      46.73      1.0
MDATA      50.07      1.0
MDATA      50.17     0.000
MDATA      20000.0    0.000
/
MPID 1717 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      50.07     0.000
MDATA      50.17      1.0
MDATA      53.51      1.0
MDATA      53.61     0.000
MDATA      20000.0    0.000
/
MPID 1718 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F

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MDATA      0.0      0.000
MDATA      53.51     0.000
MDATA      53.61      1.0
MDATA      56.95      1.0
MDATA      57.05     0.000
MDATA      20000.0    0.000
/
MPID 1719  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 19 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      56.95     0.000
MDATA      57.05      1.0
MDATA      60.4      1.0
MDATA      60.50     0.000
MDATA      20000.0    0.000
/
MPID 1720  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 20 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      60.40     0.000
MDATA      60.50      1.0
MDATA      63.84      1.0
MDATA      63.94     0.000
MDATA      20000.0    0.000
/
MPID 1721  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 21 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      63.84     0.000
MDATA      63.94      1.0
MDATA      67.28      1.0
MDATA      67.38     0.000
MDATA      20000.0    0.000
/
MPID 1722  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 22 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      67.28     0.000
MDATA      67.38      1.0
MDATA      70.72      1.0
MDATA      70.82     0.000
MDATA      20000.0    0.000
/
MPID 1723  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 23 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      70.72     0.000
MDATA      70.82      1.0
MDATA      74.17      1.0
MDATA      74.27     0.000
MDATA      20000.0    0.000
/
MPID 1724  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 24 AS f(TIME)  BTU/HR/FT**2/F

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M DATA      0.0      0.000
M DATA      74.17     0.000
M DATA      74.27     1.0
M DATA      77.61     1.0
M DATA      77.71     0.000
M DATA      20000.0    0.000
/
MPID 1725 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      77.61     0.000
M DATA      77.71     1.0
M DATA      81.05     1.0
M DATA      81.15     0.000
M DATA      20000.0    0.000
/
MPID 1726 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      81.05     0.000
M DATA      81.15     1.0
M DATA      84.5      1.0
M DATA      84.60     0.000
M DATA      20000.0    0.000
/
MPID 1727 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      84.5      0.000
M DATA      84.60     1.0
M DATA      87.94     1.0
M DATA      88.04     0.000
M DATA      20000.0    0.000
/
MPID 1728 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      87.94     0.000
M DATA      88.04     1.0
M DATA      91.38     1.0
M DATA      91.48     0.000
M DATA      20000.0    0.000
/
MPID 1729 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      91.38     0.000
M DATA      91.48     1.0
M DATA      94.82     1.0
M DATA      94.92     0.000
M DATA      20000.0    0.000
/
MPID 1730 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F

```

```

MDATA      0.0      0.000
MDATA      94.82     0.000
MDATA      94.92     1.0
MDATA      98.27     1.0
MDATA      98.37     0.000
MDATA     20000.0     0.000
/
MPID 1731  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 31 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      98.27     0.000
MDATA      98.37     1.0
MDATA     101.71     1.0
MDATA     101.81     0.000
MDATA     20000.0     0.000
/
MPID 1732  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 32 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     101.71     0.000
MDATA     101.81     1.0
MDATA     105.15     1.0
MDATA     105.25     0.000
MDATA     20000.0     0.000
/
MPID 1733  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 33 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     105.15     0.000
MDATA     105.25     1.0
MDATA     108.59     1.0
MDATA     108.69     0.000
MDATA     20000.0     0.000
/
MPID 1734  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 34 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     108.59     0.000
MDATA     108.69     1.0
MDATA     112.04     1.0
MDATA     112.14     0.000
MDATA     20000.0     0.000
/
MPID 1735  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 35 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     112.04     0.000
MDATA     112.14     1.0
MDATA     115.48     1.0
MDATA     115.58     0.000
MDATA     20000.0     0.000
/
MPID 1736  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 36 AS f(TIME)  BTU/HR/FT**2/F

```

```

MDATA      0.0      0.000
MDATA     115.48    0.000
MDATA     115.58    1.0
MDATA     118.92    1.0
MDATA     119.02    0.000
MDATA     20000.0   0.000
/
MPID 1737  TABLE  TIME  1.00
WASTE CONVECTION h IN LAYER 37 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     118.92    0.000
MDATA     119.02    1.0
MDATA     20000.0   1.0
/
MPID 1901  TABLE  TIME  0.90
EMISSION FROM LAYER 1 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      0.03     0.0
MDATA      0.53     1.0
MDATA      2.16     1.0
MDATA      2.26     0.0
MDATA     20000.0   0.0
/
MPID 1902  TABLE  TIME  0.90
EMISSION FROM LAYER 2 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      2.16     0.0
MDATA      2.26     1.0
MDATA      4.89     1.0
MDATA      4.99     0.0
MDATA     20000.0   0.0
/
MPID 1903  TABLE  TIME  0.90
EMISSION FROM LAYER 3 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      4.89     0.0
MDATA      4.99     1.0
MDATA      7.85     1.0
MDATA      7.95     0.0
MDATA     20000.0   0.0
/
MPID 1904  TABLE  TIME  0.90
EMISSION FROM LAYER 4 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      7.85     0.0
MDATA      7.95     1.0
MDATA     10.91     1.0
MDATA     11.01     0.0
MDATA     20000.0   0.0
/
MPID 1905  TABLE  TIME  0.90
EMISSION FROM LAYER 5 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA     10.91     0.0

```

```

MDATA      11.01      1.0
MDATA      14.0       1.0
MDATA      14.10      0.0
MDATA      20000.0     0.0
/
MPID 1906  TABLE  TIME  0.90
EMISSION FROM  LAYER 6 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      14.0      0.0
MDATA      14.10     1.0
MDATA      17.16     1.0
MDATA      17.26     0.0
MDATA      20000.0    0.0
/
MPID 1907  TABLE  TIME  0.90
EMISSION FROM  LAYER 7 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      17.16     0.0
MDATA      17.26     1.0
MDATA      20.37     1.0
MDATA      20.47     0.0
MDATA      20000.0    0.0
/
MPID 1908  TABLE  TIME  0.90
EMISSION FROM  LAYER 8 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      20.37     0.0
MDATA      20.47     1.0
MDATA      23.58     1.0
MDATA      23.68     0.0
MDATA      20000.0    0.0
/
MPID 1909  TABLE  TIME  0.90
EMISSION FROM  LAYER 9 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      23.58     0.0
MDATA      23.68     1.0
MDATA      26.79     1.0
MDATA      26.89     0.0
MDATA      20000.0    0.0
/
MPID 1910  TABLE  TIME  0.90
EMISSION FROM  LAYER 10 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      26.79     0.0
MDATA      26.89     1.0
MDATA      30.00     1.0
MDATA      30.10     0.0
MDATA      20000.0    0.0
/
MPID 1911  TABLE  TIME  0.90
EMISSION FROM  LAYER 11 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0       0.0
MDATA      30.00     0.0

```

```

M DATA      30.10      1.0
M DATA      33.21      1.0
M DATA      33.31      0.0
M DATA      20000.0     0.0
/
MPID 1912 TABLE TIME 0.90
EMISSION FROM LAYER 12 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      33.21      0.0
M DATA      33.31      1.0
M DATA      36.41      1.0
M DATA      36.51      0.0
M DATA      20000.0     0.0
/
MPID 1913 TABLE TIME 0.90
EMISSION FROM LAYER 13 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      36.41      0.0
M DATA      36.51      1.0
M DATA      39.74      1.0
M DATA      39.84      0.0
M DATA      20000.0     0.0
/
MPID 1914 TABLE TIME 0.90
EMISSION FROM LAYER 14 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      39.74      0.0
M DATA      39.84      1.0
M DATA      43.18      1.0
M DATA      43.28      0.0
M DATA      20000.0     0.0
/
MPID 1915 TABLE TIME 0.90
EMISSION FROM LAYER 15 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      43.18      0.0
M DATA      43.28      1.0
M DATA      46.63      1.0
M DATA      46.73      0.0
M DATA      20000.0     0.0
/
MPID 1916 TABLE TIME 0.90
EMISSION FROM LAYER 16 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      46.63      0.0
M DATA      46.73      1.0
M DATA      50.07      1.0
M DATA      50.17      0.0
M DATA      20000.0     0.0
/
MPID 1917 TABLE TIME 0.90
EMISSION FROM LAYER 17 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0        0.0
M DATA      50.07      0.0

```

```

MDATA      50.17      1.0
MDATA      53.51      1.0
MDATA      53.61      0.0
MDATA      20000.0    0.0
/
MPID 1918  TABLE  TIME  0.90
EMISSION FROM  LAYER 18 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      53.51      0.0
MDATA      53.61      1.0
MDATA      56.95      1.0
MDATA      57.05      0.0
MDATA      20000.0    0.0
/
MPID 1919  TABLE  TIME  0.90
EMISSION FROM  LAYER 19 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      56.95      0.0
MDATA      57.05      1.0
MDATA      60.4       1.0
MDATA      60.50      0.0
MDATA      20000.0    0.0
/
MPID 1920  TABLE  TIME  0.90
EMISSION FROM  LAYER 20 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      60.40      0.0
MDATA      60.50      1.0
MDATA      63.84      1.0
MDATA      63.94      0.0
MDATA      20000.0    0.0
/
MPID 1921  TABLE  TIME  0.90
EMISSION FROM  LAYER 21 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      63.84      0.0
MDATA      63.94      1.0
MDATA      67.28      1.0
MDATA      67.38      0.0
MDATA      20000.0    0.0
/
MPID 1922  TABLE  TIME  0.90
EMISSION FROM  LAYER 22 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      67.28      0.0
MDATA      67.38      1.0
MDATA      70.72      1.0
MDATA      70.82      0.0
MDATA      20000.0    0.0
/
MPID 1923  TABLE  TIME  0.90
EMISSION FROM  LAYER 23 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      70.72      0.0

```

```

MDATA      70.82      1.0
MDATA      74.17      1.0
MDATA      74.27      0.0
MDATA      20000.0    0.0
/
MPID 1924  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 24 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      74.17      0.0
MDATA      74.27      1.0
MDATA      77.61      1.0
MDATA      77.71      0.0
MDATA      20000.0    0.0
/
MPID 1925  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 25 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      77.61      0.0
MDATA      77.71      1.0
MDATA      81.05      1.0
MDATA      81.15      0.0
MDATA      20000.0    0.0
/
MPID 1926  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 26 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      81.05      0.0
MDATA      81.15      1.0
MDATA      84.5       1.0
MDATA      84.60      0.0
MDATA      20000.0    0.0
/
MPID 1927  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 27 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      84.5       0.0
MDATA      84.60      1.0
MDATA      87.94      1.0
MDATA      88.04      0.0
MDATA      20000.0    0.0
/
MPID 1928  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 28 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      87.94      0.0
MDATA      88.04      1.0
MDATA      91.38      1.0
MDATA      91.48      0.0
MDATA      20000.0    0.0
/
MPID 1929  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 29 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.0
MDATA      91.38      0.0

```

```

MDATA      91.48      1.0
MDATA      94.82      1.0
MDATA      94.92      0.0
MDATA      20000.0     0.0
/
MPID 1930  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 30 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      94.82      0.0
MDATA      94.92      1.0
MDATA      98.27      1.0
MDATA      98.37      0.0
MDATA      20000.0     0.0
/
MPID 1931  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 31 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      98.27      0.0
MDATA      98.37      1.0
MDATA      101.71     1.0
MDATA      101.81     0.0
MDATA      20000.0     0.0
/
MPID 1932  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 32 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      101.71     0.0
MDATA      101.81     1.0
MDATA      105.15     1.0
MDATA      105.25     0.0
MDATA      20000.0     0.0
/
MPID 1933  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 33 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      105.15     0.0
MDATA      105.25     1.0
MDATA      108.59     1.0
MDATA      108.69     0.0
MDATA      20000.0     0.0
/
MPID 1934  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 34 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      108.59     0.0
MDATA      108.69     1.0
MDATA      112.04     1.0
MDATA      112.14     0.0
MDATA      20000.0     0.0
/
MPID 1935  TABLE  TIME  0.90
EMISSIONITY FROM  LAYER 35 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0        0.0
MDATA      112.04     0.0

```


MDATA 112.14 1.0
MDATA 115.48 1.0
MDATA 115.58 0.0
MDATA 20000.0 0.0
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.0
MDATA 115.48 0.0
MDATA 115.58 1.0
MDATA 118.92 1.0
MDATA 119.02 0.0
MDATA 20000.0 0.0
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.0
MDATA 118.92 0.0
MDATA 119.02 1.0
MDATA 20000.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/

```

$ MICRO.DAT
$ FILL TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT 77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      18
MICDAT 0.0      1.61228
MICDAT 15.5     1.61228
MICDAT 17.0     22.2072
MICDAT 21.0     18.2843
MICDAT 25.0     15.6168
MICDAT 30.0     13.2827
MICDAT 35.0     11.6155
MICDAT 45.0     9.3926
MICDAT 55.0     7.9780
MICDAT 65.0     6.9986
MICDAT 75.0     6.2804
MICDAT 85.0     5.7313
MICDAT 100.0    5.1134
MICDAT 120.64   4.5144
MICDAT 20000.0  4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*

```

MICRO	1601	0	15		
MICDAT	0.45	20000	1.0	0.0	
/					
MICRO	1602	0	15		
MICDAT	2.16	20000	1.0	0.0	
/					
MICRO	1603	0	15		
MICDAT	4.89	20000	1.0	0.0	
/					
MICRO	1604	0	15		
MICDAT	7.85	20000	1.0	0.0	
/					
MICRO	1605	0	15		
MICDAT	10.91	20000	1.0	0.0	
/					
MICRO	1606	0	15		
MICDAT	14.00	20000	1.0	0.0	
/					
MICRO	1607	0	15		
MICDAT	17.16	20000	1.0	0.0	
/					
MICRO	1608	0	15		
MICDAT	20.37	20000	1.0	0.0	
/					
MICRO	1609	0	15		
MICDAT	23.37	20000	1.0	0.0	
/					
MICRO	1610	0	15		
MICDAT	26.79	20000	1.0	0.0	
/					
MICRO	1611	0	15		
MICDAT	30.00	20000	1.0	0.0	
/					
MICRO	1612	0	15		
MICDAT	33.21	20000	1.0	0.0	
/					
MICRO	1613	0	15		
MICDAT	36.41	20000	1.0	0.0	
/					
MICRO	1614	0	15		
MICDAT	39.74	20000	1.0	0.0	
/					
MICRO	1615	0	15		
MICDAT	43.18	20000	1.0	0.0	
/					
MICRO	1616	0	15		
MICDAT	46.63	20000	1.0	0.0	
/					
MICRO	1617	0	15		
MICDAT	50.07	20000	1.0	0.0	
/					
MICRO	1618	0	15		
MICDAT	53.51	20000	1.0	0.0	
/					

WHC-SD-W236A-ER-014
Rev. 0

MICRO	1619	0	15		
MICDAT	56.95	20000		1.0	0.0
/					
MICRO	1620	0	15		
MICDAT	60.40	20000		1.0	0.0
/					
MICRO	1621	0	15		
MICDAT	63.84	20000		1.0	0.0
/					
MICRO	1622	0	15		
MICDAT	67.28	20000		1.0	0.0
/					
MICRO	1623	0	15		
MICDAT	70.72	20000		1.0	0.0
/					
MICRO	1624	0	15		
MICDAT	74.17	20000		1.0	0.0
/					
MICRO	1625	0	15		
MICDAT	77.61	20000		1.0	0.0
/					
MICRO	1626	0	15		
MICDAT	81.05	20000		1.0	0.0
/					
MICRO	1627	0	15		
MICDAT	84.5	20000		1.0	0.0
/					
MICRO	1628	0	15		
MICDAT	87.94	20000		1.0	0.0
/					
MICRO	1629	0	15		
MICDAT	91.38	20000		1.0	0.0
/					
MICRO	1630	0	15		
MICDAT	94.82	20000		1.0	0.0
/					
MICRO	1631	0	15		
MICDAT	98.27	20000		1.0	0.0
/					
MICRO	1632	0	15		
MICDAT	101.71	20000		1.0	0.0
/					
MICRO	1633	0	15		
MICDAT	105.15	20000		1.0	0.0
/					
MICRO	1634	0	15		
MICDAT	108.59	20000		1.0	0.0
/					
MICRO	1635	0	15		
MICDAT	112.04	20000		1.0	0.0
/					
MICRO	1636	0	15		
MICDAT	115.48	20000		1.0	0.0
/					

MICRO 1637 0 15
 MICDAT 118.92 20000 1.0 0.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR GAS SPACE = 15 FT BTU/HR/FT**2

*

MICRO 1800 1 18
 MICDAT 0.0 0.0
 MICDAT 100.0 -1.607
 MICDAT 125.0 -7.503
 MICDAT 150.0 -18.056
 MICDAT 170.0 -29.851
 MICDAT 190.0 -44.626
 MICDAT 200.0 -53.13
 MICDAT 210.0 -62.382
 MICDAT 225.0 -77.654
 MICDAT 250.0 -106.833
 MICDAT 500.0 -222.22

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO 1850 1 18
 MICDAT 0.0 0.0
 MICDAT 100.0 -1.910
 MICDAT 125.0 -9.174
 MICDAT 150.0 -22.057
 MICDAT 170.0 -36.41
 MICDAT 190.0 -54.359
 MICDAT 200.0 -64.683
 MICDAT 210.0 -75.906
 MICDAT 225.0 -94.425
 MICDAT 250.0 -129.788
 MICDAT 500.0 -222.22

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO 1860 1 18
 MICDAT 0.0 0.0
 MICDAT 100.0 -2.709
 MICDAT 125.0 -10.267
 MICDAT 150.0 -23.156
 MICDAT 170.0 -37.307
 MICDAT 190.0 -54.869
 MICDAT 200.0 -64.930
 MICDAT 210.0 -75.843
 MICDAT 225.0 -^[[003q93.813
 MICDAT 250.0 -128.028
 MICDAT 500.0 -222.22

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions

* to account for the effects of the recirc system
*

MICRO	1870	1	18
MICDAT	100		0.03874
MICDAT	110		0.02763
MICDAT	120		0.30672
MICDAT	130		0.79331
MICDAT	140		1.15798
MICDAT	150		1.43031
MICDAT	165		1.71299
MICDAT	180		1.87847
MICDAT	195		1.94773
MICDAT	210		1.92002
MICDAT	250		2.072

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15	
MICDAT	0.45	2.16	1.0	0.0
/				
MICRO	1802	0	15	
MICDAT	2.16	4.89	1.0	0.0
/				
MICRO	1803	0	15	
MICDAT	4.89	7.85	1.0	0.0
/				
MICRO	1804	0	15	
MICDAT	7.85	10.91	1.0	0.0
/				
MICRO	1805	0	15	
MICDAT	10.91	14.0	1.0	0.0
/				
MICRO	1806	0	15	
MICDAT	14.00	17.16	1.0	0.0
/				
MICRO	1807	0	15	
MICDAT	17.16	20.37	1.0	0.0
/				
MICRO	1808	0	15	
MICDAT	20.37	23.58	1.0	0.0
/				
MICRO	1809	0	15	
MICDAT	23.58	26.79	1.0	0.0
/				
MICRO	1810	0	15	
MICDAT	26.79	30.0	1.0	0.0
/				
MICRO	1811	0	15	
MICDAT	30.00	33.21	1.0	0.0
/				
MICRO	1812	0	15	
MICDAT	33.21	36.41	1.0	0.0
/				
MICRO	1813	0	15	

MICDAT	36.41	39.74	1.0	0.0
/				
MICRO	1814	0 15		
MICDAT	39.74	43.18	1.0	0.0
/				
MICRO	1815	0 15		
MICDAT	43.18	46.63	1.0	0.0
/				
MICRO	1816	0 15		
MICDAT	46.63	50.07	1.0	0.0
/				
MICRO	1817	0 15		
MICDAT	50.07	53.51	1.0	0.0
/				
MICRO	1818	0 15		
MICDAT	53.51	56.95	1.0	0.0
/				
MICRO	1819	0 15		
MICDAT	56.95	60.4	1.0	0.0
/				
MICRO	1820	0 15		
MICDAT	60.40	63.84	1.0	0.0
/				
MICRO	1821	0 15		
MICDAT	63.84	67.28	1.0	0.0
/				
MICRO	1822	0 15		
MICDAT	67.28	70.72	1.0	0.0
/				
MICRO	1823	0 15		
MICDAT	70.72	74.17	1.0	0.0
/				
MICRO	1824	0 15		
MICDAT	74.17	77.61	1.0	0.0
/				
MICRO	1825	0 15		
MICDAT	77.61	81.05	1.0	0.0
/				
MICRO	1826	0 15		
MICDAT	81.05	84.5	1.0	0.0
/				
MICRO	1827	0 15		
MICDAT	84.5	87.94	1.0	0.0
/				
MICRO	1828	0 15		
MICDAT	87.94	91.38	1.0	0.0
/				
MICRO	1829	0 15		
MICDAT	91.38	94.82	1.0	0.0
/				
MICRO	1830	0 15		
MICDAT	94.82	98.27	1.0	0.0
/				
MICRO	1831	0 15		

WHC-SD-W236A-ER-014
Rev. 0

MICDAT	98.27	101.71	1.0	0.0
/				
MICRO	1832	0 15		
MICDAT	101.71	105.15	1.0	0.0
/				
MICRO	1833	0 15		
MICDAT	105.15	108.59	1.0	0.0
/				
MICRO	1834	0 15		
MICDAT	108.59	112.04	1.0	0.0
/				
MICRO	1835	0 15		
MICDAT	112.04	115.48	1.0	0.0
/				
MICRO	1836	0 15		
MICDAT	115.48	118.92	1.0	0.0
/				
MICRO	1837	0 15		
MICDAT	118.92	20000	1.0	0.0
/				


```
;
;  TEMPLATE.DAT
;  FILL TRANSIENT
;
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      100      901      901      901      904      905
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      150     10001     10001     10001     10004     10005
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      300     20001     20001     20001     20004     20005
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      303     20001     20001     20001     20004     20005
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      400     30001     30001     30001     30004     30005
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      401     30001     30001     30001     30004     30005
; *****
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -
; MID      402     40001     40001     40001     40004     40005
; *****
; *****
;
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      supplied by this      supplied by this
;      ----      ----      template              template
;
; CONV      70      31              1              0
;
; The code supplies GP #1.
;
; GP #2
; ----
; 1.00
; *****
```

```

;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	30	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.99

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	31	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.27

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	32	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.19

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

```

; Lower Section of Annulus
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	40	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).
; Vertical Section of Annulus
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	41	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper section of Primary Tank
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	42	27	5	5

; The code supplies GP #1.

```

;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 43 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 44 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****

```

```

*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC      60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
*****
; Ambient air temperature for convection from ground surface
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
*****
; Annulus inlet air temperature
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
*****
; Tank dome inlet air temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
*****
; Ground water temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      95      1      0      0      1.0

```

```

;
; MFID #1
; -----
; 1095
; *****
; *****
;
; 37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK
;
; MID      Kx      Ky      Kz      Density      Cp      -----
; -----
MID 501 1501 1501 1501 1004 1005
MID 502 1502 1502 1502 1004 1005
MID 503 1503 1503 1503 1004 1005
MID 504 1504 1504 1504 1004 1005
MID 505 1505 1505 1505 1004 1005
MID 506 1506 1506 1506 1004 1005
MID 507 1507 1507 1507 1004 1005
MID 508 1508 1508 1508 1004 1005
MID 509 1509 1509 1509 1004 1005
MID 510 1510 1510 1510 1004 1005
MID 511 1511 1511 1511 1004 1005
MID 512 1512 1512 1512 1004 1005
MID 513 1513 1513 1513 1004 1005
MID 514 1514 1514 1514 1004 1005
MID 515 1515 1515 1515 1004 1005
MID 516 1516 1516 1516 1004 1005
MID 517 1517 1517 1517 1004 1005
MID 518 1518 1518 1518 1004 1005
MID 519 1519 1519 1519 1004 1005
MID 520 1520 1520 1520 1004 1005
MID 521 1521 1521 1521 1004 1005
MID 522 1522 1522 1522 1004 1005
MID 523 1523 1523 1523 1004 1005
MID 524 1524 1524 1524 1004 1005
MID 525 1525 1525 1525 1004 1005
MID 526 1526 1526 1526 1004 1005
MID 527 1527 1527 1527 1004 1005
MID 528 1528 1528 1528 1004 1005
MID 529 1529 1529 1529 1004 1005
MID 530 1530 1530 1530 1004 1005
MID 531 1531 1531 1531 1004 1005
MID 532 1532 1532 1532 1004 1005
MID 533 1533 1533 1533 1004 1005
MID 534 1534 1534 1534 1004 1005
MID 535 1535 1535 1535 1004 1005
MID 536 1536 1536 1536 1004 1005
MID 537 1537 1537 1537 1004 1005
; *****
; *****
; HEAT GENERATION TEMPLATES FOR WASTE
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;

```

107

108

	1616	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	617	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1617	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	618	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1618	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	619	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1619	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	620	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1620	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	621	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1621	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	622	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1622	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	623	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
;	1623	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----

```

MACRO 624          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1624          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 625          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1625          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 626          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1626          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 627          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1627          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 628          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1628          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 629          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1629          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 630          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1630          1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 631          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1631          1600
;
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  632              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1632              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  633              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1633              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  634              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1634              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  635              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1635              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  636              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1636              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  637              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1637              1600

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer from
; tank dome to air in tank dome
; (Btu/hr/ft^2/deg.f)

```

```

;      TID      CFIG      Number of GP Values      Number of MPID's
;      ---      ---      supplied by this      supplied by this
;      ---      ---      template      template
CONV  700      31              1              0

```

```

; The code supplies GP #1.

```

```

;
; GP #2
; -----
; 1.00
; *****
; *****
; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      701      29      0      1
;      MPID
;      -----
;      -1701
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      702      29      0      1
;      MPID
;      -----
;      -1702
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      703      29      0      1
;      MPID
;      -----
;      -1703
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      704      29      0      1
;      MPID
;      -----
;      -1704
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      705      29      0      1
;      MPID
;      -----
;      -1705
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      -
; CONV      706      29      0      1
;      MPID

```

;	-----			
;	-1706			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	707	29	0	1
;	MPID			
;	-----			
;	-1707			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	708	29	0	1
;	MPID			
;	-----			
;	-1708			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	709	29	0	1
;	MPID			
;	-----			
;	-1709			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	710	29	0	1
;	MPID			
;	-----			
;	-1710			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	711	29	0	1
;	MPID			
;	-----			
;	-1711			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	712	29	0	1
;	MPID			
;	-----			
;	-1712			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----

WHC-SD-W236A-ER-014
Rev. 0

CONV	713	29	0	1
;	MPID			
;	-----			
	-1713			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	714	29	0	1
;	MPID			
;	-----			
	-1714			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	715	29	0	1
;	MPID			
;	-----			
	-1715			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	716	29	0	1
;	MPID			
;	-----			
	-1716			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	717	29	0	1
;	MPID			
;	-----			
	-1717			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	718	29	0	1
;	MPID			
;	-----			
	-1718			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	719	29	0	1
;	MPID			
;	-----			
	-1719			
;				
;				

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	720	29	0	1
	MPID			

	-1720			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	721	29	0	1
	MPID			

	-1721			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	722	29	0	1
	MPID			

	-1722			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	723	29	0	1
	MPID			

	-1723			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	724	29	0	1
	MPID			

	-1724			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	725	29	0	1
	MPID			

	-1725			

	TID	CFIG	Number of GP Values	Number of MPID's
	-----	-----	-----	-----
CONV	726	29	0	1
	MPID			

	-1726			

WHC-SD-W236A-ER-014
Rev. 0

;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	727	29	0	1
;	MPID			
;	-----			
;	-1727			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	728	29	0	1
;	MPID			
;	-----			
;	-1728			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	729	29	0	1
;	MPID			
;	-----			
;	-1729			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	730	29	0	1
;	MPID			
;	-----			
;	-1730			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	731	29	0	1
;	MPID			
;	-----			
;	-1731			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	732	29	0	1
;	MPID			
;	-----			
;	-1732			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	733	29	0	1
;	MPID			
;				


```

; -----
; -1733
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      734      29      0      1
; MPID
; -----
; -1734
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      735      29      0      1
; MPID
; -----
; -1735
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      736      29      0      1
; MPID
; -----
; -1736
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      737      29      0      1
; MPID
; -----
; -1737
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      402      29      0      1
; MPID
; -----
; -1402
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      403      29      0      1

```

;	MPID			
;	-----			
	-1403			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	404	29	0	1
;	MPID			
;	-----			
	-1404			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	405	29	0	1
;	MPID			
;	-----			
	-1405			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	406	29	0	1
;	MPID			
;	-----			
	-1406			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	407	29	0	1
;	MPID			
;	-----			
	-1407			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	408	29	0	1
;	MPID			
;	-----			
	-1408			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	409	29	0	1
;	MPID			
;	-----			
	-1409			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

;	CONV	<u>410</u>	<u>29</u>	<u>0</u>	<u>1</u>
;		MPID			
;		<u>-1410</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>411</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1411</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>412</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1412</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>413</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1413</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>414</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1414</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>415</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1415</u>			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		<u>416</u>	<u>29</u>	<u>0</u>	<u>1</u>
;	CONV	MPID			
;		<u>-1416</u>			
;					

;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	417	29	0	1
;	MPID			
;	-----			
;	-1417			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	418	29	0	1
;	MPID			
;	-----			
;	-1418			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	419	29	0	1
;	MPID			
;	-----			
;	-1419			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	420	29	0	1
;	MPID			
;	-----			
;	-1420			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	421	29	0	1
;	MPID			
;	-----			
;	-1421			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	422	29	0	1
;	MPID			
;	-----			
;	-1422			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	423	29	0	1
;	MPID			
;	-----			

-1423				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	424	29	0	1
:	MPID			
:	----			
-1424				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	425	29	0	1
:	MPID			
:	----			
-1425				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	426	29	0	1
:	MPID			
:	----			
-1426				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	427	29	0	1
:	MPID			
:	----			
-1427				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	428	29	0	1
:	MPID			
:	----			
-1428				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	429	29	0	1
:	MPID			
:	----			
-1429				
:				
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	----	----	-----	-----
CONV	430	29	0	1

;	MPID			
;	-----			
	-1430			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	431	29	0	1
;	MPID			
;	-----			
	-1431			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	432	29	0	1
;	MPID			
;	-----			
	-1432			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	433	29	0	1
;	MPID			
;	-----			
	-1433			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	434	29	0	1
;	MPID			
;	-----			
	-1434			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	435	29	0	1
;	MPID			
;	-----			
	-1435			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	436	29	0	1
;	MPID			
;	-----			
	-1436			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

```

;      -----
CONV    437      29      0      1
;      MPID
;      -----
;      -1437
;
; *****
; *****
; EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 801      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1801      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 802      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1802      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 803      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1803      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 804      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1804      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 805      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1805      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
; MACRO 806      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1806      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

124

125

	1822	1850	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	823	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1823	1850	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	824	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1824	1850	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	825	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1825	1800	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	826	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1826	1800	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	827	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1827	1800	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	828	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1828	1800	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	829	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1829	1800	1870
;			
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---

```

MACRO 830          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1830          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 831          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1831          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 832          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1832          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 833          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1833          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 834          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1834          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 835          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1835          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 836          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1836          1800          1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 837          3          0          0          1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;          1837          1800          1870
;
;
;*****

```

; Radiation heat transfer from waste surface.

```

;
;      TID      Nbands
;      ----      ----
VFAC    901          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1901      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    902          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1902      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    903          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1903      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    904          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1904      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    905          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1905      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    906          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1906      0          0.0          0.0          0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    907          0

```

;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1907	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	908	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1908	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	909	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1909	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	910	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1910	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	911	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1911	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	912	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1912	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	913	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1913	0	0.0	0.0	0
;		TID	Nbands				

```

;
; VFAC      -----
;          914          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1914      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      915          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1915      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      916          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1916      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      917          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1917      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      918          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1918      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      919          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1919      0          0.0          0.0          0
;
;
;      TID      Nbands
;      -----
; VFAC      920          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1920      0          0.0          0.0          0

```

		TID	Nbands				
		-----	-----				
VFAC		921	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1921	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		922	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1922	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		923	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1923	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		924	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1924	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		925	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1925	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		926	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	-----	-----	-----	-----	-----	-----	-----
	0.0	1.0	1926	0	0.0	0.0	0
		TID	Nbands				
		-----	-----				
VFAC		927	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag

;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1927	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	928	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1928	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	929	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1929	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	930	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1930	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	931	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1931	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	932	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1932	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	933	0				
;							
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	----	----	-----	-----	-----	-----	-----
;	0.0	1.0	1933	0	0.0	0.0	0
;		TID	Nbands				
;		----	-----				
;	VFAC	934	0				


```

;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1934    0       0.0       0.0       0
;
;       TID   Nbands
;       ---   ---
VFAC    935       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1935    0       0.0       0.0       0
;
;       TID   Nbands
;       ---   ---
VFAC    936       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1936    0       0.0       0.0       0
;
;       TID   Nbands
;       ---   ---
VFAC    937       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1937    0       0.0       0.0       0
;
;

```

2.3 Tank Drain Transient

MAT.DAT

\$ DRAIN TRANSIENT

MPID 901 TABLE FAHRENHEIT 1.0
 STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
 REFERENCE: C-SI Medium Carbon Steel NSMH
 MDATA 32.0 29.99
 MDATA 70.0 29.89
 MDATA 100.0 29.76
 MDATA 200.0 29.22
 MDATA 300.0 28.52

/
 MPID 904 CONSTANT FAHRENHEIT 1.0
 STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
 REFERENCE: AISI 1025 Carbon Steel
 MDATA 489.0

/
 MPID 905 CONSTANT FAHRENHEIT 1.0
 STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
 REFERENCE: AISI 1025 Carbon Steel
 MDATA 0.116

/
 MPID 10001 TABLE FAHRENHEIT 1.0
 AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
 References: Kreith
 Data Quality: EXCELLENT
 MDATA 0.000 0.0133
 MDATA 32.0 0.0140
 MDATA 100.0 0.0154
 MDATA 200.0 0.0174
 MDATA 300.0 0.0193
 MDATA 400.0 0.0212
 MDATA 500.0 0.0231
 MDATA 600.0 0.0250

/
 MPID 10002 TABLE FAHRENHEIT 1.0
 AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
 References: Kreith Table A-3
 Data Quality: EXCELLENT
 MDATA 0.0 0.0400
 MDATA 32.0 0.0419
 MDATA 100.0 0.0463
 MDATA 200.0 0.0518
 MDATA 300.0 0.0580
 MDATA 400.0 0.0630
 MDATA 500.0 0.0680
 MDATA 600.0 0.0720

/
 MPID 10003 RECIPROCAL FAHRENHEIT 1.0
 AIR (GAS) --> Coefficient of thermal expansion (1/F)
 References: Kreith
 Data Quality: EXCELLENT
 MDATA 1.0 459.7

/

MPID 10004 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A

Data Quality: EXCELLENT

MDATA 0.0 0.0860

MDATA 32.0 0.0810

MDATA 100.0 0.0710

MDATA 200.0 0.0600

MDATA 300.0 0.0520

MDATA 400.0 0.0460

MDATA 500.0 0.0412

MDATA 600.0 0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA 0.0 0.239

MDATA 32.0 0.240

MDATA 100.0 0.240

MDATA 200.0 0.241

MDATA 300.0 0.243

MDATA 400.0 0.245

MDATA 500.0 0.247

MDATA 600.0 0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 0.35

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: Kreith

Data Quality: ????

MDATA 0.44

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK insulating concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK insulating concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

```

MDATA 144.0
/
MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK insulating concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP  $\frac{1}{2} \sqrt{V} \cdot 137^{\circ} A \alpha \cdot \frac{1}{2} \sqrt{x} \cdot Ex^{\circ} E^{\circ} \frac{1}{2} \sqrt{i}$  Data Quality: ???
MDATA 0.20
/
MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK insulating concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))
References:
Data Quality: ???
MDATA 0.6
/
MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK insulating concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0
/
MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK insulating concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 1402 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 119.765 0.000
MDATA 120.19 1.00
MDATA 200.0 1.00
/
MPID 1403 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 117.203 0.000
MDATA 117.703 1.00
MDATA 200.0 1.00
/
MPID 1404 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 114.306 0.000
MDATA 114.806 1.00
MDATA 200.0 1.00
/
MPID 1405 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 111.28 0.000
MDATA 111.78 1.00
MDATA 200.0 1.00
/
MPID 1406 TABLE TIME 1.00

```

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 108.188 0.000
MDATA 108.688 1.00
MDATA 200.0 1.00
/
MPID 1407 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 105.089 0.000
MDATA 105.589 1.00
MDATA 200.0 1.00
/
MPID 1408 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 101.88 0.000
MDATA 102.38 1.00
MDATA 200.0 1.00
/
MPID 1409 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 98.671 0.000
MDATA 99.171 1.00
MDATA 200.0 1.00
/
MPID 1410 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 95.462 0.000
MDATA 95.962 1.00
MDATA 200.0 1.00
/
MPID 1411 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 92.252 0.000
MDATA 92.752 1.00
MDATA 200.0 1.00
/
MPID 1412 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 89.043 0.000
MDATA 89.543 1.00
MDATA 200.0 1.00
/
MPID 1413 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 85.834 0.000
MDATA 86.334 1.00
MDATA 200.0 1.00

/

MPID 1414 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 82.625 0.000
MDATA 83.125 1.00
MDATA 200.0 1.00

/MPID 1415 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 79.182 0.000
MDATA 79.682 1.00
MDATA 200.0 1.00

/

MPID 1416 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 75.739 0.000
MDATA 76.239 1.00
MDATA 200.0 1.00

/

MPID 1417 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 72.297 0.000
MDATA 72.797 1.00
MDATA 200.0 1.00

/

MPID 1418 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 68.854 0.000
MDATA 69.354 1.00
MDATA 200.0 1.00

/

MPID 1419 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 65.411 0.000
MDATA 65.911 1.00
MDATA 200.0 1.00

/

MPID 1420 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 61.969 0.000
MDATA 62.469 1.00
MDATA 200.0 1.00

/

MPID 1421 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.526 0.000
MDATA 59.026 1.00

```

M DATA      200.0    1.00
/
M PID 1422  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 22 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     55.083     0.000
M DATA     55.583     1.00
M DATA     200.0     1.00
/ M PID 1423  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 23 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     51.641     0.000
M DATA     52.141     1.00
M DATA     200.0     1.00
/
M PID 1424  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 24 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     48.198     0.000
M DATA     48.698     1.00
M DATA     200.0     1.00
/
M PID 1425  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 25 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     44.755     0.000
M DATA     45.255     1.00
M DATA     200.0     1.00
/
M PID 1426  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 26 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     41.312     0.000
M DATA     41.812     1.00
M DATA     200.0     1.00
/
M PID 1427  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 27 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     37.87      0.000
M DATA     38.37      1.00
M DATA     200.0     1.00
/
M PID 1428  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 28 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     34.427     0.000
M DATA     34.927     1.00
M DATA     200.0     1.00
/
M PID 1429  TABLE  TIME  1.00
TANK WALL CONVECTION h, LAYER 29 AS F(TIME)  BTU/HR/FT/F
M DATA      0.0      0.000
M DATA     30.984     0.000

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M DATA      31.484      1.00
M DATA      200.0      1.00
/
MPID 1430 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 30 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      27.542      0.000
M DATA      28.042      1.00
M DATA      200.0      1.00
/MPID 1431 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 31 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      24.099      0.000
M DATA      24.599      1.00
M DATA      200.0      1.00
/
MPID 1432 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 32 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      21.006      0.000
M DATA      21.156      1.00
M DATA      200.0      1.00
/
MPID 1433 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 33 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      17.213      0.000
M DATA      17.713      1.00
M DATA      200.0      1.00
/
MPID 1434 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 34 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      13.771      0.000
M DATA      14.271      1.00
M DATA      200.0      1.00
/
MPID 1435 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 35 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      10.328      0.000
M DATA      10.828      1.00
M DATA      200.0      1.00
/
MPID 1436 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 36 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      6.885      0.000
M DATA      7.385      1.00
M DATA      200.0      1.00
/
MPID 1437 TABLE TIME 1.00
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000

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```

MDATA      3.4427      0.000
MDATA      3.9427      1.00
MDATA      200.0      1.00
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      120.19    1100.0
MDATA      120.64      .5
MDATA      200.0      .5
/MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      119.765    1100.0
MDATA      120.19      0.000
MDATA      200.0      0.000
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      117.203    1100.0
MDATA      117.703      0.000
MDATA      200.0      0.000
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      114.306    1100.0
MDATA      114.806      0.000
MDATA      200.0      0.000
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      111.28     1100.0
MDATA      111.78      0.000
MDATA      200.0      0.000
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      108.188    1100.0
MDATA      108.688      0.000
MDATA      200.0      0.000
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      105.089    1100.0
MDATA      105.589      0.000
MDATA      200.0      0.000
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F

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```

M DATA      0.0      1100.0
M DATA      101.88    1100.0
M DATA      102.38    0.000
M DATA      200.0     0.000
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      98.671    1100.0
M DATA      99.171    0.000
M DATA      200.0     0.000
/MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      95.462    1100.0
M DATA      95.962    0.000
M DATA      200.0     0.000
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      92.252    1100.0
M DATA      92.752    0.000
M DATA      200.0     0.000
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      89.043    1100.0
M DATA      89.543    0.000
M DATA      200.0     0.000
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      85.834    1100.0
M DATA      86.334    0.000
M DATA      200.0     0.000
/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      82.625    1100.0
M DATA      83.125    0.000
M DATA      200.0     0.000
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      79.182    1100.0
M DATA      79.682    0.000
M DATA      200.0     0.000
/
MPID 1516 TABLE TIME 1.0

```

WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 75.739 1100.0
 MDATA 76.239 0.000
 MDATA 200.0 0.000
 /
 MPID 1517 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 72.297 1100.0
 MDATA 72.797 0.000
 MDATA 200.0 0.000
 /MPID 1518 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 68.854 1100.0
 MDATA 69.354 0.000
 MDATA 200.0 0.000
 /
 MPID 1519 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 65.411 1100.0
 MDATA 65.911 0.000
 MDATA 200.0 0.000
 /
 MPID 1520 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 61.969 1100.0
 MDATA 62.469 0.000
 MDATA 200.0 0.000
 /
 MPID 1521 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 58.526 1100.0
 MDATA 59.026 0.000
 MDATA 200.0 0.000
 /
 MPID 1522 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 55.083 1100.0
 MDATA 55.583 0.000
 MDATA 200.0 0.000
 /
 MPID 1523 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 51.641 1100.0
 MDATA 52.141 0.000
 MDATA 200.0 0.000
 /

```

MPID 1524 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      48.198    1100.0
MDATA      48.698    0.000
MDATA      200.0     0.000
/
MPID 1525 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      44.755    1100.0
MDATA      45.255    0.000
MDATA      200.0     0.000
/MPID 1526 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      41.312    1100.0
MDATA      41.812    0.000
MDATA      200.0     0.000
/
MPID 1527 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      37.87     1100.0
MDATA      38.37     0.000
MDATA      200.0     0.000
/
MPID 1528 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      34.427    1100.0
MDATA      34.927    0.000
MDATA      200.0     0.000
/
MPID 1529 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      30.984    1100.0
MDATA      31.484    0.000
MDATA      200.0     0.000
/
MPID 1530 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      27.542    1100.0
MDATA      28.042    0.000
MDATA      200.0     0.000
/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      24.099    1100.0
MDATA      24.599    0.000
MDATA      200.0     0.000

```

```

/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 20.656 1100.0
MDATA 21.156 0.000
MDATA 200.0 0.000
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 17.213 1100.0
MDATA 17.713 0.000
MDATA 200.0 0.000
/MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 13.771 1100.0
MDATA 14.271 0.000
MDATA 200.0 0.000
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 10.328 1100.0
MDATA 10.828 0.000
MDATA 200.0 0.000
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 6.885 1100.0
MDATA 7.385 0.000
MDATA 200.0 0.000
/
MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 3.4427 1100.0
MDATA 3.9427 0.000
MDATA 200.0 0.000
/
MPID 1701 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 118.48 0.000
MDATA 118.58 1.0
MDATA 200.00 1.0
/
MPID 1702 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 2 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 115.75 0.000
MDATA 115.85 1.0

```

MDATA	118.48	1.0
MDATA	118.58	0.000
MDATA	200.0	0.000
/		
MPID	1703	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 3 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	112.79	0.000
MDATA	112.89	1.0
MDATA	115.75	1.0
MDATA	115.85	0.000
MDATA	200.0	0.000
/		
MPID	1704	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 4 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	109.73	0.000
MDATA	109.83	1.0
MDATA	112.79	1.0
MDATA	112.89	0.000
MDATA	200.0	0.000
/		
MPID	1705	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 5 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	106.64	0.000
MDATA	106.74	1.0
MDATA	109.73	1.0
MDATA	109.83	0.000
MDATA	200.0	0.000
/		
MPID	1706	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 6 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	103.48	0.000
MDATA	103.58	1.0
MDATA	106.64	1.0
MDATA	106.74	0.000
MDATA	200.0	0.000
/		
MPID	1707	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 7 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	100.27	0.000
MDATA	100.37	1.0
MDATA	103.48	1.0
MDATA	103.58	0.000
MDATA	200.0	0.000
/		
MPID	1708	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	97.06	-0.000
MDATA	97.16	1.0

MDATA 100.27 1.0
 MDATA 100.37 0.000
 MDATA 200.0 0.000

/

MPID 1709 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 93.85 0.000
 MDATA 93.95 1.0
 MDATA 97.06 1.0
 MDATA 97.16 0.000
 MDATA 200.0 0.000

/

MPID 1710 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 90.64 0.000
 MDATA 90.74 1.0
 MDATA 93.85 1.0
 MDATA 93.95 0.000
 MDATA 200.0 0.000

/

MPID 1711 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 87.43 0.000
 MDATA 87.53 1.0
 MDATA 90.64 1.0
 MDATA 90.74 0.000
 MDATA 200.0 0.000

/

MPID 1712 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 84.23 0.000
 MDATA 84.33 1.0
 MDATA 87.43 1.0
 MDATA 87.53 0.000
 MDATA 200.0 0.000

/

MPID 1713 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 80.90 0.000
 MDATA 81.00 1.0
 MDATA 84.23 1.0
 MDATA 84.33 0.000
 MDATA 200.0 0.000

/

MPID 1714 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 77.46 0.000
 MDATA 77.56 1.0

MDATA	80.90	1.0
MDATA	81.00	0.000
MDATA	200.0	0.000
/		
MPID	1715	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	74.02	0.000
MDATA	74.12	1.0
MDATA	77.46	1.0
MDATA	77.56	0.000
MDATA	200.0	0.000
/		
MPID	1716	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	70.57	0.000
MDATA	70.67	1.0
MDATA	74.02	1.0
MDATA	74.12	0.000
MDATA	200.0	0.000
/		
MPID	1717	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	67.13	0.000
MDATA	67.23	1.0
MDATA	70.57	1.0
MDATA	70.67	0.000
MDATA	200.0	0.000
/		
MPID	1718	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	63.69	0.000
MDATA	63.79	1.0
MDATA	67.13	1.0
MDATA	67.23	0.000
MDATA	200.0	0.000
/		
MPID	1719	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 19 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	1.0
MDATA	63.69	1.0
MDATA	63.79	0.000
MDATA	200.0	0.000
/		
MPID	1720	TABLE TIME 1.00
WASTE CONVECTION h	IN LAYER 20 AS f(TIME) BTU/HR/FT**2/F	
MDATA	0.0	0.000
MDATA	56.80	0.000
MDATA	56.90	1.0

```

MDATA      60.25      1.0
MDATA      60.35      0.000
MDATA      200.0      0.000
/
MPID 1721  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 21 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      53.36     0.000
MDATA      53.46      1.0
MDATA      56.80      1.0
MDATA      56.90     0.000
MDATA      200.0     0.000
/
MPID 1722  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 22 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      49.92     0.000
MDATA      50.02      1.0
MDATA      53.36      1.0
MDATA      53.46     0.000
MDATA      200.0     0.000
/
MPID 1723  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 23 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      46.48     0.000
MDATA      46.58      1.0
MDATA      49.92      1.0
MDATA      50.02     0.000
MDATA      200.0     0.000
/
MPID 1724  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 24 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      43.03     0.000
MDATA      43.13      1.0
MDATA      46.48      1.0
MDATA      46.58     0.000
MDATA      200.0     0.000
/
MPID 1725  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      39.59     0.000
MDATA      39.69      1.0
MDATA      43.03      1.0
MDATA      43.13     0.000
MDATA      200.0     0.000
/
MPID 1726  TABLE  TIME 1.00
WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      36.15     0.000
MDATA      36.25      1.0

```

```

MDATA      39.59      1.0
MDATA      39.69      0.000
MDATA      200.0      0.000
/
MPID 1727 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      32.71     0.000
MDATA      32.81      1.0
MDATA      36.15      1.0
MDATA      36.25     0.000
MDATA      200.0     0.000
/
MPID 1728 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      29.26     0.000
MDATA      29.36      1.0
MDATA      32.71      1.0
MDATA      32.81     0.000
MDATA      200.0     0.000
/
MPID 1729 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      25.82     0.000
MDATA      25.92      1.0
MDATA      29.26      1.0
MDATA      29.36     0.000
MDATA      200.0     0.000
/
MPID 1730 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      22.38     0.000
MDATA      22.48      1.0
MDATA      25.82      1.0
MDATA      25.92     0.000
MDATA      200.0     0.000
/
MPID 1731 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 31 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      18.93     0.000
MDATA      19.03      1.0
MDATA      22.38      1.0
MDATA      22.48     0.000
MDATA      200.0     0.000
/
MPID 1732 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 32 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      15.49     0.000
MDATA      15.59      1.0

```

```

M DATA      18.93      1.0
M DATA      19.03      0.000
M DATA      200.0      0.000
/
MPID 1733 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 33 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      12.05     0.000
M DATA      12.15      1.0
M DATA      15.49      1.0
M DATA      15.59     0.000
M DATA      200.0     0.000
/
MPID 1734 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 34 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      8.61      0.000
M DATA      8.71      1.0
M DATA      12.05      1.0
M DATA      12.15     0.000
M DATA      200.0     0.000
/
MPID 1735 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 35 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      5.16      0.000
M DATA      5.26      1.0
M DATA      8.61      1.0
M DATA      8.71     0.000
M DATA      200.0     0.000
/
MPID 1736 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 36 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      1.72      0.000
M DATA      1.82      1.0
M DATA      5.16      1.0
M DATA      5.26     0.000
M DATA      200.0     0.000
/
MPID 1737 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 37 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      1.0
M DATA      1.72      1.0
M DATA      1.82     0.000
M DATA      200.0     0.000
/
MPID 1901 TABLE TIME 0.90
EMISSION FROM LAYER 1 AS f(TIME)
M DATA      0.0      0.000
M DATA      118.48    0.000
M DATA      118.58     1.0
M DATA      200.00     1.0
/

```

MPID 1902 TABLE TIME 0.90
EMISSION FROM LAYER 2 AS f(TIME)
MDATA 0.0 0.000
MDATA 115.75 0.000
MDATA 115.85 1.0
MDATA 118.48 1.0
MDATA 118.58 0.000
MDATA 200.0 0.000

/

MPID 1903 TABLE TIME 0.90
EMISSION FROM LAYER 3 AS f(TIME)
MDATA 0.0 0.000
MDATA 112.79 0.000
MDATA 112.89 1.0
MDATA 115.75 1.0
MDATA 115.85 0.000
MDATA 200.0 0.000

/

MPID 1904 TABLE TIME 0.90
EMISSION FROM LAYER 4 AS f(TIME)
MDATA 0.0 0.000
MDATA 109.73 0.000
MDATA 109.83 1.0
MDATA 112.79 1.0
MDATA 112.89 0.000
MDATA 200.0 0.000

/

MPID 1905 TABLE TIME 0.90
EMISSION FROM LAYER 5 AS f(TIME)
MDATA 0.0 0.000
MDATA 106.64 0.000
MDATA 106.74 1.0
MDATA 109.73 1.0
MDATA 109.83 0.000
MDATA 200.0 0.000

/

MPID 1906 TABLE TIME 0.90
EMISSION FROM LAYER 6 AS f(TIME)
MDATA 0.0 0.000
MDATA 103.48 0.000
MDATA 103.58 1.0
MDATA 106.64 1.0
MDATA 106.74 0.000
MDATA 200.0 0.000

/

MPID 1907 TABLE TIME 0.90
EMISSION FROM LAYER 7 AS f(TIME)
MDATA 0.0 0.000
MDATA 100.27 0.000
MDATA 100.37 1.0
MDATA 103.48 1.0
MDATA 103.58 0.000
MDATA 200.0 0.000

/

MPID 1908 TABLE TIME 0.90
EMISSION FROM LAYER 8 AS f(TIME)
MDATA 0.0 0.000
MDATA 97.06 0.000
MDATA 97.16 1.0
MDATA 100.27 1.0
MDATA 100.37 0.000
MDATA 200.0 0.000

/
MPID 1909 TABLE TIME 0.90
EMISSION FROM LAYER 9 AS f(TIME)
MDATA 0.0 0.000
MDATA 93.85 0.000
MDATA 93.95 1.0
MDATA 97.06 1.0
MDATA 97.16 0.000
MDATA 200.0 0.000

/
MPID 1910 TABLE TIME 0.90
EMISSION FROM LAYER 10 AS f(TIME)
MDATA 0.0 0.000
MDATA 90.64 0.000
MDATA 90.74 1.0
MDATA 93.85 1.0
MDATA 93.95 0.000
MDATA 200.0 0.000

/
MPID 1911 TABLE TIME 0.90
EMISSION FROM LAYER 11 AS f(TIME)
MDATA 0.0 0.000
MDATA 87.43 0.000
MDATA 87.53 1.0
MDATA 90.64 1.0
MDATA 90.74 0.000
MDATA 200.0 0.000

/
MPID 1912 TABLE TIME 0.90
EMISSION FROM LAYER 12 AS f(TIME)
MDATA 0.0 0.000
MDATA 84.23 0.000
MDATA 84.33 1.0
MDATA 87.43 1.0
MDATA 87.53 0.000
MDATA 200.0 0.000

/
MPID 1913 TABLE TIME 0.90
EMISSION FROM LAYER 13 AS f(TIME)
MDATA 0.0 0.000
MDATA 80.90 0.000
MDATA 81.00 1.0
MDATA 84.23 1.0
MDATA 84.33 0.000
MDATA 200.0 0.000

/

MPID 1914 TABLE TIME 0.90
EMISSION FROM LAYER 14 AS f(TIME)
MDATA 0.0 0.000
MDATA 77.46 0.000
MDATA 77.56 1.0
MDATA 80.90 1.0
MDATA 81.00 0.000
MDATA 200.0 0.000

/
MPID 1915 TABLE TIME 0.90
EMISSION FROM LAYER 15 AS f(TIME)
MDATA 0.0 0.000
MDATA 74.02 0.000
MDATA 74.12 1.0
MDATA 77.46 1.0
MDATA 77.56 0.000
MDATA 200.0 0.000

/
MPID 1916 TABLE TIME 0.90
EMISSION FROM LAYER 16 AS f(TIME)
MDATA 0.0 0.000
MDATA 70.57 0.000
MDATA 70.67 1.0
MDATA 74.02 1.0
MDATA 74.12 0.000
MDATA 200.0 0.000

/
MPID 1917 TABLE TIME 0.90
EMISSION FROM LAYER 17 AS f(TIME)
MDATA 0.0 0.000
MDATA 67.13 0.000
MDATA 67.23 1.0
MDATA 70.57 1.0
MDATA 70.67 0.000
MDATA 200.0 0.000

/
MPID 1918 TABLE TIME 0.90
EMISSION FROM LAYER 18 AS f(TIME)
MDATA 0.0 0.000
MDATA 63.69 0.000
MDATA 63.79 1.0
MDATA 67.13 1.0
MDATA 67.23 0.000
MDATA 200.0 0.000

/
MPID 1919 TABLE TIME 0.90
EMISSION FROM LAYER 19 AS f(TIME)
MDATA 0.0 0.000
MDATA 60.25 0.000
MDATA 60.35 1.0
MDATA 63.69 1.0
MDATA 63.79 0.000
MDATA 200.0 0.000

/

MPID 1920 TABLE TIME 0.90
EMISSION FROM LAYER 20 AS f(TIME)
MDATA 0.0 0.000
MDATA 56.80 0.000
MDATA 56.90 1.0
MDATA 60.25 1.0
MDATA 60.35 0.000
MDATA 200.0 0.000

/

MPID 1921 TABLE TIME 0.90
EMISSION FROM LAYER 21 AS f(TIME)
MDATA 0.0 0.000
MDATA 53.36 0.000
MDATA 53.46 1.0
MDATA 56.80 1.0
MDATA 56.90 0.000
MDATA 200.0 0.000

/

MPID 1922 TABLE TIME 0.90
EMISSION FROM LAYER 22 AS f(TIME)
MDATA 0.0 0.000
MDATA 49.92 0.000
MDATA 50.02 1.0
MDATA 53.36 1.0
MDATA 53.46 0.000
MDATA 200.0 0.000

/

MPID 1923 TABLE TIME 0.90
EMISSION FROM LAYER 23 AS f(TIME)
MDATA 0.0 0.000
MDATA 46.48 0.000
MDATA 46.58 1.0
MDATA 49.92 1.0
MDATA 50.02 0.000
MDATA 200.0 0.000

/

MPID 1924 TABLE TIME 0.90
EMISSION FROM LAYER 24 AS f(TIME)
MDATA 0.0 0.000
MDATA 43.03 0.000
MDATA 43.13 1.0
MDATA 46.48 1.0
MDATA 46.58 0.000
MDATA 200.0 0.000

/

MPID 1925 TABLE TIME 0.90
EMISSION FROM LAYER 25 AS f(TIME)
MDATA 0.0 0.000
MDATA 39.59 0.000
MDATA 39.69 1.0
MDATA 43.03 1.0
MDATA 43.13 0.000
MDATA 200.0 0.000

/

MPID 1926 TABLE TIME 0.90
EMISSION FROM LAYER 26 AS f(TIME)
MDATA 0.0 0.000
MDATA 36.15 0.000
MDATA 36.25 1.0
MDATA 39.59 1.0
MDATA 39.69 0.000
MDATA 200.0 0.000

/

MPID 1927 TABLE TIME 0.90
EMISSION FROM LAYER 27 AS f(TIME)
MDATA 0.0 0.000
MDATA 32.71 0.000
MDATA 32.81 1.0
MDATA 36.15 1.0
MDATA 36.25 0.000
MDATA 200.0 0.000

/

MPID 1928 TABLE TIME 0.90
EMISSION FROM LAYER 28 AS f(TIME)
MDATA 0.0 0.000
MDATA 29.26 0.000
MDATA 29.36 1.0
MDATA 32.71 1.0
MDATA 32.81 0.000
MDATA 200.0 0.000

/

MPID 1929 TABLE TIME 0.90
EMISSION FROM LAYER 29 AS f(TIME)
MDATA 0.0 0.000
MDATA 25.82 0.000
MDATA 25.92 1.0
MDATA 29.26 1.0
MDATA 29.36 0.000
MDATA 200.0 0.000

/

MPID 1930 TABLE TIME 0.90
EMISSION FROM LAYER 30 AS f(TIME)
MDATA 0.0 0.000
MDATA 22.38 0.000
MDATA 22.48 1.0
MDATA 25.82 1.0
MDATA 25.92 0.000
MDATA 200.0 0.000

/

MPID 1931 TABLE TIME 0.90
EMISSION FROM LAYER 31 AS f(TIME)
MDATA 0.0 0.000
MDATA 18.93 0.000
MDATA 19.03 1.0
MDATA 22.38 1.0
MDATA 22.48 0.000
MDATA 200.0 0.000

/

MPID 1932 TABLE TIME 0.90
EMISSION FROM LAYER 32 AS f(TIME)

MDATA	0.0	0.000
MDATA	15.49	0.000
MDATA	15.59	1.0
MDATA	18.93	1.0
MDATA	19.03	0.000
MDATA	200.0	0.000

/

MPID 1933 TABLE TIME 0.90
EMISSION FROM LAYER 33 AS f(TIME)

MDATA	0.0	0.000
MDATA	12.05	0.000
MDATA	12.15	1.0
MDATA	15.49	1.0
MDATA	15.59	0.000
MDATA	200.0	0.000

/

MPID 1934 TABLE TIME 0.90
EMISSION FROM LAYER 34 AS f(TIME)

MDATA	0.0	0.000
MDATA	8.61	0.000
MDATA	8.71	1.0
MDATA	12.05	1.0
MDATA	12.15	0.000
MDATA	200.0	0.000

/

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)

MDATA	0.0	0.000
MDATA	5.16	0.000
MDATA	5.26	1.0
MDATA	8.61	1.0
MDATA	8.71	0.000
MDATA	200.0	0.000

/

MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)

MDATA	0.0	0.000
MDATA	1.50	0.0
MDATA	1.60	0.1
MDATA	1.72	0.20
MDATA	1.75	0.30
MDATA	1.79	0.70
MDATA	1.82	0.80
MDATA	1.90	0.90
MDATA	2.0	1.00
MDATA	4.94	1.00
MDATA	5.04	0.9
MDATA	5.16	0.8
MDATA	5.19	0.70
MDATA	5.23	0.30
MDATA	5.26	0.2
MDATA	5.34	0.10

MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 1.60 0.9
MDATA 1.72 0.80
MDATA 1.75 0.70
MDATA 1.79 0.30
MDATA 1.82 0.2
MDATA 1.90 0.10
MDATA 2.0 0.000
MDATA 200.0 0.000
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/
/

```

$ MICRO.DAT
$ DRAIN TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
* MFID ARGUMENT OPTION
MICRO 1075 0 1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1080 0 1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1090 0 1
MICDAT 77.0
/
*
* Ground water temp
*
* MFID ARGUMENT OPTION
MICRO 1095 0 1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO 1600 0 18
MICDAT 0.0 4.5144
MICDAT 20.0 5.0911
MICDAT 40.0 5.9539
MICDAT 60.0 7.3859
MICDAT 70.0 8.5260
MICDAT 80.0 10.2272
MICDAT 90.0 13.0389
MICDAT 100.0 18.5750
MICDAT 105.0 23.9979
MICDAT 106.0 1.61228
MICDAT 20000.0 1.61228
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO 1601 0 15
MICDAT 199.0 20000 0.0 1.0
/
MICRO 1602 0 15

```

MICDAT	118.48	20000	0.0	1.0
/				
MICRO	1603	0 15		
MICDAT	115.75	20000	0.0	1.0
/				
MICRO	1604	0 15		
MICDAT	112.79	20000	0.0	1.0
/				
MICRO	1605	0 15		
MICDAT	109.73	20000	0.0	1.0
/				
MICRO	1606	0 15		
MICDAT	106.64	20000	0.0	1.0
/				
MICRO	1607	0 15		
MICDAT	103.48	20000	0.0	1.0
/				
MICRO	1608	0 15		
MICDAT	100.27	20000	0.0	1.0
/				
MICRO	1609	0 15		
MICDAT	97.06	20000	0.0	1.0
/				
MICRO	1610	0 15		
MICDAT	93.85	20000	0.0	1.0
/				
MICRO	1611	0 15		
MICDAT	90.64	20000	0.0	1.0
/				
MICRO	1612	0 15		
MICDAT	87.43	20000	0.0	1.0
/				
MICRO	1613	0 15		
MICDAT	84.23	20000	0.0	1.0
/				
MICRO	1614	0 15		
MICDAT	80.90	20000	0.0	1.0
/				
MICRO	1615	0 15		
MICDAT	77.46	20000	0.0	1.0
/				
MICRO	1616	0 15		
MICDAT	74.02	20000	0.0	1.0
/				
MICRO	1617	0 15		
MICDAT	70.57	20000	0.0	1.0
/				
MICRO	1618	0 15		
MICDAT	67.13	20000	0.0	1.0
/				
MICRO	1619	0 15		
MICDAT	63.69	20000	0.0	1.0
/				
MICRO	1620	0 15		

MICDAT	60.25	20000	0.0	1.0
/				
MICRO	1621	0	15	
MICDAT	56.80	20000	0.0	1.0
/				
MICRO	1622	0	15	
MICDAT	53.36	20000	0.0	1.0
/				
MICRO	1623	0	15	
MICDAT	49.92	20000	0.0	1.0
/				
MICRO	1624	0	15	
MICDAT	46.48	20000	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	20000	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	20000	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	20000	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	20000	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	20000	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	20000	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	20000	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	20000	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	20000	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	20000	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	20000	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	20000	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	20000	0.0	1.0
/				
*				

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR GAS SPACE = 15 FT BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.607	
MICDAT	125.0	-7.503	
MICDAT	150.0	-18.056	
MICDAT	170.0	-29.851	
MICDAT	190.0	-44.626	
MICDAT	200.0	-53.13	
MICDAT	210.0	-62.382	
MICDAT	225.0	-77.654	
MICDAT	250.0	-106.833	
MICDAT	500.0	-222.22	

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.910	
MICDAT	125.0	-9.174	
MICDAT	150.0	-22.057	
MICDAT	170.0	-36.41	
MICDAT	190.0	-54.359	
MICDAT	200.0	-64.683	
MICDAT	210.0	-75.906	
MICDAT	225.0	-94.425	
MICDAT	250.0	-129.788	
MICDAT	500.0	-222.22	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	10	0.03874	

WHC-SD-W236A-ER-014
Rev. 0

MICDAT	110	0.02763
MICDAT	120	0.30672
MICDAT	130	0.79331
MICDAT	140	1.15798
MICDAT	150	1.43031
MICDAT	165	1.71299
MICDAT	180	1.87847
MICDAT	195	1.94773
MICDAT	210	1.92002
MICDAT	250	2.072

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	20000.0	1.0	0.0	
/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	

/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	
/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	

/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	15		
MICDAT	0.0	1.72	1.0	0.0	
/					

```

; TEMPLATE.DAT
; DRAIN TRANSIENT
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      100      901      901      901      904      905
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      150     10001     10001     10001     10004     10005
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      300     20001     20001     20001     20004     20005
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      303     20001     20001     20001     20004     20005
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      400     30001     30001     30001     30004     30005
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      401     30001     30001     30001     30004     30005
; *****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
; MID      402     40001     40001     40001     40004     40005
; *****
;
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      ----      -      supplied by this      supplied by this
;      ----      -      template      template
;
; CONV      70      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; ----
; 1.00
; *****

```

```

;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	30	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.99

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	31	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.27

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	32	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.19

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

```

; Lower Section of Annulus
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	40	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).

; Vertical Section of Annulus

; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	41	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

; Upper section of Primary Tank

; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	42	27	5	5

; The code supplies GP #1.

```

;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 43 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 44 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****

```

```

*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC      60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
*****
; Ambient air temperature for convection from ground surface
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
*****
; Annulus inlet air temperature
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
*****
; Tank dome inlet air temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
*****
; Ground water temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      95      1      0      0      1.0

```

```

;
; MFID #1
; -----
; 1095
; *****
; *****
;
; 37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK
;
;
; MID      Kx      Ky      Kz      Density      Cp      -----
; -----
MID 501 1501 1501 1501 1004 1005
MID 502 1502 1502 1502 1004 1005
MID 503 1503 1503 1503 1004 1005
MID 504 1504 1504 1504 1004 1005
MID 505 1505 1505 1505 1004 1005
MID 506 1506 1506 1506 1004 1005
MID 507 1507 1507 1507 1004 1005
MID 508 1508 1508 1508 1004 1005
MID 509 1509 1509 1509 1004 1005
MID 510 1510 1510 1510 1004 1005
MID 511 1511 1511 1511 1004 1005
MID 512 1512 1512 1512 1004 1005
MID 513 1513 1513 1513 1004 1005
MID 514 1514 1514 1514 1004 1005
MID 515 1515 1515 1515 1004 1005
MID 516 1516 1516 1516 1004 1005
MID 517 1517 1517 1517 1004 1005
MID 518 1518 1518 1518 1004 1005
MID 519 1519 1519 1519 1004 1005
MID 520 1520 1520 1520 1004 1005
MID 521 1521 1521 1521 1004 1005
MID 522 1522 1522 1522 1004 1005
MID 523 1523 1523 1523 1004 1005
MID 524 1524 1524 1524 1004 1005
MID 525 1525 1525 1525 1004 1005
MID 526 1526 1526 1526 1004 1005
MID 527 1527 1527 1527 1004 1005
MID 528 1528 1528 1528 1004 1005
MID 529 1529 1529 1529 1004 1005
MID 530 1530 1530 1530 1004 1005
MID 531 1531 1531 1531 1004 1005
MID 532 1532 1532 1532 1004 1005
MID 533 1533 1533 1533 1004 1005
MID 534 1534 1534 1534 1004 1005
MID 535 1535 1535 1535 1004 1005
MID 536 1536 1536 1536 1004 1005
MID 537 1537 1537 1537 1004 1005
; *****
; *****
; HEAT GENERATION TEMPLATES FOR WASTE
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```



```

;
;-----
MACRO 601      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1601      1600
;
;
;
;
;
;-----
MACRO 602      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1602      1600
;
;
;
;
;
;-----
MACRO 603      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1603      1600
;
;
;
;
;
;-----
MACRO 604      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1604      1600
;
;
;
;
;
;-----
MACRO 605      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1605      1600
;
;
;
;
;
;-----
MACRO 606      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1606      1600
;
;
;
;
;
;-----
MACRO 607      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1607      1600
;
;
;
;
;
;-----
MACRO 608      2      0      0      1.0
; Microfunction 1      Microfunction 2
;      1608      1600
;
;
;
;
;

```


	1616	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	617	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1617	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	618	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1618	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	619	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1619	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	620	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1620	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	621	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1621	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	622	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1622	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	623	2	0	0	1.0
;	Microfunction 1	Microfunction 2			
	1623	1600			
;					
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----

```

MACRO 624      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1624      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 625      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1625      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 626      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1626      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 627      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1627      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 628      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1628      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 629      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1629      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 630      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1630      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 631      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1631      1600
;
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  632              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1632              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  633              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1633              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  634              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1634              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  635              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1635              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  636              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1636              1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  637              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1637              1600

```

```

; *****
; *****
; Convective heat transfer coefficient for heat transfer from
; tank dome to air in tank dome
; (Btu/hr/ft^2/deg.f)

```

```

;      TID      CFIG      Number of GP Values      Number of MPID's
;      ---      ---      supplied by this      supplied by this
;      ---      ---      template      template
CONV  700      31              1              0

```

```

; The code supplies GP #1.

```

```

;
; GP #2
; -----
; 1.00
;*****
;*****
; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      701      29              0              1
;      MPID
;      -----
;      -1701
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      702      29              0              1
;      MPID
;      -----
;      -1702
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      703      29              0              1
;      MPID
;      -----
;      -1703
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      704      29              0              1
;      MPID
;      -----
;      -1704
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      705      29              0              1
;      MPID
;      -----
;      -1705
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
CONV      706      29              0              1
;      MPID

```

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	707	29	0	1
MPID				
	708	29	0	1
MPID				
	709	29	0	1
MPID				
	710	29	0	1
MPID				
	711	29	0	1
MPID				
	712	29	0	1
MPID				

CONV	713	29	0	1
;	MPID			
;	-----			
	-1713			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	714	29	0	1
;	MPID			
;	-----			
	-1714			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	715	29	0	1
;	MPID			
;	-----			
	-1715			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	716	29	0	1
;	MPID			
;	-----			
	-1716			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	717	29	0	1
;	MPID			
;	-----			
	-1717			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	718	29	0	1
;	MPID			
;	-----			
	-1718			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	719	29	0	1
;	MPID			
;	-----			
	-1719			
;				
;				
;				

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	720	29	0	1
	MPID			
	-1720			
CONV	721	29	0	1
	MPID			
	-1721			
CONV	722	29	0	1
	MPID			
	-1722			
CONV	723	29	0	1
	MPID			
	-1723			
CONV	724	29	0	1
	MPID			
	-1724			
CONV	725	29	0	1
	MPID			
	-1725			
CONV	726	29	0	1
	MPID			
	-1726			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	727	29	0	1
MPID	-1727			
CONV	728	29	0	1
MPID	-1728			
CONV	729	29	0	1
MPID	-1729			
CONV	730	29	0	1
MPID	-1730			
CONV	731	29	0	1
MPID	-1731			
CONV	732	29	0	1
MPID	-1732			
CONV	733	29	0	1
MPID				

```

; -----
; -1733
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      734      29      0      1
; MPID
; -----
; -1734
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      735      29      0      1
; MPID
; -----
; -1735
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      736      29      0      1
; MPID
; -----
; -1736
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      737      29      0      1
; MPID
; -----
; -1737
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      402      29      0      1
; MPID
; -----
; -1402
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      403      29      0      1

```

;	MPID			
;	-----			
	-1403			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	404	29	0	1
;	MPID			
;	-----			
	-1404			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	405	29	0	1
;	MPID			
;	-----			
	-1405			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	406	29	0	1
;	MPID			
;	-----			
	-1406			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	407	29	0	1
;	MPID			
;	-----			
	-1407			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	408	29	0	1
;	MPID			
;	-----			
	-1408			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	409	29	0	1
;	MPID			
;	-----			
	-1409			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

;	CONV	410	29	0	1
;		MPID			
;		-1410			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		411	29	0	1
;		MPID			
;		-1411			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		412	29	0	1
;		MPID			
;		-1412			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		413	29	0	1
;		MPID			
;		-1413			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		414	29	0	1
;		MPID			
;		-1414			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		415	29	0	1
;		MPID			
;		-1415			
;					
;		TID	CFIG	Number of GP Values	Number of MPID's
;		416	29	0	1
;		MPID			
;		-1416			
;					

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	417	29	0	1
MPID	-1417			
CONV	418	29	0	1
MPID	-1418			
CONV	419	29	0	1
MPID	-1419			
CONV	420	29	0	1
MPID	-1420			
CONV	421	29	0	1
MPID	-1421			
CONV	422	29	0	1
MPID	-1422			
CONV	423	29	0	1
MPID				

-1423				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	424	29	0	1
	MPID			
-1424				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	425	29	0	1
	MPID			
-1425				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	426	29	0	1
	MPID			
-1426				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	427	29	0	1
	MPID			
-1427				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	428	29	0	1
	MPID			
-1428				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	429	29	0	1
	MPID			
-1429				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	430	29	0	1

;	MPID			
;	-----			
;	-1430			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	431	29	0	1
;	MPID			
;	-----			
;	-1431			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	432	29	0	1
;	MPID			
;	-----			
;	-1432			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	433	29	0	1
;	MPID			
;	-----			
;	-1433			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	434	29	0	1
;	MPID			
;	-----			
;	-1434			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	435	29	0	1
;	MPID			
;	-----			
;	-1435			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	436	29	0	1
;	MPID			
;	-----			
;	-1436			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's


```

;-----
; CONV      437      29      0      1
;      MPID
;-----
;      -1437
;
;*****
;*****
; EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 801      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1801      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 802      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1802      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 803      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1803      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 804      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1804      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 805      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1805      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 806      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1806      1860      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

190

	1822	1850	1870
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	823	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1823	1850	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	824	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1824	1850	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	825	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1825	1800	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	826	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1826	1800	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	827	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1827	1800	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	828	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1828	1800	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---
MACRO	829	3	0
;	Microfunction 1	Microfunction 2	Microfunction 3
	1829	1800	1870
;			
;	TID	Number of Microfunctions	NODE1
;	---	-----	---

```

MACRO 830      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1830      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 831      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1831      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 832      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1832      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 833      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1833      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 834      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1834      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 835      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1835      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 836      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1836      1800      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 837      3      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;      1837      1800      1870
;
;
;*****

```

; Radiation heat transfer from waste surface.

	TID	Nbands					
VFAC	901	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1901	0	0.0	0.0	0

	TID	Nbands					
VFAC	902	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1902	0	0.0	0.0	0

	TID	Nbands					
VFAC	903	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1903	0	0.0	0.0	0

	TID	Nbands					
VFAC	904	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1904	0	0.0	0.0	0

	TID	Nbands					
VFAC	905	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1905	0	0.0	0.0	0

	TID	Nbands					
VFAC	906	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1906	0	0.0	0.0	0

	TID	Nbands					
VFAC	907	0					

;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1907	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	908	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1908	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	909	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1909	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	910	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1910	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	911	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1911	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	912	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1912	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	913	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1913	0	0.0	0.0	0
;		TID	Nbands				

WHC-SD-W236A-ER-014
Rev. 0

```

;
; VFAC 914 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1914 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 915 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1915 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 916 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1916 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 917 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1917 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 918 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1918 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 919 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1919 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 920 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1920 0 0.0 0.0 0

```



```

;
;
;      TID      Nbands
;      -----
VFAC    921      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1921      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    922      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1922      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    923      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1923      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    924      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1924      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    925      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1925      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    926      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1926      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    927      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag

```

WHC-SD-W236A-ER-014
Rev. 0

;	0.0	1.0	1927	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	928	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1928	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	929	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1929	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	930	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1930	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	931	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1931	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	932	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1932	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	933	0				
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	0.0	1.0	1933	0	0.0	0.0	0
;		TID	Nbands				
;	VFAC	934	0				

```

;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1934      0          0.0          0.0          0
;
;      TID      Nbands
;      ----      ----
;      VFAC      935          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1935      0          0.0          0.0          0
;
;      TID      Nbands
;      ----      ----
;      VFAC      936          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1936      0          0.0          0.0          0
;
;      TID      Nbands
;      ----      ----
;      VFAC      937          0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1937      0          0.0          0.0          0
;
;

```

2.4 Steady-State, Case 1

```

$ MAT.DAT
$ STEADY STATE CASE 1
MPID 901 TABLE FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
REFERENCE: C-SI Medium Carbon Steel NSMH
MDATA 32.0 29.99
MDATA 70.0 29.89
MDATA 100.0 29.76
MDATA 200.0 29.22
MDATA 300.0 28.52
/
MPID 904 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
REFERENCE: AISI 1025 Carbon Steel
MDATA 489.0
/
MPID 905 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
REFERENCE: AISI 1025 Carbon Steel
MDATA 0.116
/
MPID 10001 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
References: Kreith
Data Quality: EXCELLENT
MDATA 0.000 0.0133
MDATA 32.0 0.0140
MDATA 100.0 0.0154
MDATA 200.0 0.0174
MDATA 300.0 0.0193
MDATA 400.0 0.0212
MDATA 500.0 0.0231
MDATA 600.0 0.0250
/
MPID 10002 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
References: Kreith Table A-3
Data Quality: EXCELLENT
MDATA 0.0 0.0400
MDATA 32.0 0.0419
MDATA 100.0 0.0463
MDATA 200.0 0.0518
MDATA 300.0 0.0580
MDATA 400.0 0.0630
MDATA 500.0 0.0680
MDATA 600.0 0.0720
/
MPID 10003 RECIPROCAL FAHRENHEIT 1.0
AIR (GAS) --> Coefficient of thermal expansion (1/F)
References: Kreith
Data Quality: EXCELLENT
MDATA 1.0 459.7
/
MPID 10004 TABLE FAHRENHEIT 1.0

```

AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA 0.0 0.0860

MDATA 32.0 0.0810

MDATA 100.0 0.0710

MDATA 200.0 0.0600

MDATA 300.0 0.0520

MDATA 400.0 0.0460

MDATA 500.0 0.0412

MDATA 600.0 0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA 0.0 0.239

MDATA 32.0 0.240

MDATA 100.0 0.240

MDATA 200.0 0.241

MDATA 300.0 0.243

MDATA 400.0 0.245

MDATA 500.0 0.247

MDATA 600.0 0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.35

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.23

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

MDATA 144.0

```
/
MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))
References:
Data Quality: ???
MDATA 0.6
/
MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0
/
MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 1402 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      119.765    0.000
MDATA      120.19    0.000
MDATA      200.0     0.000
/
MPID 1403 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      117.203    0.000
MDATA      117.703    0.000
MDATA      200.0     0.000
/
MPID 1404 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      114.306    0.000
MDATA      114.806    0.000
MDATA      200.0     0.000
/
MPID 1405 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      111.28     0.000
MDATA      111.78     0.000
MDATA      200.0     0.000
/
MPID 1406 TABLE TIME 0.65
```

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 108.188 0.000

MDATA 108.688 0.000

MDATA 200.0 0.000

/

MPID 1407 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 105.089 0.000

MDATA 105.589 0.000

MDATA 200.0 0.000

/

MPID 1408 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 101.88 0.000

MDATA 102.38 0.000

MDATA 200.0 0.000

/

MPID 1409 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 98.671 0.000

MDATA 99.171 0.000

MDATA 200.0 0.000

/

MPID 1410 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 95.462 0.000

MDATA 95.962 0.000

MDATA 200.0 0.000

/

MPID 1411 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 92.252 0.000

MDATA 92.752 0.000

MDATA 200.0 0.000

/

MPID 1412 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 89.043 0.000

MDATA 89.543 0.000

MDATA 200.0 0.000

/

MPID 1413 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 85.834 0.000

MDATA 86.334 0.000

MDATA 200.0 0.000

/

MPID 1414 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 82.625 0.000
MDATA 83.125 0.000
MDATA 200.0 0.000

/

MPID 1415 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 79.182 0.000
MDATA 79.682 0.000
MDATA 200.0 0.000

/

MPID 1416 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 75.739 0.000
MDATA 76.239 0.000
MDATA 200.0 0.000

/

MPID 1417 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 72.297 0.000
MDATA 72.797 0.000
MDATA 200.0 0.000

/

MPID 1418 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 68.854 0.000
MDATA 69.354 0.000
MDATA 200.0 0.000

/

MPID 1419 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 65.411 0.000
MDATA 65.911 0.000
MDATA 200.0 0.000

/

MPID 1420 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 61.969 0.000
MDATA 62.469 0.000
MDATA 200.0 0.000

/

MPID 1421 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.526 0.000

```
MDATA    59.026    0.000
MDATA    200.0    0.000
/
MPID 1422 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    55.083    0.000
MDATA    55.583    0.000
MDATA    200.0    0.000
/
MPID 1423 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 23 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    51.641    0.000
MDATA    52.141    0.000
MDATA    200.0    0.000
/
MPID 1424 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    48.198    0.000
MDATA    48.698    0.000
MDATA    200.0    0.000
/
MPID 1425 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    44.755    0.000
MDATA    45.255    0.000
MDATA    200.0    0.000
/
MPID 1426 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    41.312    0.000
MDATA    41.812    0.000
MDATA    200.0    0.000
/
MPID 1427 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    37.87    0.000
MDATA    38.37    0.000
MDATA    200.0    0.000
/
MPID 1428 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA    0.0    0.000
MDATA    34.427    0.000
MDATA    34.927    0.000
MDATA    200.0    0.000
/
MPID 1429 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 29 AS F(TIME) BTU/HR/FT/F
```

```

M DATA      0.0      0.000
M DATA      30.984    0.000
M DATA      31.484    0.000
M DATA      200.0     0.000
/
MPID 1430 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 30 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      27.542    0.000
M DATA      28.042    0.000
M DATA      200.0     0.000
/
MPID 1431 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 31 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      24.099    0.000
M DATA      24.599    0.000
M DATA      200.0     0.000
/
MPID 1432 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 32 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      20.656    0.000
M DATA      21.156    0.000
M DATA      200.0     0.000
/
MPID 1433 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 33 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      17.213    0.000
M DATA      17.713    0.000
M DATA      200.0     0.000
/
MPID 1434 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 34 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      13.771    0.000
M DATA      14.271    0.000
M DATA      200.0     0.000
/
MPID 1435 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 35 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      10.328    0.000
M DATA      10.828    0.000
M DATA      200.0     0.000
/
MPID 1436 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 36 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      6.885     0.000
M DATA      7.385     0.000
M DATA      200.0     0.000
/

```

MPID 1437 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 3.4427 0.000
MDATA 3.9427 0.00
MDATA 200.0 0.00
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 120.19 1100.0
MDATA 120.64 1100.0
MDATA 200.0 1100.0
/
MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 119.765 1100.0
MDATA 120.19 1100.0
MDATA 200.0 1100.0
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 117.203 1100.0
MDATA 117.703 1100.0
MDATA 200.0 1100.0
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 114.306 1100.0
MDATA 114.806 1100.0
MDATA 200.0 1100.0
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 111.28 1100.0
MDATA 111.78 1100.0
MDATA 200.0 1100.0
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 108.188 1100.0
MDATA 108.688 1100.0
MDATA 200.0 1100.0
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 105.089 1100.0
MDATA 105.589 1100.0

MDATA 200.0 1100.0
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 101.88 1100.0
MDATA 102.38 1100.0
MDATA 200.0 1100.0
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 98.671 1100.0
MDATA 99.171 1100.0
MDATA 200.0 1100.0
/
MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 95.462 1100.0
MDATA 95.962 1100.0
MDATA 200.0 1100.0
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 92.252 1100.0
MDATA 92.752 1100.0
MDATA 200.0 1100.0
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 89.043 1100.0
MDATA 89.543 1100.0
MDATA 200.0 1100.0
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 85.834 1100.0
MDATA 86.334 1100.0
MDATA 200.0 1100.0
/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 82.625 1100.0
MDATA 83.125 1100.0
MDATA 200.0 1100.0
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0

MDATA 79.182 1100.0
MDATA 79.682 1100.0
MDATA 200.0 1100.0
/
MPID 1516 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 75.739 1100.0
MDATA 76.239 1100.0
MDATA 200.0 1100.0
/
MPID 1517 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 72.297 1100.0
MDATA 72.797 1100.0
MDATA 200.0 1100.0
/
MPID 1518 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 68.854 1100.0
MDATA 69.354 1100.0
MDATA 200.0 1100.0
/
MPID 1519 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 65.411 1100.0
MDATA 65.911 1100.0
MDATA 200.0 1100.0
/
MPID 1520 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 61.969 1100.0
MDATA 62.469 1100.0
MDATA 200.0 1100.0
/
MPID 1521 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 58.526 1100.0
MDATA 59.026 1100.0
MDATA 200.0 1100.0
/
MPID 1522 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 55.083 1100.0
MDATA 55.583 1100.0
MDATA 200.0 1100.0
/
MPID 1523 TABLE TIME 1.0

WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 51.641 1100.0
 MDATA 52.141 1100.0
 MDATA 200.0 1100.0

/
 MPID 1524 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 48.198 1100.0
 MDATA 48.698 1100.0
 MDATA 200.0 1100.0

/
 MPID 1525 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 44.755 1100.0
 MDATA 45.255 1100.0
 MDATA 200.0 1100.0

/
 MPID 1526 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 41.312 1100.0
 MDATA 41.812 1100.0
 MDATA 200.0 1100.0

/
 MPID 1527 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 37.87 1100.0
 MDATA 38.37 1100.0
 MDATA 200.0 1100.0

/
 MPID 1528 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 34.427 1100.0
 MDATA 34.927 1100.0
 MDATA 200.0 1100.0

/
 MPID 1529 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 30.984 1100.0
 MDATA 31.484 1100.0
 MDATA 200.0 1100.0

/
 MPID 1530 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 27.542 1100.0
 MDATA 28.042 1100.0
 MDATA 200.0 1100.0

```

/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      24.099    1100.0
MDATA      24.599    1100.0
MDATA      200.0     1100.0
/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      20.656    1100.0
MDATA      21.156    1100.0
MDATA      200.0     1100.0
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      17.213    1100.0
MDATA      17.713    1100.0
MDATA      200.0     1100.0
/
MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      13.771    1100.0
MDATA      14.271    1100.0
MDATA      200.0     1100.0
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      10.328    1100.0
MDATA      10.828    1100.0
MDATA      200.0     1100.0
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      6.885     1100.0
MDATA      7.385     1100.0
MDATA      200.0     1100.0
/
MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      1100.0
MDATA      3.4427    1100.0
MDATA      3.9427    1100.0
MDATA      200.0     1100.0
/
MPID 1701 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      118.48    0.000

```



```
MDATA      118.58    0.000
MDATA      200.00    0.000
/
MPID 1702  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 2 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.0     0.000
/
MPID 1703  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 3 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      200.0     0.000
/
MPID 1704  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 4 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      200.0     0.000
/
MPID 1705  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 5 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      200.0     0.000
/
MPID 1706  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 6 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      200.0     0.000
/
MPID 1707  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 7 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      200.0     0.000
```

```

/
MPID 1708 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      97.06     0.000
MDATA      97.16     0.000
MDATA      200.0     0.000
/
MPID 1709 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      93.85     0.000
MDATA      93.95     0.000
MDATA      97.06     0.000
MDATA      97.16     0.000
MDATA      200.0     0.000
/
MPID 1710 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      90.64     0.000
MDATA      90.74     0.000
MDATA      93.85     0.000
MDATA      93.95     0.000
MDATA      200.0     0.000
/
MPID 1711 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      87.43     0.000
MDATA      87.53     0.000
MDATA      90.64     0.000
MDATA      90.74     0.000
MDATA      200.0     0.000
/
MPID 1712 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      84.23     0.000
MDATA      84.33     0.000
MDATA      87.43     0.000
MDATA      87.53     0.000
MDATA      200.0     0.000
/
MPID 1713 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      80.90     0.000
MDATA      81.00     0.000
MDATA      84.23     0.000
MDATA      84.33     0.000
MDATA      200.0     0.000
/
MPID 1714 TABLE TIME 0.65

```

WASTE CONVECTION h IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 77.46 0.000
 MDATA 77.56 0.000
 MDATA 80.90 0.000
 MDATA 81.00 0.000
 MDATA 200.0 0.000

/
 MPID 1715 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 74.02 0.000
 MDATA 74.12 0.000
 MDATA 77.46 0.000
 MDATA 77.56 0.000
 MDATA 200.0 0.000

/
 MPID 1716 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 70.57 0.000
 MDATA 70.67 0.000
 MDATA 74.02 0.000
 MDATA 74.12 0.000
 MDATA 200.0 0.000

/
 MPID 1717 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 67.13 0.000
 MDATA 67.23 0.000
 MDATA 70.57 0.000
 MDATA 70.67 0.000
 MDATA 200.0 0.000

/
 MPID 1718 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 63.69 0.000
 MDATA 63.79 0.000
 MDATA 67.13 0.000
 MDATA 67.23 0.000
 MDATA 200.0 0.000

/
 MPID 1719 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 19 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 60.25 0.000
 MDATA 60.35 0.000
 MDATA 63.69 0.000
 MDATA 63.79 0.000
 MDATA 200.0 0.000

/
 MPID 1720 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 20 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 56.80 0.000
 MDATA 56.90 0.000
 MDATA 60.25 0.000
 MDATA 60.35 0.000
 MDATA 200.0 0.000

/

MPID 1721 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 21 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 53.36 0.000
 MDATA 53.46 0.000
 MDATA 56.80 0.000
 MDATA 56.90 0.000
 MDATA 200.0 0.000

/

MPID 1722 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 22 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 49.92 0.000
 MDATA 50.02 0.000
 MDATA 53.36 0.000
 MDATA 53.46 0.000
 MDATA 200.0 0.000

/

MPID 1723 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 23 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 46.48 0.000
 MDATA 46.58 0.000
 MDATA 49.92 0.000
 MDATA 50.02 0.000
 MDATA 200.0 0.000

/

MPID 1724 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 24 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 43.03 0.000
 MDATA 43.13 0.000
 MDATA 46.48 0.000
 MDATA 46.58 0.000
 MDATA 200.0 0.000

/

MPID 1725 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 39.59 0.000
 MDATA 39.69 0.000
 MDATA 43.03 0.000
 MDATA 43.13 0.000
 MDATA 200.0 0.000

/

MPID 1726 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 36.15 0.000
 MDATA 36.25 0.000
 MDATA 39.59 0.000
 MDATA 39.69 0.000
 MDATA 200.0 0.000

/

MPID 1727 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 32.71 0.000
 MDATA 32.81 0.000
 MDATA 36.15 0.000
 MDATA 36.25 0.000
 MDATA 200.0 0.000

/

MPID 1728 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 29.26 0.000
 MDATA 29.36 0.000
 MDATA 32.71 0.000
 MDATA 32.81 0.000
 MDATA 200.0 0.000

/

MPID 1729 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 25.82 0.000
 MDATA 25.92 0.000
 MDATA 29.26 0.000
 MDATA 29.36 0.000
 MDATA 200.0 0.000

/

MPID 1730 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 22.38 0.000
 MDATA 22.48 0.000
 MDATA 25.82 0.000
 MDATA 25.92 0.000
 MDATA 200.0 0.000

/

MPID 1731 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 31 AS f(TIME) BTU/HR/FT**2/F

MDATA 0.0 0.000
 MDATA 18.93 0.000
 MDATA 19.03 0.000
 MDATA 22.38 0.000
 MDATA 22.48 0.000
 MDATA 200.0 0.000

/

MPID 1732 TABLE TIME 0.65

WASTE CONVECTION h IN LAYER 32 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 15.49 0.000
 MDATA 15.59 0.000
 MDATA 18.93 0.000
 MDATA 19.03 0.000
 MDATA 200.0 0.000

/

MPID 1733 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 33 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 12.05 0.000
 MDATA 12.15 0.000
 MDATA 15.49 0.000
 MDATA 15.59 0.000
 MDATA 200.0 0.000

/

MPID 1734 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 34 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 8.61 0.000
 MDATA 8.71 0.000
 MDATA 12.05 0.000
 MDATA 12.15 0.000
 MDATA 200.0 0.000

/

MPID 1735 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 35 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 5.16 0.000
 MDATA 5.26 0.000
 MDATA 8.61 0.000
 MDATA 8.71 0.000
 MDATA 200.0 0.000

/

MPID 1736 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 36 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 1.72 0.000
 MDATA 1.82 0.000
 MDATA 5.16 0.000
 MDATA 5.26 0.000
 MDATA 200.0 0.000

/

MPID 1737 TABLE TIME 1.00
 WASTE CONVECTION h IN LAYER 37 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 1.0
 MDATA 1.72 1.0
 MDATA 1.82 1.0
 MDATA 200.0 1.0

/

MPID 1901 TABLE TIME 0.90
 EMISSIVITY FROM LAYER 1 AS f(TIME)
 MDATA 0.0 0.000

```
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.00    0.000
/
MPID 1902  TABLE TIME 0.90
EMISSION FROM LAYER 2 AS f(TIME)
MDATA      0.0      0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.0     0.000
/
MPID 1903  TABLE TIME 0.90
EMISSION FROM LAYER 3 AS f(TIME)
MDATA      0.0      0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      200.0     0.000
/
MPID 1904  TABLE TIME 0.90
EMISSION FROM LAYER 4 AS f(TIME)
MDATA      0.0      0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      200.0     0.000
/
MPID 1905  TABLE TIME 0.90
EMISSION FROM LAYER 5 AS f(TIME)
MDATA      0.0      0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      200.0     0.000
/
MPID 1906  TABLE TIME 0.90
EMISSION FROM LAYER 6 AS f(TIME)
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      200.0     0.000
/
MPID 1907  TABLE TIME 0.90
EMISSION FROM LAYER 7 AS f(TIME)
MDATA      0.0      0.000
MDATA      103.58    0.000
MDATA      200.0     0.000
```

/

MPID 1908	TABLE	TIME	0.90
EMISSION FROM LAYER 8 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	97.06	0.000	
MDATA	97.16	0.000	
MDATA	200.0	0.000	

/

MPID 1909	TABLE	TIME	0.90
EMISSION FROM LAYER 9 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	93.85	0.000	
MDATA	93.95	0.000	
MDATA	97.06	0.000	
MDATA	97.16	0.000	
MDATA	200.0	0.000	

/

MPID 1910	TABLE	TIME	0.90
EMISSION FROM LAYER 10 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	90.64	0.000	
MDATA	90.74	0.000	
MDATA	93.85	0.000	
MDATA	93.95	0.000	
MDATA	200.0	0.000	

/

MPID 1911	TABLE	TIME	0.90
EMISSION FROM LAYER 11 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	87.43	0.000	
MDATA	87.53	0.000	
MDATA	90.64	0.000	
MDATA	90.74	0.000	
MDATA	200.0	0.000	

/

MPID 1912	TABLE	TIME	0.90
EMISSION FROM LAYER 12 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	84.23	0.000	
MDATA	84.33	0.000	
MDATA	87.43	0.000	
MDATA	87.53	0.000	
MDATA	200.0	0.000	

/

MPID 1913	TABLE	TIME	0.90
EMISSION FROM LAYER 13 AS f(TIME)			
MDATA	0.0	0.000	
MDATA	80.90	0.000	
MDATA	81.00	0.000	
MDATA	84.23	0.000	
MDATA	84.33	0.000	
MDATA	200.0	0.000	

/

MPID 1914	TABLE	TIME	0.90
-----------	-------	------	------

EMISSION FROM LAYER 14 AS f(TIME)

MDATA	0.0	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	80.90	0.000
MDATA	81.00	0.000
MDATA	200.0	0.000

/

MPID 1915 TABLE TIME 0.90

EMISSION FROM LAYER 15 AS f(TIME)

MDATA	0.0	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	200.0	0.000

/

MPID 1916 TABLE TIME 0.90

EMISSION FROM LAYER 16 AS f(TIME)

MDATA	0.0	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	200.0	0.000

/

MPID 1917 TABLE TIME 0.90

EMISSION FROM LAYER 17 AS f(TIME)

MDATA	0.0	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	200.0	0.000

/

MPID 1918 TABLE TIME 0.90

EMISSION FROM LAYER 18 AS f(TIME)

MDATA	0.0	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	200.0	0.000

/

MPID 1919 TABLE TIME 0.90

EMISSION FROM LAYER 19 AS f(TIME)

MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	200.0	0.000

/

MPID 1920 TABLE TIME 0.90

EMISSION FROM LAYER 20 AS f(TIME)

MDATA	0.0	0.000
MDATA	56.80	0.000
MDATA	56.90	0.000
MDATA	60.25	0.000
MDATA	60.35	0.000
MDATA	200.0	0.000

/

MPID 1921 TABLE TIME 0.90

EMISSION FROM LAYER 21 AS f(TIME)

MDATA	0.0	0.000
MDATA	53.36	0.000
MDATA	53.46	0.000
MDATA	56.80	0.000
MDATA	56.90	0.000
MDATA	200.0	0.000

/

MPID 1922 TABLE TIME 0.90

EMISSION FROM LAYER 22 AS f(TIME)

MDATA	0.0	0.000
MDATA	49.92	0.000
MDATA	50.02	0.000
MDATA	53.36	0.000
MDATA	53.46	0.000
MDATA	200.0	0.000

/

MPID 1923 TABLE TIME 0.90

EMISSION FROM LAYER 23 AS f(TIME)

MDATA	0.0	0.000
MDATA	46.48	0.000
MDATA	46.58	0.000
MDATA	49.92	0.000
MDATA	50.02	0.000
MDATA	200.0	0.000

/

MPID 1924 TABLE TIME 0.90

EMISSION FROM LAYER 24 AS f(TIME)

MDATA	0.0	0.000
MDATA	43.03	0.000
MDATA	43.13	0.000
MDATA	46.48	0.000
MDATA	46.58	0.000
MDATA	200.0	0.000

/

MPID 1925 TABLE TIME 0.90

EMISSION FROM LAYER 25 AS f(TIME)

MDATA	0.0	0.000
MDATA	39.59	0.000
MDATA	39.69	0.000
MDATA	43.03	0.000
MDATA	43.13	0.000
MDATA	200.0	0.000

/

MPID 1926 TABLE TIME 0.90

EMISSION FROM LAYER 26 AS f(TIME)

MDATA	0.0	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	39.59	0.000
MDATA	39.69	0.000
MDATA	200.0	0.000

/

MPID 1927 TABLE TIME 0.90

EMISSION FROM LAYER 27 AS f(TIME)

MDATA	0.0	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	200.0	0.000

/

MPID 1928 TABLE TIME 0.90

EMISSION FROM LAYER 28 AS f(TIME)

MDATA	0.0	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	200.0	0.000

/

MPID 1929 TABLE TIME 0.90

EMISSION FROM LAYER 29 AS f(TIME)

MDATA	0.0	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	200.0	0.000

/

MPID 1930 TABLE TIME 0.90

EMISSION FROM LAYER 30 AS f(TIME)

MDATA	0.0	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	200.0	0.000

/

MPID 1931 TABLE TIME 0.90

EMISSION FROM LAYER 31 AS f(TIME)

MDATA	0.0	0.000
MDATA	18.93	0.000
MDATA	19.03	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	200.0	0.000

/

MPID 1932 TABLE TIME 0.90

EMISSION FROM LAYER 32 AS f(TIME)
M DATA 0.0 0.000
M DATA 15.49 0.000
M DATA 15.59 0.000
M DATA 18.93 0.000
M DATA 19.03 0.000
M DATA 200.0 0.000
/
MPID 1933 TABLE TIME 0.90
EMISSION FROM LAYER 33 AS f(TIME)
M DATA 0.0 0.000
M DATA 12.05 0.000
M DATA 12.15 0.000
M DATA 15.49 0.000
M DATA 15.59 0.000
M DATA 200.0 0.000
/
MPID 1934 TABLE TIME 0.90
EMISSION FROM LAYER 34 AS f(TIME)
M DATA 0.0 0.000
M DATA 8.61 0.000
M DATA 8.71 0.000
M DATA 12.05 0.000
M DATA 12.15 0.000
M DATA 200.0 0.000
/
MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.16 0.000
M DATA 5.26 0.000
M DATA 8.61 0.000
M DATA 8.71 0.000
M DATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.44 0.00
M DATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
M DATA 0.0 1.0
M DATA 1.50 1.0
M DATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
M DATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
M DATA 1.0

/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/

```

$ MICRO.DAT
$ STEADY STATE CASE 1
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
* MFID ARGUMENT OPTION
MICRO 1075 0 1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1080 0 1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1090 0 1
MICDAT 77.0
/
*
* Ground water temp
*
* MFID ARGUMENT OPTION
MICRO 1095 0 1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO 1600 0 1
MICDAT 4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO 1601 0 15
MICDAT 199.0 200 0.0 1.0
/
MICRO 1602 0 15
MICDAT 118.48 200 0.0 1.0
/
MICRO 1603 0 15
MICDAT 115.75 200 0.0 1.0
/
MICRO 1604 0 15
MICDAT 112.79 200 0.0 1.0
/
MICRO 1605 0 15
MICDAT 109.73 200 0.0 1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/*

* EVAPORATION FROM WASTE SURFACE
* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2
*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	90.0	-5.0	
MICDAT	100.0	-7.5	
MICDAT	110.0	-11.0	
MICDAT	120.0	-14.5	
MICDAT	130.0	-21.0	

MICDAT	140.0	-27.7
MICDAT	150.0	-38.0
MICDAT	160.0	-50.0
MICDAT	170.0	-66.0
MICDAT	180.0	-88.0
MICDAT	190.0	-119.0
MICDAT	200.0	-162.0
MICDAT	250.0	-400.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

*

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	

/	MICRO	1802	0	15		
	MICDAT	115.75	118.48		1.0	0.0
/	MICRO	1803	0	15		
	MICDAT	112.79	115.75		1.0	0.0
/	MICRO	1804	0	15		
	MICDAT	109.73	112.79		1.0	0.0
/	MICRO	1805	0	15		
	MICDAT	106.64	109.73		1.0	0.0
/	MICRO	1806	0	15		
	MICDAT	103.48	106.64		1.0	0.0
/	MICRO	1807	0	15		
	MICDAT	100.27	103.48		1.0	0.0
/	MICRO	1808	0	15		
	MICDAT	97.06	100.27		1.0	0.0
/	MICRO	1809	0	15		
	MICDAT	93.85	97.06		1.0	0.0
/	MICRO	1810	0	15		
	MICDAT	90.64	93.85		1.0	0.0
/	MICRO	1811	0	15		
	MICDAT	87.43	90.64		1.0	0.0
/	MICRO	1812	0	15		
	MICDAT	84.23	87.43		1.0	0.0
/	MICRO	1813	0	15		
	MICDAT	80.90	84.23		1.0	0.0
/	MICRO	1814	0	15		
	MICDAT	77.46	80.90		1.0	0.0
/	MICRO	1815	0	15		
	MICDAT	74.02	77.46		1.0	0.0
/	MICRO	1816	0	15		
	MICDAT	70.57	74.02		1.0	0.0
/	MICRO	1817	0	15		
	MICDAT	67.13	70.57		1.0	0.0
/	MICRO	1818	0	15		
	MICDAT	63.69	67.13		1.0	0.0
/	MICRO	1819	0	15		
	MICDAT	60.25	63.69		1.0	0.0

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

```

$ TEMPLATE.DAT
$ STEADY STATE CASE 1
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    100      901      901      901      904      905
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    150     10001     10001     10001     10004     10005
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    300     20001     20001     20001     20004     20005
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    303     20001     20001     20001     20004     20005
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    400     30001     30001     30001     30004     30005
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    401     30001     30001     30001     30004     30005
;*****
;*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID    402     40001     40001     40001     40004     40005
;*****
;*****
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      ----      -      supplied by this      supplied by this
;      ----      -      template      template
;
CONV      70      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; ----
; 1.00
;*****

```

```

;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      30      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.99
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      31      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.27
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      32      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.19
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

```

```
; Lower Section of Annulus
; Configuration 27 is generic natural convection
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      supplied by this      supplied by this
;                               template                template
;
CONV      40      27      5      5
;
; The code supplies GP #1.
;
;      GP #2      GP #3      GP #4      GP #5      GP #6
;      -----      -      -      -      -
;      4.173E8      34.      6.271D-05      .33      .33
;
;      MPID_1      MPID_2      MPID_3      MPID_4      MPID_5
;      -----      -      -      -      -
;      10004      10002      10003      10005      10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).
; Vertical Section of Annulus
; Configuration 27 is generic natural convection
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      supplied by this      supplied by this
;                               template                template
;
CONV      41      27      5      5
;
; The code supplies GP #1.
;
;      GP #2      GP #3      GP #4      GP #5      GP #6
;      -----      -      -      -      -
;      4.173E8      34.      6.271D-05      .33      .33
;
;      MPID_1      MPID_2      MPID_3      MPID_4      MPID_5
;      -----      -      -      -      -
;      10004      10002      10003      10005      10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper section of Primary Tank
; Configuration 27 is generic natural convection
;
;      TID      CFG      Number of GP Values      Number of MPID's
;      -----      -      supplied by this      supplied by this
;                               template                template
;
CONV      42      27      5      5
;
; The code supplies GP #1.
```

```

;
;   GP #2   GP #3   GP #4   GP #5   GP #6
;   -----
;   4.173E8   34.    6.271D-05   .33    .33
;
;   MPID_1   MPID_2   MPID_3   MPID_4   MPID_5
;   -----
;   10004    10002    10003    10005    10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
;
;   TID      CFGI      Number of GP Values      Number of MPID's
;   -----      supplied by this      supplied by this
;   -----      template      template
;
CONV      43      27      5      5
;
; The code supplies GP #1.
;
;   GP #2   GP #3   GP #4   GP #5   GP #6
;   -----
;   4.173E8   34.    6.271D-05   .33    .33
;
;   MPID_1   MPID_2   MPID_3   MPID_4   MPID_5
;   -----
;   10004    10002    10003    10005    10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
;
;   TID      CFGI      Number of GP Values      Number of MPID's
;   -----      supplied by this      supplied by this
;   -----      template      template
;
CONV      44      27      5      5
;
; The code supplies GP #1.
;
;   GP #2   GP #3   GP #4   GP #5   GP #6
;   -----
;   4.173E8   34.    6.271D-05   .33    .33
;
;   MPID_1   MPID_2   MPID_3   MPID_4   MPID_5
;   -----
;   10004    10002    10003    10005    10001
; *****
; *****

```



```

*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC      60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
;
*****
; Ambient air temperature for convection from ground surface
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
;
*****
; Annulus inlet air temperature
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
;
*****
; Tank dome inlet air temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
;
*****
; Ground water temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      95      1      0      0      1.0

```

WHC-SD-W236A-ER-014
Rev. 0

```

;
; MFID #1
; -----
; 1095
; *****
; *****
;
; 37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK
;
;      MID      Kx      Ky      Kz      Density      Cp      -----
;      ----      -
; MID      501      1501      1501      1501      1004      1005
; MID      502      1502      1502      1502      1004      1005
; MID      503      1503      1503      1503      1004      1005
; MID      504      1504      1504      1504      1004      1005
; MID      505      1505      1505      1505      1004      1005
; MID      506      1506      1506      1506      1004      1005
; MID      507      1507      1507      1507      1004      1005
; MID      508      1508      1508      1508      1004      1005
; MID      509      1509      1509      1509      1004      1005
; MID      510      1510      1510      1510      1004      1005
; MID      511      1511      1511      1511      1004      1005
; MID      512      1512      1512      1512      1004      1005
; MID      513      1513      1513      1513      1004      1005
; MID      514      1514      1514      1514      1004      1005
; MID      515      1515      1515      1515      1004      1005
; MID      516      1516      1516      1516      1004      1005
; MID      517      1517      1517      1517      1004      1005
; MID      518      1518      1518      1518      1004      1005
; MID      519      1519      1519      1519      1004      1005
; MID      520      1520      1520      1520      1004      1005
; MID      521      1521      1521      1521      1004      1005
; MID      522      1522      1522      1522      1004      1005
; MID      523      1523      1523      1523      1004      1005
; MID      524      1524      1524      1524      1004      1005
; MID      525      1525      1525      1525      1004      1005
; MID      526      1526      1526      1526      1004      1005
; MID      527      1527      1527      1527      1004      1005
; MID      528      1528      1528      1528      1004      1005
; MID      529      1529      1529      1529      1004      1005
; MID      530      1530      1530      1530      1004      1005
; MID      531      1531      1531      1531      1004      1005
; MID      532      1532      1532      1532      1004      1005
; MID      533      1533      1533      1533      1004      1005
; MID      534      1534      1534      1534      1004      1005
; MID      535      1535      1535      1535      1004      1005
; MID      536      1536      1536      1536      1004      1005
; MID      537      1537      1537      1537      1004      1005
; *****
; *****
; HEAT GENERATION TEMPLATES FOR WASTE
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

```

;
;-----
MACRO 601      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 602      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 603      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 604      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 605      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 606      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 607      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;
;-----
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 608      1      0      0      1.0
; Microfunction 1      Microfunction 2
;               1600
;
;

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 609      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 610      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 611      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 612      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 613      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 614      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 615      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 616      1      0      0      1.0
;      Microfunction 1      Microfunction 2

```

1600

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  617      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;              1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  618      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;              1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  619      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;
;      1600

```

```

;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 620          1              0              0              1.0
;      Microfunction 1      Microfunction 2
;                      1600

```

```

;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 621          1              0              0              1.0
;      Microfunction 1      Microfunction 2
;                      1600

```

```

;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 622          1              0              0              1.0
;      Microfunction 1      Microfunction 2
;                      1600

```

```

;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 623          1              0              0              1.0
;      Microfunction 1      Microfunction 2
;                      1600

```

```
;
;
;      TID       Number of Microfunctions   NODE1    NODE2     Scale Factor
;      ---      -
```

```

MACRO 624      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 625      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 626      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 627      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 628      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 629      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 630      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 631      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 632      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 633      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 634      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 635      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 636      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
; MACRO 637      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;                      1600
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from
; tank dome to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      ---      ---      supplied by this      supplied by this
;      ---      ---      template      template
;
; CONV      700      31      1      0
;
; The code supplies GP #1.

```

```

;
; GP #2
; -----
; 1.00
; *****
; *****
; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  701      29              0              1
;      MPID
;      -----
;      -1701
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  702      29              0              1
;      MPID
;      -----
;      -1702
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  703      29              0              1
;      MPID
;      -----
;      -1703
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  704      29              0              1
;      MPID
;      -----
;      -1704
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  705      29              0              1
;      MPID
;      -----
;      -1705
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV  706      29              0              1
;      MPID

```


[illegible]

```

; ; ; ; C ; ;
; ; ; ; C ; ;
; ; ; ; C ; ;
; ; ; ; C ; ;
; ; ; ; C ; ;

```

[illegible]

C
C
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;

[illegible]

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•
•
•

```

;      TID      CFID      Number of GP Values      Number of MPID's
;      -----      -----      -----      -----
;

```

CONV	713	29	0	1
;	MPID			
;	-----			
	-1713			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	714	29	0	1
;	MPID			
;	-----			
	-1714			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	715	29	0	1
;	MPID			
;	-----			
	-1715			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	716	29	0	1
;	MPID			
;	-----			
	-1716			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	717	29	0	1
;	MPID			
;	-----			
	-1717			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	718	29	0	1
;	MPID			
;	-----			
	-1718			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	719	29	0	1
;	MPID			
;	-----			
	-1719			
;				
;				

WHC-SD-W236A-ER-014
Rev. 0

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	720	29	0	1
	MPID			
	-1720			
CONV	721	29	0	1
	MPID			
	-1721			
CONV	722	29	0	1
	MPID			
	-1722			
CONV	723	29	0	1
	MPID			
	-1723			
CONV	724	29	0	1
	MPID			
	-1724			
CONV	725	29	0	1
	MPID			
	-1725			
CONV	726	29	0	1
	MPID			
	-1726			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	727	29	0	1
MPID	-1727			
CONV	728	29	0	1
MPID	-1728			
CONV	729	29	0	1
MPID	-1729			
CONV	730	29	0	1
MPID	-1730			
CONV	731	29	0	1
MPID	-1731			
CONV	732	29	0	1
MPID	-1732			
CONV	733	29	0	1
MPID				

```

; -----
; -1733
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      734      29      0      1
; MPID
; -----
; -1734
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      735      29      0      1
; MPID
; -----
; -1735
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      736      29      0      1
; MPID
; -----
; -1736
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      737      29      0      1
; MPID
; -----
; -1737
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      402      29      0      1
; MPID
; -----
; -1402
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
CONV      403      29      0      1

```

;	MPID			
;	-----			
;	-1403			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	404	29	0	1
;	MPID			
;	-----			
;	-1404			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	405	29	0	1
;	MPID			
;	-----			
;	-1405			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	406	29	0	1
;	MPID			
;	-----			
;	-1406			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	407	29	0	1
;	MPID			
;	-----			
;	-1407			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	408	29	0	1
;	MPID			
;	-----			
;	-1408			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	409	29	0	1
;	MPID			
;	-----			
;	-1409			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

;	----	----	-----	-----
CONV	410	29	0	1
;	MPID			
;	----			
	-1410			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	411	29	0	1
;	MPID			
;	----			
	-1411			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	412	29	0	1
;	MPID			
;	----			
	-1412			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	413	29	0	1
;	MPID			
;	----			
	-1413			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	414	29	0	1
;	MPID			
;	----			
	-1414			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	415	29	0	1
;	MPID			
;	----			
	-1415			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	----	----	-----	-----
CONV	416	29	0	1
;	MPID			
;	----			
	-1416			
;				

;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	417	29	0	1
;	MPID			
;	-----			
;	-1417			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	418	29	0	1
;	MPID			
;	-----			
;	-1418			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	419	29	0	1
;	MPID			
;	-----			
;	-1419			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	420	29	0	1
;	MPID			
;	-----			
;	-1420			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	421	29	0	1
;	MPID			
;	-----			
;	-1421			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	422	29	0	1
;	MPID			
;	-----			
;	-1422			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	423	29	0	1
;	MPID			
;	-----			

[illegible]

Number of MPID's

1

Number of MPID's

1

Number of MPID's

1

Number of MPID's

1

Number of MPID's

1

Number of MPID's

1

Number of MPID's

1

;	MPID			
;	-----			
	-1430			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	431	29	0	1
;	MPID			
;	-----			
	-1431			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	432	29	0	1
;	MPID			
;	-----			
	-1432			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	433	29	0	1
;	MPID			
;	-----			
	-1433			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	434	29	0	1
;	MPID			
;	-----			
	-1434			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	435	29	0	1
;	MPID			
;	-----			
	-1435			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	436	29	0	1
;	MPID			
;	-----			
	-1436			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

```

;-----
; CONV      437      29      0      1
;      MPID
;-----
;      -1437
;
;*****
;*****
;      EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      801      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      802      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      803      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      804      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      805      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO      806      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                          1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

256

;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	815	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	816	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	817	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	818	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	819	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	820	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	821	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	822	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	

		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	823	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	824	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	825	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	826	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	827	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	828	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	829	2	0	0 1.0
;	Microfunction 1	Microfunction 2		Microfunction 3
		1850		1870
;				
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----

```

MACRO 830      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 831      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 832      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 833      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 834      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 835      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 836      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
;
MACRO 837      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1800      1870
;
;
;*****

```

; Radiation heat transfer from waste surface.

```
;
;      TID      Nbands
;      ----      ----
VFAC    901      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1901      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    902      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1902      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    903      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1903      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    904      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1904      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    905      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1905      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    906      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1906      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    907      0
```


	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1907	0	0.0	0.0	0
		TID	Nbands				
VFAC		908	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1908	0	0.0	0.0	0
		TID	Nbands				
VFAC		909	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1909	0	0.0	0.0	0
		TID	Nbands				
VFAC		910	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1910	0	0.0	0.0	0
		TID	Nbands				
VFAC		911	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1911	0	0.0	0.0	0
		TID	Nbands				
VFAC		912	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1912	0	0.0	0.0	0
		TID	Nbands				
VFAC		913	0				
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1913	0	0.0	0.0	0
		TID	Nbands				

```

;
VFAC      914      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1914      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      915      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1915      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      916      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1916      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      917      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1917      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      918      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1918      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      919      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1919      0      0.0      0.0      0
;
;      TID      Nbands
;      ----      ----
VFAC      920      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1920      0      0.0      0.0      0

```

;		TID	Nbands					
;		-----	-----					
;	VFAC	921	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1921	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	922	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1922	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	923	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1923	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	924	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1924	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	925	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1925	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	926	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;		-----	-----	-----	-----	-----	-----	-----
;		0.0	1.0	1926	0	0.0	0.0	0
;								
;		TID	Nbands					
;		-----	-----					
;	VFAC	927	0					
;								
;		Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag

```

; -----
; 0.0 1.0 1927 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 928 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1928 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 929 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1929 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 930 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1930 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 931 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1931 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 932 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1932 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 933 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1933 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 934 0

```

```

;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1934    0       0.0       0.0       0
;
;   TID   Nbands
;   ---   ---
; VFAC   935       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1935    0       0.0       0.0       0
;
;   TID   Nbands
;   ---   ---
; VFAC   936       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1936    0       0.0       0.0       0
;
;   TID   Nbands
;   ---   ---
; VFAC   937       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1937    0       0.0       0.0       0
;
;

```

2.5 Steady-State, Case 2

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.16 0.000
M DATA 5.26 0.000
M DATA 8.61 0.000
M DATA 8.71 0.000
M DATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.44 0.00
M DATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
M DATA 0.0 1.0
M DATA 1.50 1.0
M DATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
M DATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
M DATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
M DATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
M DATA 2258.0
/
/

```

$ MICRO.DAT
$ CASE 2
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
* MFID ARGUMENT OPTION
MICRO 1075 0 1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1080 0 1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1090 0 1
MICDAT 77.0
/
*
* Ground water temp
*
* MFID ARGUMENT OPTION
MICRO 1095 0 1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO 1600 0 1
MICDAT 0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO 1601 0 15
MICDAT 199.0 200 0.0 1.0
/
MICRO 1602 0 15
MICDAT 118.48 200 0.0 1.0
/
MICRO 1603 0 15
MICDAT 115.75 200 0.0 1.0
/
MICRO 1604 0 15
MICDAT 112.79 200 0.0 1.0
/
MICRO 1605 0 15
MICDAT 109.73 200 0.0 1.0

```


/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	90.0	-5.0	
MICDAT	100.0	-7.5	
MICDAT	110.0	-11.0	
MICDAT	120.0	-14.5	
MICDAT	130.0	-21.0	

MICDAT	140.0	-27.7
MICDAT	150.0	-38.0
MICDAT	160.0	-50.0
MICDAT	170.0	-66.0
MICDAT	180.0	-88.0
MICDAT	190.0	-119.0
MICDAT	200.0	-162.0
MICDAT	250.0	-400.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	^[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
 * to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/	MICRO	1820	0	15		
	MICDAT	56.80	60.25	1.0	0.0	
/	MICRO	1821	0	15		
	MICDAT	53.36	56.80	1.0	0.0	
/	MICRO	1822	0	15		
	MICDAT	49.92	53.36	1.0	0.0	
/	MICRO	1823	0	15		
	MICDAT	46.48	49.92	1.0	0.0	
/	MICRO	1824	0	15		
	MICDAT	43.03	46.48	1.0	0.0	
/	MICRO	1825	0	15		
	MICDAT	39.59	43.03	1.0	0.0	
/	MICRO	1826	0	15		
	MICDAT	36.15	39.59	1.0	0.0	
/	MICRO	1827	0	15		
	MICDAT	32.71	36.15	1.0	0.0	
/	MICRO	1828	0	15		
	MICDAT	29.26	32.71	1.0	0.0	
/	MICRO	1829	0	15		
	MICDAT	25.82	29.26	1.0	0.0	
/	MICRO	1830	0	15		
	MICDAT	22.38	25.82	1.0	0.0	
/	MICRO	1831	0	15		
	MICDAT	18.93	22.38	1.0	0.0	
/	MICRO	1832	0	15		
	MICDAT	15.49	18.93	1.0	0.0	
/	MICRO	1833	0	15		
	MICDAT	12.05	15.49	1.0	0.0	
/	MICRO	1834	0	15		
	MICDAT	8.61	12.05	1.0	0.0	
/	MICRO	1835	0	15		
	MICDAT	5.16	8.61	1.0	0.0	
/	MICRO	1836	0	15		
	MICDAT	1.72	5.16	1.0	0.0	
/	MICRO	1837	0	1		

MICDAT 1.0
/

2.6 Steady-State, Case 3

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSIVITY FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSIVITY FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSIVITY FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 1354.8
/


```

$ MICRO.DAT
$ STEADY STATE CASE 3
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT 77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT 0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT 199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT 118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT 115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT 112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT 109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	90.0	-3.0	
MICDAT	100.0	-4.6	
MICDAT	110.0	-6.8	
MICDAT	120.0	-8.6	
MICDAT	130.0	-12.5	

MICDAT	140.0	-17.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

2.7 Steady-State, Case 4

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSIVITY FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSIVITY FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSIVITY FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 1354.8
/
/

```

$ MICRO.DAT
$ STEADY STATE CASE 4
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT 53.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT 53.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT 53.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT 0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT 199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT 118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT 115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT 112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT 109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	70.0	-2.7	
MICDAT	80.0	-4.6	
MICDAT	90.0	-7.3	
MICDAT	100.0	-11.9	
MICDAT	110.0	-17.5	

MICDAT	120.0	-25.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

2.8 Steady-State, Case 5

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

```

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/

```

```

$ MICRO.DAT
$ STEADY STATE CASE 5
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT 53.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT 53.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT 53.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT 0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT 199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT 118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT 115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT 112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT 109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/					
MICRO	1624	0	15		
MICDAT	46.48	200	0.0	1.0	
/					
MICRO	1625	0	15		
MICDAT	43.03	200	0.0	1.0	
/					
MICRO	1626	0	15		
MICDAT	39.59	200	0.0	1.0	
/					
MICRO	1627	0	15		
MICDAT	36.15	200	0.0	1.0	
/					
MICRO	1628	0	15		
MICDAT	32.71	200	0.0	1.0	
/					
MICRO	1629	0	15		
MICDAT	29.26	200	0.0	1.0	
/					
MICRO	1630	0	15		
MICDAT	25.82	200	0.0	1.0	
/					
MICRO	1631	0	15		
MICDAT	22.38	200	0.0	1.0	
/					
MICRO	1632	0	15		
MICDAT	18.93	200	0.0	1.0	
/					
MICRO	1633	0	15		
MICDAT	15.49	200	0.0	1.0	
/					
MICRO	1634	0	15		
MICDAT	12.05	200	0.0	1.0	
/					
MICRO	1635	0	15		
MICDAT	8.61	200	0.0	1.0	
/					
MICRO	1636	0	15		
MICDAT	5.16	200	0.0	1.0	
/					
MICRO	1637	0	15		
MICDAT	1.72	200	0.0	1.0	

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18		
MICDAT	0.0	0.0			
MICDAT	70.0	-5.0			
MICDAT	80.0	-6.0			
MICDAT	90.0	-10.6			
MICDAT	100.0	-17.0			
MICDAT	110.0	-25.0			

MICDAT	120.0	-35.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

2.9 Steady-State, Case 6

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSIVITY FROM LAYER 35 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.16 0.000
M DATA 5.26 0.000
M DATA 8.61 0.000
M DATA 8.71 0.000
M DATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSIVITY FROM LAYER 36 AS f(TIME)
M DATA 0.0 0.000
M DATA 5.44 0.00
M DATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSIVITY FROM LAYER 37 AS f(TIME)
M DATA 0.0 1.0
M DATA 1.50 1.0
M DATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
M DATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
M DATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
M DATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
M DATA 1354.8
/
/

```

$ MICRO.DAT
$ STEADY STATE CASE 6
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT 77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT 0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT 199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT 118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT 115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT 112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT 109.73      200      0.0      1.0

```

/	MICRO	1606	0	15	
	MICDAT	106.64	200	0.0	1.0
/	MICRO	1607	0	15	
	MICDAT	103.48	200	0.0	1.0
/	MICRO	1608	0	15	
	MICDAT	100.27	200	0.0	1.0
/	MICRO	1609	0	15	
	MICDAT	97.06	200	0.0	1.0
/	MICRO	1610	0	15	
	MICDAT	93.85	200	0.0	1.0
/	MICRO	1611	0	15	
	MICDAT	90.64	200	0.0	1.0
/	MICRO	1612	0	15	
	MICDAT	87.43	200	0.0	1.0
/	MICRO	1613	0	15	
	MICDAT	84.23	200	0.0	1.0
/	MICRO	1614	0	15	
	MICDAT	80.90	200	0.0	1.0
/	MICRO	1615	0	15	
	MICDAT	77.46	200	0.0	1.0
/	MICRO	1616	0	15	
	MICDAT	74.02	200	0.0	1.0
/	MICRO	1617	0	15	
	MICDAT	70.57	200	0.0	1.0
/	MICRO	1618	0	15	
	MICDAT	67.13	200	0.0	1.0
/	MICRO	1619	0	15	
	MICDAT	63.69	200	0.0	1.0
/	MICRO	1620	0	15	
	MICDAT	60.25	200	0.0	1.0
/	MICRO	1621	0	15	
	MICDAT	56.80	200	0.0	1.0
/	MICRO	1622	0	15	
	MICDAT	53.36	200	0.0	1.0
/	MICRO	1623	0	15	
	MICDAT	49.92	200	0.0	1.0

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

/*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	70.0	-2.7	
MICDAT	80.0	-4.6	
MICDAT	90.0	-7.3	
MICDAT	100.0	-11.9	
MICDAT	110.0	-17.5	

MICDAT	120.0	-25.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/	MICRO	1820	0	15		
	MICDAT	56.80	60.25	1.0	0.0	
/	MICRO	1821	0	15		
	MICDAT	53.36	56.80	1.0	0.0	
/	MICRO	1822	0	15		
	MICDAT	49.92	53.36	1.0	0.0	
/	MICRO	1823	0	15		
	MICDAT	46.48	49.92	1.0	0.0	
/	MICRO	1824	0	15		
	MICDAT	43.03	46.48	1.0	0.0	
/	MICRO	1825	0	15		
	MICDAT	39.59	43.03	1.0	0.0	
/	MICRO	1826	0	15		
	MICDAT	36.15	39.59	1.0	0.0	
/	MICRO	1827	0	15		
	MICDAT	32.71	36.15	1.0	0.0	
/	MICRO	1828	0	15		
	MICDAT	29.26	32.71	1.0	0.0	
/	MICRO	1829	0	15		
	MICDAT	25.82	29.26	1.0	0.0	
/	MICRO	1830	0	15		
	MICDAT	22.38	25.82	1.0	0.0	
/	MICRO	1831	0	15		
	MICDAT	18.93	22.38	1.0	0.0	
/	MICRO	1832	0	15		
	MICDAT	15.49	18.93	1.0	0.0	
/	MICRO	1833	0	15		
	MICDAT	12.05	15.49	1.0	0.0	
/	MICRO	1834	0	15		
	MICDAT	8.61	12.05	1.0	0.0	
/	MICRO	1835	0	15		
	MICDAT	5.16	8.61	1.0	0.0	
/	MICRO	1836	0	15		
	MICDAT	1.72	5.16	1.0	0.0	
/	MICRO	1837	0	1		

MICDAT 1.0
/

2.10 Steady-State, Case 7

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/
/

```

$ MICRO.DAT
$ STEADY STATE CASE 7
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT  77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT  77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT  77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT  55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT  0.7094
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT  199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT  118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT  115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT  112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT  109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	70.0	-5.0	
MICDAT	80.0	-6.0	
MICDAT	90.0	-10.6	
MICDAT	100.0	-17.0	
MICDAT	110.0	-25.0	

WHC-SD-W236A-ER-014
Rev. 0

MICDAT	120.0	-35.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

2.11 Steady-State, Case 8

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSIVITY FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSIVITY FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSIVITY FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 1354.8
/

```

$ MICRO.DAT
$ STEADY STATE CASE 8
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT  53.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT  53.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT  53.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT  55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT  0.2580
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT  199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT  118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT  115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT  112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT  109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 300 SCFM BTU/HR/FT**2

/*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	70.0	-2.7	
MICDAT	80.0	-4.6	
MICDAT	90.0	-7.3	
MICDAT	100.0	-11.9	
MICDAT	110.0	-17.5	

MICDAT	120.0	-25.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

2.12 Steady-State, Case 9

The mat.dat file for this case is the same as for steady-state Case 1 except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for steady-state Case 1.

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/

```

$ MICRO.DAT
$ STEADY STATE CASE 9
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0              1
MICDAT  53.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0              1
MICDAT  53.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0              1
MICDAT  53.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0              1
MICDAT  55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT  0.2580
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT  199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT  118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT  115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT  112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT  109.73      200      0.0      1.0

```

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/				
MICRO	1624	0	15	
MICDAT	46.48	200	0.0	1.0
/				
MICRO	1625	0	15	
MICDAT	43.03	200	0.0	1.0
/				
MICRO	1626	0	15	
MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/

*

* EVAPORATION FROM WASTE SURFACE
* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2
*

MICRO	1800	1	18
MICDAT	60.0	-4.0	
MICDAT	70.0	-5.0	
MICDAT	80.0	-6.0	
MICDAT	90.0	-10.6	
MICDAT	100.0	-17.0	
MICDAT	110.0	-25.0	

MICDAT	120.0	-35.0
MICDAT	150.0	-23.0
MICDAT	160.0	-30.0
MICDAT	170.0	-41.0
MICDAT	180.0	-55.0
MICDAT	190.0	-73.0
MICDAT	200.0	-97.0
MICDAT	250.0	-240.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
 * to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/	MICRO	1820	0	15		
	MICDAT	56.80	60.25	1.0	0.0	
/	MICRO	1821	0	15		
	MICDAT	53.36	56.80	1.0	0.0	
/	MICRO	1822	0	15		
	MICDAT	49.92	53.36	1.0	0.0	
/	MICRO	1823	0	15		
	MICDAT	46.48	49.92	1.0	0.0	
/	MICRO	1824	0	15		
	MICDAT	43.03	46.48	1.0	0.0	
/	MICRO	1825	0	15		
	MICDAT	39.59	43.03	1.0	0.0	
/	MICRO	1826	0	15		
	MICDAT	36.15	39.59	1.0	0.0	
/	MICRO	1827	0	15		
	MICDAT	32.71	36.15	1.0	0.0	
/	MICRO	1828	0	15		
	MICDAT	29.26	32.71	1.0	0.0	
/	MICRO	1829	0	15		
	MICDAT	25.82	29.26	1.0	0.0	
/	MICRO	1830	0	15		
	MICDAT	22.38	25.82	1.0	0.0	
/	MICRO	1831	0	15		
	MICDAT	18.93	22.38	1.0	0.0	
/	MICRO	1832	0	15		
	MICDAT	15.49	18.93	1.0	0.0	
/	MICRO	1833	0	15		
	MICDAT	12.05	15.49	1.0	0.0	
/	MICRO	1834	0	15		
	MICDAT	8.61	12.05	1.0	0.0	
/	MICRO	1835	0	15		
	MICDAT	5.16	8.61	1.0	0.0	
/	MICRO	1836	0	15		
	MICDAT	1.72	5.16	1.0	0.0	
/	MICRO	1837	0	1		

MICDAT 1.0
/

2.13 Loss of All Electric Power Transient

```

$ MAT.DAT
$ LOSS OF ALL ELECTRIC POWER TRANSIENT
MPID 901 TABLE FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
REFERENCE: C-SI Medium Carbon Steel NSMH
MDATA 32.0 29.99
MDATA 70.0 29.89
MDATA 100.0 29.76
MDATA 200.0 29.22
MDATA 300.0 28.52
/
MPID 904 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
REFERENCE: AISI 1025 Carbon Steel
MDATA 489.0
/
MPID 905 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
REFERENCE: AISI 1025 Carbon Steel
MDATA 0.116
/
MPID 10001 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
References: Kreith
Data Quality: EXCELLENT
MDATA 0.000 0.0133
MDATA 32.0 0.0140
MDATA 100.0 0.0154
MDATA 200.0 0.0174
MDATA 300.0 0.0193
MDATA 400.0 0.0212
MDATA 500.0 0.0231
MDATA 600.0 0.0250
/
MPID 10002 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
References: Kreith Table A-3
Data Quality: EXCELLENT
MDATA 0.0 0.0400
MDATA 32.0 0.0419
MDATA 100.0 0.0463
MDATA 200.0 0.0518
MDATA 300.0 0.0580
MDATA 400.0 0.0630
MDATA 500.0 0.0680
MDATA 600.0 0.0720
/
MPID 10003 RECIPROCAL FAHRENHEIT 1.0
AIR (GAS) --> Coefficient of thermal expansion (1/F)
References: Kreith
Data Quality: EXCELLENT
MDATA 1.0 459.7
/
MPID 10004 TABLE FAHRENHEIT 1.0

```

AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.0860
MDATA	32.0	0.0810
MDATA	100.0	0.0710
MDATA	200.0	0.0600
MDATA	300.0	0.0520
MDATA	400.0	0.0460
MDATA	500.0	0.0412
MDATA	600.0	0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.239
MDATA	32.0	0.240
MDATA	100.0	0.240
MDATA	200.0	0.241
MDATA	300.0	0.243
MDATA	400.0	0.245
MDATA	500.0	0.247
MDATA	600.0	0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.35

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.23

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

MDATA 144.0

/

MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20

/

MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))
References:
Data Quality: ???
MDATA 0.6

/

MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0

/

MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20

/

MPID 1402 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 119.765 0.000
MDATA 120.19 0.000
MDATA 200.0 0.000

/

MPID 1403 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 117.203 0.000
MDATA 117.703 0.000
MDATA 200.0 0.000

/

MPID 1404 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 114.306 0.000
MDATA 114.806 0.000
MDATA 200.0 0.000

/

MPID 1405 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 111.28 0.000
MDATA 111.78 0.000
MDATA 200.0 0.000

/

MPID 1406 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 108.188 0.000

MDATA 108.688 0.000

MDATA 200.0 0.000

/

MPID 1407 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 105.089 0.000

MDATA 105.589 0.000

MDATA 200.0 0.000

/

MPID 1408 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 101.88 0.000

MDATA 102.38 0.000

MDATA 200.0 0.000

/

MPID 1409 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 98.671 0.000

MDATA 99.171 0.000

MDATA 200.0 0.000

/

MPID 1410 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 95.462 0.000

MDATA 95.962 0.000

MDATA 200.0 0.000

/

MPID 1411 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 92.252 0.000

MDATA 92.752 0.000

MDATA 200.0 0.000

/

MPID 1412 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 89.043 0.000

MDATA 89.543 0.000

MDATA 200.0 0.000

/

MPID 1413 TABLE TIME 0.65

TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F

MDATA 0.0 0.000

MDATA 85.834 0.000

MDATA 86.334 0.000

MDATA 200.0 0.000

/
MPID 1414 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 82.625 0.000
MDATA 83.125 0.000
MDATA 200.0 0.000
/
MPID 1415 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 79.182 0.000
MDATA 79.682 0.000
MDATA 200.0 0.000
/
MPID 1416 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 75.739 0.000
MDATA 76.239 0.000
MDATA 200.0 0.000
/
MPID 1417 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 72.297 0.000
MDATA 72.797 0.000
MDATA 200.0 0.000
/
MPID 1418 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 68.854 0.000
MDATA 69.354 0.000
MDATA 200.0 0.000
/
MPID 1419 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 65.411 0.000
MDATA 65.911 0.000
MDATA 200.0 0.000
/
MPID 1420 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 61.969 0.000
MDATA 62.469 0.000
MDATA 200.0 0.000
/
MPID 1421 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.526 0.000

MDATA 59.026 0.000
MDATA 200.0 0.000
/
MPID 1422 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 55.083 0.000
MDATA 55.583 0.000
MDATA 200.0 0.000
/
MPID 1423 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 23 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 51.641 0.000
MDATA 52.141 0.000
MDATA 200.0 0.000
/
MPID 1424 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 48.198 0.000
MDATA 48.698 0.000
MDATA 200.0 0.000
/
MPID 1425 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 44.755 0.000
MDATA 45.255 0.000
MDATA 200.0 0.000
/
MPID 1426 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 41.312 0.000
MDATA 41.812 0.000
MDATA 200.0 0.000
/
MPID 1427 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 37.87 0.000
MDATA 38.37 0.000
MDATA 200.0 0.000
/
MPID 1428 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 34.427 0.000
MDATA 34.927 0.000
MDATA 200.0 0.000
/
MPID 1429 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 29 AS F(TIME) BTU/HR/FT/F

```

M DATA      0.0      0.000
M DATA      30.984    0.000
M DATA      31.484    0.000
M DATA      200.0     0.000
/
MPID 1430 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 30 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      27.542    0.000
M DATA      28.042    0.000
M DATA      200.0     0.000
/
MPID 1431 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 31 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      24.099    0.000
M DATA      24.599    0.000
M DATA      200.0     0.000
/
MPID 1432 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 32 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      20.656    0.000
M DATA      21.156    0.000
M DATA      200.0     0.000
/
MPID 1433 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 33 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      17.213    0.000
M DATA      17.713    0.000
M DATA      200.0     0.000
/
MPID 1434 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 34 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      13.771    0.000
M DATA      14.271    0.000
M DATA      200.0     0.000
/
MPID 1435 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 35 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      10.328    0.000
M DATA      10.828    0.000
M DATA      200.0     0.000
/
MPID 1436 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 36 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      0.000
M DATA      6.885     0.000
M DATA      7.385     0.000
M DATA      200.0     0.000
/

```

MPID 1437 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 3.4427 0.000
MDATA 3.9427 0.00
MDATA 200.0 0.00
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600
MDATA 20000.0 0.600
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 100.00 110.0
MDATA 200.00 0.600

```

MDATA      20000.0    0.600
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA     100.00    110.0
MDATA     200.00    0.600
MDATA     20000.0    0.600
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0

```

```
MDATA      289.0      110.0
MDATA      289.5      110.00
MDATA      20000.0     110.00
/
MPID 1516 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      283.5     110.0
MDATA      284.0     110.00
MDATA      20000.0   110.00
/
MPID 1517 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      278.0     110.0
MDATA      278.5     110.00
MDATA      20000.0   110.00
/
MPID 1518 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      272.5     110.0
MDATA      273.0     110.00
MDATA      20000.0   110.00
/
MPID 1519 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      267.0     110.0
MDATA      267.5     110.00
MDATA      20000.0   110.00
/
MPID 1520 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      261.5     110.0
MDATA      262.0     110.00
MDATA      20000.0   110.00
/
MPID 1521 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      256.0     110.0
MDATA      256.5     110.00
MDATA      20000.0   110.00
/
MPID 1522 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      110.0
MDATA      250.5     110.0
MDATA      251.0     110.00
MDATA      20000.0   110.00
/
MPID 1523 TABLE TIME 1.0
```


WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 245.0 110.0
 MDATA 245.5 110.00
 MDATA 20000.0 110.00

/

MPID 1524 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 239.5 110.0
 MDATA 240.0 110.00
 MDATA 20000.0 110.00

/

MPID 1525 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 234.0 110.0
 MDATA 234.5 110.00
 MDATA 20000.0 110.00

/

MPID 1526 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 228.5 110.0
 MDATA 229.0 110.00
 MDATA 20000.0 110.00

/

MPID 1527 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 223.0 110.0
 MDATA 223.5 110.00
 MDATA 20000.0 110.00

/

MPID 1528 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 217.5 110.0
 MDATA 218.0 110.00
 MDATA 20000.0 110.00

/

MPID 1529 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 212.0 110.0
 MDATA 212.5 110.00
 MDATA 20000.0 110.00

/

MPID 1530 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 110.0
 MDATA 206.5 110.0
 MDATA 207.0 110.00
 MDATA 20000.0 110.00

```

/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 201.0 110.0
MDATA 201.5 110.00
MDATA 20000.0 110.00
/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 195.5 110.0
MDATA 196.0 110.00
MDATA 20000.0 110.00
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 190.0 110.0
MDATA 190.5 110.00
MDATA 20000.0 110.00
/
MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 184.5 110.0
MDATA 185.0 110.00
MDATA 20000.0 110.00
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 179.0 110.0
MDATA 179.5 110.00
MDATA 20000.0 110.00
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 173.5 110.0
MDATA 174.0 110.00
MDATA 20000.0 110.00
/
MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 110.0
MDATA 168.0 110.0
MDATA 168.5 110.00
MDATA 20000.0 110.00
/
MPID 1701 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 118.48 0.000

```

```
MDATA      118.58    0.000
MDATA      200.00    0.000
/
MPID 1702  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 2 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.0     0.000
/
MPID 1703  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 3 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      200.0     0.000
/
MPID 1704  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 4 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      200.0     0.000
/
MPID 1705  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 5 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      200.0     0.000
/
MPID 1706  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 6 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      200.0     0.000
/
MPID 1707  TABLE  TIME  0.65
WASTE CONVECTION h IN LAYER 7 AS f(TIME)  BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      200.0     0.000
```

```

/
MPID 1708 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      97.06     0.000
MDATA      97.16     0.000
MDATA      200.0     0.000
/
MPID 1709 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      93.85     0.000
MDATA      93.95     0.000
MDATA      97.06     0.000
MDATA      97.16     0.000
MDATA      200.0     0.000
/
MPID 1710 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      90.64     0.000
MDATA      90.74     0.000
MDATA      93.85     0.000
MDATA      93.95     0.000
MDATA      200.0     0.000
/
MPID 1711 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      87.43     0.000
MDATA      87.53     0.000
MDATA      90.64     0.000
MDATA      90.74     0.000
MDATA      200.0     0.000
/
MPID 1712 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      84.23     0.000
MDATA      84.33     0.000
MDATA      87.43     0.000
MDATA      87.53     0.000
MDATA      200.0     0.000
/
MPID 1713 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      80.90     0.000
MDATA      81.00     0.000
MDATA      84.23     0.000
MDATA      84.33     0.000
MDATA      200.0     0.000
/
MPID 1714 TABLE TIME 0.65

```

WASTE CONVECTION h IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 77.46 0.000
 MDATA 77.56 0.000
 MDATA 80.90 0.000
 MDATA 81.00 0.000
 MDATA 200.0 0.000

/
 MPID 1715 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 74.02 0.000
 MDATA 74.12 0.000
 MDATA 77.46 0.000
 MDATA 77.56 0.000
 MDATA 200.0 0.000

/
 MPID 1716 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 70.57 0.000
 MDATA 70.67 0.000
 MDATA 74.02 0.000
 MDATA 74.12 0.000
 MDATA 200.0 0.000

/
 MPID 1717 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 67.13 0.000
 MDATA 67.23 0.000
 MDATA 70.57 0.000
 MDATA 70.67 0.000
 MDATA 200.0 0.000

/
 MPID 1718 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 63.69 0.000
 MDATA 63.79 0.000
 MDATA 67.13 0.000
 MDATA 67.23 0.000
 MDATA 200.0 0.000

/
 MPID 1719 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 19 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 60.25 0.000
 MDATA 60.35 0.000
 MDATA 63.69 0.000
 MDATA 63.79 0.000
 MDATA 200.0 0.000

/
 MPID 1720 TABLE TIME 0.65

```

WASTE CONVECTION h IN LAYER 20 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      56.80     0.000
MDATA      56.90     0.000
MDATA      60.25     0.000
MDATA      60.35     0.000
MDATA      200.0     0.000
/
MPID 1721 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 21 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      53.36     0.000
MDATA      53.46     0.000
MDATA      56.80     0.000
MDATA      56.90     0.000
MDATA      200.0     0.000
/
MPID 1722 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 22 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      49.92     0.000
MDATA      50.02     0.000
MDATA      53.36     0.000
MDATA      53.46     0.000
MDATA      200.0     0.000
/
MPID 1723 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 23 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      46.48     0.000
MDATA      46.58     0.000
MDATA      49.92     0.000
MDATA      50.02     0.000
MDATA      200.0     0.000
/
MPID 1724 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 24 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      43.03     0.000
MDATA      43.13     0.000
MDATA      46.48     0.000
MDATA      46.58     0.000
MDATA      200.0     0.000
/
MPID 1725 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      39.59     0.000
MDATA      39.69     0.000
MDATA      43.03     0.000
MDATA      43.13     0.000
MDATA      200.0     0.000
/
MPID 1726 TABLE TIME 0.65

```

WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 36.15 0.000
 MDATA 36.25 0.000
 MDATA 39.59 0.000
 MDATA 39.69 0.000
 MDATA 200.0 0.000

/

MPID 1727 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 32.71 0.000
 MDATA 32.81 0.000
 MDATA 36.15 0.000
 MDATA 36.25 0.000
 MDATA 200.0 0.000

/

MPID 1728 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 29.26 0.000
 MDATA 29.36 0.000
 MDATA 32.71 0.000
 MDATA 32.81 0.000
 MDATA 200.0 0.000

/

MPID 1729 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 25.82 0.000
 MDATA 25.92 0.000
 MDATA 29.26 0.000
 MDATA 29.36 0.000
 MDATA 200.0 0.000

/

MPID 1730 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 22.38 0.000
 MDATA 22.48 0.000
 MDATA 25.82 0.000
 MDATA 25.92 0.000
 MDATA 200.0 0.000

/

MPID 1731 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 31 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 18.93 0.000
 MDATA 19.03 0.000
 MDATA 22.38 0.000
 MDATA 22.48 0.000
 MDATA 200.0 0.000

/

MPID 1732 TABLE TIME 0.65

```

WASTE CONVECTION h IN LAYER 32 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     15.49      0.000
M DATA     15.59      0.000
M DATA     18.93      0.000
M DATA     19.03      0.000
M DATA     200.0      0.000
/
MPID 1733 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 33 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     12.05      0.000
M DATA     12.15      0.000
M DATA     15.49      0.000
M DATA     15.59      0.000
M DATA     200.0      0.000
/
MPID 1734 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 34 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      8.61      0.000
M DATA      8.71      0.000
M DATA     12.05      0.000
M DATA     12.15      0.000
M DATA     200.0      0.000
/
MPID 1735 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 35 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      5.16      0.000
M DATA      5.26      0.000
M DATA      8.61      0.000
M DATA      8.71      0.000
M DATA     200.0      0.000
/
MPID 1736 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 36 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA      1.72      0.000
M DATA      1.82      0.000
M DATA      5.16      0.000
M DATA      5.26      0.000
M DATA     200.0      0.000
/
MPID 1737 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 37 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      1.0
M DATA      1.72      1.0
M DATA      1.82      1.0
M DATA     200.0      1.0
/
MPID 1901 TABLE TIME 0.90
EMISSION FROM LAYER 1 AS f(TIME)
M DATA      0.0      0.000

```


MDATA	118.48	0.000
MDATA	118.58	0.000
MDATA	200.00	0.000
/		
MPID 1902	TABLE TIME	0.90
EMISSION FROM LAYER 2 AS f(TIME)		
MDATA	0.0	0.000
MDATA	115.75	0.000
MDATA	115.85	0.000
MDATA	118.48	0.000
MDATA	118.58	0.000
MDATA	200.0	0.000
/		
MPID 1903	TABLE TIME	0.90
EMISSION FROM LAYER 3 AS f(TIME)		
MDATA	0.0	0.000
MDATA	112.79	0.000
MDATA	112.89	0.000
MDATA	115.75	0.000
MDATA	115.85	0.000
MDATA	200.0	0.000
/		
MPID 1904	TABLE TIME	0.90
EMISSION FROM LAYER 4 AS f(TIME)		
MDATA	0.0	0.000
MDATA	109.73	0.000
MDATA	109.83	0.000
MDATA	112.79	0.000
MDATA	112.89	0.000
MDATA	200.0	0.000
/		
MPID 1905	TABLE TIME	0.90
EMISSION FROM LAYER 5 AS f(TIME)		
MDATA	0.0	0.000
MDATA	106.64	0.000
MDATA	106.74	0.000
MDATA	109.73	0.000
MDATA	109.83	0.000
MDATA	200.0	0.000
/		
MPID 1906	TABLE TIME	0.90
EMISSION FROM LAYER 6 AS f(TIME)		
MDATA	0.0	0.000
MDATA	103.48	0.000
MDATA	103.58	0.000
MDATA	106.64	0.000
MDATA	106.74	0.000
MDATA	200.0	0.000
/		
MPID 1907	TABLE TIME	0.90
EMISSION FROM LAYER 7 AS f(TIME)		
MDATA	0.0	0.000
MDATA	103.58	0.000
MDATA	200.0	0.000

/
MPID 1908 TABLE TIME 0.90
EMISSION FROM LAYER 8 AS f(TIME)
M DATA 0.0 0.000
M DATA 97.06 0.000
M DATA 97.16 0.000
M DATA 200.0 0.000

/
MPID 1909 TABLE TIME 0.90
EMISSION FROM LAYER 9 AS f(TIME)
M DATA 0.0 0.000
M DATA 93.85 0.000
M DATA 93.95 0.000
M DATA 97.06 0.000
M DATA 97.16 0.000
M DATA 200.0 0.000

/
MPID 1910 TABLE TIME 0.90
EMISSION FROM LAYER 10 AS f(TIME)
M DATA 0.0 0.000
M DATA 90.64 0.000
M DATA 90.74 0.000
M DATA 93.85 0.000
M DATA 93.95 0.000
M DATA 200.0 0.000

/
MPID 1911 TABLE TIME 0.90
EMISSION FROM LAYER 11 AS f(TIME)
M DATA 0.0 0.000
M DATA 87.43 0.000
M DATA 87.53 0.000
M DATA 90.64 0.000
M DATA 90.74 0.000
M DATA 200.0 0.000

/
MPID 1912 TABLE TIME 0.90
EMISSION FROM LAYER 12 AS f(TIME)
M DATA 0.0 0.000
M DATA 84.23 0.000
M DATA 84.33 0.000
M DATA 87.43 0.000
M DATA 87.53 0.000
M DATA 200.0 0.000

/
MPID 1913 TABLE TIME 0.90
EMISSION FROM LAYER 13 AS f(TIME)
M DATA 0.0 0.000
M DATA 80.90 0.000
M DATA 81.00 0.000
M DATA 84.23 0.000
M DATA 84.33 0.000
M DATA 200.0 0.000

/
MPID 1914 TABLE TIME 0.90

EMISSION FROM LAYER 14 AS f(TIME)

MDATA	0.0	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	80.90	0.000
MDATA	81.00	0.000
MDATA	200.0	0.000

/

MPID 1915 TABLE TIME 0.90

EMISSION FROM LAYER 15 AS f(TIME)

MDATA	0.0	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	200.0	0.000

/

MPID 1916 TABLE TIME 0.90

EMISSION FROM LAYER 16 AS f(TIME)

MDATA	0.0	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	200.0	0.000

/

MPID 1917 TABLE TIME 0.90

EMISSION FROM LAYER 17 AS f(TIME)

MDATA	0.0	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	200.0	0.000

/

MPID 1918 TABLE TIME 0.90

EMISSION FROM LAYER 18 AS f(TIME)

MDATA	0.0	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	200.0	0.000

/

MPID 1919 TABLE TIME 0.90

EMISSION FROM LAYER 19 AS f(TIME)

MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	200.0	0.000

/

MPID 1920 TABLE TIME 0.90

EMISSION FROM LAYER 20 AS f(TIME)

MDATA	0.0	0.000
MDATA	56.80	0.000
MDATA	56.90	0.000
MDATA	60.25	0.000
MDATA	60.35	0.000
MDATA	200.0	0.000

/

MPID 1921 TABLE TIME 0.90

EMISSION FROM LAYER 21 AS f(TIME)

MDATA	0.0	0.000
MDATA	53.36	0.000
MDATA	53.46	0.000
MDATA	56.80	0.000
MDATA	56.90	0.000
MDATA	200.0	0.000

/

MPID 1922 TABLE TIME 0.90

EMISSION FROM LAYER 22 AS f(TIME)

MDATA	0.0	0.000
MDATA	49.92	0.000
MDATA	50.02	0.000
MDATA	53.36	0.000
MDATA	53.46	0.000
MDATA	200.0	0.000

/

MPID 1923 TABLE TIME 0.90

EMISSION FROM LAYER 23 AS f(TIME)

MDATA	0.0	0.000
MDATA	46.48	0.000
MDATA	46.58	0.000
MDATA	49.92	0.000
MDATA	50.02	0.000
MDATA	200.0	0.000

/

MPID 1924 TABLE TIME 0.90

EMISSION FROM LAYER 24 AS f(TIME)

MDATA	0.0	0.000
MDATA	43.03	0.000
MDATA	43.13	0.000
MDATA	46.48	0.000
MDATA	46.58	0.000
MDATA	200.0	0.000

/

MPID 1925 TABLE TIME 0.90

EMISSION FROM LAYER 25 AS f(TIME)

MDATA	0.0	0.000
MDATA	39.59	0.000
MDATA	39.69	0.000
MDATA	43.03	0.000
MDATA	43.13	0.000
MDATA	200.0	0.000

/

MPID 1926 TABLE TIME 0.90

EMISSION FROM LAYER 26 AS f(TIME)

MDATA	0.0	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	39.59	0.000
MDATA	39.69	0.000
MDATA	200.0	0.000

/

MPID 1927 TABLE TIME 0.90

EMISSION FROM LAYER 27 AS f(TIME)

MDATA	0.0	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	200.0	0.000

/

MPID 1928 TABLE TIME 0.90

EMISSION FROM LAYER 28 AS f(TIME)

MDATA	0.0	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	200.0	0.000

/

MPID 1929 TABLE TIME 0.90

EMISSION FROM LAYER 29 AS f(TIME)

MDATA	0.0	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	200.0	0.000

/

MPID 1930 TABLE TIME 0.90

EMISSION FROM LAYER 30 AS f(TIME)

MDATA	0.0	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	200.0	0.000

/

MPID 1931 TABLE TIME 0.90

EMISSION FROM LAYER 31 AS f(TIME)

MDATA	0.0	0.000
MDATA	18.93	0.000
MDATA	19.03	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	200.0	0.000

/

MPID 1932 TABLE TIME 0.90

EMISSIONITY FROM LAYER 32 AS f(TIME)

MDATA	0.0	0.000
MDATA	15.49	0.000
MDATA	15.59	0.000
MDATA	18.93	0.000
MDATA	19.03	0.000
MDATA	200.0	0.000

/

MPID 1933 TABLE TIME 0.90

EMISSIONITY FROM LAYER 33 AS f(TIME)

MDATA	0.0	0.000
MDATA	12.05	0.000
MDATA	12.15	0.000
MDATA	15.49	0.000
MDATA	15.59	0.000
MDATA	200.0	0.000

/

MPID 1934 TABLE TIME 0.90

EMISSIONITY FROM LAYER 34 AS f(TIME)

MDATA	0.0	0.000
MDATA	8.61	0.000
MDATA	8.71	0.000
MDATA	12.05	0.000
MDATA	12.15	0.000
MDATA	200.0	0.000

/

MPID 1935 TABLE TIME 0.90

EMISSIONITY FROM LAYER 35 AS f(TIME)

MDATA	0.0	0.000
MDATA	5.16	0.000
MDATA	5.26	0.000
MDATA	8.61	0.000
MDATA	8.71	0.000
MDATA	200.0	0.000

/

MPID 1936 TABLE TIME 0.90

EMISSIONITY FROM LAYER 36 AS f(TIME)

MDATA	0.0	0.000
MDATA	5.44	0.00
MDATA	200.0	0.00

/

MPID 1937 TABLE TIME 0.90

EMISSIONITY FROM LAYER 37 AS f(TIME)

MDATA	0.0	1.0
MDATA	1.50	1.0
MDATA	200.0	1.0

/

MPID 1004 TABLE TIME 1.0

WASTE DENSITY FOR TOP LAYERS LB/FT**3

MDATA	0.0	82.24
MDATA	168.0	75.0
MDATA	20000.0	75.0

/

MPID 1006 TABLE TIME 1.0

WASTE DENSITY FOR BOTTOM 14 LAYERS LB/FT**3

MDATA 0.0 82.24

MDATA 168.0 96.1

MDATA 20000.0 96.1

/

MPID 1005 TABLE TIME 1.0

WASTE SPECIFIC HEAT FOR TOP LAYERS BTU/LB/F

MDATA 0.0 0.396

MDATA 168.0 0.58

MDATA 20000.0 0.58

/

MPID 1007 TABLE TIME 1.0

WASTE SPECIFIC HEAT FOR BOTTOM 14 LAYERS BTU/LB/F

MDATA 0.0 0.396

MDATA 168.0 0.07

MDATA 20000.0 0.07

/

MPID 250 CONSTANT FAHRENHEIT 1.0

Tank annulus ventilation flow (Lbm/hr)

MDATA 0.0

/

MPID 260 CONSTANT FAHRENHEIT 1.0

Tank dome space ventilation flow (Lbm/hr)

MDATA 0.0

/

```

$ MICRO.DAT
$ LOSS OF ALL ELECTRIC POWER TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0            1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0            1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0            1
MICDAT 77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0            1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE IN TOP 12 LAYERS BTU/HR/FT**3
*
MICRO  1600      0      18
MICDAT 0.0      1.6123
MICDAT 84.0      0.0
MICDAT 20000.0    0.0
/
* MICRO 1650 IS HEAT GENERATION RATE IN LAYERS 15 TO 25 BTU/HR/FT**3
*
MICRO  1650      0      18
MICDAT 0.0      1.6123
MICDAT 84.0      1.6123
MICDAT 168.0     0.0
MICDAT 20000.0    0.0
/
* MICRO 1660 IS HEAT GENERATION RATE IN BOTTOM 14 LAYERS BTU/HR/FT**3
*
MICRO  1660      0      18
MICDAT 0.0      1.6123
MICDAT 168.0     4.6774
MICDAT 20000.0    4.6774
/

```


*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*

MICRO	1615	0	15		
MICDAT	287.5	20000	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	282.0	20000	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	276.5	20000	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	271.0	20000	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	265.5	20000	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	260.0	20000	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	254.5	20000	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	249.0	20000	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	243.5	20000	0.0	1.0	
/					
MICRO	1624	0	15		
MICDAT	238.0	20000	0.0	1.0	
/					
MICRO	1625	0	15		
MICDAT	232.5	20000	0.0	1.0	
/					
MICRO	1626	0	15		
MICDAT	227.0	20000	0.0	1.0	
/					
MICRO	1627	0	15		
MICDAT	221.5	20000	0.0	1.0	
/					
MICRO	1628	0	15		
MICDAT	216.0	20000	0.0	1.0	
/					
MICRO	1629	0	15		
MICDAT	210.5	20000	0.0	1.0	
/					
MICRO	1630	0	15		
MICDAT	205.0	20000	0.0	1.0	
/					
MICRO	1631	0	15		
MICDAT	199.5	20000	0.0	1.0	
/					

MICRO	1632	0	15		
MICDAT	194.0	20000	0.0	1.0	
/					
MICRO	1633	0	15		
MICDAT	188.5	20000	0.0	1.0	
/					
MICRO	1634	0	15		
MICDAT	183.0	20000	0.0	1.0	
/					
MICRO	1635	0	15		
MICDAT	177.5	20000	0.0	1.0	
/					
MICRO	1636	0	15		
MICDAT	172.0	20000	0.0	1.0	
/					
MICRO	1637	0	15		
MICDAT	166.5	20000	0.0	1.0	

/

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR GAS SPACE = 15 FT BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.607	
MICDAT	125.0	-7.503	
MICDAT	150.0	-18.056	
MICDAT	170.0	-29.851	
MICDAT	190.0	-44.626	
MICDAT	200.0	-53.13	
MICDAT	210.0	-62.382	
MICDAT	225.0	-77.654	
MICDAT	250.0	-106.833	
MICDAT	500.0	-222.22	

/

* MICRO 1865 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1865	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-1.910	
MICDAT	125.0	-9.174	
MICDAT	150.0	-22.057	
MICDAT	170.0	-36.41	
MICDAT	190.0	-54.359	
MICDAT	200.0	-64.683	
MICDAT	210.0	-75.906	
MICDAT	225.0	-94.425	
MICDAT	250.0	-129.788	
MICDAT	500.0	-222.22	

/

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1850 IS ZERO EVAPORATION RATE BTU/HR/FT**2

*

MICRO	1850	0	1
MICDAT		0.0	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	0.06918	
MICDAT	110	0.04934	
MICDAT	120	0.54771	
MICDAT	130	1.41662	
MICDAT	140	2.06782	
MICDAT	150	2.55413	
MICDAT	165	3.05891	
MICDAT	180	3.35440	
MICDAT	195	3.47809	
MICDAT	210	3.42861	
MICDAT	500	3.7	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1814	0	15		
MICDAT	287.5	20000.0	1.0	0.0	

/

MICRO	1815	0	15		
MICDAT	282.0	287.5	1.0	0.0	

/

MICRO	1816	0	15		
MICDAT	276.5	282.0	1.0	0.0	

/

MICRO	1817	0	15		
MICDAT	271.0	276.5	1.0	0.0	

/

MICRO	1818	0	15		
MICDAT	265.5	271.0	1.0	0.0	

/

MICRO	1819	0	15
-------	------	---	----

WHC-SD-W236A-ER-014
Rev. 0

MICDAT	260.0	265.5	1.0	0.0
/				
MICRO	1820	0 15		
MICDAT	254.5	260.0	1.0	0.0
/				
MICRO	1821	0 15		
MICDAT	249.0	254.5	1.0	0.0
/				
MICRO	1822	0 15		
MICDAT	243.5	249.0	1.0	0.0
/				
MICRO	1823	0 15		
MICDAT	238.0	243.5	1.0	0.0
/				
MICRO	1824	0 15		
MICDAT	232.5	238.0	1.0	0.0
/				
MICRO	1825	0 15		
MICDAT	227.0	232.5	1.0	0.0
/				
MICRO	1826	0 15		
MICDAT	221.5	227.0	1.0	0.0
/				
MICRO	1827	0 15		
MICDAT	216.0	221.5	1.0	0.0
/				
MICRO	1828	0 15		
MICDAT	210.5	216.0	1.0	0.0
/				
MICRO	1829	0 15		
MICDAT	205.0	210.5	1.0	0.0
/				
MICRO	1830	0 15		
MICDAT	199.5	205.0	1.0	0.0
/				
MICRO	1831	0 15		
MICDAT	194.0	199.5	1.0	0.0
/				
MICRO	1832	0 15		
MICDAT	188.5	194.0	1.0	0.0
/				
MICRO	1833	0 15		
MICDAT	183.0	188.5	1.0	0.0
/				
MICRO	1834	0 15		
MICDAT	177.5	183.0	1.0	0.0
/				
MICRO	1835	0 15		
MICDAT	172.0	177.5	1.0	0.0
/				
MICRO	1836	0 15		
MICDAT	166.5	172.0	1.0	0.0
/				
MICRO	1837	0 15		

MICDAT 0.0 166.5 1.0 0.0
/

```

$ TEMPLATE.DAT
$ LOSS OF ALL ELECTRIC POWER TRANSIENT
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      100      901      901      901      904      905
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      150      10001     10001     10001     10004     10005
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      300      20001     20001     20001     20004     20005
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      303      20001     20001     20001     20004     20005
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      400      30001     30001     30001     30004     30005
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      401      30001     30001     30001     30004     30005
;
*****
*****
;
;      MID      Kx      Ky      Kz      Density      Cp      PHID
;      ----      -      -      -      -      -      -
MID      402      40001     40001     40001     40004     40005
;
*****
*****
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      -      supplied by this      supplied by this
;      ----      -      template      template
;
CONV      70      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; ----
; 1.00
*****

```

```

;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	30	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.99

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	31	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.27

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft

```

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	32	31	1	0

```

; The code supplies GP #1.

```

```

; GP #2
; -----
; 0.19

```

```

;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

```

```
; Lower Section of Annulus
; Configuration 27 is generic natural convection
;
;      TID      CFGI  Number of GP Values      Number of MPID's
;      ----      -    supplied by this      supplied by this
;      ----      -    template                template
;
CONV      40      27      5      5
;
; The code supplies GP #1.
;
;      GP #2      GP #3      GP #4      GP #5      GP #6
;      ----      ----      ----      ----      ----
;      4.173E8      34.      6.271D-05      .33      .33
;
;      MPID_1      MPID_2      MPID_3      MPID_4      MPID_5
;      ----      ----      ----      ----      ----
;      10004      10002      10003      10005      10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).
; Vertical Section of Annulus
; Configuration 27 is generic natural convection
;
;      TID      CFGI  Number of GP Values      Number of MPID's
;      ----      -    supplied by this      supplied by this
;      ----      -    template                template
;
CONV      41      27      5      5
;
; The code supplies GP #1.
;
;      GP #2      GP #3      GP #4      GP #5      GP #6
;      ----      ----      ----      ----      ----
;      4.173E8      34.      6.271D-05      .33      .33
;
;      MPID_1      MPID_2      MPID_3      MPID_4      MPID_5
;      ----      ----      ----      ----      ----
;      10004      10002      10003      10005      10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper section of Primary Tank
; Configuration 27 is generic natural convection
;
;      TID      CFGI  Number of GP Values      Number of MPID's
;      ----      -    supplied by this      supplied by this
;      ----      -    template                template
;
CONV      42      27      5      5
;
; The code supplies GP #1.
```



```

;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 43 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 44 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****

```

```

*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC    60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
; *****
; *****
; Ambient air temperature for convection from ground surface
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO    75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
; *****
; *****
; Annulus inlet air temperature
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO    80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
; *****
; *****
; Tank dome inlet air temp
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO    90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
; *****
; *****
; Ground water temp
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO    95      1      0      0      1.0

```

MFID #1

1095

```

*****
*****

```

37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK

	MID	Kx	Ky	Kz	Density	Cp	-----
MID	501	1501	1501	1501	1006	1007	
MID	502	1502	1502	1502	1006	1007	
MID	503	1503	1503	1503	1006	1007	
MID	504	1504	1504	1504	1006	1007	
MID	505	1505	1505	1505	1006	1007	
MID	506	1506	1506	1506	1006	1007	
MID	507	1507	1507	1507	1006	1007	
MID	508	1508	1508	1508	1006	1007	
MID	509	1509	1509	1509	1006	1007	
MID	510	1510	1510	1510	1006	1007	
MID	511	1511	1511	1511	1006	1007	
MID	512	1512	1512	1512	1006	1007	
MID	513	1513	1513	1513	1006	1007	
MID	514	1514	1514	1514	1006	1007	
MID	515	1515	1515	1515	1004	1005	
MID	516	1516	1516	1516	1004	1005	
MID	517	1517	1517	1517	1004	1005	
MID	518	1518	1518	1518	1004	1005	
MID	519	1519	1519	1519	1004	1005	
MID	520	1520	1520	1520	1004	1005	
MID	521	1521	1521	1521	1004	1005	
MID	522	1522	1522	1522	1004	1005	
MID	523	1523	1523	1523	1004	1005	
MID	524	1524	1524	1524	1004	1005	
MID	525	1525	1525	1525	1004	1005	
MID	526	1526	1526	1526	1004	1005	
MID	527	1527	1527	1527	1004	1005	
MID	528	1528	1528	1528	1004	1005	
MID	529	1529	1529	1529	1004	1005	
MID	530	1530	1530	1530	1004	1005	
MID	531	1531	1531	1531	1004	1005	
MID	532	1532	1532	1532	1004	1005	
MID	533	1533	1533	1533	1004	1005	
MID	534	1534	1534	1534	1004	1005	
MID	535	1535	1535	1535	1004	1005	
MID	536	1536	1536	1536	1004	1005	
MID	537	1537	1537	1537	1004	1005	

```

*****
*****

```

HEAT GENERATION TEMPLATES FOR WASTE

TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
-----	--------------------------	-------	-------	--------------

WHC-SD-W236A-ER-014
Rev. 0

```

;
MACRO 601      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 602      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 603      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 604      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 605      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 606      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 607      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; -----
MACRO 608      1      0      0      1.0
; Microfunction 1      Microfunction 2
;                        1660
;
;

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 609          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 610          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 611          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 612          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 613          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 614          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;                          1660
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 615          2          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1615              1650
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO 616          2          0          0          1.0
;      Microfunction 1      Microfunction 2

```

	1616	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	617	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1617	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	618	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1618	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	619	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1619	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	620	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1620	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	621	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1621	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	622	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1622	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----
MACRO	623	2	0	0	1.0
	Microfunction 1	Microfunction 2			
	1623	1650			
	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
	---	-----	----	----	-----

```

MACRO 624      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1624      1650
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 625      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1625      1650
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 626      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1626      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 627      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1627      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 628      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1628      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 629      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1629      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 630      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1630      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO 631      2      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1631      1600
;
;
;

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  632              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1632              1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  633              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1633              1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  634              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1634              1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  635              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1635              1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  636              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1636              1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  637              2              0              0              1.0
;      Microfunction 1      Microfunction 2
;      1637              1600
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from
; tank dome to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ---      ---      supplied by this      supplied by this
;      ---      ---      template      template
;
CONV  700      31              1              0
;
; The code supplies GP #1.

```



```

;
; GP #2
; -----
; 1.00
; *****
; *****
; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      701      29              0              1
;      MPID
;      -----
;      -1701
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      702      29              0              1
;      MPID
;      -----
;      -1702
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      703      29              0              1
;      MPID
;      -----
;      -1703
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      704      29              0              1
;      MPID
;      -----
;      -1704
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      705      29              0              1
;      MPID
;      -----
;      -1705
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
; CONV      706      29              0              1
;      MPID
;

```

```

; -----
; -1706
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 707      29              0              1
; MPID
; -----
; -1707
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 708      29              0              1
; MPID
; -----
; -1708
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 709      29              0              1
; MPID
; -----
; -1709
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 710      29              0              1
; MPID
; -----
; -1710
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 711      29              0              1
; MPID
; -----
; -1711
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----
CONV 712      29              0              1
; MPID
; -----
; -1712
;
;
;
; TID      CFG      Number of GP Values      Number of MPID's
; -----

```

CONV	713	29	0	1
;	MPID			
;	-----			
	-1713			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	714	29	0	1
;	MPID			
;	-----			
	-1714			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	715	29	0	1
;	MPID			
;	-----			
	-1715			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	716	29	0	1
;	MPID			
;	-----			
	-1716			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	717	29	0	1
;	MPID			
;	-----			
	-1717			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	718	29	0	1
;	MPID			
;	-----			
	-1718			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	719	29	0	1
;	MPID			
;	-----			
	-1719			
;				
;				

WHC-SD-W236A-ER-014
Rev. 0

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	720	29	0	1
MPID	-1720			
CONV	721	29	0	1
MPID	-1721			
CONV	722	29	0	1
MPID	-1722			
CONV	723	29	0	1
MPID	-1723			
CONV	724	29	0	1
MPID	-1724			
CONV	725	29	0	1
MPID	-1725			
CONV	726	29	0	1
MPID	-1726			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	727	29	0	1
MPID	-1727			
CONV	728	29	0	1
MPID	-1728			
CONV	729	29	0	1
MPID	-1729			
CONV	730	29	0	1
MPID	-1730			
CONV	731	29	0	1
MPID	-1731			
CONV	732	29	0	1
MPID	-1732			
CONV	733	29	0	1
MPID				

```

; -----
; -1733
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    734      29              0              1
; MPID
; -----
; -1734
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    735      29              0              1
; MPID
; -----
; -1735
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    736      29              0              1
; MPID
; -----
; -1736
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    737      29              0              1
; MPID
; -----
; -1737
;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    402      29              0              1
; MPID
; -----
; -1402
;
;
;
; TID      CFGF      Number of GP Values      Number of MPID's
; -----
; CONV    403      29              0              1

```

:	MPID			
:	-----			
:	-1403			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	404	29	0	1
:	MPID			
:	-----			
:	-1404			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	405	29	0	1
:	MPID			
:	-----			
:	-1405			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	406	29	0	1
:	MPID			
:	-----			
:	-1406			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	407	29	0	1
:	MPID			
:	-----			
:	-1407			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	408	29	0	1
:	MPID			
:	-----			
:	-1408			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's
:	-----	-----	-----	-----
CONV	409	29	0	1
:	MPID			
:	-----			
:	-1409			
:				
:	TID	CFIG	Number of GP Values	Number of MPID's

;	-----	-----	-----	-----
CONV	410	29	0	1
;	MPID			
;	-----			
	-1410			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	411	29	0	1
;	MPID			
;	-----			
	-1411			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	412	29	0	1
;	MPID			
;	-----			
	-1412			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	413	29	0	1
;	MPID			
;	-----			
	-1413			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	414	29	0	1
;	MPID			
;	-----			
	-1414			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	415	29	0	1
;	MPID			
;	-----			
	-1415			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	416	29	0	1
;	MPID			
;	-----			
	-1416			
;				

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	417	29	0	1
	MPID			
	-1417			
CONV	418	29	0	1
	MPID			
	-1418			
CONV	419	29	0	1
	MPID			
	-1419			
CONV	420	29	0	1
	MPID			
	-1420			
CONV	421	29	0	1
	MPID			
	-1421			
CONV	422	29	0	1
	MPID			
	-1422			
CONV	423	29	0	1
	MPID			
	-1423			

-1423				
;				
;				
;				
;				
TID				

CONV	424	29	0	1
;				
MPID				

-1424				
;				
;				
;				
;				
TID				

CONV	425	29	0	1
;				
MPID				

-1425				
;				
;				
;				
;				
TID				

CONV	426	29	0	1
;				
MPID				

-1426				
;				
;				
;				
;				
TID				

CONV	427	29	0	1
;				
MPID				

-1427				
;				
;				
;				
;				
TID				

CONV	428	29	0	1
;				
MPID				

-1428				
;				
;				
;				
;				
TID				

CONV	429	29	0	1
;				
MPID				

-1429				
;				
;				
;				
;				
TID				

CONV	430	29	0	1


```

;
;-----
CONV      437      29      0      1
;
;-----
;      -1437
;
;*****
;*****
;      EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 801      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 802      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 803      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 804      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 805      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----
MACRO 806      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

393

		1850		1870
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	823	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	824	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	825	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	826	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	827	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	828	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----
MACRO	829	2	0	0 1.0
;	Microfunction 1	Microfunction 2	Microfunction 3	
		1850		1870
;				
;	TID	Number of Microfunctions	NODE1	NODE2 Scale Factor
;	---	-----	---	-----

```

MACRO 830      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 831      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 832      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 833      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 834      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 835      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 836      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;
MACRO 837      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;*****

```

; Radiation heat transfer from waste surface.

```
;
;      TID      Nbands
;      ----      ----
VFAC    901      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1901      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    902      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1902      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    903      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1903      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    904      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1904      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    905      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1905      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    906      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1906      0      0.0      0.0      0
```

```
;
;      TID      Nbands
;      ----      ----
VFAC    907      0
```

WHC-SD-W236A-ER-014
Rev. 0

```

;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1907     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   908       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1908     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   909       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1909     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   910       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1910     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   911       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1911     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   912       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1912     0       0.0       0.0       0
;
;   TID   Nbands
;   ----   -----
VFAC   913       0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ----   ---   -----   -----   -----   -----   -----
;   0.0   1.0   1913     0       0.0       0.0       0
;
;   TID   Nbands

```

```

;
; VFAC 914 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1914 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 915 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1915 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 916 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1916 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 917 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1917 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 918 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1918 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 919 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1919 0 0.0 0.0 0
;
; TID Nbands
; -----
; VFAC 920 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1920 0 0.0 0.0 0

```

400

;	0.0	1.0	1927	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	928	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1928	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	929	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1929	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	930	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1930	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	931	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1931	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	932	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1932	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	933	0					
;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
;	-----	-----	-----	-----	-----	-----	-----
;	0.0	1.0	1933	0	0.0	0.0	0
;		TID	Nbands				
;		-----	-----				
VFAC	934	0					

WHC-SD-W236A-ER-014
Rev. 0

```

;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1934    0     0.0     0.0     0
;
;
;   TID   Nbands
;   ---   ---
; VFAC   935     0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1935    0     0.0     0.0     0
;
;
;   TID   Nbands
;   ---   ---
; VFAC   936     0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1936    0     0.0     0.0     0
;
;
;   TID   Nbands
;   ---   ---
; VFAC   937     0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1937    0     0.0     0.0     0
;
;

```

2.14 Loss of Tank Dome Flow Transient

```

$ MAT.DAT
$ LOSS OF TANK DOME FLOW TRANSIENT
MPID 901 TABLE FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) THERMAL CONDUCTIVITY (Btu/Hr/ft/F)
REFERENCE: C-SI Medium Carbon Steel NSMH
MDATA 32.0 29.99
MDATA 70.0 29.89
MDATA 100.0 29.76
MDATA 200.0 29.22
MDATA 300.0 28.52
/
MPID 904 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) DENSITY (LB/FT**3)
REFERENCE: AISI 1025 Carbon Steel
MDATA 489.0
/
MPID 905 CONSTANT FAHRENHEIT 1.0
STEEL PLATE (Carbon Steel) SPECIFIC HEAT (BTU/LB/F)
REFERENCE: AISI 1025 Carbon Steel
MDATA 0.116
/
MPID 10001 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Thermal Conductivity (Btu/(Hr*Ft*F))
References: Kreith
Data Quality: EXCELLENT
MDATA 0.000 0.0133
MDATA 32.0 0.0140
MDATA 100.0 0.0154
MDATA 200.0 0.0174
MDATA 300.0 0.0193
MDATA 400.0 0.0212
MDATA 500.0 0.0231
MDATA 600.0 0.0250
/
MPID 10002 TABLE FAHRENHEIT 1.0
AIR (GAS) --> Viscosity (Lbm/(Ft*Hr))
References: Kreith Table A-3
Data Quality: EXCELLENT
MDATA 0.0 0.0400
MDATA 32.0 0.0419
MDATA 100.0 0.0463
MDATA 200.0 0.0518
MDATA 300.0 0.0580
MDATA 400.0 0.0630
MDATA 500.0 0.0680
MDATA 600.0 0.0720
/
MPID 10003 RECIPROCAL FAHRENHEIT 1.0
AIR (GAS) --> Coefficient of thermal expansion (1/F)
References: Kreith
Data Quality: EXCELLENT
MDATA 1.0 459.7
/
MPID 10004 TABLE FAHRENHEIT 1.0

```


AIR (GAS) --> Density (Lbm/Ft**3)

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.0860
MDATA	32.0	0.0810
MDATA	100.0	0.0710
MDATA	200.0	0.0600
MDATA	300.0	0.0520
MDATA	400.0	0.0460
MDATA	500.0	0.0412
MDATA	600.0	0.0373

/

MPID 10005 TABLE FAHRENHEIT 1.0

AIR (GAS) --> Specific Heat (Btu/(Lbm*F))

References: Kreith Table A-3

Data Quality: EXCELLENT

MDATA	0.0	0.239
MDATA	32.0	0.240
MDATA	100.0	0.240
MDATA	200.0	0.241
MDATA	300.0	0.243
MDATA	400.0	0.245
MDATA	500.0	0.247
MDATA	600.0	0.250

/

MPID 20001 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Thermal Conductivity (Btu/(Hr*Ft*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.35

/

MPID 20004 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Density (Lbm/Ft**3)

References: D.G. Bouse waste tank data, 6% water

Data Quality: ???

MDATA 98.0

/

MPID 20005 CONSTANT FAHRENHEIT 1.0

TANK Backfill soil --> Specific Heat (Btu/(Lbm*F))

References: KEH W236A H-1070-50

Data Quality: site test data

MDATA 0.23

/

MPID 30001 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))

References:

Data Quality: ???

MDATA 0.6

/

MPID 30004 CONSTANT FAHRENHEIT 1.0

TANK concrete --> Density (Lbm/Ft**3)

References:

Data Quality: ???

MDATA 144.0

```
/
MPID 30005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 40001 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Thermal Conductivity (Btu/(Hr*Ft*F))
References:
Data Quality: ???
MDATA 0.6
/
MPID 40004 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Density (Lbm/Ft**3)
References:
Data Quality: ???
MDATA 144.0
/
MPID 40005 CONSTANT FAHRENHEIT 1.0
TANK      concrete --> Specific Heat (Btu/(Lbm*F))
References: ANACAP
Data Quality: ???
MDATA 0.20
/
MPID 1402 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      119.765    0.000
MDATA      120.19    0.000
MDATA      200.0     0.000
/
MPID 1403 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      117.203    0.000
MDATA      117.703    0.000
MDATA      200.0     0.000
/
MPID 1404 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      114.306    0.000
MDATA      114.806    0.000
MDATA      200.0     0.000
/
MPID 1405 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA      0.0      0.000
MDATA      111.28     0.000
MDATA      111.78     0.000
MDATA      200.0     0.000
/
MPID 1406 TABLE TIME 0.65
```

TANK WALL CONVECTION h, LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 108.188 0.000
MDATA 108.688 0.000
MDATA 200.0 0.000

/
MPID 1407 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 105.089 0.000
MDATA 105.589 0.000
MDATA 200.0 0.000

/
MPID 1408 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 101.88 0.000
MDATA 102.38 0.000
MDATA 200.0 0.000

/
MPID 1409 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 98.671 0.000
MDATA 99.171 0.000
MDATA 200.0 0.000

/
MPID 1410 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 95.462 0.000
MDATA 95.962 0.000
MDATA 200.0 0.000

/
MPID 1411 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 92.252 0.000
MDATA 92.752 0.000
MDATA 200.0 0.000

/
MPID 1412 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 89.043 0.000
MDATA 89.543 0.000
MDATA 200.0 0.000

/
MPID 1413 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 85.834 0.000
MDATA 86.334 0.000
MDATA 200.0 0.000

/

MPID 1414 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 82.625 0.000
MDATA 83.125 0.000
MDATA 200.0 0.000

/

MPID 1415 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 79.182 0.000
MDATA 79.682 0.000
MDATA 200.0 0.000

/

MPID 1416 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 16 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 75.739 0.000
MDATA 76.239 0.000
MDATA 200.0 0.000

/

MPID 1417 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 17 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 72.297 0.000
MDATA 72.797 0.000
MDATA 200.0 0.000

/

MPID 1418 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 18 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 68.854 0.000
MDATA 69.354 0.000
MDATA 200.0 0.000

/

MPID 1419 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 19 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 65.411 0.000
MDATA 65.911 0.000
MDATA 200.0 0.000

/

MPID 1420 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 20 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 61.969 0.000
MDATA 62.469 0.000
MDATA 200.0 0.000

/

MPID 1421 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 21 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 58.526 0.000

MDATA 59.026 0.000
MDATA 200.0 0.000
/
MPID 1422 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 22 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 55.083 0.000
MDATA 55.583 0.000
MDATA 200.0 0.000
/
MPID 1423 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 23 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 51.641 0.000
MDATA 52.141 0.000
MDATA 200.0 0.000
/
MPID 1424 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 24 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 48.198 0.000
MDATA 48.698 0.000
MDATA 200.0 0.000
/
MPID 1425 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 25 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 44.755 0.000
MDATA 45.255 0.000
MDATA 200.0 0.000
/
MPID 1426 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 26 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 41.312 0.000
MDATA 41.812 0.000
MDATA 200.0 0.000
/
MPID 1427 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 27 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 37.87 0.000
MDATA 38.37 0.000
MDATA 200.0 0.000
/
MPID 1428 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 28 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 34.427 0.000
MDATA 34.927 0.000
MDATA 200.0 0.000
/
MPID 1429 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 29 AS F(TIME) BTU/HR/FT/F

```

MATA      0.0      0.000
MATA      30.984     0.000
MATA      31.484     0.000
MATA      200.0     0.000
/
MPID 1430  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 30 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      27.542     0.000
MATA      28.042     0.000
MATA      200.0     0.000
/
MPID 1431  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 31 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      24.099     0.000
MATA      24.599     0.000
MATA      200.0     0.000
/
MPID 1432  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 32 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      20.656     0.000
MATA      21.156     0.000
MATA      200.0     0.000
/
MPID 1433  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 33 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      17.213     0.000
MATA      17.713     0.000
MATA      200.0     0.000
/
MPID 1434  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 34 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      13.771     0.000
MATA      14.271     0.000
MATA      200.0     0.000
/
MPID 1435  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 35 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      10.328     0.000
MATA      10.828     0.000
MATA      200.0     0.000
/
MPID 1436  TABLE  TIME  0.65
TANK WALL CONVECTION h, LAYER 36 AS F(TIME)  BTU/HR/FT/F
MATA      0.0      0.000
MATA      6.885      0.000
MATA      7.385      0.000
MATA      200.0     0.000
/

```

MPID 1437 TABLE TIME 0.65
TANK WALL CONVECTION h, LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 0.000
MDATA 3.4427 0.000
MDATA 3.9427 0.00
MDATA 200.0 0.00
/
MPID 1501 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 1 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 120.19 1100.0
MDATA 120.64 1100.0
MDATA 200.0 1100.0
/
MPID 1502 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 2 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 119.765 1100.0
MDATA 120.19 1100.0
MDATA 200.0 1100.0
/
MPID 1503 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 3 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 117.203 1100.0
MDATA 117.703 1100.0
MDATA 200.0 1100.0
/
MPID 1504 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 4 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 114.306 1100.0
MDATA 114.806 1100.0
MDATA 200.0 1100.0
/
MPID 1505 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 5 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 111.28 1100.0
MDATA 111.78 1100.0
MDATA 200.0 1100.0
/
MPID 1506 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 6 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 108.188 1100.0
MDATA 108.688 1100.0
MDATA 200.0 1100.0
/
MPID 1507 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 7 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 105.089 1100.0
MDATA 105.589 1100.0

MDATA 200.0 1100.0
/
MPID 1508 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 8 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 101.88 1100.0
MDATA 102.38 1100.0
MDATA 200.0 1100.0
/
MPID 1509 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 9 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 98.671 1100.0
MDATA 99.171 1100.0
MDATA 200.0 1100.0
/
MPID 1510 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 10 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 95.462 1100.0
MDATA 95.962 1100.0
MDATA 200.0 1100.0
/
MPID 1511 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 11 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 92.252 1100.0
MDATA 92.752 1100.0
MDATA 200.0 1100.0
/
MPID 1512 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 12 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 89.043 1100.0
MDATA 89.543 1100.0
MDATA 200.0 1100.0
/
MPID 1513 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 13 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 85.834 1100.0
MDATA 86.334 1100.0
MDATA 200.0 1100.0
/
MPID 1514 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 14 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 82.625 1100.0
MDATA 83.125 1100.0
MDATA 200.0 1100.0
/
MPID 1515 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 15 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0


```

M DATA      79.182      1100.0
M DATA      79.682      1100.0
M DATA      200.0      1100.0
/
MPID 1516 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 16 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      75.739      1100.0
M DATA      76.239      1100.0
M DATA      200.0      1100.0
/
MPID 1517 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 17 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      72.297      1100.0
M DATA      72.797      1100.0
M DATA      200.0      1100.0
/
MPID 1518 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 18 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      68.854      1100.0
M DATA      69.354      1100.0
M DATA      200.0      1100.0
/
MPID 1519 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 19 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      65.411      1100.0
M DATA      65.911      1100.0
M DATA      200.0      1100.0
/
MPID 1520 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 20 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      61.969      1100.0
M DATA      62.469      1100.0
M DATA      200.0      1100.0
/
MPID 1521 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 21 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      58.526      1100.0
M DATA      59.026      1100.0
M DATA      200.0      1100.0
/
MPID 1522 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 22 AS F(TIME) BTU/HR/FT/F
M DATA      0.0      1100.0
M DATA      55.083      1100.0
M DATA      55.583      1100.0
M DATA      200.0      1100.0
/
MPID 1523 TABLE TIME 1.0

```

WASTE THERMAL CONDUCTIVITY IN LAYER 23 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 51.641 1100.0
 MDATA 52.141 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1524 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 24 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 48.198 1100.0
 MDATA 48.698 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1525 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 25 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 44.755 1100.0
 MDATA 45.255 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1526 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 26 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 41.312 1100.0
 MDATA 41.812 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1527 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 27 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 37.87 1100.0
 MDATA 38.37 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1528 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 28 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 34.427 1100.0
 MDATA 34.927 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1529 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 29 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 30.984 1100.0
 MDATA 31.484 1100.0
 MDATA 200.0 1100.0
 /
 MPID 1530 TABLE TIME 1.0
 WASTE THERMAL CONDUCTIVITY IN LAYER 30 AS F(TIME) BTU/HR/FT/F
 MDATA 0.0 1100.0
 MDATA 27.542 1100.0
 MDATA 28.042 1100.0
 MDATA 200.0 1100.0

/
MPID 1531 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 31 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 24.099 1100.0
MDATA 24.599 1100.0
MDATA 200.0 1100.0
/
MPID 1532 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 32 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 20.656 1100.0
MDATA 21.156 1100.0
MDATA 200.0 1100.0
/
MPID 1533 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 33 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 17.213 1100.0
MDATA 17.713 1100.0
MDATA 200.0 1100.0
/
MPID 1534 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 34 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 13.771 1100.0
MDATA 14.271 1100.0
MDATA 200.0 1100.0
/
MPID 1535 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 35 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 10.328 1100.0
MDATA 10.828 1100.0
MDATA 200.0 1100.0
/
MPID 1536 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 36 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 6.885 1100.0
MDATA 7.385 1100.0
MDATA 200.0 1100.0
/
MPID 1537 TABLE TIME 1.0
WASTE THERMAL CONDUCTIVITY IN LAYER 37 AS F(TIME) BTU/HR/FT/F
MDATA 0.0 1100.0
MDATA 3.4427 1100.0
MDATA 3.9427 1100.0
MDATA 200.0 1100.0
/
MPID 1701 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 1 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 118.48 0.000

MDATA 118.58 0.000
 MDATA 200.00 0.000

/

MPID 1702 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 2 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 115.75 0.000
 MDATA 115.85 0.000
 MDATA 118.48 0.000
 MDATA 118.58 0.000
 MDATA 200.0 0.000

/

MPID 1703 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 3 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 112.79 0.000
 MDATA 112.89 0.000
 MDATA 115.75 0.000
 MDATA 115.85 0.000
 MDATA 200.0 0.000

/

MPID 1704 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 4 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 109.73 0.000
 MDATA 109.83 0.000
 MDATA 112.79 0.000
 MDATA 112.89 0.000
 MDATA 200.0 0.000

/

MPID 1705 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 5 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 106.64 0.000
 MDATA 106.74 0.000
 MDATA 109.73 0.000
 MDATA 109.83 0.000
 MDATA 200.0 0.000

/

MPID 1706 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 6 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 103.48 0.000
 MDATA 103.58 0.000
 MDATA 106.64 0.000
 MDATA 106.74 0.000
 MDATA 200.0 0.000

/

MPID 1707 TABLE TIME 0.65
 WASTE CONVECTION h IN LAYER 7 AS f(TIME) BTU/HR/FT**2/F
 MDATA 0.0 0.000
 MDATA 103.48 0.000
 MDATA 103.58 0.000
 MDATA 200.0 0.000

/
MPID 1708 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 8 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 97.06 0.000
MDATA 97.16 0.000
MDATA 200.0 0.000
/
MPID 1709 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 9 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 93.85 0.000
MDATA 93.95 0.000
MDATA 97.06 0.000
MDATA 97.16 0.000
MDATA 200.0 0.000
/
MPID 1710 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 10 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 90.64 0.000
MDATA 90.74 0.000
MDATA 93.85 0.000
MDATA 93.95 0.000
MDATA 200.0 0.000
/
MPID 1711 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 11 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 87.43 0.000
MDATA 87.53 0.000
MDATA 90.64 0.000
MDATA 90.74 0.000
MDATA 200.0 0.000
/
MPID 1712 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 12 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 84.23 0.000
MDATA 84.33 0.000
MDATA 87.43 0.000
MDATA 87.53 0.000
MDATA 200.0 0.000
/
MPID 1713 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 13 AS f(TIME) BTU/HR/FT**2/F
MDATA 0.0 0.000
MDATA 80.90 0.000
MDATA 81.00 0.000
MDATA 84.23 0.000
MDATA 84.33 0.000
MDATA 200.0 0.000
/
MPID 1714 TABLE TIME 0.65

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WASTE CONVECTION h IN LAYER 14 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      77.46     0.000
MDATA      77.56     0.000
MDATA      80.90     0.000
MDATA      81.00     0.000
MDATA      200.0     0.000
/
MPID 1715 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 15 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      74.02     0.000
MDATA      74.12     0.000
MDATA      77.46     0.000
MDATA      77.56     0.000
MDATA      200.0     0.000
/
MPID 1716 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 16 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      70.57     0.000
MDATA      70.67     0.000
MDATA      74.02     0.000
MDATA      74.12     0.000
MDATA      200.0     0.000
/
MPID 1717 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 17 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      67.13     0.000
MDATA      67.23     0.000
MDATA      70.57     0.000
MDATA      70.67     0.000
MDATA      200.0     0.000
/
MPID 1718 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 18 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      63.69     0.000
MDATA      63.79     0.000
MDATA      67.13     0.000
MDATA      67.23     0.000
MDATA      200.0     0.000
/
MPID 1719 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 19 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      60.25     0.000
MDATA      60.35     0.000
MDATA      63.69     0.000
MDATA      63.79     0.000
MDATA      200.0     0.000
/
MPID 1720 TABLE TIME 0.65

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WASTE CONVECTION h IN LAYER 20 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     56.80      0.000
M DATA     56.90      0.000
M DATA     60.25      0.000
M DATA     60.35      0.000
M DATA     200.0      0.000
/
MPID 1721 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 21 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     53.36      0.000
M DATA     53.46      0.000
M DATA     56.80      0.000
M DATA     56.90      0.000
M DATA     200.0      0.000
/
MPID 1722 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 22 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     49.92      0.000
M DATA     50.02      0.000
M DATA     53.36      0.000
M DATA     53.46      0.000
M DATA     200.0      0.000
/
MPID 1723 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 23 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     46.48      0.000
M DATA     46.58      0.000
M DATA     49.92      0.000
M DATA     50.02      0.000
M DATA     200.0      0.000
/
MPID 1724 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 24 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     43.03      0.000
M DATA     43.13      0.000
M DATA     46.48      0.000
M DATA     46.58      0.000
M DATA     200.0      0.000
/
MPID 1725 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 25 AS f(TIME) BTU/HR/FT**2/F
M DATA      0.0      0.000
M DATA     39.59      0.000
M DATA     39.69      0.000
M DATA     43.03      0.000
M DATA     43.13      0.000
M DATA     200.0      0.000
/
MPID 1726 TABLE TIME 0.65

```

```

WASTE CONVECTION h IN LAYER 26 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     36.15     0.000
MDATA     36.25     0.000
MDATA     39.59     0.000
MDATA     39.69     0.000
MDATA     200.0     0.000
/
MPID 1727 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 27 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     32.71     0.000
MDATA     32.81     0.000
MDATA     36.15     0.000
MDATA     36.25     0.000
MDATA     200.0     0.000
/
MPID 1728 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 28 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     29.26     0.000
MDATA     29.36     0.000
MDATA     32.71     0.000
MDATA     32.81     0.000
MDATA     200.0     0.000
/
MPID 1729 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 29 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     25.82     0.000
MDATA     25.92     0.000
MDATA     29.26     0.000
MDATA     29.36     0.000
MDATA     200.0     0.000
/
MPID 1730 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 30 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     22.38     0.000
MDATA     22.48     0.000
MDATA     25.82     0.000
MDATA     25.92     0.000
MDATA     200.0     0.000
/
MPID 1731 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 31 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     18.93     0.000
MDATA     19.03     0.000
MDATA     22.38     0.000
MDATA     22.48     0.000
MDATA     200.0     0.000
/
MPID 1732 TABLE TIME 0.65

```



```

WASTE CONVECTION h IN LAYER 32 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     15.49      0.000
MDATA     15.59      0.000
MDATA     18.93      0.000
MDATA     19.03      0.000
MDATA     200.0      0.000
/
MPID 1733 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 33 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA     12.05      0.000
MDATA     12.15      0.000
MDATA     15.49      0.000
MDATA     15.59      0.000
MDATA     200.0      0.000
/
MPID 1734 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 34 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      8.61      0.000
MDATA      8.71      0.000
MDATA     12.05      0.000
MDATA     12.15      0.000
MDATA     200.0      0.000
/
MPID 1735 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 35 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      5.16      0.000
MDATA      5.26      0.000
MDATA      8.61      0.000
MDATA      8.71      0.000
MDATA     200.0      0.000
/
MPID 1736 TABLE TIME 0.65
WASTE CONVECTION h IN LAYER 36 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      0.000
MDATA      1.72      0.000
MDATA      1.82      0.000
MDATA      5.16      0.000
MDATA      5.26      0.000
MDATA     200.0      0.000
/
MPID 1737 TABLE TIME 1.00
WASTE CONVECTION h IN LAYER 37 AS f(TIME) BTU/HR/FT**2/F
MDATA      0.0      1.0
MDATA      1.72      1.0
MDATA      1.82      1.0
MDATA     200.0      1.0
/
MPID 1901 TABLE TIME 0.90
EMISSION FROM LAYER 1 AS f(TIME)
MDATA      0.0      0.000

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```
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.00    0.000
/
MPID 1902  TABLE TIME 0.90
EMISSION FROM LAYER 2 AS f(TIME)
MDATA      0.0      0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      118.48    0.000
MDATA      118.58    0.000
MDATA      200.0     0.000
/
MPID 1903  TABLE TIME 0.90
EMISSION FROM LAYER 3 AS f(TIME)
MDATA      0.0      0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      115.75    0.000
MDATA      115.85    0.000
MDATA      200.0     0.000
/
MPID 1904  TABLE TIME 0.90
EMISSION FROM LAYER 4 AS f(TIME)
MDATA      0.0      0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      112.79    0.000
MDATA      112.89    0.000
MDATA      200.0     0.000
/
MPID 1905  TABLE TIME 0.90
EMISSION FROM LAYER 5 AS f(TIME)
MDATA      0.0      0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      109.73    0.000
MDATA      109.83    0.000
MDATA      200.0     0.000
/
MPID 1906  TABLE TIME 0.90
EMISSION FROM LAYER 6 AS f(TIME)
MDATA      0.0      0.000
MDATA      103.48    0.000
MDATA      103.58    0.000
MDATA      106.64    0.000
MDATA      106.74    0.000
MDATA      200.0     0.000
/
MPID 1907  TABLE TIME 0.90
EMISSION FROM LAYER 7 AS f(TIME)
MDATA      0.0      0.000
MDATA      103.58    0.000
MDATA      200.0     0.000
```

/
MPID 1908 TABLE TIME 0.90
EMISSION FROM LAYER 8 AS f(TIME)
MDATA 0.0 0.000
MDATA 97.06 0.000
MDATA 97.16 0.000
MDATA 200.0 0.000
/
MPID 1909 TABLE TIME 0.90
EMISSION FROM LAYER 9 AS f(TIME)
MDATA 0.0 0.000
MDATA 93.85 0.000
MDATA 93.95 0.000
MDATA 97.06 0.000
MDATA 97.16 0.000
MDATA 200.0 0.000
/
MPID 1910 TABLE TIME 0.90
EMISSION FROM LAYER 10 AS f(TIME)
MDATA 0.0 0.000
MDATA 90.64 0.000
MDATA 90.74 0.000
MDATA 93.85 0.000
MDATA 93.95 0.000
MDATA 200.0 0.000
/
MPID 1911 TABLE TIME 0.90
EMISSION FROM LAYER 11 AS f(TIME)
MDATA 0.0 0.000
MDATA 87.43 0.000
MDATA 87.53 0.000
MDATA 90.64 0.000
MDATA 90.74 0.000
MDATA 200.0 0.000
/
MPID 1912 TABLE TIME 0.90
EMISSION FROM LAYER 12 AS f(TIME)
MDATA 0.0 0.000
MDATA 84.23 0.000
MDATA 84.33 0.000
MDATA 87.43 0.000
MDATA 87.53 0.000
MDATA 200.0 0.000
/
MPID 1913 TABLE TIME 0.90
EMISSION FROM LAYER 13 AS f(TIME)
MDATA 0.0 0.000
MDATA 80.90 0.000
MDATA 81.00 0.000
MDATA 84.23 0.000
MDATA 84.33 0.000
MDATA 200.0 0.000
/
MPID 1914 TABLE TIME 0.90

EMISSION FROM LAYER 14 AS f(TIME)

MDATA	0.0	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	80.90	0.000
MDATA	81.00	0.000
MDATA	200.0	0.000

/

MPID 1915 TABLE TIME 0.90

EMISSION FROM LAYER 15 AS f(TIME)

MDATA	0.0	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	77.46	0.000
MDATA	77.56	0.000
MDATA	200.0	0.000

/

MPID 1916 TABLE TIME 0.90

EMISSION FROM LAYER 16 AS f(TIME)

MDATA	0.0	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	74.02	0.000
MDATA	74.12	0.000
MDATA	200.0	0.000

/

MPID 1917 TABLE TIME 0.90

EMISSION FROM LAYER 17 AS f(TIME)

MDATA	0.0	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	70.57	0.000
MDATA	70.67	0.000
MDATA	200.0	0.000

/

MPID 1918 TABLE TIME 0.90

EMISSION FROM LAYER 18 AS f(TIME)

MDATA	0.0	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	67.13	0.000
MDATA	67.23	0.000
MDATA	200.0	0.000

/

MPID 1919 TABLE TIME 0.90

EMISSION FROM LAYER 19 AS f(TIME)

MDATA	0.0	0.000
MDATA	60.25	0.000
MDATA	60.35	0.000
MDATA	63.69	0.000
MDATA	63.79	0.000
MDATA	200.0	0.000

/

MPID 1920 TABLE TIME 0.90

EMISSION FROM LAYER 20 AS f(TIME)

MDATA 0.0 0.000
MDATA 56.80 0.000
MDATA 56.90 0.000
MDATA 60.25 0.000
MDATA 60.35 0.000
MDATA 200.0 0.000

/

MPID 1921 TABLE TIME 0.90

EMISSION FROM LAYER 21 AS f(TIME)

MDATA 0.0 0.000
MDATA 53.36 0.000
MDATA 53.46 0.000
MDATA 56.80 0.000
MDATA 56.90 0.000
MDATA 200.0 0.000

/

MPID 1922 TABLE TIME 0.90

EMISSION FROM LAYER 22 AS f(TIME)

MDATA 0.0 0.000
MDATA 49.92 0.000
MDATA 50.02 0.000
MDATA 53.36 0.000
MDATA 53.46 0.000
MDATA 200.0 0.000

/

MPID 1923 TABLE TIME 0.90

EMISSION FROM LAYER 23 AS f(TIME)

MDATA 0.0 0.000
MDATA 46.48 0.000
MDATA 46.58 0.000
MDATA 49.92 0.000
MDATA 50.02 0.000
MDATA 200.0 0.000

/

MPID 1924 TABLE TIME 0.90

EMISSION FROM LAYER 24 AS f(TIME)

MDATA 0.0 0.000
MDATA 43.03 0.000
MDATA 43.13 0.000
MDATA 46.48 0.000
MDATA 46.58 0.000
MDATA 200.0 0.000

/

MPID 1925 TABLE TIME 0.90

EMISSION FROM LAYER 25 AS f(TIME)

MDATA 0.0 0.000
MDATA 39.59 0.000
MDATA 39.69 0.000
MDATA 43.03 0.000
MDATA 43.13 0.000
MDATA 200.0 0.000

/

MPID 1926 TABLE TIME 0.90

EMISSION FROM LAYER 26 AS f(TIME)

MDATA	0.0	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	39.59	0.000
MDATA	39.69	0.000
MDATA	200.0	0.000

/

MPID 1927 TABLE TIME 0.90

EMISSION FROM LAYER 27 AS f(TIME)

MDATA	0.0	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	36.15	0.000
MDATA	36.25	0.000
MDATA	200.0	0.000

/

MPID 1928 TABLE TIME 0.90

EMISSION FROM LAYER 28 AS f(TIME)

MDATA	0.0	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	32.71	0.000
MDATA	32.81	0.000
MDATA	200.0	0.000

/

MPID 1929 TABLE TIME 0.90

EMISSION FROM LAYER 29 AS f(TIME)

MDATA	0.0	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	29.26	0.000
MDATA	29.36	0.000
MDATA	200.0	0.000

/

MPID 1930 TABLE TIME 0.90

EMISSION FROM LAYER 30 AS f(TIME)

MDATA	0.0	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	25.82	0.000
MDATA	25.92	0.000
MDATA	200.0	0.000

/

MPID 1931 TABLE TIME 0.90

EMISSION FROM LAYER 31 AS f(TIME)

MDATA	0.0	0.000
MDATA	18.93	0.000
MDATA	19.03	0.000
MDATA	22.38	0.000
MDATA	22.48	0.000
MDATA	200.0	0.000

/

MPID 1932 TABLE TIME 0.90

EMISSIONITY FROM LAYER 32 AS f(TIME)

MDATA 0.0 0.000
 MDATA 15.49 0.000
 MDATA 15.59 0.000
 MDATA 18.93 0.000
 MDATA 19.03 0.000
 MDATA 200.0 0.000

/

MPID 1933 TABLE TIME 0.90

EMISSIONITY FROM LAYER 33 AS f(TIME)

MDATA 0.0 0.000
 MDATA 12.05 0.000
 MDATA 12.15 0.000
 MDATA 15.49 0.000
 MDATA 15.59 0.000
 MDATA 200.0 0.000

/

MPID 1934 TABLE TIME 0.90

EMISSIONITY FROM LAYER 34 AS f(TIME)

MDATA 0.0 0.000
 MDATA 8.61 0.000
 MDATA 8.71 0.000
 MDATA 12.05 0.000
 MDATA 12.15 0.000
 MDATA 200.0 0.000

/

MPID 1935 TABLE TIME 0.90

EMISSIONITY FROM LAYER 35 AS f(TIME)

MDATA 0.0 0.000
 MDATA 5.16 0.000
 MDATA 5.26 0.000
 MDATA 8.61 0.000
 MDATA 8.71 0.000
 MDATA 200.0 0.000

/

MPID 1936 TABLE TIME 0.90

EMISSIONITY FROM LAYER 36 AS f(TIME)

MDATA 0.0 0.000
 MDATA 5.44 0.00
 MDATA 200.0 0.00

/

MPID 1937 TABLE TIME 0.90

EMISSIONITY FROM LAYER 37 AS f(TIME)

MDATA 0.0 1.0
 MDATA 1.50 1.0
 MDATA 200.0 1.0

/

MPID 1004 CONSTANT FAHRENHEIT 1.0

WASTE DENSITY FOR ALL LAYERS LB/FT**3

MDATA 82.24

/

MPID 1005 CONSTANT FAHRENHEIT 1.0

WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F

MDATA 1.0

/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 0.0
/


```

$ MICRO.DAT
$ LOSS OF TANK DOME FLOW TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
* MFID ARGUMENT OPTION
MICRO 1075 0 1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1080 0 1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1090 0 1
MICDAT 77.0
/
*
* Ground water temp
*
* MFID ARGUMENT OPTION
MICRO 1095 0 1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO 1600 0 1
MICDAT 4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO 1601 0 15
MICDAT 199.0 200 0.0 1.0
/
MICRO 1602 0 15
MICDAT 118.48 200 0.0 1.0
/
MICRO 1603 0 15
MICDAT 115.75 200 0.0 1.0
/
MICRO 1604 0 15
MICDAT 112.79 200 0.0 1.0
/
MICRO 1605 0 15
MICDAT 109.73 200 0.0 1.0
/
MICRO 1606 0 15
MICDAT 106.64 200 0.0 1.0
/

```

MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	
/					
MICRO	1624	0	15		
MICDAT	46.48	200	0.0	1.0	
/					
MICRO	1625	0	15		
MICDAT	43.03	200	0.0	1.0	
/					
MICRO	1626	0	15		

MICDAT	39.59	200	0.0	1.0
/				
MICRO	1627	0	15	
MICDAT	36.15	200	0.0	1.0
/				
MICRO	1628	0	15	
MICDAT	32.71	200	0.0	1.0
/				
MICRO	1629	0	15	
MICDAT	29.26	200	0.0	1.0
/				
MICRO	1630	0	15	
MICDAT	25.82	200	0.0	1.0
/				
MICRO	1631	0	15	
MICDAT	22.38	200	0.0	1.0
/				
MICRO	1632	0	15	
MICDAT	18.93	200	0.0	1.0
/				
MICRO	1633	0	15	
MICDAT	15.49	200	0.0	1.0
/				
MICRO	1634	0	15	
MICDAT	12.05	200	0.0	1.0
/				
MICRO	1635	0	15	
MICDAT	8.61	200	0.0	1.0
/				
MICRO	1636	0	15	
MICDAT	5.16	200	0.0	1.0
/				
MICRO	1637	0	15	
MICDAT	1.72	200	0.0	1.0

/*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2

/*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	90.0	-5.0	
MICDAT	100.0	-7.5	
MICDAT	110.0	-11.0	
MICDAT	120.0	-14.5	
MICDAT	130.0	-21.0	
MICDAT	140.0	-27.7	
MICDAT	150.0	-38.0	
MICDAT	160.0	-50.0	
MICDAT	170.0	-66.0	
MICDAT	180.0	-88.0	
MICDAT	190.0	-119.0	
MICDAT	200.0	-162.0	
MICDAT	250.0	-400.0	
MICDAT	500.0	-800.0	

/*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15		
MICDAT	118.48	200.0	1.0	0.0	
/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					

MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	
/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		

MICDAT	36.15	39.59	1.0	0.0
/				
MICRO	1827	0 15		
MICDAT	32.71	36.15	1.0	0.0
/				
MICRO	1828	0 15		
MICDAT	29.26	32.71	1.0	0.0
/				
MICRO	1829	0 15		
MICDAT	25.82	29.26	1.0	0.0
/				
MICRO	1830	0 15		
MICDAT	22.38	25.82	1.0	0.0
/				
MICRO	1831	0 15		
MICDAT	18.93	22.38	1.0	0.0
/				
MICRO	1832	0 15		
MICDAT	15.49	18.93	1.0	0.0
/				
MICRO	1833	0 15		
MICDAT	12.05	15.49	1.0	0.0
/				
MICRO	1834	0 15		
MICDAT	8.61	12.05	1.0	0.0
/				
MICRO	1835	0 15		
MICDAT	5.16	8.61	1.0	0.0
/				
MICRO	1836	0 15		
MICDAT	1.72	5.16	1.0	0.0
/				
MICRO	1837	0 1		
MICDAT	1.0			
/				

```

; TEMPLATE.DAT
; LOSS OF TANK DOME FLOW TRANSIENT
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      100      901      901      901      904      905
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      150      10001     10001     10001     10004     10005
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      300      20001     20001     20001     20004     20005
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      303      20001     20001     20001     20004     20005
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      400      30001     30001     30001     30004     30005
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      401      30001     30001     30001     30004     30005
; *****
; *****
; MID      Kx      Ky      Kz      Density      Cp      PHID
; -----
MID      402      40001     40001     40001     40004     40005
; *****
; *****
; Convective heat transfer coefficient for heat transfer from ground
; surface to ambient air. (Btu/hr/ft^2/deg.f)
;
; TID      CFIG      Number of GP Values      Number of MPID's
;          -----      supplied by this      supplied by this
;          -----      template      template
;          -----
CONV      70      31      1      0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 1.00
; *****

```

```

;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; Tank center to r = 8ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      30          31          1          0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.99
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 8ft to r = 30ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      31          31          1          0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.27
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the
; annulus ventilation air and the tank bottom (Btu/hr/ft^2/deg.f).
; r = 30ft to r = 33ft
;
;      TID      CFGI      Number of GP Values      Number of MPID's
;      -----      -----      supplied by this      supplied by this
;                               template                template
;
CONV      32          31          1          0
;
; The code supplies GP #1.
;
; GP #2
; -----
; 0.19
;*****
;*****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

```


; Lower Section of Annulus
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	40	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the verticle tank walls (BTU/hr/ft^2/degf).

; Vertical Section of Annulus
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	41	27	5	5

; The code supplies GP #1.

GP #2	GP #3	GP #4	GP #5	GP #6
4.173E8	34.	6.271D-05	.33	.33

MPID_1	MPID_2	MPID_3	MPID_4	MPID_5
10004	10002	10003	10005	10001

; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).

; Upper section of Primary Tank
; Configuration 27 is generic natural convection

	TID	CFIG	Number of GP Values supplied by this template	Number of MPID's supplied by this template
CONV	42	27	5	5

; The code supplies GP #1.

```

;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus -- Secondary tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 43 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****
; Convective heat transfer coefficient for heat transfer between the annulus
; ventilation air and the tank walls (BTU/hr/ft^2/degf).
; Upper Section of Annulus --Secondary Tank
; Configuration 27 is generic natural convection
;
; TID CFIG Number of GP Values Number of MPID's
; supplied by this supplied by this
; template template
; -----
CONV 44 27 5 5
;
; The code supplies GP #1.
;
; GP #2 GP #3 GP #4 GP #5 GP #6
; -----
; 4.173E8 34. 6.271D-05 .33 .33
;
; MPID_1 MPID_2 MPID_3 MPID_4 MPID_5
; -----
; 10004 10002 10003 10005 10001
; *****
; *****

```

```

*****
; Radiation heat transfer across annulus.
;
;      TID      Nbands
;      ----      ----
VFAC      60      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.80      1.0      0      0      0.0      0.0      0
*****
; Ambient air temperature for convection from ground surface
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      75      1      0      0      1.0
;
;      MFID #1
;      ----
;      1075
*****
; Annulus inlet air temperature
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      80      1      0      0      1.0
;
;      MFID #1
;      ----
;      1080
*****
; Tank dome inlet air temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      90      1      0      0      1.0
;
;      MFID #1
;      ----
;      1090
*****
; Ground water temp
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ----      ----      ----      ----      ----
MACRO      95      1      0      0      1.0

```

```

;
; MFID #1
; -----
; 1095
; *****
; *****
;
; 37 LAYERS OF WASTE, NUMBERED FROM BOTTOM OF TANK
;
;
; MID      Kx      Ky      Kz      Density      Cp      -----
; ----
; MID      501      1501      1501      1501      1004      1005
; MID      502      1502      1502      1502      1004      1005
; MID      503      1503      1503      1503      1004      1005
; MID      504      1504      1504      1504      1004      1005
; MID      505      1505      1505      1505      1004      1005
; MID      506      1506      1506      1506      1004      1005
; MID      507      1507      1507      1507      1004      1005
; MID      508      1508      1508      1508      1004      1005
; MID      509      1509      1509      1509      1004      1005
; MID      510      1510      1510      1510      1004      1005
; MID      511      1511      1511      1511      1004      1005
; MID      512      1512      1512      1512      1004      1005
; MID      513      1513      1513      1513      1004      1005
; MID      514      1514      1514      1514      1004      1005
; MID      515      1515      1515      1515      1004      1005
; MID      516      1516      1516      1516      1004      1005
; MID      517      1517      1517      1517      1004      1005
; MID      518      1518      1518      1518      1004      1005
; MID      519      1519      1519      1519      1004      1005
; MID      520      1520      1520      1520      1004      1005
; MID      521      1521      1521      1521      1004      1005
; MID      522      1522      1522      1522      1004      1005
; MID      523      1523      1523      1523      1004      1005
; MID      524      1524      1524      1524      1004      1005
; MID      525      1525      1525      1525      1004      1005
; MID      526      1526      1526      1526      1004      1005
; MID      527      1527      1527      1527      1004      1005
; MID      528      1528      1528      1528      1004      1005
; MID      529      1529      1529      1529      1004      1005
; MID      530      1530      1530      1530      1004      1005
; MID      531      1531      1531      1531      1004      1005
; MID      532      1532      1532      1532      1004      1005
; MID      533      1533      1533      1533      1004      1005
; MID      534      1534      1534      1534      1004      1005
; MID      535      1535      1535      1535      1004      1005
; MID      536      1536      1536      1536      1004      1005
; MID      537      1537      1537      1537      1004      1005
; *****
; *****
; HEAT GENERATION TEMPLATES FOR WASTE
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor

```

```

;
;-----
MACRO 601          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 602          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 603          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 604          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 605          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 606          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 607          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
MACRO 608          1          0          0          1.0
; Microfunction 1          Microfunction 2
;          1600
;
;

```

442

1600

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  617      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  618      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  619      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  620          1          0          0          1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  621      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  622      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      ---      ---      -----
MACRO  623      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;
;      1600

```

```

;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
;

```

```

MACRO 624      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 625      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 626      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 627      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 628      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 629      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 630      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -----      -----      -----      -----
MACRO 631      1      0      0      1.0
;      Microfunction 1      Microfunction 2
;      1600
;
;

```



```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  632      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  633      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  634      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  635      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  636      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;      ---      -
MACRO  637      1      Microfunction 2      0      0      1.0
;      Microfunction 1
;      1600

```

```

; *****
; *****
; Convective heat transfer coefficient for heat transfer from
; tank dome to air in tank dome
; (Btu/hr/ft^2/deg.f)

```

```

;      TID      CFG      Number of GP Values      Number of MPID's
;      ---      ---      supplied by this      supplied by this
;      ---      ---      template      template
CONV  700      31      1      0

```

```

; The code supplies GP #1.

```

```

;
; GP #2
; -----
; 1.00
;*****
;*****
; Convective heat transfer coefficient for heat transfer from waste
; surface to air in tank dome
; (Btu/hr/ft^2/deg.f)
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    701      29              0              1
;      MPID
;      -----
;      -1701
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    702      29              0              1
;      MPID
;      -----
;      -1702
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    703      29              0              1
;      MPID
;      -----
;      -1703
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    704      29              0              1
;      MPID
;      -----
;      -1704
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    705      29              0              1
;      MPID
;      -----
;      -1705
;
;
;      TID      CFIG      Number of GP Values      Number of MPID's
;      ----      ----      -----
CONV    706      29              0              1
;      MPID

```

;	-1706			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	707	29	0	1
;	MPID			
;	-----			
;	-1707			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	708	29	0	1
;	MPID			
;	-----			
;	-1708			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	709	29	0	1
;	MPID			
;	-----			
;	-1709			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	710	29	0	1
;	MPID			
;	-----			
;	-1710			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	711	29	0	1
;	MPID			
;	-----			
;	-1711			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	712	29	0	1
;	MPID			
;	-----			
;	-1712			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----

CONV	713	29	0	1
;	MPID			
;	-----			
	-1713			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	714	29	0	1
;	MPID			
;	-----			
	-1714			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	715	29	0	1
;	MPID			
;	-----			
	-1715			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	716	29	0	1
;	MPID			
;	-----			
	-1716			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	717	29	0	1
;	MPID			
;	-----			
	-1717			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	718	29	0	1
;	MPID			
;	-----			
	-1718			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	719	29	0	1
;	MPID			
;	-----			
	-1719			
;				
;				

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	720	29	0	1
MPID	-1720			
CONV	721	29	0	1
MPID	-1721			
CONV	722	29	0	1
MPID	-1722			
CONV	723	29	0	1
MPID	-1723			
CONV	724	29	0	1
MPID	-1724			
CONV	725	29	0	1
MPID	-1725			
CONV	726	29	0	1
MPID	-1726			

;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	727	29	0	1
;	MPID			
;	-----			
;	-1727			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	728	29	0	1
;	MPID			
;	-----			
;	-1728			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	729	29	0	1
;	MPID			
;	-----			
;	-1729			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	730	29	0	1
;	MPID			
;	-----			
;	-1730			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	731	29	0	1
;	MPID			
;	-----			
;	-1731			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	732	29	0	1
;	MPID			
;	-----			
;	-1732			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	733	29	0	1
;	MPID			
;				

;
; -----
; -1733

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	734	29	0	1
	MPID			

	-1734			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	735	29	0	1
	MPID			

	-1735			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	736	29	0	1
	MPID			

	-1736			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	737	29	0	1
	MPID			

	-1737			

;
; *****
; *****
; Convective heat transfer coefficient for heat transfer from tank
; wall to air in tank dome
; (Btu/hr/ft^2/deg.f)

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	402	29	0	1
	MPID			

	-1402			

	TID	CFIG	Number of GP Values	Number of MPID's
CONV	403	29	0	1

;	MPID			
;	-----			
;	-1403			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	404	29	0	1
;	MPID			
;	-----			
;	-1404			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	405	29	0	1
;	MPID			
;	-----			
;	-1405			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	406	29	0	1
;	MPID			
;	-----			
;	-1406			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	407	29	0	1
;	MPID			
;	-----			
;	-1407			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	408	29	0	1
;	MPID			
;	-----			
;	-1408			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	409	29	0	1
;	MPID			
;	-----			
;	-1409			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

;	-----	-----	-----	-----
CONV	410	29	0	1
;	MPID			
;	-----			
	-1410			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	411	29	0	1
;	MPID			
;	-----			
	-1411			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	412	29	0	1
;	MPID			
;	-----			
	-1412			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	413	29	0	1
;	MPID			
;	-----			
	-1413			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	414	29	0	1
;	MPID			
;	-----			
	-1414			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	415	29	0	1
;	MPID			
;	-----			
	-1415			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	416	29	0	1
;	MPID			
;	-----			
	-1416			
;				

;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	417	29	0	1
;	MPID			
;	-----			
;	-1417			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	418	29	0	1
;	MPID			
;	-----			
;	-1418			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	419	29	0	1
;	MPID			
;	-----			
;	-1419			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	420	29	0	1
;	MPID			
;	-----			
;	-1420			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	421	29	0	1
;	MPID			
;	-----			
;	-1421			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	422	29	0	1
;	MPID			
;	-----			
;	-1422			
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	423	29	0	1
;	MPID			
;	-----			

-1423				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	424	29	0	1
	MPID			
-1424				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	425	29	0	1
	MPID			
-1425				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	426	29	0	1
	MPID			
-1426				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	427	29	0	1
	MPID			
-1427				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	428	29	0	1
	MPID			
-1428				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	429	29	0	1
	MPID			
-1429				
CONV	TID	CFIG	Number of GP Values	Number of MPID's
	430	29	0	1

;	MPID			
;	-----			
	-1430			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	431	29	0	1
;	MPID			
;	-----			
	-1431			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	432	29	0	1
;	MPID			
;	-----			
	-1432			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	433	29	0	1
;	MPID			
;	-----			
	-1433			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	434	29	0	1
;	MPID			
;	-----			
	-1434			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	435	29	0	1
;	MPID			
;	-----			
	-1435			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's
;	-----	-----	-----	-----
CONV	436	29	0	1
;	MPID			
;	-----			
	-1436			
;				
;				
;	TID	CFIG	Number of GP Values	Number of MPID's

```

;-----
; CONV      437      29      0      1
;      MPID
;-----
;      -1437
;
;*****
;*****
; EVAPORATION TEMPLATES FOR WASTE
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 801      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 802      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 803      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 804      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 805      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----
; MACRO 806      2      0      0      1.0
;      Microfunction 1      Microfunction 2      Microfunction 3
;                               1850      1870
;
;
;      TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
;-----

```

```

;
MACRO 807      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 808      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 809      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 810      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 811      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 812      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 813      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ---      -----
MACRO 814      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850      1870
;
;

```

;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	815	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	816	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	817	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	818	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	819	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	820	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	821	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	822	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	

		1850		1870	
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	823	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	824	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	825	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	826	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	827	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	828	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----
MACRO	829	2	0	0	1.0
;	Microfunction 1	Microfunction 2		Microfunction 3	
		1850		1870	
;					
;	TID	Number of Microfunctions	NODE1	NODE2	Scale Factor
;	---	-----	---	---	-----


```

MACRO 830      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 831      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 832      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 833      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 834      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 835      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 836      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
;
; TID      Number of Microfunctions      NODE1      NODE2      Scale Factor
; ----      -
; MACRO 837      2      0      0      1.0
; Microfunction 1      Microfunction 2      Microfunction 3
;                        1850                        1870
;
; *****

```

; Radiation heat transfer from waste surface.

```

;
;      TID      Nbands
;      ----      ----
VFAC    901      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1901      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    902      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1902      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    903      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1903      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    904      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1904      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    905      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1905      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    906      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      ----      ----      ----      ----      ----      ----      ----
;      0.0      1.0      1906      0      0.0      0.0      0

```

```

;
;      TID      Nbands
;      ----      ----
VFAC    907      0

```

	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1907	0	0.0	0.0	0
		TID	Nbands				
VFAC	908	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1908	0	0.0	0.0	0
		TID	Nbands				
VFAC	909	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1909	0	0.0	0.0	0
		TID	Nbands				
VFAC	910	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1910	0	0.0	0.0	0
		TID	Nbands				
VFAC	911	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1911	0	0.0	0.0	0
		TID	Nbands				
VFAC	912	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1912	0	0.0	0.0	0
		TID	Nbands				
VFAC	913	0					
	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2	Kflag
	0.0	1.0	1913	0	0.0	0.0	0
		TID	Nbands				

WHC-SD-W236A-ER-014
Rev. 0

;	VFAC	914	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1914	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	915	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1915	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	916	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1916	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	917	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1917	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	918	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1918	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	919	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1919	0	0.0	0.0
;	;		TID	Nbands			
;	VFAC	920	0				
;	;	Ec	Tc	Empid	Tmpid	Lambda_1	Lambda_2
;	;	0.0	1.0	1920	0	0.0	0.0

```

;
;
;      TID      Nbands
;      -----
VFAC    921      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1921      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    922      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1922      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    923      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1923      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    924      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1924      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    925      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1925      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    926      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag
;      -----
;      0.0      1.0      1926      0      0.0      0.0      0
;
;
;      TID      Nbands
;      -----
VFAC    927      0
;
;      Ec      Tc      Empid      Tmpid      Lambda_1      Lambda_2      Kflag

```

```

; -----
; 0.0 1.0 1927 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 928 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1928 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 929 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1929 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 930 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1930 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 931 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1931 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 932 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1932 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 933 0
;
; Ec Tc Empid Tmpid Lambda_1 Lambda_2 Kflag
; -----
; 0.0 1.0 1933 0 0.0 0.0 0
;
; TID Nbands
; -----
VFAC 934 0

```

```

;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1934    0       0.0       0.0       0
;
;           TID       Nbands
;           ---       ---
VFAC      935         0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1935    0       0.0       0.0       0
;
;           TID       Nbands
;           ---       ---
VFAC      936         0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1936    0       0.0       0.0       0
;
;           TID       Nbands
;           ---       ---
VFAC      937         0
;
;   Ec   Tc   Empid   Tmpid   Lambda_1   Lambda_2   Kflag
;   ---   ---   ---   ---   ---   ---   ---
;   0.0   1.0   1937    0       0.0       0.0       0
;
;

```

2.15 Loss of Annulus Flow Transient

The mat.data file for this case is the same as for the Loss of Tank Dome Flow Transient except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for the Loss of Tank Dome Flow Transient.

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 4968.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 2258.0
/
/

```

$ MICRO.DAT
$ LOSS OF ANNULUS FLOW TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
* MFID ARGUMENT OPTION
MICRO 1075 0 1
MICDAT 77.0
/
*
* Annulus inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1080 0 1
MICDAT 77.0
/
*
* Tank dome inlet air temp
*
* MFID ARGUMENT OPTION
MICRO 1090 0 1
MICDAT 77.0
/
*
* Ground water temp
*
* MFID ARGUMENT OPTION
MICRO 1095 0 1
MICDAT 55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO 1600 0 1
MICDAT 4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO 1601 0 15
MICDAT 199.0 200 0.0 1.0
/
MICRO 1602 0 15
MICDAT 118.48 200 0.0 1.0
/
MICRO 1603 0 15
MICDAT 115.75 200 0.0 1.0
/
MICRO 1604 0 15
MICDAT 112.79 200 0.0 1.0
/
MICRO 1605 0 15
MICDAT 109.73 200 0.0 1.0

```

/
MICRO 1606 0 15
MICDAT 106.64 200 0.0 1.0
/
MICRO 1607 0 15
MICDAT 103.48 200 0.0 1.0
/
MICRO 1608 0 15
MICDAT 100.27 200 0.0 1.0
/
MICRO 1609 0 15
MICDAT 97.06 200 0.0 1.0
/
MICRO 1610 0 15
MICDAT 93.85 200 0.0 1.0
/
MICRO 1611 0 15
MICDAT 90.64 200 0.0 1.0
/
MICRO 1612 0 15
MICDAT 87.43 200 0.0 1.0
/
MICRO 1613 0 15
MICDAT 84.23 200 0.0 1.0
/
MICRO 1614 0 15
MICDAT 80.90 200 0.0 1.0
/
MICRO 1615 0 15
MICDAT 77.46 200 0.0 1.0
/
MICRO 1616 0 15
MICDAT 74.02 200 0.0 1.0
/
MICRO 1617 0 15
MICDAT 70.57 200 0.0 1.0
/
MICRO 1618 0 15
MICDAT 67.13 200 0.0 1.0
/
MICRO 1619 0 15
MICDAT 63.69 200 0.0 1.0
/
MICRO 1620 0 15
MICDAT 60.25 200 0.0 1.0
/
MICRO 1621 0 15
MICDAT 56.80 200 0.0 1.0
/
MICRO 1622 0 15
MICDAT 53.36 200 0.0 1.0
/
MICRO 1623 0 15
MICDAT 49.92 200 0.0 1.0

WHC-SD-W236A-ER-014
Rev. 0

/					
MICRO	1624	0	15		
MICDAT	46.48	200	0.0	1.0	
/					
MICRO	1625	0	15		
MICDAT	43.03	200	0.0	1.0	
/					
MICRO	1626	0	15		
MICDAT	39.59	200	0.0	1.0	
/					
MICRO	1627	0	15		
MICDAT	36.15	200	0.0	1.0	
/					
MICRO	1628	0	15		
MICDAT	32.71	200	0.0	1.0	
/					
MICRO	1629	0	15		
MICDAT	29.26	200	0.0	1.0	
/					
MICRO	1630	0	15		
MICDAT	25.82	200	0.0	1.0	
/					
MICRO	1631	0	15		
MICDAT	22.38	200	0.0	1.0	
/					
MICRO	1632	0	15		
MICDAT	18.93	200	0.0	1.0	
/					
MICRO	1633	0	15		
MICDAT	15.49	200	0.0	1.0	
/					
MICRO	1634	0	15		
MICDAT	12.05	200	0.0	1.0	
/					
MICRO	1635	0	15		
MICDAT	8.61	200	0.0	1.0	
/					
MICRO	1636	0	15		
MICDAT	5.16	200	0.0	1.0	
/					
MICRO	1637	0	15		
MICDAT	1.72	200	0.0	1.0	

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18
MICDAT	0.0	0.0	
MICDAT	90.0	-5.0	
MICDAT	100.0	-7.5	
MICDAT	110.0	-11.0	
MICDAT	120.0	-14.5	
MICDAT	130.0	-21.0	

MICDAT	140.0	-27.7
MICDAT	150.0	-38.0
MICDAT	160.0	-50.0
MICDAT	170.0	-66.0
MICDAT	180.0	-88.0
MICDAT	190.0	-119.0
MICDAT	200.0	-162.0
MICDAT	250.0	-400.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/	MICRO	1820	0	15		
	MICDAT	56.80	60.25	1.0	0.0	
/	MICRO	1821	0	15		
	MICDAT	53.36	56.80	1.0	0.0	
/	MICRO	1822	0	15		
	MICDAT	49.92	53.36	1.0	0.0	
/	MICRO	1823	0	15		
	MICDAT	46.48	49.92	1.0	0.0	
/	MICRO	1824	0	15		
	MICDAT	43.03	46.48	1.0	0.0	
/	MICRO	1825	0	15		
	MICDAT	39.59	43.03	1.0	0.0	
/	MICRO	1826	0	15		
	MICDAT	36.15	39.59	1.0	0.0	
/	MICRO	1827	0	15		
	MICDAT	32.71	36.15	1.0	0.0	
/	MICRO	1828	0	15		
	MICDAT	29.26	32.71	1.0	0.0	
/	MICRO	1829	0	15		
	MICDAT	25.82	29.26	1.0	0.0	
/	MICRO	1830	0	15		
	MICDAT	22.38	25.82	1.0	0.0	
/	MICRO	1831	0	15		
	MICDAT	18.93	22.38	1.0	0.0	
/	MICRO	1832	0	15		
	MICDAT	15.49	18.93	1.0	0.0	
/	MICRO	1833	0	15		
	MICDAT	12.05	15.49	1.0	0.0	
/	MICRO	1834	0	15		
	MICDAT	8.61	12.05	1.0	0.0	
/	MICRO	1835	0	15		
	MICDAT	5.16	8.61	1.0	0.0	
/	MICRO	1836	0	15		
	MICDAT	1.72	5.16	1.0	0.0	
/	MICRO	1837	0	1		

MICDAT 1.0
/

2.16 Postulated Earthquake Event

The mat.data file for this case is the same as for the Loss of Tank Dome Flow Transient except for the last page, so only the last page is shown here. The template.dat file for this case is the same as for the Loss of Tank Dome Flow Transient.

MPID 1935 TABLE TIME 0.90
EMISSION FROM LAYER 35 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.16 0.000
MDATA 5.26 0.000
MDATA 8.61 0.000
MDATA 8.71 0.000
MDATA 200.0 0.000
/
MPID 1936 TABLE TIME 0.90
EMISSION FROM LAYER 36 AS f(TIME)
MDATA 0.0 0.000
MDATA 5.44 0.00
MDATA 200.0 0.00
/
MPID 1937 TABLE TIME 0.90
EMISSION FROM LAYER 37 AS f(TIME)
MDATA 0.0 1.0
MDATA 1.50 1.0
MDATA 200.0 1.0
/
MPID 1004 CONSTANT FAHRENHEIT 1.0
WASTE DENSITY FOR ALL LAYERS LB/FT**3
MDATA 82.24
/
MPID 1005 CONSTANT FAHRENHEIT 1.0
WASTE SPECIFIC HEAT FOR ALL LAYERS BTU/LB/F
MDATA 1.0
/
MPID 250 CONSTANT FAHRENHEIT 1.0
Tank annulus ventilation flow (Lbm/hr)
MDATA 0.0
/
MPID 260 CONSTANT FAHRENHEIT 1.0
Tank dome space ventilation flow (Lbm/hr)
MDATA 0.0
/

```

$ MICRO.DAT
$ POSTULATED EARTHQUAKE TRANSIENT
*
* Ambient air temperature for convection from ground surface. (Deg.f)
*
*      MFID      ARGUMENT      OPTION
MICRO  1075      0            1
MICDAT  77.0
/
*
* Annulus inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1080      0            1
MICDAT  77.0
/
*
* Tank dome inlet air temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1090      0            1
MICDAT  77.0
/
*
* Ground water temp
*
*      MFID      ARGUMENT      OPTION
MICRO  1095      0            1
MICDAT  55.0
/
*
* VOLUMETRIC HEATING IN WASTE
* MICRO 1600 IS HEAT GENERATION RATE BTU/HR/FT**3
*
MICRO  1600      0      1
MICDAT  4.5144
/
*
* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER
*
MICRO  1601      0      15
MICDAT  199.0      200      0.0      1.0
/
MICRO  1602      0      15
MICDAT  118.48      200      0.0      1.0
/
MICRO  1603      0      15
MICDAT  115.75      200      0.0      1.0
/
MICRO  1604      0      15
MICDAT  112.79      200      0.0      1.0
/
MICRO  1605      0      15
MICDAT  109.73      200      0.0      1.0

```

WHC-SD-W236A-ER-014
Rev. 0

/					
MICRO	1606	0	15		
MICDAT	106.64	200	0.0	1.0	
/					
MICRO	1607	0	15		
MICDAT	103.48	200	0.0	1.0	
/					
MICRO	1608	0	15		
MICDAT	100.27	200	0.0	1.0	
/					
MICRO	1609	0	15		
MICDAT	97.06	200	0.0	1.0	
/					
MICRO	1610	0	15		
MICDAT	93.85	200	0.0	1.0	
/					
MICRO	1611	0	15		
MICDAT	90.64	200	0.0	1.0	
/					
MICRO	1612	0	15		
MICDAT	87.43	200	0.0	1.0	
/					
MICRO	1613	0	15		
MICDAT	84.23	200	0.0	1.0	
/					
MICRO	1614	0	15		
MICDAT	80.90	200	0.0	1.0	
/					
MICRO	1615	0	15		
MICDAT	77.46	200	0.0	1.0	
/					
MICRO	1616	0	15		
MICDAT	74.02	200	0.0	1.0	
/					
MICRO	1617	0	15		
MICDAT	70.57	200	0.0	1.0	
/					
MICRO	1618	0	15		
MICDAT	67.13	200	0.0	1.0	
/					
MICRO	1619	0	15		
MICDAT	63.69	200	0.0	1.0	
/					
MICRO	1620	0	15		
MICDAT	60.25	200	0.0	1.0	
/					
MICRO	1621	0	15		
MICDAT	56.80	200	0.0	1.0	
/					
MICRO	1622	0	15		
MICDAT	53.36	200	0.0	1.0	
/					
MICRO	1623	0	15		
MICDAT	49.92	200	0.0	1.0	

/					
MICRO	1624	0	15		
MICDAT	46.48	200	0.0	1.0	
/					
MICRO	1625	0	15		
MICDAT	43.03	200	0.0	1.0	
/					
MICRO	1626	0	15		
MICDAT	39.59	200	0.0	1.0	
/					
MICRO	1627	0	15		
MICDAT	36.15	200	0.0	1.0	
/					
MICRO	1628	0	15		
MICDAT	32.71	200	0.0	1.0	
/					
MICRO	1629	0	15		
MICDAT	29.26	200	0.0	1.0	
/					
MICRO	1630	0	15		
MICDAT	25.82	200	0.0	1.0	
/					
MICRO	1631	0	15		
MICDAT	22.38	200	0.0	1.0	
/					
MICRO	1632	0	15		
MICDAT	18.93	200	0.0	1.0	
/					
MICRO	1633	0	15		
MICDAT	15.49	200	0.0	1.0	
/					
MICRO	1634	0	15		
MICDAT	12.05	200	0.0	1.0	
/					
MICRO	1635	0	15		
MICDAT	8.61	200	0.0	1.0	
/					
MICRO	1636	0	15		
MICDAT	5.16	200	0.0	1.0	
/					
MICRO	1637	0	15		
MICDAT	1.72	200	0.0	1.0	

/

*

* EVAPORATION FROM WASTE SURFACE

* MICRO 1800 IS EVAPORATION RATE FOR 500 SCFM BTU/HR/FT**2

*

MICRO	1800	1	18		
MICDAT	0.0	0.0			
MICDAT	90.0	-5.0			
MICDAT	100.0	-7.5			
MICDAT	110.0	-11.0			
MICDAT	120.0	-14.5			
MICDAT	130.0	-21.0			

WHC-SD-W236A-ER-014
Rev. 0

MICDAT	140.0	-27.7
MICDAT	150.0	-38.0
MICDAT	160.0	-50.0
MICDAT	170.0	-66.0
MICDAT	180.0	-88.0
MICDAT	190.0	-119.0
MICDAT	200.0	-162.0
MICDAT	250.0	-400.0
MICDAT	500.0	-800.0

/

*

* MICRO 1850 IS EVAPORATION RATE FOR GAS SPACE = 30 FT BTU/HR/FT**2

*

MICRO	1850	1	18
MICDAT	0.0	0.0	
MICDAT	500.0	0.0	

/

*

* MICRO 1860 IS EVAPORATION RATE FOR GAS SPACE = 43 FT BTU/HR/FT**2

*

MICRO	1860	1	18
MICDAT	0.0	0.0	
MICDAT	100.0	-2.709	
MICDAT	125.0	-10.267	
MICDAT	150.0	-23.156	
MICDAT	170.0	-37.307	
MICDAT	190.0	-54.869	
MICDAT	200.0	-64.930	
MICDAT	210.0	-75.843	
MICDAT	225.0	-^[[003q93.813	
MICDAT	250.0	-128.028	
MICDAT	500.0	-222.22	

/

*

* MICRO 1870 IS A Multiplier for the previous microfunctions
* to account for the effects of the recirc system

*

MICRO	1870	1	18
MICDAT	100	1.0	
MICDAT	110	1.0	
MICDAT	120	1.0	
MICDAT	130	1.0	
MICDAT	140	1.0	
MICDAT	150	1.0	
MICDAT	165	1.0	
MICDAT	180	1.0	
MICDAT	195	1.0	
MICDAT	210	1.0	
MICDAT	250	1.0	

/

* THE FOLLOWING ARE ON-OFF TIMES FOR EACH LAYER

*

MICRO	1801	0	15
MICDAT	118.48	200.0	1.0 0.0

/					
MICRO	1802	0	15		
MICDAT	115.75	118.48	1.0	0.0	
/					
MICRO	1803	0	15		
MICDAT	112.79	115.75	1.0	0.0	
/					
MICRO	1804	0	15		
MICDAT	109.73	112.79	1.0	0.0	
/					
MICRO	1805	0	15		
MICDAT	106.64	109.73	1.0	0.0	
/					
MICRO	1806	0	15		
MICDAT	103.48	106.64	1.0	0.0	
/					
MICRO	1807	0	15		
MICDAT	100.27	103.48	1.0	0.0	
/					
MICRO	1808	0	15		
MICDAT	97.06	100.27	1.0	0.0	
/					
MICRO	1809	0	15		
MICDAT	93.85	97.06	1.0	0.0	
/					
MICRO	1810	0	15		
MICDAT	90.64	93.85	1.0	0.0	
/					
MICRO	1811	0	15		
MICDAT	87.43	90.64	1.0	0.0	
/					
MICRO	1812	0	15		
MICDAT	84.23	87.43	1.0	0.0	
/					
MICRO	1813	0	15		
MICDAT	80.90	84.23	1.0	0.0	
/					
MICRO	1814	0	15		
MICDAT	77.46	80.90	1.0	0.0	
/					
MICRO	1815	0	15		
MICDAT	74.02	77.46	1.0	0.0	
/					
MICRO	1816	0	15		
MICDAT	70.57	74.02	1.0	0.0	
/					
MICRO	1817	0	15		
MICDAT	67.13	70.57	1.0	0.0	
/					
MICRO	1818	0	15		
MICDAT	63.69	67.13	1.0	0.0	
/					
MICRO	1819	0	15		
MICDAT	60.25	63.69	1.0	0.0	

/					
MICRO	1820	0	15		
MICDAT	56.80	60.25	1.0	0.0	
/					
MICRO	1821	0	15		
MICDAT	53.36	56.80	1.0	0.0	
/					
MICRO	1822	0	15		
MICDAT	49.92	53.36	1.0	0.0	
/					
MICRO	1823	0	15		
MICDAT	46.48	49.92	1.0	0.0	
/					
MICRO	1824	0	15		
MICDAT	43.03	46.48	1.0	0.0	
/					
MICRO	1825	0	15		
MICDAT	39.59	43.03	1.0	0.0	
/					
MICRO	1826	0	15		
MICDAT	36.15	39.59	1.0	0.0	
/					
MICRO	1827	0	15		
MICDAT	32.71	36.15	1.0	0.0	
/					
MICRO	1828	0	15		
MICDAT	29.26	32.71	1.0	0.0	
/					
MICRO	1829	0	15		
MICDAT	25.82	29.26	1.0	0.0	
/					
MICRO	1830	0	15		
MICDAT	22.38	25.82	1.0	0.0	
/					
MICRO	1831	0	15		
MICDAT	18.93	22.38	1.0	0.0	
/					
MICRO	1832	0	15		
MICDAT	15.49	18.93	1.0	0.0	
/					
MICRO	1833	0	15		
MICDAT	12.05	15.49	1.0	0.0	
/					
MICRO	1834	0	15		
MICDAT	8.61	12.05	1.0	0.0	
/					
MICRO	1835	0	15		
MICDAT	5.16	8.61	1.0	0.0	
/					
MICRO	1836	0	15		
MICDAT	1.72	5.16	1.0	0.0	
/					
MICRO	1837	0	1		

MICDAT 1.0
/

3.0 SESSION FILE TO CREATE MODEL

```
$ SESSION FILE TO CREATE MWTF MODEL
GR,1,,0/0
GR,2,,2/0
GR,3,,30.4427/.8906
SET,ALPHA,8
GR,4,,33.2033/.9771
GR,5,,37.5625/5.4749
GR,6,,33.0625/5.4749
GR,7,,37.5625/12.0
GR,8,,37.5625/20.0
GR,9,,37.5625/36.0
$ GRID 9 IS AT LIQUID LEVEL
GR,10,,37.5625/37.0573
LI,3#,ST,,1T3,2T4
LI,4,ARC,G6/33.0625/5.4749/1/88.2065,4
LI,4#,PW,,5/7T10
LI,#,ARC,32.9583/37.0573/0/32.9583/37.0573/1/53.6497,10
GR,#,,0/49.
GR,#,,24.3736/49.
$ GRID 13 IS A CONSTRUCTION POINT FOR TANK DOME
LI,#,CONIC,G13/.5,12/11
GR,#,,40.0625/34.
LI,#,CONIC,40.0625/37.4541/0/.526,11/14
GR,#,,41.5625/39.8645
GR,#,,0/50.25
GR,#,,24.38/50.25
$ GRID 17 IS A CONSTRUCTION PT FOR TOP OF CONCRETE DOME
LI,#,CONIC,G17/.524,16/15
GR,#,,0/- .6667
GR,#,,33.2033/- .6667
LI,#,PWL,,18/19
GR,#,,40.0625/- .6667
LI,#,ST,,14,20
GR,#,,41.5625/- .6667
LI,#,ST,,15,21
LI,#,ST,,22,23
GR,#,,0/-3.3333
GR,#,,41.5625/-3.3333
$ CREATE LINES FOR FLOW BARS
GR,#,,-1./-.3333
GR,#,,33.2033/- .3333
LI,#,ST,,24,25
GR,#,,38.8125/5.4749
GR,#,,38.8125/37.0573
LI,#,ST,,26,27
LI,#,FILLIT,6,17,18
Y
$ CREATE PATCHES IN CONCRETE
LI,#,TR,0/- .6667,1
LI,#,TR,0/- .3333,1
PA,#,2L,,1,20
LI,13,2G,,30,19
Y
LI,2,2G,,2,4
```

Y

PA,#,2L,,2,13
 LI,#,2G,,18,21
 PA,#,2L,,22,16
 LI,2#,BR,.9,12
 LI,2#,BR,.5,11
 LI,2#,BR,.145,15
 PA,#,2L,,14,28
 PA,#,2L,,26,27
 PA,#,2L,,25,24
 PA,#,2L,,10,23

\$ CREATE PATCHES TO FLOW BARS

PA,#,2L,,1,21
 LI,#,2G,,32,28
 PA,#,2L,,2,29
 PA,#,2L,,4,19
 LI,2#,BR,.97,18
 LI,#,2G,,5,10
 PA,#,2L,,32,30
 LI,2#,BR,.5,9
 PA,#,2L,,33,31
 LI,2#,BR,.5,25
 PA,#,2L,,36,31
 LI,#,2G,,19,20
 LI,2#,BR,.5,19
 PA,#,2L,,37,38
 LI,2#,BR,.81,14
 PA,#,2L,,41,39
 PA,#,2L,,40,30
 PA,#,2L,,26,31

\$ CREATE BARS REPRESENTING STEEL PLATE

SET,ACTIVE,NONE

LI,1T#,PL

GFEG,1L,G/1/0,2

LI,2,2G,,2,3

Y

GFEG,2L,G/1/0,6
 GFEG,3L,G/1/0,2
 GFEG,4L,G/1/0,6
 NO,15,OFF,.1294,.4942
 NO,14,OFF,.4595,.8122
 NO,13,OFF,.8763,.883
 NO,12,OFF,1.1753,.636
 GFEG,5L,G/1/0,8
 GFEG,6L,G/1/0,9
 GFEG,7L,G/1/0,17
 GFEG,8L,G/1/0,2
 GFEG,33L,G/1/0,3
 GFEG,34L,G/1/0,3
 GFEG,10L,G/1/0,6
 GFEG,35L,G/1/0,3
 GFEG,36L,G/1/0,3
 GFEG,26L,G/1/0,3
 GFEG,40L,G/1/0,33

GFEG,41L,G/1/0,4
GFEG,37L,G/1/0,3
CFEG,1LT8L/33LT34L/10L/35L/36L/26L/40L/41L/37L,BAR
4
PFEG,1L,BAR,100/.0833/.0833
PFEG,2L,BAR,100/.0417/.0417
PFEG,3L,BAR,100/.0833/.0833
PFEG,4L,BAR,100/.0833/.0833
PFEG,5L,BAR,100/.0833/.0833
PFEG,6L,BAR,100/.0729/.0729
PFEG,7L/8L/33L/34L,BAR,100/.0625/.0625
PFEG,10L,BAR,100/.0313/.0313
PFEG,35L/36L/26L/40L/41L/37L,BAR,100/.0313/.0313
NAME,PLATE
\$ MAKE FLOW BARS
LI,21,2G,,24,32
Y
GFEG,21L,F/1/0,3
NO,115,OFF,-.5
LI,2#,BR,.9231,29
GFEG,42L,F/1/0,6
GFEG,43L,F/1/0,2
GFEG,38L,F/1/0,3
GFEG,39L,F/1/0,4
GFEG,30L,F/1/0,33
GFEG,31L,F/1/0,3
EQUIV
N
2
1
Y
CFEG,21L/42L/43L/38L/39L/30L/31L,BAR/2/10
4
PFEG,21L/42L/43L/38L/39L/30L/31L,BAR//10,10005/1./250
\$ MESH CONVECTIVE PATCHES
ME,P8,QUAD//31,NUM
1
1
1
1
1
PA,9,2L,,2,42
Y
ME,P9,QUAD//31,NUM
1
5
1
5
PA,#,2L,,3,43
ME,P18,QUAD//31,NUM
1
1
1
1
ME,P10,QUAD//31,NUM

1
5/.5
1
5/.5
EQUIV
Y
2
2
4
189/12
4
13/190
4
14/191
4
126/195
4
126/195
4
127/196
4
129/197
4
130/198
5
Y
ME, P14, QUAD//31, NUM
1
2
1
2
ME, P15, QUAD//31, NUM
1
3
1
3
ME, P11, QUAD//31, NUM
1
32
1
32
EQUIV
N
2
4
215/18
4
216/19
4
217/20
4
218/21
4
219/22

4
220/23
5
Y
EQUIV
N
2
4
24/221
4
222/26
4
223/27
4
224/28
4
225/29
4
226/30
4
227/31
4
228/32
4
229/33
EQUIV
Y
N
2
4
35/230
4
36/231
4
37/232
4
38/233
4
39/234
4
40/235
4
41/236
4
237/42
4
238/43
4
239/44
4
240/45
5
Y
EQUIV

```

Y
.2
2
4
46T50/241T245
5
Y
ME,P12,QUAD//31,NUM
1
2
1
2
ME,P13,QUAD//31,NUM
1
2
1
2
ME,P17,QUAD//31,NUM
1
2
1
2
ME,P16,QUAD//31,NUM
1
32
1
32
EQUIV
Y
.08
2
1
Y
NOD,115/116/118T122/124/126/127/129T131/133T164/166/167,MOD
2
F/1/0
GO
$ MESH CONCRETE PATCHES
!UI YNS KEYBOARD(FALSE)
ME,P1,QUAD,NUM
1
1
1
1
LI,2#,BR,.9115,13
PA,2,2L,,2,44
Y
ME,P2,QUAD,NUM
1
5
1
5
PA,#,2L,,3,45
ME,P19,QUAD,NUM

```


1
1
1
1
LI,2#,BR,.0481,16
PA,#,2L,,20,46
ME,P20,QUAD,NUM
1
1
1
1
LI,2#,TR,0/-2.6667,44/45
PA,2#,2L,,44/45,48/49
ME,P21,QUAD,NUM
1
5
1
5
ME,P22,QUAD,NUM
1
1
1
1
LI,#,2G,,19,21
LI,#,2G,,45,23
PA,#,2L,,50,51
ME,P23,TRI,NUM
1
2
1
3
EQUIV
Y
1.5
2
4
209/112
4
210/110
5
Y
GR,#,,41.5625/5.92
LI,#,2G,,40,46
PA,2#,BR,52L,4
ME,P25,QUAD,NUM
1
3
1
3
MESH,P5,QUAD,NUM
1
2
1
2

```
MESH,P6,QUAD,NUM
1
4
1
4
EQUIV
Y
.05
2
3
MESH,P7,QUAD,NUM
1
5
1
5
EQUIV
Y
N
2
3
5
Y
GFEG,P24,,17/2,,ED4
CFEG,P24,QUAD
EQUIV
N
2
1
Y
7
$ CREATE SOIL PATCHES
LI,#,TR,0./-139.,46
PA,#,2L,,46,53
LI,3#,TR,0./-139.,48/49/51
PA,3#,2L,,48/49/51,54T56
LI,#,2G,,21,23
LI,#,2G,,46,21
LI,#,2G,,35,46
LI,4#,TR,28.5,57T59/27
PA,4#,2L,,57T59/27,60T63
LI,#,2G,,23,53
LI,#,TR,0./-139,64
PA,#,2L,,64,65
GR,3#,,0,57.25,0,37.9415,57.25,0,41.5625,57.25,0
LI,2#,2G,,58/59,59/60
PA,2#,2L,,23/24,66/67
LI,#,2G,,15,60
LI,#,TR,28.5,68
PA,#,2L,,68,69
$ MESH SOIL PATCHES
MESH,P26,QUAD,NUM
20
1
20
```

1
MESH, P27, QUAD, NUM
20
5
20
5
MESH, P28, QUAD, NUM
20
1
20
1
MESH, P34, QUAD, NUM
20
4
20
4
MESH, P35, QUAD, NUM
4
5
4
5
GR, 2#, , 48.6875, -3, 0, 48.6875, 38., 0
LI, #, 2G, , 63, 62
PA, 2#, BR, 70L, 32
GR, 2#, , 55.8125, -3, 0, 55.8125, 38., 0
LI, #, 2G, , 67, 66
PA, 2#, BR, 71L, 39
GFEG, P38, , 9/2, , ED4
CFEG, P38, QUAD
GFEG, P40, , 5/2, , ED4
CFEG, P40, QUAD
MESH, P41, QUAD, NUM
2
4
2
4
MESH, P29, QUAD, NUM
20
2
20
2
MESH, P31, QUAD, NUM
4
3
4
3
MESH, P30, QUAD, NUM
4
1
4
1
ME, P33, QUAD, NUM
4
2

```

4
2
MESH, P36, QUAD, NUM
4
4
4
4
MESH, P37, QUAD, NUM
4
4
4
4
EQUIV
N
2
1
Y
7
$ PFEG CONVECTION PATCHES TO ANNULUS FLOW
PFEG, P8, QUAD//31, 30
PFEG, P9, QUAD//31, 31
PFEG, P18, QUAD//31, 32
PFEG, P10/P14/P15, QUAD//31, 40
PFEG, P11/P16, QUAD//31, 41
PFEG, P12, QUAD//31, 42
PFEG, P13, QUAD//31, 43
PFEG, P17, QUAD//31, 44
$PFEG SOIL PATCHES
PFEG, P26TP31, QUAD, 300
PFEG, P33/P34/P38/P40/P41, QUAD, 300
PFEG, P35TP37, QUAD, 303
$ PFEG CONCRETE PATCHES
PFEG, P1, QUAD, 400
PFEG, P2/P19, QUAD, 401
PFEG, P20TP22/P24TP25/P5TP7, QUAD, 402
PFEG, P23, TRI/3/0, 402
$ ENCLOSURE 1 IS ANNULUS REGION
DFEG, 4L, VFAC, 60, 1
VFAC, 4L, REVERSE
DFEG, 37L, VFAC, 60, 1
DFEG, 41L, VFAC, 60, 1
DFEG, 40L, VFAC, 60, 1
DFEG, 5LT8L/33L/34L, VFAC, 60, 1
VFAC, 5LT8L/33L/34L, REVERSE
DFEG, 26L/36L/35L, VFAC, 60, 1
$ DFEG GROUND SURFACE H
LI, #, , 0/0/0/30/59
GFEG, 72L, F/1/0, 1
DFEG, 72L, TEMP, /75
DFEG, P35/P36, CONV, /70, 899, ED2
DFEG, P37, CONV, /70, 899, ED3
$ DOME AIR FLOW
LI, #, , 19/0/0/0/43
GFEG, 73L, F/1/0, 2

```

CFEG,73L,BAR/2/10
4
PFEG,73L,BAR/2/10,10005/1./260
DFEG,73L,TEMP,/90,,N900
\$ DFEG GROUND WATER TEMP
DFEG,P26TP29/P34,TEMP,/95,,ED2
\$ FIX ANNULUS FLOW INLET (IT HAS A NEGATIVE X COORDINATE)
BAR,97,DEL
NOD,114,DEL
GR,#,,0/-2
LI,#,2G,,74,31
GFEG,74L,F/1/0,2
EQUIV
N
2
4
115/903
5
Y
CFEG,74L,BAR/2/10
4
PFEG,74L,BAR/2/10,10005/1./250
\$ DFEG ANNULUS INLET AIR TEMP
DFEG,74L,TEMP,/80,,N902
NAME,MWTF
\$ CREATE PATCHES IN WASTE
LI,#,,2/0/0/0/.9771
LI,#,,28.4427/0/0/2/.9771
LI,#,,2.7606/0/0/30.4427/.9771
PA,#,2L,,3,77
PA,#,2L,,2,76
PA,#,2L,,1,75
LI,#,,0/5/0/0/.9771
LI,#,2G,,75,4
LI,#,,37.5625/0/0/0/5.47486
PA,#,EDG,,78/79/4/80
LI,#,,-36/0/0/35.7648/1.8767
PA,2#,BR,81L,45
PA,45,DEL
LI,#,,-37/0/0/36.67/2.77619
PA,2#,BR,82L,46
PA,46,DEL
LI,#,,-37.3/0/0/37.1873/3.6758
PA,2#,BR,83L,48
PA,48,DEL
LI,#,,-37.5/0/0/37.472/4.5753
PA,2#,BR,84L,50
PA,50,DEL
LI,#,,-37.5625/0/0/37.5625/6.40706
PA,#,2L,,80,85
PA,#,TR,0/.932157,54
PA,2#,TR,0/1.864314,54/55
PA,3#,TR,0/2.796471,55T57
LI,#,,-37.5625/0/0/37.5625/12

LI,#,, -37.5625/0/0/37.5625/13

PA,#,2L,,86,87

PA,#,TR,0/1,61

PA,2#,TR,0/2,61/62

PA,4#,TR,0/4,61T64

PA,8#,TR,0/8,61T68

PA,8#,TR,0/8,69T76

PA,47/49/51T53/61T84,REV

\$ MESH WASTE PATCHES

MESH,P44,QUAD,NUM

1

1

1

1

MESH,P43,QUAD,NUM

1

5

1

5

MESH,P42,TRI,NUM

1

1

1

MESH,P47,QUAD,NUM

7

1

7

1

NO,925,OFF,-2.74333

NO,927,OFF,-1.79812

NO,929,OFF,-.8529

NO,931,OFF,.00923

NO,933,OFF,1.0376

NO,935,OFF,1.9827

SET,ACTIVE,ALL

ME,P49,QUAD,NUM

7

1

7

1

ME,P51/53/52,QUAD,NUM

7

1

7

1

7

1

7

1

7

1

7

1

MESH,P54TP60,QUAD,NUM,1/7/1/7

MESH,P61TP84,QUAD,NUM,7/1/7/1
\$ PFEG WASTE PATCHES
PFEG,P42,TRI,501
PFEG,P43/P44,QUAD,501
PFEG,P47,QUAD,502
PFEG,P49,QUAD,503
PFEG,P51,QUAD,504
PFEG,P53,QUAD,505
PFEG,P52,QUAD,506
PFEG,P54,QUAD,507
PFEG,P55,QUAD,508
PFEG,P56,QUAD,509
PFEG,P57,QUAD,510
PFEG,P58,QUAD,511
PFEG,P59,QUAD,512
PFEG,P60,QUAD,513
PFEG,P61,QUAD,514
PFEG,P62,QUAD,515
PFEG,P63,QUAD,516
PFEG,P64,QUAD,517
PFEG,P65,QUAD,518
PFEG,P66,QUAD,519
PFEG,P67,QUAD,520
PFEG,P68,QUAD,521
PFEG,P69,QUAD,522
PFEG,P70,QUAD,523
PFEG,P71,QUAD,524
PFEG,P72,QUAD,525
PFEG,P73,QUAD,526
PFEG,P74,QUAD,527
PFEG,P75,QUAD,528
PFEG,P76,QUAD,529
PFEG,P77,QUAD,530
PFEG,P78,QUAD,531
PFEG,P79,QUAD,532
PFEG,P80,QUAD,533
PFEG,P81,QUAD,534
PFEG,P82,QUAD,535
PFEG,P83,QUAD,536
PFEG,P84,QUAD,537
\$ DFEG HEAT LOAD ON WASTE PATCHES
DFEG,P42TP44,HEAT,/601/3
DFEG,P47,HEAT,/602/3
DFEG,P49,HEAT,/603/3
DFEG,P51,HEAT,/604/3
DFEG,P53,HEAT,/605/3
DFEG,P52,HEAT,/606/3
DFEG,P54,HEAT,/607/3
DFEG,P55,HEAT,/608/3
DFEG,P56,HEAT,/609/3
DFEG,P57,HEAT,/610/3
DFEG,P58,HEAT,/611/3
DFEG,P59,HEAT,/612/3
DFEG,P60,HEAT,/613/3

DFEG,P61,HEAT,/614/3
DFEG,P62,HEAT,/615/3
DFEG,P63,HEAT,/616/3
DFEG,P64,HEAT,/617/3
DFEG,P65,HEAT,/618/3
DFEG,P66,HEAT,/619/3
DFEG,P67,HEAT,/620/3
DFEG,P68,HEAT,/621/3
DFEG,P69,HEAT,/622/3
DFEG,P70,HEAT,/623/3
DFEG,P71,HEAT,/624/3
DFEG,P72,HEAT,/625/3
DFEG,P73,HEAT,/626/3
DFEG,P74,HEAT,/627/3
DFEG,P75,HEAT,/628/3
DFEG,P76,HEAT,/629/3
DFEG,P77,HEAT,/630/3
DFEG,P78,HEAT,/631/3
DFEG,P79,HEAT,/632/3
DFEG,P80,HEAT,/633/3
DFEG,P81,HEAT,/634/3
DFEG,P82,HEAT,/635/3
DFEG,P83,HEAT,/636/3
DFEG,P84,HEAT,/637/3
\$ DFEG CONVECTION FROM TANK DOME TO AIR IN TANK DOME
DFEG,10L/33L/34L,CONV,/700,901
\$ DFEG CONVECTION FROM WASTE SURFACE TO AIR IN TANK DOME
DFEG,P42TP44,CONV,/701,901,ED2
DFEG,P47,CONV,/702,901,ED1
DFEG,P49,CONV,/703,901,ED1
DFEG,P51,CONV,/704,901,ED1
DFEG,P53,CONV,/705,901,ED1
DFEG,P52,CONV,/706,901,ED1
DFEG,P54,CONV,/707,901,ED2
DFEG,P55,CONV,/708,901,ED2
DFEG,P56,CONV,/709,901,ED2
DFEG,P57,CONV,/710,901,ED2
DFEG,P58,CONV,/711,901,ED2
DFEG,P59,CONV,/712,901,ED2
DFEG,P60,CONV,/713,901,ED2
DFEG,P61,CONV,/714,901,ED3
DFEG,P62,CONV,/715,901,ED3
DFEG,P63,CONV,/716,901,ED3
DFEG,P64,CONV,/717,901,ED3
DFEG,P65,CONV,/718,901,ED3
DFEG,P66,CONV,/719,901,ED3
DFEG,P67,CONV,/720,901,ED3
DFEG,P68,CONV,/721,901,ED3
DFEG,P69,CONV,/722,901,ED3
DFEG,P70,CONV,/723,901,ED3
DFEG,P71,CONV,/724,901,ED3
DFEG,P72,CONV,/725,901,ED3
DFEG,P73,CONV,/726,901,ED3
DFEG,P74,CONV,/727,901,ED3

DFEG,P75,CONV,/728,901,ED3
DFEG,P76,CONV,/729,901,ED3
DFEG,P77,CONV,/730,901,ED3
DFEG,P78,CONV,/731,901,ED3
DFEG,P79,CONV,/732,901,ED3
DFEG,P80,CONV,/733,901,ED3
DFEG,P81,CONV,/734,901,ED3
DFEG,P82,CONV,/735,901,ED3
DFEG,P83,CONV,/736,901,ED3
DFEG,P84,CONV,/737,901,ED3
\$ DFEG EVAPORATION FROM WASTE SURFACE
DFEG,P42TP44,HEAT,/801/2,,ED2
LOCK,1
DFEG,P47,HEAT,/802/2,,ED1
LOCK,1
DFEG,P49,HEAT,/803/2,,ED1
LOCK,1
DFEG,P51,HEAT,/804/2,,ED1
LOCK,1
DFEG,P53,HEAT,/805/2,,ED1
LOCK,1
DFEG,P52,HEAT,/806/2,,ED1
LOCK,1
DFEG,P54,HEAT,/807/2,,ED2
LOCK,1
DFEG,P55,HEAT,/808/2,,ED2
LOCK,1
DFEG,P56,HEAT,/809/2,,ED2
LOCK,1
DFEG,P57,HEAT,/810/2,,ED2
LOCK,1
DFEG,P58,HEAT,/811/2,,ED2
LOCK,1
DFEG,P59,HEAT,/812/2,,ED2
LOCK,1
DFEG,P60,HEAT,/813/2,,ED2
LOCK,1
DFEG,P61,HEAT,/814/2,,ED3
LOCK,1
DFEG,P62,HEAT,/815/2,,ED3
LOCK,1
DFEG,P63,HEAT,/816/2,,ED3
LOCK,1
DFEG,P64,HEAT,/817/2,,ED3
LOCK,1
DFEG,P65,HEAT,/818/2,,ED3
LOCK,1
DFEG,P66,HEAT,/819/2,,ED3
LOCK,1
DFEG,P67,HEAT,/820/2,,ED3
LOCK,1
DFEG,P68,HEAT,/821/2,,ED3
LOCK,1
DFEG,P69,HEAT,/822/2,,ED3

LOCK,1
DFEG,P70,HEAT,/823/2,,ED3
LOCK,1
DFEG,P71,HEAT,/824/2,,ED3
LOCK,1
DFEG,P72,HEAT,/825/2,,ED3
LOCK,1
DFEG,P73,HEAT,/826/2,,ED3
LOCK,1
DFEG,P74,HEAT,/827/2,,ED3
LOCK,1
DFEG,P75,HEAT,/828/2,,ED3
LOCK,1
DFEG,P76,HEAT,/829/2,,ED3
LOCK,1
DFEG,P77,HEAT,/830/2,,ED3
LOCK,1
DFEG,P78,HEAT,/831/2,,ED3
LOCK,1
DFEG,P79,HEAT,/832/2,,ED3
LOCK,1
DFEG,P80,HEAT,/833/2,,ED3
LOCK,1
DFEG,P81,HEAT,/834/2,,ED3
LOCK,1
DFEG,P82,HEAT,/835/2,,ED3
LOCK,1
DFEG,P83,HEAT,/836/2,,ED3
LOCK,1
DFEG,P84,HEAT,/837/2,,ED3
LOCK,1
!UI YNS_KEYBOARD(FALSE)
EQUIV
N
2
4
904/907
4
906/913
5
Y
EQUIV
N
2
4
912/919
4
918/920
5
Y
SET,ACTIVE,ALL
NAME,,SHOW
SET,PH2,ON
SET,ACTIVE,NONE

PA,42T84,PL
NODE,PA42T84,PL
ELE,PA42T84,PL
NAME,WASTE,ADD
WIN
4
PL
NAME,WASTE,ERASE
PA,42T44,PL
NODE,PA42T44,PL
ELE,PA42T44,PL
NAME,LAYER01,ADD
PA,47,PL
NODE,PA47,PL
ELE,PA47,PL
NAME,LAYER01,ERASE
NAME,LAYER02,ADD
PA,49,PL
NODE,PA49,PL
ELE,PA49,PL
NAME,LAYER02,ERASE
NAME,LAYER03,ADD
PA,51,PL
NAME,LAYER03,ERASE
NODE,PA51,PL
ELE,PA51,PL
NAME,LAYER04,ADD
PA,53,PL
NAME,LAYER04,ERASE
NODE,PA53,PL
ELE,PA53,PL
NAME,LAYER05,ADD
NAME,LAYER05,ERASE
PA,52,PL
NODE,PA52,PL
ELE,PA52,PL
NAME,LAYER06,ADD
PA,54,PL
NAME,LAYER06,ERASE
NODE,PA54,PL
ELE,PA54,PL
NAME,LAYER07,ADD
PA,55,PL
NAME,LAYER07,ERASE
NODE,PA55,PL
ELE,PA55,PL
NAME,LAYER08,ADD
PA,56,PL
NAME,LAYER08,ERASE
NODE,PA56,PL
ELE,PA56,PL
NAME,LAYER09,ADD
PA,56,PL
PA,57,PL

NAME,LAYER09,ERASE
NODE,PA57,PL
ELE,PA57,PL
NAME,LAYER10,ADD
PA,58,PL
NAME,LAYER10,ERASE
NODE,PA58,PL
ELE,PA58,PL
NAME,LAYER11,ADD
PA,59,PL
NAME,LAYER11,ERASE
NODE,PA59,PL
ELE,PA59,PL
NAME,LAYER12,ADD
PA,60,PL
NAME,LAYER12,ERASE
NODE,PA60,PL
ELE,PA60,PL
NAME,LAYER13,ADD
PA,61,PL
NAME,LAYER13,ERASE
ELE,PA61,PL
NODE,PA61,PL
NAME,LAYER14,ADD
PA,62,PL
NAME,LAYER14,ERASE
NODE,PA62,PL
ELE,PA62,PL
NAME,LAYER15,ADD
PA,63,PL
NAME,LAYER15,ERASE
NODE,PA63,PL
ELE,PA63,PL
NAME,LAYER16,ADD
PA,64,PL
NAME,LAYER16,ERASE
NODE,PA66,PL
NODE,PA66,ERASE
NODE,PA64,PL
ELE,PA64,PL
NAME,LAYER17,ADD
PA,65,PL
NAME,LAYER17,ERASE
NODE,PA65,PL
ELE,PA65,PL
NAME,LAYER18,ADD
PA,66,PL
NAME,LAYER18,ERASE
NODE,PA66,PL
ELE,PA66,PL
NAME,LAYER19,ADD
PA,67,PL
NAME,LAYER19,ERASE
NODE,PA67,PL

ELE, PA67, PL
NAME, LAYER20, ADD
PA, 68, PL
NAME, LAYER20, ERASE
NODE, PA68, PL
ELE, PA68, PL
NAME, LAYER21, ADD
PA, 69, PL
NAME, LAYER21, ERASE
NODE, PA69, PL
ELE, PA69, PL
NAME, LAYER22, ADD
PA, 70, PL
NAME, LAYER22, ERASE
NODE, PA23, PL
NODE, PA23, ERASE
NODE, PA70, PL
ELE, PA70, PL
NAME, LAYER23, ADD
PA, 71, PL
NAME, LAYER23, ERASE
NODE, PA71, PL
ELE, PA71, PL
NAME, LAYER24, ADD
PA, 72, PL
NAME, LAYER24, ERASE
NODE, PA72, PL
ELE, PA72, PL
NAME, LAYER25, ADD
PA, 73, PL
NAME, LAYER25, ERASE
NODE, PA73, PL
ELE, PA73, PL
NAME, LAYER26, ADD
PA, 74, PL
NAME, LAYER26, ERASE
NODE, PA74, PL
ELE, PA74, PL
NAME, LAYER27, ADD
PA, 75, PL
NAME, LAYER27, ERASE
NODE, PA75, PL
ELE, PA75, PL
NAME, LAYER28, ADD
PA, 76, PL
NAME, LAYER28, ERASE
NODE, PA76, PL
ELE, PA76, PL
NAME, LAYER29, ADD
PA, 77, PL
NAME, LAYER29, ERASE
NODE, PA77, PL
ELE, PA77, PL
NAME, LAYER30, ADD

PA,78,PL
NAME,LAYER30,ERASE
NODE,PA78,PL
ELE,PA78,PL
NAME,LAYER31,ADD
PA,79,PL
NAME,LAYER31,ERASE
NODE,PA79,PL
ELE,PA79,PL
NAME,LAYER32,ADD
PA,80,PL
NAME,LAYER32,ERASE
NODE,PA80,PL
ELE,PA80,PL
NAME,LAYER33,ADD
PA,81,PL
NAME,LAYER33,ERASE
NODE,PA81,PL
ELE,PA81,PL
NAME,LAYER34,ADD
PA,82,PL
NAME,LAYER34,ERASE
NODE,PA82,PL
ELE,PA82,PL
NAME,LAYER35,ADD
PA,83,PL
NAME,LAYER35,ERASE
NODE,PA83,PL
ELE,PA83,PL
NAME,LAYER36,ADD
PA,84,PL
NAME,LAYER36,ERASE
NODE,PA84,PL
ELE,PA84,PL
NAME,LAYER37,ADD
PL
SET,ACTIVE,NONE
LI,1T10,PL
NODE,1LT10,PL
ELE,1LT10,PL
NAME,PRIMARY,ADD
LI,9,ERASE
LI,33/34,PL
NODE,33L/34L,PL
ELE,33L/34L,PL
NAME,PRIMARY,REPLACE
RUN,YBEAM
SET,PH2,OFF
PL
NAME,LAYER01,PL
N
SH,ED2,PA42T44
DFEG,PA42T44,VFAC,901,101,ED2
DFEG,4LT8/10L/33L/34L,VFAC,901,101

NAME, LAYER02, PL
N
PL
SH, ED4, PA47
DFEG, PA47, VFAC, 902, 102, ED1
DFEG, 5LT8/10L/33L/34L, VFAC, 902, 102
BAR, 4L, PL
ELE, 9, SH
VFAC, ELE9T12, ADD
102
902
GO
NAME, LAYER03, PL
N
PL
SH, ED4, PA49
DFEG, PA49, VFAC, 903, 103, ED1
DFEG, 5LT8/10L/33L/34L, VFAC, 903, 103
ELE, 4L, PL
VFAC, ELE10T12, ADD
103
903
G
NAME, LAYER04, PL
N
PL
SH, ED4, PA51
DFEG, PA51, VFAC, 904, 104, ED1
DFEG, 5LT8/10L/33L/34L, VFAC, 904, 104
ELE, 4L, PL
VFAC, ELE11T12, ADD
104
904
G
NAME, LAYER05, PL
N
PL
SH, ED4, PA53
DFEG, PA53, VFAC, 905, 105, ED1
DFEG, 5LT8/10L/33L/34L, VFAC, 905, 105
ELE, 4L, PL
VFAC, ELE12, ADD
105
905
NAME, LAYER06, PL
N
SH, ED4, PA52
DFEG, PA52, VFAC, 906, 106, ED1
DFEG, 5LT8/10L/33L/34L, VFAC, 906, 106
NAME, LAYER07, PL
N
PL
SH, ED2, PA54
DFEG, PA54, VFAC, 907, 107, ED2

DFEG,6LT8/10L/33L/34L,VFAC,907,107
ELE,5L,PL
VFAC,ELE14T19,ADD
107
907
GO
NAME,LAYER08,PL
N
PL
SH,ED2,PA55
DFEG,PA55,VFAC,908,108,ED2
DFEG,6LT8/10L/33L/34L,VFAC,908,108
ELE,5L,PL
VFAC,ELE15T19,ADD
108
908
GO
NAME,LAYER09,PL
N
PL
SH,ED2,PA56
DFEG,PA56,VFAC,909,109,ED2
DFEG,6LT8/10L/33L/34L,VFAC,909,109
ELE,5L,PL
VFAC,ELE16T19,ADD
109
909
GO
NAME,LAYER10,PL
N
PL
SH,ED2,PA57
DFEG,PA57,VFAC,910,110,ED2
DFEG,6LT8/10L/33L/34L,VFAC,910,110
ELE,5L,PL
VFAC,ELE17T19,ADD
110
910
GO
NAME,LAYER11,PL
N
PL
SH,ED2,PA58
DFEG,PA58,VFAC,911,111,ED2
DFEG,6LT8/10L/33L/34L,VFAC,911,111
ELE,5L,PL
VFAC,ELE18T19,ADD
111
911
GO
NAME,LAYER12,PL
N
PL
SH,ED2,PA59

DFEG, PA59, VFAC, 912, 112, ED2
DFEG, 6LT8/10L/33L/34L, VFAC, 912, 112
ELE, 5L, PL
VFAC, ELE19, ADD
112
912
NAME, LAYER13, PL
N
PL
SH, ED2, PA60
DFEG, PA60, VFAC, 913, 113, ED2
DFEG, 6LT8/10L/33L/34L, VFAC, 913, 113
NAME, LAYER14, PL
N
PL
SH, ED2, PA61
DFEG, PA61, VFAC, 914, 114, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 914, 114
ELE, 6L, PL
VFAC, ELE21T27, ADD
114
914
GO
NAME, LAYER15, PL
N
PL
SH, ED3, PA62
DFEG, PA62, VFAC, 915, 115, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 915, 115
ELE, 6L, PL
VFAC, ELE22T27, ADD
115
915
GO
NAME, LAYER16, PL
N
PL
SH, ED3, PA63
DFEG, PA63, VFAC, 916, 116, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 916, 116
ELE, 6L, PL
VFAC, ELE23T27, ADD
116
916
GO
NAME, LAYER17, PL
N
PL
SH, ED3, PA64
DFEG, PA64, VFAC, 917, 117, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 917, 117
ELE, 6L, PL
VFAC, ELE24T27, ADD
117

917
GO
NAME, LAYER18, PL
N
PL
SH, ED3, PA65
DFEG, PA65, VFAC, 918, 118, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 918, 118
ELE, 6L, PL
VFAC, ELE25T27, ADD
118
918
GO
NAME, LAYER19, PL
N
PL
SH, ED3, PA66
DFEG, PA66, VFAC, 919, 119, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 919, 119
ELE, 6L, PL
VFAC, ELE26T27, ADD
119
919
GO
NAME, LAYER20, PL
N
PL
SH, ED3, PA67
DFEG, PA67, VFAC, 920, 120, ED3
DFEG, 7LT8/10L/33L/34L, VFAC, 920, 120
ELE, 6L, PL
VFAC, ELE27, ADD
120
920
NAME, LAYER21, PL
N
PL
SH, ED3, PA68
DFEG, PA68, VFAC, 921, 121, ED3
DFEG, 7L/8L/10L/33L/34L, VFAC, 921, 121
NAME, LAYER22, PL
N
PL
SH, ED3, PA69
DFEG, PA69, VFAC, 922, 122, ED3
DFEG, 8L/10L/33L/34L, VFAC, 922, 122
ELE, 7L, PL
VFAC, ELE29T43, ADD
122
922
GO
NAME, LAYER23, PL
N
PL

SH,ED3,PA70
DFEG,PA70,VFAC,923,123,ED3
DFEG,8L/10L/33L/34L,VFAC,923,123
ELE,7L,PL
VFAC,ELE30T43,ADD
123
923
GO
NAME,LAYER24,PL
N
PL
SH,ED3,PA71
DFEG,PA71,VFAC,924,124,ED3
DFEG,8L/10L/33L/34L,VFAC,924,124
ELE,7L,PL
VFAC,ELE31T43,ADD
124
924
GO
NAME,LAYER25,PL
N
PL
SH,ED3,PA72
DFEG,PA72,VFAC,925,125,ED3
DFEG,8L/10L/33L/34L,VFAC,925,125
ELE,7L,PL
VFAC,ELE32T43,ADD
125
925
GO
NAME,LAYER26,PL
N
PL
SH,ED3,PA73
DFEG,PA73,VFAC,926,126,ED3
DFEG,8L/10L/33L/34L,VFAC,926,126
ELE,7L,PL
VFAC,ELE33T43,ADD
126
926
GO
NAME,LAYER27,PL
N
PL
SH,ED3,PA74
DFEG,PA74,VFAC,927,127,ED3
DFEG,8L/10L/33L/34L,VFAC,927,127
ELE,7L,PL
VFAC,ELE34T43,ADD
127
927
GO
NAME,LAYER28,PL
N

PL
 SH, ED3, PA75
 DFEG, PA75, VFAC, 928, 128, ED3
 DFEG, 8L/10L/33L/34L, VFAC, 928, 128
 ELE, 7L, PL
 VFAC, ELE35T43, ADD
 128
 928
 GO
 NAME, LAYER29, PL
 N
 PL
 SH, ED3, PA76
 DFEG, PA76, VFAC, 929, 129, ED3
 DFEG, 8L/10L/33L/34L, VFAC, 929, 129
 ELE, 7L, PL
 VFAC, ELE36T43, ADD
 129
 929
 GO
 NAME, LAYER30, PL
 N
 PL
 SH, ED3, PA77
 DFEG, PA77, VFAC, 930, 130, ED3
 DFEG, 8L/10L/33L/34L, VFAC, 930, 130
 ELE, 7L, PL
 VFAC, ELE37T43, ADD
 130
 930
 GO
 NAME, LAYER31, PL
 N
 PL
 SH, ED3, PA78
 DFEG, PA78, VFAC, 931, 131, ED3
 DFEG, 8L/10L/33L/34L, VFAC, 931, 131
 ELE, 7L, PL
 VFAC, ELE38T43, ADD
 131
 931
 GO
 NAME, LAYER32, PL
 N
 PL
 SH, ED3, PA79
 DFEG, PA79, VFAC, 932, 132, ED3
 DFEG, 8L/10L/33L/34L, VFAC, 932, 132
 ELE, 7L, PL
 VFAC, ELE39T43, ADD
 132
 932
 GO
 NAME, LAYER33, PL

N
PL
SH, ED3, PA80
DFEG, PA80, VFAC, 933, 133, ED3
DFEG, 8L/10L/33L/34L, VFAC, 933, 133
ELE, 7L, PL
VFAC, ELE40T43, ADD
133
933
GO
NAME, LAYER34, PL
N
PL
SH, ED3, PA81
DFEG, PA81, VFAC, 934, 134, ED3
DFEG, 8L/10L/33L/34L, VFAC, 934, 134
ELE, 7L, PL
VFAC, ELE41T43, ADD
134
934
GO
NAME, LAYER35, PL
N
PL
SH, ED3, PA82
DFEG, PA82, VFAC, 935, 135, ED3
DFEG, 8L/10L/33L/34L, VFAC, 935, 135
ELE, 7L, PL
VFAC, ELE42T43, ADD
135
935
GO
NAME, LAYER36, PL
N
PL
SH, ED3, PA83
DFEG, PA83, VFAC, 936, 136, ED3
DFEG, 8L/10L/33L/34L, VFAC, 936, 136
ELE, 7L, PL
VFAC, ELE43, ADD
136
936
NAME, LAYER37, PL
N
PL
SH, ED3, PA84
DFEG, PA84, VFAC, 937, 137, ED3
DFEG, 8L/10L/33L/34L, VFAC, 937, 137

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