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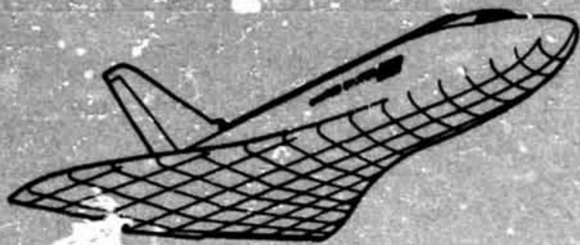

DATA CORRELATION AND ANALYSIS OF ARC TUNNEL AND WIND TUNNEL TESTS OF RSI JOINTS AND GAPS

PHASE II FINAL REPORT

VOLUME II — DATA REPORT
PART 2

NAS9-14012 DRD MA-384T 19 MAY 1975

MCDONNELL DOUGLAS ASTRONAUTICS COMPANY • EAST

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FOREWORD

This report summarizes the work conducted by McDonnell Douglas Astronautics Company-East (MDAC-E) in St. Louis, Missouri for the Structures and Mechanics Division of the NASA Johnson Space Center (NASA-JSC) under Contract NAS9-14012, "Data Correlation and Analysis of Arc Tunnel and Wind Tunnel Test of RSI Joints and Gaps, Phase II." This final report consists of two volumes: Volume I - Technical Report and Volume II - Data Base, Part 1 and Part 2. The period of p rformance was from 20 May 1974 thru 19 May 1975.

Mr. Donald J. Tillian was the NASA Technical Monitor for this study; Messrs. H. E. Christensen and H. W. Kipp were the MDAC Principal Investigator and Study Manager, respectively. Significant contributions to this study were made by A. E. Bruns, M. B. Donovan, L. H. Ebbesmeyer, E. A. Eiswirth and T. W. Parkinson. The cooperation of numerous NASA Personnel at Ames Research Center, Johnson Space Center and Langley Research Center in providing experimental data, supplemental calculations and valuab[illegible] unsel was instrumental to the successful completion of this study. We are appreciative of the cooperation from the following for supplying test data; C. D. Scott and L. P. Murray of JSC, W. K. Lockman and F. J. Centolanzi of Ames, D. A. Throckmorton and I. Weinstein of LaRC, and G. W. Mauss and C. B. Blumer of Rockwell International.

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5.0 NASA/AMES, 3.5 FOOT H.W.T. TESTS OF LONG IN-LINE GAP

Thin skin models with a long in-line gap were tested in the Ames 3.5 foot H.W.T., Figure 5.0-1. Thermocouples were installed along the top of the panel and along the faces of the gap. These are shown in Section 5.1. Gap widths of zero, 0.127cm and 0.254 cm for a gap depth of zero, 1.0 cm, 2.0 cm and 3.81 cm and for a gap length of 101.6 and 30.48 centimeters were tested at 0, 5, 10 and 15 degree orientation to the flow. Tests were conducted at a free stream Mach number of 5.1 and Reynolds number per meter of 1.64×10^6, 3.28×10^6 and 6.56×10^6. Figure 5.0-2 is a complete run schedule.

AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

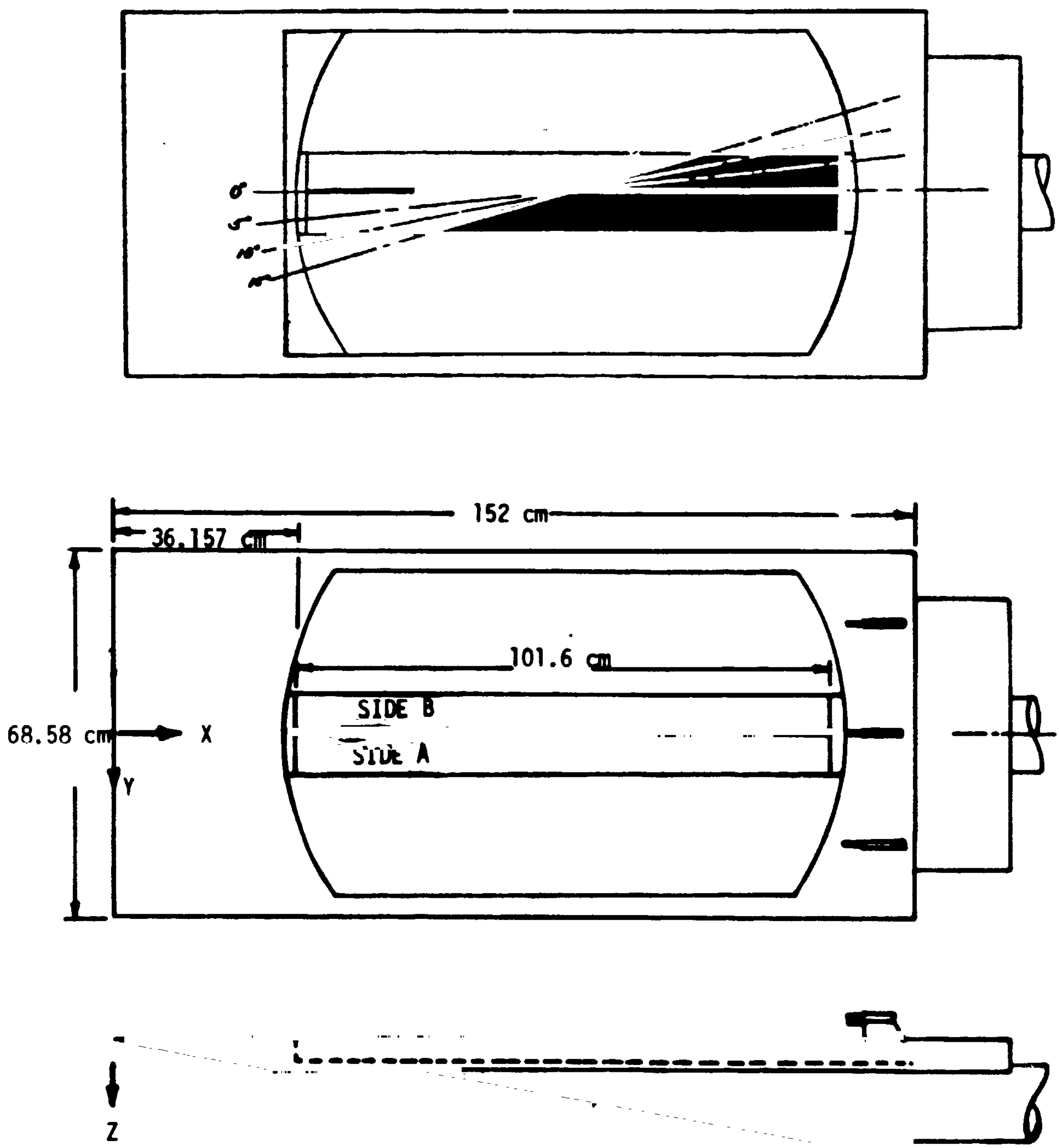


FIGURE 5.0-1

RUN SCHEDULE

SINGLE IN-LINE GAP TESTED IN THE AMES 3.5 H.W.T.
MODEL OH-43
TEST SUPERVISED BY C. D. BLUMER

RUN NO.	R_N ($X10^6$/m)	GAP WIDTH (cm)	GAP DEPTH (cm)	GAP LENGTH (cm)	GAP ORIENT. ANGLE (DEG)	T/C SCHEDULE	MODULE POSITION SCHEDULE	REMARKS
1	1.64	0.127	0	101.6	0	2	1	TUNNEL CONDITIONS UNSTEADY, WILL RE-RUN
2	3.28							
3	1.64							GAP FILLED WITH DENTAL PLASTER
4	1.64							L.E.1
5	3.28							L.E.1
6	1.64		2.032			1		
7	3.28							
8	6.56							
9	1.64					4		L.E.1
10	3.28							
11	6.56							
12	6.56		0			2		
13	6.56		3.81			5D		
14	3.28							
15	1.64							
16	6.56		1.016			3A		
17	3.28							
18	1.64							
19	1.64		2.032	30.48 (FWD)		6H	2	
20	3.28							
21	1.64	0.254						
22	3.28							
23	3.28				5	6I		
24	1.64							
25	1.64	0.127						
26	3.28							
27	1.64				10			
28	3.28							
29	1.64	0.254						
30	3.28							
31	3.28				15			
32	1.64							
33	3.28	0.127						
34	1.64							
35	6.56					6J	3	
36		0.254						
37								
38		0.127						
39					5			
40		0.254						
41								
42		0.127						

FIGURE 5.0-2

RUN SCHEDULE

SINGLE IN-LINE GAP TESTED IN THE AMES 3.5 H.W.T.
MODEL OH-43
TEST SUPERVISED BY C. D. BLUMER

RUN NO.	R_N ($X10^6$/m)	GAP WIDTH (cm)	GAP DEPTH (cm)	GAP LENGTH (cm)	GAP ORIENT. ANGLE (DEG)	T/C SCHEDULE	MODULE POSITION SCHEDULE	REMARKS
43	1.64	0.254	1.016	101.6	0	3A	1	L.E.1
44	3.28							L.E.1
45	6.56							
46	1.64		2.037			1		
47	3.28							
48	6.56							
49	6.56					4		
50	1.64					4		
51	3.28	0.254	2.032	101.6				
52	1.64	0.063				5D		
53	3.28							
54	1.64	0.254	3.81			15D		TOTAL TEMP. GAP PROBE IN
55	3.28							
56	6.56							
57	3.28				10			
58	1.64				10			
59	3.28				5			
60					15			
61		0.127			15			
62					10			
63	6.56				10			
64	3.28				5			
65	6.56	0.063	2.032		0	5D		
66	1.64		1.016			3A		
67	3.28							
68	6.56							
69	6.56		0.508					
70	1.64							
71	3.28							
72	1.64	0.127						
73	3.28							
74	6.56							
75	1.64		0.381	30.48		5E	4	TOTAL TEMP.RAKE IN (MOD.6)
76	3.28	0.127	0.381	(FWD)				
77	6.56							
78	1.64				5	5F		
79	3.28					5G		
80	3.28				10			
81	1.64							
82	1.64				15			

FIGURE 5.0-2
CONT.

RUN SCHEDULE

SINGLE IN-LINE GAP TESTED IN THE AMES 3.5 H.W.T.
MODEL OH-43
TEST SUPERVISED BY C. D. BLUMER

RUN NO.	R_N ($\times 10^6$/m)	GAP WIDTH (cm)	GAP DEPTH (cm)	GAP LENGTH (cm)	GAP ORIENT. ANGLE (DEG)	T/C SCHEDULE	MODULE POSITION SCHEDULE	REMARKS
83	3.28	0.127	0.381	30.48	15	5G	4	
84	3.28	0.254		(FWD)				
85	1.64							
86	1.64				0	5E		
87	3.28							
88	6.36							
89	1.64	0.127	2.032					
90	3.28							
91	6.56		3.81	30.48		5H	5	
92	6.56			(AFT)	15			
93	6.56	0.254						

FIGURE 5.0-2
CONC.

5.1 Model Description and Instrumentation Location - The test configuration consisted of a thin skin model inserted into a 68.6 x 152.4 cm carrier plate wedge. Figure 5.0-1 shows the model inserted in the carrier plate. The joint configuration was a single, in-line, gap of either 30.48 cm (12 in) or 101.6 cm (40 in) length. The test matrix included four flow orientations, three gap widths, and four gap depths. A run schedule is given in Figure 5.0-2 which defines the test conditions (i.e., gap width, depth, length, etc) for each run.

The model was heavily instrumented to obtain heating data in the presence of laminar, transitional and turbulent boundary layers, and to investigate the effect of tile orientation for several gap width settings. Instrumentation included total temperature and pressure probes to define the free stream conditions, thermocouples along the gap length to define surface and gap heating, and instrumented modules to further define heating distributions.

The total temperature and pressure probes were mounted on the downstream end of the wedge at three spanwise (Y) locations as seen in Figure 5.0-1. These probes were used to define the free stream conditions for each test run.

The thermocouples along the gap length are shown graphically in Figure 5.1-1. This instrumentation consisted of one row of thermocouples along the top surface of tile at Y = -0.200 in and two rows of thermocouples near the top of the gap at depths (Z) of 0.100 and 0.200 inch. Each row contained 25 thermocouples. The axial location of each thermocouple is given in Figure 5.1-2.

Thermocouple locations on the instrumented modules are given in Figure 5.1-3 for each of the modules used. During the test program, five different module arrangements or positions were employed as defined in Figure 5.1-4. This figure gives for each arrangement, the instrumented modules used and their axial location. The reader is referred back to the run schedule (Figure 5.0-2) which cross-references the module position used during each run. It is noted, that not all available thermocouples were connected during a run. The thermocouple hookup schedule is given in Figure 5.1-5, and again the reader is referred to Figure 5.0-2 to determine the applicable T/C schedule for each run.

Nominal gap widths investigated during the test program were 0, 0.025, 0.050 and 0.100 inches. For each run, the actual gap width was measured at various axial locations, and are recorded in Figure 5.1-6.

AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL
RIGHT SIDE INSTRUMENTATION

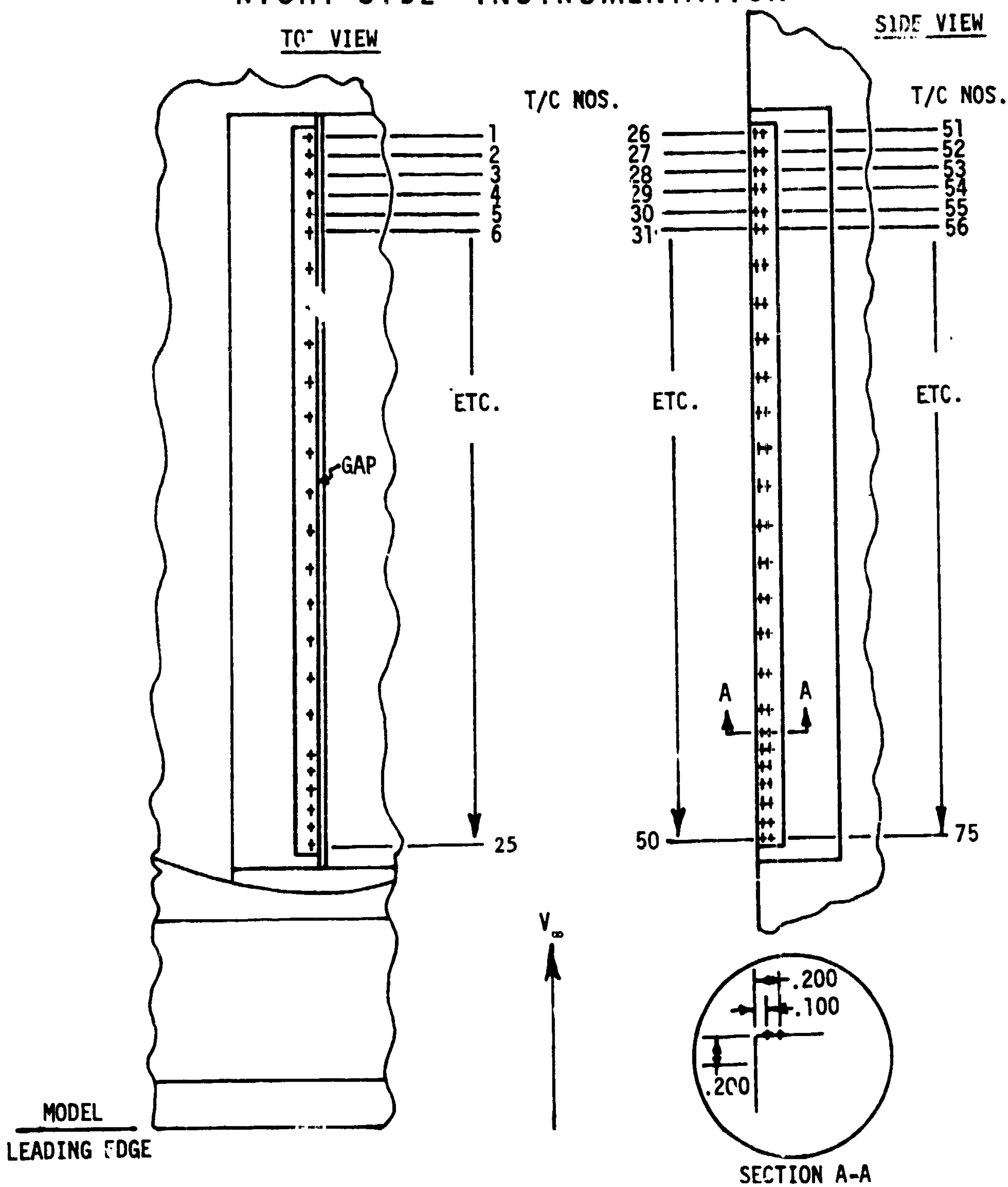


FIGURE 5.1-1

THERMOCOUPLE LOCATIONS
AMES 3.5 FOOT H.W.T. INLINE GAP MODEL

T/C NUMBERS ROW 1	ROW 2	ROW 3	X_1 DISTANCE FROM LEADING EDGE (IN)	X_2 DISTANCE FROM START OF GAP (IN)
1	26	51	53.244	39.009
2	27	52	52.246	38.011
3	28	53	51.246	37.011
4	29	54	50.247	36.012
5	30	55	49.249	35.014
6	31	56	48.250	34.015
7	32	57	46.249	32.014
8	33	58	44.242	30.007
9	34	59	42.247	28.012
10	35	60	40.237	26.002
11	36	61	38.237	24.002
12	37	62	36.238	22.003
13	38	63	34.238	20.003
14	39	64	32.237	18.002
15	40	65	30.237	16.002
16	41	66	28.237	14.002
17	42	67	26.237	12.002
18	43	68	24.236	10.001
19	44	69	22.236	8.001
20	45	70	20.233	5.998
21	46	71	19.237	5.002
22	47	72	18.231	3.996
23	48	73	17.231	2.996
24	49	74	16.235	2.000
25	50	75	15.237	1.002

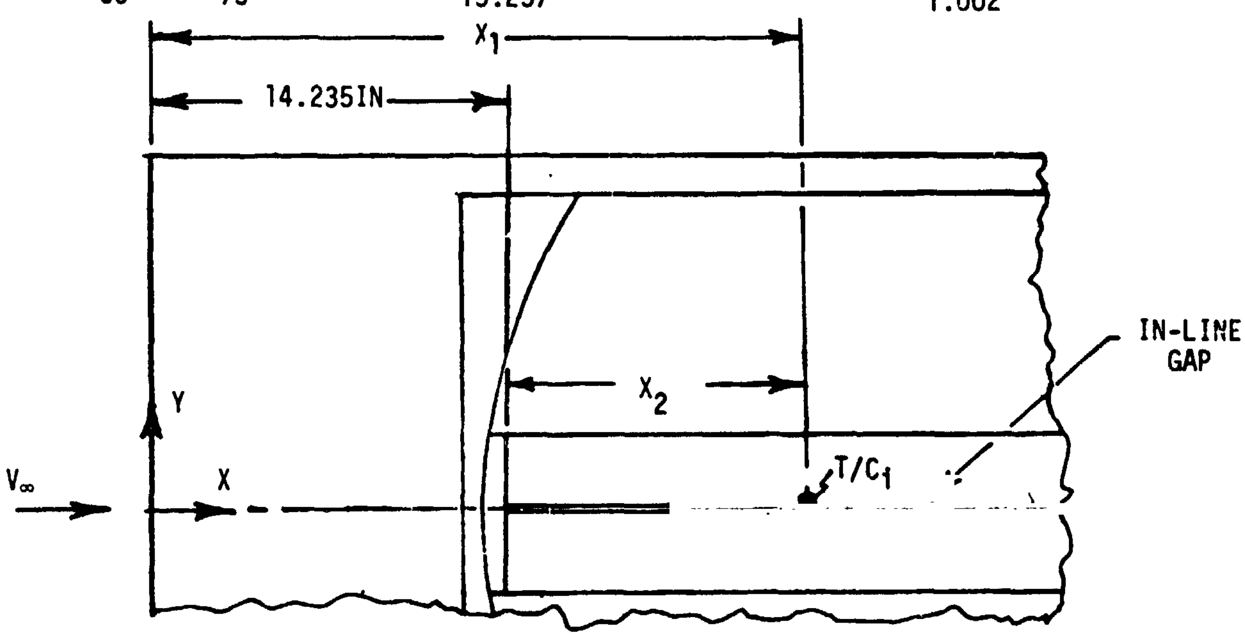
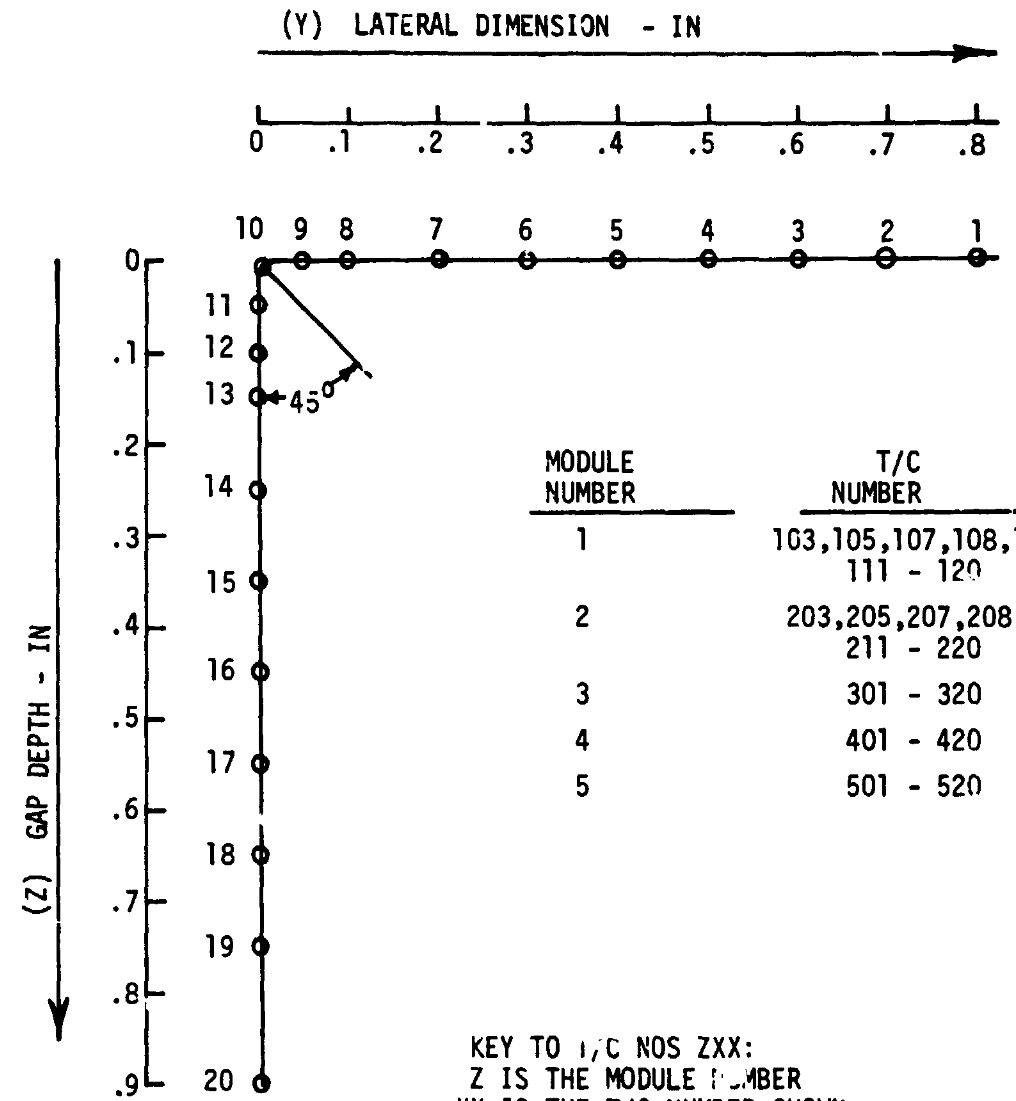


FIGURE 5.1-2

THERMOCOUPLE LOCATIONS ON THE INSTRUMENTED MODULES
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL



MODULE NUMBER	T/C NUMBER
1	103,105,107,108,110, 111 - 120
2	203,205,207,208,210, 211 - 220
3	301 - 320
4	401 - 420
5	501 - 520

KEY TO T/C NOS ZXX:
Z IS THE MODULE NUMBER
XX IS THE T/C NUMBER SHOWN
IN THE FIGURE

FIGURE 5.1-3

MODULE POSITIONS AND THERMOCOUPLE LOCATIONS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODULE

o ALL DIMENSIONS IN INCHES

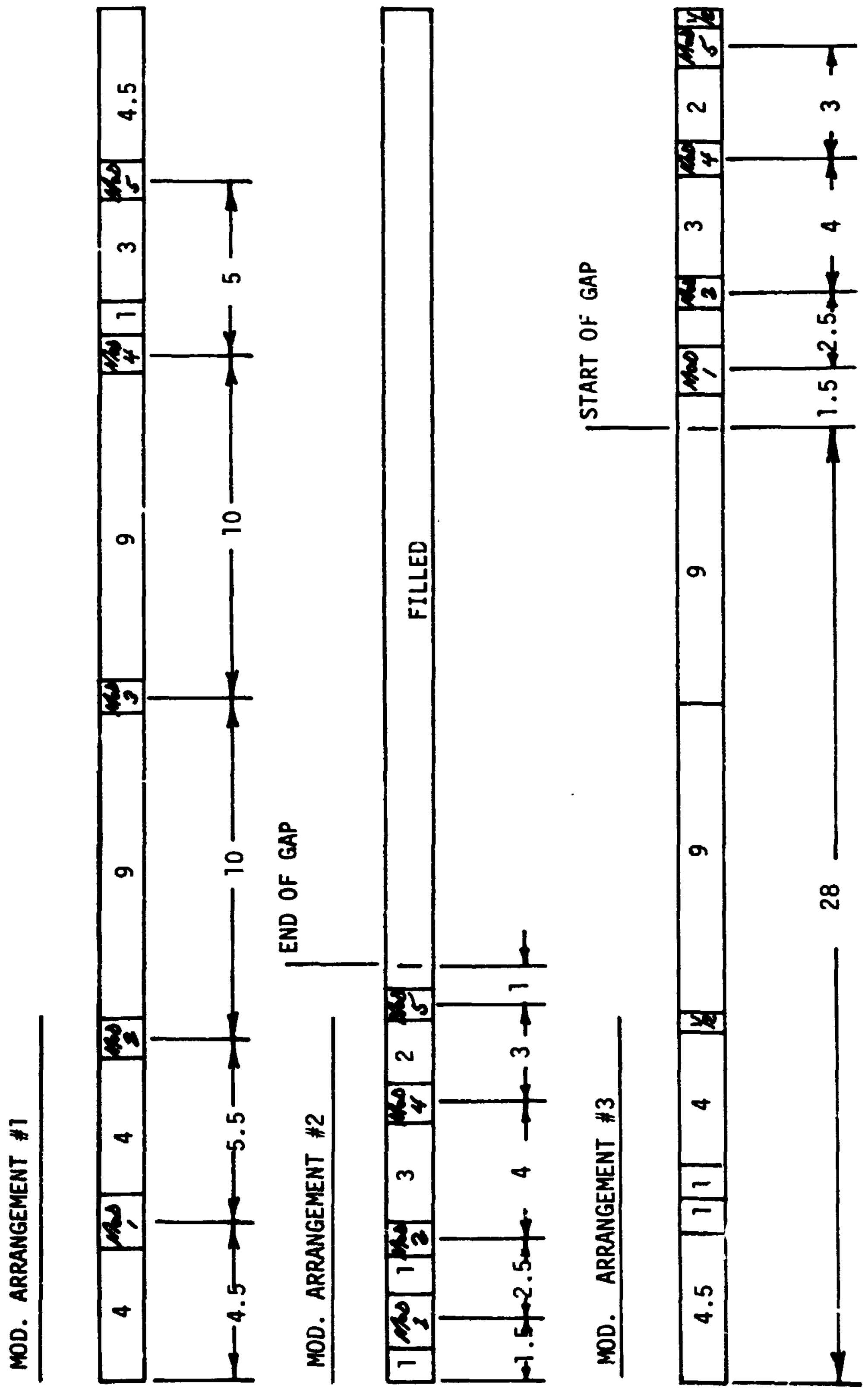


FIGURE 5.1-4

MODULE POSITIONS AND THERMOCOUPLE LOCATIONS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

o ALL DIMENSIONS IN INCHES

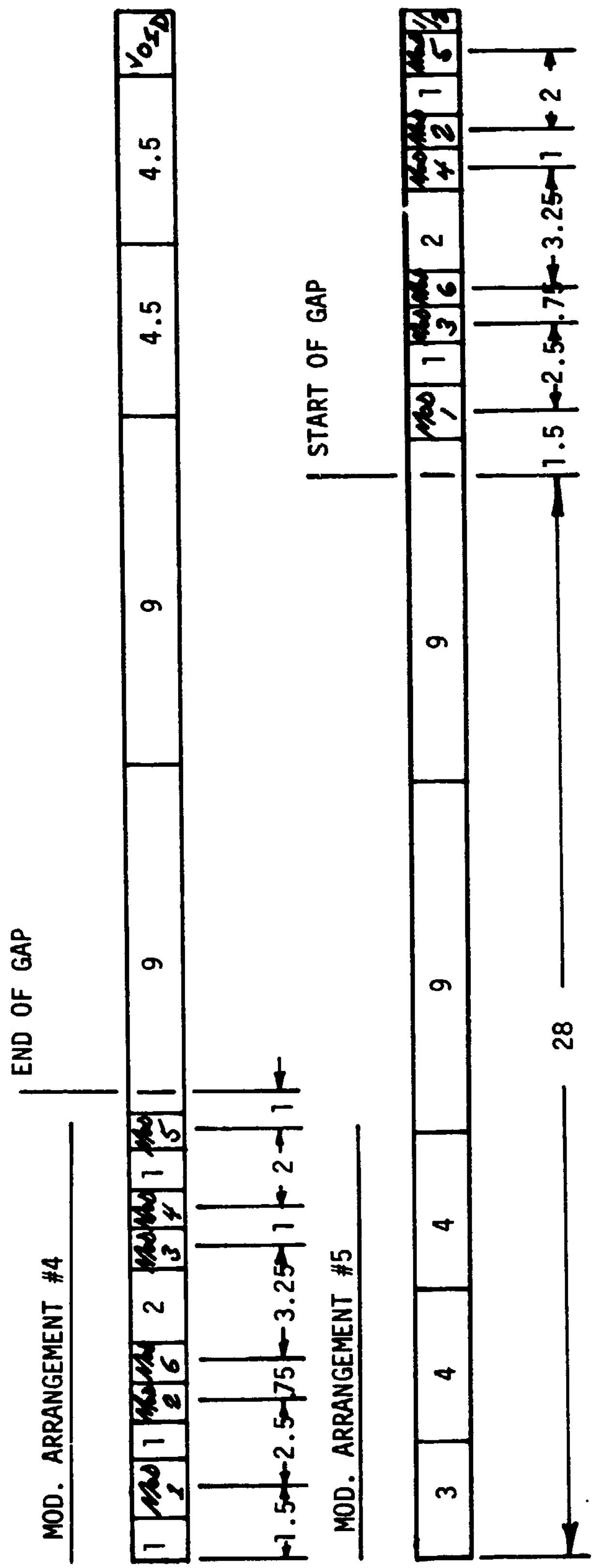


FIGURE 5.1-4
CONC.

THERMOCOUPLE HOOKUP SCHEDULES
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

T/C HOOKUP SCHEDULE NO.	T/C NUMBER	NUMBER OF T/C'S
1	1 - 75	75
2	1 - 25 103,105,107,108,110, 203,205,207,208,210 301 - 310 401 - 410 501 - 510	65
3A	1 - 25 103,105,107,108,110,111 - 115 203,205,207,208,210,211 - 215 306 - 315 406 - 415 506 - 515	75
4	102,105,107,108,110, 111 - 120 203,205,207,208,210, 211 - 220 306 - 320 406 - 420 506 - 520	75
5D	1 - 25 103,105,107,108,110, 111 - 115 203, 205, 207, 208, 210, 211 - 215 306 - 320 506 - 520	75
5E	6 - 25 103,105,107,108,110, 111 - 115 203,205,207,208,210, 211 - 220 306 - 320 506 - 515 601 - 605	75
5F	16 - 25 41 - 50 103,105,107,108,110, 111 - 115 203,205,207,208,210, 211 - 220 306 - 320 406 - 415 601 - 605	75

FIGURE 5.1-5

THERMOCOUPLE HOOKUP SCHEDULES
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

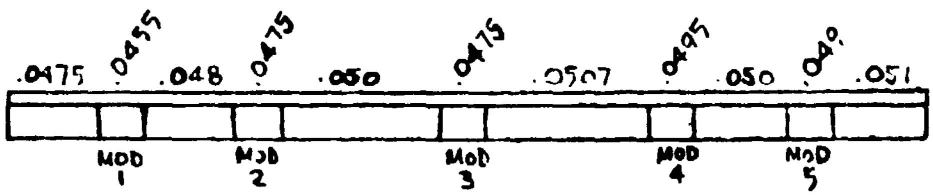
T/C HOOKUP SCHEDULE NO.	T/C NUMBER	NUMBER OF T/C'S
5G	16 - 25 41 - 50 103,105,107,108,110, 111 - 115 203,205,207,208,210, 211 - 220 306 - 320 506 - 515 601 - 605	75
5H	1 - 15 103,105,107,108,110, 111 - 115 306 - 320 406 - 420 506 - 520 601 - 605	75
6H	6 - 25 103,105,107,108,110, 111 - 120 203,205,207,208,210, 211 - 220 406 - 420 506 - 515	75
6I	16 - 25 41 - 50 103,105,107,108,110, 111 - 115 203,205,207,208,210, 211 - 220 406 - 420 506 - 520	75
6J	1 - 15 103,105,107,108,110, 111 - 120 203,205,207,208,210, 211 - 220 406 - 420 506 - 520	75
15D 5D WITH SINGLE GAP PROBE INSTEAD OF T/C 213	1 - 25 103,105,107,108,110, 111 - 115 203,205,207,208,210,211,212, GAP TOTAL TEMP. PROBE (CALLED GAP) 214,215 306 - 320 506 - 520	75

FIGURE 5.1-5
CONC.

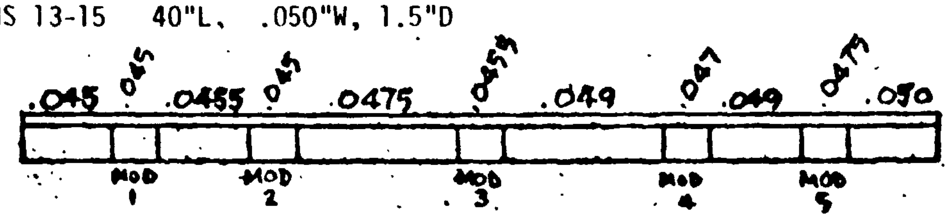
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

- o SKETCHES NOT TO SCALE
- o ALL DIMENSIONS IN INCHES

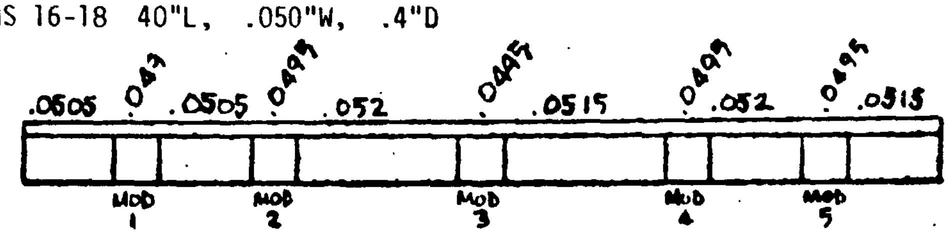
1) RUNS 6-11 40"L, .050"W, .8"D



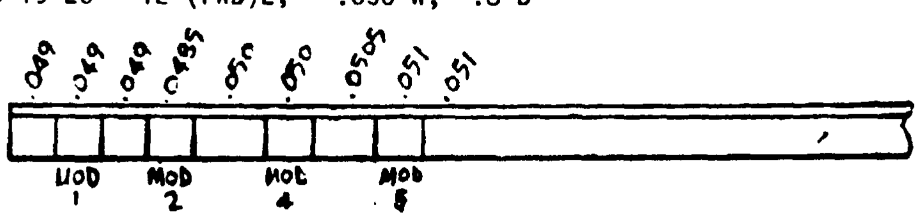
2) RUNS 13-15 40"L, .050"W, 1.5"D



3) RUNS 16-18 40"L, .050"W, .4"D



4) RUNS 19-20 12"(FWD)L, .050"W, .8"D



5) RUNS 21-24 12"(FWD)L, .100"W, .8"D

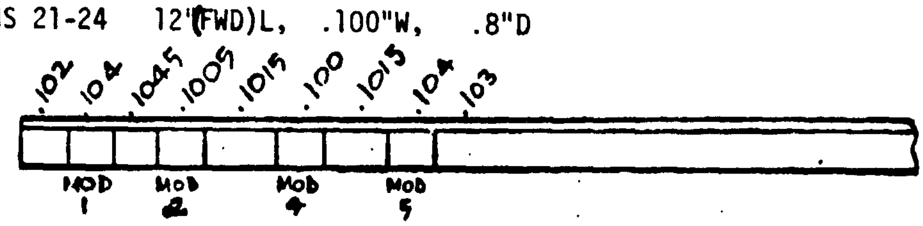
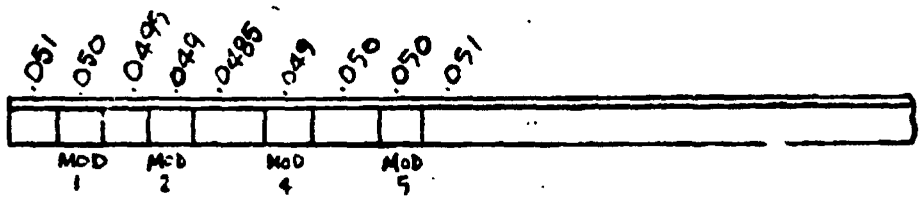


FIGURE 5.1-6

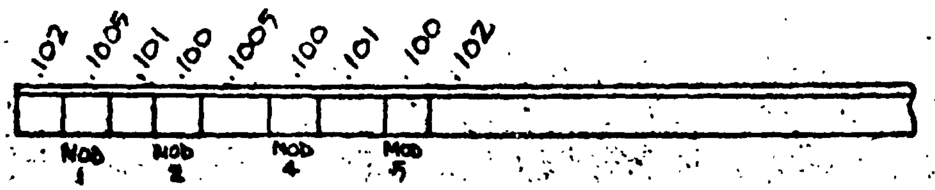
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

- o SKETCHES NOT TO SCALE
- o ALL DIMENSIONS IN INCHES

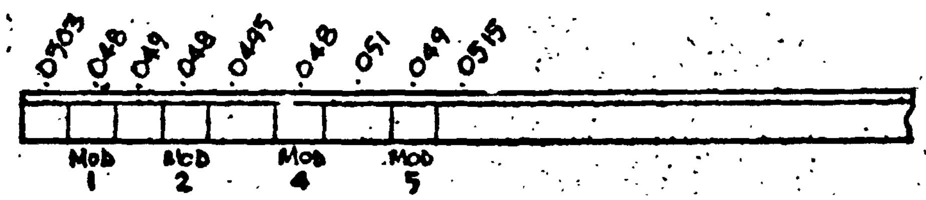
6) RUNS 25-28 12"(FWD)L, .050"W, .8"D



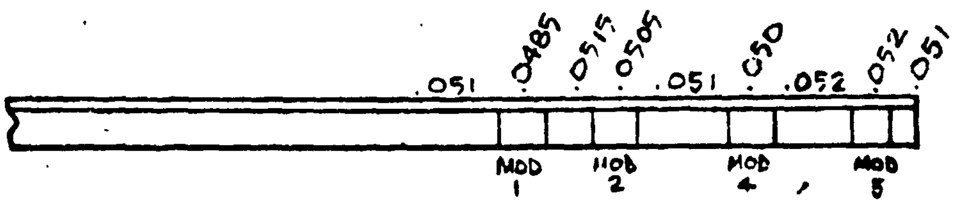
7) RUNS 29-32 12"(FWD)L, .100"W, .8"D



8) RUNS 33-34 12"(FWD)L, .050"W, .8"D



9) RUN 35 12"(AFT)L, .050"W, .8"D



10) RUNS 36-37 12"(AFT)L, .100"W, .8"D

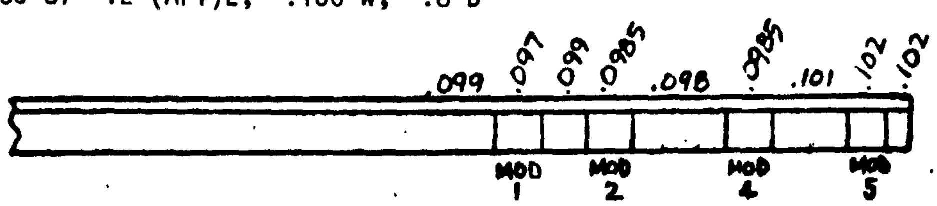
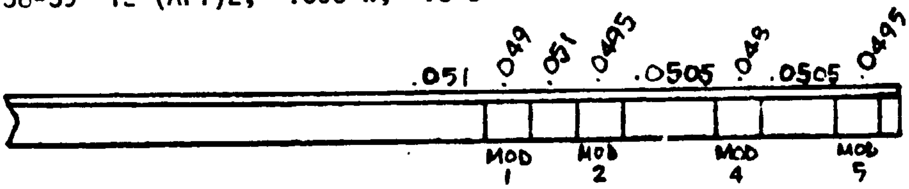


FIGURE 5.1-6

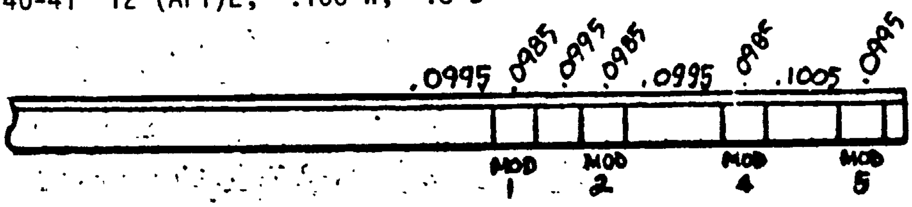
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODELS

- o SKETCHES NOT TO SCALE
- o ALL DIMENSIONS IN INCHES

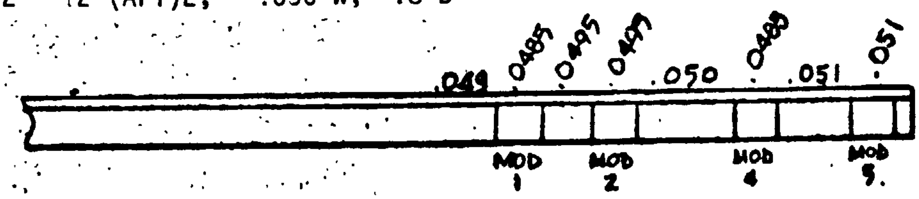
11) RUNS 38-39 12"(AFT)L, .050"W, .8"D



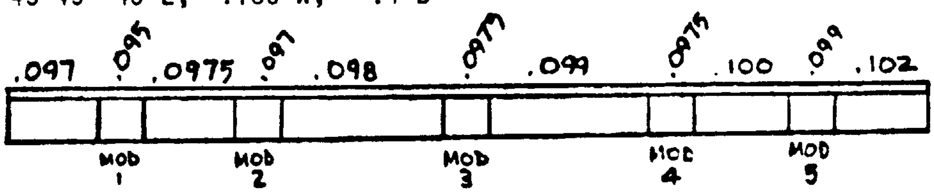
12) RUNS 40-41 12"(AFT)L, .100"W, .8"D



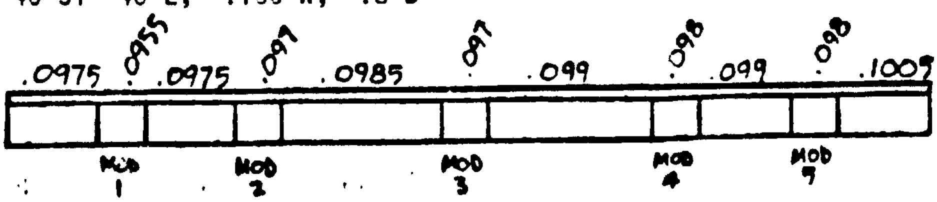
13) RUN 42 12"(AFT)L, .050"W, .8"D



14) RUNS 43-45 40"L, .100"W, .4"D



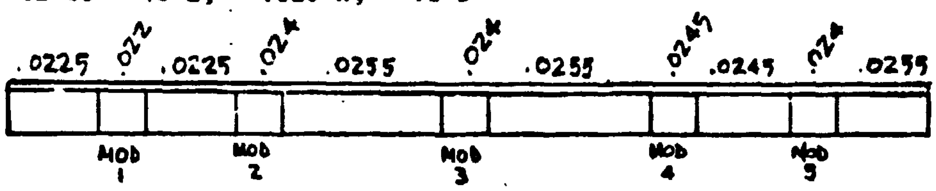
15) RUNS 46-51 40"L, .100"W, .8"D



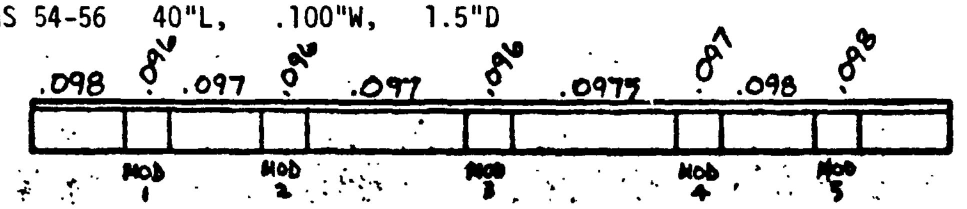
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

- SKETCHES NOT TO SCALE
- ALL DIMENSIONS IN INCHES

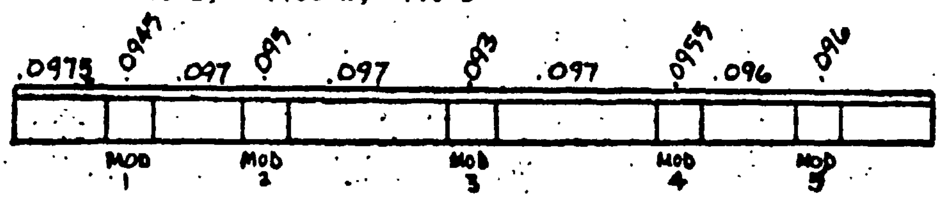
16) RUNS 52-53 40"L, .025"W, .8"D



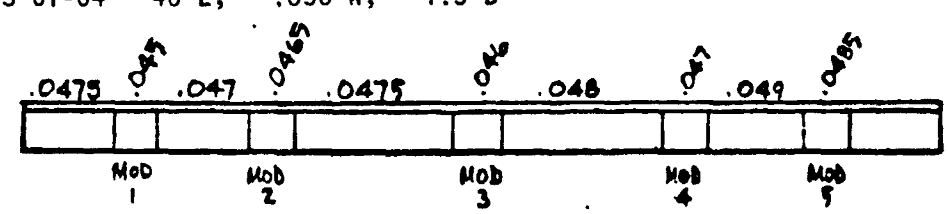
17) RUNS 54-56 40"L, .100"W, 1.5"D



18) RUNS 57-60 40"L, .100"W, 1.5"D



19) RUNS 61-64 40"L, .050"W, 1.5"D



20) RUN 65 40"L, .025"W, .8"D

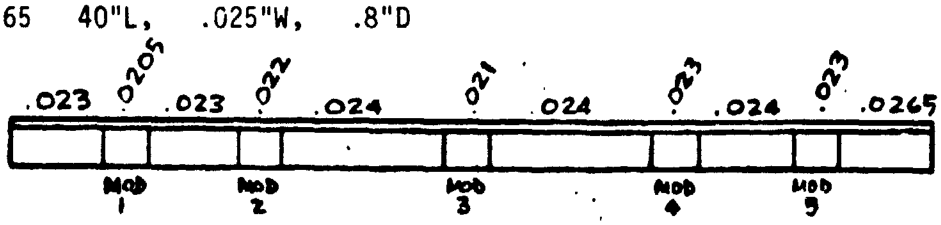
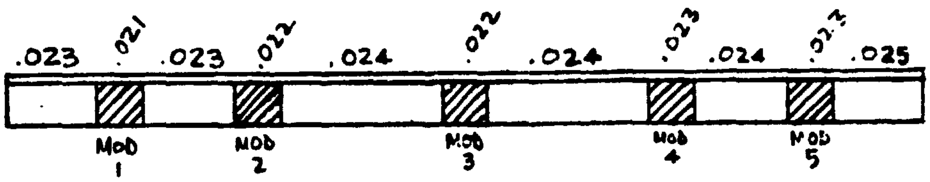


FIGURE 5.1-6

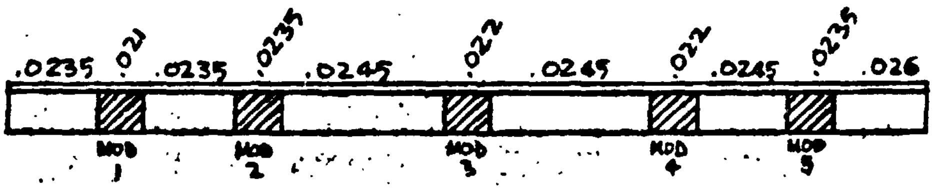
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

- SKETCHES NOT TO SCALE
- ALL DIMENSIONS IN INCHES

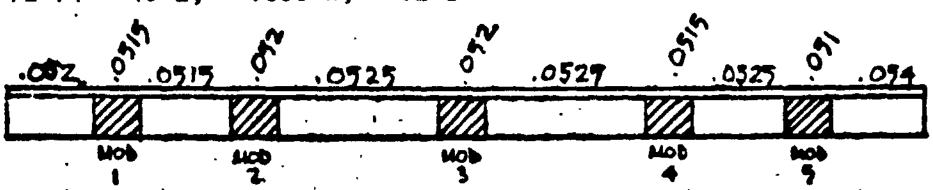
21) RUNS 66-68 40"L, .025"W, .4"D



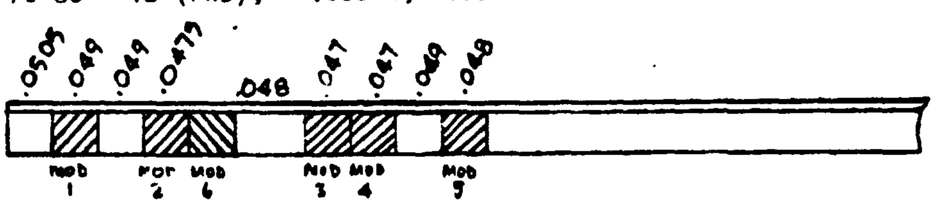
22) RUNS 69-71 40"L, .025"W, .2"D



23) RUNS 72-74 40"L, .050"W, .2"D



24) RUNS 75-83 12"(FWD), .050"W, 1.5"D



25) RUNS 84-88 12"(FWD), .100"W, 1.5"D

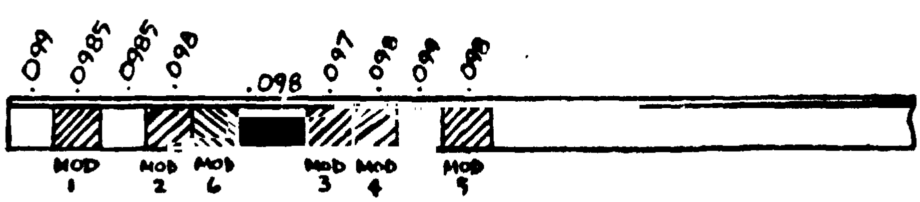
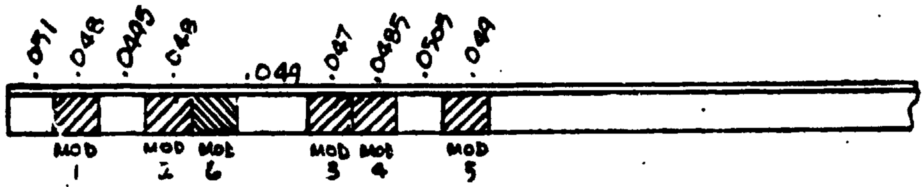


FIGURE 5.1-6

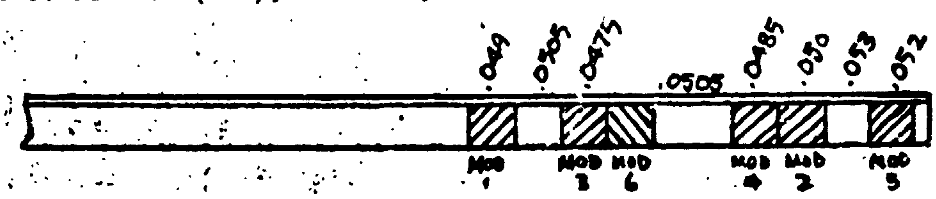
MEASURED GAP WIDTHS
AMES 3.5 FOOT H.W.T. IN-LINE GAP MODEL

- o SKETCHES NOT TO SCALE
- o ALL DIMENSIONS IN INCHES

26) RUNS 89-90 12"(FWD), .050"W, .8"D



27) RUNS 91-92 12"(AFT), .050"W, 1.5"D



28) RUN 93 12"(AFT), .100"W, 1.5"D

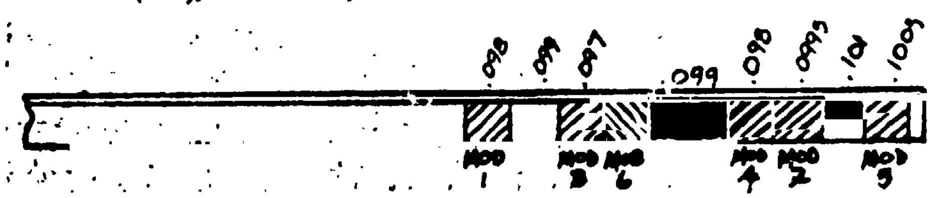


FIGURE 5.1-6
CONC.

5.2 Explanation of Terminology Used in Data Listing - Results from the Ames long in-line gap tests presented in Section 5.3 are organized by run number and contain information about test conditions, model configuration and thermocouple location, heat transfer parameters and boundary layer parameters. The data listing was prepared by analyzing and combining information recorded during calibration and test runs with boundary layer information.

The terminology used in the data listing is as follows:

X X	X X X X .	X X X	← IDENTIFICATION NUMBER
TEST NUMBER	RUN NUMBER	T/C NUMBER	

A(RAD)	=	Flow orientation - radians
B.L.	=	Boundary layer state (1=laminar, 2=transitional, 3=turbulent)
DELS	=	Displacement thickness
FLOW-L	=	Gap flow length
GAP	=	Gap width
GAP-D	=	Gap depth
G-CF	=	Gap configuration
HAW/HT	=	Recovery factor (adiabatic wall enthalpy ratioed to free stream total enthalpy) 0.908 for HT (Turbulent convective heat transfer coefficient) 0.874 for HL (Laminar convective heat transfer coefficient)
HL	=	Convective heat transfer coefficient based on recovery factor of 0.874
HLC, HLCC	=	Conduction corrected HL
HL/HLCC	=	Convective heat transfer coefficient ratioed to conduction corrected heat transfer coefficient
HL/HE	=	Convective heat transfer coefficient ratioed to heat transfer coefficient measured on top of tile near gap
HLC/HEC	=	Conduction corrected HL/HE
HREF	=	Convective heat transfer coefficient on calibration plate
HLC/HREF, HLCC/HREF	=	Conduction corrected HL ratioed to heat transfer coefficient on calibration plate

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HL/HREF	=	Convective heat transfer coefficient in gap ratioed to coefficient on calibration plate at the same location
HT	=	Convective heat transfer coefficient based on recovery factor of 0.907
LOC	=	Instrumentation location
M, MACH	=	Mach number
M-THICK	=	Momentum thickness
NSTT	=	Stanton number based on free stream conditions and HT
NTOL	=	Data sequence number
PATN	=	Tile pattern (0=staggered, 1=in-line)
PT	=	Free stream total pressure
Q	=	Convective heating
QS	=	Heating rate to a sphere
RE/M, RE/METER	=	Unit Reynolds number per meter
RHO VEL	=	Free stream density - velocity product
STEP	=	Step height
STL	=	Stanton number based on free stream conditions and HL
STT	=	Stanton number based on free stream conditions and HT
SUB-T	=	Sub-layer thickness
T	=	Temperature of model at time test data was obtained
TT	=	Free stream total temperature
T/C	=	Thermocouple number
TW/TE	=	Temperature ratio across boundary layer
X	=	Distance downstream from leading edge of carrier plate
X(BAR)	=	Distance from leading edge of tile
Y, YY	=	Lateral distance from tile centerline
Z,ZZ	=	Distance from top of tile (X, Y, YY, Z, ZZ form right hand coordinate system)

5.3 Data Tabulation for Ames 3.5 Foot H.W.T. Long In-Line Gap Heating Tests - This section contains the program for transcribing data from the Ames 3.5 Foot H.W.T. into the Data Bank and the tabulation generated by the program. The program listing is included for completeness and also documents those steps necessary to process the data into the Data Bank. The data listing begins on Page 5.3-22. This listing employs the "24 Attribute Word List" (described in Volume 1, Section 5) used in the data selection and data correlation programs.

```
000003        PROGRAM RSIANFL(INPUT=10C,OUTPUT,TAPE5=INPUT,TAPE6=OUTPUT,
             1              TAPE14=102,TAPE15=1022,TAPE22,TAPE23)
                                                  H.E.CHRISTENSEN         1374
              HEAT TRANSFER TAPE LISTING FROM AMES 3.5 FT TUNNEL
       C
              LONG IN-LINE GAP

000003        DIMENSION  X(196),Y(196),Z(196)
000003        DIMENSION  ARRAY(160), W1(19),NTC(80),W (730)
000003        DIMENSION WORD(24), IWORD(24)                                   TBLU  90
000003        COMMON WORDT ,KN, MSKIP, NSKIP
000003        DIMENSION WORDT(24,30)
000003        DIMENSION  RECAL(4,3), HREF(13,4,3),H1(2,3),H2(2),R1(3),R2(3),   TBLU 110
             1            XTAB(13)                                              TBLU 120
000003        DIMENSION K1S(7)
000003        DIMENSION ND(80),D(14,80)
000003        EQUIVALENCE (WORD,IWORD)                                          TBLU 130
000003        DATA  XTAB / 40., 50., 60., 70., 80., 90., 95., 100., 105., 110.,  TBLU 140
             1             115., 120., 130./                                    TBLU 150
000003        DATA RECAL / 1.4600E+06,2.1286E+06,3.1450E+06,4.3415E+06,         TBLU 160
             1             1.4508E+06,2.1991E+06,3.2607E+06,4.5119E+06,         TBLU 170
             2             1.4508E+06,2.3221E+06,3.3476E+06,4.5119E+06/         TBLU 180
000003        DIMENSION XTRANS( 6,3),REPMT(6),YSTATN(3)                         TBLU 190
000003        DIMENSION HREG(104),HREH(52),DUN(156)                             TBLU 200
000003        DIMENSION IIL(3)                                                  TBLU 201
000003        DIMENSION  DIST2(2), JD(3), T(3)
000003        EQUIVALENCE (HREG(1),HREF(1,1,1)),(HREH(1),HREF(1,1,3))           TBLU 210
000003        DATA  HREG/ .115, .102, .094, .086, .082, .079, .077, .075, .072,  TBLU 220
             1            .072, .069, .066, .050,                               TBLU 230
             2            .118, .102, .094, .086, .082, .079, .077, .074, .072,  TBLU 240
             3            .075, .082, .090, .116,                               TBLU 250
             4            .140, .125, .115, .108, .113, .121, .134, .145, .173,  TBLU 260
             5            .215, .267, .317, .385,                               TBLU 270
             6            .149, .140, .137, .140, .163, .191, .217, .245, .281,  TBLU 280
             7            .330, .348, .445, .511,                               TBLU 290
             8            .105, .094, .083, .074, .072, .069, .066, .066, .053,  TBLU 300
             9            .061, .061, .063, .055,                               TBLU 310
             A            .113, .102, .091, .079, .077, .077, .077, .075, .071,  TBLU 320
             B            .075, .078, .082, .103,                               TBLU 330
             C            .134, .113, .105, .095, .091, .102, .110, .137, .163,  TBLU 340
             D            .196, .239, .295, .416,                               TBLU 350
             E            .109, .135, .119, .117, .118, .150, .134, .225, .272,  TBLU 360
             F            .335, .401, .463, .573/                               TBLU 370
000003        DATA HREH / .112, .101, .093, .087, .081, .073, .073, .072, .063,  TBLU 380
             1            .073, .073, .073, .075,                               TBLU 390
             2            .124, .103, .093, .093, .087, .082, .076, .077, .067,  TBLU 400
             3            .074, .073, .075, .087,                               TBLU 410
             4            .143, .123, .117, .110, .104, .107, .11 , .122, .137,  TBLU 420
             5            .155, .193, .241, .348,                               TBLU 430
             6            .162, .145, .133, .125, .127, .143, .146, .139, .238,  TBLU 440
             7            .280, .353, .444, .525/                               TBLU 450
000003        EQUIVALENCE (DUN(1),HREF(1,1,1))                                  TBLU 460
       C      TRANSITION CURVE                                                  TBLU 470
000003        DATA  XTRANS / 163.,110.,32., 60., 74.,63.,                       TBLU 480
             1               180.,122.,39., 85., 78.,80.,                       TBLU 490
             2               194.,140.,118.,103.,94.,84./                       TBLU 500
000003        DATA  REPMT  / 1.5E06,2.0E06,2.5E06,3.0E06,3.5E06,4.5E06/         TBLU 510
```

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```
000003          DATA  YSTATN / -20.5359,0.0,20.5359/                          TBLU 520
000003          DIMENSION TMF(13,4),DELSF(13,4)                               TBLU 530
000003          DATA TMF/ .0169,.0190,.0210,.0225,.0240,.0258,.0270,.0280,.0300,  TBLU 540
              1           .0325,.0350,.0377,.0440,                            TBLU 550
              2           .0200,.0220,.0240,.0260,.0280,.0300,.0310,.0320,.0330,  TBLU 560
              3           .0350,.0370,.0390,.0440,                            TBLU 570
              4           .0240,.0265,.0290,.0312,.0338,.0360,.0366,.0380,.0389,  TBLU 580
              5           .0400,.0406,.0410,.0431,                            TBLU 590
              6           .0300,.0340,.0370,.0395,.0420,.0446,.0460,.0470,.0480,  TBLU 600
              7           .0490,.0508,.0520,.0540/                            TBLU 610
000003          DATA DELSF/ .148,.162,.175,.190,.208,.213,.213,.214,.225,     TBLU 620
              1           .232,.250,.260,.305,                                TBLU 630
              2           .172,.185,.203,.225,.240,.250,.251,.253,.260,       TBLU 640
              3           .268,.275,.280,.320,                                TBLU 650
              4           .203,.228,.243,.268,.280,.303,.310,.322,.330,       TBLU 660
              5           .335,.340,.345,.350,                                TBLU 670
              6           .265,.293,.322,.350,.370,.390,.402,.416,.422,       TBLU 680
              7           .430,.440,.455,.472/                                TBLU 690
000003          DATA IW, IWT /0, 1/
000003          DATA ILAST,ITOTAL /2,13/
000003          DATA RELAST,XLAST,YLAST /1.0,-1.0,100./
000003          DATA LIP /1/
000003          KN = 0
000004          MSKIP = 0
000005          NSKIP = 10
000006          JW = 0
      C         JW = 1 PRINT DETAILS OF CONDUCTION CORRECTION
000007          DO 10 I=1,156
000010       10 DUN(I) = DUN(I)*0.1
      C
000014          Y1 = -20.5359                                                 TBLU1130
000016          Y2 =   0.0                                                    TBLU1140
000017          Y3 =  20.5359                                                 TBLU1150
000020          D1 = (Y2-Y1)*(Y3-Y1)                                          TBLU1160
000023          D2 = (Y1-Y2)*(Y3-Y2)                                          TBLU1170
000026          D3 = (Y2-Y3)*(Y1-Y3)                                          TBLU1180
000030          X1 = 0.0                                                      TBLU1190
000031          X2 = 0.6965874
000033          X3 = 0.9595674
000034          DD1= (X2-X1)*(X3-X1)
000037          DD2= (X1-X2)*(X3-X2)
000042          DD3= (X2-X3)*(X1-X3)
000044          NRUN = 93
000045          MRUN = 0
000046          IPAGE= 0
      C
000047          ITAPE = 14
000050          REWIND 15
      C         TAPE14 = TAPE FROM AMES 3.5, LONGITUDINAL GAP TEST(DEC 10-21,1973)
      C         TAPE15 = TAPE BEING PREPARED FOR THE--- SELECT PROGRAM
000052          READ(5,901) MTAPE
      C                   MTAPE=1, PREPARE TAPE FOR--- SELECT
      C                   MTAPE=0, DO NOT PREPARE TAPE FOR SELECT
      C                                                                       TBLU1060
000060          IPAGE =0                                                      TBLU1070
000061          IF(MTAPE.EQ.1) WRITE(22,906) W(1), IRUN, IPAGE                TBLU1080
000075          IF(MTAPE.EQ.1) WRITE(23,906) W(1), IRUN, IPAGE                TBLU1090
000111          WRITE(22,913)
```

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```
000115          WRITE(22,913)
000121          IF(MTAPE.EQ.1) WRITE(22,580)
000127          IF(MTAPE.EQ.1) WRITE(23,539)
        C
        C
        C       THERMOCOUPLE LOCATION SPECIFICATION
        C
000135          DO 28 J=1,195
000137          X(J) = 0.0
000140          Y(J) = 0.0
000141       28 Z(J) = 0.0
000144          DO 30  J=1,25
000145          READ(5,902) X(J)
000152          X(J)      =(X(J)+14.235)*2.54
000156          X(J+25)  =X(J)
000160          X(J+50)  =X(J)
000162          Y(J)      =-0.508
        C                0.508  =2.54*.2
000163          Z(J+25) = 0.254
000165       30 Z(J+50) = 0.508
        C
000170          K = 75
000171          DO 37 I=1,5
000173          K = K + 1
000175          Y(K) = 0.8
000177          DO 32 J=1,8
000202          K = K + 1
000202       32 Y(K) = Y(K-1) -0.1
000207          Y(K) = Y(K) + 0.06
000211          K = K + 1
000212          Y(K)=0.017574
000213          Z(K) = 0.017574
        C               .017574 = 0.6 - 0.042426
        C                        0.042426 = 0.06* COS(45)
000215          K = K + 1
000216          Z(K) = 0.36
000220          K = K+1
000221          Z(K) = 0.10
000222          K = K+1
000224          Z(K) = 0.15
000225          DO 36 J=1,7
000227          K= K+1
000231       36 Z(K) = Z(K-1) + 0.11
000236       37 Z(K) = Z(K) +0.050
000242          Z(176) = 0.11
000243          Z(177) = 0.19
000245          Z(178) = 0.36
000246          Z(179) = 0.54
000250          Z(180) = 0.745
000251          X(196)=0.0
000252          Z(196)=0.890
000253          X(196)=89.789
        C       89.789=(40-4.650)*2.54
        C
000255          DO 38 L=76,196
000256          Y(L) = Y(L)*2.54
000260       38 Z(L) = Z(L)*2.54
000264          IRATIO = 0
```

TBLU1110
TBLU1110

```
                C
                C
000265          40 CONTINUE
                C     HEATING RATIOED TO GAP EDGE AND PRINTS RESULTS (SUB. RATIO)
000265             IF(IRATIO.EQ.1) CALL RATIO(M, ND,D,LINE,MTEST,IRUN,IPAGE)
000276             IRATIO = 1
                C
000277             CALL BUFFLT(14,108,ARRAY(1),ARRAY(180),NWD)
000303             IF (NWD.EQ.-6) CALL EXIT
000306             DECODE(130,912,ARRAY(1)) (W1(I),I=1,10)
000322             DECODE(130,912,ARRAY(14)) (W1(I),I=11,18)
000336             MTEST= W1(1)
000340             IRUN = W1(2)
000342             M = W1(18)
000344             CALL BUFFLT(14,108,ARRAY(1),ARRAY(180),NWD)
000350             IF(NWD.EQ.-6) CALL EXIT
000353             MIA = 120
000354             DO 43 J=1,3
000356             IA = 12*(J-1)+1
000361             KIA = 30*J
000363             IF(J.EQ.3) KIA=80
000366             IW0 = 30*(J-1)+1
000371             IW1 = IW0+29
000373             IF(M-KIA) 41,41,42
000375          41 MIA = 4*(M-30*(J-1))
000402             IW1 = M
000403          42 IF(IRUN.GE.54.AND.IRUN.LE.64) GO TO 820
000414         810 CONTINUE
000414         815 DECODE(MIA,904,ARRAY(IA)) (NTC(I),I=IW0,IW1)
000431             IF(M.EQ.IW1) GO TO 44
000433             GO TO 43
000434         820 IF(J.NE.2) GO TO 810
000436             DECODE(MIA,973,ARRAY(IA))   (NTC(I),I=IW0,IW1)
000453             NTC(43)=700.
                C     SINGLE GAP PROBE IS DESIGNATED AS T/C 700, COORDINATES
                C      STORED AT 136
000455          43 CONTINUE
000457          44 CONTINUE
000457             CALL BUFFLT(14,108,ARRAY(1),ARRAY(180),NWD)
000463             IF(NWD.EQ.-6) CALL EXIT
000466             DO 45 J=1,4
000470             IA = 13*(J-1)+1
000474             IW0 = 10*(J-1)+1
000476             IW1 = IW0+9
000500             DECODE(130,912,ARRAY(IA)) (W(I),I=IW0,IW1)
000514          45 CONTINUE
000516             DO 47 K=1,5
000520             CALL BUFFLT(14,108,ARRAY(1),ARRAY(180),NWD)
000523             IF(NWD.EQ.-6) CALL EXIT
000526             IK = 138*(K-1)+41
000533             DO 46 J=1,13
000534             IA = 13*(J-1)+1
000540             IW0 = 10*(J-1)+IK
000543             IW1 = IW0+9
000545             DECODE(130,912,ARRAY(IA)) (W(I),I=IW0,IW1)
000561          46 CONTINUE
000563             IA = IA+13
000565             IW0 = IW0+10
```

```
000566          IW1 = IW0+7
000570          DECODE(104,902,ARRAY(IA)) (W(I),I=IW0,IW1)
000604       47 CONTINUE
       CCC      IF (IRUN.GT.3) CALL EXIT
       C
       C        CHECK T/C NO. FOR OUT OF SEQUENCE
       C
000606          NLL = -1
000607          DO 49 JJ=1,4
000611          IF(NTC(JJ) .EQ. 730) GO TO 49
000614          IF(NTC(JJ).GT. NLL) GC TO 48
000617          NTC(JJ) = NLL+1
000620          GO TO 49
000621       48 NLL=NTC(JJ)
000623       49 CONTINUE
       C
000626          JW = 0
       CCC
       CCC      IF(IRUN.LT.2) JW =1
       C
000627          GAM = 0.0
000630          MRUN = IRUN
000631          IF(IRUN.EQ.12) GO TO 51
000633          IF(IRUN.GT.5) GO TO 52
       C        ZERO GAP
000636       51 GAP = 0.0
000637          GAPD= 0.0
000640          GAPL= 0.0
000641          MODP= 1
       C        MODP= INSTRUMENTATION MODULE POSITION
000642          GO TO 60
000642       52 GAP = 0.050
000644          GAPL= 40.0
000645          GAPD= 0.8
000647          MODP= 1
000650          IF(IRUN.LT.13) GO TO 60
000652          GAPD= 1.6
000654          IF(IRUN.LT.16) GO TO 60
000656          GAPD= 0.4
000660          IF(IRUN.LT.19) GO TO 60
000662          MODP= 2
000663          GAP = 0.050
000665          GAPL= 12.0
000666          GAPD= 0.8
000670          IF(IRUN.LT.21) GO TO 60
000672          GAP = 0.1
000673          IF(IRUN.GT.22) GAM = 5.0
       C
000677          IF(IRUN.LT.23) GO TO 60
000702          IF(IRUN.GT.26) GAM = 10.0
000706          GAP = 0.05
000710          IF(IRUN.LT.29) GO TO 60
000712          IF(IRUN.GT.31) GAM = 15.0
000716          GAP = 0.1
000717          IF(IRUN.LT.33) GO TO 60
000721          GAP = 0.05
000723          IF(IRUN.LT.35) GO TO 60
000725          IF(IRUN.GT.35) GAM = 10.0
```

```
000731        MODP = 3
000732        IF(IRUN.LT.36)  GO TO 60
000734        GAP = 0.10
000735        IF(IRUN.LT.38)  GO TO 60
000737        IF(IRUN.GT.33)  GAM = 5.0
000742        GAP = 0.05
000744        IF(IRUN.LT.40)  GO TO 60
000746        IF(IRUN.GT.40)  GAM = 0.0
000751        GAP = 0.10
000752        IF(IRUN.LT.42)  GO TO 60
000754        GAP = 0.05
000755        IF(IRUN.LT.43)  GO TO 60
000757        GAPL = 40.0
000761        GAP  = 0.10
000762        GAPD = 0.4
000763        MODP = 1
000764        IF(IRUN.LT.46)  GO TO 60
000766        GAPD = 0.80
000770        IF(IRUN.LT.52)  GO TO 60
000772        GAP  = 0.025
000774        IF(IRUN.LT.54)  GO TO 60
000776        GAP  = 0.10
000777        GAPD = 1.5
001001        IF(IRUN.LT.57)  GO TO 60
001003        GAM  = 10.0
001005        IF(IRUN.EQ.59)  GAM= 5.0
001010        IF(IRUN.GT.59)  GAM= 15.0
001014        IF(IRUN.LT.61)  GO TO 60
001016        IF(IRUN.GT.61)  GAM= 10.0
001021        GAP  = 0.050
001023        IF(IRUN.EQ.64)  GAM= 5.0
001026        IF(IRUN.LT.65)  GO TO 60
001030        GAM = 0.0
001031        GAP = 0.025
001033        GAPD= 0.80
001034        IF(IRUN.LT.66)  GO TO  60
001036        GAPD= 0.4
001040        IF(IRUN.LT.69)  GO TO  60
001042        GAPD= 0.2
001044        IF(IRUN.LT.72)  GO TO 60
001046        GAP = 0.05
001050        IF(IRUN.LT.75)  GO TO 60
001052        MODP = 4
001053        GAPL = 12.0
001055        GAPD = 1.3
001056        IF(IRUN.GT.77)  GAM =5.0
001062        IF(IRUN.GT.79)  GAM =10.0
001066        IF(IRUN.GT.81)  GAM =15.0
001072        IF(IRUN.LT.84)  GO TO  60
001074        GAP  = 0.10
001076        IF(IRUN.GT.85)  GAM =0.0
001101        IF(IRUN.LT.89)  GO TO  60
001103        GAP  = 0.050
001104        GAPD = 0.8
001106        IF(IRUN.LT.91)  GO TO  60
001110        MODP = 5
001111        GAPD =1.5
001113        IF(IRUN.GT.91)  GAM =15.0
```

```
001116          IF(IRUN.LT.93) GO TO  60
001120          GAP  =0.10
001122       60 CONTINUE
001122          GAP =  GAP *2.54
001124          GAPD=  GAPD*2.54
001125          GAPL=  GAPL*2.54
           C
           C    ASSIGN X-COORDINATES  (BASED ON MODP)
           C
001127          DO 90 J=1,20
001130          GO TO( 80, 82, 84, 86, 88), MODP
           C
001141       80 X(J+ 75)= 4.0
001143          X(J+ 95)=10.0
001145          X(J+115)=20.0
001146          X(J+135)=30.0
001150          X(J+155)=35.0
001151          GO TO 90
           C
001152       82 X(J+ 75)= 1.5
001154          X(J+ 95)= 4.0
001156          X(J+135)= 8.0
001157          X(J+155)=11.0
001161          GO TO 90
           C
001161       84 X(J+ 75)=29.5
001163          X(J+ 95)=32.0
001165          X(J+135)=36.0
001166          X(J+155)=39.0
001170          GO TO 90
           C
001170       86 X(J+ 75)= 1.5
001172          X(J+ 95)= 4.0
001174          X(J+115)= 8.0
001175          X(J+135)= 9.0
001177          X(J+155)=11.0
001200          X(J+175)= 4.75
001202          GO TO 90
           C
001202       88 X(J+ 75)=29.5
001204          X(J+ 95)=37.0
001206          X(J+115)=32.0
001207          X(J+135)=36.0
001211          X(J+155)=39.0
001212          X(J+175)=32.75
001214       90 CONTINUE
           C
001216          DO 92 J=76,135
001220       92 X(J) =  (X(J)+14.235)*2.54
           C
001225          IPAGE = IPAGE + 1
001226          WRITE(6,986) MTEST, IRUN, IPAGE
001240          W1( 4) = W1( 4)*3.280839
001242          W1( 8) = W1( 8)*6894.75729
001243          W1( 9) = W1( 9)/1.8
001245          W1(10) = W1(10)*2327.7948
001246          W1(14) = W1(14)*157.087
001250          W(241) =   W(241)*11348.931
```

```
001251           LINE = 0
001252           NLAST = 100
001253           WRITE(6,937)W1(9),GAPL, W1(3), GAP, W1(10), GAPD, W1(4), GAM,
               1             W1(3), W(241) ,W1(14), MODP
001307           WRITE(6,911)
001313           WRITE(6,908)
001317           WRITE(6,909)
001323           LINE = LINE + 3
           C
           C
001325           M= W1(18)
001327           DO 372 I=1,M
001330       372 W(I) = W(I)/1.8
001334           TAW = W1(9) * 0.874
           C
001336           DO 400 I= 1,M
001340           HT = W(I +607)*W1(14)
001343           HL = W(I +643)*W1(14)
001345           N  =   NTC(I)
001346           HOHLCC = 9999.
001350           HLCOHR = 3999.
           C     STORAGE LOCATION INDEX
           C
001351           K = N
001352           IF(N.LT.131) GO TO 390
001354           K=   N-25
001356           IF(N.LT.201) GO TO 390
001360           K = N-105
001362           IF(N.LT.301) GO TO 390
001364           K = N-185
001366           IF(N.LT.401) GO TO 390
001370           K = N-265
001372           IF(N.LT.501) GO TO 390
001374           K= N-345
001376           IF(N.LT.601) GO TO 390
001400           K = N-425
001402           IF(N.LT.700) GO TO 390
001404           K=N-504
001406       390 CONTINUE                                                        TBLU3990
           C                                                                     TBLU4000
           C     REFERENCE HEATING (RE--LINEAR,Y--2ND ORDER, X=LINEAR)
001406           J=K
001410           XX=X(K)
001411           IF(W1(4).EQ.RELAST.AND. XX.EQ.XLAST .AND. Y(J).EQ.YLAST) GO TO 300TBLU4010
           C                                                                     TBLU4020
                                                                                 TBLU4030
001425           IW = IW+1
001426           IF(W1(4).EQ.RELAST) GO TO 290
001430           RELAST = W1(4)                                                  TBLU4060
001431           L = 0                                                           TBLU4070
001432       260 L = L +1                                                        TBLU4080
           C     FIND REYNOLDS NO. POINT TO LEFT                                 TBLU4090
001434           II = 0
001436       270 II = II + 1                                                     TBLU4101
001437           IIL(L) = II                                                     TBLU4110
001441           IF(II.EC.3)  GO TO 280
001442           IF(W1(4).GT.RECAL(II+1,L)) GO TO 270
001447       280 R1(L) =(W1(4)-RECAL(II+1,L))/(RECAL(II,L)-RECAL(II+1,L))        TBLU4140
001460           R2(L) = 1.0-R1(L)
```

```
001462          IF(IW.LT.IWT) WRITE(6,670)L,II,R1(L),R2(L),H1(4),RECAL(II,L),RECAL
               1(II+1,L)
001510          IF(L.LT.3) GO TO 260                                                  TBLU4170
001513      290 CONTINUE                                                               TBLU4180
001513          IF(Y(J).EQ.YLAST) GO TO 300                                           TBLU4190
001516          YLAST = Y(J)                                                          TBLU4200
001520          F1 = (Y2 -Y(J))*(Y3 -Y(J))/D1                                         TBLU4210
001524          F2 = (Y1 -Y(J))*(Y3 -Y(J))/D2                                         TBLU4220
001531          F3 = (Y2  -Y(J))*(Y1 -Y(J))/D3                                        TBLU4230
001536          IF(IW.LT.IWT) WRITE(6,680) F1,F2,F3,Y(J),Y1,Y2,Y3,D1,D2,D3            TBLU4240
        C                                                                             TBLU4250
001570      300 IF(XX.EQ.XLAST) GO TO 350                                             TBLU4260
001572          IF(XX.LT.XTAB(ITOTAL-1)) GO TO 310                                    TBLU4270
001575          ILAST = ITOTAL                                                        TBLU4280
001576          GO TO 340                                                             TBLU4290
001577      310 IF(XTAB(ILAST).GT. XX) GO TO 330                                      TBLU4300
001604      320 ILAST = ILAST+1                                                       TBLU4310
001606          IF(ILAST.EQ.ITOTAL) GO TO 340                                         TBLU4320
001610          IF(XTAB(ILAST).GT. XX) GO TO 340                                      TBLU4330
001614          GO TO 320                                                             TBLU4340
001614      330 IF(XTAB(ILAST-1).LE.XX) GO TO 340                                     TBLU4350
001620          ILAST =ILAST-1                                                        TBLU4360
001621          IF(ILAST.EQ.2) GO TO 340                                              TBLU4370
001623          GO TO 330                                                             TBLU4380
001623      340 CONTINUE                                                              TBLU4390
001623          IF(ILAST.LT.2) ILAST=2                                                TBLU4400
001627          BCD =( XX-XTAB(ILAST))/(XTAB(ILAST-1)-XTAB(ILAST))                    TBLU4410
001634          XLAST =XX                                                             TBLU4420
001635          IF(IW.LT.IWT) WRITE(6,690) ILAST,BCD,XX,XTAB(ILAST),XTAB(ILAST-1)     TBLU4430
        C                                                                             TBLU4440
001655      350 DO 360 L=1,3                                                          TBLU4450
001657          II = IIL(L)                                                           TBLU4451
001661          KKK = ILAST-2                                                         TBLU4460
001663          DO 360 KK=1,2                                                         TBLU4470
001664          KKK = KKK +1                                                          TBLU4480
001666          IF(IW.LT.IWT) WRITE(6,700) L,KK,KKK,HREF(KKK,II,L),R1(L),HREF(KKK,TBLU4490
               1II+1,L),R2(L)                                                         TBLU4500
001724      360 H1(KK,L) = HREF(KKK,II  ,L)*R1(L) + HREF(KKK,II+1,L)*R2(L)            TBLU4510
001747          IF(IW.LT.IWT) WRITE(6,710) H1,R1,R2                                   TBLU4520
        C                                                                             TBLU4530
001763          DO 370 KK=1,2                                                         TBLU4540
001765      370 H2(KK)= H1(KK ,1)*F1 +H1(KK ,2)*F2 + H1(KK ,3)*F3                     TBLU4550
001776          HREFF = BCD*H2(1) + (1.0-BCD)*H2(2)                                   TBLU4560
002002          IF(IW.LT.IWT) WRITE(6,720) HREFF,BCD,H2,F1,F2,F3                      TBLU4570
        C                                                                             TBLU4580
002024      380 CONTINUE                                                              TBLU4590
002024          HLOHF = HL/HREFF                                                      TBLU4600
002026          ND(I) = N
002030          D(1,I) = X(K)
002034          D(2,I) = Y(K)
002037          D(3,I) = Z(K)
002042          D(4,I) = 9999.
002045          D(11,I) = W(I)
002050          IF(W(I+640).GT. 1.E-07  .AND.  W(I+640).LT.1.0) GO TO 382
002060          GO TO 400
002060      382 CONTINUE
        C
002060          Q = W(I+15.)*11348.931
```

```
                C
                C
                C      CONDUCTION CORRECTION FOR MODULES ONLY
                C
 002063                DIST2(1) = 99999.0
 002064                DIST2(2) = 99999.0
 002065                JD(1) = 0
 002066                JD(2) = 0
                C      JD(1) = INDEX FOR T/C TEMP TO RIGHT
                C      JD(2) = INDEX FOR T/C TEMP TO LEFT
                C
 002067                IF(N.GT.100) GO TO 377
                C
                C      2 ND T, CONDUCTION CORRECTION FOR T/C 1 TO 75
                C
 002072                N1 = N
 002072                IF(N.GT.25) N1= N-25
 002075                IF(N.GT.50) N1= N-50
 002100                KFD = 0
 002101                N1=N1 -25
 002102                DO 376 J=1,7
 002104                N1 =N1 + 25
 002106                DO 374 K1 =1,M
 002107                IF(N1.EQ.NTC(K1)) GO TO 375
 002111            374 CONTINUE
 002114                GO TO 387
 002114            375 T(J) = W(K1)
 002117                IF(T(J).LT. 290.0  .OR.  T(J).GT. 320.0) GO TO 387
 002131            376 CONTINUE
                C
 002133                D2TDY2 = T(1)/DD1 + T(2)/DD2 + T(3)/DD3
 002141                CP = 332.426 +0.682575*W(I)
 002145                HO7RCP = (W(I+F40)*W1(14)/CP)*505.328
 002150                GO TO 394
 002151            377 CONTINUE
                C
 002151                DO 385 J=1,M
 002153                IF(J.EQ.I) GO TO 385
 002155                N1 = NTC(J)
 002156                IF((N1/100).NE.(N/100)) GO TO 385
 002164                K1 = N1
 002165                IF(N1.LT.101) GO TO 385
 002167                K1 = N1 - 25
 002171                IF(N1.LT.201) GO TO 384
 002173                K1 = N1- 125
 002175                IF(N1.LT.301) GO TO 384
 002177                K1 = N1- 185
 002201                IF(N1.LT.401) GO TO 384
 002203                K1 = N1- 265
 002205                IF(N1.LT.501) GO TO 384
 002207                K1 = N1- 345
 002211                IF(N1.GT.601) GO TO 385
                C
 002214            384 CONTINUE
                C      SAME MODULE
                C
 002214                VY =Y(K1) - Y(K)
 002220                VZ =Z(K1) - Z(K)
```

```
                C
002222                DIST = VY**2 + VZ**2
002225                IDIR = 2
                C     IDIR =1, RIGHT SIDE
                C     IDIR =2, LEFT SIDE
                C
002226                IF(N1.LT.N) IDIR=1
002232                IF(JW.EQ. 1)
                     1WRITE (6,912) J,K,K1,N1,IDIR,VY,Y(K1),Y(K),VZ,Z(K1),Z(K)
                     1,DIST,DIST2
002272                IF(DIST.GT. DIST2(IDIR)) GO TO 385
002277                DIST2(IDIR) = DIST
002300                JD(IDIR) = I
                C     JD(IDIR) = POINTER FOR TEMP.
002301                K1S(IDIR) =K1
002303            385 CONTINUE
                C
002306                IF(JW.EQ. 1)
                     1WRITE (6,912) JD
                C
                C     SINGLE END 2 NO. ORDER TEMP CURVE FIT
002315                KFD = 0
002316                SIGN1=1.0
002320                SIGN2 =-1.0
002321                IF(JD(1).NE.0 .AND. JD(2).NE.0) GO TO 381
002327                IF(JD(1).EQ.0 .AND. JD(2).EQ.0) GO TO 387
002335                IF(JD(1).NE.0) GO TO 378
002336                KFD = 1
002337                SIGN1 =-1.0
002340                JD(1) = JD(2)+1
002341                K1 = K1S(2)+1
002343                GO TO 379
002343            378 KFD = 2
002344                JD(2) = JD(1)-1
002346                SIGN2 =1.0
002350                K1   = K1S(1)-1
002351            379 VY = Y(K1)-Y(K)
002355                VZ = Z(K1)-Z(K)
002357                DIST2(KFD) = VY**2 + VZ**2
002363            381 CONTINUE
002363                IF(JW.EQ.1) GO TO 392
002365                IF(DIST2(1).GT. 0.0 .AND. DIST2(2).GT. 0.0) GO TO 393
002375            392          WRITE(6,912) J,K,K1,N1,KFD,VY,Y(K1),Y(K),VZ,Z(K1),
                     1    Z(K), DIST2
002431                WRITE(6,912) JD,IDIR
002441            393 CONTINUE
                C
                C
                C     POINTS ON RT. AND LEFT HAVE BEEN ESTABLISHED
                C
002441                DO 386 JJ=1,3
002443                J = JD(JJ)
002445                IF(JJ.EQ.3) J= I
                C     CP = 332.426 + .682575*300.
002450                CP = 332.426 + .682575*W(J)
                C     CP = SPECIFIC HEAT OF 174 PH S.S.  (J/KG-K)
002454                HOZRCP =(W(J +640)*W1(14)/CP)* 505.328
                C      505.328 =1 09.301*100/(0.0254*7861.116)
```

```
                    C
                    C
                    C          T(JJ) = TAW -(TAW-300.)*EXP(-HOZRCP)
                    C          T(JJ) = TAW -(TAW-W(J))*EXP(-HOZRCP)
      002460                   T(JJ) = W(4)
      002462                   IF(JW.EQ. 1)
                             1WRITE (6,912) JJ,JJ,JJ,J,I,CP,TAW,W(J),W(J+640),W1(14),HOZRCP
      002515             386   CONTINUE
                    C          T( 1) = TEMP OF POINT ON RT.
                    C          T( 2) = TEMP OF POINT ON LEFT
                    C          T( 3) = TEMP AT NODE (I)
      002517                   IF(DIST2(1).EQ.0.0 .OR. DIST2(2).EQ.0.0) GO TO 387
                    C
      002525                   DIST2(1) = SQRT(DIST2(1))*SIGN1
      002530                   DIST2(2) = SQRT(DIST2(2))*SIGN2
      002533                   X1MX2 = DIST2(1)-DIST2(2)
      002535                   D2TDY2 =2.0*(T(1)/(X1MX2*DIST2(1)) - T(2)/(X1MX2*DIST2(2))
                             1            +T(3)/(DIST2(1)*DIST2(2)))
      002550             394   CONTINUE
                    C
                    C          COND = 11.8590 + 0.014803*300.
      002550                   COND = 11.8590 + 0.014803*W(I)
                    C          COND  =  THERMAL CONDUCTIVITY OF 174 PH S.S.
                    C                   (WATT/M-K)
                    C
      002554                   DTDT  = HOZRCP*(TAW-W(I))
                    C
      002560                   AB = 1.99672*CP*DTDT
                    C
                    C                1009.001 J/KG-K, SPECIFIC HEAT OF AIR
                    C          CONDUCTION TERM COMPUTED USING SECOND ORDER CURVE
                    C
                    C                1.99672 = 0.0254*7861.1159/100
      002562                   CON1 = 2.54*COND*D2TDY2
      002565                   HLCC = (AB-CON1)/((TAW-W(I))*1009.001)
      002573                   IF(JW.EQ.1) WRITE(6,630) COND,DIST2,T,DTDT,D2TDY2,AB,CON1
      002616                   HOHLCC = HL/HLCC
      002620                   HLCOHR = HLCC/HREFF
      002622             387   D(4,I) = 0
      002626                   D(5,I) = HL
      002630                   D(6,I) = HT
      002633                   D(7,I) = HLOHF
      002636                   D(8,I) = HREFF
      002641                   D(9,I) = W(I+640)
      002644                   D(10,I) = W(I+560)
      002647                   D(12,I) = HLCC
      002652                   D(13,I) = HOHLCC
      002655                   D(14,I) = HLCOHR
                    C          0.0254 = THICKNESS OF SKIN (CM)
                    C          7861.1 = DENSITY OF 174 PH S.S. (KG/M3)
                    C          0.0508 = 2.*0.0254  FACTOR ON CONDUCTION TERM
                    C
                    C
                    C
      002660                   AB=N
      002662                   WORD( 1) = 160000. +W1(2) +AB/1000.0
      002665                   IWORD( 2) = 1
      002666                   IWORD( 3) = 3
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002667          WORD( 4) = X(K)
002671          WORD( 5) = Y(K)
002673          WORD( 6) = Z(K)
002675          WORD(7) = X(K)-36.1563
         C            36.1559 = 14.235*2.54
002700          WORD( 9) = GAM/57.2957795
002702          WORD(11) = 0.0
002703          WORD(10) = GAP
002704          WORD(12) = WORD(7)
002706          WORD(13) = GAFD
002707          IWORD(14) = 1
002710          WORD(15) = W1(3)
002712          WORD(16) = W1(4)
         C                 = REYNOLDS NO. PER METER                     TBLU5520
         C      WORD(17) = MOMENTUM THICKNESS                           TBLU5530
002713          CALL DISCOT(XX,W1(4),XTAB,THF,RECAL(1,2), 11,52,4,WORD(17),13,IND)  TBLU5550
         C                 = DISPLACEMENT THICKNESS
002726          CALL DISCOT(XX,W1(4),XTAB,DELSF,RECAL(1,2), 11,52,4,WORD(18),13,  TBLU5570
              1  IND)
         C                 = SUB-LAYER THICKNESS                        TBLU5580
         C      WORD(20) = HEAT TRANSFER COEFFICIENT (KG/M2-S)          TBLU5590
002741          WORD(20) = HL/HLOHF                                     TBLU5600
002743          WORD(21) = HLCCHR                                       TBLU5610
002745          IF(HLCCHR .GT. 100.) WORD(21) = HLCHF
         C      WORD(22) = STANTON NUMBER --- CORRECTED                 TBLU5630
002750          WORD(22) = W(I+64)/WORD(21)
         C      WORD(23) = B.L. TEMP. RATIO                             TBLU5650
002753          WORD(23) = W(I)/(1.8*W1(9))                             TBLU5660
         C                 = B.L. TEMP. RATIO                           TBLU5670
002756          IF(W1(4).EQ. OREPM .AND. Y(K).EQ.YOLD) GO TO 410
002766          CALL DISCOT (W1(4),Y(K),REPMT,XTRANS,YSTATN.12,18,3,XCHECK,6,IND)
003002          OREPM = W1(4)                                           TBLU5710
003004          YOLD  = Y(K)
003006      410 CONTINUE
003006          IWORD(24) = 1
003007          IF(XCHECK.LE.XX) IWORD(24) = 2
         C                      1,LAMINAR
         C                      2,TRANSITIONAL
         C                      3,TURBULENT
003013          NTOL = NTOL + 1
003015          KN = KN + 1
003016          DO 420 KM =1,24                                         TBLU5810
003017      420 WORDT(KM,KN) = WORD(KM)                                 TBLU5820
         C                                                              TBLU5940
         C                                                              TBLU5950
003025      400 CONTINUE
003030          GO TO 40
003030      570 FORMAT(I4,4F7.2,E10.2,2E11.3,F8.3,E11.3,3X,2E12.4,2X,A6)  TBLU6190
003030      580 FORMAT(13X,* G-CF  LOC       X         Y        Z     X(EAR) HLC/HEC A(RAD) TBLU6200
              1  GAP    STEP  FLOW-L  GAP-D  PATN  MACH      RE/M         M-THK*)  TBLU6210
003030      590 FORMAT(14X,*  DELS    SUB-T      HLC     HLC/HREF    NSTT          TW/TE  TBLU6220
              1     B.L. NTOL*)                                          TBLU6230
003030      600 FORMAT(F12.3,2I5,2F8.2,F5.2,2F8.3,F7.2,2F6.3,F8.2,F7.3,I5,F7.2,E11 TBLU6240
              1.3,F8.3)                                                  TBLU6250
003030      610 FORMAT(F12.3,2F6.3,E11.3,F9.4,2E11.3,2I5)                TBLU6260
003030      620 FORMAT(2X,6E13.6)
003030      630 FORMAT(10E13.6)
003030      650 FORMAT(4I10)
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003030   650 FORMAT(114X*RE/M=*E11.3)
003030   670 FORMAT(* ST.280  *2I10,6E10.2)                                    TBLU6320
003030   680 FORMAT(* ST.290  *13E10.2)                                        TBLU6330
003030   690 FORMAT(* ST.340  *I10,10E10.2)                                    TBLU6340
003030   700 FORMAT(* ST.350 *3I10,10E10.2)                                    TBLU6350
003030   710 FORMAT(* ST.360  *13E10.2)                                        TBLUE360
003030   720 FORMAT(* ST.370  *13E10.2)                                        TBLUE370
003030   901 FORMAT(4I10)
003030   902 FORMAT(10E10.F)
003030   904 FORMAT(*0I4)
003030   903 FORMAT (12I4,A4,17I4)
003030   906 FORMAT(*1       AMES 3.5 FT HWT TEST  (*I3,*), C.B. BLUMER, IN-LINE
            1RSI GAP  RUN(*I4,*) 1973*35X,*PAGE*I4)
003030   907 FORMAT(*         TT         =*E11.4,*(K)*,
            111X*GAP LENGTH =*F7.3,*(CM)*/
            2*         FT         =*E11.4,*(N/M2)*,
            3*           GAP WIDTH  =*F7.3,*(CM)*/
            4*         HT         =*E11.4,*(J/KG)*,
            5*           GAP DEPTH  =*F7.3,*(CM)*/
            6*         RE/METER =*E11.4,
            714X*ORIENTATION=*F7.3,*(DEG)*/
            8*         MACH       =*F6.3,
            919X*QS            =*E12.4,*(W/M2)*/
            A*         RHO VEL   =*E11.4,*(KG/M2-S)        MOD.POSITION=*I3/
            B*         HAW/HT     = 0.939 FOR HT*/*        HAW/HT    = 0.874 FOR HL*/
            D*         HLCC       = HL(2ND. ORDER COND.)*)
003030   908 FORMAT(* T/C        X          YY          ZZ      Q         HL            HT      HL
            1/HREFF   HREF           STL             STT       T     HLCC     HL/HLCC   HLCC/H
            2REF  HL/HE*)
003030   909 FORMAT(*           (CM)     (CM)      (CM)    (W/M2)     (KG/M2-S)    (KG/M2-S)
            1         (KG/M2-S)                                 (K)  (KG/M2-S)*)
003030   910 FORMAT(I4,3F7.2,3E10.2,F6.3,3E11.3,F6.1,E10.2,2F5.2)
003030   911 FORMAT(* *)
003030   912 FORMAT (5I4,3E12.5)
003030   913 FORMAT(* CONDUCTION CORRECTED HL USED IN HLCC/HREF AND HLC/HEC WHE
            1N AVAILABLE,OTHERWISE (HL) IS USED*)
003030       END
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```
                    SUBROUTINE RATIO(M,ND,D,LINE,MTEST,IRUN,IPAGE)
            C
            C       HEADING RATIOED TO GAP EDGE AND PRINTS T/C DATA , AMES IN-LINE GAP
            C                                                  H.E. CHRISTENSION 74
            C       HEATING AT GAP AVERAGED,IF POSSIBLE
            C
000012              COMMON WORDT ,KN, MSKIP, NSKIP
000012              DIMENSION WORDT(24,80)
000012              DIMENSION IWORDT(24,80)
000012              EQUIVALENCE (WORDT,IWORDT)
000012              DIMENSION ND(1), D(14,80), X1(26), H1(26), X2(6), H2(6), ITC(5)
000012              DATA ITC/107,207,307,407,507/
000012              DATA NTOL/0/
            C
            C       HEATING CORRECTED FOR CONDUCTION, FIRST CHOICE
            C       UNCORRECTED HEATING SECOND CHOICE
            C
            C       T/C 1 TO 25 MAKE FIRST   STRING
            C       T/C  107  207, 307, 407, 507 MAKE SECOND STRING
            C
            C       FORMING STRINGS *************
            C
000012              DO 10 I=1,25
000013              X1(I) = 9999.
000015              IF(I.GT.5) GO TO 10
000020              X2(I) = 9999.
000021           10 CONTINUE
            C
000023              DO 100 I=1,M
000025              IF(D(4,I).EQ.9999.) GO TO 100
000031              IF(ND(I).GT.25 .AND.ND(I).LE.75) GO TO 100
000042              IF(ND(I).GT.25)      GO TO 40
000046              H = D(14,I)
000050              IF(H.GT. 0.0 .AND. H.NE.9999.) GO TO 28
000060              H = D(7,I)
000063              IF(H.LT.0.0 .OR. H.GT. 9.0) GO TO 100
            C
000073           28 J =25
000074           30 IF(D(1,I).GT.X1(J)) GO TO 32
000103              IF(J.GT.1 .AND.(D(1,I).EQ. X1(J-1))) GO TO 32
000114              X1(J+1) = X1(J)
000117              H1(J+1) = H1(J)
000122              X1(J)    = D(1,I)
000127              H1(J)    = H
000130           32 CONTINUE
000130              J = J-1
000132              IF(J.GT.0) GO TO 30
000134              GO TO 100
            C
000134           40 DO 50 J=1,5
000136              IF(ND(I).EQ.ITC(J)) GO TO 60
000141           50 CONTINUE
000143              GO TO 100
000144           60 H = D(14,I)
000150              IF(H.GT.0.0 .AND. H.NE.9999.) GO TO 70
000157              H = D(7,I )
000162              IF(H.LE.0.0 .OR. H.GT.3.0) GO TO 100
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```
000172        70 J = 5
000173        90 IF(D(1,I).GT.X2(J)) GO TO 100
000202           IF(J.GT.1 .AND.(D(1,I).EQ. X2(J-1))) GO TO 82
000213           X2(J+1) = X2(J)
000216           H2(J+1) = H2(J)
000221           X2(J)   = D(1,I)
000226           H2(J)   = H
000227        82 CONTINUE
000227           J = J-1
000231           IF(J.GT.0) GO TO 90
000233       100 CONTINUE
          C
000236           DO 110 IT = 1,25
000237           IF(X1(IT+1).EQ.9999.) GO TO 120
000242       110 CONTINUE
000244       120 DO 130 IJ = 1,5
000246           IF(X2(IJ+1).EQ.9999.) GO TO 140
000251       130 CONTINUE
000253       140 CONTINUE
          C
          C      IT = NO. OF POINTS IN STRING 1
          C      IJ = NO. OF POINTS IN STRING 2
000253           K = 1
000254           IF(IT.GT.1 .AND. IJ.GT.1) GO TO 150
000264           K = 2
000265           IF(IT.GT.1) GO TO 150
000267           K = 3
000270           IF(IJ.LT.2)  K=4
000273       150 CONTINUE
          C
000273           IP1 = 2
000274           IP2 = 2
000275           NLAST = 100
000276           KM = 0
          C
          C      DISTANCE TO TRANSITION ONSET AND TO TURBULENT CONDITION
          C
          C      ID = NO. OF ADDITIONAL POINTS CHECKED
000277           ID = 2
          C      FF = FACTOR ON CURRENT HEATING TO COVER POTENTIAL DATA SCATTER
000300           FF = 1.03
          C
000301           XTRAN1 = 1.E+30
000303           DO 152 I=1,IT
000304           II = I+ID
000306           DO 151 J=I,II
000307           IF(J+1 .GT.IT) GO TO 153
000313           IF(H1(J+1).LT.FF*H1(J)) GO TO 152
000317       151 CONTINUE
000321           XTRAN1 = X1(I)
000323           GO TO 153
000324       152 CONTINUE
000327       153 CONTINUE
          C
000327           XTRAN2 = 1.0E+30
000331           DO 155 I=1,IJ
000332           II = I+ ID
000334           DO 154 J=I,II
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000335          IF(J+1.GT.IJ) GO TO 156
000341          IF(H2(J+1) .LT.FF*H2(J)) GO TO 155
000345     154  CONTINUE
000347          XTRAN2 = X2(I)
000351          GO TO 156
000352     155  CONTINUE
000355     156  CONTINUE
          C
000355          IF(XTRAN1.LT.1.0E30 .AND. XTRAN2.LT.1.E30)
               1    XTRAN =  XTRAN1
          CCC  1    XTRAN = (XTRAN1 + XTRAN2)/2.0
000367          IF(XTRAN1.EQ.1.0E30) XTRAN = XTRAN2
          CCC   IF(XTRAN2.EQ.1.0E30) XTRAN = XTRAN1
          C
          C     TURB. B.L. ONSET
000373          XTURB = 1.E30
000375          XTURB1 = 1.E30
000376          XTURB2 = 1.0E30
000400          IF(XTRAN .GT. 250.0) GO TO 163
000403          DO 158 I=1,IT
000404          IF(X1(I).LT.XTRAN) GO TO 158
000407          II= I + ID
000411          DO 157 J=I,II
000412          IF(J+1 .GT. IT) GO TO 159
000416          IF(H1(J+1) .GT. H1(J)/FF)  GO TO 158
000423     157  CONTINUE
000425          XTURB1 = X1(I)
000427          GO TO 159
000427     158  CONTINUE
000432     159  CONTINUE
          C
000432          DO 162 I=1,IJ
000434          IF(X2(I).LT. XTRAN) GO TO 162
000437          II = I +ID
000441          DO 161 J=I,II
000442          IF(J+1.GT.IJ) GO TO 163
000446          IF(H2(J+1).GT. H2(J)/FF) GO TO 162
000453     161  CONTINUE
000455          XTURB2 = X2(I)
000457     162  CONTINUE
000462     163  CONTINUE
          C
000462          IF(XTURB1.LT.1.E30 .AND. XTURB2.LT. 1.E30)
               1        XTURB =  XTURB1
          CCC  1        XTURB = (XTURB1+ XTURB2)/2.0
000474          IF(XTURB1.EQ.1.E30) XTURB = XTURB2
          CCC   IF(XTURB2.EQ.1.E30) XTURB = XTURB1
          C
          C     EDGE RATIO
          C
000500          DO 400 I=1,M
          C
000502          R = 0.0
000503          IF(D(4,I).EQ. 9999.) GO TO 300
000507          GO TO (160,170,180,300),K
000517     160  IF(D(1,I).LT.X1(1) .OR.D(1,I).GT.X1(IT)) GO TO 180
000532          CALL TBLU(IDUP,IP1,IT,D(1,I),X1,F,H1)
          CCC   IF(D(1,I).LT.X2(1) .OR. D(1,I).GT.X2(IJ)) GO TO 170
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             CCC      CALL TBLU(IDUP,IP2,IJ,D(1,I),X2,F2,H2)
             CCC      F = (F + F2)/2.0
000543                GO TO 190
             C
000547           170  IF(K.EQ.3) GO TO 300
000551                IF(D(1,I).LT.X1(1).OR.D(1,I).GT.X1(IT)) GO TO 180
000564                CALL TBLU(IDUP,IP1,IT,D(1,I),X1,F,H1)
000575                GO TO 190
             C
000601           180  IF(K.EQ.2) GO TO 300
000603                IF(D(1,I).LT.X2(1) .OR. D(1,I).GT.X2(IJ)) GO TO  170
000616                CALL TBLU(IDUP,IP2,IJ,D(1,I),X2,F,H2)
             C
000627           190  IF(F.LE. 0. ) GO TO 300
000634                H = D(14,I)
000640                IF(H.GT.0.0 .AND. H.LT.3.0) GO TO 200
000647                H = D(7,I )
000652                IF(H.GT.0.0  .AND. H.LT.3.0) GO TO 200
000661                GO TO 300
             C
000661           200  R = H/F
             C
000663           300  IF(ND(I).LE. NLAST) GO TO 320
000667           310  NLAST = NLAST + 100
000671                IF(ND(I).GT. NLAST) GO TO 310
000675                LINE = LINE + 1
000676                WRITE(6,911)
000701           320  CONTINUE
             C
000701                LINE = LINE + 1
000706                IF(LINE .LT. 55) GO TO 330
000710                IPAGE = IPAGE+ 1
000712                WRITE(6,906) MTEST,IRUN,IPAGE
000723                WRITE(6,911)
000727                WRITE(6,908)
000733                WRITE(6,909)
000737                LINE = 6
000744           330  CONTINUE
             C
             C        PRINT T/C DATA
             C
000744                IF(ND(I).LT.030) GO TO 332
000750                WRITE(6,912) ND(I),D(1,I),D(2,I),D(3,I),D(11,I)
001013                GO TO 400
001017           332  CONTINUE
001017                IF(D(4,I).NE.9999.) GO TO 340
001023                WRITE(6,930) ND(I),D(1,I),D(2,I),D(3,I)
001061                GO TO 400
001065           340  IF(D(14,I).EQ.9999.) GO TO 360
001071                IF(R.EQ. 0.0) GO TO 350
001072                WRITE(6,910) ND(I),(D(J,I), J=1,14),R
001121                GO TO 390
001125           350  WRITE(6,930) ND(I),(D(J,I), J=1,14)
001152                GO TO 390
001156           360  IF(R.EQ.0.0) GO TO 370
001157                WRITE(6,901) ND(I),(D(J,I),   J=1,11),R
001205                GO TO 390
001212           370  WRITE(6,901) ND(I),(D(J,I),   J=1,11)
```

```
001237      390 KM =KM+1
          C
001241          WORDT(3,KM) = 0
          C
          C     BOUNDARY LAYER STATE DESIGNATION
001244          IF(WORDT( 4,KM) .GT. XTRAN) IWORDT(24,KM) = 2
001260          IF(WORDT( 4,KM) .GT. XTURB) IWORDT(24,KM) = 3
          C
001270          MSKIP = MSKIP + 1                                                TBLU5870
001272          NTOL = NTOL+1
001273          IF(MSKIP.LT.NSKIP) GO TO 450                                     TBLU5880
001275          MSKIP = 0                                                        TBLU5890
001276          WRITE(22,600) WORDT(1,KM), IWORDT(2,KM), IWORDT(3,KM),
               1 (WORDT(N,KM),N=4,13),IWORDT(14,KM),WORDT(15,KM),WORDT(16,KM),
               2 WORDT(17,KM)
001341          WRITE(23,610) WORDT(1,KM),(WORDT(N,KM),N=18,23),IWORDT(24,KM),NTOL
001365      450 CONTINUE                                                         TBLU5930
001366      400 CONTINUE
001374          WRITE(6,914)
001377          IF(IT.GT.1)
               1WRITE(6,913) (X1(I),H1(I), I=1,IT)
001426          WRITE(6,900)
001432          IF(IJ.GT.1)
               1WRITE(6,913) (X2(I),H2(I), I=1,IJ)
001461          WRITE(6,916) XTRAN, XTURB
001471          IF(KM.NE. KN) WRITE(6,915) KM, KN
001512          WRITE(15) KN,((WORDT(KM,JN),KM=1,24),JN=1,KN)                   TBLU5840
001533          KN =0                                                            TBLU5850
001534          RETURN
          C
001535      600 FORMAT(F12.3,2I5,2F8.2,F6.2,2F8.3,F7.2,2F6.3,F8.2,F7.3,I5,F7.2,E11TBLU6240
               1.3,F8.3)
001535      610 FORMAT(F12.3,2F8.3,E11.3,F9.4,2E11.3,2I5)
001535      900 FORMAT(I4,3F7.2,3E10.2,F6.3,3E11.3,F6.1,E10.2,3F8.3)
001535      901 FORMAT(I4,3F7.2,3E10.2,F6.3,3E11.3,F6.1,26X,F8.3)
001535      906 FORMAT(*1       AMES 3.5 FT HWT TEST  (*I3,*), C.B. BLUMER, IN-LINE
               1RSI GAP  RUN(*I4,*) 1973*35X,*PAGE*I4)
001535      908 FORMAT(* T/C        X          YY          ZZ       Q          HL           HT       HL
               1/HREFF  HREF          STL               STT         T      HLCC    HL/HLCC   HLCC/H
               2REF  HL/HE*)
001535      909 FORMAT(*           (CM)       (CM)       (CM)     (W/M2)      (KG/M2-S)    (KG/M2-S)
               1          (KG/M2-S)                               (K)  (KG/M2-S)*)
001535      911 FORMAT(* *)
001535      912 FORMAT(I4,3F7.2,68X,F7.2)
001535      913 FORMAT(*   X=*E13.3,*   HL   /HREFF=*E13.3)
001535      914 FORMAT(/*  EDGE HEATING USED FOR HE*)
001535      915 FORMAT(* ****** PROBLEM WITH TAPE 15 GENERATION KM=*I5,* KN=*I5)
001535      916 FORMAT(* B.L. TRANSITION DISTANCE =*F7.2,* CM*/
               1* FULLY TURBULENT B.L. CONDITIONS AT =*F7.2,* CM*)
001535          END
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```
                SUBROUTINE TBLU(IDUM,I     ,IT,X,XTAB,Y,YTAB)
          C
          C     ONE DIMENSIONAL TABLE LOOKUP WITH MEMO-Z
          C
000012          DIMENSION XTAB(1),YTAB(1)
          C     FIND BRACKET
000012          IF(X.LT.XTAB(IT-1)) GO TO 10
000015          I=IT
000016          GO TO 40
000016       10 IF(XTAB(I).GT.X) GO TO 30
000022       20 I=I+1
000023          IF(I.EQ.IT) GO TO 40
000025          IF(XTAB(I).GT.X) GO TO 40
000031          GO TO 20
          C
000031       30 IF(XTAB(I-1).LE.X) GO TO 40
000034          I=I-1
000035          IF(I.EQ.2) GO TO 40
000037          GO TO 30
000040       40 CONTINUE
000040          IF(I.LT.2) I=2
          C     I DESIGNATES THE XTAB POINT TO THE RIGHT
000043          AB=(X-XTAB(I))/(XTAB(I-1)-XTAB(I))
000047          Y=AB*YTAB(I-1)+(1.-AB)*YTAB(I)
000056          RETURN
000056          END
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AMES 3.5 FT HWT TEST (152), C.J. BLUMER, IN-LINE RSI GAP RUN(1) 1973 PAGE 1

TT	= 1.[illegible]E+03(K)	GAP LENGTH =	[illegible](CM)
PT	= 4.535E+05(N/M2)	GAP WIDTH =	0.300(CM)
HT	= 1.[illegible]E+06(J/KG)	GAP DEPTH =	[illegible](CM)
RE/METER	= 1.[illegible]	ORIENTATION=	[illegible](DEG)
MACH	= 5.195	QS =	7.5931E+04(W/M2)
RHO VEL	= 1.[illegible]E+01(KG/M2-S)	400.POSITION=	1
HAW/HT	= [illegible] FOR HT		
HAW/HT	= [illegible] FOR HL		
HLCC	= HL(3NC. ORDER CONC..)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	3.15E+03	4.71E-03	4.46E-03	.690	6.833E-03	2.422E-04	2.291E-04	296.1				1.000
2	132.78	-.51	0.00												
3	130.16	-.51	[illegible]	3.08E+03	4.92E-03	4.56E-03	.727	6.626E-03	2.479E-04	2.345E-04	296.4				1.000
4	127.63	-.51	[illegible]	3.16E+03	4.94E-03	4.68E-03	.730	6.772E-03	2.549E-04	2.403E-04	296.3				1.000
5	125.09	-.51	0.00	3.06E+03	4.79E-03	4.54E-03	.714	6.718E-03	2.463E-04	2.338E-04	296.6				1.000
6	122.56	-.51	[illegible]	3.12E+03	4.89E-03	4.62E-03	.733	6.664E-03	2.510E-04	2.374E-04	296.3				1.000
7	117.47	-.51	0.00	3.19E+03	4.99E-03	4.72E-03	.756	6.590E-03	2.565E-04	2.427E-04	296.5				1.000
8	112.37	-.51	0.00	3.20E+03	5.01E-03	4.74E-03	.767	6.527E-03	2.573E-04	2.434E-04	296.8				1.000
9	107.31	-.51	[illegible]	3.31E+03	5.19E-03	4.91E-03	.797	6.511E-03	2.655E-04	2.521E-04	296.7				1.000
10	102.20	-.51	[illegible]	3.43E+03	5.38E-03	5.09E-03	.802	6.711E-03	2.754E-04	2.615E-04	296.7				1.000
11	97.12	-.51	0.00	3.44E+03	5.39E-03	5.09E-03	.782	6.884E-03	2.767E-04	2.617E-04	296.8				1.000
12	92.04	-.51	[illegible]	3.57E+03	5.54E-03	5.24E-03	.757	7.036E-03	2.844E-04	2.691E-04	296.8				1.000
13	86.96	-.51	0.00	3.51E+03	5.50E-03	5.20E-03	.765	7.189E-03	2.825E-04	2.674E-04	297.4				1.000
14	81.88	-.51	0.00	3.75E+03	5.89E-03	5.57E-03	.807	7.298E-03	3.026E-04	2.862E-04	297.3				1.000
15	76.80	-.51	[illegible]	3.71E+03	5.81E-03	5.49E-03	.785	7.412E-03	2.934E-04	2.823E-04	297.3				1.000
16	71.72	-.51	0.00	3.91E+03	5.98E-03	5.66E-03	.797	7.503E-03	3.072E-04	2.906E-04	297.5				1.000
17	66.64	-.51	0.00	4.05E+03	6.36E-03	6.01E-03	.801	7.943E-03	3.266E-04	3.089E-04	297.5				1.000
18	61.56	-.51	0.00	4.25E+03	6.68E-03	6.32E-03	.781	8.551E-03	3.432E-04	3.247E-04	298.1				1.000
19	56.48	-.51	0.00	4.45E+03	6.99E-03	6.61E-03	.773	9.049E-03	3.592E-04	3.398E-04	297.8				1.000
20	51.39	-.51	0.00	4.44E+03	7.13E-03	6.75E-03	.751	9.499E-03	3.665E-04	3.467E-04	297.9				1.000
21	48.86	-.51	0.00	4.69E+03	7.37E-03	6.97E-03	.756	9.748E-03	3.787E-04	3.582E-04	298.5				1.000
22	46.31	-.51	0.00	4.88E+03	7.67E-03	7.26E-03	.765	1.003E-02	3.940E-04	3.727E-04	298.1				1.000
23	43.77	-.51	0.00	5.12E+03	8.03E-03	7.60E-03	.779	1.031E-02	4.127E-04	3.904E-04	298.0				1.000
24	41.24	-.51	0.00	5.40E+03	8.48E-03	8.02E-03	.801	1.059E-02	4.356E-04	4.120E-04	298.0				1.000
25	38.70	-.51	0.00	5.54E+03	8.79E-03	8.23E-03	.800	1.087E-02	4.459E-04	4.220E-04	297.6				1.000
193	47.59	1.52	0.00	5.10E+03	8.04E-03	7.61E-03	.814	9.886E-03	4.133E-04	3.908E-04	300.9	8.04E-03	1.000	.814	1.070
195	47.59	1.02	0.00	5.00E+03	7.90E-03	7.47E-03	.799	9.885E-03	4.057E-04	3.836E-04	301.4	7.90E-03	1.000	.799	1.050
197	47.59	.51	0.00	4.49E+03	7.08E-03	6.70E-03	.717	9.886E-03	3.640E-04	3.442E-04	300.7	7.08E-03	1.000	.717	.942
198	47.39	.25	0.00	3.53E+03	5.56E-03	5.25E-03	.562	9.886E-03	2.854E-04	2.699E-04	299.9	5.56E-03	1.000	.562	.739
110	47.59	.04	.04	2.30E+03	3.61E-03	3.42E-03	.366	9.887E-03	1.856E-04	1.756E-04	298.9	3.61E-03	1.000	.366	.481
203	61.56	1.52	0.00	4.40E+03	6.93E-03	6.55E-03	.810	8.558E-03	3.560E-04	3.368E-04	299.3	6.93E-03	1.000	.810	1.036
205	61.56	1.02	0.00	4.45E+03	7.01E-03	6.63E-03	.820	8.555E-03	3.602E-04	3.407E-04	299.5	7.01E-03	1.000	.820	1.049
207	61.56	.51	0.00	4.02E+03	6.33E-03	5.99E-03	.740	8.553E-03	3.253E-04	3.077E-04	293.3	6.33E-03	1.000	.740	.947
208	61.56	.25	0.00	3.29E+03	5.18E-03	4.90E-03	.605	8.552E-03	2.660E-04	2.516E-04	298.7	5.18E-03	1.000	.605	.774
210	61.56	.04	.04	2.29E+03	3.60E-03	3.49E-03	.421	8.552E-03	1.848E-04	1.748E-04	297.9	3.60E-03	1.000	.421	.538
301	86.96	2.03	0.00	3.42E+03	5.36E-03	5.07E-03	.746	7.187E-03	2.754E-04	2.605E-04	297.3	5.36E-03	1.000	.746	.974
302	86.96	1.79	0.00	3.66E+03	5.74E-03	5.43E-03	.798	7.196E-03	2.947E-04	2.785E-04	297.8	5.74E-03	1.000	.798	1.043
303	86.96	1.52	0.00	3.68E+03	5.78E-03	5.47E-03	.805	7.186E-03	2.972E-04	2.811E-04	298.3	5.78E-03	1.000	.805	1.052
304	86.96	1.27	0.00	3.59E+03	5.64E-03	5.34E-03	.785	7.185E-03	2.899E-04	2.742E-04	298.5	5.64E-03	1.000	.785	1.025

AMES 3.5 FT HWT TEST (182), T.R. BLUMER, IN-LINE RSI GAP RUN(1) 1973 PAGE 2

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
385	86.96	1.02	[illegible]	3.25E+03	5.37E-03	5.28E-03	.748	7.185E-03	2.767E-04	2.610E-04	298.5	5.37E-03	1.000	.748	.977
386	86.96	.76	.00	3.36E+03	5.27E-03	4.99E-03	.734	7.186E-03	2.789E-04	2.562E-04	297.9	5.27E-03	1.000	.734	.959
387	86.96	.51	[illegible]	3.15E+03	4.94E-03	4.57E-03	.688	7.185E-03	2.533E-04	2.401E-04	297.5	4.94E-03	1.000	.688	.899
388	86.96	.25	[illegible]	2.66E+03	4.12E-03	3.90E-03	.559	7.186E-03	2.064E-04	1.953E-04	297.6	4.92E-03	1.000	.559	.731
389	86.96	.13	.00	2.10E+03	3.29E-03	3.11E-03	.457	7.187E-03	1.663E-04	1.597E-04	296.6	3.29E-03	1.000	.457	.597
310	86.96	.04	.04	1.72E+03	2.69E-03	2.54E-03	.374	7.187E-03	1.382E-04	1.306E-04	296.4	2.69E-03	1.000	.374	.488
401	112.36	2.33	[illegible]	2.81E+03	4.41E-03	4.17E-03	.674	6.533E-03	2.264E-04	2.142E-04	296.0	4.41E-03	1.000	.674	.879
402	112.36	1.78	[illegible]	3.17E+03	4.96E-03	4.69E-03	.759	6.532E-03	2.545E-04	2.411E-04	296.5	4.96E-03	1.000	.759	.989
403	112.36	1.52	[illegible]	3.21E+03	5.03E-03	4.75E-03	.770	6.530E-03	2.592E-04	2.442E-04	296.9	5.03E-03	1.000	.770	1.003
404	112.36	1.27	[illegible]	3.32E+03	5.20E-03	4.92E-03	.797	6.529E-03	2.674E-04	2.529E-04	297.3	5.20E-03	1.000	.797	1.039
405	112.36	1.02	[illegible]	3.17E+03	4.97E-03	4.70E-03	.762	6.528E-03	2.554E-04	2.416E-04	297.1	4.97E-03	1.000	.762	.992
406	112.36	.75	[illegible]	3.09E+03	4.84E-03	4.58E-03	.742	6.527E-03	2.489E-04	2.354E-04	296.9	4.84E-03	1.000	.742	.967
407	112.36	.51	[illegible]	2.88E+03	4.51E-03	4.27E-03	.692	6.527E-03	2.319E-04	2.194E-04	296.7	4.51E-03	1.000	.692	.901
408	112.36	.25	[illegible]	2.21E+03	3.46E-03	3.28E-03	.531	6.526E-03	1.773E-04	1.683E-04	295.9	3.46E-03	1.000	.531	.691
409	112.36	.13	[illegible]	1.82E+03	2.85E-03	2.69E-03	.436	6.526E-03	1.463E-04	1.384E-04	296.1	2.85E-03	1.000	.436	.569
410	112.36	.04	.04	1.52E+03	2.37E-03	2.24E-03	.364	6.526E-03	1.219E-04	1.153E-04	296.0	2.37E-03	1.000	.364	.474
501	125.96	2.03	[illegible]	2.79E+03	4.36E-03	4.12E-03	.647	6.736E-03	2.240E-04	2.119E-04	295.7	4.36E-03	1.000	.647	.907
502	125.96	1.78	.00	3.11E+03	4.87E-03	4.61E-03	.723	6.733E-03	2.503E-04	2.368E-04	296.8	4.87E-03	1.000	.723	1.013
503	125.96	1.52	[illegible]	3.11E+03	4.88E-03	4.61E-03	.724	6.731E-03	2.505E-04	2.370E-04	296.5	4.88E-03	1.000	.724	1.015
504	125.96	1.27	[illegible]	3.10E+03	4.85E-03	4.59E-03	.721	6.728E-03	2.493E-04	2.359E-04	296.7	4.85E-03	1.000	.721	1.010
505	125.96	1.02	.00	2.94E+03	4.61E-03	4.36E-03	.686	6.726E-03	2.369E-04	2.241E-04	296.9	4.61E-03	1.000	.686	.960
506	125.96	.76	[illegible]	2.96E+03	4.65E-03	4.40E-03	.691	6.724E-03	2.397E-04	2.258E-04	296.7	4.65E-03	1.000	.691	.968
507	125.96	.51	[illegible]	2.67E+03	4.19E-03	3.96E-03	.623	6.722E-03	2.153E-04	2.037E-04	296.9	4.19E-03	1.000	.623	.873
508	125.96	.25	.00	2.19E+03	3.43E-03	3.25E-03	.511	6.721E-03	1.765E-04	1.669E-04	296.1	3.43E-03	1.000	.511	.716
509	125.96	.13	[illegible]	1.73E+03	2.70E-03	2.56E-03	.402	6.720E-03	1.388E-04	1.313E-04	295.8	2.70E-03	1.000	.402	.563
510	125.96	.04	.04	1.44E+03	2.25E-03	2.12E-03	.334	6.719E-03	1.154E-04	1.092E-04	295.4	2.25E-03	1.000	.334	.468

EDGE HEATING USED FOR HE

X=	3.877E+01	HL	/HREFF=	8.[illegible]E-01
X=	4.124E+01	HL	/HREFF=	8.[illegible]E-01
X=	4.377E+01	HL	/HREFF=	[illegible].[illegible]31E-01
X=	4.631E+01	HL	/HREFF=	7.[illegible]7E-01
X=	4.886E+01	HL	/HREFF=	7.561E-01
X=	5.139E+01	HL	/HREFF=	7.[illegible]E-01
X=	5.649E+01	HL	/HREFF=	7.[illegible]E-01
X=	6.156E+01	HL	/HREFF=	7.613E-01
X=	6.604E+01	HL	/HREFF=	[illegible]
X=	7.172E+01	HL	/HREFF=	7.[illegible]E-01
X=	7.653E+01	HL	/HREFF=	[illegible].[illegible]47E-01
X=	8.130E+01	HL	/HREFF=	[illegible]
X=	8.696E+01	HL	/HREFF=	7.[illegible]25E-01
X=	9.2[illegible]E+01	HL	/HREFF=	[illegible]
X=	9.[illegible]12E+01	HL	/HREFF=	[illegible]
X=	1.[illegible]22E+02	HL	/HREFF=	[illegible]
X=	1.[illegible]E+02	HL	/HREFF=	7.[illegible]E-01
X=	1.124E+02	HL	/HREFF=	7.[illegible]3E-01
X=	1.1[illegible]E+02	HL	/HREFF=	7.[illegible]E-01
X=	1.226E+02	HL	/HREFF=	7.33[illegible]E-01
X=	1.2[illegible]1E+02	HL	/HREFF=	7.[illegible]E-01
X=	1.2[illegible]E+02	HL	/HREFF=	[illegible]
X=	1.3[illegible]2E+02	HL	/HREFF=	7.[illegible]E-01
X=	1.3[illegible]2E+02	HL	/HREFF=	[illegible]
X=	4.7[illegible]9E+01	HL	/HREFF=	7.[illegible]7E-01
X=	[illegible].1[illegible]6E+01	HL	/HREFF=	[illegible]
X=	9.[illegible]E+01	HL	/HREFF=	[illegible]
X=	1.12[illegible]E+02	HL	/HREFF=	[illegible]
X=	1.2[illegible]E+02	HL	/HREFF=	[illegible]

B.L. TRANSITION DISTANCE = [illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT = 51.55 CM

ORIGINAL PAGE IS
OF POOR QUALITY

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AMES 3.5 FT HWT TEST (1c2), C.B. BLUMER, IN-LINE RSI GAP RUN(   2) 1973                                PAGE  3
TT        = 1.127[illegible]E+03(K)            GAP LENGTH =  0.3[illegible](CM)
PT        = 1.3613E+06(N/M2)                  GAP WIDTH  =  0.3[illegible](CM)
HT        = 1.132[illegible]E+06(J/KG)         GAP DEPTH  =  0.000(CM)
RE/METER  = 3.7171E+06                        ORIENTATION=  0.0[illegible](DEG)
MACH      = 5.1[illegible]                     QS         =  1.2536E+05(W/M2)
RHO VEL   = 4.27[illegible]E+01(KG/M2-S)       MOD.POSITION=  1
HAW/HT    = 0.923 FOR HT
HAW/HT    = 0.974 FOR HL
HLCC      = HL(2ND. ORDER CONL.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	2.6[illegible]E+04	3.535E-02	3.40E-02	.737	4.839E-02	8.399E-04	7.964E-04	298.8				1.000
2	132.7[illegible]	-.51	[illegible]	5.63E+0[illegible]	8.045E-06	7.60E-06	.000	4.564E-02	1.853E-07	1.780E-07	330.7				1.000
3	130.16	-.51	[illegible]	2.3[illegible]E+04	3.23E-02	3.03E-02	.731	4.255E-02	7.487E-04	7.099E-04	299.2				1.000
4	127.63	-.51	[illegible]	2.22E+04	3.10E-02	2.95E-02	.750	3.935E-02	7.036E-04	6.671E-04	299.2				1.000
5	125.09	-.51	0.00	1.95E+04	2.64E-02	2.50E-02	.722	3.651E-02	6.175E-04	5.855E-04	299.7				1.000
6	122.56	-.51	[illegible]	1.32E+04	2.46E-02	2.33E-02	.734	3.346E-02	5.753E-04	5.456E-04	299.3				1.000
7	117.47	-.51	[illegible]	1.[illegible]E+04	2.32E-02	1.92E-02	.735	2.754E-02	4.742E-04	4.496E-04	299.4				1.000
8	112.37	-.51	0.00	1.16E+04	1.56E-02	1.48E-02	.697	2.243E-02	3.663E-04	3.473E-04	300.2				1.000
9	107.31	-.51	[illegible]	9.23E+03	1.25E-02	1.19E-02	.679	1.546E-02	2.938E-04	2.785E-04	299.9				1.000
10	102.20	-.51	[illegible]	7.62E+03	1.03E-02	9.76E-03	.671	1.535E-02	2.411E-04	2.286E-04	299.9				1.000
11	97.12	-.51	[illegible]	6.14E+03	8.30E-03	7.87E-03	.644	1.289E-02	1.943E-04	1.843E-04	300.1				1.000
12	92.04	-.51	[illegible]	5.45E+03	7.37E-03	6.99E-03	.655	1.138E-02	1.725E-04	1.637E-04	300.3				1.000
13	86.96	-.51	[illegible]	3.[illegible]E+03	5.82E-03	6.46E-03	.675	1.010E-02	1.596E-04	1.513E-04	301.4				1.000
14	81.88	-.51	[illegible]	5.29E+03	7.86E-03	7.17E-03	.798	9.476E-03	1.771E-04	1.679E-04	301.0				1.000
15	76.8[illegible]	-.51	[illegible]	5.67E+03	7.59E-03	7.28E-03	.818	9.381E-03	1.797E-04	1.704E-04	301.1				1.000
16	71.72	-.51	[illegible]	5.9[illegible]E+03	[illegible]	7.64E-03	.840	9.596E-03	1.897E-04	1.799E-04	301.3				1.000
17	66.64	-.51	0.00	6.27E+03	8.50E-03	8.05E-03	.852	9.971E-03	1.993E-04	1.886E-04	301.6				1.000
18	61.56	-.51	[illegible]	[illegible]	[illegible]	8.31E-03	.841	1.043E-02	2.053E-04	1.946E-04	302.7				1.000
19	56.48	-.51	[illegible]	6.73E+03	9.13E-03	8.65E-03	.825	1.107E-02	2.138E-04	2.027E-04	302.2				1.000
20	51.39	-.51	[illegible]	6.92E+03	9.38E-03	8.99E-03	.796	1.178E-02	2.197E-04	2.083E-04	302.3				1.000
21	48.86	-.51	[illegible]	[illegible]	9.34E-03	8.85E-03	.759	1.215E-02	2.187E-04	2.073E-04	303.7				1.000
22	46.31	-.51	[illegible]	7.2[illegible]E+03	9.77E-03	9.26E-03	.780	1.253E-02	2.258E-04	2.169E-04	302.8				1.000
23	43.77	-.51	[illegible]	7.53E+03	1.02E-02	9.68E-03	.791	1.291E-02	2.392E-04	2.267E-04	302.5				1.000
24	41.24	-.51	[illegible]	[illegible]	1.07E-02	1.01E-02	.805	1.329E-02	2.504E-04	2.373E-04	302.5				1.000
25	38.70	-.51	[illegible]	7.91E+03	1.07E-02	1.02E-02	.78[illegible]	1.366E-02	2.511E-04	2.380E-04	301.9				1.000
103	47.59	1.02	[illegible]	[illegible]	1.03E-02	9.72E-03	.832	1.233E-02	2.402E-04	2.276E-04	307.[illegible]	1.03E-02	1.000	.832	1.075
105	47.59	1.02	[illegible]	[illegible]	1.00E-02	9.48E-03	.812	1.233E-02	2.343E-04	2.220E-04	308.6	1.00E-02	1.000	.812	1.040
107	47.59	.51	[illegible]	[illegible]	8.88E-03	8.41E-03	.720	1.233E-02	2.083E-04	1.971E-04	307.5	8.88E-03	1.000	.720	.930
108	47.59	.25	[illegible]	[illegible]	[illegible]	6.65E-03	.569	1.233E-02	1.64[illegible]E-04	1.558E-04	306.0	7.02E-03	1.000	.569	.735
110	47.59	.04	.04	[illegible]	4.66E-03	4.42E-03	.378	1.233E-02	1.091E-04	1.034E-04	304.3	4.66E-03	1.000	.378	.400
203	61.56	2.03	[illegible]	[illegible]	[illegible]	[illegible]	.869	1.042E-02	2.122E-04	2.011E-04	304.5	9.06E-03	1.000	.869	1.034
205	61.56	1.02	[illegible]	[illegible]	9.17E-03	8.69E-03	.880	1.042E-02	2.149E-04	2.036E-04	305.1	9.17E-03	1.000	.880	1.047
207	61.56	.51	[illegible]	[illegible]	8.13E-03	7.71E-03	.780	1.042E-02	1.905E-04	1.805E-04	304.6	8.13E-03	1.000	.780	.92[illegible]
208	61.56	.25	[illegible]	[illegible]	6.71E-03	6.35E-03	.642	1.042E-02	1.5[illegible]E-04	1.486E-04	303.7	6.71E-03	1.000	.642	.764
210	61.56	.04	.04	[illegible]	4.64E-03	[illegible]	.446	1.042E-02	1.[illegible]E-04	1.031E-04	302.3	4.64E-03	1.000	.446	.530
301	96.96	2.03	[illegible]	[illegible]	[illegible]	6.15E-03	.652	9.872E-03	1.522E-04	1.443E-04	300.9	6.56E-03	1.000	.652	.960
302	96.96	1.02	[illegible]	[illegible]	7.10E-03	6.73E-03	.711	9.983E-03	1.552E-04	1.576E-04	301.9	7.10E-03	1.000	.711	1.053
303	96.96	1.52	[illegible]	[illegible]	7.31E-03	6.93E-03	.732	9.994E-03	1.712E-04	1.623E-04	302.6	7.31E-03	1.000	.732	1.084
304	96.96	1.27	[illegible]	[illegible]	[illegible]	[illegible]	.7[illegible]	[illegible]	1.6[illegible]E-04	1.565E-04	303.2	7.35E-03	1.000	.775	1.044

AMES 3.5 FT HWT TEST (1:2), C.J. BLUMER, IN-LINE RSI GAP RUN(2) 1373 PAGE 4

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
305	86.96	1.02	0.00	4.95E+03	6.72E-03	6.37E-03	.671	1.002E-02	1.573E-04	1.491E-04	303.2	6.72E-03	1.000	.671	.593
306	86.96	.73	0.00	4.67E+03	6.26E-03	5.94E-03	.625	1.003E-02	1.467E-04	1.391E-04	301.2	6.26E-03	1.000	.625	.925
307	86.96	.51	0.00	4.73E+03	6.43E-03	6.09E-03	.640	1.004E-02	1.336E-04	1.427E-04	303.4	6.43E-03	1.000	.640	.940
308	86.96	.25	0.00	3.52E+03	4.76E-03	4.51E-03	.474	1.006E-02	1.115E-04	1.057E-04	303.3	4.76E-03	1.000	.474	.701
309	86.96	.15	0.00	2.80E+03	3.78E-03	3.59E-03	.376	1.006E-02	8.863E-05	8.400E-05	299.6	3.78E-03	1.000	.376	.557
310	86.96	.04	.04	2.44E+03	3.29E-03	3.12E-03	.327	1.007E-02	7.714E-05	7.314E-05	299.2	3.29E-03	1.000	.327	.485
401	112.36	2.03	0.00	1.07E+04	1.44E-02	1.36E-02	.656	2.192E-02	3.378E-04	3.196E-04	298.1	1.44E-02	1.000	.656	.941
402	112.36	1.79	0.00	1.15E+04	1.55E-02	1.47E-02	.707	2.197E-02	3.639E-04	3.458E-04	299.3	1.55E-02	1.000	.707	1.014
403	112.36	1.52	0.00	1.09E+04	1.48E-02	1.40E-02	.671	2.292E-02	3.462E-04	3.282E-04	302.6	1.48E-02	1.000	.671	.963
404	112.36	1.27	0.00	1.21E+04	1.64E-02	1.56E-02	.744	2.297E-02	3.849E-04	3.649E-04	300.6	1.64E-02	1.000	.744	1.067
405	112.36	1.02	0.00	1.11E+04	1.51E-02	1.43E-02	.681	2.212E-02	3.530E-04	3.347E-04	300.5	1.51E-02	1.000	.681	.977
406	112.36	.76	0.00	1.06E+04	1.44E-02	1.36E-02	.649	2.217E-02	3.371E-04	3.196E-04	300.2	1.44E-02	1.000	.649	.931
407	112.36	.51	0.00	9.42E+03	1.27E-02	1.21E-02	.573	2.222E-02	2.982E-04	2.827E-04	299.0	1.27E-02	1.000	.573	.822
408	112.36	.25	0.00	7.88E+03	1.06E-02	1.01E-02	.476	2.227E-02	2.491E-04	2.362E-04	298.4	1.06E-02	1.000	.476	.683
409	112.36	.15	0.00	6.60E+03	8.77E-03	8.32E-03	.394	2.229E-02	2.055E-04	1.949E-04	298.4	8.77E-03	1.000	.394	.565
410	112.36	.04	.04	5.09E+03	6.87E-03	6.51E-03	.308	2.231E-02	1.608E-04	1.525E-04	298.2	6.87E-03	1.000	.308	.441
501	125.96	2.03	0.00	1.88E+04	2.53E-02	2.40E-02	.795	3.593E-02	5.928E-04	5.621E-04	297.6	2.53E-02	1.000	.705	.979
502	125.96	1.78	0.00	2.01E+04	2.71E-02	2.57E-02	.754	3.599E-02	6.357E-04	6.028E-04	298.3	2.71E-02	1.000	.754	1.044
503	125.96	1.52	0.00	2.00E+04	2.71E-02	2.56E-02	.751	3.604E-02	6.335E-04	6.007E-04	299.2	2.71E-02	1.000	.751	1.039
504	125.96	1.27	0.00	1.97E+04	2.67E-02	2.53E-02	.739	3.616E-02	6.250E-04	5.926E-04	299.7	2.67E-02	1.000	.739	1.020
505	125.96	1.02	0.00	1.88E+04	2.54E-02	2.41E-02	.703	3.616E-02	5.955E-04	5.646E-04	299.9	2.54E-02	1.000	.703	.974
506	125.96	.75	0.00	1.81E+04	2.45E-02	2.32E-02	.676	3.621E-02	5.736E-04	5.438E-04	299.8	2.45E-02	1.000	.676	.936
507	125.96	.51	0.00	1.65E+04	2.24E-02	2.12E-02	.618	3.626E-02	5.248E-04	4.976E-04	299.3	2.24E-02	1.000	.618	.855
508	125.96	.25	0.00	1.33E+04	1.80E-02	1.71E-02	.496	3.631E-02	4.218E-04	3.999E-04	298.5	1.80E-02	1.000	.496	.686
509	125.96	.15	0.00	9.49E+03	1.28E-02	1.21E-02	.352	3.633E-02	2.996E-04	2.841E-04	297.6	1.28E-02	1.000	.352	.487
510	125.96	.04	.04	8.72E+03	1.17E-02	1.11E-02	.323	3.636E-02	2.751E-04	2.609E-04	297.5	1.17E-02	1.000	.323	.447

EDGE HEATING USED FOR HE

```
X=   3.879E+01  HL  /HREFF=  7.847E-01
X=   4.124E+01  HL  /HREFF=  8.047E-01
X=   4.377E+01  HL  /HREFF=  7.512E-01
X=   4.631E+01  HL  /HREFF=  7.738E-01
X=   4.886E+01  HL  /HREFF=  7.696E-01
X=   5.139E+01  HL  /HREFF=  7.962E-01
X=   5.648E+01  HL  /HREFF=  8.231E-01
X=   6.156E+01  HL  /HREFF=  8.4[illegible]5E-01
X=   6.664E+01  HL  /HREFF=  8.520E-01
X=   7.172E+01  HL  /HREFF=  8.398E-01
X=   7.683E+01  HL  /HREFF=  8.132E-01
X=   8.188E+01  HL  /HREFF=  7.932E-01
X=   8.696E+01  HL  /HREFF=  6.789E-01
X=   9.204E+01  HL  /HREFF=  6.653E-01
X=   9.712E+01  HL  /HREFF=  6.478E-01
X=   1.022E+02  HL  /HREFF=  6.7[illegible]E-01
X=   1.073E+02  HL  /HREFF=  6.796E-01
X=   1.124E+02  HL  /HREFF=  6.9[illegible]E-01
X=   1.179E+02  HL  /HREFF=  7.302E-01
X=   1.226E+02  HL  /HREFF=  7.344E-01
X=   1.251E+02  HL  /HREFF=  7.223E-01
X=   1.276E+02  HL  /HREFF=  7.536E-01
X=   1.302E+02  HL  /HREFF=  7.[illegible]6E-01
X=   1.327E+02  HL  /HREFF=  1.[illegible]2E-[illegible]
X=   1.352E+02  HL  /HREFF=  7.3[illegible]E-01

X=   4.739E+01  HL  /HREFF=  7.2[illegible]E-01
X=   6.156E+01  HL  /HREFF=  7.[illegible]4E-01
X=   9.696E+01  HL  /HREFF=  6.4[illegible]E-01
X=   1.124E+02  HL  /HREFF=  5.7[illegible]E-01
X=   1.281E+02  HL  /HREFF=  [illegible]E-01
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B.L. TRANSITION DISTANCE = [illegible].83 CM
FULLY TURBULENT B.L. CONDITIONS AT = [illegible]1.58 CM

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP RUN(3) 1973 PAGE 5

TT	= 1.1441E+03(K)	GAP LENGTH =	3.000(CM)
PT	= 5.1513E+05(N/M2)	GAP WIDTH =	[illegible](CM)
HT	= 1.2123E+06(J/KG)	GAP DEPTH =	0.000(CM)
RE/METER	= 1.5735E+06	ORIENTATION=	9.990(DEG)
MACH	= 5.100	QS =	8.8732E+04(N/M2)
RHO VEL	= 2.[illegible]E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 1.998 FOR HT		
HAW/HT	= 1.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.09E+03	6.82E-03	6.47E-03	1.096	6.22[illegible]E-03	3.323E-04	3.158E-04	311.2				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	4.69E+03	5.29E-03	5.96E-03	1.002	6.272E-03	3.061E-04	2.901E-04	311.5				1.000
4	127.63	-.51	0.00	4.89E+03	6.15E-03	5.82E-03	.976	6.294E-03	2.993E-04	2.837E-04	311.5				1.000
5	125.09	-.51	0.00	4.28E+03	5.74E-03	5.44E-03	.909	6.316E-03	2.797E-04	2.651E-04	311.7				1.000
6	122.56	-.51	0.00	4.29E+03	5.76E-03	5.46E-03	.918	6.337E-03	2.804E-04	2.657E-04	311.[illegible]				1.000
7	117.47	-.51	0.00	4.27E+03	5.73E-03	5.43E-03	.900	6.369E-03	2.793E-04	2.646E-04	311.3				1.000
8	112.37	-.51	0.00	4.17E+03	5.60E-03	5.31E-03	.882	6.353E-03	2.729E-04	2.586E-04	311.7				1.000
9	107.31	-.51	0.00	4.23E+03	5.67E-03	5.37E-03	.887	6.390E-03	2.761E-04	2.617E-04	311.5				1.000
10	102.20	-.51	0.00	4.24E+03	5.69E-03	5.39E-03	.860	6.615E-03	2.772E-04	2.627E-04	311.5				1.000
11	97.12	-.51	0.00	4.16E+03	5.58E-03	5.22E-03	.813	6.770E-03	2.681E-04	2.540E-04	311.6				1.000
12	92.04	-.51	0.00	[illegible]	5.42E-03	5.14E-03	.782	6.933E-03	2.640E-04	2.502E-04	311.6				1.000
13	86.96	-.51	0.00	3.92E+03	5.12E-03	4.86E-03	.721	7.110E-03	2.496E-04	2.365E-04	312.2				1.000
14	81.88	-.51	0.00	4.26E+03	5.45E-03	5.16E-03	.753	7.236E-03	2.653E-04	2.514E-04	312.0				1.000
15	76.80	-.51	0.00	4.38E+03	5.48E-03	5.19E-03	.746	7.346E-03	2.668E-04	2.528E-04	312.1				1.000
16	71.72	-.51	0.00	[illegible]	5.99E-03	5.50E-03	.793	7.447E-03	2.876E-04	2.729E-04	312.3				1.000
17	66.64	-.51	0.00	4.65E+03	6.24E-03	5.92E-03	.792	7.885E-03	3.040E-04	2.881E-04	312.6				1.000
18	61.56	-.51	0.00	4.56E+03	6.54E-03	6.20E-03	.770	8.495E-03	3.185E-04	3.018E-04	313.2				1.000
19	56.48	-.51	0.00	5.01E+03	6.74E-03	6.39E-03	.750	8.982E-03	3.282E-04	3.110E-04	313.0				1.000
20	51.39	-.51	0.00	5.76E+03	6.81E-03	6.45E-03	.723	9.414E-03	3.315E-04	3.141E-04	313.2				1.000
21	48.86	-.51	0.00	5.26E+03	7.08E-03	6.71E-03	.733	9.659E-03	3.447E-04	3.266E-04	314.1				1.000
22	46.31	-.51	0.00	5.49E+03	7.38E-03	6.99E-03	.742	9.949E-03	3.594E-04	3.406E-04	313.5				1.000
23	43.77	-.51	0.00	5.74E+03	7.72E-03	7.32E-03	.755	1.022E-02	3.760E-04	3.563E-04	313.3				1.000
24	41.24	-.51	0.00	[illegible]	8.08E-03	7.66E-03	.770	1.050E-02	3.935E-04	3.729E-04	313.4				1.000
25	38.70	-.51	0.00	[illegible]	9.19E-03	7.76E-03	.759	1.078E-02	3.987E-04	3.778E-04	313.0				1.000
103	47.59	1.52	[illegible]	[illegible]	7.95E-03	7.53E-03	.811	9.795E-03	3.971E-04	3.667E-04	316.8	7.95E-03	1.000	.811	1.100
105	47.59	1.02	[illegible]	[illegible]	7.75E-03	7.34E-03	.792	9.794E-03	3.776E-04	3.577E-04	317.4	7.75E-03	1.000	.792	1.073
107	47.59	.51	[illegible]	[illegible]	6.81E-03	6.46E-03	.696	9.795E-03	3.319E-04	3.144E-04	316.6	6.81E-03	1.000	.696	.943
108	47.59	.25	[illegible]	[illegible]	5.27E-03	4.99E-03	.536	9.796E-03	2.563E-04	2.43[illegible]E-04	315.7	5.27E-03	1.000	.538	.729
110	47.59	[illegible]	[illegible]	2.41E+03	3.24E-03	3.37E-03	.331	9.796E-03	1.579E-04	1.495E-04	314.5	3.24E-03	1.000	.331	.449
203	61.56	1.52	[illegible]	[illegible]	7.10E-03	6.73E-03	.836	8.[illegible]E-03	3.459E-04	3.277E-04	314.4	7.10E-03	1.000	.836	1.086
205	61.56	1.02	[illegible]	[illegible]	7.08E-03	6.63E-03	.824	8.497E-03	[illegible]	3.238E-04	314.8	7.08E-03	1.000	.824	1.078
207	61.56	.51	[illegible]	[illegible]	6.33E-03	5.99E-03	.744	8.496E-03	[illegible]	2.919E-04	314.4	6.33E-03	1.000	.744	.96[illegible]
208	61.56	.25	[illegible]	[illegible]	5.23E-03	4.35E-03	.615	8.495E-03	2.546E-04	2.413E-04	313.6	5.23E-03	1.000	.615	.80[illegible]
210	61.56	[illegible]	[illegible]	2.61E+03	3.51E-03	3.32E-03	.413	8.495E-03	[illegible]	1.619E-04	313.0	3.51E-03	1.000	.413	.536
301	[illegible]	2.03	[illegible]	[illegible]	[illegible]	[illegible]	.725	[illegible]	[illegible]	2.377E-04	312.2	5.19E-03	1.000	.725	1.088
302	[illegible]	1.78	[illegible]	[illegible]	[illegible]	[illegible]	.772	7.124E-03	[illegible]	[illegible]	312.7	5.48E-03	1.000	.772	1.071
303	46.96	1.52	[illegible]	[illegible]	5.58E-03	5.29E-03	.785	[illegible]	2.717E-04	2.575E-04	313.1	5.58E-03	1.000	.785	1.096
304	[illegible]	1.27	[illegible]	[illegible]	[illegible]	[illegible]	.765	[illegible]	[illegible]	2.566E-04	313.3	5.43E-03	1.000	.765	1.061

AMES 3.5 FT HWT TEST (1[illegible]), [illegible] OLUMER, IN-LINE RSI GAP RUN (3) 1373 PAGE 6

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
305	86.96	1.02	[illegible]	3.[illegible]E+03	5.19E-03	4.32E-03	.730	7.[illegible]E-03	2.527E-04	2.394E-04	313.4	5.19E-03	1.000	.730	1.013
306	86.96	.76	[illegible]	3.[illegible]E+03	5.05E-03	4.70E-03	.711	7.105E-03	2.459E-04	2.330E-04	312.3	5.05E-03	1.000	.711	.986
307	86.96	.51	[illegible]	3.[illegible]E+03	4.75E-03	4.[illegible]E-03	.669	7.1[illegible]E-03	2.315E-04	2.194E-04	314.2	4.75E-03	1.000	.669	.926
308	86.96	.25	[illegible]	2.[illegible]E+03	3.79E-03	3.59E-03	.534	7.106E-03	1.847E-04	1.750E-04	311.4	3.79E-03	1.000	.534	.748
309	86.96	.15	[illegible]	2.[illegible]E+03	2.96E-03	2.81E-03	.417	7.107E-03	1.443E-04	1.367E-04	311.1	2.96E-03	1.000	.417	.578
310	86.96	[illegible]	[illegible]	1.[illegible]E+03	2.34E-03	2.22E-03	.330	7.107E-03	1.141E-04	1.081E-04	310.9	2.34E-03	1.000	.330	.457
401	112.36	2.03	[illegible]	3.[illegible]E+03	5.14E-03	4.88E-03	.808	6.365E-03	2.506E-04	2.375E-04	310.5	5.14E-03	1.000	.808	.916
402	112.36	1.73	[illegible]	[illegible]E+03	5.71E-03	5.41E-03	.898	6.363E-03	2.782E-04	2.636E-04	310.9	5.71E-03	1.000	.898	1.018
403	112.36	1.52	[illegible]	4.2[illegible]E+03	5.72E-03	5.42E-03	.899	6.360E-03	2.786E-04	2.640E-04	311.2	5.72E-03	1.000	.899	1.020
404	112.36	1.27	[illegible]	4.24E+03	5.69E-03	5.39E-03	.895	6.358E-03	2.770E-04	2.625E-04	311.3	5.69E-03	1.000	.895	1.014
405	112.36	1.12	[illegible]	3.99E+03	5.35E-03	5.07E-03	.842	6.357E-03	2.605E-04	2.469E-04	311.5	5.35E-03	1.000	.842	.954
406	112.36	.75	[illegible]	4.[illegible]E+03	5.39E-03	5.11E-03	.849	6.355E-03	2.627E-04	2.499E-04	311.3	5.39E-03	1.000	.849	.962
407	112.36	.51	[illegible]	3.59E+03	4.82E-03	4.56E-03	.759	6.354E-03	2.345E-04	2.223E-04	311.0	4.82E-03	1.000	.758	.859
408	112.36	.25	[illegible]	2.[illegible]E+03	3.82E-03	3.62E-03	.601	6.353E-03	1.859E-04	1.762E-04	310.4	3.82E-03	1.000	.601	.681
409	112.36	.13	[illegible]	2.[illegible]E+03	3.32E-03	3.15E-03	.523	6.353E-03	1.619E-04	1.534E-04	310.7	3.32E-03	1.000	.523	.593
410	112.36	.04	.04	1.92E+03	2.57E-03	2.44E-03	.405	6.353E-03	1.253E-04	1.188E-04	310.5	2.57E-03	1.000	.405	.459
501	125.06	2.03	[illegible]	3.99E+03	5.34E-03	5.06E-03	.839	6.364E-03	2.672E-04	2.466E-04	310.3	5.34E-03	1.000	.839	.923
502	125.06	1.79	[illegible]	4.45E+03	5.97E-03	5.65E-03	.938	6.358E-03	2.906E-04	2.754E-04	310.6	5.97E-03	1.000	.938	1.032
503	125.06	1.52	[illegible]	[illegible]E+03	5.99E-03	5.68E-03	.943	6.353E-03	2.919E-04	2.766E-04	311.0	5.99E-03	1.000	.943	1.037
504	125.06	1.27	[illegible]	4.37E+03	5.87E-03	5.56E-03	.924	6.347E-03	2.858E-04	2.709E-04	311.2	5.87E-03	1.000	.924	1.017
505	125.06	1.02	[illegible]	4.12E+03	5.53E-03	5.24E-03	.871	6.342E-03	2.691E-04	2.550E-04	311.2	5.53E-03	1.000	.871	.958
506	125.06	.76	[illegible]	3.9[illegible]E+03	5.10E-03	4.83E-03	.805	6.337E-03	2.484E-04	2.354E-04	311.2	5.10E-03	1.000	.805	.885
507	125.06	.51	[illegible]	3.31E+03	4.44E-03	4.20E-03	.701	6.332E-03	2.163E-04	2.040E-04	310.8	4.44E-03	1.000	.701	.770
508	125.06	.25	[illegible]	2.49E+03	3.34E-03	3.16E-03	.528	6.328E-03	1.626E-04	1.541E-04	310.0	3.34E-03	1.000	.528	.580
509	125.06	.15	[illegible]	1.49E+03	1.99E-03	1.89E-03	.315	6.326E-03	9.709E-05	9.203E-05	310.7	1.99E-03	1.000	.315	.347
510	125.06	.04	.04	1.96E+03	2.62E-03	2.48E-03	[illegible]	6.324E-03	1.275E-04	1.209E-04	310.1	2.62E-03	1.000	.414	.455

EDGE HEATING USED FOR HE

X= 3.879E+01 HL /HREFF= 7.596E-01
X= 4.124E+01 HL /HREFF= 7.695E-01
X= 4.377E+01 HL /HREFF= 7.534E-01
X= 4.631E+01 HL /HREFF= 7.424E-01
X= 4.885E+01 HL /HREFF= 7.328E-01
X= 5.139E+01 HL /HREFF= 7.229E-01
X= 5.648E+01 HL /HREFF= 7.[illegible]E-01
X= 6.156E+01 HL /HREFF= 7.498E-01
X= 6.654E+01 HL /HREFF= 7.918E-01
X= 7.172E+01 HL /HREFF= 7.929E-01
X= 7.693E+01 HL /HREFF= 7.457E-01
X= 8.139E+01 HL /HREFF= 7.[illegible]29E-01
X= 8.696E+01 HL /HREFF= 7.2[illegible]7E-01
X= 9.204E+01 HL /HREFF= 7.[illegible]2[illegible]E-01
X= 9.712E+01 HL /HREFF= [illegible].129E-01
X= 1.022E+02 HL /HREFF= 8.[illegible]4E-01
X= 1.073E+02 HL /HREFF= 8.873E-01
X= 1.124E+02 HL /HREFF= [illegible].913E-01
X= 1.179E+02 HL /HREFF= 9.[illegible]3E-01
X= 1.226E+02 HL /HREFF= 9.085E-01
X= 1.251E+02 HL /HREFF= 9.[illegible]4E-01
X= 1.278E+02 HL /HREFF= 9.7[illegible]E-01
X= 1.302E+02 HL /HREFF= 1.[illegible]2E+00
X= 1.372E+02 HL /HREFF= 1.[illegible]E+00

X= 4.759E+01 HL /HREFF= [illegible]E-01
X= 6.1[illegible]E+01 HL /HREFF= 7.[illegible]E-01
X= 8.696E+01 HL /HREFF= [illegible]E-01
X= 1.124E+02 HL /HREFF= 7.[illegible]E-01
X= 1.2[illegible]1E+02 HL /HREFF= 7.[illegible]E-01
B.L. TRANSITION DISTANCE = [illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT = 71.72 CM

AMES 3.5 FT HWT TEST (102), D.B. BLUMER, IN-LINE RSI GAP RUN(4) 1973 PAGE 7

TT = 1.1199E+03(K) GAP LENGTH = 0.000(CM)
PT = 5.2565E+05(N/M2) GAP WIDTH = 0.060(CM)
HT = 1.1715E+06(J/KG) GAP DEPTH = 0.333(CM)
RE/METER = 1.6973E+06 ORIENTATION= 0.000(DEG)
MACH = 5.103 QS = 8.4567E+04(W/M2)
RHO VEL = 2.1333E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.999 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	4.92E+03	6.95E-03	6.50E-03	.967	7.180E-03	3.249E-04	3.075E-04	313.3				1.000
2	132.70	-.51	0.06												
3	130.16	-.51	[illegible]	4.70E+03	6.64E-03	6.28E-03	.946	7.020E-03	3.104E-04	2.939E-04	313.6				1.000
4	127.63	-.51	[illegible]	4.66E+03	6.59E-03	6.24E-03	.950	6.939E-03	3.091E-04	2.917E-04	313.6				1.000
5	125.09	-.51	0.00	4.36E+03	6.16E-03	5.84E-03	.899	6.859E-03	2.883E-04	2.729E-04	313.8				1.000
6	122.56	-.51	[illegible]	4.37E+03	6.17E-03	5.84E-03	.910	6.779E-03	2.885E-04	2.732E-04	313.6				1.000
7	117.47	-.51	[illegible]	4.35E+03	6.14E-03	5.82E-03	.921	6.668E-03	2.872E-04	2.720E-04	313.5				1.000
8	112.37	-.51	0.00	4.15E+03	5.87E-03	5.56E-03	.891	6.589E-03	2.747E-04	2.661E-04	314.0				1.000
9	107.31	-.51	[illegible]	4.17E+03	5.89E-03	5.58E-03	.899	6.554E-03	2.755E-04	2.608E-04	313.8				1.000
10	102.20	-.51	[illegible]	4.16E+03	5.89E-03	5.57E-03	.873	6.744E-03	2.753E-04	2.607E-04	313.8				1.000
11	97.12	-.51	0.00	4.13E+03	5.83E-03	5.52E-03	.843	6.924E-03	2.729E-04	2.583E-04	314.0				1.000
12	92.04	-.51	[illegible]	4.20E+03	5.94E-03	5.63E-03	.840	7.072E-03	2.779E-04	2.631E-04	3[illegible].1				1.000
13	86.96	-.51	[illegible]	4.13E+03	5.84E-03	5.53E-03	.809	7.217E-03	2.730E-04	2.585E-04	314.5				1.000
14	81.88	-.51	[illegible]	4.32E+03	6.12E-03	5.79E-03	.836	7.320E-03	2.860E-04	2.708E-04	314.4				1.000
15	76.80	-.51	[illegible]	4.21E+03	5.96E-03	5.64E-03	.803	7.421E-03	2.787E-04	2.638E-04	314.4				1.000
16	71.72	-.51	[illegible]	4.16E+03	5.88E-03	5.57E-03	.782	7.522E-03	2.751E-04	2.605E-04	314.6				1.000
17	66.64	-.51	[illegible]	4.44E+03	6.28E-03	5.94E-03	.789	7.966E-03	2.937E-04	2.780E-04	314.8				1.000
18	61.56	-.51	[illegible]	4.66E+03	6.60E-03	6.24E-03	.770	8.570E-03	3.085E-04	2.920E-04	315.3				1.000
19	56.48	-.51	[illegible]	4.87E+03	6.90E-03	6.54E-03	.751	9.173E-03	3.229E-04	3.057E-04	315.1				1.000
20	51.39	-.51	[illegible]	5.04E+03	7.14E-03	6.76E-03	.749	9.529E-03	3.349E-04	3.162E-04	315.2				1.000
21	48.36	-.51	[illegible]	5.45E+03	7.73E-03	7.32E-03	.791	9.779E-03	3.616E-04	3.423E-04	316.0				1.000
22	46.31	-.51	[illegible]	5.91E+03	8.23E-03	7.79E-03	.818	1.025E-02	3.849E-04	3.644E-04	315.5				1.000
23	43.77	-.51	[illegible]	5.99E+03	8.49E-03	8.04E-03	.821	1.034E-02	3.972E-04	3.760E-04	315.4				1.000
24	41.24	-.51	[illegible]	6.26E+03	8.88E-03	8.40E-03	.836	1.062E-02	4.151E-04	3.929E-04	315.4				1.000
25	38.70	-.51	[illegible]	6.43E+03	9.11E-03	8.63E-03	[illegible]	1.090E-02	4.251E-04	4.034E-04	315.2				1.000
103	47.59	1.52	[illegible]	5.72E+03	8.14E-03	7.71E-03	.821	9.916E-03	3.806E-04	3.602E-04	318.8	8.14E-03	1.000	.821	1.020
105	47.59	1.02	0.00	5.65E+03	8.05E-03	7.61E-03	.811	9.917E-03	3.762E-04	3.561E-04	319.4	8.05E-03	1.000	.811	1.009
107	47.59	.51	[illegible]	5.17E+03	7.37E-03	6.97E-03	.743	9.917E-03	3.445E-04	3.260E-04	318.6	7.37E-03	1.000	.743	.923
108	47.59	.25	[illegible]	[illegible]	5.74E-03	5.43E-03	.579	9.916E-03	2.685E-04	2.542E-04	317.6	5.74E-03	1.000	.579	.720
110	47.59	.04	.04	2.65E+03	3.76E-03	3.56E-03	.379	9.918E-03	1.758E-04	1.664E-04	316.3	3.76E-03	1.000	.379	.471
203	61.56	1.52	[illegible]	[illegible]	6.88E-03	6.51E-03	.802	8.576E-03	3.217E-04	3.045E-04	316.7	6.88E-03	1.000	.802	1.042
205	61.56	1.02	.00	4.82E+03	6.84E-03	6.47E-03	.798	8.575E-03	3.193E-04	3.028E-04	317.0	6.84E-03	1.000	.798	1.036
207	61.56	.51	[illegible]	4.37E+03	6.21E-03	5.88E-03	.724	8.573E-03	2.903E-04	2.740E-04	316.6	6.21E-03	1.000	.724	.94[illegible]
208	61.56	.25	[illegible]	3.62E+03	5.14E-03	4.87E-03	.600	8.572E-03	2.404E-04	2.275E-04	316.0	5.14E-03	1.000	.600	.779
210	61.56	.04	.04	2.45E+03	[illegible]	3.30E-03	.406	8.571E-03	1.629E-04	1.542E-04	315.1	3.48E-03	1.000	.406	.520
301	86.96	2.03	[illegible]	[illegible]	[illegible]	[illegible]	.802	7.216E-03	2.706E-04	2.562E-04	314.6	5.79E-03	1.000	.802	.991
302	86.96	1.78	[illegible]	[illegible]	[illegible]	5.76E-03	.844	7.215E-03	2.847E-04	2.695E-04	315.1	6.09E-03	1.000	.844	1.043
303	86.96	1.52	[illegible]	4.37E+03	6.19E-03	5.86E-03	.858	7.215E-03	2.895E-04	2.740E-04	315.5	6.19E-03	1.000	.858	1.061
304	86.96	1.27	[illegible]	4.29E+03	[illegible]	[illegible]	.842	7.214E-03	2.841E-04	2.693E-04	315.7	6.06E-03	1.000	.842	1.041

AMES 3.5 FT HWT TEST [illegible], [illegible] BLUMER, IN-L[illegible] RSI GAP RUN([illegible]) 1973 PAGE 8

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
305	86.96	1.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.214E-03	2.727E-04	2.551E-04	315.8	5.83E-03	1.000	.806	.99[illegible]
306	86.96	.75	[illegible]	[illegible]	5.75E-03	[illegible]	.796	7.214E-03	2.637E-04	2.544E-04	314.6	5.75E-03	1.000	.796	.985
307	86.96	.[illegible]1	[illegible]	3.675E+03	[illegible]	4.92E-03	.72[illegible]	7.214E-03	2.429E-04	2.301E-04	314.1	5.19E-03	1.000	.720	.890
308	86.96	.25	[illegible]	3.[illegible]2E+03	[illegible]	4.14E-03	.592	7.215E-03	1.996E-04	1.890E-04	313.7	4.27E-03	1.000	.592	.731
309	86.96	.15	[illegible]	2.[illegible]E+03	3.53E-03	3.35E-03	.490	7.215E-03	1.653E-04	1.565E-04	313.3	3.53E-03	1.000	.490	.606
310	86.96	[illegible]	.04	2.[illegible]E+03	2.93E-03	2.75E-03	.4[illegible]2	[illegible]	1.356E-04	1.284E-04	313.1	2.93E-03	1.000	.482	.497
401	112.36	2.03	[illegible]	3.87E+03	5.41E-03	5.12E-03	.820	6.592E-03	2.529E-04	2.395E-04	312.7	5.41E-03	1.000	.820	.920
402	112.36	1.79	[illegible]	[illegible]	[illegible]	5.62E-03	.900	6.591E-03	2.773E-04	2.626E-04	313.2	5.93E-03	1.000	.900	1.009
403	112.36	1.52	[illegible]	4.24E+03	5.99E-03	5.67E-03	.910	6.590E-03	2.923E-04	2.654E-04	313.5	5.99E-03	1.000	.910	[illegible].020
404	112.36	1.27	[illegible]	[illegible]	5.86E-03	5.55E-03	.890	6.589E-03	2.741E-04	2.595E-04	313.6	5.86E-03	1.000	.890	.998
405	112.36	1.02	[illegible]	[illegible]	[illegible]	5.53E-03	.887	6.588E-03	2.732E-04	2.586E-04	313.8	5.84E-03	1.000	.887	.995
406	112.36	.76	[illegible]	3.[illegible]E+03	5.48E-03	5.19E-03	.832	6.587E-03	2.564E-04	2.428E-04	313.5	5.48E-03	1.000	.832	.934
407	112.36	.51	1.00	3.68E+03	5.20E-03	4.92E-03	.789	6.587E-03	2.431E-04	2.302E-04	313.1	5.20E-03	1.000	.789	.885
408	112.36	.25	[illegible]	2.9[illegible]E+03	4.21E-03	3.99E-03	.639	6.587E-03	1.967E-04	1.863E-04	312.3	4.21E-03	1.000	.639	.716
409	112.36	.15	[illegible]	2.[illegible]E+03	3.52E-03	3.34E-03	.535	6.587E-03	1.647E-04	1.560E-04	312.7	3.52E-03	1.000	.535	.600
410	112.36	.04	.04	1.91E+03	2.70E-03	2.55E-03	.410	6.587E-03	1.262E-04	1.195E-04	312.5	2.70E-03	1.000	.410	.459
501	125.06	2.03	[illegible]	[illegible]E+03	5.68E-03	5.38E-03	.827	6.867E-03	2.655E-04	2.514E-04	312.5	5.68E-03	1.000	.827	.920
502	125.06	1.78	[illegible]	4.40E+03	6.21E-03	5.88E-03	.904	6.865E-03	2.903E-04	2.748E-04	312.8	6.21E-03	1.000	.904	1.006
503	125.06	1.52	[illegible]	[illegible]95E+03	6.34E-03	6.01E-03	.924	6.863E-03	2.967E-04	2.809E-04	313.2	6.34E-03	1.000	.924	1.026
504	125.06	1.27	[illegible]	[illegible]33E+03	6.12E-03	5.79E-03	.892	6.862E-03	2.862E-04	2.709E-04	313.5	6.12E-03	1.000	.892	.992
505	125.06	1.02	.00	[illegible]E+03	5.67E-03	5.37E-03	.827	6.861E-03	2.653E-04	2.512E-04	313.5	5.67E-03	1.000	.827	.920
506	125.06	.76	[illegible]	3.9[illegible]E+03	5.37E-03	5.08E-03	.782	6.860E-03	2.512E-04	2.376E-04	313.4	5.37E-03	1.000	.782	.870
507	125.06	.51	[illegible]	3.30E+03	4.66E-03	4.41E-03	.679	6.859E-03	2.178E-04	2.062E-04	312.9	4.66E-03	1.000	.679	.755
508	125.06	.25	[illegible]	2.30E+03	3.24E-03	3.07E-03	.472	6.858E-03	1.514E-04	1.434E-04	312.9	3.24E-03	1.000	.472	.525
509	125.06	.15	[illegible]	1.36E+03	1.91E-03	1.81E-03	.279	6.858E-03	8.93[illegible]E-05	8.461E-05	310.7	1.91E-03	1.000	.279	.310
510	125.06	.04	.04	1.92E+03	2.71E-03	2.57E-03	.396	6.858E-03	1.269E-04	1.202E-04	312.9	2.71E-03	1.000	.396	.440

EDGE HEATING USED FOR HE

X=	3.8[illegible]E+01	HL	/HREFF=	8.3[illegible]E-01
X=	4.124E+01	HL	/HREFF=	8.357E-01
X=	4.377E+01	HL	/HREFF=	8.213E-01
X=	4.631E+01	HL	/HREFF=	8.1[illegible]E-01
X=	4.886E+01	HL	/HREFF=	7.9[illegible]8E-01
X=	5.139E+01	HL	/HREFF=	7.435E-01
X=	5.648E+01	HL	/HREFF=	7.61[illegible]E-01
X=	6.156E+01	HL	/HREFF=	7.696E-01
X=	6.664E+01	HL	/HREFF=	7.539E-01
X=	7.172E+01	HL	/HREFF=	7.[illegible]21E-01
X=	7.690E+01	HL	/HREFF=	8.[illegible]29E-01
X=	8.188E+01	HL	/HREFF=	[illegible].335E-01
X=	8.696E+01	HL	/HREFF=	8.[illegible]39E-01
X=	9.204E+01	HL	/HREFF=	8.4[illegible]4E-01
X=	9.712E+01	HL	/HREFF=	[illegible].4[illegible]E-01
X=	1.022E+02	HL	/HREFF=	8.[illegible]E-01
X=	1.073E+02	HL	/HREFF=	8.988E-01
X=	1.124E+02	HL	/HREFF=	[illegible]
X=	1.175E+02	HL	/HREFF=	9.211E-01
X=	1.226E+02	HL	/HREFF=	9.1[illegible]1E-01
X=	1.251E+02	HL	/HREFF=	[illegible]
X=	1.27[illegible]E+02	HL	/HREFF=	[illegible]
X=	1.3[illegible]2E+02	HL	/HREFF=	9.4[illegible]E-01
X=	[illegible]	HL	/HREFF=	[illegible]
X=	[illegible]	HL	/HREFF=	[illegible]
X=	[illegible]	HL	/HREFF=	[illegible]
X=	[illegible]	HL	/HREFF=	[illegible]
X=	1.124E+02	HL	/HREFF=	[illegible]
X=	[illegible]	HL	/HREFF=	[illegible]

B.L. TRANSITION DISTANCE = [illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT = [illegible]1.88 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1?2), C.B. BLUMER, IN-LINE RSI GAP RUN (5) 1973 PAGE 9

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TT       = 1.133E+03(K)                 GAP LENGTH  =  0.000(CM)
PT       = 1.0294E+06(N/M2)             GAP WIDTH   =  0.000(CM)
HT       = 1.2123E+06(J/KG)             GAP DEPTH   =  0.300(CM)
RE/METER = 3.172?E+06                   ORIENTATION=  0.000(DEG)
MACH     = 5.13?                        QS          =  1.2272E+05(W/M2)
RHO VEL  = 4.113?E+01(KG/M2-S)          MOD.POSITION=  1
HAW/HT   = ?.9?? FOR HT
HAW/HT   = ?.874 FOR HL
HLCC     = HL(ZNC. OF.EF COND.)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	2.64E+04	3.45E-02	3.27E-02	.763	4.520E-02	8.376E-04	7.935E-04	312.8				1.000
2	132.78	-.51	[illegible]												
3	130.16	-.51	[illegible]	2.27E+04	3.19E-02	2.33E-02	.782	3.047E-02	7.439E-04	7.103E-04	313.3				1.000
4	127.63	-.51	[illegible]	2.16E+04	2.93E-02	2.77E-02	.799	3.460E-02	7.103E-04	6.729E-04	313.3				1.000
5	125.19	-.51	[illegible]	1.29E+04	2.57E-02	2.44E-02	.763	3.374E-02	6.246E-04	5.917E-04	313.7				1.000
6	122.56	-.51	[illegible]	1.76E+04	2.43E-02	2.30E-02	.786	3.087E-02	5.808E-04	5.578E-04	313.3				1.000
7	117.47	-.51	[illegible]	1.50E+04	2.04E-02	1.93E-02	.805	2.535E-02	4.957E-04	4.696E-04	313.2				1.000
8	112.37	-.51	[illegible]	1.19E+04	1.62E-02	1.53E-02	.782	2.066E-02	3.921E-04	3.715E-04	313.8				1.000
9	107.31	-.51	[illegible]	9.[illegible]E+03	1.30E-02	1.24E-02	.764	1.706E-02	3.157E-04	3.000E-04	313.3				1.000
10	102.2[illegible]	-.51	[illegible]	7.77E+03	1.26E-02	1.20E-02	.739	1.431E-02	2.567E-04	2.432E-04	313.1				1.000
11	97.12	-.51	[illegible]	[illegible]	8.58E-03	8.13E-03	.736	1.216E-02	2.083E-04	1.974E-04	313.2				1.000
12	92.04	-.51	[illegible]	[illegible]	7.43E-03	7.31E-03	.760	1.[illegible]7E-02	1.796E-04	1.701E-04	313.2				1.000
13	86.96	-.51	[illegible]	[illegible]	6.71E-03	6.36E-03	.639	9.722E-03	1.629E-04	1.543E-04	313.9				1.000
14	81.88	-.51	[illegible]	[illegible]	7.32E-03	6.93E-03	.795	9.202E-03	1.776E-04	1.683E-04	313.3				1.000
15	76.80	-.51	[illegible]	[illegible]	7.33E-03	7.[illegible]E-03	.807	9.157E-03	1.733E-04	1.699E-04	313.2				1.000
16	71.72	-.51	[illegible]	[illegible]	8.01E-03	7.59E-03	.853	9.392E-03	1.944E-04	1.842E-04	313.3				1.000
17	66.64	-.51	[illegible]	[illegible]	8.21E-03	7.77E-03	.839	9.782E-03	1.992E-04	1.887E-04	313.4				1.000
18	61.56	-.51	[illegible]	6.27E+03	8.50E-03	8.05E-03	.829	1.[illegible]E-02	2.063E-04	1.954E-04	314.1				1.000
19	56.48	-.51	[illegible]	6.64E+03	8.91E-03	8.44E-03	.919	1.088E-02	2.163E-04	2.049E-04	313.5				1.000
20	51.39	-.51	0.00	6.68E+03	9.09E-03	8.61E-03	.785	1.158E-02	2.207E-04	2.091E-04	313.6				1.000
21	48.86	-.51	[illegible]	[illegible].39E+03	9.40E-03	8.91E-03	.787	1.194E-02	2.281E-04	2.161E-04	314.0				1.000
22	46.31	-.51	[illegible]	7.37E+03	9.98E-03	9.46E-03	.811	1.232E-02	2.424E-04	2.296E-04	314.0				1.000
23	43.77	-.51	[illegible]	7.57E+03	1.03E-02	9.77E-03	.813	1.269E-02	2.503E-04	2.371E-04	313.7				1.000
24	41.24	-.51	[illegible]	7.91E+03	1.08E-02	1.02E-02	.825	1.316E-02	2.617E-04	2.479E-04	313.7				1.000
25	38.70	-.51	[illegible]	[illegible]	1.11E-02	1.05E-02	.826	1.343E-02	2.692E-04	2.551E-04	313.2				1.000
103	47.59	1.3[illegible]	[illegible]	7.4[illegible]E+03	1.[illegible]2E-02	9.64E-03	.9[illegible]	1.211E-02	2.471E-04	2.340E-04	318.1	1.029E-02	1.000	.841	1.052
105	47.59	1.1[illegible]	[illegible]	7.25E+03	9.95E-03	9.42E-03	.921	1.211E-02	2.416E-04	2.288E-04	319.0	9.95E-03	1.000	.821	1.029
107	47.59	.51	[illegible]	6.62E+03	9.07E-03	8.59E-03	.749	1.212E-02	2.203E-04	2.086E-04	318.1	9.07E-03	1.000	.749	.93[illegible]
108	47.59	.25	[illegible]	[illegible].14E+03	7.03E-03	6.66E-03	.58[illegible]	1.212E-02	1.707E-04	1.617E-04	316.7	7.03E-03	1.000	.580	.726
110	47.59	.[illegible]	[illegible]	[illegible]	4.70E-03	4.45E-03	.389	1.212E-02	1.141E-04	1.081E-04	315.2	4.70E-03	1.000	.388	.486
203	61.56	1.52	[illegible]	[illegible]	8.91E-03	8.44E-03	.87[illegible]	1.025E-02	2.163E-04	2.049E-04	315.3	8.91E-03	1.000	.870	1.058
205	61.56	1.0[illegible]	[illegible]	[illegible]	8.96E-03	8.49E-03	.875	1.024E-02	2.175E-04	2.061E-04	315.8	8.96E-03	1.000	.875	1.056
207	61.56	.51	[illegible]	[illegible].76E+03	7.86E-03	7.45E-03	.767	1.025E-02	1.909E-04	1.808E-04	315.5	7.86E-03	1.000	.767	.92[illegible]
208	61.56	.25	[illegible]	[illegible]	6.55E-03	6.2[illegible]E-03	.639	1.[illegible]2[illegible]E-02	1.590E-04	1.506E-04	314.6	6.55E-03	1.000	.639	.7[illegible]
210	61.56	.[illegible]	[illegible]	7.33E+03	4.53E-03	4.29E-03	.442	1.025E-02	1.100E-04	1.042E-04	313.6	4.53E-03	1.000	.442	.534
301	86.96	2.[illegible]	[illegible]	[illegible]	6.60E-03	6.25E-03	.696	9.[illegible]23E-03	1.603E-04	1.519E-04	313.4	6.60E-03	1.000	.696	.99[illegible]
302	86.96	1.[illegible]3	[illegible]	[illegible]	7.16E-03	6.78E-03	.743	9.[illegible]E-03	1.738E-04	1.646E-04	314.2	7.16E-03	1.000	.743	1.077
303	86.96	1.52	[illegible]	[illegible].31E+03	7.24E-03	6.86E-03	.751	9.[illegible]35E-03	1.757E-04	1.665E-04	31[illegible]	7.24E-03	1.000	.751	1.088
304	86.96	1.27	[illegible]	[illegible]	6.95E-03	6.59E-03	.721	9.[illegible]43E-03	1.688E-04	1.599E-04	315.3	6.95E-03	1.000	.721	1.044

AMES 3.5 FT HWT TEST (1?2), C.J. PLUMER, IN-LINE RSI GAP [illegible] (F) 1973 PAGE 19

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
305	86.96	1.02	[illegible]	[illegible]	[illegible]	6.26E-03	.684	9.?87E-03	1.604E-04	1.520E-04	315.5	6.61E-03	1.000	.684	.991
306	86.96	.76	[illegible]	[illegible]	6.14E-03	[illegible]	.635	9.666E-03	1.491E-04	1.412E-04	313.4	6.14E-03	1.000	.635	.920
307	86.96	.51	[illegible]	[illegible]	[illegible]	5.22E-03	.57?	9.67?E-03	1.378E-04	1.265E-04	313.0	5.51E-03	1.000	.57?	.825
308	86.96	.25	[illegible]	3.?7?E+03	4.59E-03	4.34E-03	.473	9.687E-03	1.113E-04	1.055E-04	312.5	4.59E-03	1.000	.473	.686
309	86.96	.15	[illegible]	2.710E+03	3.69E-03	3.49E-03	.381	9.691E-03	8.355E-05	8.484E-05	312.0	3.69E-03	1.000	.361	.551
310	86.96	[illegible]	[illegible]	2.23?E+03	[illegible]	2.87E-03	.313	9.69?E-03	7.307E-05	6.900E-05	311.6	3.03E-03	1.000	.313	.453
401	112.36	2.03	[illegible]	1.?2E+04	1.39E-02	1.32E-02	.689	2.015E-02	3.370E-04	3.193E-04	311.4	1.39E-02	1.000	.689	.881
402	112.36	1.78	[illegible]	1.12E+04	1.52E-02	1.44E-02	.752	2.?2?E-02	3.688E-04	3.494E-04	312.4	1.52E-02	1.000	.752	.962
403	112.36	1.52	[illegible]	1.1?E+04	1.55E-02	1.47E-02	.766	2.025E-02	3.764E-04	3.567E-04	312.9	1.55E-02	1.000	.766	.980
404	112.36	1.27	[illegible]	1.14E+04	1.55E-02	1.46E-02	.762	2.030E-02	3.754E-04	3.557E-04	313.3	1.55E-02	1.000	.762	.975
405	112.36	1.02	[illegible]	1.12E+04	1.53E-02	1.45E-02	.750	2.0?E-02	3.707E-04	3.512E-04	313.5	1.53E-02	1.000	.75?	.960
406	112.36	.76	[illegible]	1.?7E+04	1.45E-02	1.37E-02	.711	2.04?E-02	3.522E-04	3.336E-04	313.2	1.4?E-02	1.000	.711	.910
407	112.36	.51	[illegible]	9.?E+03	1.30E-02	1.23E-02	.635	2.045E-02	3.151E-04	2.986E-04	312.8	1.3? -02	1.000	.635	.812
408	112.36	.25	[illegible]	[illegible]	1.10E-02	1.04E-02	.537	2.05?E-02	2.571E-04	2.530E-04	311.5	1.10E-02	1.000	.537	.686
409	112.36	.15	[illegible]	6.6?E+03	9.04E-03	8.56E-03	.441	2.0?2E-02	2.193E-04	2.080E-04	311.8	9.04E-03	1.000	.441	.564
410	112.36	.04	.04	4.48E+03	6.63E-03	6.28E-03	.323	2.054E-02	1.617E-04	1.526E-04	311.5	6.63E-03	1.000	.323	.413
501	125.06	2.03	[illegible]	1.72E+04	2.34E-02	2.22E-02	.707	3.30?E-02	5.679E-04	5.381E-04	311.4	2.34E-02	1.000	.707	.927
502	125.06	1.78	[illegible]	1.88E+04	2.55E-02	2.42E-02	.770	3.315E-02	6.135E-04	5.871E-04	312.1	2.55E-02	1.000	.779	1.009
503	125.06	1.52	[illegible]	1.89E+04	2.57E-02	2.44E-02	.774	3.321E-02	6.242E-04	5.914E-04	312.8	2.57E-02	1.000	.774	1.015
504	125.06	1.27	[illegible]	1.9?E+04	2.58E-02	2.45E-02	.776	3.326E-02	6.272E-04	5.942E-04	313.2	2.58E-02	1.000	.776	1.018
505	125.06	1.02	[illegible]	1.83E+04	2.49E-02	2.36E-02	.747	3.334E-02	6.044E-04	5.726E-04	313.3	2.49E-02	1.000	.747	.979
506	125.06	.76	[illegible]	1.77E+04	2.41E-02	2.29E-02	.723	3.34?E-02	5.863E-04	5.554E-04	313.3	2.41E-02	1.000	.723	.948
507	125.06	.51	[illegible]	1.61E+04	2.19E-02	2.075E-02	.654	3.346E-02	5.317E-04	5.038E-04	312.7	2.19E-02	1.000	.654	.858
508	125.06	.25	[illegible]	1.28E+04	1.74E-02	1.65E-02	.519	3.352E-02	4.223E-04	4.001E-04	311.9	1.74E-02	1.000	.519	.680
509	125.06	.15	[illegible]	8.365E+03	1.14E-02	1.08E-02	.339	3.355E-02	2.76?E-04	2.615E-04	311.7	1.14E-02	1.000	.339	.444
510	125.06	.04	.04	8.25E+03	1.12E-02	1.06E-02	.334	3.357E-02	2.723E-04	2.580E-04	311.3	1.12E-02	1.000	.334	.438

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 8.257E-01
X= 4.124E+01 HL /HREFF= 8.253E-01
X= 4.377E+01 HL /HREFF= 8.125E-01
X= 4.631E+01 HL /HREFF= 8.106E-01
X= 4.886E+01 HL /HREFF= 7.858E-01
X= 5.139E+01 HL /HREFF= 7.847E-01
X= 5.6?8E+01 HL /HREFF= 8.1?6E-01
X= 6.156E+01 HL /HREFF= 8.287E-01
X= 6.664E+01 HL /HREFF= 8.?88E-01
X= 7.172E+01 HL /HREFF= 8.?25E-01
X= 7.680E+01 HL /HREFF= 8.?65E-01
X= 8.188E+01 HL /HREFF= 7.9?2E-01
X= 8.69?E+01 HL /HREFF= 6.??1E-01
X= 9.204E+01 HL /HREFF= 7.?E-01
X= 9.712E+01 HL /HREFF= 7.??E-01
X= 1.022E+02 HL /HREFF= 7.34?E-01
X= 1.073E+02 HL /HREFF= 7.?36E-01
X= 1.124E+02 HL /HREFF= 7.?15E-01
X= 1.17?E+02 HL /HREFF= ?.?45E-01
X= 1.226E+02 HL /HREFF= 7.55?E-01
X= 1.251E+02 HL /HREFF= 7.?25E-01
X= 1.276E+02 HL /HREFF= ?.?93E-01
X= 1.302E+02 HL /HREFF= 7.?24E-01
X= 1.352E+02 HL /HREFF= 7.??2E-01

X= 4.759E+01 HL /HREFF= 7.4?7E-01
X= 5.1?6E+01 HL /HREFF= 7.?74E-01
X= 8.635E+01 HL /HREFF= 5.??E-01
X= 1.124E+02 HL /HREFF= 6.3?8E-01
X= 1.251E+02 HL /HREFF= ?.??5E-01

B.L. TRANSITION DISTANCE = ?1.?? CM
FULLY TURBULENT B.L. CONDITIONS AT = 71.72 CM

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(6) 1973 PAGE 11

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TT        = 1.1[illegible]E+03(K)          GAP LENGTH =101.600(CM)
PT        = 5.3[illegible]E+05(N/M2)       GAP WIDTH  =   .127(CM)
HT        = 1.2[illegible]E+06(J/KG)       GAP DEPTH  =  2.032(CM)
RE/METER  = 1.623[illegible]E+06           ORIENTATION=  0.000(DEG)
MACH      = 5.10                           QS         =  8.8568E+04(W/M2)
RHO VEL   = 2.113[illegible]E+01(KG/M2-S)  MOC.POSITION=  1
HAW/HT    = [illegible] FOR HT
HAW/HT    = [illegible] FOR HL
HLCC      = HL(2ND. ORDER CONL.)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible]	3.22E-03	[illegible]	1.397	6.658E-03	4.305E-04	4.136E-04	313.6	[illegible]	.961	1.443	1.000
2	132.70	-.51	[illegible]												
3	130.16	-.51	[illegible]	[illegible]	8.32E-03	7.88E-03	[illegible]	6.603E-03	3.937E-04	3.730E-04	314.0	8.78E-03	.947	1.330	1.000
4	127.63	-.51	[illegible]	[illegible]	[illegible]	7.52E-03	1.223	6.585E-03	3.809E-04	3.607E-04	314.1	8.40E-03	.958	1.276	1.000
5	125.09	-.51	[illegible]	[illegible]	7.71E-03	7.31E-03	1.176	6.557E-03	3.650E-04	3.458E-04	314.3	8.02E-03	.962	1.223	1.000
6	122.56	-.51	[illegible]	[illegible]	[illegible]	7.18E-03	[illegible]	6.533E-03	3.583E-04	3.398E-04	314.1	7.95E-03	.953	1.217	1.000
7	117.47	-.51	[illegible]	[illegible]	7.29E-03	[illegible]	1.122	6.501E-03	3.451E-04	3.269E-04	314.3	7.63E-03	.956	1.174	1.000
8	112.37	-.51	[illegible]	[illegible]	6.95E-03	6.58E-03	1.076	6.457E-03	3.293E-04	3.115E-04	314.6	7.30E-03	.952	1.131	1.000
9	107.31	-.51	[illegible]	[illegible]	6.79E-03	6.44E-03	1.051	6.463E-03	3.215E-04	3.046E-04	314.6	7.13E-03	.952	1.104	1.000
10	102.27	-.51	[illegible]	[illegible]	6.73E-03	6.37E-03	1.008	6.672E-03	3.193E-04	3.016E-04	314.6	7.05E-03	.954	1.057	1.000
11	97.12	-.51	[illegible]	[illegible]	6.42E-03	6.09E-03	.939	6.838E-03	3.040E-04	2.880E-04	314.9	6.77E-03	.948	.991	1.000
12	92.04	-.51	[illegible]	[illegible]	6.38E-03	6.05E-03	.913	6.995E-03	3.021E-04	2.862E-04	315.1	6.75E-03	.946	.965	1.000
13	86.96	-.51	[illegible]	4.51E+03	6.12E-03	5.79E-03	.854	7.158E-03	2.894E-04	2.742E-04	315.6	6.65E-03	.920	.929	1.000
14	81.88	-.51	[illegible]	[illegible]	6.33E-03	6.00E-03	.871	7.273E-03	2.997E-04	2.839E-04	315.9	7.05E-03	.898	.969	1.000
15	76.80	-.51	[illegible]	[illegible]	6.18E-03	5.85E-03	.837	7.379E-03	2.923E-04	2.769E-04	316.1	6.57E-03	.940	.890	1.000
16	71.72	-.51	[illegible]	[illegible]	6.49E-03	6.15E-03	.867	7.485E-03	3.079E-04	2.909E-04	316.6	6.48E-03	1.001	.866	1.000
17	66.64	-.51	[illegible]	[illegible]	7.09E-03	6.72E-03	.896	7.916E-03	3.357E-04	3.180E-04	317.1	7.07E-03	1.003	.893	1.000
18	61.56	-.51	[illegible]	[illegible]	7.42E-03	7.02E-03	.870	8.529E-03	3.517E-04	3.324E-04	317.7	7.40E-03	1.002	.868	1.000
19	56.48	-.51	[illegible]	5.61E+03	7.63E-03	7.22E-03	.845	9.022E-03	3.603E-04	3.418E-04	318.0	7.60E-03	1.004	.842	1.000
20	51.39	-.51	[illegible]	5.77E+03	7.84E-03	7.43E-03	.829	9.465E-03	3.712E-04	3.516E-04	318.2	7.84E-03	1.001	.828	1.000
21	48.85	-.51	[illegible]	[illegible]	8.21E-03	7.78E-03	.846	9.712E-03	3.997E-04	3.801E-04	313.7	[illegible]	1.015	.834	1.000
22	46.31	-.51	[illegible]	[illegible]	8.42E-03	7.97E-03	.842	9.994E-03	3.994E-04	3.773E-04	313.4	8.36E-03	1.007	.836	1.000
23	43.77	-.51	[illegible]	[illegible]	8.55E-03	8.10E-03	.832	1.027E-02	4.145E-04	3.832E-04	318.3	8.49E-03	1.007	.827	1.000
24	41.24	-.51	[illegible]	[illegible]	8.93E-03	8.46E-03	.848	1.055E-02	4.237E-04	4.013E-04	318.2	8.90E-03	1.006	.843	1.000
25	38.70	-.51	[illegible]	[illegible]	9.24E-03	8.75E-03	.853	1.083E-02	4.373E-04	4.142E-04	317.5	9.28E-03	.996	.857	1.000
26	135.24	[illegible]	.25	2.19E+03	2.96E-03	2.80E-03	.444	6.664E-03	1.403E-04	1.327E-04	313.3	3.33E-03	.888	.500	.347
27	132.70	[illegible]	.25	[illegible]	3.19E-03	3.03E-03	.481	6.636E-03	1.511E-04	1.432E-04	313.6				.347
28	130.16	[illegible]	.25	2.17E+03	2.94E-03	2.78E-03	.445	6.612E-03	1.391E-04	1.318E-04	313.7	3.40E-03	.864	.515	.387
29	127.63	[illegible]	.25	2.21E+03	2.99E-03	2.83E-03	.452	6.587E-03	1.417E-04	1.335E-04	313.8	3.33E-03	.895	.505	.396
30	125.09	[illegible]	.25	[illegible]	[illegible]	2.59E-03	.433	6.561E-03	1.343E-04	1.273E-04	313.6	3.14E-03	.903	.479	.392
31	122.56	[illegible]	.25	[illegible]	2.61E-03	2.47E-03	[illegible]	6.535E-03	1.236E-04	1.171E-04	313.8	2.99E-03	.874	.457	.375
32	117.47	[illegible]	.25	[illegible]	2.47E-03	2.34E-03	.360	6.501E-03	1.169E-04	1.107E-04	313.7	2.81E-03	.879	.432	.368
33	112.37	[illegible]	.25	[illegible]	2.42E-03	2.30E-03	.375	6.457E-03	1.147E-04	1.087E-04	314.2	2.76E-03	.873	.430	.380
34	107.31	[illegible]	.25	[illegible]	2.40E-03	2.27E-03	[illegible]	6.497E-03	1.134E-04	1.075E-04	314.1	2.74E-03	.876	.424	.384
35	102.27	[illegible]	.25	[illegible]	2.27E-03	2.15E-03	[illegible]	6.665E-03	1.074E-04	1.017E-04	314.2	2.59E-03	.875	.389	[illegible]
36	97.12	[illegible]	.25	[illegible]	2.29E-03	2.16E-03	.334	6.835E-03	[illegible]	1.023E-04	314.3	2.63E-03	.867	.385	[illegible]
37	92.04	[illegible]	.25	[illegible]	2.24E-03	2.12E-03	.320	6.991E-03	1.057E-04	1.004E-04	314.4	2.60E-03	.861	.372	.386
38	86.96	[illegible]	.25	1.72E+03	2.33E-03	2.21E-03	.326	7.158E-03	1.104E-04	1.046E-04	314.9	2.87E-03	.814	.400	[illegible]
39	81.88	[illegible]	.25	[illegible]	[illegible]	[illegible]	[illegible]	7.272E-03	1.043E-04	9.873E-05	315.0	2.92E-03	.755	.401	.414
40	76.80	[illegible]	.25	[illegible]	[illegible]	1.32E-03	.275	7.380E-03	9.583E-05	9.093E-05	315.3	2.42E-03	.837	.328	.368
41	71.72	[illegible]	.25	[illegible]	2.03E-03	1.32E-03	.271	7.481E-03	9.634E-05	9.099E-05	314.5	2.02E-03	1.004	.270	.312
42	66.64	[illegible]	.25	[illegible]	2.21E-03	2.09E-03	.279	7.919E-03	1.045E-04	9.895E-05	313.1	2.19E-03	1.009	.276	.309

AMES 3.5 FT HWT TEST (192), D.P. BLUMER, IN-LINE RSI GAP RUN(6) 1973 PAGE 12

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.56	0.00	.25	1.59E+03	2.16E-03	2.05E-03	.253	8.529E-03	1.022E-04	9.685E-05	315.7	2.15E-03	1.007	.252	.290
44	56.48	0.00	.25	1.60E+03	2.39E-03	2.18E-03	.255	9.022E-03	1.087E-04	1.029E-04	315.8	2.27E-03	1.012	.251	.299
45	51.39	0.00	.25	1.74E+03	2.36E-03	2.23E-03	.249	9.464E-03	1.115E-04	1.057E-04	316.0	2.35E-03	1.004	.246	.330
46	48.86	0.00	.25	1.85E+03	2.51E-03	2.38E-03	.259	9.710E-03	1.193E-04	1.127E-04	316.5	2.40E-03	1.049	.247	.296
47	46.31	0.00	.25	1.85E+03	2.50E-03	2.37E-03	.251	9.991E-03	1.185E-04	1.122E-04	316.2	2.45E-03	1.024	.245	.293
48	43.77	0.00	.25	1.96E+03	2.65E-03	2.51E-03	.258	1.027E-02	1.256E-04	1.190E-04	315.0	2.60E-03	1.022	.253	.306
49	41.24	0.00	.25	1.93E+03	2.61E-03	2.49E-03	.248	1.055E-02	1.236E-04	1.171E-04	315.9	2.56E-03	1.021	.243	.288
50	38.70	0.00	.25	2.31E+03	3.13E-03	2.36E-03	.289	1.083E-02	1.479E-04	1.402E-04	315.4	3.17E-03	.988	.292	.341
51	135.24	0.00	.51	3.45E+02	4.65E-04	4.41E-04	.070	6.664E-03	2.203E-05	2.088E-05	311.7	8.36E-04	.556	.126	.087
52	132.70	0.00	.51	1.66E+02	2.26E-04	2.14E-04	.034	6.670E-03	1.077E-05	1.014E-05	311.8				.025
53	130.16	0.00	.51	3.93E+02	5.26E-04	4.99E-04	.080	6.612E-03	2.491E-05	2.360E-05	311.7	9.88E-04	.533	.149	.112
54	127.63	0.00	.51	4.52E+02	6.10E-04	5.78E-04	.093	6.587E-03	2.857E-05	2.735E-05	312.3	9.59E-04	.636	.146	.114
55	125.09	0.00	.51	3.98E+02	5.37E-04	5.09E-04	.082	6.561E-03	2.543E-05	2.409E-05	312.5	8.40E-04	.639	.128	.105
56	122.56	0.00	.51	3.08E+02	4.16E-04	3.94E-04	.064	6.535E-03	1.969E-05	1.865E-05	312.3	7.89E-04	.527	.121	.099
57	117.47	0.00	.51	3.28E+02	4.43E-04	4.20E-04	.068	6.501E-03	2.096E-05	1.986E-05	312.2	7.80E-04	.568	.120	.102
58	112.37	0.00	.51	3.08E+02	4.16E-04	3.94E-04	.064	6.457E-03	1.969E-05	1.866E-05	312.6	7.68E-04	.542	.119	.105
59	107.31	0.00	.51	1.74E+02	2.35E-04	2.23E-04	.036	6.457E-03	1.114E-05	1.056E-05	312.6	5.73E-04	.411	.089	.080
60	102.20	0.00	.51	3.71E+01	5.01E-05	4.75E-05	.008	6.666E-03	2.373E-06	2.245E-06	312.7	3.74E-04	.134	.056	.053
61	97.12	0.00	.51												
62	92.04	0.00	.51												
63	86.96	0.00	.51												
64	81.88	0.00	.51												
65	76.80	0.00	.51	2.34E+02	3.16E-04	3.00E-04	.043	7.380E-03	1.496E-05	1.417E-05	313.4	7.08E-04	.447	.096	.166
66	71.72	0.00	.51	3.12E+02	4.22E-04	3.99E-04	.056	7.481E-03	1.993E-05	1.890E-05	313.8	4.14E-04	1.018	.055	.064
67	66.64	0.00	.51	4.03E+02	5.45E-04	5.17E-04	.069	7.919E-03	2.581E-05	2.449E-05	314.4	5.26E-04	1.037	.066	.074
68	61.56	0.00	.51	2.59E+02	3.51E-04	3.33E-04	.041	8.529E-03	1.662E-05	1.574E-05	315.0	3.36E-04	1.044	.039	.045
69	56.48	0.00	.51	1.60E+02	2.17E-04	2.06E-04	.024	9.022E-03	1.029E-05	9.746E-06	315.1	1.90E-04	1.145	.021	.025
70	51.39	0.00	.51	3.10E+02	4.20E-04	3.98E-04	.044	9.464E-03	1.985E-05	1.881E-05	315.2	4.11E-04	1.021	.043	.052
71	48.86	0.00	.51	4.68E+02	6.34E-04	6.01E-04	.065	9.710E-03	3.002E-05	2.844E-05	316.1	5.17E-04	1.227	.053	.064
72	46.31	0.00	.51	5.46E+02	3.76E-04	5.30E-04	.088	9.991E-03	4.145E-05	3.927E-05	315.6	8.18E-04	1.971	.082	.098
73	43.77	0.00	.51	1.27E+02	1.72E-04	1.63E-04	.017	1.027E-02	9.131E-06	7.793E-06	315.4	1.15E-04	1.491	.011	.014
74	41.24	0.00	.51	2.58E+02	3.50E-04	3.31E-04	.033	1.055E-02	1.655E-05	1.568E-05	315.2	2.96E-04	1.183	.028	.033
75	38.70	0.00	.51	5.61E+01	7.60E-05	7.20E-05	.007	1.083E-02	3.594E-06	3.405E-06	314.4	1.14E-04	.664	.011	.012

EDGE HEATING USED FOR HE

X=	3.872E+01	HL	/HREFF=	8.566E-01
X=	4.124E+01	HL	/HREFF=	8.433E-01
X=	4.377E+01	HL	/HREFF=	8.266E-01
X=	4.631E+01	HL	/HREFF=	8.355E-01
X=	4.885E+01	HL	/HREFF=	8.339E-01
X=	5.139E+01	HL	/HREFF=	8.279E-01
X=	5.648E+01	HL	/HREFF=	8.421E-01
X=	6.156E+01	HL	/HREFF=	8.579E-01
X=	6.664E+01	HL	/HREFF=	8.935E-01
X=	7.172E+01	HL	/HREFF=	9.613E-01
X=	7.680E+01	HL	/HREFF=	8.913E-01
X=	8.189E+01	HL	/HREFF=	9.032E-01
X=	8.696E+01	HL	/HREFF=	9.230E-01
X=	9.204E+01	HL	/HREFF=	9.665E-01
X=	9.712E+01	HL	/HREFF=	9.917E-01
X=	1.022E+02	HL	/HREFF=	1.037E+00
X=	1.073E+02	HL	/HREFF=	1.048E+00
X=	1.124E+02	HL	/HREFF=	1.131E+00
X=	1.175E+02	HL	/HREFF=	1.174E+00
X=	1.226E+02	HL	/HREFF=	1.217E+00
X=	1.271E+02	HL	/HREFF=	1.223E+00
X=	1.276E+02	HL	/HREFF=	[illegible]
X=	1.312E+02	HL	/HREFF=	1.337E+00
X=	1.352E+02	HL	/HREFF=	1.443E+00

B.L. TRANSITION DISTANCE = 1.33 CM
FULLY TURBULENT B.L. CONDITIONS AT =376.00 CM

AMES 3.5 FT HWT TEST (152), C.B. BLUMER, IN-LINE RSI GAP RUN(7) 1973 PAGE 13

TT = 1.1213E+03(K) GAP LENGTH =101.600(CM)
PT = 1.0368E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.1599E+06(J/KG) GAP DEPTH = 2.332(CM)
RE/METER = 3.2734E+06 ORIENTATION= 0.000(DEG)
MACH = 5.132 QS = 1.2092E+05(W/M2)
RHO VEL = 4.1879E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 3.938 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	3.36E+04	4.67E-02	4.42E-02	.969	4.812E-02	1.114E-03	1.055E-03	312.5	4.72E-02	.988	.981	1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	3.36E+04	4.65E-02	4.40E-02	1.106	4.205E-02	1.139E-03	1.051E-03	313.1	4.72E-02	.983	1.125	1.000
4	127.63	-.51	0.00	3.34E+04	4.69E-02	4.44E-02	1.203	3.895E-02	1.119E-03	1.060E-03	313.2	4.75E-02	.987	1.216	1.000
5	125.09	-.51	0.00	3.33E+04	4.62E-02	4.37E-02	1.287	3.589E-02	1.113E-03	1.044E-03	313.3	4.67E-02	.988	1.302	1.000
6	122.56	-.51	0.00	3.29E+04	4.57E-02	4.33E-02	1.392	3.283E-02	1.091E-03	1.034E-03	313.0	4.63E-02	.987	1.410	1.000
7	117.47	-.51	0.00	3.17E+04	4.35E-02	4.12E-02	1.616	2.691E-02	1.033E-03	9.836E-04	313.0	4.41E-02	.987	1.637	1.000
8	112.37	-.51	0.00	2.73E+04	3.79E-02	3.59E-02	1.736	2.185E-02	9.058E-04	8.578E-04	313.3	3.85E-02	.984	1.763	1.000
9	107.31	-.51	0.00	2.27E+04	3.15E-02	2.99E-02	1.753	1.799E-02	7.533E-04	7.132E-04	313.2	3.21E-02	.982	1.784	1.000
10	102.20	-.51	0.00	1.81E+04	2.51E-02	2.38E-02	1.676	1.497E-02	5.993E-04	5.676E-04	313.1	2.56E-02	.980	1.710	1.000
11	97.12	-.51	0.00	1.39E+04	1.93E-02	1.82E-02	1.526	1.260E-02	4.597E-04	4.354E-04	313.2	1.98E-02	.972	1.572	1.000
12	92.04	-.51	0.00	1.14E+04	1.59E-02	1.50E-02	1.461	1.089E-02	3.797E-04	3.596E-04	313.3	1.64E-02	.967	1.512	1.000
13	86.96	-.51	0.00	8.81E+03	1.22E-02	1.16E-02	1.233	9.528E-03	2.922E-04	2.767E-04	313.8	1.29E-02	.946	1.304	1.000
14	81.88	-.51	0.00	8.01E+03	1.11E-02	1.05E-02	1.189	9.353E-03	2.656E-04	2.515E-04	313.7	1.20E-02	.930	1.279	1.000
15	76.80	-.51	0.00	6.95E+03	9.65E-03	9.14E-03	1.036	9.293E-03	2.304E-04	2.182E-04	313.5	1.03E-02	.940	1.105	1.000
16	71.72	-.51	0.00	6.62E+03	9.20E-03	8.71E-03	.965	9.534E-03	2.196E-04	2.080E-04	313.5	9.10E-03	1.010	.955	1.000
17	66.64	-.51	0.00	6.89E+03	9.56E-03	9.06E-03	.964	9.917E-03	2.284E-04	2.163E-04	313.7	9.47E-03	1.010	.955	1.000
18	61.56	-.51	0.00	7.06E+03	9.80E-03	9.28E-03	.945	1.037E-02	2.340E-04	2.216E-04	314.0	9.70E-03	1.010	.935	1.000
19	56.48	-.41	0.00	7.17E+03	9.96E-03	9.43E-03	.904	1.101E-02	2.378E-04	2.252E-04	313.9	9.83E-03	1.013	.893	1.000
20	51.39	-.51	0.00	7.39E+03	1.03E-02	9.72E-03	.876	1.172E-02	2.451E-04	2.321E-04	313.9	1.02E-02	1.008	.868	1.000
21	[illegible]	-.51	0.00	7.71E+03	1.07E-02	1.01E-02	.885	1.209E-02	2.536E-04	2.423E-04	314.6	1.05E-02	1.020	.868	1.000
22	46.71	-.51	0.00	7.82E+03	1.09E-02	1.03E-02	.871	1.247E-02	2.594E-04	2.456E-04	314.1	1.08E-02	1.008	.864	1.000
23	43.77	-.51	0.00	8.07E+03	1.12E-02	1.06E-02	.869	1.289E-02	2.667E-04	2.526E-04	314.0	1.11E-02	1.009	.861	1.000
24	41.24	-.51	0.00	8.54E+03	1.19E-02	1.12E-02	.897	1.323E-02	2.835E-04	2.684E-04	313.9	1.18E-02	1.008	.890	1.000
25	38.70	-.51	0.00	8.71E+03	1.21E-02	1.14E-02	.888	1.361E-02	2.886E-04	2.733E-04	313.0	1.21E-02	.999	.889	1.000
26	135.24	0.00	.25	1.85E+04	2.56E-02	2.43E-02	.533	4.806E-02	6.122E-04	5.799E-04	311.9	2.62E-02	.978	.545	.556
27	132.70	0.00	.25	2.09E+04	2.91E-02	2.74E-02	.644	4.499E-02	6.917E-04	6.551E-04	312.3				.612
28	130.16	0.00	.25	2.09E+04	2.89E-02	2.74E-02	.691	4.192E-02	6.913E-04	6.547E-04	312.2	2.97E-02	.974	.709	.631
29	127.63	0.00	.25	2.09E+04	2.89E-02	2.74E-02	.744	3.885E-02	6.934E-04	6.539E-04	312.3	2.95E-02	.980	.760	.623
30	125.09	0.00	.25	2.10E+04	2.91E-02	2.75E-02	.812	3.579E-02	6.942E-04	6.575E-04	312.4	2.96E-02	.981	.828	.636
31	122.56	0.00	.25	2.06E+04	2.86E-02	2.71E-02	.875	3.272E-02	6.833E-04	6.472E-04	312.1	2.92E-02	.979	.893	.633
32	117.47	0.00	.25	1.85E+04	2.57E-02	2.43E-02	.957	2.680E-02	6.127E-04	5.803E-04	311.8	2.62E-02	.979	.978	.598
33	112.37	0.00	.25	1.60E+04	2.22E-02	2.10E-02	1.019	2.176E-02	5.296E-04	5.016E-04	312.3	2.28E-02	.974	1.047	.594
34	107.31	0.00	.25	1.46E+04	2.03E-02	1.92E-02	1.131	1.792E-02	4.840E-04	4.584E-04	312.0	2.08E-02	.973	1.163	.652
35	102.20	0.00	.25	1.28E+04	1.77E-02	1.68E-02	1.189	1.492E-02	4.237E-04	4.013E-04	311.9	1.83E-02	.972	1.223	.71[illegible]
36	97.12	0.00	.25	1.17E+04	1.62E-02	1.54E-02	1.294	1.255E-02	3.877E-04	3.673E-04	311.9	1.68E-02	.967	1.337	.85[illegible]
37	92.04	0.00	.25	8.71E+03	1.21E-02	1.14E-02	1.115	1.082E-02	2.880E-04	2.728E-04	311.8	1.26E-02	.957	1.165	.771
38	86.96	0.00	.25	6.58E+03	9.13E-03	8.64E-03	.922	9.900E-03	2.179E-04	2.064E-04	312.3	9.83E-03	.929	.993	.76[illegible]
39	81.88	0.00	.25	4.95E+03	6.86E-03	6.50E-03	.735	9.332E-03	1.637E-04	1.551E-04	311.9	7.69E-03	.891	.824	.649
40	[illegible]	0.00	.25	3.90E+03	5.40E-03	5.11E-03	.582	9.278E-03	1.289E-04	1.221E-04	311.8	6.01E-03	.898	.648	.587
41	[illegible]	0.00	.25	3.22E+03	4.45E-03	4.22E-03	.467	9.526E-03	1.063E-04	1.007E-04	309.7	4.36E-03	1.021	.457	.479
42		0.00	.25	3.12E+03	4.31E-03	4.18E-03	.434	9.913E-03	1.028E-04	9.740E-05	310.0	4.21E-03	1.023	.425	.445

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(7) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.56	0.00	.25	2.79E+03	3.86E-03	3.66E-03	.372	1.037E-02	9.216E-05	8.732E-05	310.3	3.76E-03	1.026	.363	.388
44	56.48	0.00	.25	2.75E+03	3.80E-03	3.60E-03	.345	1.100E-02	9.064E-05	8.587E-05	310.0	3.67E-03	1.036	.333	.373
45	51.39	0.00	.25	2.41E+03	3.33E-03	3.15E-03	.284	1.172E-02	7.948E-05	7.529E-05	310.1	3.24E-03	1.026	.277	.319
46	48.86	0.00	.25	2.78E+03	3.85E-03	3.65E-03	.316	1.208E-02	9.169E-05	8.704E-05	310.9	3.64E-03	1.057	.301	.347
47	46.31	0.00	.25	2.46E+03	3.41E-03	3.23E-03	.273	1.247E-02	8.133E-05	7.704E-05	310.6	3.32E-03	1.027	.266	.308
48	43.77	0.00	.25	2.73E+03	3.78E-03	3.58E-03	.294	1.28[illegible]E-02	9.01[illegible]E-05	8.542E-05	311.3	3.67E-03	1.028	.286	.332
49	41.24	0.00	.25	2.75E+03	3.81E-03	3.51E-03	.29[illegible]	1.323E-02	9.137E-05	8.627E-05	310.2	3.72E-03	1.025	.281	.316
50	38.75	0.00	.25	2.26E+03	3.12E-03	2.95E-03	.229	1.361E-02	7.443E-05	7.055E-05	309.6	3.13E-03	.996	.230	.259
51	135.24	0.00	.51	7.01E+03	9.69E-03	9.17E-03	.2[illegible]1	4.606E-02	2.312E-04	2.190E-04	309.4	1.02E-02	.945	.213	.217
52	132.70	0.00	.51	7.19E+03	9.92E-03	9.40E-03	.221	4.499E-02	2.373E-04	2.245E-04	309.7				.209
53	130.16	0.00	.51	9.17E+03	1.27E-02	1.20E-02	.302	4.192E-02	3.022E-04	2.863E-04	308.9	1.34E-02	.943	.320	.285
54	127.63	0.00	.51	9.0[illegible]E+03	1.25E-02	1.19E-02	.323	3.885E-02	2.995E-04	2.838E-04	309.7	1.31E-02	.955	.33[illegible]	.278
55	125.09	0.00	.51	8.9[illegible]E+03	1.24E-02	1.17E-02	.346	3.579E-02	2.954E-04	2.799E-04	309.9	1.29E-02	.958	.361	.277
56	122.56	0.00	.51	9.36E+03	1.29E-02	1.22E-02	.395	3.272E-02	3.085E-04	2.923E-04	309.5	1.39E-02	.956	.413	.293
57	117.47	0.00	.51	7.96E+03	1.10E-02	1.03E-02	.405	2.680E-02	2.593E-04	2.454E-04	309.2	1.14E-02	.951	.426	.260
58	112.77	0.00	.51	6.43E+03	8.89E-03	8.41E-03	.408	2.176E-02	2.120E-04	2.009E-04	309.6	9.48E-03	.937	.436	.247
59	107.31	0.00	.51	5.78E+03	7.98E-03	7.56E-03	.445	1.792E-02	1.906E-04	1.806E-04	309.4	8.55E-03	.934	.477	.267
60	102.20	0.00	.51	5.20E+03	7.18E-03	6.80E-03	.481	1.492E-02	1.714E-04	1.624E-04	309.5	7.69E-03	.934	.515	.301
61	97.12	0.00	.51	[illegible]E+03	6.10E-03	5.55E-03	.492	1.255E-02	1.475E-04	1.398E-04	309.3	6.72E-03	.919	.536	.341
62	92.04	0.00	.51	2.32E+03	3.20E-03	3.13E-03	.296	1.082E-02	7.643E-05	7.247E-05	309.1	3.75E-03	.855	.346	.229
63	86.96	0.00	.51	[illegible]E+02	5.11E-04	5.79E-04	.062	9.9[illegible]E-03	1.459E-05	1.382E-05	309.0	1.31E-03	.[illegible]67	.132	.191
64	81.99	0.00	.51												
65	76.88	0.00	.51	9.45E+02	1.30E-03	1.23E-03	.140	9.276E-03	3.112E-05	2.948E-05	308.8	1.91E-03	.681	.206	.187
66	71.72	0.00	.51	[illegible]E+02	1.17E-03	1.11E-03	.123	9.526E-03	2.891E-05	2.654E-05	308.6	1.08E-03	1.085	.113	.119
67	66.64	0.00	.51	7.23E+02	1.[illegible]0E-03	9.48E-04	.101	9.913E-03	2.399E-05	2.264E-05	309.0	9.04E-04	1.107	.091	.096
68	61.56	0.00	.51	6.19E+02	8.54E-04	8.39E-04	.082	1.[illegible]37E-02	2.039E-05	1.932E-05	309.3	7.58E-04	1.127	.073	.078
69	56.48	0.00	.51	5.12E+02	8.45E-04	8.30E-04	.077	1.1[illegible]E-02	2.117E-05	1.911E-05	309.8	7.15E-04	1.102	.065	.073
70	51.39	0.00	.51	4.41E+02	6.08E-04	5.76E-04	.052	1.172E-02	1.452E-05	1.378E-05	309.0	5.24E-04	1.161	.045	.051
71	48.86	0.00	.51	7.27E+02	1.01E-03	9.53E-04	.083	1.208E-02	2.401E-05	2.275E-05	310.3	7.98E-04	1.259	.066	.076
72	46.31	0.00	.51	6.86E+02	9.48E-04	8.98E-04	.076	1.247E-02	2.263E-05	2.143E-05	309.6	8.58E-04	1.105	.069	.088
73	43.77	0.00	.51	3.05E+02	4.22E-04	3.99E-04	.033	1.285E-02	1.007E-05	9.538E-06	309.4	3.18E-04	1.329	.025	.029
74	41.24	0.00	.51	3.62E+02	4.99E-04	4.73E-04	.038	1.323E-02	1.192E-05	1.129E-05	309.2	4.08E-04	1.224	.031	.035
75	38.79	0.00	.51												

EDGE HEATING USED FOR HE

X=	3.873E+01	HL	/HREFF=	8.991E-01
X=	4.126E+01	HL	/HREFF=	8.9[illegible]E-01
X=	4.377E+01	HL	/HREFF=	8.611E-01
X=	4.631E+01	HL	/HREFF=	8.637E-01
X=	4.886E+01	HL	/HREFF=	8.591E-01
X=	5.139E+01	HL	/HREFF=	8.694E-01
X=	5.649E+01	HL	/HREFF=	8.928E-01
X=	6.156E+01	HL	/HREFF=	9.[illegible]53E-01
X=	6.664E+01	HL	/HREFF=	9.[illegible]E-01
X=	7.172E+01	HL	/HREFF=	[illegible]E-01
X=	7.688E+01	HL	/HREFF=	1.11[illegible]E+00
X=	8.188E+01	HL	/HREFF=	1.279E+00
X=	8.696E+01	HL	/HREFF=	1.3[illegible]4E+00
X=	9.2[illegible]E+01	HL	/HREFF=	1.312E+00
X=	9.712E+01	HL	/HREFF=	1.[illegible]72E+00
X=	1.022E+02	HL	/HREFF=	1.710E+00
X=	1.0[illegible]E+02	HL	/HREFF=	1.734E+00
X=	1.124E+02	HL	/HREFF=	1.703E+00
X=	1.175E+02	HL	/HREFF=	1.637E+00
X=	1.226E+02	HL	/HREFF=	1.41[illegible]E+00
X=	1.251E+02	HL	/HREFF=	1.3[illegible]2E+00
X=	1.276E+02	HL	/HREFF=	1.218E+00
X=	1.302E+02	HL	/HREFF=	1.12[illegible]E+00
X=	1.352E+02	HL	/HREFF=	9.813E-01

B.L. TRANSITION DISTANCE = [illegible]1.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =*376.83 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(8) 1973 PAGE 15

TT	= 1.14?E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 2.0399E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.217E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 5.7?0?E+06	ORIENTATION	= 0.000(DEG)
MACH	= 5.100	QS	= 1.7679E+05(N/M2)
RHO VEL	= 9.326?E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.9?8 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER CONE..)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	.00	[illegible]	7.23E-02	6.85E-02	.847	8.536E-02	9.680E-04	9.222E-04	319.1	7.31E-02	.988	.857	1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	[illegible]	7.30E-02	6.31E-02	.976	[illegible]	8.760E-04	8.303E-04	320.0	7.44E-02	.981	.924	1.000
4	127.43	-.51	0.00	5.57E+04	7.52E-02	7.13E-02	.983	7.614E-02	9.035E-04	8.558E-04	320.0	7.64E-02	.985	.977	1.000
5	125.09	-.51	0.00	5.59E+04	7.55E-02	7.15E-02	.997	7.576E-02	9.069E-04	8.590E-04	320.1				1.000
6	122.56	-.51	0.00	5.70E+04	7.69E-02	7.29E-02	1.049	7.338E-02	9.240E-04	8.752E-04	319.6	7.80E-02	.986	1.063	1.000
7	117.47	-.51	0.00	5.97E+04	8.05E-02	7.63E-02	1.195	6.736E-02	9.673E-04	9.162E-04	319.5	8.16E-02	.988	1.210	1.000
8	112.37	-.51	0.00	6.06E+04	8.18E-02	7.75E-02	1.394	5.872E-02	9.823E-04	9.308E-04	320.0				1.000
9	107.31	-.51	0.00	6.29E+04	8.48E-02	8.03E-02	1.756	4.831E-02	1.019E-03	9.647E-04	319.7	8.58E-02	.988	1.776	1.000
10	102.20	-.51	0.00	6.44E+04	8.69E-02	8.23E-02	2.225	3.905E-02	1.043E-03	9.882E-04	319.6	8.78E-02	.990	2.248	1.000
11	97.12	-.51	0.00	6.37E+04	8.59E-02	8.14E-02	2.720	3.160E-02	1.032E-03	9.777E-04	319.7	8.69E-02	.989	2.750	1.000
12	92.04	-.51	0.00	6.54E+04	8.82E-02	8.35E-02	3.458	2.544E-02	1.059E-03	1.003E-03	319.8	8.91E-02	.990	3.504	
13	86.96	-.51	0.00	6.17E+04	8.33E-02	7.89E-02	3.966	2.100E-02	1.000E-03	9.475E-04	320.3				
14	81.88	-.51	0.00	5.67E+04	7.65E-02	7.24E-02	4.430	1.727E-02	9.186E-04	8.701E-04	320.1				
15	76.80	-.51	0.00	[illegible]	5.50E-02	5.21E-02	3.666	1.500E-02	6.604E-04	6.256E-04	319.7	5.60E-02	.982	3.734	
16	71.72	-.51	0.00	2.94E+04	3.97E-02	3.76E-02	2.918	1.360E-02	4.766E-04	4.515E-04	319.6	3.94E-02	1.008	2.893	1.000
17	66.64	-.51	0.00	2.29E+04	3.08E-02	2.92E-02	2.299	1.341E-02	3.704E-04	3.508E-04	319.6	3.14E-02	.981	2.344	1.000
18	61.56	-.51	0.00	1.77E+04	2.47E-02	2.33E-02	1.780	1.385E-02	2.961E-04	2.804E-04	320.0	2.44E-02	1.009	1.764	1.000
19	56.48	-.51	0.00	1.34E+04	1.81E-02	1.71E-02	1.234	1.466E-02	2.171E-04	2.057E-04	319.6	1.78E-02	1.015	1.216	1.000
20	51.39	-.51	0.00	1.21E+04	1.63E-02	1.54E-02	1.043	1.561E-02	1.955E-04	1.852E-04	319.5	1.61E-02	1.010	1.033	1.000
21	48.56	-.51	0.00	1.12E+04	1.51E-02	1.43E-02	.946	1.601E-02	1.818E-04	1.723E-04	320.[illegible]				1.000
22	46.31	-.51	0.00	1.12E+04	1.51E-02	1.43E-02	.927	1.633E-02	1.819E-04	1.722E-04	319.5	1.50E-02	1.007	.921	1.000
23	43.77	-.51	0.00	1.16E+04	1.56E-02	1.48E-02	.940	1.664E-02	1.879E-04	1.780E-04	319.2	1.55E-02	1.007	.934	1.000
24	41.24	-.51	0.00	1.19E+04	1.60E-02	1.52E-02	.946	1.69[illegible]E-02	1.927E-04	1.825E-04	319.1	1.59E-02	1.004	.942	1.000
25	38.70	-.51	0.00	1.14E+04	1.54E-02	1.46E-02	.893	1.729E-02	1.847E-04	1.750E-04	317.6	1.55E-02	.994	.895	1.000
26	135.24	0.00	.25	2.80E+04	3.77E-02	3.57E-02	.441	8.539E-02	4.527E-04	4.288E-04	317.6	3.86E-02	.976	.451	.527
27	132.70	0.00	.25	3.23E+04	4.34E-02	4.12E-02	.623	[illegible]	5.217E-04	4.943E-04	319.2				.598
28	130.16	0.00	.25	3.37E+04	4.51E-02	4.27E-02	.689	6.563E-02	5.412E-04	5.127E-04	319.2	4.65E-02	.970	.676	.624
29	127.63	0.00	.25	[illegible]	4.60E-02	4.41E-02	.595	7.826E-02	5.533E-04	5.296E-04	319.1	4.77E-02	.976	.609	.624
30	125.09	0.00	.25	[illegible]	4.73E-02	4.56E-02	.672	7.584E-02	[illegible]	5.455E-04	318.2				.634
31	122.56	0.00	.25	[illegible]	4.77E-02	4.52E-02	.649	7.35[illegible]E-02	[illegible]	5.424E-04	317.7	4.87E-02	.978	.663	.626
32	117.47	0.00	.25	[illegible]	4.81E-02	4.55E-02	.712	6.752E-02	5.775E-04	5.471E-04	317.7	4.91E-02	.979	.727	.631
33	112.37	[illegible]	[illegible]	[illegible]	4.95E-02	[illegible]	.844	[illegible]	[illegible]	[illegible]	317.9				.696
34	107.31	0.00	.25	[illegible]	[illegible]	[illegible]	1.156	[illegible]	[illegible]	6.344E-04	317.6	5.68E-02	.982	1.176	.662
35	102.20	0.00	.25	[illegible]	5.91E-02	5.60E-02	1.519	3.893E-02	7.113E-04	6.726E-04	317.3	6.00E-02	.985	1.542	.687
36	97.12	0.00	.25	[illegible]	5.83E-02	5.52E-02	1.854	3.143E-02	[illegible]	6.632E-04	317.2	5.92E-02	.984	1.894	.689
37	92.36	0.00	.25	3.92E+04	5.27E-02	5.00E-02	2.087	2.527E-02	[illegible]	6.001E-04	317.8	5.37E-02	.983	2.124	.686
38	86.96	0.00	.25	[illegible]	5.56E-02	5.27E-02	2.666	2.085E-02	6.682E-04	6.339E-04	317.5				.67
39	81.88	0.00	.25	[illegible]	5.56E-02	5.27E-02	3.241	1.715E-02	6.673E-04	6.328E-04	316.7				
40	76.80	0.00	.25	3.70E+04	4.82E-02	4.57E-02	3.231	1.492E-02	5.793E-04	5.485E-04	316.5	4.92E-02	.979	3.309	
41	71.72	0.00	.25	[illegible]	4.22E-02	3.98E-02	3.105	1.359E-02	5.047E-04	4.783E-04	312.3	4.17E-02	1.008	3.060	
42	66.64	0.00	.25	[illegible]	3.85E-02	3.37E-02	2.858	1.337E-02	4.265E-04	4.044E-04	315.4	3.61E-02	.983	2.733	1.153

AMES 3.5 FT HWT TEST (182), D.E. BLUMER, IN-LINE RSI GAP RUN(6) 1973 PAGE 16

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.56	0.00	.25	1.88E+04	2.51E-02	2.38E-02	1.817	1.383E-02	3.017E-04	2.859E-04	313.3	1.49E-02	1.008	1.032	1.021
44	56.48	0.00	.25	1.20E+04	1.60E-02	1.52E-02	1.094	1.463E-02	1.924E-04	1.823E-04	312.7	1.58E-02	1.016	1.077	.885
45	51.39	0.00	.25	7.25E+03	9.69E-03	9.19E-03	.621	1.560E-02	1.154E-04	1.123E-04	312.9	9.53E-03	1.017	.611	.592
46	48.86	0.00	.25	7.27E+03	9.64E-03	9.14E-03	.602	1.600E-02	1.159E-04	1.097E-04	314.0				.637
47	46.31	0.00	.25	3.76E+03	5.03E-03	4.77E-03	.308	1.632E-02	6.042E-05	5.725E-05	313.5	4.93E-03	1.020	.302	.328
48	43.77	0.00	.25	3.36E+03	4.49E-03	4.26E-03	.273	1.664E-02	5.399E-05	5.116E-05	313.1	4.40E-03	1.023	.264	.283
49	41.24	0.00	.25	6.95E+02	9.29E-04	8.80E-04	.055	1.696E-02	1.116E-05	1.057E-05	312.9	8.69E-04	1.069	.051	.054
50	38.70	0.00	.25												
51	135.24	0.00	.51	7.27E+03	9.73E-03	9.22E-03	.114	8.539E-02	1.169E-04	1.108E-04	313.6	1.06E-02	.919	.124	.145
52	132.70	0.00	.51	6.83E+03	9.14E-03	8.66E-03	.110	8.312E-02	1.098E-04	1.040E-04	314.0				.124
53	130.16	0.00	.51	1.89E+04	2.53E-02	2.40E-02	.314	8.063E-02	3.039E-04	2.880E-04	312.0	2.67E-02	.948	.331	.358
54	127.63	0.00	.51	1.96E+04	2.64E-02	2.50E-02	.337	7.826E-02	3.171E-04	3.005E-04	313.0	2.75E-02	.960	.352	.366
55	125.09	0.00	.51	2.04E+04	2.73E-02	2.58E-02	.359	7.585E-02	3.275E-04	3.104E-04	313.3				.361
56	122.56	0.00	.51	2.13E+04	2.85E-02	2.70E-02	.388	7.350E-02	3.422E-04	3.243E-04	312.8	2.95E-02	.965	.402	.378
57	117.47	0.00	.51	2.10E+04	2.80E-02	2.65E-02	.415	6.752E-02	3.363E-04	3.187E-04	312.4	2.90E-02	.966	.429	.355
58	112.37	0.00	.51	2.02E+04	2.70E-02	2.56E-02	.459	5.877E-02	3.242E-04	3.072E-04	313.2				.330
59	107.31	0.00	.51	2.23E+04	2.98E-02	2.82E-02	.618	4.824E-02	3.579E-04	3.391E-04	312.8	3.08E-02	.968	.638	.359
60	102.23	0.00	.51	2.34E+04	3.13E-02	2.97E-02	.805	3.893E-02	3.764E-04	3.567E-04	312.9	3.22E-02	.972	.828	.368
61	97.12	0.00	.51	2.10E+04	2.81E-02	2.66E-02	.893	3.143E-02	3.371E-04	3.195E-04	312.5	2.90E-02	.968	.922	.336
62	92.04	0.00	.51	1.71E+04	2.28E-02	2.16E-02	.903	2.527E-02	2.742E-04	2.599E-04	312.2	2.37E-02	.961	.940	.268
63	86.96	0.00	.51	1.69E+04	2.26E-02	2.15E-02	1.085	2.086E-02	2.723E-04	2.577E-04	312.7				.274
64	81.98	0.00	.51	1.64E+04	2.19E-02	2.08E-02	1.278	1.716E-02	2.633E-04	2.496E-04	310.9				.288
65	76.90	0.00	.51	2.28E+04	3.04E-02	2.88E-02	2.036	1.492E-02	3.647E-04	3.457E-04	311.3	3.14E-02	.968	2.104	.563
66	71.72	0.00	.51	1.94E+04	2.59E-02	2.45E-02	1.913	1.354E-02	3.109E-04	2.947E-04	310.9	2.56E-02	1.013	1.888	.653
67	66.64	0.00	.51	1.56E+04	2.08E-02	1.97E-02	1.555	1.337E-02	2.496E-04	2.366E-04	311.4	2.14E-02	.972	1.600	.602
68	61.56	0.00	.51	1.02E+04	1.37E-02	1.29E-02	.988	1.383E-02	1.641E-04	1.555E-04	311.7	1.35E-02	1.016	.973	.552
69	56.48	0.00	.51	5.97E+03	7.96E-03	7.54E-03	.544	1.463E-02	9.560E-05	9.061E-05	311.2	7.70E-03	1.033	.526	.433
70	51.39	0.00	.51	3.49E+03	4.66E-03	4.41E-03	.298	1.560E-02	5.592E-05	5.300E-05	311.2	4.49E-03	1.037	.288	.279
71	48.86	0.00	.51	3.23E+03	4.31E-03	4.09E-03	.269	1.600E-02	5.178E-05	4.907E-05	312.9				.285
72	46.31	0.00	.51	1.30E+03	1.73E-03	1.64E-03	.106	1.632E-02	2.084E-05	1.975E-05	311.7	1.63E-03	1.062	.100	.199
73	43.77	0.00	.51	2.95E+02	3.94E-04	3.73E-04	.024	1.664E-02	4.733E-06	4.486E-06	311.3	2.95E-04	1.337	.018	.019
74	41.24	0.00	.51												
75	38.70	0.00	.51												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.094E-01
X=	4.124E+01	HL	/HREFF=	9.425E-01
X=	4.377E+01	HL	/HREFF=	9.330E-01
X=	4.631E+01	HL	/HREFF=	9.210E-01
X=	4.886E+01	HL	/HREFF=	9.405E-01
X=	5.139E+01	HL	/HREFF=	1.033E+00
X=	5.648E+01	HL	/HREFF=	1.216E+00
X=	6.156E+01	HL	/HREFF=	1.744E+00
X=	6.664E+01	HL	/HREFF=	2.344E+00
X=	7.172E+01	HL	/HREFF=	2.633E+00
X=	7.690E+01	HL	/HREFF=	3.734E+00
X=	8.188E+01	HL	/HREFF=	4.430E+00
X=	8.696E+01	HL	/HREFF=	3.256E+00
X=	9.204E+01	HL	/HREFF=	3.045E+00
X=	9.712E+01	HL	/HREFF=	2.750E+00
X=	1.022E+02	HL	/HREFF=	2.249E+00
X=	1.073E+02	HL	/HREFF=	1.776E+00
X=	1.124E+02	HL	/HREFF=	1.394E+00
X=	1.175E+02	HL	/HREFF=	1.217E+00
X=	1.226E+02	HL	/HREFF=	1.057E+00
X=	1.251E+02	HL	/HREFF=	9.967E-01
X=	1.276E+02	HL	/HREFF=	9.771E-01
X=	1.302E+02	HL	/HREFF=	9.237E-01
X=	1.352E+02	HL	/HREFF=	8.574E-01

B.L. TRANSITION DISTANCE = 1.33 CM
FULLY TURBULENT B.L. CONDITIONS AT =*376.00 CM

AMES 3.5 FT HWT TEST (132), C.B. BLUMER, IN-LINE RSI GAP RUN(9) 1973 PAGE 17

TT = 1.114E+03(K) GAP LENGTH =101.600(CM)
PT = 5.200E+05(N/M2) GAP WIDTH = .127(CM)
HT = 1.073E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 1.056E+06 ORIENTATION= 0.000(DEG)
MACH = 5.00 QS = 9.3221E+04(W/M2)
RHO VEL = 2.1094E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.993 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
103	47.59	1.52	0.00	6.77E+03	6.04E-03	7.61E-03	.813	9.884E-03	3.810E-04	3.609E-04	309.5	6.04E-03	1.000	.813	1.040
105	47.59	1.02	0.00												
107	47.59	.51	0.00	6.54E+03	7.73E-03	7.32E-03	.782	9.884E-03	3.653E-04	3.470E-04	310.1	7.73E-03	1.000	.782	1.000
108	47.59	.25	.00	4.91E+03	6.84E-03	6.48E-03	.692	9.884E-03	3.241E-04	3.070E-04	309.3	6.84E-03	1.000	.692	.885
110	47.59	.04	.04	3.66E+03	5.08E-03	4.11E-03	.514	9.885E-03	2.409E-04	2.[illegible]1E-04	308.4	5.09E-03	1.000	.514	.657
111	47.59	0.00	.15	2.97E+03	4.13E-03	3.91E-03	.417	9.885E-03	1.976E-04	1.853E-04	307.9	4.13E-03	1.000	.417	.534
112	47.59	0.00	.25	1.79E+03	2.62E-03	2.48E-03	.265	9.885E-03	1.243E-04	1.178E-04	307.1	2.62E-03	1.000	.265	.339
113	47.59	0.00	.38	1.06E+03	1.48E-03	1.40E-03	.149	9.885E-03	6.394E-05	6.626E-05	306.5	1.48E-03	1.000	.149	.191
114	47.59	0.00	.64	2.31E+02	3.20E-04	3.34E-04	.032	9.885E-03	1.513E-05	1.439E-05	305.3	3.20E-04	1.000	.032	.041
115	47.59	0.00	.89	2.47E+01	3.41E-05	3.23E-05	.003	9.885E-03	1.617E-06	1.533E-06	304.4	3.41E-05	1.000	.003	.004
116	47.59	0.00	1.14	1.75E+01	2.44E-05	2.32E-05	.002	9.885E-03	1.159E-06	1.098E-06	303.8	2.44E-05	1.000	.002	.003
117	47.59	0.00	1.40	1.71E+01	1.67E-05	1.58E-05	.002	9.885E-03	7.494E-07	7.481E-07	303.2	1.67E-05	1.000	.002	.002
118	47.59	0.00	1.65	3.38E+00	8.60E-06	8.34E-06	.001	9.885E-03	4.173E-07	3.955E-07	302.7	8.60E-06	1.000	.001	.001
119	47.59	0.00	1.90	3.36E+00	7.39E-06	7.31E-06	.001	9.885E-03	3.504E-07	3.321E-07	302.5	7.39E-06	1.000	.001	.001
120	47.59	0.00	2.29												
203	61.56	1.52	0.00	4.96E+03	6.89E-03	6.52E-03	.805	8.557E-03	3.264E-04	3.092E-04	306.9	6.89E-03	1.000	.805	1.041
205	61.56	1.02	0.00	4.98E+03	6.91E-03	6.55E-03	.808	8.554E-03	3.277E-04	3.105E-04	307.5	6.91E-03	1.000	.808	1.045
207	61.56	.51	0.00	4.76E+03	6.61E-03	6.26E-03	.773	8.552E-03	3.134E-04	2.969E-04	307.2	6.61E-03	1.000	.773	1.000
208	61.56	.25	0.00	4.34E+03	6.02E-03	5.70E-03	.704	8.551E-03	2.854E-04	2.704E-04	305.9	6.02E-03	1.000	.704	.911
210	61.56	.04	.04	3.23E+03	4.49E-03	4.25E-03	.525	8.551E-03	2.127E-04	2.015E-04	305.1	4.49E-03	1.000	.525	.679
211	61.56	0.10	.15	2.77E+03	3.79E-03	3.59E-03	.443	8.550E-03	1.795E-04	1.701E-04	305.7	3.79E-03	1.000	.443	.573
212	61.56	0.00	.25	1.89E+03	2.62E-03	2.49E-03	.307	8.550E-03	1.243E-04	1.178E-04	305.2	2.62E-03	1.000	.307	.397
213	61.56	0.00	.38	1.10E+03	1.52E-03	1.44E-03	.178	8.551E-03	7.228E-05	6.849E-05	304.8	1.52E-03	1.000	.178	.231
214	61.56	0.00	.64	2.79E+02	3.31E-04	3.14E-04	.039	8.551E-03	1.569E-05	1.487E-05	303.9	3.31E-04	1.000	.039	.050
215	61.56	0.00	.89	2.71E+01	3.74E-05	3.35E-05	.004	8.551E-03	1.774E-06	1.681E-06	303.4	3.74E-05	1.000	.004	.006
216	61.56	0.00	1.14	[illegible]	7.70E-06	7.29E-06	.001	8.550E-03	3.649E-07	3.458E-07	303.0	7.70E-06	1.000	.001	.001
217	61.56	0.00	1.40												
218	61.56	0.00	1.65												
219	61.56	0.00	1.90												
220	61.56	0.00	2.29												
306	86.96	.76	.00	6.02E+03	5.57E-03	5.28E-03	.776	7.184E-03	2.643E-04	2.503E-04	305.4	5.57E-03	1.000	.776	1.010
307	86.96	.51	0.00	3.95E+03	5.52E-03	5.23E-03	.768	7.184E-03	2.617E-04	2.479E-04	306.2	5.52E-03	1.000	.768	1.000
308	86.96	.25	.00	3.61E+03	5.00E-03	4.73E-03	.696	7.185E-03	2.369E-04	2.245E-04	305.8	5.00E-03	1.000	.696	.986
309	86.96	.13	.00	3.11E+03	4.31E-03	4.39E-03	.599	7.185E-03	2.042E-04	1.935E-04	305.5	4.31E-03	1.000	.599	.780
310	86.96	.04	.04	2.76E+03	3.82E-03	3.62E-03	.532	7.186E-03	1.812E-04	1.717E-04	305.3	3.82E-03	1.000	.532	.690
311	86.96	0.00	.15	2.22E+03	3.07E-03	2.91E-03	.427	7.186E-03	1.453E-04	1.378E-04	305.1	3.07E-03	1.000	.427	.556
312	86.96	0.00	.25	1.41E+03	1.95E-03	1.85E-03	.272	7.185E-03	9.253E-05	8.777E-05	304.6	1.95E-03	1.000	.272	.354
313	86.96	0.00	.38	8.11E+02	1.12E-03	1.06E-03	.156	7.186E-03	5.319E-05	5.039E-05	304.3	1.12E-03	1.000	.156	.203
314	86.96	.00	.64	1.75E+02	2.46E-04	2.34E-04	.034	7.186E-03	1.168E-05	1.107E-05	303.9	2.46E-04	1.000	.034	.045

AMES 3.5 FT HWT TEST (182), C.J. BLUMER, IN-LINE RSI GAP RUN(5) 1973 PAGE 18

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.96	0.00	.89												
316	86.96	0.00	1.14	5.55E+01	7.66E-05	7.26E-05	.011	7.186E-03	3.639E-06	3.440E-06	302.8	7.66E-05	1.000	.011	.014
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	86.96	0.00	2.29	5.96E+01	8.21E-05	7.78E-05	.011	7.186E-03	3.391E-06	3.688E-06	301.3	8.21E-05	1.000	.011	.015
406	112.36	.75	0.00	3.96E+03	5.49E-03	5.20E-03	.842	6.524E-03	2.604E-04	2.467E-04	305.4	5.49E-03	1.000	.842	.990
407	112.36	.51	0.00	3.97E+03	5.50E-03	5.22E-03	.844	6.524E-03	2.619E-04	2.472E-04	305.3	5.50E-03	1.000	.844	1.000
408	112.36	.25	0.00	3.57E+03	4.94E-03	4.68E-03	.758	6.523E-03	2.344E-04	2.221E-04	305.1	4.94E-03	1.000	.758	.890
409	112.36	.15	0.00	3.12E+03	4.31E-03	4.09E-03	.661	6.523E-03	2.045E-04	1.938E-04	304.9	4.31E-03	1.000	.661	.704
410	112.36	.10	.04	2.58E+03	3.57E-03	3.38E-03	.547	6.523E-03	1.690E-04	1.602E-04	304.8	3.57E-03	1.000	.547	.648
411	112.36	0.00	.15	2.13E+03	2.95E-03	2.80E-03	.452	6.523E-03	1.399E-04	1.325E-04	304.6	2.95E-03	1.000	.452	.536
412	112.36	0.00	.25	1.15E+03	1.60E-03	1.51E-03	.245	6.523E-03	7.563E-05	7.171E-05	304.2	1.60E-03	1.000	.245	.290
413	112.36	0.00	.38	6.51E+02	9.00E-04	8.53E-04	.138	6.523E-03	4.267E-05	4.043E-05	303.6	9.00E-04	1.000	.138	.164
414	112.36	0.00	.64	1.05E+02	1.45E-04	1.38E-04	.022	6.523E-03	6.882E-06	6.521E-06	303.6	1.45E-04	1.000	.022	.026
415	112.36	0.00	.89												
416	112.36	0.00	1.14												
417	112.36	0.00	1.40												
418	112.36	0.00	1.65												
419	112.36	0.00	1.90												
420	112.36	0.00	2.29												
506	125.06	.75	0.00	3.71E+03	5.15E-03	4.88E-03	.766	6.717E-03	2.440E-04	2.312E-04	305.5	5.15E-03	1.000	.766	1.006
507	125.06	.51	0.00	3.42E+03	4.74E-03	4.49E-03	.705	6.715E-03	2.246E-04	2.128E-04	305.3	4.74E-03	1.000	.705	1.000
508	125.06	.25	0.00	2.74E+03	3.79E-03	3.59E-03	.564	6.714E-03	1.796E-04	1.702E-04	304.9	3.79E-03	1.000	.564	.800
509	125.06	.15	0.00	1.67E+03	2.31E-03	2.19E-03	.345	6.713E-03	1.097E-04	1.039E-04	304.0	2.31E-03	1.000	.345	.488
510	125.06	.06	.04	2.75E+03	3.80E-03	3.60E-03	.567	6.712E-03	1.803E-04	1.709E-04	304.8	3.80E-03	1.000	.567	.803
511	125.06	0.00	.15	2.49E+03	3.45E-03	3.27E-03	.514	6.712E-03	1.635E-04	1.549E-04	304.7	3.45E-03	1.000	.514	.728
512	125.06	0.00	.25	1.67E+03	2.31E-03	2.18E-03	.343	6.712E-03	1.093E-04	1.036E-04	304.6	2.31E-03	1.000	.343	.487
513	125.06	0.00	.38	9.34E+02	1.29E-03	1.22E-03	.193	6.712E-03	6.127E-05	5.806E-05	304.4	1.29E-03	1.000	.193	.273
514	125.06	0.00	.64	1.93E+02	2.67E-04	2.53E-04	.040	6.712E-03	1.268E-05	1.201E-05	304.1	2.67E-04	1.000	.040	.056
515	125.06	0.00	.89												
516	125.06	0.00	1.14												
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X= 4.759E+01 HL /HREFF= 7.318E-01
X= 6.136E+01 HL /HREFF= 7.731E-01
X= 8.696E+01 HL /HREFF= 7.634E-01
X= 1.124E+02 HL /HREFF= 5.[illegible]E-01
X 1.251E+02 HL /HREFF= 7.[illegible]E-01
B.L. TRANSITION DISTANCE = 35.95 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.36 CM

AMES 3.5 FT HWT TEST (192), C.D. BLUMER, IN-LINE RSI GAP RUN(19) 1973 PAGE 19

TT = 1.1911E+03(K) GAP LENGTH =101.600(CM)
PT = 1.3775E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.255E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 3.1123E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 QS = 1.3232E+05(W/M2)
RHO VEL = 4.1834E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.995 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
103	47.59	1.52	0.00	8.32E+03	1.07E-02	1.02E-02	.893	1.201E-02	2.560E-04	2.427E-04	317.3	1.07E-02	1.000	.893	1.073
105	47.59	1.02	0.00												
107	47.59	.51	0.00	7.76E+03	9.99E-03	9.47E-03	.832	1.201E-02	2.388E-04	2.264E-04	318.0	9.99E-03	1.000	.832	1.000
108	47.59	.25	0.00	7.07E+03	9.09E-03	8.62E-03	.757	1.201E-02	2.173E-04	2.060E-04	316.8	9.09E-03	1.000	.757	.910
110	47.59	.04	.04	5.53E+03	7.10E-03	6.73E-03	.591	1.201E-02	1.598E-04	1.610E-04	315.6	7.10E-03	1.000	.591	.711
111	47.59	0.00	.15	4.64E+03	5.95E-03	5.64E-03	.495	1.201E-02	1.421E-04	1.348E-04	314.9	5.95E-03	1.000	.495	.595
112	47.59	0.00	.25	3.17E+03	4.06E-03	3.85E-03	.338	1.201E-02	9.697E-05	9.195E-05	313.8	4.06E-03	1.000	.338	.406
113	47.59	0.00	.38	1.91E+03	2.44E-03	2.31E-03	.203	1.201E-02	5.833E-05	5.531E-05	312.9	2.44E-03	1.000	.203	.244
114	47.59	0.00	.64	5.13E+02	6.55E-04	6.21E-04	.055	1.201E-02	1.566E-05	1.485E-05	311.3	6.55E-04	1.000	.055	.066
115	47.59	0.00	.89	1.20E+02	1.54E-04	1.46E-04	.013	1.201E-02	3.679E-06	3.481E-06	310.0	1.54E-04	1.000	.013	.015
116	47.59	0.00	1.14	2.86E+01	3.67E-05	3.48E-05	.003	1.201E-02	8.770E-07	8.319E-07	309.0	3.67E-05	1.000	.003	.004
117	47.59	0.00	1.40	1.35E+01	1.73E-05	1.64E-05	.001	1.201E-02	4.138E-07	3.925E-07	308.2	1.73E-05	1.000	.001	.002
118	47.59	0.00	1.65	1.51E+01	1.92E-05	1.82E-05	.002	1.201E-02	4.579E-07	4.344E-07	307.6	1.92E-05	1.000	.002	.002
119	47.59	0.00	1.90	7.63E+00	9.69E-06	9.19E-06	.001	1.201E-02	2.316E-07	2.197E-07	307.1	9.69E-06	1.000	.001	.001
120	47.59	0.00	2.29	7.63E+00	9.68E-06	9.19E-06	.001	1.201E-02	2.315E-07	2.196E-07	306.4	9.68E-06	1.000	.001	.001
203	61.56	1.52	.00	7.27E+03	9.32E-03	8.84E-03	.916	1.016E-02	2.223E-04	2.112E-04	314.6	9.32E-03	1.000	.916	1.095
205	61.56	1.02	.00	7.09E+03	9.09E-03	8.61E-03	.895	1.015E-02	2.172E-04	2.059E-04	315.3	9.09E-03	1.000	.895	1.068
207	61.56	.51	0.00	6.63E+03	8.51E-03	8.07E-03	.838	1.016E-02	2.034E-04	1.928E-04	315.0	8.51E-03	1.000	.838	1.006
208	61.56	.25	0.00	6.71E+03	8.60E-03	8.15E-03	.846	1.016E-02	2.055E-04	1.948E-04	314.4	8.60E-03	1.000	.846	1.010
210	61.56	.04	.04	5.93E+03	7.59E-03	7.20E-03	.748	1.016E-02	1.815E-04	1.722E-04	313.2	7.59E-03	1.000	.748	.893
211	61.56	0.00	.15	5.30E+03	6.78E-03	6.43E-03	.667	1.016E-02	1.620E-04	1.536E-04	312.7	6.78E-03	1.000	.667	.797
212	61.56	0.00	.25	4.01E+03	5.13E-03	4.86E-03	.505	1.016E-02	1.225E-04	1.162E-04	312.0	5.13E-03	1.000	.505	.602
213	61.56	0.00	.76	2.59E+03	3.31E-03	3.13E-03	.325	1.016E-02	7.901E-05	7.493E-05	311.2	3.31E-03	1.000	.325	.388
214	61.56	0.00	.64	7.56E+02	9.66E-04	9.16E-04	.095	1.016E-02	2.309E-05	2.190E-05	310.0	9.66E-04	1.000	.095	.114
215	61.56	0.00	.89	1.54E+02	1.96E-04	1.86E-04	.019	1.016E-02	4.682E-06	4.441E-06	309.2	1.96E-04	1.000	.019	.023
216	61.56	0.00	1.14	1.43E+01	1.81E-05	1.72E-05	.002	1.016E-02	4.337E-07	4.114E-07	308.5	1.81E-05	1.000	.002	.002
217	61.56	0.00	1.40												
218	61.56	0.00	1.65												
219	61.56	0.00	1.90	6.40E+00	8.13E-06	7.71E-06	.001	1.016E-02	1.944E-07	1.844E-07	307.2	8.13E-06	1.000	.001	.001
220	61.56	0.00	2.29												
304	86.96	.76	.00	6.07E+03	7.78E-03	7.38E-03	.816	9.534E-03	1.859E-04	1.763E-04	313.7	7.78E-03	1.000	.816	.694
307	86.96	.51	0.00	8.95E+03	1.14E-02	1.08E-02	1.193	9.543E-03	2.722E-04	2.581E-04	313.3	1.14E-02	1.000	1.193	1.00[illegible]
308	86.96	.25	.00	1.23E+04	1.58E-02	1.49E-02	1.656	9.553E-03	3.764E-04	3.573E-04	312.8	1.58E-02	1.000	1.656	1.38[illegible]
309	86.96	.13	.00	1.30E+04	1.66E-02	1.58E-02	1.739	9.557E-03	3.973E-04	3.769E-04	312.3	1.66E-02	1.000	1.739	1.450
310	86.96	.04	.04	1.27E+04	1.63E-02	1.54E-02	1.703	9.561E-03	3.891E-04	3.690E-04	311.8	1.63E-02	1.000	1.703	1.42[illegible]
311	86.96	0.00	.15	1.14E+04	1.45E-02	1.38E-02	1.521	9.563E-03	3.477E-04	3.298E-04	311.4	1.45E-02	1.000	1.521	1.275
312	86.96	0.00	.25	8.66E+03	1.10E-02	1.05E-02	1.155	9.563E-03	2.640E-04	2.504E-04	311.6	1.10E-02	1.000	1.155	.968
313	86.96	0.00	.38	6.07E+03	7.74E-03	7.34E-03	.810	9.553E-03	1.851E-04	1.755E-04	310.2	7.74E-03	1.000	.810	.679
314	86.96	0.00	.64	2.67E+03	3.41E-03	3.23E-03	.356	9.563E-03	8.143E-05	7.724E-05	303.3	3.41E-03	1.000	.356	.299

AMES 3.5 FT HWT TEST (132), 0.3. BLUME?, IN-LINE RSI GAP FUN(10) 1973 PAGE 20

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.96	0.00	.99	3.[illegible]E+02	1.16E-03	1.10E-03	.121	9.563E-03	2.762E-05	2.620E-05	309.6	1.16E-03	1.000	.121	.181
316	86.96	0.00	1.14	3.74E+02	4.74E-04	4.50E-04	.050	9.563E-03	1.133E-05	1.075E-05	305.6	4.74E-04	1.000	.050	.042
317	86.96	0.00	1.4?												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	86.96	0.03	2.29												
406	112.36	.76	0.00	2.56E+04	3.26E-02	3.09E-02	1.671	1.952E-02	7.797E-04	7.395E-04	310.7	3.26E-02	1.000	1.671	.988
407	112.36	.51	.00	2.82E+04	3.60E-02	3.42E-02	1.841	1.957E-02	8.612E-04	8.168E-04	310.6	3.60E-02	1.000	1.841	1.090
408	112.36	.25	0.00	2.84E+04	3.62E-02	3.43E-02	1.845	1.962E-02	8.656E-04	8.210E-04	310.1	3.62E-02	1.000	1.845	1.003
409	112.36	.15	0.00	2.71E+04	3.45E-02	3.27E-02	1.756	1.964E-02	8.244E-04	7.813E-04	309.8	3.45E-02	1.000	1.756	.954
410	112.36	.04	.04	2.43E+04	3.10E-02	2.94E-02	1.575	1.966E-02	7.433E-04	7.022E-04	309.5	3.10E-02	1.000	1.575	.856
411	112.36	0.00	.15	2.15E+04	2.75E-02	2.61E-02	1.400	1.967E-02	6.583E-04	6.244E-04	309.1	2.75E-02	1.000	1.400	.761
412	112.36	0.00	.25	1.52E+04	1.94E-02	1.84E-02	.986	1.967E-02	4.637E-04	4.399E-04	308.5	1.94E-02	1.000	.986	.536
413	112.36	0.00	.38	1.12E+04	1.42E-02	1.35E-02	.722	1.967E-02	3.393E-04	3.219E-04	307.3	1.42E-02	1.000	.722	.392
414	112.36	0.00	.64	4.75E+03	6.03E-03	5.72E-03	.306	1.967E-02	1.441E-04	1.367E-04	307.2	6.03E-03	1.000	.306	.166
415	112.36	0.00	.89	1.87E+03	2.37E-03	2.25E-03	.121	1.967E-02	5.673E-05	5.379E-05	306.8	2.37E-03	1.000	.121	.066
416	112.36	0.00	1.14	5.27E+02	6.81E-04	6.46E-04	.035	1.967E-02	1.623E-05	1.545E-05	306.1	6.81E-04	1.000	.035	.019
417	112.36	0.00	1.40												
418	112.36	0.00	1.65												
419	112.36	0.03	1.90												
420	112.36	0.00	2.29												
506	125.06	.75	0.00	3.05E+04	3.89E-02	3.69E-02	1.225	3.175E-02	9.293E-04	8.819E-04	311.6	3.89E-02	1.000	1.225	1.002
507	125.06	.51	0.00	3.05E+04	3.89E-02	3.69E-02	1.223	3.181E-02	9.237E-04	8.817E-04	310.2	3.89E-02	1.000	1.223	1.000
508	125.06	.25	0.00	2.97E+04	3.79E-02	3.59E-02	1.189	3.187E-02	9.058E-04	8.591E-04	309.6	3.79E-02	1.000	1.189	.972
509	125.06	.15	0.00	2.67E+04	3.39E-02	3.22E-02	1.063	3.190E-02	8.139E-04	7.691E-04	308.7	3.39E-02	1.000	1.063	.870
510	125.06	.04	.04	2.75E+04	3.50E-02	3.32E-02	1.096	3.192E-02	8.363E-04	7.930E-04	308.9	3.50E-02	1.000	1.096	.896
511	125.06	0.00	.15	2.61E+04	3.32E-02	3.15E-02	1.040	3.193E-02	7.942E-04	7.533E-04	308.7	3.32E-02	1.000	1.040	.851
512	125.06	0.00	.25	2.17E+04	2.76E-02	2.62E-02	.864	3.193E-02	6.592E-04	6.253E-04	308.5	2.76E-02	1.000	.864	.706
513	125.06	0.00	.38	1.67E+04	2.12E-02	2.01E-02	.665	3.193E-02	5.074E-04	4.813E-04	308.1	2.12E-02	1.000	.665	.544
514	125.06	0.00	.64	7.77E+03	9.87E-03	9.37E-03	.309	3.193E-02	2.360E-04	2.239E-04	307.6	9.87E-03	1.000	.309	.253
515	125.06	0.00	.89	3.23E+03	4.10E-03	3.89E-03	.128	3.193E-02	9.791E-05	9.289E-05	306.0	4.10E-03	1.000	.128	.105
516	125.06	0.00	1.14	1.36E+03	1.72E-03	1.63E-03	.054	3.193E-02	4.117E-05	3.906E-05	307.0	1.72E-03	1.000	.054	.044
517	125.06	0.00	1.40	9.35E+01	1.25E-04	1.19E-04	.004	3.193E-02	2.989E-06	2.834E-06	336.6	1.25E-04	1.000	.004	.003
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HT

X= 4.759E+01 HL /HREFF= 5.[illegible]E-01
X= 6.156E+01 HL /HREFF= 5.[illegible]E-01
X= 8.696E+01 HL /HREFF= 1.1[illegible]E+00
X= 1.124E+02 HL /HREFF= 1.[illegible]E+00
X= 1.251E+02 HL /HREFF= 1.[illegible]E+00
B.L. TRANSITION DISTANCE = -1.55 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.36 CM

AMES 3.5 FT HWT TEST (152), C.B. BLUMER, IN-LINE RSI GAP RUN(11) 1373 PAGE 21

TT	= 1.1[illegible]E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 2.1013E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2[illegible]E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 5.4384E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.190	QS	= 1.7444E+05(W/M2)
RHO VEL	= 3.3751E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 0.910 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (K(/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
103	47.59	1.52	0.00	9.74E+03	1.33E-02	1.26E-02	.819	1.627E-02	1.591E-04	1.506E-04	322.6	1.33E-02	1.000	.819	1.077
105	47.59	1.02	0.00												
107	47.59	.51	0.00	9.02E+03	1.24E-02	1.17E-02	.760	1.626E-02	1.475E-04	1.397E-04	324.0	1.24E-02	1.000	.760	1.000
108	47.59	.25	0.00	9.16E+03	1.25E-02	1.19E-02	.771	1.626E-02	1.496E-04	1.416E-04	322.3	1.25E-02	1.000	.771	1.013
110	47.59	.04	.04	8.71E+03	1.19E-02	1.13E-02	.731	1.626E-02	1.413E-04	1.343E-04	320.4	1.19E-02	1.000	.731	.961
111	47.59	0.00	.15	8.04E+03	1.10E-02	1.04E-02	.674	1.626E-02	1.308E-04	1.239E-04	319.4	1.10E-02	1.000	.674	.886
112	47.59	0.00	.25	6.77E+03	9.20E-03	8.71E-03	.565	1.626E-02	1.098E-04	1.040E-04	317.6	9.20E-03	1.000	.565	.744
113	47.59	0.00	.38	5.04E+03	6.84E-03	6.48E-03	.421	1.626E-02	8.169E-05	7.738E-05	316.2	6.84E-03	1.000	.421	.553
114	47.59	0.00	.64	2.34E+03	3.17E-03	3.00E-03	.195	1.626E-02	3.779E-05	3.580E-05	313.7	3.17E-03	1.000	.195	.256
115	47.59	0.00	.89	7.62E+02	1.03E-03	9.73E-04	.063	1.626E-02	1.226E-05	1.162E-05	311.7	1.03E-03	1.000	.063	.083
116	47.59	0.00	1.14	1.94E+02	2.61E-04	2.47E-04	.016	1.626E-02	3.116E-06	2.953E-06	310.1	2.61E-04	1.000	.016	.021
117	47.59	0.00	1.40	5.40E+01	7.26E-05	6.88E-05	.004	1.626E-02	8.664E-07	8.211E-07	308.8	7.26E-05	1.000	.004	.006
118	47.59	0.00	1.65	4.17E+01	5.59E-05	5.30E-05	.003	1.626E-02	6.669E-07	6.321E-07	307.8	5.59E-05	1.000	.003	.005
119	47.59	0.00	1.90	1.53E+01	2.05E-05	1.94E-05	.001	1.626E-02	2.441E-07	2.314E-07	307.0	2.05E-05	1.000	.001	.002
120	47.59	0.00	2.29												
203	61.56	1.52	0.00	8.21E+03	1.12E-02	1.06E-02	.806	1.386E-02	1.333E-04	1.263E-04	318.5	1.12E-02	1.000	.806	.727
205	61.56	1.02	0.00	7.94E+03	1.07E-02	1.01E-02	.770	1.387E-02	1.275E-04	1.208E-04	319.8	1.07E-02	1.000	.770	.694
207	61.56	.51	0.00	1.13E+04	1.54E-02	1.46E-02	1.109	1.389E-02	1.839E-04	1.741E-04	319.3	1.54E-02	1.000	1.109	1.000
208	61.56	.25	0.00	1.57E+04	2.14E-02	2.03E-02	1.541	1.390E-02	2.557E-04	2.422E-04	318.1	2.14E-02	1.000	1.541	1.389
210	61.56	.04	.04	1.84E+04	2.49E-02	2.36E-02	1.793	1.391E-02	2.977E-04	2.820E-04	316.2	2.49E-02	1.000	1.793	1.617
211	61.56	0.00	.15	1.82E+04	2.47E-02	2.34E-02	1.776	1.392E-02	2.950E-04	2.795E-04	315.6	2.47E-02	1.000	1.776	1.602
212	61.56	0.00	.25	1.68E+04	2.27E-02	2.15E-02	1.630	1.392E-02	2.707E-04	2.565E-04	314.4	2.27E-02	1.000	1.630	1.470
213	61.56	0.00	.38	1.42E+04	1.91E-02	1.81E-02	1.374	1.392E-02	2.282E-04	2.162E-04	313.3	1.91E-02	1.000	1.374	1.239
214	61.56	0.00	.64	8.25E+03	1.11E-02	1.05E-02	.799	1.392E-02	1.327E-04	1.258E-04	311.2	1.11E-02	1.000	.799	.721
215	61.56	0.00	.89	4.27E+03	5.71E-03	5.41E-03	.410	1.392E-02	6.817E-05	6.461E-05	309.8	5.71E-03	1.000	.410	.370
216	61.56	0.00	1.14	1.84E+03	2.47E-03	2.34E-03	.177	1.392E-02	2.948E-05	2.794E-05	308.6	2.47E-03	1.000	.177	.160
217	61.56	0.00	1.40	5.79E+02	7.77E-04	7.37E-04	.056	1.392E-02	9.275E-06	8.791E-06	307.8	7.77E-04	1.000	.056	.050
218	61.56	0.00	1.65	2.75E+02	3.68E-04	3.49E-04	.026	1.392E-02	4.392E-06	4.163E-06	307.1	3.68E-04	1.000	.026	.024
219	61.56	0.00	1.90	1.04E+02	1.40E-04	1.32E-04	.010	1.392E-02	1.656E-06	1.580E-06	306.5	1.40E-04	1.000	.010	.009
220	61.56	0.00	2.29	3.01E+01	4.03E-05	3.82E-05	.003	1.392E-02	4.805E-07	4.555E-07	305.[illegible]	4.03E-05	1.000	.003	.003
306	86.96	.76	0.00	4.77E+04	6.44E-02	6.10E-02	3.076	2.094E-02	7.538E-04	7.282E-04	318.5	6.44E-02	1.000	3.076	
307	86.96	.51	0.00	4.96E+04	6.78E-02	6.42E-02	3.227	2.101E-02	8.032E-04	7.664E-04	317.8	6.78E-02	1.000	3.227	
308	86.96	.25	0.00	5.03E+04	6.79E-02	6.43E-02	3.221	2.107E-02	8.101E-04	7.674E-04	317.1	6.79E-02	1.000	3.221	
309	86.96	.15	0.00	4.78E+04	6.49E-02	6.15E-02	3.076	2.110E-02	7.746E-04	7.330E-04	316.4	6.49E-02	1.000	3.076	
310	86.96	.04	.04	4.64E+04	6.29E-02	5.95E-02	2.975	2.113E-02	7.503E-04	7.107E-04	315.7	6.29E-02	1.000	2.975	.92[illegible]
311	86.96	0.00	.15	4.23E+04	5.74E-02	5.43E-02	2.713	2.114E-02	6.847E-04	6.486E-04	314.8	5.74E-02	1.000	2.713	.84[illegible]
312	86.96	0.00	.25	3.47E+04	4.69E-02	4.44E-02	2.217	2.114E-02	5.594E-04	5.300E-04	313.6	4.69E-02	1.000	2.217	.687
313	86.96	0.00	.38	2.74E+04	3.70E-02	3.50E-02	1.748	2.114E-02	4.412E-04	4.180E-04	312.6	3.70E-02	1.000	1.748	.542
314	86.96	0.00	.64	1.69E+04	2.28E-02	2.16E-02	1.078	2.114E-02	2.719E-04	2.577E-04	311.3	2.28E-02	1.000	1.078	.334

AMES 3.5 FT HWT TEST ( ), D.J. BLUMER, IN-LINE RSI GAP RUN(11) 1973 PAGE 22

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.96	0.00	.89	9.57E+03	1.29E-02	1.22E-02	.609	2.114E-02	1.537E-04	1.456E-04	310.0	1.29E-02	1.000	.609	.189
316	86.96	0.00	1.14	3.37E+03	4.50E-03	4.26E-03	.213	2.114E-02	5.363E-05	5.090E-05	304.3	4.50E-03	1.000	.213	.066
317	86.96	0.00	1.40	2.28E+03	3.05E-03	2.89E-03	.144	2.114E-02	3.643E-05	3.453E-05	304.9	3.05E-03	1.000	.144	.045
318	86.96	0.00	1.65	7.95E+02	1.06E-03	1.01E-03	.050	2.114E-02	1.268E-05	1.292E-05	304.3	1.06E-03	1.000	.050	.016
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
406	112.36	.76	0.00	5.01E+04	6.77E-02	6.42E-02	1.134	5.975E-02	8.087E-04	7.661E-04	314.2	6.77E-02	1.000	1.134	.903
407	112.36	.51	0.00	5.09E+04	6.89E-02	6.53E-02	1.154	5.973E-02	8.227E-04	7.794E-04	314.2	6.89E-02	1.000	1.154	1.000
408	112.36	.25	0.00	4.83E+04	6.53E-02	6.19E-02	1.094	5.971E-02	7.794E-04	7.385E-04	313.4	6.53E-02	1.000	1.094	.940
409	112.36	.15	0.00	4.60E+04	6.21E-02	5.88E-02	1.040	5.970E-02	7.413E-04	7.024E-04	312.8	6.21E-02	1.000	1.040	.902
410	112.36	.04	.04	4.21E+04	5.68E-02	5.39E-02	.952	5.965E-02	6.784E-04	6.428E-04	312.4	5.68E-02	1.000	.952	.825
411	112.36	0.00	.15	3.88E+04	5.24E-02	4.97E-02	.878	5.968E-02	6.254E-04	5.927E-04	311.7	5.24E-02	1.000	.878	.761
412	112.36	0.00	.25	3.03E+04	4.09E-02	3.87E-02	.685	5.968E-02	4.881E-04	4.625E-04	310.6	4.09E-02	1.000	.685	.594
413	112.36	0.00	.38	2.41E+04	3.24E-02	3.07E-02	.543	5.968E-02	3.868E-04	3.666E-04	308.2	3.24E-02	1.000	.543	.471
414	112.36	0.00	.64	1.48E+04	2.00E-02	1.90E-02	.336	5.968E-02	2.391E-04	2.266E-04	309.0	2.00E-02	1.000	.336	.291
415	112.36	0.00	.89	9.15E+03	1.23E-02	1.16E-02	.205	5.968E-02	1.463E-04	1.387E-04	307.2	1.23E-02	1.000	.205	.178
416	112.36	0.00	1.14	5.44E+03	7.28E-03	6.90E-03	.122	5.968E-02	8.685E-05	8.233E-05	306.1	7.28E-03	1.000	.122	.106
417	112.36	0.00	1.40	3.17E+03	4.24E-03	4.02E-03	.071	5.968E-02	5.060E-05	4.797E-05	305.3	4.24E-03	1.000	.071	.062
418	112.36	0.00	1.65	1.12E+03	1.50E-03	1.42E-03	.025	5.968E-02	1.792E-05	1.699E-05	305.2	1.50E-03	1.000	.025	.022
419	112.36	0.00	1.90	1.65E+02	2.20E-04	2.09E-04	.004	5.968E-02	2.631E-06	2.495E-06	304.9	2.20E-04	1.000	.004	.003
420	112.36	0.00	2.29												
506	125.06	.76	0.00	4.52E+04	6.11E-02	5.79E-02	.794	7.705E-02	7.298E-04	6.914E-04	314.1	6.11E-02	1.000	.794	.994
507	125.06	.51	0.00	4.55E+04	6.15E-02	5.82E-02	.798	7.699E-02	7.335E-04	6.950E-04	313.3	6.15E-02	1.000	.798	1.000
508	125.06	.25	0.00	4.50E+04	6.08E-02	5.76E-02	.790	7.693E-02	7.254E-04	6.873E-04	312.5	6.08E-02	1.000	.790	.990
509	125.06	.15	0.00	4.12E+04	5.55E-02	5.26E-02	.722	7.691E-02	6.626E-04	6.279E-04	311.3	5.55E-02	1.000	.722	.904
510	125.06	.04	.04	3.87E+04	5.21E-02	4.94E-02	.678	7.688E-02	6.222E-04	5.896E-04	311.5	5.21E-02	1.000	.678	.858
511	125.06	0.00	.15	3.71E+04	5.00E-02	4.74E-02	.650	7.687E-02	5.966E-04	5.653E-04	310.9	5.00E-02	1.000	.650	.815
512	125.06	0.00	.25	3.18E+04	4.29E-02	4.06E-02	.558	7.687E-02	5.117E-04	4.849E-04	310.5	4.29E-02	1.000	.558	.699
513	125.06	0.00	.38	2.63E+04	3.54E-02	3.35E-02	.460	7.687E-02	4.224E-04	4.003E-04	309.8	3.54E-02	1.000	.460	.577
514	125.06	0.00	.64	1.60E+04	2.14E-02	2.03E-02	.279	7.687E-02	2.557E-04	2.424E-04	309.7	2.14E-02	1.000	.279	.349
515	125.06	0.00	.89	9.26E+03	1.24E-02	1.18E-02	.161	7.687E-02	1.481E-04	1.404E-04	307.7	1.24E-02	1.000	.161	.202
516	125.06	0.00	1.14	5.72E+03	7.67E-03	7.27E-03	.100	7.687E-02	9.157E-05	8.673E-05	307.6	7.67E-03	1.000	.100	.125
517	125.06	0.00	1.40	3.83E+03	5.13E-03	4.86E-03	.067	7.687E-02	6.123E-05	5.804E-05	306.8	5.13E-03	1.000	.067	.084
518	125.06	0.00	1.65	1.60E+03	2.14E-03	2.03E-03	.028	7.687E-02	2.558E-05	2.425E-05	306.2	2.14E-03	1.000	.028	.035
519	125.06	0.00	1.90	2.76E+02	3.69E-04	3.50E-04	.005	7.687E-02	4.405E-06	4.180E-06	305.6	3.69E-04	1.000	.005	.006
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X= 4.759E+01 HL /HREFF= 7.045E-01
X= 6.100E+01 HL /HREFF= 1.109E+00
X= 8.696E+01 HL /HREFF= 3.227E+00
X= 1.124E+02 HL /HREFF= 1.154E+00
X= 1.251E+02 HL /HREFF= 7.932E-01
B.L. TRANSITION DISTANCE = 47.59 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.36 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1[illegible]2), C.B. BLUMER, IN-LINE RSI GAP RUN(12) 1973 PAGE 23

TT = 1.12[illegible]E+03(K) GAP LENGTH = [illegible](CM)
PT = 2.[illegible]E+06(N/M2) GAP WIDTH = 0.[illegible](CM)
HT = 1.1919E+06(J/KG) GAP DEPTH = [illegible](CM)
RE/METER = 6.[illegible] ORIENTATION= [illegible](DEG)
MACH = 5.1[illegible] QS = 1.7264E+05(W/M2)
RHO VEL = [illegible](KG/M2-S) TOC.POSITION= 1
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible].874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible]	6.72E-02	6.36E-02	.764	6.795E-02	7.935E-04	7.515E-04	316.1				1.000
2	132.70	-.51	0.30												
3	130.16	-.51	[illegible]	[illegible]E+04	6.75E-02	6.39E-02	.810	8.328E-02	7.973E-04	7.550E-04	316.[illegible]				1.000
4	127.63	-.51	[illegible]	[illegible]	5.98E-02	6.51E-02	.862	8.094E-02	8.249E-04	7.819E-04	316.5				1.000
5	125.09	-.51	[illegible]	5.[illegible]E+04	5.93E-02	6.56E-02	.892	7.56[illegible]E-02	8.188E-04	7.754E-04	317.1				1.000
6	122.56	-.51	[illegible]	[illegible]	7.12E-02	6.74E-02	.933	7.627E-02	8.411E-04	7.965E-04	316.3				1.000
7	117.47	-.51	[illegible]	[illegible].32E+04	7.36E-02	6.97E-02	1.047	7.027E-02	8.693E-04	8.232E-04	316.2				1.000
8	112.37	-.51	[illegible]	5.33E+04	7.38E-02	6.99E-02	1.204	6.135E-02	8.725E-04	8.261E-04	317.4				1.000
9	107.31	-.51	[illegible]	[illegible].34E+04	7.[illegible]E-02	6.[illegible]E-02	1.463	5.047E-02	8.727E-04	8.264E-04	316.5				1.000
10	102.20	-.51	[illegible]	[illegible]E+04	[illegible].93E-02	6.56E-02	1.700	4.076E-02	8.189E-04	7.753E-04	316.9				1.000
11	97.12	-.51	[illegible]	[illegible]E+04	5.75E-02	5.44E-02	1.744	3.296E-02	6.794E-04	6.433E-04	317.0				1.000
12	92.04	-.51	[illegible]	3.21E+04	4.45E-02	4.21E-02	1.675	[illegible].646E-02	5.254E-04	4.975E-04	317.2				1.000
13	86.96	-.51	[illegible]	2.2[illegible]E+04	3.05E-02	2.89E-02	1.400	2.179E-02	3.606E-04	3.414E-04	318.1				1.000
14	81.88	-.51	[illegible]	1.62E+04	2.25E-02	2.13E-02	1.260	1.783E-02	2.654E-04	2.513E-04	313.1				1.000
15	76.80	-.51	[illegible]	1.1[illegible]E+04	1.61E-02	1.52E-02	1.144	1.541E-02	1.900E-04	1.800E-04	317.5				1.000
16	71.72	-.51	[illegible]	[illegible]1E+04	1.40E-02	1.32E-02	1.056	1.389E-02	1.652E-04	1.564E-04	317.6				1.000
17	66.64	-.51	[illegible]	9.31E+03	1.29E-02	1.22E-02	.945	1.366E-02	1.525E-04	1.444E-04	317.8				1.000
18	61.56	-.51	[illegible]	[illegible]	1.23E-02	1.17E-02	.874	1.410E-02	1.457E-04	1.[illegible]3E-04	319.3				1.000
19	56.48	-.51	[illegible]	8.64E+03	1.20E-02	1.13E-02	.804	1.491E-02	1.415E-04	1.341E-04	318.0				1.000
20	51.39	-.51	[illegible]	8.[illegible]E+03	1.18E-02	1.12E-02	.742	1.588E-02	1.392E-04	1.318E-04	317.9				1.000
21	4[illegible]	-.51	[illegible]	[illegible]E+03	1.15E-02	1.09E-02	.707	1.629E-02	1.361E-04	1.288E-04	319.4				1.000
22	46.31	-.51	[illegible]	8.97E+03	1.23E-02	1.17E-02	.741	1.66[illegible]E-02	1.455E-04	1.377E-04	318.5				1.000
23	43.77	-.51	[illegible]	9.73E+03	1.29E-02	1.22E-02	.765	1.692E-02	1.529E-04	1.447E-04	318.0				1.000
24	41.24	-.51	[illegible]	[illegible]	1.35E-02	1.28E-02	.766	1.723E-02	1.593E-04	1.514E-04	317.[illegible]				1.000
25	38.70	-.51	[illegible]	9.03E+03	1.38E-02	1.30E-02	.784	1.754E-02	1.636E-04	1.549E-04	317.3				1.03[illegible]
103	47.[illegible]	1.32	[illegible]	[illegible]	1.3[illegible]E-02	1.23E-02	.792	1.645E-02	1.539E-04	1.457E-04	325	1.3[illegible]E-02	1.000	.792	1.094
105	47.59	1.12	[illegible]	[illegible]	1.24E-02	1.17E-02	.755	1.644E-02	1.467E-04	1.388E-04	326.[illegible]	1.2[illegible]E-02	1.000	.755	1.042
107	47.59	.51	[illegible]	[illegible]	1.10E-02	1.04E-02	.669	1.644E-02	1.299E-04	1.230E-04	324.4	1.1[illegible]E-02	1.000	.669	.523
108	47.59	.2[illegible]	[illegible]	[illegible]	[illegible].12E-03	7.[illegible]E-03	.494	1.644E-02	9.5[illegible]E-05	9.[illegible]78E-05	321	8.12E-03	1.000	.494	.682
110	47.59	.[illegible]	[illegible]	[illegible]	[illegible]	[illegible].85E-03	.247	1.644E-02	4.3[illegible]E-05	4.548E-05	319.6	4.06E-03	1.000	.247	.341
203	61.56	1.[illegible]	[illegible]	[illegible]	[illegible]	1.11E-02	.8[illegible]	[illegible]	1.3[illegible]E-04	1.312E-04	322.1	1.17E-02	1.000	.85[illegible]	.957
205	61.56	1.[illegible]	[illegible]	[illegible]	9.[illegible]E-03	9.[illegible]E-03	.704	1.[illegible]E-02	1.167E-04	1.1[illegible]E-04	322.9	9.88E-03	1.000	.704	.60[illegible]
207	61.56	.51	[illegible]	[illegible]	1.[illegible]E-02	9.93E-03	.747	1.[illegible]E-02	1.23[illegible]E-04	1.173E-04	321.9	1.05E-0[illegible]	1.000	.747	.85[illegible]
209	61.56	.[illegible]	[illegible]	[illegible]	[illegible]3E-03	[illegible]E-03	.614	1.[illegible]E-02	1.020E-04	9.65[illegible]E-05	320.6	8.63E-03	1.000	.614	.73[illegible]
210	61.56	.[illegible]4	[illegible]	[illegible]E+03	[illegible]8E-03	[illegible].78E-03	.4[illegible]	1.407E-02	6.717E-05	6.360E-05	319.3	5.68E-03	1.000	.404	.467
301	86.[illegible]	[illegible]	[illegible]	[illegible]	3.[illegible]E-02	3.28E-02	1.639	2.111E-02	4.[illegible]E-04	3.87[illegible]E-04	31[illegible].5	3.46E-02	1.000	1.639	1.176
302	[illegible]	1.79	[illegible]	2.[illegible]2E+04	3.[illegible]E-02	3.72E-02	1.657	2.117E-02	4.145E-04	3.925E-04	320.[illegible]	3.51E-02	1.000	1.657	1.16[illegible]
303	86.96	1.5[illegible]	[illegible]	[illegible]E+04	3.48E-02	3.30E-02	1.641	2.124E-02	4.118E-04	3.898E-04	321.2	3.43E-02	1.000	1.641	1.172
304	[illegible]	1.2[illegible]	[illegible]	[illegible]	3.[illegible]E-02	3.1[illegible]E-02	1.635	[illegible]	3.[illegible]E-04	3.658E-04	321.7	3.27[illegible]E-02	1.000	1.635	1.09[illegible]

AMES 3.5 FT HWT TEST (1F2), C.B. BLUMER, IN-LINE RSI GAP RUN(12) 1973 PAGE 24

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
305	86.96	1.02	0.00	2.16E+04	3.01E-02	2.95E-02	1.410	2.137E-02	3.54[illegible]E-04	3.370E-04	321.7	3.01E-02	1.000	1.410	1.007
306	86.96	.75	0.00	2.21E+04	3.05E-02	2.89E-02	1.423	2.143E-02	3.605E-04	3.413E-04	317.2	3.05E-02	1.000	1.423	1.016
307	86.96	.51	0.00	1.95E+04	2.74E-02	2.61E-02	1.276	[illegible]	3.243E-04	3.071E-04	317.0	2.74E-02	1.000	1.276	.912
308	86.96	.25	0.00	1.6[illegible]E+04	2.21E-02	2.10E-02	1.026	2.1[illegible]7E-02	2.615E-04	2.476E-04	315.5	2.21E-02	1.000	1.026	.733
309	86.96	.15	0.00	1.20E+04	1.66E-02	1.57E-02	.769	2.160E-02	1.962E-04	1.858E-04	314.3	1.66E-02	1.000	.769	.549
310	86.96	.04	.04	9.22E+03	1.27E-02	1.20E-02	.588	2.163E-02	1.5[illegible]2E-04	1.423E-04	313.9	1.27E-02	1.000	.588	.420
401	112.36	2.03	0.00	4.76E+04	6.57E-02	6.22E-02	1.068	6.153E-02	7.763E-04	7.352E-04	313.9	6.57E-02	1.000	1.068	.886
402	112.36	1.78	[illegible]	5.00E+04	6.91E-02	6.54E-02	1.123	6.151E-02	8.164E-04	7.731E-04	315.9	6.91E-02	1.000	1.123	.932
403	112.36	1.52	0.00	[illegible]	6.96E-02	6.59E-02	1.132	6.150E-02	8.229E-04	7.792E-04	316.9	6.96E-02	1.000	1.132	.940
404	112.36	1.27	0.00	4.9[illegible]E+04	6.80E-02	6.44E-02	1.105	6.140E-02	8.031E-04	7.604E-04	317.6	6.80E-02	1.000	1.105	.918
405	112.36	1.02	0.00	4.83E+04	6.70E-02	6.34E-02	1.089	6.147E-02	7.912E-04	7.492E-04	317.6	6.70E-02	1.000	1.089	.904
406	112.36	.76	0.00	4.43E+04	6.13E-02	5.81E-02	.998	6.145E-02	7.248E-04	6.863E-04	316.9	6.13E-02	1.000	.998	.829
407	112.36	.51	0.00	3.94E+04	5.45E-02	5.16E-02	.888	6.142E-02	6.443E-04	6.102E-04	316.2	5.45E-02	1.000	.888	.737
408	112.36	[illegible]	0.00	3.87E+04	5.33E-02	5.05E-02	.868	6.140E-02	6.301E-04	5.968E-04	313.9	5.33E-02	1.000	.868	.721
409	112.36	[illegible]	0.00	3.07E+04	4.24E-02	4.01E-02	.690	6.139E-02	5.009E-04	4.744E-04	314.0	4.24E-02	1.000	.690	.573
410	112.36	.04	.04	2.29E+04	3.16E-02	2.99E-02	.515	6.138E-02	3.736E-04	3.538E-04	313.5	3.16E-02	1.000	.515	.428
501	125.06	2.03	0.00	4.61E+04	6.36E-02	6.02E-02	.803	7.922E-02	7.516E-04	7.118E-04	314.0	6.36E-02	1.000	.803	.910
502	125.06	1.78	0.00	4.90E+04	6.76E-02	6.40E-02	.854	7.915E-02	7.992E-04	7.569E-04	315.1	6.76E-02	1.000	.854	.968
503	125.06	1.52	0.00	4.89E+04	6.76E-02	6.40E-02	.854	7.909E-02	7.986E-04	7.562E-04	316.3	6.76E-02	1.000	.854	.968
504	125.06	1.27	0.00	4.82E+04	6.67E-02	6.32E-02	.844	7.903E-02	7.883E-04	7.464E-04	317.0	6.67E-02	1.000	.844	.957
505	125.06	1.02	0.00	4.57E+04	6.33E-02	5.99E-02	.801	7.896E-02	7.478E-04	7.081E-04	317.3	6.33E-02	1.000	.801	.908
506	125.06	.76	0.00	4.49E+04	6.21E-02	5.88E-02	.788	7.890E-02	7.344E-04	6.954E-04	316.8	6.21E-02	1.000	.788	.893
507	125.06	.51	0.00	[illegible]E+04	5.65E-02	5.35E-02	.717	7.884E-02	6.679E-04	6.325E-04	315.6	5.65E-02	1.000	.717	.813
508	125.06	.25	0.00	3.22E+04	4.45E-02	4.21E-02	.564	7.877E-02	5.254E-04	4.976E-04	314.4	4.45E-02	1.000	.564	.640
509	125.06	.15	0.00	2.14E+04	2.95E-02	2.79E-02	.374	7.874E-02	3.492E-04	3.298E-04	312.6	2.95E-02	1.000	.374	.424
510	125.06	.04	.04	2.26E+04	3.11E-02	2.94E-02	.395	7.872E-02	3.672E-04	3.479E-04	313.0	3.11E-02	1.000	.395	.447

EDGE HEATING USED FOR HE

X=	3.870E+01	HL /HREFF=	7.945E-01
X=	4.124E+01	HL /HREFF=	7.597E-01
X=	4.377E+01	HL /HREFF=	7.646E-01
X=	4.631E+01	HL /HREFF=	7.415E-01
X=	4.885E+01	HL /HREFF=	7.370E-01
X=	5.139E+01	HL /HREFF=	7.419E-01
X=	5.648E+01	HL /HREFF=	8.037E-01
X=	6.156E+01	HL /HREFF=	8.744E-01
X=	6.664E+01	HL /HREFF=	9.448E-01
X=	7.172E+01	HL /HREFF=	1.[illegible]E+00
X=	7.680E+01	HL /HREFF=	1.[illegible]44E+00
X=	8.188E+01	HL /HREFF=	1.20[illegible]E+00
X=	8.696E+01	HL /HREFF=	1.4[illegible]E+00
X=	9.204E+01	HL /HREFF=	1.579E+00
X=	9.712E+01	HL /HREFF=	1.744E+00
X=	1.022E+02	HL /HREFF=	1.7[illegible]E+00
X=	1.073E+02	HL /HREFF=	1.463E+00
X=	1.124E+02	HL /HREFF=	1.2[illegible]4E+00
X=	1.175E+02	HL /HREFF=	1.[illegible]47E+00
X=	1.226E+02	HL /HREFF=	9.333E-01
X=	1.2[illegible]E+02	HL /HREFF=	8.915E-01
X=	1.276E+02	HL /HREFF=	[illegible]E-01
X=	1.302E+02	HL /HREFF=	8.1[illegible]2E-01
X=	1.352E+02	HL /HREFF=	7.[illegible]E-01
X=	4.759E+01	HL /HREFF=	6.6[illegible]E-01
X=	6.156E+01	HL /HREFF=	7.465E-01
X=	8.696E+01	HL /HREFF=	1.2[illegible]E+00
X=	1.124E+02	HL /HREFF=	[illegible]77E-01
X=	1.251E+02	HL /HREFF=	7.[illegible]E-01

B.L. TRANSITION DISTANCE = [illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT = 1[illegible]2.20 CM

AMES 3.5 FT HWT TEST (1?2), C.P. BLUMER, IN-LINE RSI GAP RUN(13) 1973 PAGE 25

TT = 1.1?E+03(K) GAP LENGTH =1?1.5??(CM)
PT = 2.1?25E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.221?E+06(J/KG) GAP DEPTH = 3.81 (CM)
RE/METER = ?.?3?2E+0? ORIENTATION= ?.??? (DEG)
MACH = 5.13 QS = 1.77??E+05(W/M2)
RHO VEL = ?.72??E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = ?.9?3 FOR HT
HAW/HT = ?.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	G (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	5.17E+04	5.95E-02	5.59E-02	.817	8.5?1E-02	8.352E-04	7.911E-04	320.5				1.000
2	132.70	-.51	[illegible]												
3	130.16	-.51	[illegible]	?.1?E+04	6.38E-02	?.?1E-02	.87?	8.?23E-02	8.33?E-04	7.347E-04	321.6				1.000
4	127.53	-.51	[illegible]	5.74E+04	7.19E-02	?.?0E-02	.923	7.794E-02	8.631E-04	8.175E-04	321.6				1.000
5	125.?9	-.51	[illegible]	?.37E+04	7.22E-02	6.84E-02	.957	7.545E-02	8.531E-04	9.22?E-04	322.0				1.000
6	122.56	-.51	[illegible]	[illegible]	7.31E-02	6.92E-02	1.0??	7.376E-02	8.7??E-04	8.316E-04	321.7				1.000
7	117.47	-.51	[illegible]	5.?9E+04	7.65E-02	7.26E-02	1.142	6.7?7E-02	9.209E-04	8.721E-04	321.9				1.000
8	112.37	-.51	[illegible]	5.74E+04	7.73E-02	7.32E-02	1.323	5.843E-02	9.290E-04	8.798E-04	322.5				1.000
9	107.31	-.51	[illegible]	?.8?E+04	7.92E-02	7.?0E-02	1.646	4.??7E-02	9.513E-04	9.?15E-04	322.5				1.000
10	102.20	-.51	[illegible]	?.92E+04	7.97E-02	7.55E-02	2.052	3.886E-02	9.553E-04	9.076E-04	322.5				1.000
11	97.12	-.51	0.00	5.77E+04	7.78E-02	7.36E-02	2.472	3.145E-02	9.345E-04	8.850E-04	322.9				1.000
12	92.14	-.51	[illegible]	[illegible]	7.96E-02	7.54E-02	3.1??	2.532E-02	9.571E-04	9.?64E-04	323.4				
13	86.96	-.51	[illegible]	5.75E+04	7.76E-02	7.35E-02	3.?11	2.091E-02	9.329E-04	8.834E-04	324.1				
14	81.88	-.51	[illegible]	5.90E+04	7.96E-02	7.54E-02	4.629	1.720E-02	9.571E-04	9.064E-04	324.3				
15	76.8?	-.51	[illegible]	5.?9E+04	?.?8E-02	6.51E-02	4.5??	1.496E-02	8.259E-04	7.930E-04	324.4				
16	71.72	-.51	[illegible]	?.34E+04	?.66E-02	5.55E-02	4.321	1.357E-02	7.946E-04	6.672E-04	324.8				
17	66.64	-.51	[illegible]	3.46E+04	4.67E-02	4.42E-02	3.490	1.339E-02	5.616E-04	5.318E-04	325.1				
18	61.56	-.51	[illegible]	2.47E+04	3.28E-02	3.11E-02	2.375	1.382E-02	3.946E-04	3.736E-04	325.6				1.000
19	56.48	-.51	[illegible]	1.??E+04	2.13E-02	2.02E-02	1.458	1.462E-02	2.563E-04	2.426E-04	325.6				1.000
20	51.39	-.51	0.00	1.2?E+04	1.70E-02	1.61E-02	1.388	1.558E-02	2.037E-04	1.929E-04	325.5				1.000
21	48.86	-.51	[illegible]	1.1?E+04	1.56E-02	1.48E-02	.978	1.598E-02	1.878E-04	1.778E-04	326.6				1.000
22	46.31	-.51	[illegible]	1.13E+04	1.54E-02	1.45E-02	.942	1.630E-02	1.845E-04	1.747E-04	325.8				1.000
23	43.77	-.51	[illegible]	1.1?E+04	1.56E-02	1.47E-02	.937	1.662E-02	1.871E-04	1.772E-04	325.4				1.000
24	41.?4	-.51	[illegible]	1.1?E+04	1.58E-02	1.50E-02	.975	1.?93E-02	1.9?3E-04	1.892E-04	325.3				1.000
25	38.??	-.51	[illegible]	1.1?E+04	1.54E-02	1.45E-02	.891	1.725E-02	1.947E-04	1.749E-04	323.9				1.000
103	47.59	1.32	[illegible]	[illegible]	1.32E-02	1.25E-02	.819	1.514E-02	1.5??E-04	1.503E-04	331.4	1.32E-02	1.000	.819	.853
105	47.59	1.?2	[illegible]	9.12E+03	1.25E-02	1.19E-02	.772	1.613E-02	1.49?E-04	1.418E-04	333.2	1.25E-02	1.000	.772	.805
107	47.59	.51	[illegible]	8.97E+03	1.22E-02	1.16E-02	.759	1.613E-02	1.471E-04	1.392E-04	332.4	1.22E-02	1.000	.759	.790
108	47.59	.??	[illegible]	[illegible]	1.20E-02	1.13E-02	.742	1.613E-02	1.433E-04	1.363E-04	330.7	1.20E-02	1.000	.742	.773
110	47.59	.?4	.?4	?.4?E+03	1.?1E-02	9.59E-03	.62?	1.613E-02	1.217E-04	1.152E-04	328.7	?.01E-02	1.000	.628	.654
111	47.59	?.??	.15	?.?2E+03	8.70E-03	8.24E-03	.539	1.613E-02	1.046E-04	9.903E-05	327.7	8.70E-03	1.000	.539	.562
112	47.59	[illegible]	.2?	?.?7E+03	6.19E-03	?.?5E-03	.3??	1.613E-02	7.423E-05	7.033E-05	325.6	6.18E-03	1.000	.383	.399
113	47.59	[illegible]	.??	3.9?E+03	?.36E-03	?.?7E-03	.332	1.613E-02	6.43?E-05	6.095E-05	324.6	5.36E-03	1.000	.332	.346
114	47.59	[illegible]	.44	1.6?E+03	2.22E-03	2.1?E-03	.13?	1.613E-02	2.667E-05	2.526E-05	322.4	2.22E-03	1.000	.138	.14?
115	47.59	[illegible]	.?9	?.??E+02	4.73E-04	4.48E-04	.?29	1.613E-02	5.6??E-06	5.385E-06	323.3	4.73E-04	1.000	.029	.03?
203	61.56	1.?2	[illegible]	?.17E+03	1.11E-02	1.05E-02	.8?6	1.375E-02	1.332E-04	1.261E-04	327.2	1.11E-02	1.000	.806	.33?
205	61.56	1.02	[illegible]	?.12E+03	1.10E-02	1.?4E-02	.8?1	1.?76E-02	1.32?E-04	1.254E-04	328.3	1.10E-02	1.000	.801	.33?
207	61.56	.51	[illegible]	1.1?E+04	1.54E-02	1.4?E-02	1.11?	1.379E-02	1.84?E-04	1.748E-04	327.9	1.54E-02	1.000	1.115	.470
208	61.56	.25	[illegible]	1.?4E+04	2.09E-02	1.98E-02	1.517	1.379E-02	2.514E-04	2.380E-04	326.8	2.09E-02	1.000	1.517	.639
21?	61.56	.?4	[illegible]	1.7?E+04	2.37E-02	2.24E-02	1.714	1.38?E-02	2.843E-04	2.692E-04	325.1	2.37E-02	1.000	1.714	.722

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP RUN(13) 1973 PAGE 26

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (K(/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	1.86E+04	2.49E-02	2.36E-02	1.807	1.390E-02	2.996E-04	2.930E-04	320.5	2.49E-02	1.000	1.807	.761
212	61.56	0.00	.25	1.65E+04	2.21E-02	2.10E-02	1.603	1.380E-02	2.659E-04	2.519E-04	319.9	2.21E-02	1.000	1.603	.679
213	61.56	0.00	.38	1.37E+04	1.83E-02	1.73E-02	1.323	1.380E-02	2.194E-04	2.079E-04	318.5	1.83E-02	1.000	1.323	.557
214	61.56	0.00	.64	7.34E+03	9.81E-03	9.29E-03	.711	1.380E-02	1.178E-04	1.117E-04	316.4	9.81E-03	1.000	.711	.299
215	61.56	0.00	.89	3.48E+03	4.64E-03	4.39E-03	.336	1.380E-02	5.574E-05	5.282E-05	315.3	4.64E-03	1.000	.336	.142
306	86.96	.76	0.00	[illegible]	6.44E-02	6.10E-02	3.131	2.058E-02	7.743E-04	7.333E-04	322.8	6.44E-02	1.000	3.131	
307	86.96	.51	0.00	4.95E+04	6.67E-02	6.32E-02	3.232	2.064E-02	8.018E-04	7.593E-04	322.7	6.67E-02	1.000	3.232	
308	86.96	.25	0.00	4.81E+04	6.47E-02	6.13E-02	3.126	2.071E-02	7.780E-04	7.369E-04	321.9	6.47E-02	1.000	3.126	
309	86.96	.13	0.00	4.42E+04	5.94E-02	5.63E-02	2.866	2.073E-02	7.142E-04	6.765E-04	321.1	5.94E-02	1.000	2.866	.772
310	86.96	.04	.04	4.15E+04	5.58E-02	5.28E-02	2.687	2.076E-02	6.734E-04	6.350E-04	320.6	5.58E-02	1.000	2.687	.724
311	86.96	0.00	.15	3.60E+04	4.83E-02	4.57E-02	2.324	2.077E-02	5.821E-04	5.495E-04	319.3	4.83E-02	1.000	2.324	.626
312	86.96	0.00	.25	[illegible]	3.39E-02	3.21E-02	1.633	2.077E-02	4.077E-04	3.863E-04	318.2	3.39E-02	1.000	1.633	.448
313	86.96	0.00	.38	2.65E+04	3.55E-02	3.36E-02	1.708	2.077E-02	4.264E-04	4.040E-04	316.8	3.55E-02	1.000	1.708	.460
314	86.96	0.00	.64	1.74E+04	2.33E-02	2.21E-02	1.121	2.077E-02	2.799E-04	2.651E-04	316.2	2.33E-02	1.000	1.121	.302
315	86.96	0.00	.89	1.10E+04	1.47E-02	1.39E-02	.708	2.077E-02	1.767E-04	1.674E-04	315.2	1.47E-02	1.000	.708	.191
316	86.96	0.00	1.14	7.72E+03	1.03E-02	9.74E-03	.495	2.077E-02	1.235E-04	1.171E-04	313.9	1.03E-02	1.000	.495	.133
317	86.96	0.00	1.40	4.67E+03	6.21E-03	5.88E-03	.299	2.077E-02	7.462E-05	7.072E-05	312.8	6.21E-03	1.000	.299	.080
318	86.96	0.00	1.65	2.41E+03	3.20E-03	3.03E-03	.154	2.077E-02	3.843E-05	3.643E-05	312.6	3.20E-03	1.000	.154	.041
319	86.96	0.00	1.90	8.31E+02	1.10E-03	1.05E-03	.053	2.077E-02	1.327E-05	1.257E-05	312.3	1.10E-03	1.000	.053	.014
320	86.96	.13	2.29												
506	125.06	.76	0.00	4.34E+04	5.84E-02	5.53E-02	.771	7.570E-02	7.013E-04	6.643E-04	320.4	5.84E-02	1.000	.771	.809
507	125.06	.51	0.00	4.35E+04	5.84E-02	5.53E-02	.772	7.565E-02	7.313E-04	6.649E-04	319.6	5.84E-02	1.000	.772	.806
508	125.06	.25	0.00	4.23E+04	5.67E-02	5.37E-02	.750	7.559E-02	6.812E-04	6.454E-04	318.8	5.67E-02	1.000	.750	.783
509	125.06	.13	0.00	3.67E+04	4.91E-02	4.66E-02	.650	7.557E-02	5.906E-04	5.596E-04	317.4	4.91E-02	1.000	.650	.679
510	125.06	.04	.04	3.82E+04	5.12E-02	4.85E-02	.677	7.554E-02	6.150E-04	5.326E-04	318.1	5.12E-02	1.000	.677	.787
511	125.06	0.00	.15	3.67E+04	4.91E-02	4.65E-02	.650	7.553E-02	5.898E-04	5.588E-04	317.5	4.91E-02	1.000	.650	.678
512	125.06	0.00	.25	3.16E+04	4.22E-02	4.00E-02	.559	7.553E-02	5.073E-04	4.807E-04	317.1	4.22E-02	1.000	.559	.583
513	125.06	0.00	.38	2.60E+04	3.48E-02	3.30E-02	.461	7.553E-02	4.181E-04	3.961E-04	315.3	3.48E-02	1.000	.461	.481
514	125.06	0.00	.64	1.63E+04	2.19E-02	2.06E-02	.288	7.553E-02	2.619E-04	2.478E-04	315.3	2.18E-02	1.000	.288	.301
515	125.06	0.00	.89	9.97E+03	1.33E-02	1.26E-02	.176	7.553E-02	1.596E-04	1.513E-04	314.1	1.33E-02	1.000	.176	.184
516	125.06	0.00	1.14	[illegible]	8.76E-03	8.31E-03	.116	7.553E-02	1.053E-04	9.983E-05	314.1	8.76E-03	1.000	.116	.121
517	125.06	0.00	1.40	3.93E+03	5.23E-03	4.96E-03	.069	7.553E-02	6.291E-05	5.962E-05	313.3	5.23E-03	1.000	.069	.072
518	125.06	0.00	1.65	1.51E+03	2.00E-03	1.90E-03	.027	7.553E-02	2.408E-05	2.282E-05	312.8	2.00E-03	1.000	.027	.028
519	125.06	0.00	1.90	3.12E+02	4.15E-04	3.93E-04	.005	7.553E-02	4.989E-06	4.728E-06	312.2	4.15E-04	1.000	.005	.006
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 8.911E-01
X= 4.124E+01 HL /HREFF= 9.357E-01
X= 4.377E+01 HL /HREFF= [illegible]
X= 4.631E+01 HL /HREFF= 9.421E-01
X= 4.885E+01 HL /HREFF= 9.777E-01
X= 5.139E+01 HL /HREFF= [illegible]

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X=   5.649E+01   HL   /HREFF=   1.4[illegible]E+00
X=   6.156E+01   HL   /HREFF=   2.375E+00
X=   6.664E+01   HL   /HREFF=   3.49[illegible]E+00
X=   7.172E+01   HL   /HREFF=   4.321E+00
X=   7.680E+01   HL   /HREFF=   4.6[illegible]E+00
X=   8.188E+01   HL   /HREFF=   4.629E+00
X=   8.696E+01   HL   /HREFF=   3.711E+00
X=   9.204E+01   HL   /HREFF=   3.145E+00
X=   9.712E+01   HL   /HREFF=   2.472E+00
X=   1.022E+02   HL   /HREFF=   2.[illegible]2E+00
X=   1.073E+02   HL   /HREFF=   1.648E+00
X=   1.124E+02   HL   /HREFF=   1.323E+00
X=   1.175E+02   HL   /HREFF=   1.142E+00
X=   1.226E+02   HL   /HREFF=   9.999E-01
X=   1.251E+02   HL   /HREFF=   9.573E-01
X=   1.276E+02   HL   /HREFF=   9.225E-01
X=   1.302E+02   HL   /HREFF=   8.731E-01
X=   1.352E+02   HL   /HREFF=   8.174E-01

X=   4.759E+01   HL   /HREFF=   7.568E-01
X=   6.156E+01   HL   /HREFF=   1.115E+00
X=   8.696E+01   HL   /HREFF=   3.232E+00
X=   1.251E+02   HL   /HREFF=   7.720E-01
B.L. TRANSITION DISTANCE =  39.7[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =  81.88 CM
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AMES 3.5 FT HWT TEST (1?2), C.J. BLUMER, IN-LINE RSI GAP RUN(14) 1973 PAGE 27

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TT         = 1.1191E+03(K)             GAP LENGTH =191.600(CM)
PT         = 1.0753E+06(N/M2)          GAP WIDTH  =    .127(CM)
HT         = 1.1621E+06(J/KG)          GAP DEPTH  =   3.81.(CM)
RE/METER   = 3.4113E+06                ORIENTATION=   0.000(DEG)
MACH       = 5.100                     QS         =  1.2234E+05(W/M2)
RHO VEL    = 4.756E+01(KG/M2-S)        MOD.POSITION=  1
HAW/HT     = 0.905 FOR HT
HAW/HT     = 0.874 FOR HL
HLCC       = HL(2ND. ORDER CONE.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (K(/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	3.52E+04	4.91E-02	4.65E-02	.987	4.980E-02	1.129E-03	1.068E-03	314.8				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	3.55E+04	4.96E-02	4.70E-02	1.134	4.375E-02	1.139E-03	1.079E-03	315.2				1.000
4	127.63	-.51	0.00	3.59E+04	5.02E-02	4.76E-02	1.234	4.073E-02	1.153E-03	1.092E-03	315.1				1.000
5	125.09	-.51	0.00	3.54E+04	4.95E-02	4.65E-02	1.313	3.771E-02	1.137E-03	1.076E-03	315.2				1.000
6	122.56	-.51	0.00	3.49E+04	4.87E-02	4.62E-02	1.406	3.468E-02	1.119E-03	1.059E-03	314.9				1.000
7	117.47	-.51	0.00	3.30E+04	4.61E-02	4.36E-02	1.601	2.876E-02	1.057E-03	1.001E-03	314.9				1.000
8	112.37	-.51	0.00	2.87E+04	4.01E-02	3.80E-02	1.704	2.354E-02	9.207E-04	8.718E-04	314.9				1.000
9	107.31	-.51	0.00	2.41E+04	3.37E-02	3.19E-02	1.739	1.936E-02	7.734E-04	7.323E-04	314.6				1.000
10	102.20	-.51	0.00	1.95E+04	2.72E-02	2.58E-02	1.695	1.607E-02	6.254E-04	5.922E-04	314.5				1.000
11	97.12	-.51	0.00	1.53E+04	2.13E-02	2.02E-02	1.584	1.346E-02	4.895E-04	4.636E-04	314.4				1.000
12	92.04	-.51	0.00	1.30E+04	1.81E-02	1.71E-02	1.571	1.152E-02	4.154E-04	3.934E-04	314.4				1.000
13	86.96	-.51	.00	1.01E+04	1.42E-02	1.34E-02	1.356	1.043E-02	3.248E-04	3.076E-04	314.5				1.000
14	81.88	-.51	0.00	8.70E+03	1.21E-02	1.15E-02	1.251	9.716E-03	2.789E-04	2.641E-04	314.5				1.000
15	76.80	-.51	0.00	6.92E+03	9.67E-03	9.15E-03	1.012	9.553E-03	2.219E-04	2.101E-04	314.3				1.000
16	71.72	-.51	0.00	6.66E+03	9.30E-03	8.80E-03	.956	9.719E-03	2.134E-04	2.020E-04	314.4				1.000
17	66.64	-.51	0.00	6.90E+03	9.63E-03	9.12E-03	.956	1.008E-02	2.211E-04	2.093E-04	314.5				1.000
18	61.56	-.51	.00	7.24E+03	1.01E-02	9.59E-03	.961	1.053E-02	2.324E-04	2.200E-04	314.8				1.000
19	56.48	-.51	0.00	7.38E+03	1.03E-02	9.77E-03	.923	1.117E-02	2.369E-04	2.242E-04	314.9				1.000
20	51.39	-.51	0.00	7.69E+03	1.07E-02	1.02E-02	.903	1.190E-02	2.467E-04	2.336E-04	314.9				1.000
21	48.86	-.51	0.00	7.6?E+03	1.07E-02	1.01E-02	.871	1.227E-02	2.453E-04	2.323E-04	315.4				1.000
22	46.31	-.51	0.00	8.01E+03	1.12E-02	1.06E-02	.886	1.265E-02	2.572E-04	2.435E-04	315.2				1.000
23	43.77	-.51	0.30	8.36E+03	1.17E-02	1.11E-02	.896	1.302E-02	2.684E-04	2.541E-04	315.2				1.000
24	41.24	-.51	.00	8.92E+03	1.25E-02	1.18E-02	.931	1.344E-02	2.862E-04	2.710E-04	315.2				1.000
25	38.70	-.51	.00	9.0?E+03	1.26E-02	1.20E-02	.917	1.377E-02	2.839E-04	2.744E-04	314.6				1.000
103	47.59	1.52	[illegible]	7.7?E+03	1.09E-02	1.03E-02	.875	1.244E-02	2.493E-04	2.365E-04	318.7	1.09E-02	1.000	.875	.996
105	47.59	1.02	.00	7.48E+03	1.05E-02	9.96E-03	.846	1.245E-02	2.416E-04	2.287E-04	319.7	1.05E-02	1.000	.846	.962
107	47.59	.51	0.10	7.24E+03	1.02E-02	9.63E-03	.817	1.245E-02	2.335E-04	2.210E-04	319.1	1.02E-02	1.000	.817	.930
108	47.59	.25	[illegible]	[illegible]	9.19E-03	8.70E-03	.738	1.245E-02	2.1?3E-04	1.996E-04	318.0	9.19E-03	1.000	.738	.840
110	47.59	.06	.06	[illegible]	6.93E-03	6.56E-03	.557	1.245E-02	1.591E-04	1.507E-04	316.7	6.93E-03	1.000	.557	.634
111	47.59	[illegible]	.15	4.12E+03	5.63E-03	5.33E-03	.452	1.245E-02	1.292E-04	1.223E-04	316.0	5.63E-03	1.000	.452	.514
112	47.59	[illegible]	.25	2.35E+03	3.29E-03	3.11E-03	.264	1.245E-02	7.545E-05	7.145E-05	314.8	3.29E-03	1.000	.264	.300
113	47.59	[illegible]	.76	1.37E+03	1.91E-03	1.81E-03	.154	1.245E-02	4.392E-05	4.159E-05	313.9	1.91E-03	1.000	.154	.175
114	47.59	[illegible]	.64	2.1?E+02	2.93E-04	2.78E-04	.024	1.245E-02	6.725E-06	6.378E-06	312.4	2.33E-04	1.000	.024	.027
115	47.59	[illegible]	.89												
203	61.56	1.52	[illegible]	6.??E+03	9.16E-03	8.68E-03	.871	1.052E-02	2.1?4E-04	1.992E-04	315.8	9.16E-03	1.000	.871	.907
205	61.56	1.02	[illegible]	[illegible]	8.76E-03	8.29E-03	.832	1.052E-02	2.01?E-04	1.913E-04	316.3	8.76E-03	1.000	.832	.866
207	61.56	.51	[illegible]	[illegible]	8.04E-03	7.61E-03	.763	1.053E-02	1.844E-04	1.746E-04	315.1	8.04E-03	1.000	.763	.794
208	61.56	.25	[illegible]	5.52E+03	7.72E-03	7.31E-03	.734	1.053E-02	1.773E-04	1.678E-04	315.4	7.72E-03	1.000	.734	.763
210	61.56	.06	[illegible]	[illegible]	6.04E-03	5.72E-03	.574	1.053E-02	1.387E-04	1.314E-04	314.4	6.04E-03	1.000	.574	.597

ORIGINAL PAGE IS OF POOR QUALITY

SMES [illegible] FT HWT TEST (1-2), [illegible], PLUMES, IN-LINE RSI GAP RUN(14) 1973 PAGE 28

T/C	Y (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.[illegible]	[illegible]	.15	[illegible]	[illegible]	5.71E-03	.572	1.[illegible]3E-02	1.383E-04	1.310E-04	312.0	[illegible].03E-03	1.000	.5[illegible]2	.596
212	61.56	[illegible]	.25	2.67E+0[illegible]	[illegible].72E-03	3.52E-03	.354	1.053E-02	8.544E-05	8.09UE-05	313.9	3.72E-03	1.000	.354	.368
213	61.56	.[illegible]	.[illegible]	[illegible]	[illegible]	2.38E-03	.2[illegible]	1.[illegible]3E-02	5.772E-05	5.467E-05	310.6	[illegible].51E-03	1.000	.239	.249
214	61.56	[illegible]	.[illegible]												
215	61.56	[illegible]	.99												
[illegible]	86.96	.76	[illegible]	[illegible]	[illegible].73E-03	6.37E-03	.6[illegible]	1.0[illegible]E-02	1.544E-04	[illegible].462E-04	314.1	[illegible].73E-03	1.000	.65[illegible]	.479
307	86.96	.51	[illegible]	[illegible]	8.39E-03	7.95E-03	.8[illegible]9	1.037E-02	1.926E-04	1.824E-04	313.8	8.39E-03	1.000	.809	.597
308	86.96	.25	[illegible]	[illegible]	1.13E-02	1.07E-02	1.0[illegible]1	1.[illegible]E-02	2.6[illegible]2E-04	2.464E-04	313.4	1.13E-02	1.000	1.091	.805
309	86.96	.15	[illegible]	[illegible]	1.19E-02	1.12E-02	1.141	1.039E-02	2.722E-04	2.578E-04	312.9	1.19E-02	1.000	1.141	.842
310	86.96	.04	.04	8.[illegible]1E+03	1.17E-02	1.11E-02	1.126	1.04[illegible]E-02	2.659E-04	2.546E-04	312.6	1.17E-02	1.000	1.126	.831
311	86.96	.[illegible]	.15	[illegible]E+03	[illegible].39E-03	8.89E-03	.903	1.04[illegible]E-02	2.155E-04	2.041E-04	311.9	9.39E-03	1.000	.903	.666
312	86.96	[illegible]	.25	7.[illegible]E+03	4.71E-03	4.46E-03	.453	1.04[illegible]E-02	1.082E-04	1.025E-04	311.3	4.71E-03	1.000	.453	.334
313	86.96	[illegible]	.38	5.43E+03	7.54E-03	7.14E-03	.725	1.040E-02	1.731E-04	1.640E-04	310.5	7.54E-03	1.000	.725	.535
314	86.96	[illegible]	.64	2.[illegible]E+03	3.52E-03	3.33E-03	.339	1.04[illegible]E-02	8.081E-05	7.654E-05	310.3	3.52E-03	1.000	.339	.250
315	86.96	[illegible]	.89	[illegible].22E+02	1.18E-03	1.12E-03	.114	1.040E-02	2.714E-05	2.570E-05	309.8	1.18E-03	1.000	.114	.084
316	86.96	[illegible]	1.14	[illegible]E+02	7.52E-04	7.13E-04	.072	1.040E-02	1.727E-05	1.636E-05	308.8	7.52E-04	1.000	.072	.053
317	86.96	[illegible]	1.[illegible]												
318	86.96	[illegible]	1.[illegible]												
319	86.96	[illegible]	1.9[illegible]												
320	86.96	[illegible]	2.29												
506	125.[illegible]	.75	[illegible]	2.92E+04	3.93E-02	3.73E-02	1.051	3.743E-02	9.[illegible]3E-04	8.551E-04	314.5	3.93E-02	1.000	1.051	.799
507	125.[illegible]	.51	[illegible]	2.[illegible]E+04	3.95E-02	3.74E-02	1.0[illegible]4	3.74[illegible]E-02	9.071E-04	8.590E-04	314.1	3.95E-02	1.000	1.054	.802
508	125.[illegible]	.25	[illegible]	[illegible]	3.88E-02	3.67E-02	1.034	3.753E-02	8.937E-04	8.434E-04	313.6	3.88E-02	1.000	1.034	.787
509	125.[illegible]	.15	.0[illegible]	2.[illegible]E+04	3.45E-02	3.27E-02	.920	3.75[illegible]E-02	7.925E-04	7.506E-04	312.7	3.45E-02	1.000	.920	.700
510	125.[illegible]	.04	[illegible]	[illegible]	3.[illegible]E-02	3.[illegible]E-02	.983	3.75[illegible]E-02	8.47[illegible]E-04	8.023E-04	313.2	[illegible].69E-02	1.000	.983	.746
511	125.[illegible]	[illegible]	.15	[illegible]	3.55E-02	3.36E-02	.945	3.757E-02	8.149E-04	7.716E-04	313.1	3.55E-02	1.000	.945	.719
512	125.[illegible]	[illegible]	.25	2.1[illegible]E+04	2.99E-02	2.83E-02	.795	3.757E-02	6.8[illegible]2E-04	6.439E-04	312.9	[illegible].99E-02	1.000	.795	.604
513	125.[illegible]	[illegible]	.38	1.[illegible]E+04	2.34E-02	2.21E-02	.622	3.737E-02	5.367E-04	[illegible].083E-04	312.4	[illegible].34E-02	1.000	.622	.473
514	125.[illegible]	[illegible]	.[illegible]4	[illegible]E+03	1.16E-02	1.10E-02	.308	3.757E-02	2.60[illegible]E-04	2.519E-04	311.[illegible]	[illegible].16E-02	1.000	.308	.235
515	125.[illegible]	[illegible]	.89	[illegible]E+03	[illegible].10E-03	4.[illegible]E-03	.136	3.757E-02	1.171E-04	1.1[illegible]9E-04	311.3	[illegible].10E-03	1.000	.136	.103
516	125.[illegible]	[illegible]	1.14	[illegible]E+03	2.[illegible]E-03	1.94E-03	.0[illegible]	3.757E-02	[illegible].7[illegible]E-05	4.45[illegible]E-05	311.3	2.05E-03	1.000	.055	.042
517	125.[illegible]	[illegible]	1.[illegible]	[illegible]E+02	[illegible].71E-04	[illegible].36E-04	.[illegible]	[illegible].757E-02	1.541E-05	1.459E-05	313.9	6.71E-04	1.000	.018	.014
518	125.06	[illegible]	1.[illegible]												
519	125.[illegible]	[illegible]	1.[illegible]												
520	125.[illegible]	[illegible]	2.[illegible]												

EDGE HEATING USED FOR HE

X=	3.[illegible]E+01	HL	/HREFF=	[illegible]E-01
X=	4.124E+01	HL	/HREFF=	[illegible].3[illegible]E-01
X=	[illegible].3[illegible]E+01	HL	/HREFF=	[illegible]E-01
X=	4.[illegible]E+01	HL	/HREFF=	[illegible]E-01
X=	4.[illegible]E+01	HL	/HREFF=	[illegible]E-01
X=	5.13[illegible]E+01	HL	/HREFF=	[illegible]E-01

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.156E+01	HL	/HREFF=	9.811E-01
X=	6.664E+01	HL	/HREFF=	9.559E-01
X=	7.172E+01	HL	/HREFF=	9.566E-01
X=	7.680E+01	HL	/HREFF=	1.017E+00
X=	8.188E+01	HL	/HREFF=	1.251E+00
X=	8.696E+01	HL	/HREFF=	1.356E+00
X=	9.204E+01	HL	/HREFF=	1.571E+00
X=	9.712E+01	HL	/HREFF=	1.564E+00
X=	1.022E+02	HL	/HREFF=	1.695E+00
X=	1.073E+02	HL	/HREFF=	1.739E+00
X=	1.124E+02	HL	/HREFF=	1.7[illegible]4E+00
X=	1.175E+02	HL	/HREFF=	1.611E+00
X=	1.226E+02	HL	/HREFF=	1.476E+00
X=	1.251E+02	HL	/HREFF=	1.313E+00
X=	1.276E+02	HL	/HREFF=	1.234E+00
X=	1.302E+02	HL	/HREFF=	1.134E+00
X=	1.352E+02	HL	/HREFF=	9.807E-01
X=	4.759E+01	HL	/HREFF=	8.172E-01
X=	6.156E+01	HL	/HREFF=	7.634E-01
X=	8.696E+01	HL	/HREFF=	8.[illegible]93E-01
X=	1.251E+02	HL	/HREFF=	1.054E+00

B.L. TRANSITION DISTANCE = 48.85 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.00 CM

AMES 3.5 FT HWT TEST (1[illegible]2), [illegible] BLUMER, IN-LINE RSI GAP RUN(15) 19[illegible]

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TT         = 1.[illegible]E+03(K)           GAP LENGTH =1[illegible](CM)
PT         = 5.23[illegible]E+05(N/M2)      GAP WIDTH  =   .127(CM)
HT         = 1.1[illegible]E+06(J/KG)       GAP DEPTH  =  3.31[illegible](CM)
RE/METER   = 1.7[illegible]E+06             ORIENTATION=  [illegible](DEG)
MACH       = 5.1[illegible]                 QS         =  8.3488E+04(W/M2)
RHO VEL    = 2.1464E+01(KG/M2-S)            MOD.POSITION=  1
HAW/HT     = [illegible].9[illegible] FOR HT
HAW/HT     = [illegible].8[illegible] FOR HL
HLCC       = HL(2ND. [illegible] COND.,)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible]E+03	[illegible]E-03	7.16E-03	1.029	7.346E-03	3.522E-04	3.334E-04	312.4				1.000
2	132.7[illegible]	-.51	[illegible]												
3	131.16	-.51	[illegible]	5.13E+03	7.43E-03	7.13E-03	1.039	[illegible]	3.460E-04	3.275E-04	312.6				1.000
4	127.63	-.51	[illegible]	5.2[illegible]E+03	7.51[illegible]E-03	7.11E-03	1.0[illegible]	7.152E-03	3.493E-04	3.312E-04	312.5				1.000
5	125.09	-.51	[illegible]	5.27E+03	7.44E-03	7.14E-03	1.069	6.954E-03	3.465E-04	3.280E-04	312.5				1.000
6	122.56	-.51	[illegible]	5.18E+03	7.41E-03	7.12E-03	1.081	6.856E-03	3.453E-04	3.268E-04	312.4				1.000
7	117.47	-.51	[illegible]	5.16E+03	7.35E-03	6.97E-03	1.095	6.721E-03	3.429E-04	3.246E-04	312.3				1.000
8	112.37	-.51	[illegible]	5.12E+03	7.32E-03	6.93E-03	1.104	6.63[illegible]E-03	3.419E-04	3.228E-04	312.3				1.000
9	107.31	-.51	[illegible]	5.[illegible]45E+03	7.21E-03	6.93E-03	1.095	6.583E-03	3.359E-04	3.189E-04	312.2				1.000
10	102.29	-.51	[illegible]	5.[illegible]7E+03	7.25E-03	6.86E-03	1.071	6.767E-03	3.375E-04	3.196E-04	312.0				1.000
11	97.12	-.51	[illegible]	4.92E+03	7.03E-03	6.65E-03	1.011	6.951E-03	3.273E-04	3.099E-04	312.0				1.000
12	92.[illegible]4	-.51	[illegible]	[illegible]9E+03	7.27E-03	6.9[illegible]E-03	1.[illegible]24	7.097E-03	3.387E-04	3.206E-04	311.9				1.000
13	86.96	-.51	[illegible]	[illegible]	7.21E-03	6.92E-03	.996	7.236E-03	3.358E-04	3.179E-04	312.0				1.000
14	8[illegible].[illegible]8	-.51	[illegible]	5.71E+03	7.58E-03	7.18E-03	1.034	7.334E-03	3.533E-04	3.345E-04	312.0				1.000
15	76.[illegible]	-.51	[illegible]	[illegible]1[illegible]E+03	7.29E-03	6.9[illegible]E-03	.981	7.434E-03	3.397E-04	3.216E-04	311.9				1.000
16	71.[illegible]4	-.51	[illegible]	5.23E+03	7.47E-03	7.07E-03	.991	7.535E-03	3.483E-04	3.294E-04	311.9				1.000
17	66.64	-.51	[illegible]	5.36E+03	7.66E-03	7.26E-03	.961	7.973E-03	3.571E-04	3.381E-04	311.9				1.000
18	61.56	-.51	[illegible]	[illegible]45E+03	7.78E-03	7.37E-03	.9[illegible]7	[illegible]	3.626E-04	3.432E-04	312.0				1.000
19	56.[illegible]9	-.51	[illegible]	5.57E+03	7.91E-03	7.49E-03	.87[illegible]	9.089E-03	3.684E-04	3.487E-04	312.1				1.000
20	51.39	-.51	[illegible]	5.72E+03	8.17E-03	7.74E-03	.856	9.549E-03	3.807E-04	3.604E-04	312.0				1.000
21	48.9[illegible]	-.51	[illegible]	[illegible]	8.6[illegible]E-03	8.21E-03	.88[illegible]	9.8[illegible]E-03	4.04[illegible]E-04	3.827E-04	312.2				1.000
22	46.31	-.51	[illegible]	[illegible]26E+03	8.95E-03	8.47E-03	.883	1.008E-02	4.177E-04	3.947E-04	312.1				1.000
23	43.77	-.51	[illegible]	6.40E+03	9.15E-03	8.66E-03	.883	1.03[illegible]E-02	4.261E-04	4.[illegible]34E-04	312.0				1.000
24	41.24	-.51	[illegible]	[illegible]73E+03	9.62E-03	9.11E-03	.9[illegible]4	1.064E-02	4.4[illegible]2E-04	4.243E-04	312.1				1.000
25	3[illegible]	-.51	[illegible]	[illegible]1E+03	9.8[illegible]E-03	9.35E-03	.9[illegible]4	1.[illegible]92E-02	4.5[illegible]2E-04	4.356E-04	311.6				1.000
103	47.[illegible]	1.[illegible]2	[illegible]	[illegible]E+03	[illegible]E-03	[illegible]E-03	.[illegible]	[illegible]E-03	3.9[illegible]E-04	3.696E-04	314.4	[illegible].39E-03	1.000	.943	.951
105	47.[illegible]9	1.[illegible]	[illegible]	[illegible]E+03	[illegible]E-03	[illegible]E-03	.829	[illegible]E-03	3.841E-04	3.635E-04	315.1	8.24E-03	1.000	.829	.93[illegible]
107	47.[illegible]9	.51	[illegible]	[illegible]E+03	7.98[illegible]E-03	7.56E-03	.8[illegible]3	9.939E-03	3.713E-04	3.520E-04	314.7	7.98E-03	1.000	.803	.906
108	[illegible]	[illegible]	[illegible]	[illegible]E+03	[illegible]E-03	6.72E-03	.714	[illegible]E-03	[illegible]E-04	3.131E-04	313.9	7.1[illegible]E-03	1.000	.714	.[illegible]06
110	47.[illegible]	[illegible]	[illegible]	[illegible]E+03	5.18E-03	4.90E-03	.521	[illegible]E-03	2.4[illegible]E-04	2.285E-04	313.[illegible]	5.18E-03	1.000	.521	.588
111	47.49	[illegible]	.15	2.9[illegible]E+03	4.24E-03	4.11E-03	.42[illegible]	[illegible]E-03	1.973E-04	1.858E-04	312.5	4.24E-03	1.000	.426	.481
112	47.[illegible]3	[illegible]	[illegible]	[illegible]E+03	2.70[illegible]E-03	2.56E-03	.2[illegible]2	9.94[illegible]E-03	1.2[illegible]E-04	1.193E-04	311.7	2.70E-03	1.000	.272	.307
113	47.[illegible]9	[illegible]	[illegible]	1.[illegible]7E+03	1.47[illegible]E-03	1.39E-03	.14[illegible]	[illegible]E-03	6.95[illegible]E-05	6.491E-05	311.1	1.47E-03	1.000	.148	.167
114	47.[illegible]9	[illegible]	[illegible]	[illegible]E+02	3.53E-04	3.35E-04	.036	[illegible]E-03	1.64[illegible]E-05	1.559E-05	310.1	3.53E-04	1.000	.036	.04[illegible]
115	[illegible]	[illegible]	[illegible]	[illegible]E+01	[illegible]	[illegible]	[illegible]	[illegible]	3.2[illegible]E-06	3.[illegible]67E-0[illegible]	3[illegible]	7.[illegible]3E-05	1.000	.007	.03[illegible]
[illegible]	61.[illegible]6	[illegible]	[illegible]	[illegible]E+03	7.26[illegible]E-03	[illegible]59E-03	.[illegible]47	6.592E-03	3.392E-04	3.211E-04	312.[illegible]	7.28E-03	1.000	.[illegible]47	.93[illegible]
[illegible]	61.[illegible]6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]1E-03	[illegible]	[illegible]E-03	3.4[illegible]E-04	3.221E-04	313.[illegible]	7.3[illegible]E-03	1.000	.55[illegible]	.930
[illegible]	61.[illegible]6	[illegible]	[illegible]	[illegible]	[illegible]E-03	[illegible]E-03	[illegible]	[illegible]E-03	3.2[illegible]E-04	3.[illegible]88E-04	312.[illegible]	6.96E-03	1.000	.[illegible]10	.894
[illegible]	61.56	[illegible]	[illegible]	[illegible]E+03	6.33E-03	6.39E-03	.737	[illegible]E-03	2.94[illegible]E-04	2.790E-04	312.3	6.33E-03	1.000	.737	.813
[illegible]	61.[illegible]6	[illegible]	[illegible]	[illegible]E+03	[illegible]E-03	[illegible]E-03	[illegible]	[illegible]E-03	2.27[illegible]E-04	2.15[illegible]E-04	311.7	4.59E-03	1.000	.569	.623

AMES 3.5 FT HWT TEST (102), P.3. BLUMER, IN-LINE RSI GAP RUN(15) 1373 PAGE 30

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	2.87E+03	4.09E-03	3.37E-03	.476	8.584E-03	1.915E-04	1.804E-04	319.1	4.09E-03	1.000	.476	.525
212	61.56	0.00	.25	1.71E+03	2.44E-03	2.31E-03	.284	8.584E-03	1.137E-04	1.076E-04	312.3	2.44E-03	1.000	.284	.313
213	61.56	0.00	.38	1.25E+03	1.70E-03	1.51E-03	.199	8.584E-03	7.942E-05	7.520E-05	303.4	1.70E-03	1.000	.199	.219
214	61.56	0.00	.64	2.94E+02	4.19E-04	3.96E-04	.049	8.584E-03	1.957E-05	1.847E-05	309.7	4.19E-04	1.000	.049	.054
215	61.56	0.00	.89	7.06E+01	1.00E-04	9.50E-05	.012	8.584E-03	4.674E-06	4.426E-06	308.2	1.00E-04	1.000	.012	.013
306	86.96	.75	0.00	4.32E+03	6.17E-03	5.84E-03	.853	7.233E-03	2.973E-04	2.720E-04	311.8	6.17E-03	1.000	.853	.856
307	86.96	.51	0.00	4.22E+03	6.03E-03	5.70E-03	.833	7.233E-03	2.897E-04	2.658E-04	311.6	6.03E-03	1.000	.833	.836
308	86.96	.25	0.00	3.79E+03	5.42E-03	5.13E-03	.749	7.234E-03	2.524E-04	2.389E-04	311.4	5.42E-03	1.000	.749	.752
309	86.96	.15	0.00	3.20E+03	4.57E-03	4.33E-03	.632	7.234E-03	2.129E-04	2.016E-04	311.1	4.57E-03	1.000	.632	.634
310	86.96	.04	.04	2.80E+03	4.00E-03	3.79E-03	.553	7.234E-03	1.864E-04	1.765E-04	310.9	4.00E-03	1.000	.553	.555
311	86.96	0.00	.15	2.32E+03	3.31E-03	3.13E-03	.457	7.234E-03	1.541E-04	1.459E-04	310.6	3.31E-03	1.000	.457	.459
312	86.96	0.00	.25	1.36E+03	1.94E-03	1.84E-03	.269	7.234E-03	9.051E-05	8.570E-05	310.1	1.94E-03	1.000	.269	.270
313	86.96	0.00	.38	7.57E+02	1.08E-03	1.02E-03	.149	7.234E-03	5.023E-05	4.756E-05	309.5	1.08E-03	1.000	.149	.150
314	86.96	0.00	.64	1.5[illegible]E+02	2.20E-04	2.10E-04	.030	7.234E-03	1.025E-05	9.707E-06	309.5	2.20E-04	1.000	.030	.031
315	86.96	0.00	.89												
316	86.96	0.00	1.14	7.69E+01	1.09E-04	1.04E-04	.01[illegible]	7.234E-03	5.093E-06	4.824E-06	308.6	1.09E-04	1.000	.015	.015
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	86.96	0.00	2.29	4.[illegible]1E+01	5.69E-05	5.39E-05	.008	7.234E-03	2.653E-06	2.512E-06	308.3	5.69E-05	1.000	.008	.008
506	125.06	.75	0.00	4.37E+03	6.25E-03	5.92E-03	.900	6.951E-03	2.913E-04	2.758E-04	312.1	6.25E-03	1.000	.900	.841
507	125.06	.51	0.00	4.18E+03	5.97E-03	5.65E-03	.859	6.951E-03	2.782E-04	2.633E-04	311.8	5.97E-03	1.000	.859	.803
508	125.06	.25	0.00	3.95E+03	5.64E-03	5.34E-03	.811	6.951E-03	2.627E-04	2.487E-04	311.3	5.64E-03	1.000	.811	.758
509	125.06	.15	0.00	3.16E+03	4.51E-03	4.27E-03	.649	6.951E-03	2.100E-04	1.989E-04	310.4	4.51E-03	1.000	.649	.606
510	125.06	.04	.04	2.80E+03	4.00E-03	3.78E-03	.575	6.951E-03	1.862E-04	1.763E-04	311.4	4.00E-03	1.000	.575	.538
511	125.06	0.00	.15	2.50E+03	3.57E-03	3.38E-03	.513	6.951E-03	1.662E-04	1.573E-04	311.3	3.57E-03	1.000	.513	.480
512	125.06	0.00	.25	1.66E+03	2.37E-03	2.25E-03	.341	6.951E-03	1.105E-04	1.046E-04	311.2	2.37E-03	1.000	.341	.319
513	125.06	0.00	.38	1.03E+03	1.48E-03	1.40E-03	.212	6.951E-03	6.872E-05	6.506E-05	311.1	1.48E-03	1.000	.212	.198
514	125.06	0.00	.64	3.11E+02	4.47E-04	4.24E-04	.064	6.951E-03	2.084E-05	1.973E-05	310.6	4.47E-04	1.000	.064	.060
515	125.06	0.00	.89	4.20E+01	5.98E-05	5.66E-05	.009	6.951E-03	2.797E-06	2.639E-06	310.4	5.98E-05	1.000	.009	.008
516	125.06	0.00	1.14												
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE
X= 3.8735E+01 HL /HREFF= 9.[illegible]44E-01
X= 4.1245E+01 HL /HREFF= 9.[illegible]E-01
X= 4.3775E+01 HL /HREFF= 8.[illegible]E-01
X= 4.6315E+01 HL /HREFF= [illegible].977E-01
X= 4.8865E+01 HL /HREFF= [illegible]2E-01
X= 5.1395E+01 HL /HREFF= [illegible]E-01
[illegible]

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.156E+01	HL	/HREFF=	9.[illegible]E-01
X=	5.6[illegible]4E+01	HL	/HREFF=	9.[illegible]13E-01
X=	7.172E+01	HL	/HREFF=	9.511E-01
X=	7.687E+01	HL	/HREFF=	9.8[illegible]E-01
X=	9.158E+01	HL	/HREFF=	1.[illegible]34E+[illegible]
X=	9.696E+01	HL	/HREFF=	9.9[illegible]E-01
X=	9.7[illegible]4E+01	HL	/HREFF=	1.[illegible]24E+[illegible]
X=	9.712E+01	HL	/HREFF=	1.[illegible]11E+[illegible]
X=	1.[illegible]22E+02	HL	/HREFF=	1.[illegible]71E+[illegible]
X=	1.073E+02	HL	/HREFF=	1.[illegible]35E+[illegible]
X=	1.124E+02	HL	/HREFF=	1.1[illegible]4E+[illegible]
X=	1.175E+02	HL	/HREFF=	1.[illegible]9[illegible]E+00
X=	1.226E+02	HL	/HREFF=	1.[illegible]51E+00
X=	1.251E+02	HL	/HREFF=	1.[illegible]9E+[illegible]
X=	1.276E+02	HL	/HREFF=	1.[illegible]65E+[illegible]
X=	1.302E+02	HL	/HREFF=	1.[illegible]39E+00
X=	1.352E+02	HL	/HREFF=	1.[illegible]2[illegible]E+00
X=	4.759E+01	HL	/HREFF=	[illegible].[illegible]32E-01
X=	6.156E+01	HL	/HREFF=	[illegible].102E-01
X=	8.696E+01	HL	/HREFF=	[illegible].[illegible]3[illegible]E-01
X=	1.251E+02	HL	/HREFF=	6.[illegible]99E-01

B.L. TRANSITION DISTANCE = [illegible]6.4[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT X=[illegible]76.[illegible]0 CM

AMES 3.5 FT HWT TEST (1?2), C.J. BLUMER, IN-LINE RSI GAP RUN(16) 1973 PAGE 31

TT = 1.126[illegible](K) GAP LENGTH =101.60 (CM)
PT = 2.11[illegible]E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.1913[illegible]E+06(J/KG) GAP DEPTH = 1.01[illegible](CM)
RE/METER = 6.[illegible]97[illegible]E+06 ORIENTATION= 0.000(DEG)
MACH = 5.1[illegible] QS = 1.7237E+05(W/M2)
RHO VEL = 8.4821[illegible]E+01(KG/M2-S) MOC.POSITION= 1
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible].974 FOR HL
HLCC = HL(2ND. ORDER CONC.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (K(/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.13E+04	7.12E-02	6.74E-02	.878	8.117E-02	9.395E-04	7.949E-04	317.7				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	.00	5.17E+04	7.19E-02	6.81E-02	.861	8.35[illegible]E-02	8.475E-04	8.024E-04	318.6				1.000
4	127.63	-.51	.00	5.32E+04	7.39E-02	7.00E-02	.911	8.117E-02	8.714E-04	8.253E-04	318.8				1.000
5	125.09	-.51	0.00	5.36E+04	7.45E-02	7.06E-02	.945	7.884E-02	8.767E-04	8.319E-04	319.1				1.000
6	122.56	-.51	0.00	5.45E+04	7.58E-02	7.17E-02	.990	7.650E-02	8.933E-04	8.457E-04	318.9				1.000
7	117.47	-.51	0.00	5.71E+04	7.94E-02	7.52E-02	1.126	7.050E-02	9.359E-04	8.861E-04	319.1				1.000
8	112.37	-.51	0.00	5.82E+04	8.09E-02	7.66E-02	1.315	6.156E-02	9.541E-04	9.033E-04	319.6				1.000
9	107.31	-.51	0.00	6.02E+04	8.37E-02	7.92E-02	1.653	5.065E-02	9.869E-04	9.343E-04	319.5				1.000
10	102.20	-.51	0.00	6.16E+04	8.57E-02	8.12E-02	2.096	4.090E-02	1.011E-03	9.570E-04	319.7				1.000
11	97.12	-.51	0.00	6.00E+04	8.35E-02	7.90E-02	2.525	3.307E-02	9.844E-04	9.319E-04	320.0				1.000
12	92.04	-.51	.00	5.85E+04	8.14E-02	7.71E-02	3.065	2.656E-02	9.597E-04	9.085E-04	320.3				
13	86.96	-.51	0.00	5.03E+04	7.01E-02	6.54E-02	3.209	2.185E-02	8.268E-04	7.826E-04	321.0				
14	81.88	-.51	0.00	4.09E+04	5.71E-02	5.40E-02	3.194	1.788E-02	6.731E-04	6.372E-04	321.4				
15	76.80	-.51	0.00	2.70E+04	3.76E-02	3.56E-02	2.436	1.544E-02	4.435E-04	4.198E-04	321.3				1.000
16	71.72	-.51	0.00	1.92E+04	2.67E-02	2.53E-02	1.920	1.391E-02	3.150E-04	2.982E-04	321.7				1.000
17	66.64	-.51	0.00	1.51E+04	2.11E-02	2.00E-02	1.544	1.368E-02	2.491E-04	2.358E-04	322.1				1.000
18	61.56	-.51	0.00	1.23E+04	1.72E-02	1.63E-02	1.221	1.412E-02	2.033E-04	1.924E-04	322.8				1.000
19	56.48	-.51	0.00	1.05E+04	1.47E-02	1.39E-02	.985	1.493E-02	1.733E-04	1.641E-04	322.7				1.000
20	51.39	-.51	0.00	1.03E+04	1.43E-02	1.36E-02	.901	1.590E-02	1.689E-04	1.599E-04	322.6				1.000
21	48.86	-.51	0.00	1.03E+04	1.44E-02	1.36E-02	.890	1.631E-02	1.633E-04	1.602E-04	323.5				1.000
22	46.31	-.51	0.00	1.0[illegible]E+04	1.45E-02	1.37E-02	.871	1.663E-02	1.708E-04	1.617E-04	322.8				1.000
23	43.77	-.51	0.00	1.09E+04	1.51E-02	1.43E-02	.889	1.694E-02	1.776E-04	1.681E-04	322.4				1.000
24	41.24	-.51	.00	1.15E+04	1.60E-02	1.51E-02	.926	1.725E-02	1.886E-04	1.785E-04	322.3				1.000
25	38.70	-.51	0.00	1.13E+04	1.57E-02	1.49E-02	.894	1.756E-02	1.850E-04	1.752E-04	320.9				1.000
103	47.59	1.02	.00	9.21E+03	1.30E-02	1.23E-02	.785	1.647E-02	1.529E-04	1.447E-04	323.2	1.30E-02	1.000	.788	.899
105	47.59	1.02	0.00	9.07E+03	1.26E-02	1.19E-02	.765	1.646E-02	1.485E-04	1.404E-04	329.9	1.26E-02	1.000	.765	.873
107	47.59	.51	0.00	8.[illegible]E+03	1.18E-02	1.11E-02	.714	1.646E-02	1.387E-04	1.312E-04	326.7	1.18E-02	1.000	.714	.816
108	47.59	.25	.00	7.[illegible]E+03	1.06E-02	1.00E-02	.644	1.646E-02	1.249E-04	1.182E-04	326.9	1.06E-02	1.000	.644	.735
110	47.59	.0[illegible]	.04	6.2[illegible]E+03	8.71E-03	8.25E-03	.529	1.646E-02	1.027E-04	9.723E-05	324.[illegible]	8.71E-03	1.000	.529	.604
111	47.59	0.00	.15	5.37E+03	7.51E-03	7.11E-03	.456	1.646E-02	8.858E-05	8.384E-05	323.4	7.51E-03	1.000	.456	.521
112	47.59	0.00	.25	3.[illegible]E+03	4.98E-03	4.71E-03	.302	1.646E-02	5.857E-05	5.554E-05	321.4	4.98E-03	1.000	.302	.345
113	47.59	0.00	.38	2.[illegible]E+03	3.52E-03	3.34E-03	.214	1.646E-02	4.154E-05	3.932E-05	320.[illegible]	3.52E-03	1.000	.214	.244
114	47.59	0.00	.64	6.6[illegible]E+02	9.21E-04	8.72E-04	.056	1.646E-02	1.086E-05	1.028E-05	317.5	9.21E-04	1.000	.056	.06[illegible]
115	47.59	0.00	.99	[illegible]E+01	[illegible]E-05	[illegible]E-05	.003	1.646E-02	6.7[illegible]E-07	6.792E-07	314.8	5.72E-05	1.000	.003	.004
203	61.56	1.02	.[illegible]	[illegible]E+03	1.25E-02	1.18E-02	.888	1.40[illegible]E-02	1.469E-04	1.393E-04	323.9	1.25E-02	1.000	.888	.72[illegible]
205	61.56	1.02	.[illegible]	[illegible]E+03	1.17E-02	1.11E-02	.83[illegible]	1.40[illegible]E-02	1.3[illegible]E-04	1.3[illegible]9E-04	324.8	1.17E-02	1.000	.83[illegible]	.684
207	61.56	.51	.[illegible]	[illegible]E+03	1.2[illegible]E-02	1.17E-02	.85[illegible]	1.40[illegible]E-02	1.411E-04	1.335E-04	324.4	1.21E-02	1.000	.85	.636
208	61.56	.25	.[illegible]	1.[illegible]E+04	1.42E-02	1.35E-02	1.012	1.40[illegible]E-02	1.659E-04	1.597E-04	323.1	1.42E-02	1.000	1.01[illegible]	.828
210	61.56	.04	.[illegible]	1.[illegible]E+04	1.52E-02	1.44E-02	1.0[illegible]	1.40[illegible]E-02	1.793E-04	1.[illegible]E-04	321.2	1.52E-02	1.000	1.080	.835

AMES 3.5 FT HWT TEST (152), [illegible] BLUMER, IN-LINE RSI GAP RUN(16) 1973 PAGE 32

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	[illegible]	.15	[illegible]	1.40E-02	1.32E-02	.992	1.409E-02	1.649E-04	1.560E-04	316.7	1.40E-02	1.000	.992	.812
212	61.56	0.00	.25	6.43E+03	1.17E-02	1.11E-02	.830	1.409E-02	1.380E-04	1.306E-04	318.5	1.17E-02	1.000	.830	.680
213	61.56	[illegible]	.38	[illegible]	[illegible]	7.79E-03	.583	1.409E-02	3.695E-05	9.182E-05	314.6	6.22E-03	1.000	.583	.478
214	61.56	[illegible]	.64	[illegible]	2.84E-03	2.69E-03	.201	1.409E-02	3.344E-05	3.168E-05	312.4	2.84E-03	1.000	.201	.165
215	61.56	[illegible]	.89	[illegible]	4.24E-04	4.32E-04	.030	1.409E-02	5.094E-06	4.740E-06	311.1	4.24E-04	1.000	.030	.025
306	86.96	.75	[illegible]	[illegible]	5.37E-02	5.39E-02	2.499	2.150E-02	6.334E-04	5.997E-04	319.3	5.37E-02	1.000	2.499	.779
307	86.96	.51	[illegible]	[illegible]	5.84E-02	5.53E-02	2.707	2.156E-02	6.881E-04	6.515E-04	319.2	5.84E-02	1.000	2.707	.843
308	86.96	.25	[illegible]	[illegible]	[illegible]	[illegible]	2.775	2.153E-02	7.073E-04	6.772E-04	318.2	6.00E-02	1.000	2.775	.665
309	86.96	.15	[illegible]	[illegible]	5.66E-02	5.36E-02	2.614	2.160E-02	6.676E-04	6.322E-04	317.4	5.66E-02	1.000	2.614	.815
310	86.96	.04	.04	[illegible]	5.37E-02	5.39E-02	2.476	2.169E-02	6.332E-04	5.996E-04	316.7	5.37E-02	1.000	2.476	.772
311	86.96	[illegible]	.15	[illegible]	4.62E-02	4.37E-02	2.127	2.170E-02	5.443E-04	5.155E-04	315.5	4.62E-02	1.000	2.127	.663
312	86.96	[illegible]	.25	[illegible]	3.51E-02	3.32E-02	1.615	2.170E-02	4.133E-04	3.915E-04	314.4	3.51E-02	1.000	1.615	.503
313	86.96	[illegible]	.38	1.88E+04	2.59E-02	2.45E-02	1.193	2.170E-02	3.052E-04	2.891E-04	312.9	2.59E-02	1.000	1.193	.372
314	86.96	[illegible]	.64	[illegible]	1.17E-02	1.11E-02	.540	2.170E-02	1.332E-04	1.309E-04	312.2	1.17E-02	1.000	.540	.160
315	86.96	[illegible]	.89	[illegible]	3.83E-03	3.53E-03	.177	2.170E-02	4.516E-05	4.279E-05	311.0	3.83E-03	1.000	.177	.095
406	112.36	.75	[illegible]	[illegible]	[illegible]	6.67E-02	1.143	6.160E-02	8.309E-04	7.968E-04	317.5	7.05E-02	1.000	1.143	.869
407	112.36	.51	[illegible]	5.10E+04	7.06E-02	6.69E-02	1.146	6.164E-02	8.327E-04	7.885E-04	316.6	7.06E-02	1.000	1.146	.871
408	112.36	.25	[illegible]	[illegible]	6.65E-02	6.30E-02	1.079	6.161E-02	7.849E-04	7.424E-04	316.1	6.65E-02	1.000	1.079	.828
409	112.36	.15	[illegible]	[illegible]	6.26E-02	[illegible]	1.016	6.160E-02	7.379E-04	6.988E-04	315.6	6.26E-02	1.000	1.016	.772
410	112.36	.04	[illegible]	[illegible]	5.63E-02	5.33E-02	.914	6.159E-02	6.634E-04	6.282E-04	315.2	5.63E-02	1.000	.914	.694
411	112.36	[illegible]	.15	[illegible]	[illegible]	4.75E-02	.814	6.159E-02	5.907E-04	5.595E-04	314.5	5.01E-02	1.000	.814	.618
412	112.36	[illegible]	.25	[illegible]	3.64E-02	3.44E-02	[illegible]	6.159E-02	4.296E-04	4.059E-04	313.2	3.64E-02	1.000	.599	.449
413	112.36	[illegible]	.38	[illegible]	2.54E-02	2.40E-02	.412	6.159E-02	2.989E-04	2.831E-04	312.3	2.54E-02	1.000	.412	.313
414	112.36	[illegible]	.64	7.72E+03	1.01E-02	9.53E-03	.163	6.159E-02	1.186E-04	1.123E-04	310.6	1.01E-02	1.000	.163	.124
415	112.36	[illegible]	.89	[illegible]	5.59E-03	[illegible]	.091	[illegible]	6.593E-05	6.243E-05	310.3	5.59E-03	1.000	.091	.069
506	125.36	.76	[illegible]	[illegible]	6.35E-02	[illegible]	.803	7.914E-02	7.431E-04	7.093E-04	316.7	6.35E-02	1.000	.803	.849
507	125.36	.51	[illegible]	[illegible]	[illegible]	[illegible]	.797	[illegible]	7.420E-04	7.034E-04	316.7	6.33E-02	1.000	.797	.842
508	125.36	.25	[illegible]	[illegible]	6.22E-02	[illegible]	.787	[illegible]	7.331E-04	6.942E-04	315.2	6.22E-02	1.000	.787	.832
509	125.36	.15	[illegible]	[illegible]	[illegible]	[illegible]	.718	7.098E-02	6.684E-04	6.333E-04	315.9	5.67E-02	1.000	.718	.759
510	125.36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.664	[illegible]	6.177E-04	5.849E-04	315.4	5.24E-02	1.000	.664	.701
511	125.36	[illegible]	.15	[illegible]	[illegible]	[illegible]	.620	[illegible]	5.757E-04	5.461E-04	315.8	4.89E-02	1.000	.620	[illegible]
512	125.36	[illegible]	.25	[illegible]	3.92E	[illegible]	.496	7.094E-02	4.620E-04	4.376E-04	314.7	3.92E-02	1.000	.496	.525
513	125.36	[illegible]	.38	[illegible]	2.91E-02	[illegible]	.368	[illegible]	3.423E-04	3.245E-04	313.5	2.91E-02	1.000	.368	.309
514	125.36	[illegible]	.64	[illegible]	1.32E-02	1.25E-02	.167	[illegible]	1.565E-04	1.474E-04	312.2	1.32E-02	1.000	.167	.177
515	125.36	[illegible]	.89	[illegible]	1.59E-03	1.51E-03	.020	7.394E-02	1.877E-05	1.778E-05	310.9	1.59E-03	1.000	.020	.021

EDGE HEATING USED FOR HE

X= 3.8735E+01 HL /HREFF= 8.733E-01
X= 4.124E+01 HL /HREFF= [illegible]
X= 4.377E+01 HL /HREFF= [illegible]
X= 4.631E+01 HL /HREFF= [illegible]
X= 4.885E+01 HL /HREFF= [illegible]

X=	9.139E+01	HL	/HREFF=	[illegible]E-01
X=	5.648E+01	HL	/HREFF=	9.348E-01
X=	6.156E+01	HL	/HREFF=	1.221E+00
X=	6.664E+01	HL	/HREFF=	1.[illegible]44E+00
X=	7.172E+01	HL	/HREFF=	1.920E+00
X=	7.699E+01	HL	/HREFF=	2.436E+00
X=	8.188E+01	HL	/HREFF=	3.194E+00
X=	8.696E+01	HL	/HREFF=	3.229E+00
X=	9.204E+01	HL	/HREFF=	3.[illegible]E+00
X=	9.712E+01	HL	/HREFF=	2.525E+00
X=	1.022E+02	HL	/HREFF=	2.096E+00
X=	1.073E+02	HL	/HREFF=	1.633E+00
X=	1.124E+02	HL	/HREFF=	1.[illegible]E+00
X=	1.175E+02	HL	/HREFF=	1.125E+00
X=	1.226E+02	HL	/HREFF=	9.9[illegible]4E-01
X=	1.251E+02	HL	/HREFF=	9.454E-01
X=	1.276E+02	HL	/HREFF=	9.186E-01
X=	1.332E+02	HL	/HREFF=	8.609E-01
X=	1.[illegible]2E+02	HL	/HREFF=	8.[illegible]76E-01
X=	4.759E+01	HL	/HREFF=	7.144E-01
X=	6.156E+01	HL	/HREFF=	8.5[illegible]3E-01
X=	8.696E+01	HL	/HREFF=	2.767E+00
X=	1.124E+02	HL	/HREFF=	1.146E+00
X=	1.251E+02	HL	/HREFF=	7.910E-01

B.L. TRANSITION DISTANCE = 38.70 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1[illegible]2), [illegible] BLUMER, IN-LINE RSI GAP RUN(17) 1973 PAGE 33

TT	= 1.11[illegible](K)	GAP LENGTH	=1[illegible]1.6[illegible](CM)
PT	= 1.[illegible]73[illegible](N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.1[illegible]17[illegible](J/KG)	GAP DEPTH	= 1.316(CM)
RE/METER	= [illegible].40[illegible]	ORIENTATION	= [illegible](DEG)
MACH	= 5.1[illegible]	QS	= 1.2[illegible]1E+05(W/M2)
RHO VEL	= 4.[illegible]73E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= [illegible].9[illegible] FOR HT		
HAW/HT	= [illegible].87[illegible] FOR HL		
HLCC	= HL(2ND. ORDER COND..)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	3.[illegible]2E+04	4.[illegible]5E-02	4.60E-02	.97[illegible]	4.973E-02	1.116E-03	1.057E-03	305.1				1.000
2	132.[illegible]	-.51	[illegible]												
3	130.16	-.51	[illegible]	3.[illegible]1E+04	4.84E-02	4.59E-02	1.1[illegible]	4.[illegible]7E-02	1.113E-03	1.0[illegible]E-03	305.6				1.000
4	127.63	-.51	[illegible]	[illegible].[illegible]1E+04	4.85E-02	4.59E-02	1.133	4.[illegible]E-02	1.113E-03	1.057E-03	305.6				1.000
5	125.[illegible]9	-.51	[illegible]	3.42E+04	4.72E-02	4.47E-02	1.254	3.763E-02	1.085E-03	1.028E-03	305.8				1.000
6	122.56	-.51	[illegible]	3.[illegible]	4.62E-02	4.37E-02	1.334	3.4[illegible]E-02	1.062E-03	1.006E-03	305.7				1.000
7	117.47	-.51	[illegible]	3.11E+04	4.29E-02	4.07E-02	1.497	2.866E-02	9.876E-04	9.357E-04	305.9				1.000
8	112.[illegible]7	-.51	[illegible]	2.[illegible]E+04	3.66E-02	3.47E-02	1.559	2.34[illegible]E-02	8.413E-04	7.971E-04	306.2				1.000
9	107.31	-.51	[illegible]	2.1[illegible]E+04	2.[illegible]7E-02	2.32E-02	1.5[illegible]	1.931E-02	5.9[illegible]E-04	6.491E-04	306.2				1.000
10	1[illegible]2.[illegible]	-.51	[illegible]	1.67E+04	2.31E-02	2.19E-02	1.442	1.6[illegible]3E-02	5.317E-04	5.[illegible]38E-04	306.2				1.000
11	97.12	-.51	[illegible]	1.28E+04	1.76E-02	1.67E-02	[illegible]313	1.342E-02	4.[illegible]56E-04	3.843[illegible]4	306.4				1.000
12	92.04	-.51	[illegible]	1.[illegible]E+04	1.47E-02	1.39E-02	1.279	1.149E-02	3.379E-04	3.202E-04	306.6				1.000
13	86.96	-.51	[illegible]	[illegible].3[illegible]E+03	1.15E-02	1.09E-02	1.1[illegible]9	1.041E-02	2.655E-04	2.516E-04	307.1				1.000
14	81.8[illegible]	-.51	[illegible]	7.[illegible]E+03	1.08E-02	1.03E-02	1.116	9.699E-03	2.495E-04	2.364E-04	307.2				1.000
15	76	-.51	[illegible]	[illegible]E+03	9.7[illegible]E-03	9.24E-03	1.022	9.[illegible]1E-03	2.243E-04	2.125E-04	307.3				1.000
16	71	-.51	[illegible]	6.[illegible]7E+03	9.5[illegible]E-03	9.[illegible]E-03	.979	9.71[illegible]E-03	2.186E-04	2.071E-04	307.5				1.000
17	66	-.51	[illegible]	7.[illegible]9E+03	9.[illegible]1E-03	9.29E-03	.974	1.007E-02	2.256E-04	2.138E-04	307.7				1.000
18	61.[illegible]	-.51	[illegible]	[illegible].2[illegible]E+03	1.01E-02	9.[illegible]3E-03	.956	1.[illegible]3E-02	2.314E-04	2.192E-04	308.1				1.000
19	56.4[illegible]	-.51	[illegible]	[illegible].30E+03	1.[illegible]2E-02	9.[illegible]E-03	.91[illegible]	1.117E-02	2.355E-04	2.231E-04	308.3				1.000
20	51.39	-.51	[illegible]	7.55E+03	1.[illegible]5E-02	9.30E-03	.879	1.189E-02	2.4[illegible]5E-04	2.278E-04	308.4				1.000
21	[illegible].96	-.51	[illegible]	[illegible]E+03	1.06E-02	1.01E-02	.[illegible]	1.22[illegible]E-02	2.4[illegible]3E-04	2.314E-04	308.8				1.000
22	46.71	-.51	[illegible]	[illegible]E+03	1.09E-02	1.04E-02	.8[illegible]5	1.264E-02	2.513E-04	2.381E-04	318.5				1.000
23	43.77	-.51	[illegible]	[illegible].12E+03	1.1[illegible]E-02	1.07E-02	.[illegible]64	1.3[illegible]1E-02	2.587E-04	2.451E-04	308.3				1.000
24	41.24	-.51	[illegible]	[illegible]E+03	1.2[illegible]E-02	1.14E-02	.[illegible]	1.339E-02	2.7[illegible]E-04	2.521E-04	308.4				1.000
25	[illegible].7[illegible]	-.51	[illegible]	5.[illegible]1E+03	1.23E-02	1.17E-02	.[illegible]	1.377E-02	2.83[illegible]E-04	2.6[illegible]7E-04	307.[illegible]				1.000
1[illegible]	47.59	1.[illegible]2	[illegible]	[illegible]E+03	1.[illegible]5E-02	9.92E-03	.842	1.244E-02	2.4[illegible]9E-04	2.282E-04	312.2	1.05E-02	1.000	.842	.973
1[illegible]	47.59	1.[illegible]2	[illegible]	7.31E+03	1.[illegible]2E-02	[illegible].66E-03	.821	1.244E-02	2.347E-04	2.223E-04	313.3	1.02E-02	1.000	.821	.948
1[illegible]7	47.59	.[illegible]1	[illegible]	[illegible].[illegible]E+03	[illegible].7[illegible]E-03	9.19E-03	.79[illegible]	1.244E-02	2.232E-04	2.114E-04	312.7	9.76E-03	1.000	.78[illegible]	.901
1[illegible]8	47.59	.[illegible]	[illegible]	[illegible].1[illegible]E+03	[illegible]E-03	[illegible].1[illegible]E-03	.69[illegible]	1.244E-02	1.9[illegible]5E-04	1.871E-04	311.4	8.59E-03	1.000	.690	.790
11[illegible]	47.[illegible]	[illegible]	.[illegible]4	[illegible]E+03	[illegible].49E-03	[illegible].13E-03	.[illegible]	1.244E-02	1.4[illegible]E-04	1.411E-04	309.9	6.40E-03	1.000	.520	.601
111	47.59	[illegible]	.[illegible]	[illegible]E+03	5.41E-03	5.13E-03	.435	1.244E-02	1.245E-04	1.179E-04	309.2	5.41E-03	1.000	.435	.502
112	47.59	[illegible]	[illegible]	2.[illegible]E+03	3.4[illegible]E-03	[illegible].22E-03	.273	1.244E-02	7.823E-05	7.411E-05	30[illegible].9	3.40E-03	1.000	.273	.316
113	47.59	[illegible]	.[illegible]	1.[illegible]E+03	1.[illegible]E-03	1.74E-03	.14[illegible]	1.244E-02	4.224E-05	4.[illegible]2E-05	30[illegible].0	1.84E-03	1.000	.148	.171
114	47.59	[illegible]	.64	1.[illegible]E+02	2.53E-04	2.40E-04	.02[illegible]	1.244E-02	5.828E-06	5.5[illegible]3E-06	305.3	2.53E-04	1.000	.020	.02[illegible]
115	47.59	[illegible]	[illegible]												
2[illegible]	61.56	1.[illegible]2	[illegible]	[illegible]E+03	[illegible].23E-03	6.74E-03	.[illegible]	1.[illegible]52E-02	2.123E-04	2.011E-04	338.[illegible]	9.23E[illegible]	1.000	.877	.91[illegible]
2[illegible]5	61.56	1.[illegible]2	[illegible]	[illegible]E+03	[illegible]E-03	[illegible].24E-03	.[illegible]	1.[illegible]52E-02	2.0[illegible]4E-04	1.964E-04	309.6	9.[illegible]2E-03	1.000	.85[illegible]	.89[illegible]
2[illegible]7	61.56	.[illegible]1	[illegible]	[illegible]	[illegible]E-03	[illegible]E-03	.[illegible]59	1.[illegible]52E-02	1.91[illegible]E-04	1.8[illegible]9E-04	303.3	6.3[illegible]E-03	1.000	.789	.826
2[illegible]8	61.56	.2[illegible]	[illegible]	5.[illegible]E+03	[illegible]E-03	[illegible].27E-03	.730	1.[illegible]52E-02	1.7[illegible]5E-04	1.673E-04	338.5	7.68E-03	1.000	.730	.764
21[illegible]	61.[illegible]	.[illegible]	[illegible]	[illegible]E+03	[illegible].19E-03	[illegible].36E-03	.5[illegible]	1.[illegible]52E-02	1.423E-04	1.343E-04	337.3	6.19E-03	[illegible].000	.588	.61[illegible]

AMES 3.5 FT HWT TEST (152), D.3. BLUMER, IN-LINE RSI GAP RUN(17) 197[illegible] PAGE 34

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	5.16E+03	5.74E-03	5.44E-03	.546	1.052E-02	1.321E-04	1.252E-04	304.8	5.74E-03	1.000	.546	.571
212	61.56	0.00	.25	2.93E+03	3.91E-03	3.71E-03	.372	1.052E-02	9.000E-05	[illegible]E-05	306.8	3.91E-03	1.000	.372	.389
213	61.56	0.00	.38	1.92E+03	2.64E-03	2.50E-03	.251	1.052E-02	6.076E-05	[illegible]-05	303.6	2.64E-03	1.000	.251	.263
214	61.56	0.00	.64	3.28E+02	4.47E-04	4.23E-04	.042	1.052E-02	1.027E-05	[illegible]-06	302.4	4.47E-04	1.000	.042	.044
215	61.56	0.00	.89												
306	86.96	.76	0.00	[illegible]E+03	6.19E-03	3.86E-03	.599	1.033E-02	1.424E-04	1.349E-04	306.5	6.19E-03	1.000	.599	.540
307	86.96	.51	0.00	4.36E+03	6.30E-03	5.97E-03	.609	1.035E-02	1.450E-04	1.374E-04	306.3	6.30E-03	1.000	.609	.549
308	86.96	.25	0.00	6.05E+03	8.35E-03	7.32E-03	.806	1.036E-02	1.922E-04	1.821E-04	305.8	8.35E-03	1.000	.806	.727
309	86.96	.15	0.00	6.31E+03	8.70E-03	8.25E-03	.839	1.037E-02	2.002E-04	1.897E-04	305.3	8.70E-03	1.000	.839	.757
310	86.96	.04	.04	5.87E+03	8.09E-03	7.67E-03	.780	1.037E-02	1.862E-04	1.764E-04	304.9	8.09E-03	1.000	.780	.703
311	86.96	0.00	.15	4.05E+03	5.58E-03	5.29E-03	.538	1.038E-02	1.285E-04	1.217E-04	304.1	5.58E-03	1.000	.538	.485
312	86.96	0.00	.25	1.63E+03	2.25E-03	2.13E-03	.217	1.038E-02	5.170E-05	4.899E-05	303.5	2.25E-03	1.000	.217	.195
313	86.96	0.00	.38	2.95E+03	4.05E-03	3.84E-03	.390	1.038E-02	9.311E-05	8.824E-05	302.5	4.05E-03	1.000	.390	.352
314	86.96	0.00	.64	8.34E+02	1.15E-03	1.09E-03	.110	1.038E-02	2.637E-05	2.499E-05	302.3	1.15E-03	1.000	.110	.100
315	86.96	0.00	.89	3.51E+01	4.81E-05	4.56E-05	.005	1.038E-02	1.107E-06	1.049E-06	301.6	4.81E-05	1.000	.005	.004
406	112.36	.76	0.00	2.08E+04	2.87E-02	2.72E-02	1.237	2.322E-02	6.604E-04	6.257E-04	305.4	2.87E-02	1.000	1.237	.793
407	112.36	.51	0.00	2.23E+04	3.07E-02	2.91E-02	1.321	2.326E-02	7.071E-04	6.701E-04	304.9	3.07E-02	1.000	1.321	.840
408	112.36	.25	0.00	2.21E+04	3.04E-02	2.88E-02	1.305	2.331E-02	6.999E-04	6.632E-04	304.5	3.04E-02	1.000	1.305	.837
409	112.36	.15	0.00	2.07E+04	2.85E-02	2.70E-02	1.223	2.333E-02	6.565E-04	6.221E-04	304.1	2.85E-02	1.000	1.223	.785
410	112.36	.04	.04	1.91E+04	2.50E-02	2.37E-02	1.070	2.335E-02	5.744E-04	5.444E-04	304.0	2.50E-02	1.000	1.070	.686
411	112.36	0.00	.15	1.59E+04	2.19E-02	2.07E-02	.937	2.335E-02	5.031E-04	4.768E-04	303.5	2.19E-02	1.000	.937	.601
412	112.36	0.00	.25	9.99E+03	1.37E-02	1.30E-02	.586	2.335E-02	3.159E-04	2.994E-04	302.9	1.37E-02	1.000	.586	.377
413	112.36	0.00	.38	5.36E+03	7.39E-03	7.00E-03	.316	2.335E-02	1.700E-04	1.611E-04	302.3	7.39E-03	1.000	.316	.203
414	112.36	0.00	.64												
415	112.36	0.00	.89	4.59E+02	6.29E-04	5.96E-04	.027	2.335E-02	1.447E-05	1.371E-05	301.1	6.29E-04	1.000	.027	.017
506	125.06	.76	0.00	2.90E+04	4.00E-02	3.79E-02	1.070	3.735E-02	9.191E-04	8.710E-04	304.7	4.00E-02	1.000	1.070	.852
507	125.06	.51	0.00	2.92E+04	4.02E-02	3.81E-02	1.076	3.740E-02	9.256E-04	8.771E-04	304.7	4.02E-02	1.000	1.076	.857
508	125.06	.25	0.00	2.90E+04	3.99E-02	3.78E-02	1.066	3.745E-02	9.179E-04	8.698E-04	304.4	3.99E-02	1.000	1.066	.849
509	125.06	.15	0.00	2.64E+04	3.64E-02	3.45E-02	.971	3.746E-02	8.365E-04	7.927E-04	304.2	3.64E-02	1.000	.971	.773
510	125.06	.04	.04	2.43E+04	3.34E-02	3.16E-02	.891	3.748E-02	7.682E-04	7.280E-04	303.7	3.34E-02	1.000	.891	.710
511	125.06	0.00	.15	2.27E+04	3.12E-02	2.96E-02	.833	3.749E-02	7.190E-04	6.804E-04	304.0	3.12E-02	1.000	.833	.663
512	125.06	0.00	.25	1.69E+04	2.33E-02	2.21E-02	.622	3.749E-02	5.362E-04	5.081E-04	303.7	2.33E-02	1.000	.622	.495
513	125.06	0.00	.38	1.17E+04	1.61E-02	1.53E-02	.430	3.749E-02	3.709E-04	3.515E-04	303.0	1.61E-02	1.000	.430	.343
514	125.06	0.00	.64	3.58E+03	4.94E-03	4.68E-03	.132	3.749E-02	1.136E-04	1.076E-04	302.2	4.94E-03	1.000	.132	.105
515	125.06	0.00	.89												

EDGE HEATING USED FOR HE

X=	3.37?E+01	HL	/HREFF=	8.936E-01
X=	4.124E+01	HL	/HREFF=	8.901E-01
X=	4.377E+01	HL	/HREFF=	8.841E-01
X=	4.631E+01	HL	/HREFF=	8.645E-01
X=	4.846E+01	HL	/HREFF=	8.537E-01

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X=     5.139E+01   HL   /HREFF=     8.[illegible]E-01
X=     5.648E+01   HL   /HREFF=     9.109E-01
X=     6.156E+01   HL   /HREFF=     9.[illegible]5E-01
X=     6.664E+01   HL   /HREFF=     9.[illegible]2E-01
X=     7.172E+01   HL   /HREFF=     9.786E-01
X=     7.680E+01   HL   /HREFF=     1.022E+00
X=     8.188E+01   HL   /HREFF=     1.119E+00
X=     8.696E+01   HL   /HREFF=     1.139E+00
X=     9.204E+01   HL   /HREFF=     1.279E+00
X=     9.712E+01   HL   /HREFF=     1.313E+00
X=     1.022E+02   HL   /HREFF=     1.442E+00
X=     1.073E+02   HL   /HREFF=     1.540E+00
X=     1.124E+02   HL   /HREFF=     1.539E+00
X=     1.175E+02   HL   /HREFF=     1.497E+00
X=     1.226E+02   HL   /HREFF=     1.334E+00
X=     1.251E+02   HL   /HREFF=     1.234E+00
X=     1.276E+02   HL   /HREFF=     1.193E+00
X=     1.302E+02   HL   /HREFF=     1.1[illegible]E+00
X=     1.352E+02   HL   /HREFF=     9.753E-01

X=     4.759E+01   HL   /HREFF=     7.[illegible]E-01
X=     6.176E+01   HL   /HREFF=     7.[illegible]94E-01
X=     8.696E+01   HL   /HREFF=     8.091E-01
X=     1.124E+02   HL   /HREFF=     1.321E+00
X=     1.281E+02   HL   /HREFF=     1.[illegible]76E+00
B.L. TRANSITION DISTANCE =  51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.37 CM
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AMES 3.5 FT HWT - ST (152), C.B. BLUMER, IN-LINE RSI GAP RUN(18) 1973 PAGE 35

TT = .1666E+03(K) GAP LENGTH =191.5?? (CM)
PT = .1891E+05(N/M2) GAP WIDTH = .127(CM)
HT = 1.2269E+06(J/KG) GAP DEPTH = 1.316(CM)
RE/METER = 1.5531E+06 ORIENTATION= 0.000(DEG)
MACH = 5.199 QS = 9.0193E+04(W/M2)
RHO VEL = 2.1473E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.918 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.71E+03	7.48E-03	7.09E-03	1.235	6.058E-03	3.655E-04	3.466E-04	306.4				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	5.28E+03	7.05E-03	6.59E-03	1.149	6.136E-03	3.445E-04	3.267E-04	306.7				1.000
4	127.63	-.51	0.00	5.34E+03	7.00E-03	6.64E-03	1.133	6.178E-03	3.419E-04	3.242E-04	306.7				1.000
5	125.09	-.51	0.00	5.18E+03	6.80E-03	6.45E-03	1.093	6.218E-03	3.320E-04	3.148E-04	306.8				1.000
6	122.56	-.51	0.00	5.16E+03	6.76E-03	6.41E-03	1.090	6.258E-03	3.301E-04	3.130E-04	306.7				1.000
7	117.47	-.51	0.00	5.13E+03	6.72E-03	6.37E-03	1.055	6.398E-03	3.284E-04	3.114E-04	306.8				1.000
8	112.37	-.51	0.00	5.02E+03	6.59E-03	6.25E-03	1.044	6.316E-03	3.218E-04	3.051E-04	307.1				1.000
9	107.31	-.51	0.00	4.96E+03	6.50E-03	6.16E-03	1.022	6.361E-03	3.176E-04	3.011E-04	307.2				1.000
10	102.20	-.51	0.00	4.96E+03	6.50E-03	6.16E-03	.986	6.592E-03	3.176E-04	3.011E-04	307.2				1.000
11	97.12	-.51	0.00	4.79E+03	6.29E-03	5.96E-03	.933	6.743E-03	3.071E-04	2.912E-04	307.5				1.000
12	92.04	-.51	0.00	4.80E+03	6.30E-03	5.97E-03	.911	6.908E-03	3.073E-04	2.915E-04	307.7				1.000
13	86.96	-.51	0.00	4.65E+03	6.10E-03	5.79E-03	.861	7.091E-03	2.981E-04	2.827E-04	308.?				1.000
14	81.88	-.51	0.00	4.78E+03	6.28E-03	5.95E-03	.869	7.221E-03	3.066E-04	2.906E-04	308.4				1.000
15	76.80	-.51	0.00	4.69E+03	6.16E-03	5.84E-03	.840	7.333E-03	3.009E-04	2.852E-04	308.5				1.000
16	71.72	-.51	0.00	4.93E+03	6.48E-03	6.14E-03	.872	7.433E-03	3.164E-04	3.000E-04	308.7				1.000
17	66.64	-.51	0.00	5.39E+03	7.09E-03	6.72E-03	.900	7.871E-03	3.462E-04	3.282E-04	309.1				1.000
18	61.56	-.51	0.00	5.62E+03	7.40E-03	7.02E-03	.873	8.482E-03	3.615E-04	3.427E-04	309.5				1.000
19	56.48	-.51	0.00	5.74E+03	7.58E-03	7.19E-03	.845	8.965E-03	3.702E-04	3.510E-04	309.8				1.000
20	51.39	-.51	0.00	5.94E+03	7.82E-03	7.41E-03	.833	9.394E-03	3.820E-04	3.621E-04	309.9				1.000
21	48.96	-.51	0.00	6.23E+03	8.21E-03	7.78E-03	.852	9.636E-03	4.008E-04	3.800E-04	310.3				1.000
22	46.31	-.51	0.00	6.39E+03	8.41E-03	7.98E-03	.848	9.919E-03	4.110E-04	3.896E-04	310.1				1.000
23	43.77	-.51	0.00	6.51E+03	8.57E-03	8.13E-03	.840	1.020E-02	4.186E-04	3.969E-04	310.0				1.000
24	41.24	-.51	0.00	6.85E+03	9.02E-03	8.55E-03	.850	1.048E-02	4.434E-04	4.175E-04	310.1				1.000
25	38.70	-.51	0.00	7.09E+03	9.32E-03	8.84E-03	.857	1.176E-02	4.555E-04	4.318E-04	309.5				1.000
103	47.59	1.52	[illegible]	6.10E+03	8.06E-03	7.64E-03	.825	9.773E-03	3.938E-04	3.732E-04	312.7	8.06E-03	1.000	.825	.971
105	47.59	1.07	0.10	5.94E+03	7.86E-03	7.45E-03	.804	9.772E-03	3.840E-04	3.639E-04	313.5	7.86E-03	1.000	.804	.946
107	47.59	.51	0.00	5.78E+03	7.64E-03	7.24E-03	.782	9.773E-03	3.731E-04	3.536E-04	313.0	7.64E-03	1.000	.782	.920
108	47.59	.23	[illegible]	5.17E+03	6.77E-03	6.42E-03	.693	9.774E-03	3.309E-04	3.136E-04	312.3	6.77E-03	1.000	.693	.815
110	47.59	.04	.04	3.81E+03	5.02E-03	4.75E-03	.513	9.775E-03	2.450E-04	2.322E-04	311.3	5.02E-03	1.000	.513	.604
111	47.59	1.00	.15	3.08E+03	4.06E-03	3.85E-03	.416	9.775E-03	1.984E-04	1.881E-04	310.9	4.06E-03	1.000	.416	.489
112	47.59	0.01	.25	1.89E+03	2.49E-03	2.36E-03	.255	9.775E-03	1.217E-04	1.153E-04	310.1	2.49E-03	1.000	.255	.300
113	47.59	0.01	.38	1.01E+03	1.33E-03	1.26E-03	.136	9.775E-03	6.498E-05	6.160E-05	309.5	1.33E-03	1.000	.136	.160
114	47.59	0.00	.64	1.54E+02	2.02E-04	1.92E-04	.021	9.775E-03	9.8??E-06	9.362E-06	308.4	2.02E-04	1.000	.021	.02?
115	47.59	[illegible]	.89												
203	61.56	1.52	[illegible]	5.39E+03	7.09E-03	6.72E-03	.836	8.486E-03	3.465E-04	3.284E-04	310.2	7.09E-03	1.000	.836	.95
205	61.56	1.?2	[illegible]	5.37E+03	7.08E-03	6.71E-03	.835	8.483E-03	3.459E-04	3.279E-04	310.6	7.08E-03	1.000	.835	.95?
207	61.56	.51	[illegible]	5.15E+03	6.77E-03	6.42E-03	.799	8.482E-03	3.309E-04	3.137E-04	310.4	6.77E-03	1.000	.799	.915
208	61.56	.25	0.00	4.69E+03	6.18E-03	5.86E-03	.728	8.482E-03	3.018E-04	2.861E-04	310.0	6.18E-03	1.000	.728	.835
210	61.56	.04	.04	3.51E+03	4.62E-03	4.38E-03	.545	8.482E-03	2.257E-04	2.133E-04	309.3	4.62E-03	1.000	.545	.624

AMES 3.5 FT HWT TEST (1?2), C.S. BLUMER, IN-LINE RSI GAP RUN(19) 1973 PAGE 36

T/C	X (CM)	Y (CM)	Z (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	[illegible]	.15	[illegible]	3.92E-03	3.72E-03	.462	8.482E-03	1.915E-04	1.817E-04	307.8	3.92E-03	1.000	.462	.530
212	61.56	[illegible]	.25	1.?2E+03	2.13E-03	2.?2E-03	.252	8.482E-03	1.043E-04	9.886E-05	310.3	2.13E-03	1.000	.252	.288
213	61.56	[illegible]	.38	1.1?E+03	1.53E-03	1.4?E-03	.181	8.482E-03	7.494E-05	7.068E-05	307.2	1.53E-03	1.000	.180	.206
214	61.56	[illegible]	.?4	2.??E+02	3.11E-04	2.95E-04	.037	8.482E-03	1.519E-05	1.443E-05	306.5	3.11E-04	1.000	.037	.042
215	61.56	[illegible]	.69												
306	86.96	.?6	[illegible]	[illegible]	5.30E-03	5.?35E-03	.748	7.0?8E-03	2.530E-04	2.455E-04	308.0	5.30E-03	1.000	.748	.869
307	86.96	.51	[illegible]	4.??E+03	5.25E-03	4.37E-03	.740	7.0?6E-03	2.562E-04	2.430E-04	307.8	5.25E-03	1.000	.740	.860
308	86.96	.25	[illegible]	7.0?E+03	4.77E-03	4.52E-03	.672	7.0?7E-03	2.327E-04	2.207E-04	307.5	4.77E-03	1.000	.672	.781
309	86.96	.13	[illegible]	3.??2E+03	3.96E-03	3.76E-03	.559	7.097E-03	1.933E-04	1.836E-04	307.2	3.96E-03	1.000	.559	.650
310	86.96	.04	.?4	2.63E+03	3.45E-03	3.27E-03	.487	7.08?E-03	1.686E-04	1.598E-04	307.1	3.45E-03	1.000	.487	.566
311	86.96	[illegible]	.15	1.??E+03	2.40E-03	2.28E-03	.339	7.08?E-03	1.173E-04	1.113E-04	306.7	2.40E-03	1.000	.339	.394
312	86.96	[illegible]	.25	1.?6E+03	1.39E-03	1.31E-03	.196	7.08?E-03	6.774E-05	6.423E-05	306.3	1.39E-03	1.000	.196	.227
313	86.96	[illegible]	.?6	?.??E+02	9.69E-04	9.19E-04	.137	7.088E-03	4.732E-05	4.487E-05	305.7	9.69E-04	1.000	.137	.159
314	86.96	[illegible]	.64	2.24E+02	2.93E-04	2.79E-04	.041	7.08?E-03	1.433E-05	1.359E-05	305.7	2.93E-04	1.000	.041	.048
315	86.96	[illegible]	.?9												
406	112.36	.??	[illegible]	[illegible]	5.64E-03	5.34E-03	.893	6.314E-03	2.753E-04	2.611E-04	306.7	5.64E-03	1.000	.893	.855
407	112.36	.51	[illegible]	[illegible]	5.59E-03	5.3?E-03	.885	6.312E-03	2.730E-04	2.589E-04	306.5	5.59E-03	1.000	.885	.848
408	112.36	.?5	[illegible]	3.73E+03	4.89E-03	4.63E-03	.774	6.311E-03	2.387E-04	2.264E-04	306.3	4.89E-03	1.000	.774	.742
409	112.36	.13	[illegible]	3.13E+03	4.10E-03	3.88E-03	.649	6.311E-03	2.000E-04	1.897E-04	306.1	4.10E-03	1.000	.649	.622
410	112.36	.?4	.?4	2.?1E+03	3.29E-03	3.12E-03	.521	6.311E-03	1.605E-04	1.522E-04	306.0	3.29E-03	1.000	.521	.499
411	112.36	[illegible]	.15	1.9?E+03	2.49E-03	2.36E-03	.394	6.311E-03	1.215E-04	1.152E-04	305.8	2.49E-03	1.000	.394	.378
412	112.36	[illegible]	.25	?.??E+02	1.14E-03	1.?8E-03	.180	6.311E-03	5.563E-05	5.273E-05	303.4	1.14E-03	1.000	.180	.173
413	112.36	[illegible]	.38	2.31E+01	3.02E-05	2.96E-05	[illegible]	6.311E-03	1.474E-06	1.398E-06	304.9	3.02E-05	1.000	.005	.005
414	112.36	[illegible]	.64												
415	112.36	[illegible]	.?9												
506	125.?6	.75	[illegible]	4.?6E+03	5.71E-03	5.42E-03	.915	6.243E-03	2.792E-04	2.647E-04	306.2	5.71E-03	1.000	.915	.838
507	125.?6	.51	[illegible]	4.2?E+03	5.62E-03	5.33E-03	.901	6.236E-03	2.745E-04	2.603E-04	306.2	5.62E-03	1.000	.901	.824
508	125.?6	.25	[illegible]	3.??E+03	5.20E-03	4.93E-03	.834	6.233E-03	2.54?E-04	2.409E-04	306.2	5.20E-03	1.000	.834	.763
509	125.?6	.15	[illegible]	3.31E+03	4.33E-03	4.11E-03	.696	6.231E-03	2.117E-04	2.007E-04	306.0	4.33E-03	1.000	.696	.636
510	125.?6	.?4	[illegible]	2.92E+03	3.83E-03	3.63E-03	.614	6.229E-03	1.8?9E-04	1.773E-04	305.7	3.83E-03	1.000	.614	.562
511	125.?6	[illegible]	.15	2.64E+03	3.46E-03	3.28E-03	.556	6.228E-03	1.691E-04	1.604E-04	306.0	3.46E-03	1.000	.556	.509
512	125.?6	[illegible]	.25	2.??E+03	2.62E-03	2.49E-03	.421	6.228E-03	1.282E-04	1.216E-04	305.8	2.62E-03	1.000	.421	.386
513	125.?6	[illegible]	.??	7.??E+02	9.99E-04	9.47E-04	.160	6.22?E-03	4.879E-05	4.627E-05	305.5	9.99E-04	1.000	.160	.147
514	125.?6	[illegible]	.64												
515	125.?6	[illegible]	.?9												

EDGE HEATING USED FOR HE

X=	3.874E+01	HL	/HREFF=	8.6?7E-01
X=	4.124E+01	HL	/HREFF=	[illegible]
X=	4.377E+01	HL	/HREFF=	[illegible]
X=	4.631E+01	HL	/HREFF=	[illegible]
X=	4.?96E+01	HL	/HREFF=	[illegible]

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	8.494E-01
X=	6.156E+01	HL	/HREFF=	8.725E-01
X=	6.664E+01	HL	/HREFF=	9.074E-01
X=	7.172E+01	HL	/HREFF=	8.715E-01
X=	7.680E+01	HL	/HREFF=	8.437E-01
X=	8.138E+01	HL	/HREFF=	8.891E-01
X=	8.696E+01	HL	/HREFF=	8.637E-01
X=	9.274E+01	HL	/HREFF=	9.113E-01
X=	9.712E+01	HL	/HREFF=	9.725E-01
X=	1.022E+02	HL	/HREFF=	9.864E-01
X=	1.073E+02	HL	/HREFF=	1.022E+00
X=	1.124E+02	HL	/HREFF=	1.044E+00
X=	1.175E+02	HL	/HREFF=	1.365E+00
X=	1.226E+02	HL	/HREFF=	1.083E+00
X=	1.251E+02	HL	/HREFF=	1.093E+00
X=	1.276E+02	HL	/HREFF=	1.173E+00
X=	1.302E+02	HL	/HREFF=	1.149E+00
X=	1.392E+02	HL	/HREFF=	1.279E+00
X=	4.759E+01	HL	/HREFF=	7.816E-01
X=	6.156E+01	HL	/HREFF=	7.987E-01
X=	8.696E+01	HL	/HREFF=	7.493E-01
X=	1.124E+02	HL	/HREFF=	8.854E-01
X=	1.251E+02	HL	/HREFF=	9.011E-01

B.L. TRANSITION DISTANCE = 56.49 CM
FULLY TURBULENT B.L. CONDITIONS AT = 66.64 CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (182), C.B. PLUMER, IN-LINE RSI GAP RUN(19) 1973 PAGE 37

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TT        = 1.20[illegible]E+03(K)          GAP LENGTH = 30.480(CM)
PT        = 5.21[illegible]E+0[illegible](N/M2)        GAP WIDTH  =   .127(CM)
HT        = 1.27[illegible]E+06(J/KG)        GAP DEPTH  =  2.032(CM)
RE/METER  = 1.4[illegible]E+06               ORIENTATION=  0.000(DEG)
MACH      = 5.10[illegible]                  QS         =  9.5941E+04(N/M2)
RHO VEL   = 1.99[illegible]E+01(KG/M2-S)     MOD.POSITION=  2
HAW/HT    = 0.9[illegible]9 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2NC. DRUBP CONC.,)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.86	-.51	0.00	5.74E+03	6.96E-03	6.23E-03	1.179	5.910E-03	3.293E-04	3.118E-04	300.5				1.000
7	117.47	-.51	0.00	5.69E+00	7.34E-06	6.35E-06	.001	6.083E-03	3.672E-07	3.477E-07	330.7				1.000
8	112.37	-.51	0.00	5.24E+03	6.21E-03	5.85E-03	1.012	6.128E-03	3.112E-04	2.945E-04	300.8				1.000
9	107.31	-.51	0.00	5.07E+03	6.23E-03	5.92E-03	1.099	6.234E-03	3.119E-04	2.961E-04	300.9				1.000
10	102.20	-.51	0.00	5.18E+03	6.37E-03	6.35E-03	.982	6.491E-03	3.193E-04	3.020E-04	301.1				1.000
11	97.12	-.51	0.00	[illegible]	6.22E-03	5.90E-03	.939	6.624E-03	3.112E-04	2.954E-04	301.2				1.000
12	92.04	-.51	0.00	5.19E+03	6.27E-03	5.95E-03	.922	6.800E-03	3.139E-04	2.980E-04	301.5				1.000
13	86.96	-.51	0.00	5.15E+03	6.22E-03	5.90E-03	.887	7.039E-03	3.112E-04	2.954E-04	301.8				1.000
14	81.88	-.51	0.00	5.19E+03	6.39E-03	6.07E-03	.894	7.156E-03	3.200E-04	3.032E-04	301.9				1.000
15	76.80	-.51	0.00	5.03E+03	6.19E-03	5.88E-03	.851	7.274E-03	3.098E-04	2.941E-04	302.1				1.000
16	71.72	-.51	0.00	5.22E+03	6.43E-03	6.11E-03	.872	7.375E-03	3.219E-04	3.056E-04	302.2				1.000
17	66.64	-.51	0.00	5.69E+03	7.02E-03	6.66E-03	.898	7.813E-03	3.511E-04	3.333E-04	303.1				1.000
18	61.56	-.51	0.00	6.26E+03	7.73E-03	7.34E-03	.917	8.424E-03	3.869E-04	3.671E-04	304.2				1.000
19	56.48	-.51	0.00	6.48E+03	8.00E-03	7.60E-03	.920	8.695E-03	4.006E-04	3.802E-04	304.8				1.000
20	51.39	-.51	0.00	6.77E+03	8.32E-03	7.90E-03	.894	9.305E-03	4.164E-04	3.952E-04	304.9				1.000
21	48.96	-.51	0.00	7.23E+03	8.94E-03	8.49E-03	.937	9.543E-03	4.476E-04	4.248E-04	305.2				1.000
22	46.31	-.51	0.00	7.35E+03	9.09E-03	8.62E-03	.925	9.825E-03	4.547E-04	4.316E-04	305.3				1.000
23	43.77	-.51	0.00	7.42E+03	9.18E-03	8.71E-03	.908	1.011E-02	4.594E-04	4.360E-04	305.4				1.000
24	41.24	-.51	0.00	7.92E+03	9.68E-03	9.19E-03	.932	1.039E-02	4.844E-04	4.597E-04	306.0				1.000
25	38.70	-.51	0.00	8.00E+03	9.89E-03	9.39E-03	.927	1.067E-02	4.951E-04	4.699E-04	305.0				1.000
103	39.97	1.52	0.00	7.60E+03	9.44E-03	8.96E-03	.899	1.050E-02	4.724E-04	4.482E-04	309.0	9.44E-03	1.000	.899	.967
105	39.97	1.02	0.00	7.44E+03	9.26E-03	8.79E-03	.882	1.051E-02	4.635E-04	4.398E-04	310.2	9.26E-03	1.000	.882	.948
107	39.97	.51	0.00	7.20E+03	9.02E-03	8.56E-03	.858	1.051E-02	4.513E-04	4.282E-04	309.7	9.02E-03	1.000	.858	.923
108	39.97	.25	0.00	6.52E+03	8.10E-03	7.68E-03	.770	1.052E-02	4.052E-04	3.845E-04	308.7	8.10E-03	1.000	.770	.828
110	39.97	.04	.04	5.01E+03	6.22E-03	5.90E-03	.591	1.052E-02	3.111E-04	2.953E-04	307.3	6.22E-03	1.000	.591	.636
111	39.97	0.00	.15	4.23E+03	5.24E-03	4.97E-03	.498	1.052E-02	2.621E-04	2.487E-04	306.9	5.24E-03	1.000	.498	.535
112	39.97	0.00	.25	2.90E+03	3.59E-03	3.40E-03	.340	1.052E-02	1.791E-04	1.700E-04	305.8	3.58E-03	1.000	.340	.366
113	39.97	0.00	.38	1.71E+03	2.10E-03	2.00E-03	.200	1.052E-02	1.053E-04	9.996E-05	304.9	2.10E-03	1.000	.200	.215
114	39.97	0.00	.64	[illegible]	[illegible]	5.68E-04	.057	1.052E-02	2.994E-05	2.842E-05	303.5	5.98E-04	1.000	.057	.061
115	39.97	0.00	.89	5.40E+01	6.68E-05	6.34E-05	.006	1.052E-02	3.341E-06	3.172E-06	302.2	6.68E-05	1.000	.006	.007
116	39.97	0.00	1.14	2.34E+01	2.87E-05	2.73E-05	.003	1.052E-02	1.439E-06	1.366E-06	301.3	2.07E-05	1.000	.003	.003
117	39.97	0.00	1.40	3.2[illegible]E+00	3.97E-06	3.77E-06	.000	1.052E-02	1.985E-07	1.885E-07	303.[illegible]	3.97E-06	1.000	.000	.000
118	39.97	0.00	1.65												
119	39.97	0.00	1.90												
120	39.97	0.00	2.29												
203	46.32	1.52	0.00	[illegible]	8.72E-03	8.27E-03	.888	9.815E-03	4.363E-04	4.140E-04	306.3	8.72E-03	1.000	.888	.967
205	46.32	1.02	0.00	[illegible]	8.72E-03	8.27E-03	.866	[illegible]	4.363E-04	4.140E-04	306.9	8.72E-03	1.000	.866	.966
207	46.32	.51	0.00	[illegible]	8.39E-03	7.95E-03	.854	9.817E-03	4.194E-04	3.989E-04	306.7	8.38E-03	1.000	.854	.923
208	46.32	.25	0.00	6.14E+03	7.55E-03	7.16E-03	.769	9.819E-03	3.777E-04	3.585E-04	306.0	7.55E-03	1.000	.769	.831
210	46.32	[illegible]	[illegible]	[illegible]	5.75E-03	[illegible]	.585	9.820E-03	2.877E-04	2.730E-04	304.9	5.75E-03	1.000	.585	.633

AMES 3.5 FT HWT TEST (182), C.D. PLUMER, IN-LINE RSI GAP RUN(19) 1973 PAGE 38

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	46.32	0.00	.18	3.915E+03	4.82E-03	4.57E-03	.491	9.820E-03	2.411E-04	2.288E-04	303.2	4.82E-03	1.000	.491	.530
212	46.32	0.00	.25	2.77E+03	3.41E-03	3.24E-03	.346	9.820E-03	1.708E-04	1.622E-04	332.7	3.41E-03	1.000	.346	.376
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	1.22E+02	1.50E-04	1.42E-04	.015	9.820E-03	7.508E-06	7.120E-06	300.0	1.50E-04	1.000	.015	.017
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.97												
220	46.32	0.00	2.29												
406	56.48	.76	0.00	5.645E+03	6.97E-03	6.52E-03	.784	8.653E-03	3.489E-04	3.312E-04	305.0	6.97E-03	1.000	.784	.871
407	56.48	.51	0.00	5.705E+03	7.04E-03	6.59E-03	.792	8.893E-03	3.526E-04	3.348E-04	304.4	7.04E-03	1.000	.792	.880
408	56.48	.25	0.00	5.405E+03	6.66E-03	6.32E-03	.749	8.893E-03	3.333E-04	3.164E-04	303.9	6.66E-03	1.000	.749	.832
409	56.48	.15	0.00	4.73E+03	5.83E-03	5.54E-03	.656	8.893E-03	2.919E-04	2.771E-04	303.6	5.83E-03	1.000	.656	.729
410	56.48	.04	.04	4.00E+03	4.93E-03	4.68E-03	.555	8.493E-03	2.468E-04	2.343E-04	303.2	4.93E-03	1.000	.595	.616
411	56.48	0.00	.15	3.43E+03	4.23E-03	4.01E-03	.476	8.893E-03	2.117E-04	2.009E-04	302.7	4.23E-03	1.000	.476	.528
412	56.48	0.00	.25	2.11E+03	2.60E-03	2.47E-03	.293	[illegible]	1.302E-04	1.236E-04	331.8	2.60E-03	1.000	.293	.325
413	56.48	0.00	.38	1.235E+03	1.52E-03	1.44E-03	.171	[illegible]	7.594E-05	7.209E-05	301.4	1.52E-03	1.000	.171	.190
414	56.48	0.00	.64	1.39E+02	1.71E-04	1.62E-04	.019	8.853E-03	8.542E-06	8.110E-06	300.4	1.71E-04	1.000	.019	.021
415	56.48	0.00	.89												
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.98												
420	56.48	0.00	2.29												
506	64.10	.76	0.00	5.346E+03	6.60E-03	6.26E-03	.813	8.119E-03	3.302E-04	3.134E-04	304.1	6.60E-03	1.000	.813	.895
507	64.10	.51	0.00	5.165E+03	6.37E-03	6.05E-03	.785	8.118E-03	3.193E-04	3.028E-04	303.9	6.37E-03	1.000	.785	.865
508	64.10	.25	0.00	4.79E+03	5.91E-03	5.61E-03	.726	8.118E-03	2.953E-04	2.808E-04	303.5	5.91E-03	1.000	.726	.802
509	64.10	.15	0.00	4.00E+03	4.93E-03	4.68E-03	.607	8.118E-03	2.467E-04	2.341E-04	303.0	4.93E-03	1.000	.607	.669
510	64.10	.04	.04	3.46E+03	4.27E-03	4.05E-03	.526	8.118E-03	2.137E-04	2.029E-04	302.5	4.27E-03	1.000	.526	.579
511	64.10	0.00	.15	3.15E+03	3.88E-03	3.69E-03	.478	8.118E-03	1.944E-04	1.845E-04	302.6	3.88E-03	1.000	.478	.527
512	64.10	0.00	.25	2.065E+03	2.54E-03	2.41E-03	.313	8.118E-03	1.272E-04	1.205E-04	302.2	2.54E-03	1.000	.313	.344
513	64.10	0.00	.38	8.87E+02	1.09E-03	1.03E-03	.134	8.118E-03	5.438E-05	5.162E-05	301.5	1.09E-03	1.000	.134	.147
514	64.10	0.00	.64	7.37E+01	9.71E-05	9.22E-05	.012	8.115E-03	4.859E-06	4.613E-06	300.5	9.71E-05	1.000	.012	.013
515	64.10	0.00	.89												

EDGE HEATING USED FOR HE

X= 3.877E+01 HL /HREFF= 9.279E-01
X= 4.124E+01 HL /HREFF= 9.720E-01
X= 4.377E+01 HL /HREFF= 9.[illegible]3E-01
X= 4.631E+01 HL /HREFF= 9.248E-01
X= 4.898E+01 HL /HREFF= 9.373E-01
X= 5.139E+01 HL /HREFF= 6.942E-01
[illegible]

X=	5.6[illegible]E+01	HL	/HREFF=	[illegible]
X=	6.156E+01	HL	/HREFF=	9.175E-01
X=	6.664E+01	HL	/HREFF=	5.981E-01
X=	7.172E+01	HL	/HREFF=	6.723E-01
X=	7.693E+01	HL	/HREFF=	[illegible].510E-01
X=	8.188E+01	HL	/HREFF=	[illegible]E-01
X=	8.696E+01	HL	/HREFF=	[illegible]E-01
X=	9.234E+01	HL	/HREFF=	[illegible]E-01
X=	9.712E+01	HL	/HREFF=	9.[illegible]E-01
X=	1.022E+02	HL	/HREFF=	9.[illegible]E-01
X=	1.073E+02	HL	/HREFF=	9.958E-01
X=	1.124E+02	HL	/HREFF=	1.[illegible]12E+00
X=	1.175E+02	HL	/HREFF=	1.[illegible]6E[illegible]
X=	1.226E+02	HL	/HREFF=	1.119E+00
X=	3.997E+01	HL	/HREFF=	8.[illegible]9E-01
X=	4.632E+01	HL	/HREFF=	8.537E-01
X=	5.649E+01	HL	/HREFF=	7.922E-01
X=	6.417E+01	HL	/HREFF=	7.[illegible]52E-01

B.L. TRANSITION DISTANCE = [illegible]6.48 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.0[illegible] CM

AMES 3.5 FT HWT TEST (122), C.B. BLUMER, IN-LINE RSI GAP RUN(21) 1973 PAGE 39

TT = 1.1449E+03(K) GAP LENGTH = 30.491(CM)
PT = 1.0744E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.2132E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 3.2729E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 QS = 1.2835E+05(W/M2)
RHO VEL = 4.2735E+01(KG/M2-S) MOD.POSITION= 2
HAW/HT = 0.973 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.86	-.51	0.00	3.27E+04	4.30E-02	4.27E-02	1.307	3.287E-02	1.995E-03	9.532E-04	305.4				1.000
7	117.47	-.51	0.00												
8	112.37	-.51	.00	2.46E+04	3.26E-02	3.19E-02	1.489	2.189E-02	7.623E-04	7.227E-04	306.1				1.000
9	107.31	-.51	0.00	2.01E+04	2.68E-02	2.34E-02	1.487	1.802E-02	6.279E-04	5.944E-04	306.3				1.000
10	102.20	-.51	0.00	1.58E+04	2.11E-02	2.00E-02	1.407	1.502E-02	4.935E-04	4.679E-04	306.6				1.000
11	97.12	-.51	0.00	1.25E+04	1.73E-02	1.62E-02	1.351	1.261E-02	3.968E-04	3.789E-04	306.9				1.000
12	92.04	-.51	0.00	1.17E+04	1.55E-02	1.47E-02	1.431	1.087E-02	3.635E-04	3.449E-04	307.2				1.000
13	86.96	-.51	0.00	9.16E+03	1.22E-02	1.16E-02	1.230	9.937E-03	2.859E-04	2.718E-04	307.8				1.000
14	81.88	-.51	0.00	7.93E+03	1.06E-02	1.00E-02	1.130	9.360E-03	2.476E-04	2.347E-04	308.0				1.000
15	76.80	-.51	0.00	8.18E+03	1.09E-02	1.03E-02	1.174	9.297E-03	2.554E-04	2.421E-04	308.1				1.000
16	71.72	-.51	0.00	8.59E+03	1.15E-02	1.09E-02	1.202	9.537E-03	2.632E-04	2.542E-04	308.4				1.000
17	66.64	-.51	0.00	8.75E+03	1.17E-02	1.11E-02	1.130	9.920E-03	2.739E-04	2.595E-04	309.6				1.000
18	61.56	-.51	0.00	7.85E+03	1.05E-02	9.30E-03	1.015	1.038E-02	2.465E-04	2.336E-04	311.0				1.000
19	56.48	-.51	0.00	7.90E+03	1.06E-02	1.00E-02	.962	1.101E-02	2.478E-04	2.349E-04	311.5				1.000
20	51.39	-.51	0.00	8.00E+03	1.07E-02	1.02E-02	.91	1.173E-02	2.514E-04	2.383E-04	311.4				1.000
21	48.86	-.51	0.00	8.72E+03	1.16E-02	1.10E-02	.956	1.209E-02	2.735E-04	2.563E-04	311.7				1.000
22	46.31	-.51	0.00	8.85E+03	1.19E-02	1.12E-02	.951	1.247E-02	2.776E-04	2.630E-04	311.8				1.000
23	43.77	-.51	0.00	9.17E+03	1.23E-02	1.17E-02	.957	1.285E-02	2.877E-04	2.726E-04	311.9				1.000
24	41.24	-.51	0.00	9.80E+03	1.31E-02	1.25E-02	.994	1.323E-02	3.077E-04	2.916E-04	312.2				1.000
25	38.70	-.51	0.00	9.87E+03	1.32E-02	1.25E-02	.968	1.361E-02	3.092E-04	2.921E-04	311.1				1.000
103	39.97	1.52	0.00	9.12E+03	1.23E-02	1.17E-02	.917	1.342E-02	2.890E-04	2.728E-04	316.3	1.23E-02	1.000	.917	.935
105	39.97	1.02	0.00	9.10E+03	1.22E-02	1.15E-02	.908	1.342E-02	2.852E-04	2.700E-04	317.5	1.22E-02	1.000	.908	.925
107	39.97	.51	.00	[illegible]	1.20E-02	1.14E-02	.895	1.342E-02	2.809E-04	2.661E-04	316.8	1.20E-02	1.000	.895	.912
108	39.97	.25	0.00	[illegible]	1.12E-02	1.06E-02	.832	1.342E-02	2.612E-04	2.474E-04	315.4	1.12E-02	1.000	.832	.848
110	39.97	[illegible]	.04	[illegible]	8.91E-03	8.44E-03	.664	1.342E-02	2.084E-04	1.975E-04	314.0	8.91E-03	1.000	.664	.677
111	39.97	[illegible]	.15	[illegible]	7.54E-03	7.15E-03	.562	1.342E-02	1.765E-04	1.673E-04	313.2	7.54E-03	1.000	.562	.573
112	39.97	[illegible]	.25	[illegible]	5.26E-03	4.99E-03	.392	1.342E-02	1.231E-04	1.167E-04	311.9	5.26E-03	1.000	.392	.400
113	39.97	[illegible]	.36	2.41E+03	3.22E-03	3.06E-03	.240	1.342E-02	7.545E-05	7.151E-05	310.6	3.22E-03	1.000	.240	.245
114	39.97	[illegible]	.76	[illegible]	7.66E-04	[illegible]	.057	1.342E-02	1.792E-05	1.699E-05	309.2	7.66E-04	1.000	.057	.058
115	39.97	[illegible]	.89												
116	39.97	[illegible]	1.14												
117	39.97	[illegible]	[illegible]												
118	39.97	[illegible]	[illegible]												
119	39.97	[illegible]	[illegible]												
120	39.97	[illegible]	2.79												
[illegible]	46.32	1.27	[illegible]	[illegible]	1.11E-02	[illegible]	[illegible]	[illegible]	[illegible]	2.455E-04	313.6	1.11E-02	1.000	.889	.93
[illegible]	45.32	1.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.523E-04	2.392E-04	314.4	1.08E-02	1.000	.861	.911
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	313.5	1.02E-02	1.000	.82	.863
[illegible]	45.32	[illegible]	[illegible]	[illegible]	[illegible]	8.59E-03	.782	1.247E-02	2.194E-04	[illegible]	313.2	9.38E-03	1.000	.752	.791
[illegible]	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.247E-02	[illegible]	[illegible]	311.7	7.33E-03	1.000	.506	.616

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HW TEST (132), D.B. BLUMER, IN-LINE RSI GAP RUN (20) 1973 PAGE 49

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	46.32	0.00	.18	7.155E+03	6.88E-03	6.92E-03	.552	1.247E-02	1.611E-04	1.527E-04	309.1	6.88E-03	1.000	.552	.581
212	46.32	0.00	.25	3.F1E+03	4.81E-03	4.56E-03	.386	1.247E-02	1.127E-04	1.068E-04	308.5	4.81E-03	1.000	.386	.406
213	46.32	0.00	.39												
214	46.32	0.00	.64	7.26E+00	5.51E-06	5.21E-06	.000	1.247E-02	1.290E-07	1.220E-07	339.7	5.51E-06	1.000	.000	.000
215	46.32	0.00	.89												
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.91												
220	46.32	0.00	2.29												
406	56.49	.75	.10	3.416E+03	5.17E-03	4.30E-03	.470	1.100E-02	1.211E-04	1.147E-04	311.8	5.17E-03	1.000	.470	.489
407	56.48	.51	.20	3.F45E+03	4.74E-03	4.49E-03	.431	1.100E-02	1.179E-04	1.051E-04	311.0	4.74E-03	1.000	.431	.448
408	56.48	.25	[illegible]	7.11E+03	9.49E-03	8.99E-03	.862	1.101E-02	2.220E-04	2.194E-04	309.8	9.49E-03	1.000	.862	.897
409	56.48	.15	[illegible]	[illegible]	9.05E-03	8.58E-03	.823	1.101E-02	2.119E-04	2.006E-04	309.9	9.05E-03	1.000	.823	.855
410	56.48	.04	.04	[illegible]	8.10E-03	7.68E-03	.730	1.101E-02	1.896E-04	1.797E-04	309.4	8.10E-03	1.000	.736	.765
411	56.48	0.00	.15	[illegible]	7.08E-03	6.71E-03	.644	1.101E-02	1.658E-04	1.571E-04	309.7	7.08E-03	1.000	.644	.669
412	56.48	0.00	.25	[illegible]	4.55E-03	4.32E-03	.414	1.101E-02	1.066E-04	1.010E-04	307.6	4.55E-03	1.000	.414	.430
413	56.48	0.00	.39	1.6[illegible]E+03	2.58E-03	2.44E-03	.234	1.101E-02	6.033E-05	5.719E-05	306.8	2.58E-03	1.000	.234	.244
414	56.48	0.00	.64												
415	56.48	0.00	.89												
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.90												
420	56.48	.00	2.29												
506	64.10	.76	[illegible]	[illegible]	7.66E-03	7.26E-03	.755	1.014E-02	1.793E-04	1.699E-04	311.0	7.66E-03	1.000	.755	.680
507	64.10	.51	.20	[illegible]	7.87E-03	7.46E-03	.776	1.014E-02	1.842E-04	1.745E-04	310.8	7.87E-03	1.000	.776	.797
508	64.10	.25	[illegible]	[illegible]	8.97E-03	[illegible]	.885	1.014E-02	2.13[illegible]E-04	1.993E-04	310.1	8.97E-03	1.000	.68[illegible]	.806
509	64.10	.15	.06	[illegible]	8.74E-03	[illegible]	.862	1.014E-02	2.045E-04	1.939E-04	309.6	8.74E-03	1.000	.862	.785
510	64.10	.04	.04	[illegible]	8.02E-03	7.60E-03	.790	1.014E-02	1.876E-04	1.776E-04	309.1	8.02E-03	1.000	.790	.720
511	64.10	0.00	.15	[illegible]	7.27E-03	6.89E-03	.717	1.014E-02	1.701E-04	1.612E-04	309.4	7.27E-03	1.000	.717	.653
512	64.10	0.00	.25	[illegible]	5.03E-03	4.77E-03	.496	1.014E-02	1.177E-04	1.115E-04	308.1	5.03E-03	1.000	.496	.452
513	64.10	0.00	.38	2.2[illegible]E+03	3.05E-03	2.89E-03	.301	1.014E-02	7.139E-05	6.767E-05	307.[illegible]	3.05E-03	1.000	.301	.274
514	64.10	0.00	.64	[illegible]	6.55E-05	6.21E-05	[illegible]	1.014E-02	1.533E-06	1.454E-06	305.[illegible]	6.55E-05	1.000	.006	.006
515	64.10	0.00	.89												

EDGE HEATING USED FOR HE

X=	3.871E+01	HL	/HREFF=	9.479E-01
X=	4.124E+01	HL	/HREFF=	9.939E-01
X=	4.377E+01	HL	/HREFF=	[illegible]
X=	4.631E+01	HL	/HREFF=	[illegible]
X=	4.846E+01	HL	/HREFF=	[illegible]
X=	5.1[illegible]	HL	/HREFF=	[illegible]

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X=   [illegible]  HL  /HREFF=   [illegible]
X=   6.156E+01    HL  /HREFF=   1.017E+00
X=   6.664E+01    HL  /HREFF=   1.13[illegible]E+00
X=   7.172E+01    HL  /HREFF=   1.2[illegible]2E+00
X=   7.680E+01    HL  /HREFF=   1.174E+00
X=   8.188E+01    HL  /HREFF=   1.133E+00
X=   8.696E+01    HL  /HREFF=   1.27[illegible]E+00
X=   9.204E+01    HL  /HREFF=   1.431E+00
X=   9.712E+01    HL  /HREFF=   1.351E+00
X=   1.022E+02    HL  /HREFF=   1.4[illegible]7E+00
X=   1.073E+02    HL  /HREFF=   1.437E+00
X=   1.124E+02    HL  /HREFF=   1.433E+00
X=   1.226E+02    HL  /HREFF=   1.3[illegible]E+00

X=   3.937E+01    HL  /HREFF=   [illegible]-01
X=   4.632E+01    HL  /HREFF=   8.2[illegible]-01
X=   5.648E+01    HL  /HREFF=   4.309E-01
X=   6.413E+01    HL  /HREFF=   7.763E-01
B.L. TRANSITION DISTANCE = [illegible]1.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =[illegible]376.00 CM
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[illegible] IN-LINE RSI GAP [illegible] 21) 1373
TT         = [illegible] (K)                GAP LENGTH = 37.[illegible] (CM)
PT         = [illegible].21[illegible](N/M2)     GAP WIDTH  =   .2[illegible] (CM)
HT         = 1.11[illegible] (J/KG)            GAP DEPTH  =  2.[illegible]32(CM)
RE/METER   = 1.[illegible]                   ORIENTATION= [illegible] (DEG)
MACH       = [illegible]                      QS         =  7.3737[illegible](W/M2)
RHO VEL    = 2.1[illegible](KG/M2-S)         MOC.POSITION=  2
HAW/HT     = [illegible] FOR HT
HAW/HT     = [illegible] FOR HL
HLCC       = HL(2ND. ORDER CUND.,)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
[illegible]	122.56	-.51	[illegible]	[illegible]	1.05[illegible]E-02	1.[illegible]E-02	1.4[illegible]	7.273E-03	4.329E-04	4.573E-04	300.1				1.000
7	117.47	-.51	[illegible]												
8	112.[illegible]	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.3[illegible]	[illegible]	4.27[illegible]	4.347E-04	300.4				1.000
9	1[illegible].31	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.3[illegible]	6.737E-03	4.159E-04	3.946E-04	300.4				1.000
10	1[illegible]2.[illegible]	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.321	6.889E-03	4.14[illegible]	3.919E-04	300.5				1.000
11	97.12	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.253	[illegible]	4.[illegible]	3.828E-04	300.				1.000
12	92.[illegible]	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.248	7.22[illegible]E-03	4.1[illegible]	3.884E-04	301.[illegible]				1.000
13	86.96	-.51	[illegible]	[illegible]	3.593E-03	[illegible]	1.225	7.337E-03	4.088E-04	3.870E-04	301.				1.000
14	81.88	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.2[illegible]3	7.413E-03	4.190E-04	3.966E-04	301.4				1.000
15	76.[illegible]	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.191	7.5[illegible]E-03	4.[illegible]	3.[illegible]15E-04	301.4				1.000
16	71.72	-.51	[illegible]	[illegible]	3.793E-03	[illegible]	1.155	7.837E-03	3.996E-04	3.782E-04	301.4				1.000
17	66.64	-.51	[illegible]	[illegible]	[illegible]	[illegible]	1.111	[illegible]	4.[illegible]E-04	3.847E-04	302.2				1.000
18	61.5[illegible]	-.51	[illegible]	[illegible]	9.755E-03	[illegible]	1.011	[illegible]	3.9[illegible]E-04	3.766E-04	303.2				1.000
19	56.48	-.51	[illegible]	5.6[illegible]E+03	8.575E-03	[illegible]	.926	9.175E-03	3.865E-04	3.658E-04	303.6				1.000
20	51.39	-.51	[illegible]	[illegible]	[illegible]	[illegible]	.954	9.[illegible]E-03	3.972E-04	3.759E-04	303.5				1.000
21	[illegible]	-.51	[illegible]	6.22[illegible]E+03	[illegible]	[illegible]	.942	9.91[illegible]E-03	4.247E-04	4.019E-04	303.7				1.000
22	46.31	-.51	[illegible]	[illegible]	9.755E-03	9.23E-03	.356	1.02[illegible]E-02	4.435E-04	4.197E-04	303.6				1.000
23	43.77	-.51	[illegible]	[illegible]	1.[illegible]E-02	9.54E-03	.363	1.[illegible]E-02	4.587E-04	4.341E-04	303.6				1.000
24	41.[illegible]	-.51	[illegible]	[illegible]	1.[illegible]E-02	9.35E-03	.978	1.[illegible]75E-02	4.782E-04	4.525E-04	304.1				1.000
25	3[illegible]	-.51	[illegible]	[illegible]	1.033E-02	9.79E-03	.338	1.1[illegible]3E-02	4.726E-04	4.453E-04	303.3				1.000
1[illegible]3	39.[illegible]	1.[illegible]	[illegible]	[illegible]	[illegible]	9.[illegible]2E-03	.875	1.[illegible]89E-02	4.337E-04	4.103E-04	306.1	9.54E-03	1.000	.875	.914
1[illegible]	39.97	1.[illegible]	[illegible]	[illegible]	[illegible].515E-03	[illegible].395E-03	.873	1.[illegible]89E-02	4.32[illegible]E-04	4.[illegible]90E-04	307.[illegible]	9.51E-03	1.000	.873	.911
1[illegible]	39.97	[illegible]	[illegible]	[illegible]	[illegible]	9.[illegible]1E-03	.874	1.[illegible]89E-02	4.33[illegible]E-04	4.[illegible]07E-04	3[illegible].7	[illegible].52E-03	1.000	.874	.913
1[illegible]	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]9E-02	4.134E-04	3.912E-04	306.[illegible]	9.[illegible]9E-03	1.000	.835	.971
1[illegible]	39.97	[illegible]	[illegible]	[illegible]	7.[illegible]3E-03	[illegible]	.682	1.[illegible]89E-02	3.39[illegible]E-04	3.198E-04	30[illegible].0	7.43[illegible]E-03	1.000	.682	.712
111	[illegible].37	[illegible]	.15	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	2.[illegible]7E-04	2.713E-04	30[illegible]	6.30E-03	1.000	.579	.604
112	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.1[illegible]E-03	[illegible]	1.[illegible]9E-02	1.97[illegible]E-04	1.8[illegible]E-04	30[illegible]	4.33E-03	1.000	.398	.415
11[illegible]	39.97	[illegible]	[illegible]	1.[illegible]E+03	[illegible]	2.5[illegible]E-03	.243	1.[illegible]9E-02	1.2[illegible]3E-04	1.139E-04	303.2	2.655E-03	1.000	.243	.254
114	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	3.[illegible]E-05	[illegible].441E-05	302.1	7.995E-04	1.000	.073	.077
11[illegible]	39.97	[illegible]	.79	1.[illegible]E+02	[illegible]	1.925E-04	[illegible]19	1.[illegible]E-02	[illegible].229E-06	8.735E-06	301.1	2.[illegible]3E-04	1.000	.019	.019
116	39.97	[illegible]	1.14												
117	39.97	[illegible]	1.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	2.73[illegible]E-07	2.[illegible]E-07	29[illegible]	6.02E-06	1.000	.001	.001
118	39.97	[illegible]	1.[illegible]												
119	39.97	[illegible]	1.[illegible]												
12[illegible]	39.97	[illegible]	[illegible]												
2[illegible]3	46.32	1.[illegible]	[illegible]	[illegible]	[illegible]	8.2[illegible]E-03	[illegible]	1.[illegible]E-02	3.34[illegible]E-04	3.72[illegible]E-04	304.4	8.66E-03	1.000	.850	.88[illegible]
2[illegible]	46.32	1.[illegible]2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	3.[illegible]E-04	3.[illegible]E-04	30[illegible]	8.59E-03	1.000	.842	.88[illegible]
2[illegible]	46.32	[illegible]1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	3.312[illegible]E-04	3.[illegible]2E-04	304.[illegible]	[illegible]E-03	1.000	.844	.882
2[illegible]	46.32	[illegible]	[illegible]	[illegible]	[illegible]	8.225E-03	[illegible]	1.[illegible]9E-02	3.953E-04	3.74[illegible]E-04	304.3	8.65E-03	1.000	.853	.891
21[illegible]	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	3.5[illegible]E-04	[illegible].345E-04	303.4	7.77E-03	1.000	.762	.797

AMES 3.5 FT HWT TEST (1*2), C.B. BLUMER, IN-LINE RSI GAP RUN(21) 1373 PAGE 42

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	46.32	0.00	.15	4.64E+03	6.95E-03	6.58E-03	.682	1.019E-02	3.163E-04	2.994E-04	301.9	6.95E-03	1.000	.682	.713
212	46.32	0.00	.25	3.57E+03	5.24E-03	4.36E-03	.514	1.019E-02	2.385E-04	2.257E-04	301.6	5.24E-03	1.000	.514	.538
213	46.32	0.00	.38												
214	46.32	0.00	.54	2.39E+00	3.78E-06	3.36E-06	.000	1.019E-02	1.718E-07	1.621E-07	338.7	3.78E-06	1.000	.000	.000
215	46.32	0.00	.89	2.01E+02	3.00E-04	2.84E-04	.029	1.019E-02	1.366E-05	1.294E-05	299.6	3.00E-04	1.000	.029	.031
216	46.32	0.00	1.14	4.71E+01	7.83E-05	6.66E-05	.007	1.019E-02	3.198E-06	3.027E-06	299.3	7.83E-05	1.000	.007	.007
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
406	56.48	.76	.00	[illegible].16E+03	6.24E-03	7.91E-03	.680	9.179E-03	2.839E-04	2.687E-04	303.4	6.24E-03	1.000	.680	.734
407	56.48	.51	.00	4.37E+03	6.55E-03	6.20E-03	.714	9.178E-03	2.981E-04	2.821E-04	303.0	6.55E-03	1.000	.714	.771
408	56.48	.25	0.00	4.66E+03	6.99E-03	6.61E-03	.761	9.177E-03	3.170E-04	3.008E-04	302.4	6.99E-03	1.000	.761	.822
409	56.49	.15	[illegible]	4.46E+03	6.69E-03	6.33E-03	.729	9.177E-03	3.042E-04	2.879E-04	302.5	6.69E-03	1.000	.729	.787
410	56.48	.06	.04	3.96E+03	5.94E-03	5.62E-03	.648	9.176E-03	2.793E-04	2.558E-04	302.3	5.94E-03	1.000	.648	.699
411	56.48	0.00	.15	3.53E+03	5.29E-03	5.0[illegible]E-03	.576	9.176E-03	2.495E-04	2.276E-04	301.9	5.29E-03	1.000	.576	.622
412	56.48	0.00	.25	2.29E+03	3.42E-03	3.24E-03	.373	9.176E-03	1.557E-04	1.474E-04	301.2	3.42E-03	1.000	.373	.403
413	56.48	0.00	.38	1.47E+03	2.21E-03	2.09E-03	.240	9.176E-03	1.004E-04	9.500E-05	300.5	2.21E-03	1.000	.240	.260
414	56.48	0.00	.64	3.43E+02	5.13E-04	4.85E-04	.056	9.176E-03	2.333E-05	2.208E-05	300.0	5.13E-04	1.000	.056	.060
415	56.48	0.00	.89												
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.90												
420	56.48	0.00	2.29												
506	64.10	.76	0.00	3.71E+03	5.56E-03	5.26E-03	.666	8.356E-03	2.530E-04	2.394E-04	302.9	5.56E-03	1.000	.666	.627
507	64.10	.51	0.00	3.95E+03	5.92E-03	5.60E-03	.709	8.354E-03	2.693E-04	2.549E-04	302.8	5.92E-03	1.000	.709	.668
508	64.10	.25	0.00	4.46E+03	6.68E-03	6.32E-03	.800	8.353E-03	3.039E-04	2.876E-04	302.6	6.68E-03	1.000	.800	.754
509	64.10	.15	.00	4.36E+03	6.54E-03	6.19E-03	.783	8.352E-03	2.976E-04	2.817E-04	302.2	6.54E-03	1.000	.783	.738
510	64.10	.06	.04	4.22E+03	6.33E-03	5.98E-03	.721	8.352E-03	2.740E-04	2.594E-04	301.8	6.33E-03	1.000	.721	.680
511	64.10	0.00	.15	3.74E+03	5.61E-03	5.31E-03	.672	8.351E-03	2.554E-04	2.417E-04	302.1	5.61E-03	1.000	.672	.634
512	64.10	0.00	.25	3.10E+03	4.64E-03	4.39E-03	.556	8.351E-03	2.111E-04	1.999E-04	301.6	4.64E-03	1.000	.556	.524
513	64.10	0.00	.38	1.95E+03	2.92E-03	2.77E-03	.350	8.351E-03	1.329E-04	1.258E-04	301.1	2.92E-03	1.000	.350	.330
514	64.10	0.00	.64	4.58E+02	6.87E-04	6.50E-04	.082	8.351E-03	3.125E-05	2.958E-05	300.3	6.87E-04	1.000	.082	.078
515	64.10	0.00	.89												

EDGE HEATING USED FOR HT
X= 3.873E+01 HL /HREFF 9.377E-01
X= 4.124E+01 HL /HREFF= 9.777E-01
X= 4.377E+01 HL /HREFF= 9.627E-01
X= 4.631E+01 HL /HREFF= 9.564E-01
X= 4.886E+01 HL /HREFF= 9.413E-01
X= 5.139E+01 HL /HREFF= [illegible]E-01

X=	[illegible]	HL	/HREFF= [illegible]
X=	6.156E+01	HL	/HREFF= 1.011E+00
X=	6.664E+01	HL	/HREFF= 1.111E+00
X=	7.172E+01	HL	/HREFF= 1.1[illegible]E+00
X=	7.680E+01	HL	/HREFF= 1.181E+00
X=	8.188E+01	HL	/HREFF= 1.2[illegible]E+00
X=	8.696E+01	HL	/HREFF= 1.225E+00
X=	9.204E+01	HL	/HREFF= 1.248E+00
X=	9.712E+01	HL	/HREFF= 1.2[illegible]E+00
X=	1.022E+02	HL	/HREFF= 1.321E+00
X=	1.073E+02	HL	/HREFF= 1.361E+00
X=	1.124E+02	HL	/HREFF= 1.372E+00
X=	1.226E+02	HL	/HREFF= 1.4[illegible]E+00
X=	3.997E+01	HL	/HREFF= 8.[illegible]41E-01
X=	4.612E+01	HL	/HREFF= 8.438E-01
X=	5.648E+01	HL	/HREFF= 7.[illegible]1E-01
X=	6.419E+01	HL	/HREFF= 7.[illegible]6E-01

B.L. TRANSITION DISTANCE = [illegible].33 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.0[illegible] CM

C-2

AMES 3.5 FT HWT TEST (1F2), C.B. BLUMER, IN-LINE RSI GAP RUN(22) 1973 PAGE 43

TT	= 1.1532E+03(K)		GAP LENGTH =	30.480(CM)
PT	= 1.0315E+06(N/M2)		GAP WIDTH =	.294(CM)
HT	= 1.2346E+06(J/KG)		GAP DEPTH =	2.032(CM)
RE/METER	= 3.2576E+06		ORIENTATION=	0.000(DEG)
MACH	= 5.100		QS =	1.2856E+05(W/M2)
RHO VEL	= 4.5275E+01(KG/M2-S)		MOD.POSITION=	2
HAW/HT	= 0.908 FOR HT			
HAW/HT	= 0.874 FOR HL			
HLCC	= HL(2ND. ORDER COND.,)			

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	0.00	3.79E+04	4.39E-02	4.17E-02	1.560	2.815E-02	1.054E-03	1.028E-03	304.1				1.000
7	117.47	-.51	0.00												
8	112.37	-.51	0.00	4.24E+04	4.19E-02	3.38E-02	2.201	1.906E-02	1.035E-03	9.818E-04	304.7				1.000
9	107.31	-.51	0.00	3.75E+04	3.96E-02	3.75E-02	2.494	1.587E-02	9.770E-04	9.267E-04	304.9				1.000
10	102.20	-.51	0.00	2.76E+04	3.58E-02	3.39E-02	2.660	1.345E-02	8.831E-04	8.376E-04	305.1				1.000
11	97.12	-.51	0.00	2.26E+04	2.94E-02	2.78E-02	2.532	1.159E-02	7.245E-04	6.871E-04	305.4				1.000
12	92.04	-.51	0.00	1.95E+04	2.40E-02	2.28E-02	2.352	1.021E-02	5.927E-04	5.621E-04	305.6				1.000
13	86.96	-.51	0.00	1.50E+04	1.94E-02	1.84E-02	2.050	9.472E-03	4.793E-04	4.545E-04	306.2				1.000
14	81.88	-.51	0.00	1.37E+04	1.78E-02	1.69E-02	1.975	9.016E-03	4.393E-04	4.167E-04	306.4				1.000
15	76.80	-.51	0.00	1.31E+04	1.71E-02	1.62E-02	1.900	8.985E-03	4.213E-04	3.996E-04	306.4				1.000
16	71.72	-.51	0.00	1.29E+04	1.67E-02	1.59E-02	1.819	9.204E-03	4.132E-04	3.919E-04	306.7				1.000
17	66.64	-.51	0.00	1.07E+04	1.40E-02	1.33E-02	1.456	9.593E-03	3.449E-04	3.270E-04	308.1				1.000
18	61.56	-.51	0.00	8.66E+03	1.13E-02	1.07E-02	1.120	1.009E-02	2.789E-04	2.644E-04	309.9				1.000
19	56.48	-.51	0.00	8.97E+03	1.17E-02	1.11E-02	1.094	1.071E-02	2.891E-04	2.741E-04	310.4				1.000
20	51.39	-.51	0.00	9.29E+03	1.21E-02	1.15E-02	1.065	1.139E-02	2.995E-04	2.839E-04	310.3				1.000
21	48.86	-.51	0.00	9.46E+03	1.29E-02	1.22E-02	1.097	1.174E-02	3.178E-04	3.013E-04	310.7				1.000
22	46.31	-.51	0.00	9.99E+03	1.31E-02	1.24E-02	1.078	1.211E-02	3.221E-04	3.054E-04	310.6				1.000
23	43.77	-.51	0.00	1.00E+04	1.31E-02	1.24E-02	1.050	1.247E-02	3.233E-04	3.062E-04	310.6				1.000
24	41.24	-.51	0.00	1.01E+04	1.32E-02	1.25E-02	1.031	1.282E-02	3.262E-04	3.093E-04	310.9				1.000
25	38.73	-.51	0.00	9.76E+03	1.27E-02	1.21E-02	.966	1.318E-02	3.143E-04	2.980E-04	309.5				1.000
103	39.97	1.02	0.00	8.96E+03	1.17E-02	1.11E-02	.903	1.301E-02	2.999E-04	2.748E-04	313.9	1.17E-02	1.000	.903	.905
105	39.97	1.02	0.00	8.91E+03	1.17E-02	1.11E-02	.900	1.300E-02	2.859E-04	2.730E-04	315.4	1.17E-02	1.000	.900	.902
107	39.97	.51	0.00	8.95E+03	1.19E-02	1.11E-02	.904	1.306E-02	2.903E-04	2.751E-04	315.6	1.18E-02	1.000	.904	.906
108	39.97	.25	0.00	8.66E+03	1.12E-02	1.06E-02	.864	1.300E-02	2.772E-04	2.628E-04	314.0	1.12E-02	1.000	.364	.865
110	39.97	.14	.04	7.10E+03	9.30E-03	8.91E-03	.715	1.300E-02	2.295E-04	2.175E-04	312.7	9.30E-03	1.000	.715	.716
111	39.97	0.00	.15	6.13E+03	8.02E-03	7.60E-03	.617	1.300E-02	1.979E-04	1.876E-04	312.2	6.02E-03	1.000	.617	.616
112	39.97	0.00	.25	4.45E+03	5.82E-03	5.52E-03	.448	1.300E-02	1.436E-04	1.362E-04	311.0	5.82E-03	1.000	.448	.448
113	39.97	0.00	.38	2.87E+03	3.75E-03	3.55E-03	.288	1.300E-02	9.246E-05	8.767E-05	310.0	3.75E-03	1.000	.288	.289
114	39.97	0.00	.64	9.16E+02	1.19E-03	1.13E-03	.092	1.300E-02	2.943E-05	2.790E-05	303.4	1.19E-03	1.000	.092	.092
115	39.97	0.00	.89	9.29E+01	1.21E-04	1.15E-04	.009	1.302E-02	2.987E-06	2.826E-06	306.9	1.21E-04	1.000	.009	.909
116	39.97	0.00	1.14												
117	39.97	0.00	1.40												
118	39.97	0.00	1.65												
119	39.97	0.00	1.90												
120	39.97	0.00	2.29												
203	46.32	1.52	0.00	8.24E+03	1.09E-02	1.03E-02	.901	1.219E-02	2.683E-04	2.549E-04	311.1	1.09E-02	1.000	.901	.877
205	46.32	1.02	0.00	8.11E+03	1.06E-02	1.01E-02	.877	1.209E-02	2.613E-04	2.483E-04	311.9	1.06E-02	1.000	.877	.814
207	46.32	.51	0.00	8.70E+03	1.10E-02	1.04E-02	.907	1.216E-02	2.717E-04	2.566E-04	311.7	1.10E-02	1.000	.907	.841
208	46.32	.25	0.00	9.11E+03	1.19E-02	1.13E-02	.984	1.216E-02	2.938E-04	2.786E-04	311.6	1.19E-02	1.000	.984	.913
210	46.32	.04	.04	9.24E+03	1.21E-02	1.14E-02	.996	1.210E-02	2.974E-04	2.820E-04	303.9	1.21E-02	1.000	.996	.924

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (112), O.A. BLUMER, IN-LINE RSI GAP RUN(22) 1973 PAGE 44

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	46.32	[illegible]	.15	[illegible]E+03	1.23E-02	1.17E-02	1.017	1.21 E-02	3.035E-04	2.878E-04	307.2	1.23E-02	1.000	1.017	.943
212	46.32	[illegible]	.25	9.19E+03	1.06E-02	1.01E-02	.879	1.210E-02	2.625E-04	2.490E-04	336.6	1.06E-02	1.000	.879	.816
213	46.32	[illegible]	.36												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.99	9.89E+02	1.23E-03	1.21E-03	[illegible]	1.210E-02	3.159E-05	2.997E-05	313.7	1.28E-03	1.000	.186	.898
216	46.32	[illegible]	1.14												
217	46.32	[illegible]	1.4[illegible]												
218	46.32	[illegible]	1.65												
219	46.32	[illegible]	1.90												
220	46.32	[illegible]	2.29												
406	56.48	.75	[illegible]	3.92E+03	5.12E-03	4.95E-03	.476	1.071E-02	1.253E-04	1.197E-04	309.9	5.12E-03	1.000	.478	.437
407	56.48	.31	[illegible]	[illegible]E+03	5.24E-03	4.97E-03	.490	1.071E-02	1.294E-04	1.226E-04	309.3	5.24E-03	1.000	.490	.448
408	56.48	.25	[illegible]	7.91E+03	1.03E-02	9.77E-03	.962	1.071E-02	2.542E-04	2.411E-04	308.1	1.03E-02	1.000	.962	.886
409	56.48	.15	[illegible]	7.77E+03	1.01E-02	9.59E-03	.945	1.071E-02	2.496E-04	2.367E-04	308.3	1.01E-02	1.000	.945	.864
410	56.48	[illegible]	.04	7.17E+03	9.33E-03	9.85E-03	.872	1.071E-02	2.303E-04	2.184E-04	307.8	9.33E-03	1.000	.872	.797
411	56.48	[illegible]	.15	6.73E+03	8.75E-03	8.29E-03	.817	1.071E-02	2.159E-04	2.047E-04	307.2	8.75E-03	1.000	.817	.747
412	56.48	[illegible]	.25	[illegible]E+03	6.55E-03	6.21E-03	.612	1.071E-02	1.617E-04	1.534E-04	306.1	6.55E-03	1.000	.612	.560
413	56.48	[illegible]	.38	3.84E+03	4.73E-03	4.48E-03	.441	1.071E-02	1.166E-04	1.106E-04	305.5	4.73E-03	1.000	.441	.404
414	56.48	[illegible]	.64	1.37E+03	1.78E-03	1.68E-03	.166	1.071E-02	4.382E-05	4.156E-05	304.4	1.78E-03	1.000	.166	.152
415	56.48	[illegible]	.99	[illegible]E+01	5.07E-05	1.37E-05	[illegible]	1.071E-02	1.449E-06	1.375E-06	303.7	5.07E-05	1.000	.095	.005
416	56.48	[illegible]	1.14												
417	56.48	[illegible]	1.40												
418	56.48	[illegible]	1.65												
419	56.48	[illegible]	1.90												
420	56.48	[illegible]	2.29												
506	64.10	.75	[illegible]	7.79E+03	7.82E-03	6.56E-03	.714	9.830E-03	1.733E-04	1.643E-04	308.8	7.82E-03	1.000	.714	.794
507	64.10	.51	[illegible]	6.22E+03	8.10E-03	7.56E-03	.823	9.830E-03	1.999E-04	1.895E-04	308.7	8.10E-03	1.000	.823	.639
508	64.10	.23	[illegible]	[illegible]E+03	9.03E-03	8.57E-03	.919	9.839E-03	2.230E-04	2.114E-04	309.2	9.03E-03	1.000	.918	.717
509	64.10	.15	[illegible]	6.86E+03	8.54E-03	8.10E-03	.858	9.839E-03	2.107E-04	1.998E-04	307.6	8.54E-03	1.000	.866	.674
510	64.10	[illegible]	.04	[illegible]E+03	7.82E-03	7.42E-03	.795	9.846E-03	1.930E-04	1.830E-04	307.4	7.82E-03	1.000	.795	.617
511	64.10	[illegible]	.15	[illegible]E+03	7.16E-03	6.81E-03	.729	9.84[illegible]E-03	1.771E-04	1.680E-04	307.7	7.16E-03	1.000	.729	.566
512	64.10	[illegible]	.25	[illegible]E+03	5.76E-03	5.48E-03	.585	9.8[illegible]E-03	1.422E-04	1.348E-04	306.9	5.76E-03	1.000	.585	.455
513	64.10	[illegible]	.38	2.[illegible]E+03	3.63E-03	3.45E-03	.369	9.847E-03	8.971E-05	8.508E-05	306.6	3.63E-03	1.000	.369	.287
514	64.10	[illegible]	.64	9.[illegible]E+02	1.17E-03	1.11E-03	.119	9.8[illegible]E-03	2.895E-05	2.747E-05	304.7	1.17E-03	1.000	.119	.093
515	64.10	[illegible]	.99												

EDGE HEATING USED FOR HE

X=	3.973E+01	HL /HREFF=	9.610E-01
X=	4.124E+01	HL /HREFF=	1.031E+00
X=	4.377E+01	HL /HREFF=	1.[illegible]E+00
X=	4.631E+01	HL /HREFF=	1.[illegible]E+00
X=	4.886E+01	HL /HREFF=	1.097E+00
X=	5.139E+01	HL /HREFF=	1.[illegible]E+00
X=	[illegible]	HL /HREFF=	[illegible]

X=	[illegible]E+01	HL	/HREFF=	1.[illegible]
X=	6.156E+01	HL	/HREFF=	1.120E+00
X=	6.664E+01	HL	/HREFF=	1.456E+00
X=	7.172E+01	HL	/HREFF=	1.819E+00
X=	7.680E+01	HL	/HREFF=	1.930E+00
X=	8.188E+01	HL	/HREFF=	1.975E+00
X=	8.696E+01	HL	/HREFF=	2.[illegible]E+00
X=	9.204E+01	HL	/HREFF=	2.352E+00
X=	9.712E+01	HL	/HREFF=	2.532E+00
X=	1.022E+02	HL	/HREFF=	2.[illegible]E+00
X=	1.073E+02	HL	/HREFF=	2.494E+00
X=	1.124E+02	HL	/HREFF=	2.2[illegible]1E+00
X=	1.226E+02	HL	/HREFF=	1.563E+00
X=	3.997E+01	HL	/HREFF=	9.[illegible]5E-01
X=	4.032E+01	HL	/HREFF=	9.049E-01
X=	5.040E+01	HL	/HREFF=	4.898E-01
X=	6.413E+01	HL	/HREFF=	8.233E-01

B.L. TRANSITION DISTANCE = 78.73 CM
FULLY TURBULENT B.L. CONDITIONS AT = 102.23 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1?2), D.A. BLUMER, IN-LINE RSI GAP RUN(23) 1373 PAGE 45

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TT        = 1.0362E+03(K)             GAP LENGTH = 30.48 (CM)
PT        = 5.2129E+05(N/M2)          GAP WIDTH  =   .254(CM)
HT        = 1.156?E+16(J/KG)          GAP DEPTH  =  2.032(CM)
RE/METER  = 1.7?4?E+06                ORIENTATION=  0.000(DEG)
MACH      = 5.130                     QS         =  8.3390E+04(W/M2)
RHO VEL   = 2.1372E+01(KG/M2-S)       MOD.POSITION=  2
HAW/HT    = 0.908 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2ND. ORDER COND.,)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	[illegible]	[illegible]	.748	7.634E-03	2.638E-04	2.498E-04	398.0				1.000
17	66.64	-.51	0.00												
18	61.56	-.51	[illegible]	[illegible]	6.53E-03	6.15E-03	.757	6.582E-03	[illegible]	2.879E-04	309.8				1.000
19	56.48	-.51	[illegible]	[illegible]	6.99E-03	6.51E-03	.768	9.087E-03	3.267E-04	3.093E-04	310.1				1.000
20	51.39	-.51	[illegible]	6.21E+03	7.47E-03	7.07E-03	.782	9.547E-03	3.495E-04	3.309E-04	310.3				1.000
21	48.86	-.51	[illegible]	[illegible]	8.23E-03	7.79E-03	.847	9.796E-03	3.852E-04	3.647E-04	311.5				1.000
22	46.31	-.51	[illegible]	6.11E+03	8.75E-03	8.29E-03	.868	1.098E-02	4.095E-04	3.877E-04	310.7				1.000
23	43.77	-.51	[illegible]	6.44E+03	9.24E-03	8.74E-03	.892	1.036E-02	4.322E-04	4.091E-04	310.8				1.000
24	41.24	-.51	[illegible]	[illegible]	9.93E-03	9.37E-03	.930	1.064E-02	4.532E-04	4.305E-04	311.0				1.000
25	38.70	-.51	[illegible]	[illegible]	9.97E-03	9.44E-03	.913	1.092E-02	4.666E-04	4.418E-04	310.4				1.000
41	71.72	0.00	.25	6.48E+02	9.23E-04	8.74E-04	.122	7.635E-03	4.318E-05	4.089E-05	306.5				.164
42	66.64	[illegible]	.25	2.12E+03	3.02E-03	2.86E-03	.379	7.973E-03	1.413E-04	1.338E-04	307.2				.503
43	61.56	[illegible]	.25	1.61E+03	2.30E-03	2.18E-03	.266	8.583E-03	1.076E-04	1.019E-04	308.7				.354
44	56.48	[illegible]	.25	1.75E+03	2.50E-03	2.37E-03	.275	9.087E-03	1.179E-04	1.108E-04	309.2				.358
45	51.39	[illegible]	.25	1.67E+03	2.39E-03	2.26E-03	.250	9.546E-03	1.118E-04	1.059E-04	309.2				.320
46	48.86	[illegible]	.25	2.01E+03	2.88E-03	2.73E-03	.234	9.797E-03	1.349E-04	1.276E-04	309.4				.358
47	46.31	[illegible]	.25	2.44E+03	3.50E-03	3.31E-03	.347	1.098E-02	1.636E-04	1.549E-04	309.6				.400
48	43.77	[illegible]	.25	2.81E+03	4.02E-03	3.81E-03	.388	1.036E-02	1.881E-04	1.780E-04	309.5				.435
49	41.24	[illegible]	.25	2.65E+03	3.79E-03	3.59E-03	.357	1.064E-02	1.774E-04	1.680E-04	310.0				.383
[illegible]	38.70	[illegible]	.25	2.04E+03	2.92E-03	2.77E-03	.268	1.091E-02	1.367E-04	1.294E-04	309.3				.293
103	39.97	1.32	[illegible]	6.66E+03	9.58E-03	9.06E-03	.889	1.077E-02	4.491E-04	4.241E-04	313.7	9.58E-03	1.000	.889	.964
105	39.97	1.02	[illegible]	6.52E+03	9.40E-03	8.90E-03	.873	1.077E-02	4.398E-04	4.162E-04	314.6	9.40E-03	1.000	.873	.947
107	39.97	.51	[illegible]	[illegible]	9.98E-03	9.44E-03	.926	1.077E-02	4.669E-04	4.419E-04	314.3	9.98E-03	1.000	.926	1.005
108	39.97	.23	[illegible]	[illegible]	1.03E-02	9.72E-03	.953	1.077E-02	4.805E-04	4.548E-04	313.5	1.03E-02	1.000	.953	1.034
110	39.97	.04	.04	6.12E+03	8.79E-03	8.32E-03	.816	1.077E-02	4.113E-04	3.893E-04	312.5	8.79E-03	1.000	.816	.885
111	39.97	[illegible]	.15	5.32E+03	7.64E-03	7.23E-03	.709	1.078E-02	3.573E-04	3.383E-04	312.2	7.64E-03	1.000	.709	.769
112	39.97	[illegible]	.25	3.80E+03	5.45E-03	5.16E-03	.506	1.078E-02	2.551E-04	2.415E-04	311.3	5.45E-03	1.000	.506	.549
113	39.97	0.00	.38	2.35E+03	3.37E-03	3.19E-03	.313	1.076E-02	1.576E-04	1.492E-04	310.6	3.37E-03	1.000	.313	.339
114	39.97	[illegible]	.64	[illegible]	9.46E-04	8.96E-04	.088	1.078E-02	4.427E-05	4.191E-05	309.5	9.46E-04	1.000	.088	.695
115	39.97	[illegible]	.89	1.71E+02	2.45E-04	2.32E-04	.023	1.078E-02	1.145E-05	1.084E-05	308.4	2.45E-04	1.000	.023	.025
203	46.32	1.32	[illegible]	5.97E+03	8.56E-03	8.11E-03	.850	1.008E-02	4.007E-04	3.793E-04	311.6	8.56E-03	1.000	.850	.979
205	46.32	1.02	[illegible]	6.32E+03	9.09E-03	8.59E-03	.901	1.008E-02	4.248E-04	4.021E-04	312.2	9.08E-03	1.000	.901	1.030
207	46.32	.51	0.10	7.91E+03	1.14E-02	1.07E-02	1.127	1.008E-02	5.313E-04	5.029E-04	312.0	1.14E-02	1.000	1.127	1.29?
208	46.32	.25	[illegible]	[illegible]	1.16E-02	1.10E-02	1.154	1.008E-02	5.430E-04	5.149E-04	311.5	1.16E-02	1.000	1.154	1.32?
210	46.32	.05	.04	6.65E+03	9.54E-03	9.03E-03	.947	1.008E-02	4.465E-04	4.227E-04	310.6	9.54E-03	1.000	.947	1.091
211	46.32	[illegible]	.15	5.79E+03	8.30E-03	7.85E-03	.823	1.008E-02	3.882E-04	3.675E-04	310.3	8.30E-03	1.000	.823	.94?
212	46.32	[illegible]	.25	4.25E+03	6.09E-03	5.77E-03	.605	1.008E-02	2.851E-04	2.699E-04	303.6	6.09E-03	1.000	.605	.69?
213	46.32	[illegible]	.38	[illegible]	7.11E-06	6.73E-06	.001	1.008E-02	3.325E-07	3.140E-07	335.7	7.11E-06	1.000	.001	.001
214	46.32	[illegible]	.64	[illegible]	2.38E-06	2.24E-06	.000	1.008E-02	1.112E-07	1.050E-07	336.7	2.38E-06	1.000	.000	.000
215	46.32	[illegible]	.89	[illegible]	2.93E-04	2.78E-04	.029	1.008E-02	1.373E-05	1.300E-05	307.5	2.93E-04	1.000	.029	.034

AMES 3.5 FT HWT TEST (1+2), C.B. PLUMER, IN-LINE RSI GAP RUN(23) 1973 PAGE 46

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.99	1.14	1.515E+01	2.15E-05	2.33E-05	.002	1.006E-02	1.303E-06	9.517E-07	305.7	2.15E-05	1.000	.002	.002
217	46.32	0.00	1.40	9.53E+00	1.36E-05	1.28E-05	.001	1.008E-02	6.344E-07	6.008E-07	305.5	1.36E-05	1.000	.001	.002
218	46.32	0.33	1.65	2.41E+00	3.41E-06	3.23E-06	.000	1.009E-02	1.594E-07	1.510E-07	305.3	3.41E-06	1.000	.000	.000
219	46.32	0.33	1.90	7.22E+01	1.03E-04	9.73E-05	.010	1.008E-02	4.807E-06	4.552E-06	305.1	1.03E-04	1.000	.010	.012
220	46.32	0.39	2.29	5.22E+01	7.42E-05	7.03E-05	.007	1.008E-02	3.471E-06	3.288E-06	304.8	7.42E-05	1.000	.007	.008
406	56.48	.75	0.00	5.97E+03	8.55E-03	8.10E-03	.941	9.089E-03	4.001E-04	3.788E-04	311.4	8.55E-03	1.000	.941	1.224
407	56.48	.51	0.00	5.77E+03	8.26E-03	7.82E-03	.909	9.088E-03	3.864E-04	3.658E-04	310.1	8.26E-03	1.000	.909	1.183
408	56.48	.25	0.00	5.17E+03	7.40E-03	7.00E-03	.814	9.088E-03	3.463E-04	3.276E-04	309.6	7.40E-03	1.000	.814	1.059
409	56.49	.15	0.00	4.61E+03	6.60E-03	6.25E-03	.726	9.088E-03	3.087E-04	2.923E-04	309.3	6.60E-03	1.000	.726	.945
410	56.48	.04	.04	3.95E+03	5.64E-03	5.34E-03	.621	9.087E-03	2.640E-04	2.499E-04	308.9	5.64E-03	1.000	.621	.808
411	56.48	0.00	.15	3.21E+03	4.59E-03	4.35E-03	.505	9.087E-03	2.147E-04	2.033E-04	308.5	4.59E-03	1.000	.505	.657
412	56.48	0.00	.25	2.00E+03	2.85E-03	2.70E-03	.314	9.087E-03	1.335E-04	1.265E-04	307.7	2.85E-03	1.000	.314	.409
413	56.48	0.00	.38	1.47E+03	2.10E-03	1.99E-03	.231	9.087E-03	9.837E-05	9.315E-05	307.1	2.10E-03	1.000	.231	.301
414	56.48	0.33	.64	4.38E+02	6.25E-04	5.92E-04	.069	9.087E-03	2.924E-05	2.769E-05	306.8	6.25E-04	1.000	.069	.089
415	56.48	0.33	.89	5.24E+01	7.47E-05	7.07E-05	.008	9.087E-03	3.494E-06	3.309E-06	306.3	7.47E-05	1.000	.008	.011
416	56.48	0.00	1.14	3.58E+01	5.09E-05	4.82E-05	.006	9.087E-03	2.382E-06	2.256E-06	305.8	5.09E-05	1.000	.006	.007
417	56.48	0.33	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.90												
420	56.48	0.03	2.29												
506	64.10	.75	0.00	5.07E+03	7.26E-03	6.88E-03	.877	8.281E-03	3.398E-04	3.217E-04	309.5	7.26E-03	1.000	.877	1.162
507	64.10	.51	0.00	5.11E+03	7.31E-03	6.92E-03	.883	8.280E-03	3.419E-04	3.238E-04	309.8	7.31E-03	1.000	.883	1.169
508	64.10	.25	0.00	4.73E+03	6.76E-03	6.40E-03	.816	8.279E-03	3.161E-04	2.993E-04	308.2	6.76E-03	1.000	.816	1.081
509	64.10	.15	0.00	3.65E+03	5.21E-03	4.93E-03	.629	8.279E-03	2.439E-04	2.309E-04	307.1	5.21E-03	1.000	.629	.834
510	64.10	.04	.04	3.83E+03	5.47E-03	5.18E-03	.661	8.278E-03	2.562E-04	2.424E-04	308.2	5.47E-03	1.000	.661	.876
511	64.10	0.00	.15	3.61E+03	5.15E-03	4.88E-03	.623	8.278E-03	2.412E-04	2.284E-04	308.0	5.15E-03	1.000	.623	.829
512	64.10	0.00	.25	2.74E+03	3.91E-03	3.70E-03	.472	8.278E-03	1.831E-04	1.733E-04	307.6	3.91E-03	1.000	.472	.628
513	64.10	0.00	.38	1.86E+03	2.65E-03	2.51E-03	.321	8.278E-03	1.242E-04	1.176E-04	307.3	2.65E-03	1.000	.321	.429
514	64.10	0.33	.64	5.46E+02	7.79E-04	7.38E-04	.094	8.278E-03	3.644E-05	3.451E-05	306.7	7.79E-04	1.000	.094	.125
515	64.10	0.00	.89	2.29E+02	3.25E-04	3.07E-04	.039	8.278E-03	1.519E-05	1.439E-05	306.8	3.25E-04	1.000	.039	.052
516	64.10	0.33	1.14	4.12E+01	5.88E-05	5.57E-05	.007	8.275E-03	2.753E-06	2.607E-06	306.1	5.88E-05	1.000	.007	.009
517	64.10	0.99	1.40	5.09E+01	7.24E-05	6.85E-05	.009	8.278E-03	3.387E-06	3.207E-06	305.7	7.24E-05	1.000	.009	.012
518	64.10	0.09	1.65	1.91E+01	2.71E-05	2.57E-05	.003	8.278E-03	1.269E-06	1.202E-06	305.5	2.71E-05	1.000	.003	.004
519	64.10	0.00	1.90												
520	64.10	0.09	2.29												

EDGE HEATING USED FOR HE

X=	3.875E+01	HL /HREFF=	9.134E-01
X=	4.124E+01	HL /HREFF=	9.305E-01
X=	4.377E+01	HL /HREFF=	6.915E-01
X=	4.671E+01	HL /HREFF=	8.693E-01
X=	4.886E+01	HL /HREFF=	8.413E-01
X=	5.139E+01	HL /HREFF=	7.225E-01
X=	5.648E+01	HL /HREFF=	7.684E-01
X=	6.156E+01	HL /HREFF=	7.572E-01
X=	7.172E+01	HL /HREFF=	7.433E-01
X=	3.997E+01	HL /HREFF=	9.262E-01
X=	4.672E+01	HL /HREFF=	1.127E+00
X=	5.649E+01	HL /HREFF=	9.047E-01
X=	6.410E+01	HL /HREFF=	8.926E-01

B.L. TRANSITION DISTANCE = 39.97 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

AMES 3.5 FT HWT TEST (1??), C.P. BLUMER, IN-LINE RSI GAP RUN(24) 1973 PAGE 47

TT = 1.12[illegible](K) GAP LENGTH = 3?.48 (CM)
PT = 1.[illegible](N/M2) GAP WIDTH = .254(CM)
HT = 1.[illegible](J/KG) GAP DEPTH = 2.?32(CM)
RE/METER = 3.2[illegible] ORIENTATION= [illegible](DEG)
MACH = ?.1?? QS = 1.2092E+05(W/M2)
RHO VEL = [illegible](KG/M2-S) MOD.POSITION= 2
HAW/HT = ?.??? FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	5.16E+03	7.11E-03	6.73E-03	.748	[illegible]	1.7?3E-04	1.618E-04	310.8				1.080
17	66.64	-.51	?.05												
18	61.56	-.51	[illegible]	[illegible]	[illegible]	6.92E-03	.596	1.?35E-02	1.731E-04	1.639E-04	313.7				1.080
19	56.48	-.51	[illegible]	[illegible]	[illegible]	9.?0E-03	.77?	1.096E-02	2.031E-04	1.923E-04	314.0				1.080
20	51.39	-.51	[illegible]	9.22E+03	1.00E-02	9.56E-03	.858	1.169E-02	2.411E-04	2.282E-04	314.2				1.090
21	48.86	-.51	[illegible]	[illegible]	1.12E-02	1.06E-02	.925	1.20?E-02	2.651E-04	2.539E-04	314.5				1.080
22	46.31	-.51	[illegible]	[illegible]	1.19E-02	1.13E-02	.957	1.243E-02	2.851E-04	2.709E-04	314.7				1.080
23	43.77	-.51	[illegible]	8.93E+03	1.24E-02	1.18E-02	.969	1.281E-02	2.983E-04	2.825E-04	314.6				1.080
24	41.24	-.51	[illegible]	9.45E+03	1.31E-02	1.24E-02	.996	1.319E-02	3.156E-04	2.989E-04	314.9				1.080
25	38.70	-.51	[illegible]	[illegible]	1.32E-02	1.25E-02	.972	1.357E-02	3.169E-04	3.002E-04	314.0				1.080
41	71.72	[illegible]	.25	1.12E+03	1.55E-03	1.46E-03	.163	9.493E-03	3.713E-05	3.520E-05	308.3				.218
42	66.64	[illegible]	.25	[illegible]	[illegible]	3.94E-03	.420	9.832E-03	9.936E-05	9.461E-05	309.4				.502
43	61.56	[illegible]	.25	1.74E+03	2.41E-03	2.28E-03	.233	1.034E-02	5.786E-05	5.481E-05	312.0				.334
44	56.48	[illegible]	.25	2.64E+03	3.66E-03	3.47E-03	.334	1.097E-02	8.891E-05	8.336E-05	312.6				.434
45	51.39	[illegible]	.25	[illegible]	6.15E-03	5.83E-03	.527	1.156E-02	1.479E-04	1.401E-04	312.5				.614
46	48.86	[illegible]	.25	[illegible]	7.58E-03	7.18E-03	.629	1.205E-02	1.821E-04	1.725E-04	312.6				.680
47	46.31	[illegible]	.25	6.15E+03	8.52E-03	[illegible]	.686	1.243E-02	2.049E-04	1.941E-04	312.8				.716
48	43.77	[illegible]	.25	5.71E+03	7.91E-03	7.49E-03	.616	1.281E-02	1.902E-04	1.801E-04	312.8				.630
49	41.24	[illegible]	.25	[illegible]	5.72E-03	[illegible]	.434	1.319E-02	1.375E-04	1.302E-04	313.1				.436
50	38.70	[illegible]	.25	2.47E+03	3.42E-03	3.24E-03	.252	1.357E-02	8.233E-05	7.795E-05	312.2				.260
103	39.97	1.52	[illegible]	[illegible]	1.29E-02	1.21E-02	.956	1.338E-02	3.074E-04	2.910E-04	318.4	1.28E-02	1.000	.956	.971
105	39.97	1.02	[illegible]	8.97E+03	1.25E-02	1.18E-02	.934	1.338E-02	3.002E-04	2.842E-04	319.6	1.25E-02	1.000	.934	.949
107	39.97	.51	[illegible]	[illegible]	1.35E-02	1.28E-02	1.010	1.338E-02	[illegible]	3.073E-04	313.1	1.35E-02	1.000	1.010	1.026
108	39.97	.25	[illegible]	[illegible]	1.47E-02	1.39E-02	1.096	1.338E-02	3.524E-04	3.338E-04	318.1	1.47E-02	1.000	1.096	1.115
110	39.97	.04	.04	9.54E+03	1.33E-02	1.26E-02	.994	1.338E-02	3.196E-04	3.026E-04	316.7	1.33E-02	1.000	.994	1.010
111	39.97	[illegible]	.15	[illegible]	1.17E-02	1.11E-02	.877	1.338E-02	2.813E-04	2.670E-04	316.1	1.17E-02	1.000	.877	.891
112	39.97	[illegible]	.25	[illegible]	8.58E-03	8.13E-03	.642	1.338E-02	2.063E-04	1.954E-04	314.9	8.58E-03	1.000	.642	.652
113	39.97	[illegible]	.38	[illegible]	[illegible]	5.09E-03	.402	1.336E-02	[illegible]	1.224E-04	313.8	5.38E-03	1.000	.402	.408
114	39.97	[illegible]	.64	[illegible]	1.63E-03	1.54E-03	.122	1.338E-02	[illegible]	3.713E-05	312.3	1.63E-03	1.000	.122	.124
115	39.97	[illegible]	.89	2.64E+02	3.64E-04	3.45E-04	.027	1.338E-02	8.761E-06	8.299E-06	317.8	3.64E-04	1.000	.027	.028
203	46.32	1.32	[illegible]	[illegible]	1.15E-02	1.09E-02	.924	1.242E-02	2.759E-04	2.613E-04	316.0	1.15E-02	1.000	.924	.966
205	46.32	1.02	[illegible]	[illegible]	1.23E-02	1.17E-02	.992	1.242E-02	2.961E-04	2.803E-04	315.8	1.23E-02	1.000	.992	1.036
207	46.32	.51	[illegible]	1.3?E+04	1.81E-02	1.72E-02	1.459	1.243E-02	4.357E-04	4.128E-04	316.5	1.81E-02	1.000	1.459	1.52?
208	46.32	.25	[illegible]	[illegible]	2.20E-02	[illegible]	1.767	1.243E-02	5.279E-04	4.993E-04	315.8	2.20E-02	1.000	1.767	1.84?
210	46.32	.04	.04	1.54E+04	2.13E-02	2.02E-02	1.717	1.243E-02	5.129E-04	4.857E-04	314.5	2.13E-02	1.000	1.717	1.79?
211	46.32	[illegible]	.15	1.41E+04	1.96E-02	1.86E-02	1.580	1.243E-02	4.719E-04	4.469E-04	314.0	1.96E-02	1.000	1.580	1.65?
212	46.32	[illegible]	.25	1.12E+04	1.56E-02	1.48E-02	1.254	1.243E-02	3.745E-04	3.547E-04	313.6	1.56E-02	1.000	1.254	1.316
213	46.32	[illegible]	.3?	[illegible]	9.12E-06	8.62E-06	.0?1	1.243E-02	2.193E-07	2.073E-07	338.7	9.12E-06	1.000	.0?1	.071
214	46.32	[illegible]	.54	[illegible]	8.00E-06	7.56E-06	.0?1	1.243E-02	1.922E-07	1.817E-07	338.7	8.00E-06	1.000	.001	.001
215	46.32	[illegible]	.?9	[illegible]	2.17E-03	2.06E-03	.17?	1.243E-02	[illegible]	[illegible]	309.8	2.17E-0?	1.000	.175	.182

AMES 3.5 FT HWT TEST (1°2), C.B. BLUMER, IN-LINE RSI GAP RUN(24) 1973 PAGE 48

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
210	46.32	0.00	1.14	5.77E+02	7.93E-04	7.51E-04	.064	1.243E-02	1.906E-05	1.806E-05	307.2	7.93E-04	1.000	.064	.067
217	46.32	0.00	1.40	1.99E+02	2.60E-04	2.46E-04	.021	1.243E-02	6.245E-06	5.917E-06	306.9	2.60E-04	1.000	.021	.022
218	46.32	0.00	1.65	3.13E+01	4.30E-05	4.07E-05	.003	1.243E-02	1.033E-06	9.787E-07	306.4	4.30E-05	1.000	.003	.004
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
406	56.48	.76	.00	1.01E+04	1.40E-02	1.33E-02	1.276	1.097E-02	3.364E-04	3.186E-04	314.4	1.40E-02	1.000	1.276	1.653
407	56.48	.51	0.00	8.79E+03	1.22E-02	1.16E-02	1.112	1.097E-02	2.932E-04	2.776E-04	314.1	1.22E-02	1.000	1.112	1.444
408	56.48	.25	0.00	6.72E+03	9.32E-03	8.83E-03	.849	1.097E-02	2.240E-04	2.122E-04	313.4	9.32E-03	1.000	.849	1.104
409	56.48	.15	0.00	5.75E+03	7.97E-03	7.55E-03	.727	1.097E-02	1.916E-04	1.815E-04	312.9	7.97E-03	1.000	.726	.944
410	56.48	.04	.04	4.95E+03	6.86E-03	6.50E-03	.625	1.097E-02	1.649E-04	1.562E-04	312.4	6.86E-03	1.000	.625	.812
411	56.48	0.00	.15	4.26E+03	5.90E-03	5.59E-03	.538	1.097E-02	1.419E-04	1.344E-04	311.9	5.90E-03	1.000	.538	.699
412	56.48	0.00	.25	2.95E+03	4.08E-03	3.86E-03	.372	1.097E-02	9.835E-05	9.288E-05	311.0	4.08E-03	1.000	.372	.483
413	56.48	0.00	.38	2.05E+03	2.82E-03	2.67E-03	.257	1.097E-02	6.782E-05	6.425E-05	309.6	2.82E-03	1.000	.257	.334
414	56.48	0.00	.64	8.34E+02	1.15E-03	1.09E-03	.105	1.097E-02	2.762E-05	2.617E-05	309.1	1.15E-03	1.000	.105	.136
415	56.48	0.00	.89	3.58E+02	4.93E-04	4.67E-04	.045	1.097E-02	1.185E-05	1.122E-05	308.3	4.93E-04	1.000	.045	.058
416	56.48	0.00	1.14	1.71E+02	2.36E-04	2.23E-04	.021	1.097E-02	5.663E-06	5.372E-06	307.6	2.36E-04	1.000	.021	.028
417	56.48	0.00	1.40	5.79E+01	7.97E-05	7.55E-05	.007	1.097E-02	1.915E-06	1.814E-06	307.0	7.97E-05	1.000	.007	.009
418	56.48	0.00	1.65	2.78E+01	3.82E-05	3.52E-05	.003	1.097E-02	9.178E-07	8.697E-07	306.6	3.82E-05	1.000	.003	.005
419	56.48	0.00	1.90	3.25E+01	4.47E-05	4.24E-05	.004	1.097E-02	1.075E-06	1.019E-06	306.4	4.47E-05	1.000	.004	.005
420	56.48	0.00	2.29												
506	64.10	.76	0.00	7.58E+03	1.05E-02	9.97E-03	1.041	1.011E-02	2.533E-04	2.396E-04	313.9	1.05E-02	1.000	1.041	1.460
507	64.10	.51	0.00	7.14E+03	9.90E-03	9.38E-03	.980	1.011E-02	2.381E-04	2.255E-04	313.4	9.90E-03	1.000	.980	1.382
508	64.10	.25	0.00	6.74E+03	9.34E-03	8.84E-03	.923	1.011E-02	2.244E-04	2.128E-04	312.7	9.34E-03	1.000	.923	1.302
509	64.10	.15	0.06	5.68E+03	7.87E-03	7.45E-03	.778	1.011E-02	1.891E-04	1.791E-04	311.8	7.87E-03	1.000	.778	1.097
510	64.10	.04	.04	5.07E+03	7.02E-03	6.65E-03	.694	1.011E-02	1.687E-04	1.598E-04	311.4	7.02E-03	1.000	.694	.979
511	64.10	0.00	.15	4.86E+03	6.72E-03	6.36E-03	.664	1.011E-02	1.615E-04	1.530E-04	311.1	6.72E-03	1.000	.664	.937
512	64.10	0.00	.25	3.75E+03	5.18E-03	4.91E-03	.512	1.011E-02	1.246E-04	1.180E-04	310.5	5.18E-03	1.000	.512	.723
513	64.10	0.00	.38	2.57E+03	3.55E-03	3.36E-03	.351	1.011E-02	8.532E-05	8.083E-05	310.0	3.55E-03	1.000	.351	.495
514	64.10	0.00	.64	8.49E+02	1.17E-03	1.11E-03	.116	1.011E-02	2.812E-05	2.664E-05	309.1	1.17E-03	1.000	.116	.163
515	64.10	0.00	.89	1.77E+02	2.44E-04	2.31E-04	.024	1.011E-02	5.856E-06	5.548E-06	308.1	2.44E-04	1.000	.024	.034
516	64.10	0.00	1.14	2.02E+02	2.77E-04	2.63E-04	.027	1.011E-02	6.669E-06	6.319E-06	308.1	2.77E-04	1.000	.027	.039
517	64.10	0.00	1.40	2.91E+02	4.01E-04	3.80E-04	.040	1.011E-02	9.633E-06	9.127E-06	307.6	4.01E-04	1.000	.040	.056
518	64.10	0.00	1.65	1.60E+02	2.19E-04	2.08E-04	.022	1.011E-02	5.275E-06	4.998E-06	307.2	2.19E-04	1.000	.022	.031
519	64.10	0.00	1.90	1.99E+01	2.73E-05	2.59E-05	.003	1.011E-02	6.560E-07	6.215E-07	306.9	2.73E-05	1.000	.003	.004
520	64.10	0.00	2.29	4.84E+01	6.65E-05	6.31E-05	.007	1.011E-02	1.599E-06	1.516E-06	306.4	6.65E-05	1.000	.007	.009

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 9.719E-01
X= 4.124E+01 HL /HREFF= 9.946E-01
X= 4.377E+01 HL /HREFF= 9.695E-01
X= 4.631E+01 HL /HREFF= 9.572E-01
X= 4.885E+01 HL /HREFF= 9.234E-01
X= 5.139E+01 HL /HREFF= 8.577E-01
X= 5.648E+01 HL /HREFF= 7.697E-01
X= 6.156E+01 HL /HREFF= 6.962E-01
X= 7.172E+01 HL /HREFF= 7.481E-01

X= 3.997E+01 HL /HREFF= 1.110E+00
X= 4.632E+01 HL /HREFF= 1.459E+00
X= 5.648E+01 HL /HREFF= 1.112E+00
X= 6.417E+01 HL /HREFF= 9.797E-01

B.L. TRANSITION DISTANCE = 61.55 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.09 CM

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(25) 1973 PAGE 49

TT	= 1.1198E+03(K)	GAP LENGTH	=	30.480(CM)
PT	= 5.9583E+05(N/M2)	GAP WIDTH	=	.127(CM)
HT	= 1.1929E+06(J/KG)	GAP DEPTH	=	2.032(CM)
RE/METER	= 1.8578E+06	ORIENTATION=		5.000(DEG)
MACH	= 5.170	QS	=	9.1223E+04(W/M2)
RHO VEL	= 2.3742E+01(KG/M2-S)	MOD.POSITION=		2
HAW/HT	= 0.988 FOR HT			
HAW/HT	= 0.874 FOR HL			
HLCC	= HL(2ND. ORDER COND.,)			

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	6.47E-03	6.13E-03	.848	7.635E-03	2.726E-04	2.583E-04	307.7				1.000
17	66.64	-.51	[illegible]												
18	61.56	-.51	[illegible]	[illegible]	7.52E-03	7.12E-03	.866	8.683E-03	3.155E-04	2.999E-04	309.2				1.000
19	56.48	-.51	[illegible]	[illegible]	7.86E-03	7.43E-03	.852	9.210E-03	3.394E-04	3.130E-04	309.3				1.000
20	51.39	-.51	[illegible]	5.99E+03	9.28E-03	7.85E-03	.854	9.701E-03	3.488E-04	3.304E-04	309.3				1.000
21	48.96	-.51	[illegible]	[illegible]	8.81E-03	8.34E-03	.884	9.961E-03	3.713E-04	3.515E-04	309.4				1.000
22	46.71	-.51	[illegible]	[illegible]	9.09E-03	8.61E-03	.887	1.024E-02	3.827E-04	3.629E-04	309.6				1.000
23	43.77	-.51	[illegible]	6.60E+03	9.15E-03	8.67E-03	.870	1.052E-02	3.854E-04	3.651E-04	309.5				1.000
24	41.24	-.51	[illegible]	7.02E+03	9.73E-03	9.21E-03	.901	1.080E-02	4.097E-04	3.881E-04	309.7				1.000
25	38.70	-.51	[illegible]	7.41E+03	1.03E-02	9.76E-03	.930	1.108E-02	4.341E-04	4.112E-04	309.1				1.000
41	71.72	0.00	.25	9.10E+02	1.25E-03	1.19E-03	.164	7.638E-03	5.284E-05	5.007E-05	306.8				.194
42	66.64	0.00	.25	1.62E+03	2.23E-03	2.12E-03	.277	8.075E-03	9.408E-05	8.914E-05	306.8				.323
43	61.56	0.00	.25	1.47E+03	2.03E-03	1.92E-03	.234	8.685E-03	8.555E-05	8.105E-05	307.9				.270
44	56.48	0.00	.25	1.76E+03	2.43E-03	2.30E-03	.264	9.211E-03	1.024E-04	9.702E-05	308.3				.310
45	51.39	0.00	.25	1.71E+03	2.36E-03	2.24E-03	.243	9.701E-03	9.937E-05	9.414E-05	308.1				.285
46	48.86	0.00	.25	1.64E+03	2.27E-03	2.15E-03	.227	9.963E-03	9.543E-05	9.040E-05	308.1				.257
47	46.31	0.00	.25	1.87E+03	2.59E-03	2.46E-03	.253	1.024E-02	1.092E-04	1.035E-04	308.3				.285
48	43.77	0.00	.25	1.72E+03	2.37E-03	2.25E-03	.226	1.052E-02	9.996E-05	9.470E-05	308.1				.259
49	41.24	0.00	.25	2.11E+03	2.92E-03	2.76E-03	.270	1.080E-02	1.228E-04	1.163E-04	308.5				.309
50	38.70	0.00	.25	2.25E+03	3.11E-03	2.94E-03	.281	1.109E-02	1.309E-04	1.240E-04	307.8				.302
103	39.97	1.52	[illegible]	7.22E+03	1.00E-02	9.52E-03	.919	1.094E-02	4.233E-04	4.008E-04	312.6	1.00E-02	1.000	.918	1.003
105	39.97	1.02	[illegible]	6.99E+03	9.73E-03	9.22E-03	.890	1.094E-02	4.100E-04	3.883E-04	313.4	9.73E-03	1.000	.890	.972
107	39.97	.51	[illegible]	7.22E+03	1.01E-02	9.52E-03	.919	1.094E-02	4.233E-04	4.009E-04	312.9	1.01E-02	1.000	.919	1.004
108	39.97	.25	[illegible]	[illegible]	9.85E-03	9.33E-03	.900	1.094E-02	4.148E-04	3.929E-04	312.1	9.85E-03	1.000	.900	.903
110	39.97	.06	.04	5.75E+03	7.99E-03	7.56E-03	.730	1.094E-02	3.363E-04	3.186E-04	310.9	7.99E-03	1.000	.730	.797
111	39.97	0.00	.10	[illegible]	6.72E-03	6.36E-03	.614	1.094E-02	2.829E-04	2.680E-04	310.6	6.72E-03	1.000	.614	.671
112	39.97	0.00	.20	3.23E+03	4.49E-03	4.26E-03	.409	1.094E-02	1.886E-04	1.787E-04	309.6	4.48E-03	1.000	.409	.447
113	39.97	0.00	.38	1.85E+03	2.57E-03	2.44E-03	.235	1.094E-02	1.083E-04	1.026E-04	308.9	2.57E-03	1.000	.235	.257
114	39.97	0.00	.64	[illegible]	5.95E-04	5.67E-04	.054	1.094E-02	2.505E-05	2.373E-05	307.9	5.95E-04	1.000	.054	.059
115	39.97	0.00	.89	9.61E+01	1.33E-04	1.26E-04	.012	1.094E-02	5.596E-06	5.293E-06	306.8	1.33E-04	1.000	.012	.013
203	46.32	1.52	[illegible]	[illegible]	9.07E-03	8.59E-03	.885	1.024E-02	3.819E-04	3.617E-04	310.8	9.07E-03	1.000	.885	.998
205	46.32	1.02	[illegible]	6.70E+03	9.31E-03	8.82E-03	.909	1.024E-02	3.921E-04	3.714E-04	311.4	9.31E-03	1.000	.909	1.025
207	46.32	.51	[illegible]	6.92E+03	9.62E-03	9.11E-03	.939	1.024E-02	4.051E-04	3.836E-04	311.1	9.62E-03	1.000	.939	1.059
208	46.32	.25	[illegible]	[illegible]	8.35E-03	7.91E-03	.816	1.024E-02	3.519E-04	3.333E-04	310.5	8.35E-03	1.000	.816	.924
210	46.32	.06	.04	4.27E+03	5.91E-03	5.60E-03	.578	1.024E-02	2.491E-04	2.360E-04	309.6	5.91E-03	1.000	.578	.651
211	46.32	0.00	.10	3.53E+03	4.89E-03	4.63E-03	.477	1.024E-02	2.059E-04	1.950E-04	309.2	4.89E-03	1.000	.477	.530
212	46.32	0.00	.25	2.38E+03	3.30E-03	3.12E-03	.322	1.024E-02	1.390E-04	1.315E-04	308.5	3.30E-03	1.000	.322	.364
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	[illegible]	7.45E-05	7.06E-05	.007	1.024E-02	3.139E-06	2.974E-06	308.4	7.45E-05	1.000	.007	.008

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(25) 1973 PAGE 90

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90	7.22E+01	4.42E-05	4.19E-05	.004	1.024E-02	1.862E-06	1.765E-06	304.0	4.42E-05	1.000	.004	.005
220	46.32	0.00	2.29												
406	56.40	.76	0.00	5.55E+03	7.69E-03	7.28E-03	.835	9.214E-03	3.239E-04	3.068E-04	309.9	7.69E-03	1.000	.835	.908
407	56.40	.51	0.00	5.76E+03	7.90E-03	7.49E-03	.858	9.213E-03	3.328E-04	3.153E-04	309.6	7.90E-03	1.000	.858	1.007
408	56.40	.25	0.00	5.21E+03	7.21E-03	6.83E-03	.783	9.212E-03	3.038E-04	2.878E-04	309.0	7.21E-03	1.000	.783	.919
409	56.40	.15	0.00	4.61E+03	6.38E-03	6.04E-03	.693	9.212E-03	2.587E-04	2.946E-04	308.6	6.38E-03	1.000	.693	.813
410	56.40	.04	.04	3.87E+03	5.35E-03	5.07E-03	.581	9.211E-03	2.253E-04	2.135E-04	308.2	5.35E-03	1.000	.581	.682
411	56.40	0.00	.15	3.25E+03	4.56E-03	4.26E-03	.488	9.211E-03	1.894E-04	1.794E-04	307.9	4.50E-03	1.000	.488	.573
412	56.40	0.00	.25	1.96E+03	2.70E-03	2.56E-03	.294	9.211E-03	1.139E-04	1.079E-04	307.2	2.70E-03	1.000	.294	.345
413	56.40	0.00	.38	1.15E+03	1.58E-03	1.50E-03	.172	9.211E-03	6.672E-05	6.322E-05	306.5	1.58E-03	1.000	.172	.202
414	56.40	0.00	.64	2.42E+02	3.34E-04	3.17E-04	.036	9.211E-03	1.407E-05	1.334E-05	306.1	3.34E-04	1.000	.036	.043
415	56.40	0.00	.89												
416	56.40	0.00	1.14												
417	56.40	0.00	1.40												
418	56.40	0.00	1.65												
419	56.40	0.00	1.90												
420	56.40	0.00	2.29												
506	64.10	.75	0.00	5.05E+03	7.00E-03	6.63E-03	.835	8.385E-03	2.949E-04	2.794E-04	309.5	7.00E-03	1.000	.835	.978
507	64.10	.51	0.00	4.97E+03	6.88E-03	6.52E-03	.821	8.383E-03	2.899E-04	2.747E-04	309.2	6.88E-03	1.000	.821	.954
508	64.10	.25	0.00	4.55E+03	6.30E-03	5.97E-03	.752	8.382E-03	2.654E-04	2.514E-04	308.7	6.30E-03	1.000	.752	.873
509	64.10	.15	0.00	3.76E+03	5.19E-03	4.92E-03	.620	8.381E-03	2.187E-04	2.072E-04	308.1	5.19E-03	1.000	.620	.720
510	64.10	.04	.04	3.33E+03	4.60E-03	4.36E-03	.549	8.381E-03	1.937E-04	1.835E-04	307.8	4.60E-03	1.000	.549	.637
511	64.10	0.00	.15	3.02E+03	4.17E-03	3.95E-03	.498	8.380E-03	1.757E-04	1.664E-04	307.6	4.17E-03	1.000	.498	.578
512	64.10	0.00	.25	2.11E+03	2.92E-03	2.76E-03	.348	8.380E-03	1.229E-04	1.165E-04	307.2	2.92E-03	1.000	.348	.404
513	64.10	0.00	.38	1.28E+03	1.77E-03	1.68E-03	.211	8.380E-03	7.463E-05	7.068E-05	306.9	1.77E-03	1.000	.211	.245
514	64.10	0.00	.64	2.77E+02	3.82E-04	3.62E-04	.046	8.380E-03	1.611E-05	1.526E-05	306.2	3.82E-04	1.000	.046	.053
515	64.10	0.00	.89	9.30E+01	1.28E-04	1.21E-04	.015	8.380E-03	5.397E-06	5.114E-06	305.5	1.28E-04	1.000	.015	.018
516	64.10	0.00	1.14	7.71E+01	1.06E-04	1.01E-04	.013	8.380E-03	4.475E-06	4.240E-06	305.5	1.06E-04	1.000	.013	.015
517	64.10	0.00	1.40	2.59E+02	3.70E-04	3.51E-04	.044	8.380E-03	1.559E-05	1.477E-05	305.2	3.70E-04	1.000	.044	.051
518	64.10	0.00	1.65												
519	64.10	0.00	1.90												
520	64.10	0.00	2.29	8.19E+01	1.13E-04	1.07E-04	.013	8.380E-03	4.749E-06	4.500E-06	304.5	1.13E-04	1.000	.013	.016

EDGE HEATING USED FOR HE

X= 3.070E+01 HL /HREFF= 9.302E-01
X= 4.124E+01 HL /HREFF= 9.027E-01
X= 4.377E+01 HL /HREFF= 8.697E-01
X= 4.631E+01 HL /HREFF= 8.872E-01
X= 4.886E+01 HL /HREFF= 8.843E-01
X= 5.139E+01 HL /HREFF= 8.537E-01
X= 5.640E+01 HL /HREFF= 8.517E-01
X= 6.156E+01 HL /HREFF= 8.555E-01
X= 7.172E+01 HL /HREFF= 8.478E-01

X= 3.997E+01 HL /HREFF= 9.180E-01
X= 4.632E+01 HL /HREFF= 9.391E-01
X= 5.640E+01 HL /HREFF= 8.777E-01
X= 6.410E+01 HL /HREFF= 8.211E-01

B.L. TRANSITION DISTANCE =0376.00 CM
FULLY TURBULENT B.L. CONDITIONS AT =0376.00 CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HHT TEST (162), D.R. BLUMER, IN-LINE RSI GAP RUN(6) 1973 PAGE 51

TT	= 1.1334E+03(K)	GAP LENGTH	= 30.480(CM)
PT	= 1.0357E+05(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.1995E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 3.2[illegible]94E+06	ORIENTATION	= 5.000(DEG)
MACH	= 5.13[illegible]	QS	= 1.2304E+05(W/M2)
RHO VEL	= 4.1499E+01(KG/M2-S)	MOD.POSITION	= 2
HAW/HT	= 1.0[illegible] FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	5.79E+03	7.97E-03	7.45E-03	.833	9.439E-03	1.895E-04	1.796E-04	310.9				1.000
17	66.64	-.51	0.00												
18	61.56	-.51	0.00	6.56E+03	8.96E-03	8.49E-03	.871	1.029E-02	2.153E-04	2.046E-04	313.5				1.000
19	56.48	-.51	0.00	6.83E+03	9.32E-03	8.83E-03	.854	1.092E-02	2.247E-04	2.178E-04	313.8				1.000
20	51.39	-.51	0.00	7.15E+03	9.80E-03	9.28E-03	.843	1.163E-02	2.362E-04	2.237E-04	313.8				1.000
21	48.86	-.51	0.00	7.61E+03	1.04E-02	9.85E-03	.867	1.199E-02	2.525E-04	2.373E-04	314.1				1.000
22	46.31	-.51	0.00	7.71E+03	1.06E-02	1.00E-02	.856	1.237E-02	2.551E-04	2.416E-04	314.3				1.000
23	43.77	-.51	0.00	7.99E+03	1.09E-02	1.03E-02	.857	1.274E-02	2.639E-04	2.491E-04	314.0				1.000
24	41.24	-.51	0.00	8.74E+03	1.20E-02	1.13E-02	.913	1.312E-02	2.886E-04	2.734E-04	314.4				1.000
25	38.70	-.51	0.00	9.00E+03	1.23E-02	1.17E-02	.915	1.349E-02	2.975E-04	2.819E-04	313.3				1.000
41	71.72	0.00	.25	1.22E+03	1.65E-03	1.56E-03	.175	9.433E-03	3.972E-05	3.764E-05	308.4				.210
42	66.64	0.00	.25	1.72E+03	2.34E-03	2.22E-03	.238	9.823E-03	5.634E-05	5.338E-05	309.7				.279
43	61.56	0.00	.25	1.55E+03	2.11E-03	2.00E-03	.205	1.029E-02	5.094E-05	4.826E-05	311.7				.230
44	56.48	0.00	.25	2.12E+03	2.89E-03	2.73E-03	.264	1.092E-02	6.953E-05	6.587E-05	312.3				.310
45	51.39	0.00	.25	1.99E+03	2.71E-03	2.57E-03	.234	1.162E-02	6.540E-05	6.197E-05	312.0				.277
46	48.86	0.00	.25	2.01E+03	2.74E-03	2.60E-03	.229	1.198E-02	6.614E-05	6.266E-05	312.0				.284
47	46.31	0.00	.25	2.08E+03	2.84E-03	2.69E-03	.230	1.236E-02	6.845E-05	6.485E-05	312.4				.260
48	43.77	0.00	.25	2.25E+03	3.07E-03	2.91E-03	.241	1.274E-02	7.331E-05	7.002E-05	312.1				.281
49	41.24	0.00	.25	3.27E+03	4.47E-03	4.23E-03	.341	1.311E-02	1.076E-04	1.020E-04	312.6				.373
50	38.70	0.00	.25	2.72E+03	3.70E-03	3.51E-03	.274	1.349E-02	8.919E-05	8.450E-05	311.4				.300
103	39.97	1.52	0.00	8.90E+03	1.22E-02	1.16E-02	.919	1.330E-02	2.947E-04	2.791E-04	318.1	1.22E-02	1.000	.919	1.006
105	39.97	1.02	0.00	8.60E+03	1.18E-02	1.12E-02	.888	1.330E-02	2.845E-04	2.694E-04	319.5	1.18E-02	1.000	.888	.971
107	39.97	.51	0.00	9.09E+03	1.24E-02	1.17E-02	.930	1.330E-02	2.949E-04	2.822E-04	318.9	1.24E-02	1.000	.932	1.017
108	39.97	.25	0.00	9.16E+03	1.26E-02	1.19E-02	.945	1.330E-02	3.037E-04	2.878E-04	317.7	1.26E-02	1.000	.945	1.034
110	39.97	.04	.04	7.76E+03	1.06E-02	1.01E-02	.800	1.330E-02	2.563E-04	2.428E-04	316.3	1.06E-02	1.000	.800	.875
111	39.97	0.00	.15	6.69E+03	9.16E-03	8.68E-03	.689	1.330E-02	2.207E-04	2.091E-04	315.7	9.16E-03	1.000	.689	.753
112	39.97	0.00	.25	4.72E+03	6.46E-03	6.12E-03	.486	1.330E-02	1.556E-04	1.474E-04	314.5	6.46E-03	1.000	.486	.531
113	39.97	0.00	.38	2.86E+03	3.90E-03	3.70E-03	.294	1.330E-02	9.410E-05	8.914E-05	313.5	3.90E-03	1.000	.294	.321
114	39.97	0.00	.64	8.70E+02	1.19E-03	1.12E-03	.089	1.330E-02	2.853E-05	2.730E-05	311.9	1.19E-03	1.000	.089	.098
115	39.97	0.00	.89	1.79E+02	2.43E-04	2.31E-04	.018	1.330E-02	5.835E-06	5.557E-06	310.5	2.43E-04	1.000	.018	.020
203	46.32	1.52	0.00	8.05E+03	1.10E-02	1.04E-02	.892	1.236E-02	2.656E-04	2.515E-04	315.4	1.10E-02	1.000	.892	1.042
205	46.32	1.02	0.00	8.47E+03	1.16E-02	1.10E-02	.940	1.236E-02	2.799E-04	2.651E-04	316.2	1.16E-02	1.000	.940	1.090
207	46.32	.51	0.00	9.45E+03	1.29E-02	1.23E-02	1.047	1.236E-02	3.118E-04	2.953E-04	315.9	1.29E-02	1.000	1.047	1.22[illegible]
208	46.32	.25	0.00	7.99E+03	1.09E-02	1.03E-02	.884	1.236E-02	2.631E-04	2.492E-04	315.1	1.09E-02	1.000	.884	1.03[illegible]
210	46.32	.04	.04	5.42E+03	7.40E-03	7.01E-03	.599	1.236E-02	1.784E-04	1.690E-04	313.9	7.40E-03	1.000	.599	.70[illegible]
211	46.32	0.00	.15	4.44E+03	6.06E-03	5.74E-03	.490	1.236E-02	1.461E-04	1.384E-04	313.3	6.06E-03	1.000	.490	.57[illegible]
212	46.32	0.00	.25	3.02E+03	4.11E-03	3.90E-03	.333	1.236E-02	9.910E-05	9.389E-05	312.3	4.11E-03	1.000	.333	.36[illegible]
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	1.35E+01	1.83E-05	1.73E-05	.001	1.236E-02	4.419E-07	4.176E-07	309.3	1.83E-05	1.000	.001	.002

AMES 3.5 FT HWT TEST (1E2), C.J. BLUMER, IN-LINE RSI GAP RUN(26) 1973 PAGE 52

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
406	56.40	.76	0.00	7.11E+03	9.71E-03	9.19E-03	.889	1.091E-02	2.339E-04	2.216E-04	313.8	9.71E-03	1.000	.889	1.042
407	56.40	.51	0.00	7.55E+03	1.03E-02	9.76E-03	.944	1.092E-02	2.484E-04	2.353E-04	313.5	1.03E-02	1.000	.944	1.106
408	56.40	.25	0.00	7.[illegible]E+03	9.54E-03	9.04E-03	.874	1.092E-02	2.330E-04	2.179E-04	312.7	9.54E-03	1.000	.874	1.024
409	56.40	.15	0.00	6.11E+03	8.33E-03	7.99E-03	.763	1.092E-02	2.000E-04	1.902E-04	312.2	8.33E-03	1.000	.763	.894
410	56.40	.04	.04	5.10E+03	6.95E-03	6.50E-03	.636	1.092E-02	1.674E-04	1.586E-04	311.7	6.95E-03	1.000	.636	.746
411	56.40	0.00	.15	4.21E+03	5.73E-03	5.43E-03	.525	1.092E-02	1.392E-04	1.329E-04	311.3	5.73E-03	1.000	.525	.615
412	56.40	0.00	.25	2.26E+03	3.07E-03	2.91E-03	.281	1.092E-02	7.392E-05	7.005E-05	310.3	3.07E-03	1.000	.281	.329
413	56.40	0.00	.38	1.43E+03	1.95E-03	1.84E-03	.178	1.092E-02	4.698E-05	4.444E-05	309.2	1.95E-03	1.000	.178	.209
414	56.40	0.00	.64	2.34E+02	3.17E-04	3.01E-04	.029	1.092E-02	7.646E-06	7.246E-06	[illegible].7	3.17E-04	1.000	.029	.034
415	56.40	0.00	.89												
416	56.40	0.00	1.14												
417	56.40	0.00	1.40												
418	56.40	0.00	1.65												
419	56.40	0.00	1.90												
420	56.40	0.00	2.29												
506	64.10	.76	0.00	6.50E+03	8.80E-03	8.41E-03	.883	1.005E-02	2.140E-04	2.027E-04	313.5	8.80E-03	1.000	.883	1.026
507	64.10	.51	0.00	5.99E+03	8.10E-03	7.75E-03	.813	1.005E-02	1.971E-04	1.867E-04	312.9	8.10E-03	1.000	.813	.944
508	64.10	.25	0.00	5.09E+03	6.94E-03	6.58E-03	.690	1.005E-02	1.673E-04	1.585E-04	312.2	6.94E-03	1.000	.690	.801
509	64.10	.15	0.00	3.59E+03	4.89E-03	4.63E-03	.486	1.006E-02	1.177E-04	1.115E-04	311.3	4.89E-03	1.000	.486	.564
510	64.10	.04	.04	4.[illegible]E+03	5.44E-03	5.15E-03	.541	1.006E-02	1.313E-04	1.241E-04	311.0	5.44E-03	1.000	.541	.628
511	64.10	0.00	.15	3.73E+03	5.08E-03	4.81E-03	.505	1.006E-02	1.224E-04	1.160E-04	310.7	5.08E-03	1.000	.505	.586
512	64.10	0.00	.25	2.51E+03	3.42E-03	3.24E-03	.340	1.006E-02	8.235E-05	7.803E-05	310.2	3.42E-03	1.000	.340	.394
513	64.10	0.00	.38	1.58E+03	2.14E-03	2.03E-03	.213	1.006E-02	5.159E-05	4.889E-05	309.7	2.14E-03	1.000	.213	.247
514	64.10	0.00	.64	2.68E+02	3.64E-04	3.45E-04	.036	1.006E-02	8.762E-06	8.303E-06	308.8	3.64E-04	1.000	.036	.042
515	64.10	0.00	.89												
516	64.10	0.00	1.14												
517	64.10	0.00	1.40												
518	64.10	0.00	1.65												
519	64.10	0.00	1.90												
520	64.10	0.00	2.29												

EDGE HEATING USED FOR HE

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X=    3.870E+01  HL  /HREFF=    9.154E-01
X=    4.124E+01  HL  /HREFF=    9.131E-01
X=    4.37[illegible]E+01  HL  /HREFF=    8.566E-01
X=    4.631E+01  HL  /HREFF=    8.5[illegible]9E-01
X=    4.886E+01  HL  /HREFF=    8.669E-01
X=    5.139E+01  HL  /HREFF=    8.428E-01
X=    5.648E+01  HL  /HREFF=    8.[illegible]35E-01
X=    6.156E+01  HL  /HREFF=    8.[illegible]38E-01
X=    7.172E+01  HL  /HREFF=    8.333E-01

X=    3.997E+01  HL  /HREFF=    9.298E-01
X=    4.632E+01  HL  /HREFF=    1.047E+00
X=    5.648E+01  HL  /HREFF=    9.442E-01
X=    6.410E+01  HL  /HREFF=    8.134E-01
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B.L. TRANSITION DISTANCE = 39.97 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

AMES 3.5 FT HWT TEST (152), D.J. BLUMER, IN-LINE RSI GAP RUN(27) 1973

TT	= 1.127E+03(K)	GAP LENGTH =	30.480(CM)
PT	= 5.2252E+05(N/M2)	GAP WIDTH =	.127(CM)
HT	= 1.1920E+06(J/KG)	GAP DEPTH =	2.032(CM)
RE/METER	= 1.6332E+06	ORIENTATION=	15.000(DEG)
MACH	= 5.199	QS =	6.7263E+04(W/M2)
RHC VEL	= 2.1019E+01(KG/M2-S)	MOC.POSITION=	2
HAW/HT	= 1.000 FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	3.90E+03	5.31E-03	5.94E-03	.710	7.486E-03	2.529E-04	2.396E-04	305.6				1.000
17	66.64	-.51	0.00												
18	61.56	-.51	0.00	4.69E+03	6.41E-03	6.07E-03	.751	8.535E-03	3.046E-04	2.888E-04	307.5				1.000
19	56.48	-.51	0.00	4.94E+03	6.75E-03	6.39E-03	.747	9.030E-03	3.209E-04	3.041E-04	307.5				1.000
20	51.39	-.51	0.00	5.27E+03	7.29E-03	6.83E-03	.760	9.474E-03	3.427E-04	3.248E-04	307.8				1.000
21	48.86	-.51	0.00	5.49E+03	7.51E-03	7.11E-03	.772	9.722E-03	3.572E-04	3.385E-04	306.1				1.000
22	46.31	-.51	0.00	5.89E+03	8.05E-03	7.63E-03	.805	1.000E-02	3.830E-04	3.629E-04	308.2				1.000
23	43.77	-.51	0.00	5.94E+03	8.12E-03	7.70E-03	.790	1.026E-02	3.864E-04	3.661E-04	308.1				1.000
24	41.24	-.51	0.00	6.19E+03	8.46E-03	8.02E-03	.801	1.056E-02	4.025E-04	3.814E-04	308.2				1.000
25	38.70	-.51	0.00	6.66E+03	9.10E-03	8.62E-03	.839	1.084E-02	4.329E-04	4.103E-04	307.7				1.000
41	71.72	0.03	.25												
42	66.64	0.03	.25	7.13E+02	9.71E-04	9.20E-04	.123	7.925E-03	4.619E-05	4.378E-05	305.3				.168
43	61.56	0.03	.25	1.07E+03	1.46E-03	1.38E-03	.171	8.535E-03	6.944E-05	6.581E-05	306.2				.228
44	56.48	0.03	.25	1.35E+03	1.84E-03	1.74E-03	.204	9.029E-03	8.744E-05	8.286E-05	307.1				.272
45	51.39	0.03	.25	1.36E+03	1.85E-03	1.75E-03	.195	9.473E-03	8.802E-05	8.341E-05	306.9				.257
46	48.86	0.03	.25	1.43E+03	1.95E-03	1.85E-03	.201	9.720E-03	9.300E-05	8.813E-05	307.0				.260
47	46.31	0.03	.25	1.58E+03	2.16E-03	2.05E-03	.216	1.000E-02	1.028E-04	9.746E-05	307.1				.269
48	43.77	0.03	.25	1.43E+03	1.95E-03	1.95E-03	.190	1.028E-02	9.301E-05	8.814E-05	307.0				.241
49	41.24	0.03	.25	1.50E+03	2.04E-03	1.93E-03	.193	1.056E-02	9.714E-05	9.205E-05	307.3				.241
50	38.70	0.03	.25	1.87E+03	2.55E-03	2.42E-03	.236	1.084E-02	1.215E-04	1.151E-04	306.5				.281
103	39.97	1.52	0.00	6.75E+03	9.72E-03	9.26E-03	.816	1.069E-02	4.151E-04	3.932E-04	311.4	8.72E-03	1.000	.816	.995
105	39.97	1.02	0.00	6.45E+03	8.87E-03	8.40E-03	.829	1.069E-02	4.[illegible]E-04	3.996E-04	312.2	8.87E-03	1.000	.829	1.011
107	39.97	.51	0.00	7.21E+03	9.89E-03	9.37E-03	.925	1.069E-02	4.705E-04	4.458E-04	311.9	9.89E-03	1.000	.925	1.128
108	39.97	.25	0.00	7.[illegible]E+03	9.69E-03	9.18E-03	.905	1.070E-02	4.609E-04	4.365E-04	310.9	9.69E-03	1.000	.905	1.104
110	39.97	.04	.04	5.61E+03	7.68E-03	7.28E-03	.718	1.070E-02	3.656E-04	3.463E-04	309.9	7.68E-03	1.000	.718	.876
111	39.97	0.00	.15	4.66E+03	6.38E-03	6.04E-03	.596	1.070E-02	3.035E-04	2.875E-04	309.5	6.38E-03	1.000	.596	.727
112	39.97	0.00	.25	3.01E+03	4.12E-03	3.90E-03	.385	1.070E-02	1.959E-04	1.856E-04	308.7	4.12E-03	1.000	.385	.469
113	39.97	0.00	.38	1.63E+03	2.23E-03	2.12E-03	.209	1.070E-02	1.063E-04	1.007E-04	308.1	2.23E-03	1.000	.209	.255
114	39.97	0.00	.64	4.84E+02	6.60E-04	6.25E-04	.062	1.070E-02	3.139E-05	2.974E-05	306.7	6.60E-04	1.000	.062	.075
115	39.97	0.00	.89	9.69E+01	1.32E-04	1.25E-04	.012	1.070E-02	6.282E-06	5.954E-06	305.8	1.32E-04	1.000	.012	.015
203	46.32	1.52	0.00	6.39E+03	8.75E-03	8.29E-03	.875	9.998E-03	4.161E-04	3.943E-04	309.1	8.75E-03	1.000	.875	1.007
205	46.32	1.02	0.00	6.76E+03	9.25E-03	8.77E-03	.925	9.998E-03	4.402E-04	4.171E-04	309.4	9.25E-03	1.000	.925	1.150
207	46.32	.51	0.00	5.92E+03	8.10E-03	7.68E-03	.810	9.998E-03	3.855E-04	3.652E-04	309.7	8.10E-03	1.000	.810	1.007
208	46.32	.25	0.00	5.55E+03	7.60E-03	7.20E-03	.760	9.999E-03	3.615E-04	3.426E-04	309.2	7.60E-03	1.000	.760	.944
210	46.32	.04	.04	4.38E+03	5.98E-03	5.67E-03	.598	1.000E-02	2.845E-04	2.696E-04	308.2	5.98E-03	1.000	.598	.743
211	46.32	0.00	.15	3.72E+03	5.08E-03	4.82E-03	.508	1.000E-02	2.419E-04	2.291E-04	307.9	5.08E-03	1.000	.508	.637
212	46.32	0.00	.25	2.58E+03	3.53E-03	3.34E-03	.353	1.000E-02	1.677E-04	1.590E-04	306.9	3.53E-03	1.000	.353	.436
213	46.32	0.00	.38												
214	46.32	0.00	.64	3.17E+00	4.53E-06	4.29E-06	.000	1.000E-02	2.153E-07	2.036E-07	338.7	4.53E-06	1.000	.000	.001
215	46.32	0.00	.89												

AMES 3.5 FT HWT TEST (132), C.J. BLUMER, IN-LINE RST GAP RUN(27) 1973 PAGE 54

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	6.37E+00	6.65E-06	9.20E-06	.001	1.000E-02	4.116E-07	3.902E-07	383.9	6.65E-06	1.000	.001	.001
217	46.32	0.01	1.40												
218	46.32	0.30	1.65	1.93E+01	2.62E-05	2.48E-05	.003	1.000E-02	1.245E-06	1.181E-06	383.7	2.62E-05	1.000	.003	.003
219	46.32	0.99	1.90	2.41E+01	3.27E-05	3.10E-05	.003	1.000E-02	1.557E-06	1.476E-06	383.4	3.27E-05	1.000	.003	.004
220	46.32	0.99	2.29	4.01E+00	5.45E-06	5.16E-06	.001	1.000E-02	2.591E-07	2.456E-07	383.2	5.45E-06	1.000	.001	.001
406	56.48	.76	0.00	5.43E+03	7.43E-03	7.04E-03	.823	9.030E-03	3.536E-04	3.351E-04	388.9	7.43E-03	1.000	.823	1.102
407	56.48	.51	0.00	5.61E+03	7.68E-03	7.28E-03	.850	9.030E-03	3.653E-04	3.461E-04	388.6	7.68E-03	1.000	.850	1.130
408	56.48	.25	0.00	5.11E+03	6.99E-03	6.62E-03	.774	9.030E-03	3.324E-04	3.150E-04	383.1	6.99E-03	1.000	.774	1.036
409	56.48	.15	0.00	4.52E+03	6.18E-03	5.86E-03	.685	9.029E-03	2.949E-04	2.786E-04	387.8	6.18E-03	1.000	.685	.918
410	56.48	.04	.04	3.86E+03	5.27E-03	5.00E-03	.584	9.029E-03	2.508E-04	2.377E-04	387.4	5.27E-03	1.000	.584	.782
411	56.48	0.00	.15	3.36E+03	4.59E-03	4.35E-03	.509	9.029E-03	2.184E-04	2.078E-04	387.1	4.59E-03	1.000	.509	.681
412	56.48	0.00	.25	1.98E+03	2.69E-03	2.55E-03	.298	9.029E-03	1.282E-04	1.215E-04	386.5	2.69E-03	1.000	.298	.399
413	56.48	0.00	.38	1.01E+03	1.38E-03	1.31E-03	.153	9.029E-03	6.560E-05	6.217E-05	385.2	1.38E-03	1.000	.153	.204
414	56.48	0.00	.64	1.52E+02	2.07E-04	1.96E-04	.023	9.029E-03	9.833E-06	9.320E-06	385.3	2.07E-04	1.000	.023	.031
415	56.48	0.00	.89												
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65	4.30E+01	5.84E-05	5.53E-05	.006	9.029E-03	2.777E-06	2.632E-06	383.9	5.84E-05	1.000	.006	.009
419	56.48	0.00	1.90	2.14E+01	2.92E-05	2.77E-05	.003	9.029E-03	1.389E-06	1.317E-06	383.7	2.92E-05	1.000	.003	.004
420	56.48	0.00	2.29												
506	64.10	.76	0.00	4.70E+03	6.43E-03	6.10E-03	.781	8.232E-03	3.061E-04	2.900E-04	388.6	6.43E-03	1.000	.781	1.055
507	64.10	.51	0.00	4.66E+03	6.37E-03	6.03E-03	.774	8.232E-03	3.029E-04	2.873E-04	388.3	6.37E-03	1.000	.774	1.045
508	64.10	.25	0.00	4.39E+03	6.00E-03	5.68E-03	.729	8.231E-03	2.853E-04	2.704E-04	387.8	6.00E-03	1.000	.729	.984
509	64.10	.15	0.00	3.69E+03	5.02E-03	4.76E-03	.610	8.231E-03	2.389E-04	2.264E-04	387.2	5.02E-03	1.000	.610	.824
510	64.10	.04	.04	3.07E+03	4.19E-03	3.97E-03	.509	8.230E-03	1.994E-04	1.890E-04	386.4	4.19E-03	1.000	.509	.688
511	64.10	0.00	.1	2.85E+03	3.89E-03	3.68E-03	.472	8.230E-03	1.859E-04	1.753E-04	386.6	3.89E-03	1.000	.472	.638
512	64.10	0.00	.25	1.87E+03	2.55E-03	2.42E-03	.310	8.230E-03	1.213E-04	1.150E-04	386.4	2.55E-03	1.000	.310	.418
513	64.10	0.00	.38	1.19E+03	1.62E-03	1.53E-03	.196	8.230E-03	7.694E-05	7.291E-05	386.1	1.62E-03	1.000	.196	.265
514	64.10	0.99	.64	2.02E+02	2.75E-04	2.61E-04	.033	8.230E-03	1.308E-05	1.240E-05	385.5	2.75E-04	1.000	.033	.045
515	64.10	0.99	.89	7.16E+00	9.73E-06	9.23E-06	.001	8.230E-03	4.631E-07	4.389E-07	384.8	9.73E-06	1.000	.001	.002
516	64.10	0.00	1.14	1.99E+01	2.70E-05	2.36E-05	.003	8.230E-03	1.287E-06	1.219E-06	384.8	2.70E-05	1.000	.003	.004
517	64.10	0.00	1.40	7.95E+01	1.08E-04	1.03E-04	.013	8.230E-03	5.146E-06	4.877E-06	384.5	1.08E-04	1.000	.013	.018
518	64.10	0.99	1.65	7.56E+01	1.03E-04	9.74E-05	.012	8.230E-03	4.888E-06	4.633E-06	384.3	1.03E-04	1.000	.012	.017
519	64.10	0.00	1.90												
520	64.10	0.00	2.29	7.67E+01	1.04E-04	9.94E-05	.013	8.230E-03	4.938E-06	4.681E-06	383.9	1.04E-04	1.000	.013	.017

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.393E-01
X=	4.124E+01	HL	/HREFF=	8.039E-01
X=	4.377E+01	HL	/HREFF=	7.837E-01
X=	4.631E+01	HL	/HREFF=	8.047E-01
X=	4.886E+01	HL	/HREFF=	7.723E-01
X=	5.139E+01	HL	/HREFF=	7.664E-01
X=	5.648E+01	HL	/HREFF=	7.471E-01
X=	6.156E+01	HL	/HREFF=	7.536E-01
X=	7.172E+01	HL	/HREFF=	7.099E-01
X=	3.997E+01	HL	/HREFF=	9.249E-01
X=	4.632E+01	HL	/HREFF=	8.164E-01
X=	5.648E+01	HL	/HREFF=	6.513E-01
X=	6.410E+01	HL	/HREFF=	7.735E-01

B.L. TRANSITION DISTANCE = 46.32 CM
FULLY TURBULENT B.L. CONDITIONS AT = 61.56 CM

AMES 3.5 FT HWT TEST (1P2), C.B. SLUMER, IN-LINE RSI GAP RUN(28) 1973 PAGE 55

TT = 1.1190E+03(K) GAP LENGTH = 30.480(CM)
PT = 1.0345E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.1235E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 3.2697E+06 ORIENTATION= 10.00 (DEG)
MACH = 3.100 QS = 1.2100E+05(W/M2)
RHO VEL = 4.1322E+01(KG/M2-S) MOC.POSITION= 2
HAW/HT = 0.903 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	5.72E+03	7.91E-03	7.53E-03	.830	9.533E-03	1.993E-04	1.793E-04	309.6				1.000
17	66.64	-.51	.06												
18	61.56	-.51	.25	6.49E+03	9.11E-03	8.54E-03	.869	1.093E-02	2.153E-04	2.041E-04	311.9				1.000
19	56.48	-.51	0.00	6.77E+03	9.41E-03	8.91E-03	.854	1.131E-02	2.249E-04	2.130E-04	312.3				1.000
20	51.39	-.51	0.00	7.17E+03	9.96E-03	9.43E-03	.849	1.172E-02	2.383E-04	2.235E-04	312.3				1.000
21	48.86	-.51	.03	7.75E+03	1.08E-02	1.02E-02	.892	1.209E-02	2.573E-04	2.441E-04	312.6				1.000
22	46.31	-.51	0.00	7.94E+03	1.10E-02	1.05E-02	.886	1.247E-02	2.649E-04	2.501E-04	312.8				1.000
23	43.77	-.51	0.00	8.12E+03	1.13E-02	1.07E-02	.878	1.285E-02	2.697E-04	2.554E-04	312.7				1.000
24	41.24	-.51	0.00	8.82E+03	1.23E-02	1.16E-02	.927	1.323E-02	2.933E-04	2.777E-04	313.1				1.000
25	38.70	-.51	0.00	9.34E+03	1.30E-02	1.23E-02	.954	1.361E-02	3.132E-04	2.938E-04	312.2				1.000
41	71.72	0.00	.25	1.22E+03	1.69E-03	1.60E-03	.177	9.526E-03	4.838E-05	3.826E-05	307.6				.214
42	66.64	0.00	.25	1.72E+03	2.38E-03	2.25E-03	.240	9.912E-03	5.695E-05	5.386E-05	308.1				.282
43	61.56	0.00	.25	1.56E+03	2.16E-03	2.05E-03	.218	1.037E-02	5.167E-05	4.894E-05	310.0				.240
44	56.48	0.00	.25	2.11E+03	2.92E-03	2.77E-03	.265	1.100E-02	6.993E-05	6.615E-05	310.6				.311
45	51.39	.00	.25	1.97E+03	2.73E-03	2.59E-03	.233	1.172E-02	6.534E-05	6.189E-05	310.3				.279
46	48.86	0.00	.25	1.90E+03	2.63E-03	2.49E-03	.218	1.208E-02	6.208E-05	5.956E-05	310.4				.244
47	46.31	0.00	.25	2.04E+03	2.83E-03	2.68E-03	.227	1.247E-02	6.767E-05	6.410E-05	310.8				.256
48	43.77	0.00	.25	1.96E+03	2.72E-03	2.57E-03	.211	1.285E-02	6.494E-05	6.151E-05	310.5				.241
49	41.24	0.00	.25	2.98E+03	4.13E-03	3.91E-03	.312	1.323E-02	9.965E-05	9.344E-05	311.1				.336
50	38.79	0.00	.25	2.49E+03	3.44E-03	3.26E-03	.253	1.361E-02	8.232E-05	7.798E-05	310.1				.265
103	39.97	1.52	0.00	8.88E+03	1.24E-02	1.17E-02	.921	1.342E-02	2.956E-04	2.799E-04	316.5	1.24E-02	1.000	.921	.988
105	39.97	1.02	0.00	8.81E+03	1.23E-02	1.17E-02	.919	1.342E-02	2.946E-04	2.791E-04	317.7	1.23E-02	1.000	.919	.977
107	39.97	.51	0.00	1.01E+04	1.41E-02	1.34E-02	1.054	1.342E-02	3.382E-04	3.202E-04	317.1	1.41E-02	1.000	1.054	1.121
108	39.97	.25	0.00	1.07E+04	1.49E-02	1.41E-02	1.109	1.342E-02	3.578E-04	3.364E-04	315.9	1.49E-02	1.000	1.109	1.179
110	39.97	.04	.04	8.95E+03	1.25E-02	1.19E-02	.930	1.342E-02	2.983E-04	2.821E-04	314.4	1.25E-02	1.000	.930	.985
111	39.97	0.00	.15	7.64E+03	1.06E-02	1.01E-02	.793	1.342E-02	2.544E-04	2.403E-04	313.8	1.06E-02	1.000	.793	.843
112	39.97	0.00	.25	5.28E+03	7.33E-03	6.95E-03	.547	1.342E-02	1.754E-04	1.661E-04	312.5	7.33E-03	1.000	.547	.581
113	39.97	0.00	.38	3.15E+03	4.37E-03	4.13E-03	.325	1.342E-02	1.044E-04	9.886E-05	311.5	4.37E-03	1.000	.325	.346
114	39.97	0.00	.64	9.43E+02	1.31E-03	1.24E-03	.097	1.342E-02	3.122E-05	2.957E-05	310.6	1.31E-03	1.000	.097	.133
115	39.97	0.00	.89	1.97E+02	2.77E-04	2.59E-04	.020	1.342E-02	6.525E-06	6.181E-06	308.6	2.77E-04	1.000	.020	.022
203	46.32	1.52	0.00	8.86E+03	1.23E-02	1.17E-02	.990	1.246E-02	2.955E-04	2.794E-04	313.8	1.23E-02	1.000	.990	1.118
205	46.32	1.02	0.00	9.69E+03	1.35E-02	1.28E-02	1.084	1.246E-02	3.228E-04	3.056E-04	314.6	1.35E-02	1.000	1.084	1.224
207	46.32	.51	0.00	7.50E+03	1.04E-02	9.89E-03	.838	1.246E-02	2.497E-04	2.365E-04	314.2	1.04E-02	1.000	.838	.94[illegible]
208	46.32	.25	0.00	6.66E+03	9.27E-03	8.77E-03	.743	1.246E-02	2.213E-04	2.098E-04	313.4	9.27E-03	1.000	.743	.84[illegible]
210	46.32	.04	.04	5.24E+03	7.27E-03	6.89E-03	.584	1.246E-02	1.739E-04	1.648E-04	312.1	7.27E-03	1.000	.584	.659
211	46.32	0.00	.15	4.46E+03	6.19E-03	5.86E-03	.496	1.246E-02	1.479E-04	1.401E-04	311.6	6.19E-03	1.000	.496	.56[illegible]
212	46.32	0.00	.25	3.14E+03	4.35E-03	4.12E-03	.349	1.246E-02	1.340E-04	9.853E-05	310.6	4.35E-03	1.000	.349	.394
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	4.34E+01	6.08E-05	6.33E-05	.005	1.246E-02	1.597E-06	1.513E-06	307.5	6.08E-05	1.000	.005	.000

AMES 3.5 FT HWT TEST (1c-/, C.3. 9LUMER, IN-LINE RSI GAP RUN(28) 1973 PAGE 56

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCG (KG/M2-S)	HL/HLCG	HLCG/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.03	2.29												
406	56.48	.76	0.00	7.19E+03	9.98E-03	9.45E-03	.907	1.100E-02	2.397E-04	2.260E-04	312.3	9.98E-03	1.000	.907	1.062
407	56.48	.51	0.00	7.58E+03	1.05E-02	9.96E-03	.956	1.100E-02	2.515E-04	2.382E-04	311.9	1.05E-02	1.000	.956	1.119
408	56.48	.25	0.00	7.12E+03	9.88E-03	9.35E-03	.898	1.100E-02	2.361E-04	2.237E-04	311.2	9.88E-03	1.000	.898	1.051
409	56.48	.15	0.00	6.37E+03	8.82E-03	8.36E-03	.802	1.100E-02	2.110E-04	1.998E-04	310.6	8.82E-03	1.000	.802	.930
410	56.48	.04	.04	5.43E+03	7.52E-03	7.13E-03	.684	1.100E-02	1.799E-04	1.704E-04	310.1	7.52E-03	1.000	.684	.800
411	56.48	0.00	.15	4.62E+03	6.40E-03	6.06E-03	.581	1.100E-02	1.533E-04	1.449E-04	309.6	6.40E-03	1.000	.581	.680
412	56.48	0.00	.25	3.02E+03	4.19E-03	3.97E-03	.381	1.100E-02	1.002E-04	9.492E-05	308.6	4.19E-03	1.000	.381	.446
413	56.48	0.00	.38	1.68E+03	2.32E-03	2.19E-03	.211	1.100E-02	5.539E-05	5.248E-05	307.1	2.32E-03	1.000	.211	.246
414	56.48	0.00	.54	3.52E+02	4.85E-04	4.59E-04	.044	1.100E-02	1.159E-05	1.098E-05	306.7	4.85E-04	1.000	.044	.052
415	56.48	0.00	.89	2.30E+01	3.20E-05	3.11E-05	.003	1.100E-02	7.052E-07	7.440E-07	306.0	3.20E-05	1.000	.003	.003
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.90												
420	56.48	0.00	2.29												
506	64.10	.76	0.00	5.96E+03	8.28E-03	7.84E-03	.817	1.014E-02	1.980E-04	1.875E-04	311.9	8.28E-03	1.000	.817	.951
507	64.10	.51	0.00	6.02E+03	8.34E-03	7.90E-03	.823	1.014E-02	1.995E-04	1.898E-04	311.4	8.34E-03	1.000	.823	.958
508	64.10	.25	0.00	5.79E+03	8.03E-03	7.61E-03	.792	1.014E-02	1.920E-04	1.819E-04	310.7	8.03E-03	1.000	.792	.922
509	64.10	.13	0.00	4.85E+03	6.72E-03	6.36E-03	.663	1.014E-02	1.607E-04	1.522E-04	309.7	6.72E-03	1.000	.663	.771
510	64.10	.04	.04	4.19E+03	5.79E-03	5.49E-03	.571	1.014E-02	1.385E-04	1.312E-04	309.3	5.79E-03	1.000	.571	.665
511	64.10	0.00	.15	3.84E+03	5.31E-03	5.03E-03	.524	1.014E-02	1.273E-04	1.203E-04	309.0	5.31E-03	1.000	.524	.609
512	64.10	0.00	.25	2.72E+03	3.75E-03	3.56E-03	.370	1.014E-02	8.978E-05	8.505E-05	308.5	3.75E-03	1.000	.370	.431
513	64.10	0.00	.38	1.79E+03	2.47E-03	2.34E-03	.244	1.014E-02	5.918E-05	5.606E-05	307.9	2.47E-03	1.000	.244	.284
514	64.10	0.00	.64	3.87E+02	5.33E-04	5.05E-04	.053	1.014E-02	1.279E-05	1.200E-05	307.0	5.33E-04	1.000	.053	.061
515	64.10	0.00	.89	6.04E+01	8.31E-05	7.38E-05	.008	1.014E-02	1.988E-06	1.883E-06	306.1	8.31E-05	1.000	.008	.010
516	64.10	0.00	1.14												
517	64.10	0.00	1.40												
518	64.10	0.00	1.65												
519	64.10	0.03	1.90												
520	64.10	0.00	2.29	3.90E+01	5.47E-05	5.18E-05	.005	1.014E-02	1.307E-06	1.239E-06	304.5	5.47E-05	1.000	.005	.006

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 9.036E-01
X= 4.124E+01 HL /HREFF= 9.273E-01
X= 4.377E+01 HL /HREFF= 8.778E-01
X= 4.631E+01 HL /HREFF= 8.956E-01
X= 4.886E+01 HL /HREFF= 8.919E-01
X= 5.139E+01 HL /HREFF= 8.493E-01
X= 5.648E+01 HL /HREFF= 8.545E-01
X= 6.156E+01 HL /HREFF= 8.693E-01
X= 7.172E+01 HL /HREFF= 8.323E-01

X= 3.997E+01 HL /HREFF= 1.054E+00
X= 4.632E+01 HL /HREFF= 8.331E-01
X= 5.648E+01 HL /HREFF= 9.552E-01
X= 6.410E+01 HL /HREFF= 8.231E-01

B.L. TRANSITION DISTANCE = 46.32 CM
FULLY TURBULENT B.L. CONDITIONS AT = 48.96 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1*2), C.P. BLUMER, IN-LINE RSI GAP RUN(29) 1973 PAGE 57

TT	= 1.0977E+03(K)	GAP LENGTH	= 30.480(CM)
PT	= 5.2134E+05(N/M2)	GAP WIDTH	= .234(CM)
HT	= 1.1577E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 1.730E+06	ORIENTATION	= 15.000(DEG)
MACH	= 5.130	QS	= 8.3166E+04(W/M2)
RHO VEL	= 2.1..E+01(KG/M2-S)	MOC.POSITION	= 2
HAW/HT	= 0.909 FOR HT		
HAW/HT	= 0.674 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	4.55E+03	5.52E-03	6.17E-03	.865	7.536E-03	3.047E-04	2.884E-04	310.9				1.000
17	66.64	-.51	0.00												
18	61.56	-.51	0.00	5.14E+03	7.23E-03	6.35E-03	.843	8.583E-03	3.330E-04	3.199E-04	312.5				1.000
19	56.48	-.51	0.00	5.21E+03	7.49E-03	7.08E-03	.923	9.082E-03	3.494E-04	3.307E-04	312.6				1.000
20	51.39	-.51	0.00	5.35E+03	7.68E-03	7.27E-03	.804	9.546E-03	3.588E-04	3.397E-04	312.7				1.000
21	48.86	-.51	0.00	5.71E+03	8.20E-03	7.75E-03	.837	9.799E-03	3.833E-04	3.625E-04	312.6				1.000
22	46.31	-.51	0.00	5.95E+03	8.54E-03	8.08E-03	.847	1.008E-02	3.999E-04	3.777E-04	312.8				1.000
23	43.77	-.51	0.00	6.22E+03	8.94E-03	8.46E-03	.862	1.036E-02	4.175E-04	3.952E-04	312.7				1.000
24	41.24	-.51	0.00	6.65E+03	9.56E-03	9.05E-03	.898	1.064E-02	4.465E-04	4.227E-04	312.9				1.000
25	38.70	-.51	0.00	6.79E+03	9.75E-03	9.23E-03	.893	1.092E-02	4.555E-04	4.312E-04	312.4				1.000
41	71.72	0.00	.25	7.85E+02	1.12E-03	1.06E-03	.149	7.536E-03	5.246E-05	4.967E-05	309.8				.172
42	66.54	0.00	.25	1.53E+03	2.19E-03	2.08E-03	.275	7.974E-03	1.325E-04	9.701E-05	310.5				.322
43	61.56	0.00	.25	1.81E+03	2.59E-03	2.45E-03	.302	8.583E-03	1.299E-04	1.145E-04	311.6				.350
44	56.48	0.00	.25	2.13E+03	3.05E-03	2.89E-03	.336	9.088E-03	1.425E-04	1.349E-04	312.0				.400
45	51.39	0.00	.25	1.84E+03	2.64E-03	2.50E-03	.277	9.547E-03	1.234E-04	1.169E-04	311.9				.344
46	48.86	0.00	.25	1.94E+03	2.78E-03	2.63E-03	.284	9.798E-03	1.299E-04	1.230E-04	311.8				.339
47	46.31	0.00	.25	2.02E+03	2.90E-03	2.75E-03	.288	1.008E-02	1.356E-04	1.284E-04	311.9				.340
48	43.77	0.00	.25	2.34E+03	3.36E-03	3.18E-03	.324	1.036E-02	1.567E-04	1.484E-04	311.7				.376
49	41.24	0.00	.25	2.26E+03	3.25E-03	3.07E-03	.305	1.064E-02	1.516E-04	1.435E-04	312.0				.340
50	38.70	0.00	.25	1.83E+03	2.62E-03	2.48E-03	.240	1.092E-02	1.224E-04	1.159E-04	311.4				.269
103	39.97	1.52	0.00	6.51E+03	9.39E-03	8.59E-03	.872	1.077E-02	4.339E-04	4.153E-04	315.6	9.39E-03	1.000	.872	.974
105	39.97	1.02	0.00	6.47E+03	9.33E-03	8.83E-03	.866	1.077E-02	4.360E-04	4.126E-04	316.3	9.33E-03	1.000	.866	.967
107	39.97	.51	0.00	7.25E+03	1.05E-02	9.90E-03	.971	1.077E-02	4.889E-04	4.627E-04	315.9	1.05E-02	1.000	.971	1.085
108	39.97	.25	0.00	7.45E+03	1.07E-02	1.02E-02	.997	1.078E-02	5.019E-04	4.750E-04	315.2	1.07E-02	1.000	.997	1.113
110	39.97	.06	.04	6.24E+03	8.98E-03	8.50E-03	.833	1.078E-02	4.136E-04	3.972E-04	314.3	8.98E-03	1.000	.833	.931
111	39.97	0.00	.15	5.34E+03	7.68E-03	7.27E-03	.713	1.078E-02	3.349E-04	3.397E-04	314.0	7.68E-03	1.000	.713	.796
112	39.97	0.00	.25	3.81E+03	5.49E-03	5.19E-03	.509	1.078E-02	2.561E-04	2.424E-04	313.2	5.48E-03	1.000	.509	.568
113	39.97	0.00	.38	2.39E+03	3.44E-03	3.25E-03	.319	1.078E-02	1.606E-04	1.520E-04	312.7	3.44E-03	1.000	.319	.356
114	39.97	0.00	.64	9.74E+02	1.40E-03	1.32E-03	.130	1.078E-02	6.522E-05	6.174E-05	311.8	1.40E-03	1.000	.130	.145
115	39.97	0.00	.89	1.70E+02	2.44E-04	2.31E-04	.023	1.078E-02	1.139E-05	1.078E-05	319.8	2.44E-04	1.000	.023	.025
203	46.32	1.52	0.00	6.45E+03	9.29E-03	8.79E-03	.922	1.008E-02	4.333E-04	4.107E-04	314.3	9.29E-03	1.000	.922	1.000
205	46.32	1.02	0.00	7.34E+03	1.06E-02	1.00E-02	1.048	1.008E-02	4.936E-04	4.671E-04	314.7	1.06E-02	1.000	1.046	1.230
207	46.32	.51	0.00	7.34E+03	1.06E-02	1.00E-02	1.049	1.008E-02	4.943E-04	4.676E-04	314.5	1.06E-02	1.000	1.049	1.23[illegible]
208	46.32	.25	0.00	6.59E+03	9.49E-03	8.97E-03	.941	1.008E-02	4.432E-04	4.193E-04	314.0	9.48E-03	1.000	.941	1.11[illegible]
210	46.32	.06	.04	5.26E+03	7.58E-03	7.18E-03	.752	1.008E-02	3.542E-04	3.353E-04	313.3	7.58E-03	1.000	.752	.888
211	46.32	0.00	.15	4.60E+03	6.61E-03	6.26E-03	.656	1.008E-02	3.089E-04	2.924E-04	313.0	6.61E-03	1.000	.656	.77[illegible]
212	46.32	0.00	.25	3.44E+03	4.93E-03	4.67E-03	.489	1.008E-02	2.305E-04	2.182E-04	312.4	4.93E-03	1.000	.489	.57[illegible]
213	46.32	0.00	.38												
214	46.32	0.00	.64	3.10E+00	4.74E-06	4.48E-06	.000	1.008E-02	2.216E-07	2.093E-07	336.7	4.74E-06	1.000	.000	.001
215	46.32	0.00	.89	2.1[illegible]E+02	3.07E-04	2.91E-04	.030	1.008E-02	1.436E-05	1.359E-05	319.6	3.07E-04	1.000	.030	.036

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP RUN(29) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	2.78E+00	3.40E-06	3.22E-06	.000	1.008E-02	1.530E-07	1.506E-07	309.0	3.40E-06	1.000	.000	.000
217	46.32	0.00	1.40	1.96E+01	2.83E-05	2.68E-05	.003	1.008E-02	1.322E-06	1.252E-06	308.9	2.83E-05	1.000	.003	.003
218	46.32	0.00	1.65	3.26E+00	4.57E-06	4.32E-06	.000	1.008E-02	2.133E-07	2.020E-07	308.7	4.57E-06	1.000	.000	.001
219	46.32	0.00	1.90	1.36E+01	1.94E-05	1.84E-05	.002	1.008E-02	9.078E-07	8.598E-07	308.5	1.94E-05	1.000	.002	.002
220	46.32	0.00	2.29												
406	56.40	.76	0.00	5.94E+03	8.54E-03	8.08E-03	.939	9.090E-03	3.989E-04	3.776E-04	313.4	8.54E-03	1.000	.939	1.142
407	56.40	.51	0.00	6.23E+03	8.95E-03	8.47E-03	.984	9.089E-03	4.183E-04	3.957E-04	313.1	8.95E-03	1.000	.984	1.196
408	56.40	.25	0.00	6.39E+03	8.74E-03	8.27E-03	.962	9.089E-03	4.033E-04	3.869E-04	312.8	8.74E-03	1.000	.962	1.169
409	56.40	.15	0.00	5.72E+03	8.21E-03	7.77E-03	.903	9.089E-03	3.835E-04	3.630E-04	312.4	8.21E-03	1.000	.903	1.098
410	56.40	.04	.04	5.07E+03	7.27E-03	6.88E-03	.800	9.089E-03	3.397E-04	3.216E-04	312.1	7.27E-03	1.000	.800	.972
411	56.40	0.00	.15	4.63E+03	6.64E-03	6.29E-03	.731	9.088E-03	3.103E-04	2.938E-04	311.9	6.64E-03	1.000	.731	.888
412	56.40	0.00	.25	3.01E+03	4.32E-03	4.09E-03	.475	9.088E-03	2.018E-04	1.910E-04	311.3	4.32E-03	1.000	.475	.578
413	56.40	0.00	.38	1.85E+03	2.65E-03	2.51E-03	.291	9.088E-03	1.237E-04	1.171E-04	310.4	2.65E-03	1.000	.291	.354
414	56.40	0.00	.64	5.69E+02	8.14E-04	7.71E-04	.090	9.088E-03	3.813E-05	3.608E-05	310.3	8.14E-04	1.000	.090	.109
415	56.40	0.00	.89	1.47E+02	2.11E-04	2.08E-04	.023	9.088E-03	9.847E-06	9.323E-06	309.9	2.11E-04	1.000	.023	.028
416	56.40	0.00	1.14												
417	56.40	0.00	1.40	1.61E+00	2.29E-06	2.16E-06	.000	9.088E-03	1.368E-07	1.011E-07	309.2	2.29E-06	1.000	.000	.000
418	56.40	0.00	1.65												
419	56.40	0.00	1.90												
420	56.40	0.00	2.29												
506	64.10	.76	0.00	5.46E+03	7.84E-03	7.42E-03	.946	8.282E-03	3.661E-04	3.465E-04	312.9	7.84E-03	1.000	.946	1.115
507	64.10	.51	0.00	5.08E+03	7.29E-03	6.90E-03	.880	8.281E-03	3.405E-04	3.223E-04	312.6	7.29E-03	1.000	.880	1.037
508	64.10	.25	0.00	4.81E+03	6.91E-03	6.54E-03	.834	8.280E-03	3.226E-04	3.054E-04	312.2	6.91E-03	1.000	.834	.983
509	64.10	.15	0.00	4.20E+03	6.02E-03	5.70E-03	.727	8.279E-03	2.811E-04	2.661E-04	311.7	6.02E-03	1.000	.727	.856
510	64.10	.04	.04	3.76E+03	5.39E-03	5.10E-03	.650	8.279E-03	2.516E-04	2.382E-04	311.4	5.39E-03	1.000	.650	.767
511	64.10	0.00	.15	3.54E+03	5.07E-03	4.80E-03	.613	8.279E-03	2.371E-04	2.244E-04	311.3	5.07E-03	1.000	.613	.722
512	64.10	0.00	.25	2.70E+03	3.86E-03	3.66E-03	.467	8.279E-03	1.804E-04	1.708E-04	311.0	3.86E-03	1.000	.467	.550
513	64.10	0.00	.38	1.87E+03	2.68E-03	2.54E-03	.324	8.279E-03	1.253E-04	1.186E-04	310.8	2.68E-03	1.000	.324	.382
514	64.10	0.00	.64	6.02E+02	8.32E-04	7.88E-04	.101	8.279E-03	3.887E-05	3.680E-05	310.3	8.32E-04	1.000	.101	.118
515	64.10	0.00	.89	1.05E+02	1.51E-04	1.43E-04	.018	8.279E-03	7.049E-06	6.665E-06	309.6	1.51E-04	1.000	.018	.021
516	64.10	0.00	1.14	1.58E+01	2.27E-05	2.15E-05	.003	8.279E-03	1.059E-06	1.002E-06	309.7	2.27E-05	1.000	.003	.003
517	64.10	0.00	1.40												
518	64.10	0.00	1.65												
519	64.10	0.00	1.90												
520	64.10	0.00	2.29												

EDGE HEATING USED FOR HE
X= 3.878E+01 HL /HREFF= 8.928E-01
X= 4.124E+01 HL /HREFF= 8.982E-01
X= 4.377E+01 HL /HREFF= 8.624E-01
X= 4.631E+01 HL /HREFF= 8.472E-01
X= 4.886E+01 HL /HREFF= 8.365E-01
X= 5.139E+01 HL /HREFF= 8.044E-01
X= 5.648E+01 HL /HREFF= 8.228E-01
X= 6.156E+01 HL /HREFF= 8.429E-01
X= 7.172E+01 HL /HREFF= 8.455E-01

X= 3.997E+01 HL /HREFF= 9.712E-01
X= 4.632E+01 HL /HREFF= 1.049E+00
X= 5.648E+01 HL /HREFF= 9.843E-01
X= 6.410E+01 HL /HREFF= 8.800E-01
B.L. TRANSITION DISTANCE = 39.97 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

AMES 3.5 FT HWT TEST (132), T.P. GLUP [illegible] IN-LINE RSI GAP RUN [illegible] 1977

TT	= 1.129[illegible](K)	GAP LENGTH =	33.48[illegible](CM)
PT	= 1.[illegible]3[illegible](N/M2)	GAP WIDTH =	.254(CM)
HT	= 1.13[illegible](J/KG)	GAP DEPTH =	2.[illegible]32(CM)
PE/METER	= 3.22[illegible]	ORIENTATION=	10.000(DEG)
MACH	= 5.19[illegible]	QS =	1.2246E+05(W/M2)
RHC VEL	= 4.1[illegible]1(KG/M2-S)	MOD.POSITION=	2
HAW/HT	= [illegible].95[illegible] FOR HT		
HAW/HT	= 0.[illegible]74 FOR HL		
HLCC	= HL(2ND. ORDER CORR.)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	[illegible].375E-03	[illegible].985E-03	.779	9.465E-03	1.773E-04	1.689E-04	309.6				1.000
17	66.64	-.51	[illegible]												
18	61.56	-.51	[illegible]	[illegible].91E+03	[illegible].11E-03	7.69E-03	.787	1. 32E-02	1.952E-04	1.849E-04	312.5				1.000
19	56.48	-.51	[illegible]	[illegible].27E+03	3.[illegible]E-03	[illegible].15E-03	.786	1.[illegible]95E-02	2.379E-04	1.961E-04	312.5				1.000
20	51.39	-.51	0.00	[illegible].84E+03	3.38E-03	8.89E-03	.805	1.166E-02	2.257E-04	2.138E-04	312.6				1.000
21	48.96	-.51	[illegible]	[illegible].05E+03	1.[illegible]6E-02	1.0[illegible]E-02	.878	1.202E-02	2.538E-04	2.405E-04	312.9				1.000
22	46.31	-.51	[illegible]	[illegible].29E+03	1.14E-02	1.08E-02	.915	1.246E-02	2.739E-04	2.594E-04	312.9				1.000
23	43.77	-.51	[illegible]	8.37E+03	1.22E-02	1.16E-02	.959	1.277E-02	2.946E-04	2.791E-04	312.9				1.000
24	41.24	-.51	[illegible]	9.[illegible]2E+03	1.31E-02	1.24E-02	.995	1.315E-02	3.146E-04	2.980E-04	313.1				1.000
25	38.78	-.51	[illegible]	9.50E+03	1.31E-02	1.25E-02	.972	1.352E-02	3.163E-04	2.997E-04	311.9				1.000
41	71.72	[illegible]	.25	1.[illegible]E+03	1.43E-03	1.36E-03	.152	9.459E-03	3.449E-05	3.269E-05	307.1				.195
42	66.64	[illegible]	.25	2.17E+03	2.90E-03	2.30E-03	.3[illegible]	9.649E-03	7.117E-05	6.744E-05	308.2				.304
43	61.56	[illegible]	.25	1.6[illegible]E+03	2.28E-03	2.16E-03	.221	1.031E-02	5.480E-05	5.192E-05	310.6				.281
44	56.48	0.03	.25	1.67E+03	2.29E-03	2.17E-03	.209	1.094E-02	5.503E-05	5.214E-05	310.9				.266
45	51.39	[illegible]	.25	2.26E+03	3.11E-03	2.35E-03	.267	1.165E-02	7.489E-05	7.095E-05	310.6				.332
46	48.86	[illegible]	.25	3.1[illegible]E+03	4.36E-03	4.13E-03	.363	1.201E-02	1.049E-04	9.929E-05	310.7				.413
47	46.31	[illegible]	.25	[illegible].21E+03	5.77E-03	5.46E-03	.465	1.239E-02	1.387E-04	1.314E-04	310.9				.507
48	43.77	[illegible]	.25	[illegible]E+03	[illegible].35E-03	6.37E-03	.576	1.27[illegible]E-02	1.769E-04	1.676E-04	310.8				.601
49	41.24	[illegible]	.25	[illegible]E+03	5.53E-03	5.24E-03	.420	1.315E-02	1.330E-04	1.260E-04	311.1				.423
50	38.78	[illegible]	.25	2.27E+03	3.10E-03	2.93E-03	.229	1.352E-02	7.449E-05	7.058E-05	309.9				.236
103	39.97	1.32	[illegible]	9.[illegible]E+03	1.25E-02	1.18E-02	.937	1.334E-02	3.009E-04	2.849E-04	314.3	1.25E-02	1.000	.937	.983
105	39.97	1.32	[illegible]	9.1[illegible]E+03	1.25E-02	1.19E-02	.948	1.334E-02	3.017E-04	2.857E-04	315.9	1.25E-02	1.000	.940	.956
107	39.97	.51	[illegible]	1.12E+04	1.[illegible]4E-02	1.[illegible]E-02	1.156	1.333E-02	3.707E-04	3.511E-04	315.7	1.54E-02	1.000	1.156	1.175
108	39.97	.25	[illegible]	1.[illegible]E+04	1.79E-02	1.79E-02	1.342	1.333E-02	4.3[illegible]E-04	4.076E-04	314.6	1.79E-02	1.000	1.342	1.365
110	39.97	.94	.[illegible]4	1.19E+04	1.63E-02	1.55E-02	1.224	1.333E-02	3.928E-04	3.720E-04	313.4	1.63E-02	1.000	1.224	1.249
111	39.97	[illegible]	.15	1.[illegible]E+04	1.42E-02	1.35E-02	1.067	1.333E-02	3.423E-04	3.243E-04	312.6	1.42E-02	1.000	1.067	1.085
112	39.97	[illegible]	.25	7.[illegible]E+03	1.02E-02	9.64E-03	.763	1.333E-02	2.448E-04	2.319E-04	311.5	1.02E-02	1.000	.763	.776
113	39.97	[illegible]	.38	4.[illegible]E+03	[illegible].21E-03	5.98E-03	.466	1.333E-02	1.493E-04	1.415E-04	310.5	6.21E-03	1.000	.466	.473
114	39.97	[illegible]	.64	1.31E+03	1.79E-03	1.7[illegible]E-03	.134	1.333E-02	4.3[illegible]E-05	4.060E-05	308.4	1.79E-03	1.000	.134	.136
115	39.97	[illegible]	.89	2.[illegible]E+02	[illegible].56E-04	3.37E-04	.027	1.333E-02	8.559E-06	8.118E-06	307.3	3.56E-04	1.000	.027	.027
203	46.32	1.42	[illegible]	9.35E+03	1.28E-02	1.22E-02	1.037	1.230E-02	3.[illegible]E-04	2.927E-04	311.1	1.28E-02	1.003	1.037	1.138
205	46.32	1.32	[illegible]	1.2[illegible]E+04	1.64E-02	1.56E-02	1.326	1.239E-02	3.951E-04	3.742E-04	312.2	1.64E-02	1.000	1.326	1.445
207	46.32	.51	[illegible]	1.27E+04	1.74E-02	1.65E-02	1.402	1.239E-02	4.179E-04	3.959E-04	312.0	1.74E-02	1.000	1.402	1.52[illegible]
208	46.32	.25	[illegible]	1.2[illegible]E+04	1.73E-02	1.64E-02	1.397	1.239E-02	4.1[illegible]E-04	3.943E-04	311.3	1.73E-02	1.000	1.397	1.52[illegible]
210	46.32	.94	.[illegible]4	1.[illegible]E+04	1.[illegible]9E-02	1.41E-02	1.205	1.239E-02	3.539E-04	3.402E-04	310.2	1.49E-02	1.000	1.295	1.312
211	46.32	[illegible]	.15	9.7[illegible]E+03	1.33E-02	1.26E-02	1.070	1.239E-02	3.191E-04	3.023E-04	309.6	1.33E-02	1.000	1.070	1.16[illegible]
212	46.32	[illegible]	.25	[illegible]E+03	1. 3E-02	[illegible].10E-03	.935	1.239E-02	2.439E-04	2.35[illegible]E-04	304.6	[illegible].03E-02	1.000	.835	.916
213	46.32	[illegible]	.38	[illegible]E+01	1.35E-05	1.28E-05	.[illegible]1	1.239E-02	3.255E-07	3.077E-07	333.[illegible]	1.35E-05	1.000	.001	.001
214	46.32	0.00	.64												
215	46.32	[illegible]	.89	1.27E+03	1.69E-03	1.[illegible]9E-03	.135	1.[illegible]3[illegible]E-02	4.[illegible]3[illegible]E-05	3.920E-05	335.6	[illegible].68E-03	1.000	.135	.147

AMES 3.5 FT HWT TEST (182), C.P. PLUMER, IN-LINE RSI GAP RUN(30) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	5.37E+02	7.17E-04	6.90E-04	.058	1.239E-02	1.728E-05	1.635E-05	302.7	7.17E-04	1.000	.058	.063
217	46.32	0.00	1.40	2.81E+02	3.81E-04	3.61E-04	.031	1.239E-02	9.155E-06	8.679E-06	302.5	3.81E-04	1.000	.031	.033
218	46.32	0.00	1.65	7.16E+01	9.69E-05	9.18E-05	.008	1.239E-02	2.339E-06	2.209E-06	302.1	9.69E-05	1.000	.008	.009
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
406	56.48	.76	0.00	5.93E+03	8.12E-03	7.69E-03	.742	1.094E-02	1.953E-04	1.850E-04	310.4	8.12E-03	1.000	.742	.944
407	56.48	.51	0.00	5.57E+03	8.16E-03	7.74E-03	.746	1.094E-02	1.964E-04	1.861E-04	310.2	8.16E-03	1.000	.746	.950
408	56.48	.25	0.00	5.64E+03	7.70E-03	7.30E-03	.704	1.094E-02	1.852E-04	1.755E-04	309.5	7.70E-03	1.000	.704	.895
409	56.48	.15	0.00	5.14E+03	7.01E-03	6.65E-03	.641	1.094E-02	1.687E-04	1.599E-04	309.1	7.01E-03	1.000	.641	.816
410	56.48	.04	.04	4.42E+03	6.03E-03	5.72E-03	.551	1.094E-02	1.451E-04	1.375E-04	308.6	6.03E-03	1.000	.551	.701
411	56.48	0.00	.15	3.77E+03	5.14E-03	4.87E-03	.469	1.094E-02	1.236E-04	1.171E-04	308.2	5.14E-03	1.000	.469	.597
412	56.48	0.00	.25	2.42E+03	3.29E-03	3.12E-03	.301	1.094E-02	7.925E-05	7.511E-05	307.1	3.29E-03	1.000	.301	.383
413	56.48	0.00	.38	1.33E+03	1.81E-03	1.71E-03	.165	1.094E-02	4.352E-05	4.125E-05	305.8	1.81E-03	1.000	.165	.210
414	56.48	0.00	.64	3.12E+02	4.23E-04	4.01E-04	.039	1.094E-02	1.018E-05	9.653E-06	305.5	4.23E-04	1.000	.039	.049
415	56.48	0.00	.89												
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65	3.19E+00	4.30E-06	4.08E-06	.000	1.094E-02	1.034E-07	9.806E-08	302.8	4.30E-06	1.000	.000	.000
419	56.48	0.00	1.90												
420	56.48	0.00	2.29												
506	64.10	.76	0.00	6.05E+03	8.27E-03	7.84E-03	.821	1.008E-02	1.990E-04	1.885E-04	310.6	8.27E-03	1.000	.821	1.046
507	64.10	.51	0.00	5.87E+03	8.02E-03	7.60E-03	.796	1.008E-02	1.930E-04	1.829E-04	310.2	8.02E-03	1.000	.796	1.015
508	64.10	.25	0.00	5.89E+03	8.05E-03	7.63E-03	.799	1.008E-02	1.936E-04	1.834E-04	309.5	8.05E-03	1.000	.798	1.018
509	64.10	.15	0.00	5.24E+03	7.15E-03	6.77E-03	.709	1.008E-02	1.720E-04	1.630E-04	308.5	7.15E-03	1.000	.709	.904
510	64.10	.04	.04	4.58E+03	6.26E-03	5.93E-03	.621	1.008E-02	1.506E-04	1.427E-04	308.2	6.26E-03	1.000	.621	.791
511	64.10	0.00	.15	4.42E+03	6.03E-03	5.71E-03	.598	1.008E-02	1.450E-04	1.374E-04	307.8	6.03E-03	1.000	.598	.762
512	64.10	0.00	.25	3.34E+03	4.55E-03	4.31E-03	.452	1.008E-02	1.095E-04	1.038E-04	307.5	4.55E-03	1.000	.452	.576
513	64.10	0.00	.38	2.34E+03	3.20E-03	3.03E-03	.317	1.008E-02	7.696E-05	7.293E-05	306.9	3.20E-03	1.000	.317	.404
514	64.10	0.00	.64	7.97E+02	1.08E-03	1.03E-03	.108	1.008E-02	2.607E-05	2.471E-05	306.0	1.08E-03	1.000	.108	.137
515	64.10	0.00	.89	1.46E+02	1.99E-04	1.89E-04	.020	1.008E-02	4.779E-06	4.530E-06	305.2	1.99E-04	1.000	.020	.025
516	64.10	0.00	1.14	1.04E+02	1.41E-04	1.34E-04	.014	1.008E-02	3.403E-06	3.225E-06	305.2	1.41E-04	1.000	.014	.018
517	64.10	0.00	1.40	6.35E+00	8.62E-06	8.17E-06	.001	1.008E-02	2.074E-07	1.966E-07	304.6	8.62E-06	1.000	.001	.001
518	64.10	0.00	1.65	5.49E+01	7.45E-05	7.06E-05	.007	1.008E-02	1.792E-06	1.698E-06	304.4	7.45E-05	1.000	.007	.009
519	64.10	0.00	1.90	7.96E+00	1.08E-05	1.02E-05	.001	1.008E-02	2.596E-07	2.460E-07	304.0	1.08E-05	1.000	.001	.001
520	64.10	0.00	2.29												

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 9.723E-01
X= 4.124E+01 HL /HREFF= 9.945E-01
X= 4.377E+01 HL /HREFF= 9.588E-01
X= 4.631E+01 HL /HREFF= 9.161E-01
X= 4.886E+01 HL /HREFF= 8.780E-01
X= 5.139E+01 HL /HREFF= 8.249E-01
X= 5.648E+01 HL /HREFF= 7.833E-01
X= 6.156E+01 HL /HREFF= 7.865E-01
X= 7.172E+01 HL /HREFF= 7.757E-01

X= 3.997E+01 HL /HREFF= 1.146E+00
X= 4.632E+01 HL /HREFF= 1.072E+00
X= 5.648E+01 HL /HREFF= 7.464E-01
X= 6.410E+01 HL /HREFF= 7.962E-01

B.L. TRANSITION DISTANCE = 34.97 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

AMES 3.5 FT HWT TEST (152), 0.3, PLUMER, IN-LINE RSI GAP RUN(31) 1973

TT	= 1.0922E+03(K)	GAP LENGTH	= 39.49 (CM)
PT	= 1.031E+06(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.14 EE+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 3.454E+06	ORIENTATION	= 15.000(DEG)
MACH	= 5.10	QS	= 1.1625E+05(W/M2)
RHC VEL	= 4.273E+01(KG/M2-S)	MOC.POSITION	= 2
HAW/HT	= 0.998 FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	[illegible]E+03	7.64E-03	7.23E-03	.791	9.775E-03	1.795E-04	1.691E-04	300.0				1.000
17	66.64	-.51	0.00												
18	61.56	-.51	0.00	5.04E+03	5.60E-03	8.14E-03	.812	1.038E-02	2.039E-04	1.913E-04	303.2				1.000
19	56.48	-.51	0.00	6.29E+03	9.11E-03	8.43E-03	.812	1.123E-02	2.129E-04	2.016E-04	303.4				1.000
20	51.39	-.51	0.00	6.59E+03	9.54E-03	9.03E-03	.798	1.195E-02	2.229E-04	2.110E-04	303.7				1.000
21	48.96	-.51	0.00	7.14E+03	1.02E-02	9.55E-03	.827	1.232E-02	2.382E-04	2.235E-04	303.9				1.000
22	46.31	-.51	0.00	7.42E+03	1.07E-02	1.02E-02	.846	1.274E-02	2.511E-04	2.377E-04	304.1				1.000
23	43.77	-.51	0.00	7.77E+03	1.12E-02	1.06E-02	.853	1.308E-02	2.609E-04	2.469E-04	304.0				1.000
24	41.24	-.31	0.00	8.11E+03	1.18E-02	1.12E-02	.878	1.345E-02	2.751E-04	2.613E-04	304.3				1.000
25	39.70	-.51	.00	8.13E+03	1.18E-02	1.11E-02	.851	1.383E-02	2.759E-04	2.604E-04	303.3				1.000
41	71.72	0.90	.25	1.20E+03	1.73E-03	1.54E-03	.177	9.765E-03	4.036E-05	3.824E-05	297.3				.226
42	66.64	0.00	.25	2.10E+03	3.02E-03	2.86E-03	.296	1.112E-02	7.053E-05	6.681E-05	298.7				.374
43	61.56	0.00	.25	1.67E+03	2.41E-03	2.28E-03	.228	1.058E-02	5.624E-05	5.326E-05	301.4				.200
44	56.48	0.00	.25	1.85E+03	2.67E-03	2.53E-03	.238	1.122E-02	6.230E-05	5.900E-05	302.0				.293
45	51.39	0.00	.25	1.70E+03	2.46E-03	2.33E-03	.206	1.195E-02	5.745E-05	5.440E-05	301.9				.250
46	48.98	0.00	.25	1.99E+03	2.88E-03	2.73E-03	.234	1.232E-02	6.734E-05	6.377E-05	302.0				.283
47	46.31	0.00	.25	2.35E+03	3.39E-03	3.21E-03	.267	1.270E-02	7.924E-05	7.504E-05	302.2				.316
48	43.77	0.00	.25	3.32E+03	4.80E-03	4.55E-03	.367	1.307E-02	1.122E-04	1.063E-04	302.1				.430
49	41.24	0.00	.25	3.11E+03	4.49E-03	4.25E-03	.334	1.345E-02	1.049E-04	9.934E-05	302.5				.380
50	38.70	0.00	.25	2.00E+03	2.88E-03	2.73E-03	.209	1.382E-02	6.741E-05	6.384E-05	301.5				.245
103	39.97	1.52	0.00	7.10E+03	1.05E-02	9.90E-03	.757	1.384E-02	2.445E-04	2.314E-04	307.8	1.05E-02	1.000	.767	.807
105	39.97	1.02	0.00	7.67E+03	1.11E-02	1.05E-02	.810	1.364E-02	2.582E-04	2.444E-04	309.2	1.10E-02	1.000	.810	.937
107	39.97	.51	0.00	9.79E+03	1.41E-02	1.34E-02	1.037	1.364E-02	3.305E-04	3.129E-04	308.7	1.41E-02	1.000	1.037	1.200
108	39.97	.25	0.00	1.03E+04	1.49E-02	1.41E-02	1.096	1.364E-02	3.492E-04	3.306E-04	307.6	1.49E-02	1.000	1.096	1.267
110	39.97	.06	.04	8.39E+03	1.22E-02	1.15E-02	.894	1.364E-02	2.850E-04	2.698E-04	306.1	1.22E-02	1.000	.894	1.034
111	39.97	0.00	.15	7.26E+03	1.05E-02	9.95E-03	.771	1.364E-02	2.456E-04	2.325E-04	305.5	1.05E-02	1.000	.771	.891
112	39.97	0.00	.25	5.37E+03	7.76E-03	7.34E-03	.569	1.364E-02	1.813E-04	1.716E-04	304.2	7.76E-03	1.000	.569	.658
113	39.97	0.00	.38	3.51E+03	5.08E-03	4.81E-03	.372	1.364E-02	1.186E-04	1.123E-04	303.1	5.08E-03	1.000	.372	.431
114	39.97	0.00	.64	1.14E+03	1.65E-03	1.56E-03	.121	1.364E-02	3.848E-05	3.644E-05	301.4	1.65E-03	1.000	.121	.140
115	39.97	0.00	.89	2.83E+02	4.09E-04	3.83E-04	.030	1.364E-02	9.458E-06	8.958E-06	299.6	4.05E-04	1.000	.030	.034
203	46.32	1.32	0.00	8.76E+03	1.27E-02	1.20E-02	1.001	1.269E-02	2.963E-04	2.811E-04	304.9	1.27E-02	1.000	1.001	1.104
205	46.32	1.02	.00	8.95E+03	1.29E-02	1.22E-02	1.014	1.269E-02	3.006E-04	2.846E-04	305.8	1.29E-02	1.000	1.014	1.190
207	46.32	.51	0.00	8.10E+03	1.18E-02	1.12E-02	.932	1.259E-02	2.765E-04	2.618E-04	305.6	1.18E-02	1.000	.932	1.10[illegible]
208	46.32	.25	0.00	7.73E+03	1.12E-02	1.06E-02	.883	1.269E-02	2.620E-04	2.481E-04	304.8	1.12E-02	1.000	.883	1.044
210	46.32	.06	.04	6.34E+03	9.18E-03	8.69E-03	.723	1.259E-02	2.146E-04	2.032E-04	303.5	9.18E-03	1.000	.723	.855
211	46.32	0.00	.15	5.61E+03	8.12E-03	7.69E-03	.639	1.259E-02	1.897E-04	1.796E-04	303.6	8.12E-03	1.000	.639	.75[illegible]
212	46.32	0.00	.25	4.35E+03	6.29E-03	5.95E-03	.495	1.269E-02	1.469E-04	1.391E-04	301.9	6.29E-03	1.000	.495	.586
213	46.32	0.00	.38	5.02E+00	7.26E-06	6.55E-06	.001	1.269E-02	1.696E-07	1.602E-07	330.7	7.26E-06	1.000	.001	.001
214	46.32	0.00	.64												
215	46.32	0.00	.89	4.62E+02	6.64E-04	6.29E-04	.052	1.269E-02	1.532E-05	1.471E-05	298.6	6.64E-04	1.000	.052	.062

AMES 3.5 FT HWT TEST (182), C.J. BLUMER, IN-LINE RSI GAP RUN(31) 1973 PAGE 62

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	1.92E+02	2.69E-04	2.55E-04	.021	1.269E-02	6.299E-06	5.968E-06	296.0	2.69E-04	1.000	.021	.025
217	46.32	0.03	1.40	8.41E+01	1.20E-04	1.14E-04	.009	1.269E-02	2.813E-06	2.666E-06	295.7	1.20E-04	1.000	.009	.011
218	46.32	0.00	1.65	6.60E+00	9.10E-06	7.57E-06	.001	1.269E-02	1.893E-07	1.793E-07	295.3	9.10E-06	1.000	.001	.001
219	46.32	0.00	1.90	3.72E+01	5.32E-05	5.04E-05	.004	1.269E-02	1.244E-06	1.179E-06	295.0	5.32E-05	1.000	.004	.005
220	46.32	0.00	2.29	1.32E+02	1.89E-04	1.79E-04	.015	1.269E-02	4.417E-06	4.179E-06	294.6	1.89E-04	1.000	.015	.018
406	56.48	.75	0.00	5.23E+03	9.02E-03	8.54E-03	.804	1.122E-02	2.110E-04	1.996E-04	303.4	9.02E-03	1.000	.804	.991
407	56.48	.51	0.00	6.71E+03	9.71E-03	9.19E-03	.865	1.122E-02	2.269E-04	2.140E-04	303.1	9.71E-03	1.000	.865	1.066
408	56.48	.25	0.00	6.57E+03	9.58E-03	9.07E-03	.854	1.122E-02	2.238E-04	2.120E-04	302.5	9.58E-03	1.000	.854	1.052
409	56.48	.15	0.00	6.00E+03	8.67E-03	8.21E-03	.773	1.122E-02	2.027E-04	1.919E-04	301.9	8.67E-03	1.000	.773	.952
410	56.48	.06	.04	5.17E+03	7.45E-03	7.06E-03	.664	1.122E-02	1.742E-04	1.650E-04	301.3	7.45E-03	1.000	.664	.819
411	56.48	0.00	.15	4.19E+03	6.04E-03	5.72E-03	.538	1.122E-02	1.411E-04	1.336E-04	300.8	6.04E-03	1.000	.538	.663
412	56.48	0.00	.25	2.49E+03	3.59E-03	3.40E-03	.320	1.122E-02	8.384E-05	7.942E-05	299.7	3.59E-03	1.000	.320	.394
413	56.48	0.03	.38	1.57E+03	2.26E-03	2.14E-03	.201	1.122E-02	5.272E-05	4.994E-05	298.5	2.26E-03	1.000	.201	.248
414	56.48	0.00	.64	2.58E+02	3.71E-04	3.51E-04	.033	1.122E-02	8.667E-06	8.210E-06	297.9	3.71E-04	1.000	.033	.041
415	56.48	0.00	.89	1.52E+01	2.18E-05	2.07E-05	.002	1.122E-02	5.095E-07	4.827E-07	297.2	2.18E-05	1.000	.002	.002
416	56.48	0.03	1.14												
417	56.48	0.03	1.40												
418	56.48	0.03	1.65												
419	56.48	0.00	1.90												
420	56.48	0.03	2.29												
506	64.10	.76	0.00	5.17E+03	7.47E-03	7.08E-03	.723	1.034E-02	1.747E-04	1.654E-04	302.8	7.47E-03	1.000	.723	.890
507	64.10	.51	0.00	4.91E+03	7.09E-03	6.71E-03	.685	1.034E-02	1.657E-04	1.569E-04	302.4	7.09E-03	1.000	.685	.852
508	64.10	.25	0.00	4.34E+03	6.26E-03	5.93E-03	.606	1.035E-02	1.464E-04	1.387E-04	301.6	6.26E-03	1.000	.606	.753
509	64.10	.15	0.00	3.18E+03	4.58E-03	4.34E-03	.442	1.035E-02	1.070E-04	1.013E-04	300.0	4.58E-03	1.000	.442	.550
510	64.10	.04	.04	3.80E+03	5.48E-03	5.19E-03	.530	1.035E-02	1.281E-04	1.213E-04	300.2	5.48E-03	1.000	.530	.658
511	64.10	0.00	.15	3.61E+03	5.19E-03	4.92E-03	.502	1.035E-02	1.214E-04	1.150E-04	299.8	5.19E-03	1.000	.502	.624
512	64.10	0.00	.25	2.73E+03	3.93E-03	3.72E-03	.380	1.035E-02	9.199E-05	8.705E-05	299.3	3.93E-03	1.000	.380	.472
513	64.10	0.00	.38	1.78E+03	2.56E-03	2.43E-03	.248	1.035E-02	5.991E-05	5.675E-05	298.8	2.56E-03	1.000	.248	.308
514	64.10	0.03	.64	4.16E+02	5.97E-04	5.66E-04	.058	1.035E-02	1.395E-05	1.322E-05	297.9	5.97E-04	1.000	.058	.072
515	64.10	0.00	.89												
516	64.10	0.03	1.14												
517	64.10	0.00	1.40												
518	64.10	0.00	1.65												
519	64.10	0.03	1.90												
520	64.10	0.00	2.29												

EDGE HEATING USED FOR HE

X= 3.075E+01 HL /HREFF= 8.511E-01
X= 4.124E+01 HL /HREFF= 8.790E-01
X= 4.377E+01 HL /HREFF= 8.534E-01
X= 4.631E+01 HL /HREFF= 8.459E-01
X= 4.886E+01 HL /HREFF= 8.275E-01
X= 5.139E+01 HL /HREFF= 7.978E-01
X= 5.648E+01 HL /HREFF= 8.116E-01
X= 6.150E+01 HL /HREFF= 8.125E-01
X= 7.172E+01 HL /HREFF= 7.512E-01

X= 3.997E+01 HL /HREFF= 1.037E+00
X= 4.632E+01 HL /HREFF= 9.322E-01
X= 5.648E+01 HL /HREFF= 8.633E-01
X= 6.410E+01 HL /HREFF= 6.958E-01

B.L. TRANSITION DISTANCE = 39.97 CM
FULLY TURBULENT B.L. CONDITIONS AT = 48.05 CM

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(32) 1973 PAGE 63

TT	= 1. [illegible](K)	GAP LENGTH	= 3[illegible](CM)
PT	= [illegible](N/M2)	GAP WIDTH	= .2[illegible]4(CM)
HT	= 1.1[illegible](J/KG)	GAP DEPTH	= 2.[illegible]32(CM)
RE/METER	= 1.[illegible]	ORIENTATION	= 1[illegible](DEG)
MACH	= 5.1[illegible]	QS	= 8.4[illegible]78E+04(W/M2)
RHO VEL	= 2.13[illegible](KG/M2-S)	MOD.POSITION	= 2
HAW/HT	= [illegible].9[illegible] FOR HT		
HAW/HT	= [illegible].874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible].62E+03	5.53E-03	6.18E-03	.967	[illegible].631E-03	3.[illegible]58E-04	2.897E-04	302.2				1.000
17	66.64	-.51	[illegible]												
18	61.56	-.51	[illegible]	[illegible]	7.74E-03	7.33E-03	.9[illegible]2	8.179E-03	3.625E-04	3.434E-04	304.1				1.000
19	56.48	-.51	[illegible]	[illegible].72E+03	8.11E-03	7.68E-03	.993	9.[illegible]83E-03	3.8[illegible]E-04	3.690E-04	304.4				1.000
20	51.39	-.51	[illegible]	5.[illegible]E+03	8.28E-03	7.84E-03	.868	9.542E-03	3.879E-04	3.674E-04	304.6				1.000
21	48.86	-.51	[illegible]	[illegible]	8.71E-03	8.25E-03	.[illegible]91	9.793E-03	4.[illegible]33E-04	3.867E-04	304.8				1.000
22	46.31	-.51	[illegible]	6.2[illegible]E+03	8.66E-03	8.39E-03	.879	1.[illegible]07E-02	4.1[illegible]1E-04	3.932E-04	305.0				1.000
23	43.77	-.51	0.00	6.43E+03	9.12E-03	8.63E-03	.880	1.035E-02	4.271E-04	4.[illegible]45E-04	305.0				1.000
24	41.24	-.51	[illegible]	[illegible]	9.66E-03	9.14E-03	.9[illegible]	1.[illegible]63E-02	4.524E-04	4.285E-04	305.2				1.000
25	38.70	-.51	[illegible]	6.5[illegible]E+03	9.84E-03	9.32E-03	.902	1.091E-02	4.612E-04	4.369E-04	304.7				1.000
41	71.72	[illegible]	.25	7.[illegible]9E+02	1.08E-03	1.[illegible]3E-03	.144	7.532E-03	5.077E-05	4.810E-05	300.8				.166
42	66.64	[illegible]	.25	1.[illegible]1E+03	2.27E-03	2.15E-03	.284	7.97[illegible]E-03	1.[illegible]2E-04	1.006E-04	301.6				.322
43	61.56	[illegible]	.25	1.49E+03	2.11E-03	2.[illegible]E-03	.246	8.579E-03	9.892E-05	9.370E-05	303.0				.273
44	56.48	[illegible]	.25	1.94E+03	2.60E-03	2.47E-03	.287	9.[illegible]03E-03	1.219E-04	1.155E-04	303.5				.321
45	51.39	[illegible]	.25	1.[illegible]E+03	2.31E-03	2.19E-03	.2[illegible]2	9.541E-03	1.083E-04	1.026E-04	303.5				.279
46	48.86	[illegible]	.25	1.[illegible]E+03	2.40E-03	2.28E-03	.245	9.792E-03	1.125E-04	1.066E-04	303.6				.276
47	46.31	[illegible]	.25	1.79E+03	2.54E-03	2.40E-03	.252	1.007E-02	1.188E-04	1.125E-04	303.8				.286
48	43.77	[illegible]	.25	2.24[illegible]E+03	3.17E-03	3.[illegible]E-03	.3[illegible]6	1.[illegible]35E-02	1.483E-04	1.405E-04	303.7				.347
49	41.24	[illegible]	.25	2.[illegible]E+03	3.26E-03	3.09E-03	.307	1.063E-02	1.539E-04	1.449E-04	304.1				.338
50	38.70	[illegible]	.25	1.7[illegible]E+03	2.52E-03	2.39E-03	.231	1.091E-02	1.183E-04	1.120E-04	303.5				.256
1[illegible]3	39.97	1.[illegible]	[illegible]	8.9[illegible]E+03	9.91E-03	9.39E-03	.921	1.077E-02	4.645E-04	[illegible]98E-04	307.9	9.91E-03	1.000	.921	1.010
105	39.97	1.02	[illegible]	7.[illegible]E+03	1.00E-02	9.49E-03	.931	1.077E-02	4.695E-04	4.[illegible]46E-04	308.7	1.00E-02	1.000	.931	1.028
107	39.97	.51	[illegible]	[illegible].13E+03	1.16E-02	1.10E-02	1.076	1.077E-02	5.427E-04	5.139E-04	303.4	1.16E-02	1.000	1.076	1.109
109	39.97	.23	[illegible]	8.[illegible]E+03	1.21E-02	1.15E-02	1.123	1.077E-02	5.665E-04	5.365E-04	307.6	1.21E-02	1.000	1.123	1.241
110	39.97	.[illegible]	.[illegible]4	7.[illegible]E+03	1.01E-02	9.53E-03	.934	1.077E-02	4.713E-04	4.464E-04	306.6	1.01E-02	1.000	.934	1.032
111	39.97	[illegible]	.15	[illegible].1[illegible]E+03	8.66E-03	8.20E-03	.8[illegible]4	1.077E-02	4.059E-04	3.844E-04	306.2	8.66E-03	1.000	.804	.889
112	39.97	[illegible]	.25	[illegible].3[illegible]E+03	6.11E-03	5.78E-03	.567	1.077E-02	2.861E-04	2.710E-04	305.3	6.11E-03	1.000	.567	.626
113	39.97	[illegible]	.38	2.[illegible]0E+03	3.67E-03	3.48E-03	.341	1.077E-02	1.723E-04	1.629E-04	304.5	3.67E-03	1.000	.341	.377
114	39.97	[illegible]	.[illegible]4	7.[illegible]E+02	1.11E-03	1.05E-03	.1[illegible]3	1.077E-02	5.212E-05	4.937E-05	303.5	1.11E-03	1.000	.103	.114
115	39.97	[illegible]	.[illegible]0	1.7[illegible]E+02	2.49E-04	2.36E-04	.023	1.077E-02	1.166E-05	1.104E-05	302.4	2.49E-04	1.000	.023	.026
2[illegible]3	46.32	1.52	[illegible]	7.[illegible]E+03	1.09E-02	1.[illegible]3E-02	1.081	1.0[illegible]7E-02	5.1[illegible]E-04	4.831E-04	306.[illegible]	1.09E-02	1.000	1.081	1.229
2[illegible]5	46.32	1.02	[illegible]	7.2[illegible]E+03	1.03E-02	9.76E-03	1.023	1.0[illegible]7E-02	4.827E-04	4.572E-04	306.6	1.03E-02	1.000	1.023	1.163
207	46.32	.51	[illegible]	6.51E+03	9.25E-03	8.76E-03	.918	1.0[illegible]7E-02	4.33[illegible]E-04	4.103E-04	306.4	9.25E-03	1.000	.918	1.04[illegible]
2[illegible]8	46.32	.25	[illegible]	[illegible].11E+03	[illegible]	[illegible].22E-03	.[illegible]62	1.0[illegible]7E-02	4.35[illegible]E-04	3.851E-04	305.6	8.68E-03	1.000	.862	.98[illegible]
21[illegible]	46.32	.[illegible]	.[illegible]4	4.59E+03	6.93E-03	6.56E-03	.688	1.0[illegible]7E-02	3.245E-04	[illegible].074E-04	304.9	6.93E-03	1.000	.688	.782
211	46.32	[illegible]	.15	4.23E+03	6.00E-03	5.68E-03	.596	1.007E-02	2.810E-04	2.662E-04	304.6	6.00E-03	1.000	.596	.67[illegible]
212	46.32	.[illegible]	.25	3.[illegible]E+03	4.34E-03	[illegible].11E-03	.431	1.[illegible]07E-02	2.035E-04	1.927E-04	303.9	4.34E-03	1.000	.431	.49[illegible]
213	46.32	.[illegible]	.38												
214	46.32	[illegible]	.64	1.[illegible]E+00	2.37E-06	2.24E-06	.000	1.007E-02	1.110E-07	1.[illegible]48E-07	338.7	2.37E-06	1.000	.000	.000
215	46.32	[illegible]	.89	1.[illegible]E+02	1.96E-04	1.86E-04	.019	1.0[illegible]7E-02	9.17[illegible]E-06	8.692E-06	331.7	1.95E-04	1.000	.019	.022

AMES 3.5 FT HWT TEST (152), C.B. BLUMER, IN-LINE RSI GAP RUN(32) 1973 PAGE 64

T/C	X (CM)	W (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	1.79E+00	1.24E-05	1.17E-05	.001	1.007E-02	5.831E-07	5.497E-07	300.1	1.24E-05	1.000	.001	.001
217	46.32	0.30	1.40												
218	46.32	0.39	1.65	1.05E+01	1.48E-05	1.40E-05	.001	1.007E-02	6.916E-07	6.553E-07	299.7	1.48E-05	1.000	.001	.002
219	46.32	0.99	1.90	1.45E+01	2.04E-05	1.94E-05	.002	1.007E-02	9.589E-07	9.078E-07	299.5	2.04E-05	1.000	.002	.002
220	46.32	0.89	2.29												
406	56.40	.76	0.00	6.00E+03	8.62E-03	8.16E-03	.949	9.084E-03	4.039E-04	3.825E-04	304.5	8.62E-03	1.000	.949	1.062
407	56.40	.51	0.99	6.44E+03	9.13E-03	8.65E-03	1.005	9.084E-03	4.276E-04	4.051E-04	304.6	9.13E-03	1.000	1.005	1.125
408	56.40	.25	0.99	6.32E+03	8.96E-03	8.48E-03	.986	9.084E-03	4.196E-04	3.974E-04	304.1	8.96E-03	1.000	.986	1.104
409	56.40	.15	0.00	5.80E+03	8.22E-03	7.78E-03	.905	9.084E-03	3.853E-04	3.647E-04	303.7	8.22E-03	1.000	.905	1.013
410	56.40	.34	.04	5.06E+03	7.16E-03	6.78E-03	.788	9.084E-03	3.354E-04	3.177E-04	303.3	7.16E-03	1.000	.788	.882
411	56.40	0.99	.15	4.42E+03	6.25E-03	5.92E-03	.688	9.084E-03	2.929E-04	2.775E-04	303.0	6.25E-03	1.000	.688	.771
412	56.40	0.89	.25	2.96E+03	4.18E-03	3.96E-03	.461	9.084E-03	1.961E-04	1.859E-04	302.3	4.18E-03	1.000	.461	.516
413	56.40	0.99	.38	1.99E+03	2.66E-03	2.52E-03	.293	9.084E-03	1.246E-04	1.181E-04	301.4	2.66E-03	1.000	.293	.328
414	56.40	0.99	.64	5.46E+02	7.71E-04	7.30E-04	.085	9.084E-03	3.611E-05	3.421E-05	301.2	7.71E-04	1.000	.085	.095
415	56.40	0.30	.99	8.78E+01	1.24E-04	1.17E-04	.014	9.084E-03	5.796E-06	5.492E-06	300.7	1.24E-04	1.000	.014	.015
416	56.40	0.89	1.14	1.60E+01	2.25E-05	2.13E-05	.002	9.084E-03	1.054E-06	9.982E-07	300.2	2.25E-05	1.000	.002	.003
417	56.40	0.30	1.40												
418	56.40	0.09	1.65												
419	56.40	0.90	1.90	9.59E+00	1.35E-05	1.28E-05	.001	9.084E-03	6.326E-07	5.994E-07	299.4	1.35E-05	1.000	.001	.002
420	56.40	0.00	2.29												
506	64.10	.76	0.00	4.99E+03	7.07E-03	6.69E-03	.853	8.278E-03	3.319E-04	3.136E-04	304.2	7.07E-03	1.000	.853	.956
507	64.10	.51	0.00	4.98E+03	7.05E-03	6.68E-03	.852	8.277E-03	3.304E-04	3.129E-04	303.9	7.05E-03	1.000	.852	.954
508	64.10	.25	0.00	4.81E+03	6.80E-03	6.45E-03	.822	8.276E-03	3.189E-04	3.020E-04	303.4	6.80E-03	1.000	.822	.921
509	64.10	.15	0.00	4.05E+03	5.73E-03	5.43E-03	.693	8.275E-03	2.687E-04	2.545E-04	302.9	5.73E-03	1.000	.693	.776
510	64.10	.34	.04	3.59E+03	5.08E-03	4.81E-03	.613	8.275E-03	2.379E-04	2.253E-04	302.4	5.08E-03	1.000	.613	.687
511	64.10	0.99	.15	3.33E+03	4.70E-03	4.46E-03	.569	8.275E-03	2.204E-04	2.088E-04	302.4	4.70E-03	1.000	.569	.637
512	64.10	0.99	.25	2.18E+03	3.09E-03	2.92E-03	.373	8.275E-03	1.446E-04	1.370E-04	302.0	3.09E-03	1.000	.373	.418
513	64.10	0.30	.38	1.49E+03	2.11E-03	2.00E-03	.255	8.275E-03	9.870E-05	9.351E-05	301.7	2.11E-03	1.000	.255	.285
514	64.10	0.99	.64	2.97E+02	4.20E-04	3.98E-04	.051	8.275E-03	1.966E-05	1.863E-05	301.1	4.20E-04	1.000	.051	.057
515	64.10	0.09	.89												
516	64.10	0.09	1.14												
517	64.10	0.09	1.40												
518	64.10	0.09	1.65												
519	64.10	0.30	1.90												
520	64.10	0.30	2.29												

EDGE HEATING USED FOR HE

X= 3.879E+01 HL /HREFF= 9.329E-01
X= 4.124E+01 HL /HREFF= 9.080E-01
X= 4.377E+01 HL /HREFF= 8.904E-01
X= 4.631E+01 HL /HREFF= 8.794E-01
X= 4.886E+01 HL /HREFF= 8.698E-01
X= 5.139E+01 HL /HREFF= 8.675E-01
X= 5.648E+01 HL /HREFF= 8.930E-01
X= 6.156E+01 HL /HREFF= 9.019E-01
X= 7.172E+01 HL /HREFF= 9.548E-01

X= 3.997E+01 HL /HREFF= 1.076E+00
X= 4.632E+01 HL /HREFF= 9.132E-01
X= 5.648E+01 HL /HREFF= 1.003E+00
X= 6.419E+01 HL /HREFF= 8.519E-01

B.L. TRANSITION DISTANCE = 46.32 CM
FULLY TURBULENT B.L. CONDITIONS AT = 51.36 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(33) 1973 PAGE 65

TT = 1.15 [illegible](K)
PT = 1.0311E+06(N/M2)
HT = 1.23 [illegible](J/KG)
RE/METER = [illegible]
MACH = 5.13[illegible]
RHO VEL = 4.[illegible]E+01(KG/M2-S)
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible] FOR HL
HLCC = HL(2ND. ORDER COND.,)

GAP LENGTH = 3[illegible](CM)
GAP WIDTH = .127(CM)
GAP DEPTH = 2.032(CM)
ORIENTATION= 15.000(DEG)
QS = 1.2784E+05(W/M2)
MOD.POSITION= 2

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	7.79E-03	7.39E-03	.944	9.223E-03	1.919E-04	1.820E-04	305.4				1.000
17	66.64	-.51	[illegible]												
18	61.56	-.51	[illegible]	6.[illegible]E+03	3.86E-03	6.41E-03	.677	1.0[illegible]E-02	2.183E-04	2.070E-04	308.3				1.000
19	56.48	-.51	[illegible]	7.1[illegible]E+03	[illegible]	[illegible]	.865	1.072E-02	2.285E-04	2.169E-04	308.7				1.000
20	51.39	-.51	[illegible]	7.46E+03	3.79E-03	9.28E-03	.858	1.141E-02	2.413E-04	2.297E-04	308.9				1.000
21	48.86	-.51	[illegible]	7.97E+03	1.04E-02	9.95E-03	.887	1.176E-02	2.571E-04	2.438E-04	309.3				1.000
22	46.31	-.51	[illegible]	8.17E+03	1.07E-02	1.02E-02	.883	1.213E-02	2.636E-04	2.591E-04	309.5				1.000
23	43.77	-.51	[illegible]	8.71E+03	1.09E-02	1.03E-02	.871	1.249E-02	2.681E-04	2.542E-04	309.3				1.000
24	41.24	-.51	[illegible]	8.79E+03	1.15E-02	1.09E-02	.896	1.285E-02	2.837E-04	2.693E-04	309.8				1.000
25	39.70	-.51	[illegible]	9.26E+03	1.21E-02	1.15E-02	.917	1.321E-02	2.994E-04	2.829E-04	308.7				1.000
41	71.72	[illegible]	.25	1.25E+03	1.62E-03	1.54E-03	.176	9.218E-03	3.992E-05	3.787E-05	302.6				.286
42	66.64	[illegible]	.25	1.76E+03	2.28E-03	2.17E-03	.237	9.616E-03	5.626E-05	5.336E-05	304.1				.276
43	61.56	[illegible]	.25	1.[illegible]E+03	2.02E-03	1.91E-03	.200	1.010E-02	4.970E-05	4.713E-05	305.3				.228
44	56.48	[illegible]	.25	2.07E+03	2.71E-03	2.37E-03	.253	1.072E-02	6.673E-05	6.327E-05	307.1				.292
45	51.39	[illegible]	.25	1.37E+03	2.44E-03	2.31E-03	.214	1.141E-02	5.073E-05	5.693E-05	306.9				.249
46	48.86	[illegible]	.25	1.80E+03	2.36E-03	2.23E-03	.200	1.176E-02	5.874E-05	5.584E-05	307.1				.226
47	46.31	[illegible]	.25	2.01E+03	2.63E-03	2.49E-03	.217	1.212E-02	6.477E-05	6.142E-05	307.4				.246
48	43.77	[illegible]	.25	1.84E+03	2.40E-03	2.28E-03	.192	1.249E-02	5.920E-05	5.614E-05	307.2				.221
49	41.24	[illegible]	.25	2.62E+03	3.42E-03	3.24E-03	.266	1.285E-02	8.429E-05	7.993E-05	307.9				.297
50	38.70	[illegible]	.25	2.31E+03	3.01E-03	2.95E-03	.228	1.321E-02	7.613E-05	7.029E-05	306.7				.240
103	39.97	1.52	[illegible]	8.35E+03	1.10E-02	1.04E-02	.844	1.303E-02	2.709E-04	2.568E-04	313.8	1.10E-02	1.000	.844	.931
105	39.97	1.12	[illegible]	8.69E+03	1.15E-02	1.09E-02	.880	1.303E-02	2.824E-04	2.676E-04	315.0	1.15E-02	1.000	.880	.970
107	39.97	.51	[illegible]	1.[illegible]E+04	1.35E-02	1.28E-02	1.034	1.303E-02	3.32[illegible]E-04	3.146E-04	314.5	1.35E-02	1.000	1.034	1.141
108	39.97	.25	[illegible]	1.[illegible]E+04	1.35E-02	1.28E-02	1.038	1.303E-02	3.331E-04	3.157E-04	313.3	1.35E-02	1.000	1.034	1.145
110	39.97	.04	[illegible]	6.23E+03	1.08E-02	1.02E-02	.830	1.303E-02	2.663E-04	2.525E-04	311.8	1.08E-02	1.000	.830	.916
111	39.97	[illegible]	.16	[illegible]	9.11E-03	8.64E-03	.699	1.303E-02	2.245E-04	2.128E-04	311.2	9.11E-03	1.000	.699	.771
112	39.97	[illegible]	.25	[illegible]	6.22E-03	5.90E-03	.478	1.303E-02	1.534E-04	1.454E-04	309.9	6.22E-03	1.000	.478	.527
113	39.97	[illegible]	.76	2.84E+03	3.72E-03	3.53E-03	.286	1.303E-02	9.171E-05	8.696E-05	308.4	3.72E-03	1.000	.286	.315
114	39.97	[illegible]	.64	[illegible]	1.02E-03	9.71E-04	.079	1.303E-02	2.524E-05	2.393E-05	307.2	1.02E-03	1.000	.079	.087
115	39.97	[illegible]	[illegible]	1.60E+02	2.07E-04	1.96E-04	.016	1.303E-02	5.103E-06	4.841E-06	305.6	2.07E-04	1.000	.016	.018
203	46.32	1.52	[illegible]	9.06E+03	1.18E-02	1.11E-02	.972	1.211E-02	2.896E-04	2.745E-04	310.5	1.18E-02	1.000	.976	1.099
205	46.32	1.12	[illegible]	8.12E+03	1.06E-02	1.01E-02	.875	1.211E-02	2.622E-04	2.486E-04	311.3	1.06E-02	1.000	.878	.995
207	46.32	.51	[illegible]	7.69E+03	1.01E-02	9.57E-03	.833	1.212E-02	2.437E-04	2.350E-04	311.0	1.01E-02	1.000	.833	.94[illegible]
208	46.32	.25	[illegible]	7.65E+03	1.00E-02	9.51E-03	.827	1.212E-02	2.471E-04	2.343E-04	310.2	1.00E-02	1.000	.827	.93[illegible]
210	46.32	.14	[illegible]	6.16E+03	8.06E-03	7.64E-03	.665	1.212E-02	1.995E-04	1.883E-04	308.9	8.06E-03	1.000	.665	.753
211	46.32	[illegible]	.15	5.21E+03	6.82E-03	6.47E-03	.563	1.212E-02	1.659E-04	1.593E-04	308.3	6.82E-03	1.000	.563	.63[illegible]
212	46.32	[illegible]	.25	3.62E+03	4.73E-03	4.48E-03	.390	1.212E-02	1.154E-04	1.104E-04	307.3	4.73E-03	1.000	.390	.44[illegible]
213	46.32	[illegible]	.72												
214	46.32	[illegible]	.84												
215	46.32	[illegible]	.89	3.26E+01	4.24E-05	4.[illegible]E-05	.003	1.212E-02	1.045E-06	9.9[illegible]E-07	304.2	4.24E-05	1.000	.003	.004

AMES 3.5 FT HWT TEST (1&2), C.E. BLUMER, IN-LINE RSI GAP FUN(33) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
406	56.48	.76	0.00	7.36E+03	3.62E-03	9.13E-03	.898	1.072E-02	2.371E-04	2.248E-04	308.6	5.62E-03	1.000	.898	1.038
407	56.48	.51	0.00	7.81E+03	1.02E-02	9.69E-03	.953	1.072E-02	2.517E-04	2.387E-04	308.4	1.02E-02	1.000	.953	1.101
408	56.48	.25	0.00	7.50E+03	9.79E-03	9.29E-03	.914	1.072E-02	2.413E-04	2.288E-04	307.5	9.79E-03	1.000	.914	1.056
409	56.48	.15	0.00	6.72E+03	8.77E-03	8.32E-03	.818	1.072E-02	2.162E-04	2.059E-04	307.0	8.77E-03	1.000	.818	.945
410	56.48	.76	.04	5.75E+03	7.50E-03	7.11E-03	.700	1.072E-02	1.848E-04	1.753E-04	306.4	7.50E-03	1.000	.700	.808
411	56.48	0.00	.15	4.97E+03	6.48E-03	6.14E-03	.604	1.072E-02	1.596E-04	1.513E-04	305.9	6.48E-03	1.000	.604	.698
412	56.48	0.00	.25	3.09E+03	4.02E-03	3.81E-03	.375	1.072E-02	9.901E-05	9.390E-05	304.8	4.02E-03	1.000	.375	.433
413	56.48	0.00	.38	1.77E+03	2.30E-03	2.18E-03	.215	1.072E-02	5.673E-05	5.381E-05	303.6	2.30E-03	1.000	.215	.248
414	56.48	0.00	.64	4.47E+02	5.80E-04	5.50E-04	.054	1.072E-02	1.429E-05	1.356E-05	303.2	5.80E-04	1.000	.054	.063
415	56.48	0.00	.89	2.47E+01	3.20E-05	3.04E-05	.003	1.072E-02	7.896E-07	7.490E-07	302.4	3.20E-05	1.000	.003	.003
416	56.48	0.00	1.14												
417	56.48	0.00	1.40												
418	56.48	0.00	1.65												
419	56.48	0.00	1.98												
420	56.48	0.00	2.29												
506	64.18	.75	0.00	6.44E+03	8.42E-03	7.98E-03	.854	9.856E-03	2.075E-04	1.967E-04	308.1	8.42E-03	1.000	.854	.983
507	64.18	.51	0.00	6.30E+03	8.23E-03	7.81E-03	.835	9.856E-03	2.028E-04	1.923E-04	307.6	8.23E-03	1.000	.835	.961
508	64.18	.25	0.00	5.96E+03	7.78E-03	7.37E-03	.789	9.857E-03	1.916E-04	1.817E-04	306.8	7.78E-03	1.000	.789	.908
509	64.18	.15	0.00	4.92E+03	6.41E-03	6.08E-03	.650	9.858E-03	1.579E-04	1.498E-04	305.7	6.41E-03	1.000	.650	.748
510	64.18	.04	.04	4.27E+03	5.56E-03	5.27E-03	.564	9.858E-03	1.372E-04	1.299E-04	305.4	5.56E-03	1.000	.564	.649
511	64.18	0.00	.15	4.01E+03	5.22E-03	4.96E-03	.530	9.858E-03	1.287E-04	1.221E-04	305.0	5.22E-03	1.000	.530	.610
512	64.18	0.00	.25	2.72E+03	3.54E-03	3.35E-03	.359	9.858E-03	8.714E-05	8.265E-05	304.5	3.54E-03	1.000	.359	.413
513	64.18	0.00	.38	1.69E+03	2.20E-03	2.09E-03	.224	9.858E-03	5.433E-05	5.158E-05	304.0	2.20E-03	1.000	.224	.257
514	64.18	0.00	.64	3.83E+02	4.97E-04	4.72E-04	.050	9.858E-03	1.226E-05	1.163E-05	303.0	4.97E-04	1.000	.050	.058
515	64.18	0.00	.89												
516	64.18	0.00	1.14	3.43E+01	4.45E-05	4.22E-05	.005	9.858E-03	1.095E-06	1.039E-06	302.0	4.45E-05	1.000	.005	.005
517	64.18	0.00	1.40												
518	64.19	0.00	1.65												
519	64.18	0.00	1.90												
520	64.18	0.00	2.29	4.31E+01	5.57E-05	5.29E-05	.006	9.858E-03	1.373E-06	1.303E-06	309.1	5.57E-05	1.000	.006	.007

EDGE HEATING USED FOR HE
X= 3.878E+01 HL /HREFF= 9.169E-01
X= 4.124E+01 HL /HREFF= 8.962E-01
X= 4.377E+01 HL /HREFF= 8.714E-01
X= 4.631E+01 HL /HREFF= 8.929E-01
X= 4.886E+01 HL /HREFF= 8.871E-01
X= 5.139E+01 HL /HREFF= 8.578E-01
X= 5.648E+01 HL /HREFF= 8.639E-01
X= 6.156E+01 HL /HREFF= 8.771E-01
X= 7.172E+01 HL /HREFF= 8.443E-01

X= 3.997E+01 HL /HREFF= 1.034E+00
X= 4.632E+01 HL /HREFF= 6.332E-01
X= 5.649E+01 HL /HREFF= 9.031E-01
X= 6.410E+01 HL /HREFF= 8.392E-01
B.L. TRANSITION DISTANCE = 46.32 CM
FULLY TURBULENT B.L. CONDITIONS AT = 48.86 CM

AMES 3.5 FT HWT TEST (1?2), C.B. BLUMER, IN-LINE RSI GAP RUN(34) 1973 PAGE 67

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TT        = 1.1??E+03(K)              GAP LENGTH = 30.48(CM)
PT        = 5.154E+05(N/M2)           GAP WIDTH  =   .127(CM)
HT        = 1.171E+06(J/KG)           GAP DEPTH  =  2.032(CM)
RE/METER  = 1.657E+06                 ORIENTATION= 15.000(DEG)
MACH      = 5.13                      QS         = 8.4279E+04(W/M2)
FMC VEL   = 2.739E+01(KG/M2-S)        400.POSITION=  2
HAW/HT    = 0.909 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2ND. ORDER CONE.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	0.00	6.465E+03	5.83E-03	6.47E-03	.910	7.003E-03	3.251E-04	3.079E-04	308.2				1.000
17	66.64	-.51	0.00	3.28E+00	4.96E-06	4.69E-06	.001	7.946E-03	2.364E-07	2.234E-07	338.7				1.000
18	61.56	-.51	0.00	5.03E+03	7.87E-03	7.46E-03	.921	8.551E-03	3.749E-04	3.551E-04	309.7				1.000
19	56.48	-.51	0.00	5.48E+03	8.13E-03	7.70E-03	.899	9.049E-03	3.972E-04	3.667E-04	310.1				1.000
20	51.39	-.51	0.00	5.95E+03	8.38E-03	7.93E-03	.882	9.499E-03	3.990E-04	3.778E-04	310.4				1.000
21	48.86	-.51	0.00	6.23E+03	8.78E-03	8.31E-03	.906	9.746E-03	4.173E-04	3.958E-04	310.6				1.000
22	46.31	-.51	0.00	6.36E+03	8.96E-03	8.49E-03	.894	1.002E-02	4.269E-04	4.043E-04	310.8				1.000
23	43.77	-.51	0.00	6.41E+03	9.02E-03	8.55E-03	.875	1.031E-02	4.298E-04	4.078E-04	310.9				1.000
24	41.24	-.51	0.00	6.67E+03	9.35E-03	8.35E-03	.883	1.059E-02	4.451E-04	4.215E-04	311.1				1.000
25	38.70	-.51	0.00	6.96E+03	9.83E-03	9.29E-03	.902	1.087E-02	4.669E-04	4.421E-04	310.7				1.000
41	71.72	0.00	.25	9.26E+02	1.30E-03	1.23E-03	.173	7.504E-03	6.167E-05	5.861E-05	306.8				.190
42	66.64	0.00	.25	1.32E+03	1.86E-03	1.76E-03	.234	7.941E-03	8.840E-05	8.373E-05	307.6				373.932
43	61.56	0.00	.25	1.34E+03	1.89E-03	1.79E-03	.221	8.551E-03	8.982E-05	8.507E-05	308.6				.248
44	56.48	0.00	.25	1.59E+03	2.23E-03	2.11E-03	.247	9.049E-03	1.062E-04	1.006E-04	309.2				.274
45	51.39	0.00	.25	1.57E+03	2.21E-03	2.09E-03	.232	9.498E-03	1.057E-04	9.947E-05	309.2				.263
46	48.86	0.00	.25	1.39E+03	1.95E-03	1.85E-03	.200	9.746E-03	9.296E-05	9.804E-05	309.3				.222
47	46.31	0.00	.25	1.73E+03	2.44E-03	2.31E-03	.243	1.003E-02	1.162E-04	1.100E-04	309.6				.272
48	43.77	0.00	.25	1.56E+03	2.22E-03	2.11E-03	.216	1.031E-02	1.059E-04	1.003E-04	309.5				.247
49	41.24	0.00	.25	1.73E+03	2.49E-03	2.27E-03	.228	1.058E-02	1.141E-04	1.088E-04	309.9				.256
50	38.70	0.10	.25	1.82E+03	2.56E-03	2.43E-03	.236	1.086E-02	1.220E-04	1.156E-04	309.4				.261
103	39.97	1.52	0.00	6.80E+03	9.76E-03	9.24E-03	.910	1.072E-02	4.647E-04	4.399E-04	314.4	9.76E-03	1.000	.910	1.020
105	39.97	1.02	0.00	6.99E+03	9.93E-03	9.38E-03	.924	1.072E-02	4.717E-04	4.465E-04	315.1	9.90E-03	1.000	.924	1.035
107	39.97	.51	0.00	7.16E+03	1.07E-02	1.01E-02	.998	1.072E-02	5.095E-04	4.825E-04	314.5	1.07E-02	1.000	.998	1.119
108	39.97	.25	0.00	7.17E+03	1.01E-02	9.61E-03	.946	1.072E-02	4.933E-04	4.575E-04	313.7	1.01E-02	1.000	.946	1.360
110	39.97	.14	.04	5.56E+03	7.85E-03	7.43E-03	.732	1.072E-02	3.739E-04	3.540E-04	312.6	7.85E-03	1.000	.732	.820
111	39.97	0.00	.15	4.64E+03	6.54E-03	6.20E-03	.610	1.072E-02	3.117E-04	2.951E-04	312.2	6.54E-03	1.000	.610	.684
112	39.97	0.10	.25	3.04E+03	4.29E-03	4.06E-03	.400	1.072E-02	2.041E-04	1.933E-04	311.3	4.29E-03	1.000	.400	.448
113	39.97	0.00	.38	1.75E+03	2.46E-03	2.33E-03	.229	1.072E-02	1.171E-04	1.108E-04	310.6	2.46E-03	1.000	.229	.257
114	39.97	0.00	.64	4.63E+02	6.51E-04	6.16E-04	.061	1.072E-02	3.099E-05	2.935E-05	309.5	6.51E-04	1.000	.061	.066
115	39.97	0.00	.89	8.25E+01	1.16E-04	1.10E-04	.011	1.072E-02	5.516E-06	5.224E-06	308.5	1.16E-04	1.000	.011	.012
203	46.32	1.52	0.00	6.69E+03	9.73E-03	9.22E-03	.971	1.002E-02	4.636E-04	4.389E-04	312.6	9.[illegible]	1.000	.971	1.086
205	46.32	1.02	0.00	6.67E+03	9.05E-03	8.57E-03	.903	1.002E-02	4.309E-04	4.080E-04	313.1	9.[illegible]	1.000	.903	1.010
207	46.32	.51	0.00	6.46E+03	9.13E-03	8.64E-03	.911	1.002E-02	4.347E-04	4.116E-04	312.8	[illegible]	1.000	.911	1.01[illegible]
208	46.32	.25	0.00	6.24E+03	8.81E-03	8.34E-03	.876	1.003E-02	4.194E-04	3.971E-04	312.2	[illegible]	1.000	.876	.98[illegible]
210	46.32	.14	.04	4.96E+03	6.96E-03	6.59E-03	.694	1.003E-02	3.315E-04	3.140E-04	311.3	6.96E-03	1.000	.694	.777
211	46.32	0.00	.15	4.19E+03	5.91E-03	5.59E-03	.589	1.003E-02	2.813E-04	2.664E-04	310.9	5.91E-03	1.000	.589	.65[illegible]
212	46.32	0.00	.25	2.89E+03	4.06E-03	3.85E-03	.405	1.003E-02	1.933E-04	1.832E-04	310.2	4.06E-03	1.000	.405	.45[illegible]
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	6.98E+01	9.83E-05	9.25E-05	.010	1.003E-02	4.605E-06	4.419E-06	308.1	9.83E-05	1.000	.010	.011

AMES 3.5 FT HWT TEST (152), C.B. BLUMER, IN-LINE RSI GAP RUN(34) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.46	3.97E+00	5.56E-06	5.26E-06	.001	1.003E-02	2.647E-07	2.507E-07	306.2	5.56E-06	1.000	.001	.001
218	46.32	0.00	1.65	3.[illegible]E+01	4.27E-05	4.04E-05	.004	1.003E-02	2.031E-06	1.924E-06	306.1	4.27E-05	1.000	.004	.005
219	46.32	0.00	1.98												
220	46.32	0.03	2.29	1.28E+01	1.80E-05	1.79E-05	.002	1.003E-02	6.553E-07	8.183E-07	305.7	1.80E-05	1.000	.002	.002
406	56.49	.76	0.00	6.[illegible]E+03	8.56E-03	9.11E-03	.946	9.050E-03	4.078E-04	3.862E-04	311.2	8.56E-03	1.000	.946	1.053
407	56.48	.51	0.00	6.31E+03	8.89E-03	8.42E-03	.983	9.050E-03	4.235E-04	4.018E-04	310.8	8.89E-03	1.000	.983	1.093
408	56.48	.25	0.00	5.98E+03	8.27E-03	7.83E-03	.914	9.049E-03	3.939E-04	3.731E-04	311.3	8.27E-03	1.000	.914	1.017
409	56.48	.15	0.00	5.2[illegible]E+03	7.32E-03	6.93E-03	.809	9.049E-03	3.485E-04	3.301E-04	309.9	7.32E-03	1.000	.809	.900
410	56.48	.04	.04	4.36E+03	6.14E-03	5.81E-03	.678	9.049E-03	2.923E-04	2.768E-04	309.6	6.14E-03	1.000	.678	.755
411	56.48	0.00	.15	3.74E+03	5.25E-03	4.98E-03	.581	9.049E-03	2.502E-04	2.370E-04	309.3	5.25E-03	1.000	.581	.646
412	56.48	0.00	.25	2.26E+03	3.17E-03	3.00E-03	.350	9.049E-03	1.509E-04	1.429E-04	308.5	3.17E-03	1.000	.350	.390
413	56.48	0.00	.38	1.09E+03	1.53E-03	1.45E-03	.169	9.049E-03	7.270E-05	6.894E-05	307.6	1.53E-03	1.000	.169	.188
414	56.48	0.00	.[illegible]	2.21E+02	3.10E-04	2.94E-04	.034	9.049E-03	1.478E-05	1.400E-05	307.4	3.10E-04	1.000	.034	.038
415	56.48	0.00	.89	3.97E+01	5.56E-05	5.27E-05	.006	9.049E-03	2.649E-06	2.509E-06	306.9	5.56E-05	1.000	.006	.007
416	56.48	0.00	1.14	4.29E+01	6.01E-05	5.69E-05	.007	9.049E-03	2.860E-06	2.709E-06	306.5	6.01E-05	1.000	.007	.007
417	56.48	0.00	1.40	4.69E+01	6.56E-05	6.21E-05	.007	9.049E-03	3.122E-06	2.958E-06	306.2	6.56E-05	1.000	.007	.008
418	56.48	0.00	1.65												
419	56.48	0.00	1.98												
420	56.48	0.00	2.29												
506	64.10	.76	0.00	5.49E+03	7.73E-03	7.32E-03	.937	8.249E-03	3.680E-04	3.485E-04	310.5	7.73E-03	1.000	.937	2.030
507	64.10	.51	0.00	5.46E+03	7.69E-03	7.28E-03	.932	8.248E-03	3.652E-04	3.460E-04	310.1	7.69E-03	1.000	.932	2.021
508	64.10	.25	0.00	5.[illegible]3E+03	7.[illegible]E-03	6.70E-03	.857	8.247E-03	3.36[illegible]E-04	3.189E-04	309.7	7.07E-03	1.000	.857	1.059
509	64.10	.15	0.00	4.14E+03	5.82E-03	5.51E-03	.706	8.247E-03	2.772E-04	2.626E-04	309.0	5.82E-03	1.000	.706	1.530
510	64.10	.04	.04	3.5[illegible]E+03	4.91E-03	4.65E-03	.596	8.247E-03	2.339E-04	2.216E-04	308.6	4.91E-03	1.000	.596	1.291
511	64.10	0.00	.15	3.23E+03	4.53E-03	4.29E-03	.549	8.246E-03	2.157E-04	2.043E-04	308.5	4.53E-03	1.000	.549	1.191
512	64.10	0.00	.25	2.06E+03	2.89E-03	2.74E-03	.351	8.246E-03	1.378E-04	1.305E-04	308.2	2.89E-03	1.000	.351	.762
513	64.10	0.00	.38	1.30E+03	1.82E-03	1.72E-03	.221	8.246E-03	8.673E-05	8.212E-05	307.9	1.82E-03	1.000	.221	.479
514	64.10	0.00	.64	2.8[illegible]E+02	3.99E-04	3.78E-04	.048	8.246E-03	1.902E-05	1.802E-05	307.3	3.99E-04	1.000	.048	.105
515	64.10	0.00	.89	1.33E+02	1.87E-04	1.77E-04	.023	8.246E-03	8.895E-06	8.426E-06	306.6	1.87E-04	1.000	.023	.049
516	64.10	0.00	1.14												
517	64.10	0.00	1.40	3.21E+02	4.49E-04	4.25E-04	.054	8.246E-03	2.139E-05	2.026E-05	306.3	4.49E-04	1.000	.054	.118
518	64.10	0.00	1.65												
519	64.10	0.00	1.98												
520	64.10	0.00	2.29	4.2[illegible]E+01	6.[illegible]E-05	[illegible].69E-05	.007	8.246E-03	2.859E-06	2.708E-06	305.7	6.0[illegible]E-05	1.000	.007	.016

EDGE HEATING USED FOR HE

X=	3.8[illegible]3E+01	HL	/HREFF=	9.[illegible]20E-01
X=	4.124E+01	HL	/HREFF=	8.827E-01
X=	4.37[illegible]E+01	HL	/HREFF=	8.[illegible]54E-01
X=	4.631E+01	HL	/HREFF=	8.933E-01
X=	4.896E+01	HL	/HREFF=	9.003E-01
X=	5.139E+01	HL	/HREFF=	6.819E-01
X=	5.648E+01	HL	/HREFF=	8.[illegible]6E-01
X=	6.156E+01	HL	/HREFF=	9.2[illegible]7E-01
X=	6.664E+01	HL	/HREFF=	6.2[illegible]1E-04
X=	7.172E+01	HL	/HREFF=	9.[illegible]30E-01
X=	3.997E+01	HL	/HREFF=	9.392E-01
X=	4.632E+01	HL	/HREFF=	9.1[illegible]E-01
X=	5.648E+01	HL	/HREFF=	9.826E-01
X=	6.410E+01	HL	/HREFF=	9.[illegible]22E-01

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT X=375.30 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1?2), C.?. BLUMER, IN-LINE RSI GAP RUN(35) 1973

TT	= 1.1332E+03(K)	GAP LENGTH	= 3?.48?(CM)
PT	= 2.091?E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.1935E+06(J/KG)	GAP DEPTH	= 2.?32(CM)
RE/METER	= 6.4?7E+06	ORIENTATION	= 15.090(DEG)
MACH	= 5.19?	QS	= 1.7445E+05(W/M2)
RHO VEL	= 5.3?41E+?1(KG/M2-S)	MOD.POSITION	= 3
HAW/HT	= ?.9?? FOR HT		
HAW/HT	= ?.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	?.??	?.7??E+04	7.31E-02	?.93E-02	.842	8.685E-02	8.719E-04	8.261E-04	311.?				1.000
2	132.7?	-.51	?.0?												
3	130.16	.51	?.??												
4	127.63	.51	.??	?.??E+04	7.?3E-02	7.?2E-02	.982	7.977E-02	9.34?E-04	8.84?E-04	312.4				1.000
5	125.09	-.51	?.0?	5.61E+04	7.66E-02	7.26E-02	.990	7.742E-02	9.140E-04	8.659E-04	312.5				1.000
6	122.?6	-.51	?.??	?.?7E+04	7.67E-02	7.27E-02	1.?22	7.516E-02	9.152E-04	8.671E-04	311.4				1.036
7	117.47	-.51	?.??	?.??E+04	7.44?E-02	7.0??E-02	1.077	6.907E-02	8.87?E-04	8.4?3E-04	312.5				1.000
8	112.37	-.51	?.??	?.37?E+04	7.33E-02	6.95E-02	1.217	6.?25E-02	8.745E-04	8.284E-04	313.0				1.000
9	107.31	-.51	?.??	?.??E+04	6.91E-02	6.54E-02	1.393	4.957E-02	8.236E-04	7.8?3E-04	311.4				1.000
10	1?2.2?	-.51	?.??	?.96E+04	6.82E-02	6.27E-02	1.653	4.005E-02	7.895E-04	7.481E-04	31?.5				?.?00
11	97.12	-.51	?.??	5.14E+04	7.01E-02	6.64E-02	2.163	3.239E-02	8.359E-04	7.920E-04	313.8				?.??0
12	92.?6	-.51	?.??	?.3?E+04	7.23E-02	6.35E-02	2.775	2.634E-02	8.62?E-04	8.167E-04	311.1				1.000
13	86.96	-.31	?.??	?.22E+04	7.13E-02	6.75E-02	3.320	2.146E-02	8.499E-04	8.052E-04	311.6				
14	81.88	-.51	?.??	5.16E+04	7.04E-02	6.67E-02	3.999	1.759E-02	8.392E-04	7.950E-04	311.9				
15	76.5?	-.51	?.??	3.38E+04	5.43E-02	5.14E-02	3.561	1.524E-02	6.472E-04	6.132E-04	311.9				
103	111.?9	1.52	?.??	5.?7E+04	7.51E-02	7.11E-02	1.302	5.765E-02	8.954E-04	8.480E-04	316.1	7.51E-02	1.000	1.302	1.032
105	111.09	1.?2	?.??	?.?5E+04	7.?9E-02	7.10E-02	1.300	5.766E-02	8.940E-04	8.466E-04	317.3	7.50E-02	1.000	1.300	1.030
107	111.09	.51	?.??	?.?1E+04	8.12E-02	7.69E-02	1.407	5.767E-02	9.58?E-04	9.168E-04	316.7	8.12E-02	1.000	1.407	1.115
109	111.?9	.25	?.??	6.7?E+04	9.26E-02	8.77E-02	1.605	5.767E-02	1.134E-03	1.046E-03	315.6	9.26E-02	1.000	1.605	1.272
110	111.?9	.?4	.?4	?.?0E+04	8.89E-02	?.42E-02	1.542	5.767E-02	1.061E-03	1.0?5E-03	314.0	8.89E-02	1.000	1.542	1.222
111	111.?9	?.??	.15	?.3?E+04	?.04E-02	7.62E-02	1.394	5.767E-02	9.399E-04	9.083E-04	313.6	8.04E-02	1.000	1.394	1.105
112	111.09	?.??	.25	?.6?E+04	6.35E-02	6.01E-02	1.100	5.767E-02	7.569E-04	7.170E-04	312.3	6.35E-02	1.000	1.100	.872
113	111.?9	?.??	.38	3.1?E+04	4.34E-02	4.11E-02	.753	5.767E-02	5.179E-04	4.907E-04	311.4	4.34E-02	1.000	.753	.597
114	111.?9	?.??	.64	1.31E+04	1.78E-02	1.69E-02	.309	5.767E-02	2.125E-04	2.013E-04	309.7	1.78E-02	1.000	.309	.245
115	111.09	?.00	.89	?.46E+03	6.05E-03	5.73E-03	.105	5.767E-02	7.219E-05	6.840E-05	308.4	6.05E-03	1.000	.105	.083
116	111.?9	?.??	1.14	1.?6E+03	2.11E-03	2.00E-03	.037	5.767E-02	2.52?E-05	2.388E-05	307.4	2.11E-03	1.000	.037	.029
117	111.?9	?.??	1.40	7.??E+02	1.08E-03	1.02E-03	.019	5.767E-02	1.29?E-05	1.222E-05	306.5	1.08E-03	1.000	.019	.015
118	111.09	?.??	1.65	3.6?E+02	4.97E-04	4.71E-04	.009	5.767E-02	5.933E-06	5.623E-06	305.9	4.97E-04	1.000	.009	.007
119	111.?9	?.??	1.90	1.6?E+02	2.25E-04	2.13E-04	.004	5.767E-02	2.63?E-06	2.540E-06	30?.4	2.25E-04	1.000	.004	.003
120	111.?9	?.??	2.20	?.??E+01	4.64E-05	4.40E-05	.001	5.767E-02	5.539E-07	5.253E-07	304.6	4.64E-05	1.000	.001	.001
203	117.44	1.?2	?.??	?.??E+04	7.45E-02	7.?6E-02	1.071	6.958E-02	8.89?E-04	8.420E-04	313.3	7.45E-02	1.000	1.071	.994
205	117.44	1.??	?.??	?.3?E+04	7.30E-02	6.91E-02	1.051	6.945E-02	8.7?7E-04	8.247E-04	314.0	7.30E-02	1.000	1.051	.975
207	117.44	.51	?.??	?.3?E+04	7.36E-02	6.97E-02	1.062	6.931E-02	8.761E-04	8.318E-04	313.8	7.36E-02	1.000	1.062	.98?
2??	117.44	.2?	?.??	?.9?E+04	8.?6E-02	7.?4E-02	1.1?5	6.?24E-02	9.618E-04	9.111E-04	313.0	8.?6E-02	1.000	1.16?	1.08?
210	117.44	.?4	.?4	?.??E+04	7.82E-02	7.?1E-02	1.131	6.918E-02	9.32?E-04	8.8?8E-04	311.8	7.82E-02	1.000	1.131	1.049
211	117.44	?.??	.15	?.??E+04	7.35E-02	6.96E-02	1.062	6.917E-02	8.731E-04	8.3??E-04	311.3	7.35E-02	1.000	1.062	.98?
212	117.44	?.??	.25	4.??E+04	6.20E-02	5.86E-02	.397	6.917E-02	7.4??E-04	7.011E-04	310.3	6.20E-02	1.000	.397	.83?
213	117.44	?.??	.38	?.1?E+01	4.?0E-05	4.25E-05	.0?1	6.917E-02	5.365E-07	5.?73E-07	338.7	4.50E-05	1.000	.001	.001
214	117.44	?.??	.44	1.??E+01	2.25E-05	2.12E-05	.?0?	6.917E-02	2.681E-07	2.535E-07	336.7	2.25E-05	1.000	.000	.000
215	117.44	?.??	.49	1.4?E+04	1.98E-02	1.88E-?2	.286	6.917E-02	2.36?E-04	2.237E-04	337.?	1.98E-02	1.003	.286	.265

AMES 3.5 FT HWT TEST (152), J.R. BLUMER, IN-LINE RSI GAP RUN(33) 1973 PAGE 70

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.30	1.14	9.56E+03	1.29E-02	1.22E-02	.186	6.917E-02	1.537E-04	1.457E-04	302.4	1.29E-02	1.000	.186	.173
217	117.44	0.00	1.40	6.07E+03	8.20E-03	7.78E-03	.119	6.917E-02	9.784E-05	9.274E-05	305.0	8.20E-03	1.000	.119	.110
218	117.44	0.00	1.65	3.31E+03	4.46E-03	4.23E-03	.065	6.917E-02	5.323E-05	5.046E-05	302.0	4.46E-03	1.000	.065	.066
219	117.44	0.00	1.90	1.40E+03	1.89E-03	1.79E-03	.027	6.917E-02	2.252E-05	2.135E-05	301.6	1.89E-03	1.000	.027	.025
220	117.44	0.00	2.29	1.11E+02	1.49E-04	1.41E-04	.002	6.917E-02	1.776E-06	1.684E-06	301.4	1.49E-04	1.000	.002	.002
406	127.60	.76	0.00	5.10E+04	6.95E-02	6.59E-02	.869	8.004E-02	8.294E-04	7.858E-04	311.1	6.95E-02	1.000	.869	.885
407	127.60	.51	0.00	5.33E+04	7.26E-02	6.88E-02	.907	7.998E-02	8.657E-04	8.202E-04	310.9	7.26E-02	1.000	.907	.924
408	127.60	.25	0.00	5.37E+04	7.31E-02	6.93E-02	.915	7.993E-02	8.723E-04	8.262E-04	310.1	7.31E-02	1.000	.915	.932
409	127.60	.15	0.00	5.13E+04	6.97E-02	6.61E-02	.872	7.990E-02	8.318E-04	7.879E-04	309.5	6.97E-02	1.000	.872	.889
410	127.60	.04	.04	4.58E+04	6.22E-02	5.89E-02	.778	7.988E-02	7.416E-04	7.028E-04	309.0	6.22E-02	1.000	.778	.793
411	127.60	0.00	.15	4.07E+04	5.52E-02	5.23E-02	.692	7.987E-02	6.597E-04	6.242E-04	308.5	5.52E-02	1.000	.692	.704
412	127.60	0.00	.25	2.74E+04	3.72E-02	3.52E-02	.465	7.987E-02	4.432E-04	4.209E-04	307.0	3.72E-02	1.000	.465	.474
413	127.60	0.00	.38	1.73E+04	2.34E-02	2.22E-02	.293	7.987E-02	2.788E-04	2.643E-04	305.8	2.34E-02	1.000	.293	.298
414	127.60	0.00	.64	5.89E+03	7.96E-03	7.55E-03	.100	7.987E-02	9.500E-05	9.005E-05	304.9	7.96E-03	1.000	.100	.102
415	127.60	0.00	.89	2.19E+03	2.95E-03	2.80E-03	.037	7.987E-02	3.523E-05	3.339E-05	304.1	2.95E-03	1.000	.037	.038
416	127.60	0.00	1.14	7.86E+02	1.06E-03	1.01E-03	.013	7.987E-02	1.268E-05	1.202E-05	303.3	1.06E-03	1.000	.013	.014
417	127.60	0.00	1.40	2.49E+02	3.35E-04	3.18E-04	.004	7.987E-02	4.000E-06	3.792E-06	302.6	3.35E-04	1.000	.004	.004
418	127.60	0.00	1.65	6.17E+01	8.32E-05	7.88E-05	.001	7.987E-02	9.918E-07	9.403E-07	302.2	8.32E-05	1.000	.001	.001
419	127.60	0.00	1.90												
420	127.60	0.00	2.29												
506	135.22	.76	0.00	5.06E+04	6.89E-02	6.53E-02	.792	8.706E-02	8.222E-04	7.798E-04	311.4	6.89E-02	1.000	.792	.946
507	135.22	.51	0.00	5.14E+04	7.00E-02	6.64E-02	.805	8.702E-02	8.353E-04	7.915E-04	310.6	7.00E-02	1.000	.805	.956
508	135.22	.25	0.00	5.53E+04	7.52E-02	7.13E-02	.865	8.697E-02	8.972E-04	8.501E-04	309.9	7.52E-02	1.000	.865	1.027
509	135.22	.15	0.00	5.30E+04	7.20E-02	6.82E-02	.828	8.695E-02	8.589E-04	8.139E-04	308.4	7.20E-02	1.000	.828	.983
510	135.22	.04	.04	5.02E+04	6.81E-02	6.45E-02	.783	8.693E-02	8.119E-04	7.693E-04	307.8	6.81E-02	1.000	.783	.930
511	135.22	0.00	.15	4.79E+04	6.50E-02	6.16E-02	.747	8.693E-02	7.749E-04	7.343E-04	307.3	6.50E-02	1.000	.747	.887
512	135.22	0.00	.25	4.01E+04	5.43E-02	5.15E-02	.625	8.693E-02	6.482E-04	6.143E-04	307.0	5.43E-02	1.000	.625	.742
513	135.22	0.00	.38	3.20E+04	4.33E-02	4.10E-02	.498	8.693E-02	5.163E-04	4.891E-04	306.2	4.33E-02	1.000	.498	.591
514	135.22	0.00	.64	1.82E+04	2.46E-02	2.33E-02	.283	8.693E-02	2.933E-04	2.780E-04	305.3	2.46E-02	1.000	.283	.336
515	135.22	0.00	.89	1.09E+04	1.48E-02	1.40E-02	.170	8.693E-02	1.761E-04	1.670E-04	304.2	1.48E-02	1.000	.170	.202
516	135.22	0.00	1.14	6.93E+03	9.38E-03	8.89E-03	.108	8.693E-02	1.119E-04	1.060E-04	304.1	9.38E-03	1.000	.108	.128
517	135.22	0.00	1.40	3.63E+03	4.90E-03	4.54E-03	.056	8.693E-02	5.840E-05	5.536E-05	303.5	4.99E-03	1.000	.056	.067
518	135.22	0.00	1.65	1.82E+03	2.45E-03	2.32E-03	.028	8.693E-02	2.924E-05	2.772E-05	303.1	2.45E-03	1.000	.028	.033
519	135.22	0.00	1.90	1.23E+03	1.66E-03	1.57E-03	.019	8.693E-02	1.973E-05	1.872E-05	302.4	1.66E-03	1.000	.019	.023
520	135.22	0.00	2.29	1.69E+02	2.28E-04	2.16E-04	.003	8.693E-02	2.718E-06	2.577E-06	301.8	2.28E-04	1.000	.003	.003

EDGE HEATING USED FOR HE

X=	7.690E+01	HL	/HREFF=	3.561E+00
X=	8.188E+01	HL	/HREFF=	3.999E+00
X=	8.696E+01	HL	/HREFF=	3.320E+00
X=	9.204E+01	HL	/HREFF=	2.775E+00
X=	9.712E+01	HL	/HREFF=	2.163E+00
X=	1.022E+02	HL	/HREFF=	1.533E+00
X=	1.073E+02	HL	/HREFF=	1.393E+00
X=	1.124E+02	HL	/HREFF=	1.217E+00
X=	1.175E+02	HL	/HREFF=	1.077E+00
X=	1.225E+02	HL	/HREFF=	1.022E+00
X=	1.251E+02	HL	/HREFF=	9.899E-01
X=	1.276E+02	HL	/HREFF=	9.816E-01
X=	1.352E+02	HL	/HREFF=	8.417E-01
X=	1.111E+02	HL	/HREFF=	1.467E+00
X=	1.174E+02	HL	/HREFF=	1.152E+00
X=	1.276E+02	HL	/HREFF=	9.775E-01
X=	1.352E+02	HL	/HREFF=	8.048E-01

B.L. TRANSITION DISTANCE = 60.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 81.85 CM

AMES 3.5 FT HWT TEST (1-2), T.E. BLUMER, IN-LINE RSI GAP RUN(36) 1973 PAGE 71

TT	= 1.13[illegible](K)	GAP LENGTH	= 3[illegible](CM)
PT	= 2.[illegible](N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.19[illegible](J/KG)	GAP DEPTH	= 3.[illegible]2(CM)
RE/METER	= 6.[illegible]	ORIENTATION	= 1[illegible](DEG)
MACH	= [illegible]	QS	= [illegible].7317E+05(W/M2)
RHO VEL	= [illegible](KG/M2-S)	MOD.POSITION	= 3
HAW/HT	= [illegible] FOR HT		
HAW/HT	= [illegible] FOR HL		
HLCC	= HL(2ND. D[illegible] COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HF
1	135.24	-.51	[illegible]	[illegible]	7.40E-02	7.31E-02	.848	8.719E-02	9.9.1E-04	9.336E-04	316.0				1.09C
2	132.70	-.51	[illegible]												
3	130.16	-.51	[illegible]	[illegible]	7.56E-02	7.15E-02	.917	[illegible]	9.0[illegible]E-04	8.523E-04	317.0				1.091
4	127.67	-.51	[illegible]	[illegible]	7.56E-02	7.26E-02	.956	8.014E-02	9.119E-04	8.635E-04	317.1				1.09C
5	125.09	-.51	[illegible]	[illegible]	7.43E-02	7.33E-02	.955	7.779E-02	9.034E-04	8.366E-04	317.3				1.09C
6	122.56	-.51	[illegible]	[illegible]	7.44E-02	7.34E-02	.956	7.[illegible]E-02	[illegible]	8.370E-04	317.1				1.08[illegible]
7	117.47	-.51	[illegible]	[illegible]	6.84E-02	6.47E-02	.985	6.944E-02	8.134E-04	7.703E-04	317.3				1.09C
8	112.37	-.51	[illegible]	5.21E+04	7.18E-02	6.80E-02	1.185	6.[illegible]E-02	8.544E-04	8.090E-04	317.7				1.08C
9	107.31	-.51	[illegible]	[illegible]	[illegible]	6.70E-02	1.418	4.965E-02	9.411E-04	7.966E-04	31[illegible].1				1.00C
10	102.28	-.51	[illegible]	[illegible]	6.59E-02	6.24E-02	1.676	4.027E-02	7.839E-04	7.424E-04	314.9				1.00C
11	97.12	-.51	[illegible]	[illegible]	5.62E-02	5.33E-02	1.726	3.257E-02	6.689E-04	6.335E-04	315.2				1.000
12	92.34	-.51	[illegible]	[illegible]	[illegible]	4.74E-02	1.911	2.[illegible]E-02	5.953E-04	5.638E-04	315.9				1.00C
13	86.96	-.51	[illegible]	3.[illegible]E+04	4.99E-02	4.73E-02	2.314	2.156E-02	5.937E-04	5.623E-04	316.1				1.00C
14	81.90	-.51	[illegible]	2.[illegible]E+04	3.59E-02	3.40E-02	2.035	1.767E-02	4.277E-04	4.050E-04	316.8				1.00C
15	76.80	-.51	[illegible]	1.[illegible]E+04	2.49E-02	2.35E-02	1.62[illegible]	1.529E-02	2.949E-04	2.792E-04	316.7				1.000
103	111.99	1.52	[illegible]	[illegible]E+04	7.34E-02	5.95E-02	1.267	5.798E-02	8.738E-04	8.272E-04	320.6	7.34E-02	1.000	1.267	1.018
105	111.99	1.02	[illegible]	[illegible]225+04	7.25E-02	6.86E-02	1.25[illegible]	[illegible]E-02	8.627E-04	8.167E-04	322.0	7.25E-02	1.000	1.250	1.00[illegible]
107	111.99	.51	[illegible]	[illegible]	8.29E-02	7.35E-02	1.429	5.8[illegible]E-02	9.954E-04	9.338E-04	321.6	8.29E-02	1.000	1.429	1.149
108	111.99	.25	[illegible]	7.[illegible]E+04	1.08E-01	1.03E-01	1.870	5.[illegible]E-02	1.291E-03	1.222E-03	320.6	1.08E-01	1.000	1.870	1.503
110	111.99	.04	[illegible]	[illegible]	1.20E-01	1.14E-01	2.076	5.[illegible]E-02	1.412E-03	1.356E-03	319.1	1.20E-01	1.000	2.076	1.668
111	111.99	[illegible]	.18	[illegible]	1.15E-01	1.09E-01	1.982	5.[illegible]E-02	1.359E-03	1.295E-03	318.7	1.15E-01	1.000	1.982	1.593
112	111.99	[illegible]	.25	7.[illegible]E+04	1.[illegible]E-01	9.65E-02	1.756	5.830E-02	1.212E-03	1.146E-03	317.6	1.02E-01	1.000	1.756	1.411
113	111.99	[illegible]	.73	[illegible]	[illegible]	7.71E-02	1.4[illegible]3	[illegible]	[illegible]	9.171E-04	316.7	[illegible].14E-02	1.000	1.4[illegible]3	1.12[illegible]
114	111.99	[illegible]	.64	3.[illegible]E+04	[illegible]	4.92E-02	.89[illegible]	[illegible]	5.193E-04	5.856E-04	315.[illegible]	5.20E-02	1.000	.896	.720
115	111.99	[illegible]	.99	2.46E+04	3.38E-02	3.26E-02	.582	[illegible]E-02	4.017E-04	3.805E-04	313.6	3.38E-02	1.000	.582	.466
116	111.99	[illegible]	1.14	1.72E+04	2.36E-02	2.24E-02	.407	[illegible]E-02	2.837E-04	2.659E-04	312.6	2.36E-02	1.000	.407	.327
117	111.99	[illegible]	1.4[illegible]	1.[illegible]E+04	1.85E-02	1.76E-02	.321	5.[illegible]E-02	2.213E-04	2.097E-04	311.7	1.86E-02	1.000	.321	.259
118	111.99	0.0[illegible]	1.65	1.[illegible]E+04	1.49E-02	1.41E-02	.256	[illegible]E-02	1.703E-04	1.676E-04	311.0	1.49E-02	1.000	.256	.206
119	111.99	[illegible]	1.9[illegible]	[illegible]E+03	9.33E-03	8.81E-03	.16[illegible]	[illegible]E-02	1.1[illegible]E-04	1.[illegible]48E-04	310.3	9.30E-03	1.000	.160	.129
120	111.99	[illegible]	2.29	1.[illegible]E+03	1.46E-03	1.39E-03	.025	[illegible]E-02	1.7[illegible]E-05	1.651E-05	309.3	1.46E-03	1.000	.025	.02[illegible]
203	117.44	1.[illegible]	[illegible]	[illegible]	[illegible].79E-02	7.37E-02	1.113	[illegible]E-02	9.202E-04	8.771E-04	317.6	[illegible].78E-02	1.000	1.113	1.128
205	117.44	1.32	[illegible]	[illegible]	[illegible]	7.14E-02	1.09[illegible]	[illegible].963E-02	8.975E-04	8.499E-04	318.4	7.54E-02	1.000	1.080	1.09[illegible]
207	117.44	.51	[illegible]	[illegible]	8.19E-02	7.75E-02	1.175	6.969E-02	9.741E-04	9.224E-04	318.3	8.19E-02	1.000	1.175	1.19[illegible]
20[illegible]	117.44	.27	[illegible]	[illegible]	[illegible]	[illegible]	1.32[illegible]	[illegible]E-02	1.093E-03	1.[illegible]35E-03	317.7	9.19E-02	1.000	1.32[illegible]	1.33[illegible]
21[illegible]	117.44	[illegible]	[illegible]	[illegible]	9.[illegible]E-02	9.92E-02	1.294	6.99[illegible]E-02	1.071E-03	1.014E-03	316.6	9.[illegible]E-02	1.000	1.294	1.312
211	117.44	[illegible]	.15	[illegible]	[illegible]65E-02	9.15E-02	1.243	6.954E-02	1.029E-03	9.741E-04	315.1	8.65E+02	1.000	1.243	1.26[illegible]
212	117.44	[illegible]	.25	[illegible]	7.66E-02	[illegible]	1.13[illegible]	6.954E-02	9.3[illegible]2E-04	8.853E-04	315.1	7.66E-02	1.000	1.131	1.14[illegible]
213	117.44	[illegible]	[illegible]												
214	117.44	[illegible]	.64	9.[illegible]	1.41E-05	1.33E-05	.0[illegible]	6.954E-02	1.676E-07	1.504E-07	338.7	1.41E-05	1.000	.080	.09[illegible]
21[illegible]	117.44	[illegible]	.[illegible]9	[illegible].12E+04	[illegible]	[illegible].74E-02	.811	[illegible]E-02	[illegible]E-04	6.354E-04	311.9	5.64E-02	1.000	.811	.822

AMES 3.5 FT HWT TEST (1-2), C.S. BLUMER, IN-LINE RSI GAP RUN(36) 1973 PAGE 72

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.00	1.14	3.53E+04	4.83E-02	4.55E-02	.598	6.954E-02	5.707E-04	5.409E-04	317.1	4.80E-02	1.000	.698	.700
217	117.44	0.00	1.46	3.11E+04	4.24E-02	4.32E-02	.610	6.954E-02	5.047E-04	4.782E-04	309.7	4.24E-02	1.000	.610	.619
218	117.44	0.00	1.65	2.45E+04	3.39E-02	3.21E-02	.497	6.954E-02	4.332E-04	3.821E-04	306.6	3.39E-02	1.000	.487	.494
219	117.44	0.00	1.90	1.55E+04	2.26E-02	2.14E-02	.325	6.954E-02	2.687E-04	2.546E-04	306.0	2.26E-02	1.000	.325	.329
220	117.44	0.00	2.29	3.93E+03	5.33E-03	5.05E-03	.077	6.954E-02	6.340E-05	6.009E-05	305.6	5.33E-03	1.000	.077	.078
406	127.60	.76	0.00	4.62E+04	6.35E-02	6.01E-02	.799	8.041E-02	7.551E-04	7.152E-04	315.1	6.35E-02	1.000	.789	.825
407	127.60	.51	0.00	4.46E+04	6.13E-02	5.80E-02	.762	8.035E-02	7.289E-04	6.904E-04	315.1	6.13E-02	1.000	.762	.797
408	127.60	.25	0.00	4.15E+04	5.70E-02	5.40E-02	.710	8.029E-02	6.796E-04	6.429E-04	314.5	5.70E-02	1.000	.710	.743
409	127.60	.15	0.00	3.92E+04	5.39E-02	5.10E-02	.671	8.027E-02	6.409E-04	6.071E-04	314.0	5.39E-02	1.000	.671	.702
410	127.60	.06	.04	3.55E+04	4.86E-02	4.61E-02	.606	8.024E-02	5.787E-04	5.481E-04	313.5	4.86E-02	1.000	.606	.634
411	127.60	0.00	.15	3.24E+04	4.44E-02	4.20E-02	.553	8.023E-02	5.276E-04	4.998E-04	313.0	4.44E-02	1.000	.553	.578
412	127.60	0.00	.25	2.47E+04	3.38E-02	3.20E-02	.421	8.023E-02	4.016E-04	3.804E-04	311.6	3.38E-02	1.000	.421	.440
413	127.60	0.00	.38	1.93E+04	2.63E-02	2.49E-02	.328	8.023E-02	3.129E-04	2.965E-04	309.7	2.63E-02	1.000	.328	.343
414	127.60	0.00	.64	1.38E+04	1.88E-02	1.78E-02	.234	8.023E-02	2.232E-04	2.115E-04	309.5	1.88E-02	1.000	.234	.244
415	127.60	0.00	.39	1.19E+04	1.63E-02	1.54E-02	.203	8.023E-02	1.934E-04	1.833E-04	308.7	1.63E-02	1.000	.203	.212
416	127.60	0.00	1.14	1.05E+04	1.42E-02	1.35E-02	.177	8.023E-02	1.694E-04	1.605E-04	307.8	1.42E-02	1.000	.177	.186
417	127.60	0.00	1.40	8.97E+03	1.22E-02	1.16E-02	.152	8.023E-02	1.451E-04	1.375E-04	306.9	1.22E-02	1.000	.152	.159
418	127.60	0.00	1.65	7.09E+03	9.63E-03	9.13E-03	.120	8.023E-02	1.145E-04	1.086E-04	306.6	9.63E-03	1.000	.120	.126
419	127.60	0.00	1.90	4.36E+03	5.92E-03	5.61E-03	.074	8.023E-02	7.049E-05	6.680E-05	306.2	5.92E-03	1.000	.074	.077
420	127.60	0.00	2.29	6.77E+02	9.19E-04	8.71E-04	.011	8.023E-02	1.094E-05	1.037E-05	305.8	9.19E-04	1.000	.011	.012
506	135.22	.76	0.00	4.65E+04	6.39E-02	6.05E-02	.731	8.741E-02	7.599E-04	7.197E-04	315.2	6.39E-02	1.000	.731	.861
507	135.22	.51	0.00	4.11E+04	5.64E-02	5.34E-02	.646	8.736E-02	6.713E-04	6.359E-04	314.5	5.64E-02	1.000	.646	.766
508	135.22	.25	0.00	3.49E+04	4.78E-02	4.53E-02	.548	8.732E-02	5.699E-04	5.389E-04	313.7	4.78E-02	1.000	.548	.645
509	135.22	.15	0.00	2.80E+04	3.84E-02	3.64E-02	.440	8.730E-02	4.568E-04	4.327E-04	312.4	3.84E-02	1.000	.440	.518
510	135.22	.04	.04	2.44E+04	3.33E-02	3.16E-02	.382	8.728E-02	3.967E-04	3.758E-04	312.0	3.33E-02	1.000	.382	.450
511	135.22	0.00	.15	2.22E+04	3.04E-02	2.88E-02	.348	8.727E-02	3.614E-04	3.424E-04	311.5	3.04E-02	1.000	.348	.410
512	135.22	0.00	.25	1.57E+04	2.14E-02	2.03E-02	.245	8.727E-02	2.549E-04	2.415E-04	311.3	2.14E-02	1.000	.245	.289
513	135.22	0.00	.38	1.08E+04	1.47E-02	1.39E-02	.168	8.727E-02	1.748E-04	1.656E-04	311.7	1.47E-02	1.000	.168	.198
514	135.22	0.00	.64	5.42E+03	7.40E-03	7.01E-03	.085	8.727E-02	8.799E-05	8.336E-05	309.8	7.40E-03	1.000	.085	.100
515	135.22	0.00	.89	3.91E+03	5.32E-03	5.04E-03	.061	8.727E-02	6.332E-05	6.000E-05	308.7	5.32E-03	1.000	.061	.072
516	135.22	0.00	1.14	3.37E+03	4.60E-03	4.36E-03	.053	8.727E-02	5.468E-05	5.181E-05	308.7	4.60E-03	1.000	.053	.062
517	135.22	0.00	1.40	2.91E+03	3.96E-03	3.75E-03	.045	8.727E-02	4.712E-05	4.469E-05	308.0	3.96E-03	1.000	.045	.053
518	135.22	0.00	1.65	2.25E+03	3.06E-03	2.90E-03	.035	8.727E-02	3.641E-05	3.451E-05	307.5	3.06E-03	1.000	.035	.041
519	135.22	0.00	1.90	1.11E+03	1.51E-03	1.43E-03	.017	8.727E-02	1.801E-05	1.707E-05	306.7	1.51E-03	1.000	.017	.020
520	135.22	0.00	2.29	2.64E+02	3.59E-04	3.40E-04	.004	8.727E-02	4.266E-06	4.043E-06	305.7	3.59E-04	1.000	.004	.005

EDGE HEATING USED FOR HE

X=	7.680E+01	HL /HREFF=	1.029E+00
X=	8.188E+01	HL /HREFF=	2.335E+00
X=	8.696E+01	HL /HREFF=	2.314E+00
X=	9.204E+01	HL /HREFF=	1.911E+00
X=	9.712E+01	HL /HREFF=	1.726E+00
X=	1.022E+02	HL /HREFF=	1.535E+00
X=	1.073E+02	HL /HREFF=	1.418E+00
X=	1.124E+02	HL /HREFF=	1.185E+00
X=	1.175E+02	HL /HREFF=	9.846E-01
X=	1.226E+02	HL /HREFF=	9.957E-01
X=	1.251E+02	HL /HREFF=	9.545E-01
X=	1.276E+02	HL /HREFF=	9.364E-01
X=	1.302E+02	HL /HREFF=	9.171E-01
X=	1.352E+02	HL /HREFF=	8.435E-01
X=	1.111E+02	HL /HREFF=	1.420E+00
X=	1.174E+02	HL /HREFF=	1.175E+00
X=	1.276E+02	HL /HREFF=	7.825E-01
X=	1.352E+02	HL /HREFF=	6.155E-01

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 86.95 CM

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP FUN(37) 1973 PAGE 73

TT = 1.1235E+03(K)
PT = 2.0945E+06(N/M2)
HT = 1.1994E+06(J/KG)
RE/METER = 6.5327E+06
MACH = 5.135
RHO VEL = 5.4453E+01(KG/M2-S)
HAW/HT = 0.985 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

GAP LENGTH = 30.480(CM)
GAP WIDTH = .254(CM)
GAP DEPTH = 2.032(CM)
ORIENTATION= 10.390(DEG)
QS = 1.7132E+05(W/M2)
MOD.POSITION= 3

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	[illegible]	7.72E-02	7.30E-02	.877	8.799E-02	9.135E-04	8.650E-04	317.5				1.000
2	132.79	-.51	0.00												
3	130.16	-.51	0.00	5.27E+04	7.35E-02	6.96E-02	.882	8.332E-02	8.704E-04	8.241E-04	318.3				1.000
4	127.63	-.51	0.00	5.45E+04	7.59E-02	7.19E-02	.937	8.098E-02	8.989E-04	8.511E-04	318.4				1.000
5	125.09	-.51	0.00	5.55E+04	7.73E-02	7.32E-02	.983	7.865E-02	9.155E-04	8.668E-04	318.6				1.000
6	122.56	-.51	0.00	5.67E+04	7.90E-02	7.48E-02	1.035	7.631E-02	9.351E-04	8.853E-04	318.4				1.000
7	117.47	-.51	0.00	4.95E+04	6.90E-02	6.54E-02	.982	7.031E-02	8.174E-04	7.738E-04	318.9				1.000
8	112.37	-.51	0.00	5.17E+04	7.21E-02	6.82E-02	1.174	6.139E-02	8.536E-04	8.081E-04	319.3				1.000
9	107.31	-.51	0.00	5.22E+04	7.26E-02	6.88E-02	1.436	5.054E-02	8.601E-04	8.143E-04	317.9				1.000
10	102.20	-.51	0.00	4.84E+04	6.73E-02	6.37E-02	1.650	4.079E-02	7.971E-04	7.547E-04	317.8				1.000
11	97.12	-.51	0.00	4.27E+04	5.94E-02	5.63E-02	1.803	3.295E-02	7.035E-04	6.664E-04	317.5				1.000
12	92.04	-.51	0.00	3.74E+04	5.21E-02	4.93E-02	1.965	2.649E-02	6.164E-04	5.836E-04	317.8				1.000
13	86.96	-.51	0.00	3.41E+04	4.75E-02	4.49E-02	2.177	2.180E-02	5.619E-04	5.320E-04	318.4				1.000
14	81.88	-.51	0.00	2.82E+04	3.94E-02	3.73E-02	2.234	1.764E-02	4.664E-04	4.415E-04	319.2				1.000
15	76.80	-.51	0.00	1.76E+04	2.46E-02	2.33E-02	1.596	1.541E-02	2.912E-04	2.757E-04	319.1				1.000
103	111.09	1.52	0.00	5.29E+04	7.42E-02	7.02E-02	1.262	5.875E-02	8.791E-04	8.311E-04	322.3	7.42E-02	1.000	1.262	1.017
105	111.09	1.02	0.00	5.21E+04	7.32E-02	6.92E-02	1.245	5.876E-02	8.662E-04	8.198E-04	323.4	7.32E-02	1.000	1.245	1.003
107	111.09	.51	0.00	5.54E+04	7.77E-02	7.36E-02	1.322	5.877E-02	9.203E-04	8.718E-04	322.8	7.77E-02	1.000	1.322	1.065
108	111.09	.25	0.00	6.85E+04	9.59E-02	9.08E-02	1.633	5.877E-02	1.136E-03	1.075E-03	321.9	9.59E-02	1.000	1.633	1.316
110	111.09	.04	.04	7.66E+04	1.07E-01	1.02E-01	1.828	5.877E-02	1.272E-03	1.204E-03	320.6	1.07E-01	1.000	1.828	1.472
111	111.09	0.00	.15	7.42E+04	1.04E-01	9.91E-02	1.764	5.877E-02	1.227E-03	1.162E-03	321.1	1.04E-01	1.000	1.764	1.421
112	111.09	0.00	.25	6.68E+04	9.32E-02	8.82E-02	1.585	5.877E-02	1.103E-03	1.044E-03	319.9	9.32E-02	1.000	1.585	1.277
113	111.09	0.00	.38	5.41E+04	7.54E-02	7.14E-02	1.283	5.877E-02	8.929E-04	8.454E-04	318.2	7.54E-02	1.000	1.283	1.034
114	111.09	0.00	.64	3.42E+04	4.75E-02	4.59E-02	.808	5.877E-02	5.623E-04	5.324E-04	316.7	4.75E-02	1.000	.808	.651
115	111.09	0.00	.89	1.95E+04	2.71E-02	2.56E-02	.460	5.877E-02	3.203E-04	3.034E-04	315.4	2.71E-02	1.000	.460	.371
116	111.09	0.00	1.14	1.11E+04	1.54E-02	1.46E-02	.263	5.877E-02	1.828E-04	1.732E-04	314.	1.54E-02	1.000	.263	.212
117	111.09	0.00	1.40	7.15E+03	9.91E-03	9.39E-03	.169	5.877E-02	1.174E-04	1.112E-04	313.8	9.91E-03	1.000	.169	.136
118	111.09	0.00	1.65	5.61E+03	7.77E-03	7.36E-03	.132	5.877E-02	9.198E-05	8.712E-05	313.2	7.77E-03	1.000	.132	.106
119	111.09	0.00	1.90	3.56E+03	4.92E-03	4.66E-03	.084	5.877E-02	5.827E-05	5.519E-05	312.6	4.92E-03	1.000	.084	.067
120	111.09	0.00	2.29	4.65E+02	6.29E-04	5.96E-04	.011	5.877E-02	7.447E-06	7.054E-06	311.6	6.29E-04	1.000	.011	.009
203	117.44	1.52	0.00	5.52E+04	7.71E-02	7.30E-02	1.088	7.086E-02	9.129E-04	8.642E-04	319.5	7.71E-02	1.000	1.088	1.107
205	117.44	1.02	0.00	5.53E+04	7.73E-02	7.31E-02	1.093	7.072E-02	9.149E-04	8.662E-04	320.1	7.73E-02	1.000	1.093	1.111
207	117.44	.51	0.00	5.52E+04	7.71E-02	7.30E-02	1.093	7.057E-02	9.135E-04	8.648E-04	319.9	7.71E-02	1.000	1.093	1.11[illegible]
208	117.44	.25	0.00	6.61E+04	9.27E-02	8.78E-02	1.315	7.050E-02	1.098E-03	1.033E-03	319.3	9.27E-02	1.000	1.315	1.33[illegible]
210	117.44	.04	.06	7.46E+04	1.04E-01	9.85E-02	1.477	7.043E-02	1.231E-03	1.166E-03	318.3	1.04E-01	1.000	1.477	1.502
211	117.44	0.00	.15	7.35E+04	1.02E-01	9.59E-02	1.454	7.042E-02	1.212E-03	1.148E-03	317.6	1.02E-01	1.000	1.454	1.47[illegible]
212	117.44	0.00	.25	6.75E+04	9.44E-02	8.94E-02	1.340	7.042E-02	1.119E-03	1.058E-03	316.9	9.44E-02	1.000	1.340	1.36[illegible]
213	117.44	0.00	.38												
214	117.44	0.00	.64												
215	117.44	0.00	.89	[illegible]	[illegible]	6.63E-02	.995	7.042E-02	8.234E-04	7.855E-04	314.0	7.90E-02	1.000	.995	1.612

AMES 3.5 FT HWT TEST (172), C.P. BLUMER, IN-LINE RSI GAP RUN(37) 1973 PAGE 74

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.00	1.14	4.77E+04	6.01E-02	5.70E-02	.854	7.042E-02	7.122E-04	6.747E-04	309.6	6.01E-02	1.000	.854	.869
217	117.44	0.00	1.40	3.55E+04	4.91E-02	4.65E-02	.697	7.042E-02	5.815E-04	5.558E-04	312.3	4.91E-02	1.000	.697	.709
218	117.44	0.00	1.65	2.71E+04	3.79E-02	3.59E-02	.538	7.042E-02	4.496E-04	4.259E-04	309.2	3.79E-02	1.000	.538	.547
219	117.44	0.00	1.90	1.72E+04	2.45E-02	2.32E-02	.348	7.042E-02	2.903E-04	2.750E-04	308.8	2.45E-02	1.000	.348	.354
220	117.44	0.00	2.29	3.85E+03	5.29E-03	5.01E-03	.075	7.042E-02	6.269E-05	5.931E-05	308.5	5.29E-03	1.000	.075	.076
406	127.60	.76	0.00	4.31E+04	6.00E-02	5.68E-02	.738	8.126E-02	7.099E-04	6.721E-04	317.0	5.99E-02	1.000	.738	.706
407	127.60	.51	0.00	4.02E+04	5.59E-02	5.29E-02	.688	8.120E-02	6.619E-04	6.267E-04	316.9	5.59E-02	1.000	.688	.734
408	127.60	.25	0.00	3.76E+04	5.23E-02	4.95E-02	.644	8.114E-02	6.187E-04	5.858E-04	316.3	5.23E-02	1.000	.644	.687
409	127.60	.15	0.00	3.65E+04	5.08E-02	4.81E-02	.626	8.112E-02	6.013E-04	5.694E-04	315.9	5.08E-02	1.000	.626	.667
410	127.60	.04	.04	3.40E+04	4.72E-02	4.47E-02	.582	8.109E-02	5.586E-04	5.290E-04	315.4	4.72E-02	1.000	.582	.620
411	127.60	0.00	.15	3.15E+04	4.37E-02	4.13E-02	.539	8.108E-02	5.173E-04	4.896E-04	315.0	4.37E-02	1.000	.539	.574
412	127.60	0.00	.25	2.58E+04	3.54E-02	3.36E-02	.437	8.108E-02	4.196E-04	3.974E-04	313.7	3.54E-02	1.000	.437	.466
413	127.60	0.00	.38	2.14E+04	2.95E-02	2.80E-02	.364	8.108E-02	3.495E-04	3.311E-04	311.9	2.95E-02	1.000	.364	.388
414	127.60	0.00	.64	1.71E+04	2.36E-02	2.23E-02	.291	8.108E-02	2.794E-04	2.646E-04	311.0	2.36E-02	1.000	.291	.310
415	127.60	0.00	.89	1.51E+04	2.09E-02	1.98E-02	.257	8.108E-02	2.471E-04	2.340E-04	311.1	2.09E-02	1.000	.257	.274
416	127.60	0.30	1.14	1.30E+04	1.80E-02	1.70E-02	.222	8.108E-02	2.127E-04	2.015E-04	310.3	1.80E-02	1.000	.222	.236
417	127.60	0.30	1.40	1.09E+04	1.51E-02	1.43E-02	.186	8.108E-02	1.784E-04	1.690E-04	309.6	1.51E-02	1.000	.186	.198
418	127.60	0.30	1.65	8.22E+03	1.13E-02	1.07E-02	.140	8.108E-02	1.349E-04	1.269E-04	309.3	1.13E-02	1.000	.140	.149
419	127.60	0.30	1.90	4.94E+03	6.80E-03	6.44E-03	.084	8.108E-02	8.046E-05	7.623E-05	309.0	6.80E-03	1.000	.084	.089
423	127.60	0.30	2.29	8.07E+02	1.11E-03	1.05E-03	.014	8.108E-02	1.314E-05	1.245E-05	308.7	1.11E-03	1.000	.014	.015
506	135.22	.75	0.00	4.38E+04	6.10E-02	5.77E-02	.691	8.822E-02	7.220E-04	6.836E-04	316.9	6.10E-02	1.000	.691	.708
507	135.22	.31	0.00	3.72E+04	5.17E-02	4.39E-02	.586	8.817E-02	6.117E-04	5.793E-04	316.3	5.17E-02	1.000	.586	.660
508	135.22	.25	0.00	2.95E+04	4.09E-02	3.87E-02	.464	8.812E-02	4.841E-04	4.585E-04	315.6	4.09E-02	1.000	.464	.529
509	135.22	.15	0.00	2.34E+04	3.24E-02	3.07E-02	.368	8.810E-02	3.836E-04	3.633E-04	314.4	3.24E-02	1.000	.368	.419
510	135.22	.04	.04	2.03E+04	2.82E-02	2.67E-02	.320	8.806E-02	3.334E-04	3.158E-04	313.9	2.82E-02	1.000	.320	.365
511	135.22	0.00	.15	1.94E+04	2.55E-02	2.41E-02	.289	8.807E-02	3.016E-04	2.857E-04	313.5	2.55E-02	1.000	.289	.330
512	135.22	0.00	.25	1.34E+04	1.85E-02	1.75E-02	.210	8.807E-02	2.199E-04	2.073E-04	313.3	1.85E-02	1.000	.210	.239
513	135.22	0.00	.38	9.79E+03	1.35E-02	1.28E-02	.154	8.807E-02	1.603E-04	1.518E-04	312.8	1.35E-02	1.000	.154	.175
514	135.22	0.00	.64	6.16E+03	8.51E-03	8.06E-03	.097	8.807E-02	1.008E-04	9.546E-05	312.1	8.51E-03	1.000	.097	.110
515	135.22	0.00	.89	4.98E+03	6.87E-03	6.51E-03	.078	8.807E-02	8.140E-05	7.711E-05	311.1	6.87E-03	1.000	.078	.089
516	135.22	0.30	1.14	4.82E+03	6.65E-03	6.30E-03	.075	8.807E-02	7.870E-05	7.455E-05	311.0	6.65E-03	1.000	.075	.086
517	135.22	0.30	1.40	3.75E+03	5.18E-03	4.90E-03	.059	8.807E-02	6.128E-05	5.805E-05	310.5	5.18E-03	1.000	.059	.067
518	135.22	0.30	1.65	2.99E+03	4.11E-03	3.90E-03	.047	8.807E-02	4.870E-05	4.614E-05	309.9	4.11E-03	1.000	.047	.053
519	135.22	0.30	1.90	1.59E+03	2.17E-03	2.05E-03	.025	8.807E-02	2.568E-05	2.433E-05	309.3	2.17E-03	1.000	.025	.028
520	135.22	0.00	2.29	2.18E+02	3.00E-04	2.84E-04	.003	8.807E-02	3.550E-06	3.363E-06	308.5	3.09E-04	1.000	.003	.004

EDGE HEATING USED FOR HE
X= 7.699E+01 HL /HREFF= 1.595E+00
X= 8.188E+01 HL /HREFF= 2.228E+00
X= 8.696E+01 HL /HREFF= 2.177E+00
X= 9.204E+01 HL /HREFF= 1.955E+00
X= 9.712E+01 HL /HREFF= 1.803E+00
X= 1.022E+02 HL /HREFF= 1.650E+00
X= 1.073E+02 HL /HREFF= 1.439E+00
X= 1.124E+02 HL /HREFF= 1.174E+00
X= 1.175E+02 HL /HREFF= 9.818E-01
X= 1.226E+02 HL /HREFF= 1.035E+00
X= 1.251E+02 HL /HREFF= 9.631E-01
X= 1.276E+02 HL /HREFF= 9.375E-01
X= 1.302E+02 HL /HREFF= 8.223E-01
X= 1.352E+02 HL /HREFF= 6.768E-01

X= 1.111E+02 HL /HREFF= 1.122E+00
X= 1.174E+02 HL /HREFF= 1.093E+00
X= 1.276E+02 HL /HREFF= 6.847E-01
X= 1.352E+02 HL /HREFF= 5.889E-01
B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 50.36 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (1F2), C.P. BLUMER, IN-LINE RSI GAP RUN(38) 1973

TT	= 1.11-2E+03(K)	GAP LENGTH	= 33.48(CM)
PT	= 2.0899E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.1775E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 6.5623E+06	ORIENTATION	= 13.300(DEG)
MACH	= 5.17	QS	= 1.6904E+05(W/M2)
RHO VEL	= 9.4c11E+11(KG/M2-S)	MOD.POSITION	= 3
HAW/HT	= 0.958 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	3.0C	[illegible]	7.15E-02	6.78E-02	.875	8.695E-02	8.419E-04	7.988E-04	317.4				1.000
2	132.70	-.51	[illegible]												
3	130.16	-.51	[illegible]	[illegible]	7.[illegible]1E-02	6.54E-02	.832	8.431E-02	8.259E-04	7.828E-04	318.1				1.000
4	127.63	-.51	[illegible]	6.11E+04	7.21E-02	6.93E-02	.880	8.199E-02	8.595E-04	9.051E-04	319.2				1.000
5	125.09	-.51	0.00	6.13E+04	7.25E-02	6.86E-02	.910	7.967E-02	8.548E-04	8.091E-04	318.3				1.000
6	122.56	-.51	[illegible]	5.25E+04	7.43E-02	7.33E-02	.961	7.735E-02	8.762E-04	8.294E-04	318.2				1.000
7	117.47	-.51	[illegible]	5.29E+04	7.47E-02	7.08E-02	1.048	7.135E-02	8.814E-04	8.343E-04	318.4				1.000
8	112.37	-.51	[illegible]	5.19E+04	7.34E-02	6.95E-02	1.177	6.234E-02	8.653E-04	8.198E-04	318.9				1.000
9	107.31	-.51	[illegible]	[illegible]	7.[illegible]2E-02	6.65E-02	1.369	5.128E-02	8.277E-04	7.839E-04	317.8				1.000
10	102.20	-.51	[illegible]	4.65E+04	6.56E-02	6.21E-02	1.584	4.141E-02	7.733E-04	7.328E-04	317.1				1.000
11	97.12	-.51	[illegible]	4.17E+04	5.88E-02	5.57E-02	1.758	3.347E-02	6.937E-04	6.567E-04	317.4				1.000
12	92.04	-.51	[illegible]	3.66E+04	5.16E-02	4.89E-02	1.922	2.687E-02	6.099E-04	5.764E-04	317.7				1.000
13	86.96	-.51	[illegible]	3.42E+04	4.82E-02	4.57E-02	2.194	2.209E-02	5.688E-04	5.384E-04	319.2				1.000
14	81.56	-.51	0.00	2.75E+04	3.88E-02	3.67E-02	2.152	1.804E-02	4.577E-04	4.332E-04	318.9				1.000
15	76.80	-.51	[illegible]	1.62E+04	2.28E-02	2.16E-02	1.468	1.556E-02	2.693E-04	2.549E-04	318.9				1.000
103	111.69	1.52	[illegible]	5.23E+04	7.43E-02	7.03E-02	1.246	5.967E-02	8.765E-04	8.294E-04	322.3	7.43E-02	1.000	1.246	1.016
105	111.09	1.02	[illegible]	5.19E+04	7.37E-02	6.97E-02	1.235	5.966E-02	8.669E-04	8.222E-04	323.2	7.37E-02	1.000	1.235	1.097
107	111.09	.51	[illegible]	[illegible]	7.68E-02	7.26E-02	1.296	5.969E-02	9.051E-04	8.565E-04	322.6	7.68E-02	1.000	1.286	1.049
108	111.09	.25	[illegible]	6.06E+04	8.59E-02	8.13E-02	1.440	5.969E-02	1.013E-03	9.598E-04	321.7	8.59E-02	1.000	1.440	1.175
110	111.09	.04	.04	5.94E+04	8.42E-02	7.36E-02	1.410	5.968E-02	9.923E-04	9.391E-04	320.3	8.42E-02	1.000	1.410	1.150
111	111.09	[illegible]	.15	[illegible]	7.71E-02	7.30E-02	1.292	5.966E-02	9.099E-04	8.603E-04	319.8	7.71E-02	1.000	1.292	1.094
112	111.09	0.00	.25	4.46E+04	6.31E-02	5.37E-02	1.057	5.968E-02	7.437E-04	7.039E-04	318.8	6.31E-02	1.000	1.057	.862
113	111.09	[illegible]	.38	3.16E+04	4.49E-02	4.25E-02	.753	5.968E-02	5.293E-04	5.015E-04	317.9	4.49E-02	1.000	.753	.614
114	111.09	[illegible]	.64	1.41E+04	1.99E-02	1.88E-02	.333	5.968E-02	2.345E-04	2.220E-04	316.5	1.99E-02	1.000	.333	.272
115	111.09	0.00	.89	4.69E+03	6.59E-03	6.24E-03	.110	5.968E-02	7.773E-05	7.359E-05	315.2	6.59E-03	1.000	.110	.090
116	111.09	[illegible]	1.14	1.49E+03	2.11E-03	1.99E-03	.035	5.968E-02	2.484E-05	2.352E-05	314.4	2.11E-03	1.000	.035	.029
117	111.09	0.00	1.40	5.85E+02	8.20E-04	7.77E-04	.014	5.968E-02	9.673E-06	9.157E-06	313.6	8.20E-04	1.000	.014	.011
118	111.09	0.00	1.65	3.16E+02	4.43E-04	4.20E-04	.007	5.968E-02	5.227E-06	4.950E-06	313.2	4.43E-04	1.000	.007	.006
119	111.09	[illegible]	1.90	1.50E+02	2.10E-04	1.99E-04	.004	5.966E-02	2.473E-06	2.347E-06	312.6	2.10E-04	1.000	.004	.003
120	111.09	[illegible]	2.20												
203	117.44	1.52	[illegible]	5.21E+04	7.37E-02	6.97E-02	1.024	7.193E-02	8.689E-04	8.223E-04	319.6	7.37E-02	1.000	1.024	.977
205	117.44	1.02	[illegible]	5.14E+04	7.28E-02	6.89E-02	1.015	7.178E-02	9.587E-04	8.127E-04	320.1	7.28E-02	1.000	1.015	.968
207	117.44	.51	[illegible]	4.80E+04	6.80E-02	6.43E-02	.949	7.163E-02	8.014E-04	7.585E-04	319.8	6.80E-02	1.000	.949	.907
208	117.44	.25	[illegible]	5.17E+04	7.31E-02	6.92E-02	1.022	7.155E-02	8.624E-04	8.162E-04	319.2	7.31E-02	1.000	1.022	.975
210	117.44	.04	.04	5.22E+04	7.37E-02	6.97E-02	1.031	7.148E-02	8.686E-04	8.222E-04	318.1	7.37E-02	1.000	1.031	.983
211	117.44	[illegible]	.15	5.00E+04	7.05E-02	6.68E-02	.987	7.147E-02	8.315E-04	7.871E-04	317.7	7.05E-02	1.000	.987	.94[illegible]
212	117.44	[illegible]	.25	4.39E+04	6.19E-02	5.86E-02	.866	7.147E-02	7.298E-04	6.909E-04	316.8	6.19E-02	1.000	.866	.826
213	117.44	[illegible]	.38												
214	117.44	0.00	.64												
215	117.44	[illegible]	.89	1.[illegible]E+04	2.25E-02	2.13E-02	.315	7.147E-02	2.659E-04	2.514E-04	314.1	2.25E-02	1.000	.315	.301

AMES 3.5 FT HWT TEST (182), D.B. BLUMER, IN-LINE RSI GAP JUN(30) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.33	1.14	1.05E+04	1.46E-02	1.38E-02	.204	7.147E-02	1.722E-04	1.631E-04	309.9	1.46E-02	1.000	.204	.195
217	117.44	0.99	1.40	6.90E+03	9.49E-03	8.98E-03	.133	7.147E-02	1.118E-04	1.059E-04	310.0	9.49E-03	1.000	.133	.127
218	117.44	0.33	1.65	3.94E+03	5.49E-03	5.20E-03	.077	7.147E-02	6.473E-05	6.131E-05	309.3	5.49E-03	1.000	.077	.073
219	117.44	0.99	1.90	1.75E+03	2.44E-03	2.31E-03	.034	7.147E-02	2.879E-05	2.727E-05	308.9	2.44E-03	1.000	.034	.033
220	117.44	0.33	2.29	1.76E+02	2.45E-04	2.32E-04	.003	7.147E-02	2.893E-06	2.740E-06	308.7	2.45E-04	1.000	.003	.003
406	127.60	.76	3.00	4.58E+04	6.45E-02	6.11E-02	.784	8.229E-02	7.610E-04	7.204E-04	317.1	6.45E-02	1.000	.784	.891
407	127.60	.51	0.30	4.63E+04	6.53E-02	6.18E-02	.794	8.222E-02	7.693E-04	7.287E-04	317.0	6.53E-02	1.000	.794	.902
408	127.60	.25	0.00	4.31E+04	6.06E-02	5.73E-02	.737	8.216E-02	7.143E-04	6.759E-04	316.4	6.06E-02	1.000	.737	.837
409	127.60	.15	0.00	3.90E+04	5.48E-02	5.19E-02	.668	8.213E-02	6.465E-04	6.120E-04	315.9	5.48E-02	1.000	.668	.758
410	127.60	.04	.04	3.36E+04	4.75E-02	4.50E-02	.579	8.211E-02	5.631E-04	5.303E-04	315.5	4.75E-02	1.000	.579	.657
411	127.60	0.00	.15	2.92E+04	4.11E-02	3.89E-02	.500	8.209E-02	4.842E-04	4.584E-04	315.0	4.11E-02	1.000	.500	.568
412	127.60	0.00	.25	1.90E+04	2.62E-02	2.48E-02	.319	8.209E-02	3.085E-04	2.921E-04	313.8	2.62E-02	1.000	.319	.362
413	127.60	0.00	.38	1.09E+04	1.53E-02	1.45E-02	.186	8.209E-02	1.805E-04	1.709E-04	312.2	1.53E-02	1.000	.186	.212
414	127.60	0.00	.64	3.11E+03	4.35E-03	4.12E-03	.053	8.209E-02	5.131E-05	4.859E-05	312.1	4.35E-03	1.000	.053	.060
415	127.60	0.00	.89	7.92E+02	1.11E-03	1.05E-03	.013	8.209E-02	1.309E-05	1.236E-05	311.5	1.11E-03	1.000	.013	.015
416	127.60	0.99	1.14	7.72E+01	1.08E-04	1.02E-04	.001	8.209E-02	1.272E-06	1.204E-06	310.6	1.08E-04	1.000	.001	.001
417	127.60	0.33	1.40	7.93E+00	1.11E-05	1.05E-05	.000	8.219E-02	1.305E-07	1.236E-07	310.8	1.11E-05	1.000	.000	.000
418	127.60	0.99	1.65												
419	127.60	0.03	1.90												
420	127.60	0.33	2.29												
506	135.22	.75	0.30	4.58E+04	6.46E-02	6.12E-02	.725	8.918E-02	7.620E-04	7.213E-04	317.4	6.46E-02	1.000	.725	.900
507	135.22	.51	0.03	4.59E+04	6.46E-02	6.12E-02	.725	8.914E-02	7.622E-04	7.216E-04	316.0	6.46E-02	1.000	.725	.901
508	135.22	.25	0.00	4.81E+04	6.78E-02	6.41E-02	.761	8.909E-02	7.989E-04	7.563E-04	316.0	6.78E-02	1.000	.761	.946
509	135.22	.15	0.00	4.62E+04	6.50E-02	6.15E-02	.730	8.907E-02	7.662E-04	7.254E-04	314.9	6.50E-02	1.000	.730	.907
510	135.22	.04	.04	4.33E+04	6.09E-02	5.76E-02	.684	8.904E-02	7.176E-04	6.795E-04	314.4	6.09E-02	1.000	.684	.849
511	135.22	0.00	.15	4.12E+04	5.79E-02	5.48E-02	.650	8.904E-02	6.828E-04	6.465E-04	313.9	5.79E-02	1.000	.650	.808
512	135.22	0.00	.25	3.38E+04	4.75E-02	4.49E-02	.533	8.904E-02	5.595E-04	5.298E-04	313.7	4.75E-02	1.000	.533	.662
513	135.22	0.00	.38	2.54E+04	3.56E-02	3.37E-02	.400	8.904E-02	4.200E-04	3.977E-04	313.2	3.56E-02	1.000	.400	.497
514	135.22	0.00	.64	1.19E+04	1.66E-02	1.57E-02	.187	8.904E-02	1.960E-04	1.856E-04	312.5	1.66E-02	1.000	.187	.232
515	135.22	0.00	.89	5.57E+03	7.79E-03	7.37E-03	.087	8.904E-02	9.180E-05	8.694E-05	311.5	7.79E-03	1.000	.087	.109
516	135.22	0.00	1.14	3.36E+03	4.70E-03	4.45E-03	.053	8.934E-02	5.535E-05	5.243E-05	311.5	4.70E-03	1.000	.053	.066
517	135.22	0.00	1.40	2.85E+03	3.99E-03	3.77E-03	.045	8.904E-02	4.691E-05	4.443E-05	310.9	3.99E-03	1.000	.045	.056
518	135.22	0.30	1.65	2.83E+03	3.96E-03	3.75E-03	.044	8.904E-02	4.667E-05	4.420E-05	310.4	3.96E-03	1.000	.044	.055
519	135.22	0.03	1.90	2.49E+03	3.47E-03	3.29E-03	.039	8.934E-02	4.097E-05	3.883E-05	309.9	3.47E-03	1.000	.039	.048
520	135.22	0.03	2.29	3.84E+02	5.36E-04	5.08E-04	.006	8.904E-02	6.310E-06	5.985E-06	309.1	5.36E-04	1.000	.006	.007

EDGE HEATING USED FOR HE

X=	7.680E+01	HL	/HREFF=	1.458E+00
X=	8.180E+01	HL	/HREFF=	2.152E+00
X=	8.696E+01	HL	/HREFF=	2.194E+00
X=	9.204E+01	HL	/HREFF=	1.922E+00
X=	9.712E+01	HL	/HREFF=	1.758E+00
X=	1.022E+02	HL	/HREFF=	1.594E+00
X=	1.073E+02	HL	/HREFF=	1.349E+00
X=	1.124E+02	HL	/HREFF=	1.177E+00
X=	1.175E+02	HL	/HREFF=	1.048E+00
X=	1.226E+02	HL	/HREFF=	9.006E-01
X=	1.251E+02	HL	/HREFF=	9.099E-01
X=	1.276E+02	HL	/HREFF=	8.730E-01
X=	1.302E+02	HL	/HREFF=	8.310E-01
X=	1.352E+02	HL	/HREFF=	8.046E-01
X=	1.111E+02	HL	/HREFF=	1.296E+00
X=	1.174E+02	HL	/HREFF=	9.489E-01
X=	1.276E+02	HL	/HREFF=	7.916E-01
X=	1.352E+02	HL	/HREFF=	7.252E-01

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 86.96 CM

AMES 3.5 FT HWT TEST (1-2), C.J. BLUMER, IN-LINE RSI GAP RUN(39) 1973

TT	= 1.1199E+03(K)	GAP LENGTH =	30.480(CM)
PT	= 2.0899E+06(N/M2)	GAP WIDTH =	.127(CM)
HT	= 1.1942E+06(J/KG)	GAP DEPTH =	2.032(CM)
RE/METER	= 5.6055E+06	ORIENTATION=	5.000(DEG)
MACH	= 5.107	QS =	1.7905E+05(W/M2)
RHO VEL	= 9.4459E+01(KG/M2-S)	MOD.POSITION=	3
HAW/HT	= 9.908 FOR HT		
HAW/HT	= 9.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	4.91E+04	6.89E-02	6.52E-02	.780	8.826E-02	8.149E-04	7.713E-04	318.8				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	4.91E+04	6.89E-02	6.52E-02	.824	8.360E-02	8.153E-04	7.717E-04	320.0				1.000
4	127.63	-.51	0.00	5.14E+04	7.38E-02	6.71E-02	.872	8.127E-02	8.385E-04	7.937E-04	320.3				1.000
5	125.09	-.51	0.00	5.40E+04	7.16E-02	6.77E-02	.907	7.894E-02	8.470E-04	8.018E-04	320.5				1.000
6	122.56	.51	0.00	5.28E+04	7.42E-02	7.13E-02	.969	7.661E-02	8.785E-04	8.316E-04	320.2				1.000
7	117.47	-.51	0.00	5.53E+04	7.77E-02	7.36E-02	1.101	7.061E-02	9.201E-04	8.709E-04	320.4				1.000
8	112.37	-.51	0.00	5.50E+04	7.74E-02	7.32E-02	1.255	6.166E-02	9.157E-04	8.667E-04	321.1				1.000
9	107.31	-.51	0.00	5.15E+04	7.23E-02	6.84E-02	1.425	5.072E-02	8.558E-04	8.101E-04	319.3				1.000
10	102.20	-.51	0.00	4.74E+04	6.64E-02	6.28E-02	1.628	4.097E-02	7.855E-04	7.436E-04	318.3				1.000
11	97.12	-.51	0.00	4.26E+04	5.98E-02	5.66E-02	1.874	3.312E-02	7.072E-04	6.695E-04	318.7				1.000
12	92.04	-.51	0.00	3.61E+04	5.06E-02	4.79E-02	1.902	2.660E-02	5.989E-04	5.669E-04	318.9				1.000
13	86.96	-.51	0.00	3.10E+04	4.35E-02	4.11E-02	1.986	2.188E-02	5.143E-04	4.869E-04	319.1				1.000
14	81.88	-.51	0.00	2.56E+04	3.60E-02	3.40E-02	2.010	1.790E-02	4.257E-04	4.029E-04	319.6				1.000
15	76.80	-.51	0.00	1.75E+04	2.46E-02	2.33E-02	1.592	1.546E-02	2.912E-04	2.757E-04	319.6				1.000
103	111.09	1.52	0.00	5.35E+04	7.56E-02	7.15E-02	1.281	5.901E-02	8.948E-04	8.467E-04	324.1	7.56E-02	1.000	1.281	.907
105	111.09	1.02	0.00	5.25E+04	7.42E-02	7.32E-02	1.257	5.903E-02	8.783E-04	8.311E-04	325.4	7.42E-02	1.000	1.257	.969
107	111.09	.51	0.00	5.27E+04	7.45E-02	7.05E-02	1.262	5.903E-02	8.817E-04	8.343E-04	324.8	7.45E-02	1.000	1.262	.972
108	111.09	.25	0.00	5.65E+04	7.97E-02	7.54E-02	1.350	5.903E-02	9.430E-04	8.924E-04	323.4	7.97E-02	1.000	1.350	1.040
110	111.09	.04	.04	5.30E+04	7.74E-02	7.33E-02	1.311	5.903E-02	9.153E-04	8.672E-04	321.9	7.74E-02	1.000	1.311	1.016
111	111.09	0.00	.15	5.16E+04	7.13E-02	6.74E-02	1.297	5.903E-02	8.433E-04	7.982E-04	321.8	7.13E-02	1.000	1.207	.930
112	111.09	0.00	.25	4.16E+04	5.85E-02	5.53E-02	.990	5.903E-02	6.920E-04	6.550E-04	320.5	5.85E-02	1.000	.990	.763
113	111.09	0.00	.38	3.01E+04	4.22E-02	3.99E-02	.714	5.903E-02	4.991E-04	4.725E-04	319.6	4.22E-02	1.000	.714	.550
114	111.09	0.00	.64	1.32E+04	1.84E-02	1.75E-02	.312	5.903E-02	2.182E-04	2.066E-04	317.7	1.84E-02	1.000	.312	.241
115	111.09	0.00	.89	3.93E+03	5.53E-03	5.21E-03	.093	5.903E-02	6.538E-05	6.161E-05	316.6	5.50E-03	1.000	.093	.072
116	111.09	0.00	1.14	1.06E+03	1.48E-03	1.40E-03	.025	5.903E-02	1.751E-05	1.659E-05	315.4	1.48E-03	1.000	.025	.019
117	111.09	0.00	1.40	3.47E+02	4.78E-04	4.52E-04	.008	5.903E-02	5.656E-06	5.356E-06	314.5	4.78E-04	1.000	.008	.006
118	111.09	0.00	1.65	1.76E+02	2.47E-04	2.34E-04	.004	5.903E-02	2.929E-06	2.774E-06	313.6	2.47E-04	1.000	.004	.003
119	111.09	0.00	1.90	1.11E+02	1.53E-04	1.45E-04	.003	5.903E-02	1.813E-06	1.717E-06	313.0	1.53E-04	1.000	.003	.002
120	111.09	0.00	2.29	7.61E+00	1.06E-05	1.00E-05	.000	5.903E-02	1.251E-07	1.184E-07	312.1	1.06E-05	1.000	.000	.000
203	117.44	1.52	0.00	5.25E+04	7.39E-02	6.99E-02	1.038	7.117E-02	8.743E-04	8.276E-04	320.9	7.39E-02	1.000	1.038	.942
205	117.44	1.02	0.00	5.23E+04	7.36E-02	6.97E-02	1.037	7.102E-02	8.713E-04	8.247E-04	321.6	7.36E-02	1.000	1.037	.941
207	117.44	.51	0.00	4.98E+04	7.00E-02	6.63E-02	.988	7.087E-02	8.288E-04	7.845E-04	321.2	7.00E-02	1.000	.988	.89[illegible]
208	117.44	.25	0.00	5.10E+04	7.15E-02	6.77E-02	1.010	7.080E-02	8.465E-04	8.013E-04	320.7	7.15E-02	1.000	1.010	.91[illegible]
210	117.44	.04	.04	5.08E+04	7.12E-02	6.74E-02	1.007	7.073E-02	8.432E-04	7.982E-04	319.5	7.12E-02	1.000	1.007	.914
211	117.44	0.00	.15	4.91E+04	6.89E-02	6.52E-02	.974	7.072E-02	8.154E-04	7.719E-04	319.1	6.89E-02	1.000	.974	.88[illegible]
212	117.44	0.00	.25	4.42E+04	6.19E-02	5.86E-02	.876	7.072E-02	7.329E-04	6.939E-04	318.0	6.19E-02	1.000	.876	.79[illegible]
213	117.44	0.00	.38												
214	117.44	0.00	.64												
215	117.44	0.00	.89	1.72E+04	2.41E-02	2.28E-02	.341	7.072E-02	2.852E-04	2.701E-04	315.0	2.41E-02	1.000	.341	.389

AMES 3.5 FT HWT TEST (182), C.E. BLUMER, IN-LINE RSI GAP RUN(39) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.00	1.14	1.12E+04	1.55E-02	1.47E-02	.219	7.072E-02	1.833E-04	1.736E-04	310.3	1.55E-02	1.000	.219	.199
217	117.44	0.00	1.40	6.74E+03	9.33E-03	8.84E-03	.132	7.072E-02	1.105E-04	1.046E-04	310.3	9.33E-03	1.000	.132	.120
218	117.44	0.00	1.65	3.61E+03	4.99E-03	4.73E-03	.071	7.072E-02	5.904E-05	5.593E-05	309.5	4.99E-03	1.000	.071	.064
219	117.44	0.00	1.90	1.47E+03	2.03E-03	1.92E-03	.029	7.072E-02	2.401E-05	2.275E-05	308.9	2.03E-03	1.000	.029	.026
220	117.44	0.00	2.29	3.40E+01	4.70E-05	4.45E-05	.001	7.072E-02	5.564E-07	5.272E-07	308.8	4.70E-05	1.000	.001	.001
406	127.60	.75	0.00	4.62E+04	6.46E-02	6.12E-02	.792	8.155E-02	7.647E-04	7.239E-04	317.7	6.46E-02	1.000	.792	.908
407	127.60	.51	0.00	4.56E+04	6.39E-02	6.05E-02	.784	8.149E-02	7.559E-04	7.156E-04	317.7	6.39E-02	1.000	.784	.898
408	127.60	.25	0.00	4.10E+04	5.74E-02	5.43E-02	.704	8.143E-02	6.790E-04	6.428E-04	317.1	5.74E-02	1.000	.704	.808
409	127.60	.13	0.00	3.67E+04	5.14E-02	4.86E-02	.631	8.141E-02	6.079E-04	5.755E-04	316.7	5.14E-02	1.000	.631	.723
410	127.60	.04	.04	3.15E+04	4.40E-02	4.16E-02	.540	8.138E-02	5.203E-04	4.926E-04	316.4	4.40E-02	1.000	.540	.619
411	127.60	0.00	.15	2.70E+04	3.77E-02	3.57E-02	.464	8.137E-02	4.467E-04	4.230E-04	315.8	3.77E-02	1.000	.464	.532
412	127.60	0.00	.25	1.75E+04	2.43E-02	2.30E-02	.299	8.137E-02	2.878E-04	2.725E-04	314.6	2.43E-02	1.000	.299	.343
413	127.60	0.00	.38	1.03E+04	1.43E-02	1.36E-02	.176	8.137E-02	1.695E-04	1.605E-04	313.0	1.43E-02	1.000	.176	.202
414	127.60	0.00	.54	2.87E+03	4.00E-03	3.78E-03	.049	8.137E-02	4.733E-05	4.480E-05	312.9	4.00E-03	1.000	.049	.056
415	127.60	0.00	.89	6.99E+02	9.70E-04	9.18E-04	.012	8.137E-02	1.140E-05	1.087E-05	312.1	9.70E-04	1.000	.012	.014
416	127.60	0.00	1.14	1.44E+02	2.00E-04	1.90E-04	.002	8.137E-02	2.370E-06	2.245E-06	310.9	2.00E-04	1.000	.002	.003
417	127.60	0.00	1.40	3.37E+01	4.66E-05	4.42E-05	.001	8.137E-02	5.519E-07	5.227E-07	310.2	4.66E-05	1.000	.001	.001
418	127.60	0.00	1.65												
419	127.60	0.00	1.90												
420	127.60	0.00	2.29												
506	135.22	.75	0.00	4.61E+04	6.45E-02	6.11E-02	.729	8.849E-02	7.638E-04	7.231E-04	318.2	6.45E-02	1.000	.729	.935
507	135.22	.51	0.00	4.48E+04	6.27E-02	5.94E-02	.709	8.845E-02	7.425E-04	7.029E-04	317.4	6.27E-02	1.000	.709	.909
508	135.22	.25	0.00	4.35E+04	6.08E-02	5.76E-02	.688	8.840E-02	7.197E-04	6.814E-04	316.8	6.08E-02	1.000	.688	.882
509	135.22	.15	0.00	3.88E+04	5.41E-02	5.13E-02	.613	8.838E-02	6.437E-04	6.067E-04	315.3	5.41E-02	1.000	.613	.785
510	135.22	.04	.04	3.58E+04	5.00E-02	4.73E-02	.566	8.836E-02	5.918E-04	5.604E-04	315.2	5.00E-02	1.000	.566	.725
511	135.22	0.00	.15	3.38E+04	4.71E-02	4.46E-02	.534	8.835E-02	5.579E-04	5.283E-04	314.7	4.71E-02	1.000	.534	.684
512	135.22	0.00	.25	2.75E+04	3.83E-02	3.62E-02	.433	8.835E-02	4.531E-04	4.298E-04	314.7	3.83E-02	1.000	.433	.555
513	135.22	0.00	.38	2.12E+04	2.95E-02	2.80E-02	.334	8.835E-02	3.495E-04	3.310E-04	314.0	2.95E-02	1.000	.334	.428
514	135.22	0.00	.64	1.03E+04	1.44E-02	1.36E-02	.162	8.835E-02	1.699E-04	1.609E-04	313.1	1.44E-02	1.000	.162	.208
515	135.22	0.00	.89	4.72E+03	6.55E-03	6.21E-03	.074	8.835E-02	7.757E-05	7.347E-05	312.4	6.55E-03	1.000	.074	.095
516	135.22	0.00	1.14	2.73E+03	3.80E-03	3.60E-03	.043	8.835E-02	4.433E-05	4.256E-05	312.3	3.80E-03	1.000	.043	.055
517	135.22	0.00	1.40	1.71E+03	2.38E-03	2.25E-03	.027	8.835E-02	2.812E-05	2.663E-05	311.2	2.38E-03	1.000	.027	.034
518	135.22	0.00	1.65	2.02E+03	2.80E-03	2.66E-03	.032	8.835E-02	3.318E-05	3.143E-05	310.9	2.80E-03	1.000	.032	.041
519	135.22	0.00	1.90	1.62E+03	2.24E-03	2.13E-03	.025	8.835E-02	2.657E-05	2.516E-05	310.0	2.24E-03	1.000	.025	.032
520	135.22	0.00	2.29	2.95E+02	4.08E-04	3.37E-04	.005	8.835E-02	4.832E-06	4.578E-06	309.1	4.08E-04	1.000	.005	.006

EDGE HEATING USED FOR HE
X= 7.688E+01 HL /HREFF= 1.592E+00
X= 8.108E+01 HL /HREFF= 2.013E+00
X= 8.696E+01 HL /HREFF= 1.956E+00
X= 9.204E+01 HL /HREFF= 1.912E+00
X= 9.712E+01 HL /HREFF= 1.594E+00
X= 1.022E+02 HL /HREFF= 1.620E+00
X= 1.073E+02 HL /HREFF= 1.435E+00
X= 1.124E+02 HL /HREFF= 1.235E+00
X= 1.175E+02 HL /HREFF= 1.131E+00
X= 1.224E+02 HL /HREFF= 9.659E-01
X= 1.251E+02 HL /HREFF= 9.066E-01
X= 1.276E+02 HL /HREFF= 8.718E-01
X= 1.302E+02 HL /HREFF= 8.240E-01
X= 1.352E+02 HL /HREFF= 7.799E-01

X= 1.111E+02 HL /HREFF= 1.232E+00
X= 1.174E+02 HL /HREFF= 9.951E-01
X= 1.276E+02 HL /HREFF= 7.836E-01
X= 1.352E+02 HL /HREFF= 7.093E-01
B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 85.96 CM

AMES 3.5 FT HWT TEST (1?2), C.R. BLUMER, IN-LINE RSI GAP RUN(40) 1973 PAGE 79

TT	= 1.1229E+03(K)	GAP LENGTH =	30.480(CM)
PT	= 2.0959E+06(N/M2)	GAP WIDTH =	.254(CM)
HT	= 1.1877E+06(J/KG)	GAP DEPTH =	2.032(CM)
RE/METER	= 6.5940E+06	ORIENTATION=	5.000(DEG)
MACH	= 5.1[illegible]	QS =	1.7010E+05(N/M2)
RHO VEL	= 5.45[illegible]E+01(KG/M2-S)	MOD.POSITION=	3
MAW/HT	= [illegible].9[illegible] FOR HT		
MAW/HT	= 1.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	[illegible]E+04	7.13E-02	6.75E-02	.809	8.813E-02	8.429E-04	7.977E-04	322.9				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	5.[illegible]E+04	7.12E-02	6.74E-02	.853	8.346E-02	8.417E-04	7.965E-04	323.9				1.000
4	127.53	-.51	0.00	5.2[illegible]E+04	7.40E-02	7.00E-02	.912	8.112E-02	8.743E-04	8.278E-04	324.1				1.000
5	125.09	-.51	0.00	5.40E+04	7.59E-02	7.18E-02	.963	7.879E-02	8.975E-04	8.493E-04	324.2				1.000
6	122.56	-.51	0.00	5.63E+04	7.92E-02	7.50E-02	1.036	7.646E-02	9.370E-04	8.867E-04	324.1				1.000
7	117.47	-.51	0.00	5.[illegible]E+04	7.59E-02	7.18E-02	1.077	7.046E-02	8.977E-04	8.495E-04	324.4				1.000
8	112.37	-.51	0.00	5.35E+04	7.53E-02	7.12E-02	1.224	6.152E-02	8.904E-04	8.426E-04	324.8				1.000
9	107.31	-.51	0.00	5.29E+04	7.43E-02	7.03E-02	1.468	5.061E-02	8.789E-04	8.318E-04	323.8				1.000
10	102.20	-.51	0.00	4.9[illegible]E+04	6.94E-02	6.57E-02	1.697	4.088E-02	8.206E-04	7.767E-04	321.7				1.000
11	97.12	-.51	0.00	4.41E+04	6.18E-02	5.85E-02	1.869	3.305E-02	7.304E-04	6.914E-04	321.8				1.000
12	92.04	-.51	0.00	3.79E+04	5.31E-02	5.02E-02	2.006	2.654E-02	6.278E-04	5.942E-04	321.9				1.000
13	86.96	-.51	0.00	3.11E+04	4.36E-02	4.13E-02	1.996	2.184E-02	5.156E-04	4.880E-04	322.3				1.000
14	81.88	-.51	0.00	2.47E+04	3.46E-02	3.27E-02	1.936	1.787E-02	4.092E-04	3.872E-04	322.8				1.000
15	76.80	-.51	0.00	1.68E+04	2.36E-02	2.23E-02	1.526	1.543E-02	2.786E-04	2.637E-04	322.5				1.000
103	111.09	1.52	0.00	5.30E+04	7.49E-02	7.08E-02	1.272	5.886E-02	8.956E-04	8.379E-04	327.8	7.49E-02	1.000	1.272	.909
105	111.09	1.02	0.00	5.1[illegible]E+04	7.28E-02	6.88E-02	1.235	5.889E-02	8.604E-04	8.148E-04	328.9	7.28E-02	1.000	1.235	.961
107	111.09	.51	0.00	5.[illegible]E+04	7.50E-02	7.09E-02	1.273	5.890E-02	8.865E-04	8.387E-04	328.5	7.50E-02	1.000	1.273	.990
108	111.09	.25	0.00	5.92E+04	8.37E-02	7.91E-02	1.420	5.890E-02	9.993E-04	9.360E-04	327.5	8.37E-02	1.000	1.420	1.104
110	111.09	.0[illegible]	.0[illegible]	6.24E+04	8.80E-02	8.32E-02	1.494	5.890E-02	1.040E-03	9.843E-04	326.1	8.80E-02	1.000	1.494	1.161
111	111.09	0.00	.15	6.[illegible]E+04	8.45E-02	8.00E-02	1.435	5.890E-02	9.999E-04	9.461E-04	325.7	8.45E-02	1.000	1.435	1.116
112	111.09	0.00	.25	5.52E+04	7.76E-02	7.35E-02	1.318	5.890E-02	9.183E-04	8.690E-04	324.6	7.76E-02	1.000	1.318	1.025
113	111.09	0.00	.38	4.62E+04	6.50E-02	6.15E-02	1.103	5.890E-02	7.695E-04	7.273E-04	323.8	6.50E-02	1.000	1.103	.858
114	111.09	0.00	.64	3.06E+04	4.26E-02	4.03E-02	.723	5.890E-02	5.037E-04	4.767E-04	322.2	4.26E-02	1.000	.723	.562
115	111.09	0.00	.89	1.69E+04	2.37E-02	2.24E-02	.402	5.890E-02	2.800E-04	2.650E-04	320.8	2.37E-02	1.000	.402	.313
116	111.09	0.00	1.14	8.64E+03	1.21E-02	1.14E-02	.205	5.890E-02	1.429E-04	1.353E-04	319.9	1.21E-02	1.000	.205	.160
117	111.09	0.00	1.40	4.71E+03	6.58E-03	6.23E-03	.112	5.890E-02	7.777E-05	7.363E-05	319.0	6.58E-03	1.000	.112	.087
118	111.09	0.00	1.65	3.40E+03	4.74E-03	4.49E-03	.081	5.890E-02	5.609E-05	5.311E-05	318.3	4.74E-03	1.000	.081	.063
119	111.09	0.00	1.90	2.[illegible]E+03	2.82E-03	2.67E-03	.048	5.890E-02	3.338E-05	3.160E-05	317.5	2.82E-03	1.000	.048	.037
120	111.09	0.00	2.29	2.[illegible]E+02	3.69E-04	3.49E-04	.006	5.890E-02	4.363E-06	4.132E-06	316.4	3.69E-04	1.000	.006	.005
203	117.44	1.52	0.00	5.26E+04	7.40E-02	7.00E-02	1.042	7.101E-02	8.753E-04	8.283E-04	324.8	7.40E-02	1.000	1.042	.967
205	117.44	1.02	0.00	5.34E+04	7.52E-02	7.12E-02	1.061	7.087E-02	8.893E-04	8.415E-04	325.4	7.52E-02	1.000	1.061	.984
207	117.44	.51	0.00	5.39E+04	7.58E-02	7.17E-02	1.071	7.072E-02	8.960E-04	8.478E-04	325.3	7.58E-02	1.000	1.371	.99[illegible]
208	117.44	.25	0.00	5.97E+04	8.41E-02	7.96E-02	1.190	7.064E-02	9.942E-04	9.408E-04	324.8	8.41E-02	1.000	1.190	1.104
210	117.44	.0[illegible]	.0[illegible]	6.49E+04	9.12E-02	8.63E-02	1.292	7.056E-02	1.079E-03	1.021E-03	323.6	9.12E-02	1.000	1.292	1.190
211	117.44	0.00	.15	6.[illegible]E+04	9.13E-02	8.64E-02	1.294	7.057E-02	1.080E-03	1.022E-03	323.1	9.13E-02	1.000	1.294	1.20[illegible]
212	117.44	0.00	.25	6.23E+04	8.74E-02	8.27E-02	1.239	7.057E-02	1.034E-03	9.784E-04	322.2	8.74E-02	1.000	1.239	1.14[illegible]
213	117.44	0.00	.38												
214	117.44	0.00	.64												
215	117.44	1.0[illegible]	.09	[illegible].26E+04	7.37E-02	6.98E-02	1.044	7.057E-02	8.717E-04	8.252E-04	319.3	7.37E-02	1.000	1.044	.969

AMES 3.5 FT HWT TEST (1*2), C.B. BLUMER, IN-LINE RSI GAP RUN(40) 1973 PAGE 80

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	[illegible]	1.14	[illegible]	6.43E-02	6.39E-02	.912	7.057E-02	7.608E-04	7.205E-04	314.8	6.43E-02	1.000	.912	.845
217	117.44	0.99	1.40	3.76E+04	5.22E-02	4.95E-02	.740	7.057E-02	6.179E-04	5.851E-04	314.9	5.22E-02	1.000	.740	.687
218	117.44	[illegible]	1.65	2.79E+04	3.87E-02	3.67E-02	.549	7.057E-02	4.582E-04	4.340E-04	314.2	3.87E-02	1.000	.549	.509
219	117.44	[illegible]	1.90	1.76E+04	2.45E-02	2.32E-02	.347	7.057E-02	2.892E-04	2.739E-04	313.5	2.45E-02	1.000	.347	.321
220	117.44	0.00	2.29	3.58E+03	4.96E-03	4.70E-03	.070	7.057E-02	5.864E-05	5.554E-05	313.2	4.96E-03	1.000	.070	.065
406	127.60	.7[illegible]	[illegible]	[illegible]	7.07E-02	6.70E-02	.869	8.141E-02	8.366E-04	7.919E-04	322.1	7.07E-02	1.000	.869	.952
407	127.60	.51	[illegible]	4.36E+04	6.40E-02	6.06E-02	.787	8.135E-02	7.568E-04	7.163E-04	322.1	6.40E-02	1.000	.787	.862
408	127.60	.25	[illegible]	3.77E+04	5.28E-02	5.00E-02	.649	8.129E-02	6.243E-04	5.909E-04	321.5	5.28E-02	1.000	.649	.712
409	127.60	.15	0.00	3.45E+04	4.83E-02	4.57E-02	.594	8.126E-02	5.707E-04	5.402E-04	321.1	4.83E-02	1.000	.594	.651
410	127.60	.04	.04	9.84E+02	1.38E-03	1.30E-03	.017	8.123E-02	1.629E-05	1.542E-05	320.9	1.38E-03	1.000	.017	.019
411	127.60	0.00	.15	2.92E+04	[illegible]	3.36E-02	.502	8.122E-02	4.825E-04	4.568E-04	320.2	4.08E-02	1.000	.502	.551
412	127.60	[illegible]	.25	2.44E+04	[illegible]	3.22E-02	.419	8.122E-02	4.028E-04	3.814E-04	319.0	3.41E-02	1.000	.419	.460
413	127.60	0.00	.38	[illegible]	2.98E-02	2.82E-02	.367	8.122E-02	3.527E-04	3.339E-04	317.3	2.98E-02	1.000	.367	.402
414	127.60	[illegible]	.64	1.80E+04	2.50E-02	2.37E-02	.308	8.122E-02	2.960E-04	2.803E-04	317.3	2.50E-02	1.000	.308	.338
415	127.60	[illegible]	.89	1.61E+04	2.24E-02	2.12E-02	.276	8.122E-02	2.653E-04	2.512E-04	316.7	2.24E-02	1.000	.276	.303
416	127.60	0.00	1.14	1.39E+04	1.93E-02	1.83E-02	.237	8.122E-02	2.281E-04	2.160E-04	315.7	1.93E-02	1.000	.237	.260
417	127.60	[illegible]	1.40	1.15E+04	1.59E-02	1.51E-02	.196	8.122E-02	1.883E-04	1.788E-04	314.8	1.59E-02	1.000	.196	.215
418	127.60	[illegible]	1.65	8.42E+03	1.17E-02	1.11E-02	.144	8.122E-02	1.382E-04	1.309E-04	314.6	1.17E-02	1.000	.144	.158
419	127.60	[illegible]	1.90	4.98E+03	6.77E-03	6.42E-03	.083	8.122E-02	8.012E-05	7.588E-05	314.2	6.77E-03	1.000	.083	.091
420	127.60	[illegible]	2.29	6.42E+02	8.90E-04	8.43E-04	.011	8.122E-02	1.052E-05	9.965E-06	313.7	8.90E-04	1.000	.011	.012
506	135.22	.76	0.00	4.24E+04	5.95E-02	5.63E-02	.673	8.835E-02	7.033E-04	6.656E-04	322.0	5.95E-02	1.000	.673	.832
507	135.22	.51	[illegible]	3.64E+04	5.10E-02	4.83E-02	.578	8.831E-02	6.035E-04	5.712E-04	321.3	5.10E-02	1.000	.578	.714
508	135.22	.25	[illegible]	2.91E+04	[illegible]	3.85E-02	.461	8.826E-02	4.827E-04	4.550E-04	320.6	4.06E-02	1.000	.461	.569
509	135.22	.15	[illegible]	2.23E+04	[illegible]	2.94E-02	.353	8.824E-02	3.679E-04	3.482E-04	319.5	3.11E-02	1.000	.353	.436
510	135.22	.04	.04	1.91E+04	2.66E-02	2.52E-02	.302	8.822E-02	3.147E-04	2.979E-04	319.2	2.66E-02	1.000	.302	.373
511	135.22	[illegible]	.15	1.73E+04	2.42E-02	2.29E-02	.274	8.821E-02	2.857E-04	2.705E-04	318.6	2.42E-02	1.000	.274	.339
512	135.22	[illegible]	.25	1.33E+04	1.85E-02	1.75E-02	.210	8.821E-02	2.188E-04	2.071E-04	318.6	1.85E-02	1.000	.210	.259
513	135.22	[illegible]	.38	[illegible]	1.47E-02	1.40E-02	.167	8.821E-02	1.744E-04	1.651E-04	318.1	1.47E-02	1.000	.167	.207
514	135.22	[illegible]	.64	7.39E+03	1.03E-02	9.75E-03	.117	8.821E-02	1.217E-04	1.153E-04	317.4	1.03E-02	1.000	.117	.144
515	135.22	[illegible]	.89	5.96E+03	8.29E-03	7.85E-03	.094	8.821E-02	9.810E-05	9.280E-05	316.6	8.29E-03	1.000	.094	.116
516	135.22	[illegible]	1.14	5.27E+03	7.34E-03	6.95E-03	.083	8.821E-02	8.675E-05	8.214E-05	316.7	7.34E-03	1.000	.083	.103
517	135.22	[illegible]	1.40	4.76E+03	6.62E-03	6.27E-03	.075	8.821E-02	7.833E-05	7.417E-05	316.1	6.62E-03	1.000	.075	.093
518	135.22	[illegible]	1.65	3.85E+03	5.35E-03	5.07E-03	.061	8.821E-02	6.330E-05	5.994E-05	315.5	5.35E-03	1.000	.061	.075
519	135.22	[illegible]	1.90	2.19E+03	3.04E-03	2.88E-03	.034	8.821E-02	3.594E-05	3.403E-05	314.8	3.04E-03	1.000	.034	.043
520	135.22	[illegible]	2.29	[illegible]	6.95E-04	6.58E-04	.008	8.821E-02	8.223E-06	7.788E-06	313.7	6.95E-04	1.000	.008	.010

EDGE HEATING USED FOR HE

X=	7.633E+01	HL	/HREFF=	1.526E+00
X=	8.100E+01	HL	/HREFF=	1.936E+00
X=	8.696E+01	HL	/HREFF=	1.936E+00
X=	9.204E+01	HL	/HREFF=	[illegible]
X=	9.712E+01	HL	/HREFF=	1.869E+00
X=	1.022E+02	HL	/HREFF=	1.597E+00
X=	1.073E+02	HL	/HREFF=	1.469E+00
X=	1.124E+02	HL	/HREFF=	1.224E+00
X=	1.175E+02	HL	/HREFF=	1.077E+00
X=	1.226E+02	HL	/HREFF=	[illegible]
X=	1.251E+02	HL	/HREFF=	9.632E-01
X=	1.276E+02	HL	/HREFF=	9.118E-01
X=	1.302E+02	HL	/HREFF=	8.528E-01
X=	1.352E+02	HL	/HREFF=	8.387E-01
X=	1.111E+02	HL	/HREFF=	1.273E+00
X=	1.174E+02	HL	/HREFF=	1.071E+00
X=	1.276E+02	HL	/HREFF=	7.967E-01
X=	1.352E+02	HL	/HREFF=	[illegible]

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 92.[illegible] CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (152), C.B. BLUME!, IN-LINE RSI GAP RUN(+1) 1373 PAGE 81

TT = 1.1441E+03(K) GAP LENGTH = 30.480(CM)
PT = 2.0993E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.2146E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 6.3778E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 QS = 1.7864E+05(N/M2)
RHO VEL = 9.3352E+01(KG/M2-S) MOD.POSITION= 3
HAW/HT = 0.939 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER CONC.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.325E+04	7.095E-02	6.715E-02	.928	8.553E-02	8.497E-04	8.055E-04	308.0				1.000
2	132.78	-.51	0.00												
3	130.16	-.51	0.00	5.65E+04	7.343E-02	5.96E-02	.959	8.176E-02	8.933E-04	8.344E-04	338.9				1.000
4	127.63	-.51	0.00	5.79E+04	7.70E-02	7.30E-02	.983	7.638E-02	9.241E-04	8.759E-04	339.0				1.000
5	125.09	-.51	0.00	5.995E+04	7.995E-02	7.57E-02	1.051	7.600E-02	9.583E-04	9.088E-04	309.1				1.000
6	122.56	-.51	0.00	6.23E+04	8.375E-02	7.93E-02	1.137	7.362E-02	1.004E-03	9.516E-04	309.0				1.000
7	117.47	-.51	0.00	6.24E+04	8.335E-02	7.895E-02	1.231	6.763E-02	9.999E-04	9.468E-04	309.4				1.000
8	112.37	-.51	0.00	6.13E+04	8.18E-02	7.76E-02	1.389	5.694E-02	9.818E-04	9.306E-04	309.7				1.000
9	107.31	-.51	0.00	5.57E+04	7.425E-02	7.03E-02	1.530	4.849E-02	8.902E-04	8.439E-04	308.8				1.000
10	102.20	-.51	0.00	5.27E+04	6.94E-02	6.58E-02	1.771	3.919E-02	8.324E-04	7.891E-04	306.6				1.000
11	97.12	-.51	0.00	4.63E+04	6.15E-02	5.83E-02	1.940	3.172E-02	7.383E-04	6.996E-04	306.7				1.000
12	92.04	-.51	0.00	3.81E+04	5.075E-02	4.80E-02	1.965	2.552E-02	6.079E-04	5.763E-04	306.8				1.000
13	86.96	-.51	0.00	2.95E+04	3.83E-02	3.635E-02	.819	2.107E-02	4.597E-04	4.359E-04	307.4				1.000
14	81.88	-.51	0.00	2.21E+04	2.94E-02	2.78E-02	1.697	1.731E-02	3.524E-04	3.341E-04	308.1				1.000
15	76.88	-.51	0.00	1.625E+04	2.15E-02	2.04E-02	1.431	1.504E-02	2.581E-04	2.446E-04	307.7				1.000
103	111.09	1.02	0.00	5.57E+04	7.46E-02	7.07E-02	1.323	5.636E-02	8.948E-04	8.480E-04	312.5	7.46E-02	1.000	1.324	.929
105	111.09	1.02	0.00	5.30E+04	7.11E-02	6.73E-02	1.260	5.643E-02	8.525E-04	8.078E-04	313.6	7.11E-02	1.000	1.260	.885
107	111.09	.51	0.00	5.29E+04	7.08E-02	6.70E-02	1.254	5.641E-02	8.487E-04	8.043E-04	312.9	7.08E-02	1.000	1.254	.881
108	111.09	.25	0.00	5.46E+04	7.31E-02	6.93E-02	1.296	5.641E-02	8.772E-04	8.313E-04	312.1	7.31E-02	1.000	1.296	.910
110	111.09	.04	.04	5.40E+04	7.21E-02	6.84E-02	1.279	5.641E-02	8.652E-04	8.201E-04	310.6	7.21E-02	1.000	1.279	.899
111	111.09	0.00	.15	5.11E+04	6.825E-02	6.475E-02	1.209	5.641E-02	8.184E-04	7.757E-04	310.8	6.82E-02	1.000	1.209	.849
112	111.09	0.00	.25	4.68E+04	6.25E-02	5.92E-02	1.107	5.641E-02	7.493E-04	7.103E-04	308.9	6.25E-02	1.000	1.107	.777
113	111.09	0.00	.38	4.01E+04	5.34E-02	5.06E-02	.947	5.641E-02	6.406E-04	6.073E-04	308.0	5.34E-02	1.000	.947	.665
114	111.09	0.00	.64	2.97E+04	3.855E-02	3.65E-02	.683	5.641E-02	4.624E-04	4.384E-04	306.4	3.85E-02	1.000	.683	.480
115	111.09	0.00	.89	1.81E+04	2.40E-02	2.28E-02	.426	5.641E-02	2.884E-04	2.734E-04	304.9	2.40E-02	1.000	.426	.299
116	111.09	0.00	1.14	9.79E+03	1.273E-02	1.21E-02	.225	5.641E-02	1.525E-04	1.446E-04	304.1	1.27E-02	1.000	.225	.158
117	111.19	0.00	1.40	5.14E+03	6.67E-03	6.32E-03	.118	5.641E-02	7.999E-05	7.585E-05	303.2	6.67E-03	1.000	.118	.083
118	111.09	0.00	1.65	3.18E+03	4.21E-03	3.99E-03	.075	5.641E-02	5.050E-05	4.789E-05	302.6	4.21E-03	1.000	.075	.052
119	111.09	0.00	1.90	1.825E+03	2.40E-03	2.28E-03	.043	5.641E-02	2.878E-05	2.729E-05	302.0	2.40E-03	1.000	.043	.030
120	111.09	0.00	2.29	2.745E+02	3.61E-04	3.43E-04	.006	5.641E-02	4.336E-06	4.112E-06	301.0	3.61E-04	1.000	.006	.004
203	117.44	1.32	0.00	5.43E+04	7.25E-02	6.87E-02	1.064	6.811E-02	8.695E-04	8.241E-04	309.5	7.25E-02	1.000	1.064	.853
205	117.44	1.02	0.00	5.50E+04	7.345E-02	6.965E-02	1.080	6.799E-02	8.805E-04	8.345E-04	310.1	7.34E-02	1.000	1.080	.876
207	117.44	.51	0.00	5.40E+04	7.215E-02	6.83E-02	1.062	6.786E-02	8.643E-04	8.192E-04	309.9	7.21E-02	1.000	1.062	.869
208	117.44	.25	0.00	5.58E+04	7.44E-02	7.06E-02	1.096	6.779E-02	8.933E-04	8.464E-04	309.3	7.44E-02	1.000	1.096	.894
210	117.44	.04	.04	5.97E+04	7.95E-02	7.54E-02	1.174	6.773E-02	9.536E-04	9.039E-04	308.1	7.95E-02	1.000	1.174	.952
211	117.44	0.00	.15	6.13E+04	8.165E-02	7.73E-02	1.204	6.772E-02	9.783E-04	9.274E-04	307.6	8.16E-02	1.000	1.204	.970
212	117.44	0.00	.25	6.19E+04	8.21E-02	7.79E-02	1.213	6.772E-02	9.854E-04	9.342E-04	306.6	8.21E-02	1.000	1.213	.984
213	117.44	0.00	.38												
214	117.44	0.00	.64												
215	117.44	0.00	.89	5.91E+04	7.82E-02	7.41E-02	1.154	6.772E-02	9.375E-04	8.893E-04	303.6	7.82E-02	1.000	1.154	.936

AMES 3.5 FT HWT TEST (182), D.F. BLUMER, IN-LINE RSI GAP RUN(41) 1977 PAGE 82

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.00	1.14	6.21E+04	6.87E-02	6.51E-02	1.014	6.772E-02	8.236E-04	7.825E-04	299.4	6.87E-02	1.000	1.014	.823
217	117.44	0.00	1.40	4.35E+04	5.67E-02	5.37E-02	.837	6.772E-02	6.796E-04	6.462E-04	293.4	5.67E-02	1.000	.837	.679
218	117.44	0.00	1.65	3.27E+04	4.28E-02	4.06E-02	.631	6.772E-02	5.129E-04	4.865E-04	298.9	4.28E-02	1.000	.631	.512
219	117.44	0.00	1.90	2.08E+04	2.73E-02	2.59E-02	.403	6.772E-02	3.275E-04	3.107E-04	298.4	2.73E-02	1.000	.403	.327
220	117.44	0.00	2.29	4.77E+03	6.27E-03	5.94E-03	.093	6.772E-02	7.517E-05	7.131E-05	298.0	6.27E-03	1.000	.093	.075
406	127.60	.76	0.00	5.16E+04	6.87E-02	6.51E-02	.873	7.863E-02	8.239E-04	7.810E-04	306.8	6.87E-02	1.000	.873	.880
407	127.60	.51	0.00	5.13E+04	6.82E-02	6.46E-02	.866	7.858E-02	8.177E-04	7.752E-04	306.7	6.82E-02	1.000	.868	.832
408	127.60	.25	0.00	4.51E+04	5.99E-02	5.68E-02	.763	7.852E-02	7.183E-04	6.810E-04	306.2	5.99E-02	1.000	.763	.775
409	127.60	.15	0.00	4.12E+04	5.47E-02	5.19E-02	.697	7.850E-02	6.566E-04	6.225E-04	305.7	5.47E-02	1.000	.697	.709
410	127.60	.14	.04	4.87E+03	6.46E-03	6.13E-03	.082	7.848E-02	7.750E-05	7.348E-05	305.3	6.46E-03	1.000	.082	.084
411	127.60	0.00	.15	3.44E+04	4.56E-02	4.32E-02	.561	7.847E-02	5.459E-04	5.185E-04	304.0	4.56E-02	1.000	.581	.591
412	127.60	0.00	.25	2.84E+04	3.77E-02	3.57E-02	.480	7.847E-02	4.519E-04	4.284E-04	303.5	3.77E-02	1.000	.480	.488
413	127.60	0.00	.38	2.42E+04	3.20E-02	3.03E-02	.407	7.847E-02	3.835E-04	3.637E-04	301.8	3.20E-02	1.000	.407	.414
414	127.60	0.00	.64	2.04E+04	2.69E-02	2.55E-02	.343	7.847E-02	3.229E-04	3.063E-04	301.7	2.69E-02	1.000	.343	.349
415	127.60	0.00	.89	1.82E+04	2.41E-02	2.28E-02	.307	7.847E-02	2.858E-04	2.739E-04	301.1	2.41E-02	1.000	.307	.312
416	127.60	0.00	1.14	1.57E+04	2.07E-02	1.96E-02	.263	7.847E-02	2.478E-04	2.350E-04	300.3	2.07E-02	1.000	.263	.268
417	127.60	0.00	1.40	1.31E+04	1.72E-02	1.54E-02	.220	7.847E-02	2.063E-04	1.962E-04	299.6	1.72E-02	1.000	.220	.223
418	127.60	0.00	1.65	9.89E+03	1.29E-02	1.22E-02	.164	7.847E-02	1.548E-04	1.469E-04	299.3	1.29E-02	1.000	.164	.167
419	127.60	0.00	1.90	5.74E+03	7.55E-03	7.16E-03	.096	7.847E-02	9.059E-05	8.593E-05	298.9	7.55E-03	1.000	.096	.098
420	127.60	0.00	2.29	9.41E+02	1.24E-03	1.17E-03	.016	7.847E-02	1.485E-05	1.408E-05	298.6	1.24E-03	1.000	.016	.016
506	135.22	.76	0.00	5.12E+04	6.81E-02	6.46E-02	.795	8.573E-02	8.171E-04	7.746E-04	306.0	6.81E-02	1.000	.795	.959
507	135.22	.51	0.00	4.77E+04	6.33E-02	6.00E-02	.739	8.569E-02	7.595E-04	7.201E-04	306.2	6.33E-02	1.000	.739	.892
508	135.22	.25	0.00	3.83E+04	5.08E-02	4.82E-02	.594	8.564E-02	6.099E-04	5.783E-04	305.5	5.08E-02	1.000	.594	.717
509	135.22	.15	0.00	2.89E+04	3.83E-02	3.63E-02	.448	8.563E-02	4.598E-04	4.360E-04	304.4	3.83E-02	1.000	.448	.540
510	135.22	.14	.04	2.46E+04	3.26E-02	3.09E-02	.381	8.561E-02	3.910E-04	3.707E-04	303.8	3.26E-02	1.000	.381	.459
511	135.22	0.00	.15	2.22E+04	2.94E-02	2.78E-02	.343	8.560E-02	3.523E-04	3.340E-04	303.4	2.94E-02	1.000	.343	.414
512	135.22	0.00	.25	1.67E+04	2.21E-02	2.09E-02	.258	8.560E-02	2.648E-04	2.511E-04	303.2	2.21E-02	1.000	.258	.311
513	135.22	0.00	.38	1.32E+04	1.75E-02	1.66E-02	.205	8.560E-02	2.100E-04	1.592E-04	302.8	1.75E-02	1.000	.205	.247
514	135.22	0.00	.64	9.20E+03	1.22E-02	1.16E-02	.143	8.560E [illegible]	1.466E-04	1.390E-04	302.1	1.22E-02	1.000	.143	.172
515	135.22	0.00	.89	7.47E+03	9.86E-03	9.35E-03	.115	8.560 [illegible]	1.182E-04	1.121E-04	301.0	9.86E-03	1.000	.115	.139
516	135.22	0.00	1.14	6.90E+03	9.16E-03	8.58E-03	.107	8.56 [illegible]	1.098E-04	1.042E-04	301.1	9.16E-03	1.000	.107	.129
517	135.22	0.00	1.40	6.21E+03	8.19E-03	7.76E-03	.096	8.56 [illegible]	9.821E-05	9.315E-05	300.7	8.19E-03	1.000	.096	.115
518	135.22	0.00	1.65	5.20E+03	6.85E-03	6.50E-03	.080	8.560E [illegible]	8.219E-05	7.795E-05	300.0	6.85E-03	1.000	.080	.097
519	135.22	0.00	1.90	3.45E+03	4.60E-03	4.36E-03	.054	8.560F [illegible]	5.519E-05	5.234E-05	299.4	4.60E-03	1.000	.054	.065
520	135.22	0.00	2.29	8.70E+02	1.13E-03	1.07E-03	.013	8.56 [illegible]	1.355E-05	1.236E-05	298.5	1.13E-03	1.000	.013	.016

EDGE HEATING USED FOR HE
X= 7.683E+01 HL /HREFF= 1.431E+00
X= 8.188E+01 HL /HREFF= 1.697E+00
X= 8.696E+01 HL /HREFF= 1.619E+00
X= 9.204E+01 HL /HREFF= 1.395E+00
X= 9.712E+01 HL /HREFF= 1.947E+00
X= 1.022E+02 HL /HREFF= 1.771E+00
X= 1.073E+02 HL /HREFF= 1.537E+00
X= 1.124E+02 HL /HREFF= 1.339E+00
X= 1.175E+02 HL /HREFF= 1.231E+00
X= 1.225E+02 HL /HREFF= 1.177E+00
X= 1.251E+02 HL /HREFF= 1.051E+00
X= 1.276E+02 HL /HREFF= 9.628E-01
X= 1.302E+02 HL /HREFF= 9.077E-01
X= 1.352E+02 HL /HREFF= 8.292E-01

X= 1.111E+02 HL /HREFF= 1.234E+00
X= 1.174E+02 HL /HREFF= 1.052E+00
X= 1.276E+02 HL /HREFF= 8.673E-01
X= 1.372E+02 HL /HREFF= 7.395E-01
B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULEN B.L. CONDITIONS AT = 9 .12 CM

AMES 3.5 FT HWT TEST (1P2), C.B. BLUMER, IN-LINE RSI GAP RUN(42) 1973 PAGE 83

TT	= 1.1412E+03(K)	GAP LENGTH	= 30.480(CM)
PT	= 2.1016E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2278E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 6.6406E+06	ORIENTATION	= 0.000(DEG)
MACH	= 5.103	QS	= 1.7680E+05(W/M2)
RHO VEL	= 9.3773E+01(KG/M2-S)	MOD.POSITION	= 3
HAW/HT	= 0.928 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	6.23E+04	7.34E-02	6.57E-02	.816	8.628E-02	8.407E-04	7.966E-04	310.8				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	6.18E+04	6.99E-02	6.62E-02	.857	8.154E-02	8.342E-04	7.905E-04	311.5				1.000
4	127.63	-.51	0.00	6.34E+04	7.21E-02	6.93E-02	.911	7.917E-02	8.675E-04	8.154E-04	311.6				1.000
5	125.09	-.51	0.00	5.46E+04	7.37E-02	6.98E-02	.959	7.681E-02	8.794E-04	8.333E-04	311.7				1.000
6	122.56	-.51	0.00	5.66E+04	7.64E-02	7.24E-02	1.026	7.444E-02	9.116E-04	8.638E-04	311.6				1.000
7	117.47	-.51	0.00	6.00E+04	8.10E-02	7.67E-02	1.183	6.844E-02	9.665E-04	9.158E-04	312.0				1.000
8	112.37	-.51	0.00	6.08E+04	8.22E-02	7.79E-02	1.377	5.969E-02	9.808E-04	9.293E-04	312.3				1.000
9	107.31	-.51	0.00	5.45E+04	7.35E-02	6.96E-02	1.496	4.910E-02	8.771E-04	8.312E-04	310.7				1.000
10	102.25	-.51	0.00	5.24E+04	7.05E-02	6.68E-02	1.776	3.968E-02	8.412E-04	7.972E-04	309.7				1.000
11	97.12	-.51	0.00	4.46E+04	6.01E-02	5.69E-02	1.871	3.210E-02	7.170E-04	6.795E-04	309.9				1.000
12	92.04	-.51	0.00	3.57E+04	4.78E-02	4.53E-02	1.851	2.582E-02	5.704E-04	5. 05E-04	310.0				1.000
13	86.96	-.51	0.00	2.64E+04	3.55E-02	3.36E-02	1.667	2.129E-02	4.237E-04	4.015E-04	310.4				1.000
14	81.88	-.51	0.00	1.99E+04	2.68E-02	2.54E-02	1.537	1.747E-02	3.205E-04	3.037E-04	310.6				1.000
15	76.80	-.51	0.00	1.45E+04	1.96E-02	1.86E-02	1.295	1.519E-02	2.342E-04	2.220E-04	310.5				1.000
103	111.09	1.52	0.00	5.56E+04	7.94E-02	7.15E-02	1.321	5.710E-02	9.034E-04	8.533E-04	316.7	7.54E-02	1.000	1.321	.939
105	111.09	1.02	0.00	5.41E+04	7.35E-02	6.96E-02	1.287	5.712E-02	8.774E-04	8.311E-04	316.7	7.35E-02	1.000	1.287	.915
107	111.09	.51	0.00	5.33E+04	7.23E-02	6.85E-02	1.265	5.713E-02	8.629E-04	8.174E-04	315.9	7.23E-02	1.000	1.265	.899
108	111.09	.25	0.00	5.39E+04	7.31E-02	6.93E-02	1.280	5.713E-02	8.726E-04	8.267E-04	315.0	7.31E-02	1.000	1.280	.909
110	111.09	.14	.04	5.14E+04	6.95E-02	6.59E-02	1.217	5.713E-02	8.330E-04	7.864E-04	313.5	6.95E-02	1.000	1.217	.865
111	111.09	0.00	.15	4.75E+04	6.41E-02	6.08E-02	1.123	5.713E-02	7.658E-04	7.255E-04	312.9	6.41E-02	1.000	1.123	.798
112	111.09	0.00	.25	3.99E+04	5.38E-02	5.10E-02	.942	5.713E-02	6.427E-04	6.098E-04	311.7	5.38E-02	1.000	.942	.670
113	111.09	0.00	.38	2.97E+04	4.00E-02	3.79E-02	.700	5.713E-02	4.771E-04	4.521E-04	310.9	4.00E-02	1.000	.700	.497
114	111.09	0.00	.64	1.35E+04	1.81E-02	1.72E-02	.317	5.713E-02	2.164E-04	2.051E-04	309.3	1.81E-02	1.000	.317	.226
115	111.09	0.00	.89	4.06E+03	5.48E-03	5.20E-03	.096	5.713E-02	6.545E-05	6.204E-05	307.9	5.48E-03	1.000	.096	.068
116	111.09	0.00	1.14	1.08E+03	1.44E-03	1.37E-03	.025	5.713E-02	1.723E-05	1.633E-05	307.0	1.44E-03	1.000	.025	.018
117	111.09	0.00	1.40	3.55E+02	4.75E-04	4.51E-04	.008	5.713E-02	5.676E-06	5.380E-06	305.2	4.75E-04	1.000	.008	.006
118	111.09	0.00	1.65	2.15E+02	2.87E-04	2.72E-04	.005	5.713E-02	3.428E-06	3.250E-06	305.6	2.87E-04	1.000	.005	.004
119	111.09	0.00	1.90	8.79E+01	1.17E-04	1.11E-04	.002	5.713E-02	1.402E-06	1.329E-06	305.1	1.17E-04	1.000	.002	.001
120	111.09	0.00	2.29												
203	117.44	1.52	0.00	5.47E+04	7.39E-02	7.01E-02	1.072	6.895E-02	8.825E-04	8.362E-04	313.0	7.39E-02	1.000	1.072	.935
205	117.44	1.02	0.00	5.57E+04	7.47E-02	7.18E-02	1.085	6.882E-02	8.915E-04	8.446E-04	313.5	7.47E-02	1.000	1.085	.916
207	117.44	.51	0.00	5.29E+04	7.15E-02	6.77E-02	1.041	6.868E-02	8.535E-04	8.086E-04	313.3	7.15E-02	1.000	1.041	.877
208	117.44	.23	0.00	5.28E+04	7.14E-02	6.76E-02	1.040	6.861E-02	8.513E-04	8.071E-04	312.5	7.14E-02	1.000	1.040	.876
210	117.44	.14	.04	5.19E+04	7.00E-02	6.63E-02	1.021	6.855E-02	9.357E-04	7.919E-04	311.3	7.00E-02	1.000	1.021	.862
211	117.44	0.00	.15	5.04E+04	6.79E-02	6.44E-02	.991	6.654E-02	8.108E-04	7.684E-04	310.8	6.79E-02	1.0.	.991	.837
212	117.44	0.00	.25	4.57E+04	6.17E-02	5.34E-02	.900	6.854E-02	7.352E-04	6.977E-04	309.9	6.17E-02	1.000	.900	.760
213	117.44	0.00	.38												
214	117.44	0.00	.64												
215	117.44	0.00	.89	1.89E+04	2.53E-02	2.40E-02	.369	6.854E-02	3.013E-04	2.862E-04	306.8	2.53E-02	1.000	.369	.312

AMES 3.5 FT HWT TEST (OH2), C.B. BLUMER, IN-LINE RSI GAP RUN(42) 1973 PAGE 84

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	117.44	0.00	1.14	1.20E+04	1.59E-02	1.51E-02	.233	6.854E-02	1.934E-04	1.885E-04	302.4	1.59E-02	1.000	.233	.196
217	117.44	0.00	1.40	7.33E+03	9.76E-03	9.26E-03	.142	6.854E-02	1.165E-04	1.105E-04	302.5	9.76E-03	1.000	.142	.120
218	117.44	0.00	1.65	3.81E+03	5.07E-03	4.81E-03	.074	6.854E-02	6.053E-05	5.740E-05	301.9	5.07E-03	1.000	.074	.062
219	117.44	0.00	1.90	1.69E+03	2.25E-03	2.13E-03	.033	6.854E-02	2.683E-05	2.544E-05	301.4	2.25E-03	1.000	.033	.028
220	117.44	0.00	2.29	2.03E+02	2.70E-04	2.56E-04	.004	6.854E-02	3.228E-06	3.061E-06	301.2	2.70E-04	1.000	.004	.003
406	127.60	.76	0.00	4.94E+04	6.52E-02	6.18E-02	.821	7.943E-02	7.784E-04	7.377E-04	310.3	6.52E-02	1.000	.821	.901
407	127.60	.51	0.00	4.74E+04	6.38E-02	6.04E-02	.803	7.938E-02	7.612E-04	7.214E-04	310.3	6.38E-02	1.000	.803	.882
408	127.60	.25	0.00	4.11E+04	5.52E-02	5.23E-02	.696	7.932E-02	6.594E-04	6.249E-04	309.6	5.52E-02	1.000	.696	.764
409	127.60	.15	0.00	3.60E+04	4.82E-02	4.57E-02	.608	7.930E-02	5.752E-04	5.451E-04	309.1	4.82E-02	1.000	.608	.667
410	127.60	.04	.04	3.01E+04	4.04E-02	3.83E-02	.510	7.927E-02	4.825E-04	4.573E-04	308.9	4.04E-02	1.000	.510	.560
411	127.60	0.00	.15	2.57E+04	3.46E-02	3.28E-02	.436	7.926E-02	4.125E-04	3.910E-04	308.1	3.46E-02	1.000	.436	.479
412	127.60	0.00	.25	1.55E+04	2.11E-02	2.00E-02	.267	7.926E-02	2.524E-04	2.393E-04	306.8	2.11E-02	1.000	.267	.293
413	127.60	0.00	.38	8.91E+03	1.19E-02	1.13E-02	.150	7.926E-02	1.423E-04	1.349E-04	305.1	1.19E-02	1.000	.150	.165
414	127.60	0.00	.64	2.57E+03	3.43E-03	3.26E-03	.043	7.926E-02	4.103E-05	3.887E-05	304.9	3.43E-03	1.000	.043	.048
415	127.60	0.00	.89	6.01E+02	8.03E-04	7.61E-04	.010	7.926E-02	9.583E-06	9.083E-06	304.4	8.03E-04	1.000	.010	.011
416	127.60	0.00	1.14	5.77E+01	7.70E-05	7.30E-05	.001	7.926E-02	9.194E-07	8.717E-07	303.6	7.70E-05	1.000	.001	.001
417	127.60	0.00	1.40												
418	127.60	0.00	1.65												
419	127.60	0.00	1.90												
420	127.60	0.00	2.29												
506	135.22	.76	0.00	4.64E+04	6.29E-02	5.92E-02	.723	8.648E-02	7.463E-04	7.073E-04	310.4	6.29E-02	1.000	.723	.885
507	135.22	.51	0.00	4.51E+04	6.06E-02	5.75E-02	.702	8.644E-02	7.239E-04	6.860E-04	309.8	6.06E-02	1.000	.702	.859
508	135.22	.25	0.00	4.45E+04	5.98E-02	5.67E-02	.692	8.640E-02	7.140E-04	6.767E-04	309.0	5.98E-02	1.000	.692	.848
509	135.22	.15	0.00	4.05E+04	5.43E-02	5.15E-02	.629	8.638E-02	6.485E-04	6.147E-04	308.8	5.43E-02	1.000	.629	.770
510	135.22	.04	.04	3.76E+04	5.04E-02	4.78E-02	.584	8.636E-02	6.020E-04	5.706E-04	307.5	5.04E-02	1.000	.584	.715
511	135.22	0.00	.15	3.56E+04	4.78E-02	4.53E-02	.553	8.635E-02	5.703E-04	5.406E-04	306.9	4.78E-02	1.000	.553	.670
512	135.22	0.00	.25	2.91E+04	3.91E-02	3.70E-02	.452	8.635E-02	4.662E-04	4.419E-04	306.7	3.91E-02	1.000	.452	.554
513	135.22	0.00	.38	2.24E+04	3.00E-02	2.85E-02	.348	8.635E-02	3.584E-04	3.397E-04	306.1	3.00E-02	1.000	.348	.426
514	135.22	0.00	.64	1.07E+04	1.44E-02	1.36E-02	.166	8.635E-02	1.713E-04	1.624E-04	305.5	1.44E-02	1.000	.166	.204
515	135.22	0.00	.89	5.01E+03	6.70E-03	6.35E-03	.078	8.635E-02	7.995E-05	7.588E-05	304.4	6.70E-03	1.000	.078	.095
516	135.22	0.00	1.14	3.35E+03	4.48E-03	4.25E-03	.052	8.635E-02	5.346E-05	5.068E-05	304.4	4.48E-03	1.000	.052	.064
517	135.22	0.00	1.40	3.49E+03	4.66E-03	4.42E-03	.054	8.635E-02	5.567E-05	5.278E-05	304.1	4.66E-03	1.000	.054	.066
518	135.22	0.00	1.65	3.28E+03	4.38E-03	4.15E-03	.051	8.635E-02	5.226E-05	4.955E-05	303.4	4.38E-03	1.000	.051	.062
519	135.22	0.00	1.96	2.81E+03	3.75E-03	3.56E-03	.043	8.635E-02	4.475E-05	4.243E-05	302.8	3.75E-03	1.000	.043	.053
520	135.22	0.00	2.29	5.24E+02	6.99E-04	6.62E-04	.008	8.635E-02	8.329E-06	7.898E-06	302.0	6.98E-04	1.000	.008	.010

EDGE HEATING USED FOR HE

X= 7.680E+01 HL /HREFF= 1.295E+00
X= 8.188E+01 HL /HREFF- 1.537E+00
X= 8.696E+01 HL /HREFF= 1.657E+00
X= 9.204E+01 HL /HREFF= 1.851E+00
X= 9.712E+01 HL /HREFF= 1.871E+00
X= 1.022E+02 HL /HREFF= 1.776E+00
X= 1.073E+02 HL /HREFF= 1.496E+00
X= 1.124E+02 HL /HREFF= 1.377E+00
X= 1.175E+02 HL /HREFF= 1.133E+00
X= 1.226E+02 HL /HREFF= 1.026E+00
X= 1.251E+02 HL /HREFF= 9.592E-01
X= 1.276E+02 HL /HREFF= 9.135E-01
X= 1.302E+02 HL /HREFF= 8.57[illegible]E-01
X= 1.352E+02 HL /HREFF= 8.163E-01

X= 1.111E+02 HL /HREFF= 1.26[illegible]E+00
X= 1.174E+02 HL /HREFF= 1.041E+00
X= 1.276E+02 HL /HREFF= 8.[illegible]34E-01
X= 1.352E+02 HL /HREFF= 7.[illegible]1[illegible]E-01

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 97.12 CM

AMES 3.5 FT HWT TEST (152), C.S. BLUMER, IN-LINE RSI GAP RUN(43) 1973 PAGE 85

TT	= 1.0977E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 5.1369E+05(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.1419E+06(J/KG)	GAP DEPTH	= 1.316(CM)
RE/METER	= 1.7034E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.102	QS	= 8.2081E+04(W/M2)
RHO VEL	= 2.1224E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 0.929 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	8.24E+03	1.19E-02	1.12E-02	1.619	7.332E-03	5.594E-04	5.297E-04	305.3				1.000
2	132.78	-.51	0.00												
3	130.16	-.51	0.00	7.84E+03	1.13E-02	1.07E-02	1.582	7.139E-03	5.322E-04	5.039E-04	305.8				1.000
4	127.63	-.51	0.00	7.82E+03	1.13E-02	1.07E-02	1.600	7.042E-03	5.308E-04	5.026E-04	305.8				1.000
5	125.09	-.51	0.00	7.73E+03	1.11E-02	1.06E-02	1.604	6.946E-03	5.250E-04	4.971E-04	306.0				1.000
6	122.56	-.51	0.00	7.54E+03	1.09E-02	1.03E-02	1.597	6.849E-03	5.122E-04	4.850E-04	305.9				1.000
7	117.47	-.51	0.00	7.21E+03	1.04E-02	9.88E-03	1.553	6.716E-03	4.914E-04	4.653E-04	306.0				1.000
8	112.37	-.51	0.00	6.79E+03	9.79E-03	9.27E-03	1.477	6.626E-03	4.611E-04	4.366E-04	306.3				1.000
9	107.31	-.51	0.00	6.31E+03	9.10E-03	8.62E-03	1.383	6.580E-03	4.285E-04	4.060E-04	306.3				1.000
10	102.20	-.51	0.00	[illegible]	8.65E-03	8.20E-03	1.280	6.765E-03	4.089E-04	3.863E-04	306.4				1.000
11	97.12	-.51	0.00	5.79E+03	8.36E-03	7.91E-03	1.203	6.948E-03	3.937E-04	3.720E-04	306.5				1.000
12	92.04	-.51	0.00	5.89E+03	8.49E-03	8.04E-03	1.197	7.094E-03	4.002E-04	3.789E-04	306.7				1.000
13	86.96	-.51	0.00	5.57E+03	8.04E-03	7.51E-03	1.111	7.234E-03	3.768E-04	3.507E-04	306.9				1.000
14	81.88	-.51	0.00	5.64E+03	8.15E-03	7.71E-03	1.111	7.333E-03	3.838E-04	3.634E-04	307.2				1.000
15	76.80	-.51	0.00	5.19E+03	7.50E-03	7.10E-03	1.009	7.433E-03	3.534E-04	3.346E-04	307.2				1.000
16	71.72	-.51	0.00	5.14E+03	7.42E-03	7.03E-03	.985	7.534E-03	3.497E-04	3.311E-04	307.4				1.000
17	66.64	-.51	0.00	5.33E+03	7.70E-03	7.29E-03	.966	7.572E-03	3.629E-04	3.436E-04	307.6				1.000
18	61.56	-.51	0.00	5.63E+03	8.14E-03	7.70E-03	.948	8.582E-03	3.833E-04	3.629E-04	307.8				1.000
19	56.48	-.51	0.00	5.79E+03	8.37E-03	7.93E-03	.921	9.088E-03	3.945E-04	3.734E-04	308.2				1.000
20	51.39	-.51	0.00	6.05E+03	8.74E-03	8.28E-03	.916	9.547E-03	4.128E-04	3.908E-04	308.3				1.000
21	48.86	-.51	0.00	6.37E+03	9.22E-03	8.73E-03	.941	9.799E-03	4.344E-04	4.112E-04	308.5				1.000
22	46.31	-.51	0.00	6.54E+03	9.45E-03	8.95E-03	.938	1.008E-02	4.455E-04	4.217E-04	308.4				1.000
23	43.77	-.51	0.00	6.82E+03	9.83E-03	9.31E-03	.949	1.036E-02	4.632E-04	4.385E-04	308.5				1.000
24	41.24	-.51	0.00	7.19E+03	1.04E-02	9.83E-03	.976	1.064E-02	4.895E-04	4.634E-04	308.6				1.000
25	38.70	-.51	0.00	7.19E+03	1.04E-02	9.85E-03	.953	1.092E-02	4.991E-04	4.639E-04	308.0				1.000
103	47.59	1.52	0.00	5.22E+03	7.72E-03	7.30E-03	.777	9.936E-03	3.638E-04	3.442E-04	315.4	7.72E-03	1.000	.777	.027
105	47.59	1.02	0.00	5.69E+03	8.27E-03	7.83E-03	.832	9.937E-03	3.897E-04	3.680E-04	311.7	8.27E-03	1.000	.832	.086
107	47.59	.51	0.00	5.75E+03	8.35E-03	7.90E-03	.840	9.937E-03	3.932E-04	3.722E-04	311.2	8.35E-03	1.000	.840	.094
108	47.59	.25	0.00	5.36E+03	7.77E-03	7.36E-03	.782	9.937E-03	3.652E-04	3.467E-04	310.5	7.77E-03	1.000	.782	.033
110	47.59	.04	.04	4.23E+03	6.13E-03	5.90E-03	.617	9.938E-03	2.889E-04	2.735E-04	309.5	6.13E-03	1.000	.617	.057
111	47.59	0.00	.15	3.50E+03	5.07E-03	4.80E-03	.510	9.936E-03	2.390E-04	2.262E-04	309.1	5.07E-03	1.000	.510	.543
112	47.59	0.00	.25	2.32E+03	3.36E-03	3.18E-03	.338	9.935E-03	1.583E-04	1.499E-04	308.2	3.36E-03	1.000	.338	.360
113	47.59	0.00	.38	1.30E+03	1.88E-03	1.78E-03	.189	9.938E-03	8.849E-05	8.378E-05	307.6	1.88E-03	1.000	.189	.201
114	47.59	0.00	.64	3.03E+02	4.38E-04	4.14E-04	.044	9.938E-03	2.062E-05	1.953E-05	306.4	4.38E-04	1.000	.044	[illegible]
115	47.59	0.00	.89												
203	61.56	1.52	0.00	5.00E+03	7.24E-03	6.85E-03	.842	8.591E-03	3.409E-04	3.227E-04	308.5	7.24E-03	1.000	.842	[illegible]
205	61.56	1.02	0.00	[illegible]	7.17E-03	6.79E-03	.835	8.587E-03	3.379E-04	3.198E-04	308.8	7.17E-03	1.000	.835	[illegible]
207	61.56	.51	0.00	4.77E+03	6.91E-03	6.54E-03	.804	8.585E-03	3.254E-04	3.080E-04	309.7	6.91E-03	1.000	.804	.849
208	61.56	.25	0.00	4.55E+03	6.57E-03	6.22E-03	.766	8.584E-03	3.093E-04	2.933E-04	308.3	6.57E-03	1.000	.766	.888
212	61.56	.04	.04	3.71E+03	5.35E-03	5.07E-03	.624	8.582E-03	2.523E-04	2.389E-04	307.6	5.35E-03	1.000	.624	.658

AMES 3.5 FT HWT TEST (132), C.B. BLUMER, IN-LINE RSI GAP RUN(43) 1973 PAGE 86

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.10	.15	3.39E+03	4.88E-03	4.67E-03	.569	8.583E-03	2.299E-04	2.177E-04	306.1	4.88E-03	1.000	.569	.600
212	61.56	0.00	.25	2.49E+03	3.59E-03	3.40E-03	.418	8.583E-03	1.692E-04	1.602E-04	305.8	3.59E-03	1.000	.418	.441
213	61.56	0.00	.38												
214	61.56	0.00	.64	7.97E+00	6.01E-06	5.67E-06	.001	8.583E-03	2.831E-07	2.673E-07	338.7	6.01E-06	1.000	.001	.001
215	61.56	0.33	.89	1.43E+01	2.06E-05	1.95E-05	.002	8.583E-03	9.731E-07	9.187E-07	303.6	2.06E-05	1.000	.002	.003
306	86.96	.76	0.00	3.05E+00	4.62E-06	4.36E-06	.001	7.231E-03	2.177E-07	2.056E-07	338.7	4.62E-06	1.000	.001	.001
307	86.96	.51	0.00	4.05E+03	5.84E-03	5.53E-03	.808	7.231E-03	2.752E-04	2.605E-04	306.6	5.84E-03	1.000	.808	.727
308	86.96	.25	0.00	4.20E+03	6.06E-03	5.74E-03	.838	7.232E-03	2.857E-04	2.705E-04	306.3	6.06E-03	1.000	.838	.754
309	86.96	.15	0.00	3.77E+03	5.43E-03	5.14E-03	.751	7.232E-03	2.558E-04	2.422E-04	306.0	5.43E-03	1.000	.751	.675
310	86.96	.04	.04	3.50E+03	5.05E-03	4.78E-03	.698	7.232E-03	2.378E-04	2.251E-04	305.9	5.05E-03	1.000	.698	.628
311	86.96	0.00	.15	2.74E+03	3.94E-03	3.73E-03	.545	7.232E-03	1.857E-04	1.759E-04	305.5	3.94E-03	1.000	.545	.490
312	86.96	0.00	.25	1.71E+03	2.46E-03	2.33E-03	.340	7.232E-03	1.160E-04	1.098E-04	304.8	2.46E-03	1.000	.348	.306
313	86.96	0.00	.38	1.23E+03	1.77E-03	1.67E-03	.244	7.232E-03	8.327E-05	7.885E-05	304.5	1.77E-03	1.000	.244	.220
314	86.96	0.00	.64	4.38E+02	6.30E-04	5.97E-04	.087	7.232E-03	2.970E-05	2.813E-05	304.5	6.30E-04	1.000	.087	.078
315	86.96	0.00	.89	4.46E+01	6.40E-05	6.07E-05	.009	7.232E-03	3.018E-06	2.858E-06	304.0	6.40E-05	1.000	.009	.008
406	112.36	.76	0.00	3.87E+03	5.58E-03	5.29E-03	.843	6.624E-03	2.630E-04	2.490E-04	305.7	5.58E-03	1.000	.843	.571
407	112.36	.51	0.00	4.78E+03	6.88E-03	6.52E-03	1.039	6.624E-03	3.243E-04	3.070E-04	305.4	6.88E-03	1.000	1.039	.704
408	112.36	.25	0.00	5.36E+03	7.71E-03	7.30E-03	1.164	6.624E-03	3.634E-04	3.441E-04	305.2	7.71E-03	1.000	1.164	.789
409	112.36	.15	0.00	5.08E+03	7.31E-03	6.93E-03	1.104	6.624E-03	3.446E-04	3.263E-04	305.0	7.31E-03	1.000	1.104	.748
410	112.36	.04	.04	4.44E+03	6.40E-03	6.06E-03	.966	6.624E-03	3.014E-04	2.854E-04	305.0	6.40E-03	1.000	.966	.654
411	112.36	0.00	.15	7.00E+03	5.61E-03	5.31E-03	.846	6.624E-03	2.642E-04	2.502E-04	304.7	5.61E-03	1.000	.846	.573
412	112.36	0.00	.25	2.23E+03	3.20E-03	3.03E-03	.484	6.624E-03	1.509E-04	1.429E-04	304.2	3.20E-03	1.000	.484	.328
413	112.36	0.00	.38	8.70E+02	1.25E-03	1.19E-03	.189	6.624E-03	5.884E-05	5.572E-05	303.6	1.25E-03	1.000	.189	.128
414	112.36	0.00	.64												
415	112.36	0.00	.89	1.25E+02	1.79E-04	1.70E-04	.027	6.624E-03	8.456E-06	8.008E-06	303.5	1.79E-04	1.000	.027	.018
506	125.06	.76	0.00	4.39E+03	6.32E-03	5.99E-03	.911	6.943E-03	2.980E-04	2.821E-04	305.0	6.32E-03	1.000	.911	.560
507	125.06	.51	0.00	5.42E+03	7.81E-03	7.39E-03	1.125	6.943E-03	3.679E-04	3.484E-04	305.1	7.81E-03	1.000	1.125	.701
508	125.06	.25	0.00	6.23E+03	8.97E-03	8.50E-03	1.292	6.943E-03	4.229E-04	4.303E-04	305.0	8.97E-03	1.000	1.292	.806
509	125.06	.15	0.00	5.81E+03	8.36E-03	7.91E-03	1.204	6.943E-03	3.938E-04	3.729E-04	305.0	8.36E-03	1.000	1.204	.750
510	125.06	.04	.04	5.21E+03	7.49E-03	7.09E-03	1.079	6.943E-03	3.529E-04	3.342E-04	304.7	7.49E-03	1.000	1.079	.672
511	125.06	0.00	.15	4.89E+03	7.03E-03	6.66E-03	1.013	6.943E-03	3.315E-04	3.139E-04	305.0	7.03E-03	1.000	1.013	.632
512	125.06	0.00	.25	3.28E+03	4.72E-03	4.47E-03	.680	6.943E-03	2.225E-04	2.107E-04	304.7	4.72E-03	1.000	.680	.424
513	125.06	0.00	.38	2.12E+03	3.05E-03	2.89E-03	.439	6.943E-03	1.437E-04	1.361E-04	304.5	3.05E-03	1.000	.439	.274
514	125.06	0.00	.64	5.12E+02	7.35E-04	6.96E-04	.106	6.943E-03	3.465E-05	3.282E-05	303.9	7.35E-04	1.000	.106	.066
515	125.06	0.00	.89												

EDGE HEATING USED FOR HF
X= 3.879E+01 HL /HREFF= 9.526E-01
X= 4.124E+01 HL /HREFF= 9.734E-01
X= 4.377E+01 HL /HREFF= 9.490E-01
X= 4.631E+01 HL /HREFF= 9.379E-01
X= 4.886E+01 HL /HREFF= 9.406E-01

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	9.212E-01
X=	6.156E+01	HL	/HREFF=	9.440E-01
X=	6.664E+01	HL	/HREFF=	9.651E-01
X=	7.172E+01	HL	/HREFF=	9.851E-01
X=	7.680E+01	HL	/HREFF=	1.[illegible]9E+00
X=	8.188E+01	HL	/HREFF=	1.111E+00
X=	8.696E+01	HL	/HREFF=	1.111E+00
X=	9.204E+01	HL	/HREFF=	1.197E+00
X=	9.712E+01	HL	/HREFF=	1.2[illegible]3E+00
X=	1.022E+02	HL	/HREFF=	1.280E+00
X=	1.073E+02	HL	/HREFF=	1.383E+00
X=	1.124E+02	HL	/HREFF=	1.477E+00
X=	1.175E+02	HL	/HREFF=	1.553E+00
X=	1.226E+02	HL	/HREFF=	1.[illegible]07E+00
X=	1.251E+02	HL	/HREFF=	1.6[illegible]4E+00
X=	1.276E+02	HL	/HREFF=	1.6[illegible]7E+00
X=	1.302E+02	HL	/HREFF=	1.582E+00
X=	1.352E+02	HL	/HREFF=	1.619E+00
X=	4.759E+01	HL	/HREFF=	8.339E-01
X=	6.196E+01	HL	/HREFF=	8.[illegible]46E-01
X=	8.696E+01	HL	/HREFF=	8.076E-01
X=	1.124E+02	HL	/HREFF=	1.039E+00
X=	1.291E+02	HL	/HREFF=	1.125E+00

B.L. TRANSITION DISTANCE = 76.80 CM
FULLY TURBULENT B.L. CONDITIONS AT = 376.80 CM

AMES 3.5 FT HWT TEST (182), C.E. BLUMER, IN-LINE RSI GAP RUN(44) 1973 PAGE 87

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TT        = 1.1834E+03(K)          GAP LENGTH =101.500(CM)
PT        = 9.9070E+05(N/M2)       GAP WIDTH  =    .254(CM)
HT        = 1.2312E+06(J/KG)       GAP DEPTH  =   1.310(CM)
RE/METER  = 2.9490E+06             ORIENTATION=   0.000(DEG)
MACH      = 5.100                  QS         = 1.2482E+05(W/M2)
RHO VEL   = 3.8991E+01(KG/M2-S)    MOD.POSITION=  1
HAW/HT    = 0.909 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	3.56E+04	4.65E-02	4.42E-02	1.249	3.731E-02	1.195E-03	1.133E-03	309.1				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	3.53E+04	4.62E-02	4.38E-02	1.414	3.267E-02	1.185E-03	1.123E-03	309.6				1.000
4	127.63	-.51	0.00	3.56E+04	4.67E-02	4.42E-02	1.537	3.034E-02	1.197E-03	1.134E-03	309.7				1.000
5	125.09	-.51	0.00	3.47E+04	4.54E-02	4.30E-02	1.620	2.802E-02	1.164E-03	1.104E-03	309.9				1.000
6	122.56	-.51	0.00	3.36E+04	4.42E-02	4.19E-02	1.720	2.570E-02	1.134E-03	1.075E-03	309.7				1.000
7	117.47	-.51	0.00	3.11E+04	4.08E-02	3.96E-02	1.913	2.130E-02	1.045E-03	9.909E-04	309.8				1.000
8	112.37	-.51	0.00	2.65E+04	3.47E-02	3.29E-02	1.971	1.762E-02	8.908E-04	8.446E-04	310.2				1.000
9	107.31	-.51	0.00	2.19E+04	2.87E-02	2.72E-02	1.938	1.479E-02	7.354E-04	6.972E-04	310.2				1.000
10	102.28	-.51	0.00	1.78E+04	2.33E-02	2.21E-02	1.838	1.268E-02	5.977E-04	5.666E-04	310.2				1.000
11	97.12	-.51	0.00	1.41E+04	1.85E-02	1.76E-02	1.671	1.109E-02	4.753E-04	4.506E-04	310.4				1.000
12	92.04	-.51	0.00	1.27E+04	1.66E-02	1.57E-02	1.676	9.895E-03	4.254E-04	4.033E-04	310.6				1.000
13	86.96	-.51	0.00	9.99E+03	1.31E-02	1.24E-02	1.417	9.248E-03	3.360E-04	3.185E-04	311.0				1.000
14	81.88	-.51	0.00	9.19E+03	1.21E-02	1.14E-02	1.363	8.849E-03	3.093E-04	2.932E-04	311.3				1.000
15	76.80	-.51	0.00	8.54E+03	1.06E-02	1.10E-02	1.195	8.630E-03	2.707E-04	2.566E-04	311.3				1.000
16	71.72	-.51	0.00	7.79E+03	1.02E-02	9.69E-03	1.132	9.034E-03	2.623E-04	2.486E-04	311.4				1.000
17	66.64	-.51	0.00	9.06E+03	1.06E-02	1.00E-02	1.121	9.435E-03	2.714E-04	2.572E-04	311.6				1.000
18	61.56	-.51	0.00	9.32E+03	1.09E-02	1.04E-02	1.100	9.936E-03	2.803E-04	2.657E-04	311.9				1.000
19	56.48	-.51	0.00	8.27E+03	1.08E-02	1.02E-02	1.024	1.059E-02	2.772E-04	2.627E-04	312.1				1.000
20	51.39	-.51	0.00	8.87E+03	1.16E-02	1.10E-02	1.038	1.122E-02	2.988E-04	2.832E-04	312.2				1.000
21	48.86	-.51	0.00	8.84E+03	1.16E-02	1.10E-02	1.004	1.156E-02	2.979E-04	2.824E-04	312.5				1.000
22	46.31	-.51	0.00	9.27E+03	1.21E-02	1.15E-02	1.018	1.192E-02	3.112E-04	2.950E-04	312.3				1.000
23	43.77	-.51	0.00	9.61E+03	1.26E-02	1.20E-02	1.029	1.227E-02	3.237E-04	3.069E-04	312.2				1.000
24	41.24	-.51	0.00	9.37E+03	1.31E-02	1.24E-02	1.039	1.261E-02	3.361E-04	3.186E-04	312.3				1.000
25	38.70	-.51	0.00	9.72E+03	1.28E-02	1.21E-02	.964	1.296E-02	3.273E-04	3.103E-04	311.4				1.000
103	47.59	1.52	0.00	7.87E+03	1.04E-02	9.34E-03	.896	1.172E-02	2.663E-04	2.524E-04	315.3	1.04E-02	1.000	.886	.876
105	47.59	1.02	0.00	7.72E+03	1.02E-02	9.64E-03	.867	1.173E-02	2.609E-04	2.472E-04	316.4	1.02E-02	1.000	.867	.850
107	47.59	.51	0.00	7.99E+03	1.05E-02	9.98E-03	.898	1.173E-02	2.701E-04	2.559E-04	315.9	1.05E-02	1.000	.898	.880
108	47.59	.25	.05	8.09E+03	1.07E-02	1.01E-02	.910	1.173E-02	2.737E-04	2.594E-04	314.8	1.07E-02	1.000	.916	.899
110	47.59	.06	.06	7.09E+03	9.34E-03	8.85E-03	.796	1.173E-02	2.394E-04	2.278E-04	313.5	9.34E-03	1.000	.796	.787
111	47.59	0.00	.15	6.15E+03	8.09E-03	7.67E-03	.689	1.173E-02	2.074E-04	1.966E-04	312.9	8.09E-03	1.000	.689	.681
112	47.59	0.00	.25	4.47E+03	5.87E-03	5.36E-03	.500	1.173E-02	1.505E-04	1.427E-04	311.7	5.87E-03	1.000	.500	[illegible]
113	47.59	0.00	.38	3.12E+03	4.10E-03	3.88E-03	.349	1.173E-02	1.051E-04	9.963E-05	310.9	4.10E-03	1.000	.349	[illegible]
114	47.59	0.00	.64	9.17E+02	1.20E-03	1.14E-03	.102	1.173E-02	3.077E-05	[illegible]	[illegible]	[illegible]	[illegible]	.102	[illegible]
115	47.59	0.00	.99												
203	61.56	1.52	0.00	6.57E+03	8.64E-03	8.19E-03	.869	9.934E-03	2.215E-04	2.100E-04	313.3	8.64E-03	1.000	.869	[illegible]
205	61.56	1.02	0.00	6.24E+03	8.20E-03	7.77E-03	.826	9.933E-03	2.103E-04	1.994E-04	312.9	8.20E-03	1.000	.826	.751
207	61.56	.51	0.00	5.94E+03	7.81E-03	7.41E-03	.787	9.934E-03	2.004E-04	1.900E-04	312.7	7.81E-03	1.000	.787	.715
208	61.56	.25	0.00	5.44E+03	7.15E-03	6.78E-03	.720	9.934E-03	1.833E-04	1.738E-04	312.0	7.15E-03	1.000	.720	.654
210	61.56	.04	.04	4.22E+03	5.54E-03	5.25E-03	.558	9.935E-03	1.421E-04	1.347E-04	311.0	5.54E-03	1.000	.558	.507

AMES 3.5 FT HWT TEST (1^2), D.J. BLUMER, IN-LINE RSI GAP RUN(44) 1973 PAGE 88

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	4.39E+03	5.74E-03	5.44E-03	.578	9.935E-03	1.473E-04	1.396E-04	308.7	5.74E-03	1.000	.578	.525
212	61.56	0.00	.25	3.10E+03	4.05E-03	3.84E-03	.408	9.935E-03	1.039E-04	9.851E-05	308.3	4.05E-03	1.000	.408	.371
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.76	0.00												
307	86.96	.51	0.00	4.44E+03	5.82E-03	5.51E-03	.631	9.213E-03	1.492E-04	1.414E-04	318.4	5.82E-03	1.000	.631	.446
308	86.96	.25	0.00	6.95E+03	9.13E-03	8.53E-03	.987	9.221E-03	2.334E-04	2.213E-04	309.7	9.13E-03	1.000	.987	.697
309	86.96	.15	0.00	7.2[illegible]E+03	9.49E-03	[illegible]E-03	1.029	9.224E-03	2.434E-04	2.308E-04	309.2	9.49E-03	1.000	1.029	.726
310	86.96	.04	.04	6.95E+03	9.09E-03	8.62E-03	.985	9.228E-03	2.332E-04	2.211E-04	308.9	9.09E-03	1.000	.985	.696
311	86.96	0.00	.15	[illegible]E+03	7.15E-03	6.76E-03	.774	9.229E-03	1.833E-04	1.738E-04	308.2	7.15E-03	1.000	.774	.547
312	86.96	0.00	.25	3.21E+03	4.19E-03	3.97E-03	.454	9.229E-03	1.074E-04	1.018E-04	307.1	4.19E-03	1.000	.454	.320
313	86.96	0.00	.38	4.[illegible]E+03	5.87E-03	5.56E-03	.636	9.229E-03	1.504E-04	1.427E-04	306.9	5.87E-03	1.000	.636	.449
314	86.96	0.00	.64	1.[illegible]1E+03	2.36E-03	2.24E-03	.256	9.229E-03	6.063E-05	5.749E-05	306.5	2.36E-03	1.000	.256	.181
315	86.96	0.00	.89	2.[illegible]4E+02	3.70E-04	3.50E-04	.040	9.229E-03	9.470E-06	8.989E-06	305.5	3.70E-04	1.000	.040	.028
406	112.36	.76	0.00	1.[illegible]9E+04	2.48E-02	2.35E-02	1.425	1.739E-02	6.356E-04	6.027E-04	309.1	2.48E-02	1.000	1.425	.723
407	112.36	.51	0.00	2.12E+04	2.77E-02	2.63E-02	1.589	1.743E-02	7.106E-04	6.738E-04	308.6	2.77E-02	1.000	1.589	.806
408	112.36	.25	0.00	2.19E+04	2.85E-02	2.71E-02	1.633	1.748E-02	7.322E-04	6.943E-04	308.3	2.85E-02	1.000	1.633	.829
409	112.36	.13	0.00	2.[illegible]5E+04	2.70E-02	2.56E-02	1.544	1.749E-02	6.927E-04	6.568E-04	308.0	2.70E-02	1.000	1.544	.783
410	112.36	.04	.04	1.[illegible]6E+04	2.44E-02	2.31E-02	1.391	1.751E-02	6.245E-04	5.922E-04	307.8	2.44E-02	1.000	1.391	.705
411	112.36	0.00	.15	1.66E+04	2.17E-02	2.06E-02	1.240	1.752E-02	5.572E-04	5.284E-04	307.4	2.17E-02	1.000	1.240	.629
412	112.36	0.00	.25	1.1[illegible]E+04	1.52E-02	1.44E-02	.867	1.752E-02	3.896E-04	3.696E-04	306.8	1.52E-02	1.000	.867	.440
413	112.36	0.00	.38	7.23E+03	9.43E-03	8.94E-03	.538	1.752E-02	2.418E-04	2.293E-04	306.1	9.43E-03	1.000	.538	.273
414	112.36	0.00	.64	1.19E+03	1.54E-03	1.46E-03	.088	1.752E-02	3.960E-05	3.756E-05	304.7	1.54E-03	1.000	.088	.045
415	112.36	0.00	.89	1.87E+03	2.44E-03	2.31E-03	.139	1.752E-02	6.251E-05	5.929E-05	304.5	2.44E-03	1.000	.139	.071
506	125.96	.75	0.00	2.81E+04	3.67E-02	3.48E-02	1.325	2.771E-02	9.413E-04	8.926E-04	308.1	3.67E-02	1.000	1.325	.017
507	125.96	.51	0.00	2.91E+04	3.80E-02	3.6[illegible]E-02	1.366	2.776E-02	9.739E-04	9.234E-04	308.3	3.80E-02	1.000	1.366	.044
508	125.96	.23	0.00	2.97E+04	3.89E-02	3.68E-02	1.396	2.782E-02	9.964E-04	9.448E-04	308.0	3.89E-02	1.000	1.396	.061
509	125.96	.15	0.00	2.76E+04	3.61E-02	3.42E-02	1.295	2.785E-02	9.247E-04	8.768E-04	307.8	3.61E-02	1.000	1.295	.799
510	125.96	.04	.04	2.59E+04	3.38E-02	3.20E-02	1.213	2.787E-02	8.668E-04	8.220E-04	307.5	3.38E-02	1.000	1.213	.748
511	125.96	0.00	.15	2.47E+04	3.23E-02	3.06E-02	1.159	2.788E-02	8.289E-04	7.869E-04	307.7	3.23E-02	1.000	1.159	.715
512	125.96	0.00	.25	2.05E+04	2.68E-02	2.54E-02	.960	2.788E-02	6.864E-04	6.509E-04	307.1	2.68E-02	1.000	.960	.592
513	125.96	0.00	.38	1.[illegible]1E+04	2.13E-02	1.99E-02	.754	2.788E-02	5.388E-04	5.110E-04	306.7	2.13E-02	1.000	.754	.465
514	125.96	0.00	.64	7.84E+03	1.02E-02	9.69E-03	.366	2.788E-02	2.620E-04	2.485E-04	305.8	1.02E-02	1.000	.366	.226
515	125.96	0.00	.89	2.7[illegible]E+03	3.59E-03	3.40E-03	.129	2.788E-02	9.200E-05	8.725E-05	304.8	3.59E-03	1.000	.129	.079

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 9.845E-01
X= 4.124E+01 HL /HREFF= 1.039E+00
X= 4.377E+01 HL /HREFF= 1.029E+00
X= 4.631E+01 HL /HREFF= 1.018E+00
X= 4.885E+01 HL /HREFF= 1.0[illegible]5E+00

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	1.924E+00
X=	6.156E+01	HL	/HREFF=	1.107E+00
X=	6.664E+01	HL	/HREFF=	1.121E+00
X=	7.172E+01	HL	/HREFF=	1.132E+00
X=	7.680E+01	HL	/HREFF=	1.195E+00
X=	8.188E+01	HL	/HREFF=	1.363E+00
X=	8.696E+01	HL	/HREFF=	1.417E+00
X=	9.204E+01	HL	/HREFF=	1.676E+00
X=	9.712E+01	HL	/HREFF=	1.471E+00
X=	1.022E+02	HL	/HREFF=	1.838E+00
X=	1.073E+02	HL	/HREFF=	1.938E+00
X=	1.124E+02	HL	/HREFF=	1.971E+00
X=	1.175E+02	HL	/HREFF=	1.913E+00
X=	1.226E+02	HL	/HREFF=	1.720E+00
X=	1.251E+02	HL	/HREFF=	1.627E+00
X=	1.278E+02	HL	/HREFF=	1.537E+00
X=	1.302E+02	HL	/HREFF=	1.414E+00
X=	1.352E+02	HL	/HREFF=	1.249E+00
X=	4.759E+01	HL	/HREFF=	8.976E-01
X=	6.156E+01	HL	/HREFF=	7.666E-01
X=	8.698E+01	HL	/HREFF=	6.313E-01
X=	1.124E+02	HL	/HREFF=	1.529E+00
X=	1.251E+02	HL	/HREFF=	1.368E+00

B.L. TRANSITION DISTANCE = 38.78 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.37 CM

AMES 3.5 FT HWT TEST (1F2), C.P. BLUMER, IN-LINE RSI GAP RUN(45) 1973

TT	= 1.1235E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 2.0924E+06(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.1884E+06(J/KG)	GAP DEPTH	= 1.016(CM)
RE/METER	= 6.5779E+06	ORIENTATION	= 0.000(DEG)
MACH	= 5.130	QS	= 1.7229E+05(W/M2)
RHO VEL	= 9.4369E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 1.908 FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. ORDER CONC..)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	6.20E+04	7.27E-02	6.88E-02	.826	8.793E-02	8.611E-04	8.156E-04	312.6				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	6.22E+04	7.22E-02	6.84E-02	.868	8.325E-02	8.551E-04	8.108E-04	313.2				1.000
4	127.63	-.51	0.00	6.41E+04	7.49E-02	7.19E-02	.925	8.091E-02	8.870E-04	8.481E-04	313.2				1.000
5	125.09	-.51	0.00	6.40E+04	7.47E-02	7.08E-02	.951	7.858E-02	8.836E-04	8.388E-04	313.4				1.000
6	122.56	-.51	0.00	6.49E+04	7.59E-02	7.19E-02	.996	7.624E-02	8.998E-04	8.522E-04	313.1				1.000
7	117.47	-.51	0.00	6.71E+04	7.99E-02	7.48E-02	1.125	7.124E-02	9.364E-04	8.869E-04	313.2				1.000
8	112.37	-.51	0.00	5.83E+04	8.06E-02	7.64E-02	1.315	6.133E-02	9.553E-04	9.048E-04	313.3				1.000
9	107.31	-.51	0.00	6.00E+04	8.30E-02	7.86E-02	1.645	5.045E-02	9.832E-04	9.312E-04	313.2				1.000
10	102.20	-.51	0.00	6.10E+04	8.55E-02	8.10E-02	2.098	4.075E-02	1.013E-03	9.596E-04	313.1				1.000
11	97.12	-.51	0.00	6.14E+04	8.49E-02	8.04E-02	2.577	3.294E-02	1.006E-03	9.538E-04	313.0				1.000
12	92.04	-.51	.03	6.31E+04	8.73E-02	8.27E-02	3.300	2.647E-02	1.035E-03	9.802E-04	313.1				
13	86.96	-.51	0.00	5.99E+04	8.29E-02	7.85E-02	3.904	2.126E-02	9.820E-04	9.300E-04	313.5				
14	81.88	-.51	0.00	5.88E+04	8.12E-02	7.69E-02	4.553	1.782E-02	9.618E-04	9.109E-04	313.6				
15	76.80	-.51	0.00	4.83E+04	6.69E-02	6.34E-02	4.343	1.540E-02	7.925E-04	7.509E-04	313.4				
16	71.72	-.51	0.00	3.87E+04	5.36E-02	5.07E-02	3.858	1.389E-02	6.348E-04	6.013E-04	313.5				
17	66.64	-.51	0.00	2.82E+04	3.90E-02	3.70E-02	2.858	1.366E-02	4.627E-04	4.382E-04	313.6				1.000
18	61.56	-.51	0.00	1.94E+04	2.69E-02	2.55E-02	1.908	1.410E-02	3.188E-04	3.020E-04	313.9				1.000
19	56.48	-.51	0.00	1.42E+04	1.97E-02	1.86E-02	1.318	1.491E-02	2.329E-04	2.206E-04	314.1				1.096
20	51.39	-.51	0.00	1.38E+04	1.91E-02	1.81E-02	1.205	1.586E-02	2.267E-04	2.147E-04	314.2				1.000
21	48.86	-.51	0.00	1.26E+04	1.75E-02	1.65E-02	1.072	1.629E-02	2.068E-04	1.959E-04	314.7				1.000
22	46.33	-.51	0.00	1.30E+04	1.80E-02	1.70E-02	1.094	1.660E-02	2.133E-04	2.020E-04	314.5				1.000
23	43.77	-.51	0.26	1.35E+04	1.87E-02	1.77E-02	1.103	1.691E-02	2.211E-04	2.094E-04	314.6				1.000
24	41.24	-.51	0.00	1.38E+04	1.91E-02	1.81E-02	1.111	1.722E-02	2.269E-04	2.148E-04	314.8				1.000
25	38.70	-.51	0.00	1.27E+04	1.75E-02	1.66E-02	1.000	1.754E-02	2.077E-04	1.967E-04	313.7				1.000
103	47.59	1.52	0.00	9.37E+03	1.38E-02	1.31E-02	.842	1.644E-02	1.641E-04	1.554E-04	318.7	1.38E-02	1.000	.842	.781
105	47.59	1.02	0.00	9.07E+03	1.34E-02	1.27E-02	.814	1.644E-02	1.585E-04	1.500E-04	320.3	1.34E-02	1.000	.814	.755
107	47.59	.51	0.00	1.06E+04	1.48E-02	1.40E-02	.901	1.644E-02	1.755E-04	1.661E-04	319.3	1.48E-02	1.000	.901	.836
108	47.59	.25	0.00	1.22E+04	1.70E-02	1.61E-02	1.033	1.644E-02	2.013E-04	1.906E-04	317.6	1.70E-02	1.000	1.033	.959
110	47.59	.04	.04	1.27E+04	1.77E-02	1.57E-02	1.076	1.644E-02	2.096E-04	1.984E-04	315.5	1.77E-02	1.000	1.076	.999
111	47.59	0.00	.15	1.18E+04	1.64E-02	1.55E-02	.996	1.644E-02	1.939E-04	1.837E-04	314.5	1.64E-02	1.000	.996	.924
112	47.59	0.00	.25	1.08E+04	1.49E-02	1.41E-02	.905	1.644E-02	1.764E-04	1.671E-04	312.5	1.49E-02	1.000	.905	.840
113	47.59	0.00	.38	1.06E+04	1.46E-02	1.38E-02	.888	1.644E-02	1.737E-04	1.639E-04	311.3	1.46E-02	1.000	.888	.824
114	47.59	0.00	.64	6.00E+03	8.33E-03	7.89E-03	.507	1.644E-02	9.873E-05	9.354E-05	308.7	8.33E-03	1.000	.507	.470
115	47.59	0.00	.89	1.81E+03	2.48E-03	2.35E-03	.151	1.644E-02	2.942E-05	2.788E-05	306.4	2.48E-03	1.000	.151	.140
203	61.56	1.52	0.00	8.09E+03	1.12E-02	1.06E-02	.808	1.401E-02	1.329E-04	1.258E-04	314.8	1.12E-02	1.000	.808	.410
205	61.56	1.02	0.00	8.44E+03	1.17E-02	1.11E-02	.835	1.403E-02	1.389E-04	1.314E-04	315.8	1.17E-02	1.000	.835	.430
207	61.56	.51	0.00	1.29E+04	1.79E-02	1.69E-02	1.272	1.405E-02	2.117E-04	2.005E-04	315.1	1.79E-02	1.000	1.272	.660
208	61.56	.25	0.00	1.52E+04	2.11E-02	1.99E-02	1.497	1.406E-02	2.494E-04	2.362E-04	314.0	2.11E-02	1.000	1.497	.785
210	61.56	.04	.04	1.58E+04	2.19E-02	2.07E-02	1.554	1.407E-02	2.531E-04	2.455E-04	312.2	2.19E-02	1.000	1.554	.815

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP RUN(45) 1973 PAGE 98

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	1.6?E+04	2.27E-02	2.15E-02	1.614	1.407E-02	2.691E-04	2.558E-04	308.6	2.27E-02	1.000	1.614	.846
212	61.56	0.00	.25	1.39E+04	1.91E-02	1.91E-02	1.360	1.407E-02	2.267E-04	2.148E-04	307.8	1.91E-02	1.000	1.360	.712
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89	2.98E+02	4.07E-04	3.85E-04	.029	1.407E-02	4.917E-06	4.566E-06	303.1	4.07E-04	1.000	.029	.015
306	86.96	.75	0.00												
307	86.96	.51	0.00	4.94E+04	6.82E-02	6.46E-02	3.175	2.149E-02	8.088E-04	7.668E-04	312.4	6.82E-02	1.000	3.175	
308	86.96	.25	0.00	4.83E+04	6.66E-02	6.31E-02	3.098	2.156E-02	7.897E-04	7.480E-04	311.4	6.66E-02	1.000	3.098	
309	86.96	.15	0.00	5.9?E+04	8.14E-02	7.71E-02	3.771	2.159E-02	9.648E-04	9.143E-04	310.8	8.14E-02	1.000	3.771	
310	86.96	.04	.04	4.16E+04	5.73E-02	5.42E-02	2.648	2.162E-02	6.784E-04	6.427E-04	309.9	5.73E-02	1.000	2.648	.696
311	86.96	0.00	.15	3.64E+04	5.00E-02	4.74E-02	2.313	2.163E-02	5.930E-04	5.619E-04	309.0	5.00E-02	1.000	2.313	.608
312	86.96	0.00	.25	2.67E+04	3.67E-02	3.47E-02	1.694	2.163E-02	4.343E-04	4.115E-04	307.2	3.67E-02	1.000	1.694	.445
313	86.96	0.00	.38	2.39E+04	3.27E-02	3.10E-02	1.514	2.163E-02	3.880E-04	3.677E-04	306.0	3.27E-02	1.000	1.514	.398
314	86.96	0.00	.64	1.3?E+04	1.78E-02	1.68E-02	.821	2.163E-02	2.104E-04	1.994E-04	305.5	1.78E-02	1.000	.821	.216
315	86.96	0.00	.89	5.1?E+03	6.97E-03	6.50E-03	.322	2.163E-02	8.257E-05	7.826E-05	304.1	6.97E-03	1.000	.322	.085
406	112.36	.75	0.00	4.97E+04	6.87E-02	6.50E-02	1.118	6.142E-02	8.137E-04	7.707E-04	312.1	6.87E-02	1.000	1.118	.850
407	112.36	.51	0.00	4.97E+04	6.85E-02	6.49E-02	1.116	6.140E-02	8.122E-04	7.693E-04	311.5	6.85E-02	1.000	1.116	.848
408	112.36	.25	0.00	4.67E+04	6.43E-02	6.09E-02	1.048	6.138E-02	7.623E-04	7.222E-04	310.7	6.43E-02	1.000	1.048	.797
409	112.36	.15	0.00	4.34E+04	5.98E-02	5.67E-02	.975	6.136E-02	7.091E-04	6.718E-04	310.1	5.98E-02	1.000	.975	.741
410	112.36	.04	.04	3.89E+04	5.36E-02	5.08E-02	.874	6.135E-02	6.352E-04	6.017E-04	309.8	5.36E-02	1.000	.874	.664
411	112.36	0.00	.15	3.57E+04	4.91E-02	4.65E-02	.801	6.135E-02	5.820E-04	5.514E-04	309.1	4.91E-02	1.000	.801	.608
412	112.36	0.00	.25	2.63E+04	3.61E-02	3.42E-02	.589	6.135E-02	4.282E-04	4.058E-04	307.9	3.61E-02	1.000	.589	.448
413	112.36	0.00	.38	1.82E+04	2.50E-02	2.36E-02	.407	6.135E-02	2.957E-04	2.802E-04	306.9	2.50E-02	1.000	.407	.309
414	112.36	0.00	.64	6.34E+03	8.67E-03	8.22E-03	.141	6.135E-02	1.028E-04	9.740E-05	304.8	8.67E-03	1.000	.141	.107
415	112.36	0.00	.89	5.45E+03	7.44E-03	7.05E-03	.121	6.135E-02	8.815E-05	8.355E-05	303.9	7.44E-03	1.000	.121	.092
506	125.06	.76	0.00	4.67E+04	6.45E-02	6.11E-02	.818	7.880E-02	7.643E-04	7.240E-04	311.3	6.45E-02	1.000	.818	.859
507	125.06	.51	0.00	4.6?E+04	6.35E-02	6.02E-02	.806	7.881E-02	7.526E-04	7.129E-04	311.5	6.35E-02	1.000	.806	.847
508	125.06	.25	0.00	4.49E+04	6.19E-02	5.86E-02	.786	7.875E-02	7.336E-04	6.949E-04	310.7	6.19E-02	1.000	.786	.826
509	125.06	.15	0.00	4.07E+04	5.61E-02	5.32E-02	.713	7.872E-02	6.653E-04	6.300E-04	310.5	5.61E-02	1.000	.713	.749
510	125.06	.04	.04	3.76E+04	5.18E-02	4.91E-02	.659	7.869E-02	6.143E-04	5.820E-04	310.0	5.18E-02	1.000	.659	.692
511	125.06	0.00	.15	3.54E+04	4.88E-02	4.62E-02	.620	7.866E-02	5.783E-04	5.476E-04	310.1	4.88E-02	1.000	.620	.651
512	125.06	0.00	.25	2.91E+04	4.00E-02	3.79E-02	.509	7.866E-02	4.742E-04	4.493E-04	309.2	4.00E-02	1.000	.509	.534
513	125.06	0.00	.38	2.23E+04	3.07E-02	2.91E-02	.390	7.868E-02	3.637E-04	3.446E-04	308.2	3.07E-02	1.000	.390	.410
514	125.06	0.00	.64	1.08E+04	1.48E-02	1.41E-02	.189	7.868E-02	1.759E-04	1.667E-04	306.5	1.48E-02	1.000	.189	.198
515	125.06	0.00	.89	3.11E+03	4.25E-03	4.03E-03	.054	7.868E-02	5.039E-05	4.776E-05	305.1	4.25E-03	1.000	.054	.057

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 9.396E-01
X= 4.124E+01 HL /HREFF= 1.111E+00
X= 4.377E+01 HL /HREFF= 1.1?3E+00
X= 4.631E+01 HL /HREFF= 1.084E+00
X= 4.896E+01 HL /HREFF= 1.?72E+00
X= [illegible] HL /HREFF= [illegible]

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.646E+01	HL	/HREFF=	1.318E+00
X=	6.158E+01	HL	/HREFF=	1.938E+00
X=	6.664E+01	HL	/HREFF=	2.858E+00
X=	7.172E+01	HL	/HREFF=	3.858E+00
X=	7.685E+01	HL	/HREFF=	4.343E+00
X=	8.188E+01	HL	/HREFF=	4.533E+00
X=	8.696E+01	HL	/HREFF=	3.874E+00
X=	9.204E+01	HL	/HREFF=	3.33[illegible]E+00
X=	9.712E+01	HL	/HREFF=	2.577E+00
X=	1.022E+02	HL	/HREFF=	2.038E+00
X=	1.073E+02	HL	/HREFF=	1.645E+00
X=	1.124E+02	HL	/HREFF=	1.315E+00
X=	1.175E+02	HL	/HREFF=	1.125E+00
X=	1.226E+02	HL	/HREFF=	9.979E-01
X=	1.251E+02	HL	/HREFF=	9.511E-01
X=	1.276E+02	HL	/HREFF=	9.251E-01
X=	1.302E+02	HL	/HREFF=	8.679E-01
X=	1.352E+02	HL	/HREFF=	8.254E-01
X=	4.759E+01	HL	/HREFF=	9.[illegible]E-01
X=	6.158E+01	HL	/HREFF=	1.272E+00
X=	8.696E+01	HL	/HREFF=	3.175E+00
X=	1.124E+02	HL	/HREFF=	1.115E+00
X=	1.251E+02	HL	/HREFF=	8.958E-01

B.L. TRANSITION DISTANCE = 30.75 CM
FULLY TURBULENT B.L. CONDITIONS AT = 81.88 CM

AMES 3.5 FT HWT TEST (102), C.B. BLUMER, IN-LINE RSI GAP RUN(46) 1973 PAGE 91

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TT        = 1.0342E+03(K)            GAP LENGTH =191.600(CM)
PT        = 5.1748E+05(N/M2)         GAP WIDTH  =    .254(CM)
HT        = 1.1429E+06(J/KG)         GAP DEPTH  =   2.032(CM)
RE/METER  = 1.7273E+06               ORIENTATION=   0.000(DEG)
MACH      = 5.100                    QS         = 8.1512E+04(W/M2)
RHC VEL   = 2.1431E+01(KG/M2-S)      400.POSITION=  1
HAW/HT    = 1.9?9 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL,2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	1.52E+04	2.22E-02	2.10E-02	2.967	7.514E-03	1.037E-03	9.813E-04	309.9	2.26E-02	.983	3.008	.983
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	1.41E+04	2.06E-02	1.95E-02	2.829	7.282E-03	9.613E-04	9.098E-04	310.2	2.11E-02	.977	2.894	1.000
4	127.63	-.51	0.00	1.39E+04	2.02E-02	1.92E-02	2.825	7.166E-03	9.446E-04	8.940E-04	310.2	2.06E-02	.982	2.877	1.000
5	125.09	-.51	0.00	1.33E+04	1.94E-02	1.84E-02	2.751	7.050E-03	9.051E-04	8.567E-04	310.3	1.97E-02	.984	2.795	1.000
6	122.56	-.51	0.00	1.29E+04	1.88E-02	1.78E-02	2.707	6.934E-03	8.759E-04	8.298E-04	310.2	1.91E-02	.983	2.755	1.000
7	117.47	-.51	0.00	1.20E+04	1.75E-02	1.65E-02	2.579	6.773E-03	8.151E-04	7.715E-04	310.2	1.78E-02	.980	2.632	1.000
8	112.37	-.51	0.00	1.10E+04	1.63E-02	1.51E-02	2.395	6.671E-03	7.454E-04	7.055E-04	310.4	1.64E-02	.977	2.451	1.000
9	107.31	-.51	0.00	1.01E+04	1.47E-02	1.39E-02	2.222	6.611E-03	6.854E-04	6.487E-04	310.3	1.51E-02	.976	2.277	1.000
10	102.20	-.51	0.00	9.22E+03	1.34E-02	1.27E-02	1.980	6.790E-03	6.272E-04	5.936E-04	310.3	1.38E-02	.976	2.028	1.000
11	97.12	-.51	0.00	8.38E+03	1.22E-02	1.16E-02	1.751	6.978E-03	5.703E-04	5.397E-04	310.3	1.26E-02	.970	1.805	1.000
12	92.04	-.51	0.00	8.28E+03	1.21E-02	1.14E-02	1.695	7.121E-03	5.631E-04	5.330E-04	310.3	1.24E-02	.971	1.745	1.000
13	86.96	-.51	0.00	7.19E+03	1.05E-02	9.92E-03	1.445	7.255E-03	4.893E-04	4.631E-04	310.5	1.09E-02	.960	1.506	1.000
14	81.88	-.51	0.00	6.61E+03	9.64E-03	9.13E-03	1.312	7.349E-03	4.500E-04	4.259E-04	310.6	1.02E-02	.943	1.391	1.000
15	76.80	-.51	0.00	5.62E+03	8.20E-03	7.76E-03	1.101	7.448E-03	3.827E-04	3.622E-04	310.5	8.61E-03	.952	1.157	1.000
16	71.72	-.51	0.00	5.23E+03	7.63E-03	7.22E-03	1.011	7.549E-03	3.560E-04	3.369E-04	310.6	7.61E-03	1.003	1.008	1.000
17	66.64	-.51	0.00	5.45E+03	7.88E-03	7.46E-03	.987	7.986E-03	3.678E-04	3.481E-04	310.7	7.88E-03	1.001	.986	1.000
18	61.56	-.51	0.00	5.51E+03	8.02E-03	7.59E-03	.933	8.597E-03	3.745E-04	3.544E-04	310.9	8.03E-03	1.000	.934	1.000
19	56.48	-.51	0.00	5.40E+03	7.88E-03	7.46E-03	.866	9.105E-03	3.679E-04	3.482E-04	311.1	7.81E-03	1.009	.858	1.000
20	51.39	-.51	0.00	5.62E+03	8.21E-03	7.77E-03	.858	9.569E-03	3.839E-04	3.624E-04	311.1	8.17E-03	1.005	.853	1.000
21	48.86	-.51	0.00	5.86E+03	8.59E-03	8.12E-03	.874	9.822E-03	4.004E-04	3.790E-04	311.3	8.49E-03	1.011	.864	1.000
22	46.31	-.51	0.00	6.02E+03	8.79E-03	8.32E-03	.870	1.019E-02	4.102E-04	3.880E-04	311.2	8.72E-03	1.008	.863	1.000
23	43.77	-.51	0.00	6.17E+03	9.00E-03	8.52E-03	.867	1.038E-02	4.202E-04	3.976E-04	311.1	8.95E-03	1.006	.862	1.000
24	41.24	-.51	0.00	6.35E+03	9.32E-03	8.82E-03	.874	1.066E-02	4.347E-04	4.114E-04	311.2	9.26E-03	1.006	.869	1.000
25	38.70	-.51	0.00	6.36E+03	9.28E-03	8.78E-03	.848	1.094E-02	4.330E-04	4.098E-04	310.6	8.92E-03	1.040	.815	1.000
26	135.24	0.00	.25	7.59E+03	1.11E-02	1.05E-02	1.471	7.515E-03	5.160E-04	4.884E-04	309.7	1.14E-02	.966	1.523	.506
27	132.70	0.00	.25	[illegible]	1.15E-02	1.11E-02	1.569	7.306E-03	5.485E-04	5.192E-04	310.0				.538
28	130.16	0.00	.25	[illegible]	1.13E-02	1.11E-02	1.615	7.2?1E-03	5.486E-04	5.193E-04	310.0	1.22E-02	.961	1.680	.580
29	127.63	0.00	.25	7.98E+03	1.16E-02	1.10E-02	1.624	7.164E-03	5.439E-04	5.139E-04	310.1	1.20E-02	.969	1.676	.503
30	125.09	0.00	.25	7.75E+03	1.12E-02	1.06E-02	1.586	7.047E-03	5.215E-04	4.936E-04	310.0	1.15E-02	.973	1.630	.583
31	122.56	0.00	.25	7.03E+03	1.02E-02	9.69E-03	1.478	6.931E-03	4.779E-04	4.524E-04	309.9	1.06E-02	.969	1.526	.554
32	117.47	0.00	.25	6.27E+03	9.14E-03	8.65E-03	1.350	6.770E-03	4.255E-04	4.037E-04	309.9	9.50E-03	.962	1.403	.533
33	112.37	0.00	.25	5.99E+03	8.73E-03	8.26E-03	1.328	6.670E-03	4.072E-04	3.854E-04	310.0	9.10E-03	.959	1.365	.557
34	107.31	0.00	.25	5.92E+03	8.62E-03	8.16E-03	1.376	6.686E-03	4.024E-04	3.809E-04	309.9	8.99E-03	.959	1.361	.598
35	102.20	0.00	.25	5.79E+03	8.44E-03	7.99E-03	1.244	6.784E-03	3.938E-04	3.727E-04	309.9	8.77E-03	.963	1.292	.637
36	97.12	0.00	.25	5.97E+03	8.69E-03	8.23E-03	1.246	6.975E-03	4.056E-04	3.839E-04	309.9	9.07E-03	.959	1.300	.724
37	92.04	0.00	.25	6.18E+03	8.85E-03	8.38E-03	1.243	7.118E-03	4.130E-04	3.909E-04	309.8	9.21E-03	.961	1.294	.741
38	86.96	0.00	.25	6.22E+03	9.06E-03	5.57E-03	1.249	7.253E-03	4.227E-04	4.001E-04	310.0	9.50E-03	.954	1.309	.877
39	81.88	0.00	.25	4.95E+03	7.22E-03	6.84E-03	.963	7.349E-03	3.371E-04	3.191E-04	309.9	7.60E-03	.926	1.002	.764
40	76.80	0.00	.25	[illegible]	5.05E-03	4.73E-03	.671	7.449E-03	2.331E-04	2.207E-04	309.9	5.41E-03	.924	.726	.628
41	71.72	0.00	.25	2.87E+03	4.17E-03	3.95E-03	.552	7.550E-03	1.946E-04	1.842E-04	309.7	4.15E-03	1.005	.552	.545
42	66.64	0.00	.25	[illegible]	4.11E-03	3.39E-03	.515	7.980E-03	1.918E-04	1.816E-04	308.9	4.11E-03	1.001	.514	.521

AMES 3.5 FT HWT TEST (1[illegible]2), 0.[illegible] BLUMER, IN-LINE RSI GAP RUN (46) 1973 PAGE 92

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.60	0.00	.25	[illegible]	4.03E-03	3.91E-03	.468	8.596E-03	1.878E-04	1.778E-04	309.0	4.03E-03	1.000	.466	.592
44	56.48	0.00	.25	2.85E+03	3.64E-03	3.45E-03	.435	9.175E-03	1.750E-04	1.639E-04	308.9	3.57E-03	1.021	.392	.457
45	51.39	0.00	.25	2.73E+03	3.97E-03	3.75E-03	.414	9.[illegible]E-03	1.850E-04	1.752E-04	308.9	3.93E-03	1.010	.410	.481
46	[illegible]	0.00	.25	[illegible].09E+03	4.49E-03	4.25E-03	.458	9.821E-03	2.097E-04	1.985E-04	309.3	4.40E-03	1.021	.448	.518
47	46.31	0.00	.25	3.23E+03	4.71E-03	4.45E-03	.466	1.011E-02	2.196E-04	2.079E-04	309.1	4.64E-03	1.014	.459	.532
48	43.77	0.00	.25	3.34E+03	4.36E-03	4.30E-03	.465	1.036E-02	2.273E-04	2.148E-04	309.1	4.81E-03	1.011	.463	.538
49	41.24	0.00	.25	2.76E+03	3.93E-03	3.78E-03	.375	1.066E-02	1.863E-04	1.763E-04	309.6	3.94E-03	1.014	.369	.425
50	38.70	0.00	.25	1.99E+03	2.89E-03	2.74E-03	.265	1.094E-02	1.350E-04	1.278E-04	308.6	2.54E-03	1.139	.232	.285
51	135.24	0.00	.51	2.[illegible]E+03	3.71E-03	3.51E-03	.494	7.51[illegible]E-03	1.731E-04	1.639E-04	308.3	4.09E-03	.906	.545	.181
52	132.70	0.00	.51	2.76E+03	[illegible]	3.80E-03	.542	7.396E-03	1.872E-04	1.772E-04	308.2				.184
53	130.16	0.00	.51	3.[illegible]E+03	5.05E-03	4.78E-03	.694	7.281E-03	2.353E-04	2.232E-04	308.1	5.53E-03	.914	.759	.262
54	127.63	0.00	.51	3.[illegible]E+03	4.96E-03	4.70E-03	.693	7.164E-03	2.316E-04	2.192E-04	308.6	5.33E-03	.931	.744	.259
55	125.09	0.00	.51	3.22E+03	4.69E-03	4.43E-03	.665	7.047E-03	2.186E-04	2.069E-04	309.8	4.99E-03	.938	.708	.253
56	122.56	0.00	.51	3.06E+03	4.46E-03	4.22E-03	.643	6.931E-03	2.079E-04	1.968E-04	308.5	4.79E-03	.931	.691	.251
57	117.47	0.00	.51	2.61E+03	3.79E-03	3.59E-03	.560	6.770E-03	1.769E-04	1.674E-04	308.4	4.15E-03	.914	.613	.233
58	112.37	0.00	.51	2.[illegible]E+03	3.63E-03	3.44E-03	.545	6.67[illegible]E-03	1.636E-04	1.605E-04	309.5	4.01E-03	.906	.601	.245
59	107.31	0.00	.51	2.23E+03	3.24E-03	3.07E-03	.495	6.636E-03	1.512E-04	1.431E-04	308.4	3.61E-03	.898	.546	.248
60	102.24	0.00	.51	2.31E+03	3.36E-03	3.18E-03	.495	6.78[illegible]E-03	1.566E-04	1.482E-04	308.5	3.68E-03	.912	.543	.268
61	97.12	0.00	.51	2.27E+03	3.31E-03	3.13E-03	.474	6.975E-03	1.543E-04	1.460E-04	308.3	3.68E-03	.898	.528	.292
62	92.04	0.00	.51	1.96E+03	2.86E-03	2.70E-03	.401	7.118E-03	1.333E-04	1.261E-04	308.2	3.21E-03	.889	.451	.259
63	86.96	0.00	.51	1.52E+03	2.21E-03	2.09E-03	.305	7.253E-03	1.033E-04	9.776E-05	308.1	2.65E-03	.836	.365	.242
64	81.38	0.00	.51												
65	76.90	0.00	.51	1.31E+03	1.90E-03	1.80E-03	.256	7.449E-03	8.886E-05	8.412E-05	308.1	2.31E-03	.823	.311	.269
66	71.72	0.00	.51	1.16E+03	1.69E-03	1.60E-03	.224	7.55[illegible]E-03	7.886E-05	7.465E-05	308.6	1.67E-03	1.012	.221	.219
67	66.54	0.00	.51	9.89E+02	1.44E-03	1.36E-03	.180	7.988E-03	6.711E-05	6.353E-05	308.3	1.43E-03	1.003	.179	.182
68	61.56	0.00	.51	1.00E+03	1.46E-03	1.38E-03	.170	8.596E-03	6.802E-05	6.438E-05	308.3	1.46E-03	.999	.178	.182
69	56.48	0.00	.51	8.70E+02	1.28E-03	1.21E-03	.140	9.105E-03	5.962E-05	5.642E-05	308.4	1.26E-03	1.061	.132	.154
70	51.39	0.00	.51	7.97E+02	1.16E-03	1.10E-03	.121	9.569E-03	5.4[illegible]9E-05	5.129E-05	308.3	1.12E-03	1.036	.117	.137
71	48.86	0.00	.51	1.07E+03	1.56E-03	1.48E-03	.159	9.821E-03	7.297E-05	6.897E-05	308.9	1.47E-03	1.064	.149	.173
72	46.31	0.00	.51	1.23E+03	1.78E-03	1.59E-03	.176	1.01[illegible]E-02	8.319E-05	7.874E-05	309.6	1.72E-03	1.039	.178	.197
73	43.77	0.00	.51	9.03E+02	1.31E-03	1.24E-03	.127	1.030E-02	5.129E-05	5.802E-05	308.5	1.26E-03	1.042	.121	.141
74	41.24	0.00	.51	7.08E+02	1.07E-03	1.02E-03	.101	1.066E-02	5.004E-05	4.736E-05	308.4	1.02E-03	1.055	.095	.110
75	38.70	0.00	.51												

EDGE HEATING USED FOR HE

X= 3.879E+01 HL /HREFF= 8.155E-01
X= 4.124E+01 HL /HREFF= 8.6[illegible]E-01
X= 4.377E+01 HL /HREFF= 8.621E-01
X= 4.631E+01 HL /HREFF= 8.531E-01
X= 4.896E+01 HL /HREFF= 8.[illegible]41E-01
X= 5.139E+01 HL /HREFF= 8.535E-01
X= 5.645E+01 HL /HREFF= 8.579E-01
X= 6.156E+01 HL /HREFF= 9.[illegible]E-01
X= 6.664E+01 HL /HREFF= 9.[illegible]E-01
X= 7.1[illegible]2E+01 HL /HREFF= 1.[illegible]8E+0[illegible]
X= 7.680E+01 HL /HREFF= 1.157E+0[illegible]
X= 8.189E+01 HL /HREFF= 1.331E+0[illegible]
X= 8.696E+01 HL /HREFF= 1.[illegible]E+00
X= 9.2[illegible]4E+01 HL /HREFF= 1.[illegible]45E+0[illegible]
X= 9.712E+01 HL /HREFF= 1.8[illegible]5E+0[illegible]
X= 1.022E+02 HL /HREFF= 2.[illegible]E+0[illegible]
X= 1.0[illegible]3E+02 HL /HREFF= 2.277E+00
X= 1.124E+02 HL /HREFF= 2.451E+00
X= 1.175E+02 HL /HREFF= 2.[illegible]E+0[illegible]
X= 1.226E+02 HL /HREFF= 2.7[illegible]5E+0[illegible]
X= 1.251E+02 HL /HREFF= 2.[illegible]95E+00
X= 1.276E+02 HL /HREFF= 2.877E+0[illegible]
X= 1.3[illegible]2E+02 HL /HREFF= 2.[illegible]34E+0[illegible]
X= 1.352E+02 HL /HREFF= 3.[illegible]8E+0[illegible]

B.L. TRANSITION DISTANCE = [illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT X=[illegible]376.[illegible] CM

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(47) 1973 PAGE 93

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TT       = 1.1426E+03(K)          GAP LENGTH =101.600(CM)
PT       = 1.0271E+06(N/M2)       GAP WIDTH  =    .254(CM)
HT       = 1.2110E+06(J/KG)       GAP DEPTH  =   2.032(CM)
RE/METER = 3.1381E+06             ORIENTATION=   0.000(DEG)
MACH     = 5.100                  QS         =  1.2361E+05(W/M2)
RHO VEL  = 4.0633E+01(KG/M2-S)    40D.POSITION=  1
HAW/HT   = 0.909 FOR HT
HAW/HT   = 0.874 FOR HL
HLCC     = HL(2ND. ORDER COND.)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	3.35E+04	4.52E-02	4.28E-02	1.072	4.381E-02	1.105E-03	1.047E-03	313.9	4.59E-02	.984	1.048	1.000
2	132.78	-.51	0.00												
3	133.16	-.51	0.00	3.41E+04	4.59E-02	4.35E-02	1.139	3.827E-02	1.122E-03	1.063E-03	314.2	4.66E-02	.984	1.219	1.000
4	127.63	-.51	0.00	3.53E+04	4.77E-02	4.51E-02	1.342	3.550E-02	1.155E-03	1.104E-03	314.3	4.83E-02	.987	1.359	1.000
5	125.09	-.51	0.00	3.54E+04	4.78E-02	4.52E-02	1.459	3.273E-02	1.168E-03	1.106E-03	314.4	4.83E-02	.988	1.476	1.000
6	122.56	-.51	0.00	3.59E+04	4.84E-02	4.59E-02	1.617	2.996E-02	1.185E-03	1.122E-03	314.4	4.90E-02	.988	1.636	1.000
7	117.47	-.51	0.00	3.67E+04	4.95E-02	4.69E-02	2.010	2.464E-02	1.211E-03	1.147E-03	314.5	5.01E-02	.988	2.035	1.000
8	112.37	-.51	0.00	3.51E+04	4.74E-02	4.49E-02	2.357	2.012E-02	1.160E-03	1.099E-03	314.8	4.81E-02	.986	2.391	1.000
9	107.31	-.51	0.00	3.27E+04	4.41E-02	4.18E-02	2.644	1.666E-02	1.078E-03	1.021E-03	314.6	4.48E-02	.985	2.683	1.000
10	102.20	-.51	0.00	2.91E+04	3.93E-02	3.72E-02	2.801	1.403E-02	9.605E-04	9.109E-04	314.9	3.99E-02	.985	2.843	1.000
11	97.12	-.51	0.00	2.46E+04	3.33E-02	3.15E-02	2.783	1.197E-02	8.142E-04	7.714E-04	315.1	3.39E-02	.982	2.835	1.000
12	92.04	-.51	0.00	2.19E+04	2.95E-02	2.80E-02	2.827	1.045E-02	7.220E-04	6.841E-04	315.4	3.01E-02	.980	2.884	1.000
13	86.96	-.51	0.00	1.77E+04	2.39E-02	2.27E-02	2.481	9.638E-03	5.847E-04	5.539E-04	315.9	2.46E-02	.973	2.551	1.000
14	81.88	-.51	0.00	1.58E+04	2.13E-02	2.02E-02	2.332	9.139E-03	5.210E-04	4.936E-04	316.1	2.21E-02	.964	2.420	1.000
15	76.89	-.51	0.00	1.27E+04	1.72E-02	1.63E-02	1.887	9.[illegible]99E-03	4.198E-04	3.977E-04	316.2	1.79E-02	.968	1.965	1.000
16	71.72	-.51	0.00	1.06E+04	1.43E-02	1.36E-02	1.537	9.329E-03	3.515E-04	3.321E-04	316.5	1.44E-02	.996	1.542	1.000
17	66.64	-.51	0.00	9.28E+03	1.26E-02	1.19E-02	1.292	9.721E-03	3.071E-04	2.909E-04	316.9	1.27E-02	.993	1.301	1.000
18	61.56	-.51	0.00	8.65E+03	1.17E-02	1.11E-02	1.150	1.020E-02	2.866E-04	2.715E-04	317.3	1.16E-02	.989	1.162	1.000
19	56.48	-.51	0.00	8.33E+03	1.13E-02	1.07E-02	1.043	1.082E-02	2.761E-04	2.615E-04	317.5	1.13E-02	.996	1.047	1.000
20	51.39	-.51	0.00	8.93E+03	1.21E-02	1.15E-02	1.051	1.152E-02	2.963E-04	2.804E-04	317.7	1.22E-02	.995	1.056	1.000
21	48.86	-.51	0.00	8.76E+03	1.19E-02	1.13E-02	1.001	1.188E-02	2.906E-04	2.752E-04	318.2	1.18E-02	1.004	.997	1.000
22	46.31	-.51	0.00	8.95E+03	1.21E-02	1.15E-02	.991	1.225E-02	2.967E-04	2.810E-04	317.9	1.21E-02	1.005	.986	1.000
23	43.77	-.51	0.00	8.94E+03	1.21E-02	1.15E-02	.952	1.261E-02	2.965E-04	2.809E-04	317.8	1.20E-02	1.007	.955	1.000
24	41.24	-.51	0.00	9.02E+03	1.22E-02	1.16E-02	.942	1.298E-02	2.989E-04	2.831E-04	317.8	1.21E-02	1.009	.934	1.000
25	38.70	-.51	0.00	8.73E+03	1.18E-02	1.12E-02	.896	1.335E-02	2.891E-04	2.739E-04	317.0	1.14E-02	1.036	.855	1.000
26	135.24	0.00	.25	1.94E+04	2.62E-02	2.48E-02	.599	4.372E-02	6.307E-04	6.071E-04	313.1	2.69E-02	.973	.616	.587
27	132.70	0.00	.25	2.06E+04	2.78E-02	2.63E-02	.679	4.095E-02	6.797E-04	6.449E-04	313.6				.599
28	133.16	0.00	.25	2.19E+04	2.95E-02	2.79E-02	.773	3.817E-02	7.209E-04	6.831E-04	313.6	3.02E-02	.975	.792	.650
29	127.63	0.00	.25	2.25E+04	3.03E-02	2.87E-02	.857	3.539E-02	7.414E-04	7.024E-04	313.7	3.09E-02	.980	.874	.643
30	125.09	0.00	.25	2.33E+04	3.14E-02	2.97E-02	.963	3.261E-02	7.676E-04	7.273E-04	313.8	3.20E-02	.982	.980	.664
31	122.56	0.00	.25	2.27E+04	3.06E-02	2.90E-02	1.026	2.984E-02	7.437E-04	7.094E-04	313.6	3.12E-02	.981	1.046	.639
32	117.47	0.00	.25	2.23E+04	3.00E-02	2.85E-02	1.225	2.451E-02	7.342E-04	6.957E-04	313.6	3.06E-02	.980	1.250	.614
33	112.37	0.00	.25	2.31E+04	3.10E-02	2.94E-02	1.545	2.[illegible]3E-02	7.577E-04	7.179E-04	313.9	3.17E-02	.979	1.581	.661
34	107.31	0.00	.25	2.42E+04	3.26E-02	3.09E-02	1.96[illegible]	1.661E-02	7.995E-04	7.569E-04	314.0	3.33E-02	.980	2.005	.747
35	102.20	0.00	.25	2.35E+04	3.16E-02	3.00E-02	2.264	1.398E-02	7.736E-04	7.330E-04	314.0	3.22E-02	.982	2.306	.81[illegible]
36	97.12	0.00	.25	2.23E+04	3.00E-02	2.84E-02	2.517	1.193E-02	7.341E-04	6.955E-04	314.1	3.06E-02	.980	2.578	.98[illegible]
37	92.04	0.00	.25	1.96E+04	2.51E-02	2.38E-02	2.409	1.042E-02	6.135E-04	5.813E-04	314.2	2.57E-02	.977	2.466	.855
38	86.96	0.00	.25	1.60E+04	2.16E-02	2.05E-02	2.250	9.616E-03	5.239E-04	5.011E-04	314.7	2.23E-02	.978	2.319	.90[illegible]
39	81.89	0.00	.25	1.29E+04	1.74E-02	1.65E-02	1.[illegible]04	9.121E-03	4.245E-04	4.022E-04	314.7	1.82E-02	.956	1.992	.824
40	76.80	0.00	.25	1.20E+04	1.33E-02	1.31E-02	1.518	8.667E-03	3.372E-04	3.194E-04	314.8	1.45E-02	.951	1.596	.812
41	71.72	0.00	.25	8.58E+03	1.15E-02	1.09E-02	1.236	9.324E-03	2.917E-04	2.669E-04	315.1	1.16E-02	.996	1.241	.885
42	66.64	0.00	.25	[illegible]	8.54E-03	8.10E-03	.879	9.717E-03	2.[illegible]33E-04	1.979E-04	313.7	8.63E-03	.990	.888	.683

AMES 3.5 FT HWT TEST (172), 0.3. BLUMER, IN-LINE RSI GAP RUN(47) 1973 PAGE 94

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.56	0.00	.25	4.78E+03	5.44E-03	6.17E-03	.632	1.015E-02	1.575E-04	1.493E-04	314.0	6.57E-03	.981	.644	.555
44	56.48	0.00	.25	5.01E+03	6.76E-03	6.40E-03	.625	1.082E-02	1.603E-04	1.566E-04	314.0	6.80E-03	.994	.629	.680
45	51.39	0.00	.25	7.95E+03	9.30E-03	8.51E-03	.807	1.151E-02	2.273E-04	2.153E-04	314.3	9.36E-03	.993	.813	.769
46	48.85	0.00	.25	[illegible]	1.04E-02	9.93E-03	.874	1.187E-02	2.536E-04	2.403E-04	314.7	1.03E-02	1.005	.870	.873
47	46.31	0.00	.25	6.24E+03	8.42E-03	7.98E-03	.688	1.224E-02	2.063E-04	1.952E-04	314.4	8.36E-03	1.008	.683	.693
48	43.77	0.00	.25	[illegible]	6.80E-03	6.44E-03	.539	1.261E-02	1.663E-04	1.575E-04	314.3	6.72E-03	1.012	.533	.558
49	41.24	0.00	.25	2.56E+03	3.59E-03	3.40E-03	.276	1.298E-02	8.762E-05	8.301E-05	314.2	3.48E-03	1.039	.268	.207
50	38.70	0.00	.25	7.84E+02	1.06E-03	1.00E-03	.079	1.335E-02	2.586E-05	2.450E-05	313.5	6.48E-04	1.632	.049	.057
51	135.24	0.00	.51	8.75E+03	1.17E-02	1.11E-02	.268	4.372E-02	2.869E-04	2.719E-04	310.1	1.2 E-02	.943	.285	.272
52	132.70	0.00	.51	8.76E+03	1.17E-02	1.11E-02	.267	4.095E-02	2.872E-04	2.722E-04	309.9				.253
53	130.16	0.00	.51	1.36E+04	1.85E-02	1.75E-02	.484	3.817E-02	4.517E-04	4.281E-04	310.4	1.92E-02	.961	.504	.413
54	127.63	0.00	.51	1.37E+04	1.85E-02	1.75E-02	.522	3.539E-02	4.516E-04	4.280E-04	311.1	1.91E-02	.968	.539	.397
55	125.09	0.00	.51	1.37E+04	1.84E-02	1.74E-02	.564	3.261E-02	4.498E-04	4.263E-04	311.2	1.90E-02	.970	.582	.394
56	122.56	0.00	.51	1.36E+04	1.82E-02	1.73E-02	.610	2.984E-02	4.453E-04	4.220E-04	311.0	1.88E-02	.969	.630	.385
57	117.47	0.00	.51	1.32E+04	1.77E-02	1.68E-02	.722	2.451E-02	4.327E-04	4.101E-04	310.8	1.83E-02	.967	.747	.367
58	112.37	0.00	.51	1.36E+04	1.83E-02	1.74E-02	.915	2.003E-02	4.480E-04	4.245E-04	311.0	1.90E-02	.965	.948	.397
59	107.31	0.00	.51	1.43E+04	1.92E-02	1.82E-02	1.157	1.661E-02	4.639E-04	4.453E-04	311.1	1.99E-02	.967	1.196	.446
60	102.24	0.00	.51	1.43E+04	1.93E-02	1.82E-02	1.378	1.396E-02	4.739E-04	4.461E-04	311.3	1.98E-02	.971	1.419	.499
61	97.12	0.00	.51	1.31E+04	1.76E-02	1.67E-02	1.476	1.193E-02	4.355E-04	4.080E-04	311.3	1.82E-02	.966	1.528	.539
62	92.04	0.00	.51	9.77E+03	1.31E-02	1.24E-02	1.258	1.042E-02	3.204E-04	3.037E-04	311.4	1.37E-02	.957	1.315	.486
63	86.96	0.00	.51	7.61E+03	9.13E-03	8.57E-03	.951	9.610E-03	2.237E-04	2.119E-04	311.6	9.81E-03	.932	1.021	.480
64	81.88	0.00	.51	3.67E+03	4.67E-03	4.42E-03	.512	9.121E-03	1.141E-04	1.081E-04	311.0	5.46E-03	.854	.599	.247
65	76.80	0.00	.51	6.26E+03	8.41E-03	7.97E-03	.926	9.087E-03	2.057E-04	1.949E-04	311.5	9.12E-03	.923	1.003	.511
66	71.72	0.00	.51	4.70E+03	6.32E-03	5.98E-03	.677	9.324E-03	1.544E-04	1.463E-04	311.6	6.37E-03	.992	.683	.443
67	66.64	0.00	.51	3.37E+03	4.54E-03	4.30E-03	.467	9.717E-03	1.113E-04	1.051E-04	312.2	4.63E-03	.981	.476	.366
68	61.56	0.00	.51	2.58E+03	3.48E-03	3.30E-03	.341	1.019E-02	8.532E-05	8.057E-05	312.3	3.60E-03	.965	.353	.384
69	56.48	0.00	.51	2.87E+03	3.86E-03	3.66E-03	.357	1.082E-02	9.442E-05	8.947E-05	312.6	3.90E-03	.989	.361	.344
70	51.39	0.00	.51	4.76E+03	5.47E-03	5.19E-03	.475	1.151E-02	1.338E-04	1.268E-04	312.8	5.54E-03	.989	.481	.455
71	48.96	0.00	.51	4.50E+03	6.06E-03	5.75E-03	.511	1.187E-02	1.483E-04	1.485E-04	313.7	6.02E-03	1.008	.507	.509
72	46.31	0.00	.51	3.56E+03	4.80E-03	4.55E-03	.392	1.224E-02	1.173E-04	1.111E-04	313.4	4.73E-03	1.014	.387	.392
73	43.77	0.00	.51	2.15E+03	2.89E-03	2.74E-03	.229	1.261E-02	7.070E-05	6.699E-05	313.4	2.01E-03	1.038	.223	.233
74	41.24	0.00	.51	1.11E+03	1.50E-03	1.42E-03	.116	1.298E-02	3.671E-05	3.478E-05	313.3	1.40E-03	1.075	.108	.115
75	38.70	0.00	.51												

EDGE HEATING USED FOR HE

X=	3.873E+01	HL	/HREFF=	6.5[illegible]E-01
X=	4.124E+01	HL	/HREFF	9.337E-01
X=	4.377E+01	HL	/HREFF=	9.548E-01
X=	4.631E+01	HL	/HREFF=	9.856E-01
X=	4.885E+01	HL	/HREFF=	9.967E-01
X=	5.139E+01	HL	/HREFF=	1.036E+00
X=	5.648E+01	HL	/HREFF=	1.047E+00
X=	6.156E+01	HL	/HREFF=	1.152E+00
X=	6.664E+01	HL	/HREFF=	1.301E+00
X=	7.172E+01	HL	/HREFF=	1.542E+00
X=	7.680E+01	HL	/HREFF=	1.955E+00
X=	8.188E+01	HL	/HREFF=	2.420E+00
X=	8.696E+01	HL	/HREFF=	2.531E+00
X=	9.204E+01	HL	/HREFF=	2.854E+00
X=	9.712E+01	HL	/HREFF=	2.835E+00
X=	1.022E+02	HL	/HREFF=	2.643E+00
X=	1.073E+02	HL	/HREFF=	2.[illegible]3E+00
X=	1.124E+02	HL	/HREFF=	2.391E+00
X=	1.175E+02	HL	/HREFF=	2.037E+00
X=	1.225E+02	HL	/HREFF=	1.836E+00
X=	1.251E+02	HL	/HREFF=	1.476E+00
X=	1.276E+02	HL	/HREFF=	1.[illegible]3E+00
X=	1.322E+02	HL	/HREFF=	1.219E+00
X=	1.352E+02	HL	/HREFF=	1.[illegible]8E+00

B.L. TRANSITION DISTANCE = 78.7[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.00 CM

AMES 3.5 FT HWT TEST (182), D.C. BLUMER, IN-LINE RSI GAP RUN(48) 1973 PAGE 95

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TT        = 1.1224E+03(K)              GAP LENGTH =101.600(CM)
PT        = 2.1013E+03(N/M2)           GAP WIDTH  =    .254(CM)
HT        = 1.1977E+06(J/KG)           GAP DEPTH  =   2.032(CM)
RE/METER  = 6.6170E+06                 ORIENTATION=   0.000(DEG)
MACH      = 5.100                      QS         =  1.7120E+05(W/M2)
RHO VEL   = 9.4919E+01(KG/M2-S)        MOD.POSITION=  1
HAW/HT    = 0.900 FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2ND. ORDER COND.)
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T/C	X (CM)	YY (CM)	Z (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	[illegible]	6.54E-02	6.19E-02	[illegible]	6.640E-02	7.709E-04	7.299E-04	318.2	6.65E-02	.983	.752	1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	[illegible]	6.80E-02	6.44E-02	.812	8.374E-02	8.316E-04	7.589E-04	319.3	6.93E-02	.981	.827	1.000
4	127.63	-.51	0.00	5.10E+04	7.13E-02	6.75E-02	.875	8.142E-02	8.472E-04	7.954E-04	319.3	7.23E-02	.985	.888	1.000
5	125.09	-.51	0.00	5.17E+04	7.18E-02	6.79E-02	.907	7.909E-02	8.461E-04	8.010E-04	319.5	7.27E-02	.986	.920	1.000
6	122.56	-.51	0.00	5.27E+04	7.37E-02	6.98E-02	.950	7.776E-02	8.591E-04	8.228E-04	319.2	7.47E-02	.987	.973	1.000
7	117.47	-.51	0.00	5.57E+04	7.73E-02	7.32E-02	1.093	7.076E-02	9.120E-04	8.634E-04	319.4	7.84E-02	.987	1.108	1.000
8	112.37	-.51	0.00	5.68E+04	7.94E-02	7.51E-02	1.285	6.180E-02	9.360E-04	8.860E-04	319.7	8.06E-02	.985	1.304	1.000
9	107.31	-.51	0.00	5.97E+04	8.29E-02	7.81E-02	1.624	5.104E-02	9.733E-04	9.214E-04	319.6	8.37E-02	.986	1.647	1.000
10	102.23	-.51	0.00	6.17E+04	8.58E-02	8.12E-02	2.090	4.105E-02	1.011E-03	9.575E-04	319.6	8.69E-02	.988	2.116	1.000
11	97.12	-.51	0.00	6.07E+04	8.49E-02	8.04E-02	2.559	3.319E-02	1.001E-03	9.480E-04	319.6	8.66E-02	.987	2.592	1.000
12	92.14	-.51	0.00	[illegible]	8.50E-02	8.05E-02	3.190	2.665E-02	1.002E-03	9.489E-04	319.9	8.61E-02	.987	3.230	
13	86.96	-.51	0.00	[illegible]	7.65E-02	7.24E-02	3.488	2.192E-02	9.015E-04	8.535E-04	320.4				
14	81.88	-.51	0.00	4.98E+04	6.97E-02	6.60E-02	3.887	1.793E-02	8.216E-04	7.777E-04	320.7				
15	76.80	-.51	0.00	3.57E+04	4.99E-02	4.73E-02	3.227	1.546E-02	5.890E-04	5.575E-04	320.5				
16	71.72	-.51	0.00	2.37E+04	3.33E-02	3.15E-02	2.386	1.394E-02	3.922E-04	3.713E-04	320.9				1.000
17	66.64	-.51	0.00	1.70E+04	2.38E-02	2.25E-02	1.736	1.371E-02	2.806E-04	2.656E-04	321.4				1.000
18	61.56	-.51	0.00	1.45E+04	2.04E-02	1.93E-02	1.441	1.414E-02	2.404E-04	2.275E-04	322.2				1.000
19	56.48	-.51	0.00	1.24E+04	1.75E-02	1.65E-02	1.168	1.495E-02	2.058E-04	1.948E-04	322.5				1.000
20	51.39	-.51	0.00	1.21E+04	1.69E-02	1.60E-02	1.063	1.593E-02	1.997E-04	1.890E-04	322.8				1.000
21	48.86	-.51	0.00	1.17E+04	1.65E-02	1.56E-02	1.011	1.634E-02	1.947E-04	1.843E-04	323.7				1.000
22	46.31	-.51	0.00	1.21E+04	1.71E-02	1.62E-02	1.025	1.665E-02	2.012E-04	1.904E-04	323.5				1.000
23	43.77	-.51	0.00	1.19E+04	1.67E-02	1.58E-02	.995	1.696E-02	1.970E-04	1.864E-04	323.4				1.000
24	41.24	-.51	0.00	1.13E+04	1.59E-02	1.51E-02	.921	1.727E-02	1.876E-04	1.776E-04	323.5				1.000
25	38.73	-.51	0.00	1.05E+04	1.47E-02	1.39E-02	.837	1.758E-02	1.735E-04	1.643E-04	322.0				1.000
26	135.24	0.00	.25	2.33E+04	3.25E-02	3.08E-02	.367	8.851E-02	3.839E-04	3.627E-04	317.0	3.36E-02	.966	.380	.505
27	132.70	0.00	.25	2.44E+04	3.41E-02	3.23E-02	.395	8.619E-02	4.013E-04	3.804E-04	317.9				.501
28	130.16	0.00	.25	2.61E+04	3.65E-02	3.45E-02	.435	8.387E-02	4.300E-04	4.071E-04	317.9	3.78E-02	.966	.450	.544
29	127.63	0.00	.25	2.75E+04	3.84E-02	3.64E-02	.471	8.154E-02	4.539E-04	4.289E-04	318.0	3.95E-02	.973	.484	.545
30	125.09	0.00	.25	2.89E+04	4.03E-02	3.82E-02	.509	7.922E-02	4.758E-04	4.504E-04	317.9	4.13E-02	.976	.522	.567
31	122.56	0.00	.25	2.85E+04	3.98E-02	3.77E-02	.517	7.690E-02	4.692E-04	4.442E-04	317.5	4.08E-02	.975	.530	.545
32	117.47	0.00	.25	2.89E+04	4.03E-02	3.81E-02	.569	7.092E-02	4.750E-04	4.498E-04	317.3	4.13E-02	.975	.583	.526
33	112.37	0.00	.25	3.29E+04	4.59E-02	4.35E-02	.742	6.186E-02	5.413E-04	5.125E-04	318.1	4.71E-02	.975	.761	.504
34	107.31	0.00	.25	3.68E+04	5.13E-02	4.86E-02	1.011	5.078E-02	6.054E-04	5.732E-04	317.9	5.25E-02	.978	1.034	.628
35	102.20	0.00	.25	4.02E+04	5.60E-02	5.30E-02	1.368	4.093E-02	6.604E-04	6.253E-04	317.8	5.71E-02	.981	1.394	.650
36	97.12	0.00	.25	4.54E+04	6.33E-02	5.99E-02	1.915	[illegible]	7.464E-04	7.067E-04	317.7	6.44E-02	.983	1.951	.75[illegible]
37	92.14	0.00	.25	[illegible]	6.52E-02	6.18E-02	2.454	[illegible]	7.692E-04	7.282E-04	317.5	6.63E-02	.984	2.504	.775
38	86.96	0.00	.25	[illegible]	6.36E-02	6.02E-02	2.920	2.178E-02	7.530E-04	7.100E-04	318.2				.83[illegible]
39	81.99	0.00	.25	[illegible]	[illegible]	[illegible]	2.757	1.731E-02	5.775E-04	5.468E-04	317.8				.70[illegible]
40	76.9[illegible]	0.00	.25	2.19E+04	3.05E-02	2.89E-02	1.993	1.539E-02	3.598E-04	3.407E-04	317.9				.615
41	71.72	0.00	.25	1.54E+04	2.14E-02	2.02E-02	1.540	1.387E-02	2.518E-04	2.385E-04	314.7				.645
42	66.64	0.00	.25	[illegible]	2.08E-02	1.97E-02	1.523	1.366E-02	2.452E-04	2.322E-04	315.3				.677

AMES 3.5 FT HWT TEST (1/2), C.3. PLUMER, IN-LINE RSI GAP RUN(48) 1973

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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
43	61.56	0.00	.25	1.40E+04	2.85E-02	2.13E-02	1.815	1.412E-02	3.121E-04	2.861E-04	316.2				1.259
44	56.48	0.00	.25	1.95E+04	2.76E-02	2.61E-02	1.848	1.494E-02	3.255E-04	3.082E-04	316.3				1.503
45	51.39	0.00	.25	1.[illegible]E+04	2.39E-02	2.44E-02	1.518	1.592E-02	3.037E-04	2.676E-04	317.1				1.521
46	48.86	0.00	.25	1.61E+04	2.52E-02	2.39E-02	1.545	1.633E-02	2.375E-04	2.817E-04	317.9				1.528
47	46.31	0.00	.25	1.31E+04	1.82E-02	1.72E-02	1.094	1.665E-02	2.147E-04	2.033E-04	317.8				1.067
48	43.77	0.00	.25	9.45E+03	1.18E-02	1.11E-02	.594	1.696E-02	1.388E-04	1.314E-04	317.7				.705
49	41.24	0.00	.25	3.[illegible]E+03	4.68E-03	4.62E-03	.263	1.727E-02	5.756E-05	5.453E-05	317.6				.387
50	38.70	0.00	.25												
51	135.24	0.00	.51	1.[illegible]E+04	1.43E-02	1.36E-02	.162	8.851E-02	1.691E-04	1.601E-04	312.2	1.55E-02	.927	.175	.232
52	132.70	0.00	.51	[illegible]E+04	1.48E-02	1.40E-02	.172	8.619E-02	1.747E-04	1.655E-04	312.4				.218
53	130.16	0.00	.51	1.73E+04	2.40E-02	2.27E-02	.286	8.367E-02	2.825E-04	2.676E-04	312.5	2.52E-02	.950	.301	.364
54	127.63	0.00	.51	1.82E+04	2.52E-02	2.39E-02	.309	8.154E-02	2.971E-04	2.814E-04	313.4	2.62E-02	.960	.322	.362
55	125.09	0.00	.51	1.85E+04	2.65E-02	2.47E-02	.329	7.922E-02	3.070E-04	2.907E-04	313.6	2.70E-02	.964	.341	.371
56	122.56	0.00	.51	1.94E+04	2.69E-02	2.55E-02	.350	7.690E-02	3.169E-04	3.002E-04	313.0	2.79E-02	.964	.362	.372
57	117.47	0.00	.51	1.97E+04	2.72E-02	2.58E-02	.384	7.092E-02	3.212E-04	3.042E-04	312.5	2.83E-02	.963	.399	.360
58	112.37	0.00	.51	1.97E+04	2.73E-02	2.59E-02	.442	6.186E-02	3.223E-04	3.053E-04	313.0	2.85E-02	.959	.461	.353
59	107.31	0.00	.51	2.10E+04	2.91E-02	2.75E-02	.573	5.078E-02	3.429E-04	3.248E-04	312.8	3.02E-02	.962	.595	.362
60	102.23	0.00	.51	2.45E+04	3.39E-02	3.21E-02	.828	4.093E-02	3.936E-04	3.785E-04	313.0	3.49E-02	.970	.854	.404
61	97.12	0.00	.51	2.92E+04	4.05E-02	3.84E-02	1.227	3.301E-02	4.776E-04	4.524E-04	312.7	4.16E-02	.974	1.260	.408
62	92.04	0.00	.51	3.08E+04	4.26E-02	4.04E-02	1.611	2.648E-02	5.028E-04	4.762E-04	312.5	4.37E-02	.976	1.651	.511
63	86.96	0.00	.51	2.63E+04	3.65E-02	3.46E-02	1.676	2.178E-02	4.303E-04	4.075E-04	312.8				.400
64	81.88	0.00	.51	1.43E+04	1.98E-02	1.88E-02	1.112	1.781E-02	2.335E-04	2.212E-04	311.7				.286
65	76.80	0.00	.51	1.19E+04	1.65E-02	1.57E-02	1.074	1.539E-02	1.949E-04	1.846E-04	312.1				.333
66	71.72	0.00	.51	8.25E+03	1.14E-02	1.08E-02	.823	1.387E-02	1.346E-04	1.275E-04	312.0				.345
67	66.64	0.00	.51	1.02E+04	1.42E-02	1.34E-02	1.039	1.366E-02	1.674E-04	1.585E-04	313.1				.599
68	61.56	0.00	.51	1.40E+04	1.94E-02	1.83E-02	1.371	1.412E-02	2.282E-04	2.161E-04	313.6				.951
69	56.48	0.00	.51	1.57E+04	2.18E-02	2.07E-02	1.462	1.494E-02	2.573E-04	2.438E-04	314.2				1.252
70	51.39	0.00	.51	1.39E+04	1.92E-02	1.81E-02	1.204	1.592E-02	2.263E-04	2.149E-04	314.7				1.132
71	48.86	0.00	.51	1.34E+04	1.86E-02	1.76E-02	1.139	1.633E-02	2.194E-04	2.077E-04	316.0				1.127
72	46.31	0.00	.51	8.61E+03	1.20E-02	1.13E-02	.720	1.665E-02	1.412E-04	1.338E-04	315.6				.702
73	43.77	0.00	.51	3.60E+03	5.01E-03	4.74E-03	.295	1.696E-02	5.922E-05	5.589E-05	315.5				.300
74	41.24	0.00	.51	1.35E+03	1.88E-03	1.78E-03	.109	1.727E-02	2.214E-05	2.096E-05	315.4				.118
75	38.70	0.00	.51												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	6.371E-01
X=	4.124E+01	HL	/HREFF=	9.213E-01
X=	4.377E+01	HL	/HREFF=	9.849E-01
X=	4.631E+01	HL	/HREFF=	1.[illegible]25E+00
X=	4.886E+01	HL	/HREFF=	1.011E+00
X=	5.139E+01	HL	/HREFF=	1.063E+00
X=	5.648E+01	HL	/HREFF=	1.168E+00
X=	6.156E+01	HL	/HREFF=	1.441E+00
X=	6.664E+01	HL	/HREFF=	1.736E+00
X=	7.172E+01	HL	/HREFF=	2.385E+00
X=	7.680E+01	HL	/HREFF=	3.327E+00
X=	8.188E+01	HL	/HREFF=	3.597E+00
X=	8.696E+01	HL	/HREFF=	3.438E+00
X=	9.204E+01	HL	/HREFF=	3.230E+00
X=	9.712E+01	HL	/HREFF=	2.592E+00
X=	1.022E+02	HL	/HREFF=	2.116E+00
X=	1.073E+02	HL	/HREFF=	1.647E+00
X=	1.124E+02	HL	/HREFF=	1.374E+00
X=	1.175E+02	HL	/HREFF=	1.1[illegible]E+00
X=	1.226E+02	HL	/HREFF=	9.733E-01
X=	1.251E+02	HL	/HREFF=	9.198E-01
X=	1.276E+02	HL	/HREFF=	8.832E-01
X=	1.302E+02	HL	/HREFF=	8.272E-01
X=	1.352E+02	HL	/HREFF=	7.824E-01

B.L. TRANSITION DISTANCE = 38.70 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.?? CM

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(49) 1973 PAGE 97

TT = 1.1053E+03(K) GAP LENGTH =101.600(CM)
PT = 2.0853E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.1672E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 6.7786E+06 ORIENTATION= 0.000(DEG)
MACH = 5.180 QS = 1.5458E+05(N/M2)
RHO VEL = 5.5135E+01(KG/M2-S) MOC.POSITION= 1
HAW/HT = 0.998 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
103	47.59	1.52	0.00	9.62E+03	1.40E-02	1.32E-02	.839	1.665E-02	1.640E-04	1.551E-04	328.1	1.40E-02	1.000	.839	.893
105	47.59	1.02	0.00												
107	47.59	.51	0.00	1.08E+04	1.56E-02	1.48E-02	.940	1.664E-02	1.837E-04	1.737E-04	329.8	1.56E-02	1.000	.940	1.000
108	47.59	.25	0.00	1.34E+04	1.95E-02	1.84E-02	1.170	1.664E-02	2.287E-04	2.163E-04	327.6	1.95E-02	1.000	1.170	1.245
110	47.59	.06	.06	1.47E+04	2.13E-02	2.01E-02	1.276	1.664E-02	2.499E-04	2.364E-04	326.0	2.13E-02	1.000	1.276	1.361
111	47.59	0.00	.15	1.47E+04	2.12E-02	2.00E-02	1.272	1.664E-02	2.487E-04	2.353E-04	325.2	2.12E-02	1.000	1.272	1.354
112	47.59	0.00	.25	1.39E+04	2.01E-02	1.90E-02	1.206	1.664E-02	2.357E-04	2.230E-04	323.8	2.01E-02	1.000	1.206	1.283
113	47.59	0.00	.38	1.19E+04	1.72E-02	1.63E-02	1.033	1.664E-02	2.019E-04	1.910E-04	322.5	1.72E-02	1.000	1.033	1.099
114	47.59	0.00	.64	7.84E+03	1.13E-02	1.06E-02	.676	1.664E-02	1.322E-04	1.251E-04	320.5	1.13E-02	1.000	.676	.720
115	47.59	0.00	.89	3.98E+03	5.70E-03	5.39E-03	.342	1.664E-02	6.692E-05	6.333E-05	318.9	5.70E-03	1.000	.342	.364
116	47.59	0.00	1.14	1.69E+03	2.42E-03	2.29E-03	.145	1.664E-02	2.838E-05	2.686E-05	317.7	2.42E-03	1.000	.145	.155
117	47.59	0.00	1.40	6.41E+02	9.13E-04	8.70E-04	.055	1.664E-02	1.079E-05	1.022E-05	316.8	9.19E-04	1.000	.055	.059
118	47.59	0.00	1.65												
119	47.59	0.00	1.90												
120	47.59	0.00	2.29												
203	61.56	1.32	0.00	8.28E+03	1.20E-02	1.13E-02	.842	1.419E-02	1.404E-04	1.328E-04	325.1	1.20E-02	1.000	.842	.722
205	61.56	1.02	0.00	8.50E+03	1.23E-02	1.16E-02	.866	1.421E-02	1.444E-04	1.366E-04	326.1	1.23E-02	1.000	.866	.742
207	61.56	.51	0.00	1.15E+04	1.66E-02	1.57E-02	1.167	1.423E-02	1.950E-04	1.844E-04	325.6	1.66E-02	1.000	1.167	1.000
208	61.56	.25	0.00	1.43E+04	2.06E-02	1.95E-02	1.449	1.424E-02	2.423E-04	2.292E-04	324.8	2.06E-02	1.000	1.449	1.242
210	61.56	.06	.06	1.71E+04	2.47E-02	2.33E-02	1.731	1.425E-02	2.897E-04	2.741E-04	323.2	2.47E-02	1.000	1.731	1.484
211	61.56	0.00	.15	1.67E+04	2.40E-02	2.27E-02	1.683	1.425E-02	2.817E-04	2.665E-04	322.7	2.40E-02	1.000	1.683	1.442
212	61.56	0.00	.25	1.66E+04	2.39E-02	2.26E-02	1.675	1.425E-02	2.804E-04	2.653E-04	321.7	2.39E-02	1.000	1.675	1.436
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89	6.93E+03	9.90E-03	9.37E-03	.695	1.425E-02	1.153E-04	1.101E-04	317.8	9.90E-03	1.000	.695	.595
216	61.56	0.00	1.14	3.92E+03	5.59E-03	5.29E-03	.392	1.425E-02	6.566E-05	6.215E-05	317.0	5.59E-03	1.000	.392	.336
217	61.56	0.00	1.40	1.75E+03	2.49E-03	2.36E-03	.175	1.425E-02	2.925E-05	2.768E-05	316.3	2.49E-03	1.000	.175	.150
218	61.56	0.00	1.65	4.56E+02	6.51E-04	6.16E-04	.046	1.425E-02	7.642E-06	7.233E-06	315.8	6.51E-04	1.000	.046	.039
219	61.56	0.00	1.90												
220	61.56	0.00	2.29												
306	86.96	.75	0.00												
307	86.96	.51	0.00	4.60E+04	6.64E-02	6.29E-02	3.012	2.206E-02	7.909E-04	7.383E-04	324.4	6.64E-02	1.000	3.012	
308	86.96	.25	0.00	5.01E+04	7.23E-02	6.84E-02	3.267	2.213E-02	8.492E-04	8.033E-04	323.8	7.23E-02	1.000	3.267	
309	86.96	.13	0.00	4.99E+04	7.19E-02	6.80E-02	3.243	2.216E-02	8.441E-04	7.985E-04	323.0	7.19E-02	1.000	3.243	
[illegible]	[illegible]96	.06	.06	4.91E+04	7.07E-02	6.69E-02	3.185	2.219E-02	8.302E-04	7.854E-04	322.5	7.07E-02	1.000	3.185	
[illegible]	[illegible]96	0.00	.15	4.78E+04	6.87E-02	6.50E-02	3.094	2.220E-02	8.069E-04	7.634E-04	321.9	6.87E-02	1.000	3.094	
[illegible]	[illegible]96	0.00	.25	4.03E+04	5.81E-02	5.49E-02	2.615	2.220E-02	6.820E-04	6.453E-04	320.6	5.81E-02	1.000	2.615	.860
313	86.96	0.00	.38	3.40E+04	4.88E-02	4.62E-02	2.197	2.220E-02	5.731E-04	5.423E-04	320.1	4.88E-02	1.000	2.197	.729
314	86.96	0.00	.64	2.30E+04	3.29E-02	3.11E-02	1.482	2.220E-02	3.866E-04	3.659E-04	318.9	3.29E-02	1.000	1.482	.492

AMES 3.5 FT HWT TEST (192), G.R. BLUMER, IN-LINE RSI GAP RUN(49) 1973 PAGE 99

T/C	X (CM)	YY (CM)	Z (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.36	0.00	.00	1.47E+04	2.10E-02	1.99E-02	.946	2.220E-02	2.468E-04	2.335E-04	317.8	2.10E-02	1.000	.946	.314
316	86.96	0.03	1.14	1.06E+04	1.51E-02	1.43E-02	.680	2.220E-02	1.773E-04	1.678E-04	313.9	1.51E-02	1.000	.680	.226
317	86.96	0.07	1.40	6.315E+03	8.97E-03	8.49E-03	.404	2.220E-02	1.053E-04	9.971E-05	313.9	8.97E-03	1.000	.404	.134
318	86.96	0.00	1.65	3.28E+03	4.62E-03	4.37E-03	.208	2.221E-02	5.427E-05	5.138E-05	313.3	4.62E-03	1.000	.208	.069
319	86.96	0.00	1.90	4.27E+02	6.03E-04	5.71E-04	.027	2.221E-02	7.088E-06	6.711E-06	312.6	6.03E-04	1.000	.027	.009
320	86.36	0.00	2.29												
406	112.36	.76	0.00	4.61E+04	6.63E-02	6.27E-02	1.146	6.338E-02	7.785E-04	7.366E-04	321.2	6.63E-02	1.000	1.046	1.023
407	112.36	.51	0.00	4.51E+04	6.47E-02	6.12E-02	1.022	6.334E-02	7.634E-04	7.194E-04	320.9	6.47E-02	1.000	1.022	1.000
408	112.36	.25	0.00	4.12E+04	5.91E-02	5.50E-02	.934	6.331E-02	6.946E-04	6.573E-04	320.1	5.91E-02	1.000	.934	.914
409	112.36	.15	0.00	3.82E+04	5.48E-02	5.19E-02	.866	6.330E-02	6.436E-04	6.090E-04	319.6	5.48E-02	1.000	.866	.847
410	112.36	.04	.04	3.46E+04	4.95E-02	4.69E-02	.782	6.326E-02	5.816E-04	5.504E-04	319.0	4.95E-02	1.000	.782	.766
411	112.36	0.00	.13	2.99E+04	4.27E-02	4.04E-02	.675	6.328E-02	5.017E-04	4.748E-04	318.1	4.27E-02	1.000	.675	.660
412	112.36	0.00	.25	2.22E+04	3.18E-02	3.01E-02	.503	6.326E-02	3.738E-04	3.538E-04	316.6	3.18E-02	1.000	.503	.492
413	112.36	0.00	.38	2.10E+04	2.99E-02	2.83E-02	.473	6.326E-02	3.515E-04	3.327E-04	316.4	2.99E-02	1.000	.473	.463
414	112.36	0.00	.64	1.34E+04	1.92E-02	1.81E-02	.303	6.328E-02	2.259E-04	2.138E-04	316.2	1.92E-02	1.000	.303	.296
415	112.36	0.00	.89	9.00E+03	1.28E-02	1.21E-02	.203	6.328E-02	1.506E-04	1.426E-04	315.6	1.28E-02	1.000	.203	.198
416	112.36	0.00	1.14	5.90E+03	8.48E-03	8.03E-03	.134	6.328E-02	9.959E-05	9.428E-05	314.8	8.48E-03	1.000	.134	.131
417	112.36	0.00	1.40	3.70E+03	5.32E-03	5.04E-03	.084	6.328E-02	6.251E-05	5.918E-05	314.0	5.32E-03	1.000	.084	.082
418	112.36	0.00	1.65	1.81E+03	2.57E-03	2.44E-03	.041	6.328E-02	3.023E-05	2.862E-05	313.7	2.57E-03	1.000	.041	.040
419	112.36	0.00	1.90												
420	112.36	0.00	2.29												
506	125.06	.76	0.00	4.23E+04	6.07E-02	5.74E-02	.749	8.098E-02	7.128E-04	6.745E-04	320.6	6.07E-02	1.000	.749	1.050
507	125.06	.51	0.00	4.03E+04	5.78E-02	5.46E-02	.714	8.091E-02	6.784E-04	6.419E-04	320.0	5.78E-02	1.000	.714	1.000
508	125.06	.25	0.00	3.68E+04	5.28E-02	4.99E-02	.653	8.084E-02	6.197E-04	5.864E-04	319.1	5.28E-02	1.000	.653	.914
509	125.06	.15	0.00	3.16E+04	4.52E-02	4.28E-02	.560	8.081E-02	5.312E-04	5.027E-04	317.8	4.52E-02	1.000	.560	.784
510	125.06	.04	.04	3.35E+04	4.79E-02	4.54E-02	.593	8.078E-02	5.630E-04	5.328E-04	318.4	4.79E-02	1.000	.593	.831
511	125.06	0.00	.15	3.19E+04	4.57E-02	4.32E-02	.565	8.077E-02	5.365E-04	5.077E-04	318.1	4.57E-02	1.000	.565	.792
512	125.06	0.00	.25	2.70E+04	3.86E-02	3.65E-02	.478	8.077E-02	4.532E-04	4.289E-04	317.6	3.86E-02	1.000	.478	.669
513	125.06	0.00	.38	2.24E+04	3.21E-02	3.03E-02	.397	8.077E-02	3.765E-04	3.564E-04	317.0	3.21E-02	1.000	.397	.556
514	125.06	0.00	.64	1.44E+04	2.06E-02	1.95E-02	.255	8.077E-02	2.419E-04	2.290E-04	316.3	2.06E-02	1.000	.255	.357
515	125.06	0.00	.89	9.05E+03	1.29E-02	1.23E-02	.160	8.077E-02	1.523E-04	1.439E-04	315.3	1.29E-02	1.000	.160	.225
516	125.06	0.00	1.14	5.95E+03	8.49E-03	8.03E-03	.105	8.077E-02	9.967E-05	9.434E-05	315.3	8.49E-03	1.000	.105	.147
517	125.06	0.00	1.40	3.58E+03	5.09E-03	4.82E-03	.063	8.077E-02	5.932E-05	5.662E-05	314.6	5.09E-03	1.000	.063	.088
518	125.06	0.00	1.65	1.31E+03	1.92E-03	1.82E-03	.024	8.077E-02	2.258E-05	2.137E-05	314.2	1.92E-03	1.000	.024	.033
519	125.06	0.00	1.90	1.60E+01	2.25E-05	2.13E-05	.000	8.077E-02	2.638E-07	2.499E-07	313.4	2.25E-05	1.000	.000	.000
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X= 4.759E+01 HL /HREFF= 9.336E-01
X= 6.196E+01 HL /HREFF= 1.137E+00
X= 8.696E+01 HL /HREFF= 3.412E+00
X= 1.124E+02 HL /HREFF= 1.022E+00
X= 1.251E+02 HL /HREFF= 7.138E-01
B.L. TRANSITION DISTANCE = 47.59 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.36 CM

ORIGINAL PAGE IS POOR QUALITY

AMES 3.5 FT HWT TEST (1o2), G.B. BLUMER, IN-LINE RSI GAP RUN(5.) 1373 PAGE 99

TT = 1.123E+03(K) GAP LENGTH =101.600(CM)
PT = 5.1378E+05(N/M2) GAP WIDTH = .254(CM)
HT = 1.1883E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 1.6153E+05 ORIENTATION= 0.000(DEG)
MACH = 5.10 QS = 8.4657E+04(W/M2)
RHO VEL = 2.0722E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.908 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER CONC.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
193	47.59	1.52	0.00	7.95E+03	8.16E-03	7.79E-03	.830	9.840E-03	3.939E-04	3.729E-04	319.3	8.16E-03	1.000	.830	1.004
105	47.59	1.02	0.00												
107	47.59	.51	0.00	5.92E+03	8.13E-03	7.79E-03	.826	9.840E-03	3.923E-04	3.714E-04	319.9	8.13E-03	1.000	.826	1.000
108	47.59	.25	0.00	5.72E+03	7.98E-03	7.56E-03	.811	9.841E-03	3.851E-04	3.646E-04	319.2	7.98E-03	1.000	.811	.982
110	47.59	.06	.04	4.31E+03	6.71E-03	6.35E-03	.681	9.841E-03	3.236E-04	3.063E-04	318.5	6.71E-03	1.000	.681	.825
111	47.59	0.00	.15	4.19E+03	5.84E-03	5.53E-03	.593	9.841E-03	2.817E-04	2.667E-04	318.1	5.84E-03	1.000	.593	.718
112	47.59	0.00	.25	3.11E+03	4.33E-03	4.10E-03	.440	9.841E-03	2.090E-04	1.979E-04	317.5	4.33E-03	1.000	.440	.533
113	47.59	0.00	.38	2.04E+03	2.84E-03	2.69E-03	.289	9.841E-03	1.372E-04	1.299E-04	316.9	2.84E-03	1.000	.289	.350
114	47.59	0.00	.64	7.48E+02	1.04E-03	9.84E-04	.106	9.841E-03	5.016E-05	4.750E-05	316.0	1.04E-03	1.000	.136	.120
115	47.59	0.00	.89	1.90E+02	2.64E-04	2.50E-04	.027	9.841E-03	1.274E-05	1.297E-05	315.2	2.64E-04	1.000	.027	.032
116	47.59	0.00	1.14	4.07E+01	5.64E-05	5.34E-05	.006	9.841E-03	2.721E-06	2.577E-06	314.6	5.64E-05	1.000	.036	.007
117	47.59	0.00	1.40	3.43E+01	4.75E-05	4.50E-05	.005	9.841E-03	2.293E-06	2.171E-06	314.1	4.75E-05	1.000	.005	.006
118	47.59	0.00	1.65												
119	47.59	0.00	1.90												
120	47.59	0.00	2.29												
203	61.56	1.52	0.00	5.01E+03	6.96E-03	6.59E-03	.816	8.529E-03	3.357E-04	3.178E-04	316.7	6.96E-03	1.000	.816	1.033
205	61.56	1.02	0.00	4.74E+03	6.59E-03	6.24E-03	.773	8.526E-03	3.189E-04	3.011E-04	317.2	6.59E-03	1.000	.773	.979
207	61.56	.51	0.00	4.84E+03	6.73E-03	6.37E-03	.789	8.524E-03	3.247E-04	3.074E-04	317.0	6.73E-03	1.000	.789	1.000
208	61.56	.25	0.00	5.07E+03	7.06E-03	6.68E-03	.828	8.523E-03	3.406E-04	3.225E-04	316.6	7.06E-03	1.000	.828	1.049
210	61.56	.06	.06	4.52E+03	6.28E-03	5.95E-03	.737	8.523E-03	3.031E-04	2.870E-04	316.2	6.28E-03	1.000	.737	.934
211	61.56	0.00	.15	4.03E+03	5.60E-03	5.30E-03	.657	8.523E-03	2.702E-04	2.559E-04	315.8	5.60E-03	1.000	.657	.832
212	61.56	0.00	.25	3.13E+03	4.35E-03	4.12E-03	.511	8.523E-03	2.100E-04	1.988E-04	315.5	4.35E-03	1.000	.511	.647
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89	2.05E+02	2.83E-04	2.68E-04	.033	8.523E-03	1.369E-05	1.296E-05	313.9	2.83E-04	1.000	.033	.042
216	61.56	0.00	1.14	3.79E+01	4.72E-05	4.47E-05	.006	8.523E-03	2.279E-06	2.157E-06	318.1	4.72E-05	1.000	.006	.007
217	61.56	0.00	1.40												
218	61.56	0.00	1.65												
219	61.56	0.00	1.90												
220	61.56	0.00	2.29	[illegible]	6.83E	6.38E-06	.001	8.527E-03	4.269E-07	4.035E-07	312.6	6.83E-06	1.000	.001	.001
306	86.96	.75	0.00												
307	86.96	.51	0.00	5.36E+03	7.44E-03	7.05E-03	1.041	7.145E-03	3.591E-04	3.400E-04	313.9	7.44E-03	1.000	1.041	1.008
308	86.96	.23	0.00	6.91E+03	9.62E-03	9.11E-03	1.346	7.146E-03	4.642E-04	4.395E-04	315.7	9.62E-03	1.000	1.346	1.294
309	86.96	.13	0.00	7.14E+03	9.98E-03	9.45E-03	1.396	7.146E-03	4.316E-04	4.560E-04	315.4	9.98E-03	1.000	1.396	1.341
310	86.96	.04	.06	7.02E+03	9.74E-03	9.23E-03	1.363	7.147E-03	4.703E-04	4.453E-04	315.2	9.74E-03	1.000	1.363	1.307
311	86.96	0.00	.15	6.67E+03	9.20E-03	8.71E-03	1.287	7.147E-03	4.440E-04	4.225E-04	315.0	9.20E-03	1.000	1.287	1.234
312	86.96	0.00	.25	4.97E+03	6.89E-03	6.53E-03	.964	7.147E-03	3.325E-04	3.149E-04	314.6	6.89E-03	1.000	.964	.926
313	86.96	0.00	.38	3.77E+03	5.18E-03	4.90E-03	.724	7.147E-03	2.439E-04	2.365E-04	314.5	5.18E-03	1.000	.724	.695
314	86.96	0.00	.64	1.94E+03	2.69E-03	2.55E-03	.377	7.147E-03	1.300E-04	1.231E-04	314.1	2.69E-03	1.000	.377	.362

AMES 3.5 FT HWT TEST (192), C.R. BLUMER, IN-LINE RSI GAP RUN(50) 1973 PAGE 109

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.96	0.30	.99	9.16E+02	1.12E-03	1.06E-03	.157	7.147E-03	5.414E-05	5.128E-05	313.7	1.12E-03	1.000	.157	.151
316	86.96	0.30	1.14	3.75E+02	4.63E-04	4.38E-04	.065	7.147E-03	2.232E-05	2.114E-05	312.2	4.63E-04	1.000	.065	.062
317	86.96	0.30	1.40	2.96E+01	4.08E-05	3.87E-05	.006	7.147E-03	1.7 1E-06	1.667E-06	312.2	4.08E-05	1.000	.006	.005
318	86.96	0.30	1.65												
319	86.96	0.30	1.90												
320	86.96	0.30	2.29												
406	112.36	.76	0.00	7.99E+03	1.09E-02	1.34E-02	1.639	6.440E-03	5.289E-04	5.003E-04	315.0	1.09E-02	1.000	1.699	.748
407	112.36	.51	.00	1.05E+04	1.46E-02	1.39E-02	2.271	6.441E-03	7.039E-04	6.685E-04	314.8	1.46E-02	1.000	2.271	1.000
408	112.36	.25	0.00	1.12E+04	1.56E-02	1.47E-02	2.415	6.439E-03	7.534E-04	7.107E-04	314.7	1.56E-02	1.000	2.415	1.063
409	112.36	.15	0.00	1.05E+04	1.46E-02	1.38E-02	2.268	6.439E-03	7.048E-04	6.675E-04	314.5	1.46E-02	1.000	2.268	.999
410	112.36	.04	.04	9.32E+03	1.29E-02	1.22E-02	2.007	6.439E-03	6.235E-04	5.905E-04	314.4	1.29E-02	1.000	2.007	.883
411	112.36	0.00	.15	8.06E+03	1.12E-02	1.06E-02	1.736	6.439E-03	5.393E-04	5.107E-04	314.2	1.12E-02	1.000	1.736	.764
412	112.36	0.00	.25	5.82E+03	8.06E-03	7.63E-03	1.252	6.439E-03	3.889E-04	3.683E-04	313.7	8.06E-03	1.000	1.252	.551
413	112.36	0.00	.38	4.63E+03	6.41E-03	6.07E-03	.995	6.439E-03	3.091E-04	2.928E-04	313.5	6.41E-03	1.000	.995	.438
414	112.36	0.00	.64	2.31E+03	3.20E-03	3.03E-03	.497	6.439E-03	1.544E-04	1.463E-04	313.6	3.20E-03	1.000	.497	.219
415	112.36	0.00	.89	1.06E+03	1.47E-03	1.39E-03	.228	6.439E-03	7.094E-05	6.718E-05	313.5	1.47E-03	1.000	.228	.101
416	112.36	0.00	1.14	4.18E+02	5.79E-04	5.48E-04	.090	6.439E-03	2.793E-05	2.645E-05	313.2	5.79E-04	1.000	.090	.040
417	112.36	0.00	1.40	3.48E+01	4.81E-05	4.56E-05	.007	6.439E-03	2.321E-06	2.199E-06	312.9	4.81E-05	1.000	.007	.003
418	112.36	0.00	1.65												
419	112.36	0.00	1.90												
420	112.36	0.00	2.29												
506	125.06	.76	0.00	9.78E+03	1.36E-02	1.29E-02	2.079	6.529E-03	6.550E-04	6.202E-04	315.1	1.36E-02	1.000	2.079	.850
507	125.06	.51	0.00	1.14E+04	1.58E-02	1.50E-02	2.424	6.525E-03	7.632E-04	7.228E-04	314.9	1.58E-02	1.000	2.424	1.000
508	125.06	.25	0.00	1.13E+04	1.56E-02	1.48E-02	2.397	6.522E-03	7.546E-04	7.146E-04	314.5	1.56E-02	1.000	2.397	.989
509	125.06	.15	0.00	9.31E+03	1.29E-02	1.22E-02	1.979	6.521E-03	6.227E-04	5.897E-04	314.6	1.29E-02	1.000	1.979	.816
510	125.06	.04	.04	9.73E+03	1.35E-02	1.28E-02	2.068	6.520E-03	6.508E-04	6.164E-04	314.3	1.35E-02	1.000	2.068	.853
511	125.06	0.00	.15	9.25E+03	1.28E-02	1.21E-02	1.966	6.520E-03	6.184E-04	5.857E-04	314.2	1.28E-02	1.000	1.966	.811
512	125.06	0.00	.25	7.29E+03	1.01E-02	9.57E-03	1.550	6.520E-03	4.875E-04	4.618E-04	314.2	1.01E-02	1.000	1.550	.639
513	125.06	0.00	.38	5.53E+03	7.66E-03	7.26E-03	1.175	6.520E-03	3.698E-04	3.502E-04	314.1	7.66E-03	1.000	1.175	.485
514	125.06	0.00	.64	2.57E+03	3.56E-03	3.37E-03	.545	6.520E-03	1.716E-04	1.625E-04	313.9	3.56E-03	1.000	.545	.225
515	125.06	0.00	.89	9.95E+02	1.38E-03	1.31E-03	.211	6.520E-03	6.651E-05	6.299E-05	313.6	1.38E-03	1.000	.211	.087
516	125.06	0.00	1.14	3.06E+02	4.24E-04	4.01E-04	.065	6.521E-03	2.044E-05	1.936E-05	313.7	4.24E-04	1.000	.065	.027
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X= 4.759E+01 HL /HREFF= 6.262E-01
X= 6.156E+01 HL /HREFF= 7.693E-01
X= 8.696E+01 HL /HREFF= 1.041E+00
X= 1.124E+02 HL /HREFF= 2.271E+00
X= 1.251E+02 HL /HREFF= 2.424E+00
B.L. TRANSITION DISTANCE = 61.56 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.00 CM

AMES 3.5 FT HWT TEST (1121), C.P. BLUNER, IN-LINE RSI GAP RUN(91) 1973 PAGE 101

TT = 1.1776E+03(K)
PT = 1.0257E+06(N/M2)
HT = 1.1599E+06(J/KG)
RE/METER = 3.3939E+06
MACH = 5.190
RHO VEL = 4.1913E+01(KG/M2-S)
HAW/HT = 0.998 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

GAP LENGTH =131.600(CM)
GAP WIDTH = .254(CM)
GAP DEPTH = 2.032(CM)
ORIENTATION= 0.000(DEG)
QS = 1.1650E+05(W/M2)
MOD.POSITION= 1

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
103	47.59	1.52	0.00	7.42E+03	1.06E-02	1.31E-02	.865	1.231E-02	2.547E-04	2.409E-04	323.3	1.06E-02	1.000	.865	.940
105	47.59	1.02	0.00												
107	47.59	.51	0.00	7.88E+03	1.13E-02	1.37E-02	.920	1.231E-02	2.713E-04	2.564E-04	323.9	1.13E-02	1.000	.920	1.000
108	47.59	.25	0.00	8.78E+03	1.26E-02	1.19E-02	1.023	1.231E-02	3.013E-04	2.[illegible]E-04	323.0	1.26E-02	1.000	1.023	1.112
110	47.59	.04	.04	8.06E+03	1.23E-02	1.16E-02	.996	1.231E-02	2.933E-04	2.775E-04	322.0	1.23E-02	1.000	.996	1.002
111	47.59	0.[illegible]	.15	7.99E+03	1.14E-02	1.10E-02	.927	1.232E-02	2.732E-04	2.585E-04	321.4	1.14E-02	1.000	.927	1.000
112	47.59	0.00	.25	6.81E+03	9.74E-03	9.22E-03	.791	1.232E-02	2.330E-04	2.204E-04	320.3	9.74E-03	1.000	.791	.859
113	47.59	0.00	.38	5.19E+03	7.42E-03	7.02E-03	.602	1.232E-02	1.774E-04	1.679E-04	319.6	7.42E-03	1.000	.602	.654
114	47.59	0.00	.64	2.65E+03	3.78E-03	3.58E-03	.307	1.232E-02	9.051E-05	8.566E-05	318.2	3.78E-03	1.000	.307	.334
115	47.59	0.00	.99	1.02E+03	1.45E-03	1.38E-03	.118	1.232E-02	3.478E-05	3.292E-05	317.1	1.45E-03	1.000	.118	.120
116	47.59	0.00	1.14	3.64E+02	5.18E-04	4.90E-04	.042	1.232E-02	1.238E-05	1.172E-05	316.3	5.18E-04	1.000	.042	.046
117	47.59	0.00	1.40	1.21E+02	1.72E-04	1.63E-04	.014	1.232E-02	4.115E-06	3.895E-06	315.6	1.72E-04	1.000	.014	.015
118	47.59	0.00	1.65												
119	47.59	0.00	1.90												
120	47.59	0.00	2.29												
203	61.56	1.52	0.00	5.97E+03	8.55E-03	8.19E-03	.822	1.040E-02	2.044E-04	1.934E-04	321.6	8.55E-03	1.000	.821	.868
205	61.56	1.02	0.00	5.92E+03	8.47E-03	8.02E-03	.815	1.040E-02	2.027E-04	1.910E-04	321.7	8.47E-03	1.000	.815	.861
207	61.56	.51	0.00	6.88E+03	9.85E-03	9.32E-03	.946	1.040E-02	2.359E-04	2.220E-04	321.4	9.85E-03	1.000	.946	1.000
208	61.56	.25	0.00	7.70E+03	1.10E-02	1.04E-02	1.059	1.041E-02	2.635E-04	2.494E-04	320.0	1.10E-02	1.000	1.059	1.119
210	61.56	.04	.04	7.50E+03	1.07E-02	1.01E-02	1.029	1.041E-02	2.562E-04	2.424E-04	319.9	1.07E-02	1.000	1.029	1.087
211	61.56	0.00	.15	6.64E+03	9.49E-03	8.98E-03	.912	1.041E-02	2.269E-04	2.148E-04	319.5	9.49E-03	1.000	.912	.963
212	61.56	0.00	.25	5.62E+03	8.02E-03	7.59E-03	.771	1.041E-02	1.919E-04	1.816E-04	318.6	8.02E-03	1.000	.771	.815
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89	8.15E+02	1.16E-03	1.10E-03	.111	1.041E-02	2.772E-05	2.624E-05	316.5	1.16E-03	1.000	.111	.116
216	61.56	0.00	1.14	1.71E+02	2.44E-04	2.31E-04	.023	1.041E-02	5.839E-06	5.525E-06	323.3	2.44E-04	1.000	.023	.025
217	61.56	0.00	1.40												
218	61.56	0.00	1.65												
219	61.56	0.00	1.90												
220	61.56	0.00	2.29												
306	86.96	.76	0.00												
307	86.96	.51	0.00	1.25E+04	1.78E-02	1.69E-02	1.707	9.983E-03	4.269E-04	4.040E-04	320.3	1.78E-02	1.000	1.707	1.80[illegible]
308	86.96	.25	0.00	1.71E+04	2.45E-02	2.32E-02	2.447	1.000E-02	5.833E-04	5.533E-04	319.7	2.45E-02	1.000	2.447	1.36[illegible]
309	86.96	.15	0.00	1.87E+04	2.67E-02	2.52E-02	2.664	1.001E-02	6.377E-04	6.035E-04	319.3	2.67E-02	1.000	2.664	1.491
310	86.96	.04	.04	1.87E+04	2.67E-02	2.53E-02	2.670	1.001E-02	6.394E-04	6.051E-04	319.0	2.67E-02	1.000	2.670	1.49[illegible]
311	86.96	0.00	.15	1.86E+04	2.66E-02	2.51E-02	2.652	1.002E-02	6.354E-04	6.013E-04	318.7	2.66E-02	1.000	2.652	1.464
312	86.96	0.00	.25	1.59E+04	2.27E-02	2.15E-02	2.265	1.002E-02	5.425E-04	5.134E-04	318.0	2.27E-02	1.000	2.265	1.267
313	86.96	0.00	.38	1.34E+04	1.91E-02	1.91E-02	1.911	1.002E-02	4.577E-04	4.332E-04	317.6	1.91E-02	1.000	1.911	1.069
314	86.96	0.00	.64	9.19E+03	1.31E-02	1.24E-02	1.305	1.002E-02	3.123E-04	2.958E-04	316.9	1.31E-02	1.000	1.305	.73[illegible]

AMES 3.5 FT HWT TEST (1:2), C.J. BLUMER, IN-LINE RSI GAP RUN(51) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
315	86.96	0.00	.89	5.61E+03	7.99E-03	7.55E-03	.797	1.002E-02	1.908E-04	1.806E-04	316.4	7.98E-03	1.000	.797	.446
316	86.96	0.00	1.14	3.37E+03	3.48E-03	5.19E-03	.548	1.002E-02	1.312E-04	1.242E-04	313.9	5.48E-03	1.000	.548	.306
317	86.96	0.00	1.40	1.68E+03	2.30E-03	2.25E-03	.237	1.002E-02	5.686E-05	5.383E-05	313.9	2.30E-03	1.000	.237	.132
318	86.96	0.00	1.65	3.47E+02	4.92E-04	4.65E-04	.049	1.002E-02	1.175E-05	1.113E-05	313.6	4.92E-04	1.000	.049	.027
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
406	112.36	.76	0.00	2.53E+04	4.17E-02	3.95E-02	1.898	2.199E-02	9.982E-04	9.447E-04	317.8	4.17E-02	1.000	1.898	.905
407	112.36	.51	0.00	2.65E+04	4.25E-02	4.12E-02	1.927	2.204E-02	1.016E-03	9.612E-04	317.5	4.25E-02	1.000	1.927	1.000
408	112.36	.25	0.00	2.83E+04	4.03E-02	3.91E-02	1.823	2.209E-02	9.628E-04	9.112E-04	317.2	4.03E-02	1.000	1.823	.946
409	112.36	.15	0.00	2.68E+04	3.81E-02	3.61E-02	1.724	2.210E-02	9.113E-04	8.626E-04	316.9	3.81E-02	1.000	1.724	.895
410	112.36	.04	.04	2.43E+04	3.45E-02	3.27E-02	1.560	2.212E-02	8.258E-04	7.816E-04	316.6	3.45E-02	1.000	1.560	.816
411	112.36	0.00	.15	2.16E+04	3.04E-02	2.88E-02	1.374	2.213E-02	7.274E-04	6.885E-04	316.3	3.04E-02	1.000	1.374	.713
412	112.36	0.00	.25	1.58E+04	2.38E-02	2.25E-02	1.076	2.213E-02	5.694E-04	5.392E-04	315.5	2.38E-02	1.000	1.076	.558
413	112.36	0.00	.38	1.57E+04	2.22E-02	2.11E-02	1.005	2.213E-02	5.313E-04	5.035E-04	315.1	2.22E-02	1.000	1.005	.521
414	112.36	0.00	.64	1.00E+04	1.42E-02	1.34E-02	.641	2.213E-02	3.395E-04	3.214E-04	315.1	1.42E-02	1.000	.641	.333
415	112.36	0.00	.89	6.43E+03	9.12E-03	8.63E-03	.412	2.213E-02	2.181E-04	2.064E-04	314.7	9.12E-03	1.000	.412	.214
416	112.36	0.00	1.14	4.03E+03	5.71E-03	5.40E-03	.258	2.213E-02	1.365E-04	1.292E-04	314.2	5.71E-03	1.000	.258	.134
417	112.36	0.00	1.40	2.34E+03	3.32E-03	3.14E-03	.150	2.213E-02	7.933E-05	7.510E-05	313.9	3.32E-03	1.000	.150	.078
418	112.36	0.00	1.65	9.69E+02	1.37E-03	1.30E-03	.062	2.213E-02	3.283E-05	3.108E-05	313.5	1.37E-03	1.000	.062	.032
419	112.36	0.00	1.90												
420	112.36	0.00	2.29												
506	125.06	.76	0.00	2.97E+04	4.23E-02	4.00E-02	1.175	3.601E-02	1.012E-03	9.576E-04	317.5	4.23E-02	1.000	1.175	1.016
507	125.06	.51	0.00	2.92E+04	4.16E-02	3.94E-02	1.153	3.606E-02	9.949E-04	9.417E-04	317.2	4.16E-02	1.000	1.153	1.000
508	125.06	.25	0.00	2.79E+04	3.97E-02	3.75E-02	1.098	3.612E-02	9.488E-04	8.981E-04	316.8	3.97E-02	1.000	1.098	.952
509	125.06	.15	0.00	2.47E+04	3.51E-02	3.32E-02	.972	3.614E-02	8.397E-04	7.949E-04	315.9	3.51E-02	1.000	.972	.842
510	125.06	.04	.04	2.58E+04	3.67E-02	3.48E-02	1.016	3.616E-02	8.786E-04	8.316E-04	316.0	3.67E-02	1.000	1.016	.881
511	125.06	0.00	.15	2.49E+04	3.54E-02	3.35E-02	.979	3.617E-02	8.467E-04	8.015E-04	315.8	3.54E-02	1.000	.979	.849
512	125.06	0.00	.25	2.16E+04	3.07E-02	2.91E-02	.849	3.617E-02	7.344E-04	6.951E-04	315.7	3.07E-02	1.000	.849	.736
513	125.06	0.00	.38	1.82E+04	2.59E-02	2.45E-02	.716	3.617E-02	6.194E-04	5.863E-04	315.2	2.59E-02	1.000	.716	.621
514	125.06	0.00	.64	1.18E+04	1.67E-02	1.58E-02	.462	3.617E-02	3.999E-04	3.785E-04	314.9	1.67E-02	1.000	.462	.401
515	125.06	0.00	.89	7.64E+03	1.08E-02	1.03E-02	.300	3.617E-02	2.592E-04	2.454E-04	314.5	1.08E-02	1.000	.300	.260
516	125.06	0.00	1.14	4.97E+03	7.05E-03	6.67E-03	.195	3.617E-02	1.686E-04	1.596E-04	314.4	7.05E-03	1.000	.195	.169
517	125.06	0.00	1.40	3.14E+03	4.45E-03	4.21E-03	.123	3.617E-02	1.063E-04	1.007E-04	314.2	4.45E-03	1.000	.123	.107
518	125.06	0.00	1.65	1.31E+03	1.86E-03	1.76E-03	.051	3.617E-02	4.441E-05	4.205E-05	314.1	1.85E-03	1.000	.051	.045
519	125.06	0.00	1.90	3.00E+02	4.25E-04	4.03E-04	.012	3.617E-02	1.017E-05	9.631E-06	313.7	4.25E-04	1.000	.012	.010
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X= 4.759E+01 HL /HREFF= 9.213E-01
X= 6.156E+01 HL /HREFF= 9.454E-01
X= 8.696E+01 HL /HREFF= 1.787E+00
X= 1.124E+02 HL /HREFF= 1.927E+00
X= 1.251E+02 HL /HREFF= 1.175E+00
B.L. TRANSITION DISTANCE = 61.56 CM
FULLY TURBULENT B.L. CONDITIONS AT = 112.36 CM

ORIGINAL PAGE IS POOR QUALITY

AMES 3.5 FT HWT TEST (192), C.J. BLUMER, IN-LINE RSI GAP RUN(52) 1973 PAGE 193

TT	= 1.1177E+03(K)	GAP LENGTH	=191.600(CM)
PT	= 5.1639E+05(N/M2)	GAP WIDTH	= .063(CM)
HT	= 1.1517E+06(J/KG)	GAP DEPTH	= 2.032(CM)
RE/METER	= 1.6372E+06	ORIENTATION	= 0.000(DEG)
MACH	= 5.130	QS	= 8.4824E+04(W/M2)
RHO VEL	= 2.9303E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.938 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	4.31E+03	6.02E-03	5.70E-03	.890	6.762E-03	2.878E-04	2.725E-04	313.5				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	4.37E+03	6.10E-03	5.78E-03	.912	6.691E-03	2.920E-04	2.765E-04	314.4				1.000
4	127.63	-.51	0.00	4.54E+03	6.35E-03	6.01E-03	.954	6.655E-03	3.037E-04	2.876E-04	314.3				1.000
5	125.09	-.51	0.00	4.49E+03	6.27E-03	5.94E-03	.947	6.620E-03	3.000E-04	2.841E-04	314.8				1.000
6	122.56	-.51	0.00	4.55E+03	6.36E-03	6.02E-03	.965	6.595E-03	3.041E-04	2.879E-04	314.9				1.000
7	117.47	-.51	0.00	4.77E+03	6.67E-03	6.31E-03	1.020	6.530E-03	3.190E-04	3.029E-04	315.1				1.000
8	112.37	-.51	0.00	4.76E+03	6.67E-03	6.31E-03	1.028	6.485E-03	3.189E-04	3.019E-04	315.2				1.000
9	107.31	-.51	0.00	4.84E+03	6.76E-03	6.41E-03	1.044	6.482E-03	3.236E-04	3.064E-04	315.2				1.000
10	102.20	-.51	0.00	4.87E+03	6.81E-03	6.45E-03	1.019	6.687E-03	3.259E-04	3.086E-04	315.4				1.000
11	97.12	-.51	0.00	4.76E+03	6.66E-03	6.30E-03	.971	6.856E-03	3.186E-04	3.016E-04	315.6				1.000
12	92.04	-.51	0.00	4.87E+03	6.82E-03	6.46E-03	.973	7.011E-03	3.264E-04	3.090E-04	315.9				1.000
13	86.96	-.51	0.00	4.96E+03	6.95E-03	6.58E-03	.970	7.170E-03	3.326E-04	3.149E-04	316.0				1.000
14	81.88	-.51	0.00	5.30E+03	7.43E-03	7.03E-03	1.020	7.283E-03	3.552E-04	3.363E-04	316.6				1.000
15	76.80	-.51	0.00	5.07E+03	7.05E-03	6.67E-03	.954	7.388E-03	3.373E-04	3.191E-04	316.8				1.000
16	71.72	-.51	0.00	5.19E+03	7.28E-03	6.90E-03	.973	7.489E-03	3.485E-04	3.299E-04	316.9				1.000
17	66.64	-.51	0.00	5.22E+03	7.32E-03	6.93E-03	.923	7.927E-03	3.541E-04	3.315E-04	316.9				1.000
18	61.56	-.51	0.00	5.36E+03	7.52E-03	7.12E-03	.881	8.537E-03	3.596E-04	3.405E-04	317.0				1.000
19	56.48	-.51	0.00	5.39E+03	7.56E-03	7.16E-03	.837	9.033E-03	3.616E-04	3.424E-04	316.8				1.000
20	51.39	-.51	0.00	5.85E+03	8.19E-03	7.76E-03	.864	9.478E-03	3.919E-04	3.711E-04	316.5				1.000
21	48.86	-.51	0.00	6.18E+03	8.66E-03	8.20E-03	.891	9.726E-03	4.145E-04	3.924E-04	316.9				1.000
22	46.31	-.51	0.00	6.26E+03	8.77E-03	8.30E-03	.876	1.001E-02	4.196E-04	3.973E-04	316.5				1.000
23	43.77	-.51	0.00	6.31E+03	8.85E-03	8.38E-03	.860	1.029E-02	4.232E-04	4.007E-04	316.4				1.000
24	41.24	-.51	0.00	6.61E+03	9.26E-03	8.77E-03	.876	1.057E-02	4.431E-04	4.195E-04	316.2				1.000
25	38.70	-.51	0.00	6.90E+03	9.51E-03	9.01E-03	.877	1.085E-02	4.551E-04	4.309E-04	315.7				1.000
103	47.59	1.52	0.00	5.51E+03	7.80E-03	7.36E-03	.791	9.864E-03	3.733E-04	3.532E-04	323.5	7.80E-03	1.000	.791	.895
105	47.59	1.02	0.00	5.97E+03	8.35E-03	7.90E-03	.847	9.863E-03	3.995E-04	3.782E-04	319.6	8.35E-03	1.000	.847	.958
107	47.59	.51	0.00	5.78E+03	8.13E-03	7.69E-03	.824	9.864E-03	3.888E-04	3.680E-04	319.1	8.13E-03	1.000	.824	.932
108	47.59	.25	0.00	5.01E+03	7.04E-03	6.66E-03	.713	9.864E-03	3.367E-04	3.187E-04	318.2	7.04E-03	1.000	.713	.807
110	47.59	.04	.04	3.51E+03	4.97E-03	4.70E-03	.504	9.865E-03	2.377E-04	2.250E-04	317.4	4.97E-03	1.000	.504	.570
111	47.59	0.00	.15	2.87E+03	4.03E-03	3.81E-03	.408	9.865E-03	1.927E-04	1.824E-04	317.0	4.03E-03	1.000	.408	.462
112	47.59	0.00	.25	1.65E+03	2.31E-03	2.19E-03	.234	9.865E-03	1.104E-04	1.046E-04	315.9	2.31E-03	1.000	.234	.265
113	47.59	0.00	.38	8.13E+02	1.14E-03	1.08E-03	.115	9.865E-03	5.447E-05	5.159E-05	315.9	1.14E-03	1.000	.115	.131
114	47.59	0.00	.64	8.17E+01	1.14E-04	1.08E-04	.012	9.865E-03	5.441E-06	5.152E-06	315.1	1.14E-04	1.000	.012	.013
115	47.59	0.00	.99												
203	61.56	1.52	0.00	5.26E+03	7.39E-03	7.00E-03	.865	8.544E-03	3.536E-04	3.347E-04	316.3	7.39E-03	1.000	.865	.987
205	61.56	1.02	0.00	5.29E+03	7.43E-03	7.03E-03	.870	8.541E-03	3.554E-04	3.365E-04	318.4	7.43E-03	1.000	.870	.984
207	61.56	.51	0.00	5.11E+03	7.18E-03	6.80E-03	.841	8.539E-03	3.434E-04	3.251E-04	319.1	7.18E-03	1.000	.841	.955
208	61.56	.25	0.00	4.61E+03	6.47E-03	6.13E-03	.758	8.536E-03	3.096E-04	2.931E-04	317.6	6.47E-03	1.000	.758	.861
210	61.56	.04	.04	3.43E+03	4.80E-03	4.55E-03	.563	8.538E-03	2.298E-04	2.176E-04	316.8	4.80E-03	1.000	.563	.639

AMES 3.5 FT HWT TPS (1/3), 0.0, BLUMER, IN-LINE RSI GAP RUN(52) 1973 PAGE 104

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	2.34E+03	3.09E-03	3.77E-03	.466	6.630E-03	1.923E-04	1.822E-04	316.3	3.98E-03	1.000	.466	.525
212	61.56	0.00	.25	1.91E+03	2.63E-03	2.54E-03	.314	8.538E-03	1.282E-04	1.214E-04	316.2	2.68E-03	1.000	.314	.356
213	61.56	0.00	.38												
214	61.56	0.00	.64	1.09E+00	2.30E-06	2.17E-06	.000	8.538E-03	1.399E-07	1.039E-07	338.7	2.30E-06	1.000	.000	.000
215	61.56	0.00	.89												
306	86.96	.75	0.00												
307	86.96	.51	0.10	4.36E+03	6.12E-03	5.79E-03	.854	7.166E-03	2.927E-04	2.771E-04	317.3	6.12E-03	1.000	.854	.880
308	86.96	.25	0.00	3.79E+03	5.18E-03	4.90E-03	.723	7.167E-03	2.477E-04	2.345E-04	316.9	5.18E-03	1.000	.723	.745
309	86.96	.15	0.00	2.87E+03	4.11E-03	3.89E-03	.574	7.167E-03	1.957E-04	1.853E-04	316.7	4.11E-03	1.000	.574	.592
310	86.96	.04	.04	2.49E+03	3.47E-03	3.29E-03	.484	7.166E-03	1.661E-04	1.572E-04	316.5	3.47E-03	1.000	.484	.499
311	86.96	0.00	.15	1.81E+03	2.53E-03	2.39E-03	.352	7.166E-03	1.208E-04	1.144E-04	316.2	2.53E-03	1.000	.352	.363
312	86.96	0.00	.25	9.81E+02	1.37E-03	1.30E-03	.192	7.168E-03	6.579E-05	6.221E-05	315.5	1.37E-03	1.000	.192	.198
313	86.96	0.00	.38	6.44E+02	9.01E-04	8.53E-04	.126	7.168E-03	4.313E-05	4.081E-05	314.9	9.01E-04	1.000	.126	.130
314	86.96	0.00	.64	1.18E+02	1.66E-04	1.57E-04	.023	7.166E-03	7.923E-06	7.502E-06	315.1	1.66E-04	1.000	.023	.024
315	86.96	0.00	.89												
316	86.96	0.00	1.14												
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
506	125.06	.76	0.00	3.65E+03	5.10E-03	4.83E-03	.770	6.630E-03	2.441E-04	2.311E-04	315.7	5.10E-03	1.000	.770	.812
507	125.06	.51	0.00	3.37E+03	4.70E-03	4.45E-03	.710	6.627E-03	2.253E-04	2.131E-04	315.5	4.70E-03	1.000	.710	.749
508	125.06	.25	0.00	2.64E+03	3.70E-03	3.50E-03	.558	6.625E-03	1.770E-04	1.676E-04	315.1	3.70E-03	1.000	.558	.509
509	125.06	.15	0.00	1.55E+03	2.16E-03	2.05E-03	.326	6.624E-03	1.034E-04	9.790E-05	314.5	2.16E-03	1.000	.326	.344
510	125.06	.04	.04	2.33E+03	3.25E-03	3.09E-03	.491	6.623E-03	1.557E-04	1.474E-04	314.4	3.25E-03	1.000	.491	.516
511	125.06	0.00	.15	2.18E+03	3.05E-03	2.88E-03	.460	6.623E-03	1.457E-04	1.380E-04	314.5	3.05E-03	1.000	.460	.485
512	125.06	0.00	.25	1.45E+03	2.03E-03	1.93E-03	.307	6.623E-03	9.727E-05	9.211E-05	314.5	2.03E-03	1.000	.307	.324
513	125.06	0.00	.38	9.14E+02	1.28E-03	1.21E-03	.193	6.623E-03	6.110E-05	5.786E-05	314.3	1.28E-03	1.000	.193	.203
514	125.06	0.00	.64	1.95E+02	2.73E-04	2.58E-04	.041	6.623E-03	1.304E-05	1.234E-05	314.0	2.73E-04	1.000	.041	.043
515	125.06	0.00	.89												
516	125.06	0.00	1.14												
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.772E-01
X=	4.124E+01	HL	/HREFF=	8.764E-01
X=	4.377E+01	HL	/HREFF=	8.539E-01
X=	4.631E+01	HL	/HREFF=	8.765E-01
X=	4.886E+01	HL	/HREFF=	8.939E-01
X=	5.139E+01	HL	/HREFF=	8.843E-01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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X=     5.648E+01   HL   /HREFF=    8.369E-01
X=     6.156E+01   HL   /HREFF=    8.866E-01
X=     6.664E+01   HL   /HREFF=    9.234E-01
X=     7.172E+01   HL   /HREFF=    9.726E-01
X=     7.680E+01   HL   /HREFF=    9.536E-01
X=     8.188E+01   HL   /HREFF=    1.027E+00
X=     8.696E+01   HL   /HREFF=    9.697E-01
X=     9.204E+01   HL   /HREFF=    9.731E-01
X=     9.712E+01   HL   /HREFF=    9.712E-01
X=     1.022E+02   HL   /HREFF=    1.019E+00
X=     1.073E+02   HL   /HREFF=    1.044E+00
X=     1.124E+02   HL   /HREFF=    1.028E+00
X=     1.175E+02   HL   /HREFF=    1.022E+00
X=     1.226E+02   HL   /HREFF=    9.653E-01
X=     1.251E+02   HL   /HREFF=    9.474E-01
X=     1.276E+02   HL   /HREFF=    9.540E-01
X=     1.302E+02   HL   /HREFF=    9.122E-01
X=     1.352E+02   HL   /HREFF=    8.896E-01

X=     4.759E+01   HL   /HREFF=    8.240E-01
X=     6.156E+01   HL   /HREFF=    8.406E-01
X=     8.696E+01   HL   /HREFF=    8.537E-01
X=     1.251E+02   HL   /HREFF=    7.598E-01
B.L. TRANSITION DISTANCE =  61.56 CM
FULLY TURBULENT B.L. CONDITIONS AT =  81.88 CM
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AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(53) 1973 PAGE 185

TT	= 1.1373E+03(K)	GAP LENGTH	=101.590(CM)
PT	= 1.0296E+06(N/M2)	GAP WIDTH	= .063(CM)
HT	= 1.2743E+06(J/KG)	GAP DEPTH	= 2.332(CM)
RE/METER	= 7.1712E+06	ORIENTATION	= 0.000(DEG)
MACH	= 5.190	QS	= 1.2241E+05(N/M2)
RHO VEL	= 4.1147E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.976 FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HT/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.64E+04	3.61E-02	3.42E-02	.802	4.494E-02	8.765E-04	8.302E-04	316.8				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	2.39E+04	3.12E-02	2.96E-02	.796	3.924E-02	7.594E-04	7.192E-04	317.4				1.000
4	127.63	-.51	0.00	2.15E+04	2.93E-02	2.78E-02	.806	3.639E-02	7.126E-04	6.749E-04	317.6				1.000
5	125.09	-.51	0.00	1.92E+04	2.62E-02	2.49E-02	.782	3.355E-02	6.377E-04	6.040E-04	317.9				1.000
6	122.56	-.51	0.00	1.76E+04	2.40E-02	2.28E-02	.763	3.177E-02	5.841E-04	5.532E-04	317.8				1.000
7	117.47	-.51	0.00	1.45E+04	1.99E-02	1.88E-02	.788	2.522E-02	4.827E-04	4.572E-04	317.9				1.000
8	112.37	-.51	0.00	1.17E+04	1.60E-02	1.52E-02	.778	2.056E-02	3.889E-04	3.683E-04	318.4				1.000
9	107.31	-.51	0.00	9.71E+03	1.33E-02	1.26E-02	.781	1.706E-02	3.228E-04	3.057E-04	318.4				1.000
10	102.20	-.51	0.00	8.29E+03	1.13E-02	1.07E-02	.795	1.426E-02	2.756E-04	2.610E-04	318.5				1.000
11	97.12	-.51	0.00	6.97E+03	9.53E-03	9.03E-03	.787	1.212E-02	2.317E-04	2.194E-04	318.8				1.000
12	92.04	-.51	0.00	6.28E+03	8.60E-03	8.14E-03	.815	1.054E-02	2.089E-04	1.979E-04	319.0				1.000
13	86.96	-.51	0.00	5.35E+03	7.32E-03	6.93E-03	.754	9.706E-03	1.779E-04	1.685E-04	319.5				1.000
14	81.88	-.51	0.00	5.57E+03	7.63E-03	7.23E-03	.830	9.190E-03	1.854E-04	1.756E-04	319.4				1.000
15	76.80	-.51	0.00	5.56E+03	7.61E-03	7.20E-03	.832	9.146E-03	1.849E-04	1.751E-04	319.4				1.000
16	71.72	-.51	0.00	6.00E+03	8.22E-03	7.79E-03	.876	9.380E-03	1.998E-04	1.892E-04	319.[illegible]				1.000
17	66.64	-.51	0.00	6.48E+03	8.88E-03	8.41E-03	.909	9.771E-03	2.158E-04	2.043E-04	319.9				1.000
18	61.56	-.51	0.00	6.80E+03	9.33E-03	8.83E-03	.911	1.024E-02	2.267E-04	2.146E-04	320.3				1.000
19	56.48	-.51	0.00	6.94E+03	9.51E-03	9.01E-03	.875	1.087E-02	2.312E-04	2.189E-04	320.0				1.000
20	51.39	-.51	0.00	7.28E+03	9.97E-03	9.44E-03	.862	1.157E-02	2.424E-04	2.295E-04	320.0				1.000
21	48.86	-.51	0.00	6.95E+03	9.53E-03	9.02E-03	.798	1.193E-02	2.315E-04	2.192E-04	320.6				1.000
22	46.31	-.51	0.00	7.72E+03	1.08E-02	9.50E-03	.815	1.230E-02	2.430E-04	2.309E-04	320.1				1.000
23	43.77	-.51	0.00	7.43E+03	1.02E-02	9.63E-03	.803	1.267E-02	2.473E-04	2.341E-04	319.8				1.000
24	41.24	-.51	0.00	7.35E+03	1.07E-02	1.02E-02	.824	1.304E-02	2.612E-04	2.473E-04	319.7				1.000
25	38.70	-.51	0.00	8.05E+03	1.10E-02	1.05E-02	.823	1.341E-02	2.682E-04	2.540E-04	319.8				1.000
103	47.59	1.32	0.00	6.38E+03	9.53E-03	9.02E-03	.788	1.216E-02	2.316E-04	2.192E-04	328.1	9.53E-03	1.000	.788	.976
105	47.59	1.32	0.00	7.05E+03	9.74E-03	9.22E-03	.805	1.219E-02	2.357E-04	2.241E-04	324.7	9.74E-03	1.000	.805	.998
107	47.59	.51	0.00	6.77E+03	9.34E-03	8.94E-03	.771	1.211E-02	2.270E-04	2.149E-04	324.1	9.34E-03	1.000	.771	.956
108	47.59	.25	0.00	5.72E+03	7.92E-03	7.50E-03	.654	1.211E-02	1.926E-04	1.823E-04	323.1	7.92E-03	1.000	.654	.811
110	47.59	.06	.06	4.06E+03	5.58E-03	5.28E-03	.461	1.211E-02	1.356E-04	1.284E-04	321.8	5.58E-03	1.000	.461	.571
111	47.59	0.00	.15	3.11E+03	4.27E-03	4.04E-03	.352	1.211E-02	1.037E-04	9.[illegible]E-05	321.[illegible]	4.27E-03	1.000	.352	.437
112	47.59	0.00	.25	1.57E+03	2.15E-03	2.04E-03	.178	1.211E-02	5.23[illegible]	4.952E-05	323.1	2.15E-03	1.000	.178	.220
113	47.59	0.00	.78	7.13E+02	9.75E-04	9.24E-04	.081	1.211E-02	2.370E-[illegible]	2.245E-05	319.3	9.75E-04	1.000	.081	.100
114	47.59	0.00	.64												
115	47.59	0.00	.95												
203	61.56	1.52	0.00	6.24E+03	8.56E-03	8.11E-03	.836	1.023E-02	2.081E-04	1.970E-04	321.0	8.56E-03	1.000	.836	.917
205	61.56	1.02	.00	6.07E+03	8.34E-03	7.90E-03	.815	1.023E-02	2.027E-04	1.913E-04	321.7	8.34E-03	1.000	.815	.895
207	61.56	.51	0.00	5.55E+03	7.62E-03	7.21E-03	.744	1.024E-02	1.852E-04	1.753E-04	320.3	7.62E-03	1.000	.744	.917
208	61.56	.25	0.00	4.61E+03	6.33E-03	5.99E-03	.618	1.024E-02	1.538E-04	1.456E-04	320.7	6.33E-03	1.000	.618	.679
210	61.56	.06	.04	2.77E+03	3.79E-03	3.59E-03	.370	1.024E-02	9.215E-05	8.726E-05	319.8	3.79E-03	1.000	.370	.407

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(53) 1973 PAGE 106

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	3.71E+03	4.11E-03	3.85E-03	.401	1.024E-02	9.478E-05	9.458E-05	317.6	4.11E-03	1.000	.401	.440
212	61.56	0.00	.25	1.81E+03	2.47E-03	2.34E-03	.241	1.024E-02	5.998E-05	5.681E-05	317.4	2.47E-03	1.000	.241	.265
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.76	0.00												
307	86.96	.51	0.00	3.28E+03	4.49E-03	4.25E-03	.465	9.651E-03	1.092E-04	1.034E-04	319.2	4.49E-03	1.000	.465	.617
308	86.96	.25	0.00	2.62E+03	3.58E-03	3.39E-03	.370	9.671E-03	8.694E-05	8.233E-05	318.7	3.58E-03	1.000	.370	.490
309	86.96	.15	0.00	1.63E+03	2.23E-03	2.12E-03	.231	9.676E-03	5.429E-05	5.142E-05	318.1	2.23E-03	1.000	.231	.306
310	86.96	.04	.04	1.19E+03	1.63E-03	1.54E-03	.168	9.680E-03	3.954E-05	3.745E-05	317.9	1.63E-03	1.000	.168	.223
311	86.96	0.00	.15	8.26E+01	1.13E-04	1.07E-04	.012	9.682E-03	2.748E-06	2.603E-06	317.3	1.13E-04	1.000	.012	.015
312	86.96	0.00	.25												
313	86.96	0.00	.38	9.69E+02	1.32E-03	1.25E-03	.136	9.682E-03	3.209E-05	3.040E-05	316.2	1.32E-03	1.000	.136	.181
314	86.96	0.00	.64	6.39E+01	8.71E-05	8.25E-05	.009	9.682E-03	2.116E-06	2.004E-06	315.9	8.71E-05	1.000	.009	.012
315	86.96	0.00	.89												
316	86.96	0.00	1.14												
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.91												
320	86.96	0.00	2.29												
506	125.06	.76	0.00	1.55E+04	2.11E-02	2.00E-02	.636	3.321E-02	5.135E-04	4.863E-04	317.4	2.11E-02	1.000	.636	.813
507	125.06	.51	0.00	1.47E+04	2.00E-02	1.90E-02	.601	3.327E-02	4.863E-04	4.606E-04	317.1	2.00E-02	1.000	.601	.769
508	125.06	.25	0.00	1.29E+04	1.76E-02	1.66E-02	.527	3.333E-02	4.271E-04	4.045E-04	316.6	1.76E-02	1.000	.527	.674
509	125.06	.15	0.00	9.48E+03	1.29E-02	1.22E-02	.387	3.336E-02	3.138E-04	2.973E-04	315.7	1.29E-02	1.000	.387	.495
510	125.06	.04	.04	1.12E+04	1.52E-02	1.44E-02	.456	3.338E-02	3.731E-04	3.566E-04	[illegible]	1.52E-02	1.000	.456	.583
511	125.06	0.00	.15	1.00E+04	1.37E-02	1.30E-02	.410	3.339E-02	3.326E-04	3.150E-04	315.6	1.37E-02	1.000	.410	.524
512	125.06	0.00	.25	6.39E+03	8.70E-03	8.24E-03	.261	3.339E-02	2.115E-04	2.004E-04	315.4	8.70E-03	1.000	.261	.333
513	125.06	0.00	.38	3.64E+03	4.96E-03	4.70E-03	.148	3.339E-02	1.205E-04	1.142E-04	314.8	4.96E-03	1.000	.148	.190
514	125.06	0.00	.64	4.76E+02	6.48E-04	6.13E-04	.019	3.339E-02	1.574E-05	1.491E-05	314.3	6.48E-04	1.000	.019	.025
515	125.06	0.00	.89												
516	125.06	0.00	1.14												
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.227E-01
X=	4.124E+01	HL	/HREFF=	8.239E-01
X=	[illegible].377E+01	HL	/HREFF=	8.[illegible]E-01
X=	4.631E+01	HL	/HREFF=	8.1[illegible]E-01
X=	4.886E+01	HL	/HREFF=	7.95[illegible]E-01
X=	5.139E+01	HL	/HREFF=	8.[illegible]18E-01

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X=   5.648E+01  HL  /HREFF=   [illegible]
X=   6.156E+01  HL  /HREFF=   9.136E-01
X=   6.644E+01  HL  /HREFF=   9.337E-01
X=   7.172E+01  HL  /HREFF=   8.764E-01
X=   7.680E+01  HL  /HREFF=   8.317E-01
X=   8.188E+01  HL  /HREFF=   8.302E-01
X=   8.696E+01  HL  /HREFF=   7.541E-01
X=   9.204E+01  HL  /HREFF=   8.154E-01
X=   9.712E+01  HL  /HREFF=   7.266E-01
X=   1.022E+02  HL  /HREFF=   7.991E-01
X=   1.073E+02  HL  /HREFF=   7.810E-01
X=   1.124E+02  HL  /HREFF=   7.784E-01
X=   1.175E+02      /HREFF=   7.977E-01
X=   1.226E+02      /HREFF=   7.829E-01
X=   1.251E+02      /HREFF=   7.821E-01
X=   1.276E+02  HL  /HREFF=   8.098E-01
X=   1.302E+02  HL  /HREFF=   7.962E-01
X=   1.352E+02  HL  /HREFF=   8.025E-01

X=   4.759E+01  HL  /HREFF=   7.714E-01
X=   6.156E+01  HL  /HREFF=   7.444E-01
X=   8.696E+01  HL  /HREFF=   4.652E-01
X=   1.251E+02  HL  /HREFF=   6.814E-01
B.L. TRANSITION DISTANCE =  40.96 CM
FULLY TURBULENT B.L. CONDITIONS AT =  66.64 CM
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AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(54) 1973

TT	= 1.0942E+03(K)	GAP LENGTH	=181.500(CM)
PT	= 5.1739E+05(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.1544E+06(J/KG)	GAP DEPTH	= 3.810(CM)
RE/METER	= 1.7075E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.195	QS	= 4.3547E+04(W/M2)
RHO VEL	= 2.1262E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 0.930 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER CONC.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.77E+04	2.88E-02	2.72E-02	3.944	7.291E-03	1.351E-03	1.280E-03	301.2				
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	1.79E+04	2.54E-02	2.41E-02	3.575	7.107E-03	1.194E-03	1.131E-03	301.6				
4	127.63	-.51	0.00	1.77E+04	2.51E-02	2.37E-02	3.573	7.014E-03	1.178E-03	1.116E-03	301.5				
5	125.09	-.51	0.00	1.73E+04	2.45E-02	2.32E-02	3.541	6.922E-03	1.152E-03	1.091E-03	301.7				
6	122.56	-.51	0.00	1.71E+04	2.43E-02	2.30E-02	3.555	6.830E-03	1.141E-03	1.081E-03	301.7				
7	117.47	-.51	0.00	1.70E+04	2.41E-02	2.28E-02	3.598	6.703E-03	1.133E-03	1.073E-03	301.8				
8	112.37	-.51	0.00	1.68E+04	2.38E-02	2.26E-02	3.602	6.616E-03	1.120E-03	1.061E-03	302.0				
9	107.31	-.51	0.00	1.65E+04	2.35E-02	2.22E-02	3.571	6.573E-03	1.103E-03	1.045E-03	302.1				
10	102.20	-.51	0.00	1.59E+04	2.25E-02	2.14E-02	3.336	6.759E-03	1.059E-03	1.004E-03	302.1				
11	97.12	-.51	0.00	1.47E+04	2.08E-02	1.97E-02	3.001	6.942E-03	9.790E-04	9.274E-04	302.2				
12	92.04	-.51	0.00	9.00E+03	1.28E-02	1.21E-02	1.801	7.088E-03	5.999E-04	5.683E-04	301.3				1.000
13	86.96	-.31	0.00	1.20E+04	1.70E-02	1.61E-02	2.357	7.230E-03	8.009E-04	7.585E-04	302.8				1.000
14	81.88	-.51	0.00	1.11E+04	1.57E-02	1.49E-02	2.149	7.330E-03	7.400E-04	7.009E-04	303.1				1.000
15	76.80	-.51	0.00	9.37E+03	1.33E-02	1.26E-02	1.793	7.430E-03	6.260E-04	5.929E-04	303.2				1.000
16	71.72	-.51	0.00	8.30E+03	1.18E-02	1.12E-02	1.567	7.531E-03	5.546E-04	5.253E-04	303.3				1.000
17	66.64	-.51	0.00	7.56E+03	1.08E-02	1.02E-02	1.350	7.969E-03	5.056E-04	4.789E-04	303.5				1.000
18	61.56	-.31	0.00	6.99E+03	9.94E-03	9.42E-03	1.159	8.579E-03	4.672E-04	4.425E-04	303.8				1.000
19	56.48	-.51	0.00	6.40E+03	9.12E-03	8.53E-03	1.034	9.084E-03	4.284E-04	4.057E-04	304.3				1.000
20	51.39	-.51	0.00	6.53E+03	9.31E-03	8.82E-03	.976	9.542E-03	4.374E-04	4.143E-04	304.3				1.000
21	48.86	-.31	0.00	6.80E+03	9.69E-03	9.18E-03	.990	9.793E-03	4.554E-04	4.314E-04	304.5				1.000
22	46.31	-.51	0.00	6.90E+03	9.83E-03	9.31E-03	.976	1.008E-02	4.618E-04	4.374E-04	304.5				1.000
23	43.77	-.51	0.00	6.95E+03	9.91E-03	9.39E-03	.957	1.036E-02	4.656E-04	4.410E-04	304.5				1.000
24	41.24	-.51	0.00	7.18E+03	1.02E-02	9.69E-03	.962	1.063E-02	4.809E-04	4.555E-04	304.6				1.000
25	38.70	-.51	0.00	7.17E+03	1.02E-02	9.67E-03	.936	1.091E-02	4.799E-04	4.545E-04	304.1				1.000
103	47.59	1.52	0.00	5.56E+03	7.92E-03	7.49E-03	.797	9.932E-03	3.720E-04	3.521E-04	311.3	7.92E-03	1.000	.797	.811
105	47.59	1.02	0.00	5.90E+03	8.45E-03	8.00E-03	.851	9.932E-03	3.970E-04	3.759E-04	307.6	8.45E-03	1.000	.851	.866
107	47.59	.51	0.00	6.02E+03	8.61E-03	8.15E-03	.867	9.932E-03	4.044E-04	3.830E-04	307.2	8.61E-03	1.000	.867	.882
108	47.59	.25	0.00	5.91E+03	8.45E-03	8.00E-03	.850	9.932E-03	3.969E-04	3.758E-04	306.5	8.45E-03	1.000	.850	.865
110	47.59	.04	.04	5.05E+03	7.22E-03	6.84E-03	.727	9.932E-03	3.391E-04	3.212E-04	305.6	7.22E-03	1.000	.727	.740
111	47.59	0.00	.15	4.36E+03	6.22E-03	5.89E-03	.626	9.932E-03	2.921E-04	2.767E-04	305.2	6.22E-03	1.000	.626	.637
112	47.59	0.00	.25	3.33E+03	4.69E-03	4.45E-03	.473	9.932E-03	2.206E-04	2.089E-04	304.4	4.69E-03	1.000	.473	.481
113	47.59	0.00	.38	2.15E+03	3.06E-03	2.90E-03	.308	9.932E-03	1.437E-04	1.361E-04	304.0	3.06E-03	1.000	.308	.313
114	47.59	0.00	.64	3.84E+02	1.26E-03	1.19E-03	.126	9.932E-03	5.902E-05	5.591E-05	302.9	1.26E-03	1.000	.126	.128
115	47.59	0.00	.89	2.61E+02	3.71E-04	3.52E-04	.037	9.932E-03	1.744E-05	1.652E-05	302.0	3.71E-04	1.000	.037	.038
203	61.56	1.52	0.00	5.06E+03	7.21E-03	6.83E-03	.840	8.587E-03	3.387E-04	3.208E-04	304.7	7.21E-03	1.000	.840	.728
205	61.56	1.02	0.00	4.93E+03	6.89E-03	6.53E-03	.803	8.584E-03	3.240E-04	3.068E-04	305.1	6.89E-03	1.000	.803	.696
207	61.56	.51	0.00	5.23E+03	7.50E-03	7.11E-03	.874	8.582E-03	3.526E-04	3.339E-04	305.0	7.50E-03	1.000	.874	.755
208	61.56	.25	0.00	6.10E+03	8.69E-03	8.23E-03	1.013	8.581E-03	4.382E-04	3.866E-04	304.6	8.69E-03	1.000	1.013	.874
210	61.56	.04	.04	6.23E+03	8.87E-03	8.40E-03	1.034	8.580E-03	4.163E-04	3.947E-04	303.9	8.87E-03	1.000	1.034	.892

AMES 3.5 FT HWT TEST (132), C.B. BLUMER, IN-LINE RSI GAP RUN(54) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	7.97E+03	6.39E-03	7.38E-03	.973	6.580E-03	3.944E-04	3.736E-04	303.0	6.39E-03	1.000	.978	.844
212	61.56	0.00	.25	5.74E+03	7.16E-03	6.78E-03	.834	6.580E-03	3.353E-04	3.185E-04	302.6	7.16E-03	1.000	.834	.720
7[illegible]	89.79	0.00	2.26								298.93				
214	61.56	0.00	.64												
215	61.56	0.00	.89	1.11E+03	1.56E-03	1.48E-03	.182	6.580E-03	7.323E-05	5.942E-05	300.7	1.56E-03	1.000	.182	.157
306	86.96	.75	0.00												
307	86.96	.31	0.00	7.82E+03	1.11E-02	1.35E-02	1.538	7.227E-03	5.223E-04	4.948E-04	303.0	1.11E-02	1.000	1.536	.653
308	86.96	.25	0.00	1.[illegible]E+04	1.46E-02	1.38E-02	2.017	7.227E-03	6.948E-04	6.487E-04	302.7	1.46E-02	1.000	2.017	.856
309	86.96	.15	0.00	1.[illegible]E+04	1.51E-02	1.43E-02	2.095	7.227E-03	7.139E-04	6.706E-04	302.4	1.51E-02	1.000	2.085	.884
310	86.96	.04	.04	1.[illegible]E+04	1.47E-02	1.39E-02	2.031	7.228E-03	6.897E-04	6.533E-04	302.2	1.47E-02	1.000	2.031	.862
311	86.96	0.00	.15	9.72E+03	1.38E-02	1.31E-02	1.909	7.228E-03	6.454E-04	6.142E-04	301.6	1.38E-02	1.000	1.909	.810
312	86.96	0.00	.25	[illegible]E+03	1.10E-02	1.04E-02	1.518	7.228E-03	5.156E-04	4.985E-04	301.2	1.10E-02	1.000	1.518	.644
313	86.96	0.00	.38	6.37E+03	9.03E-03	6.55E-03	1.249	7.228E-03	4.243E-04	4.019E-04	301.2	9.03E-03	1.000	1.249	.530
314	86.96	0.00	.64	4.45E+03	6.31E-03	5.98E-03	.873	7.228E-03	2.966E-04	2.810E-04	301.1	6.31E-03	1.000	.873	.371
315	86.96	0.00	.89	2.77E+03	3.93E-03	3.72E-03	.543	7.228E-03	1.844E-04	1.747E-04	300.5	3.93E-03	1.000	.543	.230
316	86.96	0.00	1.14	1.[illegible]E+03	2.54E-03	2.41E-03	.352	7.228E-03	1.195E-04	1.133E-04	300.2	2.54E-03	1.000	.352	.149
317	86.96	0.00	1.40	9.33E+02	1.32E-03	1.25E-03	.183	7.228E-03	6.205E-05	5.879E-05	299.9	1.32E-03	1.000	.183	.076
318	86.96	0.00	1.65	[illegible]E+02	5.10E-04	4.83E-04	.071	7.228E-03	2.397E-05	2.271E-05	299.8	5.10E-04	1.000	.071	.030
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
506	125.06	.75	0.00	1.27E+04	1.80E-02	1.71E-02	2.608	6.921E-03	8.489E-04	8.033E-04	301.5	1.80E-02	1.000	2.608	.736
507	125.06	.51	0.00	1.46E+04	2.07E-02	1.96E-02	2.994	6.920E-03	9.735E-04	9.223E-04	301.3	2.07E-02	1.000	2.994	.845
508	125.06	.25	0.00	1.[illegible]E+04	2.22E-02	2.10E-02	3.203	6.920E-03	1.042E-03	9.867E-04	300.6	2.22E-02	1.000	3.203	
509	125.06	.15	0.00	1.44E+04	2.05E-02	1.94E-02	2.955	6.920E-03	9.609E-04	9.104E-04	300.1	2.05E-02	1.000	2.955	.835
510	125.06	.04	.04	1.51E+04	2.14E-02	2.03E-02	3.097	6.920E-03	1.007E-03	9.541E-04	300.7	2.14E-02	1.000	3.097	
511	125.06	0.00	.15	1.44E+04	2.03E-02	1.93E-02	2.940	6.920E-03	9.559E-04	9.056E-04	300.5	2.03E-02	1.000	2.940	.830
512	125.06	0.00	.25	1.22E+04	1.73E-02	1.64E-02	2.503	6.920E-03	8.139E-04	7.711E-04	300.3	1.73E-02	1.000	2.503	.737
513	125.06	0.00	.38	1.01E+04	1.42E-02	1.35E-02	2.057	6.920E-03	6.687E-04	6.336E-04	300.2	1.42E-02	1.000	2.057	.581
514	125.06	0.00	.64	6.[illegible]E+03	9.10E-03	8.62E-03	1.314	6.920E-03	4.274E-04	4.050E-04	299.9	9.10E-03	1.000	1.314	.371
515	125.06	0.00	.89	4.[illegible]E+03	5.77E-03	5.46E-03	.833	6.920E-03	2.713E-04	2.567E-04	299.4	5.77E-03	1.000	.833	.235
516	125.06	0.00	1.14	2.71E+03	3.83E-03	3.63E-03	.554	6.920E-03	1.802E-04	1.707E-04	299.5	3.83E-03	1.000	.554	.156
517	125.06	0.00	1.40	1.23E+03	1.74E-03	1.64E-03	.251	6.920E-03	8.156E-05	7.729E-05	299.4	1.74E-03	1.000	.251	.071
518	125.06	0.00	1.65	7.7[illegible]E+02	1.09E-03	1.03E-03	.157	6.920E-03	5.117E-05	4.848E-05	299.3	1.09E-03	1.000	.157	.044
519	125.06	0.00	1.90	2.51E+02	3.55E-04	3.36E-04	.051	6.920E-03	1.666E-05	1.579E-05	299.1	3.55E-04	1.000	.051	.014
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	9.357E-01
X=	4.124E+01	HL	/HREFF=	9.625E-01
X=	4.377E+01	HL	/HREFF=	9.569E-01
X=	4.631E+01	HL	/HREFF=	9.735E-01
X=	4.885E+01	HL	/HREFF=	9.997E-01
X=	5.139E+01	HL	/HREFF=	9.735E-01
X=	5.648E+01	HL	/HREFF=	1.014E+00

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	1.350E+00
X=	7.172E+01	HL	/HREFF=	1.567E+00
X=	7.690E+01	HL	/HREFF=	1.733E+00
X=	8.188E+01	HL	/HREFF=	2.149E+00
X=	8.696E+01	HL	/HREFF=	2.337E+00
X=	9.204E+01	HL	/HREFF=	1.531E+00
X=	9.712E+01	HL	/HREFF=	3.031E+00
X=	1.022E+02	HL	/HREFF=	3.336E+00
X=	1.073E+02	HL	/HREFF=	3.571E+00
X=	1.124E+02	HL	/HREFF=	3.602E+00
X=	1.175E+02	HL	/HREFF=	3.599E+00
X=	1.226E+02	HL	/HREFF=	3.555E+00
X=	1.251E+02	HL	/HREFF=	3.541E+00
X=	1.276E+02	HL	/HREFF=	3.673E+00
X=	1.302E+02	HL	/HREFF=	3.579E+00
X=	1.352E+02	HL	/HREFF=	3.944E+00
X=	[illegible].759E+01	HL	/HREFF=	8.667E-01
X=	.156E+01	HL	/HREFF=	8.749E-01
X=	8.696E+01	HL	/HREFF=	1.539E+00
X=	1.251E+02	HL	/HREFF=	2.994E+00

B.L. TRANSITION DISTANCE = 56.45 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.00 CM

AMES 3.5 FT HWT TEST (1-2), C.A. BLUMER, IN-LINE RSI GAP RUN(30) 1973 PAGE 109

TT	= 1.13 ?E+03(K)	GAP LENGTH	=131.5??(CM)
PT	= 1.?23?E+05(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.2??E+0?(J/KG)	GAP DEPTH	= 3.81?(CM)
RE/METER	= 3.17?E+0?	ORIENTATION	= 0.00?(DEG)
MACH	= 5.1??	QS	= 1.2398E+05(W/M2)
RHO VEL	= 4.11?E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= ?.91? FOR HT		
HAW/HT	= ?.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.31	0.00	3.95E+04	4.59E-02	4.27E-02	.996	4.517E-02	1.093E-03	1.036E-03	304.5				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	3.37E+04	4.54E-02	4.30E-02	1.151	3.944E-02	1.101E-03	1.044E-03	305.0				1.000
4	127.63	-.51	0.00	3.57E+04	4.71E-02	4.46E-02	1.287	3.657E-02	1.143E-03	1.084E-03	305.0				1.000
5	125.09	-.51	0.00	3.51E+04	4.73E-02	4.48E-02	1.4?2	3.371E-02	1.148E-03	1.088E-03	305.1				1.000
6	122.56	-.51	0.00	3.53E+04	4.91E-02	4.56E-02	1.560	3.?85E-02	1.169E-03	1.108E-03	305.0				1.000
7	117.47	-.31	0.00	3.65E+04	4.91E-02	4.56E-02	1.940	2.533E-02	1.193E-03	1.131E-03	305.2				1.000
8	112.37	-.51	0.00	3.54E+04	4.76E-02	4.51E-02	2.305	2.065E-02	1.156E-03	1.096E-03	305.4				1.000
9	107.31	-.31	0.00	3.30E+04	4.53E-02	4.29E-02	2.652	1.707E-02	1.099E-03	1.042E-03	305.5				1.000
10	102.20	-.51	0.00	3.10E+04	4.17E-02	3.95E-02	2.911	1.431E-02	1.012E-03	9.588E-04	305.5				1.000
11	97.12	-.51	0.00	2.74E+04	3.68E-02	3.49E-02	3.032	1.215E-02	8.944E-04	8.478E-04	305.6				
12	92.64	-.51	0.00	1.94E+04	2.47E-02	2.34E-02	2.341	1.?56E-02	6.0?4E-04	5.691E-04	304.3				1.000
13	86.96	-.51	0.00	2.1?E+04	2.99E-02	2.75E-02	2.?85	9.720E-03	7.046E-04	6.679E-04	306.4				1.000
14	81.88	-.51	0.00	1.92E+04	2.99E-02	2.46E-02	2.818	9.200E-03	6.296E-04	5.968E-04	306.5				1.000
15	76.8?	-.51	0.00	1.49E+04	2.01E-02	1.9?E-02	2.191	9.156E-03	4.971E-04	4.617E-04	306.6				1.000
16	71.72	-.51	0.00	1.25E+04	1.68E-02	1.59E-02	1.79?	9.391E-03	4.?81E-04	3.868E-04	306.8				1.000
17	66.64	-.51	0.00	1.?8E+04	1.46E-02	1.39E-02	1.495	9.781E-03	3.55?E-04	3.365E-04	307.1				1.000
18	61.56	-.51	0.00	9.?5E+03	1.33E-02	1.26E-02	1.298	1.025E-02	3.233E-04	3.061E-04	307.5				1.000
19	56.48	-.51	0.00	9.??E+03	1.27E-02	1.21E-02	1.172	1.0??E-02	3.095E-04	2.933E-04	307.9				1.000
20	51.39	-.51	0.00	9.?2E+03	1.29E-02	1.22E-02	1.111	1.158E-02	3.124E-04	2.960E-04	308.0				1.000
21	48.?6	-.31	0.00	9.14E+03	1.24E-02	1.17E-02	1.035	1.194E-02	3.0?1E-04	2.?44E-04	308.4				1.000
22	46.31	-.51	0.00	9.17E+03	1.23E-02	1.17E-02	1.0?1	1.231E-02	2.994E-04	2.838E-04	308.2				1.000
23	43.77	-.31	0.00	?.??E+03	1.20E-02	1.13E-02	.944	1.269E-02	2.9?7E-04	2.755E-04	308.2				1.000
24	41.24	-.31	0.00	8.9?E+03	1.21E-02	1.14E-02	.925	1.30?E-02	2.932E-04	2.779E-04	308.3				1.000
25	38.70	-.51	0.00	8.7?E+03	1.18E-02	1.12E-02	.8??	1.343E-02	2.87?E-04	2.720E-04	307.3				1.000
133	47.59	1.52	0.00	7.21E+03	9.84E-03	9.32E-03	.813	1.211E-02	2.39?E-04	2.264E-04	31?.6	9.84E-03	1.000	.813	.790
195	47.59	1.02	0.00	7.3?E+03	9.98E-03	9.45E-03	.924	1.211E-02	2.423E-04	2.295E-04	312.7	9.98E-03	1.000	.824	.809
197	47.59	.31	0.00	7.99E+03	1.09E-02	1.03E-02	.896	1.212E-02	2.637E-04	2.498E-04	312.4	1.09E-02	1.000	.896	.880
1?8	47.59	.23	.08	?.?5E+03	1.20E-02	1.14E-02	.991	1.212E-02	2.91?E-04	2.764E-04	311.4	1.20E-02	1.000	.991	.974
11?	47.59	.3?	.?4	?.??E+03	1.19E-02	1.1?E-02	.983	1.212E-02	2.895E-04	2.743E-04	310.2	1.19E-02	1.000	.983	.966
111	47.59	0.00	.15	?.1?E+03	1.11E-02	1.0?E-02	.913	1.212E-02	2.687E-04	2.547E-04	309.6	1.11E-02	1.000	.913	.897
112	47.59	0.00	.25	7.? E+03	9.46E-03	8.97E-03	.781	1.212E-02	2.297E-04	2.177E-04	30?.4	9.46E-03	1.000	.781	.767
11?	47.59	0.00	.?6	?.97E+03	6.71E-03	6.36E-03	.553	1.212E-02	1.629E-04	1.544E-04	307.6	6.71E-03	1.000	.553	.543
114	47.59	0.00	.64	?.7?E+03	3.77E-03	3.57E-03	.311	1.212E-02	9.146E-05	8.669E-05	306.2	3.77E-03	1.000	.311	.30?
115	47.59	0.00	.?9	1.2?E+03	1.67E-03	1.?5E-03	.138	1.212E-02	4.063E-05	3.854E-05	30?.8	1.67E-03	1.000	.138	.13?
2?3	61.56	1.32	0.00	?.??E+03	7.64E-03	7.24E-03	.746	1.024E-02	1.953E-04	1.758E-04	310.1	7.64E-03	1.000	.746	.57?
2?5	61.56	1.12	.??	?.7?E+03	7.82E-03	7.41E-03	.7?4	1.024E-02	1.9??E-04	1.800E-04	3??.8	7.82E-03	1.000	.764	.58?
2?7	61.56	.31	.??	7.??E+03	9.71E-03	9.21E-03	.9??	1.024E-02	2.3??E-04	2.236E-04	309.7	9.71E-03	1.000	.948	.731
2?8	61.56	.25	0.0?	?.??E+03	1.09E-02	1.03E-02	1.064	1.02?E-02	2.647E-04	2.5?9E-04	308.1	1.09E-02	1.000	1.064	.820
21?	61.56	.??	.?4	?.2?E+03	1.12E-02	1.??E-02	1.09?	1.02?E-02	2.71?E-04	2.571E-04	307.1	1.12E-02	1.000	1.09?	.840

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(55) 1973 PAGE 110

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	8.59E+03	1.16E-02	1.10E-02	1.128	1.025E-02	2.807E-04	2.661E-04	305.6	1.16E-02	1.000	1.128	.069
212	61.56	0.00	.25	7.93E+03	1.07E-02	1.01E-02	1.042	1.025E-02	2.592E-04	2.457E-04	305.1	1.07E-02	1.000	1.042	.063
700	89.79	0.00	2.26								299.81				
214	61.56	0.00	.64												
215	61.56	0.00	.89	2.77E+03	3.66E-03	3.47E-03	.357	1.025E-02	8.869E-05	8.428E-05	302.1	3.66E-03	1.000	.357	.275
306	86.96	.76	0.00												
307	86.96	.51	0.00	1.31E+04	1.77E-02	1.68E-02	1.829	9.674E-03	4.296E-04	4.072E-04	306.4	1.77E-02	1.000	1.829	.613
308	86.96	.25	0.00	1.76E+04	2.34E-02	2.25E-02	2.432	9.665E-03	5.767E-04	5.467E-04	305.8	2.38E-02	1.000	2.452	.822
309	86.96	.13	0.00	1.91E+04	2.57E-02	2.44E-02	2.652	9.689E-03	6.239E-04	5.914E-04	305.3	2.57E-02	1.000	2.652	.888
310	86.96	.04	.04	1.91E+04	2.57E-02	2.43E-02	2.649	9.694E-03	6.235E-04	5.910E-04	305.0	2.57E-02	1.000	2.649	.887
311	86.96	0.00	.15	1.84E+04	2.48E-02	2.35E-02	2.553	9.696E-03	6.011E-04	5.698E-04	304.3	2.48E-02	1.000	2.553	.855
312	86.96	0.00	.25	1.61E+04	2.16E-02	2.05E-02	2.231	9.696E-03	5.253E-04	4.980E-04	303.3	2.16E-02	1.000	2.231	.747
313	86.96	0.00	.38	1.63E+04	2.19E-02	2.07E-02	2.257	9.696E-03	5.313E-04	5.037E-04	303.4	2.19E-02	1.000	2.257	.756
314	86.96	0.00	.64	1.27E+04	1.70E-02	1.62E-02	1.758	9.696E-03	4.139E-04	3.924E-04	302.6	1.70E-02	1.000	1.758	.589
315	86.96	0.00	.89	9.71E+03	1.30E-02	1.23E-02	1.342	9.696E-03	3.159E-04	2.995E-04	302.0	1.30E-02	1.000	1.342	.450
316	86.96	0.00	1.14	7.42E+03	9.93E-03	9.42E-03	1.024	9.696E-03	2.411E-04	2.286E-04	301.3	9.93E-03	1.000	1.024	.343
317	86.96	0.00	1.40	5.02E+03	6.71E-03	6.37E-03	.692	9.696E-03	1.630E-04	1.546E-04	300.8	6.71E-03	1.000	.692	.232
318	86.96	0.00	1.65	3.10E+03	4.14E-03	3.93E-03	.427	9.696E-03	1.006E-04	9.537E-05	300.6	4.14E-03	1.000	.427	.143
319	86.96	0.00	1.90	9.30E+02	1.24E-03	1.18E-03	.128	9.696E-03	3.019E-05	2.863E-05	300.3	1.24E-03	1.000	.128	.043
320	86.96	0.00	2.29												
506	125.06	.76	0.00	2.99E+04	4.02E-02	3.81E-02	1.204	3.337E-02	9.759E-04	9.252E-04	304.5	4.02E-02	1.000	1.204	.697
507	125.06	.51	0.00	2.89E+04	3.88E-02	3.68E-02	1.161	3.343E-02	9.427E-04	8.937E-04	304.2	3.88E-02	1.000	1.161	.827
508	125.06	.25	0.00	2.62E+04	3.52E-02	3.33E-02	1.050	3.350E-02	8.542E-04	8.098E-04	303.6	3.52E-02	1.000	1.050	.748
509	125.06	.13	0.00	2.19E+04	2.94E-02	2.79E-02	.877	3.352E-02	7.138E-04	6.767E-04	302.8	2.94E-02	1.000	.877	.624
510	125.06	.04	.04	2.32E+04	3.11E-02	2.95E-02	.928	3.354E-02	7.559E-04	7.167E-04	303.0	3.11E-02	1.000	.928	.661
511	125.06	0.00	.15	2.21E+04	2.96E-02	2.81E-02	.883	3.356E-02	7.191E-04	6.818E-04	302.7	2.96E-02	1.000	.883	.628
512	125.06	0.00	.25	1.91E+04	2.56E-02	2.42E-02	.762	3.356E-02	6.209E-04	5.886E-04	302.4	2.56E-02	1.000	.762	.543
513	125.06	0.00	.38	1.60E+04	2.14E-02	2.03E-02	.639	3.356E-02	5.209E-04	4.938E-04	301.9	2.14E-02	1.000	.639	.455
514	125.06	0.00	.64	1.07E+04	1.44E-02	1.36E-02	.429	3.356E-02	3.495E-04	3.314E-04	301.3	1.44E-02	1.000	.429	.305
515	125.06	0.00	.89	7.38E+03	9.87E-03	9.36E-03	.294	3.356E-02	2.399E-04	2.273E-04	300.5	9.87E-03	1.000	.294	.210
516	125.06	0.00	1.14	5.36E+03	7.17E-03	6.80E-03	.214	3.356E-02	1.742E-04	1.652E-04	300.5	7.17E-03	1.000	.214	.152
517	125.06	0.00	1.40	3.95E+03	5.28E-03	5.01E-03	.157	3.356E-02	1.283E-04	1.217E-04	300.4	5.28E-03	1.000	.157	.112
518	125.06	0.00	1.65	2.34E+03	3.13E-03	2.97E-03	.093	3.356E-02	7.600E-05	7.206E-05	300.0	3.13E-03	1.000	.093	.066
519	125.06	0.00	1.90	1.53E+03	2.04E-03	1.93E-03	.061	3.356E-02	4.943E-05	4.693E-05	299.8	2.04E-03	1.000	.061	.043
520	125.06	0.00	2.29	1.84E+02	2.46E-04	2.34E-04	.007	3.356E-02	5.980E-06	5.671E-06	299.5	2.46E-04	1.000	.007	.005

EDGE HEATING USED FOR HE

X=	3.873E+01	HL	/HREFF=	8.[illegible]3E-01
X=	4.124E+01	HL	/HREFF=	9.249E-01
X=	4.377E+01	HL	/HREFF=	9.436E-01
X=	4.631E+01	HL	/HREFF=	1.0[illegible]1E+00
X=	4.896E+01	HL	/HREFF=	1.035E+00
X=	5.139E+01	HL	/HREFF=	1.111E+00
X=	5.649E+01	HL	/HREFF=	1.172E+00

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	1.435E+00
X=	7.172E+01	HL	/HREFF=	1.79[illegible]E+00
X=	7.680E+01	HL	/HREFF=	2.191E+00
X=	8.188E+01	HL	/HREFF=	2.618E+00
X=	8.696E+01	HL	/HREFF=	2.995E+00
X=	9.204E+01	HL	/HREFF=	2.341E+00
X=	9.712E+01	HL	/HREFF=	3.032E+00
X=	1.022E+02	HL	/HREFF=	2.911E+00
X=	1.073E+02	HL	/HREFF=	2.552E+00
X=	1.124E+02	HL	/HREFF=	2.375E+00
X=	1.175E+02	HL	/HREFF=	1.9[illegible]E+00
X=	1.226E+02	HL	/HREFF=	1.55[illegible]E+00
X=	1.251E+02	HL	/HREFF=	1.412E+00
X=	1.276E+02	HL	/HREFF=	1.297E+00
X=	1.302E+02	HL	/HREFF=	1.130E+00
X=	1.352E+02	HL	/HREFF=	9.964E-01

X=	4.759E+01	HL	/HREFF=	[illegible]
X=	6.156E+01	HL	/HREFF=	9.493E-01
X=	8.696E+01	HL	/HREFF=	1.829E+00
X=	1.251E+02	HL	/HREFF=	1.161E+00

B.L. TRANSITION DISTANCE = 38.7[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT = 86.96 CM

AMES 3.5 FT HWT TEST (1-2), C.E. BLUMER, IN-LINE RSI GAP RUN(56) 1973 PAGE 111

TT = 1.1329E+03(K) GAP LENGTH =101.600(CM)
PT = 2.1004E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.1982E+06(J/KG) GAP DEPTH = 3.810(CM)
RE/METER = 5.5195E+06 ORIENTATION= 0.000(DEG)
MACH = 5.190 QS = 1.7472E+05(W/M2)
RHO VEL = 9.4232E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.909 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER CONC.)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	4.68E+04	6.39E-02	6.35E-02	.732	8.723E-02	7.577E-04	7.179E-04	311.7				1.000
2	132.70	-.51	0.00	1.75E+01	2.32E-05	2.28E-05	.000	8.488E-02	2.757E-07	2.615E-07	291.3				1.000
3	130.16	-.51	0.00	4.91E+04	6.58E-02	6.23E-02	.797	6.253E-02	7.838E-04	7.397E-04	312.7				1.000
4	127.63	-.51	0.00	5.17E+04	7.00E-02	6.63E-02	.874	8.016E-02	8.315E-04	7.877E-04	312.7				1.000
5	125.09	-.51	0.00	5.28E+04	7.22E-02	6.84E-02	.927	7.783E-02	8.566E-04	8.115E-04	312.9				1.000
6	122.56	-.51	0.00	5.53E+04	7.53E-02	7.15E-02	1.000	7.548E-02	8.965E-04	8.492E-04	312.7				1.000
7	117.47	-.51	0.00	5.92E+04	8.09E-02	7.66E-02	1.164	6.948E-02	9.606E-04	9.100E-04	312.6				1.000
8	112.37	-.51	0.00	6.14E+04	8.39E-02	7.95E-02	1.384	6.063E-02	9.961E-04	9.436E-04	313.0				1.000
9	107.31	-.51	0.00	6.31E+04	8.61E-02	8.16E-02	1.727	4.988E-02	1.023E-03	9.687E-04	312.9				1.000
10	102.20	-.51	0.00	6.33E+04	8.66E-02	8.20E-02	2.149	4.030E-02	1.028E-03	9.737E-04	312.8				1.000
11	97.12	-.51	0.00	6.09E+04	8.33E-02	7.89E-02	2.556	3.259E-02	9.889E-04	9.367E-04	312.9				1.000
12	92.04	-.51	0.00	4.37E+04	5.95E-02	5.64E-02	2.273	2.619E-02	7.069E-04	6.698E-04	313.7				1.000
13	86.96	-.51	0.00	5.62E+04	7.67E-02	7.26E-02	3.554	2.157E-02	9.102E-04	8.622E-04	313.7				
14	81.88	-.51	0.00	5.42E+04	7.42E-02	7.03E-02	4.199	1.768E-02	8.812E-04	8.347E-04	314.1				
15	76.80	-.51	0.00	4.42E+04	6.05E-02	5.73E-02	3.958	1.530E-02	7.188E-04	6.808E-04	314.1				
16	71.72	-.51	0.00	3.51E+04	4.81E-02	4.56E-02	3.485	1.381E-02	5.714E-04	5.413E-04	314.4				
17	66.64	-.51	0.00	2.73E+04	3.75E-02	3.55E-02	2.756	1.368E-02	4.449E-04	4.214E-04	314.8				1.000
18	61.56	-.51	0.00	2.14E+04	2.94E-02	2.78E-02	2.095	1.403E-02	3.491E-04	3.306E-04	315.5				1.000
19	56.48	-.51	0.00	1.68E+04	2.31E-02	2.19E-02	1.556	1.484E-02	2.740E-04	2.595E-04	316.0				1.000
20	51.39	-.51	0.00	1.50E+04	2.07E-02	1.96E-02	1.307	1.581E-02	2.453E-04	2.323E-04	316.5				1.000
21	48.86	-.51	0.00	1.46E+04	2.00E-02	1.90E-02	1.236	1.621E-02	2.379E-04	2.253E-04	317.0				1.000
22	46.31	-.51	0.00	1.37E+04	1.88E-02	1.78E-02	1.138	1.653E-02	2.233E-04	2.115E-04	316.7				1.000
23	43.77	-.51	0.00	1.29E+04	1.78E-02	1.68E-02	1.055	1.684E-02	2.109E-04	1.998E-04	316.8				1.000
24	41.24	-.51	0.00	1.23E+04	1.69E-02	1.60E-02	.985	1.715E-02	2.006E-04	1.900E-04	316.9				1.000
25	38.70	-.51	0.00	1.15E+04	1.58E-02	1.49E-02	.903	1.747E-02	1.872E-04	1.773E-04	315.4				1.000
103	47.59	1.52	0.00	1.02E+04	1.41E-02	1.33E-02	.861	1.637E-02	1.674E-04	1.584E-04	321.4	1.41E-02	1.000	.861	.725
105	47.59	1.02	0.00	9.75E+03	1.35E-02	1.28E-02	.827	1.637E-02	1.607E-04	1.521E-04	323.7	1.35E-02	1.000	.827	.697
107	47.59	.51	0.00	1.11E+04	1.53E-02	1.44E-02	.933	1.637E-02	1.812E-04	1.715E-04	323.3	1.53E-02	1.000	.933	.706
109	47.59	.25	0.00	1.31E+04	1.81E-02	1.71E-02	1.110	1.637E-02	2.149E-04	2.035E-04	321.8	1.61E-02	1.000	1.130	.932
110	47.59	.04	.04	1.39E+04	1.92E-02	1.92E-02	1.176	1.637E-02	2.285E-04	2.164E-04	319.9	1.92E-02	1.000	1.176	.991
111	47.59	0.00	.15	1.36E+04	1.86E-02	1.76E-02	1.136	1.637E-02	2.207E-04	2.090E-04	318.9	1.86E-02	1.000	1.136	.957
112	47.59	0.00	.25	1.2 E+04	1.77E-02	1.67E-02	1.076	1.637E-02	2.095E-04	1.984E-04	317.0	1.77E-02	1.000	1.076	.908
113	47.59	0.00	.38	1.1 E+04	1.50E-02	1.42E-02	.918	1.637E-02	1.784E-04	1.690E-04	315.5	1.50E-02	1.000	.918	.776
114	47.59	0.00	.64	6.9 E+03	9.50E-03	9.10E-03	.580	1.637E-02	1.127E-04	1.068E-04	312.9	9.50E-03	1.000	.580	.40
115	47.59	0.00	.89	7.4 E+03	5.23E-03	4.95E-03	.320	1.637E-02	5.212E-05	5.886E-05	310.4	5.23E-03	1.000	.320	.26
203	61.56	1.32	0.00	9.27E+03	1.27E-02	1.20E-02	.912	1.395E-02	1.519E-04	1.439E-04	315.8	1.27E-02	1.000	.912	.43
205	61.56	1.02	0.00	1.0 E+04	1.43E-02	1.36E-02	1.025	1.398E-02	1.7 E-04	1.679E-04	317.0	1.43E-02	1.000	1.025	.40
207	61.56	.51	0.00	1.59E+04	2.19E-02	2.07E-02	1.567	1.398E-02	2.601E-04	2.463E-04	317.0	2.19E-02	1.000	1.567	.748
208	61.56	.25	0.00	2.08E+04	2.86E-02	2.71E-02	2.044	1.399E-02	3.395E-04	3.216E-04	316.1	2.86E-02	1.000	2.044	.975
211	61.56	.04	.04	2.4 E+04	3.40E-02	3.22E-02	2.431	1.400E-02	4.04 E-04	3.626E-04	314.6	3.40E-02	1.000	2.431	1.160

AMES 3.5 FT HWT TEST (152), [illegible] BLUMER, IN-LINE RSI GAP RUN(56) 1973 PAGE 112

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	[illegible]	3.41E-02	3.23E-02	2.433	1.401E-02	4.745E-04	3.833E-04	310.3	3.41E-02	1.000	2.433	1.161
212	61.56	0.00	.25	2.49E+04	3.39E-02	3.21E-02	2.419	1.401E-02	4.323E-04	3.812E-04	313.2	3.39E-02	1.000	2.419	1.155
700	89.79	0.00	2.76								301.73				
214	61.56	0.00	.64												
215	61.56	0.00	.39	1.37E+04	1.85E-02	1.75E-02	1.322	1.401E-02	2.199E-04	2.083E-04	305.6	1.85E-02	1.000	1.322	.631
306	86.96	.76	0.00												
307	86.96	.51	0.00	4.76E+04	6.51E-02	6.17E-02	3.058	2.129E-02	7.730E-04	7.322E-04	313.9	6.51E-02	1.000	3.058	
308	86.96	.25	0.00	4.71E+04	6.43E-02	6.10E-02	3.012	2.136E-02	7.638E-04	7.236E-04	313.0	6.43E-02	1.000	3.012	
309	86.96	.13	0.00	[illegible]	6.14E-02	5.82E-02	2.871	2.139E-02	7.298E-04	6.905E-04	312.1	6.14E-02	1.000	2.871	.899
310	86.96	.04	.04	4.36E+04	5.95E-02	5.64E-02	2.779	2.142E-02	7.065E-04	6.694E-04	311.7	5.95E-02	1.000	2.779	.782
311	86.96	0.00	.15	4.18E+04	5.73E-02	5.40E-02	2.659	2.143E-02	6.764E-04	6.408E-04	310.6	5.70E-02	1.000	2.659	.748
312	86.96	0.00	.29	3.47E+04	4.71E-02	4.46E-02	2.199	2.143E-02	5.593E-04	5.309E-04	308.9	4.71E-02	1.000	2.199	.615
313	86.96	0.00	.38	2.91E+04	3.95E-02	3.75E-02	1.845	2.143E-02	4.693E-04	4.447E-04	307.2	3.95E-02	1.000	1.845	.519
314	86.96	0.00	.64	2.12E+04	2.87E-02	2.72E-02	1.338	2.143E-02	3.404E-04	3.226E-04	306.6	2.87E-02	1.000	1.338	.376
315	86.96	0.00	.89	1.53E+04	2.07E-02	1.96E-02	.967	2.143E-02	2.459E-04	2.331E-04	305.3	2.07E-02	1.000	.967	.272
316	86.96	0.00	1.14	1.15E+04	1.55E-02	1.47E-02	.726	2.143E-02	1.846E-04	1.749E-04	304.3	1.55E-02	1.000	.726	.204
317	86.96	0.00	1.40	8.34E+03	1.13E-02	1.07E-02	.525	2.143E-02	1.336E-04	1.266E-04	303.2	1.13E-02	1.000	.525	.146
318	86.96	0.00	1.65	6.02E+03	8.12E-03	7.69E-03	.37	2.143E-02	9.636E-05	9.135E-05	303.0	8.12E-03	1.000	.379	.107
319	86.96	0.00	1.90	4.13E+03	5.56E-03	5.27E-03	.260	2.143E-02	6.605E-05	6.262E-05	302.6	5.56E-03	1.000	.260	.073
320	86.96	0.00	2.29	2.34E+03	3.16E-03	2.39E-03	.147	2.143E-02	3.747E-05	3.553E-05	302.3	3.16E-03	1.000	.147	.041
506	125.06	.75	0.00	4.79E+04	6.53E-02	6.19E-02	.836	7.812E-02	7.755E-04	7.347E-04	311.6	6.53E-02	1.000	.836	.901
507	125.06	.51	0.00	4.52E+04	6.16E-02	5.84E-02	.789	7.805E-02	7.316E-04	6.931E-04	311.2	6.16E-02	1.000	.789	.851
508	125.06	.25	0.00	4.01E+04	5.46E-02	5.17E-02	.700	7.799E-02	6.483E-04	6.142E-04	310.4	5.46E-02	1.000	.700	.754
509	125.06	.15	0.00	3.39E+04	4.61E-02	4.37E-02	.592	7.797E-02	5.476E-04	5.189E-04	309.3	4.61E-02	1.000	.592	.637
510	125.06	.04	.04	3.12E+04	4.24E-02	4.02E-02	.544	7.794E-02	5.030E-04	4.767E-04	308.8	4.24E-02	1.000	.544	.586
511	125.06	0.00	.15	2.96E+04	4.02E-02	3.81E-02	.516	7.793E-02	4.778E-04	4.528E-04	308.6	4.02E-02	1.000	.516	.557
512	125.06	0.00	.29	2.52E+04	3.43E-02	3.25E-02	.440	7.793E-02	4.066E-04	3.853E-04	308.5	3.43E-02	1.000	.443	.474
513	125.06	0.00	.38	2.17E+04	2.95E-02	2.80E-02	.379	7.793E-02	3.504E-04	3.321E-04	307.7	2.95E-02	1.000	.379	.406
514	125.06	0.00	.64	1.61E+04	2.17E-02	2.06E-02	.279	7.793E-02	2.582E-04	2.447E-04	306.0	2.17E-02	1.000	.279	.301
515	125.06	0.00	.89	1.25E+04	1.59E-02	1.60E-02	.217	7.793E-02	2.010E-04	1.905E-04	304.5	1.69E-02	1.000	.217	.234
516	125.06	0.00	1.14	[illegible]	1.42E-02	1.35E-02	.183	7.793E-02	1.691E-04	1.603E-04	304.4	1.42E-02	1.000	.183	.197
517	125.06	0.00	1.40	[illegible]	1.15E-02	1.09E-02	.148	7.793E-02	1.370E-04	1.298E-04	303.8	1.15E-02	1.000	.148	.160
518	125.06	0.00	1.65	6.74E+03	9.15E-03	8.67E-03	.117	7.793E-02	1.086E-04	1.030E-04	303.2	9.15E-03	1.000	.117	.126
519	125.06	0.00	1.90	[illegible]	8.08E-03	7.66E-03	.104	7.793E-02	9.596E-05	9.097E-05	302.6	8.08E-03	1.000	.104	.112
520	125.06	0.00	2.29	[illegible]	6.25E-03	5.93E-03	.080	7.793E-02	7.420E-05	7.034E-05	301.9	6.25E-03	1.000	.080	.086

EDGE HEATING USED FOR HE

X=	3.875E+01	HL /HREFF=	9.729E-01
X=	4.124E+01	HL /HREFF=	9.849E-01
X=	4.377E+01	HL /HREFF=	1.095E+00
X=	4.631E+01	HL /HREFF=	1.139E+00
X=	4.886E+01	HL /HREFF=	1.236E+00
X=	5.139E+01	HL /HREFF=	1.337E+00
X=	5.645E+01	HL /HREFF=	1.[illegible]

X=	6.150E+01	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	2.736E+00
X=	7.172E+01	HL	/HREFF=	3.425E+00
X=	7.680E+01	HL	/HREFF=	3.958E+00
X=	8.180E+01	HL	/HREFF=	4.199E+00
X=	8.696E+01	HL	/HREFF=	3.534E+00
X=	9.204E+01	HL	/HREFF=	2.273E+00
X=	9.712E+01	HL	/HREFF=	2.556E+00
X=	1.022E+02	HL	/HREFF=	2.149E+00
X=	1.073E+02	HL	/HREFF=	1.727E+00
X=	1.124E+02	HL	/HREFF=	1.384E+00
X=	1.175E+02	HL	/HREFF=	1.164E+00
X=	1.226E+02	HL	/HREFF=	1.033E+00
X=	1.251E+02	HL	/HREFF=	9.270E-01
X=	1.276E+02	HL	/HREFF=	8.735E-01
X=	1.302E+02	HL	/HREFF=	7.970E-01
X=	1.327E+02	HL	/HREFF=	2.736E-04
X=	1.352E+02	HL	/HREFF=	7.317E-01
X=	4.759E+01	HL	/HREFF=	9.326E-01
X=	6.156E+01	HL	/HREFF=	1.567E+00
X=	8.696E+01	HL	/HREFF=	3.058E+00
X=	1.251E+02	HL	/HREFF=	7.095E-01

B.L. TRANSITION DISTANCE = 38.73 CM
FULLY TURBULENT B.L. CONDITIONS AT = 61.88 CM

AMES 3.5 FT HWT TEST (122), C.B. BLUMER, IN-LINE RSI GAP RUN(57) 1973 PAGE 113

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TT        = 1.1312E+03(K)              GAP LENGTH =101.500(CM)
PT        = 1.0222E+06(N/M2)           GAP WIDTH  =    .254(CM)
HT        = 1.1373E+06(J/KG)           GAP DEPTH  =   3.510(CM)
RE/METER  = 3.1767E+06                 ORIENTATION= 13.000(DEG)
MACH      = 5.180                      QS         =  1.2210E+05(N/M2)
RHC VEL   = 4.1716E+01(KG/M2-S)        MOD.POSITION=  1
HAW/HT    = 0.904 FOR HT
HAW/HT    = 0.974 FOR HL
HLCC      = HL(2ND. ORDER CONC.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.22E+04	3.03E-02	2.97E-02	.671	4.514E-02	7.386E-04	6.999E-04	309.4				1.000
2	132.70	-.51	0.00												
3	130.16	-.51	0.00	1.57E+04	2.26E-02	2.16E-02	.576	3.941E-02	5.332E-04	5.261E-04	309.7				1.000
4	127.63	-.51	0.00	1.50E+04	2.05E-02	1.94E-02	.561	3.655E-02	4.995E-04	4.733E-04	309.7				1.000
5	125.09	-.51	0.00	1.34E+04	1.83E-02	1.73E-02	.543	3.369E-02	4.453E-04	4.229E-04	309.8				1.000
6	122.56	-.51	0.00	1.22E+04	1.66E-02	1.57E-02	.536	3.083E-02	4.042E-04	3.830E-04	309.7				1.000
7	117.47	-.51	0.00	1.00E+04	1.37E-02	1.29E-02	.539	2.532E-02	3.329E-04	3.154E-04	309.9				1.000
8	112.37	-.51	0.00	8.27E+03	1.13E-02	1.07E-02	.546	2.063E-02	2.747E-04	2.602E-04	310.0				1.000
9	107.31	-.51	0.00	7.04E+03	9.60E-03	9.10E-03	.563	1.706E-02	2.341E-04	2.218E-04	310.2				1.000
10	102.20	-.51	0.00	6.44E+03	8.79E-03	8.33E-03	.615	1.430E-02	2.144E-04	2.032E-04	310.3				1.000
11	97.12	-.51	0.00	6.72E+03	9.21E-03	7.78E-03	.676	1.215E-02	2.003E-04	1.898E-04	310.5				1.000
12	92.04	-.51	0.00	[illegible]	8.13E-03	7.76E-03	.775	1.056E-02	1.936E-04	1.891E-04	310.9				1.000
13	86.96	-.51	0.00	5.77E+03	7.87E-03	7.46E-03	.810	9.718E-03	1.920E-04	1.819E-04	311.4				1.000
14	81.88	-.51	0.00	5.52E+03	7.54E-03	7.14E-03	.820	9.199E-03	1.838E-04	1.741E-04	311.9				1.000
15	76.80	-.51	0.00	4.91E+03	6.71E-03	6.36E-03	.733	9.154E-03	1.637E-04	1.551E-04	312.0				1.000
16	71.72	-.51	0.00	4.96E+03	6.78E-03	6.43E-03	.722	9.389E-03	1.654E-04	1.567E-04	312.3				1.000
17	66.64	-.51	0.00	5.32E+03	7.27E-03	6.89E-03	.744	9.779E-03	1.773E-04	1.680E-04	312.5				1.000
18	61.56	-.51	0.00	5.71E+03	7.80E-03	7.39E-03	.761	1.025E-02	1.931E-04	1.801E-04	312.9				1.000
19	56.48	-.51	0.00	6.21E+03	8.50E-03	8.05E-03	.781	1.088E-02	2.072E-04	1.963E-04	313.4				1.000
20	51.39	-.51	0.00	7.11E+03	9.74E-03	9.23E-03	.841	1.158E-02	2.375E-04	2.249E-04	313.7				1.000
21	48.86	-.51	0.00	7.72E+03	1.06E-02	1.00E-02	.896	1.194E-02	2.578E-04	2.442E-04	313.9				1.000
22	46.31	-.51	0.00	8.12E+03	1.11E-02	1.05E-02	.903	1.231E-02	2.712E-04	2.569E-04	314.0				1.000
23	43.77	-.51	0.00	8.44E+03	1.15E-02	1.10E-02	.912	1.268E-02	2.820E-04	2.671E-04	314.2				1.000
24	41.24	-.51	0.00	8.93E+03	1.22E-02	1.15E-02	.928	1.305E-02	2.985E-04	2.828E-04	314.6				1.000
25	38.70	-.51	0.00	9.09E+03	1.24E-02	1.18E-02	.925	1.342E-02	3.029E-04	2.869E-04	314.0				1.000
103	47.59	1.52	.00	8.77E+03	1.20E-02	1.14E-02	.990	1.211E-02	2.922E-04	2.767E-04	316.1	1.20E-02	1.000	.99	1.107
105	47.59	1.02	0.00	1.01E+04	1.39E-02	1.31E-02	1.147	1.211E-02	3.386E-04	3.206E-04	319.4	1.39E-02	1.000	1.147	1.202
107	47.59	.51	0.00	1.10E+04	1.51E-02	1.43E-02	1.248	1.212E-02	3.687E-04	3.491E-04	318.6	1.51E-02	1.000	1.248	1.395
108	47.59	.25	.00	1.07E+04	1.48E-02	1.40E-02	1.219	1.212E-02	3.599E-04	3.409E-04	317.5	1.48E-02	1.000	1.218	1.362
110	47.59	.26	.06	9.07E+03	1.24E-02	1.17E-02	1.020	1.212E-02	3.015E-04	2.856E-04	316.1	1.24E-02	1.000	1.020	1.141
111	47.59	0.00	.15	7.97E+03	1.09E-02	1.04E-02	.903	1.212E-02	2.667E-04	2.526E-04	315.3	1.09E-02	1.000	.903	1.009
112	47.59	0.00	.25	[illegible]	8.33E-03	7.89E-03	.687	1.212E-02	2.030E-04	1.923E-04	314.0	8.33E-03	1.000	.687	.768
113	47.59	0.00	.38	4.25E+03	5.92E-03	5.52E-03	.450	1.212E-02	1.420E-04	1.345E-04	313.1	5.82E-03	1.000	.480	.537
114	47.59	0.00	.64	1.91E+03	2.61E-03	2.48E-03	.216	1.212E-02	6.375E-05	6.039E-05	311.3	2.61E-03	1.000	.216	.240
115	47.59	0.00	.89	[illegible]	1.19E-03	1.13E-03	.099	1.212E-02	2.911E-05	2.758E-05	309.9	1.19E-03	1.000	.099	.110
203	61.56	1.02	0.00	7.91E+03	1.08E-02	1.03E-02	1.058	1.024E-02	2.642E-04	2.503E-04	314.5	1.08E-02	1.000	1.058	1.39[illegible]
205	61.56	1.02	0.00	7.55E+03	1.04E-02	9.83E-03	1.013	1.024E-02	2.531E-04	2.396E-04	315.2	1.04E-02	1.000	1.013	1.331
207	61.56	.51	0.00	6.86E+03	9.42E-03	8.92E-03	.919	1.024E-02	2.296E-04	2.174E-04	315.[illegible]	9.42E-03	1.000	.919	1.2[illegible]
208	61.56	.25	0.00	6.51E+03	8.93E-03	8.46E-03	.872	1.024E-02	2.177E-04	2.062E-04	314.3	8.93E-03	1.000	.872	1.145
210	61.56	.26	.06	5.59E+03	7.65E-03	7.25E-03	.747	1.025E-02	1.865E-04	1.768E-04	313.2	7.65E-03	1.000	.747	.982

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	1.75E+03	5.49E-03	6.15E-03	.633	1.025E-02	1.582E-04	1.498E-04	311.4	5.49E-03	1.000	.633	.832
212	61.56	0.00	.25	7.81E+03	5.20E-03	4.93E-03	.508	1.025E-02	1.269E-04	1.202E-04	313.4	5.20E-03	1.000	.508	.668
700	59.79	0.00	2.26								305.31				
214	61.56	0.00	.64												
215	61.56	0.00	.89	3.67E+02	4.98E-04	4.72E-04	.049	1.025E-02	1.215E-05	1.151E-05	307.9	4.98E-04	1.000	.049	.064
306	86.96	.76	0.00	3.55E+00	4.33E-06	4.09E-06	.000	9.663E-03	1.055E-07	9.979E-08	330.7	4.33E-06	1.000	.000	.001
307	86.96	.51	0.00	3.25E+02	4.63E-04	4.37E-04	.048	9.673E-03	1.128E-05	1.066E-05	330.5	4.63E-04	1.000	.048	.059
308	86.96	.25	0.00	1.45E+04	1.43E-02	1.36E-02	1.481	9.683E-03	3.497E-04	3.313E-04	311.6	1.43E-02	1.000	1.481	1.828
309	86.96	.15	0.00	1.37E+04	1.41E-02	1.34E-02	1.456	9.687E-03	3.439E-04	3.258E-04	311.1	1.41E-02	1.000	1.456	1.797
310	86.96	.04	.04	1.41E+04	1.37E-02	1.30E-02	1.416	9.692E-03	3.345E-04	3.170E-04	313.6	1.37E-02	1.000	1.416	1.747
311	86.96	0.00	.15	2.35E+03	1.27E-02	1.21E-02	1.315	9.694E-03	3.107E-04	2.944E-04	309.9	1.27E-02	1.000	1.315	1.622
312	86.96	0.00	.25	7.15E+03	9.65E-03	9.15E-03	.996	9.694E-03	2.354E-04	2.230E-04	309.7	9.65E-03	1.000	.996	1.229
313	86.96	0.00	.38	4.94E+03	6.72E-03	6.37E-03	.693	9.694E-03	1.638E-04	1.552E-04	309.0	6.72E-03	1.000	.693	.855
314	86.96	0.00	.64	2.70E+03	3.67E-03	3.47E-03	.378	9.694E-03	8.938E-05	8.470E-05	308.2	3.67E-03	1.000	.378	.467
315	86.96	0.00	.89	1.73E+03	2.35E-03	2.22E-03	.242	9.694E-03	5.724E-05	5.424E-05	307.6	2.35E-03	1.000	.242	.299
316	86.96	0.00	1.14	1.28E+03	1.73E-03	1.64E-03	.179	9.694E-03	4.227E-05	4.006E-05	307.2	1.73E-03	1.000	.179	.221
317	86.96	0.00	1.40	9.30E+02	1.26E-03	1.20E-03	.130	9.694E-03	3.076E-05	2.915E-05	306.7	1.26E-03	1.000	.130	.161
318	86.96	0.00	1.65	6.23E+02	8.46E-04	8.01E-04	.087	9.694E-03	2.052E-05	1.954E-05	306.6	8.46E-04	1.000	.087	.108
319	86.96	0.00	1.90	4.20E+02	5.70E-04	5.40E-04	.059	9.694E-03	1.393E-05	1.317E-05	306.4	5.70E-04	1.000	.059	.073
320	86.96	0.00	2.29	2.04E+02	2.76E-04	2.62E-04	.029	9.694E-03	6.737E-06	6.385E-06	306.3	2.76E-04	1.000	.029	.035
506	125.96	.76	0.00	1.71E+04	2.33E-02	2.21E-02	.700	3.335E-02	5.688E-04	5.389E-04	310.2	2.33E-02	1.000	.699	1.288
507	125.96	.51	0.00	1.63E+04	2.22E-02	2.10E-02	.664	3.341E-02	5.413E-04	5.129E-04	309.8	2.22E-02	1.000	.664	1.223
508	125.96	.25	0.00	1.61E+04	2.20E-02	2.08E-02	.656	3.347E-02	5.353E-04	5.074E-04	309.1	2.20E-02	1.000	.656	1.208
509	125.96	.15	0.00	1.44E+04	1.96E-02	1.86E-02	.585	3.350E-02	4.776E-04	4.526E-04	308.2	1.96E-02	1.000	.585	1.077
510	125.96	.04	.04	1.31E+04	1.78E-02	1.69E-02	.532	3.352E-02	4.349E-04	4.121E-04	308.5	1.78E-02	1.000	.532	.979
511	125.96	0.00	.15	1.24E+04	1.69E-02	1.60E-02	.505	3.353E-02	4.125E-04	3.909E-04	308.5	1.69E-02	1.000	.505	.929
512	125.96	0.00	.25	1.02E+04	1.38E-02	1.31E-02	.413	3.353E-02	3.377E-04	3.200E-04	308.3	1.38E-02	1.000	.413	.760
513	125.96	0.00	.38	7.71E+03	1.05E-02	9.93E-03	.312	3.353E-02	2.554E-04	2.420E-04	308.0	1.05E-02	1.000	.312	.575
514	125.96	0.00	.64	3.65E+03	4.95E-03	4.69E-03	.148	3.353E-02	1.207E-04	1.144E-04	307.3	4.95E-03	1.000	.148	.272
515	125.96	0.00	.89	1.70E+03	2.30E-03	2.18E-03	.069	3.353E-02	5.616E-05	5.323E-05	306.5	2.30E-03	1.000	.069	.126
516	125.96	0.00	1.14	1.18E+03	1.60E-03	1.52E-03	.048	3.353E-02	3.911E-05	3.706E-05	306.4	1.60E-03	1.000	.048	.088
517	125.96	0.00	1.40	6.96E+02	9.44E-04	8.93E-04	.028	3.353E-02	2.302E-05	2.181E-05	306.2	9.44E-04	1.000	.028	.052
518	125.96	0.00	1.65	5.48E+02	7.42E-04	7.03E-04	.022	3.353E-02	1.810E-05	1.715E-05	305.8	7.42E-04	1.000	.022	.041
519	125.96	0.00	1.90	3.45E+02	4.67E-04	4.43E-04	.014	3.353E-02	1.139E-05	1.080E-05	305.6	4.67E-04	1.000	.014	.026
520	125.96	0.00	2.29	2.15E+02	2.91E-04	2.75E-04	.009	3.353E-02	7.096E-06	6.717E-06	305.1	2.91E-04	1.000	.009	.016

EDGE HEATING USED FOR HE

X=	3.372E+01	HL	/HREFF=	9.2[illegible]3E-01
X=	4.124E+01	HL	/HREFF=	9.330E-01
X=	4.377E+01	HL	/HREFF=	9.119E-01
X=	4.631E+01	HL	/HREFF=	9.[illegible]35E-01
X=	4.885E+01	HL	/HREFF=	8.958E-01
X=	5.139E+01	HL	/HREFF=	8.411E-01
X=	5.648E+01	HL	/HREFF=	7.314E-01

X=	6.[illegible]E+01	HL	/HREFF=	[illegible]E-01
X=	6.664E+01	HL	/HREFF=	7.437E-01
X=	7.172E+01	HL	/HREFF=	7.274E-01
X=	7.69[illegible]E+01	HL	/HREFF=	7.333E-01
X=	8.188E+01	HL	/HREFF=	8.196E-01
X=	8.696E+01	HL	/HREFF=	8.1[illegible]3E-01
X=	9.274E+01	HL	/HREFF=	7.722E-01
X=	9.712E+01	HL	/HREFF=	6.763E-01
X=	1.022E+02	HL	/HREFF=	6.15[illegible]E-01
X=	1.073E+02	HL	/HREFF=	5.[illegible]27E-01
X=	1.124E+02	HL	/HREFF=	5.460E-01
X=	1.175E+02	HL	/HREFF=	5.394E-01
X=	1.226E+02	HL	/HREFF=	5.378E-01
X=	1.251E+02	HL	/HREFF=	5.433E-01
X=	1.276E+02	HL	/HREFF=	5.6[illegible]5E-01
X=	1.3[illegible]2E+02	HL	/HREFF=	5.778E-01
X=	1.35[illegible]E+02	HL	/HREFF=	6.712E-01
X=	4.759E+01	HL	/HREFF=	1.249E+00
X=	6.156E+01	HL	/HREFF=	9.192E-01
X=	8.636E+01	HL	/HREFF=	4.782E-02
X=	1.271E+02	HL	/HREFF=	6.644E-01

B.L. TRANSITION DISTANCE = 76.9[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =*376.63 CM

AMES 3.5 FT HWT TEST (132), C.S. BLUMER, IN-LINE RSI GAP RUN(58) 1973 PAGE 115

TT	= 1.119E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 2.5327E+06(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.1827E+06(J/KG)	GAP DEPTH	= 3.911(CM)
RE/METER	= 5.507E+06	ORIENTATION	= 19.900(DEG)
MACH	= 5.130	QS	= 1.7021E+05(N/M2)
RHO VEL	= 9.4272E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.918 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HL
1	135.24	-.51	0.00	5.29E+04	7.39E-02	6.99E-02	.838	8.815E-02	9.765E-04	8.399E-04	315.2				1.000
2	132.70	-.51	0.00	5.30E+04	7.41E-02	7.01E-02	.863	8.581E-02	8.788E-04	8.321E-04	315.5				1.000
3	130.16	-.51	0.00	5.20E+04	7.26E-02	6.88E-02	.870	8.346E-02	9.616E-04	8.158E-04	315.3				1.000
4	127.63	-.51	0.00	5.35E+04	7.48E-02	7.08E-02	.922	8.114E-02	9.876E-04	8.405E-04	315.1				1.000
5	125.09	-.51	0.00	5.39E+04	7.53E-02	7.13E-02	.955	7.881E-02	8.932E-04	8.457E-04	315.3				1.000
6	122.56	-.51	0.00	5.50E+04	7.68E-02	7.27E-02	1.004	7.648E-02	9.111E-04	8.627E-04	315.1				1.000
7	117.47	-.51	0.00	5.67E+04	7.92E-02	7.50E-02	1.123	7.048E-02	9.394E-04	8.895E-04	315.1				1.000
8	112.37	-.51	0.00	5.58E+04	7.80E-02	7.39E-02	1.267	6.154E-02	9.256E-04	8.764E-04	315.2				1.000
9	107.31	-.51	0.00	5.33E+04	7.45E-02	7.05E-02	1.472	5.063E-02	8.841E-04	8.371E-04	315.2				1.000
10	102.20	-.51	0.00	4.79E+04	6.69E-02	6.34E-02	1.637	4.089E-02	7.942E-04	7.520 -04	315.2				1.000
11	97.12	-.51	0.00	3.90E+04	5.45E-02	5.16E-02	1.649	3.306E-02	6.469E-04	6.125E-04	315.5				1.000
12	92.04	-.51	0.00	3.17E+04	4.44E-02	4.20E-02	1.672	2.655E-02	5.267E-04	4.987E-04	315.9				1.000
13	86.96	-.51	0.00	2.64E+04	3.70E-02	3.50E-02	1.694	2.185E-02	4.391E-04	4.157E-04	316.4				1.000
14	81.[illegible]	-.51	0.00	2.42E+04	3.39E-02	3.21E-02	1.896	1.787E-02	4.020E-04	3.806E-04	317.0				1.000
15	76	-.51	0.00	1.58E+04	2.21E-02	2.09E-02	1.429	1.544E-02	2.619E-04	2.479E-04	317.1				1.000
16	71	-.51	0.00	1.01E+04	1.42E-02	1.35E-02	1.022	1.391E-02	1.687E-04	1.597E-04	317.5				1.000
17	66	-.51	0.00	8.70E+03	1.22E-02	1.15E-02	.891	1.368E-02	1.447E-04	1.370E-04	317.8				1.000
18	61.56	-.51	0.00	8.75E+03	1.23E-02	1.15E-02	.870	1.412E-02	1.457E-04	1.380E-04	318.5				1.000
19	56.48	-.51	0.00	9.54E+03	1.34E-02	1.27E-02	.898	1.493E-02	1.591E-04	1.506E-04	319.2				1.000
20	51.39	-.51	0.00	1.04E+04	1.46E-02	1.38E-02	.917	1.590E-02	1.731E-04	1.638E-04	319.5				1.000
21	48.85	-.51	0.00	1.09E+04	1.53E-02	1.45E-02	.939	1.631E-02	1.817E-04	1.720E-04	319.7				1.000
22	46.31	-.51	0.00	1.14E+04	1.61E-02	1.52E-02	.968	1.662E-02	1.909E-04	1.807E-04	320.0				1.000
23	43.77	-.51	0.00	1.19E+04	1.67E-02	1.58E-02	.986	1.694E-02	1.982E-04	1.876E-04	320.2				1.000
24	41.24	-.51	0.00	1.25E+04	1.75E-02	1.66E-02	1.017	1.725E-02	2.081E-04	1.970E-04	320.6				1.000
25	38.70	-.51	0.00	1.24E+04	1.75E-02	1.65E-02	.995	1.756E-02	2.074E-04	1.963E-04	320.0				1.000
103	47.59	1.52	.00	1.34E+04	1.90E-02	1.80E-02	1.156	1.647E-02	2.259E-04	2.137E-04	324.9	1.90E-02	1.000	1.156	1.212
105	47.59	1.02	0.00	1.69E+04	2.39E-02	2.26E-02	1.450	1.646E-02	2.833E-04	2.680E-04	326.5	2.39E-02	1.000	1.450	1.521
107	47.59	.51	0.00	2.21E+04	3.14E-02	2.97E-02	1.907	1.646E-02	3.725E-04	3.525E-04	325.7	3.14E-02	1.000	1.907	2.001
108	47.59	.[illegible]	.00	2.41E+04	3.41E-02	3.22E-02	2.069	1.646E-02	4.042E-04	3.824E-04	324.2	3.41E-02	1.000	2.069	2.171
110	47.59	.[illegible]	.04	2.14E+04	3.02E-02	2.86E-02	1.835	1.646E-02	3.535E-04	3.393E-04	322.2	3.02E-02	1.000	1.835	1.925
111	47.59	[illegible]	.[illegible]	1.92E+04	2.70E-02	2.55E-02	1.639	1.646E-02	3.202E-04	3.031E-04	321.2	2.70E-02	1.000	1.639	1.720
112	47.59	[illegible]	.2[illegible]	1.52E+04	2.14E-02	2.02E-02	1.299	1.646E-02	2.538E-04	2.403E-04	319.3	2.14E-02	1.000	1.299	1.363
113	47.59	0.07	.38	1.12E+04	1.57E-02	1.48E-02	.951	1.646E-02	1.859E-04	1.760E-04	317.6	1.57E-02	1.000	.951	.998
114	47.59	0.00	.64	5.57E+03	7.78E-03	7.36E-03	.472	1.646E-02	9.227E-05	8.737E-05	315.1	7.78E-03	1.000	.472	.497
115	47.59	.0	.89	2.89E+03	4.02E-03	3.80E-03	.244	1.646E-02	4.765E-05	4.514E-05	312.9	4.02E-03	1.000	.244	.256
203	61.56	1.52	0.00	2.75E+04	[illegible]E-02	3.57E-02	2.759	1.423E-02	4.535E-04	4.349E-04	323.1	3.67E-02	1.000	2.759	3.177
205	61.56	1.02	.00	2.6[illegible]E+04	[illegible]E-02	3.47E-02	2.610	1.4[illegible]E-02	4.351E-04	4.119E-04	321.2	3.67E-02	1.000	2.610	3.006
207	61.56	.51	0.00	2.[illegible]E+04	[illegible]E-02	2.77E-02	2.077	1.437E-02	3.458E-04	3.282E-04	323.9	2.92E-02	.000	2.077	2.389
209	61.56	.25	0.00	1.6[illegible]E+04	[illegible]E-02	2.46E-02	1.645	1.406E-02	3.052E-04	2.917E-04	320.0	2.60E-02	1.000	1.645	2.121
210	61.56	.04	.04	1.53E+04	2.14E-02	2.03E-02	1.524	1.409E-02	2.541E-04	2.406E-04	313.4	2.14E-02	1.000	1.524	1.747

AMES 3.5 FT HWT TEST (152), D.B. BLUMER, IN-LINE RSI GAP RUN(36) 1373 PAGE 115

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	ST	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	1.72E+04	1.85E-02	1.75E-02	1.309	1.409E-02	2.189E-04	2.073E-04	314.5	1.85E-02	1.000	1.399	1.585
212	61.56	0.00	.25	[illegible]	1.47E-02	1.39E-02	1.040	1.409E-02	1.739E-04	1.646E-04	313.8	1.47E-02	1.000	1.040	1.195
[illegible]	99.79	0.00	2.26								305.80				
214	61.56	0.00	.54	7.94E+00	1.15E-05	1.38E-05	.001	1.409E-02	1.360E-07	1.285E-07	334.6	1.15E-05	1.000	.001	.001
215	61.56	.20	.39	2.4[illegible]E+03	3.44E-03	3.26E-03	.244	1.409E-02	4.081E-05	3.866E-05	309.3	3.44E-03	1.000	.244	.281
306	86.96	.76	[illegible]												
307	86.96	.51	[illegible]	1.34E+04	1.95E-02	1.94E-02	.903	2.1[illegible]6E-02	2.309E-04	2.182E-04	340.3	1.95E-02	1.000	.903	.533
308	86.96	.25	.05	4.5[illegible]E+04	6.41E-02	6.37E-02	2.364	2.163E-02	7.657E-04	7.202E-04	315.8	6.41E-02	1.000	2.964	1.750
309	86.96	.13	.0[illegible]	[illegible]	6.12E-02	5.79E-02	2.826	2.166E-02	7.262E-04	6.677E-04	314.9	6.12E-02	1.000	2.826	1.668
310	86.96	.04	.04	4.22E+04	5.89E-02	5.58E-02	2.717	2.169E-02	6.933E-04	6.622E-04	314.4	5.89E-02	1.000	2.717	1.604
311	86.96	0.00	.15	[illegible]	5.51E-02	5.21E-02	2.539	2.170E-02	6.535E-04	6.188E-04	313.5	5.51E-02	1.000	2.538	1.498
312	86.96	0.00	.25	[illegible]	4.21E-02	3.39E-02	1.940	2.171E-02	4.994E-04	4.733E-04	311.8	4.21E-02	1.000	1.940	1.145
313	86.96	0.00	.38	[illegible]	3.19E-02	3.02E-02	1.470	2.170E-02	3.784E-04	3.584E-04	309.4	3.19E-02	1.000	1.470	.868
314	86.96	0.00	.64	1.30E+04	1.88E-02	1.78E-02	.867	2.170E-02	2.233E-04	2.115E-04	309.7	1.38E-02	1.000	.867	.512
315	86.96	0.00	.89	[illegible]	1.19E-02	1.13E-02	.548	2.170E-02	1.412E-04	1.337E-04	308.9	1.19E-02	1.000	.548	.324
316	86.96	0.00	1.14	[illegible]	8.36E-03	7.92E-03	.385	2.170E-02	9.921E-05	9.399E-05	308.2	8.36E-03	1.000	.385	.227
317	86.96	0.00	1.40	[illegible]	[illegible]	5.37E-03	.261	2.170E-02	6.726E-05	6.373E-05	307.5	5.67E-03	1.000	.261	.154
318	86.96	0.00	1.65	2.89E+03	3.99E-03	3.78E-03	.184	2.170E-02	4.732E-05	4.484E-05	307.3	3.99E-03	1.000	.184	.108
319	86.96	0.00	1.90	[illegible]	2.49E-03	2.36E-03	.115	2.170E-02	2.958E-05	2.802E-05	306.9	2.49E-03	1.000	.115	.068
320	86.96	0.00	2.29	[illegible]	1.40E-03	1.33E-03	.065	2.170E-02	1.660E-05	1.378E-05	306.8	1.40E-03	1.000	.065	.038
506	125.06	.75	0.00	4.18E+04	5.94E-02	5.53E-02	.736	7.911E-02	6.929E-04	6.561E-04	315.1	5.84E-02	1.000	.730	.772
507	125.06	.51	0.00	3.94E+04	5.50E-02	5.21E-02	.696	7.905E-02	6.530E-04	6.184E-04	314.6	5.50E-02	1.000	.696	.728
508	125.06	.25	0.00	[illegible]	5.11E-02	4.84E-02	.647	7.898E-02	6.064E-04	5.742E-04	313.8	5.11E-02	1.000	.647	.677
509	125.06	.13	0.00	[illegible]	4.28E-02	[illegible]	.542	7.896E-02	5.076E-04	4.808E-04	312.5	4.28E-02	1.000	.542	.567
510	125.06	.04	.04	2.77E+04	3.86E-02	[illegible]	.489	7.893E-02	4.581E-04	4.339E-04	312.7	3.86E-02	1.000	.489	.512
511	125.06	0.00	.15	[illegible]	3.59E-02	3.40E-02	.455	7.892E-02	4.259E-04	4.033E-04	312.6	3.59E-02	1.000	.455	.476
512	125.06	0.00	.25	[illegible]	2.86E-02	2.71E-02	.363	7.892E-02	3.396E-04	3.216E-04	312.1	2.86E-02	1.000	.363	.379
513	125.06	0.00	.38	1.63E+04	2.27E-02	2.15E-02	.288	7.892E-02	2.696E-04	2.553E-04	311.4	2.27E-02	1.000	.288	.301
514	125.06	0.00	.64	[illegible]	1.19E-02	1.13E-02	.151	7.892E-02	1.414E-04	1.339E-04	310.[illegible]	1.19E-02	1.000	.151	.158
515	125.06	0.00	.89	[illegible]	7.52E-03	7.13E-03	.095	7.892E-02	8.928E-05	8.458E-05	308.6	7.52E-03	1.000	.095	.100
516	125.06	0.00	1.14	4.28E+03	5.93E-03	5.62E-03	.075	7.892E-02	7.034E-05	6.664E-05	308.3	5.93E-03	1.000	.075	.079
517	125.06	0.00	1.40	[illegible]	4.47E-03	4.24E-03	.057	7.892E-02	[illegible]	5.030E-05	307.9	4.47E-03	1.000	.057	.059
518	125.06	0.00	1.65	[illegible]	3.70E-03	3.51E-03	.047	7.892E-02	4.391E-05	4.160E-05	307.3	3.70E-03	1.000	.047	.049
519	125.06	0.00	1.90	2.51E+03	3.46E-03	3.28E-03	.044	7.892E-02	[illegible]	3.889E-05	306.8	3.46E-03	1.000	.044	.046
520	125.06	0.00	2.29	[illegible]	3.14E-03	2.97E-03	.041	7.892E-02	3.724E-05	3.529E-05	306.3	3.14E-03	1.000	.040	.042

EDGE HEATING USED FOR HE

X=	3.9[illegible]E+01	HL /HREFF=	9.3[illegible]E-01
X=	4.124E+01	HL /HREFF=	1.017E+00
X=	4.377E+01	HL /HREFF=	9.[illegible]3E-01
X=	4.631E+01	HL /HREFF=	[illegible]
X=	4.856E+01	HL /HREFF=	9.[illegible]9E-01
X=	5.139E+01	HL /HREFF=	9.172E-01
X=	5.64[illegible]	HL /HREFF=	[illegible]

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	6.913E-01
X=	7.172E+01	HL	/HREFF=	1.022E+00
X=	7.680E+01	HL	/HREFF=	1.429E+00
X=	8.188E+01	HL	/HREFF=	1.896E+00
X=	8.696E+01	HL	/HREFF=	1.694E+00
X=	9.204E+01	HL	/HREFF=	1.672E+00
X=	9.712E+01	HL	/HREFF=	1.649E+00
X=	1.022E+02	HL	/HREFF=	1.637E+00
X=	1.073E+02	HL	/HREFF=	1.472E+00
X=	1.124E+02	HL	/HREFF=	1.267E+00
X=	1.175E+02	HL	/HREFF=	1.123E+00
X=	1.226E+02	HL	/HREFF=	1.074E+00
X=	1.251E+02	HL	/HREFF=	9.551E-01
X=	1.276E+02	HL	/HREFF=	9.218E-01
X=	1.302E+02	HL	/HREFF=	8.698E-01
X=	1.327E+02	HL	/HREFF=	8.630E-01
X=	1.352E+02	HL	/HREFF=	8.380E-01
X=	4.759E+01	HL	/HREFF=	1.907E+00
X=	6.136E+01	HL	/HREFF=	2.077E+00
X=	8.696E+01	HL	/HREFF=	9.027E-01
X=	1.251E+02	HL	/HREFF=	6.962E-01

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 81.89 CM

AMES 3.5 FT HWT TEST (1[illegible]), C.[illegible] BLUN[illegible], IN-LINE RSI GAP RUN([illegible]) 1373 PAGE 117

TT = [illegible].113E[illegible](K) GAP LENGTH =1[illegible]1.[illegible](CM)
PT = [illegible] GAP WIDTH = .254(CM)
HT = [illegible].17[illegible]E+[illegible](J/KG) GAP DEPTH = 3.81[illegible](CM)
RE/METER = 3.4314E+[illegible] ORIENTATION= 5.0[illegible](DEG)
MACH = 5.13[illegible] QS = 1.224[illegible]E+[illegible]5(W/M2)
FMC VEL = [illegible]E+[illegible]1(KG/M2-S) MOD.POSITION= 1
HAW/HT = [illegible].9[illegible] FOR HT
HAW/HT = [illegible].9[illegible] FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible].20E+04	4.55E-02	4.31E-02	.909	5.[illegible]45E-02	1.[illegible]42E-03	9.867E-04	309.1				1.000
2	132.70	-.51	[illegible]	3.2[illegible]E+04	4.54E-02	4.30E-02	.965	4.703E-02	1.039E-03	9.842E-04	309.4				1.000
3	130.16	-.51	[illegible]	3.[illegible]9E+04	4.31E-02	4.39E-02	.980	4.400E-02	9.879E-04	9.358E-04	309.4				1.000
4	127.63	-.51	[illegible]	3.[illegible]E+04	4.25E-02	4.32E-02	1.[illegible]36	4.096E-02	9.729E-04	9.215E-04	309.3				1.000
5	125.09	-.51	[illegible]	2.94E+04	4.11E-02	3.89E-02	1.081	3.797E-02	9.474E-04	8.907E-04	309.4				1.000
6	122.56	-.51	[illegible]	2.64E+04	3.96E-02	3.75E-02	1.132	3.495E-02	9.365E-04	8.567E-04	309.2				1.000
7	117.47	-.51	[illegible]	2.[illegible]2E+04	3.66E-02	3.47E-02	1.261	2.902E-02	8.391E-04	7.938E-04	309.2				1.000
8	112.37	-.51	[illegible]	2.[illegible]2E+04	3.23E-02	3.06E-02	1.360	2.373E-02	7.408E-04	7.016E-04	309.2				1.000
9	107.31	-.51	[illegible]	2.[illegible]E+04	2.86E-02	2.71E-02	1.462	1.957E-02	6.556E-04	6.213E-04	309.1				1.000
10	1[illegible]2.2[illegible]	-.51	[illegible]	1.[illegible]E+04	2.49E-02	2.36E-02	1.532	1.623E-02	5.697E-04	5.396E-04	309.1				1.000
11	97.12	-.51	[illegible]	1.5[illegible]E+04	2.09E-02	1.98E-02	1.542	1.359E-02	4.799E-04	4.545E-04	309.1				1.000
12	92.04	-.51	[illegible]	1.3[illegible]E+04	1.59E-02	1.79E-02	1.631	1.161E-02	4.340E-04	4.111E-04	309.3				1.000
13	86.96	-.51	[illegible]	1.13E+04	1.57E-02	1.49E-02	1.496	1.051E-02	3.6[illegible]E-04	3.410E-04	309.6				1.000
14	81.88	-.51	[illegible]	9.[illegible]E+03	1.35E-02	1.28E-02	1.386	9.766E-03	3.102E-04	2.930E-04	310.1				1.000
15	76.80	-.51	[illegible]	7.12E+03	9.96E-03	9.43E-03	1.039	9.590E-03	2.281E-04	2.166E-04	310.3				1.000
16	71.72	-.51	[illegible]	[illegible].[illegible]2E+03	7.87E-03	7.45E-03	.807	9.745E-03	1.802E-04	1.707E-04	310.8				1.000
17	66.64	-.51	[illegible]	[illegible].27E+03	7.38E-03	[illegible].99E-03	.731	1.010E-02	1.691E-04	1.601E-04	311.3				1.000
18	61.56	-.51	[illegible]	[illegible].72E+03	[illegible].[illegible]2E-03	7.59E-03	.760	1.056E-02	1.837E-04	1.740E-04	312.2				1.000
19	56.48	-.51	[illegible]	[illegible].7[illegible]E+03	9.43E-03	8.97E-03	.840	1.120E-02	2.171E-04	2.055E-04	313.0				1.000
20	51.39	-.51	[illegible]	[illegible].56E+03	1.06E-02	1.01E-02	.890	1.193E-02	2.432E-04	2.393E-04	313.5				1.000
21	48.86	-.51	[illegible]	[illegible].[illegible]7E+03	1.13E-02	[illegible].07E-02	.923	1.229E-02	2.598E-04	2.460E-04	313.9				1.000
22	46.31	-.51	[illegible]	8.43E+03	1.19E-02	1.12E-02	.934	1.267E-02	2.712E-04	2.567E-04	314.0				1.000
23	43.77	-.51	[illegible]	3.[illegible]E+03	1.21E-02	1.15E-02	.930	1.305E-02	2.779E-04	2.630E-04	314.1				1.000
24	41.24	-.51	[illegible]	8.[illegible]E+03	1.26E-02	1.19E-02	.9[illegible]	1.342E-02	2.839E-04	2.736E-04	314.3				1.000
2[illegible]	39.70	-.51	[illegible]	8.9[illegible]E+03	1.26E-02	1.19E-02	.914	1.380E-02	2.858E-04	2.735E-04	313.8				1.090
1[illegible]3	47.59	1.52	[illegible]	7.97E+03	1.12E-02	1.06E-02	.896	1.247E-02	2.363E-04	2.423E-04	317.5	1.12E-02	1.000	.896	.965
1[illegible]5	47.59	1.[illegible]2	[illegible]	8.[illegible]E+03	1.27E-02	1.20E-02	1.[illegible]19	1.247E-02	2.839E-04	2.744E-04	318.4	1.27E-02	1.000	1.015	1.093
1[illegible]7	47.59	.51	[illegible]	1.72E+04	1.87E-02	1.77E-02	1.498	1.247E-02	4.250E-04	4.0[illegible]2E-04	317.9	1.87E-02	1.000	1.498	1.614
1[illegible]8	47.59	.25	[illegible]	1.[illegible]E+04	2.21E-02	2.09E-02	1.766	1.246E-02	5.[illegible]1E-04	4.7[illegible]2E-04	316.9	2.21E-02	1.000	1.768	1.904
11[illegible]	47.59	.[illegible]	.04	1.[illegible]E+04	2.05E-02	1.94E-02	1.639	1.249E-02	4.695E-04	4.435E-04	315.5	2.05E-02	1.000	1.639	1.766
111	47.59	[illegible]	.15	1.3[illegible]E+04	1.83E-02	1.74E-02	1.469	1.246E-02	4.200E-04	3.976E-04	314.6	1.83E-02	1.000	1.469	1.583
112	47.59	[illegible]	.25	1.[illegible]7E+04	1.44E-02	1.37E-02	1.157	1.246E-02	3.3[illegible]E-04	3.131E-04	313.6	1.44E-02	1.000	1.157	1.246
113	47.59	[illegible]	.38	[illegible].[illegible]7E+03	1.02E-02	9.6[illegible]E-03	.817	1.246E-02	2.334E-04	2.211E-04	312.6	1.02E-02	1.000	.917	.880
114	47.59	[illegible]	.54	3.[illegible]1E+03	[illegible].[illegible]5E-03	4.78E-03	.405	1.246E-02	1.157E-04	1.096E-04	310.9	5.05E-03	1.000	.405	.43[illegible]
115	47.59	[illegible]	.[illegible]	1.[illegible]2E+03	2.54E-03	[illegible]	.2[illegible]3	1.246E-02	5.81[illegible] [illegible]5	5.539E-05	309.5	2.54E-03	1.000	.203	.219
2[illegible]3	61.56	1.52	[illegible]	1.12E+04	1.57E-02	1.[illegible]E-02	1.492	1.055E-02	3.6[illegible]E-04	3.414E-04	313.0	1.57E-02	1.000	1.492	1.96[illegible]
2[illegible]	61.56	1.[illegible]	[illegible]	1.[illegible]E+04	1.74E-02	1.[illegible]E-02	1.654	1.0[illegible]E-02	3.3[illegible]E-04	3.723E-04	313.0	1.74E-02	1.000	1.654	2.17[illegible]
2[illegible]7	61.56	.51	[illegible]	1.[illegible]E+04	1.49E-02	1.41E-02	1.41[illegible]	1.0[illegible]E-02	3.4[illegible]E-04	3.225E-04	313.6	1.49E-02	1.000	1.41[illegible]	1.855
2[illegible]	61.56	.25	[illegible]	[illegible].[illegible]2E+03	1.34E-02	1.26E-02	1.266	1.0[illegible]E-02	[illegible].[illegible]3E-04	2.697E-04	312.9	1.34E-02	1.000	1.266	1.666
21[illegible]	61.56	.[illegible]	[illegible]	[illegible]1E+03	1.12E-02	1.[illegible]E-02	1.[illegible]3	1.0[illegible]E-02	2.37[illegible]E-04	[illegible].4[illegible]E-04	311.9	1.12E-02	1.000	1.063	1.399

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(59) 1973

T/C	Y (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.99	.15	7.09E+03	9.90E-03	9.38E-03	.938	1.055E-02	2.268E-04	2.148E-04	309.9	9.90E-03	1.000	.938	1.235
212	61.56	0.31	.25	5.77E+03	8.05E-03	7.63E-03	.763	1.055E-02	1.845E-04	1.748E-04	309.3	8.05E-03	1.000	.763	1.005
7°C	89.79	0.99	2.26								304.23				
214	61.56	0.90	.64	3.16E+00	4.60E-06	4.35E-06	.000	1.055E-02	1.054E-07	9.958E-08	338.7	4.60E-06	1.000	.000	.001
215	61.56	0.00	.39	1.40E+03	1.95E-03	1.84E-03	.185	1.055E-02	4.460E-05	4.225E-05	306.4	1.95E-03	1.000	.185	.243
306	86.96	.76	0.00												
307	86.96	.51	0.00	2.62E+04	3.65E-02	3.46E-02	3.500	1.044E-02	8.370E-04	7.928E-04	309.9	3.65E-02	1.000	3.500	
308	86.96	.25	0.00	2.52E+04	3.52E-02	3.34E-02	3.371	1.046E-02	8.073E-04	7.647E-04	309.4	3.52E-02	1.000	3.371	
309	86.96	.15	0.00	2.35E+04	3.28E-02	3.11E-02	3.134	1.046E-02	7.510E-04	7.114E-04	308.8	3.28E-02	1.000	3.134	
310	86.96	.04	.04	2.25E+04	3.13E-02	2.97E-02	2.993	1.047E-02	7.176E-04	6.798E-04	308.6	3.13E-02	1.000	2.993	2.001
311	86.96	0.12	.15	2.08E+04	2.90E-02	2.75E-02	2.770	1.047E-02	6.644E-04	6.293E-04	308.0	2.90E-02	1.000	2.770	1.052
312	86.96	0.99	.25	1.58E+04	2.20E-02	2.08E-02	2.101	1.047E-02	5.040E-04	4.774E-04	307.1	2.20E-02	1.000	2.101	1.405
313	86.96	0.00	.38	1.24E+04	1.72E-02	1.63E-02	1.645	1.047E-02	3.947E-04	3.739E-04	305.7	1.72E-02	1.000	1.645	1.100
314	86.96	0.33	.64	7.56E+03	1.05E-02	9.95E-03	1.003	1.047E-02	2.405E-04	2.279E-04	306.0	1.05E-02	1.000	1.003	.670
315	86.96	0.00	.89	4.99E+03	6.93E-03	6.56E-03	.661	1.047E-02	1.587E-04	1.503E-04	305.4	6.93E-03	1.000	.661	.442
316	86.96	0.60	1.14	3.52E+03	5.02E-03	4.76E-03	.479	1.047E-02	1.150E-04	1.090E-04	304.9	5.02E-03	1.000	.479	.321
317	86.96	0.00	1.40	2.67E+03	3.71E-03	3.51E-03	.354	1.047E-02	8.493E-05	8.049E-05	304.5	3.71E-03	1.000	.354	.237
318	86.96	0.00	1.65	2.02E+03	2.80E-03	2.66E-03	.268	1.047E-02	6.422E-05	6.085E-05	304.3	2.80E-03	1.000	.260	.179
319	86.96	0.00	1.90	1.47E+03	2.04E-03	1.93E-03	.195	1.047E-02	4.677E-05	4.431E-05	304.1	2.04E-03	1.000	.195	.130
320	86.96	0.99	2.29	9.15E+02	1.27E-03	1.20E-03	.121	1.047E-02	2.903E-05	2.750E-05	304.1	1.27E-03	1.000	.121	.081
506	125.06	.76	0.00	3.15E+04	4.40E-02	4.17E-02	1.167	3.769E-02	1.008E-03	9.547E-04	309.2	4.40E-02	1.000	1.167	1.079
507	125.06	.51	0.00	3.03E+04	4.23E-02	4.00E-02	1.120	3.774E-02	9.681E-04	9.170E-04	308.9	4.23E-02	1.000	1.120	1.035
508	125.06	.25	0.00	2.95E+04	4.12E-02	3.91E-02	1.091	3.779E-02	9.445E-04	8.947E-04	308.4	4.12E-02	1.000	1.091	1.008
509	125.06	.15	0.00	2.75E+04	3.84E-02	3.64E-02	1.017	3.781E-02	8.805E-04	8.341E-04	307.6	3.84E-02	1.000	1.017	.940
510	125.06	.04	.04	2.62E+04	3.64E-02	3.45E-02	.963	3.783E-02	8.346E-04	7.906E-04	307.5	3.64E-02	1.000	.963	.890
511	125.06	0.33	.15	2.53E+04	3.52E-02	3.34E-02	.932	3.783E-02	8.073E-04	7.646E-04	307.5	3.52E-02	1.000	.932	.861
512	125.06	0.33	.25	2.22E+04	3.08E-02	2.92E-02	.815	3.783E-02	7.065E-04	6.693E-04	307.3	3.08E-02	1.000	.815	.753
513	125.06	0.00	.38	1.85E+04	2.58E-02	2.45E-02	.683	3.783E-02	5.916E-04	5.605E-04	307.0	2.58E-02	1.000	.683	.631
514	125.06	0.00	.64	1.20E+04	1.67E-02	1.58E-02	.442	3.783E-02	3.823E-04	3.626E-04	306.3	1.67E-02	1.000	.442	.438
515	125.06	0.00	.89	8.44E+03	1.17E-02	1.11E-02	.310	3.783E-02	2.684E-04	2.543E-04	305.5	1.17E-02	1.000	.310	.286
516	125.06	0.00	1.14	6.38E+03	8.86E-03	8.39E-03	.234	3.783E-02	2.029E-04	1.923E-04	305.4	8.86E-03	1.000	.234	.216
517	125.06	0.00	1.40	4.77E+03	6.62E-03	6.28E-03	.175	3.783E-02	1.517E-04	1.437E-04	305.1	6.62E-03	1.000	.175	.162
518	125.06	0.00	1.65	3.35E+03	4.64E-03	4.40E-03	.123	3.783E-02	1.054E-04	1.008E-04	304.9	4.64E-03	1.000	.123	.113
519	125.06	0.00	1.90	2.61E+03	3.62E-03	3.43E-03	.096	3.783E-02	8.292E-05	7.857E-05	304.7	3.62E-03	1.000	.096	.088
520	125.06	0.00	2.29	1.45E+03	2.01E-03	1.91E-03	.053	3.783E-02	4.607E-05	4.366E-05	304.4	2.01E-03	1.000	.053	.049

EDGE HEATING USED FOR HE

X=	3.871E+01	HL	/HREFF=	9.139E-01
X=	4.124E+01	HL	/HREFF=	9.339E-01
X=	4.377E+01	HL	/HREFF=	9.235E-01
X=	4.631E+01	HL	/HREFF=	9.342E-01
X=	4.884E+01	HL	/HREFF=	9.226E-01
X=	5.139E+01	HL	/HREFF=	8.934E-01
X=	5.648E+01	HL	/HREFF=	6.402E-01
[illegible]				

ORIGINAL PAGE IS OF POOR QUALITY

X=	6.1[illegible]E+01	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	7.319E-01
X=	7.172E+01	HL	/HREFF=	[illegible]72E-01
X=	7.689E+01	HL	/HREFF=	1.[illegible]
X=	8.138E+01	HL	/HREFF=	1.346E+00
X=	8.698E+01	HL	/HREFF=	1.436E+00
X=	9.274E+01	HL	/HREFF=	1.[illegible]31E+00
X=	9.712E+01	HL	/HREFF=	1.542E+00
X=	1.022E+02	HL	/HREFF=	1.532E+00
X=	1.073E+02	HL	/HREFF=	1.462E+00
X=	1.124E+02	HL	/HREFF=	1.359E+00
X=	1.175E+02	HL	/HREFF=	1.261E+00
X=	1.226E+02	HL	/HREFF=	1.132E+00
X=	1.251E+02	HL	/HREFF=	1.091E+00
X=	1.276E+02	HL	/HREFF=	1.036E+00
X=	1.302E+02	HL	/HREFF=	9.8[illegible]1E-01
X=	1.327E+02	HL	/HREFF=	9.546E-01
X=	1.352E+02	HL	/HREFF=	9.[illegible]37E-01
X=	4.759E+01	HL	/HREFF=	1.498E+00
X=	6.156E+01	HL	/HREFF=	1.41[illegible]E+00
X=	8.696E+01	HL	/HREFF=	[illegible]E+00
X=	1.251E+02	HL	/HREFF=	1.120E+00

B.L. TRANSITION DISTANCE = 66.64 CM
FULLY TURBULENT B.L. CONDITIONS AT = 92.04 CM

PAGE 119

AMES 3.5 FT HWT TEST (162), G.R. BLUMER, IN-LINE RSI GAP RUN(63) 1973

TT = 1.1051E+03(K)
PT = 1.0307E+06(N/M2)
HT = 1.1612E+06(J/KG)
RE/METER = 3.7574E+06
MACH = 5.100
RHO VEL = 4.2229E+01(KG/M2-S)
HAW/HT = 0.909 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

GAP LENGTH =101.600(CM)
GAP WIDTH = .254(CM)
GAP DEPTH = 3.510(CM)
ORIENTATION= 15.000(DEG)
QS = 1.1751E+05(W/M2)
MOD.POSITION= 1

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	.00	2.39E+04	3.41E-02	3.23E-02	.694	4.915E-02	8.077E-04	7.647E-04	310.3				1.000
2	132.70	-.51	[illegible]	2.20E+04	3.13E-02	2.97E-02	.679	4.612E-02	7.417E-04	7.022E-04	310.6				1.000
3	130.16	-.51	[illegible]	1.90E+04	2.71E-02	2.56E-02	.629	4.338E-02	6.415E-04	6.073E-04	310.5				1.000
4	127.63	-.51	.00	1.63E+04	2.32E-02	2.20E-02	.579	4.004E-02	5.492E-04	5.208E-04	310.4				1.000
5	125.09	-.51	.00	1.34E+04	1.91E-02	1.81E-02	.516	3.701E-02	4.526E-04	4.285E-04	310.4				1.000
6	122.56	-.51	[illegible]	1.18E+04	1.68E-02	1.59E-02	.494	3.397E-02	3.971E-04	3.759E-04	310.3				1.000
7	117.47	-.51	[illegible]	9.51E+03	1.35E-02	1.28E-02	.483	2.806E-02	3.207E-04	3.036E-04	310.3				1.000
8	112.37	-.51	[illegible]	7.93E+03	1.13E-02	1.07E-02	.493	2.289E-02	2.675E-04	2.533E-04	310.4				1.000
9	107.31	-.51	[illegible]	6.98E+03	9.94E-03	9.42E-03	.528	1.885E-02	2.355E-04	2.230E-04	310.4				1.000
10	102.20	-.51	[illegible]	6.21E+03	8.85E-03	8.52E-03	.575	1.565E-02	2.130E-04	2.017E-04	310.5				1.000
11	97.12	-.51	[illegible]	5.80E+03	8.27E-03	7.83E-03	.630	1.313E-02	1.939E-04	1.855E-04	310.8				1.000
12	92.04	-.51	[illegible]	5.54E+03	7.90E-03	7.48E-03	.701	1.126E-02	1.870E-04	1.771E-04	311.1				1.000
13	86.96	-.51	[illegible]	5.05E+03	7.23E-03	6.84E-03	.706	1.024E-02	1.711E-04	1.620E-04	311.7				1.000
14	81.88	-.51	[illegible]	5.04E+03	7.20E-03	6.81E-03	.752	9.577E-03	1.705E-04	1.614E-04	312.2				1.000
15	76.80	-.51	[illegible]	4.95E+03	7.07E-03	6.70E-03	.748	9.453E-03	1.675E-04	1.586E-04	312.6				1.000
16	71.72	-.51	[illegible]	5.11E+03	7.31E-03	6.92E-03	.758	9.648E-03	1.732E-04	1.640E-04	313.1				1.000
17	66.64	-.51	[illegible]	5.63E+03	8.06E-03	7.63E-03	.805	1.002E-02	1.909E-04	1.807E-04	313.7				1.000
18	61.56	-.51	[illegible]	5.90E+03	8.46E-03	8.01E-03	.808	1.047E-02	2.004E-04	1.897E-04	314.6				1.000
19	56.48	-.51	[illegible]	6.17E+03	8.85E-03	8.38E-03	.796	1.111E-02	2.095E-04	1.983E-04	315.4				1.000
20	51.39	-.51	[illegible]	6.57E+03	9.43E-03	8.93E-03	.797	1.183E-02	2.234E-04	2.114E-04	316.0				1.000
21	48.86	-.51	[illegible]	7.07E+03	1.01E-02	9.56E-03	.828	1.226E-02	2.393E-04	2.265E-04	316.5				1.000
22	46.31	-.51	[illegible]	7.25E+03	1.04E-02	9.85E-03	.828	1.285E-02	2.456E-04	2.334E-04	316.7				1.000
23	43.77	-.51	[illegible]	7.41E+03	1.07E-02	1.01E-02	.823	1.296E-02	2.524E-04	2.389E-04	316.9				1.000
24	41.24	-.51	[illegible]	7.65E+03	1.13E-02	1.07E-02	.848	1.333E-02	2.677E-04	2.534E-04	317.2				1.000
25	38.70	-.51	[illegible]	7.96E+03	1.14E-02	1.08E-02	.835	1.371E-02	2.710E-04	2.564E-04	316.5				1.000
103	47.59	1.32	[illegible]	[illegible]	1.12E-02	1.06E-02	.986	1.236E-02	2.656E-04	2.513E-04	319.9	1.12E-02	1.000	.986	1.094
105	47.59	1.32	[illegible]	[illegible]	1.09E-02	1.03E-02	.880	1.238E-02	2.593E-04	2.441E-04	321.0	1.09E-02	1.000	.880	1.063
107	47.59	.51	[illegible]	8.12E+03	1.17E-02	1.11E-02	.948	1.236E-02	2.751E-04	2.631E-04	320.5	1.17E-02	1.000	.948	1.145
109	47.59	.25	[illegible]	7.66E+03	1.11E-02	1.05E-02	.893	1.238E-02	2.617E-04	2.476E-04	319.4	1.11E-02	1.000	.893	1.078
110	47.59	.00	.04	6.28E+03	9.02E-03	8.53E-03	.728	1.236E-02	2.135E-04	2.021E-04	318.1	9.02E-03	1.000	.728	.879
111	47.59	[illegible]	.15	5.42E+03	7.80E-03	7.38E-03	.630	1.238E-02	1.846E-04	1.747E-04	317.5	7.80E-03	1.000	.630	.760
112	47.59	[illegible]	.25	3.97E+03	5.70E-03	5.39E-03	.460	1.238E-02	1.350E-04	1.277E-04	316.2	5.70E-03	1.000	.460	.556
113	47.59	[illegible]	.38	[illegible]	3.78E-03	3.57E-03	.305	1.238E-02	8.943E-05	8.46?E-05	315.4	3.78E-03	1.000	.305	.368
114	47.59	[illegible]	.64	9.93E+02	1.42E-03	1.35E-03	.115	1.238E-02	3.363E-05	3.180E-05	313.7	1.42E-03	1.000	.115	.13?
115	47.59	[illegible]	.89	[illegible]	4.32E-04	4.09E-04	.035	1.236E-02	1.023E-05	9.683E-06	312.3	4.32E-04	1.000	.035	.042
203	61.56	1.32	[illegible]	[illegible]	8.68E-03	8.21E-03	.829	1.046E-02	2.055E-04	1.945E-04	315.2	8.68E-03	1.000	.829	1.02?
205	61.56	1.32	[illegible]	[illegible]	8.96E-03	8.48E-03	.857	1.046E-02	2.123E-04	2.009E-04	315.9	8.96E-03	1.000	.857	1.060
207	61.56	.51	[illegible]	[illegible]	[illegible]	[illegible]	.869	1.047E-02	[illegible]	2.085E-04	315.8	9.30E-03	1.000	.889	1.100
208	61.56	.25	.10	6.34E+03	[illegible]	8.52E-03	.870	1.047E-02	2.156E-04	2.040E-04	315.2	9.10E-03	1.000	.870	1.076
210	61.56	[illegible]	.04	[illegible]	7.52E-03	7.12E-03	.718	1.047E-02	1.78?E-04	1.685E-04	314.2	7.52E-03	1.000	.718	.889

AMES 3.5 FT HWT TEST (192), 0.3. BLUNER, IN-LINE RSI GAP FUN(50) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	51.56	0.00	.15	4.45E+03	6.36E-03	6.025E-03	.608	1.047E-02	1.597E-04	1.426E-04	312.2	6.36E-03	1.000	.608	.752
212	61.56	0.00	.25	3.44E+03	4.91E-03	4.65E-03	.469	1.047E-02	1.162E-04	1.100E-04	311.7	4.91E-03	1.000	.469	.58?
											385.24				
300	89.79	0.00	2.28												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.76	0.00												
307	85.96	.51	0.00	6.55E+03	9.36E-03	8.86E-03	.919	1.018E-02	2.215E-04	2.098E-04	311.8	9.36E-03	1.000	.919	1.303
308	86.96	.25	0.00	6.94E+03	9.90E-03	9.37E-03	.971	1.019E-02	2.344E-04	2.219E-04	311.3	9.90E-03	1.000	.971	1.376
309	86.96	.13	0.00	6.44E+03	9.18E-03	8.69E-03	.900	1.020E-02	2.175E-04	2.059E-04	310.8	9.18E-03	1.000	.900	1.276
310	86.96	.04	.04	6.17E+03	8.79E-03	8.32E-03	.861	1.021E-02	2.082E-04	1.971E-04	310.4	8.79E-03	1.000	.861	1.221
311	86.96	0.00	.15	5.67E+03	8.07E-03	7.64E-03	.790	1.021E-02	1.910E-04	1.809E-04	309.8	8.07E-03	1.000	.790	1.120
312	86.96	0.00	.25	4.24E+03	6.03E-03	5.71E-03	.591	1.021E-02	1.428E-04	1.352E-04	308.7	6.03E-03	1.000	.591	.837
313	86.96	0.00	.38	2.84E+03	4.03E-03	3.81E-03	.395	1.021E-02	9.537E-05	9.032E-05	307.9	4.03E-03	1.000	.395	.559
314	86.96	.00	.64	1.37E+03	1.95E-03	1.84E-03	.191	1.021E-02	4.638E-05	4.362E-05	308.2	1.95E-03	1.000	.191	.270
315	86.96	0.00	.89	5.22E+02	7.49E-04	7.11E-04	.073	1.021E-02	1.753E-05	1.660E-05	307.7	7.49E-04	1.000	.073	.103
316	86.96	0.00	1.14	2.66E+02	3.78E-04	3.58E-04	.037	1.021E-02	8.941E-06	8.460E-06	307.2	3.78E-04	1.000	.037	.052
317	86.96	0.00	1.40	7.62E+01	1.08E-04	1.02E-04	.011	1.021E-02	2.558E-06	2.422E-06	306.7	1.08E-04	1.000	.011	.015
318	86.96	0.00	1.65	9.67E+00	1.36E-05	1.29E-05	.001	1.021E-02	3.231E-07	3.060E-07	306.6	1.36E-05	1.000	.001	.002
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
506	125.06	.76	0.00	1.37E+04	1.94E-02	1.84E-02	[illegible]	[illegible]	4.606E-04	4.361E-04	310.2	1.94E-02	1.000	.530	1.026
507	125.06	.51	0.00	1.39E+04	1.98E-02	1.88E-02	.539	3.678E-02	4.696E-04	4.446E-04	309.9	1.98E-02	1.000	.539	1.045
508	125.06	.25	0.00	1.45E+04	2.07E-02	1.96E-02	.562	3.683E-02	4.901E-04	4.640E-04	309.2	2.07E-02	1.000	.562	1.089
509	125.06	.15	0.00	1.31E+04	1.86E-02	1.77E-02	.506	3.685E-02	4.419E-04	4.181E-04	308.3	1.86E-02	1.000	.506	.981
510	125.06	.04	.04	1.19E+04	1.69E-02	1.60E-02	.459	3.687E-02	4.003E-04	3.791E-04	308.7	1.69E-02	1.000	.459	.889
511	125.06	0.00	.15	1.11E+04	1.62E-02	1.53E-02	.439	3.687E-02	3.832E-04	3.629E-04	308.7	1.62E-02	1.000	.439	.850
512	125.06	0.00	.25	9.71E+03	1.32E-02	1.25E-02	.359	3.687E-02	3.131E-04	2.965E-04	308.4	1.32E-02	1.000	.359	.695
513	125.06	0.00	.38	6.94E+03	9.85E-03	9.33E-03	.267	3.687E-02	2.333E-04	2.209E-04	308.2	9.85E-03	1.000	.267	.518
514	125.06	0.00	.64	2.85E+03	4.04E-03	3.83E-03	.110	3.687E-02	9.569E-05	9.061E-05	307.4	4.04E-03	1.000	.110	.212
515	125.06	0.00	.89	1.20E+03	1.71E-03	1.62E-03	.046	3.687E-02	4.039E-05	3.825E-05	306.6	1.71E-03	1.000	.046	.090
516	125.06	0.00	1.14	7.93E+02	1.12E-03	1.06E-03	.030	3.687E-02	2.661E-05	2.529E-05	306.6	1.12E-03	1.000	.030	.059
517	125.06	0.00	1.40	4.22E+02	5.98E-04	5.66E-04	.016	3.687E-02	1.415E-05	1.341E-05	306.4	5.98E-04	1.000	.016	.031
518	125.06	0.00	1.65	3.62E+02	5.12E-04	4.95E-04	.014	3.687E-02	1.212E-05	1.148E-05	306.0	5.12E-04	1.000	.014	.027
519	125.06	0.00	1.90	1.92E+02	2.72E-04	2.58E-04	.007	3.687E-02	6.447E-06	6.106E-06	305.7	2.72E-04	1.000	.007	.014
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.873E+01	HL	/HREFF=	8.346E-01
X=	4.124E+01	HL	/HREFF=	8.4??E-01
X=	4.377E+01	HL	/HREFF=	6.228E-01
X=	4.631E+01	HL	/HREFF=	6.2??E-01
X=	4.885E+01	HL	/HREFF=	6.295E-01
X=	5.139E+01	HL	/HREFF=	7.9??E-01
X=	5.648E+01	HL	/HREFF=	7.9??E-01

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	6.049E-01
X=	7.172E+01	HL	/HREFF=	7.[illegible]52E-01
X=	7.680E+01	HL	/HREFF=	7.463E-01
X=	8.188E+01	HL	/HREFF=	7.916E-01
X=	8.696E+01	HL	/HREFF=	7.057E-01
X=	9.204E+01	HL	/HREFF=	[illegible].012E-01
X=	9.712E+01	HL	/HREFF=	[illegible]
X=	1.022E+02	HL	/HREFF=	[illegible]
X=	1.073E+02	HL	/HREFF=	[illegible]
X=	1.124E+02	HL	/HREFF=	4.934E-01
X=	1.175E+02	HL	/HREFF=	4.827E-01
X=	1.226E+02	HL	/HREFF=	4.[illegible]35E-01
X=	1.251E+02	HL	/HREFF=	5.164E-01
X=	1.276E+02	HL	/HREFF=	5.792E-01
X=	1.302E+02	HL	/HREFF=	6.208E-01
X=	1.327E+02	HL	/HREFF=	6.791E-01
X=	1.352E+02	HL	/HREFF=	6.939E-01
X=	4.759E+01	HL	/HREFF=	9.485E-01
X=	6.156E+01	HL	/HREFF=	6.889E-01
X=	8.696E+01	HL	/HREFF=	9.194E-01
X=	1.251E+02	HL	/HREFF=	[illegible].392E-01

B.L. TRANSITION DISTANCE = 122.56 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.[illegible] CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (1??), C.P. BLUMER, IN-LINE RSI GAP RUN(?1) 1973 — PAGE 121

TT	= 1.?????E+03(K)	GAP LENGTH	=1?1.6??(CM)
PT	= 1.?296E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.1???E+06(J/KG)	GAP DEPTH	= 3.810(CM)
RE/METER	= ?.75?1E+06	ORIENTATION	= 15.0??(DEG)
MACH	= ?.1??	QS	= 1.17?1E+05(W/M2)
RHO VEL	= 4.2164E+?1(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= ?.9?? FOR HT		
HAW/HT	= ?.874 FOR HL		
HLCC	= HL(2ND. ORDER CONC.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	2.1?E+04	2.99E-02	2.?3E-02	.61?	4.9?7E-02	?.1??E-04	6.722E-04	31?.6				1.000
2	132.70	-.51	[illegible]	1.99E+04	2.82E-02	2.57E-02	.612	4.6?3E-02	6.679E-04	6.324E-04	310.9				1.000
3	130.16	-.51	[illegible]	1.?8E+04	2.53E-02	2.??E-02	.?89	4.299E-02	6.??9E-04	5.669E-04	311.0				1.000
4	127.63	-.51	[illegible]	1.?1E+04	2.23E-02	2.17E-02	.573	3.995E-02	5.474E-04	5.145E-04	311.0				1.000
5	125.?9	-.51	[illegible]	1.33E+04	1.89E-02	1.79E-02	.512	3.?32E-02	4.481E-	4.242E-04	311.1				1.000
6	122.56	-.51	[illegible]	1.1?E+04	1.65E-02	1.56E-02	.467	3.38?E-02	3.912E-04	3.7?4E-04	311.1				1.000
7	117.47	-.51	[illegible]	9.?7E+03	1.35E-02	1.29E-02	.483	2.79?E-02	3.2?2E-04	3.?32E-04	311.4				1.000
8	112.37	-.51	[illegible]	7.?3E+03	1.12E-02	1.06E-02	.490	2.281E-02	2.648E-04	2.507E-04	311.5				1.000
9	107.31	-.51	[illegible]	?.?1E+03	?.39E-03	9.46E-03	.532	1.676E-02	2.359E-04	2.243E-04	311.7				1.000
10	1?2.2?	-.51	[illegible]	?.?9E+03	?.40E-03	8.93E-03	.6??	1.560E-02	2.229E-04	2.118E-04	312.0				1.000
11	97.12	-.51	[illegible]	?.17E+03	8.81E-03	8.34E-03	.673	1.309E-02	2.093E-04	1.978E-04	312.4				1.000
12	92.?4	-.51	[illegible]	?.?3E+03	?.62E-03	8.16E-03	.757	1.123E-02	2.044E-04	1.935E-04	312.8				1.000
13	86.9?	-.51	[illegible]	?.?3E+03	9.13E-03	7.75E-03	.8?2	1.121E-02	1.943E-04	1.839E-04	313.6				1.000
14	81.83	-.51	[illegible]	5.68E+03	8.13E-03	7.70E-03	.851	9.556E-03	1.929E-04	1.826E-04	314.3				1.000
15	76.90	-.51	[illegible]	?.??E+03	7.87E-03	7.45E-03	.834	9.44?E-03	1.?57E-04	1.768E-04	314.7				1.000
16	71.72	-.51	[illegible]	?.??E+03	7.96E-03	7.33E-03	.82?	9.6??E-03	1.899E-04	1.787E-04	315.3				1.000
17	66.64	-.51	[illegible]	5.71E+03	8.19E-03	7.75E-03	.818	1.001E-02	1.942E-04	1.838E-04	315.8				1.000
18	61.56	-.51	[illegible]	?.92E+03	?.49E-03	8.04E-03	.812	1.?46E-02	2.014E-04	1.906E-04	316.5				1.000
19	56.48	-.51	[illegible]	?.??E+03	?.70E-03	?.23E-03	.784	1.11?E-02	2.?64E-04	1.953E-04	317.0				1.000
20	51.39	-.51	[illegible]	?.1?E+03	?.86E-03	8.38E-03	.749	1.182E-02	2.151E-04	1.988E-04	317.2				1.000
21	48.86	-.51	[illegible]	?.??E+03	?.32E-03	8.82E-03	.765	1.219E-02	2.21?E-04	2.092E-04	317.4				1.000
22	46.?1	-.51	[illegible]	?.??E+03	9.61E-03	9.?9E-03	.764	1.257E-02	2.278E-04	2.156E-04	317.4				1.000
23	43.77	-.51	[illegible]	?.??E+03	9.75E-03	9.23E-03	.753	1.295E-02	2.313E-04	2.189E-04	317.5				1.000
24	41.24	-.51	[illegible]	7.?6E+03	1.?4E-02	9.88E-03	.?73	1.332E-02	2.475E-04	2.342E-04	317.6				1.000
25	?8.7?	-.51	[illegible]	?.??E+03	1.?9E-02	1.?2E-02	.7?9	1.370E-02	2.565E-04	2.427E-04	317.0				1.000
1?3	47.59	1.??	[illegible]	[illegible]	?.90E-03	9.36E-03	.8?0	1.237E-02	2.347E-04	2.223E-04	321.3	9.90E-03	1.000	.8?0	1.047
1?5	47.59	1.??	[illegible]	[illegible]	9.49E-03	8.97E-03	.767	1.237E-02	2.25?E-04	2.128E-04	322.1	9.49E-03	1.000	.767	1.004
107	47.59	.51	[illegible]	?.?3E+03	?.88E-03	9.34E-03	.798	1.237E-02	2.3?3E-04	2.216E-04	321.3	9.88E-03	1.000	.79?	1.045
108	47.59	.2?	[illegible]	?.?2E+03	9.13E-03	?.64E-03	.735	1.237E-02	2.1?5E-04	2.049E-04	320.3	9.13E-03	1.000	.738	.?65
110	47.59	[illegible]	.?4	[illegible]	7.43E-03	7.??E-03	.6?1	1.237E-02	1.763E-04	1.668E-04	318.9	7.43E-03	1.000	.6?1	.786
111	47.59	1.??	.15	?.?6E+03	6.26E-03	5.92E-03	.516	1.237E-02	1.434E-04	1.404E-04	318.3	6.26E-03	1.000	.506	.661
112	47.59	[illegible]	.25	3.?6E+03	4.40E-03	4.16E-03	.355	1.237E-02	1.042E-04	9.866E-05	317.1	4.40E-03	1.000	.355	.465
113	47.59	[illegible]	.??	1.?7E+03	2.68E-03	2.54E-03	.217	1.237E-02	?.366E-05	6.025E-05	316.3	2.68E-03	1.000	.217	.284
114	47.59	[illegible]	.64	?.??E+02	7.87E-04	7.45E-04	.064	1.237E-02	1.857E-05	1.768E-05	314.9	7.87E-04	1.000	.064	.08?
115	47.59	[illegible]	.?9	1.?2E+02	2.?3E-04	1.9?E-04	.01?	1.237E-02	4.82?E-06	4.567E-06	313.7	2.?3E-04	1.000	.016	.02?
2?3	61.56	1.??	[illegible]	[illegible]	9.33E-03	?.82E-03	.892	1.046E-02	2.212E-04	2.093E-04	318.1	9.33E-03	1.000	.892	1.09?
2?5	61.56	1.??	[illegible]	[illegible]	9.28E-03	?.78E-03	.8??	1.04?E-02	2.2?2E-04	2.083E-04	319.7	9.28E-03	1.000	.888	1.094
2?7	61.56	.51	[illegible]	[illegible]	9.36E-03	?.?6E-03	.59?	1.04?E-02	2.2??E-04	2.100E-04	319.4	9.36E-03	1.000	.895	1.103
208	61.56	.25	[illegible]	.11?E+03	?.79E-03	?.31E-03	.84?	1.046E-02	2.?33E-04	1.971E-04	317.7	8.78E-03	1.000	.84?	1.035
21?	61.56	[illegible]	.??	?.?3E+03	?.93E-03	?.56E-03	.663	1.0??E-02	1.644E-04	1.556E-04	316.7	6.93E-03	1.000	.663	.817

AMES 3.5 FT HWT TEST (1-2), D.R. BLUMER, IN-LINE RSI GAP RUN(51) 1973 PAGE 122

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	3.94E+03	5.64E-03	5.34E-03	.539	1.046E-02	1.339E-04	1.266E-04	314.6	5.64E-03	1.000	.539	.664
212	61.56	0.00	.25	2.97E+03	4.24E-03	4.02E-03	.406	1.046E-02	1.377E-04	9.528E-05	314.2	4.24E-03	1.000	.406	.580
213	69.70	0.00	2.26								306.41				
214	61.56	0.00	.64	3.17E+00	4.71E-06	4.45E-06	.000	1.046E-02	1.117E-07	1.055E-07	338.7	4.71E-06	1.000	.000	.001
215	61.56	0.00	.89												
306	86.96	.76	0.00												
307	86.96	.51	0.00	6.39E+03	9.14E-03	8.65E-03	.901	1.015E-02	2.169E-04	2.053E-04	314.5	9.14E-03	1.000	.900	1.123
308	86.96	.25	0.00	5.92E+03	8.47E-03	8.02E-03	.833	1.017E-02	2.039E-04	1.902E-04	314.0	8.47E-03	1.000	.833	1.039
309	86.96	.15	0.00	4.93E+03	7.05E-03	6.68E-03	.693	1.017E-02	1.673E-04	1.584E-04	313.4	7.05E-03	1.000	.693	.865
310	86.96	.04	.04	4.51E+03	6.45E-03	6.11E-03	.634	1.018E-02	1.530E-04	1.448E-04	313.1	6.45E-03	1.000	.634	.790
311	86.96	0.00	.15	3.85E+03	5.49E-03	5.20E-03	.539	1.018E-02	1.303E-04	1.233E-04	312.7	5.49E-03	1.000	.539	.673
312	86.96	0.00	.25	2.28E+03	3.25E-03	3.08E-03	.319	1.018E-02	7.712E-05	7.301E-05	311.8	3.25E-03	1.000	.319	.398
313	86.96	0.00	.38	1.28E+03	1.81E-03	1.72E-03	.178	1.018E-02	4.303E-05	4.075E-05	310.2	1.81E-03	1.000	.178	.222
314	86.96	0.00	.64	3.83E+02	5.48E-04	5.19E-04	.054	1.018E-02	1.300E-05	1.231E-05	313.5	5.48E-04	1.000	.054	.067
315	86.96	0.00	.89	2.60E+01	3.72E-05	3.52E-05	.004	1.018E-02	8.816E-07	8.347E-07	310.1	3.72E-05	1.000	.004	.005
316	86.96	0.00	1.14												
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90	1.92E+01	2.73E-05	2.58E-05	.003	1.018E-02	6.469E-07	6.126E-07	309.8	2.73E-05	1.000	.003	.003
320	86.96	0.00	2.29												
506	125.06	.76	0.00	1.25E+04	1.78E-02	1.69E-02	.485	3.663E-02	4.213E-04	3.988E-04	312.0	1.78E-02	1.000	.485	.940
507	125.06	.51	0.00	1.29E+04	1.84E-02	1.74E-02	.501	3.668E-02	4.368E-04	4.125E-04	311.7	1.84E-02	1.000	.501	.900
508	125.06	.25	0.00	1.33E+04	1.90E-02	1.80E-02	.517	3.673E-02	4.505E-04	4.265E-04	311.2	1.90E-02	1.000	.517	1.011
509	125.06	.15	0.00	1.20E+04	1.71E-02	1.62E-02	.464	3.675E-02	4.046E-04	3.830E-04	310.7	1.71E-02	1.000	.464	.900
510	125.06	.04	.04	1.10E+04	1.56E-02	1.48E-02	.424	3.677E-02	3.702E-04	3.505E-04	310.8	1.56E-02	1.000	.424	.830
511	125.06	0.00	.15	1.01E+04	1.44E-02	1.36E-02	.391	3.678E-02	3.413E-04	3.231E-04	310.0	1.44E-02	1.000	.391	.765
512	125.06	0.00	.25	7.56E+03	1.07E-02	1.01E-02	.291	3.678E-02	2.542E-04	2.407E-04	309.6	1.07E-02	1.000	.291	.570
513	125.06	0.00	.38	5.06E+03	7.19E-03	6.81E-03	.195	3.676E-02	1.705E-04	1.615E-04	309.3	7.19E-03	1.000	.195	.382
514	125.06	0.00	.64	1.57E+03	2.23E-03	2.11E-03	.061	3.674E-02	5.295E-05	5.014E-05	308.6	2.23E-03	1.000	.061	.119
515	125.06	0.00	.89	4.37E+02	6.20E-04	5.87E-04	.017	3.678E-02	1.471E-05	1.393E-05	307.8	6.20E-04	1.000	.017	.033
516	125.06	0.00	1.14	2.71E+02	3.85E-04	3.64E-04	.010	3.678E-02	9.127E-06	8.643E-06	307.7	3.85E-04	1.000	.010	.020
517	125.06	0.00	1.40	6.67E+01	9.45E-05	8.95E-05	.003	3.676E-02	2.241E-06	2.122E-06	307.5	9.45E-05	1.000	.003	.005
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29	[illegible]	1.68E-04	[illegible]	.005	3.678E-02	4.454E-06	4.218E-06	306.9	1.68E-04	1.000	.005	.010

EDGE HEATING USED FOR HT

X=	3.875E+01	HL	/HREFF=	7.894E-01
X=	4.124E+01	HL	/HREFF=	7.733E-01
X=	4.377E+01	HL	/HREFF=	7.532E-01
X=	4.631E+01	HL	/HREFF=	7.642E-01
X=	4.885E+01	HL	/HREFF=	7.645E-01
X=	5.139E+01	HL	/HREFF=	7.432E-01
X=	5.648E+01	HL	/HREFF=	7.637E-01

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X=    6.150E+01  HL   /HREFF=    [illegible]
X=    6.664E+01  HL   /HREFF=    8.151E-01
X=    7.172E+01  HL   /HREFF=    9.268E-01
X=    7.690E+01  HL   /HREFF=    8.341E-01
X=    8.194E+01  HL   /HREFF=    8.579E-01
X=    8.696E+01  HL   /HREFF=    8.19E-01
X=    9.204E+01  HL   /HREFF=    7.576E-01
X=    9.712E+01  HL   /HREFF=    6.733E-01
X=    1.022E+02  HL   /HREFF=    6.025E-01
X=    1.073E+02  HL   /HREFF=    5.321E-01
X=    1.124E+02  HL   /HREFF=    4.995E-01
X=    1.175E+02  HL   /HREFF=    4.829E-01
X=    1.226E+02  HL   /HREFF=    4.869E-01
X=    1.251E+02  HL   /HREFF=    5.117E-01
X=    1.276E+02  HL   /HREFF=    5.735E-01
X=    1.302E+02  HL   /HREFF=    5.893E-01
X=    1.327E+02  HL   /HREFF=    6.118E-01
X=    1.352E+02  HL   /HREFF=    6.151E-01

X=    4.795E+01  HL   /HREFF=    7.985E-01
X=    6.156E+01  HL   /HREFF=    8.937E-01
X=    8.696E+01  HL   /HREFF=    9.035E-01
X=    1.251E+02  HL   /HREFF=    5.012E-01
B.L. TRANSITION DISTANCE =  51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =  81.89 CM
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AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(62) 1373

TT = 1.1086E+03(K)
PT = 1.8309E+06(N/M2)
HT = 1.1711E+15(J/KG)
RE/METER = 3.3146E+06
MACH = 5.180
RHO VEL = 4.1934E+01(KG/M2-S)
HAW/HT = 0.905 FOR HT
HAW/HT = 0.[illegible]74 FOR HL
HLCC = HL(2ND. ORDER COND.,)

GAP LENGTH =101.600(CM)
GAP WIDTH = .127(CM)
GAP DEPTH = 3.810(CM)
ORIENTATION= 10.900(DEG)
QS = 1.1884E+05(W/M2)
MOD.POSITION= 1

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	[illegible]	3.29E-02	3.11E-02	.676	4.864E-02	7.825E-04	7.410E-04	[illegible]				1.000
2	132.70	-.51	0.00	2.14E+04	3.02E-02	2.86E-02	.662	4.560E-02	7.194E-04	6.812E-04	[illegible]				1.000
3	130.16	-.51	0.00	1.85E+04	2.60E-02	2.47E-02	.612	4.255E-02	6.203E-04	5.874E-04	[illegible]				1.000
4	127.63	-.51	0.00	1.68E+04	2.37E-02	2.24E-02	.600	3.950E-02	5.640E-04	5.341E-04	[illegible]				1.000
5	125.09	-.51	0.06	1.50E+04	2.11E-02	1.99E-02	.578	3.646E-02	5.016E-04	4.750E-04	[illegible]				1.000
6	122.56	-.51	0.00	1.37E+04	1.93E-02	1.83E-02	.579	3.341E-02	4.635E-04	4.361E-04	[illegible]				1.000
7	117.47	-.51	0.00	1.12E+04	1.58E-02	1.49E-02	.573	2.749E-02	3.754E-04	3.599E-04	[illegible]				1.000
8	112.37	-.51	0.00	8.96E+03	1.26E-02	1.29E-02	.564	2.238E-02	3.008E-04	2.849E-04	[illegible]				1.000
9	107.31	-.51	0.00	7.79E+03	1.10E-02	1.04E-02	.596	1.843E-02	2.616E-04	2.477E-04	311.3				1.000
10	102.20	-.51	0.00	7.11E+03	1.00E-02	9.50E-03	.655	1.532E-02	2.388E-04	2.261E-04	311.5				1.000
11	97.12	-.51	0.00	6.34E+03	8.95E-03	[illegible]	.695	1.287E-02	2.131E-04	2.017E-04	311.8				1.000
12	92.04	-.51	0.00	5.39E+03	8.45E-03	8.00E-03	.764	1.106E-02	2.012E-04	1.905E-04	312.1				1.000
13	86.96	-.51	0.00	5.54E+03	7.83E-03	7.41E-03	.776	1.009E-02	[illegible]	1.766E-04	312.7				1.00[illegible]
14	81.88	-.51	0.00	5.52E+03	7.79E-03	7.38E-03	.823	9.467E-03	[illegible]	[illegible]	[illegible]				1.00[illegible]
15	76.80	-.51	0.00	5.31E+03	7.51E-03	7.11E-03	.801	9.374E-03	1.788E-04	1.692E-04	[illegible]				[illegible]
16	71.72	-.51	0.00	5.55E+03	7.85E-03	7.43E-03	.818	9.591E-03	1.869E-04	1.770E-04	313.0				1.00[illegible]
17	66.64	-.51	0.00	6.05E+03	8.56E-03	8.11E-03	.859	9.967E-03	2.039E-04	1.931E-04	314.1				1.00[illegible]
18	61.56	-.51	0.00	6.42E+03	9.09E-03	8.61E-03	.872	1.042E-02	2.165E-04	2.050E-04	314.0				1.00[illegible]
19	56.[illegible]	-.51	0.00	6.69E+03	9.48E-03	8.98E-03	.857	1.106E-02	2.259E-04	2.130E-04	315.2				1.000
20	51.39	-.51	0.00	6.91E+03	9.79E-03	9.27E-03	.831	1.178E-02	2.332E-04	2.207E-04	315.5				1.000
21	48.86	-.51	0.00	7.36E+03	1.04E-02	9.81E-03	.853	1.214E-02	2.467E-04	2.335E-04	315.9				1.000
22	46.31	-.51	0.00	7.59E+03	1.08E-02	1.02E-02	.859	1.253E-02	2.564E-04	2.427E-04	315.9				1.000
23	43.77	-.51	0.00	7.87E+03	1.11E-02	1.05E-02	.861	1.290E-02	2.645E-04	2.504E-04	316.0				1.000
24	41.24	-.51	0.00	8.44E+03	1.20E-02	1.13E-02	.902	1.326E-02	2.852E-04	2.708E-04	316.2				1.000
25	38.70	-.51	0.00	[illegible]	1.24E-02	1.17E-02	.908	1.365E-02	2.953E-04	2.795E-04	315.6				1.000
193	47.59	1.52	0.00	[illegible]	1.16E-02	1.19E-02	.939	1.232E-02	2.754E-04	2.606E-04	320.0	1.16E-02	1.000	.939	1.096
105	47.59	1.[illegible]	0.00	[illegible]	1.13E-02	1.17E-02	.920	1.232E-02	2.791E-04	2.555E-04	321.0	1.13E-02	1.000	.920	1.075
10[illegible]	47.59	[illegible]	0.00	7.66E+03	1.09E-02	1.13E-02	.887	1.233E-02	2.604E-04	2.464E-04	320.3	1.09E-02	1.000	.887	1.036
108	47.59	.25	0.00	7.11E+03	1.01E-02	[illegible]	.822	1.233E-02	2.412E-04	2.282E-04	319.1	1.01E-02	1.000	.822	.959
110	47.59	.14	.04	[illegible]	8.14E-03	7.71E-03	.660	1.233E-02	1.939E-04	1.835E-04	317.7	8.14E-03	1.000	.660	.771
111	47.59	0.00	.15	4.72E+03	6.71E-03	6.35E-03	.544	1.233E-02	1.538E-04	1.512E-04	317.0	6.71E-03	1.000	.544	.636
112	47.59	0.00	.25	3.15E+03	4.51E-03	4.27E-03	.366	1.233E-02	1.074E-04	1.016E-04	315.7	4.51E-03	1.000	.366	.427
113	47.59	0.00	.38	1.86E+03	2.64E-03	2.50E-03	.214	1.233E-02	6.285E-05	5.949E-05	314.9	2.64E-03	1.000	.214	.250
114	47.59	0.10	.64	5.05E+02	7.14E-04	6.76E-04	.058	1.233E-02	1.700E-05	1.610E-05	313.4	7.14E-04	1.000	.058	.06[illegible]
115	47.59	[illegible]	.89	9.[illegible]E+01	1.38E-04	1.31E-04	.011	1.233E-02	3.297E-06	3.122E-06	312.1	1.38E-04	1.000	.011	.01[illegible]
203	61.56	1.52	0.00	6.37E+03	9.04E-03	[illegible]	.867	1.042E-02	2.152E-04	2.037E-04	316.3	9.04E-03	1.000	.867	.99[illegible]
205	61.56	1.22	[illegible]	6.7[illegible]E+03	9.59E-03	9.07E-03	.920	1.042E-02	2.282E-04	2.160E-04	317.0	9.59E-03	1.000	.920	1.055
207	61.56	.51	[illegible]	[illegible]	9.78E-03	9.26E-03	.939	1.042E-02	2.329E-04	2.2[illegible]E-04	316.7	9.78E-03	1.000	.939	1.076
208	61.56	.25	[illegible]	[illegible]	9.20E-03	8.71E-03	.883	1.042E-02	2.192E-04	2.075E-04	316.0	9.20E-03	1.000	.883	1.013
210	61.56	[illegible]	[illegible]	[illegible]	7.23E-03	6.85E-03	.694	1.042E-02	1.722E-04	1.630E-04	314.9	7.23E-03	1.000	.694	.796

AMES 3.5 FT HWT TEST (150), 3.1, BLUMER, IN-LINE RSI GAP FUN(52) 1973 PAGE 124

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	[illegible]	.15	4.26E+03	6.01E-03	3.59E-03	.577	1.042E-02	1.432E-04	1.356E-04	312.7	6.01E-03	1.000	.577	.662
212	61.56	[illegible]	.25	3.17E+03	4.34E-03	4.11E-03	.416	1.042E-02	1.333E-04	9.778E-05	312.4	4.34E-03	1.000	.416	.477
[illegible]	89.79	[illegible]	2.20								306.12				
214	61.56	[illegible]	.64	[illegible]	8.15E-06	7.70E-06	.001	1.042E-02	1.942E-07	1.835E-07	330.7	8.15E-06	1.000	.001	.001
215	61.56	[illegible]	.39	[illegible]	7.24E-05	6.36E-05	.007	1.042E-02	1.725E-06	1.633E-06	333.6	7.24E-05	1.000	.007	.008
306	86.96	.76	[illegible]	[illegible]	7.83E-06	7.40E-06	.001	1.032E-02	1.865E-07	1.763E-07	330.7	7.83E-06	1.000	.001	.001
307	86.96	.51	[illegible]	6.32E+03	8.93E-03	8.46E-03	.890	1.003E-02	2.127E-04	2.014E-04	313.3	8.93E-03	1.000	.890	1.147
308	86.96	.25	[illegible]	[illegible]	8.68E-03	8.22E-03	.864	1.004E-02	2.066E-04	1.956E-04	312.8	8.68E-03	1.000	.864	1.113
309	86.96	.15	[illegible]	[illegible]	7.62E-03	7.22E-03	.758	1.005E-02	1.815E-04	1.718E-04	312.2	7.62E-03	1.000	.758	.977
310	86.96	.04	[illegible]	[illegible]	7.12E-03	6.75E-03	.709	1.005E-02	1.697E-04	1.607E-04	311.9	7.12E-03	1.000	.709	.913
311	86.96	[illegible]	.15	[illegible]	6.12E-03	[illegible]	.609	1.006E-02	1.456E-04	1.381E-04	311.4	6.12E-03	1.000	.609	.784
312	86.96	[illegible]	.25	2.67E+03	3.76E-03	3.56E-03	.374	1.006E-02	8.948E-05	8.474E-05	310.2	3.76E-03	1.000	.374	.481
313	86.96	[illegible]	.38	1.58E+03	2.22E-03	2.10E-03	.221	1.006E-02	5.277E-05	5.008E-05	309.7	2.22E-03	1.000	.221	.284
314	86.96	[illegible]	.64	[illegible]	5.36E-04	5.07E-04	.053	1.006E-02	1.276E-05	1.208E-05	309.3	5.36E-04	1.000	.053	.069
315	85.96	[illegible]	.89	[illegible]	7.35E-05	6.96E-05	.007	1.006E-02	1.750E-06	1.657E-06	309.9	7.35E-05	1.000	.007	.009
316	86.96	[illegible]	1.14												
317	86.96	[illegible]	1.47												
318	86.96	[illegible]	1.65												
319	86.96	[illegible]	1.93												
320	86.96	[illegible]	2.29												
506	125.76	.76	[illegible]	1.5?E+04	2.12E-02	2.00E-02	.585	3.616E-02	5.048E-04	4.773E-04	311.2	2.12E-02	1.000	.585	1.013
507	125.96	.51	[illegible]	1.56E+04	2.11E-02	1.99E-02	.582	3.622E-02	5.017E-04	4.751E-04	310.9	2.11E-02	1.000	.582	1.007
508	125.96	.25	[illegible]	1.49E+04	2.10E-02	1.99E-02	.578	3.627E-02	4.996E-04	4.731E-04	310.3	2.10E-02	1.000	.578	1.001
509	125.96	.15	[illegible]	1.35E+04	1.90E-02	1.80E-02	.523	3.629E-02	4.519E-04	4.279E-04	309.3	1.90E-02	1.000	.523	.905
510	125.96	.04	.04	1.20E+04	1.69E-02	1.60E-02	.465	3.631E-02	4.021E-04	3.808E-04	309.1	1.69E-02	1.000	.465	.805
511	125.96	[illegible]	.15	1.12E+04	1.58E-02	1.50E-02	.435	3.632E-02	3.761E-04	3.562E-04	309.1	1.58E-02	1.000	.435	.753
512	125.96	[illegible]	.25	[illegible]	1.13E-02	1.07E-02	.312	3.632E-02	2.699E-04	2.556E-04	308.9	1.13E-02	1.000	.312	.540
513	125.96	[illegible]	.38	5.38E+03	7.55E-03	7.15E-03	.208	3.632E-02	1.798E-04	1.703E-04	308.8	7.55E-03	1.000	.208	.360
514	125.96	[illegible]	.64	[illegible]	2.45E-03	2.32E-03	.068	3.632E-02	5.842E-05	5.533E-05	308.1	2.45E-03	1.000	.068	.117
515	125.96	[illegible]	.89	[illegible]	6.65E-04	6.30E-04	.018	3.632E-02	1.584E-05	1.501E-05	[illegible]	6.65E-04	1.000	.018	.032
516	125.96	[illegible]	1.14	[illegible]	2.80E-04	2.66E-04	.008	3.632E-02	6.676E-06	6.324E-06	307.5	2.80E-04	1.000	.008	.013
517	125.96	[illegible]	1.4?												
518	125.96	[illegible]	1.65												
519	125.96	[illegible]	1.9?												
520	125.96	[illegible]	2.29												

EDGE HEATING USED FOR HT
** 3.8? E+01 HL /HREFF= [illegible]
** 4.124E+01 HL /HREFF= [illegible]
** 4.??7E+01 HL /HREFF= [illegible]
** 4.631E+01 HL /HREFF= [illegible]
** 4.8??E+01 HL /HREFF= [illegible]
** 5.139E+01 HL /HREFF= 8.313E-01
** 5.649E+01 HL /HREFF= [illegible]

X=	[illegible]	HL	/HREFF=	[illegible]
X=	6.664E+01	HL	/HREFF=	6.592E-01
X=	7.172E+01	HL	/HREFF=	6.185E-01
X=	7.6[illegible]E+01	HL	/HREFF=	[illegible]
X=	8.169E+01	HL	/HREFF=	8.274E-01
X=	8.696E+01	HL	/HREFF=	7.752E-01
X=	9.274E+01	HL	/HREFF=	7.[illegible]E-01
X=	9.[illegible]2E+01	HL	/HREFF=	6.[illegible]E-01
X=	1.022E+02	HL	/HREFF=	[illegible]45E-01
X=	1.073E+02	HL	/HREFF=	5.962E-01
X=	1.124E+02	HL	/HREFF=	5.644E-01
X=	1.175E+02	HL	/HREFF=	5.734E-01
X=	1.226E+02	HL	/HREFF=	5.7[illegible]E-01
X=	1.251E+02	HL	/HREFF=	[illegible].778E-01
X=	1.276E+02	HL	/HREFF=	[illegible]
X=	1.302E+02	HL	/HREFF=	6.1[illegible]E-01
X=	1.327E+02	HL	/HREFF=	6.62[illegible]E-01
X=	1.352E+02	HL	/HREFF=	6.75[illegible]E-01
X=	4.759E+01	HL	/HREFF=	8.[illegible]73[illegible]-01
X=	6.156E+01	HL	/HREFF=	9.337E-01
X=	8.696E+01	HL	/HREFF=	[illegible].915E-01
X=	1.251E+02	HL	/HREFF=	[illegible].817E-01

B.L. TRANSITION DISTANCE 51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT = 66.64 CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (132), C.J. BLUMER, IN-LINE RSI GAP RUN(63) 1973 PAGE 125

TT	= 1.1431E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 2.1277E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2134E+06(J/KG)	GAP DEPTH	= 3.81C(CM)
RE/METER	= 5.4159E+06	ORIENTATION	= 10.000(DEG)
MACH	= 5.190	QS	= 1.7710E+05(N/M2)
RHO VEL	= 9.3767E+01(KG/M2-S)	400.POSITION	= 1
HAW/HT	= 0.909 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.46E+04	7.36E-02	6.97E-02	.856	8.598E-02	8.783E-04	8.318E-04	315.6				1.000
2	132.70	-.51	0.00	5.43E+04	7.32E-02	6.94E-02	.876	8.361E-02	8.740E-04	8.288E-04	316.4				1.000
3	130.16	-.51	0.00	5.30E+04	7.15E-02	6.77E-02	.880	8.123E-02	8.533E-04	8.081E-04	316.4				1.000
4	127.63	-.51	0.00	5.39E+04	7.27E-02	6.89E-02	.922	7.886E-02	8.683E-04	8.226E-04	316.4				1.000
5	125.09	-.51	0.00	5.33E+04	7.20E-02	6.82E-02	.941	7.649E-02	8.590E-04	8.138E-04	316.6				1.000
6	122.56	-.51	0.00	5.42E+04	7.31E-02	6.92E-02	.986	7.412E-02	8.719E-04	8.260E-04	316.3				1.000
7	117.47	-.51	0.00	5.54E+04	7.48E-02	7.08E-02	1.097	6.812E-02	8.922E-04	8.452E-04	316.4				1.000
8	112.37	-.51	0.00	5.40E+04	7.29E-02	6.90E-02	1.227	5.940E-02	8.696E-04	8.238E-04	316.7				1.000
9	107.31	-.51	0.00	5.14E+04	6.94E-02	6.58E-02	1.421	4.886E-02	8.296E-04	7.849E-04	316.7				1.000
10	102.20	-.51	0.00	4.65E+04	6.27E-02	5.94E-02	1.589	3.949E-02	7.488E-04	7.094E-04	316.7				1.000
11	97.12	-.51	0.00	3.70E+04	4.99E-02	4.73E-02	1.563	3.195E-02	5.958E-04	5.645E-04	316.9				1.000
12	92.04	-.51	0.00	2.67E+04	3.60E-02	3.41E-02	1.400	2.570E-02	4.296E-04	4.070E-04	317.3				1.000
13	86.96	-.51	0.00	1.72E+04	2.33E-02	2.20E-02	1.097	2.120E-02	2.776E-04	2.629E-04	318.1				1.000
14	81.88	-.51	0.00	1.24E+04	1.68E-02	1.59E-02	.966	1.741E-02	2.008E-04	1.902E-04	318.6				1.000
15	76.90	-.51	0.00	9.35E+03	1.26E-02	1.20E-02	.837	1.511E-02	1.509E-04	1.429E-04	318.5				1.000
16	71.72	-.51	0.00	8.61E+03	1.16E-02	1.10E-02	.852	1.367E-02	1.390E-04	1.317E-04	318.9				1.000
17	66.64	-.51	0.00	8.52E+03	1.15E-02	1.09E-02	.856	1.348E-02	1.377E-04	1.305E-04	319.4				1.000
18	61.56	-.51	0.00	8.65E+03	1.17E-02	1.11E-02	.843	1.392E-02	1.400E-04	1.326E-04	320.3				1.000
19	56.48	-.51	0.00	8.69E+03	1.18E-02	1.12E-02	.801	1.471E-02	1.409E-04	1.333E-04	320.5				1.000
20	51.39	-.51	0.00	9.07E+03	1.23E-02	1.17E-02	.785	1.568E-02	1.468E-04	1.391E-04	320.7				1.000
21	46.36	-.51	0.00	9.67E+03	1.31E-02	1.24E-02	.817	1.606E-02	1.567E-04	1.484E-04	321.7				1.000
22	46.31	-.51	0.00	1.05E+04	1.42E-02	1.34E-02	.863	1.640E-02	1.690E-04	1.608E-04	321.2				1.000
23	43.77	-.51	0.00	1.13E+04	1.54E-02	1.46E-02	.921	1.671E-02	1.837E-04	1.748E-04	321.1				1.000
24	41.24	-.51	0.00	1.24E+04	1.69E-02	1.60E-02	.991	1.703E-02	2.014E-04	1.908E-04	321.2				1.000
25	38.70	-.51	0.00	1.26E+04	1.71E-02	1.52E-02	.987	1.734E-02	2.042E-04	1.934E-04	319.7				1.000
103	47.59	1.52	0.00	1.26E+04	1.72E-02	1.63E-02	1.061	1.624E-02	2.056E-04	1.947E-04	326.8	1.72E-02	1.000	1.061	1.263
105	47.59	1.02	.00	1.38E+04	1.87E-02	1.77E-02	1.152	1.624E-02	2.232E-04	2.112E-04	320.9	1.87E-02	1.000	1.152	1.371
107	47.59	.51	0.00	1.28E+04	1.72E-02	1.63E-02	1.058	1.623E-02	2.050E-04	1.940E-04	320.0	1.72E-02	1.000	1.058	1.260
108	47.59	.25	0.00	1.16E+04	1.56E-02	1.47E-02	.956	1.623E-02	1.855E-04	1.757E-04	326.1	1.56E-02	1.000	.956	1.140
110	47.59	.04	.04	9.06E+03	1.22E-02	1.16E-02	.752	1.624E-02	1.457E-04	1.380E-04	323.9	1.22E-02	1.000	.752	.896
111	47.59	0.00	.15	7.66E+03	1.04E-02	9.87E-03	.642	1.624E-02	1.244E-04	1.178E-04	322.8	1.04E-02	1.000	.642	.764
112	47.59	0.00	.25	5.37E+03	7.23E-03	6.95E-03	.445	1.624E-02	8.631E-05	8.174E-05	323.8	7.23E-03	1.000	.445	.530
113	47.59	0.00	.38	2.96E+03	3.99E-03	3.78E-03	.246	1.624E-02	4.759E-05	4.508E-05	318.8	3.99E-03	1.000	.246	.292
114	47.59	0.00	.64	8.39E+02	1.13E-03	1.07E-03	.070	1.624E-02	1.350E-05	1.279E-05	316.6	1.13E-03	1.000	.070	.087
115	47.59	0.00	.89	1.48E+02	1.99E-04	1.89E-04	.012	1.624E-02	2.378E-06	2.254E-06	314.3	1.99E-04	1.000	.012	.015
203	61.56	1.52	0.00	1.33E+04	1.81E-02	1.72E-02	1.309	1.383E-02	2.162E-04	2.047E-04	321.1	1.81E-02	1.000	1.309	1.557
205	61.56	1.02	0.00	1.26E+04	1.70E-02	1.61E-02	1.227	1.386E-02	2.023E-04	1.921E-04	322.2	1.70E-02	1.000	1.227	1.456
207	61.56	.51	.00	1.11E+04	1.51E-02	1.43E-02	1.088	1.387E-02	1.800E-04	1.705E-04	322.0	1.51E-02	1.000	1.088	1.290
208	61.56	.25	0.00	1.07E+04	1.45E-02	1.37E-02	1.045	1.386E-02	1.731E-04	1.639E-04	320.8	1.45E-02	1.000	1.045	1.239
210	61.56	.04	.04	8.97E+03	1.21E-02	1.15E-02	.871	1.359E-02	1.444E-04	1.368E-04	313.0	1.21E-02	1.000	.871	1.033

C-3

AMES 3.5 FT HWT TEST (182), C.B. RUMER, IN-LINE RSI GAP RUN(63) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	7.51E+03	1.01E-02	9.57E-03	.727	1.389E-02	1.205E-04	1.142E-04	314.2	1.01E-02	1.000	.727	.862
212	61.56	0.00	.25	5.64E+03	7.58E-03	7.18E-03	.546	1.389E-02	9.845E-05	8.571E-05	313.9	7.58E-03	1.000	.546	.647
700	89.79	0.00	2.26								305.18				
214	61.56	0.00	.64												
215	61.56	0.00	.89	3.51E+02	4.69E-04	4.44E-04	.034	1.389E-02	5.593E-06	5.301E-06	309.1	4.69E-04	1.000	.034	.046
306	86.96	.75	0.00												
307	86.96	.51	0.00	2.15E+04	2.31E-02	2.79E-02	1.309	2.093E-02	3.470E-04	3.207E-04	317.5	2.91E-02	1.000	1.309	1.267
308	86.96	.25	0.00	1.93E+04	2.60E-02	2.47E-02	1.240	2.095E-02	3.1[illegible]-04	2.943E-04	316.4	2.60E-02	1.000	1.240	1.131
309	86.96	.15	0.00	1.56E+04	2.10E-02	1.98E-02	.997	2.102E-02	2.5[illegible]-04	2.369E-04	315.6	2.10E-02	1.000	.997	.909
310	86.96	.04	.04	1.36E+04	1.84E-02	1.74E-02	.873	2.105E-02	2.1[illegible]E-04	2.077E-04	315.1	1.84E-02	1.000	.873	.796
311	86.96	0.00	.15	1.[illegible]E+04	1.45E-02	1.37E-02	.686	2.106E-02	1.725E-04	1.634E-04	314.1	1.45E-02	1.000	.686	.626
312	86.96	0.00	.25	7.70E+03	1.03E-02	9.79E-03	.490	2.106E-02	1.233E-04	1.160E-04	312.2	1.03E-02	1.000	.490	.447
313	86.96	0.00	.38	6.54E+03	8.72E-03	8.27E-03	.414	2.106E-02	1.041E-04	9.865E-05	308.2	8.72E-03	1.000	.414	.378
314	86.96	0.00	.64	2.44E+03	3.26E-03	3.19E-03	.155	2.106E-02	3.889E-05	3.686E-05	309.7	3.26E-03	1.000	.155	.141
315	86.96	0.00	.89	6.72E+02	8.98E-04	8.51E-04	.043	2.106E-02	1.072E-05	1.016E-05	309.3	8.98E-04	1.000	.043	.039
316	86.96	0.00	1.14												
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	86.96	0.00	2.29												
506	125.06	.75	0.00	4.79E+04	6.45E-02	6.11E-02	.840	7.676E-02	7.639E-04	7.294E-04	315.6	6.45E-02	1.000	.840	.897
507	125.06	.51	0.00	4.63E+04	6.23E-02	5.90E-02	.812	7.670E-02	7.436E-04	7.049E-04	314.9	6.23E-02	1.000	.812	.863
508	125.06	.25	0.00	4.62E+04	6.21E-02	5.89E-02	.810	7.664E-02	7.413E-04	7.024E-04	313.9	6.21E-02	1.000	.810	.861
509	125.06	.15	0.00	4.21E+04	5.64E-02	5.35E-02	.737	7.662E-02	6.735E-04	6.382E-04	312.5	5.64E-02	1.000	.737	.782
510	125.06	.04	.04	4.11E+04	5.52E-02	5.23E-02	.721	7.659E-02	6.586E-04	6.241E-04	312.2	5.52E-02	1.000	.720	.765
511	125.06	0.00	.15	3.94E+04	5.29E-02	5.01E-02	.690	7.656E-02	6.309E-04	5.979E-04	311.7	5.29E-02	1.000	.690	.733
512	125.06	0.00	.25	3.28E+04	4.40E-02	4.17E-02	.574	7.658E-02	5.246E-04	4.971E-04	311.3	4.40E-02	1.000	.574	.610
513	125.06	0.00	.38	2.59E+04	3.47E-02	3.28E-02	.453	7.658E-02	4.136E-04	3.920E-04	310.7	3.47E-02	1.000	.453	.481
514	125.06	0.00	.64	1.38E+04	1.84E-02	1.74E-02	.240	7.658E-02	2.134E-04	2.380E-04	309.7	1.84E-02	1.000	.240	.255
515	125.06	0.00	.89	7.49E+03	9.99E-03	9.47E-03	.131	7.658E-02	1.193E-04	1.131E-04	309.5	9.99E-03	1.000	.131	.139
516	125.06	0.00	1.14	4.37E+03	5.83E-03	5.52E-03	.076	7.658E-02	6.953E-05	6.591E-05	308.6	5.83E-03	1.000	.076	.081
517	125.06	0.00	1.40	2.15E+03	2.87E-03	2.72E-03	.037	7.656E-02	3.425E-05	3.247E-05	306.0	2.87E-03	1.000	.037	.040
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	9.456E-01
X=	4.124E+01	HL	/HREFF=	9.911E-01
X=	4.377E+01	HL	/HREFF=	9.210E-01
X=	4.631E+01	HL	/HREFF=	8.633E-01
X=	4.895E+01	HL	/HREFF=	8.166E-01
X=	5.139E+01	HL	/HREFF=	7.848E-01
X=	5.648E+01	HL	/HREFF=	8.014E-01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

X=	6.156E+01	HL	/HREFF=	8.431E-01
X=	6.664E+01	HL	/HREFF=	8.563E-01
X=	7.172E+01	HL	/HREFF=	8.518E-01
X=	7.680E+01	HL	/HREFF=	8.776E-01
X=	8.188E+01	HL	/HREFF=	9.663E-01
X=	8.696E+01	HL	/HREFF=	1.137E+00
X=	9.204E+01	HL	/HREFF=	1.476E+00
X=	9.712E+01	HL	/HREFF=	1.563E+00
X=	1.022E+02	HL	/HREFF=	1.589E+00
X=	1.073E+02	HL	/HREFF=	1.421E+00
X=	1.124E+02	HL	/HREFF=	1.227E+00
X=	1.175E+02	HL	/HREFF=	1.097E+00
X=	1.226E+02	HL	/HREFF=	9.857E-01
X=	1.251E+02	HL	/HREFF=	9.419E-01
X=	1.276E+02	HL	/HREFF=	9.225E-01
X=	1.302E+02	HL	/HREFF=	8.799E-01
X=	1.327E+02	HL	/HREFF=	8.758E-01
X=	1.352E+02	HL	/HREFF=	8.556E-01
X=	4.759E+01	HL	/HREFF=	1.058E+00
X=	6.156E+01	HL	/HREFF=	1.088E+00
X=	8.696E+01	HL	/HREFF=	1.389E+00
X=	1.251E+02	HL	/HREFF=	8.123E-01

B.L. TRANSITION DISTANCE = 56.49 CM
FULLY TURBULENT B.L. CONDITIONS AT = 102.20 CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(34) 1973 PAGE 127

TT	= 1.146 E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 1.0379E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2144E+06(J/KG)	GAP DEPTH	= 3.810(CM)
RE/METER	= 3.1342E+06	ORIENTATION	= 5.300(DEG)
MACH	= 5.100	QS	= 1.2424E+05(W/M2)
RHO VEL	= 4.0963E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.005 FOR HT		
HAW/HT	= 0.674 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.15E+04	2.88E-02	2.73E-02	.660	4.368E-02	7.937E-04	6.660E-04	314.4				1.000
2	132.70	-.51	0.00	1.99E+04	2.68E-02	2.53E-02	.654	4.092E-02	6.531E-04	6.188E-04	314.7				1.000
3	130.16	-.51	0.00	1.79E+04	2.39E-02	2.27E-02	.627	3.816E-02	5.843E-04	5.536E-04	314.8				1.000
4	127.63	-.51	0.00	1.65E+04	2.22E-02	2.10E-02	.626	3.540E-02	5.413E-04	5.129E-04	314.8				1.000
5	125.09	-.51	0.00	1.47E+04	1.98E-02	1.88E-02	.607	3.264E-02	4.934E-04	4.588E-04	314.9				1.000
6	122.56	-.51	0.00	1.34E+04	1.80E-02	1.71E-02	.603	2.988E-02	4.399E-04	4.168E-04	314.8				1.000
7	117.47	-.51	0.00	1.12E+04	1.50E-02	1.42E-02	.612	2.457E-02	3.668E-04	3.476E-04	315.0				1.000
8	112.37	-.51	0.00	9.06E+03	1.22E-02	1.16E-02	.607	2.007E-02	2.977E-04	2.821E-04	315.3				1.000
9	107.31	-.51	0.00	7.79E+03	1.05E-02	9.94E-03	.630	1.664E-02	2.560E-04	2.426E-04	315.4				1.000
10	102.20	-.51	0.00	6.96E+03	9.36E-03	8.87E-03	.669	1.400E-02	2.286E-04	2.165E-04	315.7				1.000
11	97.12	-.51	0.00	6.03E+03	8.11E-03	7.69E-03	.679	1.195E-02	1.981E-04	1.877E-04	316.0				1.000
12	92.04	-.51	0.00	5.51E+03	7.43E-03	7.04E-03	.712	1.044E-02	1.813E-04	1.718E-04	316.4				1.000
13	86.96	-.51	0.00	5.17E+03	6.98E-03	6.61E-03	.724	9.630E-03	1.703E-04	1.613E-04	317.1				1.000
14	81.88	-.51	0.00	5.46E+03	7.37E-03	6.98E-03	.807	9.133E-03	1.799E-04	1.704E-04	317.4				1.000
15	76.80	-.51	0.00	5.42E+03	7.32E-03	6.93E-03	.804	9.094E-03	1.785E-04	1.692E-04	317.6				1.000
16	71.72	-.51	0.00	5.83E+03	7.87E-03	7.46E-03	.844	9.323E-03	1.922E-04	1.821E-04	317.9				1.000
17	66.64	-.51	0.00	6.24E+03	8.43E-03	7.99E-03	.868	9.715E-03	2.059E-04	1.950E-04	318.4				1.000
18	61.56	-.51	0.00	6.61E+03	8.92E-03	8.45E-03	.875	1.019E-02	2.178E-04	2.063E-04	319.1				1.000
19	56.48	-.51	0.00	6.85E+03	9.27E-03	8.78E-03	.857	1.082E-02	2.264E-04	2.144E-04	319.5				1.000
20	51.39	-.51	0.00	7.03E+03	9.52E-03	9.01E-03	.826	1.151E-02	2.323E-04	2.200E-04	320.0				1.000
21	48.86	-.51	0.00	7.40E+03	1.00E-02	9.49E-03	.844	1.187E-02	2.447E-04	2.317E-04	320.6				1.000
22	46.31	-.51	0.00	7.60E+03	1.03E-02	9.75E-03	.841	1.224E-02	2.513E-04	2.380E-04	320.6				1.000
23	43.77	-.51	0.00	7.86E+03	1.06E-02	1.01E-02	.845	1.261E-02	2.599E-04	2.462E-04	320.7				1.000
24	41.24	-.51	0.00	8.51E+03	1.15E-02	1.09E-02	.889	1.297E-02	2.816E-04	2.666E-04	320.9				1.000
25	38.70	-.51	0.00	8.81E+03	1.29E-02	1.13E-02	.897	1.334E-02	2.921E-04	2.767E-04	320.1				1.000
103	47.59	1.32	0.00	7.16E+03	9.92E-03	9.29E-03	.516	1.234E-02	2.397E-04	2.269E-04	323.6	9.82E-03	1.000	.616	.968
105	47.59	1.12	0.00	8.07E+03	1.10E-02	1.04E-02	.910	1.234E-02	2.674E-04	2.532E-04	326.0	1.10E-02	1.000	.910	1.000
107	47.59	.51	0.00	8.62E+03	1.18E-02	1.11E-02	.976	1.204E-02	2.869E-04	2.717E-04	325.4	1.18E-02	1.000	.976	1.150
108	47.59	.25	0.00	7.38E+03	1.01E-02	9.52E-03	.835	1.215E-02	2.494E-04	2.324E-04	324.2	1.01E-02	1.000	.835	.990
110	47.59	.04	.04	5.51E+03	7.49E-03	7.10E-03	.622	1.205E-02	1.829E-04	1.732E-04	322.8	7.49E-03	1.000	.622	.730
111	47.59	0.00	.15	4.54E+03	6.16E-03	5.83E-03	.511	1.205E-02	1.504E-04	1.424E-04	322.1	6.16E-03	1.000	.511	.607
112	47.59	0.00	.25	2.95E+03	4.04E-03	3.82E-03	.335	1.235E-02	9.853E-05	9.332E-05	320.6	4.34E-03	1.000	.335	.398
113	47.59	0.00	.38	1.71E+03	2.34E-03	2.22E-03	.194	1.215E-02	5.717E-05	5.414E-05	319.7	2.34E-03	1.000	.194	.231
114	47.59	0.00	.64	4.50E+02	6.20E-04	5.88E-04	.051	1.265E-02	1.513E-05	1.435E-05	318.3	6.20E-04	1.000	.051	.061
115	47.59	0.00	.89	7.33E+01	9.89E-05	9.36E-05	.008	1.205E-02	2.413E-06	2.286E-06	315.9	9.69E-05	1.000	.008	.010
203	61.56	1.52	0.00	7.39E+03	1.00E-02	9.48E-03	.983	1.018E-02	2.444E-04	2.315E-04	320.4	1.00E-02	1.000	.983	1.127
205	61.56	1.12	0.00	7.01E+03	9.51E-03	9.01E-03	.933	1.018E-02	2.321E-04	2.198E-04	321.0	9.51E-03	1.000	.933	1.066
207	61.56	.51	0.00	6.82E+03	9.24E-03	8.75E-03	.908	1.019E-02	2.257E-04	2.137E-04	320.8	9.24E-03	1.000	.908	1.037
208	61.56	.25	0.00	6.60E+03	8.93E-03	5.46E-03	.877	1.019E-02	2.131E-04	2.065E-04	320.1	8.93E-03	1.000	.877	1.002
210	61.56	.04	.04	5.29E+03	7.15E-03	6.77E-03	.702	1.019E-02	1.746E-04	1.654E-04	319.1	7.15E-03	1.000	.732	.802

AMES 3.5 FT HHT TEST (1?2), C.J. BLUMER, IN-LINE RSI GAP RUN(64) 1973 PAGE 128

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	[illegible]	.15	4.36E+03	5.87E-03	5.56E-03	.577	1.019E-02	1.434E-04	1.358E-04	316.9	5.87E-03	1.000	.576	.659
212	61.56	[illegible]	.25	7.19E+03	4.30E-03	4.97E-03	.422	1.019E-02	1.049E-04	9.939E-05	315.4	4.30E-03	1.000	.422	.402
[illegible]	89.79	[illegible]	2.26								313.03				
214	61.56	[illegible]	.64												
215	61.56	[illegible]	.39	6.[illegible]E+01	8.80E-05	8.34E-05	.009	1.019E-02	2.143E-06	2.137E-06	313.7	8.80E-05	1.000	.009	.016
306	86.96	.75	[illegible]												
307	86.96	.31	[illegible]	5.47E+03	7.28E-03	5.98E-03	.760	9.587E-03	1.778E-04	1.685E-04	317.4	7.28E-03	1.000	.760	1.049
308	86.96	.25	[illegible]	5.11E+03	6.89E-03	6.33E-03	.718	9.597E-03	1.683E-04	1.595E-04	316.8	6.89E-03	1.000	.718	.991
309	86.96	.15	[illegible]	4.64E+03	5.98E-03	5.67E-03	.623	9.601E-03	1.461E-04	1.384E-04	316.3	5.98E-03	1.000	.623	.860
310	86.96	.04	.04	4.14E+03	5.57E-03	5.28E-03	.580	9.605E-03	1.360E-04	1.288E-04	315.9	5.57E-03	1.000	.580	.800
311	86.96	[illegible]	.15	3.52E+03	4.73E-03	4.48E-03	.492	9.607E-03	1.154E-04	1.094E-04	315.2	4.73E-03	1.000	.492	.679
312	86.96	[illegible]	.25	2.25E+03	3.04E-03	2.98E-03	.317	9.607E-03	7.425E-05	7.039E-05	314.0	3.04E-03	1.000	.317	.437
313	86.96	[illegible]	.38	1.23E+03	1.65E-03	1.56E-03	.172	9.607E-03	4.033E-05	3.819E-05	313.1	1.65E-03	1.000	.172	.237
314	86.96	[illegible]	.64	3.26E+02	4.37E-04	4.14E-04	.045	9.607E-03	1.067E-05	1.011E-05	313.6	4.37E-04	1.000	.045	.063
315	86.96	[illegible]	.89	4.74E+00	6.36E-06	6.92E-06	.001	9.607E-03	1.552E-07	1.478E-07	313.1	6.36E-06	1.000	.001	.001
316	86.96	[illegible]	1.14												
317	86.96	[illegible]	1.40												
318	86.96	[illegible]	1.65												
319	86.96	[illegible]	1.90												
320	86.96	[illegible]	2.29												
506	125.36	.76	[illegible]	1.49E+04	1.98E-02	1.88E-02	.614	3.229E-02	4.844E-04	4.599E-04	315.8	1.98E-02	1.000	.614	1.013
507	125.06	.51	[illegible]	1.46E+04	1.97E-02	1.86E-02	.608	3.235E-02	4.808E-04	4.548E-04	314.6	1.97E-02	1.000	.608	1.002
508	125.06	.25	[illegible]	1.44E+04	1.94E-02	1.83E-02	.597	3.242E-02	4.727E-04	4.479E-04	313.9	1.94E-02	1.000	.597	.985
509	125.06	.15	[illegible]	1.31E+04	1.75E-02	1.66E-02	.540	3.244E-02	4.275E-04	4.051E-04	312.8	1.75E-02	1.000	.540	.890
510	125.36	.04	.04	1.15E+04	1.54E-02	1.46E-02	.475	3.247E-02	3.765E-04	3.560E-04	313.4	1.54E-02	1.000	.475	.783
511	125.06	[illegible]	.15	1.06E+04	1.45E-02	1.37E-02	.446	3.248E-02	3.533E-04	3.348E-04	313.3	1.45E-02	1.000	.446	.735
512	125.06	[illegible]	.25	7.61E+03	1.02E-02	9.68E-03	.314	3.248E-02	2.493E-04	2.363E-04	313.1	1.02E-02	1.000	.314	.518
513	125.06	[illegible]	.38	5.04E+03	6.76E-03	6.41E-03	.208	3.248E-02	1.651E-04	1.565E-04	312.8	6.76E-03	1.000	.208	.343
514	125.06	[illegible]	.64	1.57E+03	2.10E-03	1.99E-03	.065	3.248E-02	5.127E-05	4.859E-05	312.2	2.10E-03	1.000	.065	.107
515	125.06	[illegible]	.89	5.56E+02	7.45E-04	7.06E-04	.023	3.248E-02	1.819E-05	1.723E-05	311.5	7.45E-04	1.000	.023	.038
516	125.06	[illegible]	1.14	1.15E+02	1.54E-04	1.46E-04	.005	3.248E-02	3.749E-06	3.553E-06	311.5	1.54E-04	1.000	.005	.008
517	125.06	[illegible]	1.42												
518	125.06	[illegible]	1.65												
519	125.06	[illegible]	1.90												
520	125.06	[illegible]	2.29												

EDGE HEATING USED FOR HE

X= 3.871E+01 HL /HREFF= 6.571E-01
X= 4.124E+01 HL /HREFF= 8.939E-01
X= 4.377E+01 HL /HREFF= 8.446E-01
X= 4.631E+01 HL /HREFF= 8.417E-01
X= 4.885E+01 HL /HREFF= 8.444E-01
X= 5.139E+01 HL /HREFF= 8.264E-01
X= 5.64[illegible]E+01 HL /HREFF= 6.571E-01

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X=      6.156E+01   HL   /HREFF=     [illegible]
X=      6.664E+01   HL   /HREFF=     8.681E-01
X=      7.172E+01   HL   /HREFF=     8.445E-01
X=      7.683E+01   HL   /HREFF=     8.044E-01
X=      8.188E+01   HL   /HREFF=     8.060E-01
X=      8.696E+01   HL   /HREFF=     7.244E-01
X=      9.204E+01   HL   /HREFF=     7.118E-01
X=      9.712E+01   HL   /HREFF=     6.790E-01
X=      1.022E+02   HL   /HREFF=     6.698E-01
X=      1.073E+02   HL   /HREFF=     6.333E-01
X=      1.124E+02   HL   /HREFF=     6.075E-01
X=      1.175E+02   HL   /HREFF=     6.116E-01
X=      1.226E+02   HL   /HREFF=     6.031E-01
X=      1.251E+02   HL   /HREFF=     6.067E-01
X=      1.276E+02   HL   /HREFF=     6.264E-01
X=      1.302E+02   HL   /HREFF=     6.272E-01
X=      1.327E+02   HL   /HREFF=     6.537E-01
X=      1.352E+02   HL   /HREFF=     6.599E-01

X=      4.755E+01   HL   /HREFF=     9.739E-01
X=      6.156E+01   HL   /HREFF=     9.075E-01
X=      8.696E+01   HL   /HREFF=     7.597E-01
X=      1.251E+02   HL   /HREFF=     6.077E-01
B.L. TRANSITION DISTANCE =  56.48 CM
FULLY TURBULENT B.L. CONDITIONS AT =  71.72 CM
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AMES 3.5 FT HWT TEST (1&2), C.P. BLUMER, IN-LINE RSI GAP RUN(65) 1973 PAGE 129

TT = 1.[illegible](K) GAP LENGTH =1[illegible](CM)
PT = 2.1[illegible]E+06(N/M2) GAP WIDTH = .063(CM)
HT = 1.15[illegible]E+06(J/KG) GAP DEPTH = 2.032(CM)
RE/METER = 6.90[illegible] ORIENTATION= [illegible](DEG)
MACH = 5.100 QS = 1.6481E+05(W/M2)
RHO VEL = 5.64[illegible](KG/M2-S) 10C.POSITION= 1
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible].874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible]E+04	7.08E-02	6.70E-02	.770	9.190E-02	9.194E-04	7.752E-04	317.5				1.000
2	132.70	-.51	[illegible]	4.96E+04	7.21E-02	6.82E-02	.804	8.964E-02	8.342E-04	7.892E-04	318.1				1.000
3	130.16	-.51	[illegible]	[illegible].96E+04	7.07E-02	6.59E-02	.809	6.737E-02	8.181E-04	7.740E-04	318.2				1.000
4	127.63	-.51	[illegible]	[illegible]E+04	7.33E-02	6.94E-02	.862	8.510E-02	8.487E-04	8.030E-04	318.4				1.000
5	125.09	-.51	[illegible]	[illegible]E+04	7.33E-02	6.94E-02	.885	8.284E-02	8.487E-04	8.029E-04	318.7				1.000
6	122.56	-.51	[illegible]	[illegible].11E+04	7.43E-02	7.03E-02	.923	8.057E-02	8.601E-04	8.137E-04	318.4				1.000
7	117.47	-.51	[illegible]	[illegible].71E+04	7.73E-02	7.31E-02	1.036	7.457E-02	8.942E-04	8.459E-04	318.7				1.000
8	112.37	-.51	[illegible]	[illegible].39E+04	7.86E-02	7.43E-02	1.204	6.527E-02	9.090E-04	8.599E-04	319.3				1.000
9	107.31	-.51	[illegible]	[illegible]E+04	7.98E-02	7.55E-02	1.487	5.369E-02	9.237E-04	8.738E-04	319.2				1.000
10	102.29	-.51	[illegible]	[illegible]E+04	7.83E-02	7.41E-02	1.808	4.332E-02	9.065E-04	8.576E-04	319.5				1.000
11	97.12	-.51	[illegible]	4.70E+04	6.84E-02	6.47E-02	1.957	3.496E-02	7.920E-04	7.492E-04	319.9				1.000
12	92.04	-.51	[illegible]	3.77E+04	[illegible].49E-02	5.20E-02	1.960	2.632E-02	6.355E-04	6.012E-04	320.2				1.000
13	86.96	-.51	[illegible]	2.61E+04	3.82E-02	3.61E-02	1.661	2.297E-02	4.415E-04	4.176E-04	321.4				1.000
14	81.88	-.51	[illegible]	1.87E+04	2.73E-02	2.58E-02	1.462	1.867E-02	3.159E-04	2.988E-04	321.7				1.000
15	76.80	-.51	[illegible]	1.3[illegible]E+04	1.93E-02	1.50E-02	1.157	1.601E-02	2.230E-04	2.381E-04	321.9				1.000
16	71.72	-.51	[illegible]	1.[illegible]E+04	1.56E-02	1.48E-02	1.091	1.432E-02	1.809E-04	1.710E-04	322.3				1.000
17	66.64	-.51	[illegible]	9.6[illegible]E+03	1.44E-02	1.36E-02	1.026	1.404E-02	1.666E-04	1.575E-04	322.9				1.000
18	61.56	-.51	[illegible]	9.42E+03	1.38E-02	1.31E-02	.955	1.447E-02	1.539E-04	1.512E-04	323.9				1.000
19	56.48	-.51	[illegible]	9.29E+03	1.36E-02	1.29E-02	.890	1.529E-02	1.576E-04	1.499E-04	323.9				1.000
20	51.39	-.51	[illegible]	9.27E+03	1.36E-02	1.29E-02	.835	1.629E-02	1.574E-04	1.480E-04	324.3				1.000
21	48.96	-.51	[illegible]	9.33E+03	1.37E-02	1.30E-02	.821	1.671E-02	1.586E-04	1.500E-04	325.3				1.000
22	46.31	-.51	[illegible]	9.47E+03	1.39E-02	1.32E-02	.817	1.701E-02	1.609E-04	1.522E-04	324.6				1.000
23	43.77	-.51	[illegible]	9.61E+03	1.41E-02	1.33E-02	.813	1.732E-02	1.631E-04	1.541E-04	324.4				1.000
24	41.24	-.51	[illegible]	9.9[illegible]E+03	1.45E-02	1.37E-02	.824	1.762E-02	1.681E-04	1.590E-04	324.6				1.000
25	36.70	-.51	[illegible]	1.[illegible]E+04	1.47E-02	1.39E-02	.818	1.793E-02	1.697E-04	1.605E-04	323.4				1.000
133	47.59	1.52	[illegible]	9.0[illegible]E+03	1.32E-02	1.25E-02	.782	1.686E-02	1.525E-04	1.442E-04	330.6	1.32E-02	1.000	.782	.955
105	47.59	1.02	[illegible]	8.76E+03	1.30E-02	1.23E-02	.771	1.686E-02	1.503E-04	1.421E-04	332.6	1.30E-02	1.000	.771	.941
107	47.59	.51	[illegible]	8.22E+03	1.22E-02	1.15E-02	.724	1.685E-02	1.411E-04	1.334E-04	331.4	1.22E-02	1.000	.724	.883
109	47.59	.25	[illegible]	[illegible]E+03	1.03E-02	9.72E-03	.611	1.685E-02	1.192E-04	1.126E-04	329.5	1.03E-02	1.000	.611	.746
110	47.59	.06	.06	[illegible]E+03	7.47E-03	7.06E-03	.443	1.686E-02	8.643E-05	8.171E-05	327.2	7.47E-03	1.000	.443	.541
111	47.59	[illegible]	.15	[illegible]E+03	6.15E-03	5.82E-03	.365	1.686E-02	7.121E-05	6.733E-05	326.0	6.15E-03	1.000	.365	.446
112	47.59	[illegible]	.25	[illegible]E+03	4.19E-03	3.96E-03	.249	1.686E-02	4.848E-05	4.584E-05	324.2	4.19E-03	1.000	.249	.303
113	47.59	[illegible]	.38	[illegible]E+03	2.39E-03	2.26E-03	.142	1.686E-02	2.766E-05	2.616E-05	322.3	2.39E-03	1.000	.142	.173
114	47.59	[illegible]	.64	[illegible]E+02	7.00E-04	6.62E-04	.042	1.686E-02	8.099E-06	7.661E-06	320.2	7.00E-04	1.000	.042	.05[illegible]
115	47.59	[illegible]	[illegible]	[illegible].12E+01	[illegible].45E-05	7.[illegible]E-05	.004	1.686E-02	5.616E-07	8.152E-07	313.1	7.45E-05	1.000	.004	.86[illegible]
203	61.56	1.52	[illegible]	9.2[illegible]E+03	1.35E-02	1.28E-02	.940	1.438E-02	1.564E-04	1.479E-04	325.6	1.35E-02	1.000	.940	.98[illegible]
205	61.56	1.02	[illegible]	[illegible]E+03	1.31E-02	1.24E-02	.913	1.439E-02	1.52[illegible]E-04	1.437E-04	326.5	1.31E-02	1.000	.913	.956
207	61.56	.51	[illegible]	[illegible]E+03	1.24E-02	1.17E-02	.859	1.442E-02	1.433E-04	1.355E-04	326.1	1.24E-02	1.000	.859	.900
208	61.56	.25	[illegible]	7.6[illegible]E+03	1.12E-02	1.06E-02	.779	1.443E-02	1.293E-04	1.229E-04	324.8	1.12E-02	1.000	.778	.815
210	61.56	[illegible]	[illegible]	[illegible]E+03	[illegible].45E-03	[illegible]E-03	.5[illegible]	1.444E-02	9.7[illegible]E-05	9.253E-05	323.0	8.45E-03	1.000	.586	.613

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (182), D.B. BLUMER, IN-LINE RSI GAP RUN(65) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	[illegible]	6.65E-03	6.29E-03	.460	1.444E-02	7.692E-05	7.279E-05	315.3	6.65E-03	1.000	.460	.482
212	61.56	0.00	.25	3.21E+03	4.66E-03	4.41E-03	.323	1.444E-02	5.389E-05	5.100E-05	316.7	4.66E-03	1.000	.323	.338
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.76	0.00												
307	86.96	.51	0.00	2.40E+04	3.51E-02	3.32E-02	1.547	2.265E-02	4.057E-04	3.837E-04	321.1	3.51E-02	1.000	1.547	.932
308	86.96	.25	0.00	[illegible]	3.14E-02	2.97E-02	1.381	2.273E-02	3.631E-04	3.435E-04	320.0	3.14E-02	1.000	1.381	.831
309	86.96	.15	0.00	1.79E+04	2.60E-02	2.46E-02	1.143	2.276E-02	[illegible]	2.848E-04	319.0	2.60E-02	1.000	1.143	.688
310	86.96	.06	.06	1.60E+04	2.32E-02	2.20E-02	1.019	2.279E-02	2.687E-04	2.543E-04	318.6	2.32E-02	1.000	1.019	.614
311	86.96	0.00	.15	1.30E+04	1.89E-02	1.78E-02	.827	2.280E-02	2.183E-04	2.065E-04	317.4	1.89E-02	1.000	.827	.498
312	86.96	0.00	.25	7.55E+03	1.09E-02	1.04E-02	.486	2.280E-02	1.256E-04	1.198E-04	315.6	1.09E-02	1.000	.488	.289
313	86.96	0.00	.38	5.44E+03	7.81E-03	7.39E-03	.342	2.280E-02	9.036E-05	8.555E-05	309.0	7.01E-03	1.000	.342	.206
314	86.96	0.00	.64	1.40E+03	2.01E-03	1.90E-03	.088	2.280E-02	2.324E-05	2.200E-05	311.0	2.01E-03	1.000	.088	.053
315	86.96	0.00	.89												
316	86.96	0.00	1.14												
317	86.96	0.00	1.40												
318	86.96	0.00	1.65												
319	86.96	0.00	1.90												
320	66.96	0.00	2.29												
506	125.06	.76	0.00	4.34E+04	6.30E-02	5.96E-02	.758	8.320E-02	7.294E-04	6.981E-04	318.0	6.30E-02	1.000	.758	.855
507	125.06	.51	0.00	4.19E+04	6.08E-02	5.75E-02	.731	8.312E-02	7.033E-04	6.655E-04	317.2	6.08E-02	1.000	.731	.825
508	125.06	.25	0.00	4.04E+04	5.86E-02	5.55E-02	.706	8.304E-02	6.785E-04	6.420E-04	316.2	5.86E-02	1.000	.706	.797
509	125.06	.15	0.00	3.62E+04	5.23E-02	4.95E-02	.630	8.301E-02	6.055E-04	5.731E-04	314.8	5.23E-02	1.000	.630	.712
510	125.06	.06	.06	3.35E+04	4.85E-02	4.59E-02	.584	8.296E-02	5.612E-04	5.311E-04	314.9	4.85E-02	1.000	.584	.660
511	125.06	0.00	.15	3.14E+04	4.55E-02	4.30E-02	.548	8.297E-02	5.262E-04	4.979E-04	314.7	4.55E-02	1.000	.548	.619
512	125.06	0.00	.25	2.39E+04	3.45E-02	3.27E-02	.416	8.297E-02	3.999E-04	3.783E-04	314.4	3.45E-02	1.000	.416	.470
513	125.06	0.00	.38	1.67E+04	2.41E-02	2.28E-02	.291	8.297E-02	2.789E-04	2.643E-04	313.0	2.41E-02	1.000	.291	.328
514	125.06	0.00	.64	4.77E+03	6.82E-03	6.45E-03	.082	8.297E-02	7.891E-05	7.469E-05	312.7	6.82E-03	1.000	.082	.093
515	125.06	0.00	.89	4.87E+02	7.01E-04	6.63E-04	.008	8.297E-02	8.109E-06	7.676E-06	311.4	7.01E-04	1.000	.008	.010
516	125.06	0.00	1.14												
517	125.06	0.00	1.40												
518	125.06	0.00	1.65												
519	125.06	0.00	1.90												
520	125.06	0.00	2.29												

EDGE HEATING USED FOR HE

X=	3.879E+01	HL	/HREFF=	8.191E-01
X=	4.124E+01	HL	/HREFF=	8.243E-01
X=	4.377E+01	HL	/HREFF=	8.134E-01
X=	4.631E+01	HL	/HREFF=	8.175E-01
X=	4.886E+01	HL	/HREFF=	8.216E-01
X=	5.139E+01	HL	/HREFF=	8.355E-01

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X=   [illegible]   HL   /HREFF=   [illegible]
X=   6.156E+01   HL   /HREFF=   9.552E-01
X=   6.664E+01   HL   /HREFF=   1.026E+00
X=   7.172E+01   HL   /HREFF=   1.[illegible]1E+00
X=   7.680E+01   HL   /HREFF=   1.187E+00
X=   8.188E+01   HL   /HREFF=   1.462E+00
X=   8.696E+01   HL   /HREFF=   1.651E+00
X=   9.204E+01   HL   /HREFF=   1.959E+00
X=   9.712E+01   HL   /HREFF=   1.957E+00
X=   1.022E+02   HL   /HREFF=   1.[illegible]9E+00
X=   1.073E+02   HL   /HREFF=   1.487E+00
X=   1.124E+02   HL   /HREFF=   1.214E+00
X=   1.175E+02   HL   /HREFF=   1.036E+00
X=   1.226E+02   HL   /HREFF=   9.225E-01
X=   1.251E+02   HL   /HREFF=   8.853E-01
X=   1.276E+02   HL   /HREFF=   8.619E-01
X=   1.302E+02   HL   /HREFF=   8.692E-01
X=   1.327E+02   HL   /HREFF=   8.[illegible]42E-01
X=   1.352E+02   HL   /HREFF=   7.705E-01

X=   4.759E+01   HL   /HREFF=   7.235E-01
X=   6.156E+01   HL   /HREFF=   8.933E-01
X=   8.696E+01   HL   /HREFF=   1.547E+00
X=   1.251E+02   HL   /HREFF=   7.313E-01
B.L. TRANSITION DISTANCE =  51.3[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =  97.12 CM
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AMES 3.5 FT HWT TEST (182), D.E. BLUMER, IN-LINE RSI GAP RUN(66) 1973 PAGE 131

TT	= 1.1721E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 5.1386E+05(N/M2)	GAP WIDTH	= .063(CM)
HT	= 1.2450E+06(J/KG)	GAP DEPTH	= 1.016(CM)
RE/METER	= 1.5538E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.100	QS	= 9.1924E+04(W/M2)
RHO VEL	= 2.326E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 0.938 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	4.88E+03	6.23E-03	5.91E-03	1.104	5.644E-03	3.106E-04	2.947E-04	302.4				1.000
2	132.78	-.51	0.00	4.92E+03	6.29E-03	5.97E-03	1.098	5.729E-03	3.134E-04	2.973E-04	302.6				1.000
3	130.16	-.51	0.00	4.81E+03	6.14E-03	5.83E-03	1.056	5.813E-03	3.059E-04	2.903E-04	302.7				1.000
4	127.53	-.51	0.00	4.92E+03	6.28E-03	5.96E-03	1.065	5.897E-03	3.131E-04	2.971E-04	302.7				1.000
5	125.09	-.51	0.00	4.81E+03	6.15E-03	5.83E-03	1.028	5.982E-03	3.063E-04	2.906E-04	302.9				1.000
6	122.56	-.51	0.00	4.87E+03	6.23E-03	5.91E-03	1.027	6.066E-03	3.104E-04	2.945E-04	302.8				1.000
7	117.47	-.51	0.00	4.97E+03	6.36E-03	6.03E-03	1.028	6.185E-03	3.168E-04	3.006E-04	303.1				1.000
8	112.37	-.51	0.00	4.92E+03	6.29E-03	5.97E-03	1.014	6.208E-03	3.136E-04	2.975E-04	303.3				1.000
9	107.31	-.51	0.00	4.94E+03	6.32E-03	6.00E-03	1.005	6.290E-03	3.151E-04	2.990E-04	303.4				1.000
10	102.28	-.51	0.00	4.99E+03	6.39E-03	6.05E-03	.977	6.535E-03	3.183E-04	3.017E-04	303.5				1.000
11	97.12	-.51	0.00	4.84E+03	6.20E-03	5.88E-03	.928	6.676E-03	3.088E-04	2.930E-04	303.7				1.000
12	92.04	-.51	0.00	4.87E+03	6.23E-03	5.91E-03	.910	6.847E-03	3.107E-04	2.947E-04	303.9				1.000
13	86.96	-.51	0.00	4.79E+03	6.01E-03	5.71E-03	.854	7.045E-03	2.997E-04	2.843E-04	304.5				1.000
14	81.88	-.51	0.00	4.92E+03	6.31E-03	5.98E-03	.878	7.185E-03	3.143E-04	2.982E-04	304.7				1.000
15	76.80	-.51	0.00	4.87E+03	6.24E-03	5.92E-03	.855	7.302E-03	3.111E-04	2.952E-04	304.7				1.000
16	71.72	-.51	0.00	5.17E+03	6.62E-03	6.28E-03	.895	7.400E-03	3.309E-04	3.130E-04	304.9				1.000
17	66.64	-.51	0.00	5.60E+03	7.17E-03	6.80E-03	.915	7.838E-03	3.574E-04	3.390E-04	305.2				1.000
18	61.56	-.51	0.00	5.74E+03	7.37E-03	6.99E-03	.872	8.449E-03	3.679E-04	3.482E-04	305.7				1.000
19	56.48	-.51	0.00	5.97E+03	7.65E-03	7.26E-03	.850	8.926E-03	3.815E-04	3.619E-04	306.0				1.000
20	51.39	-.51	0.00	6.17E+03	7.92E-03	7.52E-03	.848	9.344E-03	3.948E-04	3.745E-04	306.0				1.000
21	48.86	-.51	0.00	6.43E+03	8.26E-03	7.83E-03	.861	9.584E-03	4.114E-04	3.902E-04	306.5				1.000
22	46.31	-.51	0.00	6.57E+03	8.44E-03	8.00E-03	.855	9.866E-03	4.205E-04	3.988E-04	306.3				1.000
23	43.77	-.51	0.00	6.68E+03	8.57E-03	8.13E-03	.845	1.015E-02	4.272E-04	4.053E-04	306.2				1.000
24	41.24	-.51	0.00	6.98E+03	8.96E-03	8.50E-03	.859	1.043E-02	4.464E-04	4.235E-04	306.4				1.000
25	38.70	-.51	0.00	7.11E+03	9.12E-03	8.65E-03	.852	1.071E-02	4.544E-04	4.310E-04	305.7				1.000
103	47.59	1.52	0.00	6.36E+03	8.20E-03	7.77E-03	.843	9.719E-03	4.084E-04	3.873E-04	309.0	8.20E-03	1.000	.843	.982
105	47.59	1.02	0.00	6.21E+03	8.00E-03	7.59E-03	.824	9.719E-03	3.989E-04	3.783E-04	309.7	8.00E-03	1.000	.824	.968
107	47.59	.51	0.00	5.97E+03	7.70E-03	7.30E-03	.792	9.720E-03	3.835E-04	3.637E-04	309.1	7.70E-03	1.000	.792	.923
108	47.59	.25	0.00	5.13E+03	6.60E-03	6.26E-03	.679	9.721E-03	3.290E-04	3.120E-04	308.4	6.60E-03	1.000	.679	.791
110	47.59	.04	.04	3.67E+03	4.71E-03	4.47E-03	.485	9.722E-03	2.349E-04	2.228E-04	307.3	4.71E-03	1.000	.485	.565
111	47.59	0.00	.15	2.93E+03	3.76E-03	3.56E-03	.397	9.722E-03	1.872E-04	1.776E-04	306.9	3.76E-03	1.000	.386	.458
112	47.59	0.00	.25	1.77E+03	2.28E-03	2.16E-03	.234	9.722E-03	1.134E-04	1.076E-04	306.0	2.28E-03	1.000	.234	.273
113	47.59	0.00	.38	9.18E+02	1.18E-03	1.12E-03	.121	9.722E-03	5.867E-05	5.565E-05	305.6	1.18E-03	1.000	.121	.141
114	47.59	0.00	.64	1.80E+02	2.30E-04	2.18E-04	.024	9.722E-03	1.147E-05	1.088E-05	304.5	2.30E-04	1.000	.024	.027
115	47.59	0.00	.89												
203	61.56	1.52	0.00	5.68E+03	7.29E-03	6.91E-03	.862	8.452E-03	3.632E-04	3.445E-04	306.3	7.29E-03	1.000	.862	.987
205	61.56	1.02	0.00	5.68E+03	7.29E-03	6.92E-03	.863	8.451E-03	3.634E-04	3.447E-04	306.7	7.29E-03	1.000	.863	.996
207	61.56	.51	0.00	5.41E+03	6.95E-03	6.59E-03	.822	8.449E-03	3.462E-04	3.284E-04	305.6	6.95E-03	1.000	.822	.943
208	61.56	.25	0.00	4.82E+03	6.19E-03	5.87E-03	.732	8.448E-03	3.082E-04	2.924E-04	306.1	6.19E-03	1.000	.732	.840
210	61.56	.04	.04	3.65E+03	4.68E-03	4.43E-03	.553	8.448E-03	2.330E-04	2.210E-04	303.4	4.68E-03	1.000	.553	.635

AMES 3.5 FT HWT TEST (182), C.E. BLUMER, IN-LINE RSI GAP RUN(66) 1973 PAGE 132

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	2.81E+03	3.58E-03	3.40E-03	.424	8.449E-03	1.754E-04	1.692E-04	303.4	3.58E-03	1.000	.424	.406
212	61.56	0.00	.25	1.92E+03	2.45E-03	2.33E-03	.290	8.446E-03	1.222E-04	1.159E-04	303.7	2.45E-03	1.000	.290	.383
213	61.56	0.00	.38												
214	61.56	0.00	.64	4.77E+00	6.38E-06	6.04E-06	.001	8.446E-03	3.182E-07	3.011E-07	338.7	6.38E-06	1.000	.001	.001
215	61.56	0.00	.89	6.61E+01	8.44E-05	8.01E-05	.010	8.448E-03	4.217E-06	3.992E-06	302.0	8.44E-05	1.000	.010	.011
306	86.96	.75	0.00	2.29E+00	3.07E-06	2.90E-06	.000	7.037E-03	1.527E-07	1.446E-07	338.7	3.07E-06	1.000	.000	.001
307	86.96	.51	0.00	7.00E+02	9.36E-04	8.86E-04	.133	7.038E-03	4.665E-05	4.415E-05	337.4	9.36E-04	1.000	.133	.156
308	86.96	.25	0.00	3.56E+03	4.58E-03	4.34E-03	.650	7.040E-03	2.232E-04	2.164E-04	304.2	4.58E-03	1.000	.650	.762
309	86.96	.15	0.00	2.89E+03	3.70E-03	3.51E-03	.526	7.040E-03	1.846E-04	1.751E-04	[illegible]	3.70E-03	1.000	.526	.616
310	86.96	.06	.04	2.58E+03	3.31E-03	3.14E-03	.469	7.041E-03	1.647E-04	1.563E-04	303.7	3.31E-03	1.000	.469	.550
311	86.96	0.00	.15	2.01E+03	2.57E-03	2.44E-03	.366	7.041E-03	1.283E-04	1.217E-04	303.2	2.57E-03	1.000	.366	.428
312	86.96	0.00	.25	1.16E+03	1.48E-03	1.41E-03	.211	7.041E-03	7.395E-05	7.017E-05	302.4	1.48E-03	1.000	.211	.247
313	86.96	0.00	.38	5.17E+02	6.59E-04	6.25E-04	.094	7.041E-03	3.284E-05	3.116E-05	301.4	6.59E-04	1.000	.094	.110
314	86.96	0.00	.64	3.88E+02	4.95E-04	4.70E-04	.070	7.041E-03	2.469E-05	2.342E-05	302.1	4.95E-04	1.000	.070	.082
315	86.96	0.00	.89	2.40E+00	3.06E-06	2.90E-06	.000	7.041E-03	1.523E-07	1.445E-07	301.8	3.06E-06	1.000	.000	.001
406	112.36	.76	0.00	4.34E+03	5.55E-03	5.27E-03	.894	6.213E-03	2.767E-04	2.626E-04	303.1	5.55E-03	1.000	.894	.882
407	112.36	.51	0.00	4.30E+03	5.49E-03	5.21E-03	.884	6.211E-03	2.735E-04	2.595E-04	302.8	5.49E-03	1.000	.884	.872
408	112.36	.25	0.00	3.71E+03	4.74E-03	4.49E-03	.763	6.210E-03	2.361E-04	2.239E-04	302.8	4.74E-03	1.000	.763	.752
409	112.36	.15	0.00	3.14E+03	4.01E-03	3.81E-03	.646	6.209E-03	2.001E-04	1.898E-04	302.5	4.01E-03	1.000	.646	.638
410	112.36	.06	.04	2.63E+03	3.36E-03	3.19E-03	.542	6.209E-03	1.677E-04	1.591E-04	302.5	3.36E-03	1.000	.542	.535
411	112.36	0.00	.15	2.32E+03	2.96E-03	2.81E-03	.477	6.209E-03	1.476E-04	1.401E-04	302.3	2.96E-03	1.000	.477	.471
412	112.36	0.00	.25	1.37E+03	1.75E-03	1.56E-03	.281	6.209E-03	8.737E-05	8.262E-05	302.0	1.75E-03	1.000	.281	.278
413	112.36	0.00	.38	8.00E+02	1.02E-03	9.68E-04	.164	6.209E-03	5.084E-05	4.824E-05	301.5	1.02E-03	1.000	.164	.162
414	112.36	0.00	.64	1.15E+02	1.46E-04	1.39E-04	.024	6.209E-03	7.294E-06	6.922E-06	300.6	1.46E-04	1.000	.024	.023
415	112.36	0.00	.89												
506	125.96	.76	0.00	4.15E+03	5.31E-03	5.04E-03	.882	6.016E-03	2.645E-04	2.509E-04	302.4	5.31E-03	1.000	.882	.859
507	125.96	.51	0.00	3.99E+03	5.10E-03	4.84E-03	.849	6.008E-03	2.541E-04	2.411E-04	302.4	5.10E-03	1.000	.849	.826
508	125.96	.25	0.00	3.51E+03	4.48E-03	4.25E-03	.747	6.002E-03	2.233E-04	2.119E-04	302.3	4.48E-03	1.000	.747	.727
509	125.96	.15	0.00	2.95E+03	3.76E-03	3.57E-03	.627	5.999E-03	1.875E-04	1.779E-04	302.2	3.76E-03	1.000	.627	.610
510	125.96	.06	.04	2.59E+03	3.30E-03	3.13E-03	.551	5.996E-03	1.645E-04	1.561E-04	301.6	3.30E-03	1.000	.551	.536
511	125.96	0.00	.15	2.21E+03	2.82E-03	2.68E-03	.470	5.995E-03	1.405E-04	1.333E-04	302.2	2.82E-03	1.000	.470	.458
512	125.96	0.00	.25	1.44E+03	1.84E-03	1.74E-03	.307	5.995E-03	9.159E-05	8.690E-05	302.0	1.84E-03	1.000	.307	.298
513	125.96	0.00	.38	1.04E+03	1.33E-03	1.26E-03	.221	5.995E-03	6.613E-05	6.272E-05	301.6	1.33E-03	1.000	.221	.215
514	125.96	0.00	.64	2.09E+02	2.66E-04	2.53E-04	.044	5.995E-03	1.327E-05	1.260E-05	301.2	2.66E-04	1.000	.044	.043
515	125.96	0.00	.89												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.516E-01
X=	4.124E+01	HL	/HREFF=	6.592E-01
X=	4.377E+01	HL	/HREFF=	8.450E-01
X=	4.631E+01	HL	/HREFF=	8.532E-01
X=	4.936E+01	HL	/HREFF=	6.615E-01

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X=     5.139E+01   HL   /HREFF=    8.493E-01
X=     5.648E+01   HL   /HREFF=    8.577E-01
X=     6.156E+01   HL   /HREFF=    8.717E-01
X=     6.664E+01   HL   /HREFF=    9.150E-01
X=     7.172E+01   HL   /HREFF=    8.948E-01
X=     7.680E+01   HL   /HREFF=    8.554E-01
X=     8.188E+01   HL   /HREFF=    8.780E-01
X=     8.696E+01   HL   /HREFF=    8.536E-01
X=     9.204E+01   HL   /HREFF=    9.104E-01
X=     9.712E+01   HL   /HREFF=    9.293E-01
X=     1.022E+02   HL   /HREFF=    9.766E-01
X=     1.073E+02   HL   /HREFF=    1.035E+00
X=     1.124E+02   HL   /HREFF=    1.014E+00
X=     1.175E+02   HL   /HREFF=    1.028E+00
X=     1.226E+02   HL   /HREFF=    1.027E+00
X=     1.251E+02   HL   /HREFF=    1.028E+00
X=     1.276E+02   HL   /HREFF=    1.065E+00
X=     1.302E+02   HL   /HREFF=    1.056E+00
X=     1.327E+02   HL   /HREFF=    1.098E+00
X=     1.352E+02   HL   /HREFF=    1.174E+00

X=     4.759E+01   HL   /HREFF=    7.919E-01
X=     6.156E+01   HL   /HREFF=    8.224E-01
X=     8.696E+01   HL   /HREFF=    1.030E-01
X=     1.124E+02   HL   /HREFF=    8.837E-01
X=     1.251E+02   HL   /HREFF=    8.486E-01
B.L. TRANSITION DISTANCE =  61.56 CM
FULLY TURBULENT B.L. CONDITIONS AT =  71.72 CM
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AMES 3.5 FT HWT TEST (1?2), ?.?. BLUMER, IN-LINE ?I GAP RUN(?7) 1973 PAGE 133

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TT        = 1.103E+03(K)            GAP LENGTH =171.5??(CM)
PT        = 1.029E+06(N/M2)         GAP WIDTH  =    .063(CM)
HT        = 1.1725E+06(J/KG)        GAP DEPTH  =  1.016(CM)
RE/METER  = 3.3049E+06              ORIENTATION=  0.000(DEG)
MACH      = 5.180                   QS         =  1.1971E+05(W/M2)
RHO VEL   = 4.1915E+01(KG/M2-S)     MOD.POSITION=  1
HAW/HT    = 0.9?? FOR HT
HAW/HT    = 0.874 FOR HL
HLCC      = HL(2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.56E+04	3.58E-02	3.39E-02	.738	4.853E-02	8.539E-04	8.089E-04	305.6				1.000
2	132.70	-.51	0.00	2.41E+04	3.36E-02	3.18E-02	.739	4.546E-02	8.015E-04	7.593E-04	305.9				1.000
3	130.16	-.51	0.00	2.15E+04	3.02E-02	2.85E-02	.709	4.243E-02	7.176E-04	6.799E-04	306.0				1.000
4	127.63	-.51	0.00	2.02E+04	2.82E-02	2.67E-02	.715	3.938E-02	6.716E-04	6.363E-04	305.8				1.000
5	125.09	-.51	0.00	1.81E+04	2.53E-02	2.40E-02	.696	3.634E-02	6.033E-04	5.715E-04	306.1				1.000
6	122.56	-.51	0.00	1.66E+04	2.32E-02	2.19E-02	.696	3.329E-02	5.527E-04	5.235E-04	306.0				1.000
7	117.47	-.51	0.00	1.36E+04	1.90E-02	1.80E-02	.693	2.737E-02	4.522E-04	4.283E-04	306.2				1.000
8	112.37	-.51	0.00	1.10E+04	1.53E-02	1.45E-02	.688	2.227E-02	3.656E-04	3.463E-04	306.5				1.000
9	107.31	-.51	0.00	9.45E+03	1.32E-02	1.25E-02	.725	1.833E-02	3.159E-04	2.984E-04	306.6				1.000
10	102.29	-.51	0.00	8.48E+03	1.19E-02	1.12E-02	.778	1.524E-02	2.829E-04	2.680E-04	306.7				1.000
11	97.12	-.51	0.00	7.57E+03	1.06E-02	1.00E-02	.827	1.281E-02	2.527E-04	2.394E-04	306.9				1.000
12	92.04	-.51	0.00	7.18E+03	1.00E-02	9.51E-03	.911	1.102E-02	2.395E-04	2.269E-04	307.1				1.000
13	86.96	-.51	0.00	6.59E+03	9.18E-03	8.62E-03	.915	1.005E-02	2.179E-04	2.055E-04	307.6				1.000
14	81.88	-.51	0.00	6.27E+03	8.78E-03	8.31E-03	.929	9.442E-03	2.094E-04	1.983E-04	307.9				1.000
15	76.83	-.51	0.00	5.93E+03	8.26E-03	7.82E-03	.883	9.356E-03	1.971E-04	1.867E-04	308.0				1.000
16	71.72	-.51	0.00	6.35E+03	8.90E-03	8.43E-03	.929	9.579E-03	2.123E-04	2.011E-04	308.3				1.000
17	66.64	-.51	0.00	6.90E+03	9.66E-03	9.15E-03	.971	9.956E-03	2.305E-04	2.183E-04	308.5				1.000
18	61.56	-.51	0.00	7.17E+03	1.01E-02	9.52E-03	.966	1.041E-02	2.399E-04	2.272E-04	308.8				1.000
19	56.40	-.51	0.00	7.41E+03	1.04E-02	9.84E-03	.940	1.105E-02	2.479E-04	2.348E-04	309.2				1.000
20	51.39	-.51	0.00	7.68E+03	1.08E-02	1.02E-02	.916	1.177E-02	2.573E-04	2.437E-04	309.4				1.000
21	48.86	-.51	0.00	7.94E+03	1.11E-02	1.06E-02	.918	1.213E-02	2.658E-04	2.518E-04	309.9				1.000
22	46.31	-.51	0.00	8.14E+03	1.14E-02	1.08E-02	.913	1.251E-02	2.725E-04	2.581E-04	309.7				1.000
23	43.77	-.51	0.00	8.26E+03	1.16E-02	1.10E-02	.899	1.289E-02	2.766E-04	2.620E-04	309.7				1.000
24	41.24	-.51	0.00	8.57E+03	1.20E-02	1.14E-02	.907	1.327E-02	2.871E-04	2.719E-04	309.8				1.000
25	38.70	-.51	0.00	8.72E+03	1.22E-02	1.16E-02	.897	1.365E-02	2.922E-04	2.766E-04	309.3				1.000
103	47.59	1.52	0.00	7.70E+03	1.09E-02	1.03E-02	.883	1.231E-02	2.593E-04	2.455E-04	314.0	1.09E-02	1.000	.883	.965
105	47.59	1.02	0.00	7.59E+03	1.07E-02	1.02E-02	.872	1.231E-02	2.563E-04	2.423E-04	314.9	1.07E-02	1.000	.872	.952
107	47.59	.51	0.00	7.26E+03	1.03E-02	9.71E-03	.833	1.231E-02	2.447E-04	2.316E-04	313.9	1.03E-02	1.000	.833	.919
108	47.59	.25	.00	6.23E+03	8.73E-03	8.32E-03	.713	1.232E-02	2.093E-04	1.984E-04	312.6	8.78E-03	1.000	.713	.779
110	47.59	.04	.04	4.50E+03	6.33E-03	5.99E-03	.514	1.232E-02	1.509E-04	1.429E-04	311.0	6.33E-03	1.000	.514	.561
111	47.59	0.00	.15	3.66E+03	5.14E-03	4.87E-03	.418	1.232E-02	1.227E-04	1.162E-04	311.2	5.14E-03	1.000	.418	.456
112	47.59	0.10	.25	2.31E+03	3.23E-03	3.06E-03	.262	1.232E-02	7.706E-05	7.299E-05	308.9	3.23E-03	1.000	.262	.256
113	47.59	0.00	.38	1.25E+03	1.75E-03	1.66E-03	.142	1.232E-02	4.139E-05	3.959E-05	307.9	1.75E-03	1.000	.142	.155
114	47.59	0.00	.64	2.76E+02	3.86E-04	3.66E-04	.031	1.232E-02	9.213E-06	8.729E-06	306.3	3.86E-04	1.000	.031	.03?
115	47.59	0.00	.89	2.39E+01	3.33E-05	3.15E-05	.003	1.232E-02	7.936E-07	7.519E-07	304.9	3.33E-05	1.000	.003	.00?
203	61.56	1.52	0.00	6.90E+03	9.67E-03	9.16E-03	.929	1.041E-02	2.307E-04	2.185E-04	310.7	9.67E-03	1.000	.929	.96?
205	61.56	1.02	0.00	6.97E+03	9.74E-03	9.22E-03	.936	1.041E-02	2.325E-04	2.201E-04	311.3	9.74E-03	1.000	.936	.976
207	61.56	.51	0.00	6.57E+03	9.23E-03	8.74E-03	.887	1.041E-02	2.203E-04	2.086E-04	310.9	9.23E-03	1.000	.887	.919
208	61.56	.25	.00	5.89E+03	8.27E-03	7.84E-03	.795	1.041E-02	1.974E-04	1.869E-04	310.1	8.27E-03	1.000	.795	.823
210	61.56	.04	.04	4.59E+03	6.44E-03	6.10E-03	.619	1.041E-02	1.536E-04	1.455E-04	308.9	6.44E-03	1.000	.619	.641

AMES 3.5 FT HWT TEST (182), D.B. BLUMER, IN-LINE RSI GAP RUN(67) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	3.44E+03	4.88E-03	4.55E-03	.452	1.041E-02	1.146E-04	1.086E-04	305.9	4.80E-03	1.000	.462	.478
212	61.56	0.00	.25	2.43E+03	3.39E-03	3.21E-03	.326	1.041E-02	8.089E-05	7.663E-05	306.1	3.39E-03	1.000	.326	.337
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.75	0.00	8.08E+02	1.18E-03	1.11E-03	.118	9.995E-03	2.813E-05	2.658E-05	337.8	1.18E-03	1.000	.118	.130
307	86.96	.51	0.00	4.66E+03	6.52E-03	6.16E-03	.652	1.001E-02	1.536E-04	1.474E-04	337.5	6.52E-03	1.000	.652	.720
308	86.96	.25	0.00	3.77E+03	5.27E-03	4.99E-03	.526	1.001E-02	1.258E-04	1.191E-04	306.8	5.27E-03	1.000	.526	.582
309	86.96	.15	0.00	3.40E+03	4.75E-03	4.50E-03	.474	1.002E-02	1.134E-04	1.074E-04	306.5	4.75E-03	1.000	.474	.524
310	86.96	.04	.04	2.82E+03	3.94E-03	3.73E-03	.393	1.002E-02	9.403E-05	8.908E-05	305.8	3.94E-03	1.000	.393	.435
311	86.96	0.00	.15	1.77E+03	2.47E-03	2.34E-03	.246	1.002E-02	5.886E-05	5.577E-05	304.5	2.47E-03	1.000	.246	.272
312	86.96	0.00	.25	8.12E+02	1.13E-03	1.07E-03	.113	1.002E-02	2.692E-05	2.551E-05	302.6	1.13E-03	1.000	.113	.124
313	86.96	0.00	.38	9.15E+01	1.27E-04	1.21E-04	.013	1.002E-02	3.039E-06	2.879E-06	303.5	1.27E-04	1.000	.013	.014
314	86.96	0.00	.64												
315	86.96	0.00	.89												
406	112.36	.76	0.00	9.58E+03	1.34E-02	1.27E-02	.609	2.201E-02	3.196E-04	3.027E-04	306.8	1.34E-02	1.000	.609	.884
407	112.36	.51	0.00	9.49E+03	1.33E-02	1.26E-02	.601	2.206E-02	3.163E-04	2.997E-04	306.5	1.33E-02	1.000	.601	.873
408	112.36	.25	0.00	8.26E+03	1.15E-02	1.09E-02	.522	2.211E-02	2.752E-04	2.607E-04	306.0	1.15E-02	1.000	.522	.758
409	112.36	.15	0.00	7.09E+03	9.90E-03	9.38E-03	.447	2.213E-02	2.361E-04	2.237E-04	305.5	9.90E-03	1.000	.447	.650
410	112.36	.04	.04	5.37E+03	8.19E-03	7.76E-03	.370	2.215E-02	1.955E-04	1.852E-04	305.4	8.19E-03	1.000	.370	.538
411	112.36	0.00	.15	4.97E+03	6.93E-03	6.57E-03	.313	2.216E-02	1.654E-04	1.567E-04	305.0	6.93E-03	1.000	.313	.455
412	112.36	0.00	.25	2.92E+03	4.06E-03	3.85E-03	.183	2.215E-02	9.698E-05	9.188E-05	304.4	4.06E-03	1.000	.183	.267
413	112.36	0.00	.38	1.63E+03	2.28E-03	2.16E-03	.103	2.216E-02	5.428E-05	5.143E-05	303.7	2.28E-03	1.000	.103	.149
414	112.36	0.00	.64	2.74E+02	3.81E-04	3.61E-04	.017	2.216E-02	9.084E-06	8.608E-06	302.3	3.81E-04	1.000	.017	.025
415	112.36	0.00	.89												
506	125.06	.76	0.00	1.57E+04	2.19E-02	2.07E-02	.608	3.603E-02	5.225E-04	4.950E-04	306.2	2.19E-02	1.000	.608	.873
507	125.06	.51	0.00	1.53E+04	2.13E-02	2.02E-02	.590	3.609E-02	5.053E-04	4.813E-04	306.1	2.13E-02	1.000	.590	.848
508	125.06	.25	0.00	1.42E+04	1.99E-02	1.88E-02	.549	3.614E-02	4.737E-04	4.487E-04	305.8	1.99E-02	1.000	.549	.789
509	125.06	.15	0.00	1.18E+04	1.64E-02	1.56E-02	.455	3.616E-02	3.922E-04	3.715E-04	305.5	1.64E-02	1.000	.455	.653
510	125.06	.04	.04	1.03E+04	1.43E-02	1.36E-02	.396	3.618E-02	3.417E-04	3.237E-04	305.0	1.43E-02	1.000	.396	.569
511	125.06	0.00	.15	9.24E+03	1.29E-02	1.22E-02	.356	3.619E-02	3.075E-04	2.913E-04	303.2	1.29E-02	1.000	.356	.512
512	125.06	0.00	.25	6.01E+03	8.38E-03	7.94E-03	.232	3.619E-02	2.000E-04	1.835E-04	304.7	8.38E-03	1.000	.232	.333
513	125.06	0.00	.38	2.99E+03	4.17E-03	3.95E-03	.115	3.619E-02	9.942E-05	9.420E-05	304.3	4.17E-03	1.000	.115	.165
514	125.06	0.00	.64	6.23E+02	8.67E-04	8.22E-04	.024	3.619E-02	2.069E-05	1.961E-05	303.3	8.67E-04	1.000	.024	.034
515	125.06	0.00	.89	2.83E+02	3.93E-04	3.72E-04	.011	3.619E-02	9.375E-06	8.883E-06	302.5	3.93E-04	1.000	.011	.016

EDGE HEATING USED FOR HE

X=	3.870E+01	HL /HREFF=	8.969E-01
X=	4.124E+01	HL /HREFF=	9.039E-01
X=	4.377E+01	HL /HREFF=	8.997E-01
X=	4.631E+01	HL /HREFF=	9.127E-01
X=	4.885E+01	HL /HREFF=	9.134E-01

X=	[illegible]	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	9.4.4E-[illegible]
X=	6.156E+01	HL	/HREFF=	9.636E-01
X=	6.664E+01	HL	/HREFF=	9.7[illegible]5E-01
X=	7.172E+01	HL	/HREFF=	9.292E-01
X=	7.680E+01	HL	/HREFF=	8.828E-01
X=	8.188E+01	HL	/HREFF=	9.294E-01
X=	8.696E+01	HL	/HREFF=	9.049E-01
X=	9.204E+01	HL	/HREFF=	9.112E-01
X=	9.712E+01	HL	/HREFF=	8.259E-01
X=	1.022E+02	HL	/HREFF=	7.779E-01
X=	1.073E+02	HL	/HREFF=	7.2[illegible]4E-01
X=	1.124E+02	HL	/HREFF=	6.881E-01
X=	1.175E+02	HL	/HREFF=	6.925E-01
X=	1.226E+02	HL	/HREFF=	6.939E-01
X=	1.251E+02	HL	/HREFF=	6.959E-01
X=	1.276E+02	HL	/HREFF=	7.149E-01
X=	1.302E+02	HL	/HREFF=	7.0d9E-01
X=	1.327E+02	HL	/HREFF=	7.397E-01
X=	1.352E+02	HL	/HREFF=	7.375E-01
X=	4.799E+01	HL	/HREFF=	8.[illegible]29E-01
X=	6.156E+01	HL	/HREFF=	6.871E-01
X=	8.696E+01	HL	/HREFF=	1.179E-01
X=	1.124E+02	HL	/HREFF=	6.[illegible]11E-01
X=	1.251E+02	HL	/HREFF=	5.903E-01

B.L. TRANSITION DISTANCE = 76.8[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =*376.[illegible] CM

ORIGINAL PAGE IS OF POOR QUALITY

AMES 3.5 FT HWT TEST (192), C.3. BLUMER, IN-LINE RSI GAP RUN(68) 1973 PAGE 135

TT	= 1.1381E+03(K)		GAP LENGTH	=101.600(CM)
PT	= 2.0891E+06(N/M2)		GAP WIDTH	= .063(CM)
HT	= 1.2953E+06(J/KG)		GAP DEPTH	= 1.016(CM)
RE/METER	= 6.4261E+06		ORIENTATION	= 0.000(DEG)
MACH	= 5.100		QS	= 1.7570E+05(N/M2)
RHO VEL	= 5.3400E+01(KG/M2-S)		MOD.POSITION	= 1
HAW/HT	= 0.905 FOR HT			
HAW/HT	= 0.874 FOR HL			
HLCC	= HL(2ND. ORDER COND.,)			

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	5.55E+04	7.51E-02	7.12E-02	.873	8.610E-02	9.006E-04	8.533E-04	311.4				1.000
2	132.70	-.51	0.00	5.63E+04	7.62E-02	7.22E-02	.910	8.374E-02	9.128E-04	8.649E-04	312.0				1.000
3	130.16	-.51	0.00	5.5[illegible]E+04	7.43E-02	7.36E-02	.916	8.136E-02	8.931E-04	8.462E-04	312.0				1.000
4	127.63	-.51	0.00	5.67E+04	7.68E-02	7.27E-02	.972	7.899E-02	9.199E-04	8.716E-04	312.0				1.000
5	125.09	-.51	0.00	5.65E+04	7.65E-02	7.25E-02	.998	7.662E-02	9.165E-04	8.686E-04	312.3				1.000
6	122.56	-.51	0.00	5.71E+04	7.74E-02	7.33E-02	1.042	7.425E-02	9.271E-04	8.784E-04	312.0				1.000
7	117.47	-.51	0.00	5.88E+04	7.96E-02	7.54E-02	1.166	6.826E-02	9.535E-04	9.035E-04	312.2				1.000
8	112.37	-.51	0.00	5.89E+04	7.98E-02	7.56E-02	1.340	5.952E-02	9.560E-04	9.058E-04	312.6				1.000
9	107.31	-.51	0.00	5.55E+04	7.93E-02	7.51E-02	1.619	4.896E-02	9.501E-04	9.001E-04	312.7				1.000
10	102.29	-.51	0.00	5.51E+04	7.47E-02	7.08E-02	1.889	3.957E-02	8.958E-04	8.487E-04	312.9				1.000
11	97.12	-.51	0.00	4.64E+04	6.29E-02	5.96E-02	1.964	3.201E-02	7.535E-04	7.139E-04	313.1				1.000
12	92.04	-.51	0.00	3.58E+04	4.86E-02	4.61E-02	1.888	2.575E-02	5.828E-04	5.522E-04	313.5				1.000
13	86.96	-.51	0.00	2.44E+04	3.32E-02	3.15E-02	1.563	2.124E-02	3.979E-04	3.770E-04	314.3				1.000
14	81.88	-.51	0.00	1.78E+04	2.42E-02	2.29E-02	1.386	1.744E-02	2.896E-04	2.743E-04	314.7				1.000
15	76.80	-.51	0.00	1.29E+04	1.75E-02	1.66E-02	1.160	1.512E-02	2.102E-04	1.991E-04	314.6				1.000
16	71.72	-.51	0.00	1.11E+04	1.51E-02	1.43E-02	1.105	1.369E-02	1.812E-04	1.717E-04	315.0				1.000
17	66.64	-.51	0.00	1.08E+04	1.46E-02	1.39E-02	1.085	1.349E-02	1.755E-04	1.662E-04	315.3				1.000
18	61.56	-.51	0.00	1.04E+04	1.42E-02	1.34E-02	1.017	1.393E-02	1.698E-04	1.608E-04	316.2				1.000
19	56.48	-.51	0.00	1.03E+04	1.41E-02	1.33E-02	.955	1.473E-02	1.696E-04	1.597E-04	316.4				1.000
20	51.39	-.51	0.00	1.05E+04	1.43E-02	1.35E-02	.910	1.569E-02	1.711E-04	1.621E-04	316.8				1.000
21	48.86	-.51	0.00	1.05E+04	1.43E-02	1.36E-02	.890	1.609E-02	1.717E-04	1.626E-04	317.6				1.000
22	46.31	-.51	0.00	1.08E+04	1.47E-02	1.39E-02	.894	1.641E-02	1.758E-04	1.665E-04	317.3				1.000
23	43.77	-.51	0.00	1.09E+04	1.49E-02	1.41E-02	.888	1.673E-02	1.760E-04	1.686E-04	317.3				1.000
24	41.24	-.51	0.00	1.13E+04	1.54E-02	1.46E-02	.902	1.704E-02	1.842E-04	1.744E-04	317.6				1.000
25	38.70	-.51	0.00	1.14E+04	1.55E-02	1.47E-02	.894	1.736E-02	1.860E-04	1.762E-04	316.8				1.000
103	47.59	1.52	0.00	1.0[illegible]E+04	1.38E-02	1.31E-02	.848	1.625E-02	1.652E-04	1.564E-04	324.0	1.38E-02	1.000	.848	.951
105	47.59	1.02	0.00	9.94E+03	1.36E-02	1.29E-02	.836	1.625E-02	1.627E-04	1.540E-04	325.5	1.36E-02	1.000	.836	.937
107	47.59	.51	0.00	9.32E+03	1.28E-02	1.21E-02	.789	1.625E-02	1.536E-04	1.454E-04	323.8	1.28E-02	1.000	.789	.885
108	47.59	.25	0.00	[illegible]E+03	1.09E-02	1.03E-02	.671	1.625E-02	1.3[illegible]E-04	1.237E-04	321.6	1.09E-02	1.000	.671	.752
110	47.59	.04	.04	5.75E+03	7.86E-03	7.45E-03	.484	1.625E-02	9.424E-05	8.925E-05	318.9	7.86E-03	1.000	.484	.543
111	47.59	0.00	.15	4.7[illegible]E+03	6.46E-03	6.11E-03	.397	1.625E-02	7.737E-05	7.328E-05	317.6	6.46E-03	1.000	.397	.445
112	47.59	0.00	.25	3.21E+03	4.37E-03	4.14E-03	.269	1.625E-02	3.237E-05	4.961E-05	315.5	4.37E-03	1.000	.269	.302
113	47.59	0.00	.38	1.[illegible]E+03	2.29E-03	2.17E-03	.141	1.625E-02	2.741E-05	2.597E-05	313.6	2.29E-03	1.000	.141	.158
114	47.59	0.00	.64	3.8[illegible]E+02	5.24E-04	4.97E-04	.032	1.625E-02	6.285E-06	5.956E-06	311.0	5.24E-04	1.000	.032	.03[illegible]
115	47.59	0.00	.89												
203	61.56	1.52	0.00	9.59E+03	1.32E-02	1.25E-02	.957	1.385E-02	1.587E-04	1.593E-04	318.5	1.32E-02	1.000	.957	.94[illegible]
205	61.56	1.02	0.00	9.70E+03	1.33E-02	1.26E-02	.957	1.386E-02	1.5[illegible]E-04	1.536E-04	319.9	1.33E-02	1.000	.957	.941
207	61.56	.51	0.00	9.27E+03	1.26E-02	1.19E-02	.939	1.388E-02	1.511E-04	1.431E-04	319.0	1.26E-02	1.000	.909	.893
208	61.56	.25	0.00	8.21E+03	1.12E-02	1.06E-02	.806	1.389E-02	1.341E-04	1.271E-04	317.5	1.12E-02	1.000	.806	.792
210	61.56	.04	.04	[illegible]E+03	8.64E-03	8.19E-03	.622	1.390E-02	1.036E-04	9.813E-05	31[illegible].4	8.64E-03	1.000	.622	.611

AMES 3.5 FT HWT TEST (1E2), C.A. BLUMER, IN-LINE RSI GAP RUN(68) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	4.92E+03	6.64E-03	6.29E-03	.477	1.390E-02	7.953E-05	7.537E-05	309.6	6.64E-03	1.000	.477	.469
212	61.56	0.00	.25	3.67E+03	4.95E-03	4.69E-03	.356	1.390E-02	5.933E-05	5.622E-05	310.2	4.95E-03	1.000	.356	.350
213	61.56	0.00	.38												
214	61.56	0.00	.64	7.95E+00	1.12E-05	1.06E-05	.001	1.390E-02	1.339E-07	1.266E-07	338.6	1.12E-05	1.000	.001	.001
215	61.56	0.00	.89												
306	86.96	.75	0.00	7.64E+00	1.07E-05	1.02E-05	.001	2.090E-02	1.297E-07	1.217E-07	338.7	1.07E-05	1.000	.001	.000
307	86.96	.51	0.00	1.97E+03	2.57E-03	2.43E-03	.123	2.096E-02	3.085E-05	2.917E-05	339.9	2.57E-03	1.000	.123	.079
308	86.96	.25	0.00	1.74E+04	2.36E-02	2.24E-02	1.122	2.103E-02	2.829E-04	2.679E-04	313.4	2.36E-02	1.000	1.122	.718
309	86.96	.15	0.00	1.55E+04	2.09E-02	1.98E-02	.994	2.106E-02	2.508E-04	2.376E-04	312.1	2.09E-02	1.000	.994	.636
310	86.96	.04	.04	1.44E+04	1.95E-02	1.85E-02	.927	2.108E-02	2.341E-04	2.219E-04	311.4	1.95E-02	1.000	.927	.593
311	86.96	0.00	.15	1.23E+04	1.73E-02	1.64E-02	.818	2.110E-02	2.069E-04	1.960E-04	310.1	1.73E-02	1.000	.818	.524
312	86.96	0.00	.25	7.72E+03	1.04E-02	9.82E-03	.491	2.113E-02	1.242E-04	1.177E-04	307.0	1.04E-02	1.000	.491	.314
313	86.96	0.00	.38	4.44E+03	5.94E-03	5.63E-03	.282	2.110E-02	7.121E-05	6.751E-05	304.0	5.94E-03	1.000	.282	.180
314	86.96	0.00	.64	1.01E+03	1.35E-03	1.28E-03	.064	2.110E-02	1.620E-05	1.536E-05	305.2	1.35E-03	1.000	.064	.041
315	86.96	0.00	.89												
406	112.36	.75	0.00	5.24E+04	7.09E-02	6.72E-02	1.190	5.960E-02	8.502E-04	8.056E-04	312.7	7.09E-02	1.000	1.190	.807
407	112.36	.51	0.00	5.16E+04	6.98E-02	6.62E-02	1.172	5.958E-02	8.371E-04	7.932E-04	311.9	6.98E-02	1.000	1.172	.874
408	112.36	.25	0.00	4.74E+04	6.40E-02	6.07E-02	1.075	5.956E-02	7.675E-04	7.273E-04	311.2	6.40E-02	1.000	1.075	.802
409	112.36	.15	0.00	4.36E+04	5.89E-02	5.58E-02	.988	5.955E-02	7.034E-04	6.604E-04	310.4	5.89E-02	1.000	.988	.737
410	112.36	.04	.04	3.81E+04	5.14E-02	4.87E-02	.863	5.954E-02	6.161E-04	5.838E-04	310.0	5.14E-02	1.000	.863	.644
411	112.36	0.00	.15	3.33E+04	4.49E-02	4.26E-02	.755	5.954E-02	5.387E-04	5.105E-04	309.3	4.49E-02	1.000	.755	.563
412	112.36	0.00	.25	2.21E+04	2.98E-02	2.82E-02	.500	5.954E-02	3.567E-04	3.381E-04	308.0	2.98E-02	1.000	.500	.373
413	112.36	0.00	.38	1.39E+04	1.87E-02	1.77E-02	.314	5.954E-02	2.240E-04	2.123E-04	306.7	1.87E-02	1.000	.314	.234
414	112.36	0.00	.64	3.65E+03	4.89E-03	4.64E-03	.082	5.954E-02	5.865E-05	5.560E-05	304.2	4.89E-03	1.000	.082	.061
415	112.36	0.00	.89	4.16E+02	5.57E-04	5.28E-04	.009	5.954E-02	6.675E-06	6.328E-06	304.7	5.57E-04	1.000	.009	.007
506	125.06	.75	0.00	4.99E+04	6.76E-02	6.40E-02	.879	7.689E-02	8.096E-04	7.671E-04	311.8	6.76E-02	1.000	.879	.879
507	125.06	.51	0.00	4.81E+04	6.50E-02	6.16E-02	.846	7.683E-02	7.785E-04	7.378E-04	311.7	6.50E-02	1.000	.846	.846
508	125.06	.25	0.00	4.64E+04	6.27E-02	5.94E-02	.816	7.677E-02	7.512E-04	7.118E-04	311.1	6.27E-02	1.000	.816	.817
509	125.06	.15	0.00	4.12E+04	5.57E-02	5.28E-02	.726	7.675E-02	6.677E-04	6.327E-04	310.5	5.57E-02	1.000	.726	.727
510	125.06	.04	.04	3.77E+04	5.04E-02	4.78E-02	.657	7.672E-02	6.042E-04	5.726E-04	309.8	5.04E-02	1.000	.657	.656
511	125.06	0.00	.15	3.48E+04	4.70E-02	4.45E-02	.612	7.671E-02	5.629E-04	5.333E-04	310.1	4.70E-02	1.000	.612	.613
512	125.06	0.00	.25	2.59E+04	3.49E-02	3.31E-02	.455	7.671E-02	4.181E-04	3.963E-04	309.0	3.49E-02	1.000	.455	.455
513	125.06	0.00	.38	1.77E+04	2.38E-02	2.26E-02	.310	7.671E-02	2.852E-04	2.703E-04	308.0	2.38E-02	1.000	.310	.311
514	125.06	0.00	.64	4.94E+03	6.63E-03	6.28E-03	.086	7.671E-02	7.945E-05	7.531E-05	306.2	6.63E-03	1.000	.086	.087
515	125.06	0.00	.89	9.42E+02	1.26E-03	1.20E-03	.016	7.671E-02	1.514E-05	1.435E-05	304.6	1.26E-03	1.000	.016	.016

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.944E-01
X=	4.124E+01	HL	/HREFF=	9.018E-01
X=	4.377E+01	HL	/HREFF=	8.830E-01
X=	4.631E+01	HL	/HREFF=	8.937E-01
X=	4.886E+01	HL	/HREFF=	8.931E-01

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X=   5.139E+01  HL  /HREFF=   9.17[illegible]
X=   5.648E+01  HL  /HREFF=   9.550E-01
X=   6.156E+01  HL  /HREFF=   1.017E+00
X=   6.664E+01  HL  /HREFF=   1.095E+00
X=   7.172E+01  HL  /HREFF=   1.135E+00
X=   7.680E+01  HL  /HREFF=   1.160E+00
X=   8.188E+01  HL  /HREFF=   1.306E+00
X=   8.696E+01  HL  /HREFF=   1.563E+00
X=   9.204E+01  HL  /HREFF=   1.808E+00
X=   9.712E+01  HL  /HREFF=   1.964E+00
X=   1.022E+02  HL  /HREFF=   1.809E+00
X=   1.073E+02  HL  /HREFF=   1.619E+00
X=   1.124E+02  HL  /HREFF=   1.349E+00
X=   1.175E+02  HL  /HREFF=   1.166E+00
X=   1.226E+02  HL  /HREFF=   1.042E+00
X=   1.251E+02  HL  /HREFF=   9.933E-01
X=   1.276E+02  HL  /HREFF=   9.717E-01
X=   1.302E+02  HL  /HREFF=   9.159E-01
X=   1.327E+02  HL  /HREFF=   9.096E-01
X=   1.352E+02  HL  /HREFF=   8.727E-01

X=   4.759E+01  HL  /HREFF=   7.889E-01
X=   6.156E+01  HL  /HREFF=   9.986E-01
X=   8.696E+01  HL  /HREFF=   1.228E-01
X=   1.124E+02  HL  /HREFF=   1.172E+00
X=   1.251E+02  HL  /HREFF=   8.459E-01
B.L. TRANSITION DISTANCE =  51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =  97.12 CM
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AMES 3.5 FT HWT TEST (1-2), C.B. BLUMER, IN-LINE RSI GAP FUN(69) 1973

TT	= 1.1311E+03(K)	GAP LENGTH	=101.500(CM)
PT	= 2.776E+06(N/M2)	GAP WIDTH	= .063(CM)
HT	= 1.1572E+06(J/KG)	GAP DEPTH	= .508(CM)
RE/METER	= 5.454E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.150	QS	= 1.7301E+05(W/M2)
RHO VEL	= 9.3336E+01(KG/M2-S)	MOC.POSITION=	1
HAW/HT	= 0.908 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	[illegible]	7.575E-02	7.175E-02	.876	8.645E-02	9.096E-04	8.606E-04	314.3				1.000
2	132.70	-.51	[illegible]	[illegible]	7.685E-02	7.28E-02	.914	8.409E-02	9.221E-04	8.734E-04	314.5				1.000
3	130.16	-.51	[illegible]	[illegible]	7.500E-02	7.10E-02	.917	8.172E-02	8.997E-04	8.522E-04	314.6				1.000
4	127.63	-.51	[illegible]	5.635E+04	7.735E-02	7.32E-02	.974	7.936E-02	9.274E-04	8.785E-04	314.6				1.000
5	125.09	-.51	[illegible]	[illegible]	7.673E-02	7.26E-02	.996	7.699E-02	9.202E-04	8.716E-04	314.8				1.000
6	122.56	-.51	[illegible]	5.67E+04	7.775E-02	7.36E-02	1.041	7.463E-02	9.326E-04	8.834E-04	314.7				1.000
7	117.47	-.51	[illegible]	[illegible]	7.965E-02	7.54E-02	1.160	6.863E-02	9.553E-04	9.049E-04	314.9				1.000
8	112.37	-.51	[illegible]	[illegible]	7.965E-02	7.54E-02	1.330	5.986E-02	9.556E-04	9.051E-04	315.2				1.000
9	107.31	-.51	[illegible]	[illegible]	7.90E-02	7.48E-02	1.604	4.924E-02	9.477E-04	8.976E-04	315.2				1.000
10	102.20	-.51	[illegible]	[illegible]	7.515E-02	7.11E-02	1.887	3.979E-02	9.010E-04	8.533E-04	315.4				1.000
11	97.12	-.51	[illegible]	4.69E+04	6.445E-02	6.10E-02	2.002	3.219E-02	7.732E-04	7.323E-04	315.5				1.000
12	92.04	-.51	[illegible]	[illegible]	5.14E-02	4.87E-02	1.985	2.589E-02	6.167E-04	5.841E-04	315.6				1.000
13	86.96	-.51	.00	[illegible]	3.565E-02	3.37E-02	1.669	2.134E-02	4.274E-04	4.048E-04	316.2				1.000
14	81.88	-.51	[illegible]	[illegible]	2.61E-02	2.47E-02	1.490	1.751E-02	3.130E-04	2.964E-04	316.4				1.000
15	76.80	-.51	[illegible]	[illegible]	1.87E-02	1.77E-02	1.231	1.518E-02	2.240E-04	2.122E-04	316.4				1.000
16	71.72	-.51	[illegible]	[illegible]	1.57E-02	1.49E-02	1.145	1.373E-02	1.886E-04	1.786E-04	316.5				1.000
17	66.64	-.51	[illegible]	[illegible]	1.50E-02	1.42E-02	1.107	1.352E-02	1.796E-04	1.701E-04	316.7				1.000
18	61.56	-.51	[illegible]	[illegible]	1.45E-02	1.37E-02	1.040	1.396E-02	1.742E-04	1.650E-04	317.3				1.000
19	56.48	-.51	[illegible]	[illegible]	1.45E-02	1.37E-02	.981	1.476E-02	1.737E-04	1.645E-04	317.8				1.000
20	51.39	-.51	[illegible]	[illegible]	1.47E-02	1.39E-02	.936	1.573E-02	1.766E-04	1.672E-04	317.9				1.000
21	48.86	-.51	[illegible]	[illegible]	1.44E-02	1.36E-02	.892	1.613E-02	1.727E-04	1.636E-04	318.6				1.000
22	46.31	-.51	[illegible]	[illegible]	1.48E-02	1.41E-02	.902	1.645E-02	1.781E-04	1.686E-04	318.4				1.000
23	43.77	-.51	[illegible]	[illegible]	1.51E-02	1.43E-02	.902	1.676E-02	1.814E-04	1.718E-04	318.5				1.000
24	41.24	-.51	[illegible]	1.13E+04	1.56E-02	1.47E-02	.911	1.706E-02	1.868E-04	1.768E-04	318.6				1.000
25	38.70	-.51	[illegible]	[illegible]	1.59E-02	1.50E-02	.909	1.739E-02	1.897E-04	1.797E-04	318.1				1.000
103	47.59	1.52	[illegible]	[illegible]	1.41E-02	1.33E-02	.864	1.629E-02	1.699E-04	1.599E-04	325.0	1.41E-02	1.000	.864	.963
105	47.59	1.02	[illegible]	[illegible]	1.40E-02	1.32E-02	.859	1.628E-02	1.679E-04	1.589E-04	326.2	1.40E-02	1.000	.859	.958
107	47.59	.51	[illegible]	9.61E+03	1.34E-02	1.27E-02	.821	1.628E-02	1.604E-04	1.518E-04	324.6	1.34E-02	1.000	.821	.915
108	47.59	.25	[illegible]	[illegible]	1.13E-02	1.07E-02	.697	1.628E-02	1.351E-04	1.288E-04	322.5	1.13E-02	1.000	.697	.776
110	47.59	.06	.04	[illegible]	8.15E-03	7.72E-03	.500	1.628E-02	9.779E-05	9.258E-05	319.7	8.15E-03	1.000	.500	.558
111	47.59	[illegible]	.15	[illegible]	6.61E-03	6.26E-03	.406	1.628E-02	7.936E-05	7.515E-05	[illegible]	6.61E-03	1.000	.406	.453
112	47.59	[illegible]	.25	[illegible]	4.40E-03	4.17E-03	.270	1.628E-02	5.281E-05	5.001E-05	316.2	4.40E-03	1.000	.270	.301
113	47.59	[illegible]	.76	1.29E+03	1.77E-03	1.68E-03	.109	1.628E-02	2.123E-05	2.011E-05	314.5	1.77E-03	1.000	.109	.121
114	47.59	[illegible]	.44	[illegible]	7.30E-05	6.91E-05	.004	1.628E-02	8.757E-07	8.296E-07	312.0	7.30E-05	1.000	.004	.005
115	47.59	[illegible]	.49												
203	61.56	1.52	[illegible]	[illegible]	1.35E-02	1.28E-02	.971	1.386E-02	1.617E-04	1.531E-04	320.6	1.35E-02	1.000	.971	.937
205	61.56	1.02	[illegible]	[illegible]	1.37E-02	1.30E-02	.986	1.389E-02	1.647E-04	1.559E-04	321.5	1.37E-02	1.000	.988	.954
207	61.56	.51	[illegible]	[illegible]	1.31E-02	1.24E-02	.940	1.391E-02	1.570E-04	1.486E-04	320.6	1.31E-02	1.000	.940	.904
208	61.56	.25	[illegible]	[illegible]	1.16E-02	1.10E-02	.835	1.392E-02	1.399E-04	1.321E-04	319.2	1.16E-02	1.000	.835	.803
210	61.56	[illegible]	.04	[illegible]	9.43E-03	8.93E-03	.677	1.393E-02	1.132E-04	1.072E-04	317.1	9.43E-03	1.000	.677	.651

AMES 3.5 FT HWT TEST (182), C.J. BLUMER, IN-LINE RSI GAP RUN(69) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	4.82E+03	6.59E-03	6.25E-03	.473	1.393E-02	7.911E-05	7.495E-05	311.8	6.59E-03	1.000	.473	.455
212	61.56	0.00	.25	3.54E+03	4.84E-03	4.58E-03	.347	1.393E-02	5.803E-05	5.498E-05	311.8	4.84E-03	1.000	.347	.334
213	61.56	0.00	.38												
214	61.56	0.00	.64												
215	61.56	0.00	.89												
306	86.96	.75	0.00	1.75E+03	2.48E-03	2.35E-03	.118	2.106E-02	2.977E-05	2.814E-05	340.8	2.48E-03	1.000	.118	.071
307	86.96	.51	0.00	1.89E+04	2.59E-02	2.45E-02	1.225	2.113E-02	3.107E-04	2.942E-04	315.7	2.59E-02	1.000	1.225	.734
308	86.96	.23	0.00	1.63E+04	2.24E-02	2.12E-02	1.057	2.116E-02	2.684E-04	2.542E-04	314.5	2.24E-02	1.000	1.057	.634
309	86.96	.15	0.00	1.51E+04	2.07E-02	1.36E-02	.979	2.119E-02	2.488E-04	2.357E-04	313.9	2.07E-02	1.000	.979	.587
310	86.96	.04	.04	1.26E+04	1.73E-02	1.64E-02	.816	2.121E-02	2.077E-04	1.967E-04	312.7	1.73E-02	1.000	.816	.489
311	86.96	0.00	.15	7.73E+03	1.05E-02	1.00E-02	.498	2.120E-02	1.266E-04	1.199E-04	310.6	1.05E-02	1.000	.498	.298
312	86.96	0.00	.25	4.27E+03	5.79E-03	5.49E-03	.273	2.120E-02	6.950E-05	6.587E-05	306.7	5.79E-03	1.000	.273	.164
313	86.96	0.00	.38	7.02E+02	9.54E-04	9.04E-04	.045	2.120E-02	1.145E-05	1.085E-05	307.9	9.54E-04	1.000	.045	.027
314	86.96	0.00	.64												
315	86.96	0.00	.89												
406	112.36	.75	0.00	5.19E+04	7.13E-02	6.75E-02	1.189	5.994E-02	8.535E-04	8.104E-04	313.3	7.13E-02	1.000	1.189	.893
407	112.36	.51	0.00	5.09E+04	6.98E-02	6.62E-02	1.166	5.992E-02	8.381E-04	7.939E-04	314.6	6.98E-02	1.000	1.166	.876
408	112.36	.25	0.00	4.57E+04	6.26E-02	5.93E-02	1.046	5.990E-02	7.515E-04	7.119E-04	313.9	6.26E-02	1.000	1.046	.785
409	112.36	.15	0.00	4.09E+04	5.60E-02	5.31E-02	.935	5.989E-02	6.722E-04	6.367E-04	313.0	5.60E-02	1.000	.935	.702
410	112.36	.04	.04	3.51E+04	4.81E-02	4.55E-02	.802	5.988E-02	5.765E-04	5.463E-04	312.9	4.81E-02	1.000	.802	.603
411	112.36	0.00	.15	3.01E+04	4.12E-02	3.90E-02	.688	5.988E-02	4.943E-04	4.683E-04	312.4	4.12E-02	1.000	.688	.517
412	112.36	0.00	.25	1.87E+04	2.56E-02	2.42E-02	.427	5.988E-02	3.068E-04	2.907E-04	311.2	2.56E-02	1.000	.427	.321
413	112.36	0.00	.38	1.07E+04	1.46E-02	1.38E-02	.244	5.988E-02	1.750E-04	1.658E-04	310.1	1.46E-02	1.000	.244	.183
414	112.36	0.00	.64	1.70E+03	2.31E-03	2.19E-03	.039	5.988E-02	2.773E-05	2.628E-05	308.1	2.31E-03	1.000	.039	.029
415	112.36	0.00	.89												
506	125.76	.76	0.00	4.93E+04	6.77E-02	6.41E-02	.877	7.727E-02	8.127E-04	7.697E-04	315.3	6.77E-02	1.000	.877	.879
507	125.76	.51	0.00	4.76E+04	6.53E-02	6.18E-02	.846	7.721E-02	7.835E-04	7.421E-04	315.1	6.53E-02	1.000	.846	.849
508	125.76	.25	0.00	4.49E+04	6.16E-02	5.83E-02	.798	7.715E-02	7.390E-04	7.003E-04	314.4	6.16E-02	1.000	.798	.801
509	125.76	.15	0.00	3.84E+04	5.27E-02	4.99E-02	.683	7.712E-02	6.323E-04	5.987E-04	313.9	5.27E-02	1.000	.683	.685
510	125.76	.04	.04	3.42E+04	4.68E-02	4.43E-02	.607	7.711E-02	5.617E-04	5.321E-04	313.0	4.66E-02	1.000	.607	.609
511	125.76	0.00	.15	3.11E+04	4.30E-02	4.07E-02	.557	7.709E-02	5.155E-04	4.884E-04	313.3	4.30E-02	1.000	.557	.559
512	125.76	0.00	.25	2.15E+04	2.95E-02	2.80E-02	.383	7.709E-02	3.543E-04	3.357E-04	312.3	2.95E-02	1.000	.383	.384
513	125.76	0.00	.38	1.37E+04	1.89E-02	1.78E-02	.243	7.709E-02	2.251E-04	2.133E-04	311.4	1.88E-02	1.000	.243	.244
514	125.76	0.00	.64	2.65E+03	3.64E-03	3.45E-03	.047	7.709E-02	4.358E-05	4.138E-05	309.7	3.64E-03	1.000	.047	.047
515	125.76	0.00	.89	2.56E+02	3.48E-04	3.30E-04	.005	7.709E-02	4.174E-06	3.955E-06	308.4	3.48E-04	1.000	.005	.005

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	9.032E-01
X=	4.124E+01	HL	/HREFF=	9.114E-01
X=	4.377E+01	HL	/HREFF=	9.019E-01
X=	4.631E+01	HL	/HREFF=	9.023E-01
X=	4.526E+01	HL	/HREFF=	8.923E-01

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	9.416E-01
X=	6.156E+01	HL	/HREFF=	1.040E+00
X=	6.664E+01	HL	/HREFF=	1.1[illegible]E+00
X=	7.172E+01	HL	/HREFF=	1.145E+00
X=	7.680E+01	HL	/HREFF=	1.230E+00
X=	8.188E+01	HL	/HREFF=	1.43[illegible]E+00
X=	8.696E+01	HL	/HREFF=	1.659E+00
X=	9.204E+01	HL	/HREFF=	1.985E+00
X=	9.712E+01	HL	/HREFF=	2.0[illegible]2E+00
X=	1.022E+02	HL	/HREFF=	1.607E+00
X=	1.073E+02	HL	/HREFF=	1.[illegible]34E+00
X=	1.124E+02	HL	/HREFF=	1.330E+00
X=	1.175E+02	HL	/HREFF=	1.150E+00
X=	1.226E+02	HL	/HREFF=	1.041E+00
X=	1.251E+02	HL	/HREFF=	9.959E-01
X=	1.276E+02	HL	/HREFF=	9.739E-01
X=	1.302E+02	HL	/HREFF=	9.175E-01
X=	1.327E+02	HL	/HREFF=	9.138E-01
X=	1.352E+02	HL	/HREFF=	8.798E-01
X=	4.7[illegible]9E+01	HL	/HREFF=	8.2[illegible]E-01
X=	6.156E+01	HL	/HREFF=	9.404E-01
X=	8.696E+01	HL	/HREFF=	1.179E-01
X=	1.124E+02	HL	/HREFF=	1.166E+00
X=	1.251E+02	HL	/HREFF=	8.457E-01

B.L. TRANSITION DISTANCE = 48.86 CM
FULLY TURBULENT B.L. CONDITIONS AT = 97.12 CM

AMES 3.5 FT HWT TEST (182), C.B. BLUMER, IN-LINE RSI GAP RUN(73) 1973 PAGE 139

TT = 1.0311E+03(K) GAP LENGTH =101.590(CM)
PT = 5.1361E+06(N/M2) GAP WIDTH = .053(CM)
HT = 1.1393E+06(J/KG) GAP DEPTH = .508(CM)
RE/METER = 1.7225E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 QS = 8.1369E+04(W/M2)
RHO VEL = 2.1315E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.908 FOR HT
HAW/HT = 0.974 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	4.71E+03	5.85E-03	6.49E-03	.916	7.475E-03	3.214E-04	3.043E-04	305.0				1.000
2	132.70	-.51	0.00	4.72E+03	6.85E-03	6.49E-03	.931	7.363E-03	3.216E-04	3.045E-04	305.2				1.000
3	130.16	-.51	0.00	4.54E+03	6.61E-03	6.25E-03	.911	7.251E-03	3.099E-04	2.934E-04	305.2				1.000
4	127.63	-.51	0.00	4.61E+03	6.70E-03	6.35E-03	.939	7.139E-03	3.144E-04	2.977E-04	305.1				1.000
5	125.09	-.51	0.00	4.48E+03	6.52E-03	6.17E-03	.927	7.027E-03	3.057E-04	2.894E-04	305.1				1.000
6	122.56	-.51	0.00	4.53E+03	6.58E-03	6.23E-03	.952	6.916E-03	3.089E-04	2.924E-04	304.8				1.000
7	117.47	-.51	0.00	4.48E+03	6.51E-03	6.16E-03	.963	6.761E-03	3.054E-04	2.891E-04	304.7				1.000
8	112.37	-.51	0.00	4.41E+03	6.41E-03	6.07E-03	.962	6.662E-03	3.008E-04	2.848E-04	304.7				1.000
9	107.31	-.51	0.00	4.45E+03	6.45E-03	6.12E-03	.979	6.605E-03	3.032E-04	2.871E-04	304.3				1.000
10	102.29	-.51	0.00	4.45E+03	6.46E-03	6.12E-03	.953	6.784E-03	3.032E-04	2.871E-04	304.1				1.000
11	97.12	-.51	0.00	4.40E+03	6.39E-03	6.05E-03	.916	6.971E-03	2.996E-04	2.836E-04	303.9				1.000
12	92.04	-.51	0.00	4.42E+03	6.40E-03	6.06E-03	.900	7.115E-03	3.005E-04	2.845E-04	303.7				1.000
13	86.96	-.51	0.00	4.21E+03	6.11E-03	5.78E-03	.842	7.250E-03	2.865E-04	2.712E-04	303.8				1.000
14	81.88	-.51	0.00	4.27E+03	6.19E-03	5.86E-03	.842	7.346E-03	2.912E-04	2.740E-04	303.6				1.000
15	76.80	-.51	0.00	4.11E+03	5.95E-03	5.64E-03	.800	7.445E-03	2.793E-04	2.645E-04	303.4				1.000
16	71.72	-.51	0.00	4.50E+03	6.53E-03	6.18E-03	.865	7.546E-03	3.062E-04	2.899E-04	303.2				1.000
17	66.64	-.51	0.00	4.80E+03	6.96E-03	6.59E-03	.871	7.983E-03	3.263E-04	3.090E-04	303.1				1.000
18	61.56	-.51	0.00	5.02E+03	7.28E-03	6.89E-03	.847	8.594E-03	3.415E-04	3.234E-04	303.4				1.000
19	56.48	-.51	0.00	5.23E+03	7.59E-03	7.18E-03	.833	9.101E-03	3.556E-04	3.367E-04	303.5				1.000
20	51.39	-.51	0.00	5.47E+03	7.87E-03	7.45E-03	.823	9.565E-03	3.693E-04	3.497E-04	303.3				1.000
21	48.86	-.51	0.00	5.63E+03	8.17E-03	7.74E-03	.832	9.817E-03	3.834E-04	3.630E-04	303.9				1.000
22	46.31	-.51	0.00	5.77E+03	8.37E-03	7.93E-03	.829	1.010E-02	3.929E-04	3.720E-04	303.7				1.000
23	43.77	-.51	0.00	5.90E+03	8.56E-03	8.10E-03	.825	1.038E-02	4.015E-04	3.802E-04	303.7				1.000
24	41.24	-.51	0.00	6.16E+03	8.94E-03	8.46E-03	.839	1.066E-02	4.194E-04	71E-04	303.8				1.000
25	38.70	-.51	0.00	6.26E+03	9.08E-03	8.60E-03	.830	1.094E-02	4.261E-04	35E-04	303.4				1.000
103	47.59	1.52	0.00	5.57E+03	8.11E-03	7.68E-03	.815	9.956E-03	3.806E-04	3.603E-04	306.6	8.11E-03	1.000	.815	.981
105	47.59	1.02	0.00	5.47E+03	7.96E-03	7.54E-03	.800	9.955E-03	3.736E-04	3.537E-04	306.0	7.96E-03	1.000	.800	.963
107	47.59	.51	0.00	5.21E+03	7.59E-03	7.18E-03	.762	9.955E-03	3.560E-04	3.371E-04	306.2	7.59E-03	1.000	.762	.910
108	47.59	.25	.00	4.46E+03	6.51E-03	6.17E-03	.654	9.956E-03	3.056E-04	2.894E-04	305.5	6.51E-03	1.000	.654	.780
110	47.59	.04	.04	3.21E+03	4.67E-03	4.42E-03	.469	9.956E-03	2.189E-04	2.073E-04	304.4	4.67E-03	1.000	.469	.564
111	47.59	0.00	.15	2.58E+03	3.71E-03	3.51E-03	.373	9.956E-03	1.741E-04	1.649E-04	303.9	3.71E-03	1.000	.373	.449
112	47.59	0.00	.25	1.58E+03	2.29E-03	2.17E-03	.230	9.956E-03	1.075E-04	1.018E-04	303.0	2.29E-03	1.000	.230	.277
113	47.59	0.00	.38	7.66E+02	1.11E-03	1.05E-03	.111	9.956E-03	5.203E-05	4.924E-05	302.5	1.11E-03	1.000	.111	.134
114	47.59	0.00	.64	1.38E+02	1.99E-04	1.89E-04	.020	9.956E-03	9.354E-06	8.858E-06	301.4	1.99E-04	1.000	.020	.02[illegible]
115	47.59	0.00	.39												
203	61.56	1.52	0.00	4.94E+03	7.17E-03	6.79E-03	.833	8.603E-03	3.363E-04	3.184E-04	303.9	7.17E-03	1.000	.833	.90[illegible]
205	61.56	1.02	.00	4.95E+03	7.18E-03	6.80E-03	.835	8.599E-03	3.371E-04	3.191E-04	304.3	7.18E-03	1.000	.835	.90[illegible]
207	61.56	.51	0.00	4.70E+03	6.83E-03	6.46E-03	.794	8.598E-03	3.203E-04	3.033E-04	304.1	6.83E-03	1.000	.794	.938
208	61.56	.25	0.00	4.17E+03	6.04E-03	5.72E-03	.703	8.595E-03	2.835E-04	2.684E-04	303.7	6.04E-03	1.000	.703	.830
210	61.56	.34	.04	2.95E+03	4.32E-03	4.09E-03	.503	8.590E-03	2.027E-04	1.919E-04	302.9	4.32E-03	1.000	.503	.593

AMES 3.5 FT HWT TEST (192), C.E. BLUMER, IN-LINE RSI GAP RUN(72) 1973 PAGE 149

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HRFF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	2.475E+03	3.57E-03	3.38E-03	.415	8.595E-03	1.675E-04	1.587E-04	301.1	3.57E-03	1.000	.415	.498
212	61.56	0.00	.25	1.745E+03	2.52E-03	2.38E-03	.293	8.595E-03	1.181E-04	1.119E-04	301.1	2.52E-03	1.000	.293	.346
213	61.56	0.00	.75												
214	61.56	0.00	.64	1.395E+00	2.42E-06	2.29E-06	.000	8.595E-03	1.136E-07	1.073E-07	330.7	2.42E-06	1.000	.000	.000
215	61.56	0.00	.89	4.555E+01	6.56E-05	6.21E-05	.008	8.595E-03	3.077E-06	2.915E-06	299.4	6.56E-05	1.000	.008	.009
306	86.96	.75	0.00												
307	86.96	.51	0.00	1.225E+03	1.86E-03	1.75E-03	.256	7.249E-03	8.737E-05	8.224E-05	335.7	1.86E-03	1.000	.256	.304
308	86.96	.25	0.00	3.109E+03	4.63E-03	4.38E-03	.638	7.249E-03	2.173E-04	2.055E-04	303.4	4.63E-03	1.000	.638	.758
309	86.96	.15	0.00	2.555E+03	3.70E-03	3.50E-03	.510	7.248E-03	1.734E-04	1.642E-04	303.1	3.70E-03	1.000	.510	.606
310	86.96	.04	.04	2.315E+03	3.35E-03	3.17E-03	.462	7.249E-03	1.571E-04	1.487E-04	302.9	3.35E-03	1.000	.462	.548
311	86.96	0.00	.15	1.925E+03	2.78E-03	2.63E-03	.384	7.249E-03	1.305E-04	1.236E-04	302.4	2.78E-03	1.000	.384	.456
312	86.96	0.00	.25	9.415E+02	1.36E-03	1.29E-03	.188	7.249E-03	6.386E-05	6.048E-05	301.6	1.36E-03	1.000	.188	.223
313	86.96	0.00	.38	5.775E+02	8.31E-04	7.87E-04	.115	7.249E-03	3.897E-05	3.691E-05	300.8	8.31E-04	1.000	.115	.136
314	86.96	0.00	.64	[illegible]E+01	9.45E-05	8.95E-05	.013	7.249E-03	4.432E-06	4.198E-06	301.3	9.45E-05	1.000	.013	.015
315	86.96	0.00	.89												
406	112.36	.75	0.00	3.875E+03	5.62E-03	5.32E-03	.844	6.659E-03	2.638E-04	2.498E-04	304.2	5.62E-03	1.000	.844	.877
407	112.36	.51	0.00	3.795E+03	5.50E-03	5.21E-03	.826	6.659E-03	2.581E-04	2.444E-04	303.9	5.50E-03	1.000	.826	.858
408	112.36	.25	0.00	3.255E+03	4.71E-03	4.46E-03	.707	6.659E-03	2.210E-04	2.093E-04	303.8	4.71E-03	1.000	.707	.736
409	112.36	.13	.00	2.805E+03	4.06E-03	3.84E-03	.609	6.659E-03	1.904E-04	1.803E-04	303.6	4.06E-03	1.000	.609	.633
410	112.36	.04	.04	2.315E+03	3.36E-03	3.18E-03	.504	6.662E-03	1.574E-04	1.491E-04	303.6	3.36E-03	1.000	.504	.524
411	112.36	0.00	.15	1.975E+03	2.86E-03	2.70E-03	.429	6.660E-03	1.340E-04	1.269E-04	303.4	2.86E-03	1.000	.429	.446
412	112.36	0.00	.25	1.165E+03	1.69E-03	1.60E-03	.253	6.660E-03	7.915E-05	7.498E-05	303.1	1.69E-03	1.000	.253	.263
413	112.36	0.00	.38	6.575E+02	9.52E-04	9.01E-04	.143	6.660E-03	4.465E-05	4.229E-05	302.6	9.52E-04	1.000	.143	.148
414	112.36	0.00	.64	3.185E+02	4.60E-04	4.36E-04	.069	6.661E-03	2.158E-05	2.044E-05	301.8	4.60E-04	1.000	.069	.072
415	112.36	0.00	.89	7.175E+00	1.04E-05	9.83E-06	.002	6.661E-03	4.871E-07	4.613E-07	302.2	1.04E-05	1.000	.002	.002
506	125.06	.76	0.00	3.755E+03	5.45E-03	5.16E-03	.776	7.022E-03	2.557E-04	2.421E-04	304.5	5.45E-03	1.000	.776	.837
507	125.06	.51	0.00	3.595E+03	5.20E-03	4.92E-03	.740	7.022E-03	2.437E-04	2.308E-04	304.5	5.20E-03	1.000	.740	.798
508	125.06	.25	0.00	3.275E+03	4.75E-03	4.50E-03	.677	7.023E-03	2.231E-04	2.112E-04	304.3	4.75E-03	1.000	.677	.730
509	125.06	.15	.00	2.695E+03	3.91E-03	3.70E-03	.556	7.023E-03	1.833E-04	1.735E-04	304.2	3.91E-03	1.000	.556	.600
510	125.06	.04	.04	2.265E+03	3.28E-03	3.11E-03	.467	7.023E-03	1.540E-04	1.458E-04	303.9	3.28E-03	1.000	.467	.504
511	125.06	0.00	.15	2.015E+03	2.91E-03	2.76E-03	.414	7.023E-03	1.366E-04	1.293E-04	304.2	2.91E-03	1.000	.414	.447
512	125.06	0.00	.25	1.275E+03	1.84E-03	1.74E-03	.262	7.023E-03	8.645E-05	8.185E-05	303.9	1.84E-03	1.000	.262	.283
513	125.06	0.00	.38	8.555E+02	1.23E-03	1.16E-03	.174	7.023E-03	5.747E-05	5.442E-05	303.6	1.23E-03	1.000	.174	.186
514	125.06	0.00	.64	1.875E+02	2.71E-04	2.57E-04	.039	7.023E-03	1.272E-05	1.235E-05	303.2	2.71E-04	1.000	.039	.042
515	125.06	0.00	.89												

EDGE HEATING USED FOR HT
X= 3.870E+01 HL /HREFF= 6.315E-01
X= 4.124E+01 HL /HREFF= 5.738E-01
X= 4.377E+01 HL /HREFF= 2.245E-01
X= 4.631E+01 HL /HREFF= 8.292E-01
X= 4.896E+01 HL /HREFF= 6.724E-01

X=	5.139E+01	HL	/HREFF=	[illegible].224E-01
X=	5.648E+01	HL	/HREFF=	8.329E-01
X=	6.156E+01	HL	/HREFF=	8.471E-01
X=	6.664E+01	HL	/HREFF=	8.713E-01
X=	7.172E+01	HL	/HREFF=	8.648E-01
X=	7.680E+01	HL	/HREFF=	7.998E-01
X=	8.189E+01	HL	/HREFF=	8.422E-01
X=	8.696E+01	HL	/HREFF=	8.422E-01
X=	9.204E+01	HL	/HREFF=	9.021E-01
X=	9.712E+01	HL	/HREFF=	9.139E-01
X=	1.022E+02	HL	/HREFF=	9.525E-01
X=	1.073E+02	HL	/HREFF=	9.796E-01
X=	1.124E+02	HL	/HREFF=	9.624E-01
X=	1.175E+02	HL	/HREFF=	9.627E-01
X=	1.226E+02	HL	/HREFF=	9.520E-01
X=	1.251E+02	HL	/HREFF=	9.272E-01
X=	1.276E+02	HL	/HREFF=	9.388E-01
X=	1.302E+02	HL	/HREFF=	9.110E-01
X=	1.327E+02	HL	/HREFF=	9.379E-01
X=	1.352E+02	HL	/HREFF=	9.164E-01
X=	4.759E+01	HL	/HREFF=	7.623E-01
X=	6.156E+01	HL	/HREFF=	7.943E-01
X=	8.696E+01	HL	/HREFF=	2.501E-01
X=	1.124E+02	HL	/HREFF=	8.261E-01
X=	1.251E+02	HL	/HREFF=	7.398E-01

B.L. TRANSITION DISTANCE = 76.83 CM
FULLY TURBULENT B.L. CONDITIONS AT = 127.63 CM

AMES 3.5 FT HWT TEST (1-2), D.E. BLUMER, IN-LINE RSI GAP (JULY 71) 1973 PAGE 141

TT	= 1.1001E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 1.0335E+06(N/M2)	GAP WIDTH =	.163(CM)
HT	= 1.0379E+06(J/KG)	GAP DEPTH =	.508(CM)
RE/METER	= 3.0431E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.100	QS =	1.2838E+05(W/M2)
RHO VEL	= 4.0419E+01(KG/M2-S)	MOD.POSITION=	1
HAW/HT	= 0.918 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.62E+04	3.45E-02	3.22E-02	.839	4.055E-02	8.413E-04	7.978E-04	308.2				1.000
2	132.70	-.51	0.00	2.46E+04	3.20E-02	3.03E-02	.841	3.800E-02	7.936E-04	7.497E-04	308.4				1.000
3	130.16	-.51	0.00	2.20E+04	2.86E-02	2.71E-02	.806	3.546E-02	7.072E-04	6.706E-04	308.3				1.000
4	127.63	-.51	0.00	2.06E+04	2.67E-02	2.53E-02	.811	3.291E-02	6.605E-04	6.263E-04	308.3				1.000
5	125.09	-.51	0.00	1.86E+04	2.42E-02	2.29E-02	.795	3.037E-02	5.976E-04	5.667E-04	308.3				1.000
6	122.56	-.51	0.00	1.70E+04	2.20E-02	2.09E-02	.792	2.782E-02	5.450E-04	5.168E-04	308.0				1.000
7	117.47	-.51	0.00	1.42E+04	1.85E-02	1.75E-02	.805	2.296E-02	4.571E-04	4.334E-04	307.9				1.000
8	112.37	-.51	0.00	1.17E+04	1.51E-02	1.44E-02	.802	1.887E-02	3.744E-04	3.551E-04	308.1				1.000
9	107.31	-.51	0.00	9.90E+03	1.28E-02	1.22E-02	.816	1.573E-02	3.176E-04	3.012E-04	307.8				1.000
10	102.20	-.51	0.00	8.49E+03	1.10E-02	1.04E-02	.824	1.335E-02	2.722E-04	2.582E-04	307.8				1.000
11	97.12	-.51	0.00	7.23E+03	9.37E-03	8.89E-03	.813	1.153E-02	2.319E-04	2.199E-04	307.7				1.000
12	92.04	-.51	0.00	6.61E+03	8.57E-03	8.12E-03	.842	1.017E-02	2.119E-04	2.010E-04	307.7				1.000
13	86.96	-.51	0.00	6.13E+03	7.95E-03	7.54E-03	.842	9.442E-03	1.957E-04	1.865E-04	308.1				1.000
14	81.88	-.51	0.00	6.52E+03	8.46E-03	8.02E-03	.940	8.994E-03	2.092E-04	1.984E-04	307.9				1.000
15	76.80	-.51	0.00	6.56E+03	8.51E-03	8.07E-03	.949	8.964E-03	2.106E-04	1.997E-04	307.8				1.000
16	71.72	-.51	0.00	6.84E+03	8.87E-03	8.41E-03	.966	9.181E-03	2.194E-04	2.081E-04	307.9				1.000
17	66.64	-.51	0.00	7.34E+03	9.52E-03	9.03E-03	.994	9.577E-03	2.356E-04	2.234E-04	308.1				1.000
18	61.56	-.51	0.00	7.55E+03	9.80E-03	9.29E-03	.974	1.007E-02	2.425E-04	2.299E-04	308.7				1.000
19	56.48	-.51	0.00	7.82E+03	1.01E-02	9.62E-03	.949	1.069E-02	2.511E-04	2.381E-04	308.9				1.000
20	51.39	-.51	0.00	8.09E+03	1.05E-02	9.96E-03	.924	1.137E-02	2.599E-04	2.465E-04	308.9				1.000
21	48.86	-.51	0.00	8.28E+03	1.08E-02	1.02E-02	.918	1.172E-02	2.662E-04	2.524E-04	309.9				1.000
22	46.31	-.51	0.00	8.49E+03	1.10E-02	1.05E-02	.913	1.208E-02	2.729E-04	2.587E-04	309.5				1.000
23	43.77	-.51	0.00	8.57E+03	1.13E-02	1.07E-02	.905	1.244E-02	2.736E-04	2.642E-04	309.5				1.000
24	41.24	-.51	0.00	8.98E+03	1.17E-02	1.11E-02	.912	1.280E-02	2.889E-04	2.739E-04	309.7				1.000
25	38.70	-.51	0.00	9.09E+03	1.18E-02	1.12E-02	.896	1.315E-02	2.922E-04	2.770E-04	309.2				1.000
103	47.59	1.32	0.00	8.17E+03	1.07E-02	1.01E-02	.899	1.188E-02	2.642E-04	2.504E-04	314.3	1.07E-02	1.000	.899	.982
105	47.59	1.02	0.00	8.10E+03	1.05E-02	9.93E-03	.861	1.189E-02	2.591E-04	2.456E-04	315.7	1.05E-02	1.000	.881	.962
107	47.59	.51	0.00	7.69E+03	9.93E-03	9.41E-03	.835	1.189E-02	2.457E-04	2.329E-04	314.6	9.93E-03	1.000	.835	.912
108	47.59	.25	.00	6.46E+03	8.36E-03	7.92E-03	.703	1.189E-02	2.037E-04	1.960E-04	313.1	8.36E-03	1.000	.703	.768
110	47.59	.00	.04	4.64E+03	6.04E-03	5.73E-03	.508	1.189E-02	1.494E-04	1.417E-04	311.1	6.04E-03	1.000	.508	.555
111	47.59	0.00	.15	3.77E+03	4.90E-03	4.64E-03	.412	1.189E-02	1.212E-04	1.149E-04	310.2	4.90E-03	1.000	.412	.450
112	47.59	0.00	.25	2.38E+03	3.09E-03	2.93E-03	.260	1.169E-02	7.640E-05	7.245E-05	308.7	3.09E-03	1.000	.260	.284
113	47.59	0.00	.38	1.23E+03	1.59E-03	1.51E-03	.134	1.189E-02	3.937E-05	3.734E-05	307.3	1.59E-03	1.000	.134	.146
114	47.59	0.00	.64	1.89E+02	2.43E-04	2.31E-04	.020	1.189E-02	6.023E-06	5.712E-06	305.4	2.43E-04	1.000	.020	.022
115	47.59	0.00	.89	8.70E+00	1.13E-05	1.07E-05	.001	1.189E-02	2.797E-07	2.653E-07	304.0	1.13E-05	1.000	.001	.001
203	61.56	1.32	0.00	7.46E+03	9.70E-03	9.20E-03	.964	1.006E-02	2.399E-04	2.275E-04	310.0	9.70E-03	1.000	.964	.995
205	61.56	1.02	0.00	7.46E+03	9.72E-03	9.21E-03	.966	1.006E-02	2.404E-04	2.279E-04	310.8	9.72E-03	1.000	.966	.994
207	61.56	.51	0.00	7.02E+03	9.14E-03	8.66E-03	.908	1.006E-02	2.260E-04	2.143E-04	310.3	9.14E-03	1.000	.908	.933
208	61.56	.25	0.00	6.22E+03	8.09E-03	7.67E-03	.804	1.006E-02	2.001E-04	1.897E-04	309.4	8.09E-03	1.000	.804	.826
210	61.56	.04	.04	4.64E+03	6.02E-03	5.71E-03	.598	1.006E-02	1.490E-04	1.413E-04	306.2	6.02E-03	1.000	.598	.615

AMES 3.5 FT HWT TEST (192), C.J. BLUMER, IN-LINE RSI GAP RUN(71. 1973)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.30	.15	7.6[illegible]E+03	4.64E-03	4.43E-03	.461	1.006E-02	1.149E-04	1.099E-04	304.8	4.64E-03	1.000	.461	.474
212	61.56	0.30	.25	2.[illegible]E+03	3.31E-03	3.14E-03	.326	1.006E-02	8.178E-05	7.757E-05	304.8	3.31E-03	1.000	.328	.337
213	61.56	0.33	.39												
214	61.56	0.30	.64	[illegible]E+00	7.49E-06	7.19E-06	.001	1.006E-02	1.853E-07	1.753E-07	336.7	7.49E-06	1.000	.001	.001
215	61.56	0.33	.89												
306	86.96	.75	0.30	[illegible]E+00	1.14E-05	1.07E-05	.001	9.395E-03	2.819E-07	2.658E-07	339.7	1.14E-05	1.000	.001	.001
307	86.96	.51	0.00	[illegible]E+02	1.18E-03	1.11E-03	.125	9.433E-03	2.914E-05	2.758E-05	336.8	1.18E-03	1.000	.125	.149
308	86.96	.25	[illegible]	[illegible]E+03	5.66E-03	5.36E-03	.601	9.412E-03	1.333E-04	1.327E-04	307.5	5.66E-03	1.000	.601	.713
309	86.96	.15	.00	3.[illegible]E+03	4.58E-03	4.34E-03	.486	9.416E-03	1.132E-04	1.074E-04	305.8	4.58E-03	1.000	.486	.577
310	86.96	.04	.04	3.15E+03	4.11E-03	3.90E-03	.436	9.420E-03	1.017E-04	9.647E-05	336.5	4.11E-03	1.000	.436	.518
311	86.96	0.00	.15	2.62E+03	3.39E-03	3.21E-03	.359	9.421E-03	8.377E-05	7.946E-05	335.6	3.39E-03	1.000	.359	.427
312	86.96	0.30	.25	1.[illegible]E+03	2.06E-03	1.35E-03	.218	9.421E-03	5.039E-05	4.827E-05	304.1	2.06E-03	1.000	.218	.259
313	86.96	0.33	.38	5.71E+02	7.34E-04	6.97E-04	.078	9.421E-03	1.817E-05	1.724E-05	302.1	7.34E-04	1.000	.078	.093
314	86.96	0.33	.64	1.[illegible]E+01	1.33E-05	1.27E-05	.001	9.421E-03	3.332E-07	3.132E-07	303.0	1.33E-05	1.000	.001	.002
315	86.96	0.99	.89												
406	112.36	.75	0.30	1.[illegible]E+04	1.31E-02	1.24E-02	.734	1.662E-02	3.244E-04	3.076E-04	307.8	1.31E-02	1.000	.734	.878
407	112.36	.51	0.00	9.9[illegible]E+03	1.29E-02	1.22E-02	.691	1.667E-02	3.193E-04	3.028E-04	307.3	1.29E-02	1.000	.691	.862
408	112.36	.25	0.30	9.76E+03	1.13E-02	1.08E-02	.606	1.671E-02	2.807E-04	2.662E-04	307.0	1.13E-02	1.000	.606	.756
409	112.36	.15	[illegible]	7.6[illegible]E+03	9.96E-03	9.44E-03	.532	1.673E-02	2.464E-04	2.336E-04	306.5	9.96E-03	1.000	.532	.663
410	112.36	.04	.04	[illegible]E+03	8.30E-03	7.87E-03	.442	1.675E-02	2.053E-04	1.947E-04	306.3	8.30E-03	1.000	.442	.552
411	112.36	0.00	.15	5.46E+03	7.06E-03	6.70E-03	.376	1.676E-02	1.747E-04	1.656E-04	306.1	7.06E-03	1.000	.376	.469
412	112.36	0.33	.25	3.13E+03	4.04E-03	3.34E-03	.216	1.676E-02	1.007E-04	9.409E-05	305.4	4.04E-03	1.000	.216	.269
413	112.36	0.99	.38	1.71E+03	2.21E-03	2.09E-03	.118	1.676E-02	5.459E-05	5.178E-05	304.6	2.21E-03	1.000	.118	.147
414	112.36	0.33	.64	2.9[illegible]E+02	3.82E-04	3.62E-04	.020	1.676E-02	9.441E-06	8.956E-06	302.8	3.82E-04	1.000	.020	.025
415	112.36	0.33	.89												
506	125.36	.76	.00	1.62E+04	2.09E-02	1.99E-02	.697	3.034E-02	5.182E-04	4.915E-04	307.9	2.09E-02	1.000	.697	.877
507	125.36	.51	[illegible]	1.[illegible]E+04	2.01E-02	1.90E-02	.667	3.014E-02	4.967E-04	4.711E-04	307.9	2.01E-02	1.000	.667	.839
508	125.36	.25	[illegible]	1.[illegible]E+04	1.86E-02	1.7[illegible]E-02	.616	3.01[illegible]E-02	4.595E-04	4.359E-04	307.5	1.86E-02	1.000	.616	.775
509	125.36	.15	[illegible]	1.21E+04	1.57E-02	1.48E-02	.519	3.018E-02	3.874E-04	3.674E-04	307.2	1.57E-02	1.000	.519	.652
510	125.36	.04	.04	1.[illegible]E+04	1.37E-02	1.30E-02	.453	3.021E-02	3.3[illegible]E-04	3.213E-04	306.7	1.37E-02	1.000	.453	.570
511	125.36	0.00	.15	9.[illegible]E+03	1.22E-02	1.16E-02	.405	3.022E-02	3.023E-04	2.872E-04	307.1	1.22[illegible]	1.000	.405	.509
512	125.36	0.03	.25	[illegible]E+03	8.29E-03	7.86E-03	.274	3.022E-02	2.053E-04	1.944E-04	306.4	8[illegible]	1.000	.274	.345
513	125.36	0.33	.38	3.[illegible]E+03	4.86E-03	4.51E-03	.151	3.022E-02	1.203E-04	1.141E-04	305.7	4[illegible]	1.000	.161	.292
514	125.36	0.30	.64	[illegible]E+02	8.79E-04	8.34E-04	.029	3.022E-02	2.175E-05	2.063E-05	304.8	8[illegible]	1.000	.029	.037
515	125.36	0.99	.89	[illegible]E+01	1.09E-04	1.03E-04	.004	3.022E-02	2.692E-06	2.553E-06	303.7	1[illegible]	1.000	.004	.005

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 8.977E-01
X= 4.124E+01 HL /HREFF= 9.[illegible]E-01
X= 4.377E+01 HL /HREFF= 9.[illegible]E-01
X= 4.631E+01 HL /HREFF= 9.130E-01
X= 4.[illegible]E+01 HL /HREFF= 9.1[illegible]E-01

X=	5.139E+01	HL	/HREFF=	9.2[illegible]E-01
X=	5.648E+01	HL	/HREFF=	9.494E-01
X=	6.156E+01	HL	/HREFF=	9.776E-01
X=	6.664E+01	HL	/HREFF=	9.943E-01
X=	7.172E+01	HL	/HREFF=	9.667E-01
X=	7.680E+01	HL	/HREFF=	9.494E-01
X=	8.189E+01	HL	/HREFF=	9.401E-01
X=	8.696E+01	HL	/HREFF=	8.421E-01
X=	9.204E+01	HL	/HREFF=	8.423E-01
X=	9.712E+01	HL	/HREFF=	8.130E-01
X=	1.022E+02	HL	/HREFF=	8.242E-01
X=	1.073E+02	HL	/HREFF=	8.162E-01
X=	1.124E+02	HL	/HREFF=	8.022E-01
X=	1.175E+02	HL	/HREFF=	9.046E-01
X=	1.226E+02	HL	/HREFF=	7.917E-01
X=	1.251E+02	HL	/HREFF=	7.954E-01
X=	1.276E+02	HL	/HREFF=	8.111E-01
X=	1.302E+02	HL	/HREFF=	8.162E-01
X=	1.327E+02	HL	/HREFF=	8.408E-01
X=	1.352E+02	HL	/HREFF=	8.387E-01
X=	4.759E+01	HL	/HREFF=	8.353E-01
X=	6.156E+01	HL	/HREFF=	9.088E-01
X=	8.696E+01	HL	/HREFF=	1.253E-01
X=	1.124E+02	HL	/HREFF=	6.914E-01
X=	1.251E+02	HL	/HREFF=	6.671E-01

B.L. TRANSITION DISTANCE = 13[illegible].16 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.98 CM

AMES 3.5 FT HWT TEST (152), C.P. BLUMER, IN-LINE RSI GAP RUN(72) 1973 PAGE 143

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TT        = 1.126E+03(K)              GAP LENGTH =101.600(CM)
PT        = 5.230E+05(N/M2)           GAP WIDTH  =    .127(CM)
HT        = 1.1317E+06(J/KG)          GAP DEPTH  =    .508(CM)
RE/METER  = 1.627E+06                 ORIENTATION=  0.000(DEG)
MACH      = 5.13                      QS         =  9.6430E+04(W/M2)
RHO VEL   = 2.0931E+01(KG/M2-S)       MOD.POSITION=  1
HAW/HT    = .919 FOR HT
HAW/HT    = .874 FOR HL
HLCC      = HL(2ND. ORDER CONC.)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	4.72E+03	6.49E-03	6.14E-03	.971	6.681E-03	3.099E-04	2.936E-04	310.5				1.000
2	132.70	-.51	[illegible]	4.76E+03	6.57E-03	6.22E-03	.987	6.654E-03	3.137E-04	2.971E-04	310.6				1.000
3	130.16	-.51	[illegible]	4.64E+03	6.37E-03	6.03E-03	.961	6.627E-03	3.043E-04	2.882E-04	310.6				1.000
4	127.63	-.51	[illegible]	4.73E+03	6.50E-03	6.15E-03	.984	6.601E-03	3.103E-04	2.940E-04	310.5				1.000
5	125.09	-.51	[illegible]	4.69E+03	6.44E-03	6.11E-03	.980	6.574E-03	3.079E-04	2.917E-04	310.6				1.000
6	122.56	-.51	[illegible]	4.75E+03	6.52E-03	6.18E-03	.996	6.547E-03	3.115E-04	2.951E-04	310.5				1.000
7	117.47	-.51	[illegible]	4.82E+03	6.61E-03	6.27E-03	1.016	6.511E-03	3.160E-04	2.994E-04	310.4				1.000
8	112.37	-.51	[illegible]	4.82E+03	6.62E-03	6.27E-03	1.023	6.465E-03	3.163E-04	2.994E-04	310.5				1.000
9	107.31	-.51	[illegible]	4.82E+03	6.62E-03	6.27E-03	1.023	6.468E-03	3.163E-04	2.996E-04	310.5				1.000
10	102.26	-.51	[illegible]	4.79E+03	6.57E-03	6.22E-03	.985	6.676E-03	3.141E-04	2.976E-04	310.6				1.000
11	97.12	-.51	[illegible]	4.64E+03	6.37E-03	6.04E-03	.931	6.843E-03	3.045E-04	2.885E-04	310.7				1.000
12	92.04	-.51	[illegible]	4.61E+03	6.33E-03	6.00E-03	.905	6.995E-03	3.025E-04	2.866E-04	310.8				1.000
13	86.96	-.51	[illegible]	4.36E+03	5.99E-03	5.67E-03	.836	7.161E-03	2.861E-04	2.710E-04	311.0				1.000
14	81.88	-.51	[illegible]	4.52E+03	6.22E-03	5.89E-03	.854	7.276E-03	2.973E-04	2.814E-04	311.3				[illegible]
15	76.80	-.51	[illegible]	4.52E+03	6.22E-03	5.89E-03	.842	7.392E-03	2.973E-04	2.813E-04	311.4				1.000
16	71.72	-.51	[illegible]	4.81E+03	6.61E-03	6.26E-03	.883	7.483E-03	3.137E-04	2.991E-04	311.6				1.000
17	66.64	-.51	[illegible]	5.24E+03	7.21E-03	6.83E-03	.911	7.920E-03	3.446E-04	3.265E-04	311.9				1.000
18	61.56	-.51	[illegible]	5.47E+03	7.53E-03	7.13E-03	.882	8.531E-03	3.595E-04	3.406E-04	312.2				1.000
19	56.48	-.51	[illegible]	5.62E+03	7.73E-03	7.32E-03	.857	9.028E-03	3.694E-04	3.499E-04	312.6				1.000
20	51.39	-.51	[illegible]	5.80E+03	7.99E-03	7.56E-03	.843	9.469E-03	3.815E-04	3.614E-04	312.8				1.000
21	46.36	-.51	[illegible]	[illegible]	8.34E-03	7.90E-03	.859	9.716E-03	3.935E-04	3.775E-04	313.0				1.000
22	46.31	-.51	[illegible]	6.19E+03	8.53E-03	8.08E-03	.854	9.998E-03	4.377E-04	3.862E-04	312.9				1.000
23	43.77	-.51	[illegible]	6.33E+03	8.72E-03	6.26E-03	.848	1.028E-02	4.165E-04	3.945E-04	313.0				1.000
24	41.24	-.51	[illegible]	6.66E+03	9.14E-03	8.56E-03	.856	1.056E-02	4.317E-04	4.089E-04	313.2				1.000
25	38.70	-.51	[illegible]	6.70E+03	9.30E-03	8.81E-03	.858	1.084E-02	4.442E-04	4.207E-04	313.5				1.000
103	47.59	1.52	[illegible]	5.91E+03	8.18E-03	7.74E-03	.830	9.853E-03	3.871E-04	3.700E-04	316.0	8.18E-03	1.000	.830	.976
105	47.59	1.02	[illegible]	5.85E+03	8.05E-03	7.63E-03	.817	9.853E-03	3.847E-04	3.643E-04	316.5	8.05E-03	1.000	.817	.955
107	47.59	.51	[illegible]	5.66E+03	7.85E-03	7.44E-03	.797	9.853E-03	3.751E-04	3.552E-04	315.9	7.85E-03	1.000	.797	.931
108	47.59	.25	[illegible]	[illegible]	6.87E-03	6.51E-03	.697	9.854E-03	3.232E-04	3.138E-04	315.0	6.87E-03	1.000	.697	.814
110	47.59	.04	.04	[illegible]	5.11E-03	4.84E-03	.518	9.854E-03	2.44[illegible]E-04	2.321E-04	314.0	5.11E-03	1.000	.518	.605
111	47.59	0.00	.15	[illegible]	4.17E-03	3.95E-03	.423	9.654E-03	1.993E-04	1.888E-04	313.5	4.17E-03	1.000	.423	.495
112	47.59	0.00	.25	1.91E+03	2.62E-03	2.49E-03	.266	9.854E-03	1.254E-04	1.188E-04	312.6	2.62E-03	1.000	.266	.311
113	47.59	0.00	.38	[illegible]	1.39E-03	1.31E-03	.141	9.854E-03	6.629E-05	6.280E-05	312.0	1.39E-03	1.000	.141	.164
114	47.59	0.00	.64	1.77E+02	2.45E-04	2.32E-04	.025	9.854E-03	1.159E-05	1.100E-05	310.9	2.45E-04	1.000	.025	.02[illegible]
115	47.59	0.00	.89	[illegible]	2.17E-06	2.06E-06	.000	9.854E-03	1.038E-07	9.835E-08	310.2	2.17E-06	1.000	.000	.000
203	61.56	1.52	[illegible]	5.31E+03	7.33E-03	6.94E-03	.859	8.537E-03	3.510E-04	3.315E-04	313.8	7.33E-03	1.000	.858	.97[illegible]
205	61.56	1.02	[illegible]	5.31E+03	7.33E-03	6.94E-03	.859	8.534E-03	3.5[illegible]E-04	3.317E-04	314.1	7.33E-03	1.000	.859	.974
207	61.56	.51	[illegible]	[illegible]	6.99E-03	6.62E-03	.819	8.532E-03	3.343E-04	3.167E-04	313.7	6.99E-03	1.000	.819	.929
208	61.56	.25	[illegible]	4.65E+03	6.41E-03	6.07E-03	.751	8.532E-03	3.362E-04	2.951E-04	313.3	6.41E-03	1.000	.751	.852
210	61.56	.04	.04	[illegible]	4.76E-03	4.51E-03	.556	8.531E-03	2.274E-04	2.154E-04	312.6	4.76E-03	1.000	.556	.632

AMES 3.5 FT HWT TEST (162), 0.3, BLUMER, IN-LINE RSI GAP RUN(72) 1973 PAGE 144

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	2.95E+03	4.06E-03	2.94E-03	.476	8.531E-03	1.939E-04	1.836E-04	310.9	4.06E-03	1.000	.476	.539
212	61.56	0.00	.25	2.07E+03	2.84E-03	2.69E-03	.333	8.531E-03	1.355E-04	1.284E-04	310.8	2.84E-03	1.000	.333	.377
213	61.56	0.00	.38												
214	61.56	0.00	.64	1.[illegible]E+00	2.26E-06	2.14E-06	.000	8.531E-03	1.981E-07	1.021E-07	330.7	2.26E-06	1.000	.000	.000
215	61.56	0.00	.89												
306	86.96	.75	0.00												
307	86.96	.51	0.00	3.88E+03	5.33E-03	5.05E-03	.745	7.157E-03	2.547E-04	2.412E-04	311.4	5.33E-03	1.000	.745	.891
308	86.96	.25	0.00	3.39E+03	4.66E-03	4.42E-03	.652	7.158E-03	2.223E-04	2.111E-04	311.1	4.66E-03	1.000	.652	.779
309	86.96	.13	0.00	2.91E+03	3.87E-03	3.66E-03	.540	7.158E-03	1.847E-04	1.749E-04	310.7	3.87E-03	1.000	.540	.646
310	86.96	.04	.04	2.55E+03	3.50E-03	3.31E-03	.488	7.159E-03	1.670E-04	1.582E-04	310.5	3.50E-03	1.000	.488	.584
311	86.96	0.00	.15	2.17E+03	2.93E-03	2.78E-03	.409	7.159E-03	1.393E-04	1.326E-04	310.0	2.93E-03	1.000	.409	.489
312	86.96	0.00	.25	1.31E+03	1.79E-03	1.70E-03	.250	7.159E-03	8.553E-05	8.113E-05	309.2	1.79E-03	1.000	.250	.299
313	86.96	0.00	.38	6.93E+02	9.49E-04	8.99E-04	.133	7.159E-03	4.535E-05	4.297E-05	308.9	9.49E-04	1.000	.133	.159
314	86.96	0.00	.64	1.39E+02	1.90E-04	1.80E-04	.027	7.159E-03	9.031E-06	8.604E-06	308.9	1.90E-04	1.000	.027	.032
315	86.96	0.00	.89	1.07E+01	1.41E-05	1.34E-05	.002	7.159E-03	6.746E-07	6.392E-07	308.7	1.41E-05	1.000	.002	.002
406	112.36	.75	0.00	4.21E+03	5.78E-03	5.48E-03	.894	6.466E-03	2.762E-04	2.617E-04	310.7	5.78E-03	1.000	.894	.874
407	112.36	.51	0.00	4.12E+03	5.66E-03	5.37E-03	.876	6.465E-03	2.705E-04	2.563E-04	310.5	5.66E-03	1.000	.876	.856
408	112.36	.25	0.00	3.70E+03	5.08E-03	4.82E-03	.787	6.464E-03	2.429E-04	2.301E-04	310.2	5.08E-03	1.000	.787	.769
409	112.36	.13	0.00	3.23E+03	4.43E-03	4.20E-03	.685	6.464E-03	2.116E-04	2.005E-04	310.0	4.43E-03	1.000	.685	.670
410	112.36	.04	.04	2.76E+03	3.79E-03	3.59E-03	.587	6.464E-03	1.812E-04	1.717E-04	310.0	3.79E-03	1.000	.587	.573
411	112.36	0.00	.15	2.29E+03	3.13E-03	2.97E-03	.485	6.464E-03	1.497E-04	1.419E-04	309.8	3.13E-03	1.000	.485	.474
412	112.36	0.00	.25	1.44E+03	1.98E-03	1.87E-03	.306	6.464E-03	9.448E-05	8.952E-05	309.5	1.98E-03	1.000	.306	.299
413	112.36	0.00	.38	7.[illegible]E+02	1.05E-03	9.97E-04	.162	6.464E-03	4.994E-05	4.731E-05	309.1	1.05E-03	1.000	.162	.158
414	112.36	0.00	.64												
415	112.36	0.00	.89												
506	125.06	.76	0.00	3.97E+03	5.45E-03	5.16E-03	.827	6.585E-03	2.602E-04	2.465E-04	310.7	5.45E-03	1.000	.827	.843
507	125.06	.51	0.00	3.91E+03	5.35E-03	5.07E-03	.813	6.582E-03	2.55[illegible]E-04	2.422E-04	310.6	5.35E-03	1.000	.813	.829
508	125.06	.25	0.00	3.57E+03	4.90E-03	4.64E-03	.744	6.580E-03	2.34[illegible]E-04	2.217E-04	310.5	4.90E-03	1.000	.744	.759
509	125.06	.13	0.00	3.10E+03	4.24E-03	4.01E-03	.644	6.579E-03	2.024E-04	1.917E-04	310.3	4.24E-03	1.000	.644	.657
510	125.06	.04	.04	2.75E+03	3.77E-03	3.58E-03	.574	6.578E-03	1.809E-04	1.709E-04	310.0	3.77E-03	1.000	.574	.585
511	125.06	0.00	.15	2.51E+03	3.45E-03	3.27E-03	.525	6.577E-03	1.649E-04	1.562E-04	310.1	3.45E-03	1.000	.525	.535
512	125.06	0.00	.25	1.46E+03	2.01E-03	1.90E-03	.305	6.577E-03	9.599E-05	9.093E-05	309.8	2.01E-03	1.000	.305	.311
513	125.06	0.00	.38	9.41E+02	1.29E-03	1.22E-03	.196	6.577E-03	6.164E-05	5.840E-05	309.5	1.29E-03	1.000	.196	.200
514	125.06	0.00	.64	2.04E+02	2.79E-04	2.64E-04	.042	6.577E-03	1.334E-05	1.264E-05	309.0	2.79E-04	1.000	.042	.043
515	125.06	0.00	.89												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL /HREFF=	6.379E-01
X=	4.124E+01	HL /HREFF=	6.[illegible]06E-01
X=	4.377E+01	HL /HREFF=	6.492E-01
X=	4.631E+01	HL /HREFF=	6.536E-01
X=	4.886E+01	HL /HREFF=	[illegible]36E-01

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	8.568E-01
X=	6.156E+01	HL	/HREFF=	8.822E-01
X=	6.664E+01	HL	/HREFF=	9.1?8E-01
X=	7.172E+01	HL	/HREFF=	6.832E-01
X=	7.680E+01	HL	/HREFF=	8.421E-01
X=	8.188E+01	HL	/HREFF=	8.?44E-01
X=	8.696E+01	HL	/HREFF=	8.?53E-01
X=	9.204E+01	HL	/HREFF=	9.?47E-01
X=	9.712E+01	HL	/HREFF=	9.314E-01
X=	1.022E+02	HL	/HREFF=	9.847E-01
X=	1.073E+02	HL	/HREFF=	1.?23E+00
X=	1.124E+02	HL	/HREFF=	1.?23E+00
X=	1.175E+02	HL	/HREFF=	1.016E+00
X=	1.226E+02	HL	/HREFF=	9.539E-01
X=	1.251E+02	HL	/HREFF=	9.8?4E-01
X=	1.276E+02	HL	/HREFF=	9.840E-01
X=	1.302E+02	HL	/HREFF=	9.016E-01
X=	1.327E+02	HL	/HREFF=	9.3?7E-01
X=	1.352E+02	HL	/HREFF=	9.709E-01
X=	4.759E+01	HL	/HREFF=	7.968E-01
X=	6.156E+01	HL	/HREFF=	8.193E-01
X=	8.696E+01	HL	/HREFF=	7.447E-01
X=	1.124E+02	HL	/HREFF=	8.??0E-01
X=	1.251E+02	HL	/HREFF=	8.129E-01

B.L. TRANSITION DISTANCE = 61.55 CM
FULLY TURBULENT B.L. CONDITIONS AT = 66.64 CM

AMES 3.5 FT HWT TEST (192), C.J. BLUMER, IN-LINE RSI GAP RUN(73) 1973 PAGE 145

TT	= 1.1352E+03(K)	GAP LENGTH	=101.600(CM)
PT	= 1.0195E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2331E+06(J/KG)	GAP DEPTH	= .508(CM)
RE/METER	= 3.1[illegible]E+06	ORIENTATION	= 0.00(DEG)
MACH	= 5.130	QS	= 1.2219E+05(W/M2)
RHO VEL	= 4.[illegible]E+01(KG/M2-S)	MOD.POSITION	= 1
HAW/HT	= 0.909 FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	0.00	2.32E+04	3.83E-02	3.63E-02	.872	4.394E-02	9.475E-04	8.919E-04	312.6				1.000
2	132.70	-.51	0.00	2.73E+04	3.70E-02	3.51E-02	.900	4.117E-02	9.092E-04	8.614E-04	312.8				1.000
3	130.16	-.51	0.00	2.49E+04	3.39E-02	3.21E-02	.882	3.836E-02	8.314E-04	7.877E-04	312.8				1.000
4	127.63	-.51	0.00	[illegible]	3.24E-02	3.07E-02	.909	3.560E-02	7.945E-04	7.527E-04	312.8				1.000
5	125.09	-.51	0.00	2.18E+04	2.97E-02	2.81E-02	.904	3.283E-02	7.295E-04	6.902E-04	312.8				1.000
6	122.56	-.51	0.00	2.12E+04	2.75E-02	2.60E-02	.914	3.005E-02	6.743E-04	6.389E-04	312.7				1.000
7	117.47	-.51	0.00	1.71E+04	2.32E-02	2.20E-02	.939	2.470E-02	5.693E-04	5.393E-04	312.7				1.000
8	112.37	-.51	0.00	[illegible]	1.85E-02	1.76E-02	.919	2.017E-02	4.554E-04	4.314E-04	312.9				1.000
9	107.31	-.51	0.00	1.11E+04	1.50E-02	1.42E-02	.899	1.671E-02	3.688E-04	3.494E-04	312.8				1.000
10	102.20	-.51	0.00	8.90E+03	1.22E-02	1.16E-02	.869	1.405E-02	2.999E-04	2.841E-04	312.9				1.000
11	97.12	-.51	0.00	7.26E+03	9.87E-03	9.75E-03	.824	1.196E-02	2.423E-04	2.296E-04	313.0				1.000
12	92.04	-.51	0.00	6.49E+03	8.82E-03	8.36E-03	.843	1.046E-02	2.166E-04	2.052E-04	313.1				1.000
13	86.96	-.51	0.00	[illegible]	8.30E-03	7.97E-03	.861	9.645E-03	2.039E-04	1.931E-04	313.5				1.000
14	81.88	-.51	0.00	6.48E+03	8.82E-03	8.36E-03	.965	9.145E-03	2.166E-04	2.052E-04	313.8				1.000
15	76.80	-.51	0.00	[illegible]	8.77E-03	8.31E-03	.963	9.104E-03	2.153E-04	2.039E-04	313.8				1.000
16	71.72	-.51	0.00	6.71E+03	9.14E-03	8.56E-03	.979	9.335E-03	2.244E-04	2.126E-04	314.1				1.000
17	66.64	-.51	0.00	[illegible]	9.63E-03	9.13E-03	.990	9.726E-03	2.365E-04	2.241E-04	314.3				1.000
18	61.56	-.51	0.00	7.31E+03	9.95E-03	9.42E-03	.975	1.020E-02	2.443E-04	2.314E-04	314.7				1.000
19	56.48	-.51	0.00	7.42E+03	1.01E-02	9.58E-03	.934	1.083E-02	2.494E-04	2.353E-04	315.1				1.000
20	51.39	-.51	0.00	7.60E+03	1.04E-02	9.81E-03	.899	1.153E-02	2.544E-04	2.410E-04	315.2				1.000
21	48.36	-.51	0.00	[illegible]	1.08E-02	1.02E-02	.909	1.188E-02	2.651E-04	2.511E-04	315.5				1.000
22	46.31	-.51	0.00	[illegible]	1.09E-02	1.03E-02	.89[illegible]	1.225E-02	2.676E-04	2.535E-04	315.5				1.000
23	43.77	-.51	0.00	[illegible]	1.10E-02	1.04E-02	.870	1.262E-02	2.696E-04	2.553E-04	315.6				1.000
24	41.24	-.51	0.00	8.35E+03	1.14E-02	1.08E-02	.877	1.299E-02	2.797E-04	2.643E-04	315.6				1.000
25	38.70	-.51	0.00	[illegible]	1.18E-02	1.12E-02	.883	1.335E-02	2.896E-04	2.743E-04	315.6				1.000
103	47.59	1.52	[illegible]	7.60E+03	1.04E-02	9.97E-03	.865	1.235E-02	2.563E-04	2.424E-04	319.6	1.04E-02	1.000	.865	.962
105	47.59	1.02	[illegible]	7.48E+03	1.03E-02	9.73E-03	.852	1.205E-02	2.522E-04	2.389E-04	320.3	1.03E-02	1.000	.852	.948
107	47.59	.51	0.00	7.25E+03	9.99E-03	9.45E-03	.828	1.206E-02	2.451E-04	2.321E-04	319.4	9.98E-03	1.000	.828	.921
108	47.59	.25	[illegible]	[illegible]	[illegible]	8.42E-03	.737	1.2[illegible]E-02	2.183E-04	2.067E-04	319.1	8.89E-03	1.000	.737	.820
110	47.59	[illegible]	.04	[illegible]	6.47E-03	6.13E-03	.536	1.206E-02	1.593E-04	1.504E-04	316.5	6.47E-03	1.000	.536	.596
111	47.59	0.00	.15	3.9[illegible]E+03	5.33E-03	5.05E-03	.442	1.206E-02	1.308E-04	1.239E-04	315.7	5.33E-03	1.000	.442	.491
112	47.59	0.00	.25	2.[illegible]E+03	3.59E-03	3.32E-03	.290	1.20[illegible]E-02	8.837E-05	8.144E-05	314.4	3.56E-03	1.000	.290	.323
113	47.59	0.00	.38	1.39E+03	1.87E-03	1.78E-03	.155	1.206E-02	4.602E-05	4.359E-05	313.2	1.87E-03	1.000	.155	.173
114	47.59	0.00	.64	2.79E+02	3.79E-04	3.58E-04	.031	1.206E-02	9.273E-06	8.791E-06	311.6	3.78E-04	1.000	.031	.03[illegible]
115	47.59	0.00	.89	2.14E+01	2.90E-05	2.74E-05	.002	1.206E-02	7.111E-07	6.738E-07	310.7	2.90E-05	1.000	.002	.00[illegible]
203	61.56	1.52	0.00	[illegible]	9.62E-03	9.11E-03	.944	1.020E-02	2.303E-04	2.238E-04	316.6	9.62E-03	1.000	.944	.96[illegible]
205	61.56	1.02	[illegible]	[illegible]	9.64E-03	9.13E-03	.946	1.019E-02	2.357E-04	2.242E-04	317.1	9.64E-03	1.000	.946	.97[illegible]
207	61.56	.51	[illegible]	[illegible]	9.21E-03	8.72E-03	.903	1.020E-02	2.25[illegible]E-04	2.141E-04	316.6	9.21E-03	1.000	.903	.926
208	61.56	.25	[illegible]	[illegible]	8.36E-03	7.91E-03	.819	1.020E-02	2.051E-04	1.943E-04	315.8	8.36E-03	1.000	.819	.84[illegible]
210	61.56	.04	[illegible]	[illegible]	[illegible]	[illegible]	.558	1.02[illegible]E-02	1.423E-04	1.349E-04	314.7	5.79E-03	1.000	.568	.[illegible]03

AMES 3.5 FT HWT TEST (182), C.S. BLUMER, IN-LINE RSI GAP RUN(73) 1973 PAGE 146

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	0.00	.15	3.59E+03	5.00E-03	4.74E-03	.491	1.020E-02	1.229E-04	1.164E-04	312.0	5.00E-03	1.000	.491	.503
212	61.56	0.00	.25	2.76E+03	3.75E-03	3.55E-03	.367	1.020E-02	9.199E-05	8.715E-05	311.9	3.75E-03	1.000	.367	.377
213	61.56	0.00	.38												
214	61.56	0.00	.64	3.96E+00	5.58E-06	5.28E-06	.001	1.020E-02	1.371E-07	1.296E-07	330.7	5.58E-06	1.000	.001	.001
215	61.56	0.00	.89	1.75E+01	2.36E-05	2.24E-05	.002	1.020E-02	5.794E-07	5.491E-07	309.2	2.36E-05	1.000	.002	.002
306	86.96	.75	0.00												
307	86.96	.51	0.00	5.11E+03	6.96E-03	6.59E-03	.725	9.603E-03	1.708E-04	1.618E-04	313.9	6.96E-03	1.000	.725	.841
308	86.96	.25	0.00	4.43E+03	6.02E-03	5.71E-03	.627	9.612E-03	1.479E-04	1.401E-04	313.3	6.02E-03	1.000	.627	.728
309	86.96	.15	0.00	3.68E+03	5.00E-03	4.74E-03	.520	9.617E-03	1.228E-04	1.163E-04	312.6	5.00E-03	1.000	.521	.604
310	86.96	.04	.04	3.45E+03	4.68E-03	4.43E-03	.486	9.621E-03	1.149E-04	1.089E-04	312.1	4.60E-03	1.000	.486	.565
311	86.96	0.00	.15	3.13E+03	4.25E-03	4.02E-03	.441	9.623E-03	1.043E-04	9.881E-05	311.2	4.25E-03	1.000	.441	.513
312	86.96	0.00	.25	1.97E+03	2.67E-03	2.53E-03	.277	9.623E-03	6.547E-05	6.205E-05	309.8	2.67E-03	1.000	.277	.322
313	86.96	0.00	.39	8.57E+02	1.16E-03	1.10E-03	.120	9.623E-03	2.845E-05	2.696E-05	308.9	1.16E-03	1.000	.120	.140
314	86.96	0.00	.64	1.38E+02	1.87E-04	1.77E-04	.019	9.623E-03	4.580E-06	4.340E-06	309.4	1.87E-04	1.000	.019	.023
315	86.96	0.00	.89												
406	112.36	.76	0.00	1.14E+04	1.55E-02	1.47E-02	.780	1.991E-02	3.913E-04	3.612E-04	312.9	1.55E-02	1.000	.780	.848
407	112.36	.51	0.00	1.15E+04	1.56E-02	1.48E-02	.784	1.996E-02	3.841E-04	3.639E-04	312.6	1.56E-02	1.000	.784	.853
408	112.36	.25	0.00	1.07E+04	1.46E-02	1.38E-02	.728	2.001E-02	3.575E-04	3.387E-04	312.2	1.46E-02	1.000	.728	.791
409	112.36	.15	0.00	9.62E+03	1.32E-02	1.25E-02	.657	2.003E-02	3.229E-04	3.059E-04	311.8	1.32E-02	1.000	.657	.714
410	112.36	.04	.04	8.32E+03	1.13E-02	1.07E-02	.564	2.005E-02	2.776E-04	2.630E-04	311.6	1.13E-02	1.000	.564	.613
411	112.36	0.00	.15	7.23E+03	9.81E-03	9.29E-03	.489	2.006E-02	2.408E-04	2.281E-04	311.3	9.81E-03	1.000	.489	.532
412	112.36	0.00	.25	4.55E+03	6.16E-03	5.84E-03	.307	2.006E-02	1.514E-04	1.434E-04	310.5	6.16E-03	1.000	.307	.334
413	112.36	0.00	.38	2.79E+03	3.77E-03	3.57E-03	.188	2.006E-02	9.252E-05	8.768E-05	309.7	3.77E-03	1.000	.188	.204
414	112.36	0.00	.64	5.15E+02	6.95E-04	6.59E-04	.035	2.006E-02	1.707E-05	1.618E-05	308.1	6.95E-04	1.000	.035	.038
415	112.36	0.00	.89												
506	125.06	.76	0.00	1.85E+04	2.52E-02	2.38E-02	.775	3.248E-02	6.177E-04	5.852E-04	312.8	2.52E-02	1.000	.775	.857
507	125.06	.51	0.00	1.83E+04	2.48E-02	2.35E-02	.763	3.254E-02	6.094E-04	5.774E-04	312.8	2.48E-02	1.000	.763	.844
508	125.06	.25	0.00	1.76E+04	2.39E-02	2.26E-02	.732	3.260E-02	5.857E-04	5.549E-04	312.5	2.39E-02	1.000	.732	.899
509	125.06	.15	0.00	1.53E+04	2.07E-02	1.96E-02	.635	3.263E-02	5.067E-04	4.828E-04	312.2	2.07E-02	1.000	.635	.702
510	125.06	.04	.04	1.36E+04	1.84E-02	1.74E-02	.564	3.266E-02	4.519E-04	4.281E-04	311.8	1.84E-02	1.000	.564	.623
511	125.06	0.00	.15	1.26E+04	1.70E-02	1.61E-02	.521	3.267E-02	4.182E-04	3.962E-04	311.9	1.70E-02	1.000	.521	.577
512	125.06	0.00	.25	8.78E+03	1.19E-02	1.13E-02	.365	3.267E-02	2.925E-04	2.771E-04	311.3	1.19E-02	1.000	.365	.403
513	125.06	0.00	.38	5.[illegible]E+03	7.42E-03	7.03E-03	.227	3.267E-02	1.822E-04	1.726E-04	310.	7.42E-03	1.000	.227	.251
514	125.06	0.00	.64	1.31E+03	1.77E-03	1.68E-03	.054	3.267E-02	4.358E-05	4.129E-05	309.7	1.77E-03	1.000	.054	.060
515	125.06	0.00	.89	2.26E+02	3.09E-04	2.92E-04	.009	3.267E-02	7.576E-06	7.179E-06	308.7	3.09E-04	1.000	.009	.010

EDGE HEATING USED FOR HE
X= 3.873E+01 HL /HREFF= 8.632E-01
X= 4.124E+01 HL /HREFF= 8.771E-01
X= 4.377E+01 HL /HREFF= 8.710E-01
X= 4.631E+01 HL /HREFF= 8.397E-01
X= 4.885E+01 HL /HREFF= [illegible]

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.649E+01	HL	/HREFF=	9.341E-01
X=	6.176E+01	HL	/HREFF=	9.722E-01
X=	6.664E+01	HL	/HREFF=	9.915E-01
X=	7.172E+01	HL	/HREFF=	9.791E-01
X=	7.680E+01	HL	/HREFF=	9.630E-01
X=	8.188E+01	HL	/HREFF=	9.649E-01
X=	8.696E+01	HL	/HREFF=	8.609E-01
X=	9.204E+01	HL	/HREFF=	8.435E-01
X=	9.712E+01	HL	/HREFF=	8.276E-01
X=	1.022E+02	HL	/HREFF=	8.691E-01
X=	1.073E+02	HL	/HREFF=	8.937E-01
X=	1.124E+02	HL	/HREFF=	9.134E-01
X=	1.175E+02	HL	/HREFF=	9.386E-01
X=	1.226E+02	HL	/HREFF=	9.141E-01
X=	1.251E+02	HL	/HREFF=	9.047E-01
X=	1.276E+02	HL	/HREFF=	9.789E-01
X=	1.302E+02	HL	/HREFF=	8.823E-01
X=	1.327E+02	HL	/HREFF=	8.935E-01
X=	1.352E+02	HL	/HREFF=	8.717E-01

X=	4.759E+01	HL	/HREFF=	8.281E-01
X=	6.156E+01	HL	/HREFF=	9.729E-01
X=	8.696E+01	HL	/HREFF=	7.245E-01
X=	1.124E+02	HL	/HREFF=	7.839E-01
X=	1.251E+02	HL	/HREFF=	7.627E-01

B.L. TRANSITION DISTANCE = 71.39 CM
FULLY TURBULENT B.L. CONDITIONS AT = 81.88 CM

AMES 3.5 FT HWT TEST (182), C.P. BLUMER, IN-LINE RSI GAP JUNE 74) 1973 PAGE 147

TT = 1.133E+03(K) GAP LENGTH =101.597(CM)
PT = 2.0902E+06(N/M2) GAP WIDTH = .127(CM)
HT = 1.2029E+06(J/KG) GAP DEPTH = .508(CM)
RE/METER = 6.4777E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 QS = 1.7472E+05(W/M2)
RHO VEL = 8.3963E+01(KG/M2-S) MOD.POSITION= 1
HAW/HT = 0.900 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	5.46E+04	7.37E-02	5.38E-02	.950	8.677E-02	8.775E-04	8.312E-04	315.7				1.000
2	132.70	-.51	[illegible]	[illegible]	7.51E-02	7.11E-02	.890	8.457E-02	8.944E-04	8.472E-04	316.2				1.000
3	130.16	-.51	[illegible]	[illegible]	7.32E-02	6.93E-02	.992	8.231E-02	8.712E-04	8.252E-04	316.2				1.000
4	127.63	-.51	[illegible]	[illegible]	7.53E-02	7.13E-02	.945	7.965E-02	8.954E-04	8.498E-04	316.2				1.000
5	125.09	-.51	[illegible]	[illegible]	7.53E-02	7.14E-02	.975	7.729E-02	8.974E-04	8.503E-04	316.4				1.000
6	122.56	-.51	[illegible]	[illegible]	7.62E-02	7.22E-02	1.017	7.493E-02	9.075E-04	8.596E-04	316.3				1.000
7	117.47	-.51	[illegible]	5.78E+04	7.89E-02	7.47E-02	1.145	6.893E-02	9.399E-04	8.902E-04	316.5				1.000
8	112.37	-.51	[illegible]	[illegible]	7.99E-02	7.57E-02	1.329	6.013E-02	9.517E-04	9.014E-04	316.7				1.000
9	107.31	-.51	[illegible]	[illegible]	[illegible]	7.06E-02	1.635	4.947E-02	9.632E-04	9.123E-04	316.5				1.000
10	102.20	-.51	[illegible]	[illegible]	7.91E-02	7.49E-02	1.976	3.997E-02	9.417E-04	8.919E-04	316.7				1.000
11	97.12	-.51	[illegible]	[illegible]	6.92E-02	6.56E-02	2.142	3.233E-02	9.247E-04	7.811E-04	316.7				1.000
12	92.04	-.51	[illegible]	[illegible]	[illegible]	5.26E-02	2.135	2.606E-02	6.612E-04	6.262E-04	316.8				1.000
13	86.96	-.51	[illegible]	[illegible]	3.82E-02	3.62E-02	1.784	2.143E-02	4.551E-04	4.311E-04	317.5				1.000
14	81.88	-.51	[illegible]	[illegible]	2.69E-02	2.54E-02	1.529	1.757E-02	3.199E-04	3.030E-04	318.0				1.000
15	76.90	-.51	[illegible]	[illegible]	1.85E-02	1.75E-02	1.212	1.522E-02	2.198E-04	2.081E-04	317.8				1.000
16	71.72	-.51	[illegible]	1.12E+04	1.53E-02	1.45E-02	1.115	1.376E-02	1.827E-04	1.730E-04	318.1				1.000
17	66.64	-.51	[illegible]	[illegible]	1.44E-02	1.36E-02	1.060	1.355E-02	1.711E-04	1.620E-04	318.4				1.000
18	61.56	-.51	[illegible]	[illegible]	1.41E-02	1.34E-02	[illegible]	1.359E-02	1.681E-04	1.592E-04	319.0				1.000
19	56.49	-.51	[illegible]	[illegible]	1.40E-02	1.32E-02	.946	1.479E-02	1.664E-04	1.576E-04	319.5				1.000
20	51.39	-.51	[illegible]	[illegible]	1.43E-02	1.35E-02	.906	1.575E-02	1.699E-04	1.609E-04	319.5				1.000
21	48.96	-.51	[illegible]	[illegible]	1.44E-02	1.36E-02	.890	1.616E-02	1.713E-04	1.622E-04	320.2				1.000
22	46.71	-.51	[illegible]	[illegible]	1.47E-02	1.39E-02	.890	1.648E-02	1.747E-04	1.654E-04	319.8				1.000
23	43.77	-.51	[illegible]	[illegible]	1.48E-02	1.40E-02	.884	1.679E-02	1.767E-04	1.673E-04	319.9				1.000
24	41.24	-.51	[illegible]	[illegible]	1.59E-02	1.50E-02	.926	1.711E-02	1.887E-04	1.787E-04	320.3				1.000
25	38.70	-.51	[illegible]	1.10E+04	1.63E-02	1.54E-02	.934	1.742E-02	1.937E-04	1.834E-04	319.5				1.000
103	47.59	1.52	[illegible]	[illegible]	1.33E-02	1.26E-02	.818	1.632E-02	1.599E-04	1.514E-04	326.7	1.33E-02	1.000	.816	.919
105	47.59	1.02	[illegible]	[illegible]	1.32E-02	1.25E-02	.812	[illegible]	1.577E-04	1.492E-04	328.2	1.32E-02	1.000	.812	.912
107	47.59	.51	[illegible]	9.13E+03	1.26E-02	1.20E-02	.775	1.631E-02	1.516E-04	1.425E-04	326.5	1.26E-02	1.000	.775	.871
108	47.59	.25	[illegible]	[illegible]	1.07E-02	1.02E-02	[illegible]	1.631E-02	1.278E-04	1.210E-04	324.1	1.07E-02	1.000	.656	.739
110	47.59	[illegible]	[illegible]	[illegible]	[illegible]	7.74E-03	[illegible]	1.631E-02	9.733E-05	9.216E-05	321.1	8.17E-03	1.000	.501	.563
111	47.59	[illegible]	.15	[illegible]	6.75E-03	6.39E-03	.414	1.631E-02	8.042E-05	7.615E-05	319.7	6.75E-03	1.000	.414	.465
112	47.59	[illegible]	.25	[illegible]	4.56E-03	4.32E-03	.280	1.631E-02	5.436E-05	5.149E-05	317.2	4.56E-03	1.000	.280	.314
113	47.59	[illegible]	.38	[illegible]	2.19E-03	[illegible]	.134	1.631E-02	2.610E-05	2.473E-05	315.2	2.19E-03	1.000	.134	.151
114	47.55	[illegible]	.64	2.37E+02	3.22E-04	3.05E-04	.020	1.631E-02	3.839E-06	3.637E-06	312.2	3.22E-04	1.000	.020	.022
115	47.59	[illegible]	.89												
203	61.56	1.52	[illegible]	9.22E+03	1.27E-02	1.20E-02	.913	1.396E-02	1.511E-04	1.431E-04	321.7	1.27E-02	1.000	.913	.90[illegible]
205	61.56	1.02	[illegible]	9.17E+03	1.26E-02	[illegible]	[illegible]	1.392E-02	[illegible]	1.425E-04	322.7	1.26E-02	1.000	.906	.906
207	61.56	.51	[illegible]	[illegible]	1.23E-02	1.14E-02	.864	1.394E-02	1.474E-04	1.357E-04	321.8	1.23E-02	1.000	.864	.856
208	61.56	.25	[illegible]	[illegible]	1.12E-02	1.06E-02	.804	1.395E-02	1.336E-04	1.263E-04	320.3	1.12E-02	1.000	.804	.797
210	61.56	[illegible]	[illegible]	[illegible]	9.23E-03	[illegible]	.666	1.796E-02	[illegible]	[illegible]	313.1	9.23E-03	1.000	.666	.660

AMES 7.5 FT HWT TEST (192), O.J. BLUMER, IN-LINE RSI GAP RUN(74) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
211	61.56	[illegible]	.15	[illegible]	7.19E-03	6.51E-03	.515	1.395E-02	8.550E-05	8.110E-05	312.8	7.19E-03	1.000	.515	.510
212	61.56	[illegible]	.25	4.34E+03	5.90E-03	5.59E-03	.422	1.396E-02	7.024E-05	6.654E-05	312.6	5.90E-03	1.000	.422	.419
213	61.56	[illegible]	.38												
214	61.56	[illegible]	.64												
215	61.56	[illegible]	.89	1.96E+02	2.65E-04	2.51E-04	.019	1.396E-02	3.156E-06	2.991E-06	307.3	2.65E-04	1.000	.019	.019
306	86.96	.76	[illegible]	1.14E+01	1.61E-05	1.52E-05	.001	2.130E-02	1.919E-07	1.815E-07	330.7	1.61E-05	1.009	.001	.000
307	86.96	.51	[illegible]	2.13E+04	2.92E-02	2.77E-02	1.362	2.114E-02	3.479E-04	3.295E-04	317.7	2.92E-02	1.000	1.362	.775
308	86.96	.25	[illegible]	2.14E+04	2.94E-02	2.79E-02	1.368	2.121E-02	3.503E-04	3.320E-04	316.5	2.94E-02	1.000	1.388	.776
309	86.96	.15	[illegible]	1.94E+04	2.65E-02	2.51E-02	1.249	2.124E-02	3.159E-04	2.993E-04	315.3	2.65E-02	1.000	1.249	.701
310	86.96	.04	.04	1.83E+04	2.50E-02	2.37E-02	1.175	2.127E-02	2.976E-04	2.819E-04	314.7	2.58E-02	1.003	1.175	.659
311	86.96	[illegible]	.15	1.57E+04	2.16E-02	2.05E-02	1.015	2.128E-02	2.572E-04	2.436E-04	313.4	2.16E-02	1.000	1.015	.569
312	86.96	[illegible]	.25	9.77E+03	1.33E-02	1.26E-02	.623	2.128E-02	1.579E-04	1.496E-04	311.0	1.33E-02	1.000	.623	.349
313	86.96	0.00	.38	7.27E+03	9.81E-03	9.29E-03	.461	2.128E-02	1.168E-04	1.107E-04	306.8	9.81E-03	1.000	.461	.258
314	86.96	[illegible]	.64	1.32E+03	2.59E-03	2.46E-03	.122	2.126E-02	3.085E-05	2.924E-05	337.9	[illegible]	1.000	.122	.068
315	86.96	[illegible]	.89												
406	112.36	.76	[illegible]	5.16E+04	7.08E-02	6.70E-02	1.175	6.122E-02	8.430E-04	7.989E-04	316.2	7.08E-02	1.003	1.175	.884
407	112.36	.51	[illegible]	5.18E+04	7.07E-02	6.59E-02	1.174	6.129E-02	8.415E-04	7.971E-04	315.4	7.07E-02	1.000	1.174	.883
408	112.36	.25	[illegible]	4.84E+04	6.59E-02	6.24E-02	1.095	6.019E-02	7.851E-04	7.437E-04	314.7	6.59E-02	1.000	1.095	.824
409	112.36	.15	[illegible]	4.49E+04	6.12E-02	5.79E-02	1.017	6.017E-02	7.285E-04	6.901E-04	313.9	6.12E-02	1.000	1.017	.764
410	112.36	.04	.04	3.99E+04	5.43E-02	5.14E-02	.902	6.016E-02	6.453E-04	6.123E-04	313.7	5.43E-02	1.000	.902	.678
411	112.36	0.00	.15	3.51E+04	4.77E-02	4.52E-02	.793	6.015E-02	5.681E-04	5.382E-04	313.1	4.77E-02	1.000	.793	.596
412	112.36	0.00	.25	2.35E+04	3.19E-02	3.02E-02	.531	6.015E-02	3.8 1E-04	3.602E-04	311.7	3.19E-02	1.000	.531	.399
413	112.36	[illegible]	.38	1.46E+04	1.98E-02	1.87E-02	.329	6. 15E-02	2.354E-04	2.230E-04	310.4	1.98E-02	1.000	.329	.247
414	112.36	[illegible]	.64	2.80E+03	3.78E-03	3.58E-03	.063	6. 15E-02	4.498E-05	4.263E-05	307.9	3.78E-03	1.000	.063	.047
415	112.36	[illegible]	.89												
506	125.36	.76	[illegible]	[illegible]	6.62E-02	6.27E-02	.853	7.757E-02	7.879E-04	7.463E-04	316.3	6.62E-02	1.000	.853	.874
507	125.36	.51	[illegible]	[illegible]	6.46E-02	6.12E-02	.833	7.751E-02	7.693E-04	7.287E-04	316.1	6.46E-02	1.000	.833	.854
508	125.36	.25	[illegible]	[illegible]	6.27E-02	5.94E-02	.809	7.745E-02	7.457E-04	7.073E-04	315.4	6.27E-02	1.000	.809	.830
509	125.36	.15	[illegible]	[illegible]	5.56E-02	5.27E-02	.719	7.742E-02	6.627E-04	6.278E-04	314.6	5.56E-02	1.000	.719	.737
510	125.36	.04	.04	[illegible]	[illegible]	4.79E-02	.653	7.739E-02	[illegible]	5.704E-04	314.0	5.06E-02	1.000	.653	.670
511	125.36	[illegible]	.15	[illegible]	4.61E-02	4.36E-02	.595	7.736E-02	5.435E-04	5.197E-04	314.2	4.61E-02	1.000	.595	.610
512	125.36	0.00	.25	2.45E+04	3.33E-02	3.16E-02	.430	7.738E-02	3.967E-04	3.758E-04	313.1	3.33E-02	1.000	.430	.441
513	125.36	[illegible]	.38	1.55E+04	2.11E-02	2.00E-02	.272	7.736E-02	2.5 8E-04	2.376E-04	312.1	2.11E-02	1.000	.272	.279
514	125.36	[illegible]	.64	2.63E+03	3.57E-03	3.38E-03	.046	7.736E-02	4.250E-05	4.029E-05	310.1	3.57E-03	1.000	.046	.047
515	125.36	[illegible]	.89												

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	9.316E-01
X=	4.124E+01	HL	/HREFF=	9.253E-01
X=	4.377E+01	HL	/HREFF=	8.916E-01
X=	4.631E+01	HL	/HREFF=	8.932E-01
X=	4.866E+01	HL	/HREFF=	8.130E-01

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X=    5.139E+01  HL  /HREFF=   9.972E-01
X=    5.648E+01  HL  /HREFF=   9.449E-01
X=    6.156E+01  HL  /HREFF=   1.039E+00
X=    6.664E+01  HL  /HREFF=   1.050E+00
X=    7.172E+01  HL  /HREFF=   1.115E+00
X=    7.680E+01  HL  /HREFF=   1.212E+00
X=    8.188E+01  HL  /HREFF=   1.529E+00
X=    8.696E+01  HL  /HREFF=   1.784E+00
X=    9.204E+01  HL  /HREFF=   2.135E+00
X=    9.712E+01  HL  /HREFF=   2.142E+00
X=    1.022E+02  HL  /HREFF=   1.978E+00
X=    1.073E+02  HL  /HREFF=   1.635E+00
X=    1.124E+02  HL  /HREFF=   1.329E+00
X=    1.175E+02  HL  /HREFF=   1.145E+00
X=    1.226E+02  HL  /HREFF=   1.017E+00
X=    1.251E+02  HL  /HREFF=   9.748E-01
X=    1.276E+02  HL  /HREFF=   9.449E-01
X=    1.302E+02  HL  /HREFF=   8.921E-01
X=    1.327E+02  HL  /HREFF=   8.791E-01
X=    1.352E+02  HL  /HREFF=   8.496E-01

X=    4.755E+01  HL  /HREFF=   7.751E-01
X=    6.156E+01  HL  /HREFF=   8.636E-01
X=    8.695E+01  HL  /HREFF=   1.382E+00
X=    1.124E+02  HL  /HREFF=   1.174E+00
X=    1.251E+02  HL  /HREFF=   8.334E-01
B.L. TRANSITION DISTANCE =  81.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =  97.12 CM
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AMES 3.5 FT HWT TEST (132), C.3. BLUMER, IN-LINE RSI GAP RUN(75) 1973

TT	= 1.1[illegible]E+03(K)	GAP LENGTH =	30.480(CM)
PT	= 5.2[illegible]E+05(N/M2)	GAP WIDTH =	.127(CM)
HT	= 1.1665E+06(J/KG)	GAP DEPTH =	3.81[illegible](CM)
RE/METER	= 1.[illegible]21E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.130	QS =	8.4167E+04(W/M2)
RHO VEL	= 2.124[illegible]E+01(KG/M2-S)	MOD.POSITION=	4
HAW/HT	= 0.9[illegible] FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	[illegible]	[illegible]	6.44E-03	[illegible].10E-03	.953	6.759E-03	3.033E-04	2.873E-04	308.5				1.000
7	117.47	-.51	[illegible].00	4.56E+03	6.45E-03	6.10E-03	.969	6.655E-03	3.035E-04	2.874E-04	308.7				1.000
8	112.37	-.51	[illegible]	[illegible].52E+03	6.39E-03	6.05E-03	.971	6.578E-03	3.027E-04	2.848E-04	308.9				1.000
9	107.31	-.51	[illegible]	[illegible].49E+03	6.35E-03	6.01E-03	.970	6.546E-03	2.938E-04	2.830E-04	309.0				1.000
10	102.20	-.51	[illegible]	[illegible].56E+03	6.45E-03	6.11E-03	.957	6.736E-03	3.037E-04	2.876E-04	309.2				1.000
11	97.12	-.51	[illegible]	4.53E+03	6.41E-03	6.07E-03	.926	6.917E-03	3.016E-04	2.856E-04	309.4				1.000
12	92.04	-.51	[illegible]	[illegible]	6.51E-03	6.16E-03	.921	7.066E-03	3.065E-04	2.902E-04	309.9				1.000
13	86.96	-.51	[illegible]	4.56E+03	6.45E-03	6.11E-03	.895	7.212E-03	3.039E-04	2.878E-04	310.4				1.000
14	81.88	-.51	[illegible]	[illegible].75E+03	6.73E-03	6.37E-03	.920	7.316E-03	3.159E-04	3.001E-04	310.8				1.000
15	76.80	-.51	[illegible]	4.72E+03	6.40E-03	6.06E-03	.863	7.418E-03	3.014E-04	2.854E-04	311.3				1.000
16	71.72	-.51	[illegible]	4.59E+03	6.51E-03	6.16E-03	.865	7.519E-03	3.063E-04	2.908E-04	311.8				1.000
17	66.64	-.51	[illegible]	[illegible]	7.09E-03	6.72E-03	.892	7.956E-03	3.340E-04	3.162E-04	312.9				1.000
18	61.56	-.51	[illegible]	5.43E+03	7.73E-03	7.32E-03	.902	8.567E-03	3.640E-04	3.445E-04	314.4				1.000
19	56.48	-.51	0.00	5.65E+03	8.06E-03	7.63E-03	.889	9.069E-03	3.795E-04	3.592E-04	315.2				1.000
20	51.39	-.51	[illegible]	5.92E+03	8.44E-03	7.99E-03	.886	9.524E-03	3.975E-04	3.762E-04	315.4				1.000
21	48.86	-.51	[illegible]	6.27E+03	8.94E-03	8.46E-03	.914	9.774E-03	4.209E-04	3.983E-04	315.6				1.000
22	46.31	-.51	0.00	6.46E+03	9.21E-03	8.72E-03	.916	1.006E-02	4.338E-04	4.106E-04	315.6				1.000
23	43.77	-.51	[illegible]	6.56E+03	9.35E-03	8.85E-03	.925	1.034E-02	4.404E-04	4.169E-04	315.6				1.000
24	41.24	-.51	[illegible]	[illegible]	9.77E-03	9.25E-03	.920	1.051E-02	4.600E-04	4.354E-04	316.0				1.000
25	38.70	-.51	[illegible]	7.02E+03	1.00E-02	9.46E-03	.918	1.089E-02	4.704E-04	4.456E-04	315.2				1.000
103	39.97	1.52	[illegible]	[illegible]	9.52E-03	9.01E-03	.886	1.075E-02	4.482E-04	4.241E-04	319.4	9.52E-03	1.000	.886	.964
105	39.97	1.12	[illegible]	6.52E+03	9.35E-03	8.85E-03	.870	1.075E-02	4.403E-04	4.166E-04	319.3	9.35E-03	1.000	.870	.947
107	39.97	.51	[illegible]	[illegible]	9.12E-03	8.63E-03	.848	1.075E-02	4.292E-04	4.062E-04	318.9	9.1[illegible]E-03	1.000	.848	.923
108	39.97	.25	[illegible]	5.77E+03	8.26E-03	7.82E-03	.768	1.075E-02	3.889E-04	3.680E-04	318.0	8.26E-03	1.000	.768	.836
110	39.97	.76	.04	4.44E+03	6.34E-03	6.00E-03	.590	1.075E-02	2.994E-04	2.824E-04	317.0	6.34E-03	1.000	.590	.641
111	39.97	0.00	.15	3.[illegible]E+03	5.26E-03	[illegible].98E-03	.489	1.075E-02	2.477E-04	2.344E-04	316.6	5.26E-03	1.000	.489	.532
112	39.97	0.00	.25	2.[illegible]E+03	3.47E-03	3.29E-03	.323	1.075E-02	1.635E-04	1.547E-04	315.7	3.47E-03	1.000	.323	.351
113	39.97	[illegible]	.38	1.39E+03	1.98E-03	1.88E-03	.184	1.075E-02	9.331E-05	8.833E-05	315.1	1.98E-03	1.000	.184	.201
114	39.97	[illegible]	.64	3.31E+02	4.71E-04	4.46E-04	.044	1.075E-02	2.218E-05	2.100E-05	314.0	4.71E-04	1.000	.044	.048
115	39.97	[illegible]	.89	[illegible]E+01	7.08E-05	6.70E-05	.007	1.075E-02	3.332E-06	3.154E-06	313.0	7.08E-05	1.000	.007	.007
203	46.32	1.52	[illegible]	[illegible]	[illegible]	[illegible].23E-03	.865	1.005E-02	4.094E-04	3.875E-04	316.5	8.70E-03	1.000	.865	.944
205	46.32	1.12	[illegible]	[illegible]	8.69E-03	8.23E-03	.865	[illegible]	4.093E-04	3.874E-04	317.0	8.69E-03	1.000	.865	.944
207	46.32	.51	[illegible]	[illegible]	8.43E-03	7.35E-03	.835	1.005E-02	3.953E-04	3.742E-04	316.9	8.40E-03	1.000	.835	.91[illegible]
208	46.32	.25	[illegible]	[illegible]	7.65E-03	7.25E-03	.762	1.005E-02	3.606E-04	3.413E-04	316.3	7.66E-03	1.000	.762	.83[illegible]
210	46.32	.76	.04	[illegible]	5.74E-03	5.44E-03	.571	1.005E-02	2.704E-04	2.560E-04	315.5	5.74E-03	1.000	.571	.624
211	46.32	0.00	.15	3.37E+03	4.81E-03	4.55E-03	.476	1.005E-02	2.262E-04	2.141E-04	315.1	4.81E-03	1.000	.478	.52[illegible]
212	46.32	[illegible]	.25	2.3[illegible]E+03	3.27E-03	3.10E-03	.326	1.005E-02	1.541E-04	1.459E-04	314.4	3.27E-03	1.000	.326	.355
213	46.32	[illegible]	.38												
214	46.32	0.00	.64												
215	46.32	[illegible]	.39												

AMES 3.5 FT HWT TEST (132), 0.3, BLUMER, IN-LINE RSI GAP RUN(75) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	45.32	0.00	1.14	2.[illegible]E+02	2.94E-04	2.59E-04	.028	1.005E-02	1.335E-05	1.264E-05	310.0	2.84E-04	1.000	.026	.031
217	46.32	0.23	1.40	2.37E+00	3.36E-06	3.18E-06	.000	1.005E-02	1.583E-07	1.499E-07	310.4	2.36E-06	1.000	.000	.000
218	46.32	[illegible]	1.65												
219	46.32	0.00	1.90	1.7[illegible]E+01	2.49E-05	2.35E-05	.002	1.005E-02	1.173E-06	1.111E-06	310.2	2.49E-05	1.000	.002	.003
220	46.32	0.00	2.29												
306	56.48	.75	0.00												
307	56.48	.51	0.00	5.11E+03	7.28E-03	6.89E-03	.803	9.070E-03	3.427E-04	3.244E-04	315.4	7.28E-03	1.000	.803	.903
308	56.48	.23	0.00	4.51E+03	6.42E-03	6.08E-03	.706	9.069E-03	3.025E-04	2.863E-04	314.9	6.42E-03	1.000	.706	.797
309	56.48	.15	0.00	3.67E+03	5.22E-03	4.95E-03	.576	9.069E-03	2.460E-04	2.329E-04	314.4	5.22E-03	1.000	.576	.648
310	56.48	.10	.04	3.29E+03	4.68E-03	4.43E-03	.516	9.069E-03	2.204E-04	2.086E-04	314.0	4.68E-03	1.000	.516	.581
311	56.48	0.00	.15	2.63E+03	3.74E-03	3.54E-03	.412	9.069E-03	1.759E-04	1.665E-04	313.4	3.74E-03	1.000	.412	.464
312	56.48	0.00	.25	1.56E+03	2.22E-03	2.10E-03	.244	9.069E-03	1.043E-04	9.876E-05	312.4	2.22E-03	1.000	.244	.275
313	56.48	0.00	.38	7.19E+02	1.02E-03	9.65E-04	.112	9.069E-03	4.799E-05	4.543E-05	311.5	1.02E-03	1.000	.112	.126
314	56.48	0.00	.64	2.15E+02	3.05E-04	2.89E-04	.034	9.069E-03	1.437E-05	1.361E-05	311.9	3.05E-04	1.000	.034	.038
315	56.48	0.00	.89	8.63E+00	1.23E-05	1.17E-05	.001	9.069E-03	5.802E-07	5.493E-07	311.4	1.23E-05	1.000	.001	.002
316	56.48	0.00	1.14												
317	56.48	0.00	1.40	3.15E+00	4.49E-06	4.25E-06	.000	9.069E-03	2.114E-07	2.002E-07	310.5	4.49E-06	1.000	.000	.001
318	56.48	0.00	1.65												
319	56.48	0.00	1.90	4.81E+00	6.81E-06	6.45E-06	.001	9.069E-03	3.205E-07	3.035E-07	310.1	6.81E-06	1.000	.001	.001
320	56.48	0.00	2.29												
506	64.10	.75	0.00	4.76E+03	6.78E-03	6.42E-03	.820	8.266E-03	3.193E-04	3.023E-04	314.2	6.78E-03	1.000	.820	.915
507	64.10	.51	0.00	4.55E+03	6.48E-03	6.14E-03	.784	8.265E-03	3.052E-04	2.889E-04	313.9	6.48E-03	1.000	.784	.874
508	64.10	.25	0.00	4.27E+03	6.00E-03	5.68E-03	.726	8.264E-03	2.823E-04	2.673E-04	313.2	6.00E-03	1.000	.726	.809
509	64.10	.15	0.06	3.58E+03	5.09E-03	4.81E-03	.615	8.263E-03	2.394E-04	2.267E-04	312.1	5.09E-03	1.000	.615	.686
510	64.10	.04	.04	2.98E+03	4.24E-03	4.02E-03	.513	8.263E-03	1.997E-04	1.891E-04	312.7	4.24E-03	1.000	.513	.572
511	64.10	0.00	.15	2.77E+03	3.93E-03	3.72E-03	.476	8.263E-03	1.851E-04	1.752E-04	312.5	3.93E-03	1.000	.476	.530
512	64.10	0.00	.25	1.94E+03	2.75E-03	2.60E-03	.332	8.263E-03	1.293E-04	1.225E-04	312.1	2.75E-03	1.000	.332	.371
513	64.10	0.00	.38	1.11E+03	1.57E-03	1.49E-03	.190	8.263E-03	7.335E-05	6.992E-05	311.8	1.57E-03	1.000	.190	.212
514	64.10	0.00	.64	[illegible]E+02	3.94E-04	3.73E-04	.048	8.263E-03	1.854E-05	1.755E-05	311.1	3.94E-04	1.000	.048	.053
515	64.10	0.00	.89												
601	48.22	0.00	.25								311.39				
602	48.22	0.00	.48								311.15				
603	48.22	0.00	.91								310.67				
604	48.22	0.00	1.37								310.19				
605	48.22	0.00	1.95								309.66				

EDGE HEATING USED FOR HE
X= 3.87[illegible]E+01 HL /HREFF= 9.17[illegible]E-01
X= 4.124E+01 HL /HREFF= [illegible]E-01
X= 4.377E+01 HL /HREFF= [illegible]E-01
X= 4.631E+01 HL /HREFF= 9.15[illegible]E-01
X= 4.8[illegible]E+01 HL /HREFF= 9.144E-01

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X=   5.139E+01   HL   /HREFF=   [illegible]
X=   5.648E+01   HL   /HREFF=   8.887E-01
X=   6.156E+01   HL   /HREFF=   9.[illegible]23E-01
X=   6.664E+01   HL   /HREFF=   8.917E-01
X=   7.172E+01   HL   /HREFF=   8.053E-01
X=   7.680E+01   HL   /HREFF=   8.623E-01
X=   8.188E+01   HL   /HREFF=   9.2[illegible]E-01
X=   8.696E+01   HL   /HREFF=   8.949E-01
X=   9.204E+01   HL   /HREFF=   9.213E-01
X=   9.712E+01   HL   /HREFF=   9.262E-01
X=   1.022E+02   HL   /HREFF=   9.573E-01
X=   1.073E+02   HL   /HREFF=   9.695E-01
X=   1.124E+02   HL   /HREFF=   9.710E-01
X=   1.175E+02   HL   /HREFF=   9.656E-01
X=   1.226E+02   HL   /HREFF=   9.[illegible]2E-01

X=   3.997E+01   HL   /HREFF=   8.492E-01
X=   4.632E+01   HL   /HREFF=   8.354E-01
X=   5.648E+01   HL   /HREFF=   8.[illegible]25E-01
X=   6.410E+01   HL   /HREFF=   7.843E-01
B.L. TRANSITION DISTANCE =  51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT =*276.00 CM
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AMES 3.5 FT HWT TEST (1?2), C.?. BLUMER, IN-LINE RSI GAP RUN(76) 1973 PAGE 151

TT	= 1.135?E+03(K)	GAP LENGTH	= 30.48?(CM)
PT	= 1.?343E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2??E+06(J/KG)	GAP DEPTH	= 3.810(CM)
RE/METER	= 3.17?1E+06	ORIENTATION=	0.000(DEG)
MACH	= 5.10?	QS	= 1.2359E+05(W/M2)
RHO VEL	= 4.129?E+01(KG/M2-S)	MOD.POSITION=	4
HAW/HT	= ?.9?? FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	[illegible]	2.18E+04	2.96E-02	2.3?E-02	.957	3.?88E-02	7.159E-04	6.783E-04	312.2				1.000
7	117.47	-.51	[illegible]	1.79E+04	2.43E-02	2.30E-02	.957	2.536E-02	5.877E-04	5.569E-04	312.5				1.000
8	112.37	-.51	[illegible]	1.47E+04	1.94E-02	1.34E-02	.941	2.?66E-02	4.7?7E-04	4.459E-04	312.9				1.000
9	107.31	-.51	[illegible]	1.17E+04	1.59E-02	1.59E-02	.926	1.709E-02	3.832E-04	3.639E-04	313.1				1.000
10	102.20	-.51	[illegible]	9.?3E+03	1.32E-02	1.25E-02	.922	1.432E-02	3.195E-04	3.027E-04	313.5				1.000
11	97.12	-.51	[illegible]	7.4?E+03	1.01E-02	9.?3E-03	.833	1.216E-02	2.453E-04	2.324E-04	313.9				1.000
12	92.?4	-.51	[illegible]	?.9?E+03	9.37E-03	8.88E-03	.837	1.057E-02	2.263E-04	2.149E-04	314.3				1.000
13	86.96	-.51	[illegible]	5.97E+03	?.?4E-03	7.52E-03	.827	9.723E-03	1.347E-04	1.844E-04	314.9				1.000
14	81.83	-.51	[illegible]	?.?1E+03	7.29E-03	7.?8E-03	.856	9.222E-03	1.911E-04	1.810E-04	315.3				1.000
15	76.8?	-.51	[illegible]	?.77E+03	7.85E-03	7.43E-03	.857	9.158E-03	.9??E-04	1.800E-04	315.7				1.000
16	71.72	-.51	[illegible]	5.9?E+03	8.02E-03	7.53E-03	.854	9.393E-03	1.943E-04	1.840E-04	316.3				1.000
17	66.64	-.51	[illegible]	6.79E+03	9.26E-03	9.77E-03	.946	9.783E-03	2.242E-04	2.123E-04	317.6				1.000
18	61.56	-.51	[illegible]	[illegible]	1.00E-02	9.??E-03	.977	1.025E-02	2.425E-04	2.296E-04	319.2				1.000
19	56.48	-.51	[illegible]	7.42E+03	1.01E-02	9.61E-03	.932	1.088E-02	2.457E-04	2.327E-04	320.0				1.000
20	51.39	-.51	[illegible]	7.62E+03	1.04E-02	9.88E-03	.900	1.153E-02	2.525E-04	2.391E-04	320.1				1.000
21	48.96	-.51	[illegible]	?.1?E+03	1.12E-02	1.06E-02	.934	1.294E-02	2.702E-04	2.559E-04	320.5				1.000
22	46.31	-.51	[illegible]	8.32E+03	1.14E-02	1.08E-02	.925	1.232E-02	2.756E-04	2.612E-04	320.8				1.000
23	43.77	-.51	[illegible]	[illegible]	1.17E-02	1.10E-02	.920	1.269E-02	2.825E-04	2.675E-04	320.8				1.000
24	41.24	-.51	[illegible]	6.92E+03	1.22E-02	1.16E-02	.936	1.30?E-02	2.359E-04	2.802E-04	321.3				1.000
25	38.70	-.51	[illegible]	?.?2E+03	1.21E-02	1.14E-02	.899	1.343E-02	2.923E-04	2.768E-04	320.2				1.000
103	39.97	1.52	[illegible]	[illegible]	1.16E-02	1.10E-02	.874	1.325E-02	2.803E-04	2.653E-04	325.4	1.16E-02	1.000	.874	.933
105	39.97	1.02	[illegible]	[illegible]	1.13E-02	1.07E-02	.855	1.324E-02	2.743E-04	2.596E-04	326.9	1.13E-02	1.000	.855	.932
107	39.97	.51	[illegible]	[illegible]	1.1?E-02	1.?5E-02	.834	1.324E-02	2.67?E-04	2.531E-04	325.2	1.10E-02	1.000	.834	.905
109	39.97	.25	[illegible]	[illegible]	1.02E-02	9.64E-03	.769	1.324E-02	2.467E-04	2.335E-04	324.8	1.02E-02	1.000	.769	[illegible]
110	39.97	[illegible]	[illegible]	[illegible]	8.16E-03	7.73E-03	.616	1.324E-02	1.977E-04	1.871E-04	323.3	8.16E-03	1.000	.616	.67
111	39.97	[illegible]	.15	[illegible]	?.94E-03	6.57E-03	.524	1.324E-02	1.581E-04	1.591E-04	322.6	6.94E-03	1.000	.524	.57
112	39.97	[illegible]	.25	[illegible]	?.95E-03	4.69E-03	.374	1.324E-02	1.2??E-04	1.136E-04	321.2	4.95E-03	1.000	.374	.498
113	39.97	[illegible]	.38	2.2?E+03	3.10E-03	2.94E-03	.234	1.324E-02	7.508E-05	7.109E-05	320.0	3.10E-03	1.000	.234	.255
114	39.97	[illegible]	.64	[illegible]	1.12E-03	1.0?E-03	.085	1.324E-02	2.723E-05	2.579E-05	316.2	1.12E-03	1.000	.085	.093
115	39.97	[illegible]	.89	[illegible]	2.73E-04	2.59E-04	.021	1.324E-02	6.603E-06	6.256E-06	316.6	2.73E-04	1.000	.021	.022
203	46.32	1.52	[illegible]	[illegible]	1.?5E-02	9.96E-03	.857	1.23?E-02	2.552E-04	2.416E-04	322.5	1.?5E-02	1.000	.857	.926
205	46.32	1.02	[illegible]	[illegible]	1.?5E-02	9.93E-03	.852	1.230E-02	2.539E-04	2.404E-04	323.5	1.05E-02	1.000	.852	.922
207	46.32	.51	[illegible]	[illegible]	1.02E-02	9.67E-03	.830	1.231E-02	2.474E-04	2.342E-04	322.4	1.02E-02	1.000	.830	.89?
209	46.32	.25	[illegible]	[illegible]	?.44E-03	8.94E-03	.767	1.231E-02	2.2?8E-04	2.164E-04	321.8	5.44E-03	1.000	.767	.62?
210	46.32	[illegible]	[illegible]	[illegible]	?.45E-03	7.05E-03	.605	1.231E-02	1.803E-04	1.707E-04	320.5	7.45E-03	1.000	.605	.654
211	46.32	[illegible]	.15	[illegible]	6.23E-03	?.90E-03	.506	1.231E-02	1.507E-04	1.428E-04	321.0	6.23E-03	1.000	.596	.54?
212	46.32	[illegible]	.25	[illegible]	4.31E-03	4.08E-03	.35	1.231E-02	1.04?E-04	9.886E-05	319.0	4.31E-03	1.000	.350	.375
213	46.32	[illegible]	.38												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.89												

AMES 3.5 FT HWT TEST (132), D.B. BLUMER, IN-LINE RSI GAP RUN(76) 1973 PAGE 152

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.30	2.29												
306	56.48	.75	0.00												
307	56.48	.51	0.00	5.27E+03	8.58E-03	8.13E-03	.789	1.087E-02	2.079E-04	1.968E-04	320.8	8.58E-03	1.000	.789	.847
308	56.48	.25	0.00	5.34E+03	8.11E-03	7.59E-03	.746	1.088E-02	1.963E-04	1.859E-04	319.9	8.11E-03	1.000	.746	.880
309	56.48	.15	0.00	5.11E+03	6.98E-03	6.61E-03	.642	1.088E-02	1.690E-04	1.601E-04	319.0	6.98E-03	1.000	.642	.688
310	56.48	.04	.04	4.59E+03	6.27E-03	5.94E-03	.577	1.088E-02	1.519E-04	1.438E-04	318.5	6.27E-03	1.000	.577	.618
311	56.48	0.00	.15	3.68E+03	5.02E-03	4.76E-03	.462	1.088E-02	1.216E-04	1.152E-04	317.6	5.02E-03	1.000	.462	.495
312	56.48	0.00	.25	1.91E+03	2.60E-03	2.46E-03	.239	1.088E-02	6.293E-05	5.961E-05	315.9	2.60E-03	1.000	.239	.256
313	56.48	0.00	.38	1.06E+03	1.44E-03	1.36E-03	.132	1.088E-02	3.479E-05	3.295E-05	314.9	1.44E-03	1.000	.132	.142
314	56.48	0.00	.64	3.27E+02	4.44E-04	4.2 E-04	.041	1.088E-02	1.075E-05	1.019E-05	315.1	4.44E-04	1.000	.041	.044
315	56.48	0.00	.89	1.31E+02	1.78E-04	1.69E-04	.016	1.088E-02	4.32[illegible]E-06	4.081E-06	314.1	1.78E-04	1.000	.016	.018
316	56.48	0.00	1.14	1.15E+02	1.56E-04	1.48E-04	.014	1.088E-02	3.772E-06	3.573E-06	313.3	1.56E-04	1.000	.014	.015
317	56.48	0.00	1.40	1.33E+02	1.79E-04	1.70E-04	.016	1.088E-02	4.346E-06	4.117E-06	312.7	1.79E-04	1.000	.016	.018
318	56.48	0.00	1.65	6.63E+01	8.97E-05	8.50E-05	.008	1.038E-02	2.172E-06	2.058E-06	312.3	8.97E-05	1.000	.008	.009
319	56.48	0.00	1.90	1.52E+02	2.05E-04	1.95E-04	.019	1.088E-02	4.972E-06	4.711E-06	312.1	2.05E-04	1.000	.019	.020
320	56.48	0.00	2.29	1.10E+02	1.49E-04	1.41E-04	.014	1.088E-02	3.611E-06	3.422E-06	311.9	1.49E-04	1.000	.014	.015
506	64.10	.75	0.00	5.85E+03	8.00E-03	7.58E-03	.799	1.001E-02	1.936E-04	1.835E-04	319.8	8.00E-03	1.000	.799	.831
507	64.10	.51	0.00	5.66E+03	7.75E-03	7.34E-03	.775	1.001E-02	1.878E-04	1.776E-04	319.1	7.75E-03	1.000	.775	.8[illegible]
508	64.10	.25	0.00	5.51E+03	7.51E-03	7.12E-03	.750	1.001E-02	1.819E-04	1.723E-04	317.9	7.51E-03	1.000	.750	.780
509	64.10	.15	0.00	4.44E+03	6.04E-03	5.72E-03	.603	1.001E-02	1.453E-04	1.386E-04	316.2	6.04E-03	1.000	.603	.627
510	64.10	.04	.04	3.96E+03	5.40E-03	5.12E-03	.539	1.001E-02	1.309E-04	1.239E-04	317.2	5.40E-03	1.000	.539	.561
511	64.10	0.00	.15	4.02E+03	5.47E-03	5.18E-03	.547	1.001E-02	1.325E-04	1.255E-04	317.0	5.47E-03	1.000	.547	.568
512	64.10	0.00	.25	3.05E+03	4.15E-03	3.93E-03	.414	1.[illegible]E-02	1.005E-04	9.521E-05	316.4	4.15E-03	1.000	.414	.431
513	64.10	0.00	.38	1.95E+03	2.65E-03	2.51E-03	.264	1.[illegible]E-02	6.427E-05	6.069E-05	315.6	2.65E-03	1.000	.264	.275
514	64.10	0.00	.64	3.47E+02	4.72E-04	4.47E-04	.047	1.[illegible]E-02	1.142E-05	1.082E-05	314.6	4.72E-04	1.000	.047	.049
515	64.10	0.00	.89												
601	48.22	0.00	.25								314.12				
602	48.22	0.00	.46								313.34				
603	48.22	0.00	.91								312.58				
604	48.22	0.00	1.37								312.14				
605	48.22	0.00	1.89								311.15				

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 8.388E- 1
X= 4.124E+01 HL /HREFF= 9.7[illegible]E-01
X= 4.377E+01 HL /HREFF= 9.135E-01
X= 4.631E+01 HL /HREFF= 9.249E-01
X= 4.886E+01 HL /HREFF= 9.345E- 1

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X=     [illegible]      HL   /HREFF=    [illegible]
X=     5.648E+01   HL   /HREFF=    9.324E-01
X=     5.156E+01   HL   /HREFF=    9.797E-01
X=     6.664E+01   HL   /HREFF=    9.463E-01
X=     7.172E+01   HL   /HREFF=    8.942E-01
X=     7.680E+01   HL   /HREFF=    8.568E-01
X=     8.188E+01   HL   /HREFF=    8.577E-01
X=     8.696E+01   HL   /HREFF=    8.269E-01
X=     9.204E+01   HL   /HREFF=    8.864E-01
X=     9.712E+01   HL   /HREFF=    8.331E-01
X=     1.022E+02   HL   /HREFF=    9.215E-01
X=     1.073E+02   HL   /HREFF=    9.262E-01
X=     1.124E+02   HL   /HREFF=    9.406E-01
X=     1.175E+02   HL   /HREFF=    9.572E-01
X=     1.226E+02   HL   /HREFF=    9.574E-01

X=     3.997E+01   HL   /HREFF=    6.339E-01
X=     4.632E+01   HL   /HREFF=    8.371E-01
X=     5.648E+01   HL   /HREFF=    7.295E-01
X=     6.413E+01   HL   /HREFF=    7.746E-01
B.L. TRANSITION DISTANCE =   31.39 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.30 CM
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AMES 3.5 FT HWT TEST (152), C.B. BLUMER, IN-LINE RSI GAP FOR(77) 19[illegible]

TT	= 1.141E+03(K)	GAP LENGTH	= 30.480(CM)
PT	= 2.637E+06(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2391E+06(J/KG)	GAP DEPTH	= 3.810(CM)
RE/METER	= 5.42 E+06	ORIENTATION	= 0.00(DEG)
MACH	= 5.10	QS	= 1.7595E+05(W/M2)
RHO VEL	= 3.7[illegible]E+01(KG/M2-S)	MOD.POSITION	= 4
HAW/HT	= 0.90 FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
4	122.56	-.51	0.00	7.17E+04	6.94E-02	6.58E-02	.936	7.418E-02	8.337E-04	7.879E-04	315.4				1.000
7	117.47	-.51	0.00	7.16E+04	6.99E-02	6.62E-02	1.025	6.819E-02	8.360E-04	7.920E-04	315.6				1.000
8	112.77	-.51	0.00	[illegible]	6.99E-02	6.62E-02	1.175	5.945E-02	8.354E-04	7.914E-04	316.0				1.000
9	107.31	-.51	0.00	6.32E+04	7.21E-02	6.93E-02	1.473	4.891E-02	8.621E-04	8.167E-04	316.0				1.000
10	102.23	-.51	0.00	5.87E+04	7.96E-02	7.54E-02	2.014	3.952E-02	9.522E-04	9.020E-04	316.4				1.000
11	97.12	-.51	.00	[illegible]	[illegible]	7.63E-02	2.519	3.196E-02	9.636E-04	9.128E-04	316.6				1.000
12	92.04	-.51	0.00	[illegible]	7.96E-02	7.54E-02	3.093	2.573E-02	9.519E-04	9.017E-04	316.9				
13	86.96	-.51	0.00	5.46E+04	7.40E-02	7.01E-02	3.486	2.122E-02	9.053E-04	8.383E-04	317.3				
14	81.58	-.51	0.00	[illegible]	7.48E-02	7.08E-02	4.29[illegible]	1.742E-02	8.942E-04	8.473E-04	317.5				
15	76.80	-.51	0.00	[illegible]	6.90E-02	6.53E-02	4.565	1.511E-02	8.2[illegible]E-04	7.817E-04	317.8				
16	71.72	-.51	0.00	[illegible]	6.65E-02	6.30E-02	4.863	1.366E-02	7.953E-04	7.538E-04	318.0				
17	66.64	-.51	0.00	[illegible]	6.12E-02	5.80E-02	4.541	1.346E-02	7.323E-04	6.937E-04	313.7				
18	61.56	-.51	0.00	2.66E+04	3.64E-02	3.44E-02	2.613	1.392E-02	4.351E-04	4.119E-04	322.4				1.000
19	56.48	-.51	0.00	1.53E+04	2.12E-02	2.01E-02	1.440	1.472E-02	2.535E-04	2.400E-04	323.3				1.000
20	51.39	-.51	0.00	1.16E+04	1.51E-02	1.43E-02	.963	1.56[illegible]E-02	1.807E-04	1.711E-04	323.2				1.000
21	[illegible]	-.51	0.00	1.14E+04	1.57E-02	1.48E-02	.973	1.609E-02	1.973E-04	1.773E-04	323.4				1.000
22	46.31	-.51	.00	1.14E+04	1.56E-02	1.47E-02	.956	1.6[illegible]E-02	1.863E-04	1.764E-04	324.0				1.000
23	43.77	-.51	.00	1.16E+04	1.61E-02	1.53E-02	.964	1.672E-02	1.927E-04	1.825E-04	324.0				1.000
24	41.24	-.51	0.00	1.18E+04	1.62E-02	1.54E-02	.953	1.703E-02	1.942E-04	1.839E-04	324.7				1.000
25	38.70	-.51	0.00	1.11E+04	1.52E-02	1.44E-02	.879	1.735E-02	1.824E-04	1.727E-04	323.2				1.000
103	39.97	1.02	.00	1.11E+04	1.53E-02	1.45E-02	.888	1.721E-02	1.829E-04	1.730E-04	330.5	1.53E-02	1.000	.888	.970
105	39.97	1.02	0.00	[illegible]	1.51E-02	1.43E-02	.876	1.724E-02	1.802E-04	1.705E-04	332.6	1.51E-02	1.000	.876	.956
107	39.37	.51	[illegible]	[illegible]	1.45E-02	1.37E-02	.841	1.722E-02	1.73[illegible]E-04	1.637E-04	331.3	1.45E-02	1.000	.841	.918
109	39.97	.25	.00	[illegible]	1.31E-02	1.24E-02	.760	1.719E-02	1.562E-04	1.479E-04	329.2	1.31E-02	1.000	.760	.829
110	39.97	.04	.04	7.37E+03	1.04E-02	9.8[illegible]E-03	.602	1.719E-02	1.238E-04	1.172E-04	326.7	1.04E-02	1.000	.602	.657
111	39.97	0.00	.15	[illegible]	8.97E-03	8.49E-03	.522	1.719E-02	1.073E-04	1.015E-04	325.5	8.97E-03	1.000	.522	.570
112	39.97	0.00	.25	[illegible]	6.64E-03	6.29E-03	.386	1.719E-02	7.949E-05	7.526E-05	323.2	6.64E-03	1.000	.386	.422
113	39.97	0.00	.38	3.32E+03	4.53E-03	4.29E-03	.263	1.719E-02	5.415E-05	5.128E-05	321.4	4.53E-03	1.000	.263	.287
114	39.97	0.00	.64	1.28E+03	1.74E-03	1.65E-03	.101	1.719E-02	2.086E-05	1.976E-05	319.4	1.74E-03	1.000	.101	.111
115	39.97	0.00	.89	[illegible]	5.77E-04	5.47E-04	.034	1.719E-02	6.911E-06	6.544E-06	315.9	5.77E-04	1.000	.034	.037
203	46.32	1.52	.00	[illegible]	1.35E-02	1.28E-02	.824	1.641E-02	1.617E-04	1.532E-04	323.6	1.35E-02	1.000	.824	.867
205	46.32	1.02	0.00	[illegible]	1.32E-02	1.25E-02	.804	1.64[illegible]E-02	1.579E-04	[illegible]493E-04	327.4	1.32E-02	1.000	.894	.847
207	46.32	.51	0.00	9.46E+03	1.33E-02	1.23E-02	.791	1.640E-02	1.552E-04	[illegible]469E-04	326.4	1.30E-02	1.000	.791	.837
208	46.32	.25	0.00	[illegible]	1.35E-02	1.28E-02	.823	1.64[illegible]E-02	1.615E-04	1.529E-04	323.1	1.35E-02	1.000	.823	.86[illegible]
210	46.32	[illegible]	.04	[illegible]	1.24E-02	1.17E-02	.754	1.64[illegible]E-02	1.479E-04	1.40[illegible]E-04	322.8	1.24E-02	1.000	.754	.794
211	46.32	0.00	.15	3.39E+03	1.15E-02	1.08E-02	.699	1.640E-02	1.373E-04	1.298E-04	321.8	1.15E-02	1.000	.699	.73[illegible]
212	46.32	0.00	.25	[illegible]	9.26E-03	8.77E-03	.565	1.64[illegible]E-02	1.1[illegible]E-04	1.[illegible]49E-04	320.1	9.26E-03	1.000	.565	.59[illegible]
213	46.32	0.00	.38												
214	46.32	0.00	.64												
215	46.32	0.00	.89	1.0[illegible]E+03	1.37E-03	1.30E-03	.083	1.64[illegible]E-02	1.63[illegible]E-05	1.5[illegible]1E-05	314.3	1.37E-03	1.000	.083	.088

[illegible].5 FT HWT TEST (182), C.R. BLUMER, IN-LINE RSI GAP RUN(77) 1973

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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	7.45E+01	1.09E-04	9.40E-05	.026	1.04?E-02	1.137E-06	1.134E-06	309.1	1.08E-04	1.000	.986	.006
217	46.32	0.00	1.47												
218	46.32	0.30	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
306	56.48	.75	0.00	7.64E+00	1.07E-05	1.01E-05	.001	1.469E-02	1.279E-07	1.239E-07	339.7	1.07E-05	1.000	.001	.001
307	56.48	.51	0.50	1.04E+04	1.46E-02	1.30E-02	.991	1.470E-02	1.743E-04	1.658E-04	323.3	1.46E-02	1.000	.991	.689
308	56.48	.25	[illegible]	1.3?E+04	2.05E-02	1.34E-02	1.396	1.470E-02	2.456E-04	2.325E-04	321.7	2.05E-02	1.000	1.396	.976
309	56.48	.13	0.00	1.60E+04	2.18E-02	2.30E-02	1.479	1.470E-02	2.612E-04	2.464E-04	319.9	2.18E-02	1.000	1.479	1.028
310	56.48	.04	.24	1.58E+04	2.14E-02	2.03E-02	1.457	1.471E-02	2.564E-04	2.428E-04	318.8	2.14E-02	1.000	1.457	1.012
311	56.48	0.00	.15	1.4?E+04	1.95E-02	1.85E-02	1.327	1.471E-02	2.334E-04	2.211E-04	316.7	1.95E-02	1.000	1.327	.922
312	56.48	0.00	.25	1.16E+04	1.59E-02	1.51E-02	1.084	1.471E-02	1.9?7E-04	1.807E-04	314.0	1.59E-02	1.000	1.084	.752
313	56.48	0.00	.38	9.61E+03	1.29E-02	1.23E-02	.880	1.471E-02	1.547E-04	1.466E-04	311.4	1.29E-02	1.000	.880	.611
314	56.48	0.00	.64	?.39E+03	6.74E-03	6.38E-03	.458	1.471E-02	8.059E-05	7.635E-05	312.6	6.74E-03	1.000	.458	.318
315	56.48	0.00	.89	2.17E+03	2.93E-03	2.78E-03	.199	1.471E-02	3.504E-05	3.329E-05	311.8	2.93E-03	1.000	.199	.138
316	56.48	0.00	1.14	1.?9E+03	1.46E-03	1.39E-03	.100	1.471E-02	1.752E-05	1.660E-05	310.8	1.46E-03	1.000	.100	.069
317	56.48	0.0?	1.4?	?.3?E+02	5.85E-04	5.54E-04	.040	1.471E-02	6.996E-06	6.630E-06	309.7	5.85E-04	1.000	.040	.028
318	56.48	0.00	1.65	1.42E+02	1.91E-04	1.81E-04	.013	1.471E-02	2.299E-06	2.169E-06	309.3	1.91E-04	1.000	.013	.009
319	56.48	0.00	1.90	1.00E+02	1.34E-04	1.27E-04	.009	1.471E-02	1.606E-06	1.522E-06	308.8	1.34E-04	1.000	.009	.006
320	56.48	0.00	2.29												
506	64.10	.76	0.00	1.77E+04	2.42E-02	2.29E-02	1.776	1.362E-02	2.893E-04	2.740E-04	322.4	2.42E-02	1.000	1.776	.497
507	64.10	.51	.00	2.74E+04	3.20E-02	3.03E-02	2.346	1.364E-02	3.826E-04	3.623E-04	321.0	3.20E-02	1.000	2.346	.656
508	64.10	.25	0.00	2.97E+04	3.99E-02	3.78E-02	2.924	1.365E-02	4.774E-04	4.522E-04	318.9	3.99E-02	1.000	2.924	.818
509	64.10	.15	0.00	3.?7E+04	4.11E-02	3.90E-02	3.011	1.366E-02	4.919E-04	4.660E-04	316.4	4.11E-02	1.000	3.011	
510	64.10	.0?	.0?	2.?5E+04	4.07E-02	3.85E-02	2.975	1.366E-02	4.863E-04	4.606E-04	317.9	4.07E-02	1.000	2.975	.832
511	64.10	0.00	.15	2.9?E+04	4.01E-02	3.90E-02	2.932	1.367E-02	4.794E-04	4.540E-04	317.0	4.01E-02	1.000	2.932	.820
512	64.10	0.00	.25	2.6?E+04	3.64E-02	3.45E-02	2.662	1.367E-02	4.351E-04	4.122E-04	316.7	3.64E-02	1.000	2.662	.744
513	64.10	0.00	.38	2.2?E+04	3.05E-02	2.89E-02	2.234	1.367E-02	3.653E-04	3.460E-04	315.5	3.05E-02	1.000	2.234	.625
514	64.10	0.00	.64	1.3?E+04	1.76E-02	1.67E-02	1.286	1.367E-02	2.103E-04	1.992E-04	313.5	1.76E-02	1.000	1.286	.360
515	64.10	0.00	.89	6.77E+03	9.06E-03	8.59E-03	.663	1.367E-02	1.084E-04	1.027E-04	311.8	9.06E-03	1.000	.663	.185
601	48.22	0.00	.25								312.32				
602	48.22	0.00	.48								310.64				
603	48.22	0.00	.91								309.19				
604	48.22	0.00	1.37								307.65				
605	48.22	0.00	1.89								306.15				

EDGE HEATING USED FOR HE
X= 3.877E+01 HL /HREFF= 8.785E-01
X= 4.124E+01 HL /HREFF= 9.?33E-01
X= 4.377E+01 HL /HREFF= 9.676E-01
X= 4.631E+01 HL /HREFF= 9.496E-01
X= 4.886E+01 HL /HREFF= 9.731E-01

X=	5.139E+01	HL	/HREFF=	9.[illegible]E-01
X=	5.648E+01	HL	/HREFF=	1.440E+00
X=	6.156E+01	HL	/HREFF=	2.313E+00
X=	6.664E+01	HL	/HREFF=	4.541E+00
X=	7.172E+01	HL	/HREFF=	4.883E+00
X=	7.680E+01	HL	/HREFF=	4.555E+00
X=	8.188E+01	HL	/HREFF=	4.23[illegible]E+00
X=	8.696E+01	HL	/HREFF=	3.486E+00
X=	9.204E+01	HL	/HREFF=	3.[illegible]93E+00
X=	9.712E+01	HL	/HREFF=	2.519E+00
X=	1.022E+02	HL	/HREFF=	2.014E+00
X=	1.073E+02	HL	/HREFF=	1.473E+00
X=	1.124E+02	HL	/HREFF=	1.17[illegible]E+00
X=	1.175E+02	HL	/HREFF=	1.025E+00
X=	1.226E+02	HL	/HREFF=	9.361E-01
X=	3.997E+01	HL	/HREFF=	8.412E-01
X=	4.632E+01	HL	/HREFF=	7.911E-01
X=	5.648E+01	HL	/HREFF=	9.912E-01
X=	6.410E+01	HL	/HREFF=	2.346E+00

B.L. TRANSITION DISTANCE = 38.73 CM
FULLY TURBULENT B.L. CONDITIONS AT = 71.72 CM

[illegible] 3.5 FT HWT TEST (1A2), [illegible], BLUMER, IN-LINE RSI GAP RUN(78) 1973 PAGE 155

TT	= 1.1019E+03(K)	GAP LENGTH =	30.48(CM)
PT	= 5.2397E+05(N/M2)	GAP WIDTH =	.127(CM)
HT	= 1.1033E+06(J/KG)	GAP DEPTH =	3.810(CM)
RE/METER	= 1.7717E+06	ORIENTATION=	5.000(DEG)
MACH	= 5.150	QS =	8.3544E+04(W/M2)
RHO VEL	= 2.1437E+01(KG/M2-S)	MOD.POSITION=	4
HAW/HT	= 1.970 FOR HT		
HAW/HT	= 0.674 FOR HL		
HLCC	= HL(2ND. ORDER CONC.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	[illegible]	[illegible]	.879	7.532E-03	3.387E-04	2.922E-04	314.5				1.000
17	66.64	-.51	[illegible]	[illegible]	6.90E-03	6.93E-03	.865	7.969E-03	3.217E-04	3.045E-04	314.9				1.000
18	61.56	-.51	[illegible]	[illegible]	7.24E-03	6.95E-03	.843	[illegible]	3.376E-04	3.195E-04	315.7				1.000
19	56.48	-.51	[illegible]	1.22E+03	7.49E-03	7.08E-03	.823	9.085E-03	3.498E-04	3.301E-04	316.0				1.000
20	51.39	-.51	[illegible]	[illegible]	7.93E-03	7.51E-03	.831	9.544E-03	3.701E-04	3.593E-04	316.2				1.000
21	48.86	-.51	[illegible]	5.88E+03	8.43E-03	7.98E-03	.901	9.795E-03	3.932E-04	3.722E-04	316.4				1.000
22	46.31	-.51	[illegible]	[illegible]	8.71E-03	8.24E-03	.364	1.008E-02	4.052E-04	3.844E-04	316.7				1.000
23	43.77	-.51	[illegible]	6.17E+03	8.85E-03	8.37E-03	.854	1.036E-02	4.128E-04	3.906E-04	316.7				1.000
24	41.24	-.51	[illegible]	[illegible]	9.34E-03	3.34E-03	.878	1.064E-02	4.357E-04	4.123E-04	317.1				1.000
25	38.70	-.51	[illegible]	[illegible]	9.81E-03	9.29E-03	.898	1.092E-02	4.574E-04	4.329E-04	316.5				1.000
41	71.72	[illegible]	.25	1.01E+03	1.44E-03	1.37E-03	.192	7.533E-03	6.733E-05	6.374E-05	312.8				.218
42	66.64	[illegible]	.25	[illegible]	2.37E-03	2.24E-03	.297	7.971E-03	1.104E-04	1.045E-04	313.3				.343
43	61.56	[illegible]	.25	1.36E+03	1.93E-03	1.84E-03	.227	8.581E-03	9.092E-05	8.606E-05	314.4				.269
44	56.48	.33	.25	1.57E+03	2.25E-03	2.13E-03	.248	9.085E-03	1.049E-04	9.930E-05	315.0				.301
45	51.39	[illegible]	.25	1.56E+03	2.20E-03	2.14E-03	.237	9.543E-03	1.336E-04	9.592E-05	314.9				.285
46	48.86	[illegible]	.25	1.56E+03	2.23E-03	2.11E-03	.226	9.793E-03	1.341E-04	9.858E-05	315.0				.265
47	46.31	[illegible]	.25	1.72E+03	2.46E-03	2.33E-03	.244	1.007E-02	1.147E-04	1.085E-04	315.3				.282
48	43.77	[illegible]	.25	[illegible]	2.34E-03	2.22E-03	.226	1.035E-02	1.392E-04	1.034E-04	315.3				.265
49	41.24	[illegible]	.25	1.97E+03	2.81E-03	2.36E-03	.265	1.063E-02	1.313E-04	1.243E-04	315.8				.301
50	38.70	[illegible]	.25	2.09E+03	2.98E-03	2.92E-03	.273	1.091E-02	1.392E-04	1.317E-04	315.1				.304
103	39.97	1.52	[illegible]	[illegible]	9.33E-03	8.83E-03	.867	1.077E-02	4.354E-04	4.120E-04	320.4	9.33E-03	1.000	.867	.976
105	39.97	1.02	[illegible]	6.34E+03	9.16E-03	8.56E-03	.851	1.077E-02	4.272E-04	4.042E-04	321.3	9.16E-03	1.000	.851	.957
107	39.97	.51	[illegible]	[illegible]	9.46E-03	[illegible]	.878	1.077E-02	4.411E-04	4.173E-04	320.8	9.46E-03	1.000	.878	.908
109	39.97	.25	[illegible]	[illegible]	9.19E-03	[illegible]	.853	1.077E-02	4.267E-04	4.056E-04	319.9	9.19E-03	1.000	.853	.961
110	39.97	.14	[illegible]	5.13E+03	7.38E-03	6.98E-03	.685	1.077E-02	3.441E-04	3.256E-04	318.8	7.38E-03	1.000	.685	.771
111	39.97	[illegible]	.13	[illegible]	6.16E-03	[illegible]	.572	1.077E-02	2.873E-04	2.721E-04	318.3	6.16E-03	1.000	.572	.644
112	39.97	[illegible]	[illegible]	[illegible]	4.19E-03	3.98E-03	.389	1.077E-02	1.911E-04	1.808E-04	317.3	4.19E-03	1.000	.389	.428
113	39.97	[illegible]	.38	[illegible]	2.36E-03	2.23E-03	.219	1.077E-02	1.099E-04	1.040E-04	316.6	2.36E-03	1.000	.219	.246
114	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.059	1.077E-02	2.94[illegible]E-05	2.789E-05	315.4	6.32E-04	1.000	.059	.066
115	39.97	[illegible]	[illegible]	[illegible]	1.35E-04	1.28E-04	.013	1.077E-02	6.32[illegible]E-06	5.983E-06	314.3	1.33E-04	1.000	.013	.014
203	46.32	1.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.077E-02	[illegible]	3.741E-04	315.1	6.47E-03	1.000	.641	.674
205	46.32	1.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.1[illegible]E-04	3.885E-04	318.7	8.80E-03	1.000	.874	1.011
207	46.32	.51	[illegible]	[illegible]	[illegible]	[illegible]	.397	1.077E-02	4.21[illegible]E-04	3.987E-04	318.4	9.03E-03	1.000	.897	1.03[illegible]
208	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.6[illegible]E-04	[illegible]	317.6	7.93E-03	1.000	.787	.91[illegible]
210	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.624E-04	2.483E-04	[illegible]	5.62E-03	1.000	.558	.646
211	46.32	[illegible]	.15	[illegible]	[illegible]	[illegible]	.462	[illegible]	2.172E-04	2.056E-04	316.4	4.66E-03	1.000	.462	.53[illegible]
212	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.311	[illegible]	1.4[illegible]E-04	1.363E-04	315.7	3.13E-03	1.000	.311	.366
213	46.32	[illegible]	[illegible]												
214	46.32	[illegible]	[illegible]												
215	46.32	[illegible]	.19												

AMES 3.5 FT HWT TEST (1?2), C.B. BLUMER, IN-LINE RSI GAP RUN(73) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.16												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29	2.41E+01	3.41E-05	3.23E-05	.003	1.007E-02	1.592E-06	1.507E-06	311.0	3.41E-05	1.000	.003	.304
306	56.49	.76	0.00												
307	56.48	.51	0.00	4.96E+03	7.11E-03	6.73E-03	.783	9.086E-03	3.319E-04	3.141E-04	316.8	7.11E-03	1.000	.783	.951
308	56.48	.25	0.00	4.42E+03	6.34E-03	6.00E-03	.698	9.085E-03	2.955E-04	2.798E-04	316.1	6.34E-03	1.000	.698	.848
309	56.49	.15	0.00	3.6[illegible]E+03	5.22E-03	4.94E-03	.574	9.085E-03	2.437E-04	2.303E-04	315.6	5.22E-03	1.000	.574	.697
310	56.45	.14	.04	3.26E+03	4.66E-03	4.41E-03	.513	9.085E-03	2.174E-04	2.058E-04	315.3	4.66E-03	1.000	.513	.623
311	56.48	0.00	.15												
312	56.48	0.00	.25	1.[illegible]E+03	2.25E-03	2.13E-03	.248	9.085E-03	1.052E-04	9.956E-05	313.5	2.25E-03	1.000	.248	.302
313	56.48	0.00	.38	8.[illegible]E+02	1.21E-03	1.15E-03	.133	9.085E-03	5.654E-05	5.353E-05	312.5	1.21E-03	1.000	.133	.162
314	56.48	0.00	.64	1.93E+02	2.75E-04	2.60E-04	.030	9.085E-03	1.284E-05	1.215E-05	312.9	2.75E-04	1.000	.030	.037
315	56.48	0.00	.89	2.38E+00	3.39E-06	3.21E-06	.000	9.085E-03	1.591E-07	1.497E-07	312.4	3.39E-06	1.000	.000	.000
316	56.48	0.00	1.14	4.47E+01	6.37E-05	6.03E-05	.007	9.085E-03	2.973E-06	2.814E-06	311.9	6.37E-05	1.000	.007	.009
317	56.48	0.00	1.40												
318	56.48	0.00	1.65												
319	56.48	0.00	1.90												
320	56.48	0.00	2.29												
406	59.02	.76	0.00	5.[illegible]E+03	7.17E-03	6.78E-03	.809	8.858E-03	3.344E-04	3.165E-04	316.7	7.17E-03	1.000	.809	.971
407	59.02	.51	0.00	5.[illegible]E+03	7.26E-03	6.87E-03	.820	8.857E-03	3.387E-04	3.206E-04	316.3	7.26E-03	1.000	.820	.984
408	59.02	.25	0.00	4.56E+03	6.53E-03	6.18E-03	.737	8.857E-03	3.046E-04	2.883E-04	315.5	6.53E-03	1.000	.737	.885
409	59.02	.15	0.00	3.97E+03	5.68E-03	5.37E-03	.641	8.856E-03	2.648E-04	2.506E-04	314.6	5.68E-03	1.000	.641	.769
410	59.02	.04	.04	3.23E+03	4.62E-03	4.37E-03	.521	8.856E-03	2.153E-04	2.038E-04	314.6	4.62E-03	1.000	.521	.626
411	59.02	0.00	.15	2.79E+03	3.98E-03	3.77E-03	.450	8.856E-03	1.859E-04	1.759E-04	314.4	3.98E-03	1.000	.450	.540
412	59.02	0.00	.25	1.66E+03	2.37E-03	2.25E-03	.268	8.856E-03	1.106E-04	1.047E-04	313.9	2.37E-03	1.000	.268	.321
413	59.02	0.00	.38	9.86E+02	1.41E-03	1.33E-03	.159	8.856E-03	6.555E-05	6.215E-05	313.6	1.41E-03	1.000	.159	.191
414	59.02	0.00	.64	2.[illegible]E+02	2.95E-04	2.39E-04	.033	8.856E-03	1.379E-05	1.309E-05	312.9	2.95E-04	1.000	.033	.040
415	59.02	0.00	.89												
601	48.22	0.00	.25								328.31				
602	48.22	0.00	.48								328.16				
603	48.22	0.00	.91								311.52				
604	48.22	0.00	1.37								311.08				
605	48.22	0.00	1.89								310.38				

EDGE HEATING USED FOR HE

X= 3.870E+01 HL /HREFF= 6.934E-01
X= 4.124E+01 HL /HREFF= 8.722E-01
X= 4.377E+01 HL /HREFF= 8.[illegible]E-01
X= 4.631E+01 HL /HREFF= 8.841E-01
X= 4.886E+01 HL /HREFF= 8.[illegible]7E-01
X= 5.139E+01 HL /HREFF= 8.313E-01
X= 5.648E+01 HL /HREFF= 8.231E-01
X= 6.156E+01 HL /HREFF= 8.43[illegible]E-01
X= 6.664E+01 HL /HREFF= 8.[illegible]E-01
X= 7.172E+01 HL /HREFF= 8.787E-01

X= 3.937E+01 HL /HREFF= 6.79[illegible]E-01
X= 4.672E+01 HL /HREFF= 8.506E-01
X= 5.648E+01 HL /HREFF= 7.[illegible]E-01
X= 5.902E+01 HL /HREFF= 8.138E-01

B.L. TRANSITION DISTANCE = 56.48 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.[illegible] CM

AMES 3.5 FT HWT TEST (182), C.E. BLUMER, IN-LINE RSI GAP RUN(79) 1373 PAGE 157

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TT         = 1.1393E+03(K)             GAP LENGTH = 3[illegible].49[illegible](CM)
PT         = 1.0368E+06(N/M2)          GAP WIDTH  =   .127(CM)
HT         = 1.2[illegible]E+06(J/KG)           GAP DEPTH  =  3.81[illegible](CM)
RE/METER   = 3.1836E+06                ORIENTATION=  5.[illegible](DEG)
MACH       = 5.1[illegible]                    QS         =  1.2317E+05(W/M2)
RHO VEL    = 4.137[illegible]E+01(KG/M2-S)       MOD.POSITION=  4
HAW/HT     = [illegible].999 FOR HT
HAW/HT     = [illegible].874 FOR HL
HLCC       = HL(2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.31	[illegible]	5.90E+03	8.03E-03	7.60E-03	.854	9.400E-03	1.943E-04	1.838E-04	316.8				1.000
17	66.64	-.31	[illegible]	6.28E+03	8.55E-03	9.10E-03	.873	9.790E-03	2.066E-04	1.957E-04	317.8				1.000
18	61.56	-.31	[illegible]	6.67E+03	9.05E-03	8.37E-03	.883	1.026E-02	2.168E-04	2.072E-04	319.3				1.000
19	56.48	-.51	[illegible]	6.91E+03	9.44E-03	8.94E-03	.867	1.089E-02	2.282E-04	2.161E-04	319.8				1.000
20	51.39	-.51	[illegible]	7.22E+03	9.86E-03	9.34E-03	.851	1.159E-02	2.363E-04	2.257E-04	319.9				1.000
21	48.86	-.31	[illegible]	7.62E+03	1.04E-02	9.85E-03	.871	1.195E-02	2.515E-04	2.382E-04	320.2				1.000
22	46.31	-.51	[illegible]	7.77E+03	1.06E-02	1.01E-02	.862	1.232E-02	2.568E-04	2.432E-04	320.6				1.000
23	43.77	-.51	[illegible]	8.[illegible]3E+03	1.10E-02	1.04E-02	.865	1.270E-02	2.654E-04	2.513E-04	320.5				1.000
24	41.24	-.51	[illegible]	8.67E+03	1.19E-02	1.12E-02	.9[illegible]6	1.307E-02	2.868E-04	2.716E-04	321.1				1.000
25	38.70	-.51	[illegible]	8.99E+03	1.23E-02	1.16E-02	.914	1.344E-02	2.970E-04	2.812E-04	320.0				1.000
41	71.72	[illegible]	.25	1.29E+03	1.74E-03	1.65E-03	.185	9.394E-03	4.199E-05	3.978E-05	313.9				.217
42	66.54	[illegible]	.25	1.79E+03	2.42E-03	2.30E-03	.248	9.786E-03	5.856E-05	5.548E-05	314.9				.284
43	61.56	[illegible]	.25	1.65E+03	2.25E-03	2.13E-03	.219	1.025E-02	5.434E-05	5.147E-05	317.2				.248
44	56.48	[illegible]	.25	2.[illegible]E+03	2.78E-03	2.63E-03	.255	1.088E-02	6.711E-05	6.356E-05	318.0				.284
45	51.39	[illegible]	.25	1.92E+03	2.62E-03	2.48E-03	.226	1.158E-02	6.333E-05	5.998E-05	317.7				.266
46	48.96	[illegible]	.25	1.89E+03	2.57E-03	2.43E-03	.215	1.194E-02	6.211E-05	5.883E-05	317.8				.247
47	46.31	[illegible]	.25	2.10E+03	2.87E-03	2.71E-03	.233	1.232E-02	6.927E-05	6.560E-05	318.4				.270
48	43.77	[illegible]	.25	2.46E+03	3.35E-03	3.18E-03	.264	1.269E-02	8.105E-05	7.677E-05	318.2				.306
49	41.24	[illegible]	.25	3.51E+03	4.78E-03	4.53E-03	.366	1.307E-02	1.156E-04	1.095E-04	319.9				.403
50	38.70	[illegible].03	.25	2.63E+03	3.58E-03	3.39E-03	.266	1.344E-02	8.643E-05	8.192E-05	317.7				.291
103	39.97	1.52	[illegible]	8.91E+03	1.23E-02	1.16E-02	.926	1.325E-02	2.966E-04	2.808E-04	325.5	1.23E-02	1.000	.926	1.016
105	39.97	1.02	[illegible]	8.63E+03	1.19E-02	1.13E-02	.898	1.325E-02	2.876E-04	2.722E-04	327.6	1.19E-02	1.000	.898	.985
107	39.97	.51	[illegible]	8.92E+03	1.23E-02	1.16E-02	.928	1.325E-02	2.971E-04	2.813E-04	326.3	1.23E-02	1.000	.928	1.018
108	39.97	.25	[illegible]	8.90E+03	1.22E-02	1.16E-02	.923	1.321E-02	2.937E-04	2.799E-04	324.9	1.22E-02	1.000	.923	1.013
110	39.97	[illegible]	[illegible]	7.50E+03	1.03E-02	9.75E-03	.777	1.325E-02	2.453E-04	2.355E-04	323.3	1.03E-02	1.000	.777	.852
111	39.97	[illegible]	.15	[illegible]	8.85E-03	8.38E-03	.668	1.325E-02	2.133E-04	2.025E-04	322.5	8.85E-03	1.000	.668	.733
112	39.97	[illegible]	.25	4.67E+03	6.37E-03	6.03E-03	.481	1.325E-02	1.539E-04	1.458E-04	321.0	6.37E-03	1.000	.481	.527
113	39.97	[illegible]	.38	2.87E+03	3.93E-03	3.72E-03	.296	1.325E-02	9.488E-05	8.985E-05	319.8	3.93E-03	1.000	.296	.325
114	39.97	[illegible]	.64	[illegible]	1.14E-03	1.08E-03	.086	1.325E-02	2.764E-05	2.618E-05	317.5	1.14E-03	1.000	.086	.095
115	39.97	[illegible]	.89	[illegible]	2.94E-04	2.78E-04	.022	1.325E-02	7.102E-06	6.727E-06	316.3	2.94E-04	1.000	.022	.024
203	46.32	1.52	[illegible]	[illegible]	1.09E-02	1.03E-02	.886	1.231E-02	2.635E-04	2.495E-04	321.5	1.09E-02	1.000	.886	1.028
205	46.32	1.02	[illegible]	[illegible]	1.15E-02	1.09E-02	.933	1.231E-02	2.775E-04	2.628E-04	322.9	1.15E-02	1.000	.933	1.082
207	46.32	.51	[illegible]	9.32E+03	1.28E-02	1.21E-02	1.038	1.231E-02	3.0[illegible]3E-04	2.924E-04	322.5	1.28E-02	1.000	1.038	1.20[illegible]
208	46.32	.25	[illegible]	[illegible]	1.10E-02	1.04E-02	.895	1.232E-02	2.6[illegible]E-04	2.523E-04	321.7	1.10E-02	1.000	.895	1.036
210	46.32	[illegible]	[illegible]	5.61E+03	7.66E-03	7.26E-03	.622	1.232E-02	1.852E-04	1.754E-04	320.2	7.66E-03	1.000	.622	.722
211	46.32	[illegible]	.15	4.63E+03	6.32E-03	5.98E-03	.513	1.232E-02	1.527E-04	1.446E-04	319.6	6.32E-03	1.000	.513	.597
212	46.32	[illegible]	.2[illegible]	[illegible]	4.28E-03	4.06E-03	.348	1.232E-02	1.[illegible]E-04	9.8[illegible]1E-05	318.5	4.28E-03	1.000	.348	.483
213	46.32	[illegible]	.38												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.89												

AMES 3.5 FT HWT TEST (152), C.P. BLUMER, IN-LINE RSI GAP RUN (79) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
306	56.48	.76	0.00	7.61E+00	1.07E-05	1.01E-05	.001	1.088E-02	2.591E-07	2.450E-07	330.7	1.07E-05	1.000	.001	.001
307	56.48	.51	0.00	8.01E+03	9.31E-03	8.82E-03	.856	1.088E-02	2.251E-04	2.131E-04	320.7	9.31E-03	1.000	.856	.907
308	56.48	.25	0.00	[illegible]	8.72E-03	8.26E-03	.801	1.088E-02	2.107E-04	1.996E-04	319.7	8.72E-03	1.000	.801	.924
309	56.48	.15	0.00	6.42E+03	7.39E-03	7.00E-03	.679	1.088E-02	1.796E-04	1.691E-04	318.8	7.39E-03	1.000	.679	.783
310	56.48	.04	.04	4.79E+03	6.52E-03	6.17E-03	.599	1.088E-02	1.575E-04	1.492E-04	318.1	6.52E-03	1.000	.599	.691
311	56.48	0.00	.10												
312	56.48	0.00	.25	2.26E+03	3.10E-03	2.94E-03	.285	1.088E-02	7.493E-05	7.098E-05	315.1	3.10E-03	1.000	.285	.329
313	56.48	0.00	.38	1.21E+03	1.64E-03	1.56E-03	.151	1.088E-02	3.974E-05	3.765E-05	314.3	1.64E-03	1.000	.151	.174
314	56.48	0.00	.64	[illegible]E+02	4.16E-04	3.94E-04	.038	1.088E-02	1.004E-05	9.514E-06	314.4	4.16E-04	1.000	.038	.044
315	56.48	0.00	.89	1.66E+01	2.25E-05	2.13E-05	.002	1.088E-02	5.436E-07	5.150E-07	313.6	2.25E-05	1.000	.002	.002
316	56.48	0.00	1.14												
317	56.48	0.00	1.40												
318	56.48	0.00	1.65												
319	56.48	0.00	1.90	1.44E+01	1.94E-05	1.84E-05	.002	1.088E-02	4.691E-07	4.445E-07	311.4	1.94E-05	1.000	.002	.002
320	56.48	0.00	2.29	7.11E+01	9.61E-05	9.10E-05	.009	1.088E-02	2.321E-06	2.200E-06	311.2	9.61E-05	1.000	.009	.010
506	64.10	.76	0.00	6.67E+03	8.97E-03	8.50E-03	.896	1.002E-02	2.168E-04	2.053E-04	319.7	8.97E-03	1.000	.896	1.020
507	64.10	.51	0.00	6.63E+03	8.91E-03	8.44E-03	.890	1.002E-02	2.154E-04	2.040E-04	319.6	8.91E-03	1.000	.890	1.013
508	64.10	.25	0.00	[illegible]	8.04E-03	7.62E-03	.803	1.002E-02	1.944E-04	1.841E-04	317.7	8.04E-03	1.000	.803	.915
509	64.10	.15	0.00	4.64E+03	6.30E-03	5.97E-03	.629	1.002E-02	1.523E-04	1.443E-04	316.0	6.30E-03	1.000	.629	.717
510	64.10	.04	.04	3.88E+03	5.27E-03	5.00E-03	.526	1.002E-02	1.275E-04	1.207E-04	316.4	5.27E-03	1.000	.526	.600
511	64.10	0.00	.15	3.64E+03	4.95E-03	4.69E-03	.494	1.002E-02	1.197E-04	1.134E-04	316.4	4.95E-03	1.000	.494	.563
512	64.10	0.00	.25	2.56E+03	3.47E-03	3.29E-03	.346	1.002E-02	8.391E-05	7.948E-05	315.9	3.47E-03	1.000	.346	.395
513	64.10	0.00	.35	1.59E+03	2.16E-03	2.04E-03	.215	1.002E-02	5.214E-05	4.940E-05	315.3	2.16E-03	1.000	.215	.245
514	64.10	0.00	.44	4.08E+02	5.54E-04	5.25E-04	.055	1.002E-02	1.339E-05	1.268E-05	314.2	5.54E-04	1.000	.055	.063
515	64.10	0.00	.89	9.41E+01	1.27E-04	1.21E-04	.013	1.002E-02	3.070E-06	2.916E-06	313.1	1.27E-04	1.000	.013	.014
601	48.22	0.00	.25								313.66				
602	48.22	0.00	.48								312.73				
603	48.22	0.00	.91								311.76				
604	48.22	0.00	1.37								311.02				
605	48.22	0.00	1.89								310.64				

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 9.144E-01
X= 4.124E+01 HL /HREFF= [illegible]
X= 4.377E+01 HL /HREFF= [illegible]
X= 4.631E+01 HL /HREFF= 8.621E-01
X= 4.886E+01 HL /HREFF= 8.711E-01
X= 5.139E+01 HL /HREFF= [illegible]
X= 5.649E+01 HL /HREFF= 8.871E-01
X= 6.156E+01 HL /HREFF= [illegible]
X= 6.664E+01 HL /HREFF= [illegible]
X= 7.172E+01 HL /HREFF= [illegible]

X= 3.997E+01 HL /HREFF= [illegible]
X= 4.632E+01 HL /HREFF= 1.[illegible]E+00
X= 5.648E+01 HL /HREFF= [illegible]
X= 5.417E+01 HL /HREFF= [illegible]
B.L. TRANSITION DISTANCE = [illegible].97 CM
FULLY TURBULENT B.L. CONDITIONS AT = -1.2[illegible] CM

MSS 3.5 FT HWT TEST (1?2), ?.?, BLUMER, IN-LINE RSI GAP RUN(80) 1973

TT	= 1.1???E+03(K)		GAP LENGTH	= 3?.48?(CM)	
PT	= 1.?3?3E+06(N/M2)		GAP WIDTH	= .127(CM)	
HT	= 1.22?2E+?6(J/KG)		GAP DEPTH	= 3.91?(CM)	
RE/METER	= ?.1217E+?6		ORIENTATION	= 1?.???(DEG)	
MACH	= 5.1??		QS	= 1.2469E+05(W/M2)	
RHO VEL	= 4.1?9-1?E+?1(KG/M2-S)		TDG.POSITION	= 4	
HAW/HT	= ?.95? FOR HT				
HAW/HT	= ?.87? FOR HL				
HLCC	= HL(2?D, DR??? CONE.,)				

T/C	Y (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.?1	?.??	?.9?E+?3	7.?1?E-?3	7.49E-?3	.85?	9.3?3E-03	1.931E-?4	1.829E-04	318.1				1.000
17	66.64	-.?1	?.??	?.?1E+?3	4.47E-03	8.?2E-03	.873	9.696E-03	2.067E-?4	1.958E-04	319.?				1.000
18	61.56	-.?1	?.??	?.??E+?3	?.??E-?3	?.5?E-03	.8?5	1.?17E-?2	2.19?E-?4	2.?32E-04	320.4				1.00?
19	56.4?	-.?1	.??	?.??E+?3	?.?5E-?3	9.8?E-?3	.8??	1.??E-?2	2.283E-?4	2.162E-04	321.?				1.000
20	51.39	-.?1	.??	?.?1E+?3	9.85E-?3	9.33E-?3	.857	1.149E-?2	2.4?6E-04	2.276E-04	321.3				1.000
21	4?.?6	-.?1	.??	?.?1E+?3	1.??E-?2	?.?4E-?3	.877	1.1??E-?2	2.537E-04	2.4?3E-04	321.?				1.000
22	4?.?1	-.?1	.??	?.??E+?3	1.??E-?2	1.?2E-?2	.?79	1.222E-?2	2.622E-04	2.4?4E-04	322.1				1.000
23	43.77	-.?1	?.??	2.1?E+?3	1.10E-?2	1.?4E-02	.877	1.258E-?2	2.693E-04	2.558E-04	322.1				1.000
24	41.?4	-.?1	.??	?.?9E+??	1.?2E-?2	1.14E-?2	.92?	1.29?E-?2	2.928E-?4	2.7?3E-?4	322.7				1.000
25	38.??	-.?1	?.??	9.2?E+?3	1.2?E-?2	1.1?E-?2	.937	1.331E-?2	3.?44E-?4	2.883E-?4	321.6				1.000
41	71.72	?.??	.25	1.?1E+?3	1.74E-?3	1.65E-?3	.188	9.298E-03	4.257E-05	4.?33E-05	315.2				.221
42	??.??	?.??	.2?	1.??E+??	2.?2E-?3	2.2?E-?3	.240	9.?93E-?3	5.6?5E-05	5.377E-05	316.1				.275
43	61.?6	?.??	.2?	1.??E+??	?.19E-?3	2.?8E-?3	.216	1.?17E-?2	?.351E-?5	5.069E-?5	31?.4				.244
44	56.4?	?.??	.25	1.?9E+?3	2.67?E-?3	2.53E-?3	.248	1.?8?E-02	5.523E-?5	?.179E-?5	319.3				.286
45	51.39	?.??	.2?	1.??E+??	?.59?E-?3	2.45?E-?3	.22?	1.1?9E-?2	6.31?E-?5	5.9??E-?5	31?.1				.263
46	??.??	?.??	.2?	1.??E+??	?.?4?E-?3	2.??E-?3	.223	1.1?4E-?2	6.434E-?5	6.?95E-?5	319.2				.254
47	46.31	?.??	.2?	?.??E+?3	2.78E-?3	2.53E-?3	.22?	1.221E ?2	5.79?E-?5	6.432E-?5	31?.8				.259
48	43.77	?.??	.2?	?.12?E+?3	?.?4?E-?3	2.?9E-?3	.226	1.??E-?2	6.941E-?5	6.57?E-?5	319.7				.258
49	41.24	?.??	.25	?.?1E+?3	?.?5?E-?3	3.??E-??	.313	1.295E-?2	9.883E-?5	?.361E-?5	32?.4				.338
50	38.??	?.??	.2?	?.??E+?3	?.26E-?3	?.?9E-?3	.245	1.331E-02	7.969E-?5	7.549E-?5	319.3				.262
1??	39.37	1.??	?.??	?.??E+?3	1.18E-?2	1.12E-?2	.?39	1.313E-?2	2.?8?E-04	2.729E-04	32?.?	1.18E-?2	1.000	.899	.965
1??	39.37	1.??	?.??	?.??E+?3	1.19?E-?2	1.11?E-?2	.?97	1.313E-?2	2.87?E-?4	2.722E-04	32?.3	1.18E-?2	1.?0?	.?97	.963
1??	39.3?	.?1	.	?.??E+??	1.32?E-?2	1.2??-?2	1.??3	1.?1?E-?2	3.21?E-??	3.??4E-?4	32?.5	1.32E-?2	1.000	1.003	1.077
1?8	39.?7	.??	?.??	?.??E+?3	1.?E-?2	1.27E-?2	1.?2?	1.31??-?2	?.2?1?-?4	3.1?6E-?4	327.?	1.34E-?2	1.000	1.?24	1.?99
11?	39.?7	.	.?	?.22E+?3	1.11?-?2	1.??E-??	.?4?	1.31?E-?2	2.71?E-?4	2.574E-?4	32?.3	1.11E-?2	1.000	.?4?	.911
111	??.??	?.	.1?	?.??E+??	?.??E-?3	?.?4E-??	.?2?	1.313E-??	2.?3?E-?4	2.2?8E-?4	324.?	9.5?-?3	1.0??	.727	.761
112	??.??	?.??	.2?	?.??E+??	?.?1?-?3	?.2?E-?3	.??3	1.313?-?2	1.51??-?4	1.52?E-?4	322.9	6.61E-?3	1.?0?	.?83	.54?
113	3?.?7	.??	.??	?.??E+?3	?.?1E-?3	?.3?E-?3	.3??	1.313E-?2	?.7??E-?5	9.269E-?5	321.7	4.?1E-?3	1.?0?	.3?5	.326
114	??.?7	?.?	.??	?.??E+??	1.?7?-??	1.2?E-?3	.???	1.?1?E-?2	?.???-??	2.932E-?5	32?.?	1.27E-?3	1.00?	.?97	.1?4
115	??.??	?.??	.??	?.??E+??	?.11?-?4	?.?4?-?4	.?24	1.31??-?2	7.5??E-?6	7.18?E-06	31?.?	3.11E-?4	1.?00	.024	.?25
2?3	??.?2	1.?	.	?.??E+??	1.1??-?2	1.11?-?2	.??	1.???E-?2	2.8??-?4	2.7??E-?	32?.?	1.1?E-?2	1.?0?	.?29	1.?91
2??	?.32	1.?	.??	?.??E+?3	?.29?-?2	1.22E-?2	1.?58	1.??E-?2	3.1??-?4	2.9??E-?4	325.?	1.29?-?2	1.?0?	1.?5?	1.204
2??	4?.32	.?1	.	?.??E+?3	1.?3?-?2	?.??E-?3	.?43	1.??1E-?2	2.51? -?4	2.?73E-?4	324.5	1.?3E-?2	1.0??	.8?3	.95?
2??	??.??	.??	.	?.??E+?	?.?3?-?3	?.5?-??	.?3?	1.?21?-?2	2.1?? -?4	2.??4E-??	323.?	?.?3E-?3	1.?0?	.731	.?3?
21?	??.?2	.??	.??	?.??E+??	?.??	?.?7E-?3	.??	1.?2?E-??	1.6??E-?4	1.???E-?4	322.1	6.6?E-?3	1.000	.56?	.637
211	??.??	.??	.1?	?.??E+??	?.??-?3	?.??E-?3	.??	1.221E-?2	1.4?1?-?4	1.35?E-?4	32?.?	?.?6?-?3	1.?0?	.4??	.5??
212	??.?2	.?	.??	?.??E+??	?.?-?	?.??E-??	.???	1.?21E-?2	?.?3?-?5	?.?11?-?5	32?.?	4.?7E-?3	1.?0?	.333	.37?
213	??.??	.	.??												
214	??.32	?.??	.??												
215	??.?2	.?	.?												

AMES 3.5 FT HWT TEST (1?2), [illegible] BLUMER, IN-LINE RSI GAP FUN(30) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14												
217	46.32	[illegible]	1.4[illegible]												
218	46.32	[illegible]	1.65												
219	46.32	[illegible]	1.[illegible]												
220	46.32	[illegible]	2.29												
306	56.48	.76	[illegible]												
307	56.48	.51	[illegible]	[illegible]E+03	3.44E-03	8.94E-03	.875	1.079E-02	2.335E-04	2.183E-04	322.1	9.44E-03	1.000	.875	1.011
308	56.48	.25	[illegible]	[illegible]E+03	[illegible]E-03	[illegible].25E-03	.8?7	1.079E-02	2.127E-04	2.015E-04	321.1	8.71E-03	1.000	.807	.932
309	56.48	.13	[illegible]	[illegible].42E+03	7.29E-03	6.91E-03	.675	1.079E-02	1.731E-04	1.686E-04	320.1	7.29E-03	1.000	.675	.786
310	56.48	.04	.04	[illegible].92E+03	6.61E-03	6.26E-03	.612	1.[illegible]E-02	1.613E-04	1.528E-04	319.5	6.61E-03	1.000	.612	.787
311	56.48	[illegible]	.15												
312	56.48	[illegible]	.25	2.29E+03	3.06E-03	2.90E-03	.284	1.[illegible]E-02	7.477E-05	7.084E-05	316.2	3.06E-03	1.000	.284	.328
313	56.48	[illegible]	.38	1.19E+03	1.59E-03	1.51E-03	.147	1.080E-02	3.879E-05	3.675E-05	314.9	1.59E-03	1.000	.147	.178
314	56.48	[illegible]	.64	2.29E+02	3.[illegible]E-04	2.90E-04	.026	1.080E-02	7.459E-06	7.076E-06	315.5	3.06E-04	1.000	.026	.033
315	56.48	[illegible]	.89												
316	56.48	0.00	1.14												
317	56.48	[illegible]	1.40												
318	56.48	[illegible]	1.65												
319	56.48	[illegible]	1.30												
320	56.48	[illegible]	2.29	1.[illegible]E+01	1.38E-05	1.31E-05	.001	1.080E-02	3.372E-07	3.195E-07	312.4	1.38E-05	1.000	.001	.001
506	64.10	.75	[illegible]	6.74E+03	8.54E-03	8.39E-03	.860	9.929E-03	2.085E-04	1.975E-04	321.0	8.54E-03	1.000	.860	.979
507	64.10	.51	[illegible]	6.14E+03	8.26E-03	[illegible].32E-03	.831	9.930E-03	2.015E-04	1.909E-04	320.2	8.26E-03	1.000	.831	.946
508	64.10	.25	[illegible]	5.67E+03	7.61E-03	7.21E-03	.767	9.931E-03	1.959E-04	1.761E-04	318.9	7.61E-03	1.000	.767	.872
509	64.10	.13	[illegible]	[illegible].69E+03	6.29E-03	5.96E-03	.633	9.931E-03	1.535E-04	1.454E-04	317.2	6.29E-03	1.000	.633	.720
510	64.10	.04	.04	[illegible]E+03	[illegible].37E-03	[illegible].09E-03	.541	9.932E-03	1.311E-04	1.242E-04	316.0	5.37E-03	1.000	.541	.615
511	64.10	[illegible]	.15	[illegible].75E+03	4.92E-03	4.66E-03	.496	9.932E-03	1.202E-04	1.139E-04	318.0	4.92E-03	1.000	.496	.564
512	64.10	[illegible]	.25	[illegible].62E+03	3.51E-03	3.32E-03	.353	9.932E-03	8.567E-05	8.116E-05	317.3	3.51E-03	1.000	.353	.402
513	64.10	[illegible]	.38	1.7[illegible]E+03	2.33E-03	2.21E-03	.235	9.932E-03	5.700E-05	5.400E-05	316.7	2.33E-03	1.000	.235	.267
514	64.10	[illegible]	.64	[illegible]E+02	[illegible].80E-04	[illegible].45E-04	.069	9.932E-03	1.661E-05	1.574E-05	315.5	6.80E-04	1.000	.069	.078
515	64.10	[illegible]	.89	1.35E+02	1.80E-04	1.71E-04	.018	9.932E-03	4.400E-06	4.169E-06	314.3	1.80E-04	1.000	.018	.021
691	48.22	[illegible]	.25								314.92				
692	48.22	[illegible]	.[illegible]								314.10				
693	48.22	[illegible]	.91								313.17				
694	48.22	[illegible]	1.37								312.30				
695	48.22	[illegible]	1.39								311.17				

EDGE HEATING USED FOR HE
X= 3.870E+01 HL /HREFF= 9.305E-01
X= 4.124E+01 HL /HREFF= 9.253E-01
X= 4.377E+01 HL /HREFF= [illegible]E-01
X= 4.631E+01 HL /HREFF= 8.732E-01
X= 4.8[illegible]E+01 HL /HREFF= [illegible]E-01
X= [illegible].139E+01 HL /HREFF= [illegible]E-01
X= 5.648E+01 HL /HREFF= 8.[illegible]9E-01
X= [illegible].156E+01 HL /HREFF= [illegible]E-01
X= 6.664E+01 HL /HREFF= [illegible]E-01
X= 7.172E+01 HL /HREFF= [illegible]E-01

X= 3.997E+01 HL /HREFF= 1.[illegible]E+00
X= 4.632E+01 HL /HREFF= [illegible].72E-01
X= 5.648E+01 HL /HREFF= [illegible]E-01
X= 6.413E+01 HL /HREFF= [illegible].314E-01
B.L. TRANSITION DISTANCE = 46.32 CM
FULLY TURBULENT B.L. CONDITIONS AT = 56.49 CM

AMES 3.5 FT HWT TEST (1*2), [illegible] BLUMER, IN-LINE RSI GAP RUN(51) 1973

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TT         = 1.[illegible]E+03(K)          GAP LENGTH = 39.480(CM)
PT         = 5.2[illegible]E+05(N/M2)      GAP WIDTH  =   .127(CM)
HT         = 1.14[illegible]E+06(J/KG)     GAP DEPTH  =  3.81[illegible](CM)
RE/METER   = 1.7265E+06                    ORIENTATION= 1[illegible](DEG)
MACH       = 5.1[illegible]                QS         =  3.2620E+04(W/M2)
RHO VEL    = 2.1464E+01(KG/M2-S)           400.POSITION=  4
HAW/HT     = 0.909 FOR HT
HAW/HT     = 0.874 FOR HL
HLCC       = HL(2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible].72E+03	6.79E-03	5.43E-03	.900	7.548E-03	3.161E-04	2.993E-04	305.8				1.000
17	66.64	-.51	[illegible]	[illegible].99E+03	7.18E-03	6.79E-03	.899	7.986E-03	3.340E-04	3.162E-04	305.5				1.000
18	61.56	-.51	[illegible]	[illegible].13E+03	7.39E-03	7.30E-03	.850	6.596E-03	3.441E-04	3.258E-04	306.4				1.000
19	56.48	-.51	.00	[illegible].18E+03	7.48E-03	7.18E-03	.821	9.104E-03	3.479E-04	3.294E-04	306.6				1.000
20	51.39	-.51	[illegible]	[illegible].34E+03	7.78E-03	7.29E-03	.805	9.568E-03	3.586E-04	3.395E-04	306.7				1.000
21	48.86	-.51	[illegible]	[illegible]	8.17E-03	7.74E-03	.832	9.821E-03	3.8[illegible]E-04	3.601E-04	306.9				1.000
22	46.31	-.51	[illegible]	[illegible].87E+03	8.47E-03	8.02E-03	.839	1.010E-02	3.944E-04	3.735E-04	307.1				1.000
23	43.77	-.51	[illegible]	[illegible].95E+03	8.59E-03	8.14E-03	.828	1.038E-02	4.003E-04	3.787E-04	307.1				1.000
24	41.24	-.51	[illegible]	[illegible].26E+03	[illegible]	8.56E-03	.846	1.066E-02	4.239E-04	3.985E-04	307.4				1.000
25	38.79	-.51	[illegible]	[illegible]	8.45E-03	8.39E-03	.864	1.094E-02	4.399E-04	4.164E-04	306.8				1.000
41	71.72	[illegible]	.25	1.03E+03	1.47E-03	1.40E-03	.195	7.550E-03	6.857E-05	6.494E-05	303.4				.217
42	66.64	[illegible]	.25	1.39E+03	2.00E-03	1.89E-03	.250	7.987E-03	9.295E-05	8.802E-05	303.9				.278
43	61.56	[illegible]	.25	1.30E+03	1.87E-03	1.77E-03	.217	8.597E-03	8.653E-05	8.222E-05	305.2				.252
44	56.48	[illegible]	.25	1.46E+03	2.10E-03	1.99E-03	.232	9.105E-03	9.763E-05	9.244E-05	305.8				.281
45	51.39	[illegible]	.25	1.4[illegible]E+03	2.08E-03	1.97E-03	.217	9.568E-03	9.662E-05	9.149E-05	305.5				.269
46	48.86	[illegible]	.25	1.41E+03	2.03E-03	1.92E-03	.207	9.820E-03	9.457E-05	8.948E-05	305.5				.248
47	46.31	[illegible]	.25	1.61E+03	2.32E-03	2.19E-03	.229	1.010E-02	1.079E-04	1.021E-04	305.8				.273
48	43.77	[illegible]	.25	[illegible]	2.11E-03	2.19E-03	[illegible]	1.038E-02	9.838E-05	9.316E-05	305.7				.246
49	41.24	[illegible]	.25	1.65E+03	2.37E-03	2.25E-03	.223	1.066E-02	1.105E-04	1.046E-04	306.3				.263
50	38.78	[illegible]	.25	1.74E+03	2.51E-03	2.37E-03	.229	1.094E-02	1.167E-04	1.105E-04	305.5				.265
103	39.97	1.32	[illegible]	[illegible]	9.89E-03	9.33E-03	.815	1.079E-02	4.097E-04	3.878E-04	310.4	8.80E-03	1.000	.815	.953
105	39.97	1.32	[illegible]	[illegible]	8.85E-03	9.38E-03	.820	1.079E-02	4.121E-04	3.900E-04	311.4	8.85E-03	1.000	.820	.956
107	39.97	.51	[illegible]	[illegible]	9.58E-03	9.07E-03	.888	1.0[illegible]E-02	4.461E-04	4.222E-04	313.9	9.58E-03	1.000	.888	1.337
108	39.97	.25	.00	[illegible]	9.14E-03	[illegible]	.847	1.08[illegible]E-02	4.256E-04	4.028E-04	310.1	9.14E-03	1.000	.847	.989
110	39.97	.06	.06	[illegible]	7.15E-03	6.77E-03	.662	1.08[illegible]E-02	3.330E-04	3.152E-04	308.9	7.15E-03	1.000	.662	.774
111	39.97	[illegible]	.15	[illegible]	[illegible].98E-03	[illegible]	.554	1.08[illegible]E-02	2.734E-04	2.636E-04	308.6	5.98E-03	1.000	.554	.647
112	39.97	[illegible]	.25	2.7[illegible]E+03	7.99E-03	3.7[illegible]E-03	.369	1.08[illegible]E-02	1.956E-04	1.757E-04	307.6	3.99E-03	1.000	.369	.431
113	39.97	[illegible]	.38	1.57E+03	2.26E-03	2.14E-03	.209	1.08[illegible]E-02	1.052E-04	9.957E-05	305.9	2.26E-03	1.000	.209	.244
114	39.97	[illegible]	.64	[illegible]E+02	[illegible].52E-04	[illegible].22E-04	.051	1.08[illegible]E-02	2.569E-05	2.433E-05	305.7	5.52E-04	1.000	.051	.060
115	39.97	[illegible]	.89	[illegible]E+01	1.27E-04	1.20E-04	.012	1.08[illegible]E-02	5.912E-06	5.598E-06	304.7	1.27E-04	1.000	.012	.014
203	46.32	1.52	[illegible]	[illegible]E+03	8.8[illegible]E-03	8.33E-03	.871	1.01[illegible]E-02	4.035E-04	3.877E-04	309.1	8.83E-03	1.000	.871	1.039
205	46.32	1.[illegible]	[illegible]	[illegible]E+03	9.17E-03	8.68E-03	.908	1.01[illegible]E-02	4.269E-04	4.041E-04	308.7	9.17E-03	1.000	.908	1.083
207	46.32	.51	[illegible]	5.67E+03	8.13E-03	7.69E-03	.805	1.010E-02	3.783E-04	3.581E-04	308.6	8.13E-03	1.000	.805	.95[illegible]
208	46.32	.25	[illegible]	[illegible]E+03	7.35E-03	6.36E-03	.726	1.01[illegible]E-02	3.423E-04	3.241E-04	307.9	7.35E-03	1.000	.726	.86[illegible]
210	46.32	.06	[illegible]	7.9[illegible]E+03	5.69E-03	5.3[illegible]E-03	.563	1.01[illegible]E-02	2.647E-04	2.506E-04	307.1	5.69E-03	1.000	.563	.671
211	46.32	[illegible]	.15	3.3[illegible]E+03	4.82E-03	4.57E-03	.477	1.01[illegible]E-02	2.244E-04	2.125E-04	306.7	4.82E-03	1.000	.477	.56[illegible]
212	46.32	[illegible]	.25	2.[illegible]E+03	3.40E-03	3.22E-03	.336	1.01[illegible]E-02	1.583E-04	1.496E-04	306.1	3.40E-03	1.000	.336	.40[illegible]
213	46.32	[illegible]	.3[illegible]												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.89	[illegible]E+02	2.04E-04	1.93E-04	.020	1.01[illegible]E-02	9.475E-06	8.973E-06	303.9	2.04E-04	1.000	.020	.024

AMES 3.5 FT HWT TEST (132), C.B. BLUMER, IN-LINE RSI GAP RUN(32) 1973

TT	= 1.1[illegible](K)	GAP LENGTH =	3[illegible].48[illegible](CM)
PT	= 5.1874E+05(N/M2)	GAP WIDTH =	.127(CM)
HT	= 1.1721E+06(J/KG)	GAP DEPTH =	3.81[illegible](CM)
RE/METER	= 1.66[illegible]E+06	ORIENTATION=	[illegible]5.[illegible](DEG)
MACH	= 5.190	QS =	1.4950E+04(W/M2)
RHO VEL	= 2.111[illegible]E+01(KG/M2-S)	MOC.POSITION=	4
HAW/HT	= [illegible].97[illegible] FOR HT		
HAW/HT	= [illegible].874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	5.[illegible]E+03	7.10E-03	6.73E-03	.946	7.[illegible]E-03	3.362E-04	3.185E-04	305.4				1.000
17	66.64	-.51	[illegible].06	5.37E+03	7.59E-03	7.11E-03	.944	7.945E-03	3.553E-04	3.366E-04	305.8				1.000
18	61.56	-.51	[illegible]	[illegible].09E+03	7.96E-03	7.54E-03	.930	8.556E-03	3.757E-04	3.568E-04	306.6				1.000
19	56.48	-.51	[illegible]	[illegible]E+03	8.19E-03	7.76E-03	.904	9.056E-03	3.979E-04	3.674E-04	306.9				1.000
20	51.39	-.51	[illegible]	6.[illegible]5E+03	8.46E-03	8.02E-03	.890	9.507E-03	4.007E-04	3.795E-04	307.1				1.000
21	45.86	-.51	[illegible]	6.37E+03	8.92E-03	8.45E-03	.914	9.756E-03	4.223E-04	4.000E-04	307.3				1.000
22	45.31	-.51	[illegible]	6.51E+03	9.12E-03	8.64E-03	.918	1.004E-02	4.317E-04	4.089E-04	307.6				1.000
23	43.77	-.51	[illegible]	6.67E+03	9.23E-03	8.72E-03	.892	1.032E-02	4.359E-04	4.129E-04	307.7				1.000
24	41.24	-.51	[illegible]	6.91E+03	9.67E-03	9.15E-03	.912	1.[illegible]E-02	4.577E-04	4.335E-04	308.[illegible]				1.000
25	38.70	-.51	[illegible]	7.21E+03	1.01E-02	9.57E-03	.929	1.[illegible]8E-02	4.783E-04	4.531E-04	307.6				1.000
41	71.72	[illegible].33	.25	1.05E+03	1.47E-03	1.39E-03	.196	7.599E-03	6.954E-05	6.589E-05	303.7				.207
42	66.64	[illegible]	.25	1.35E+03	1.89E-03	1.79E-03	.236	7.947E-03	8.943E-05	8.473E-05	304.1				.252
43	61.56	[illegible]	.25	1.32E+03	1.84E-03	1.74E-03	.215	8.556E-03	9.704E-05	9.246E-05	305.4				.231
44	56.48	[illegible].33	.25	1.54E+03	2.15E-03	2.03E-03	.237	9.056E-03	1.017E-04	9.638E-05	305.9				.262
45	51.39	[illegible]	.25	1.[illegible]E+03	2.15E-03	2.03E-03	.226	9.566E-03	1.015E-04	9.629E-05	305.7				.254
46	48.86	[illegible]	.25	1.51E+03	2.11E-03	1.99E-03	.216	9.755E-03	9.970E-05	9.445E-05	305.8				.236
47	46.31	0.[illegible]	.25	1.72E+03	2.40E-03	2.28E-03	.239	1.004E-02	1.137E-04	1.077E-04	306.2				.263
48	43.77	[illegible]	.25	1.[illegible]E+03	2.19E-03	2.07E-03	.212	1.032E-02	1.035E-04	9.808E-05	306.2				.238
49	41.24	[illegible]	.25	1.81E+03	2.53E-03	2.40E-03	.239	1.059E-02	1.197E-04	1.134E-04	306.7				.262
50	38.70	0.[illegible]	.25	1.93E+03	2.70E-03	2.56E-03	.248	1.087E-02	1.279E-04	1.211E-04	306.1				.267
103	39.97	1.52	[illegible]	7.25E+03	1.02E-02	9.66E-03	.951	1.073E-02	4.832E-04	4.576E-04	311.5	1.02E-02	1.000	.951	1.034
105	39.97	1.02	[illegible]	7.3[illegible]E+03	1.03E-02	9.74E-03	.959	1.073E-02	4.873E-04	4.614E-04	312.4	1.03E-02	1.000	.959	1.042
107	39.97	.51	[illegible]	[illegible]E+03	1.11E-02	1.05E-02	1.035	1.073E-02	5.257E-04	4.973E-04	311.8	1.11E-02	1.000	1.035	1.124
108	39.97	.25	[illegible]	[illegible]E+03	1.[illegible]E-02	1.00E-02	.988	1.073E-02	5.023E-04	4.757E-04	31[illegible].8	1.06E-02	1.000	.988	1.074
110	39.97	.04	.04	[illegible]E+03	8.24E-03	7.80E-03	.767	1.073E-02	3.900E-04	3.694E-04	309.7	8.24E-03	1.000	.767	.834
111	39.97	[illegible]	.15	[illegible]E+03	[illegible]E-03	[illegible]E-03	.639	1.073E-02	3.246E-04	3.074E-04	309.2	6.85E-03	1.000	.639	.694
112	39.97	[illegible]	.25	7.17E+03	4.45E-03	4.21E-03	.415	1.073E-02	2.107E-04	1.995E-04	308.2	4.45E-03	1.000	.415	.450
113	39.97	[illegible]	.38	1.7[illegible]E+03	2.49E-03	2.36E-03	.232	1.073E-02	1.178E-04	1.116E-04	307.4	2.49E-03	1.000	.232	.252
114	39.97	[illegible]	[illegible]	[illegible]E+02	[illegible]E-04	[illegible]E-04	.059	1.073E-02	2.932E-05	2.834E-05	306.2	6.32E-04	1.000	.059	.064
115	39.97	[illegible]	.49	[illegible].11E+01	1.13E-04	[illegible]E-04	.011	1.073E-02	5.359E-06	5.077E-06	305.1	1.13E-04	1.000	.011	.011
203	46.32	1.52	[illegible]	[illegible].31E+03	1.[illegible]E-02	[illegible]	1.022	1.[illegible]E-02	4.9[illegible]E-04	4.599E-04	309.2	1.03E-02	1.000	1.022	1.125
205	46.32	1.02	[illegible]	[illegible]E+03	9.41E-03	[illegible]E-03	.938	1.003E-02	4.457E-04	4.221E-04	309.6	9.41E-03	1.000	.938	1.033
207	46.32	.51	[illegible]	6.49E+03	9.12E-03	[illegible]E-03	.909	1.003E-02	4.317E-04	4.089E-04	309.5	9.12E-03	1.000	.909	1.00[illegible]
208	46.32	.25	[illegible]	[illegible].27E+03	[illegible].73E-03	[illegible]	.87[illegible]	1.[illegible]E-02	4.13[illegible]E-04	3.916E-04	308.[illegible]	8.73E-03	1.000	.87[illegible]	.95[illegible]
210	46.32	.04	.04	[illegible]E+03	6.76E-03	[illegible]E-03	.674	1.003E-02	3.201E-04	3.032E-04	307.9	6.76E-03	1.000	.674	.742
211	46.32	[illegible]	.15	4.[illegible]E+03	5.69E-03	5.39E-03	.567	1.003E-02	2.633E-04	2.551E-04	307.5	5.69E-03	1.000	.567	.62[illegible]
212	46.32	[illegible]	.25	[illegible]E+03	3.94E-03	3.73E-03	.393	1.003E-02	1.8[illegible]E-04	1.767E-04	306.7	3.94E-03	1.000	.393	.432
213	46.32	[illegible]	[illegible]												
214	46.32	[illegible]	[illegible]												
215	46.32	[illegible]	.39	[illegible]E+02	3.45E-04	3.27E-04	.034	1.003E-02	1.633E-05	1.547E-05	304.3	3.45E-04	1.000	.034	.038

AMES 3.5 FT HWT TEST (1[illegible]), [illegible] PLUMER, IN THE RSI GAP RUN(92) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14												
217	46.32	0.00	1.4[illegible]												
218	46.32	[illegible]	1.6[illegible]												
219	46.32	[illegible]	1.[illegible]	2.965E+01	4.14E-05	3.92E-05	.004	1.0[illegible]E-02	1.959E-06	1.857E-06	302.1	4.14E-05	1.000	.004	.005
220	46.32	[illegible]	2.29												
306	56.48	.76	[illegible]	[illegible].53E+00	2.24E-06	2.12E-06	.000	9.057E-03	1.351E-07	1.003E-07	330.7	2.24E-06	1.000	.000	.000
307	56.48	.51	[illegible]	[illegible].32E+02	6.33E-04	5.98E-04	.070	9.056E-03	2.997E-05	2.832E-05	330.6	6.33E-04	1.000	.076	.077
308	56.48	.25	[illegible]	[illegible].25E+03	7.72E-03	7.32E-03	.853	9.056E-03	3.657E-04	3.465E-04	307.2	7.72E-03	1.000	.853	.943
309	56.48	.15	[illegible]	4.[illegible]E+03	6.31E-03	5.98E-03	.697	9.056E-03	2.989E-04	2.831E-04	306.6	6.31E-03	1.000	.697	.771
310	56.48	.04	.[illegible]4	4.[illegible]E+03	5.65E-03	5.35E-03	.624	9.056E-03	2.674E-04	2.533E-04	306.3	5.65E-03	1.000	.624	.689
311	56.48	[illegible]	.15	[illegible].34E+00	9.28E-06	5.77E-06	.001	9.056E-03	4.396E-07	4.154E-07	333.7	9.28E-06	1.000	.001	.001
312	56.48	[illegible]	.25	1.[illegible]E+03	2.64E-03	2.5[illegible]E-03	.292	9.056E-03	1.251E-04	1.186E-04	304.3	2.64E-03	1.000	.292	.323
313	56.48	[illegible]	.38	9.[illegible]E+02	1.37E-03	1.30E-03	.152	9.056E-03	6.503E-05	6.162E-05	303.5	1.37E-03	1.000	.152	.168
314	56.48	[illegible]	.64	[illegible]E+01	9.85E-05	9.35E-05	.011	9.056E-03	4.671E-06	4.425E-06	303.7	9.86E-05	1.000	.011	.012
315	56.48	[illegible]	.89	[illegible]E+01	8.[illegible]E-05	7.56E-05	.009	9.056E-03	3.839E-06	3.629E-06	303.3	8.09E-05	1.000	.009	.010
316	56.48	[illegible]	1.14	2.425E+00	3.36E-06	3.19E-06	.000	9.056E-03	1.593E-07	1.509E-07	302.8	3.36E-06	1.000	.000	.000
317	56.48	[illegible]	1.[illegible]	[illegible]	1.34E-05	1.27E-05	.001	9.056E-03	6.357E-07	6.023E-07	302.4	1.34E-05	1.000	.001	.002
318	56.48	[illegible]	1.6[illegible]												
319	56.48	[illegible]	1.9[illegible]												
320	56.48	[illegible]	2.29	2.1[illegible]E+01	3.0[illegible]E-05	2.86E-05	.003	9.056E-03	1.423E-06	1.354E-06	302.[illegible]	3.02E-05	1.000	.003	.004
506	64.10	.75	[illegible]	[illegible].55E+03	[illegible].77E-03	7.36E-03	.942	8.255E-03	3.683E-04	3.486E-04	307.3	7.77E-03	1.000	.942	1.005
507	64.10	.51	[illegible]	[illegible]E+03	7.55E-03	7.15E-03	.915	8.254E-03	3.577E-04	3.388E-04	306.9	7.55E-03	1.000	.915	.977
508	64.10	.25	[illegible]	[illegible]E+03	7.06E-03	6.69E-03	.856	8.253E-03	3.344E-04	3.168E-04	306.2	7.06E-03	1.000	.856	.913
509	64.10	.15	[illegible]	[illegible].24E+03	5.92E-03	5.60E-03	.717	8.252E-03	2.8[illegible]E-04	2.654E-04	305.1	5.92E-03	1.000	.717	.765
510	64.10	.04	.04	3.[illegible]E+03	4.99E-03	4.73E-03	.605	8.252E-03	2.36[illegible]E-04	2.238E-04	305.4	4.99E-03	1.000	.605	.645
511	64.10	[illegible]	.15	[illegible]E+03	4.61E-03	4.37E-03	.559	8.252E-03	2.133E-04	2.068E-04	305.3	4.61E-03	1.000	.559	.596
512	64.10	[illegible]	.25	2.13E+03	2.98E-03	2.82E-03	.361	8.252E-03	1.409E-04	1.335E-04	304.8	2.98E-03	1.000	.361	.385
513	64.10	[illegible]	.38	1.2[illegible]E+03	1.79E-03	1.70E-03	.218	8.252E-03	8.439E-05	8.053E-05	304.5	1.79E-03	1.000	.218	.232
514	64.10	[illegible]	.64	2.[illegible]E+02	2.88E-04	2.73E-04	.035	8.252E-03	1.363E-05	1.293E-05	303.7	2.88E-04	1.000	.035	.037
515	64.10	[illegible]	.89	2.4[illegible]E+01	3.43E-05	[illegible].25E-05	.004	8.252E-03	1.626E-06	1.541E-06	302.9	3.43E-05	1.000	.004	.004
601	48.22	[illegible]	.25								303.41				
602	48.22	[illegible]	.48								302.77				
603	48.22	[illegible]	.31								302.25				
604	48.22	[illegible]	1.[illegible]								301.81				
605	48.22	[illegible]	1.[illegible]9								301.14				

EDGE HEATING USED FOR HE

X= 3.87[illegible]E+01 HL /HREFF= 9.[illegible]7E-1
X= 4.124[illegible]E+01 HL /HREFF= [illegible]E-01
X= [illegible].377[illegible]E+01 HL /HREFF= [illegible]E-01
X= 4.[illegible]1E+01 HL /HREFF= 9.[illegible]E-01
X= 4.[illegible]E+01 HL /HREFF= [illegible]E-1
X= 5.1[illegible]E+01 HL /HREFF= [illegible]E-1
X= 5.[illegible]E+01 HL /HREFF= [illegible]E-01
X= 6.1[illegible]E+01 HL /HREFF= [illegible]E-1
X= 6.[illegible]E+01 HL /HREFF= [illegible]E-1
X= 7.1[illegible]E+01 HL /HREFF= 9.[illegible]7E-01

X= [illegible]E+01 HL /HREFF= 1.[illegible]E+00
X= 4.6[illegible]E+01 HL /HREFF= [illegible]E-01
X= 5.[illegible]E+01 HL /HREFF= [illegible]E-2
X= 6.[illegible]E+01 HL /HREFF= [illegible]E-01
B.L. TRANSITION DISTANCE = [illegible].43 CM
FULLY TURBULENT B.L. CONDITIONS AT [illegible] CM

AMES 3.5 FT HWT TEST (172), 3.3. BLUNT?, IN-LINE RSI GAP JUN(83) 1973

TT = 1.[illegible](K) GAP LENGTH = 3[illegible](CM)
PT = 1.0311E+0[illegible](N/M2) GAP WIDTH = .127(CM)
HT = 1.2116E+[illegible](J/KG) GAP DEPTH = 3.81[illegible](CM)
RE/METER = 3.1461E+[illegible] ORIENTATION= 15.0[illegible](DEG)
MACH = 5.1[illegible] QS = 1.2485E+05(W/M2)
RHO VEL = [illegible](KG/M2-S) MOD.POSITION= 4
HAW/HT = [illegible] FOR HT
HAW/HT = 3.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	C (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	7.81E-03	7.15E-03	.637	9.341E-03	1.9[illegible]4E-04	1.805E-04	307.8				1.000
17	66.64	-.51	[illegible]	[illegible]	8.40E-03	7.96E-03	.863	9.733E-03	2.046E-04	1.940E-04	308.6				1.000
18	61.56	-.51	[illegible]	[illegible]	9.83E-03	8.34E-03	[illegible]	1.021E-02	2.145E-04	2.034E-04	309.9				1.000
19	56.48	-.51	[illegible]	[illegible]	9.13E-03	[illegible]	.943	1.094E-02	2.226E-04	2.119E-04	310.4				1.000
20	51.39	-.51	[illegible]	[illegible]	9.48E-03	8.98E-03	.822	1.153E-02	2.310E-04	2.189E-04	310.8				1.000
21	48.96	-.31	[illegible]	[illegible]	1.20E-02	9.52E-03	[illegible]	1.189E-02	2.449E-04	2.321E-04	311.1				1.000
22	46.31	-.51	[illegible]	7.70E+03	1.03E-02	9.91E-03	.844	1.226E-02	2.522E-04	2.390E-04	311.6				1.000
23	43.77	-.51	[illegible]	7.75E+03	1.04E-02	9.37E-03	.825	1.263E-02	2.539E-04	2.405E-04	311.7				1.000
24	41.24	-.51	[illegible]	8.25E+03	1.11E-02	1.05E-02	.854	1.350E-02	2.7[illegible]E-04	2.563E-04	312.3				1.000
25	38.70	.51	.05	8.34E+03	1.15E-02	1.09E-02	.858	1.336E-02	2.795E-04	2.648E-04	311.6				1.000
41	71.72	0.00	.25	1.29E+03	1.72E-03	1.63E-03	.184	9.336E-03	4.192E-05	3.975E-05	304.9				.220
42	66.64	0.00	.25	1.67E+03	2.22E-03	2.10E-03	.223	9.733E-03	5.416E-05	5.126E-05	305.7				.264
43	61.56	[illegible]	.25	[illegible]	[illegible]	1.98E-03	[illegible]	[illegible]	[illegible]	4.825E-05	307.9				.237
44	56.48	0.00	.25	1.90E+03	2.54E-03	2.41E-03	.235	1.083E-02	5.196E-05	5.873E-05	308.7				.278
45	51.39	[illegible]	.25	[illegible]	2.41E-03	2.28E-03	.209	1.153E-02	5.854E-05	5.559E-05	309.6				.254
46	48.86	[illegible]	.25	1.92E+03	2.44E-03	2.31E-03	[illegible]	1.188E-02	5.939E-05	5.629E-05	310.7				.243
47	46.31	0.00	.25	1.96E+03	2.65E-03	2.51E-03	.216	1.225E-02	6.449E-05	6.112E-05	309.4				.256
48	43.77	[illegible]	.25	[illegible]	2.49E-03	2.36E-03	.197	1.262E-02	6.063E-05	5.753E-05	309.3				.239
49	41.24	[illegible]	.25	[illegible]	3.49E-03	3.30E-03	.268	1.299E-02	8.491E-05	8.047E-05	310.1				.314
50	38.70	[illegible]	.25	2.16E+03	2.89E-03	2.74E-03	.216	1.336E-02	7.049E-05	6.681E-05	309.2				.252
103	39.97	1.52	[illegible]	[illegible]	1.08E-02	1.02E-02	.816	1.319E-02	2.621E-04	2.483E-04	317.3	1.08E-02	1.000	.816	.993
105	39.97	1.02	[illegible]	8.11E+03	1.10E-02	1.04E-02	.834	1.318E-02	2.679E-04	2.538E-04	318.6	1.10E-02	1.000	.834	.974
107	39.97	.51	[illegible]	[illegible]	1.26E-02	1.19E-02	.956	1.318E-02	3.072E-04	2.910E-04	317.7	1.[illegible]E-02	1.000	.956	1.117
108	39.97	.25	[illegible]	9.25E+03	1.25E-02	1.19E-02	.952	1.318E-02	3.05[illegible]E-04	2.897E-04	316.2	1.25E-02	1.000	.952	1.112
110	39.97	[illegible]	.34	[illegible]	1.02E-02	9.66E-03	.774	1.318E-02	2.486E-04	2.355E-04	314.4	1.02E-02	1.000	.774	.984
111	39.97	[illegible]	.15	[illegible]	8.62E-03	8.16E-03	.654	1.318E-02	2.1[illegible]E-04	1.990E-04	313.7	8.62E-03	1.000	.654	.754
112	39.97	[illegible]	.25	[illegible]	6.05E-03	5.73E-03	.459	1.318E-02	1.474E-04	1.397E-04	312.1	6.05E-03	1.000	.459	.538
113	39.97	[illegible]	.76	[illegible]	3.70E-03	3.50E-03	.280	1.318E-02	9.[illegible]5E-05	8.534E-05	310.9	3.70E-03	1.000	.280	.378
114	39.97	[illegible]	.64	[illegible]	1.14E-03	1.08E-03	.087	1.318E-02	2.781E-05	2.635E-05	310.9	1.14E-03	1.000	.087	.101
115	39.97	[illegible]	.89	[illegible]	3.15E-04	[illegible]	.024	1.318E-02	7.672E-06	7.273E-06	307.2	3.15E-04	1.000	.024	.028
203	46.32	1.52	[illegible]	[illegible]	1.15E-02	1.09E-02	.939	1.224E-02	2.8[illegible]1E-04	2.654E-04	313.8	1.15E-02	1.000	.939	1.112
205	46.32	1.02	[illegible]	[illegible]	1.05E-02	9.95E-03	.857	1.225E-02	2.559E-04	2.424E-04	314.5	1.05E-02	1.000	.857	1.016
207	46.32	.51	[illegible]	6.97E+03	9.39E-03	8.90E-03	.767	1.225E-02	2.2[illegible]9E-04	2.168E-04	314.2	9.39E-03	1.000	.767	.96[illegible]
208	46.32	.25	[illegible]	[illegible]	9.02E-03	[illegible]	.736	1.225E-02	2.139E-04	2.083E-04	313.2	9.02E-03	1.000	.736	.87[illegible]
210	46.32	[illegible]	[illegible]	[illegible]	7.09E-03	6.72E-03	.579	1.225E-02	1.729E-04	1.639E-04	311.7	7.09E-03	1.000	.579	.686
211	46.32	[illegible]	.15	[illegible]	6.08E-03	5.76E-03	.496	1.225E-02	1.482E-04	1.404E-04	311.0	6.08E-03	1.000	.496	.58
212	46.32	[illegible]	[illegible]	[illegible]	4.32E-03	4.09E-03	.352	1.225E-02	1.0[illegible]2E-04	9.979E-05	309.9	4.32E-03	1.000	.352	.41[illegible]
213	46.32	[illegible]	.76												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.89	[illegible]	2.44E-05	2.31E-05	.002	1.22[illegible]E-02	[illegible]	5.639E-07	305.1	2.44E-05	1.000	.002	.002

AMES 3.5 FT HWT TEST (1?2), C.J. BLUMER, IN-LINE RSI GAP RUN(33) 1973 PAGE 166

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14												
217	46.32	[illegible]	[illegible]												
218	46.32	[illegible]	[illegible]												
219	46.32	0.33	[illegible]												
220	46.32	[illegible]	2.2[illegible]												
306	56.48	.75	[illegible]												
307	56.48	.51	[illegible]	1.68E+02	2.34E-04	2.21E-04	.022	1.083E-02	5.707E-06	5.398E-06	330.8	2.34E-04	1.000	.022	.026
308	56.48	.28	[illegible]	6.21E+03	9.33E-03	7.30E-03	.770	1.083E-02	2.031E-04	1.925E-04	313.8	8.33E-03	1.000	.773	.913
309	56.48	.15	[illegible]	5.19E+03	6.95E-03	6.59E-03	.642	1.083E-02	1.694E-04	1.605E-04	309.8	6.95E-03	1.000	.642	.761
310	56.48	.04	[illegible]	[illegible]	6.30E-03	5.97E-03	.582	1.083E-02	1.535E-04	1.455E-04	309.2	6.30E-03	1.000	.581	.690
311	56.48	[illegible]	.15												
312	56.48	[illegible]	.25	2.13E+03	2.92E-03	2.77E-03	.270	1.083E-02	7.124E-05	6.754E-05	306.3	2.92E-03	1.000	.270	.320
313	56.48	[illegible]	.38	1.23E+03	1.64E-03	1.55E-03	.151	1.083E-02	3.991E-05	3.784E-05	305.0	1.64E-03	1.000	.151	.179
314	56.48	[illegible]	.64	2.54E+02	3.39E-04	3.21E-04	.031	1.083E-02	8.255E-06	7.827E-06	305.3	3.39E-04	1.000	.031	.037
315	56.48	[illegible]	[illegible]	5.33E+01	7.09E-05	6.72E-05	.007	1.083E-02	1.729E-06	1.638E-06	304.5	7.09E-05	1.000	.007	.008
316	56.48	[illegible]	1.14	2.25E+01	2.99E-05	2.84E-05	.003	1.083E-02	7.293E-07	6.915E-07	303.9	2.99E-05	1.000	.003	.003
317	56.48	[illegible]	1.4[illegible]	1.21E+01	1.60E-05	1.52E-05	.001	1.083E-02	3.904E-07	3.702E-07	303.2	1.60E-05	1.000	.001	.002
318	56.48	[illegible]	1.6[illegible]												
319	56.48	[illegible]	1.90												
320	56.48	[illegible]	2.29												
506	64.10	.76	[illegible]	[illegible]	8.15E-03	7.72E-03	.818	9.964E-03	1.986E-04	1.882E-04	310.9	8.15E-03	1.000	.818	.948
507	64.10	.51	[illegible]	[illegible]	8.05E-03	7.63E-03	.808	9.965E-03	1.961E-04	1.859E-04	310.2	8.05E-03	1.000	.808	.936
508	64.10	.25	[illegible]	[illegible]	7.52E-03	7.13E-03	.754	9.966E-03	1.832E-04	1.737E-04	309.9	7.52E-03	1.000	.754	.874
509	64.10	.15	[illegible]	[illegible]	6.21E-03	5.89E-03	.623	9.966E-03	1.514E-04	1.435E-04	307.5	6.21E-03	1.000	.623	.723
510	64.10	[illegible]	[illegible]	[illegible]	5.40E-03	5.12E-03	.542	9.967E-03	1.316E-04	1.247E-04	308.0	5.40E-03	1.000	.542	.628
511	64.10	[illegible]	.15	[illegible]	4.98E-03	4.72E-03	.500	9.967E-03	1.214E-04	1.151E-04	307.9	4.98E-03	1.000	.500	.580
512	64.10	[illegible]	.25	2.6[illegible]E+03	3.47E-03	3.29E-03	.348	9.967E-03	8.456E-05	8.018E-05	307.1	3.47E-03	1.000	.348	.404
513	64.10	[illegible]	[illegible]	1.71E+03	2.28E-03	2.16E-03	.229	9.967E-03	5.564E-05	5.275E-05	306.6	2.28E-03	1.000	.229	.266
514	64.10	[illegible]	[illegible]	3.97E+02	5.29E-04	[illegible]	.053	9.967E-03	1.290E-05	1.223E-05	305.3	5.29E-04	1.000	.053	.062
515	64.10	[illegible]	[illegible]	2.[illegible]E+01	2.75E-05	2.61E-05	.003	9.967E-03	6.702E-07	6.354E-07	304.1	2.75E-05	1.000	.003	.003
601	48.22	[illegible]	.2[illegible]								304.83				
602	48.22	[illegible]	[illegible]								304.02				
603	48.22	[illegible]	[illegible]								303.12				
604	48.22	[illegible]	1.3[illegible]								302.43				
605	48.22	[illegible]	1.[illegible]								301.51				

EDGE HEATING LIST FOR HE

X= 3.873E+01 HL /HREFF= 6.[illegible]E-01
X= 4.124E+01 HL /HREFF= [illegible]E-01
X= 4.377E+01 HL /HREFF= [illegible]E-01
X= 4.631E+01 HL /HREFF= 8.[illegible]1E-01
X= 4.[illegible]E+01 HL /HREFF= [illegible]E-01
X= 5.1[illegible]E+01 HL /HREFF= [illegible]E-01
X= 5.[illegible]E+01 HL /HREFF= [illegible]E-01
X= 6.1[illegible]E+01 HL /HREFF= [illegible]E-01
X= [illegible]E+01 HL /HREFF= [illegible]E-01
X= 7.172E+01 HL /HREFF= [illegible]E-01

X= [illegible]E+01 HL /HREFF= [illegible]E-01
X= 4.632E+01 HL /HREFF= 7.6[illegible]7E-01
X= 5.[illegible]E+01 HL /HREFF= [illegible]E-02
X= [illegible]E+01 HL /HREFF= [illegible]E-01

B.L. TRANSITION DISTANCE = [illegible]6.4[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =[illegible]7[illegible] CM

ORIGINAL PAGE IS POOR QUALITY

AMES 3.5 FT HWT TEST (1[illegible]), [illegible] BLUMER, IN-LINE RSI GAP RUN(64) 1973

TT	= 1.12[illegible](K)	GAP LENGTH	= 3[illegible].4[illegible](CM)
PT	= 1.[illegible]3[illegible]E+06(N/M2)	GAP WIDTH	= .254(CM)
HT	= 1.139/[illegible](J/KG)	GAP DEPTH	= 3.310(CM)
RE/METER	= 3.23[illegible]E+06	ORIENTATION	= 15.0[illegible](DEG)
MACH	= 5.1[illegible]	QS	= 1.2157E+05(W/M2)
RHO VEL	= 4.1[illegible](KG/M2-S)	MOD.POSITION	= 4
HAW/HT	= 0.9[illegible] FOR HT		
HAW/HT	= 0.974 FOR HL		
HLCC	= HL(2ND. [illegible] COND..)		

T/C	Y (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]+03	7.76E-03	[illegible].35E-03	.818	9.461E-03	1.[illegible]E-04	1.770E-04	303.5				1.000
17	66.64	-.51	[illegible]	[illegible]+03	8.16E-03	7.73E-03	.827	9.667E-03	1.964E-04	1.869E-04	310.4				1.000
18	61.56	-.51	[illegible]	[illegible].2[illegible]E+03	[illegible].62E-03	8.17E-03	.83[illegible]	1.[illegible]33E-02	2.07[illegible]E-04	1.960E-04	311.6				1.000
19	56.48	-.51	[illegible]	[illegible]E+03	8.92E-03	8.45E-03	.814	1.09[illegible]E-02	2.149E-04	2.035E-04	312.1				1.000
20	51.39	-.51	[illegible]	6.7[illegible]E+03	9.32E-03	8.83E-03	.796	1.167E-02	2.243E-04	2.124E-04	312.6				1.000
21	48.86	-.51	[illegible]	7.2[illegible]E+03	1.00E-02	9.[illegible]E-03	.833	1.203E-02	2.413E-04	2.260E-04	312.9				1.000
22	46.31	-.51	[illegible]	7.4[illegible]E+03	1.035E-02	9.74E-03	.829	1.241E-02	2.47[illegible]E-04	2.346E-04	313.3				1.000
23	43.77	-.51	0.[illegible]	7.6[illegible]E+03	1.065E-02	1.00E-02	.827	1.279E-02	2.549E-04	2.411E-04	313.5				1.000
24	41.24	-.51	[illegible]	[illegible]E+03	1.13E-02	1.07E-02	.855	1.317E-02	2.71[illegible]E-04	2.567E-04	314.0				1.000
25	38.7[illegible]	-.51	[illegible]	[illegible]E+03	1.11E-02	1.05E-02	.822	1.354E-02	2.679E-04	2.538E-04	313.6				1.000
41	71.72	[illegible]	.25	1.21E+03	1.66E-03	1.57E-03	.175	9.474E-03	4.003E-05	3.790E-05	306.8				.214
42	66.64	[illegible]	.25	2.[illegible]E+03	3.61E-03	3.[illegible]E-03	.366	9.863E-03	8.692E-05	8.236E-05	307.7				.443
43	61.56	[illegible]	.25	2.1[illegible]E+03	3.[illegible]E-03	2.95E-03	.291	1.032E-02	7.243E-05	6.861E-05	310.0				.349
44	56.48	[illegible]	.25	2.11E+03	2.90E-03	2.75E-03	.265	1.096E-02	6.977E-05	6.61[illegible]E-05	310.6				.326
45	51.39	[illegible]	.25	1.[illegible]E+03	2.71E-03	2.56E-03	.232	1.166E-02	6.516E-05	6.172E-05	310.7				.291
46	48.86	[illegible]	.25	2.[illegible]E+03	3.51E-03	3.33E-03	.292	1.203E-02	8.457E-05	8.011E-05	310.9				.351
47	46.31	[illegible]	.25	[illegible].74E+03	3.78E-03	3.58E-03	.305	1.241E-02	9.098E-05	8.619E-05	311.3				.368
48	43.77	[illegible]	.25	3.31E+03	4.56E-03	4.32E-03	.357	1.279E-02	1.098E-04	1.041E-04	311.5				.432
49	41.24	[illegible]	.25	3.1[illegible]E+03	4.38E-03	4.15E-03	.333	1.316E-02	1.05[illegible]E-04	9.990E-05	312.0				.389
50	38.7[illegible]	[illegible]	.25	1.8[illegible]E+03	2.56E-03	2.42E-03	.189	1.354E-02	6.159E-05	5.834E-05	311.6				.230
103	39.37	1.52	[illegible]	7.[illegible]E+03	1.09E-02	1.03E-02	.814	1.336E-02	2.616E-04	2.476E-04	319.6	1.09E-02	1.000	.814	.970
105	39.97	1.[illegible]	[illegible]	7.[illegible]E+03	1.09E-02	1.13E-02	.817	1.335E-02	2.628E-04	2.487E-04	323.0	1.09E-02	1.000	.817	.975
107	39.37	.71	[illegible]	[illegible]E+03	1.29E-02	1.22E-02	.967	1.33[illegible]E-02	3.11[illegible]E-04	2.944E-04	313.3	1.29E-02	1.000	.967	1.154
108	39.97	[illegible]	[illegible]	[illegible]E+03	1.33E-02	1.26E-02	.994	1.335E-02	3.194E-04	3.024E-04	315.1	1.33E-02	1.000	.994	1.185
110	39.97	[illegible]	[illegible]	[illegible]E+03	1.11E-02	1.05E-02	.829	1.33[illegible]E-02	2.659E-04	2.524E-04	316.4	1.11E-02	1.000	.829	.989
111	39.97	[illegible]	.1[illegible]	[illegible]E+03	[illegible]E-03	9.06E-03	.716	1.335E-02	2.3[illegible]E-04	2.190E-04	31[illegible].8	9.56E-03	1.000	.716	.854
112	39.97	[illegible]	.25	[illegible]E+03	6.94E-03	6.58E-03	.520	1.335E-02	1.671E-04	1.583E-04	314.2	6.94E-03	1.000	.520	.620
113	39.97	[illegible]	.38	3.29E+03	4.54E-03	4.30E-03	.340	1.335E-02	1.093E-04	1.035E-04	312.9	4.54E-03	1.000	.340	.405
114	39.97	[illegible]	[illegible]	1.[illegible]E+03	1.47E-03	1.39E-03	.110	1.335E-02	3.5[illegible]E-05	3.356E-05	311.0	1.47E-03	1.000	.110	.131
115	39.97	[illegible]	.89	[illegible]E+02	3.93E-04	3.73E-04	.029	1.335E-02	9.465E-06	8.968E-06	309.3	3.93E-04	1.000	.029	.035
203	46.32	1.[illegible]	[illegible]	8.[illegible]E+03	1.24E-02	1.18E-02	1.002	1.24[illegible]E-02	2.989E-04	2.831E-04	315.4	1.24E-02	1.000	1.002	1.208
205	46.32	1.[illegible]	[illegible]	[illegible]E+03	1.27E-02	1.20E-02	1.021	1.24[illegible]E-02	3.[illegible]E-04	2.886E-04	310.4	1.27E-02	1.000	1.021	1.232
207	46.32	.51	[illegible]	[illegible].31E+03	1.15E-02	1.19E-02	.929	1.24[illegible]E-02	2.773E-04	2.625E-04	315.9	1.15E-02	1.000	.929	1.12[illegible]
208	46.32	[illegible]	[illegible]	[illegible]	1.[illegible]E-02	1.[illegible]E-02	.869	1.241E-02	2.59[illegible]E-04	2.453E-04	313.1	1.0[illegible]E-02	1.000	.869	1.04[illegible]
210	46.32	[illegible]	.[illegible]4	[illegible].7[illegible]E+03	[illegible].76E-03	[illegible].30E-03	.706	1.241E-02	2.11[illegible]E-04	1.998E-04	313.7	8.76E-03	1.000	.706	.652
211	46.32	[illegible]	.1[illegible]	[illegible]E+03	7.77E-03	7.36E-03	.626	1.241E-02	1.871E-04	1.772E-04	313.1	7.77E-03	1.000	.626	.75[illegible]
212	46.32	[illegible]	.2[illegible]	[illegible]E+03	[illegible].13E-03	[illegible]E-03	.49[illegible]	1.24[illegible]E-02	1.48[illegible]E-04	1.410E-04	312.0	6.18E-03	1.000	.498	.60[illegible]
213	46.32	[illegible]	.[illegible]												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.[illegible]	[illegible]E+02	[illegible].[illegible]E-04	[illegible].21E-04	.[illegible]3	1.24[illegible]E-02	1.57[illegible]E-05	1.495E-05	3[illegible].1	6.55E-04	1.000	.053	.064

AMES 3.5 FT HWT TEST (1-2), C.J. BLUMER, IN-LINE RSI GAP RUN(94) 1973 PAGE 168

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40	1.19E+02	1.63E-04	1.55E-04	.013	1.241E-02	3.929E-06	3.723E-06	307.7	1.63E-04	1.000	.013	.016
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.03	2.29												
306	56.48	.75	0.00												
307	56.48	.51	0.00	6.32E+02	9.04E-04	8.55E-04	.083	1.096E-02	2.176E-05	2.057E-05	337.5	9.04E-04	1.000	.083	.101
308	56.48	.25	0.00	9.71E+03	8.71E-03	8.25E-03	.795	1.096E-02	2.097E-04	1.986E-04	312.7	8.71E-03	1.000	.795	.977
309	56.48	.15	0.00	6.67E+03	7.63E-03	7.22E-03	.696	1.096E-02	1.835E-04	1.739E-04	311.7	7.63E-03	1.000	.696	.855
310	56.48	.04	.04	5.16E+03	7.11E-03	6.74E-03	.649	1.096E-02	1.712E-04	1.622E-04	311.1	7.11E-03	1.000	.649	.797
311	56.48	0.00	.15												
312	56.48	0.00	.25	2.89E+03	3.96E-03	3.75E-03	.361	1.096E-02	9.529E-05	9.029E-05	308.1	3.96E-03	1.000	.361	.444
313	56.48	0.00	.38	1.45E+03	1.99E-03	1.59E-03	.182	1.096E-02	4.796E-05	4.544E-05	306.9	1.99E-03	1.000	.182	.223
314	56.48	0.00	.64	5.73E+02	7.85E-04	7.44E-04	.072	1.096E-02	1.891E-05	1.791E-05	307.2	7.85E-04	1.000	.072	.088
315	56.48	0.00	.89	8.50E+01	1.16E-04	1.10E-04	.011	1.096E-02	2.800E-06	2.653E-06	306.6	1.16E-04	1.000	.011	.013
316	56.48	0.00	1.14	1.20E+01	1.65E-05	1.56E-05	.002	1.096E-02	3.961E-07	3.754E-07	303.9	1.65E-05	1.000	.002	.002
317	56.48	0.00	1.40												
318	56.48	0.00	1.65												
319	56.48	0.00	1.90												
320	56.48	0.03	2.29												
506	64.10	.75	0.00	5.99E+03	8.27E-03	7.83E-03	.819	1.009E-02	1.990E-04	1.884E-04	312.6	8.27E-03	1.000	.819	.986
507	64.10	.51	0.00	6.03E+03	8.31E-03	7.87E-03	.823	1.009E-02	2.000E-04	1.895E-04	312.0	8.31E-03	1.000	.823	.991
508	64.10	.25	0.00	6.12E+03	8.43E-03	7.98E-03	.835	1.009E-02	2.028E-04	1.921E-04	310.8	8.43E-03	1.000	.835	1.005
509	64.10	.15	0.00	5.53E+03	7.60E-03	7.20E-03	.753	1.009E-02	1.829E-04	1.732E-04	309.4	7.60E-03	1.000	.753	.906
510	64.10	.04	.04	4.91E+03	6.75E-03	6.40E-03	.669	1.009E-02	1.626E-04	1.540E-04	303.9	6.75E-03	1.000	.669	.805
511	64.10	0.00	.15	4.58E+03	6.30E-03	5.97E-03	.624	1.009E-02	1.517E-04	1.437E-04	309.9	6.30E-03	1.000	.624	.752
512	64.10	0.00	.25	3.47E+03	4.77E-03	4.52E-03	.472	1.009E-02	1.147E-04	1.087E-04	309.1	4.77E-03	1.000	.472	.568
513	64.10	0.00	.38	2.46E+03	3.37E-03	3.20E-03	.334	1.009E-02	8.113E-05	7.691E-05	308.5	3.37E-03	1.000	.334	.402
514	64.10	0.00	.64	8.26E+02	1.13E-03	1.07E-03	.112	1.009E-02	2.724E-05	2.581E-05	307.3	1.13E-03	1.000	.112	.135
515	64.10	0.00	.89	1.95E+02	2.66E-04	2.52E-04	.026	1.009E-02	6.410E-06	6.074E-06	306.1	2.66E-04	1.000	.026	.032
601	48.22	0.00	.15								307.13				
602	48.22	0.00	.48								305.68				
603	48.22	0.00	.81								0.00				
604	48.22	0.00	1.17								304.34				
605	48.22	0.00	1.49								303.36				

EDGE HEATING USED FOR HE

X=	3.870E+01	HL	/HREFF=	8.219E-01
X=	4.124E+01	HL	/HREFF=	8.571E-01
X=	4.377E+01	HL	/HREFF=	8.257E-01
X=	4.631E+01	HL	/HREFF=	8.238E-01
X=	4.886E+01	HL	/HREFF=	8.330E-01
X=	5.139E+01	HL	/HREFF=	7.946E-01
X=	5.648E+01	HL	/HREFF=	8.142E-01
X=	6.156E+01	HL	/HREFF=	8.349E-01
X=	6.664E+01	HL	/HREFF=	8.267E-01
X=	7.172E+01	HL	/HREFF=	8.185E-01
X=	3.997E+01	HL	/HREFF=	9.677E-01
X=	4.632E+01	HL	/HREFF=	9.286E-01
X=	5.649E+01	HL	/HREFF=	8.204E-02
X=	6.410E+01	HL	/HREFF=	9.274E-01

B.L. TRANSITION DISTANCE = 38.70 CM
FULLY TURBULENT B.L. CONDITIONS AT = 41.24 CM

AMES [illegible] FT HWT TEST (1[illegible]2), [illegible] BLUMER, IN-LINE RSI GAP RUN(85) 1373 PAGE 169

TT = 1.1[illegible](K) GAP LENGTH = 3[illegible](CM)
PT = 5.2244E+[illegible]5(N/M2) GAP WIDTH = .254(CM)
HT = 1.21[illegible](J/KG) GAP DEPTH = 3.81[illegible](CM)
RE/METER = 1.5[illegible] ORIENTATION= 15.[illegible](DEG)
MACH = [illegible] QS = 8.8872E+04(W/M2)
RHO VEL = [illegible](KG/M2-S) MOD.POSITION= 4
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible] FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
16	71.72	-.51	[illegible]	[illegible]	[illegible]	5.46E-03	.772	7.457E-03	2.773E-04	2.629E-04	310.3				1.000
17	66.64	-.51	[illegible]	4.61E+03	6.17E-03	5.85E-03	.782	7.894E-03	2.972E-04	2.817E-04	311.1				1.000
18	61.56	-.51	[illegible]	[illegible]	6.54E-03	6.20E-03	.769	8.505E-03	3.153E-04	2.986E-04	312.3				1.000
19	56.48	-.51	[illegible]	5.16E+03	6.91E-03	6.55E-03	.769	8.994E-03	3.331E-04	3.156E-04	312.7				1.000
20	51.39	-.51	[illegible]	5.29E+03	7.09E-03	6.71E-03	.751	9.429E-03	3.414E-04	3.235E-04	313.1				1.000
21	48.86	-.51	[illegible]	[illegible]	7.54E-03	7.14E-03	.775	[illegible]	[illegible]	3.439E-04	313.5				1.000
22	46.31	-.51	[illegible]	5.74E+03	7.72E-03	7.30E-03	.773	9.956E-03	3.739E-04	3.515E-04	313.7				1.000
23	43.77	-.51	[illegible]	5.99E+03	7.91E-03	7.49E-03	.772	1.024E-02	3.819E-04	3.609E-04	313.9				1.000
24	41.24	-.51	[illegible]	[illegible]	[illegible]	7.95E-03	.798	1.052E-02	4.041E-04	3.829E-04	314.3				1.000
25	38.70	-.51	[illegible]	[illegible]	8.56E-03	8.11E-03	.793	1.080E-02	4.125E-04	3.908E-04	313.6				1.000
41	71.72	[illegible]	.25	[illegible]	1.26E-03	1.19E-03	.169	7.458E-03	6.059E-05	5.753E-05	308.6				.219
42	66.64	[illegible]	.25	[illegible]	2.24E-03	2.12E-03	.233	[illegible]	1.078E-04	1.022E-04	309.4				.363
43	61.56	[illegible]	.25	[illegible]	[illegible]	1.96E-03	.243	[illegible]	[illegible]	9.420E-05	311.2				.315
44	56.48	[illegible]	.25	1.65E+03	2.21E-03	2.09E-03	.246	8.993E-03	1.065E-04	1.009E-04	311.7				.320
45	51.39	[illegible]	.25	[illegible]	2.12E-03	[illegible]	.224	9.426E-03	1.019E-04	9.658E-05	311.8				.299
46	[illegible]	[illegible]	.25	1.72E+03	2.31E-03	2.19E-03	.238	9.672E-03	1.111E-04	1.053E-04	312.1				.306
47	46.31	[illegible]	.25	[illegible]	[illegible]	2.23E-03	.236	9.954E-03	1.132E-04	1.073E-04	312.4				.305
48	43.77	[illegible]	.25	2.10E+03	2.82E-03	2.67E-03	.275	1.023E-02	1.356E-04	1.285E-04	312.6				.356
49	41.24	[illegible]	.25	2.25E+03	3.02E-03	2.86E-03	.288	1.051E-02	1.456E-04	1.380E-04	313.0				.361
50	38.70	0.00	.25	1.71E+03	2.29E-03	2.17E-03	.212	1.079E-02	1.102E-04	1.045E-04	312.3				.267
103	39.97	[illegible]	[illegible]	[illegible]	[illegible]	7.87E-03	[illegible]	[illegible]	[illegible]	3.799E-04	318.1	8.30E-03	1.000	.789	.981
105	39.97	1.02	[illegible]	[illegible]	8.31E-03	7.97E-03	.780	1.064E-02	4.001E-04	3.799E-04	319.3	8.31E-03	1.000	.780	.981
107	39.97	.51	[illegible]	[illegible]	9.52E-03	[illegible]	.894	[illegible]	[illegible]	4.343E-04	313.0	9.52E-03	1.000	.894	1.124
108	39.97	.25	[illegible]	[illegible]	9.66E-03	9.15E-03	.907	[illegible]	4.654E-04	4.408E-04	319.0	9.66E-03	1.000	.907	1.141
110	39.97	[illegible]	[illegible]	[illegible]	8.14E-03	7.71E-03	.764	1.065E-02	3.921E-04	3.715E-04	316.9	8.14E-03	1.000	.764	.961
111	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.653	[illegible]	[illegible]	3.173E-04	316.4	6.95E-03	1.000	.653	.821
112	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.474	[illegible]	2.434E-04	2.306E-04	[illegible]	[illegible]	1.000	.474	.598
113	39.97	[illegible]	[illegible]	[illegible]	3.19E-03	[illegible]	.300	1.065E-02	1.539E-04	1.457E-04	314.4	3.19E-03	1.000	.300	.377
114	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.093	[illegible]	[illegible]	4.542E-05	313.0	9.95E-04	1.000	.093	.117
115	39.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.022	[illegible]	[illegible]	1.050E-05	311.7	2.30E-04	1.000	.022	.027
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.000	.892	1.154
205	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.891	[illegible]	[illegible]	4.044E-04	315.8	8.86E-03	1.000	.891	1.151
207	46.32	.51	[illegible]	[illegible]	7.75E-03	[illegible]	.779	[illegible]	3.733E-04	3.537E-04	315.5	7.75E-03	1.000	[illegible]	[illegible]
[illegible]	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	314.9	7.24E-03	[illegible]	[illegible]	[illegible]
[illegible]	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.653E-04	[illegible]	5.82E-03	[illegible]	.585	.757
211	46.32	[illegible]	.15	[illegible]	[illegible]	[illegible]	.513	[illegible]	2.461E-04	2.332E-04	313.6	5.11E-03	[illegible]	.513	[illegible]
212	46.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.332	[illegible]	[illegible]	1.734E-04	312.6	[illegible]	1.000	.382	.494
[illegible]	[illegible]	[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	.54												
[illegible]	[illegible]	[illegible]	[illegible]												

AMES 3.5 FT HWT TEST (1?2), ?.?. BLUMER, IN-LINE RSI GAP RUN(35) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14												
217	46.32	[illegible]	1.47	[illegible] 1E+??	5.33E-06	5.?5E-06	.001	9.952E-03	2.569E-07	2.435E-07	307.5	5.33E-06	1.000	.001	.001
218	46.32	[illegible]	1.3?												
219	46.32	[illegible]	1.6?												
220	46.32	?.00	2.29												
306	56.48	.76	[illegible]	1.??E+00	2.12E-06	2.??E-06	.000	8.994E-03	1.021E-07	9.656E-08	338.7	2.12E-06	1.000	.000	.000
307	56.48	.51	[illegible]	?.19E+02	7.20E-04	6.31E-04	.080	8.993E-03	?.469E-05	3.281E-05	336.3	7.20E-04	1.000	.080	.104
308	56.48	.25	[illegible]	?.9?E+?3	6.63E-03	?.28E-03	.737	8.993E-03	3.194E-04	3.027E-04	313.1	6.63E-03	1.000	.737	.959
309	56.48	.15	[illegible]	?.29E+03	5.75E-03	5.45E-03	.639	8.993E-03	2.77?E-04	2.625E-04	312.4	5.75E-03	1.000	.639	.832
310	56.48	.14	.14	3.96E+13	5.31E-03	5.13E-03	.591	8.993E-03	2.559E-04	2.425E-04	312.2	5.31E-03	1.000	.591	.768
311	56.48	[illegible]	.15	?.34E+??	?.?1E-06	?.33E-06	.001	8.993E-03	4.244E-07	4.014E-07	338.7	6.81E-06	1.000	.001	.001
312	56.48	[illegible]	.??	?.11E+03	2.82E-03	2.57E-03	.314	8.993E-03	1.335E-04	1.266E-04	310.4	2.82E-03	1.000	.314	.408
313	56.48	[illegible]	.??	1.4?E+03	1.98E-03	1.37E-03	.220	8.993E-03	9.527E-05	9.031E-05	309.2	1.98E-03	1.000	.220	.286
314	56.48	[illegible]	.??	3.?5E+02	?.6??E-04	?.35E-04	.051	8.993E-03	2.217E-05	2.101E-05	309.5	4.60E-04	1.000	.051	.067
315	56.48	[illegible]	.?9	?.2?E+01	?.71E-05	?.41E-05	.006	8.993E-03	2.751E-06	2.607E-06	308.9	5.71E-05	1.000	.006	.008
316	56.48	?.0?	1.?4	?.? E+00	5.33E-06	5.?5E-06	.001	8.993E-03	2.568E-07	2.434E-07	308.2	5.33E-06	1.000	.001	.001
317	56.48	[illegible]	1.??												
318	56.48	[illegible]	1.??												
319	56.48	?.??	1.??	1.??E+01	2.35E-05	2.22E-05	.003	8.993E-03	1.130E-06	1.071E-06	307.2	2.35E-05	1.000	.003	.003
320	56.48	?.??	2.?9												
506	64.1?	.76	[illegible]	?.6?E+03	6.27E-03	5.94E-03	.764	8.203E-03	3.020E-04	2.862E-04	312.6	6.27E-03	1.000	.764	.985
507	64.1?	.51	[illegible]	?.??E+03	?.16E-03	?.34E-03	.751	8.202E-03	2.967E-04	2.812E-04	312.3	6.16E-03	1.000	.751	.968
508	64.10	.25	[illegible]	?.?1E+03	?.9?E-03	?.59E-03	.719	8.201E-03	2.841E-04	2.693E-04	311.7	5.90E-03	1.000	.719	.927
509	64.10	.15	?.??	2.?7E+03	5.18E-03	4.91E-03	.631	8.201E-03	2.494E-04	2.363E-04	310.7	5.18E-03	1.000	.631	.814
510	64.1?	.?4	.?4	?.??E+03	?.6?E-03	4.36E-03	.561	8.2??E-03	2.216E-04	2.100E-04	310.6	4.60E-03	1.000	.561	.723
511	64.1?	[illegible]	.1?	?.2?E+03	?.31E-03	4.?9E-03	.526	8.20?E-03	2.0??E-04	1.970E-04	310.6	4.31E-03	1.000	.526	.678
512	64.10	?.0?	.2?	2.4?E+03	3.30E-03	3.12E-03	.402	8.20?E-03	1.587E-04	1.504E-04	310.2	3.30E-03	1.000	.402	.518
513	64.1?	[illegible]	.??	1.??E+03	2.17E-03	2.?6E-03	.265	8.20?E-03	1.043E-04	9.929E-05	309.8	2.17E-03	1.000	.265	.342
514	64.1?	[illegible]	.?4	4.??E+02	?.??E-04	5.59E-04	.073	8.20?E-03	2.859E-05	2.738E-05	309.0	6.00E-04	1.000	.073	.094
515	64.1?	[illegible]	.?9	1.??E+01	1.80E-05	1.70E-05	.002	8.20?E-03	8.653E-07	8.203E-07	308.2	1.80E-05	1.000	.002	.003
601	48.22	[illegible]	.?5								308.81				
602	48.22	[illegible]	.?8								307.97				
603	46.22	[illegible]	.?1								?.??				
604	48.22	[illegible]	1.?7								307.10				
605	48.22	[illegible]	?.?9								306.53				

EDGE HEATING US?D FOR HE
X= 3.97?E+?1 HL /HREFF= 7.931E-?1
X= ?.124E+01 HL /HREFF= ?.???E-?1
X= 4.???E+?1 HL /HREFF= 7.7??E-?1
X= 4.631E+?1 HL /HREFF= ?.734E-?1
X= ?.???E+?1 HL /HREFF= 7.???E-?1
X= 5.13?E+?1 HL /HREFF= 7.??E-?1
X= 5.643E+?1 HL /HREFF= 7.?47E-?1
X= 6.1??E+?1 HL /HREFF= ?.???E-?1
X= 6.???E+?1 HL /HREFF= ?.???E-?1
X= 7.172E+?1 HL /HREFF= 7.?19E-01

X= ?.9??E+?1 HL /HREFF= ?.???E-?1
X= 4.6?2E+?1 HL /HREFF= ?.???E-?1
X= ?.??E+?1 HL /HREFF= ?.??E-?2
X= ?.41?E+?1 HL /HREFF= 7.???E-?1
B.L. TRANSITION DISTANCE = ??.4? CM
FULLY TURBULENT B.L. CONDITIONS AT =?3?.? CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (1[illegible]2), [illegible] BLUMER, IN-LINE RSI GAP RUN (36) 1973 PAGE 171

TT	= 1.11[illegible]E+03(K)		GAP LENGTH	= 30.480(CM)
PT	= 5.2[illegible]E+05(N/M2)		GAP WIDTH	= .254(CM)
HT	= 1.1734E+06(J/KG)		GAP DEPTH	= 3.510(CM)
RE/METER	= 1.6[illegible]E+06		ORIENTATION	= 0.000(DEG)
MACH	= 7.1[illegible]		QS	= 8.4851E+04(W/M2)
RHO VEL	= 2.11[illegible]E+01(KG/M2-S)		MOL.POSITION	= 4
HAW/HT	= [illegible] FOR HT			
HAW/HT	= 0.974 FOR HL			
HLCC	= HL(2ND. [illegible] COND.,)			

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	[illegible]	7.37E+03	1.[illegible]3E-02	9.725-03	1.532	6.7[illegible]E-03	4.851E-04	4.595E-04	308.5				1.000
7	117.47	-.51	[illegible]	7.31E+03	1.02E-02	9.69E-03	1.547	6.615E-03	4.833E-04	4.552E-04	308.4				1.000
8	112.37	-.51	[illegible]	[illegible]E+03	1.[illegible]E-02	9.[illegible]7E-03	1.543	6.546E-03	4.77[illegible]E-04	4.522E-04	308.5				1.000
9	107.31	-.51	[illegible]	7.30E+03	1.[illegible]2E-02	9.69E-03	1.567	6.525E-03	4.833E-04	4.577E-04	308.4				1.000
10	102.2[illegible]	-.51	[illegible]	7.[illegible]E+03	1.05E-02	9.34E-03	1.552	6.721E-03	4.961E-04	4.699E-04	308.5				1.000
11	97.12	-.51	[illegible]	[illegible]E+03	1.05E-02	9.35E-03	1.523	6.896E-03	4.953E-04	4.701E-04	308.5				1.000
12	92.04	-.51	[illegible]	7.31E+03	1.09E-02	1.04E-02	1.552	7.047E-03	5.17[illegible]E-04	4.897E-04	308.6				1.000
13	86.96	-.51	[illegible]	8.14E+03	1.15E-02	1.09E-02	1.592	7.196E-03	5.419E-04	5.132E-04	308.8				1.000
14	81.98	-.51	[illegible]	8.76E+03	1.23E-02	1.16E-02	1.584	7.305E-03	5.814E-04	5.507E-04	309.0				1.000
15	76.80	-.51	[illegible]	[illegible]E+03	1.22E-02	1.15E-02	1.646	7.408E-03	5.753E-04	5.458E-04	309.0				1.000
16	71.72	-.51	[illegible]	8.67E+03	1.22E-02	1.15E-02	1.618	7.509E-03	5.744E-04	5.440E-04	309.1				1.000
17	66.64	-.51	[illegible]	7.[illegible]1E+03	1.07E-02	1.01E-02	1.343	7.946E-03	5.04[illegible]E-04	4.779E-04	309.8				1.000
18	61.56	-.51	[illegible]	[illegible]E+03	9.78E-03	9.26E-03	1.143	8.557E-03	4.624E-04	4.379E-04	310.9				1.000
19	56.48	-.51	[illegible]	6.51E+03	9.14E-03	8.66E-03	1.010	9.057E-03	4.323E-04	4.094E-04	311.4				1.000
20	51.39	-.51	[illegible]	[illegible]E+03	9.20E-03	8.72E-03	.966	9.508E-03	4.351E-04	4.120E-04	311.5				1.000
21	48.86	-.51	[illegible]	7.03E+03	9.88E-03	9.36E-03	1.013	9.758E-03	4.672E-04	4.422E-04	311.7				1.000
22	46.31	-.51	.00	7.17E+03	1.01E-02	9.55E-03	1.005	1.034E-02	4.763E-04	4.516E-04	311.9				1.000
23	43.77	-.51	[illegible]	7.34E+03	1.03E-02	9.78E-03	1.001	1.032E-02	4.884E-04	4.625E-04	312.1				1.000
24	41.24	-.51	[illegible]	7.57E+03	1.06E-02	1.00E-02	1.000	1.060E-02	5.009E-04	4.743E-04	312.0				1.000
25	38.70	-.51	[illegible]	7.[illegible]3E+03	1.06E-02	1.00E-02	.973	1.088E-02	5.036E-04	4.749E-04	312.0				1.000
103	39.97	1.52	[illegible]	7.1[illegible]E+03	1.00E-02	9.50E-03	.935	1.073E-02	4.743E-04	4.491E-04	315.2	1.00E-02	1.000	.935	.948
105	39.97	1.02	[illegible]	7.[illegible]E+03	9.91E-03	9.38E-03	.923	1.073E-02	4.693E-04	4.433E-04	316.1	9.91E-03	1.000	.923	.936
107	39.97	.51	[illegible]	[illegible]E+03	9.69E-03	9.18E-03	.903	1.073E-02	4.582E-04	4.338E-04	315.7	9.69E-03	1.000	.903	.915
108	39.97	.25	[illegible]	[illegible]E+03	8.72E-03	8.26E-03	.812	1.073E-02	4.122E-04	3.902E-04	315.0	8.72E-03	1.000	.812	.823
110	39.97	.14	[illegible]	[illegible]E+03	6.68E-03	6.32E-03	.622	1.073E-02	3.157E-04	2.989E-04	314.0	6.68E-03	1.000	.622	.631
111	39.97	[illegible]	.16	[illegible]E+03	5.55E-03	[illegible]E-03	.517	1.073E-02	2.623E-04	2.483E-04	313.6	5.55E-03	1.000	.517	.524
112	39.97	[illegible]	.25	2.[illegible]E+03	3.74E-03	3.54E-03	.348	1.073E-02	1.768E-04	1.674E-04	312.7	3.74E-03	1.000	.348	.353
113	39.97	[illegible]	.76	1.56E+03	2.19E-03	2.17E-03	.204	1.073E-02	1.035E-04	9.805E-05	311.9	2.19E-03	1.000	.204	.207
114	39.97	[illegible]	[illegible]	[illegible]E+02	[illegible]E-04	6.19E-04	.061	1.073E-02	3.392E-05	2.928E-05	312.8	6.54E-04	1.000	.061	.062
115	39.97	[illegible]	[illegible]	1.34E+02	1.83E-04	1.74E-04	.017	1.073E-02	8.667E-06	8.209E-06	309.8	1.83E-04	1.000	.017	.017
203	46.32	1.52	[illegible]	[illegible]E+03	9.[illegible]E-03	9.50E-03	.905	1.0[illegible]E-02	4.291E-04	4.063E-04	313.0	9.06E-03	1.000	.905	.900
205	46.32	1.02	[illegible]	[illegible]E+03	9.02E-03	8.54E-03	.899	1.003E-02	4.264E-04	4.037E-04	313.7	9.02E-03	1.000	.899	.894
207	46.32	.51	[illegible]	[illegible]E+03	8.97E-03	8.49E-03	.894	1.003E-02	4.233E-04	4.013E-04	313.5	8.97E-03	1.000	.894	.88[illegible]
208	46.32	.25	[illegible]	[illegible]E+03	8.63E-03	8.36E-03	[illegible]	1.004E-02	4.173E-04	3.953E-04	313.6	8.63E-03	1.000	.880	.876
210	46.32	[illegible]	[illegible]	[illegible]E+03	7.42E-03	7.[illegible]E-03	.739	1.00[illegible]E-02	3.517E-04	3.321E-04	312.1	7.42E-03	1.000	.739	.736
211	46.32	[illegible]	.16	4.69E+03	6.58E-03	6.23E-03	.656	1.004E-02	3.110E-04	2.945E-04	311.8	6.58E-03	1.000	.656	.65[illegible]
212	46.32	[illegible]	[illegible]	[illegible]E+03	[illegible]E-03	[illegible]E-03	[illegible]	1.004E-02	2.372E-04	2.246E-04	311.0	5.02E-03	1.000	.500	.49[illegible]
213	46.32	[illegible]	[illegible]												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	[illegible]	8.[illegible]E+02	[illegible]E-03	1.13E-03	.124	1.004E-02	5.891E-05	5.579E-05	309.[illegible]	1.2[illegible]E-03	1.000	.124	.124

AMES 3.5 FT HWT TEST (192), [illegible] BLUMER, IN-LINE RSI GAP RUN(86) 1973 PAGE 172

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14	[illegible]	1.24E-04	1.18E-04	.012	1.004E-02	5.872E-06	5.563E-06	307.8	1.24E-04	1.000	.012	.012
217	46.32	0.00	1.40	7.13E+00	1.00E-05	9.47E-06	.001	1.004E-02	4.726E-07	4.476E-07	309.4	1.00E-05	1.000	.001	.001
218	46.32	0.00	[illegible]	[illegible]	5.59E-06	5.29E-06	.001	1.004E-02	2.643E-07	2.531E-07	306.6	5.58E-06	1.000	.001	.001
219	46.32	0.00	1.90	[illegible]	3.58E-05	3.40E-05	.004	1.004E-02	1.794E-06	1.695E-06	306.5	3.58E-05	1.000	.004	.004
220	46.32	0.00	2.29												
306	56.48	.75	[illegible]	9.92E+00	1.45E-05	1.37E-05	.002	9.058E-03	6.858E-07	6.481E-07	338.7	1.45E-05	1.000	.002	.002
307	56.48	.51	1.00	6.46E+03	7.68E-03	7.28E-03	.848	9.057E-03	3.632E-04	3.439E-04	311.0	7.68E-03	1.000	.848	.840
308	56.48	.25	[illegible]	5.91E+03	8.30E-03	7.86E-03	.917	9.057E-03	3.925E-04	3.717E-04	311.4	8.30E-03	1.000	.917	.906
309	56.48	.13	[illegible]	[illegible]	7.78E-03	7.37E-03	.859	9.057E-03	3.677E-04	3.483E-04	310.9	7.78E-03	1.000	.859	.851
310	56.48	.04	.04	5.26E+03	7.38E-03	6.99E-03	.815	9.057E-03	3.488E-04	3.304E-04	310.6	7.38E-03	1.000	.815	.807
311	56.48	0.00	.15												
312	56.48	0.00	.25	3.45E+03	4.83E-03	4.58E-03	.533	9.057E-03	2.284E-04	2.163E-04	308.9	4.83E-03	1.000	.533	.520
313	56.48	0.00	.38	2.66E+03	3.58E-03	3.39E-03	.396	9.057E-03	1.693E-04	1.604E-04	308.3	3.58E-03	1.000	.396	.392
314	56.48	0.00	[illegible]	1.22E+03	1.71E-03	1.62E-03	.188	9.057E-03	8.063E-05	7.638E-05	308.1	1.71E-03	1.000	.188	.187
315	56.48	0.00	.89	[illegible]	7.78E-04	7.37E-04	.086	9.057E-03	3.677E-05	3.483E-05	307.6	7.78E-04	1.000	.086	.085
316	56.48	0.03	1.14	2.23E+02	3.11E-04	2.95E-04	.034	9.057E-03	1.472E-05	1.394E-05	307.1	3.11E-04	1.000	.034	.034
317	56.48	0.00	[illegible]	[illegible]	6.39E-05	6.05E-05	.007	9.057E-03	3.017E-06	2.858E-06	306.7	6.38E-05	1.000	.007	.007
318	56.48	0.00	[illegible]	[illegible]	4.37E-05	4.14E-05	.005	9.057E-03	2.364E-06	1.955E-06	306.5	4.37E-05	1.000	.005	.005
319	56.48	0.00	1.90	9.53E+00	1.34E-05	1.27E-05	.001	9.057E-03	6.355E-07	6.020E-07	306.3	1.34E-05	1.000	.001	.001
320	56.48	0.00	2.29	[illegible]	[illegible]	2.55E-05	.003	9.057E-03	1.323E-06	1.254E-06	305.3	2.80E-05	1.000	.003	.003
506	64.10	.76	[illegible]	4.56E+03	6.41E-03	6.07E-03	.777	8.256E-03	3.031E-04	2.870E-04	311.1	6.41E-03	1.000	.777	.625
507	64.10	.51	[illegible]	[illegible]	7.32E-03	6.94E-03	.887	8.255E-03	3.462E-04	3.278E-04	310.7	7.32E-03	1.000	.887	.714
508	64.10	.25	[illegible]	[illegible]	8.45E-03	8.01E-03	1.024	8.254E-03	3.996E-04	3.785E-04	309.8	8.45E-03	1.000	1.024	.824
509	64.10	.15	[illegible]	[illegible]	8.22E-03	7.78E-03	.995	8.253E-03	3.884E-04	3.679E-04	308.7	8.22E-03	1.000	.995	.801
510	64.10	.04	.04	[illegible]	7.46E-03	7.07E-03	.904	8.253E-03	3.529E-04	3.341E-04	309.2	7.46E-03	1.000	.904	.727
511	64.10	0.00	.15	[illegible]	7.23E-03	6.84E-03	.876	8.253E-03	3.416E-04	3.235E-04	309.2	7.23E-03	1.000	.876	.704
512	64.10	0.00	.25	4.29E+03	6.00E-03	5.69E-03	.728	8.253E-03	2.838E-04	2.688E-04	308.9	6.00E-03	1.000	.728	.585
513	64.10	0.00	.38	3.37E+03	4.66E-03	4.42E-03	.565	8.253E-03	2.204E-04	2.088E-04	308.6	4.66E-03	1.000	.565	.455
514	64.10	0.00	.64	[illegible]	2.38E-03	2.26E-03	.289	8.253E-03	1.126E-04	1.067E-04	307.9	2.38E-03	1.000	.289	.232
515	64.10	0.00	.89	[illegible]	1.04E-03	9.88E-04	.126	8.253E-03	4.930E-05	4.670E-05	307.1	1.04E-03	1.000	.126	.102
601	48.22	0.00	.25								307.71				
602	48.22	0.00	.48								307.03				
603	48.22	0.00	.91								338.72				
604	48.22	0.00	1.37								306.43				
605	48.22	0.00	1.89								305.69				

EDGE HEATING USED FOR HE

X=	[illegible]	HL /HREFF=	9.735E-01
X=	4.124E+01	HL /HREFF=	[illegible]
X=	4.377E+01	HL /HREFF=	[illegible]
X=	4.671E+01	HL /HREFF=	[illegible]
X=	4.695E+01	HL /HREFF=	1.013E+00

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X=     [illegible]   HL   /HREFF=     [illegible]
X=     5.648E+01   HL   /HREFF=     1.019E+00
X=     6.156E+01   HL   /HREFF=     1.147E+00
X=     6.664E+01   HL   /HREFF=     1.347E+00
X=     7.172E+01   HL   /HREFF=     1.618E+00
X=     7.680E+01   HL   /HREFF=     1.646E+00
X=     8.189E+01   HL   /HREFF=     1.634E+00
X=     8.696E+01   HL   /HREFF=     1.592E+00
X=     9.204E+01   HL   /HREFF=     1.552E+00
X=     9.712E+01   HL   /HREFF=     1.523E+00
X=     1.022E+02   HL   /HREFF=     1.562E+00
X=     1.073E+02   HL   /HREFF=     1.557E+00
X=     1.124E+02   HL   /HREFF=     1.543E+00
X=     1.175E+02   HL   /HREFF=     1.547E+00
X=     1.226E+02   HL   /HREFF=     1.532E+00

X=     3.997E+01   HL   /HREFF=     9.032E-01
X=     4.632E+01   HL   /HREFF=     8.935E-01
X=     5.648E+01   HL   /HREFF=     8.492E-01
X=     6.410E+01   HL   /HREFF=     8.871E-01
B.L. TRANSITION DISTANCE =  51.39 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.09 CM
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AMES 3.5 FT HWT TEST (1:P), C.J. PLUMER, IN-LINE RSI GAP RUN(37) 1973 PAGE 173

TT = 1.116E+03(K) GAP LENGTH = 30.480(CM)
PT = 1.037E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.1[illegible]E+06(J/KG) GAP DEPTH = 3.31[illegible](CM)
RE/METER = 3.27[illegible]E+06 ORIENTATION= 0.000(DEG)
MACH = 5.1[illegible] QS = 1.2015E+05(W/M2)
RHO VEL = 4.17[illegible]E+01(KG/M2-S) MOC.POSITION= 4
HAW/HT = [illegible] FOR HT
HAW/HT = [illegible].374 FOR HL
HLCC = HL(2ND. ORDER CONC.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	[illegible]	3.74E+04	4.65E-02	4.41E-02	1.415	3.289E-02	1.114E-03	1.055E-03	310.2				1.000
7	117.47	-.51	[illegible]	3.44E+04	4.78E-02	4.53E-02	1.773	2.696E-02	1.145E-03	1.084E-03	310.3				1.000
8	112.37	-.51	[illegible]	3.37E+04	4.69E-02	4.45E-02	2.143	2.190E-02	1.124E-03	1.065E-03	310.4				1.000
9	107.31	-.51	[illegible]	3.40E+04	4.73E-02	4.48E-02	2.622	1.803E-02	1.132E-03	1.072E-03	310.4				1.000
10	102.20	-.51	[illegible]	3.41E+04	4.75E-02	4.50E-02	3.164	1.501E-02	1.137E-03	1.077E-03	310.6				
11	97.12	-.51	[illegible]	3.34E+04	4.65E-02	4.41E-02	3.667	1.262E-02	1.114E-03	1.055E-03	310.7				
12	92.04	-.51	[illegible]	3.30E+04	4.60E-02	4.36E-02	4.270	1.087E-02	1.1[illegible]1E-03	1.043E-03	310.8				
13	86.96	-.51	[illegible]	3.15E+04	4.41E-02	4.18E-02	4.435	9.942E-03	1.056E-03	1.000E-03	311.1				
14	81.88	-.51	[illegible]	3.00E+04	4.17E-02	3.95E-02	4.468	9.363E-03	9.996E-04	9.467E-04	311.3				
15	76.80	-.51	[illegible]	2.59E+04	3.59E-02	3.40E-02	3.863	9.300E-03	8.602E-04	8.147E-04	311.3				
16	71.72	-.51	[illegible]	2.34E+04	3.27E-02	3.09E-02	3.425	9.539E-03	7.822E-04	7.408E-04	311.6				
17	66.64	-.51	[illegible]	2.56E+04	3.58E-02	3.39E-02	3.604	9.922E-03	8.561E-04	8.108E-04	312.5				
18	61.56	-.51	[illegible]	1.22E+04	1.71E-02	1.62E-02	1.649	1.038E-02	4.095E-04	3.881E-04	314.1				1.000
19	56.48	-.51	[illegible]	9.63E+03	1.36E-02	1.28E-02	1.231	1.101E-02	3.246E-04	3.073E-04	314.7				1.000
20	51.39	-.51	[illegible]	[illegible]	1.27E-02	1.20E-02	1.081	1.173E-02	3.037E-04	2.875E-04	315.0				1.000
21	48.86	-.51	[illegible]	9.[illegible]E+03	1.33E-02	1.26E-02	1.103	1.209E-02	3.195E-04	3.025E-04	315.2				1.000
22	46.31	-.51	[illegible]	9.61E+03	1.35E-02	1.28E-02	1.080	1.240E-02	3.225E-04	3.054E-04	315.6				1.000
23	43.77	-.51	[illegible]	9.62E+03	1.35E-02	1.26E-02	1.050	1.261E-02	3.232E-04	3.060E-04	315.9				1.000
24	41.24	-.51	[illegible]	9.68E+03	1.36E-02	1.29E-02	1.026	1.323E-02	3.251E-04	3.078E-04	316.3				1.000
25	38.70	-.51	[illegible]	9.57E+03	1.34E-02	1.27E-02	.986	1.361E-02	3.214E-04	3.043E-04	315.8				1.000
103	39.97	1.52	[illegible]	9.1[illegible]E+03	1.29E-02	1.22E-02	.961	1.342E-02	3.089E-04	2.924E-04	320.2	1.29E-02	1.000	.961	.955
105	39.97	1.02	[illegible]	9.13E+03	1.28E-02	1.21E-02	.951	1.342E-02	3.055E-04	2.891E-04	321.4	1.28E-02	1.000	.951	.945
107	39.97	.51	[illegible]	8.76E+03	1.24E-02	1.17E-02	.922	1.342E-02	2.962E-04	2.804E-04	320.8	1.24E-02	1.000	.922	.916
108	39.97	.25	[illegible]	7.88E+03	1.11E-02	1.05E-02	.825	1.342E-02	2.651E-04	2.513E-04	319.6	1.11E-02	1.000	.825	.820
110	39.97	[illegible]	.04	6.15E+03	8.65E-03	8.19E-03	.644	1.342E-02	2.071E-04	1.960E-04	318.2	8.65E-03	1.000	.644	.640
111	39.97	[illegible]	.15	[illegible]	7.19E-03	6.81E-03	.535	1.342E-02	1.721E-04	1.629E-04	317.5	7.19E-03	1.000	.535	.532
112	39.97	[illegible]	.25	3.52E+03	4.93E-03	4.67E-03	.368	1.342E-02	1.182E-04	1.119E-04	316.1	4.93E-03	1.000	.368	.365
113	39.97	[illegible]	.38	2.12E+03	2.97E-03	2.12E-03	.222	1.342E-02	7.122E-05	6.743E-05	314.9	2.97E-03	1.000	.222	.220
114	39.97	[illegible]	[illegible]	[illegible]	9.07E-04	2.59E-04	.066	1.342E-02	2.172E-05	2.057E-05	313.1	9.07E-04	1.000	.066	.067
115	39.97	[illegible]	[illegible]	1.88E+02	2.63E-04	2.49E-04	.020	1.342E-02	6.299E-06	5.955E-06	311.5	2.63E-04	1.000	.020	.019
203	46.32	1.52	[illegible]	[illegible]	1.16E-02	1.10E-02	.934	1.247E-02	2.788E-04	2.639E-04	317.3	1.16E-02	1.000	.934	.665
205	46.32	1.02	[illegible]	[illegible]	1.14E-02	1.08E-02	.912	1.247E-02	2.720E-04	2.575E-04	319.2	1.14E-02	1.000	.912	.844
207	46.32	.51	[illegible]	8.26E+03	1.16E-02	1.10E-02	.932	1.247E-02	2.782E-04	2.634E-04	317.8	1.16E-02	1.000	.932	.867
208	46.32	.25	[illegible]	[illegible]	1.23E-02	1.16E-02	.983	1.247E-02	2.933E-04	2.777E-04	317.6	1.23E-02	1.000	.983	.914
210	46.32	[illegible]	[illegible]	[illegible]	1.15E-02	1.09E-02	.922	1.247E-02	2.752E-04	2.605E-04	315.8	1.15E-02	1.000	.922	.854
211	46.32	[illegible]	.1[illegible]	[illegible]	1.06E-02	1.01E-02	.852	1.247E-02	2.544E-04	2.409E-04	315.2	1.06E-02	1.000	.852	.787
212	46.32	[illegible]	[illegible]	[illegible]	8.62E-03	8.16E-03	.691	1.247E-02	2.063E-04	1.954E-04	314.1	8.62E-03	1.000	.691	.640
213	46.32	[illegible]	[illegible]	[illegible]	9.29E-06	8.59E-06	.001	1.247E-02	2.213E-07	2.192E-07	336.7	9.29E-06	1.000	.001	.001
214	46.72	.1[illegible]	.[illegible]4												
215	46.32	[illegible]	[illegible]	[illegible]	1.90E-03	1.80E-03	.152	1.247E-02	4.54[illegible]E-05	4.304E-05	313.8	1.90E-03	1.000	.152	.141

AMES 3.5 FT HWT TEST (1*2), C.J. BLUMER, IN-LINE RSI GAP RUN(87) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	G (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14	[illegible]	4.28E-04	[illegible]	.034	1.247E-02	1.007E-05	9.537E-06	397.7	4.28E-04	1.000	.034	.031
217	46.32	[illegible]	1.4[illegible]	[illegible]	1.38E-04	1.31E-04	.011	1.247E-02	3.299E-06	3.125E-06	310.1	1.38E-04	1.000	.011	.010
218	46.32	[illegible]	1.[illegible]												
219	46.32	[illegible]	1.[illegible]												
220	46.32	[illegible]	2.29												
306	56.48	.[illegible]	[illegible]												
307	56.48	.31	[illegible]	[illegible]	1.09E-02	1.[illegible]E-02	.991	1.101E-02	2.611E-04	2.472E-04	313.3	1.09E-02	1.000	.991	.885
308	56.48	.23	[illegible]	[illegible]	1.29E-02	1.22E-02	1.175	1.101E-02	3.[illegible]37E-04	2.932E-04	314.6	1.29E-02	1.000	1.175	.956
309	56.48	.1[illegible]	[illegible]	9.21E+03	1.29E-02	1.22E-02	1.17[illegible]	1.101E-02	3.094E-04	2.920E-04	313.8	1.29E-02	1.000	1.170	.951
310	56.48	.[illegible]	.[illegible]	9.[illegible]2E+03	1.26E-02	1.19E-02	1.146	1.101E-02	3.023E-04	2.860E-04	313.4	1.26E-02	1.003	1.146	.931
311	56.48	[illegible]	.15												
312	56.48	[illegible]	.[illegible]	[illegible]	9.34E-03	[illegible]	.349	1.101E-02	2.237E-04	2.119E-04	310.8	9.34E-03	1.000	.849	.689
313	56.48	[illegible]	.38	[illegible]	7.31E-03	6.92E-03	.664	1.101E-02	1.749E-04	1.657E-04	309.8	7.31E-03	1.000	.664	.539
314	56.48	[illegible]	.64	3.1[illegible]E+03	4.37E-03	4.14E-03	.397	1.101E-02	1.047E-04	9.918E-05	3[illegible].4	4.37E-03	1.000	.397	.323
315	56.48	[illegible]	.[illegible]	1.[illegible]E+03	2.42E-03	2.30E-03	.220	1.101E-02	5.8[illegible]9E-05	5.499E-05	338.5	2.42E-03	1.000	.220	.179
316	56.48	[illegible]	1.14	9.60E+02	1.33E-03	1.26E-03	.121	1.101E-02	3.157E-05	3.019E-05	307.8	1.33E-03	1.000	.121	.098
317	56.48	[illegible]	1.4[illegible]	[illegible]	[illegible]	5.02E-04	.048	1.101E-02	1.259E-05	1.202E-05	307.3	5.30E-04	1.000	.048	.039
318	56.48	[illegible]	1.[illegible]	1.91E+02	2.64E-04	2.5[illegible]E-04	.024	1.101E-02	6.339E-06	5.997E-06	307.0	2.64E-04	1.000	.024	.020
319	56.48	[illegible]	1.9[illegible]	1.[illegible]2E+02	2.11E-04	2.30E-04	.019	1.101E-02	5.092E-06	4.787E-06	306.8	2.11E-04	1.000	.019	.016
320	56.48	[illegible]	2.29	[illegible]	2.89E-04	2.74E-04	.026	1.101E-02	6.913E-06	6.550E-06	306.8	2.89E-04	1.000	.026	.021
506	64.10	.76	[illegible]	7.72E+03	1.08E-02	1.32E-02	1.366	1.014E-02	2.559E-04	2.451E-04	314.5	1.08E-02	1.000	1.066	.486
507	64.10	.[illegible]1	[illegible]	1.[illegible]1E+04	1.41E-02	1.33E-02	1.389	1.014E-02	3.374E-04	3.195E-04	313.9	1.41E-02	1.000	1.389	.529
508	64.10	.23	[illegible]	1.27E+04	1.77E-02	1.58E-02	1.745	1.015E-02	4.240E-04	4.015E-04	312.7	1.77E-02	1.000	1.745	.668
509	64.10	.15	[illegible]	1.31E+04	1.83E-02	1.73E-02	1.8[illegible]3	1.015E-02	4.381E-04	4.149E-04	311.0	1.83E-02	1.000	1.803	.687
510	64.10	.[illegible]	.[illegible]	1.2[illegible]E+04	1.75E-02	1.66E-02	1.726	1.015E-02	4.193E-04	3.971E-04	311.6	1.75E-02	1.000	1.726	.657
511	64.10	[illegible]	.1[illegible]	1.24E+04	1.73E-02	1.64E-02	1.7[illegible]7	1.015E-02	4.147E-04	3.920E-04	311.7	1.73E-02	1.000	1.707	.650
512	64.10	[illegible]	.25	1.1[illegible]E+04	1.60E-02	1.51E-02	1.574	1.013E-02	3.823E-04	3.621E-04	311.1	1.60E-02	1.000	1.574	.600
513	64.10	[illegible]	.36	[illegible]	1.36E-02	1.29E-02	1.343	1.015E-02	3.2[illegible]2E-04	3.093E-04	310.5	1.36E-02	1.000	1.343	.512
514	64.10	[illegible]	.66	[illegible]	[illegible].83E-03	[illegible].37E-03	.87[illegible]	1.015E-02	2.115E-04	2.[illegible]3E-04	309.4	8.83E-03	1.000	.87[illegible]	.332
515	64.10	1.[illegible]	.49	[illegible]	5.63E-03	[illegible].34E-03	.555	1.015E-02	1.349E-04	1.278E-04	308.3	5.63E-03	1.000	.555	.212
601	48.22	[illegible]	.2[illegible]								309.37				
602	48.22	[illegible]	.48								308.03				
603	48.22	[illegible]	.31								338.72				
604	48.22	[illegible]	1.77								306.93				
605	48.22	[illegible]	1.89								308.27				

EDGE HEATING USED FOR HE

X=	3.877E+01	HL	/HREFF=	9.002E-01
X=	4.124E+01	HL	/HREFF=	1.[illegible]26E+00
X=	4.377E+01	HL	/HREFF=	1.[illegible]E+00
X=	4.631E+01	HL	/HREFF=	1.[illegible]8[illegible]E+00
X=	4.896E+01	HL	/HREFF=	1.1[illegible]3E+00

X=	5.139E+01	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	1.231E+00
X=	6.156E+01	HL	/HREFF=	1.649E+00
X=	6.664E+01	HL	/HREFF=	3.634E+00
X=	7.172E+01	HL	/HREFF=	3.425E+00
X=	7.680E+01	HL	/HREFF=	3.553E+00
X=	8.188E+01	HL	/HREFF=	4.436E+00
X=	8.696E+01	HL	/HREFF=	4.435E+00
X=	9.204E+01	HL	/HREFF=	4.23[illegible]E+00
X=	9.712E+01	HL	/HREFF=	3.097E+00
X=	1.022E+02	HL	/HREFF=	3.104E+00
X=	1.073E+02	HL	/HREFF=	2.622E+00
X=	1.124E+02	HL	/HREFF=	2.143E+00
X=	1.175E+02	HL	/HREFF=	1.773E+00
X=	1.226E+02	HL	/HREFF=	1.415E+00
X=	3.997E+01	HL	/HREFF=	9.216E-01
X=	4.632E+01	HL	/HREFF=	9.321E-01
X=	5.649E+01	HL	/HREFF=	5.916E-01
Y=	5.410E+01	HL	/HREFF=	1.369E+00

B.L. TRANSITION DISTANCE = 36.73 CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.98 CM

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (142), [illegible] BLUMER, IN-LINE RSI GAP RUN(38) 1973 PAGE 175

TT = 1.1479E+03(K) GAP LENGTH = 30.480(CM)
PT = 2.1109E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.2166E+06(J/KG) GAP DEPTH = 3.810(CM)
RE/METER = 6.3690E+06 ORIENTATION= 0.000(DEG)
MACH = 5.100 PS = 1.7770E+05(N/M2)
RHO VEL = 9.3371E+01(KG/M2-S) MOD.POSITION= 4
HAW/HT = 0.908 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	[illegible]	7.16E+04	6.93E-02	6.56E-02	.942	7.352E-02	9.306E-04	7.871E-04	314.7				1.000
7	117.47	-.51	0.00	5.29E+04	7.18E-02	6.72E-02	1.051	6.752E-02	8.512E-04	8.065E-04	314.9				1.000
8	112.37	-.51	[illegible]	5.23E+04	7.12E-02	6.65E-02	1.193	5.895E-02	8.424E-04	7.961E-04	315.2				1.000
9	107.31	-.51	[illegible]	5.39E+04	7.24E-02	6.96E-02	1.495	4.841E-02	8.679E-04	8.223E-04	315.4				1.000
10	102.29	-.51	[illegible]	5.59E+04	7.49E-02	7.18E-02	1.914	3.913E-02	8.993E-04	8.512E-04	315.5				1.000
11	97.12	-.51	[illegible]	5.62E+04	7.55E-02	7.15E-02	2.384	3.167E-02	9.353E-04	8.579E-04	315.8				1.000
12	92.04	-.51	[illegible]	5.68E+04	7.63E-02	7.23E-02	2.995	2.549E-02	9.156E-04	8.674E-04	316.0				1.000
13	86.96	-.51	[illegible]	5.56E+04	7.47E-02	7.08E-02	3.551	2.104E-02	8.961E-04	8.489E-04	316.6				
14	81.88	-.51	[illegible]	5.69E+04	7.65E-02	7.25E-02	4.422	1.729E-02	9.173E-04	8.690E-04	316.8				
15	76.80	-.51	[illegible]	5.46E+04	7.34E-02	6.96E-02	4.890	1.502E-02	8.819E-04	8.346E-04	316.7				
16	71.72	-.51	[illegible]	5.46E+04	7.34E-02	6.95E-02	5.391	1.361E-02	8.803E-04	8.340E-04	317.0				
17	66.64	-.51	[illegible]	8.44E+04	1.14E-01	1.08E-01	8.492	1.343E-02	1.366E-03	1.294E-03	319.2				
18	61.56	-.51	[illegible]	6.25E+04	8.47E-02	8.02E-02	6.111	1.388E-02	1.016E-03	9.623E-04	323.0				
19	56.48	-.51	0.00	5.90E+04	8.02E-02	7.59E-02	5.469	1.466E-02	9.616E-04	9.106E-04	324.1				
20	51.39	-.51	[illegible]	[illegible]E+04	6.88E-02	6.52E-02	4.408	1.562E-02	8.257E-04	7.819E-04	324.5				
21	48.86	-.51	[illegible]	4.77E+04	5.94E-02	5.62E-02	3.705	1.602E-02	7.121E-04	6.743E-04	325.0				
22	46.31	-.51	[illegible]	3.[illegible]E+04	4.18E-02	3.87E-02	2.499	1.634E-02	4.899E-04	4.638E-04	325.4				1.000
23	43.77	-.51	[illegible]	1.65E+04	2.17E-02	2.06E-02	1.304	1.666E-02	2.626E-04	2.467E-04	325.9				1.000
24	41.24	-.51	[illegible]	9.47E+03	1.29E-02	1.22E-02	.760	1.697E-02	1.548E-04	1.466E-04	326.6				1.000
25	38.73	-.51	[illegible]	[illegible]E+03	1.09E-02	1.34E-02	.632	1.729E-02	1.311E-04	1.242E-04	329.2				1.000
103	39.97	1.52	[illegible]	9.[illegible]E+03	1.34E-02	1.27E-02	.781	1.715E-02	1.695E-04	1.528E-04	331.9	1.34E-02	1.000	.781	1.121
105	39.97	1.02	[illegible]	9.12E+03	1.26E-02	1.19E-02	.733	1.714E-02	1.597E-04	1.426E-04	334.6	1.26E-02	1.000	.733	1.053
107	39.97	.51	[illegible]	[illegible].21E+03	9.93E-03	9.39E-03	.579	1.713E-02	1.191E-04	1.127E-04	334.2	9.93E-03	1.000	.579	.832
108	39.97	.25	[illegible]	5.32E+03	7.33E-03	6.31E-03	.426	1.713E-02	8.761E-05	8.289E-05	332.4	7.30E-03	1.000	.426	.612
110	39.97	.06	.06	3.41E+03	4.67E-03	4.42E-03	.272	1.713E-02	5.536E-05	5.296E-05	330.3	4.67E-03	1.000	.272	.391
111	39.97	[illegible]	.15	2.69E+03	3.67E-03	3.46E-03	.214	1.713E-02	4.405E-05	4.169E-05	329.2	3.67E-03	1.000	.214	.308
112	39.97	[illegible]	.25	1.78E+03	2.43E-03	2.30E-03	.142	1.713E-02	2.916E-05	2.761E-05	326.9	2.43E-03	1.000	.142	.204
113	39.97	[illegible]	.38	1.18E+03	1.61E-03	1.52E-03	.094	1.713E-02	1.930E-05	1.828E-05	324.9	1.61E-03	1.000	.094	.135
114	39.97	[illegible]	.64	[illegible]E+02	5.86E-04	5.55E-04	.034	1.713E-02	7.035E-06	6.662E-06	321.4	5.86E-04	1.000	.034	.049
115	39.97	[illegible]	.89	2.84E+02	3.92E-04	3.71E-04	.023	1.713E-02	4.699E-06	4.452E-06	318.4	3.92E-04	1.000	.023	.033
203	46.32	1.52	[illegible]	[illegible]E+03	1.23E-02	1.17E-02	.754	1.634E-02	1.479E-04	1.399E-04	326.2	1.23E-02	1.000	.754	.381
205	46.32	1.02	[illegible]	[illegible]E+04	1.78E-02	1.69E-02	1.090	1.634E-02	2.135E-04	2.021E-04	328.0	1.78E-02	1.000	1.090	.435
207	46.32	.51	[illegible]	2.34E+04	3.19E-02	3.02E-02	1.956	1.634E-02	3.832E-04	3.628E-04	327.0	3.19E-02	1.000	1.956	.72
208	46.32	.25	[illegible]	2.71E+04	3.70E-02	3.50E-02	2.265	1.634E-02	4.438E-04	4.202E-04	326.8	3.70E-02	1.000	2.265	.905
210	46.32	.06	[illegible]	2.42E+04	3.29E-02	3.12E-02	2.015	1.634E-02	3.948E-04	3.738E-04	324.8	3.29E-02	1.000	2.015	[illegible]
211	46.32	[illegible]	.15	2.17E+04	2.92E-02	2.76E-02	1.787	1.634E-02	3.531E-04	3.316E-04	323.8	2.92E-02	1.000	1.787	.71
212	46.32	[illegible]	.25	[illegible]E+04	2.17E-02	[illegible]	1.327	1.634E-02	[illegible]	2.462E-04	322.0	2.17E-02	1.000	1.327	.536
213	46.32	[illegible]	.38												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.89	2.19E+03	2.94E-03	2.78E-03	.180	1.634E-02	3.521E-05	3.336E-05	315.5	2.94E-03	1.000	.180	.072

AMES 3.5 FT HWT TEST (182), ?.?. BLUMER, IN-LINE RSI GAP RUN(83) 1973 PAGE 176

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	[illegible]	1.14	1.22E+03	1.63E-03	1.54E-03	.100	1.634E-02	1.950E-05	1.848E-05	309.7	1.63E-03	1.000	.100	.048
217	46.32	[illegible]	1.40	1.53E+03	2.05E-03	1.94E-03	.125	1.634E-02	2.453E-05	2.325E-05	311.8	2.05E-03	1.000	.125	.050
218	46.32	[illegible]	1.65	1.66E+03	2.24E-03	2.12E-03	.137	1.634E-02	2.685E-05	2.545E-05	307.9	2.24E-03	1.000	.137	.055
219	46.32	[illegible]	1.90	2.02E+03	2.68E-03	2.54E-03	.164	1.634E-02	3.210E-05	3.043E-05	307.4	2.68E-03	1.000	.164	.065
220	46.32	[illegible]	2.29	2.00E+03	2.66E-03	2.52E-03	.163	1.634E-02	3.191E-05	3.025E-05	307.0	2.66E-03	1.000	.163	.065
306	56.48	.75	[illegible]												
307	56.48	.51	[illegible]	5.16E+04	7.00E-02	6.53E-02	4.786	1.464E-02	8.432E-04	7.956E-04	323.8	7.00E-02	1.000	4.786	
308	56.48	.25	[illegible]	5.36E+04	7.27E-02	6.88E-02	4.964	1.464E-02	8.718E-04	8.256E-04	322.5	7.27E-02	1.000	4.964	
309	56.48	.15	[illegible]	[illegible]	6.87E-02	6.50E-02	4.689	1.464E-02	8.237E-04	7.801E-04	321.2	6.87E-02	1.000	4.689	
310	56.48	.94	.34	4.98E+04	6.59E-02	6.24E-02	4.500	1.465E-02	7.905E-04	7.487E-04	320.3	6.59E-02	1.000	4.500	
311	56.48	[illegible]	.15												
312	56.48	[illegible]	.25	3.61E+04	4.84E-02	4.59E-02	3.308	1.465E-02	5.811E-04	5.506E-04	315.6	4.84E-02	1.000	3.308	
313	56.48	[illegible]	.38												
314	56.48	[illegible]	.64	1.?5E+04	2.39E-02	2.27E-02	1.633	1.465E-02	2.863E-04	2.718E-04	313.6	2.39E-02	1.000	1.633	.299
315	56.48	[illegible]	.89	1.04E+04	1.39E-02	1.31E-02	.946	1.465E-02	1.662E-04	1.575E-04	311.5	1.39E-02	1.000	.946	.173
316	56.48	[illegible]	1.14	6.42E+03	8.55E-03	8.11E-03	.584	1.465E-02	1.025E-04	9.726E-05	310.0	8.55E-03	1.000	.584	.107
317	56.48	[illegible]	1.40	3.82E+03	5.07E-03	4.81E-03	.346	1.465E-02	6.395E-05	5.769E-05	308.5	5.07E-03	1.000	.346	.063
318	56.48	[illegible]	1.65	2.83E+03	3.76E-03	3.56E-03	.257	1.465E-02	4.509E-05	4.275E-05	308.3	3.76E-03	1.000	.257	.047
319	56.48	[illegible]	1.90	2.?9E+03	3.45E-03	3.27E-03	.235	1.465E-02	4.135E-05	3.928E-05	307.8	3.45E-03	1.000	.235	.043
320	56.48	[illegible]	2.29	[illegible]	4.22E-03	4.??E-03	.288	1.465E-02	5.059E-05	4.796E-05	307.6	4.22E-03	1.000	.288	.053
506	64.10	.76	[illegible]	5.27E+04	7.13E-02	6.75E-02	5.258	1.356E-02	8.555E-04	8.102E-04	321.8	7.13E-02	1.000	5.258	
507	64.10	.51	[illegible]	5.38E+04	7.28E-02	6.89E-02	5.359	1.358E-02	8.729E-04	8.267E-04	320.6	7.28E-02	1.000	5.359	
508	64.10	.25	[illegible]	5.6?E+04	7.61E-02	7.21E-02	5.597	1.359E-02	9.126E-04	8.645E-04	318.5	7.61E-02	1.000	5.597	
509	64.10	.15	0.00	5.54E+04	7.44E-02	7.05E-02	5.474	1.360E-02	8.933E-04	8.451E-04	314.8	7.44E-02	1.000	5.474	
510	64.10	[illegible]	.?4	5.32E+04	7.17E-02	6.79E-02	5.267	1.361E-02	8.597E-04	8.144E-04	31?.1	7.17E-02	1.000	5.267	
511	64.10	[illegible]	.15	5.21E+04	7.02E-02	6.65E-02	5.156	1.361E-02	8.417E-04	7.974E-04	317.0	7.02E-02	1.000	5.156	
512	64.10	[illegible]	.25	4.99E+04	6.59E-02	6.24E-02	4.842	1.361E-02	7.903E-04	7.489E-04	316.7	6.59E-02	1.000	4.842	
513	64.10	[illegible]	.38	[illegible]	5.95E-02	5.64E-02	4.375	1.361E-02	7.142E-04	6.767E-04	315.6	5.95E-02	1.000	4.375	
514	64.10	[illegible]	.64	[illegible]	4.56E-02	4.32E-02	3.351	1.361E-02	?.471E-04	5.184E-04	313.4	4.56E-02	1.000	3.351	
515	64.10	[illegible]	.89	2.49E+04	3.33E-02	3.16E-02	2.447	1.361E-02	3.994E-04	3.785E-04	311.5	3.33E-02	1.000	2.447	.339
601	49.22	[illegible]	.25								313.73				
602	48.22	[illegible]	.46								310.58				
603	48.22	[illegible]	.51								338.72				
604	49.22	[illegible]	1.??								307.22				
605	48.22	[illegible]	1.?9								305.60				

EDGE HEATING USED FOR HE

X=	3.070E+01	HL	/HREFF=	6.327E-01
X=	4.124E+01	HL	/HREFF=	7.??E-01
X=	4.377E+01	HL	/HREFF=	1.?14E+00
X=	4.631E+01	HL	/HREFF=	2.499E+00
X=	4.8??E+01	HL	/HREFF=	3.??E+00

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X=     5.139E+01  HL   /HREFF=     [illegible]
X=     5.648E+01  HL   /HREFF=     5.595E+00
X=     6.156E+01  HL   /HREFF=     6.111E+00
X=     6.664E+01  HL   /HREFF=     6.402E+00
X=     7.172E+01  HL   /HREFF=     5.331E+00
X=     7.680E+01  HL   /HREFF=     4.552E+00
X=     8.188E+01  HL   /HREFF=     4.022E+00
X=     8.696E+01  HL   /HREFF=     3.591E+00
X=     9.204E+01  HL   /HREFF=     2.995E+00
X=     9.712E+01  HL   /HREFF=     2.394E+00
X=     1.022E+02  HL   /HREFF=     1.914E+00
X=     1.073E+02  HL   /HREFF=     1.435E+00
X=     1.124E+02  HL   /HREFF=     1.133E+00
X=     1.175E+02  HL   /HREFF=     1.051E+00
X=     1.226E+02  HL   /HREFF=     9.421E-01

X=     3.997E+01  HL   /HREFF=     6.734E-01
X=     4.632E+01  HL   /HREFF=     1.3[illegible]E+00
X=     5.648E+01  HL   /HREFF=     4.796E+00
X=     6.410E+01  HL   /HREFF=     5.359E+00
B.L. TRANSITION DISTANCE =  36.7[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT X=376.00 CM
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ORIGINAL PAGE IS OF POOR QUALITY

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AMES 3.5 FT HWT TEST  (122), C.P. BLUMER, IN-LINE RSI GAP  RUN(  39) 1973                PAGE 177
TT         = 1.1171E+03(K)              GAP LENGTH = 30.482(CM)
PT         = 5.2030E+05(N/M2)           GAP WIDTH  =   .127(CM)
HT         = 1.1817E+06(J/KG)           GAP DEPTH  =  2.032(CM)
RE/METER   = 1.655E+06                  ORIENTATION=  0.000(DEG)
MACH       = 5.100                      QS         =  8.5176E+04(W/M2)
RHO VEL    = 2.1062E+01(KG/M2-S)        MOD.POSITION=  4
HAW/HT     = 0.900 FOR HT
HAW/HT     = 0.974 FOR HL
HLCC       = HL(2ND. ORDER COND.)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	2.00	4.66E+03	6.34E-03	6.00E-03	.955	6.636E-03	3.011E-04	2.850E-04	312.4				1.000
7	117.47	-.51	2.00	4.66E+03	6.49E-03	6.15E-03	.988	6.571E-03	3.082E-04	2.919E-04	312.5				1.000
8	112.37	-.51	2.00	4.68E+03	6.53E-03	6.19E-03	1.003	6.512E-03	3.103E-04	2.938E-04	312.7				1.000
9	107.31	-.51	2.00	4.71E+03	6.57E-03	6.22E-03	1.010	6.501E-03	3.118E-04	2.953E-04	312.7				1.000
10	102.20	-.51	2.00	4.83E+03	6.74E-03	6.38E-03	1.005	6.702E-03	3.199E-04	3.029E-04	312.8				1.000
11	97.12	-.51	2.00	4.74E+03	6.62E-03	6.26E-03	.962	6.874E-03	3.141E-04	2.974E-04	312.8				1.000
12	92.04	-.51	2.00	4.92E+03	6.87E-03	6.50E-03	.977	7.027E-03	3.261E-04	3.088E-04	313.0				1.000
13	86.96	-.51	2.00	4.90E+03	6.84E-03	6.47E-03	.952	7.183E-03	3.246E-04	3.074E-04	313.2				1.000
14	81.38	-.51	2.00	5.16E+03	7.21E-03	6.33E-03	.936	7.293E-03	3.423E-04	3.241E-04	313.3				1.000
15	76.80	-.51	2.00	5.13E+03	7.16E-03	6.78E-03	.969	7.397E-03	3.402E-04	3.221E-04	313.5				1.000
16	71.72	-.51	2.00	5.18E+03	7.24E-03	6.85E-03	.965	7.498E-03	3.436E-04	3.254E-04	313.7				1.000
17	66.64	-.51	2.00	5.53E+03	7.73E-03	7.32E-03	.974	7.935E-03	3.673E-04	3.475E-04	314.1				1.000
18	61.56	-.51	2.00	6.12E+03	8.56E-03	8.10E-03	1.002	8.546E-03	4.064E-04	3.848E-04	314.7				1.000
19	56.48	-.51	2.00	6.18E+03	8.65E-03	8.19E-03	.957	9.044E-03	4.108E-04	3.889E-04	315.0				1.000
20	51.39	-.51	2.00	6.42E+03	8.99E-03	8.51E-03	.947	9.492E-03	4.268E-04	4.041E-04	315.0				1.000
21	48.96	-.51	2.00	6.89E+03	9.64E-03	9.13E-03	.990	9.740E-03	4.579E-04	4.336E-04	315.1				1.000
22	46.31	-.51	2.00	6.97E+03	9.76E-03	9.24E-03	.974	1.002E-02	4.635E-04	4.389E-04	315.1				1.000
23	43.77	-.51	2.00	7.11E+03	9.96E-03	9.43E-03	.967	1.030E-02	4.729E-04	4.477E-04	315.2				1.000
24	41.24	-.51	2.00	7.44E+03	1.04E-02	9.87E-03	.985	1.058E-02	4.948E-04	4.685E-04	315.6				1.000
25	38.70	-.51	2.00	7.63E+03	1.07E-02	1.01E-02	.983	1.086E-02	5.079E-04	4.800E-04	315.0				1.000
103	39.97	1.52		7.27E+03	1.02E-02	9.68E-03	.954	1.071E-02	4.954E-04	4.595E-04	318.3	1.02E-02	1.000	.954	.970
105	39.97	1.02	.06	7.14E+03	1.01E-02	9.52E-03	.939	1.071E-02	4.775E-04	4.520E-04	319.1	1.01E-02	1.000	.939	.954
107	39.97	.51	.00	7.01E+03	9.85E-03	9.32E-03	.919	1.072E-02	4.673E-04	4.426E-04	318.6	9.85E-03	1.000	.919	.934
108	39.97	.25	.00	6.35E+03	8.93E-03	8.45E-03	.833	1.072E-02	4.239E-04	4.012E-04	317.7	8.93E-03	1.000	.833	.847
110	39.97	.04	.04	4.87E+03	6.83E-03	6.47E-03	.636	1.072E-02	3.244E-04	3.072E-04	316.7	6.83E-03	1.000	.636	.648
111	39.97	0.00	.15	4.03E+03	5.66E-03	5.36E-03	.528	1.072E-02	2.686E-04	2.543E-04	316.4	5.66E-03	1.000	.526	.536
112	39.97	0.00	.25	2.69E+03	3.77E-03	3.37E-03	.352	1.072E-02	1.789E-04	1.694E-04	315.4	3.77E-03	1.001	.352	.357
113	39.97	0.00	.76	1.54E+03	2.15E-03	2.04E-03	.201	1.072E-02	1.022E-04	9.677E-05	314.8	2.15E-03	1.000	.201	.204
114	39.97	0.00	1.4	3.97E+02	5.56E-04	5.26E-04	.052	1.072E-02	2.637E-05	2.497E-05	313.8	5.55E-04	1.000	.052	.053
115	39.97	0.00	1.93	9.57E+01	1.34E-04	1.26E-04	.012	1.072E-02	6.339E-06	6.003E-06	312.8	1.34E-04	1.000	.012	.013
203	46.32	1.32	.00	6.54E+03	9.18E-03	8.69E-03	.916	1.002E-02	4.356E-04	4.126E-04	316.7	9.18E-03	1.000	.916	.941
205	46.32	1.02	.00	6.56E+03	9.25E-03	8.75E-03	.923	1.002E-02	4.390E-04	4.156E-04	317.2	9.25E-03	1.000	.923	.948
207	46.32	.51	.00	6.27E+03	8.89E-03	8.41E-03	.887	1.002E-02	4.219E-04	3.995E-04	316.9	8.89E-03	1.000	.887	.91[illegible]
208	46.32	.25	.00	5.80E+03	8.13E-03	7.70E-03	.812	1.002E-02	3.862E-04	3.657E-04	316.3	8.13E-03	1.000	.812	.834
210	46.32	.04	.04	4.41E+03	6.17E-03	5.85E-03	.616	1.002E-02	2.931E-04	2.775E-04	315.5	6.17E-03	1.000	.616	.633
211	46.32	0.00	.15	3.72E+03	5.21E-03	4.93E-03	.520	1.002E-02	2.474E-04	2.342E-04	315.1	5.21E-03	1.000	.520	.53[illegible]
212	46.32	0.00	.25	2.45E+03	3.55E-03	3.36E-03	.355	1.002E-02	1.687E-04	1.598E-04	314.4	3.55E-03	1.000	.355	.364
213	46.32	0.00	.76	1.27E+01	1.84E-05	1.74E-05	.002	1.002E-02	8.724E-07	8.245E-07	338.7	1.84E-05	1.000	.002	.002
214	46.32	0.00	.54												
215	46.32	0.00	.39	9.15E+01	1.31E-04	1.24E-04	.013	1.002E-02	6.233E-06	5.902E-06	312.9	1.31E-04	1.000	.013	.013

AMES 3.5 FT HWT TEST (122), C.E. BLUMER, IN-LINE RSI GAP RUN(39) 1973 PAGE 178

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
306	56.48	.75	0.00	[illegible]	1.11E-05	1.05E-05	.001	9.044E-03	5.253E-07	4.965E-07	338.7	1.11E-05	1.000	.001	.091
307	56.48	.51	0.00	[illegible]	7.75E-03	7.34E-03	.857	9.044E-03	3.679E-04	3.483E-04	315.7	7.75E-03	1.000	.857	.896
308	56.48	.25	[illegible]	[illegible]	7.00E-03	6.63E-03	.774	9.044E-03	3.325E-04	3.146E-04	315.2	7.00E-03	1.000	.774	.809
309	56.48	.15	0.00	[illegible]	5.83E-03	5.52E-03	.645	9.044E-03	2.771E-04	2.623E-04	314.7	5.83E-03	1.000	.645	.674
310	56.48	.04	.04	3.79E+03	5.30E-03	5.02E-03	.586	9.043E-03	2.515E-04	2.382E-04	314.4	5.30E-03	1.000	.586	.612
311	56.48	0.00	.15												
312	56.48	0.00	.25	[illegible]	2.52E-03	2.39E-03	.279	9.043E-03	1.199E-04	1.135E-04	313.0	2.52E-03	1.000	.279	.292
313	56.48	0.00	.38	[illegible]	1.40E-03	1.33E-03	.155	9.043E-03	6.668E-05	6.315E-05	312.3	1.40E-03	1.000	.155	.162
314	56.48	0.00	.64	[illegible]	3.58E-04	3.39E-04	.040	9.043E-03	1.702E-05	1.612E-05	312.2	3.58E-04	1.000	.040	.041
315	56.48	0.00	.89	3.33E+01	4.63E-05	4.39E-05	.005	9.043E-03	2.200E-06	2.084E-06	311.7	4.63E-05	1.000	.005	.005
316	56.48	0.00	1.14												
317	56.48	0.00	1.40	7.19E+00	1.00E-05	9.48E-06	.001	9.043E-03	4.750E-07	4.499E-07	311.0	1.00E-05	1.000	.001	.001
318	56.48	0.00	1.65												
319	56.48	0.00	1.90												
320	56.48	0.00	2.29												
506	64.10	.76	0.00	5.18E+03	7.26E-03	6.87E-03	.880	8.245E-03	3.446E-04	3.263E-04	315.4	7.26E-03	1.000	.880	.891
507	64.10	.51	0.00	[illegible]	7.17E-03	6.79E-03	.870	8.243E-03	[illegible]	3.224E-04	315.0	7.17E-03	1.000	.870	.881
508	64.10	.25	[illegible]	[illegible]	6.74E-03	6.39E-03	.818	8.243E-03	3.202E-04	3.032E-04	314.2	6.74E-03	1.000	.818	.828
509	64.10	.15	0.00	[illegible]	5.60E-03	5.30E-03	.679	8.242E-03	2.658E-04	2.517E-04	313.2	5.60E-03	1.000	.679	.688
510	64.10	.04	.04	[illegible]	4.87E-03	4.61E-03	.590	8.242E-03	2.311E-04	2.188E-04	313.6	4.87E-03	1.000	.590	.596
511	64.10	0.00	.15	[illegible]	4.31E-03	4.08E-03	.523	8.242E-03	2.045E-04	1 937E-04	313.6	4.31E-03	1.000	.523	.529
512	64.10	0.00	.25	[illegible]	2.87E-03	2.72E-03	.349	8.242E-03	1.364E-04	1.292E-04	313.2	2.87E-03	1.000	.349	.353
513	64.10	0.00	.38	1.23E+03	1.71E-03	1.62E-03	.208	8.242E-03	8.124E-05	7.693E-05	312.9	1.71E-03	1.000	.208	.210
514	64.10	0.00	.64	2.91E+02	4.06E-04	3.84E-04	.049	8.242E-03	1.927E-05	1.825E-05	312.2	4.06E-04	1.000	.049	.050
515	64.10	0.00	.89	7.75E+01	1.08E-04	[illegible]	.013	8.242E-03	5.129E-[illegible]	4.857E-06	311.6	1.08E-04	1.000	.013	.013
601	48.22	0.00	.25								311.61				
602	48.22	0.00	.49								311.26				
603	48.22	0.00	.91								310.83				
604	48.22	0.00	1.37								310.60				
605	48.22	0.00	1.89								310.10				

EDGE HEATING USED FOR HE

X=	3.873E+01	HL /HREFF=	9.431E-01
X=	4.124E+01	HL /HREFF=	9.543E-01
X=	4.377E+01	HL /HREFF=	9.547E-01
X=	4.631E+01	HL /HREFF=	9.747E-01
X=	4.836E+01	HL /HREFF=	9.9.2E-01

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X=   [illegible]   HL   /HREFF=   [illegible]
X=   5.649E+01   HL   /HREFF=   9.[illegible]6E-01
X=   6.156E+01   HL   /HREFF=   1.[illegible]2E+00
X=   6.664E+01   HL   /HREFF=   9.7[illegible]E-01
X=   7.172E+01   HL   /HREFF=   9.[illegible]2E-01
X=   7.635E+01   HL   /HREFF=   9.[illegible]5E-01
X=   8.189E+01   HL   /HREFF=   9.6[illegible]E-01
X=   8.696E+01   HL   /HREFF=   9.518E-01
X=   9.204E+01   HL   /HREFF=   9.7[illegible]5E-01
X=   9.712E+01   HL   /HREFF=   9.[illegible]23E-01
X=   1.022E+02   HL   /HREFF=   1.[illegible]5E+00
X=   1.073E+02   HL   /HREFF=   1.[illegible]1[illegible]E+00
X=   1.124E+02   HL   /HREFF=   1.[illegible]5E+00
X=   1.175E+02   HL   /HREFF=   9.879E-01
X=   1.226E+02   HL   /HREFF=   9.[illegible]3E-01

X=   3.997E+01   HL   /HREFF=   9.192E-01
X=   4.632E+01   HL   /HREFF=   8.[illegible]2E-01
X=   5.649E+01   HL   /HREFF=   8.[illegible]8E-01
X=   6.410E+01   HL   /HREFF=   8.7[illegible]E-01
B.L. TRANSITION DISTANCE =  38.7[illegible] CM
FULLY TURBULENT B.L. CONDITIONS AT =  48.86 CM
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AMES 3.5 FT HWT TEST  (1[illegible]), [illegible] BLUMER, IN-LINE RSI GAP  RUN( 90) 1973                PAGE 179
TT         = 1.1[illegible]E+03(K)                 GAP LENGTH = 33.487(CM)
PT         = 1.[illegible]317E+05(N/M2)            GAP WIDTH  =   .127(CM)
HT         = 1.1[illegible]E+06(J/KG)              GAP DEPTH  =  2.[illegible]32(CM)
RE/METER   = [illegible].1[illegible]21E+0[illegible]   ORIENTATION=  0.000(DEG)
MACH       = 5.10[illegible]                       QS         =  1.2241E+05(W/M2)
RHO VEL    = [illegible].12[illegible]3E+[illegible]1(KG/M2-S)   MOD.POSITION=  4
HAW/HT     = [illegible].9[illegible] FOR HT
HAW/HT     = [illegible].974 FOR HL
HLCC       = HL(2ND. ORDER COND.,)
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T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
6	122.56	-.51	.00	2.97E+04	3.85E-02	3.66E-02	1.239	3.117E-02	9.349E-04	8.855E-04	313.2				1.000
7	117.47	-.51	.00	2.46E+04	3.36E-02	3.19E-02	1.315	2.559E-02	8.147E-04	7.718E-04	313.3				1.000
8	112.37	-.51	.00	2.[illegible]E+04	2.79E-02	2.01E-02	1.322	2.[illegible]E-02	6.671E-04	6.320E-04	313.5				1.000
9	107.31	-.51	.00	1.63E+04	2.22E-02	2.11E-02	1.292	1.721E-02	5.385E-04	5.101E-04	313.6				1.000
10	102.20	-.51	.00	1.33E+04	1.81E-02	1.72E-02	1.239	1.441E-02	4.395E-04	4.163E-04	313.7				1.000
11	97.12	-.51	.00	1.[illegible]E+04	1.47E-02	1.39E-02	1.199	1.222E-02	3.548E-04	3.361E-04	313.7				1.000
12	92.04	-.51	.00	9.25E+03	1.26E-02	1.20E-02	1.191	1.061E-02	3.059E-04	2.898E-04	313.9				1.000
13	86.96	-.51	.00	7.62E+03	1.04E-02	9.86E-03	1.068	9.755E-03	2.522E-04	2.389E-04	314.2				1.000
14	81.88	-.51	.00	6.97E+03	9.52E-03	9.02E-03	1.032	9.223E-03	2.306E-04	2.184E-04	314.3				1.000
15	76.80	-.51	.00	6.43E+03	8.79E-03	8.32E-03	.958	9.178E-03	2.128E-04	2.016E-04	314.3				1.000
16	71.72	-.51	.00	6.67E+03	9.12E-03	8.64E-03	.969	9.413E-03	2.208E-04	2.092E-04	314.5				1.000
17	66.64	-.51	.00	7.26E+03	9.94E-03	9.41E-03	1.014	9.803E-03	2.406E-04	2.279E-04	315.3				1.000
18	61.[illegible]	-.51	.00	7.87E+03	1.07E-02	1.02E-02	1.046	1.027E-02	2.601E-04	2.463E-04	316.6				1.000
19	56.[illegible]	-.51	.00	7.81E+03	1.07E-02	1.01E-02	.963	1.096E-02	2.595E-04	2.457E-04	317.0				1.000
20	51.39	-.51	.00	8.15E+03	1.11E-02	1.04E-02	.946	1.16[illegible]E-02	2.659E-04	2.518E-04	316.9				1.000
21	48.86	-.51	.00	8.[illegible]E+03	1.16E-02	1.10E-02	.972	1.19[illegible]E-02	2.816E-04	2.667E-04	317.1				1.000
22	46.31	-.51	.00	8.37E+03	1.15E-02	1.11E-02	.953	1.234E-02	2.849E-04	2.698E-04	317.4				1.000
23	43.77	-.51	.00	8.[illegible]E+03	1.21E-02	1.15E-02	.954	1.271E-02	2.935E-04	2.781E-04	317.4				1.000
24	41.24	-.51	.00	9.32E+03	1.28E-02	1.21E-02	.978	1.308E-02	3.170E-04	2.936E-04	317.9				1.000
25	38.70	-.51	.00	9.17E+03	1.26E-02	1.19E-02	.935	1.346E-02	3.046E-04	2.885E-04	316.9				1.000
103	39.97	1.32	.00	8.92E+03	1.22E-02	1.15E-02	.917	1.327E-02	2.947E-04	2.790E-04	321.7	1.22E-02	1.000	.917	.959
105	39.97	1.02	.10	8.66E+03	1.20E-02	1.13E-02	.903	1.327E-02	2.901E-04	2.746E-04	323.0	1.20E-02	1.000	.903	.944
107	39.97	.51	[illegible]	8.51E+03	1.19E-02	1.11E-02	.886	1.327E-02	2.847E-04	2.695E-04	322.2	1.18E-02	1.000	.886	.926
108	39.97	.25	.06	7.8[illegible]E+03	1.09E-02	1.03E-02	.819	1.327E-02	2.631E-04	2.491E-04	320.7	1.09E-02	1.000	.819	.856
110	39.97	[illegible]	.14	6.39E+03	8.79E-03	8.33E	.663	1.327E-02	2.129E-04	2.016E-04	319.2	8.79E-03	1.000	.663	.693
111	39.97	[illegible]	.15	[illegible]	7.50E-03	7.1[illegible]	.565	1.327E-02	1.815E-04	1.719E-04	318.5	7.50E-03	1.000	.565	.591
112	39.97	[illegible]	.25	[illegible]	[illegible].32E-03	[illegible]	.401	1.327E-02	1.289E-04	1.221E-04	317.1	5.32E-03	1.000	.401	.419
113	39.97	[illegible]	.36	2.44E+03	3.34E-03	3.16E-03	.252	1.327E-02	8.089E-05	7.662E-05	316.0	3.34E-03	1.000	.252	.263
114	39.97	[illegible]	.64	[illegible]E+02	1.15E-03	1.09E-03	[illegible]	1.327E-02	2.7[illegible]E-05	2.659E-05	314.2	1.16E-03	1.000	.087	.091
115	39.97	[illegible]	.99	2.[illegible]E+02	2.75E-04	2.61E-04	.021	1.327E-02	6.660E-06	6.399E-06	312.7	2.75E-04	1.000	.021	.022
203	46.32	1.52	[illegible]	[illegible]E+03	1.11E-02	1.[illegible]E-02	[illegible]	1.232E-02	2.677E-04	2.535E-04	318.6	1.11E-02	1.000	.897	.941
205	46.32	1.02	[illegible]	7.99E+03	1.09E-02	1.03E-02	[illegible]	1.233E-02	2.629E-04	2.490E-04	319.5	1.09E-02	1.000	.881	.924
207	46.32	.51	[illegible]	7.64E+03	1.05E-02	9.95E-03	.852	1.233E-02	2.544E-04	2.409E-04	319.1	1.05E-02	1.000	.852	.89[illegible]
208	46.32	.25	[illegible]	7.18E+03	9.87E-03	9.35E-03	[illegible]	1.233E-02	2.39[illegible]E-04	2.264E-04	318.2	9.87E-03	1.000	[illegible]	.83[illegible]
210	46.32	[illegible]	.14	[illegible].72E+03	7.84E-03	7.43E-03	.636	1.233E-02	1.899E-04	1.799E-04	318.8	7.84E-03	1.000	.636	.667
211	46.32	[illegible]	.15	4.90E+03	6.72E-03	6.36E-03	.544	1.233E-02	1.625E-04	1.540E-04	316.2	6.72E-03	1.000	.544	.57[illegible]
212	46.32	[illegible]	.25	3.51E+03	4.83E-03	4.59E-03	[illegible]	1.233E-02	1.153E-04	1.111E-04	315.1	4.83E-03	1.000	.369	.40[illegible]
213	46.32	[illegible]	.38												
214	46.32	[illegible]	.64												
215	46.32	[illegible]	.49	[illegible]E+01	1.30E-04	1.24E-04	.011	1.233E-02	3.153E-06	2.992E-06	311.7	1.30E-04	1.000	.011	.011

AMES 3.5 FT HWT TEST (192), C.B. BLUMER, IN-LINE RSI GAP RUN(90) 1973 PAGE 180

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
216	46.32	0.00	1.14												
217	46.32	0.00	1.40												
218	46.32	0.00	1.65												
219	46.32	0.00	1.90												
220	46.32	0.00	2.29												
306	56.48	.75	0.00												
307	56.48	.51	0.00	6.36E+03	8.73E-03	8.27E-03	.801	1.089E-02	2.114E-04	2.302E-04	317.3	8.73E-03	1.000	.801	.815
308	56.48	.25	0.00	6.31E+03	8.65E-03	8.19E-03	.794	1.089E-02	2.095E-04	1.984E-04	316.3	8.65E-03	1.000	.794	.808
309	56.48	.15	0.00	5.86E+03	7.61E-03	7.21E-03	.699	1.089E-02	1.943E-04	1.746E-04	315.4	7.61E-03	1.000	.699	.711
310	56.48	.04	.04	5.19E+03	7.10E-03	6.72E-03	.651	1.090E-02	1.719E-04	1.620E-04	314.9	7.10E-03	1.000	.651	.663
311	56.48	0.00	.15												
312	56.48	0.00	.25	2.30E+03	3.82E-03	3.62E-03	.350	1.090E-02	9.242E-05	8.756E-05	312.5	3.82E-03	1.000	.350	.356
313	56.48	0.00	.38	1.62E+03	2.07E-03	1.96E-03	.190	1.090E-02	5.010E-05	4.747E-05	311.6	2.07E-03	1.000	.190	.193
314	56.48	0.00	.64	3.01E+02	5.10E-04	4.31E-04	.048	1.090E-02	1.255E-05	1.189E-05	311.2	5.10E-04	1.000	.048	.048
315	56.48	0.00	.89												
316	56.48	0.00	1.14												
317	56.48	0.00	1.40												
318	56.48	0.00	1.65												
319	56.48	0.00	1.90												
320	56.48	0.00	2.29												
506	64.10	.75	0.00	5.55E+03	7.62E-03	7.21E-03	.759	1.003E-02	1.844E-04	1.747E-04	316.7	7.62E-03	1.000	.759	.737
507	64.10	.51	0.00	5.71E+03	7.82E-03	7.41E-03	.780	1.003E-02	1.894E-04	1.794E-04	315.9	7.82E-03	1.000	.780	.757
508	64.10	.25	0.00	5.93E+03	8.11E-03	7.68E-03	.808	1.003E-02	1.963E-04	1.869E-04	314.6	8.11E-03	1.000	.808	.785
509	64.10	.15	0.00	5.46E+03	7.45E-03	7.06E-03	.742	1.003E-02	1.804E-04	1.709E-04	313.1	7.45E-03	1.000	.742	.721
510	64.10	.04	.04	4.66E+03	6.36E-03	6.03E-03	.634	1.003E-02	1.541E-04	1.459E-04	313.8	6.36E-03	1.000	.634	.616
511	64.10	0.00	.15	4.38E+03	5.99E-03	5.63E-03	.597	1.003E-02	1.452E-04	1.375E-04	313.7	5.99E-03	1.000	.597	.580
512	64.10	0.00	.25	3.26E+03	4.48E-03	4.25E-03	.447	1.003E-02	1.095E-04	1.028E-04	313.1	4.48E-03	1.000	.447	.434
513	64.10	0.00	.38	2.11E+03	2.88E-03	2.73E-03	.287	1.003E-02	6.979E-05	6.612E-05	312.5	2.88E-03	1.000	.287	.279
514	64.10	0.00	.64	5.22E+02	7.10E-04	6.73E-04	.071	1.003E-02	1.720E-05	1.629E-05	311.4	7.10E-04	1.000	.071	.069
515	64.10	0.00	.89												
601	48.22	0.00	.28								310.18				
602	48.22	0.00	.46								309.47				
603	48.22	0.00	.81								308.64				
604	48.22	0.00	1.37								308.06				
605	48.22	0.00	1.99								307.24				

EDGE HEATING USED FOR HE
X= 3.873E+01 HL /HREFF= 9.348E-01
X= 4.124E+01 HL /HREFF= 9.733E-01
X= 4.377E+01 HL /HREFF= 9.839E-01
X= 4.631E+01 HL /HREFF= 9.838E-01
X= 4.886E+01 HL /HREFF= 9.719E-01
[illegible]

X=	[illegible]	HL	/HREFF=	[illegible]
X=	5.648E+01	HL	/HREFF=	9.829E-01
X=	6.156E+01	HL	/HREFF=	1.[illegible]E+00
X=	6.664E+01	HL	/HREFF=	1.014E+00
X=	7.172E+01	HL	/HREFF=	9.696E-01
X=	7.690E+01	HL	/HREFF=	9.576E-01
X=	8.199E+01	HL	/HREFF=	1.032E+00
X=	8.696E+01	HL	/HREFF=	1.068E+00
X=	9.204E+01	HL	/HREFF=	1.191E+00
X=	9.712E+01	HL	/HREFF=	1.139E+00
X=	1.022E+02	HL	/HREFF=	1.259E+00
X=	1.073E+02	HL	/HREFF=	1.252E+00
X=	1.124E+02	HL	/HREFF=	1.322E+00
X=	1.175E+02	HL	/HREFF=	1.315E+00
X=	1.226E+02	HL	/HREFF=	1.238E+00
X=	3.997E+01	HL	/HREFF=	6.850E-01
X=	4.632E+01	HL	/HREFF=	6.521E-01
X=	5.549E+01	HL	/HREFF=	8.014E-01
X=	6.413E+01	HL	/HREFF=	7.796E-01

B.L. TRANSITION DISTANCE = 38.73 CM
FULLY TURBULENT B.L. CONDITIONS AT = 61.56 CM

AMES 3.5 FT HWT TEST (152), C.J. BLUMER, IN-LINE RSI GAP RUN(31) 1973

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TT         = 1.1   [illegible](K)          GAP LENGTH = 30.480(CM)
PT         = 2.0336E+06(N/M2)              GAP WIDTH  =   .127(CM)
HT         = 1.159E+06(J/KG)               GAP DEPTH  =  3.810(CM)
RE/METER   = [illegible]                   ORIENTATION=  0.000(DEG)
MACH       = 5.190                         QS         =  1.7311E+05(W/M2)
RHC VEL    = 3.45 [illegible](KG/M2-S)     400.POSITION=  5
HAW/HT     = [illegible] FOR HT
HAW/HT     = [illegible] FOR HL
HLCC       = HL(2ND. ORDER COND.,)
```

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.31	[illegible]	[illegible]	7.47E-02	[illegible]	[illegible]	[illegible]	9.926E-04	8.361E-04	311.4				1.000
2	132.70	-.51	[illegible]	[illegible]	7.59E-02	7.19E-02	.896	8.572E-02	8.972E-04	8.498E-04	311.9				1.000
3	130.16	-.31	[illegible]	[illegible]	[illegible]	[illegible]	.897	8.326E-02	8.939E-04	8.373E-04	311.9				1.000
4	127.63	-.51	[illegible]	[illegible]	7.71E-02	7.30E-02	[illegible]	[illegible]	9.108E-04	8.628E-04	311.8				1.000
5	125.09	-.31	[illegible]	5.66E+04	7.81E-02	7.40E-02	.992	7.872E-02	9.231E-04	8.744E-04	312.2				1.000
6	122.56	-.31	[illegible]	[illegible]	7.39E-02	7.36E-02	1.045	[illegible]	[illegible]	8.940E-04	312.2				1.000
7	117.47	-.31	[illegible]	[illegible]	[illegible]	[illegible]	1.186	[illegible]	9.863E-04	9.343E-04	312.6				1.000
8	112.37	-.51	[illegible]	[illegible]	[illegible]	7.94E-02	1.364	6.145E-02	9.995E-04	9.382E-04	312.9				1.000
9	107.31	-.31	[illegible]	[illegible]	7.52E-02	7.12E-02	1.437	[illegible]	8.933E-04	8.414E-04	311.8				1.000
10	102.20	-.51	[illegible]	[illegible]	7.21E-02	6.93E-02	1.767	4.083E-02	9.524E-04	8.077E-04	311.1				1.000
11	97.12	-.51	[illegible]	[illegible]	5.13E-02	[illegible]	1.856	3.301E-02	7.240E-04	6.858E-04	311.4				1.000
12	92.04	-.31	[illegible]	[illegible]	[illegible]	[illegible]	1.767	2.652E-02	5.539E-04	5.246E-04	311.7				1.000
13	86.96	-.51	[illegible]	2.7E+04	3.25E-02	3.18E-02	1.491	2.182E-02	3.844E-04	3.641E-04	312.2				1.000
14	81.88	-.51	[illegible]	[illegible]	2.32E-02	2.19E-02	1.298	1.785E-02	2.733E-04	2.594E-04	312.9				1.000
15	76.80	-.31	[illegible]	[illegible]	1.71E-02	1.62E-02	1.117	1.542E-02	2.019E-04	1.911E-04	312.7				1.000
103	111.99	1.52	[illegible]	5.69E+04	7.58E-02	7.46E-02	1.339	5.681E-02	9.310E-04	8.816E-04	316.2	7.88E-02	1.000	1.339	.960
105	111.79	1.12	[illegible]	[illegible]	7.73E-02	7.29E-02	1.309	[illegible]	9.134E-04	8.629E-04	316.9	7.70E-02	1.000	1.309	.939
107	111.69	.51	[illegible]	[illegible]	7.49E-02	7.08E-02	1.271	[illegible]	8.836E-04	9.367E-04	316.4	7.40E-02	1.000	1.271	.911
109	111.89	.23	[illegible]	[illegible]	7.27E-02	6.88E-02	1.235	5.883E-02	8.587E-04	8.132E-04	315.6	7.27E-02	1.000	1.235	.885
110	111.39	[illegible]	[illegible]	[illegible]	[illegible]	6.14E-02	1.131	[illegible]	7.653E-04	7.253E-04	314.1	6.48E-02	1.000	1.131	.789
111	111.99	[illegible]	.15	[illegible]	[illegible]	5.49E-02	.986	5.683E-02	6.853E-04	6.493E-04	313.6	5.80E-02	1.000	.986	.706
112	111.09	[illegible]	.25	[illegible]	4.53E-02	4.29E-02	.769	5.883E-02	5.357E-04	5.067E-04	312.6	4.53E-02	1.000	.769	.552
113	111.09	[illegible]	.38	[illegible]	3.13E-02	2.97E-02	.533	[illegible]	[illegible]	3.569E-04	311.7	3.13E-02	1.000	.533	.382
114	111.39	[illegible]	[illegible]	[illegible]	1.21E-02	1.14E-02	.205	[illegible]	1.425E-04	1.353E-04	310.2	1.21E-02	1.000	.205	.147
115	111.39	[illegible]	.89	2.2E+03	[illegible]	2.92E-03	.052	5.683E-02	3.647E-05	3.455E-05	308.8	3.09E-03	1.000	.052	.038
306	117.44	[illegible]	[illegible]												
307	117.44	.51	[illegible]	[illegible]	7.29E-02	[illegible]	1.032	[illegible]	9.619E-04	8.162E-04	314.4	7.29E-02	1.000	1.032	.878
308	117.44	.23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.185E-04	313.6	7.31E-02	1.000	1.036	.873
309	117.44	.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.943E-04	312.8	7.09E-02	1.000	1.006	.847
310	117.44	.74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.163E-04	7.732E-04	312.3	6.91E-02	1.000	.980	.825
311	117.44	[illegible]	.15												
312	117.44	[illegible]	.25	[illegible]	[illegible]	.16E-02	[illegible]	[illegible]	[illegible]	[illegible]	310.4	5.45E-02	1.000	.773	.651
313	117.44	[illegible]	.36	[illegible]	[illegible]	4.24E-02	[illegible]	7.649E-02	[illegible]	5.510E-04	310.1	4.47E-02	1.000	.635	[illegible]
314	117.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.272E-04	[illegible]	2.92E-02	1.000	.415	[illegible]
315	117.44	[illegible]	.99	1.31E+0	[illegible]	1.72E-02	.254	[illegible]	2.119E-04	[illegible]	[illegible]	1.79E-02	1.000	.254	.214
316	117.44	[illegible]	1.14	9.2E+03	1.13E-02	[illegible]	.161	[illegible]	1.341E-04	[illegible]	307.3	1.13E-02	1.000	.161	[illegible]
317	117.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.76E-03	1.000	.096	[illegible]
318	117.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.273E-05	[illegible]	3.82E-03	1.000	.054	.046
319	117.44	[illegible]	1.95	1.07E+03	2.15E-03	2.04E-03	[illegible]	[illegible]	2.543E-05	2.419E-05	306.2	2.15E-03	1.000	.031	.026
320	117.44	[illegible]	2.20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.037E-06	[illegible]	5.93E-04	1.000	[illegible]	.007

AMES 7.5 FT HWT TEST (132), T. J. BLUMER, IN-LINE RSI GAP RUN (31) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
406	127.60	.76	[illegible]	[illegible]	[illegible]	6.33E-02	.948	8.133E-02	8.152E-04	7.723E-04	309.7	6.95E-02	1.000	.848	.891
407	127.60	.31	.07	[illegible]	6.83E-02	6.47E-02	.841	8.127E-02	8.079E-04	7.652E-04	312.9	6.83E-02	1.000	.841	.884
408	127.60	.23	[illegible]	[illegible]	6.05E-02	5.73E-02	.745	8.121E-02	7.152E-04	6.774E-04	309.4	6.05E-02	1.000	.745	.783
409	127.60	.15	[illegible]	3.39E+04	5.46E-02	5.18E-02	.673	8.119E-02	6.456E-04	6.117E-04	309.0	5.46E-02	1.000	.673	.707
410	127.60	.74	.04	3.[illegible]E+04	4.83E-02	4.57E-02	.595	8.116E-02	5.735E-04	5.465E-04	308.8	4.83E-02	1.000	.595	.625
411	127.60	[illegible]	.15	3.[illegible]E+04	4.23E-02	4.01E-02	.521	8.115E-02	4.999E-04	4.736E-04	308.6	4.23E-02	1.000	.521	.548
412	127.60	[illegible]	.27	2.17E+04	2.98E-02	2.82E-02	.367	8.115E-02	3.529E-04	3.335E-04	308.0	2.98E-02	1.000	.367	.386
413	127.60	[illegible]	.38	1.54E+04	2.11E-02	2.00E-02	.260	8.115E-02	2.493E-04	2.362E-04	307.4	2.11E-02	1.000	.260	.273
414	127.60	[illegible]	.64	[illegible]E+03	9.15E-03	8.67E-03	.113	8.115E-02	1.082E-04	1.025E-04	305.8	9.15E-03	1.000	.113	.119
415	127.60	[illegible]	.89	2.[illegible]E+03	3.89E-03	3.58E-03	.048	8.115E-02	4.592E-05	4.352E-05	304.9	3.89E-03	1.000	.048	.050
416	127.60	[illegible]	1.14	1.[illegible]E+03	1.45E-03	1.37E-03	.018	8.115E-02	1.712E-05	1.622E-05	303.6	1.45E-03	1.000	.018	.019
417	127.60	[illegible]	1.4[illegible]												
418	127.60	[illegible]	1.65	9.[illegible]E+01	1.27E-04	1.21E-04	.002	8.115E-02	1.505E-06	1.427E-06	301.8	1.27E-04	1.000	.002	.002
419	127.60	[illegible]	1.90	2.71E+02	3.69E-04	3.49E-04	.005	8.115E-02	4.357E-06	4.138E-06	302.9	3.69E-04	1.000	.005	.005
420	127.60	[illegible]	2.29												
506	135.22	.76	[illegible]	[illegible]E+04	6.72E-02	6.37E-02	.761	8.826E-02	7.944E-04	7.525E-04	311.0	6.72E-02	1.000	.761	.897
507	135.22	.71	[illegible]	[illegible]E+04	6.48E-02	6.14E-02	.735	8.824E-02	7.652E-04	7.259E-04	310.4	6.48E-02	1.000	.735	.866
508	135.22	.23	[illegible]	4.[illegible]E+04	6.28E-02	5.95E-02	.712	8.819E-02	7.419E-04	7.029E-04	310.1	6.28E-02	1.000	.712	.839
509	135.22	.15	[illegible]	4.1[illegible]E+04	5.63E-02	5.33E-02	.639	8.817E-02	6.655E-04	6.305E-04	309.2	5.63E-02	1.000	.639	.753
510	135.22	.74	.04	3.[illegible]E+04	5.23E-02	4.95E-02	.593	8.816E-02	6.177E-04	5.852E-04	308.9	5.23E-02	1.000	.593	.699
511	135.22	[illegible]	.15	[illegible]E+04	5.00E-02	4.73E-02	.567	8.814E-02	5.905E-04	5.595E-04	308.2	5.00E-02	1.000	.567	.668
512	135.22	[illegible]	.25	[illegible]E+04	4.12E-02	3.90E-02	.467	8.814E-02	4.863E-04	4.610E-04	306.6	4.12E-02	1.000	.467	.550
513	135.22	[illegible]	.38	2.49E+04	3.40E-02	3.22E-02	.385	8.814E-02	4.013E-04	3.803E-04	304.9	3.40E-02	1.000	.385	.454
514	135.22	[illegible]	.64	1.31E+04	1.77E-02	1.68E-02	.201	8.814E-02	2.089E-04	1.980E-04	302.4	1.77E-02	1.000	.201	.236
515	135.22	[illegible]	.89	7.29E+03	9.94E-03	9.42E-03	.113	8.814E-02	1.173E-04	1.114E-04	303.6	9.94E-03	1.000	.113	.133
516	135.22	[illegible]	1.14	4.[illegible]E+03	6.22E-03	5.30E-03	.071	8.814E-02	7.357E-05	6.973E-05	303.4	6.22E-03	1.000	.071	.083
517	135.22	[illegible]	1.40	2.46E+03	3.35E-03	3.19E-03	.038	8.814E-02	3.962E-05	3.759E-05	303.6	3.35E-03	1.000	.038	.045
518	135.22	[illegible]	1.65	1.[illegible]E+03	2.04E-03	1.93E-03	.023	8.814E-02	2.412E-05	2.286E-05	303.6	2.04E-03	1.000	.023	.027
519	135.22	[illegible]	1.91	1.23E+03	1.67E-03	1.59E-03	.019	8.814E-02	1.978E-05	1.875E-05	303.7	1.67E-03	1.000	.019	.022
520	135.22	[illegible]	2.29	1.[illegible]E+03	1.43E-03	1.35E-03	.016	8.814E-02	1.695E-05	1.590E-05	303.3	1.43E-03	1.000	.016	.019
601	119.74	[illegible]	.25								306.58				
602	119.74	[illegible]	.48								305.17				
603	119.74	[illegible]	.91								304.61				
604	119.74	[illegible]	1.[illegible]								303.41				
605	119.74	[illegible]	1.[illegible]								302.23				

EDGE HEATING USED FOR HL

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X=   7.6[illegible]E+01   HL   /HREFF=   1.1[illegible]E+00
X=   8.150E+01   HL   /HREFF=   1.298E+00
X=   8.696E+01   HL   /HREFF=   1.[illegible]E+00
X=   9.2[illegible]E+01   HL   /HREFF=   1.767E+00
X=   9.712E+01   HL   /HREFF=   1.[illegible]E+00
X=   1.022E+02   HL   /HREFF=   1.[illegible]E+00
X=   1.[illegible]E+02   HL   /HREFF=   1.[illegible]E+00
X=   1.124E+02   HL   /HREFF=   1.304E+00
X=   1.175E+02   HL   /HREFF=   1.[illegible]E+00
X=   1.225E+02   HL   /HREFF=   1.[illegible]E+00
X=   1.251E+02   HL   /HREFF=   9.922E-01
X=   1.276E+02   HL   /HREFF=   9.[illegible]E-01
X=   1.3[illegible]E+02   HL   /HREFF=   [illegible]E-01
X=   1.327E+02   HL   /HREFF=   [illegible]E-01
X=   1.352E+02   HL   /HREFF=   [illegible]E-01

X=   1.111E+02   HL   /HREFF=   1.271E+00
X=   1.174E+02   HL   /HREFF=   1.[illegible]E+00
X=   1.275E+02   HL   /HREFF=   [illegible]E-01
X=   1.352E+02   HL   /HREFF=   7.[illegible]E-01
B.L. TRANSITION DISTANCE =   3[illegible].7   CM
FULLY TURBULENT B.L. CONDITIONS AT =   97.12 CM
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ORIGINAL PAGE IS
OF POOR QUALITY

AMES 3.5 FT HWT TEST (1?2), C.J. BLUMER, IN-LINE RSI GAP RUN(92) 1973

TT	= 1.149?E+0?(K)	GAP LENGTH	= 30.480(CM)
PT	= 2.1359E+0?(N/M2)	GAP WIDTH	= .127(CM)
HT	= 1.2131E+06(J/KG)	GAP DEPTH	= 3.81?(CM)
RE/METER	= 6.7739E+06	ORIENTATION	= 15.000(DEG)
MACH	= 5.19?	QS	= 1.7821E+05(W/M2)
RHO VEL	= 9.3505E+01(KG/M2-S)	MOD.POSITION	= 5
HAW/HT	= 0.9?? FOR HT		
HAW/HT	= 0.874 FOR HL		
HLCC	= HL(2ND. ORDER COND.,)		

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	13?.24	-.51	0.00	5.47E+04	7.32E-02	5.93E-02	.856	8.548E-02	9.764E-04	8.394E-04	314.7				1.000
2	132.70	-.51	0.00	5.60E+04	7.56E-02	7.11E-02	.913	8.310E-02	8.987E-04	8.516E-04	315.1				1.000
3	130.16	-.51	0.00	5.59E+04	7.49E-02	7.12E-02	.928	8.071E-02	8.974E-04	8.503E-04	315.1				1.000
4	127.63	-.51	0.00	5.76E+04	7.72E-02	7.31E-02	.985	7.833E-02	9.239E-04	8.754E-04	315.1				1.000
5	125.09	-.51	0.00	5.63E+04	7.54E-02	7.15E-02	.993	7.595E-02	9.032E-04	8.558E-04	315.2				1.000
6	122.56	-.51	0.00	5.62E+04	7.52E-02	7.13E-02	1.022	7.357E-02	9.037E-04	8.535E-04	315.1				1.000
7	117.47	-.51	.00	5.60E+04	7.51E-02	7.11E-02	1.111	6.757E-02	8.992E-04	8.519E-04	315.5				1.000
8	112.37	-.51	0.00	5.49E+04	7.37E-02	6.98E-02	1.251	5.890E-02	8.822E-04	8.359E-04	316.0				1.000
9	107.31	-.51	0.00	4.85E+04	6.49E-02	6.15E-02	1.339	4.845E-02	7.772E-04	7.364E-04	314.7				1.000
10	102.25	-.51	0.00	4.52E+04	6.04E-02	5.77E-02	1.544	3.916E-02	7.279E-04	5.869E-04	314.1				1.000
11	97.12	-.51	0.00	3.44E+04	4.61E-02	4.37E-02	1.455	3.169E-02	5.520E-04	5.231E-04	314.6				1.000
12	92.04	-.51	0.00	2.42E+04	3.24E-02	3.07E-02	1.270	2.551E-02	3.831E-04	3.677E-04	314.9				1.000
13	86.96	-.51	0.00	1.70E+04	2.29E-02	2.16E-02	1.083	2.105E-02	2.731E-04	2.588E-04	315.7				1.000
14	81.88	-.51	0.00	1.26E+04	1.69E-02	1.58E-02	.974	1.730E-02	2.019E-04	1.912E-04	316.6				1.000
15	76.80	-.51	0.00	1.01E+04	1.35E-02	1.28E-02	.897	1.533E-02	1.614E-04	1.529E-04	316.4				1.000
133	111.09	1.52	0.00	5.48E+04	7.38E-02	6.99E-02	1.31	5.633E-02	8.878E-04	8.372E-04	319.7	7.38E-02	1.000	1.310	1.029
105	111.09	1.02	0.00	5.52E+04	7.45E-02	7.36E-02	1.323	5.635E-02	8.928E-04	8.456E-04	320.9	7.45E-02	1.000	1.323	1.039
107	111.09	.51	0.00	5.99E+04	8.07E-02	7.65E-02	1.432	5.636E-02	9.667E-04	9.156E-04	320.4	8.07E-02	1.000	1.432	1.129
108	111.09	.25	0.00	6.42E+04	8.65E-02	8.19E-02	1.535	5.636E-02	1.036E-03	9.812E-04	319.4	8.65E-02	1.000	1.535	1.205
110	111.09	.04	.04	5.72E+04	7.73E-02	7.32E-02	1.372	5.636E-02	9.258E-04	8.773E-04	317.9	7.73E-02	1.000	1.372	1.077
111	111.09	0.00	.15	5.05E+04	6.79E-02	6.44E-02	1.205	5.636E-02	8.136E-04	7.708E-04	317.4	6.79E-02	1.000	1.205	.947
112	111.09	0.00	.25	3.75E+04	5.03E-02	4.76E-02	.892	5.636E-02	6.022E-04	5.706E-04	316.2	5.03E-02	1.000	.892	.701
113	111.09	0.00	.38	2.41E+04	3.22E-02	3.05E-02	.570	5.636E-02	3.851E-04	3.648E-04	315.3	3.22E-02	1.000	.570	.448
114	111.09	0.00	.64	8.35E+03	1.12E-02	1.06E-02	.198	5.636E-02	1.339E-04	1.269E-04	313.5	1.12E-02	1.000	.198	.156
115	111.09	0.00	.89	2.25E+03	3.00E-03	2.84E-03	.053	5.636E-02	3.592E-05	3.404E-05	312.0	3.00E-03	1.000	.053	.042
306	117.44	.76	0.00												
307	117.44	.51	0.00	5.48E+04	7.37E-02	6.98E-02	1.087	6.780E-02	8.824E-04	8.360E-04	317.8	7.37E-02	1.000	1.087	.977
308	117.44	.25	0.00	6.25E+04	8.39E-02	7.95E-02	1.236	6.773E-02	1.004E-03	9.515E-04	316.9	8.39E-02	1.000	1.236	1.113
309	117.44	.13	0.00	6.17E+04	8.28E-02	7.84E-02	1.222	6.771E-02	9.917E-04	9.389E-04	316.1	8.28E-02	1.000	1.222	1.099
310	117.44	.04	.04	5.97E+04	8.01E-02	7.59E-02	1.183	6.768E-02	9.593E-04	9.085E-04	315.5	8.01E-02	1.000	1.183	1.064
311	117.44	0.00	.13												
312	117.44	0.00	.25	4.25E+04	5.68E-02	5.39E-02	.840	6.767E-02	6.807E-04	6.451E-04	313.4	5.68E-02	1.000	.840	.755
313	117.44	0.00	.38	3.25E+04	4.35E-02	4.12E-02	.642	6.767E-02	5.204E-04	4.931E-04	313.1	4.35E-02	1.000	.642	.57?
314	117.44	0.00	.64	1.94E+04	2.59E-02	2.45E-02	.383	6.767E-02	3.104E-04	2.942E-04	312.0	2.59E-02	1.000	.383	.344
315	117.44	0.00	.89	1.21E+04	1.62E-02	1.53E-02	.239	6.767E-02	1.916E-04	1.835E-04	310.8	1.62E-02	1.000	.239	.215
316	117.44	0.00	1.14	8.15E+03	1.08E-02	1.03E-02	.160	6.767E-02	1.297E-04	1.233E-04	310.0	1.08E-02	1.000	.160	.14?
317	117.44	0.00	1.40	5.35E+03	7.11E-03	6.74E-03	.105	6.767E-02	8.511E-05	8.067E-05	309.1	7.11E-03	1.000	.105	.094
318	117.44	0.00	1.65	3.55E+03	4.72E-03	4.47E-03	.070	6.767E-02	5.650E-05	5.355E-05	308.9	4.72E-03	1.000	.070	.063
319	117.44	0.00	1.90	2.01E+03	2.66E-03	2.52E-03	.039	6.767E-02	3.159E-05	3.023E-05	308.5	2.66E-03	1.000	.039	.035
320	117.44	0.00	2.29	8.37E+02	1.11E-03	1.05E-03	.016	6.767E-02	1.331E-05	1.261E-05	308.1	1.11E-03	1.000	.016	.015

AMES 3.5 FT HWT TEST (1F2), D.B. BLUMER, IN-LINE RSI GAP RUN(32) 1973 PAGE 184

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
406	127.60	.76	0.00	5.12E+04	6.83E-02	6.48E-02	.870	7.855E-02	8.182E-04	7.754E-04	313.1	6.83E-02	1.000	.870	.863
407	127.60	.51	0.00	5.29E+04	7.05E-02	6.68E-02	.897	7.852E-02	8.437E-04	7.994E-04	316.0	7.05E-02	1.000	.897	.911
408	127.60	.25	0.00	5.63E+04	7.52E-02	7.12E-02	.958	7.847E-02	9.011E-04	8.530E-04	312.4	7.52E-02	1.000	.958	.972
409	127.60	.18	0.00	5.61E+04	7.49E-02	7.09E-02	.954	7.845E-02	8.962E-04	8.494E-04	311.9	7.48E-02	1.000	.954	.969
410	127.60	.04	.04	5.19E+04	6.91E-02	6.55E-02	.882	7.842E-02	8.281E-04	7.848E-04	311.6	6.91E-02	1.000	.882	.895
411	127.60	0.00	.15	4.65E+04	6.24E-02	5.92E-02	.796	7.841E-02	7.477E-04	7.086E-04	311.5	6.24E-02	1.000	.796	.808
412	127.60	0.00	.25	3.32E+04	4.42E-02	4.19E-02	.564	7.841E-02	5.294E-04	5.018E-04	310.7	4.42E-02	1.000	.564	.572
413	127.60	0.00	.38	2.32E+04	3.08E-02	2.92E-02	.393	7.841E-02	3.688E-04	3.496E-04	309.9	3.08E-02	1.000	.393	.399
414	127.60	0.00	.64	1.04E+04	1.39E-02	1.31E-02	.177	7.841E-02	1.659E-04	1.573E-04	308.4	1.39E-02	1.000	.177	.179
415	127.60	0.00	.89	5.65E+03	7.53E-03	7.14E-03	.096	7.841E-02	9.017E-05	8.549E-05	307.1	7.53E-03	1.000	.096	.097
416	127.60	0.00	1.14	3.29E+03	4.36E-03	4.13E-03	.056	7.841E-02	5.215E-05	4.946E-05	305.5	4.36E-03	1.000	.056	.056
417	127.60	0.00	1.40	1.79E+03	2.36E-03	2.24E-03	.030	7.841E-02	2.828E-05	2.681E-05	303.9	2.36E-03	1.000	.030	.031
418	127.60	0.00	1.55	9.47E+02	1.25E-03	1.19E-03	.016	7.841E-02	1.497E-05	1.419E-05	304.2	1.25E-03	1.000	.016	.016
419	127.60	0.00	1.90	4.63E+02	6.12E-04	5.80E-04	.008	7.841E-02	7.328E-06	6.943E-06	304.9	6.12E-04	1.000	.008	.008
420	127.60	0.00	2.29												
506	135.22	.76	0.00	4.95E+04	6.62E-02	6.27E-02	.772	8.566E-02	7.924E-04	7.508E-04	314.3	6.62E-02	1.000	.772	.902
507	135.22	.51	0.00	4.94E+04	6.60E-02	6.25E-02	.771	8.564E-02	7.905E-04	7.491E-04	313.7	6.60E-02	1.000	.771	.900
508	135.22	.25	0.00	5.27E+04	7.05E-02	6.68E-02	.823	8.559E-02	8.439E-04	7.997E-04	313.5	7.05E-02	1.000	.823	.961
509	135.22	.15	0.00	5.11E+04	6.82E-02	6.46E-02	.797	8.558E-02	8.165E-04	7.741E-04	312.6	6.82E-02	1.000	.797	.938
510	135.22	.04	.04	4.83E+04	6.45E-02	6.11E-02	.754	8.556E-02	7.721E-04	7.316E-04	312.2	6.45E-02	1.000	.754	.886
511	135.22	0.00	.15	4.66E+04	6.21E-02	5.89E-02	.726	8.555E-02	7.442E-04	7.053E-04	311.3	6.21E-02	1.000	.726	.840
512	135.22	0.00	.25	3.88E+04	5.16E-02	4.89E-02	.603	8.555E-02	6.178E-04	5.857E-04	309.2	5.16E-02	1.000	.603	.704
513	135.22	0.00	.38	3.06E+04	4.08E-02	3.87E-02	.477	8.555E-02	4.891E-04	4.637E-04	307.0	4.08E-02	1.000	.477	.557
514	135.22	0.00	.64	1.70E+04	2.25E-02	2.13E-02	.263	8.555E-02	2.693E-04	2.554E-04	303.8	2.25E-02	1.000	.263	.307
515	135.22	0.00	.89	1.02E+04	1.35E-02	1.28E-02	.157	8.555E-02	1.511E-04	1.527E-04	306.7	1.35E-02	1.000	.157	.184
516	135.22	0.00	1.14	7.12E+03	9.42E-03	8.93E-03	.110	8.555E-02	1.128E-04	1.069E-04	305.9	9.42E-03	1.000	.110	.129
517	135.22	0.00	1.40	4.90E+03	6.48E-03	6.14E-03	.076	8.555E-02	7.757E-05	7.355E-05	305.7	6.48E-03	1.000	.076	.088
518	135.22	0.00	1.65	3.20E+03	4.23E-03	4.01E-03	.049	8.555E-02	5.066E-05	4.804E-05	305.5	4.23E-03	1.000	.049	.058
519	135.22	0.00	1.91	2.22E+03	2.93E-03	2.78E-03	.034	8.555E-02	3.512E-05	3.328E-05	305.6	2.93E-03	1.000	.034	.040
520	135.22	0.00	2.29	8.63E+02	1.14E-03	1.08E-03	.013	8.555E-02	1.366E-05	1.295E-05	305.2	1.14E-03	1.000	.013	.016
601	119.34	0.00	.25								309.14				
602	119.34	0.00	.48								307.67				
603	119.34	0.00	.91								306.11				
604	119.34	0.00	1.[illegible]								305.00				
605	119.34	0.00	1.[illegible]								303.65				

EDGE HEATING USED FOR HE

X=	7.600E+01	HL	/HREFF=	8.957E-01
X=	8.188E+01	HL	/HREFF=	9.742E-01
X=	8.636E+01	HL	/HREFF=	1.033E+00
X=	9.204E+01	HL	/HREFF=	1.270E+00
X=	9.712E+01	HL	/HREFF=	1.455E+00
X=	1.022E+02	HL	/HREFF=	1.[illegible]45E+00
X=	1.073E+02	HL	/HREFF=	1.[illegible]E+00
X=	1.124E+02	HL	/HREFF=	1.251E+00
X=	1.1[illegible]E+02	HL	/HREFF=	1.111E+00
X=	1.226E+02	HL	/HREFF=	1.[illegible]E+00
X=	1.251E+02	HL	/HREFF=	9.931E-01
X=	1.275E+02	HL	/HREFF=	9.843E-01
X=	1.3[illegible]E+02	HL	/HREFF=	9.2[illegible]E-01
X=	1.327E+02	HL	/HREFF=	9.031E-01
X=	1.3[illegible]2E+02	HL	/HREFF=	8.[illegible]2E-01
X=	1.111E+02	HL	/HREFF=	1.4[illegible]E+00
X=	1.174E+02	HL	/HREFF=	1.[illegible]E+00
X=	1.276E+02	HL	/HREFF=	8.[illegible]E-01
X=	1.362E+02	HL	/HREFF=	7.[illegible]E-01

B.L. TRANSITION DISTANCE [illegible]
FULLY TURBULENT B.L. BEGINS AT X = [illegible] CM

AMES 3.5 FT HWT TEST (1[illegible]2), C.P. BLUMER, IN-LINE RSI GAP RUN(93) 1973 PAGE 185

TT = 1.116[illegible]E+03(K) GAP LENGTH = 30.480(CM)
PT = 2.1321E+06(N/M2) GAP WIDTH = .254(CM)
HT = 1.1628E+06(J/KG) GAP DEPTH = 3.810(CM)
RE/METER = 5.5562E+06 ORIENTATION= 1[illegible].990(DEG)
MACH = 5.190 QS = 1.7045E+05(N/M2)
RHO VEL = 3.5753E+01(KG/M2-S) MOD.POSITION= 5
HAW/HT = 0.919 FOR HT
HAW/HT = 0.874 FOR HL
HLCC = HL(2ND. ORDER COND.,)

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
1	135.24	-.51	[illegible]	5.23E+04	7.34E-02	6.94E-02	.825	8.888E-02	8.625E-04	8.165E-04	318.0				1.000
2	132.70	-.51	0.00	5.24E+04	7.35E-02	6.96E-02	.849	8.656E-02	8.641E-04	8.180E-04	318.6				1.000
3	130.16	-.51	[illegible]	5.23E+04	7.33E-02	5.94E-02	.871	8.423E-02	8.623E-04	5.163E-04	310.4				1.000
4	127.63	-.51	[illegible]	5.41E+04	7.59E-02	7.19E-02	.926	8.191E-02	8.929E-04	8.444E-04	318.4				1.000
5	125.09	-.51	0.00	5.39E+04	7.56E-02	7.16E-02	.950	7.959E-02	8.891E-04	8.416E-04	318.5				1.000
6	122.56	-.51	[illegible]	[illegible]E+04	7.65E-02	7.24E-02	.990	7.727E-02	8.995E-04	8.514E-04	318.2				1.000
7	117.47	-.51	[illegible]	5.55E+04	7.79E-02	7.37E-02	1.093	7.127E-02	9.157E-04	8.668E-04	318.4				1.000
8	112.37	-.51	[illegible]	5.40E+04	7.58E-02	7.17E-02	1.217	6.226E-02	8.907E-04	8.432E-04	318.9				1.000
9	107.31	-.51	[illegible]	5.12E+04	7.16E-02	6.79E-02	1.339	5.122E-02	9.423E-04	7.974E-04	316.8				1.000
10	102.20	-.51	[illegible]	5.30E+04	7.41E-02	7.02E-02	1.792	4.136E-02	8.713E-04	8.251E-04	315.3				1.000
11	97.12	-.51	[illegible]	4.74E+04	6.63E-02	6.28E-02	1.983	3.343E-02	7.794E-04	7.388E-04	315.6				1.000
12	92.04	-.51	[illegible]	3.45E+04	4.82E-02	4.56E-02	1.796	2.684E-02	5.663E-04	5.367E-04	316.0				1.000
13	86.96	-.51	[illegible]	1.96E+04	2.74E-02	2.60E-02	1.243	2.206E-02	3.224E-04	3.053E-04	316.6				1.000
14	81.88	-.51	[illegible]	1.27E+04	1.78E-02	1.59E-02	.987	1.803E-02	2.093E-04	1.981E-04	317.2				1.000
15	76.80	-.51	[illegible]	9.[illegible]E+03	1.34E-02	1.26E-02	.859	1.555E-02	1.571E-04	1.487E-04	317.2				1.000
103	111.79	1.52	[illegible]	5.43E+04	7.65E-02	7.24E-02	1.284	5.966E-02	8.936E-04	8.514E-04	321.6	7.65E-02	1.000	1.284	1.016
105	111.79	1.02	[illegible]	5.43E+04	7.67E-02	7.26E-02	1.287	5.961E-02	9.029E-04	8.536E-04	322.8	7.67E-02	1.000	1.287	1.019
107	111.79	.51	[illegible]	5.[illegible]E+04	8.19E-02	7.75E-02	1.373	5.962E-02	9.629E-04	9.109E-04	322.7	8.19E-02	1.000	1.373	1.007
108	111.79	.25	[illegible]	5.67E+04	7.99E-02	7.56E-02	1.341	5.962E-02	9.396E-04	8.893E-04	321.8	7.99E-02	1.000	1.341	1.061
110	111.79	[illegible]	[illegible]	4.[illegible]E+04	6.36E-02	6.02E-02	1.067	5.961E-02	7.479E-04	7.079E-04	320.5	6.36E-02	1.000	1.067	.945
111	111.79	[illegible]	.15	3.45E+04	5.42E-02	5.13E-02	.910	5.961E-02	6.376E-04	6.035E-04	320.1	5.42E-02	1.000	.910	.720
112	111.79	0.00	.25	2.84E+04	3.98E-02	3.77E-02	.668	5.961E-02	4.682E-04	4.432E-04	318.9	3.98E-02	1.000	.668	.529
113	111.79	0.00	.35	1.[illegible]E+04	2.59E-02	2.46E-02	.435	5.961E-02	3.0[illegible]E-04	2.567E-04	318.1	2.59E-02	1.000	.435	.345
114	111.79	[illegible]	.46	6.24E+03	8.79E-03	8.32E-03	.147	5.961E-02	1.[illegible]E-04	9.706E-05	315.2	8.79E-03	1.000	.147	.117
115	111.79	[illegible]	.49	1.52E+03	2.12E-03	2.01E-03	.036	5.961E-02	2.432E-05	2.360E-05	314.8	2.12E-03	1.000	.036	.028
306	117.44	.75	[illegible]												
307	117.44	.51	[illegible]	5.25E+04	7.38E-02	6.99E-02	1.032	7.155E-02	9.632E-04	8.218E-04	319.9	7.38E-02	1.000	1.032	.944
308	117.44	.25	[illegible]	5.72E+04	8.03E-02	7.59E-02	1.123	7.147E-02	9.437E-04	8.933E-04	319.7	8.03E-02	1.000	1.123	1.027
309	117.44	.15	[illegible]	[illegible]E+04	7.62E-02	7.21E-02	1.067	7.144E-02	8.951E-04	8.483E-04	318.5	7.62E-02	1.000	1.067	.976
310	117.44	.04	[illegible]	5.21E+04	7.31E-02	6.92E-02	1.024	7.140E-02	8.593E-04	8.135E-04	318.0	7.31E-02	1.000	1.024	.936
311	117.44	[illegible]	.13												
312	117.44	[illegible]	.25	3.72E+04	5.22E-02	4.94E-02	.731	7.139E-02	6.133E-04	5.807E-04	316.0	5.22E-02	1.000	.731	.668
313	117.44	[illegible]	.30	2.84E+04	3.98E-02	3.77E-02	.558	7.139E-02	4.684E-04	4.435E-04	315.7	3.98E-02	1.000	.558	.510
314	117.44	[illegible]	[illegible]	1.54E+04	2.16E-02	2.04E-02	.302	7.139E-02	2.53[illegible]E-04	2.403E-04	314.7	2.16E-02	1.000	.302	.276
315	117.44	0.00	[illegible]	[illegible]E+03	1.12E-02	1.06E-02	.156	7.139E-02	1.313E-04	1.243E-04	313.4	1.12E-02	1.000	.156	.143
316	117.44	[illegible]	1.14	[illegible]E+03	6.09E-03	5.77E-03	.085	7.139E-02	7.1[illegible]E-05	6.779E-05	312.6	6.09E-03	1.000	.085	.07[illegible]
317	117.44	[illegible]	[illegible]	[illegible]E+03	3.04E-03	2.88E-03	.043	7.139E-02	3.574E-05	3.385E-05	311.7	3.04E-03	1.000	.04	.039
318	117.44	[illegible]	[illegible]	1.16E+03	1.64E-03	1.55E-03	.023	7.139E-02	1.927E-05	1.825E-05	311.5	1.64E-03	1.000	.023	.021
319	117.44	[illegible]	1.92	[illegible]E+02	1.22E-03	1.16E-03	.017	7.139E-02	1.438E-05	1.352E-05	311.1	1.22E-03	1.000	.017	.016
320	117.44	[illegible]	2.29	7.94E+02	1.10E-03	1.04E-03	.015	7.139E-02	1.237E-05	1.228E-05	310.7	1.10E-03	1.000	.015	.014

SMFS 3.5 FT HWT TEST (182), C.J. BLUMER, IN-LINE RSI GAP RUN(33) 1973

T/C	X (CM)	YY (CM)	ZZ (CM)	Q (W/M2)	HL (KG/M2-S)	HT (KG/M2-S)	HL/HREFF	HREF (KG/M2-S)	STL	STT	T (K)	HLCC (KG/M2-S)	HL/HLCC	HLCC/HREF	HL/HE
406	127.60	.76	0.00	[illegible]E+04	6.84E-02	6.47E-02	.832	8.221E-02	8.339E-04	7.612E-04	315.3	6.84E-02	1.000	.832	.898
407	127.60	.51	0.00	5.22E+04	7.33E-02	6.94E-02	.892	8.214E-02	8.617E-04	8.157E-04	318.6	7.33E-02	1.000	.892	.963
408	127.60	.25	[illegible]	6.40E+04	9.36E-02	8.58E-02	1.104	8.206E-02	1.065E-03	1.008E-03	313.1	9.36E-02	1.000	1.104	1.191
409	127.60	.15	[illegible]	7.79E+04	9.90E-02	9.37E-02	1.206	8.206E-02	1.164E-03	1.102E-03	314.7	9.90E-02	1.000	1.206	1.302
410	127.60	.05	.04	6.97E+04	9.73E-02	9.21E-02	1.186	8.203E-02	1.144E-03	1.083E-03	314.5	9.73E-02	1.000	1.186	1.280
411	127.60	.00	.15	[illegible]E+04	9.19E-02	8.71E-02	1.121	8.202E-02	1.081E-03	1.023E-03	314.3	9.19E-02	1.000	1.121	1.210
412	127.60	0.00	.25	5.13E+04	7.15E-02	6.77E-02	.872	8.202E-02	8.415E-04	7.965E-04	313.6	7.15E-02	1.000	.872	.941
413	127.60	0.00	.38	3.85E+04	5.36E-02	5.07E-02	.653	8.202E-02	6.298E-04	5.965E-04	312.7	5.36E-02	1.000	.653	.705
414	127.60	0.00	.64	2.34E+04	3.25E-02	3.08E-02	.397	8.202E-02	3.823E-04	3.623E-04	311.0	3.25E-02	1.000	.397	.428
415	127.60	0.00	.89	1.81E+04	2.51E-02	2.38E-02	.306	8.202E-02	2.956E-04	2.800E-04	309.7	2.51E-02	1.000	.306	.331
416	127.60	0.00	1.14	1.36E+04	1.87E-02	1.78E-02	.229	8.202E-02	2.214E-04	2.088E-04	308.0	1.87E-02	1.000	.229	.247
417	127.60	0.00	[illegible]	1.06E+04	1.46E-02	1.38E-02	.178	8.202E-02	1.712E-04	1.622E-04	306.3	1.46E-02	1.000	.178	.192
418	127.60	0.00	1.65	8.77E+03	1.21E-02	1.14E-02	.147	8.202E-02	1.410E-04	1.343E-04	306.7	1.21E-02	1.000	.147	.159
419	127.60	0.00	1.90	5.56E+03	9.06E-03	8.59E-03	.111	8.202E-02	1.055E-04	1.010E-04	307.6	9.06E-03	1.000	.111	.119
420	127.60	0.00	2.29	[illegible]E+03	5.55E-03	[illegible].26E-03	.068	8.202E-02	6.523E-05	6.195E-05	307.5	5.55E-03	1.000	.068	.073
506	135.22	.76	0.00	4.54E+04	6.36E-02	6.02E-02	.714	8.911E-02	7.479E-04	7.081E-04	310.8	6.36E-02	1.000	.714	.865
507	135.22	.51	0.00	[illegible]E+04	6.11E-02	5.78E-02	.686	8.906E-02	7.183E-04	6.799E-04	310.3	6.11E-02	1.000	.686	.831
508	135.22	.25	[illegible]	4.69E+04	6.56E-02	6.21E-02	.737	8.901E-02	7.719E-04	7.304E-04	316.2	6.56E-02	1.000	.737	.893
509	135.22	.15	[illegible]	[illegible]E+04	6.73E-02	6.37E-02	.756	8.899E-02	7.912E-04	7.492E-04	315.4	6.73E-02	1.000	.756	.916
510	135.22	.05	.04	[illegible].63E+04	6.47E-02	6.12E-02	.727	8.897E-02	7.675E-04	7.201E-04	315.0	6.47E-02	1.000	.727	.881
511	135.22	0.00	.15	[illegible]E+04	6.20E-02	5.87E-02	.697	8.896E-02	7.286E-04	6.899E-04	314.0	6.20E-02	1.000	.697	.844
512	135.22	0.00	.25	3.65E+04	5.08E-02	4.81E-02	.570	8.896E-02	5.967E-04	5.651E-04	311.7	5.07E-02	1.000	.570	.691
513	135.22	0.00	.38	2.83E+04	3.92E-02	3.72E-02	.441	8.896E-02	4.612E-04	4.369E-04	309.5	3.92E-02	1.000	.441	.534
514	135.22	0.00	.64	1.87E+04	2.52E-02	2.39E-02	.283	8.896E-02	2.962E-04	2.807E-04	306.8	2.52E-02	1.000	.283	.343
515	135.22	0.00	.89	1.62E+04	2.24E-02	2.12E-02	.252	8.896E-02	2.633E-04	2.495E-04	309.7	2.24E-02	1.000	.252	.305
516	135.22	0.00	1.14	1.40E+04	1.94E-02	1.83E-02	.218	8.896E-02	2.277E-04	2.157E-04	309.0	1.94E-02	1.000	.218	.264
517	135.22	0.00	1.40	1.17E+04	1.62E-02	1.53E-02	.182	8.896E-02	1.903E-04	1.800E-04	308.9	1.62E-02	1.000	.182	.220
518	135.22	0.00	1.65	9.30E+03	1.29E-02	1.22E-02	.145	8.896E-02	1.514E-04	1.434E-04	308.5	1.29E-02	1.000	.145	.175
519	135.22	0.00	1.90	7.32E+03	1.01E-02	9.60E-03	.114	8.896E-02	1.191E-04	1.129E-04	308.5	1.01E-02	1.000	.114	.138
520	135.22	0.00	2.29	[illegible].60E+03	6.37E-03	6.03E-03	.072	8.896E-02	7.485E-05	7.092E-05	308.0	6.37E-03	1.000	.072	.087
601	119.34	0.00	.25								312.14				
602	119.34	0.00	.48								309.76				
603	119.34	0.00	.91								307.78				
604	119.34	0.00	1.37								306.40				
605	119.34	0.00	1.69								304.94				

EDGE HEATING USED FOR HT

X=	7.600E+01	HL /HREFF=	8.591E-01
X=	8.308E+01	HL /HREFF=	9.973E-01
X=	8.696E+01	HL /HREFF=	1.243E+00
X=	9.204E+01	HL /HREFF=	1.796E+00
X=	9.712E+01	HL /HREFF=	1.983E+00
X=	1.022E+02	HL /HREFF=	1.792E+00
X=	1.073E+02	HL /HREFF=	1.799E+00
X=	1.124E+02	HL /HREFF=	1.217E+00
X=	1.175E+02	HL /HREFF=	1.033E+00
X=	1.226E+02	HL /HREFF=	9.964E-01
X=	1.251E+02	HL /HREFF=	9.509E-01
X=	1.276E+02	HL /HREFF=	9.202E-01
X=	1.302E+02	HL /HREFF=	8.777E-01
X=	1.327E+02	HL /HREFF=	8.491E-01
X=	1.352E+02	HL /HREFF=	8.234E-01
X=	1.111E+02	HL /HREFF=	1.373E+00
X=	1.174E+02	HL /HREFF=	1.032E+00
X=	1.276E+02	HL /HREFF=	9.922E-01
X=	1.352E+02	HL /HREFF=	8.457E-01

B.L. TRANSITION DISTANCE = 38.71 CM
FULLY TURBULENT B.L. CONDITIONS AT = 97.12 CM

AMES 3.5 FT HWT TEST (3), D.A. BLUMER, IN-LINE RSI GAP RUN(3) 1973 PAGE 0

CONDUCTION CORRECTED HL USED IN HLCC/HREF AND HLC/HEC WHEN AVAILABLE,OTHERWISE (HL) IS USED
CONDUCTION CORRECTED HL USED IN HLCC/HREF AND HLC/HEC WHEN AVAILABLE,OTHERWISE (HL) IS USED

	G-CF	LOC	X	Y	Z	X(BAR)	HLC/HEC	A(PAL)	GAP	STEP	FLOW-L	GAP-C	PATN	MACH	RE/M	W-THK
160001.011	1	3	77.12	-.51	0.00	68.965	1.000	0.00	0.000	0.000	68.97	0.000	1	5.10	1.650E+06	.029
160001.021	1	3	45.35	-.51	0.00	12.705	1.000	0.00	0.000	0.000	12.71	0.000	1	5.10	1.650E+06	.020
160001.203	1	3	51.36	1.52	0.00	25.400	1.036	0.00	0.000	0.000	25.40	0.000	1	5.10	1.650E+06	.022
160001.306	1	3	36.36	.76	0.00	50.800	.959	0.00	0.000	0.000	50.80	0.000	1	5.10	1.650E+06	.026
160001.406	1	3	112.36	.76	0.00	76.200	.967	0.00	0.000	0.000	76.20	0.000	1	5.10	1.650E+06	.034
160001.506	1	3	125.06	.76	0.00	88.900	.368	0.00	0.000	0.000	88.90	0.000	1	5.10	1.650E+06	.041
160002.006	1	3	122.56	-.51	0.00	86.398	1.070	0.00	0.000	0.000	86.40	0.000	1	5.10	3.318E+06	.042
160002.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	0.000	0.000	35.57	0.000	1	5.10	3.318E+06	.032
160002.103	1	3	47.59	1.52	0.00	11.433	1.075	0.00	0.000	0.000	11.43	0.000	1	5.10	3.318E+06	.026
160002.391	1	3	86.96	2.03	0.00	50.800	.966	0.00	0.000	0.000	50.80	0.000	1	5.10	3.318E+06	.036
160002.401	1	3	112.36	2.03	0.00	76.200	.941	0.00	0.000	0.000	76.20	0.000	1	5.10	3.318E+06	.041
160002.501	1	3	125.06	2.03	0.00	88.900	.975	0.00	0.000	0.000	88.90	0.000	1	5.10	3.318E+06	.043
160003.001	1	3	135.24	-.51	0.00	99.083	1.030	0.00	0.000	0.000	99.08	0.000	1	5.10	1.574E+06	.047
160003.012	1	3	92.04	-.51	0.00	55.888	1.000	0.00	0.000	0.000	55.89	0.000	1	5.10	1.574E+06	.027
160003.022	1	3	52.31	-.51	0.00	16.159	1.000	0.00	0.000	0.000	16.15	0.000	1	5.10	1.574E+06	.019
160003.205	1	3	61.56	1.02	0.00	25.400	1.070	0.00	0.000	0.000	25.40	0.000	1	5.10	1.574E+06	.022
160003.307	1	3	86.36	.51	0.00	50.800	.928	0.00	0.000	0.000	50.80	0.000	1	5.10	1.574E+06	.026
160003.407	1	3	112.36	.51	0.00	76.200	.859	0.00	0.000	0.000	76.20	0.000	1	5.10	1.574E+06	.034
160003.507	1	3	125.06	.51	0.00	88.900	.775	0.00	0.000	0.000	88.90	0.000	1	5.10	1.574E+06	.041
160004.006	1	3	112.37	-.51	0.00	76.218	1.300	0.00	0.000	0.000	76.22	0.000	1	5.10	1.607E+06	.036
160004.018	1	3	61.56	-.51	0.00	25.403	1.000	0.00	0.000	0.000	25.40	0.000	1	5.10	1.607E+06	.022
160004.107	1	3	47.59	.51	0.00	11.430	.923	0.00	0.000	0.000	11.43	0.000	1	5.10	1.607E+06	.019
160004.393	1	3	86.96	1.52	0.00	50.800	1.361	0.00	0.000	0.000	50.80	0.000	1	5.10	1.607E+06	.027
160004.403	1	3	112.36	1.02	0.00	76.200	1.320	0.00	0.000	0.000	76.20	0.000	1	5.10	1.607E+06	.036
160004.503	1	3	125.06	1.52	0.00	88.900	1.329	0.00	0.000	0.000	88.90	0.000	1	5.10	1.607E+06	.041
160005.004	1	3	127.63	-.51	0.00	91.470	1.331	0.00	0.000	0.000	91.47	0.000	1	5.10	3.179E+06	.043
160005.014	1	3	81.39	-.51	0.00	45.725	1.306	0.00	0.000	0.000	45.73	0.000	1	5.10	3.179E+06	.034
160005.124	1	3	41.24	-.51	0.00	5.080	1.300	0.00	0.000	0.000	5.08	0.000	1	5.10	3.179E+06	.024
160005.208	1	3	61.56	.23	0.00	25.400	.771	0.00	0.000	0.000	25.40	0.000	1	5.10	3.179E+06	.029
160005.339	1	3	86.96	.15	0.00	50.800	.551	0.00	0.000	0.000	50.80	0.000	1	5.10	3.179E+06	.035
160005.409	1	3	112.36	.15	0.00	76.200	.564	0.00	0.000	0.000	76.20	0.000	1	5.10	3.179E+06	.040
160005.599	1	3	125.06	.15	0.00	88.900	.444	0.00	0.000	0.000	88.90	0.000	1	5.10	3.179E+06	.042
160006.010	1	3	102.27	-.51	0.00	66.045	1.001	0.00	.127	0.000	66.05	2.032	1	5.10	1.624E+06	.030
160006.021	1	3	51.39	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	2.032	1	5.10	1.624E+06	.020
160006.030	1	3	125.09	0.00	.25	88.936	.392	0.00	.127	0.000	88.94	2.032	1	5.10	1.624E+06	.041
160006.040	1	3	76.03	0.00	.25	40.645	.366	0.00	.127	0.000	40.65	2.032	1	5.10	1.624E+06	.024
160006.050	1	3	38.70	0.00	.25	2.545	.341	0.00	.127	0.000	2.55	2.032	1	5.10	1.624E+06	.017
160006.060	1	3	102.2	0.00	.51	66.045	.253	0.00	.127	0.000	66.05	2.032	1	5.10	1.624E+06	.030
160006.074	1	3	41.24	0.00	.51	5.080	.133	0.00	.127	0.000	5.08	2.032	1	5.10	1.624E+06	.018
160007.010	1	3	102.27	-.51	0.00	66.045	1.000	0.00	.127	0.000	66.05	2.032	1	5.10	3.278E+06	.038
160007.020	1	3	51.39	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	2.032	1	5.10	3.278E+06	.027
160007.030	1	3	125.09	0.00	.25	88.936	.030	0.00	.127	0.000	88.94	2.032	1	5.10	3.278E+06	.042
160007.040	1	3	76.80	0.00	.25	40.645	.397	0.00	.127	0.000	40.65	2.032	1	5.10	3.278E+06	.033
160007.050	1	3	38.70	0.00	.25	2.545	.259	0.00	.127	0.000	2.55	2.032	1	5.10	3.278E+06	.024
160007.060	1	3	102.20	0.00	.51	66.045	.361	0.00	.127	0.000	66.05	2.032	1	5.10	3.278E+06	.038

ORIGINAL PAGE IS OF POOR QUALITY

160007.071	1	[illegible]	[illegible]	[illegible]	.51	[illegible]	[illegible]	[illegible]	.127	[illegible]	12.71	2.032	1	5.10	[illegible]	.020
160008.008	1	3	112.37	-.51	0.00	76.218	1.000	0.00	.127	0.000	76.22	2.032	1	5.10	6.359E+06	.064
160008.015	1	3	51.56	-.51	0.00	25.403	1.003	0.00	.127	0.000	25.40	2.032	1	5.10	6.359E+06	.049
160008.028	1	3	137.16	0.00	.25	94.008	.624	0.00	.127	0.000	94.01	2.032	1	5.10	6.359E+06	.070
160008.038	1	3	86.96	0.00	.25	50.808	.672	0.00	.127	0.000	50.81	2.032	1	5.10	6.359E+06	.056
160008.048	1	3	43.77	0.00	.25	7.610	.283	0.00	.127	0.000	7.61	2.032	1	5.10	6.359E+06	.041
160008.059	1	3	117.31	0.00	.51	71.150	.359	0.00	.127	0.000	71.15	2.032	1	5.10	6.359E+06	.062
160008.069	1	3	56.48	0.00	.51	20.323	.433	0.00	.127	0.000	20.32	2.032	1	5.10	6.359E+06	.047
160009.112	1	3	47.59	0.00	.25	11.430	.339	0.00	.127	0.000	11.43	2.032	1	5.10	1.656E+06	.019
160009.207	1	3	61.56	.51	0.00	25.400	1.000	0.00	.127	0.000	25.40	2.032	1	5.10	1.656E+06	.022
160009.307	1	3	86.96	.51	0.00	50.800	1.000	0.00	.127	0.000	50.80	2.032	1	5.10	1.656E+06	.026
160009.406	1	3	112.36	.75	0.00	76.200	.993	0.00	.127	0.000	76.20	2.032	1	5.10	1.656E+06	.034
160009.507	1	3	125.06	.51	0.00	88.900	1.000	0.00	.127	0.000	88.90	2.032	1	5.10	1.656E+06	.041
160010.100	1	3	47.59	.25	0.00	11.430	.910	0.00	.127	0.000	11.43	2.032	1	5.10	3.112E+06	.025
160010.119	1	3	47.59	0.00	1.90	11.430	.001	0.00	.127	0.000	11.43	2.032	1	5.10	3.112E+06	.025
160010.214	1	3	51.56	0.00	.64	25.400	.114	0.00	.127	0.000	25.40	2.032	1	5.10	3.112E+06	.029
160010.312	1	3	86.96	0.00	.25	50.800	.960	0.00	.127	0.000	50.80	2.032	1	5.10	3.112E+06	.035
160010.411	1	3	112.36	0.00	.15	76.200	.761	0.00	.127	0.000	76.20	2.032	1	5.10	3.112E+06	.040
160010.510	1	3	125.06	.04	.04	88.900	.896	0.00	.127	0.000	88.90	2.032	1	5.10	3.112E+06	.042
160011.100	1	3	47.59	.25	0.00	11.430	1.013	0.00	.127	0.000	11.43	2.032	1	5.10	6.438E+06	.044
160011.119	1	3	47.59	0.00	1.90	11.430	.002	0.00	.127	0.000	11.43	2.032	1	5.10	6.438E+06	.044
160011.215	1	3	51.56	0.00	.89	25.400	.379	0.00	.127	0.000	25.40	2.032	1	5.10	6.438E+06	.050
160011.310	1	3	86.96	.04	.04	50.800	.622	0.00	.127	0.000	50.80	2.032	1	5.10	6.438E+06	.057
160011.407	1	3	112.36	.51	0.00	76.200	2.460	0.00	.127	0.000	76.20	2.032	1	5.10	6.438E+06	.065
160011.417	1	3	112.36	0.00	1.40	76.200	.262	0.00	.127	0.000	76.20	2.032	1	5.10	6.438E+06	.065
160011.513	1	3	125.06	0.00	.39	88.900	.577	0.00	.127	0.000	88.90	2.032	1	5.10	6.438E+06	.070
160012.[illegible]	1	3	125.09	-.51	0.00	88.936	1.000	0.00	0.000	0.000	88.94	0.000	1	5.10	6.579E+06	.071
160012	1	[illegible]	[illegible]	-.51	0.00	40.645	1.000	0.00	0.000	0.000	40.65	0.000	1	5.10	6.579E+06	.055
160012.	1	3	[illegible]	-.51	0.00	2.545	1.300	0.00	0.000	0.000	2.55	0.000	1	5.10	6.579E+06	.039
160012.[illegible]	1	3	51.56	.04	.04	25.400	.462	0.00	0.000	0.000	25.40	0.000	1	5.10	6.579E+06	.051
160012.31[illegible]	1	3	86.96	.04	.04	50.800	.420	0.00	0.000	0.000	50.80	0.000	1	5.10	6.579E+06	.058
160012.413	1	3	112.36	.04	.04	76.200	.428	0.00	0.000	0.000	76.20	0.000	1	5.10	6.579E+06	.066
160012.51[illegible]	1	3	125.06	.04	.04	88.900	.447	0.00	0.000	0.000	88.90	0.000	1	5.10	6.579E+06	.071
160013.011	1	3	97.17	-.51	0.00	60.965	1.000	0.00	.127	0.000	60.97	3.810	1	5.10	[illegible]	.068
160013.021	1	3	48.95	-.51	0.00	12.705	1.000	0.00	.127	0.000	12.71	3.810	1	5.10	6.335E+06	.044
160013.111	1	3	47.59	0.00	.15	11.430	.562	0.00	.127	0.000	11.43	3.810	1	5.10	6.335E+06	.043
160013.211	1	3	51.56	0.00	.15	25.400	[illegible]	0.00	.127	0.000	25.40	3.810	1	5.10	6.335E+06	.049
160013.311	1	3	86.96	0.00	.15	[illegible]	.626	0.00	.127	0.000	50.80	3.810	1	5.10	6.335E+06	.056
160013.507	1	3	[illegible]	[illegible]	0.00	[illegible]	.806	0.00	.127	0.000	88.90	3.810	1	5.10	6.335E+06	.069
160013.517	1	3	125.06	0.00	1.40	[illegible]	.072	0.00	.127	0.000	88.90	3.810	1	5.10	6.335E+06	.069
160014.009	1	3	117.31	-.51	0.00	[illegible]	[illegible]	0.00	.127	0.000	71.15	3.810	1	5.10	3.411E+06	.040
[illegible].019	1	[illegible]	[illegible]	-.51	[illegible]	[illegible]	[illegible]	0.00	.127	0.000	20.32	3.810	1	5.10	3.411E+06	.029
160014.109	[illegible]	[illegible]	47.59	.25	[illegible]	[illegible]	[illegible]	0.00	.127	0.000	11.43	3.810	1	5.10	3.411E+06	.027
160014.210	[illegible]	[illegible]	51.56	.04	.04	[illegible]	.597	0.00	.127	0.000	25.40	3.810	1	5.10	3.411E+06	.030
160014.312	[illegible]	[illegible]	86.96	0.00	.25	[illegible]	.334	[illegible]	.127	0.000	50.80	3.810	1	5.10	3.411E+06	.036
160014.511	[illegible]	[illegible]	125.06	0.00	.15	[illegible]	.719	0.00	.127	0.000	88.90	3.810	1	5.10	3.411E+06	.043
160015.005	1	[illegible]	125.09	-.51	0.00	88.936	1.000	0.00	.127	0.000	88.94	3.810	1	5.10	1.707E+06	.041
160015.015	1	3	[illegible]	-.51	0.00	40.645	[illegible]	0.00	.127	0.000	40.65	3.810	1	5.10	1.707E+06	.025
160015.025	1	3	[illegible]	-.51	0.00	2.545	[illegible]	0.00	.127	0.000	2.55	3.810	1	5.10	1.707E+06	.018
160015.115	1	3	47.59	0.00	.39	11.430	.005	0.00	.127	0.000	11.43	3.810	1	5.10	1.707E+06	.020
160015.215	1	3	51.56	[illegible]	.39	25.400	.213	0.00	.127	0.000	25.40	3.810	1	5.10	1.707E+06	.022

[illegible]	1	3	[illegible]	[illegible]	1.14	[illegible]	[illegible]	[illegible]	.127	0.000	[illegible]	[illegible]	1	5.10	[illegible]	.027
160015.314	1	3	125.16	0.00	.64	88.900	.060	0.00	.127	0.000	88.90	3.810	1	5.10	1.787E+06	.041
160016.010	1	3	112.27	-.51	0.00	66.045	1.000	0.00	.127	0.000	66.05	1.016	1	5.10	6.597E+06	.063
160016.0[illegible]	1	3	51.30	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	1.016	1	5.10	6.597E+06	.047
160016.11	1	3	47.59	.04	.04	11.430	.504	0.00	.127	0.000	11.43	1.016	1	5.10	6.597E+06	.045
160016.210	1	3	61.36	.04	.04	25.400	.885	0.00	.127	0.000	25.40	1.016	1	5.10	6.597E+06	.051
160016.310	1	3	36.36	.04	.04	50.800	.772	0.00	.127	0.000	50.80	1.016	1	5.10	6.597E+06	.058
160016.410	1	3	112.36	.04	.04	76.200	.694	0.00	.127	0.000	76.20	1.016	1	5.10	6.597E+06	.066
160016.510	1	3	125.16	.04	.04	88.900	.701	0.00	.127	0.000	88.90	1.016	1	5.10	6.597E+06	.071
160017.006	1	3	122.96	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	1.016	1	5.10	3.405E+06	.043
160017.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	1.016	1	5.10	3.405E+06	.033
160017.103	1	3	47.59	1.52	0.00	11.430	.973	0.00	.127	0.000	11.43	1.016	1	5.10	3.405E+06	.027
160017.205	1	3	61.56	1.02	0.00	25.400	.897	0.00	.127	0.000	25.40	1.016	1	5.10	3.405E+06	.030
160017.308	1	3	36.96	.25	0.00	50.800	.727	0.00	.127	0.000	50.80	1.016	1	5.10	3.405E+06	.036
160017.408	1	3	112.76	.25	0.00	76.200	.837	0.00	.127	0.000	76.20	1.016	1	5.10	3.405E+06	.041
160017.509	1	3	125.96	.15	0.00	88.900	.773	0.00	.127	0.000	88.90	1.016	1	5.10	3.405E+06	.043
160018.006	1	3	122.96	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	1.016	1	5.10	1.553E+06	.039
160018.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	1.016	1	5.10	1.553E+06	.023
160018.103	1	3	47.59	1.52	0.00	11.430	.971	0.00	.127	0.000	11.43	1.016	1	5.10	1.553E+06	.019
160018.205	1	3	61.56	1.02	0.00	25.400	.957	0.00	.127	0.000	25.40	1.016	1	5.10	1.553E+06	.022
160018.309	1	3	36.96	.25	0.00	50.800	.781	0.00	.127	0.000	50.80	1.016	1	5.10	1.553E+06	.026
160018.409	1	3	112.36	.1[illegible]	0.00	76.200	.622	0.00	.127	0.000	76.20	1.016	1	5.10	1.553E+06	.034
160018.511	1	3	125.16	0.00	.15	88.900	.509	0.00	.127	0.000	88.90	1.016	1	5.10	1.553E+06	.041
160019.013	1	3	96.36	-.51	0.00	50.808	1.000	0.00	.127	0.000	50.81	2.032	1	5.10	1.465E+06	.025
160019.023	1	3	43.77	-.51	0.00	7.610	1.000	0.00	.127	0.000	7.61	2.032	1	5.10	1.465E+06	.018
160019.113	1	3	39.97	0.00	.38	3.810	.215	0.00	.127	0.000	3.81	2.032	1	5.10	1.465E+06	.017
160019.211	1	3	46.32	0.00	.15	10.160	.530	0.00	.127	0.000	10.16	2.032	1	5.10	1.465E+06	.018
160019.413	1	3	56.48	0.00	.38	20.320	.199	0.00	.127	0.000	20.32	2.032	1	5.10	1.465E+06	.020
160019.514	1	3	64.10	0.00	.64	27.940	.013	0.00	.127	0.000	27.94	2.032	1	5.10	1.465E+06	.022
160020.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	2.032	1	5.10	3.273E+06	.032
160020.103	1	3	39.97	1.52	0.00	3.810	.935	0.00	.127	0.000	3.81	2.032	1	5.10	3.273E+06	.024
160020.205	1	3	46.32	1.02	0.00	10.160	.911	0.00	.127	0.000	10.16	2.032	1	5.10	3.273E+06	.026
160020.409	1	3	56.48	.1[illegible]	0.00	20.320	.855	0.00	.127	0.000	20.32	2.032	1	5.10	3.273E+06	.028
160020.511	1	3	64.10	0.00	.15	27.940	.653	0.00	.127	0.000	27.94	2.032	1	5.10	3.273E+06	.030
160021.013	1	3	86.96	-.51	0.00	50.808	1.000	0.00	.254	0.000	50.81	2.032	1	5.10	1.015E+06	.027
160021.023	1	3	43.77	-.51	0.00	7.610	1.000	0.00	.254	0.000	7.61	2.032	1	5.10	1.015E+06	.019
160021.113	1	3	39.97	0.00	.38	3.810	.254	0.00	.254	0.000	3.81	2.032	1	5.10	1.015E+06	.018
160021.212	1	3	46.32	0.00	.25	10.160	.534	0.00	.254	0.000	10.16	2.032	1	5.10	1.015E+06	.020
160021.412	1	3	56.48	0.00	.25	20.320	.403	0.00	.254	0.000	20.32	2.032	1	5.10	1.015E+06	.022
160021.513	1	3	64.10	0.00	.38	27.940	.33[illegible]	0.00	.254	0.000	27.94	2.032	1	5.10	1.015E+06	.023
160022.015	1	3	76.3[illegible]	-.51	0.00	40.545	1.000	0.00	.254	0.000	40.55	2.032	1	5.10	3.058E+06	.032
160022.025	1	3	33.[illegible]	-.51	0.00	2.545	1.000	0.00	.254	0.000	2.55	2.032	1	5.10	3.058E+06	.023
160022.115	1	3	39.97	0.00	.89	3.810	.[illegible]69	0.00	.254	0.000	3.81	2.032	1	5.10	3.058E+06	.023
160022.407	1	3	56.48	.51	0.00	20.320	.448	0.00	.254	0.000	20.32	2.032	1	5.10	3.058E+06	.027
160022.507	1	3	64.10	.51	0.00	27.940	.639	0.00	.254	0.000	27.94	2.032	1	5.10	3.058E+06	.029
160023.019	1	3	56.48	-.51	0.00	20.323	1.000	.09	.254	0.000	20.32	2.032	1	5.10	1.705E+06	.021
160023.044	1	3	56.48	0.00	.25	20.323	.356	.09	.254	0.000	20.32	2.032	1	5.10	1.705E+06	.021
160023.109	1	3	33.37	.25	0.00	3.810	1.334	.09	.254	0.000	3.81	2.032	1	5.10	1.705E+06	.018
160023.2[illegible]3	1	3	46.32	.25	0.00	10.160	1.329	.09	.254	0.000	10.16	2.032	1	5.10	1.705E+06	.019
160023.219	1	3	46.32	0.00	1.99	10.160	.012	.09	.254	0.000	10.16	2.032	1	5.10	1.705E+06	.019
160023.414	1	3	56.48	0.00	.64	20.320	.189	[illegible]	.254	0.000	20.32	2.032	1	5.10	1.705E+06	.021

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160023.513	1	3	64.1	0.00	.38	27.94	.429	.09	.254	0.000	27.94	2.032	1	5.10	1.705E+06	.023
160024.021	1	3	48.36	-.51	0.00	12.705	1.000	.09	.254	0.000	12.71	2.032	1	5.10	3.247E+06	.026
160024.046	1	3	43.36	0.00	.25	12.703	.682	.09	.254	0.000	12.71	2.032	1	5.10	3.247E+06	.026
160024.111	1	3	39.37	0.00	.15	3.810	.591	.09	.254	0.000	3.81	2.032	1	5.10	3.247E+06	.024
160024.211	1	3	46.32	0.00	.15	10.160	1.650	.09	.254	0.000	10.16	2.032	1	5.10	3.247E+06	.026
160024.408	1	3	56.49	.25	0.00	20.320	1.104	.09	.254	0.000	20.32	2.032	1	5.10	3.247E+06	.028
160024.419	1	3	56.49	0.00	1.65	20.320	.005	.09	.254	0.000	20.32	2.032	1	5.10	3.247E+06	.028
160024.514	1	3	64.17	0.00	.64	27.940	.163	.09	.254	0.000	27.94	2.032	1	5.10	3.247E+06	.030
160025.023	1	3	51.39	-.51	0.00	15.235	1.000	.09	.127	0.000	15.23	2.032	1	5.10	1.850E+06	.021
160025.045	1	3	51.39	0.00	.25	15.235	.285	.09	.127	0.000	15.23	2.032	1	5.10	1.850E+06	.021
160025.110	1	[illegible]	39.97	.04	.04	3.810	.797	.09	.127	0.000	3.81	2.032	1	5.10	1.850E+06	.019
160025.210	1	3	46.32	.04	.04	10.160	.651	.09	.127	0.000	10.16	2.032	1	5.10	1.850E+06	.020
160025.411	1	3	56.42	0.00	.15	20.320	.573	.09	.127	0.000	20.32	2.032	1	5.10	1.850E+06	.022
160025.512	1	3	64.17	0.00	.25	27.940	.404	.09	.127	0.000	27.94	2.032	1	5.10	1.850E+06	.023
160026.020	1	3	51.39	-.51	0.00	15.235	1.000	.09	.127	0.000	15.23	2.032	1	5.10	3.208E+06	.027
160026.045	1	3	51.39	0.00	.25	15.235	.277	.09	.127	0.000	15.23	2.032	1	5.10	3.208E+06	.027
160026.110	1	3	39.97	.04	.04	3.810	.875	.09	.127	0.000	3.81	2.032	1	5.10	3.208E+06	.024
160026.210	1	3	46.32	.04	.04	10.160	.700	.09	.127	0.000	10.16	2.032	1	5.10	3.208E+06	.025
160026.412	1	3	56.49	0.00	.25	20.320	.329	.09	.127	0.000	20.32	2.032	1	5.10	3.208E+06	.028
160026.513	1	3	64.10	0.00	.38	27.940	.247	.09	.127	0.000	27.94	2.032	1	5.10	3.208E+06	.030
160027.025	1	3	38.7	-.51	0.00	2.545	1.000	.17	.127	0.000	2.55	2.032	1	5.10	1.633E+06	.017
160027.107	1	3	39.97	1.52	0.00	3.810	.395	.17	.127	0.000	3.81	2.032	1	5.10	1.633E+06	.018
160027.203	1	3	46.32	1.52	0.00	10.160	1.387	.17	.127	0.000	10.16	2.032	1	5.10	1.633E+06	.019
160027.213	1	3	46.32	0.00	1.93	10.160	.004	.17	.127	0.000	10.16	2.032	1	5.10	1.633E+06	.019
160027.414	1	3	56.48	0.00	.64	20.320	.031	.17	.127	0.000	20.32	2.032	1	5.10	1.633E+06	.021
160027.513	1	3	64.10	0.00	.38	27.940	.265	.17	.127	0.000	27.94	2.032	1	5.10	1.633E+06	.022
160028.020	1	3	51.39	-.51	0.00	15.235	1.000	.17	.127	0.000	15.23	2.032	1	5.10	3.270E+06	.027
160028.045	1	3	51.39	0.00	.25	15.235	.275	.17	.127	0.000	15.23	2.032	1	5.10	3.270E+06	.027
160028.110	1	3	39.37	.04	.04	3.810	.989	.17	.127	0.000	3.81	2.032	1	5.10	3.270E+06	.024
160028.210	1	3	46.32	.04	.04	10.160	.659	.17	.127	0.000	10.16	2.032	1	5.10	3.270E+06	.026
160028.412	1	3	55.48	0.00	.25	20.320	.446	.17	.127	0.000	20.32	2.032	1	5.10	3.270E+06	.028
160028.512	1	3	64.17	0.00	.25	27.940	.431	.17	.127	0.000	27.94	2.032	1	5.10	3.270E+06	.030
160029.022	1	3	46.31	-.51	0.00	10.150	1.000	.17	.254	0.000	10.15	2.032	1	5.10	1.706E+06	.019
160029.047	1	3	46.31	0.00	.25	10.150	.340	.17	.254	0.000	10.15	2.032	1	5.10	1.706E+06	.019
160029.112	1	3	39.37	0.00	.25	3.810	.568	.17	.254	0.000	3.81	2.032	1	5.10	1.706E+06	.018
160029.212	1	3	46.32	0.00	.25	10.160	.578	.17	.254	0.000	10.16	2.032	1	5.10	1.706E+06	.019
160029.409	1	3	56.49	.15	0.00	20.320	1.398	.17	.254	0.000	20.32	2.032	1	5.10	1.706E+06	.021
160029.508	1	3	64.10	.25	0.00	27.940	.983	.17	.254	0.000	27.94	2.032	1	5.10	1.706E+06	.023
160030.018	1	3	51.76	-.51	0.00	25.403	1.000	.17	.254	0.000	25.40	2.032	1	5.10	3.225E+06	.029
160030.043	1	3	51.66	0.00	.25	25.403	.281	.17	.254	0.000	25.40	2.032	1	5.10	3.225E+06	.029
160030.107	1	3	39.97	.51	0.00	3.810	1.175	.17	.254	0.000	3.81	2.032	1	5.10	3.225E+06	.024
160030.207	1	3	46.32	.51	0.00	10.160	1.323	.17	.254	0.000	10.16	2.032	1	5.10	3.225E+06	.025
160030.406	1	3	56.48	.75	0.00	20.320	.944	.17	.254	0.000	20.32	2.032	1	5.10	3.225E+06	.028
160030.505	1	3	64.17	.76	0.00	27.940	1.046	.17	.254	0.000	27.94	2.032	1	5.10	3.225E+06	.030
160030.510	1	3	64.17	0.00	1.14	27.940	.316	.17	.254	0.000	27.94	2.032	1	5.10	3.225E+06	.030
160031.023	1	3	43.77	-.51	0.00	7.610	1.000	.26	.254	0.000	7.61	2.032	1	5.10	3.454E+06	.026
160031.048	1	3	43.77	0.00	.25	7.610	.430	.26	.254	0.000	7.61	2.032	1	5.10	3.454E+06	.026
160031.113	1	3	39.97	0.00	.38	3.810	.431	.26	.254	0.000	3.81	2.032	1	5.10	3.454E+06	.025
160031.213	1	3	46.32	0.00	.38	10.160	.301	.26	.254	0.000	10.16	2.032	1	5.10	3.454E+06	.027
160031.409	1	3	56.49	.15	0.00	20.320	.952	.26	.254	0.000	20.32	2.032	1	5.10	3.454E+06	.029
160031.509	1	3	64.1	.15	0.00	27.940	.351	.26	.254	0.000	27.94	2.032	1	5.10	3.454E+06	.031

[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.26	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
160032.046	1	3	48.56	0.00	.25	12.705	.276	.26	.254	0.000	12.71	2.032	1	5.10	1.700E+06	.020
160032.111	1	3	3.07	0.00	.15	3.810	.899	.26	.254	0.000	3.81	2.032	1	5.10	1.700E+06	.018
160032.211	1	3	46.32	0.00	.15	10.160	.677	.26	.254	0.000	10.16	2.032	1	5.10	1.700E+06	.019
160032.409	1	3	56.48	.15	0.00	20.320	1.013	.26	.254	0.000	20.32	2.032	1	5.10	1.700E+06	.021
160032.507	1	3	64.10	.51	0.00	27.940	.954	.26	.254	0.000	27.94	2.032	1	5.10	1.700E+06	.023
160033.019	1	3	56.49	-.51	0.00	20.323	1.000	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	[illegible]
160033.044	1	3	56.48	0.00	.25	20.323	.292	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	[illegible]
160033.109	1	3	39.97	.25	0.00	3.810	1.145	.26	.127	0.000	3.81	2.032	1	5.10	3.070E+06	.023
160033.208	1	3	46.32	.25	0.00	10.160	.977	.26	.127	0.000	10.16	2.032	1	5.10	3.070E+06	.025
160033.411	1	3	56.48	0.00	.15	20.320	.698	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	.027
160033.511	1	3	64.10	0.00	.15	27.940	.610	.26	.127	0.000	27.94	2.032	1	5.10	3.070E+06	.029
160034.020	1	3	51.39	-.51	0.00	15.235	1.000	.26	.127	0.000	15.23	2.032	1	5.10	1.650E+06	.020
160034.045	1	3	51.39	0.00	.25	15.235	.263	.26	.127	0.000	15.23	2.032	1	5.10	1.650E+06	.020
160034.110	1	3	39.97	.04	.04	3.810	.820	.26	.127	0.000	3.81	2.032	1	5.10	1.650E+06	.018
160034.210	1	3	46.32	.04	.04	10.160	.777	.26	.127	0.000	10.16	2.032	1	5.10	1.650E+06	.019
160034.409	1	3	56.48	.15	0.00	20.320	.900	.26	.127	0.000	20.32	2.032	1	5.10	1.650E+06	.021
160034.507	1	3	54.10	.51	0.00	27.940	2.021	.26	.127	0.000	27.94	2.032	1	5.10	1.650E+06	.022
160034.520	1	3	64.10	0.00	2.29	27.340	.316	.26	.127	0.000	27.94	2.032	1	5.10	1.650E+06	.022
160035.012	1	3	92.04	-.51	0.00	55.888	1.000	.26	.127	0.000	55.89	2.032	1	5.10	6.400E+06	.059
160035.112	1	3	111.09	0.00	.25	74.930	.872	.26	.127	0.000	74.93	2.032	1	5.10	6.400E+06	.064
160035.205	1	3	117.44	1.02	0.00	81.280	.978	.26	.127	0.000	81.28	2.032	1	5.10	6.400E+06	.068
160035.217	1	3	117.44	0.00	1.40	81.280	.110	.26	.127	0.000	81.28	2.032	1	5.10	6.400E+06	.068
160035.412	1	3	127.60	0.00	.25	91.440	.474	.26	.127	0.000	91.44	2.032	1	5.10	6.400E+06	.071
160035.509	1	3	135.22	.15	0.00	99.060	.983	.26	.127	0.000	99.06	2.032	1	5.10	6.400E+06	.072
160035.519	1	3	135.22	0.00	1.90	99.060	.023	.26	.127	0.000	99.06	2.032	1	5.10	6.400E+06	.072
160036.010	1	3	102.20	-.51	0.00	66.045	1.000	.26	.254	0.000	66.05	2.032	1	5.10	6.516E+06	.062
160036.110	1	3	111.09	.04	.04	74.930	1.668	.26	.254	0.000	74.93	2.032	1	5.10	6.516E+06	.064
160036.120	1	3	111.09	0.00	2.29	74.930	.020	.26	.254	0.000	74.93	2.032	1	5.10	6.516E+06	.064
160036.216	1	3	117.44	0.00	1.14	81.280	.700	.26	.254	0.000	81.28	2.032	1	5.10	6.516E+06	.068
160036.411	1	3	127.60	0.00	.15	91 440	.578	.26	.254	0.000	91.44	2.032	1	5.10	6.516E+06	.071
160036.506	1	3	135.22	.76	0.00	99.060	.861	.26	.254	0.000	99.06	2.032	1	5.10	6.516E+06	.072
160036.516	1	3	135.22	0.00	1.14	99.060	.362	.26	.254	0.000	99.06	2.032	1	5.10	6.516E+06	.072
160037.007	1	3	117.47	-.51	0.00	81.316	1.000	.17	.254	0.000	81.32	2.032	1	5.10	6.583E+06	.069
160037.105	1	3	111.09	1.02	0.00	74.930	1.003	.17	.254	0.000	74.93	2.032	1	5.10	6.583E+06	.065
160037.117	1	3	111.09	0.00	1.40	74.930	.136	.17	.254	0.000	74.93	2.032	1	5.10	6.583E+06	.065
160037.212	1	3	117.44	0.00	.25	81.280	1.363	.17	.254	0.000	81.28	2.032	1	5.10	6.583E+06	.069
160037.409	1	3	127.60	.15	0.00	91.440	.667	.17	.254	0.000	91.44	2.032	1	5.10	6.583E+06	.072
160037.419	1	3	127.60	0.00	1.90	91.440	.009	.17	.254	0.000	91.44	2.032	1	5.10	6.583E+06	.072
160037.514	1	3	135.22	0.00	.64	99.060	.110	.17	.254	0.000	99.06	2.032	1	5.10	6.583E+06	.073
160038.005	1	3	125.10	-.51	0.00	88.936	1.000	.17	.127	0.000	88.94	2.032	1	5.10	6.662E+06	.072
160038.015	1	3	76.30	-.51	0.00	40.645	1.000	.17	.127	0.000	40.65	2.032	1	5.10	6.662E+06	.055
160038.115	1	3	111.09	0.00	.89	74.930	.090	.17	.127	0.000	74.93	2.032	1	5.10	6.662E+06	.065
160038.211	1	3	117.44	0.00	.15	81.280	.941	.17	.127	0.000	81.28	2.032	1	5.10	6.662E+06	.070
160038.408	1	3	127.60	.25	0.00	91.440	.837	.17	.127	0.000	91.44	2.032	1	5.10	6.662E+06	.072
160038.506	1	3	135.22	.76	0.00	99.060	.900	.17	.127	0.000	99.06	2.032	1	5.10	6.662E+06	.074
160038.516	1	3	135.22	0.00	1.14	99.060	.066	.17	.127	0.000	99.06	2.032	1	5.10	6.662E+06	.074
160039.007	1	3	117.47	-.51	0.00	81.316	1.000	.09	.127	0.000	81.32	2.032	1	5.10	6.606E+06	.069
160039.105	1	3	111.09	1.02	0.00	74.930	.969	.09	.127	0.000	74.93	2.032	1	5.10	6.606E+06	.065
160039.117	1	3	111.09	0.00	1.40	74.930	.006	.09	.127	0.000	74.93	2.032	1	5.10	6.606E+06	.065
160039.212	1	3	117.44	0.00	.25	81.280	.735	.09	.127	0.000	81.28	2.032	1	5.10	6.606E+06	.069
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	1	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	5.10	[illegible]	[illegible]
160039.587	1	3	135.22	.51	0.00	99.060	.903	.09	.127	0.000	99.06	2.032	1	5.10	6.606E+06	.073
160039.517	1	3	135.22	0.00	1.40	99.060	.134	.09	.127	0.000	99.06	2.032	1	5.10	6.606E+06	.073
160040.008	1	3	112.37	-.51	0.00	76.218	1.000	.09	.254	0.000	76.22	2.032	1	5.10	6.594E+06	.066
160040.107	1	3	111.09	.51	0.00	74.930	.990	.09	.254	0.000	74.93	2.032	1	5.10	6.594E+06	.065
160040.118	1	3	111.09	0.00	1.65	74.930	.063	.09	.254	0.000	74.93	2.032	1	5.10	6.594E+06	.065
160040.215	1	3	117.44	0.00	.89	81.280	.969	.09	.254	0.000	81.28	2.032	1	5.10	6.594E+06	.069
160040.410	1	3	127.60	.04	.04	91.440	.019	.09	.254	0.000	91.44	2.032	1	5.10	6.594E+06	.072
160040.420	1	3	127.60	0.00	2.29	91.440	.012	.09	.254	0.000	91.44	2.032	1	5.10	6.594E+06	.072
160040.515	1	3	135.22	0.00	.89	99.060	.116	.09	.254	[illegible]	99.06	2.032	1	5.10	6.594E+06	.073
160041.006	1	3	122.56	-.51	0.00	86.398	1.000	0.00	.254	0.000	86.40	2.032	1	5.10	6.378E+06	.069
160041.103	1	3	111.09	1.52	0.00	74.930	.929	0.00	.254	0.000	74.93	2.032	1	5.10	6.378E+06	.063
160041.116	1	3	111.09	0.00	1.14	74.930	.159	0.00	.254	0.000	74.93	2.032	1	5.10	6.378E+06	.063
160041.211	1	3	117.44	0.00	.15	81.280	.977	0.00	.254	0.000	81.28	2.032	1	5.10	6.378E+06	.067
160041.408	1	3	127.60	.25	0.00	91.440	.775	0.00	.254	0.000	91.44	2.032	1	5.10	6.378E+06	.070
160041.419	1	3	127.60	0.00	1.65	91.440	.167	0.00	.254	0.000	91.44	2.032	1	5.10	6.378E+06	.070
160041.513	1	3	135.22	0.00	.38	99.060	.247	0.00	.254	0.000	99.06	2.032	1	5.10	6.378E+06	.071
160042.004	1	3	127.63	-.51	0.00	91.470	1.000	0.00	.127	0.000	91.47	2.032	1	5.10	6.440E+06	.070
160042.014	1	3	81.88	-.51	0.00	45.72	1.000	0.00	.127	0.000	45.73	2.032	1	5.10	6.440E+06	.055
160042.114	1	3	111.09	0.00	.64	74.930	.226	0.00	.127	0.000	74.93	2.032	1	5.10	6.440E+06	.064
160042.210	1	3	117.44	.04	.04	81.280	.862	0.00	.127	0.000	81.28	2.032	1	5.10	6.440E+06	.060
160042.407	1	3	127.60	.51	0.00	91.440	.882	0.00	.127	0.000	91.44	2.032	1	5.10	6.440E+06	.070
160042.506	1	3	135.22	.76	0.00	99.060	.885	0.00	.127	0.000	99.06	2.032	1	5.10	6.440E+06	.072
160042.516	1	3	135.22	0.00	1.14	99.060	.064	0.00	.127	0.000	99.06	2.032	1	5.10	6.440E+06	.072
160043.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.254	0.000	81.32	1.016	1	5.10	1.705E+06	.037
160043.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	1.016	1	5.10	1.705E+06	.023
160043.105	1	3	47.59	1.02	0.00	11.430	.886	0.00	.254	0.000	11.43	1.016	1	5.10	1.705E+06	.020
160043.207	1	3	61.56	.51	0.00	25.400	.949	0.00	.254	0.000	25.40	1.016	1	5.10	1.705E+06	.022
160043.309	1	3	86.96	.15	0.00	50.800	.675	0.00	.254	0.000	50.80	1.016	1	5.10	1.705E+06	.027
160043.409	1	3	112.36	.15	0.00	76.200	.748	0.00	.254	0.000	76.20	1.016	1	5.10	1.705E+06	.034
160043.510	1	3	125.06	.04	.04	88.900	.672	0.00	.254	0.000	88.90	1.016	1	5.10	1.705E+06	.041
160044.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.254	0.000	81.32	1.016	1	5.10	2.949E+06	.040
160044.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	1.016	1	5.10	2.949E+06	.029
160044.105	1	3	47.59	1.02	0.00	11.430	.859	0.00	.254	0.000	11.43	1.016	1	5.10	2.949E+06	.025
160044.207	1	3	61.56	.51	0.00	25.400	.715	0.00	.254	0.000	25.40	1.016	1	5.10	2.949E+06	.028
160044.312	1	3	86.96	0.00	.25	50.800	.320	0.00	.254	0.000	50.80	1.016	1	5.10	2.949E+06	.034
160044.412	1	3	112.36	0.00	.25	76.200	[illegible]	0.00	.254	0.000	76.20	1.016	1	5.10	2.949E+06	.039
160044.512	1	3	125.06	0.00	.25	88.900	.592	0.00	.254	0.000	88.90	1.016	1	5.10	2.949E+06	.042
[illegible]	1	3	112.37	-.51	0.00	[illegible]	1.000	0.00	.254	0.000	76.22	1.016	1	5.10	6.578E+06	.066
[illegible]	1	3	[illegible]	-.51	0.00	[illegible]	[illegible]	0.00	.254	0.000	25.40	1.016	1	5.10	6.578E+06	.051
160045.107	1	3	47.59	.51	0.00	[illegible]	.836	0.00	.254	0.000	11.43	1.016	1	5.10	6.578E+06	.045
160045.207	1	3	61.56	.51	[illegible]	[illegible]	.566	0.00	.254	0.000	25.40	1.016	1	5.10	6.578E+06	.051
160045.311	1	3	86.96	0.00	[illegible]	[illegible]	[illegible]	0.00	.254	0.000	50.80	1.016	1	5.10	6.578E+06	.058
160045.411	1	3	112.36	0.00	[illegible]	[illegible]	.608	0.00	.254	0.000	76.20	1.016	1	5.10	6.578E+06	.066
160045.511	1	3	125.06	0.00	.15	88.900	.551	0.00	.254	0.000	88.90	1.016	1	5.10	6.578E+06	.071
[illegible]	1	3	117.47	-.51	0.00	81.315	1.000	0.00	.254	0.000	81.32	2.032	1	5.10	1.727E+06	.037
[illegible]	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	2.032	1	5.10	1.727E+06	.023
160046.027	1	3	[illegible]	0.00	.25	[illegible]	[illegible]	0.00	.254	0.000	95.55	2.032	1	5.10	1.727E+06	.046
160046.037	1	3	92.04	0.00	.25	55.889	.741	0.00	.254	0.000	55.89	2.032	1	5.10	1.727E+06	.028
160046.047	1	3	46.31	0.00	.25	10.150	.532	0.00	.254	0.000	10.15	2.032	1	5.10	1.727E+06	.019
160046.057	1	3	117.47	0.00	.51	81.315	[illegible]	[illegible]	.254	0.000	81.32	2.032	1	5.10	1.727E+06	.037

160046.[illegible]	1	3	61.[illegible]	[illegible]	.51	25.4[illegible]	.182	[illegible]	.254	0.000	25.40	2.032	1	5.10	[illegible]	.022
160047.005	1	3	128.39	-.51	0.00	88.936	1.000	0.00	.254	0.000	88.94	2.032	1	5.10	3.130E+06	.042
160047.015	1	3	76.3[illegible]	-.51	0.00	40.645	1.000	0.00	.254	0.000	40.65	2.032	1	5.10	3.130E+06	.032
160047.025	1	3	38.[illegible]	-.51	0.00	2.545	1.000	0.00	.254	0.000	2.55	2.032	1	5.10	3.130E+06	.023
160047.035	1	3	172.2[illegible]	0.00	.25	66.045	.811	0.00	.254	0.000	66.05	2.032	1	5.10	3.130E+06	.038
160047.045	1	3	51.39	0.00	.25	15.235	.763	0.00	.254	0.000	15.23	2.032	1	5.10	3.130E+06	.026
160047.055	1	3	125.39	0.00	.51	88.936	.394	0.00	.254	0.000	88.94	2.032	1	5.10	3.130E+06	.042
160047.065	1	3	78.81	0.00	.51	40.645	.511	0.00	.254	0.000	40.65	2.032	1	5.10	3.130E+06	.032
160048.001	1	3	135.24	-.51	0.00	99.083	1.000	0.00	.254	0.000	99.08	2.032	1	5.10	6.617E+06	.073
160048.012	1	3	92.04	-.51	0.00	55.888	1.000	0.00	.254	0.000	55.89	2.032	1	5.10	6.617E+06	.060
160048.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.254	0.000	10.15	2.032	1	5.10	6.617E+06	.044
160048.032	1	3	117.47	0.00	.25	81.316	.326	0.00	.254	0.000	81.32	2.032	1	5.10	6.617E+06	.069
160048.042	1	3	66.64	0.00	.25	30.485	.377	0.00	.254	0.000	30.49	2.032	1	5.10	6.617E+06	.052
160048.053	1	3	130.16	0.00	.51	94.008	.364	0.00	.254	0.000	94.01	2.032	1	5.10	6.617E+06	.072
160048.063	1	3	86.36	0.00	.51	50.808	.450	0.00	.254	0.000	50.81	2.032	1	5.10	6.617E+06	.058
160048.073	1	3	43.77	0.00	.51	7.610	.300	0.00	.254	0.000	7.61	2.032	1	5.10	6.617E+06	.043
160049.115	1	3	47.59	0.00	.89	11.430	.364	0.00	.254	0.000	11.43	2.032	1	5.10	6.739E+06	.046
160049.215	1	3	61.56	0.00	.89	25.400	.595	0.00	.254	0.000	25.40	2.032	1	5.10	6.739E+06	.052
160049.313	1	3	86.96	0.00	.38	50.800	.729	0.00	.254	0.000	50.80	2.032	1	5.10	6.739E+06	.059
160049.409	1	3	112.36	.15	0.00	76.200	.847	0.00	.254	0.000	76.20	2.032	1	5.10	6.739E+06	.067
160049.506	1	3	125.16	.76	0.00	88.900	1.050	0.00	.254	0.000	88.90	2.032	1	5.10	6.739E+06	.072
160049.516	1	3	125.16	0.00	1.14	88.900	.147	0.00	.254	0.000	88.90	2.032	1	5.10	6.739E+06	.072
160050.113	1	3	47.59	0.00	.38	11.430	.350	0.00	.254	0.000	11.43	2.032	1	5.10	1.615E+06	.019
160050.211	1	3	61.56	0.00	.15	25.400	.832	0.00	.254	0.000	25.40	2.032	1	5.10	1.615E+06	.022
160050.312	1	3	86.96	0.00	.25	50.800	.926	0.00	.254	0.000	50.80	2.032	1	5.10	1.615E+06	.026
160050.410	1	3	112.36	.04	.04	76.200	.883	0.00	.254	0.000	76.20	2.032	1	5.10	1.615E+06	.034
160050.508	1	3	125.16	.25	0.00	88.900	.369	0.00	.254	0.000	88.90	2.032	1	5.10	1.615E+06	.041
160051.107	1	3	47.59	.51	0.00	11.430	1.000	0.00	.254	0.000	11.43	2.032	1	5.10	3.303E+06	.026
160051.203	1	3	61.56	1.52	0.00	25.400	.868	0.00	.254	0.000	25.40	2.032	1	5.10	3.303E+06	.030
160051.308	1	3	86.36	.23	0.00	50.800	1.369	0.00	.254	0.000	50.80	2.032	1	5.10	3.303E+06	.036
160051.318	1	3	[illegible]	0.00	1.65	50.800	.027	0.00	.254	0.000	50.80	2.032	1	5.10	3.303E+06	.036
160051.415	1	3	112.[illegible]	0.00	.89	76.200	.214	0.00	.254	0.000	76.20	2.032	1	5.10	3.303E+06	.041
160051.[illegible]12	1	3	125.16	0.00	.25	88.900	.736	0.00	.254	0.000	88.90	2.032	1	5.10	3.303E+06	.042
160052.004	1	3	127.53	-.51	0.00	91.470	1.000	0.00	.063	0.000	91.47	2.032	1	5.10	1.637E+06	.043
160052.014	1	3	81.83	-.51	0.00	45.725	1.000	0.00	.063	0.000	45.73	2.032	1	5.10	1.637E+06	.025
160052.024	1	3	41.24	-.51	0.00	5.080	1.000	0.00	.063	0.000	5.08	2.032	1	5.10	1.637E+06	.018
160052.114	1	3	47.59	0.00	.64	11.430	.913	0.00	.063	0.000	11.43	2.032	1	5.10	1.637E+06	.019
160052.308	1	3	86.96	.25	0.00	50.800	.745	0.00	.063	0.000	50.80	2.032	1	5.10	1.637E+06	.026
160052.509	1	3	125.16	.1[illegible]	0.00	88.900	.344	0.00	.063	0.000	88.90	2.032	1	5.10	1.637E+06	.041
160053.006	1	3	122.38	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	2.032	1	5.10	3.171E+06	.041
160053.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	2.032	1	5.10	3.171E+06	.031
160053.103	1	3	47.59	1.52	0.00	11.430	.376	0.00	.063	0.000	11.43	2.032	1	5.10	3.171E+06	.026
160053.207	1	3	61.56	.51	0.00	25.400	.817	0.00	.063	0.000	25.40	2.032	1	5.10	3.171E+06	.029
160053.313	1	3	86.96	0.00	.38	50.800	.181	0.00	.063	0.000	50.80	2.032	1	5.10	3.171E+06	.038
160053.514	1	3	125.16	0.00	.64	88.900	.725	0.00	.063	0.000	88.90	2.032	1	5.10	3.171E+06	.042
160054.011	1	3	97.17	-.51	0.00	60.965	1.000	0.00	.254	0.000	60.97	3.810	1	5.10	1.701E+06	.029
160054.021	1	3	48.36	-.51	0.00	12.705	1.000	0.00	.254	0.000	12.71	3.810	1	5.10	1.701E+06	.020
160054.111	1	3	47.59	0.00	.15	11.430	.637	0.00	.254	0.000	11.43	3.810	1	5.10	1.701E+06	.020
160054.211	1	3	61.56	0.00	.15	25.400	.844	0.00	.254	0.000	25.40	3.810	1	5.10	1.701E+06	.022
160054.314	1	3	86.36	0.00	.64	50.800	.371	0.00	.254	0.000	50.80	3.810	1	5.10	1.701E+06	.027
160054.511	1	3	125.16	0.00	.15	88.900	.537	0.00	.254	0.000	88.90	3.810	1	5.10	1.701E+06	.041

[illegible]	1	3	13[illegible].10	-.51	0.00	96.[illegible]	1.0[illegible]	0.00	.254	0.000	96.[illegible]	3.810	1	5.10	3.178E+06	.043
160055.013	1	3	86.36	-.51	0.00	50.808	1.000	0.00	.254	0.000	50.81	3.810	1	5.10	3.178E+06	.035
160055.023	1	3	43.77	-.51	0.00	7.610	1.000	0.00	.254	0.000	7.61	3.810	1	5.10	3.178E+06	.025
160055.113	1	3	47.59	0.00	.79	11.430	.543	0.00	.254	0.000	11.43	3.810	1	5.10	3.178E+06	.026
160055.215	1	3	61.56	0.00	.89	25.403	.278	0.00	.254	0.000	25.40	3.810	1	5.10	3.178E+06	.029
160055.316	1	3	86.36	0.00	1.14	50.800	.343	0.00	.254	0.000	50.80	3.810	1	5.10	3.178E+06	.035
160055.512	1	3	125.16	0.00	.25	88.900	.543	0.00	.254	0.000	88.90	3.810	1	5.10	3.178E+06	.042
160056.002	1	3	132.70	-.51	0.00	96.548	1.030	0.00	.254	0.000	96.55	3.810	1	5.10	6.520E+06	.072
160056.012	1	3	92.14	-.51	0.00	55.888	1.001	0.00	.254	0.000	55.89	3.810	1	5.10	6.520E+06	.059
160056.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.254	0.000	10.15	3.810	1	5.10	6.520E+06	.044
160056.112	1	3	47.59	0.00	.25	11.430	.908	0.00	.254	0.000	11.43	3.810	1	5.10	6.520E+06	.044
160056.212	1	3	61.56	0.00	.25	25.403	1.155	0.00	.254	0.000	25.40	3.810	1	5.10	6.520E+06	.050
160056.315	1	3	86.36	0.00	.89	50.800	.272	0.00	.254	0.000	50.80	3.810	1	5.10	6.520E+06	.057
160056.510	1	3	125.16	.04	.04	88.900	.584	0.00	.254	0.000	88.90	3.810	1	5.10	6.520E+06	.071
160056.522	1	3	125.16	0.00	2.23	88.900	.086	0.00	.254	0.000	88.90	3.810	1	5.10	6.520E+06	.071
160057.011	1	3	97.12	-.51	0.00	60.965	1.000	.17	.254	0.000	60.97	3.810	1	5.10	3.177E+06	.037
160057.021	1	3	48.86	-.51	0.00	12.705	1.000	.17	.254	0.000	12.71	3.810	1	5.10	3.177E+06	.026
160057.111	1	3	47.59	0.00	.15	11.430	1.009	.17	.254	0.000	11.43	3.810	1	5.10	3.177E+06	.026
160057.211	1	3	61.56	0.00	.15	25.400	.832	.17	.254	0.000	25.40	3.810	1	5.10	3.177E+06	.029
160057.313	1	3	86.96	0.00	.39	50.800	.955	.17	.254	0.000	50.80	3.810	1	5.10	3.177E+06	.035
160057.508	1	3	125.16	.25	0.00	88.900	1.206	.17	.254	0.000	88.90	3.810	1	5.10	3.177E+06	.042
160057.518	1	3	125.16	0.00	1.65	88.900	.341	.17	.254	0.000	88.90	3.810	1	5.10	3.177E+06	.042
160058.008	1	3	112.37	-.51	0.00	76.219	1.000	.17	.254	0.000	76.22	3.810	1	5.10	6.596E+06	.066
160058.018	1	3	61.56	-.51	0.00	25.403	1.000	.17	.254	0.000	25.40	3.810	1	5.10	6.596E+06	.051
160058.107	1	3	47.59	.51	0.00	11.430	2.001	.17	.254	0.000	11.43	3.810	1	5.10	6.596E+06	.045
160058.207	1	3	61.56	.51	0.00	25.400	2.389	.17	.254	0.000	25.40	3.810	1	5.10	6.596E+06	.051
160058.310	1	3	86.96	.04	.04	50.800	1.634	.17	.254	0.000	50.80	3.810	1	5.10	6.596E+06	.058
160058.320	1	3	86.96	0.00	2.29	50.800	.738	.17	.254	0.000	50.80	3.810	1	5.10	6.596E+06	.058
160058.515	1	3	125.06	0.00	.89	88.900	.100	.17	.254	0.000	88.90	3.810	1	5.10	6.596E+06	.071
160059.005	1	3	125.09	-.51	0.00	88.936	1.350	.09	.254	0.000	88.94	3.810	1	5.10	3.431E+06	.044
160059.015	1	3	76.80	-.51	0.00	40.645	1.000	.09	.254	0.000	40.65	3.810	1	5.10	3.431E+06	.034
160059.025	1	3	38.70	-.51	0.00	2.545	1.000	.09	.254	0.000	2.55	3.810	1	5.10	3.431E+06	.024
160059.115	1	3	47.59	0.00	.89	11.433	.219	.09	.254	0.000	11.43	3.810	1	5.10	3.431E+06	.027
160059.307	1	3	86.36	.51	0.00	50.800	2.000	.09	.254	0.000	50.80	3.810	1	5.10	3.431E+06	.036
160059.317	1	3	86.36	0.00	1.40	50.800	.237	.09	.254	0.000	50.80	3.810	1	5.10	3.431E+06	.036
160059.512	1	3	125.06	0.00	.25	88.900	.753	.09	.254	0.000	88.90	3.810	1	5.10	3.431E+06	.044
160060.002	1	3	132.70	-.51	0.00	96.549	1.000	.26	.254	0.000	96.55	3.810	1	5.10	3.357E+06	.045
160060.012	1	3	92.14	-.51	0.00	55.888	1.000	.26	.254	0.000	55.89	3.810	1	5.10	3.357E+06	.037
160060.022	1	3	46.31	-.51	0.00	10.150	1.000	.26	.254	0.000	10.15	3.810	1	5.10	3.357E+06	.026
160060.112	1	3	47.59	0.00	.25	11.430	.556	.26	.254	0.000	11.43	3.810	1	5.10	3.357E+06	.026
160060.212	1	3	61.56	0.00	.25	25.403	.550	.26	.254	0.000	25.40	3.810	1	5.10	3.357E+06	.030
160060.316	1	3	86.36	0.00	1.14	50.800	.052	.26	.254	0.000	50.80	3.810	1	5.10	3.357E+06	.036
160060.513	1	3	125.16	0.00	.38	88.900	.519	.26	.254	0.000	88.90	3.810	1	5.10	3.357E+06	.043
160061.004	1	3	127.63	-.51	0.00	91.470	1.000	.26	.127	0.000	91.47	3.810	1	5.10	3.350E+06	.043
160061.014	1	3	81.88	-.51	0.00	45.725	1.000	.26	.127	0.000	45.73	3.810	1	5.10	3.350E+06	.035
160061.024	1	3	41.24	-.51	0.00	5.080	1.000	.26	.127	0.000	5.08	3.810	1	5.10	3.350E+06	.025
160061.114	1	3	47.59	0.00	.64	11.430	.383	.26	.127	0.000	11.43	3.810	1	5.10	3.350E+06	.026
160061.307	1	3	86.96	.51	0.00	50.800	1.123	.26	.127	0.000	50.80	3.810	1	5.10	3.350E+06	.036
160061.506	1	3	125.16	.76	0.00	88.900	.948	.26	.127	0.000	88.90	3.810	1	5.10	3.350E+06	.043
160061.516	1	3	125.16	0.00	1.14	88.900	.320	.26	.127	0.000	88.90	3.810	1	5.10	3.350E+06	.043
160062.003	1	3	112.37	-.51	0.00	76.213	1.000	.17	.127	0.000	76.22	3.810	1	5.10	3.315E+06	.041

160062.187	1	3	47.39	.81	0.00	11.430	1.036	.17	.127	0.000	11.43	3.010	1	5.10	3.315E+06	.026
160062.207	1	3	61.36	.51	0.00	25.403	1.076	.17	.127	0.000	25.40	3.010	1	5.10	3.315E+06	.030
160062.359	1	3	96.96	.15	0.00	50.800	.977	.17	.127	0.000	50.80	3.010	1	5.10	3.315E+06	.036
160062.509	1	3	125.36	.15	0.00	88.900	.905	.17	.127	0.000	88.90	3.010	1	5.10	3.315E+06	.043
160063.003	1	3	[illegible]	-.31	0.00	94.008	1.333	.17	.127	0.000	94.01	3.010	1	5.10	6.416E+06	.071
160063.013	1	3	96.96	-.51	0.00	50.800	1.000	.17	.127	0.000	50.81	3.010	1	5.10	6.416E+06	.057
160063.023	1	3	43.77	-.51	0.00	7.610	1.000	.17	.127	0.000	7.61	3.010	1	5.10	6.416E+06	.041
160063.113	1	3	47.39	0.00	.38	11.430	.292	.17	.127	0.000	11.43	3.010	1	5.10	6.416E+06	.044
160063.215	1	3	51.56	0.00	.89	25.400	.949	.17	.127	0.000	25.40	3.010	1	5.10	6.416E+06	.059
160063.506	1	3	125.36	.76	0.00	88.900	.893	.17	.127	0.000	88.90	3.010	1	5.10	6.416E+06	.070
160063.516	1	3	125.36	0.00	1.14	88.900	.981	.17	.127	0.000	88.90	3.010	1	5.10	6.416E+06	.070
160064.009	1	3	197.31	-.51	0.00	71.150	1.000	.09	.127	0.000	71.15	3.010	1	5.10	3.134E+06	.039
160064.019	1	3	56.4[illegible]	-.51	0.00	20.323	1.000	.09	.127	0.000	20.32	3.010	1	5.10	3.134E+06	.028
160064.108	1	3	47.59	.25	0.00	11.430	.990	.09	.127	0.000	11.43	3.010	1	5.10	3.134E+06	.025
160064.208	1	3	51.56	.25	0.00	25.400	1.002	.09	.127	0.000	25.40	3.010	1	5.10	3.134E+06	.029
160064.312	1	3	86.96	0.00	.25	50.800	.437	.09	.127	0.000	50.80	3.010	1	5.10	3.134E+06	.035
160064.512	1	3	125.36	0.00	.25	88.900	.518	.09	.127	0.000	88.90	3.010	1	5.10	3.134E+06	.042
160065.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	2.032	1	5.10	6.908E+06	.074
160065.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	2.032	1	5.10	6.908E+06	.056
160065.103	1	3	47.59	1.52	0.00	11.430	.955	0.00	.063	0.000	11.43	2.032	1	5.10	6.908E+06	.047
160065.207	1	3	51.56	1.52	0.00	25.400	.985	0.00	.063	0.000	25.40	2.032	1	5.10	6.908E+06	.053
160065.310	1	3	86.96	.04	.04	50.800	.614	0.00	.063	0.000	50.80	2.032	1	5.10	6.908E+06	.068
160065.511	1	3	125.36	0.00	.15	88.900	.619	0.00	.063	0.000	88.90	2.032	1	5.10	6.908E+06	.074
160066.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	1.016	1	5.10	1.504E+06	.039
160066.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	1.016	1	5.10	1.504E+06	.023
160066.103	1	3	47.59	1.52	0.00	11.430	.982	0	.063	0.000	11.43	1.016	1	5.10	1.504E+06	.019
160066.205	1	3	51.56	1.02	0.00	25.400	[illegible]	[illegible]	.063	0.000	25.40	1.016	1	5.10	1.504E+06	.021
160066.3[illegible]8	1	3	86.36	.25	0.00	50.800	.7[illegible]	0.00	.063	0.000	50.80	1.016	1	5.10	1.504E+06	.026
160066.408	1	3	112.36	.25	0.00	76.200	.752	0.00	.063	0.000	76.20	1.016	1	5.10	1.504E+06	.034
160066.[illegible]79	1	3	125.36	.15	0.00	88.900	.61[illegible]	0.00	.063	0.000	88.90	1.016	1	5.10	1.504E+06	.041
160067.005	1	3	125.[illegible]	-.51	0.00	88.936	1.000	0.00	.063	0.000	88.94	1.016	1	5.10	3.309E+06	.042
160067.015	1	3	76.[illegible]	-.51	0.00	40.645	1.000	0.00	.063	0.000	40.65	1.016	1	5.10	3.309E+06	.033
160067.025	1	3	38.[illegible]	-.51	0.00	2.545	1.000	0.00	.063	0.000	2.55	1.016	1	5.10	3.309E+06	.024
160067.115	1	3	47.59	0.00	.09	11.430	.083	0.00	.063	0.000	11.43	1.016	1	5.10	3.309E+06	.026
160067.309	1	3	86.36	.15	0.00	50.800	.382	0.00	.063	0.000	50.80	1.016	1	5.10	3.309E+06	.036
160067.41[illegible]	1	3	112.36	.04	.04	76.200	.538	0.00	.063	0.000	76.20	1.016	1	5.10	3.309E+06	.041
160067.511	1	3	125.36	0.00	.15	88.900	.512	0.00	.063	0.000	88.90	1.016	1	5.10	3.309E+06	.042
160068.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	1.016	1	5.10	6.426E+06	.069
160068.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	1.016	1	5.10	6.426E+06	.053
160068.103	1	3	47.59	1.52	0.00	11.430	.951	0.00	.063	0.000	11.43	1.016	1	5.10	6.426E+06	.044
160068.205	1	3	51.56	1.[illegible]2	0.00	25.400	.941	0.00	.063	0.000	25.40	1.016	1	5.10	6.426E+06	.050
160068.309	1	3	86.36	.15	0.00	50.800	.636	0.00	.063	0.000	50.80	1.016	1	5.10	6.426E+06	.057
160068.41[illegible]	1	3	112.36	.04	.04	76.200	.644	0.00	.063	0.000	76.20	1.016	1	5.10	6.426E+06	.064
160068.51[illegible]	1	3	125.36	[illegible]	.04	88.900	.6[illegible]	0.00	.063	0.000	88.90	1.016	1	5.10	6.426E+06	.070
160069.005	1	3	125.[illegible]	-.51	0.00	88.936	1.000	0.00	.063	0.000	88.94	.508	1	5.10	6.455E+06	.070
160069.015	1	3	76.[illegible]	-.51	0.00	40.645	1.000	0.00	.063	0.000	40.65	.508	1	5.10	6.455E+06	.064
160069.025	1	3	38.[illegible]	-.51	0.00	2.545	1.000	0.00	.063	0.000	2.55	.508	1	5.10	6.455E+06	.038
160069.203	1	3	51.56	1.52	0.00	25.400	.933	0.00	.063	0.000	25.40	.508	1	5.10	6.455E+06	.050
160069.31[illegible]	1	3	86.36	.04	.04	50.800	.987	0.00	.063	0.000	50.80	.508	1	5.10	6.455E+06	.057
160069.411	1	3	112.36	[illegible]	.15	76.200	.517	0.00	.063	0.000	76.20	.508	1	5.10	6.455E+06	.065

[illegible]	1	3	[illegible]	[illegible]	[illegible]	88.90[illegible]	.384	[illegible]	.063	0.000	88.90	.508	1	5.10	[illegible]	[illegible]
160070.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.063	0.000	81.32	.508	1	5.10	1.723E+06	.037
160070.017	1	3	66.54	-.51	0.00	30.485	1.000	0.00	.063	0.000	30.49	.508	1	5.10	1.723E+06	.023
160070.105	1	3	47.59	1.02	0.00	11.430	.963	0.00	.063	0.000	11.43	.508	1	5.10	1.723E+06	.020
160070.207	1	3	51.56	.51	0.00	25.400	.938	0.00	.063	0.000	25.40	.508	1	5.10	1.723E+06	.022
160070.310	1	3	96.36	.04	.04	50.800	.548	0.00	.063	0.000	50.80	.508	1	5.10	1.723E+06	.027
160070.411	1	3	112.36	[illegible]	.15	76.200	.446	0.00	.063	0.000	76.20	.508	1	5.10	1.723E+06	.035
160070.511	1	3	125.06	[illegible]	.15	88.900	.447	0.00	.063	0.000	88.90	.508	1	5.10	1.723E+06	.041
160071.007	1	3	117.47	[illegible]	0.00	81.316	1.000	0.00	.063	0.000	81.32	.508	1	5.10	3.043E+06	.048
160071.017	1	3	66.54	[illegible]	0.00	30.485	1.000	0.00	.063	0.000	30.49	.508	1	5.10	3.043E+06	.029
160071.105	1	3	47.59	1.02	0.00	11.430	.962	0.00	.063	0.000	11.43	.508	1	5.10	3.043E+06	.025
160071.205	1	3	51.56	1.02	0.00	25.400	.992	0.00	.063	0.000	25.40	.508	1	5.10	3.043E+06	.028
160071.309	1	3	96.36	.15	0.00	50.800	.577	0.00	.063	0.000	50.80	.508	1	5.10	3.043E+06	.034
160071.410	1	3	112.36	.04	.04	76.200	.552	0.00	.063	0.000	76.20	.508	1	5.10	3.043E+06	.039
160071.511	1	3	125.06	0.00	.15	88.900	.509	0.00	.063	0.000	88.90	.508	1	5.10	3.043E+06	.042
160072.006	1	3	122.56	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	.508	1	5.10	1.628E+06	.040
160072.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	.508	1	5.10	1.628E+06	.024
160072.103	1	3	47.59	1.52	0.00	11.430	.975	0.00	.127	0.000	11.43	.508	1	5.10	1.628E+06	.019
160072.203	1	3	51.56	1.52	0.00	25.400	.973	0.00	.127	0.000	25.40	.508	1	5.10	1.628E+06	.022
160072.309	1	3	96.36	.15	0.00	50.800	.646	0.00	.127	0.000	50.80	.508	1	5.10	1.628E+06	.026
160072.409	1	3	112.36	.15	0.00	76.200	.570	0.00	.127	0.000	76.20	.508	1	5.10	1.628E+06	.034
160072.511	1	3	125.06	0.00	.15	88.900	.535	0.00	.127	0.000	88.90	.508	1	5.10	1.628E+06	.041
160073.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.127	0.000	81.32	.508	1	5.10	3.142E+06	.040
160073.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.127	0.000	30.49	.508	1	5.10	3.142E+06	.030
160073.105	1	3	47.59	1.02	0.00	11.430	.969	0.00	.127	0.000	11.43	.508	1	5.10	3.142E+06	.025
160073.205	1	3	61.56	1.02	0.00	25.400	.977	0.00	.127	0.000	25.40	.508	1	5.10	3.142E+06	.029
160073.309	1	3	96.36	.15	0.00	50.800	.604	0.00	.127	0.000	50.80	.508	1	5.10	3.142E+06	.035
160073.410	1	3	112.36	.04	.04	76.200	.613	0.00	.127	0.000	76.20	.508	1	5.10	3.142E+06	.040
160073.511	1	3	125.06	0.00	.15	88.900	.577	0.00	.127	0.000	88.90	.508	1	5.10	3.142E+06	.042
160074.006	1	3	122.56	-.51	0.00	86.358	1.000	0.00	.127	0.000	86.46	.508	1	5.10	6.478E+06	.070
160074.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	.508	1	5.10	6.478E+06	.053
160074.103	1	3	47.59	1.52	0.00	11.430	.919	0.00	.127	0.000	11.43	.508	1	5.10	6.478E+06	.044
160074.205	1	3	51.56	1.02	0.00	25.400	.902	0.00	.127	0.000	25.40	.508	1	5.10	6.478E+06	.050
160074.309	1	3	96.36	.15	0.00	50.800	.701	0.00	.127	0.000	50.80	.508	1	5.10	6.478E+06	.057
160074.410	1	3	112.36	.04	.04	76.200	.678	0.00	.127	0.000	76.20	.508	1	5.10	6.478E+06	.065
160074.511	1	3	125.06	0.00	.15	88.900	.61[illegible]	0.00	.127	0.000	88.90	.508	1	5.10	6.478E+06	.070
160075.012	1	3	92.34	-.51	0.00	55.888	1.000	0.00	.127	0.000	55.89	3.810	1	5.10	1.682E+06	.028
160075.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.127	0.000	10.15	3.810	1	5.10	1.682E+06	.019
160075.112	1	3	39.37	0.00	.25	3.810	.351	0.00	.127	0.000	3.81	3.810	1	5.10	1.682E+06	.018
160075.212	1	3	46.32	0.00	.25	10.160	.355	0.00	.127	0.000	10.16	3.810	1	5.10	1.682E+06	.019
160075.313	1	3	56.48	0.00	.33	20.320	.126	0.00	.127	0.000	20.32	3.810	1	5.10	1.682E+06	.021
160075.511	1	3	64.1	0.00	.15	27.940	.53[illegible]	0.00	.127	0.000	27.94	3.810	1	5.10	1.682E+06	.023
160076.012	1	3	92.34	-.51	0.00	55.888	1.000	0.00	.127	0.000	55.89	3.810	1	5.10	3.179E+06	.036
160076.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.127	0.000	10.15	3.810	1	5.10	3.179E+06	.025
160076.112	1	3	39.37	0.00	.25	3.810	.4[illegible]8	0.00	.127	0.000	3.81	3.810	1	5.10	3.179E+06	.024
160076.212	1	3	46.32	0.00	.25	10.160	.379	0.00	.127	0.000	10.16	3.810	1	5.10	3.179E+06	.025
160076.316	1	3	56.48	0.00	1.14	20.320	.01[illegible]	0.00	.127	0.000	20.32	3.810	1	5.10	3.179E+06	.028
160076.511	1	3	64.1[illegible]	0.0	.15	27.940	.968	0.00	.127	0.000	27.94	3.810	1	5.10	3.179E+06	.030
160077.012	1	3	92.34	-.51	0.00	55.888	0.000	0.00	.127	0.000	55.89	3.810	1	5.10	6.421E+06	.059
160077.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.127	0.000	10.15	3.810	1	5.10	6.421E+06	.043
160077.112	1	3	39.37	[illegible]	.25	3.810	.422	0.00	.127	0.000	3.81	3.810	1	5.10	6.421E+06	.039

[illegible]	1	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.127	0.000	[illegible]	3.810	1	5.10	[illegible]	[illegible]
160077.313	1	3	56.48	0.00	.38	20.320	.611	0.00	.127	0.000	20.32	3.810	1	5.10	6.421E+06	.048
160077.509	1	3	54.1	.15	0.00	27.940	.000	0.00	.127	0.000	27.9	3.810	1	5.10	6.421E+06	.050
160078.019	1	3	56.48	-.51	0.00	20.323	1.000	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160078.044	1	3	56.48	0.00	.25	20.323	.701	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160078.178	1	3	39.47	.20	0.00	3.810	.361	.09	.127	0.000	3.81	3.810	1	5.10	1.702E+06	.018
160078.278	1	3	46.32	.20	0.00	10.160	.911	.09	.127	0.000	10.16	3.810	1	5.10	1.702E+06	.019
160078.313	1	3	56.48	0.00	.38	20.320	.162	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160079.412	1	3	59.12	0.00	.25	22.860	.321	.09	.127	0.000	22.86	3.810	1	5.10	1.702E+06	.022
160079.023	1	3	43.77	-.51	0.00	7.610	1.000	.09	.127	0.000	7.61	3.810	1	5.10	3.184E+06	.025
160079.048	1	3	43.77	0.00	.25	7.610	.306	.09	.127	0.000	7.61	3.810	1	5.10	3.184E+06	.025
160079.113	1	3	39.37	0.00	.38	3.810	.325	.09	.127	0.000	3.81	3.810	1	5.10	3.184E+06	.024
160079.305	1	3	56.48	.75	0.00	20.320	.081	.09	.127	0.000	20.32	3.810	1	5.10	3.184E+06	.028
160079.323	1	3	56.48	0.00	2.29	20.320	.813	.09	.127	0.000	20.32	3.810	1	5.10	3.184E+06	.028
160079.515	1	3	64.17	0.00	.69	27.940	.214	.09	.127	0.000	27.94	3.810	1	5.10	3.184E+06	.030
160080.025	1	3	38.70	-.51	0.00	2.545	1.000	.17	.127	0.000	2.55	3.810	1	5.10	3.122E+06	.023
160080.050	1	3	38.70	0.00	.25	2.545	.262	.17	.127	0.000	2.55	3.810	1	5.10	3.122E+06	.023
160080.115	1	3	39.37	0.00	.89	3.810	.025	.17	.127	0.000	3.81	3.810	1	5.10	3.122E+06	.023
160080.309	1	3	56.48	.13	0.00	20.320	.780	.17	.127	0.000	20.32	3.810	1	5.10	3.122E+06	.027
160080.513	1	3	64.10	.04	.04	27.940	.615	.17	.127	0.000	27.94	3.810	1	5.10	3.122E+06	.029
160081.020	1	3	51.39	-.51	0.00	15.235	1.000	.17	.127	0.000	15.23	3.810	1	5.10	1.726E+06	.020
160081.045	1	3	51.39	0.00	.25	15.235	.269	.17	.127	0.000	15.23	3.810	1	5.10	1.726E+06	.020
160081.110	1	3	39.37	.04	.04	3.810	.774	.17	.127	0.000	3.81	3.810	1	5.10	1.726E+06	.018
160081.210	1	3	46.32	.04	.04	10.160	.671	.17	.127	0.000	10.16	3.810	1	5.10	1.726E+06	.019
160081.312	1	3	56.48	0.00	.25	20.320	.797	.17	.127	0.000	20.32	3.810	1	5.10	1.726E+06	.021
160081.513	1	3	64.10	.04	.04	27.940	.627	.17	.127	0.000	27.94	3.810	1	5.10	1.726E+06	.023
160082.020	1	3	51.39	-.51	0.00	15.235	1.00[illegible]	.26	.127	0.000	15.23	3.810	1	5.10	1.566E+06	.020
160082.045	1	3	51.39	0.00	.25	15.235	.284	.26	.127	0.000	15.23	3.810	1	5.10	1.666E+06	.020
160082.110	1	3	39.37	.04	.04	3.810	.534	.26	.127	0.000	3.81	3.810	1	5.10	1.666E+06	.018
160082.210	1	3	46.32	.04	.04	10.160	.742	.26	.127	0.000	10.16	3.810	1	5.10	1.666E+06	.019
160082.311	1	3	56.48	0.00	.15	20.320	.921	.26	.127	0.000	20.32	3.810	1	5.10	1.666E+06	.021
160082.508	1	3	64.10	.20	0.09	27.940	.913	.26	.127	0.000	27.94	3.810	1	5.10	1.666E+06	.023
160083.018	1	3	61.56	-.51	0.00	25.403	1.000	.26	.127	0.000	25.40	3.810	1	5.10	3.146E+06	.029
160083.043	1	3	61.56	0.00	.25	25.403	.237	.26	.127	0.000	25.40	3.810	1	5.10	3.146E+06	.029
160083.107	1	3	39.37	.51	0.00	3.810	1.117	.26	.127	0.000	3.81	3.810	1	5.10	3.146E+06	.024
160083.207	1	3	46.32	.01	0.00	10.160	.978	.26	.127	0.000	10.16	3.810	1	5.10	3.146E+06	.025
160083.312	1	3	56.48	0.00	.25	20.320	.320	.26	.127	0.000	20.32	3.810	1	5.10	3.146E+06	.028
160083.516	1	3	64.17	.04	.04	27.940	.620	.26	.127	0.000	27.94	3.810	1	5.10	3.146E+06	.029
160084.020	1	3	51.39	-.51	0.00	15.235	1.000	.26	.254	0.000	15.23	3.810	1	5.10	3.235E+06	.027
160084.045	1	3	51.39	0.00	.25	15.235	.291	.26	.254	0.000	15.23	3.810	1	5.10	3.235E+06	.027
160084.110	1	3	39.37	.04	.04	3.810	.919	.26	.254	0.000	3.81	3.810	1	5.10	3.235E+06	.024
160084.210	1	3	46.32	.04	.04	10.160	.852	.26	.254	0.000	10.16	3.810	1	5.10	3.235E+06	.025
160084.313	1	3	56.48	0.00	.38	20.320	.223	.26	.254	0.000	20.32	3.810	1	5.10	3.235E+06	.028
160084.512	1	3	64.17	0.00	.25	27.940	.568	.26	.254	0.000	27.94	3.810	1	5.10	3.235E+06	.030
160085.022	1	3	46.31	-.51	0.00	10.157	1.000	.26	.254	0.000	10.15	3.810	1	5.10	1.589E+06	.019
160085.047	1	3	46.31	0.00	.25	10.157	[illegible]	.26	.254	0.000	10.15	3.810	1	5.10	1.589E+06	.019
160085.112	1	3	39.37	0.00	.25	3.810	.536	.26	.254	0.000	3.81	3.810	1	5.10	1.589E+06	.017
160085.212	1	3	46.32	[illegible]	.25	10.160	.404	.26	.254	0.000	10.16	3.810	1	5.10	1.589E+06	.019
160085.314	1	3	56.48	0.00	.64	20.320	[illegible]	.26	.254	0.000	20.32	3.810	1	5.10	1.589E+06	.021
160085.512	1	3	64.10	0.00	.25	27.940	.518	.26	.254	0.000	27.94	3.810	1	5.10	1.589E+06	.022
160086.012	1	3	[illegible]	-.51	[illegible]	55.885	1.00[illegible]	[illegible]	.254	[illegible]	55.99	3.810	1	5.10	1.667E+06	.027

[illegible]	1	3	46.31	[illegible]	[illegible]	1.151	1.[illegible]	0.00	.254	0.000	10.15	3.810	1	5.10	1.667E+06	.019
160086.112	1	3	39.97	0.00	.25	3.810	.353	0.00	.254	0.000	3.81	3.810	1	5.10	1.667E+06	.018
160086.212	1	3	46.32	0.00	.25	10.160	.497	0.00	.254	0.000	13.16	3.811	1	5.10	1.667E+06	.019
160086.310	1	3	56.47	.04	.04	20.320	.807	0.00	.254	0.000	20.32	3.810	1	5.10	1.667E+06	.021
160086.506	1	3	64.17	.76	0.00	27.940	.625	0.00	.254	0.000	27.94	3.810	1	5.10	1.667E+06	.023
160087.006	1	3	132.55	-.51	0.00	86.398	1.000	0.00	.254	0.000	86.40	3.810	1	5.10	3.274E+06	.042
160087.015	1	3	71.72	-.51	0.00	35.565	0.000	0.00	.254	0.000	35.57	3.810	1	5.10	3.274E+06	.032
160087.103	1	3	39.97	1.52	0.00	3.810	.955	0.00	.254	0.000	3.81	3.810	1	5.10	3.274E+06	.024
160087.203	1	3	46.32	1.52	0.00	10.160	.865	0.00	.254	0.000	10.16	3.810	1	5.10	3.274E+06	.026
160087.217	1	3	46.32	0.00	1.40	10.160	.113	0.00	.254	0.000	10.16	3.810	1	5.10	3.274E+06	.026
160087.317	1	3	56.48	0.00	1.40	20.320	.039	0.00	.254	0.000	20.32	3.810	1	5.10	3.274E+06	.028
160087.512	1	3	64.10	0.00	.25	27.940	.560	0.00	.234	0.000	27.94	3.811	1	5.10	3.274E+06	.038
160088.012	1	3	92.04	-.51	0.00	55.888	1.000	0.00	.234	0.000	55.89	3.810	1	5.10	6.378E+06	.058
160088.022	1	3	46.31	-.51	0.00	10.159	1.000	0.00	.254	0.000	10.15	3.810	1	5.10	6.378E+06	.043
160088.112	1	3	39.97	0.00	.25	3.810	.204	0.00	.254	0.000	3.81	3.810	1	5.10	6.378E+06	.039
160088.212	1	3	46.32	0.00	.25	10.160	.530	0.00	.254	0.000	10.16	3.810	1	5.10	6.378E+06	.043
160088.310	1	3	56.48	.04	.04	20.320	0.000	0.00	.254	0.000	20.32	3.810	1	5.10	6.378E+06	.048
160088.507	1	3	64.17	.51	0.00	27.940	0.000	0.00	.254	0.000	27.94	3.810	1	5.10	6.378E+06	.050
160089.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.127	0.000	81.32	2.032	1	5.10	1.650E+06	.037
160089.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.127	0.000	30.49	2.032	1	5.10	1.650E+06	.023
160089.105	1	3	39.97	1.02	0.00	3.810	.354	0.00	.127	0.000	3.81	2.032	1	5.10	1.650E+06	.018
160089.205	1	3	46.32	1.02	0.00	10.160	.948	0.00	.127	0.000	10.16	2.032	1	5.10	1.650E+06	.019
160089.308	1	3	56.48	.25	0.00	20.320	.809	0.00	.127	0.000	20.32	2.032	1	5.10	1.650E+06	.021
160089.508	1	3	64.1	.25	0.00	27.940	.928	0.00	.127	0.000	27.94	2.032	1	5.10	1.650E+06	.022
160090.009	1	3	112.37	-.51	0.00	76.218	1.000	0.00	.127	0.000	76.22	2.032	1	5.10	3.192E+06	.040
160090.018	1	3	61.56	-.51	0.00	25.403	1.000	0.00	.127	0.000	25.40	2.032	1	5.10	3.192E+06	.029
160090.107	1	3	39.97	.51	0.00	3.810	.926	0.00	.127	0.000	3.81	2.032	1	5.10	3.192E+06	.024
160090.207	1	3	46.32	.51	0.00	10.160	.394	0.00	.127	0.000	10.16	2.032	1	5.10	3.192E+06	.029
160090.312	1	3	56.48	0.00	.25	20.320	.356	0.00	.127	0.000	20.32	2.032	1	5.10	3.192E+06	.028
160090.513	1	3	64.10	0.00	.38	27.940	.279	0.00	.127	0.000	27.94	2.032	1	5.10	3.192E+06	.030
160091.009	1	3	107.31	-.51	0.00	71.150	1.000	0.00	.127	0.000	71.15	3.810	1	5.10	6.508E+06	.063
160091.108	1	3	111.10	.25	0.00	74.930	.885	0.00	.127	0.000	74.93	3.810	1	5.10	6.508E+06	.065
160091.310	1	3	117.44	.04	.04	81.283	.825	0.00	.127	0.000	81.28	3.810	1	5.10	6.508E+06	.069
160091.406	1	3	127.60	.76	0.00	91.440	.391	0.00	.127	0.000	91.44	3.810	1	5.10	6.508E+06	.072
160091.416	1	3	127.60	0.00	1.14	91.440	.319	0.00	.127	0.000	91.44	3.810	1	5.10	6.508E+06	.072
160091.513	1	3	135.22	0.00	.38	99.060	.454	0.00	.127	0.000	99.06	3.810	1	5.10	6.508E+06	.073
160092.003	1	3	130.16	-.51	0.00	94.008	1.000	.26	.127	0.000	94.01	3.810	1	5.10	6.374E+06	.078
160092.013	1	3	96.96	-.51	0.00	50.808	1.000	.26	.127	0.000	50.81	3.810	1	5.10	6.374E+06	.056
160092.113	1	3	111.09	0.00	.33	74.930	.445	.26	.127	0.000	74.93	3.810	1	5.10	6.374E+06	.063
160092.315	1	3	117.44	0.00	.89	81.280	.215	.26	.127	0.000	81.28	3.810	1	5.10	6.374E+06	.067
160092.410	1	3	127.60	.04	.04	91.440	.495	.26	.127	0.000	91.44	3.810	1	5.10	6.374E+06	.070
160092.505	1	3	135.22	.76	0.00	99.063	.962	.26	.127	0.000	99.06	3.810	1	5.10	6.374E+06	.071
160092.516	1	3	135.22	0.00	1.14	99.069	.129	.26	.127	0.000	99.06	3.810	1	5.10	6.374E+06	.071
160093.006	1	3	122.56	-.51	0.00	86.398	1.000	.26	.254	0.000	86.40	3.810	1	5.10	6.656E+06	.071
160093.103	1	3	111.09	1.02	0.00	74.933	1.016	.26	.254	0.000	74.93	3.810	1	5.10	6.656E+06	.065
160093.207	1	3	117.44	.51	0.00	81.283	.944	.26	.254	0.000	81.28	3.810	1	5.10	6.656E+06	.070
160093.319	1	3	117.44	0.00	1.65	81.283	.021	.26	.254	0.000	81.28	3.810	1	5.10	6.656E+06	.070
160093.413	1	3	127.60	0.00	.38	91.443	[illegible]	.26	.254	0.000	91.44	3.810	1	5.10	6.656E+06	.072
160093.508	1	3	135.22	.25	0.00	99.060	.997	.26	.254	0.000	99.06	3.810	1	5.10	6.656E+06	.074
160093.518	1	3	135.22	0.00	1.65	99.069	.175	.26	.254	0.000	99.06	3.810	1	5.10	6.656E+06	.074

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AMES 3.5 FT HWT TEST ([illegible]), C.J. BLUMER, IN-LINE RSI GAP RUN([illegible]) 1373

	DELS	SUB-T	HLC	HLC/HREF	NSTT	TW/TE	9.L.	NTOL
160001.011	.224	[illegible]	6.894E-03	.7823	3.537E-04	1.612E-01	3	10
160001.021	.167	[illegible]	9.746E-03	.7561	5.078E-04	1.621E-01	2	20
160001.203	.187	[illegible]	8.550E-03	.8098	4.397E-04	1.626E-01	2	30
160001.306	.221	0.30	7.186E-03	.7335	.692E-04	1.618E-01	3	40
160001.466	.249	.00	6.527E-03	.7419	3.353E-04	1.613E-01	3	50
160001.506	.291	0.00	5.724E-03	.6310	3.494E-04	1.612E-01	3	60
160002.006	.351	0.300	3.346E-02	.7344	7.836E-04	1.475E-01	3	70
160002.016	.274	0.30	9.596E-03	.8398	2.247E-04	1.485E-01	2	80
160002.103	.225	0.00	1.273E-02	.8321	2.896E-04	1.516E-01	1	90
160002.301	.328	[illegible]	9.972E-03	.6519	2.335E-04	1.483E-01	3	100
160002.401	.342	0.30	2.192E-02	.6564	5.135E-04	1.469E-01	3	110
160002.501	.353	[illegible]	3.597E-02	.7045	8.414E-04	1.467E-01	3	120
160003.001	.327	[illegible]	6.229E-03	1.0955	3.034E-04	1.511E-01	3	130
160003.012	.219	[illegible]	1.933E-02	.7623	3.377E-04	1.513E-01	3	140
160003.022	.161	[illegible]	9.940E-03	.7424	4.841E-04	1.523E-01	1	150
160003.285	.183	0.300	8.497E-03	.8237	4.130E-04	1.526E-01	2	160
160003.307	.217	[illegible]	7.105E-03	.6639	3.460E-04	1.526E-01	3	170
160003.437	.248	[illegible]	6.354E-03	.7379	3.095E-04	1.510E-01	3	180
160003.507	.289	[illegible]	6.332E-03	.7005	3.084E-04	1.509E-01	3	190
160004.000	[illegible]	0.30	6.569E-03	.8315	3.091E-04	1.573E-01	3	200
160004.010	.18	[illegible]	[illegible]	.7896	4.070E-04	1.580E-01	1	210
160004.107	.166	0.300	9.917E-03	.7428	4.638E-04	1.596E-01	1	220
160004.303	.223	0.30	7.215E-03	.8380	3.374E-04	1.581E-01	3	230
160004.403	.25	0.30	6.598E-03	.9995	3.082E-04	1.570E-01	3	240
160004.503	.291	0.300	6.863E-03	.9244	3.210E-04	1.569E-01	3	250
160005.004	.348	[illegible]	3.660E-02	.7993	8.087E-04	1.533E-01	3	260
160005.014	.281	0.30	9.232E-03	.7952	2.234E-04	1.533E-01	3	270
160005.024	.204	[illegible]	1.306E-02	.8253	3.170E-04	1.535E-01	1	280
160005.208	.244	[illegible]	1.022E-02	.6393	2.488E-04	1.546E-01	2	290
160005.309	[illegible]	[illegible]	9.691E-03	.3986	2.353E-04	1.526E-01	3	300
160005.469	.332	[illegible]	2.052E-02	.4406	4.991E-04	1.526E-01	3	310
160005.509	.344	[illegible]	3.339E-02	.3388	8.145E-04	1.520E-01	3	320
160006.912	.227	[illegible]	6.672E-03	1.0570	3.312E-04	1.532E-01	2	330
160006.020	.169	0.30	9.465E-03	.8279	4.404E-04	1.550E-01	1	340
160006.030	.290	[illegible]	6.561E-03	.4790	2.834E-04	1.528E-01	2	350
160006.040	.21	[illegible]	7.351E-03	.3279	2.924E-04	1.535E-01	2	360
160006.050	.152	[illegible]	1.093E-02	.2923	5.062E-04	1.536E-01	1	370
160006.060	.227	[illegible]	6.60 E-03	.0561	4.222E-05	1.523E-01	2	380
160006.074	.15	[illegible]	1.055E-02	.9280	5.904E-04	1.535E-01	1	390
160007.010	.326	0.30	1.497E-02	1.7183	3.584E-04	1.551E-01	2	400
160007.[illegible]	.231	[illegible]	1.172E-02	.8684	2.823E-04	1.555E-01	1	410
160007.[illegible]	.348	[illegible]	7.979E-02	.8277	8.387E-04	1.548E-01	2	420
160007.04	.277	0.30	9.278E-03	.6481	1.989E-04	1.54 E-01	2	430
160007.05	[illegible]	[illegible]	1.351E-02	.2301	3.236E-04	1.534E-01	1	440
160007.060	.326	[illegible]	1.492E-02	.5152	3.327E-04	1.533E-01	2	450
160007.071	.226	[illegible]	1.206E-02	.9661	3.634E-04	1.537E-01	1	460
160039.300	.579	[illegible]	5.872E-02	1.3975	7.652E-04	1.548E-01	2	470

[illegible]	.444	[illegible]	[illegible]	1.7042	[illegible]	[illegible]	2	490
160008.029	.653	[illegible]	8.063E-02	.5762	9.394E-04	1.539E-01	2	498
160008.036	.314	[illegible]	2.386E-02	2.6665	2.506E-04	1.536E-01	2	500
160008.048	.389	[illegible]	1.654E-02	.2541	1.044E-04	1.515E-01	1	510
160008.059	.364	[illegible]	4.824E-02	.6387	[illegible].608E-04	1.513E-01	2	520
160008.069	.421	[illegible]	1.463E-02	.5264	[illegible].816E-04	1.506E-01	2	530
160009.112	.165	[illegible]	9.808E-03	.2652	4.686E-04	1.530E-01	1	540
160009.207	.186	[illegible]	8.552E-03	.7731	4.054E-04	1.531E-01	1	550
160009.307	.[illegible]21	[illegible]	7.194E-03	.7084	3.476E-04	1.526E-01	1	560
160009.406	.249	[illegible]	6.524E-03	.8419	3.093E-04	1.522E-01	2	570
160009.507	.291	0.907	6.713E-03	.7055	3.183E-04	1.521E-01	3	580
160010.109	.215	[illegible]	1.271E-02	.7570	2.870E-04	1.496E-01	1	590
160010.119	.216	[illegible]	1.271E-02	.0339	2.871E-04	1.445E-01	1	600
160010.214	.247	[illegible]	1.016E-02	.0351	2.420E-04	1.458E-01	1	610
160010.312	.289	[illegible]	9.563E-03	1.1351	2.286E-04	1.461E-01	2	620
160010.411	.328	[illegible]	1.567E-02	1.4307	4.702E-04	1.454E-01	2	630
160010.510	.341	[illegible]	3.192E-02	1.0956	7.631E-04	1.453E-01	3	640
160011.183	.385	[illegible]	1.626E-02	.7736	1.941E-04	1.570E-01	1	650
160011.119	.385	[illegible]	1.626E-02	.9313	1.941E-04	1.495E-01	1	660
160011.215	.449	[illegible]	1.392E-02	.4104	1.661E-04	1.599E-01	2	670
160011.310	.519	[illegible]	2.113E-02	2.9751	2.522E-04	1.537E-01	2	680
160011.407	.585	[illegible]	5.973E-02	1.1540	7.129E-04	1.530E-01	2	690
160011.417	.585	[illegible]	5.968E-02	.0710	7.124E-04	1.487E-01	2	700
160011.513	.642	[illegible]	7.697E-02	.4504	9.176E-04	1.599E-01	3	710
160012.005	.656	[illegible]	7.850E-02	.8915	9.289E-04	1.564E-01	3	720
160012.015	.508	[illegible]	1.541E-02	1.0430	1.821E-04	1.566E-01	2	730
160012.025	.363	[illegible]	1.754E-02	.7045	2.072E-04	1.565E-01	1	740
160012.210	.459	[illegible]	1.497E-02	.4340	1.663E-04	1.579E-01	2	750
160012.310	.529	[illegible]	2.153E-02	.5077	2.598E-04	1.546E-01	2	760
160012.410	.596	[illegible]	6.138E-02	.5151	7.253E-04	1.546E-01	3	770
160012.510	.655	[illegible]	7.872E-02	.3948	9.312E-04	1.543E-01	3	780
160013.011	.543	[illegible]	3.145E-02	2.4719	3.708E-04	1.557E-01	3	790
160013.021	.384	[illegible]	1.598E-02	.9777	1.928E-04	1.575E-01	2	800
160013.111	.389	[illegible]	1.613E-02	.5394	1.939E-04	1.580E-01	2	810
160013.211	.442	[illegible]	1.380E-02	1.0066	1.659E-04	1.545E-01	2	820
160013.311	.512	[illegible]	2.077E-02	2.3235	2.497E-04	1.540E-01	3	830
160013.507	.633	[illegible]	7.565E-02	.7720	9.092E-04	1.541E-01	3	840
160013.517	.633	[illegible]	7.557E-02	.0693	9.078E-04	1.511E-01	3	850
160014.039	.344	[illegible]	[illegible]	1.7369	4.448E-04	1.563E-01	2	860
160014.019	.247	[illegible]	[illegible]	.9231	2.565E-04	1.564E-01	2	870
160014.108	.239	[illegible]	[illegible]	.7379	2.050E-04	1.580E-01	1	880
160014.210	.206	[illegible]	1.083E-02	.3741	2.417E-04	1.552E-01	2	890
160014.317	.307	[illegible]	1.940E-02	.4532	2.387E-04	1.547E-01	2	900
160014.011	.381	[illegible]	3.757E-02	.9447	8.625E-04	1.556E-01	2	910
160015.005	.292	[illegible]	6.934E-03	1.5693	3.240E-04	1.579E-01	2	920
160015.015	.214	[illegible]	7.434E-03	.9908	3.464E-04	1.576E-01	2	930
160015.025	.154	[illegible]	1.092E-02	.9644	5.000E-04	1.575E-01	1	940
160015.115	.167	[illegible]	9.940E-03	[illegible]	4.631E-04	1.562E-01	1	950
160015.215	.169	[illegible]	8.594E-03	.0117	4.009E-04	1.597E-01	2	960
160015.314	.224	[illegible]	7.234E-03	.0151	[illegible].370E-04	1.559E-01	2	970
160015.514	.292	[illegible]	6.951E-03	.0644	3.219E-04	1.570E-01	2	980

[illegible]	.574	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	990
160016.020	.429	[illegible]	1.597E-02	.9008	1.875E-04	1.592E-01	3	1000
160016.110	.397	[illegible]	1.646E-02	.5293	1.941E-04	1.601E-01	3	1010
160016.213	.459	[illegible]	1.499E-02	1.0974	1.661E-04	1.584E-01	3	1020
160016.313	.539	[illegible]	2.159E-02	2.4760	2.557E-04	1.562E-01	3	1030
160016.418	.597	[illegible]	6.159E-02	.9135	7.262E-04	1.555E-01	3	1040
160016.513	.657	[illegible]	7.895E-02	.6635	9.308E-04	1.556E-01	3	1050
160017.006	.389	[illegible]	3.460E-02	1.3340	7.959E-04	1.519E-01	3	1060
160017.016	.280	[illegible]	9.712E-03	.9706	2.234E-04	1.528E-01	2	1070
160017.103	.229	[illegible]	1.244E-02	.8422	2.860E-04	1.552E-01	1	1080
160017.205	.256	[illegible]	1.652E-02	.8572	2.419E-04	1.539E-01	2	1090
160017.303	.306	[illegible]	1.036E-02	.8063	2.383E-04	1.520E-01	2	1100
160017.408	.349	[illegible]	2.331E-02	1.3954	5.362E-04	1.513E-01	2	1110
160017.509	.361	[illegible]	3.746E-02	.9707	8.618E-04	1.512E-01	3	1120
160018.006	[illegible]	[illegible]	6.238E-03	1.0799	3.057E-04	1.473E-01	3	1130
160018.016	.198	[illegible]	7.433E-03	.8718	3.631E-04	1.483E-01	3	1140
160018.103	.162	[illegible]	9.773E-03	.8250	4.773E-04	1.502E-01	1	1150
160018.205	.187	[illegible]	8.463E-03	.8345	4.144E-04	1.492E-01	2	1160
160018.308	.215	[illegible]	7.087E-03	.6724	3.462E-04	1.477E-01	3	1170
160018.409	.245	[illegible]	6.311E-03	.6489	3.083E-04	1.478E-01	3	1180
160018.511	.267	[illegible]	6.228E-03	.5559	3.042E-04	1.470E-01	3	1190
160019.013	.212	[illegible]	7.009E-03	.8872	3.337E-04	1.397E-01	2	1200
160019.023	.154	[illegible]	1.011E-02	.9083	5.057E-04	1.414E-01	1	1210
160019.113	.140	[illegible]	1.052E-02	.2301	5.264E-04	1.412E-01	1	1220
160019.211	.157	[illegible]	9.820E-03	.4305	4.914E-04	1.404E-01	1	1230
160019.413	.171	[illegible]	8.893E-03	.1706	4.450E-04	1.395E-01	1	1240
160019.514	.182	[illegible]	8.116E-03	.3120	4.062E-04	1.391E-01	2	1250
160020.016	.271	[illegible]	9.537E-03	1.2017	2.232E-04	1.497E-01	2	1260
160020.103	.274	[illegible]	1.342E-02	.9169	3.141E-04	1.535E-01	1	1270
160020.205	.219	[illegible]	1.246E-02	.8059	2.916E-04	1.526E-01	1	1280
160020.409	.230	[illegible]	1.131E-02	.8226	2.575E-04	1.594E-01	2	1290
[illegible]	.254	[illegible]	1.014E-02	.7166	2.374E-04	1.501E-01	2	1300
[illegible]	.229	[illegible]	[illegible]	1.2253	3.337E-04	1.582E-01	2	1310
160021.023	.165	[illegible]	1.048E-02	.9627	4.765E-04	[illegible]	1	1320
160021.113	.160	[illegible]	1.089E-02	.2429	4.954E-04	[illegible]	1	1330
160021.212	.160	[illegible]	1.019E-02	.5144	4.636E-04	[illegible]	1	1340
160021.412	[illegible]	[illegible]	9.176E-03	.3731	4.173E-04	1.583E-01	2	1350
[illegible]	.198	[illegible]	8.351E-03	.3496	3.798E-04	1.582E-01	2	1360
160022.015	.263	[illegible]	[illegible]	1.9302	2.217E-04	1.464E-01	2	1370
160022.329	[illegible]	[illegible]	1.318E-02	.9559	3.254E-04	1.478E-01	1	1380
160022.115	.197	[illegible]	1.300E-02	.0393	3.209E-04	1.466E-01	2	1390
160022.407	.230	[illegible]	1.070E-02	.4390	2.641E-04	1.477E-01	2	1400
160022.507	.240	[illegible]	[illegible]	[illegible]	2.428E-04	1.474E-01	2	1410
160023.019	.180	[illegible]	9.097E-03	.7084	4.252E-04	1.571E-01	3	1420
[illegible]	[illegible]	[illegible]	[illegible]	.2753	4.252E-04	1.567E-01	3	1430
160023.109	[illegible]	[illegible]	1.077E-02	.9332	5.041E-04	1.599E-01	1	1440
160023.208	.165	[illegible]	1.010E-02	1.1537	4.715E-04	1.578E-01	3	1450
160023.219	[illegible]	[illegible]	[illegible]	.9102	4.715E-04	1.546E-01	3	1460
160023.414	[illegible]	[illegible]	9.087E-03	.0680	4.252E-04	1.585E-01	3	1470
[illegible]	.197	[illegible]	9.278E-03	.3236	3.873E-04	1.597E-01	3	1480
160024.021	.225	[illegible]	[illegible]	.3254	2.397E-04	[illegible]	1	1490
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
160024.111	.203	[illegible]	1.338E-02	.8768	3.2[illegible]5E-04	1.565E-01	1	1510
160024.211	.218	[illegible]	1.243E-02	1.5797	2.987E-04	1.555E-01	1	1520
160024.408	.237	[illegible]	1.[illegible]97E-02	.8495	2.637E-04	1.552E-01	1	1530
160024.419	.237	[illegible]	1.097E-02	.6935	2.638E-04	1.518E-01	1	1540
160024.514	.253	[illegible]	1.211E-02	.1157	2.430E-04	1.531E-01	2	1550
160025.020	.177	[illegible]	9.771E-03	.9530	4.[illegible]8E-04	1.536E-01	1	1560
160025.045	.177	[illegible]	9.7[illegible]E-03	.2432	4.686E-04	1.530E-01	1	1570
160025.110	.161	[illegible]	1.094E-02	.730[illegible]	4.6[illegible]7E-04	1.544E-01	1	1580
160025.213	.17[illegible]	[illegible]	1.024E-02	.5770	4.313E-04	1.537E-01	1	1590
160025.411	.165	[illegible]	9.211E-03	.4881	3.889E-04	1.529E-01	1	1600
16002[illegible].512	.2[illegible]	[illegible]	[illegible].3[illegible]E-03	.3482	3.539E-04	1.526E-01	1	1610
16002[illegible]	.228	[illegible]	1.153E-02	.8428	2.902E-04	1.538E-01	3	1620
160026.345	.229	[illegible]	1.162E-02	.2335	2.871E-04	1.529E-01	3	1630
160026.11[illegible]	.201	[illegible]	1.33[illegible]E-02	.739[illegible]	3.2[illegible]5E-04	1.55[illegible]E-01	1	1640
160026.213	.217	[illegible]	1.236E-02	.5929	2.579E-04	1.538E-01	3	1650
160026.412	.236	[illegible]	1.092E-02	.2810	2.631E-04	1.521E-01	3	1660
160026.513	.251	[illegible]	1.[illegible]E-02	.2129	2.423E-04	1.519E-01	3	1670
160027.025	.152	[illegible]	1.[illegible]4E-02	.8393	5.159E-04	1.516E-01	1	1680
160027.103	.154	[illegible]	1.069E-02	.8160	[illegible].086E-04	1.535E-01	1	1690
160027.2[illegible]3	.163	[illegible]	9.99[illegible]E-03	.8749	4.756E-04	1.523E-01	1	1700
160027.219	.10[illegible]	[illegible]	1.0[illegible]E-02	.0[illegible]33	4.75[illegible]E-04	1.49[illegible]E-01	1	1710
160027.414	.178	[illegible]	9.029E-03	.8229	4.296E-04	1.50[illegible]E-01	2	1720
160027.513	.189	[illegible]	8.230E-03	.1965	3.316E-04	1.5[illegible]E-01	3	1730
160028.02[illegible]	.231	[illegible]	1.172E-02	.8493	2.99[illegible]E-04	1.549E-01	3	1740
160028.045	.231	[illegible]	1.172E-02	.2332	2.8[illegible]E-04	1.539E-01	3	1750
160028.11[illegible]	.2[illegible]	[illegible]	1.3[illegible]2E-02	.9298	[illegible]E-04	1.560E-01	1	1760
160028.210	.219	[illegible]	1.2[illegible]E-02	.[illegible]837	2.950E-04	1.548E-01	1	1770
160028.41[illegible]	.238	[illegible]	1.11[illegible]E-02	.3868	2.631E-04	1.531E-01	3	1780
160028.5[illegible]	.254	[illegible]	1.0[illegible]4E-02	.37[illegible]	2.425E-04	1.533E-01	3	1790
160029.[illegible]	.[illegible]5[illegible]	[illegible]	1.0[illegible]8E-02	.8472	4.710E-04	1.584E-01	3	1800
160029.047	.16[illegible]	[illegible]	1.[illegible]0E-02	.2089	4.793E-04	1.579E-01	3	1810
160029.112	.1[illegible]	[illegible]	1.07[illegible]E-02	.5[illegible]8[illegible]	5.035E-04	1.55[illegible]E-01	1	1820
160029.212	.165	[illegible]	1.0[illegible]E-02	.4394	4.7[illegible]9E-04	1.5[illegible]E-01	3	1830
160029.409	.19[illegible]	[illegible]	[illegible]E-03	.9032	4.246E-04	1.582E-01	3	1840
160029.50[illegible]	.193	[illegible]	[illegible].2[illegible]E-03	.8343	3.859E-04	1.581E-01	3	1850
160030.[illegible]18	.24[illegible]	[illegible]	1.032E-02	.796[illegible]	2.482E-04	1.537E-01	3	1860
160030.[illegible]43	.265	[illegible]	1.[illegible]1E-02	.2219	2.431E-04	1.529E-01	3	1870
160030.1[illegible]7	.2[illegible]	[illegible]	1.333E-02	1.1957	3.[illegible]8E-04	1.[illegible]E-01	1	1880
160030.2[illegible]	[illegible]	[illegible]	1.239E-02	1.4723	2.9[illegible]E-04	[illegible].[illegible]5E-01	3	1890
160030.406	.23[illegible]	[illegible]	1.094E-02	.7421	2.631E-04	1.527E-01	3	1900
16003[illegible].5[illegible]	.2[illegible]	[illegible]	1.0[illegible]E-02	.82[illegible]9	2.42[illegible]E-04	1.529E-01	3	191[illegible]
1600[illegible].916	.2[illegible]	[illegible]	1.0[illegible]E-02	.[illegible]14[illegible]	2.42[illegible]E-04	1.572E-01	3	1920
16003[illegible].[illegible]23	.1[illegible]2	[illegible]	1.378E-02	.8534	3.0[illegible]E-04	1.561E-01	2	1930
160031.048	.222	[illegible]	1.337E-02	.[illegible]57[illegible]	3.055E-04	1.5[illegible]1E-01	2	1940
160031.113	.2[illegible]	[illegible]	1.364E-02	.[illegible]22	3.187E-04	1.5[illegible]E-01	1	1950
16003[illegible].213	.22[illegible]	[illegible]	1.259E-02	.0[illegible]66	2.967E-04	1.739E-01	2	1960
160031.[illegible]09	.24[illegible]	[illegible]	1.122E-02	.7729	2.622E-04	1.55[illegible]E-01	[illegible]	1970
160031.[illegible]09	.26[illegible]	[illegible]	1.035E-02	.4425	2.418E-04	1.544E-01	3	1980
160032.021	.168	[illegible]	9.733E-03	.8898	4.599E-04	1.542E-01	2	1990
160032.[illegible]46	.158	[illegible]	9.732E-03	.2453	4.55[illegible]E-04	1.[illegible]6E-01	2	2000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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160032.1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1 2010
160032.211	.165	0.000	1.077E-02	.5955	4.719E-04	1.541E-01	1 2020
160032.409	.180	0.000	9.094E-03	.9145	4.235E-04	1.537E-01	2 2030
160032.507	.192	0.000	8.277E-03	.8519	3.878E-04	1.538E-01	3 2040
160033.019	.231	0.000	1.073E-02	.8655	2.643E-04	1.479E-01	3 2050
160033.044	.231	0.000	1.072E-02	.2526	2.642E-04	1.471E-01	3 2060
160033.108	.197	0.000	1.303E-02	1.0377	3.210E-04	1.500E-01	1 2070
160033.288	.212	0.000	1.212E-02	.8275	2.986E-04	1.496E-01	1 2080
160033.411	.231	0.000	1.072E-02	.6035	2.642E-04	1.465E-01	3 2090
160033.511	.248	0.000	9.858E-03	.5300	2.429E-04	1.461E-01	3 2100
160034.028	.171	0.000	9.499E-03	.8819	4.524E-04	1.558E-01	1 2110
160034.345	.171	0.000	9.498E-03	.2322	4.523E-04	1.550E-01	1 2120
160034.119	.155	0.000	1.072E-02	.7321	5.107E-04	1.567E-01	1 2130
160034.219	.163	0.000	1.003E-02	.6945	4.775E-04	1.560E-01	1 2140
160034.499	.179	0.000	9.049E-03	.8068	4.309E-04	1.553E-01	1 2150
160034.507	.190	0.000	9.248E-03	.9322	3.928E-04	1.584E-01	1 2160
160034.529	.190	0.000	8.246E-03	.8073	3.927E-04	1.532E-01	1 2170
160035.012	.536	0.000	2.604E-02	2.7752	3.136E-04	1.526E-01	3 2180
160035.112	.584	0.000	5.767E-02	1.1302	6.879E-04	1.532E-01	3 2190
160035.205	.613	0.000	6.945E-02	1.0510	8.284E-04	1.541E-01	3 2200
160035.217	.613	0.000	6.917E-02	.1165	8.250E-04	1.497E-01	3 2210
160035.412	.656	0.000	7.997E-02	.4652	9.526E-04	1.506E-01	3 2220
160035.509	.683	0.000	8.695E-02	.8281	1.037E-03	1.513E-01	3 2230
160035.519	.683	0.000	8.693E-02	.0190	1.037E-03	1.494E-01	3 2240
160036.019	.569	0.000	4.027E-02	1.6361	4.791E-04	1.548E-01	3 2250
160036.110	.586	0.000	5.800E-02	2.0756	6.901E-04	1.569E-01	3 2260
160036.120	.586	0.000	5.800E-02	.0253	6.901E-04	1.522E-01	3 2270
160036.216	.615	0.000	6.954E-02	.6898	8.274E-04	1.510E-01	3 2280
160036.411	.659	0.000	8.023E-02	.5528	9.545E-04	1.539E-01	3 2290
160036.506	.686	0.000	8.741E-02	.7308	1.040E-03	1.550E-01	3 2300
160036.516	.686	0.000	8.727E-02	.0527	1.038E-03	1.516E-01	3 2310
160037.007	.621	0.000	7.031E-02	.9816	8.325E-04	1.577E-01	3 2320
160037.105	.591	0.000	5.876E-02	1.2449	6.958E-04	1.599E-01	3 2330
160037.117	.591	0.000	5.877E-02	.1687	6.959E-04	1.552E-01	3 2340
160037.212	.621	0.000	7.042E-02	1.3404	8.338E-04	1.567E-01	3 2350
160037.409	.565	0.000	8.112E-02	.6250	9.605E-04	1.562E-01	3 2360
160037.419	.665	0.000	8.179E-02	.0838	9.608E-04	1.528E-01	3 2370
160037.514	.693	0.000	8.837E-02	.0964	1.043E-03	1.543E-01	3 2380
160038.005	.667	0.000	7.957E-02	.9399	9.394E-04	1.587E-01	3 2390
160038.015	.514	0.000	1.556E-02	1.4576	1.835E-04	1.595E-01	2 2400
160038.115	.597	0.000	5.966E-02	.1105	7.037E-04	1.572E-01	3 2410
160038.211	.626	0.000	7.147E-02	.9968	8.427E-04	1.584E-01	3 2420
160038.408	.673	0.000	8.216E-02	.7370	9.687E-04	1.577E-01	3 2430
160038.506	.701	0.000	8.918E-02	.7246	1.052E-03	1.583E-01	3 2440
160038.516	.701	0.000	8.914E-02	.0327	1.050E-03	1.553E-01	3 2450
160039.007	.623	0.000	7.061E-02	1.1709	8.357E-04	1.589E-01	3 2460
160039.105	.593	0.000	5.903E-02	1.2572	6.986E-04	1.614E-01	3 2470
160039.117	.593	0.000	5.913E-02	.0381	6.987E-04	1.560E-01	3 2480
160039.212	.623	0.000	7.072E-02	.8757	8.370E-04	1.578E-01	3 2490
160039.409	.667	0.000	8.141E-02	.6309	9.635E-04	1.571E-01	3 2500
160039.507	.695	0.000	8.845E-02	.7397	1.047E-03	1.575E-01	3 2510

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160040.008	.597	0.000	6.152E-02	1.2237	7.276E-04	1.607E-01	3 2530
160040.107	.592	0.000	5.890E-02	1.2727	6.966E-04	1.625E-01	3 2540
160040.116	.592	0.100	5.890E-02	.0355	6.966E-04	1.575E-01	3 2550
160040.215	.622	0.300	7.057E-02	1.0445	8.346E-04	1.580E-01	3 2560
160040.410	.566	0.000	8.123E-02	.0170	9.607E-04	1.588E-01	3 2570
160040.420	.666	0.000	8.122E-02	.0110	9.606E-04	1.552E-01	3 2580
160040.515	.694	0.300	8.821E-02	.0939	1.043E-03	1.566E-01	3 2590
160041.006	.528	0.300	7.362E-02	1.1357	8.832E-04	1.498E-01	3 2600
160041.103	.578	0.300	5.638E-02	1.3231	6.763E-04	1.515E-01	3 2610
160041.116	.575	0.300	5.641E-02	.2253	6.767E-04	1.474E-01	3 262
160041.211	.604	0.300	6.772E-02	1.2043	8.124E-04	1.494E-01	3 2630
160041.408	.646	0.300	7.852E-02	.7626	9.419E-04	1.484E-01	3 2640
160041.416	.646	0.300	7.847E-02	.1645	9.413E-04	1.451E-01	3 2650
160041.313	.672	0.000	8.561E-02	.2046	1.027E-03	1.468E-01	3 2660
160042.004	.552	0.300	7.917E-02	.9105	9.451E-04	1.516E-01	3 2670
160042.014	.512	0.000	1.747E-02	1.5366	2.086E-04	1.513E-01	2 2680
160042.114	.583	0.000	5.713E-02	.3173	6.820E-04	1.527E-01	3 2690
160042.210	.590	0.300	6.855E-02	1.0212	8.193E-04	1.517E-01	3 2700
160042.407	.652	0.000	7.938E-02	.8034	9.475E-04	1.512E-01	3 2710
160042.506	.679	0.300	8.648E-02	.7229	1.032E-03	1.512E-01	3 2720
160042.516	.579	0.000	8.635E-02	.8519	1.031E-03	1.483E-01	3 2730
160043.007	.266	0.000	6.716E-03	1.5530	3.164E-04	1.563E-01	2 2740
160043.017	.197	0.300	7.972E-03	.3661	3.756E-04	1.571E-01	1 2750
160043.105	.167	0.300	9.937E-03	.8323	4.682E-04	1.592E-01	1 2760
160043.207	.189	0.300	8.585E-03	.8044	4.045E-04	1.577E-01	1 2770
160043.309	.224	0.300	7.232E-03	.7500	3.408E-04	1.563E-01	2 2780
160043.409	.251	0.300	6.624E-03	1.1042	3.121E-04	1.558E-01	2 2790
160043.510	.292	0.000	6.943E-03	1.0787	3.271E-04	1.556E-01	2 2800
160044.007	.323	0.000	2.130E-02	1.9135	5.462E-04	1.483E-01	3 2810
160044.017	.248	0.300	9.435E-03	1.1213	2.420E-04	1.492E-01	2 2820
160044.105	.210	0.000	1.173E-02	.8674	3.008E-04	1.515E-01	2 2830
160044.207	.236	0.300	9.934E-03	.7866	2.548E-04	1.497E-01	2 2840
160044.312	.282	0.000	9.229E-03	.4536	2.367E-04	1.470E-01	2 2850
160044.412	.318	0.300	1.752E-02	.8674	4.494E-04	1.469E-01	2 2860
160044.512	.334	0.300	2.788E-02	.9500	7.150E-04	1.471E-01	3 2870
160045.008	.596	0.100	6.133E-02	1.3145	7.267E-04	1.549E-01	3 2880
160045.018	.458	0.300	1.410E-02	1.9085	1.671E-04	1.552E-01	2 2890
160045.107	.392	0.000	1.644E-02	.9029	1.948E-04	1.579E-01	2 2900
160045.207	.458	0.300	1.405E-02	1.2715	1.665E-04	1.558E-01	2 2910
160045.311	.529	0.300	2.163E-02	2.3134	2.564E-04	1.528E-01	3 2920
160045.411	.598	0.300	6.135E-02	.6003	7.270E-04	1.528E-01	3 2930
160045.511	.658	0.300	7.868E-02	.6199	9.324E-04	1.533E-01	3 2940
160046.007	.266	0.308	6.773E-03	2.6320	3.097E-04	1.590E-01	2 2950
160046.017	.198	0.300	7.988E-03	.3364	3.729E-04	1.592E-01	2 2960
160046.027	.321	0.300	7.398E-03	1.5590	3.452E-04	1.585E-01	2 2970
160046.037	.227	0.100	7.118E-03	1.2336	3.192E-04	1.587E-01	2 2980
160046.047	.166	0.000	1.010E-02	.4594	4.730E-04	1.584E-01	2 2990
160046.057	.266	0.300	6.770E-03	.5126	2.887E-04	1.580E-01	2 3000
160046.068	.193	0.300	8.598E-03	.1697	4.009E-04	1.581E-01	2 3010
160047.005	.342	0.000	7.273E-02	1.4762	7.939E-04	1.529E-01	2 3020
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160047.025	.196	[illegible]	1.335E-02	.8350	3.381E-04	1.541E-01	1	3040
160047.035	.313	[illegible]	1.396E-02	2.3359	3.355E-04	1.527E-01	2	3050
160047.045	.225	[illegible]	1.151E-02	.8127	2.796E-04	1.528E-01	2	3060
160047.055	.342	[illegible]	3.261E-02	.5315	7.735E-04	1.513E-01	2	3070
160047.065	.271	[illegible]	9.037E-03	1.0334	2.050E-04	1.515E-01	2	3080
160048.001	.597	[illegible]	5.840E-02	.7524	1.025E-03	1.575E-01	2	3090
160048.012	.345	[illegible]	2.665E-02	3.2303	3.103E-04	1.583E-01	2	3100
160048.022	.390	[illegible]	1.665E-02	1.0251	1.963E-04	1.601E-01	2	3110
160048.032	.624	[illegible]	7.992E-02	.5929	8.149E-04	1.571E-01	2	3120
160048.042	.477	[illegible]	1.366E-02	1.5228	1.610E-04	1.575E-01	2	3130
160048.053	.578	[illegible]	8.387E-02	.3908	9.331E-04	1.547E-01	2	3140
160048.063	.532	[illegible]	2.176E-02	1.6756	2.568E-04	1.548E-01	2	3150
160048.373	.382	[illegible]	1.696E-02	.2951	2.000E-04	1.561E-01	2	3160
160049.115	.401	[illegible]	1.064E-02	.3423	1.955E-04	1.603E-01	1	3170
160049.215	.468	[illegible]	1.425E-02	.6948	1.674E-04	1.597E-01	2	3180
160049.313	.546	[illegible]	2.220E-02	2.1973	2.678E-04	1.609E-01	2	3190
160049.409	.578	[illegible]	6.330E-02	.8557	7.435E-04	1.606E-01	2	3200
160049.506	.670	[illegible]	8.035E-02	.7494	9.512E-04	1.613E-01	3	3210
160049.516	.670	[illegible]	8.077E-02	.1051	9.487E-04	1.585E-01	3	3220
160050.113	.164	[illegible]	9.841E-03	.2889	4.749E-04	1.567E-01	1	3230
160050.211	.185	[illegible]	8.523E-03	.6570	4.113E-04	1.562E-01	1	3240
160050.312	.219	[illegible]	7.147E-03	.9641	3.449E-04	1.556E-01	2	3250
160050.410	.247	[illegible]	6.439E-03	2.0365	3.107E-04	1.555E-01	2	3260
160050.508	.290	[illegible]	6.522E-03	2.3974	3.148E-04	1.555E-01	2	3270
160051.107	.224	0.300	1.231E-02	.9203	2.945E-04	1.625E-01	1	3290
160051.203	.255	[illegible]	1.046E-02	.8215	2.488E-04	1.616E-01	1	3290
160051.308	.299	[illegible]	1.900E-02	2.4469	2.392E-04	1.604E-01	2	3300
160051.318	.299	0.000	1.002E-02	.0491	2.395E-04	1.573E-01	2	3310
160051.415	.341	[illegible]	2.213E-02	.4119	5.294E-04	1.579E-01	2	3320
160051.512	.351	[illegible]	3.617E-02	.8469	8.650E-04	1.584E-01	3	3330
160052.004	.300	[illegible]	6.655E-03	.9540	3.184E-04	1.562E-01	3	3340
160052.014	.217	[illegible]	7.283E-03	1.0196	3.484E-04	1.574E-01	2	3350
160052.024	.156	[illegible]	1.057E-02	.8764	5.055E-04	1.571E-01	1	3360
160052.114	.164	[illegible]	9.865E-03	.0115	4.719E-04	1.566E-01	1	3370
160052.309	.220	[illegible]	7.167E-03	.7225	3.429E-04	1.575E-01	3	3380
160052.509	.296	[illegible]	6.624E-03	.7262	3.169E-04	1.563E-01	3	3390
160053.006	.342	[illegible]	3.070E-02	.7826	7.461E-04	1.552E-01	3	3400
160053.016	.266	[illegible]	3.381E-03	.8764	2.280E-04	1.561E-01	3	3410
160053.103	.216	[illegible]	1.210E-02	.7976	2.940E-04	1.603E-01	1	3420
160053.207	.244	[illegible]	1.024E-02	.7444	2.488E-04	1.574E-01	2	3430
160053.313	.292	[illegible]	9.682E-03	.1364	2.353E-04	1.544E-01	3	3440
160053.514	.344	[illegible]	3.339E-02	.0196	8.115E-04	1.535E-01	3	3450
160054.011	.226	[illegible]	6.942E-03	3.0015	3.262E-04	1.535E-01	2	3460
160054.021	.156	[illegible]	9.733E-03	.9957	4.602E-04	1.546E-01	1	3470
160054.111	.166	[illegible]	9.932E-03	.6200	4.657E-04	1.555E-01	1	3480
160054.211	.188	[illegible]	8.530E-03	.9784	4.032E-04	1.538E-01	2	3490
160054.314	.223	[illegible]	7.226E-03	.8734	3.396E-04	1.529E-01	2	3500
160054.511	.292	[illegible]	6.321E-03	2.9399	3.252E-04	1.526E-01	2	3510
160055.303	.349	[illegible]	7.944E-02	1.1500	9.577E-04	1.492E-01	3	3520
160055.013	.292	[illegible]	4.724E-03	2.9953	2.363E-04	1.499E-01	2	3530

[illegible]	[illegible]	[illegible]	1.205E-02	.9436	[illegible]	[illegible]	2	3540
160055.113	.219	0.000	1.212E-02	.5534	2.943E-04	1.506E-01	2	3550
160055.215	.244	0.000	1.025E-02	.3573	2.438E-04	1.476E-01	2	3560
160055.316	.292	0.00	9.696E-03	1.0242	2.354E-04	1.474E-01	2	3570
160055.512	.344	0.000	3.356E-02	.7619	8.148E-04	1.479E-01	3	3580
160056.002	.579	0.000	6.486E-02	.0003	1.008E-03	1.430E-01	3	3590
160056.012	.538	0.000	2.619E-02	2.2732	3.110E-04	1.525E-01	3	3600
160056.022	.385	0.000	1.653E-02	1.1387	1.962E-04	1.554E-01	2	3610
160056.112	.389	0.000	1.637E-02	1.0785	1.943E-04	1.556E-01	2	3620
160056.212	.454	0.000	1.401E-02	2.4194	1.663E-04	1.523E-01	2	3630
160056.315	.525	0.000	2.143E-02	.9667	2.544E-04	1.499E-01	3	3640
160056.515	.651	0.000	7.794E-02	.5437	9.233E-04	1.516E-01	3	3650
160056.527	.651	0.000	7.793E-02	.0982	9.251E-04	1.482E-01	3	3660
160057.011	.318	0.000	1.215E-02	.6763	2.961E-04	1.525E-01	2	3670
160057.021	.222	0.10	1.194E-02	.8859	2.911E-04	1.542E-01	1	3680
160057.111	.219	0.00	1.212E-02	.9026	2.959E-04	1.549E-01	1	3690
160057.211	.244	0.000	1.025E-02	.6332	2.498E-04	1.529E-01	1	3700
160057.313	.292	0.000	9.634E-03	.6929	2.363E-04	1.513E-01	2	3710
160057.508	.344	0.100	3.347E-02	.6561	8.161E-04	1.516E-01	2	3720
160057.518	.344	0.000	3.353E-02	.0221	8.176E-04	1.502E-01	2	3730
160058.008	.397	0.000	6.154E-02	1.2674	7.333E-04	1.565E-01	3	3740
160058.018	.459	0.000	1.412E-02	.8699	1.675E-04	1.582E-01	1	3750
160058.107	.393	0.000	1.646E-02	1.9971	1.953E-04	1.617E-01	1	3760
160058.207	.459	0.000	1.407E-02	2.0772	1.669E-04	1.594E-01	1	3770
160058.310	.530	0.000	2.169E-02	2.7174	2.573E-04	1.561E-01	3	3780
160058.320	.530	0.000	2.170E-02	.0647	2.575E-04	1.524E-01	3	3790
160058.515	.657	0.000	7.892E-02	.0353	9.364E-04	1.533E-01	3	3800
160059.005	.367	0.000	3.797E-02	1.0913	8.697E-04	1.543E-01	3	3810
160059.015	.288	0.000	9.590E-03	1.0383	2.197E-04	1.548E-01	2	3820
160059.025	.268	0.000	1.386E-02	.9138	3.161E-04	1.565E-01	1	3830
160059.115	.231	0.000	1.248E-02	.2035	2.858E-04	1.544E-01	1	3840
160059.307	.308	0.000	1.044E-02	3.5161	2.391E-04	1.546E-01	2	3850
160059.317	.308	0.00	1.047E-02	.3542	2.399E-04	1.519E-01	2	3860
160059.512	.363	0.00	3.793E-02	.8152	9.667E-04	1.533E-01	3	3870
160060.002	.361	0.000	4.612E-02	.6791	1.092E-03	1.569E-01	2	3880
160060.012	.313	0.000	1.126E-02	.7012	2.668E-04	1.571E-01	2	3890
160060.022	.224	0.000	1.258E-02	.8278	2.979E-04	1.595E-01	1	3900
160060.112	.227	0.000	1.239E-02	.4603	2.933E-04	1.597E-01	1	3910
160060.212	.253	0.10	1.047E-02	.4588	2.479E-04	1.574E-01	1	3920
160060.316	.307	0.000	1.021E-02	.0372	2.417E-04	1.552E-01	2	3930
160060.513	.357	0.00	3.697E-02	.2672	8.732E-04	1.556E-01	2	3940
160061.004	.357	0.000	3.995E-02	.5735	9.475E-04	1.569E-01	3	3950
160061.014	.291	0.00	9.566E-03	.8529	2.267E-04	1.586E-01	2	3960
160061.024	.211	0.000	1.332E-02	.7837	3.169E-04	1.603E-01	1	3970
160061.114	.227	0.10	1.237E-02	.0636	2.935E-04	1.589E-01	1	3980
160061.307	.302	0.10	1.018E-02	.9355	2.406E-04	1.597E-01	3	3990
160061.506	.356	0.100	3.603E-02	.4349	8.688E-04	1.575E-01	3	4000
160061.516	.356	0.10	3.678E-02	.0155	8.723E-04	1.553E-01	3	4010
160062.030	.342	0.0	3.238E-02	.5644	5.339E-04	1.559E-01	3	4020
160062.019	.250	0.000	1.042E-02	.8722	2.482E-04	1.577E-01	2	4030
160062.107	.228	0.00	1.233E-02	.8977	2.935E-04	1.605E-01	1	4040
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	.930[illegible]	2.481E-04	[illegible]	2 4050
160062.309	.300	0.000	1.076E-02	.7585	2.393E-04	1.565E-01	3 4060
160062.509	.353	0.000	3.629E-02	.5229	8.041E-04	1.550E-01	3 4070
160063.003	.658	0.000	8.120E-02	.8799	9.695E-04	1.535E-01	3 4080
160063.013	.518	0.000	2.120E-02	1.0969	2.531E-04	1.543E-01	2 4090
160063.023	.372	0.000	1.671E-02	.9210	1.995E-04	1.556E-01	1 4100
160063.113	.384	0.000	1.624E-02	.2456	1.930E-04	1.547E-01	1 4110
160063.215	.447	0.000	1.399E-02	.8337	1.658E-04	1.500E-01	2 4120
160063.506	.540	0.000	7.676E-02	.8404	9.161E-04	1.531E-01	3 4130
160063.916	.640	0.000	7.658E-02	.8761	9.140E-04	1.497E-01	3 4140
160064.009	.324	0.000	1.664E-02	.6303	4.062E-04	1.529E-01	3 4150
160064.019	.233	0.000	1.052E-02	.8571	2.641E-04	1.549E-01	1 4160
160064.196	.217	0.000	1.295E-02	.8345	2.941E-04	1.572E-01	1 4170
160064.208	.243	0.000	1.019E-02	.8768	2.487E-04	1.552E-01	2 4180
160064.312	.292	0.000	9.637E-03	.3166	2.346E-04	1.522E-01	3 4190
160064.512	.342	0.000	3.248E-02	.3144	7.929E-04	1.518E-01	3 4200
160065.006	.676	0.000	8.057E-02	.9225	9.324E-04	1.617E-01	3 4210
160065.016	.513	0.000	1.432E-02	1.0508	1.657E-04	1.637E-01	2 4220
160065.103	.409	0.000	1.696E-02	.7822	1.951E-04	1.680E-01	1 4230
160065.203	.479	0.000	1.430E-02	.9404	1.664E-04	1.654E-01	2 4240
160065.310	.552	0.000	2.279E-02	1.0190	2.637E-04	1.618E-01	2 4250
160065.511	.686	0.000	8.297E-02	.5481	9.608E-04	1.598E-01	3 4260
160066.006	.279	0.000	6.066E-03	1.0268	3.023E-04	1.435E-01	3 4270
160066.016	.19[illegible]	0.000	7.435E-03	.8948	3.688E-04	1.445E-01	2 4280
160066.193	.160	0.000	9.719E-03	.8432	4.843E-04	1.464E-01	1 4290
160066.205	.150	0.000	8.456E-03	.8630	4.211E-04	1.454E-01	1 4300
160066.308	.214	0.000	7.046E-03	.6504	3.508E-04	1.442E-01	3 4310
160066.498	.243	0.000	6.210E-03	.7626	3.094E-04	1.435E-01	3 4320
160066.509	.288	0.000	5.999E-03	.6271	2.989E-04	1.432E-01	3 4330
160067.005	.352	0.000	3.634E-02	.6959	8.669E-04	1.532E-01	2 4340
160067.015	.279	0.000	9.356E-03	.8920	2.232E-04	1.542E-01	1 4350
160067.025	.202	0.000	1.365E-02	.8969	3.256E-04	1.540E-01	1 4360
160067.115	.224	0.000	1.232E-02	.8327	2.939E-04	1.526E-01	1 4370
160067.309	.299	0.000	1.001E-02	.5265	2.389E-04	1.536E-01	2 4380
160067.410	.341	0.000	2.215E-02	.3700	5.264E-04	1.525E-01	2 4390
160067.511	.352	0.000	3.619E-02	.3361	8.635E-04	1.528E-01	2 4400
160068.006	.632	0.000	7.425E-02	1.0418	8.899E-04	1.523E-01	3 4410
160068.016	.481	0.000	1.369E-02	1.1048	1.640E-04	1.530E-01	2 4420
160068.103	.385	0.000	1.625E-02	.9482	1.948E-04	1.502E-01	1 4430
160068.205	.448	0.000	1.396E-02	.9573	1.661E-04	1.561E-01	2 4440
160068.309	.518	0.00	2.116E-02	.9337	2.523E-04	1.523E-01	2 4450
160068.410	.584	0.000	5.934E-02	.8534	7.136E-04	1.513E-01	3 4460
160068.510	.641	0.000	7.672E-02	.6571	9.195E-04	1.512E-01	3 4470
160069.005	.644	0.000	7.699E-02	.9960	9.239E-04	1.546E-01	3 4480
160069.015	.499	0.000	1.518E-02	1.23[illegible]	1.821E-04	1.554E-01	2 4490
160069.029	.357	0.000	1.739E-02	.9992	2.087E-04	1.562E-01	1 4500
160069.203	.453	0.00	1.398E-02	.9708	1.665E-04	1.575E-01	2 4510
160069.310	.320	0.00	2.119E-02	.9788	2.542E-04	1.542E-01	2 4520
160069.411	.586	0.000	5.905E-02	.6879	7.185E-04	1.534E-01	3 4530
160069.512	.644	0.000	7.709E-02	.3331	9.250E-04	1.534E-01	3 4540
160070.007	.266	[illegible]	6.781E-03	.9627	3.172E-04	1.566E-01	2 4550

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
160070.105	.167	0.000	9.955E-03	.7999	4.671E-04	1.577E-01	1 4570
160070.207	.189	0.000	8.596E-03	.7343	4.033E-04	1.563E-01	1 4580
160070.313	.224	0.000	7.249E-03	.4617	3.401E-04	1.557E-01	2 4590
160070.411	.252	0.000	6.666E-03	.4288	3.124E-04	1.559E-01	2 4600
160070.511	.292	0.000	7.023E-03	.4145	3.293E-04	1.563E-01	2 4610
160071.007	.129	0.000	2.298E-02	.8346	5.680E-04	1.467E-01	2 4620
160071.017	.251	0.000	9.577E-03	.9943	2.378E-04	1.468E-01	1 4630
160071.105	.214	0.000	1.199E-02	.8312	2.941E-04	1.504E-01	1 4640
160071.205	.239	0.000	1.076E-02	.9657	2.489E-04	1.491E-01	1 4650
160071.309	.286	0.000	9.416E-03	.4860	2.330E-04	1.462E-01	2 4660
160071.410	.324	0.000	1.875E-02	.4424	4.639E-04	1.459E-01	2 4670
160071.511	.339	0.000	3.022E-02	.4051	7.476E-04	1.463E-01	2 4680
160072.006	.281	0.000	6.547E-03	.9959	3.128E-04	1.531E-01	3 4690
160072.016	.201	0.000	7.433E-03	.8832	3.575E-04	1.537E-01	3 4700
160072.103	.164	0.000	9.833E-03	.8308	4.707E-04	1.556E-01	1 4710
160072.203	.165	0.000	8.537E-03	.8581	4.079E-04	1.548E-01	1 4720
160072.309	.227	0.000	7.158E-03	.5405	3.420E-04	1.532E-01	3 4730
160072.409	.248	0.000	6.464E-03	.6932	3.088E-04	1.529E-01	3 4740
160072.511	.290	0.000	6.577E-03	.5246	3.142E-04	1.529E-01	3 4750
160073.007	.338	0.000	2.476E-02	.9386	6.065E-04	1.529E-01	3 4760
160073.017	.255	0.000	9.726E-03	.9959	2.388E-04	1.537E-01	2 4770
160073.105	.217	0.000	1.205E-02	.8524	2.959E-04	1.566E-01	1 4780
160073.205	.243	0.000	1.019E-02	.9458	2.503E-04	1.551E-01	2 4790
160073.309	.291	0.000	9.617E-03	.5200	2.361E-04	1.529E-01	3 4800
160073.410	.330	0.000	2.005E-02	.5639	4.923E-04	1.524E-01	3 4810
160073.511	.342	0.000	3.267E-02	.5214	8.020E-04	1.525E-01	3 4820
160074.006	.637	0.000	7.493E-02	1.0169	8.924E-04	1.547E-01	3 4830
160074.016	.484	0.000	1.376E-02	1.1148	1.638E-04	1.556E-01	2 4840
160074.103	.387	0.000	1.632E-02	.8176	1.943E-04	1.598E-01	1 4850
160074.205	.451	0.000	1.392E-02	.9379	1.658E-04	1.578E-01	2 4860
160074.309	.522	0.000	2.124E-02	1.2492	2.529E-04	1.542E-01	2 4870
160074.410	.588	0.000	6.016E-02	.9021	7.165E-04	1.534E-01	3 4880
160074.511	.546	0.000	7.738E-02	.5952	9.217E-04	1.537E-01	3 4890
160075.012	.225	0.000	7.066E-03	.9213	3.327E-04	1.559E-01	2 4900
160075.022	.164	0.000	1.006E-02	.9162	4.734E-04	1.587E-01	1 4910
160075.112	.155	0.000	1.075E-02	.3230	5.062E-04	1.598E-01	1 4920
160075.212	.164	0.000	1.005E-02	.3255	4.733E-04	1.581E-01	1 4930
160075.313	.180	0.000	9.069E-03	.1124	4.270E-04	1.567E-01	2 4940
160075.511	.192	0.000	8.263E-03	.4757	3.890E-04	1.572E-01	2 4950
160076.012	.302	0.000	1.057E-02	.8366	2.559E-04	1.534E-01	2 4960
160076.022	.216	0.000	1.232E-02	[illegible]	2.982E-04	1.565E-01	1 4970
160076.112	.201	0.000	1.324E-02	.3741	3.207E-04	1.567E-01	1 4980
160076.212	.216	0.000	1.231E-02	.3502	2.981E-04	1.556E-01	1 4990
160076.316	.235	0.000	1.088E-02	.0143	2.634E-04	1.529E-01	2 5000
160076.511	[illegible]	0.000	1.001E-02	.5466	2.425E-04	1.547E-01	2 5010
160077.012	.531	0.000	2.573E-02	1.0932	3.077E-04	1.542E-01	3 5020
160077.022	[illegible]	0.000	1.644E-02	.9496	1.962E-04	1.577E-01	2 5030
160077.112	.359	0.000	1.719E-02	.3965	2.057E-04	1.573E-01	2 5040
160077.212	[illegible]	0.000	1.640E-02	.5648	1.962E-04	1.558E-01	2 5050
160077.313	[illegible]	0.000	1.471E-02	.8795	1.739E-04	1.516E-01	2 5060
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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[illegible]	[illegible]	[illegible]	1.335E-2	[illegible]	1.634E-04	1.594E-01	2	[illegible]
160078.019	.180	0.000	9.635E-03	.8231	4.238E-04	1.593E-01	2	5080
160078.044	.160	0.000	9.635E-03	.2475	4.238E-04	1.586E-01	2	5090
160078.108	.156	0.000	1.077E-02	.8533	5.024E-04	1.613E-01	1	5100
160078.208	.168	0.000	1.007E-02	.7872	4.699E-04	1.602E-01	1	5110
160078.313	.180	0.000	9.085E-03	.1334	4.238E-04	1.575E-01	1	5120
160078.412	.184	0.000	8.856E-03	.2678	4.131E-04	1.583E-01	2	5130
160079.023	.219	0.000	1.270E-02	.8648	3.068E-04	1.563E-01	3	5140
160079.048	.219	0.000	1.269E-02	.2642	3.068E-04	1.552E-01	3	5150
160079.113	.201	0.000	1.329E-02	.2967	3.293E-04	1.560E-01	1	5160
160079.306	.235	0.000	1.088E-02	.0310	2.629E-04	1.652E-01	3	5170
160079.320	.235	0.000	1.088E-02	.9968	2.630E-04	1.517E-01	3	5180
160079.515	.258	0.000	1.022E-02	.9127	2.422E-04	1.527E-01	3	5190
160080.025	.196	0.000	1.331E-02	.9365	3.250E-04	1.552E-01	1	5200
160080.050	.196	0.000	1.331E-02	.2452	3.250E-04	1.541E-01	1	5210
160080.115	.199	0.000	1.313E-02	.0237	3.235E-04	1.535E-01	1	5220
160080.309	.233	0.000	1.079E-02	.6754	2.635E-04	1.545E-01	2	5230
160080.510	.249	0.000	9.932E-03	.5475	2.425E-04	1.535E-01	3	5240
160081.020	.173	0.000	9.568E-03	.9351	4.454E-04	1.567E-01	1	5250
160081.045	.173	0.000	9.568E-03	.2170	4.453E-04	1.561E-01	1	5260
160081.110	.157	0.000	1.050E-02	.6625	5.026E-04	1.576E-01	1	5270
160081.210	.165	0.000	1.010E-02	.5630	4.791E-04	1.569E-01	1	5280
160081.312	.181	0.000	9.105E-03	.2441	4.238E-04	1.552E-01	1	5290
160081.510	.194	0.000	9.293E-03	.5516	3.860E-04	1.558E-01	2	5300
160082.020	.171	0.000	9.597E-03	.9900	4.582E-04	1.538E-01	1	5310
160082.045	.171	0.000	9.506E-03	.2258	4.591E-04	1.531E-01	1	5320
160082.110	.155	0.000	1.073E-02	.7675	5.082E-04	1.551E-01	1	5330
160082.210	.164	0.000	1.003E-02	.6735	4.752E-04	1.542E-01	1	5340
160082.311	.179	0.000	9.056E-03	.0013	4.288E-04	1.696E-01	1	5350
160082.508	.191	0.000	9.253E-03	.8558	3.908E-04	1.533E-01	2	5360
160083.018	.243	0.000	1.021E-02	.8525	2.408E-04	1.506E-01	2	5370
160083.043	.243	0.000	1.020E-02	.2047	2.407E-04	1.496E-01	2	5380
160083.107	.222	0.000	1.312E-02	.9565	3.211E-04	1.543E-01	1	5390
160083.207	.218	0.000	1.225E-02	.7667	2.959E-04	1.526E-01	1	5400
160083.312	.234	0.000	1.053E-02	.2699	2.639E-04	1.488E-01	1	5410
160083.510	.249	0.000	9.957E-03	.5413	2.429E-04	1.496E-01	2	5420
160084.020	.229	0.000	1.167E-02	.7394	2.809E-04	1.544E-01	3	5430
160084.045	.229	0.000	1.166E-02	.2320	2.808E-04	1.535E-01	3	5440
160084.110	.202	0.000	1.335E-02	.8292	3.214E-04	1.563E-01	2	5450
160084.210	.218	0.000	1.241E-02	.7066	2.987E-04	1.550E-01	3	5460
160084.313	.237	0.000	1.096E-02	.1918	2.637E-04	1.516E-01	3	5470
160084.512	.252	0.000	1.009E-02	.4722	2.430E-04	1.527E-01	3	5480
160085.022	.161	0.000	9.956E-03	.7734	4.795E-04	1.521E-01	1	5490
160085.047	.161	0.000	9.954E-03	.2361	4.795E-04	1.515E-01	1	5500
160085.112	.152	0.000	1.055E-02	.4744	5.131E-04	1.529E-01	1	5510
160085.212	.161	0.000	9.952E-03	.3818	4.794E-04	1.516E-01	1	5520
160085.314	.176	0.000	8.993E-03	.0512	4.332E-04	1.500E-01	1	5530
160085.512	.187	0.000	9.230E-03	[illegible]	3.940E-04	1.504E-01	2	5540
160086.012	.224	0.000	7.047E-03	1.5521	3.331E-04	1.544E-01	2	5550
160086.022	.164	0.000	1.034E-02	1.0749	4.746E-04	1.560E-01	1	5560
160086.112	.155	0.000	1.073E-02	.3485	5.074E-04	1.564E-01	1	5570

160086.212	.164	0.000	1.034E-02	.4399	4.744E-04	1.556E-01	1	5580
160086.310	.179	0.000	9.057E-03	.8148	4.281E-04	1.554E-01	2	5590
160086.505	.191	0.000	9.256E-03	.7766	3.913E-04	1.556E-01	2	5600
160087.006	.348	0.000	7.299E-02	1.4151	7.874E-04	1.543E-01	2	5610
160087.016	.271	0.000	9.539E-03	3.4247	2.284E-04	1.550E-01	2	5620
160087.103	.204	0.000	1.342E-02	.9611	3.214E-04	1.593E-01	2	5630
160087.203	.219	0.000	1.246E-02	.9343	2.984E-04	1.579E-01	2	5640
160087.217	.219	0.000	1.247E-02	.8110	2.966E-04	1.543E-01	2	5650
160087.317	.239	0.000	1.131E-02	.6481	2.636E-04	1.529E-01	2	5660
160087.512	.254	0.000	1.018E-02	1.5737	2.439E-04	1.548E-01	2	5670
160088.012	.527	0.000	2.549E-02	2.9959	3.057E-04	1.530E-01	2	5680
160088.022	.378	0.000	1.634E-02	2.4392	1.969E-04	1.575E-01	2	5690
160088.112	.357	0.000	1.713E-02	.1419	2.055E-04	1.582E-01	2	5700
160088.212	.378	0.000	1.634E-02	1.3266	1.969E-04	1.559E-01	2	5710
160089.310	.422	0.000	1.465E-02	4.4999	1.757E-04	1.550E-01	2	5720
160088.507	.453	0.000	1.358E-02	5.3591	1.629E-04	1.552E-01	2	5730
160089.007	.264	0.000	6.571E-03	.9879	3.120E-04	1.554E-01	3	5740
160089.017	.194	0.000	7.935E-03	.9741	3.768E-04	1.562E-01	3	5750
160089.105	.154	0.000	1.071E-02	.9309	5.086E-04	1.587E-01	2	5760
160089.205	.163	0.000	1.002E-02	.9231	4.756E-04	1.577E-01	2	5770
160089.308	.178	0.000	9.044E-03	.7743	4.294E-04	1.568E-01	3	5780
160089.508	.198	0.000	8.243E-03	.8183	3.914E-04	1.563E-01	3	5790
160090.008	.338	0.000	2.084E-02	1.3221	5.046E-04	1.537E-01	3	5800
160090.018	.245	0.000	1.027E-02	1.0456	2.487E-04	1.552E-01	2	5810
160090.107	.201	0.000	1.327E-02	.8960	3.213E-04	1.579E-01	2	5820
160090.207	.216	0.000	1.233E-02	.8321	2.996E-04	1.564E-01	2	5830
160090.312	.235	0.000	1.090E-02	.3562	2.639E-04	1.532E-01	2	5840
160090.513	.251	0.000	1.013E-02	.2872	2.430E-04	1.531E-01	3	5850
160091.009	.581	0.000	5.055E-02	1.4867	5.975E-04	1.540E-01	3	5860
160091.108	.592	0.000	5.853E-02	1.2350	6.953E-04	1.559E-01	3	5870
160091.311	.521	0.000	7.050E-02	.9796	8.333E-04	1.543E-01	3	5880
160091.406	.666	0.000	8.173E-02	.8481	9.613E-04	1.530E-01	3	5890
160091.416	.566	0.000	8.115E-02	.3178	9.531E-04	1.506E-01	3	5900
160091.513	.694	0.000	5.814E-02	.3382	1.042E-03	1.588E-01	3	5910
160092.003	.554	0.000	8.871E-02	.9285	9.665E-04	1.524E-01	3	5920
160092.013	.515	0.000	2.135E-02	1.0933	2.521E-04	1.527E-01	2	5930
160092.113	.375	0.000	5.636E-02	.5795	6.752E-04	1.524E-01	3	5940
160092.315	.607	0.000	6.757E-02	.2389	8.103E-04	1.503E-01	3	5950
160092.410	.545	0.000	7.842E-02	.8317	9.392E-04	1.507E-01	3	5960
160092.506	.572	0.000	8.568E-02	.7723	1.026E-03	1.520E-01	3	5970
160092.516	.672	0.000	8.555E-02	.1101	1.024E-03	1.479E-01	3	5980
160093.006	.653	0.000	7.727E-02	.9904	9.085E-04	1.590E-01	3	5990
160093.103	.597	0.000	5.960E-02	1.2337	7.008E-04	1.537E-01	3	6000
160093.307	.527	0.000	7.155E-02	1.0321	8.412E-04	1.589E-01	3	6010
160093.318	.627	0.000	7.139E-02	.0230	8.393E-04	1.547E-01	3	6020
160093.413	.372	0.000	8.212E-02	.6531	9.643E-04	1.553E-01	3	6030
160093.508	.781	0.000	6.931E-02	.7372	1.047E-03	1.570E-01	3	6040
160093.516	.741	0.000	9.996E-02	.1447	1.346E-03	1.532E-01	3	6050

AMES 3.5 FT HWT TEST (0), C.B. BLUMER, IN-LINE RSI GAP RUN(0) 1973 PAGE 0

CONDUCTION CORRECTED HL USED IN HLCC/HREF AND HLC/HEC WHEN AVAILABLE,OTHERWISE (HL) IS USED
CONDUCTION CORRECTED HL USED IN HLCC/HREF AND HLC/HEC WHEN AVAILABLE,OTHERWISE (HL) IS USED

	G-CF	LOC	X	Y	Z	X(BAR)	HLC/HEC	A(RAD)	GAP	STEP	FLOW-L	GAP-D	PATN	MACH	RE/M	M-THK
160001.011	1	3	97.12	-.51	0.00	60.965	1.000	0.00	0.000	0.000	60.97	0.000	1	5.10	1.658E+06	.029
160001.021	1	3	48.36	-.51	0.00	12.705	1.000	0.00	0.000	0.000	12.71	0.000	1	5.10	1.658E+06	.020
160001.203	1	3	61.56	1.52	0.00	25.400	1.336	0.00	0.000	0.000	25.40	0.000	1	5.10	1.658E+06	.022
160001.306	1	3	86.36	.75	0.00	50.800	.959	0.00	0.000	0.000	50.80	0.000	1	5.10	1.658E+06	.026
160001.406	1	3	112.36	.75	0.00	76.200	.967	0.00	0.000	0.000	76.20	0.000	1	5.10	1.658E+06	.034
160001.506	1	3	125.16	.75	0.00	88.900	.968	0.00	0.000	0.000	88.90	0.000	1	5.10	1.658E+06	.041
160002.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	0.000	0.000	86.40	0.000	1	5.10	3.318E+06	.042
160002.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	0.000	0.000	35.57	0.000	1	5.10	3.318E+06	.032
160002.103	1	3	47.59	1.52	0.00	11.430	1.075	0.00	0.000	0.000	11.43	0.000	1	5.10	3.318E+06	.026
160002.301	1	3	86.36	2.03	0.00	50.800	.966	0.00	0.000	0.000	50.80	0.000	1	5.10	3.318E+06	.036
160002.401	1	3	112.36	2.03	0.00	76.200	.941	0.00	0.000	0.000	76.20	0.000	1	5.10	3.318E+06	.041
160002.501	1	3	125.16	2.03	0.00	88.900	.975	0.00	0.000	0.000	88.90	0.000	1	5.10	3.318E+06	.043
160003.001	1	3	135.24	-.51	0.00	99.083	1.000	0.00	0.000	0.000	99.08	0.000	1	5.10	1.574E+06	.047
160003.012	1	3	92.14	-.51	0.00	55.888	1.000	0.00	0.000	0.000	55.89	0.000	1	5.10	1.574E+06	.027
160003.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	0.000	0.000	10.15	0.000	1	5.10	1.574E+06	.019
160003.205	1	3	61.56	1.02	0.00	25.400	1.077	0.00	0.000	0.000	25.40	0.000	1	5.10	1.574E+06	.022
160003.307	1	3	86.96	.51	0.00	50.800	.928	0.00	0.000	0.000	50.80	0.000	1	5.10	1.574E+06	.026
160003.407	1	3	112.36	.51	0.00	76.200	.859	0.00	0.000	0.000	76.20	0.000	1	5.10	1.574E+06	.034
160003.507	1	3	125.06	.51	0.00	88.900	.772	0.00	0.000	0.000	88.90	0.000	1	5.10	1.574E+06	.041
160004.008	1	3	112.37	-.51	0.00	76.218	1.000	0.00	0.000	0.000	76.22	0.000	1	5.10	1.687E+06	.034
160004.018	1	3	51.56	-.51	0.00	25.403	1.000	0.00	0.000	0.000	25.40	0.000	1	5.10	1.687E+06	.022
160004.107	1	3	47.59	.51	0.00	11.430	.923	0.00	0.000	0.000	11.43	0.000	1	5.10	1.687E+06	.019
160004.303	1	3	86.36	1.52	0.00	50.800	1.161	0.00	0.000	0.000	50.80	0.000	1	5.10	1.687E+06	.027
160004.403	1	3	112.36	1.52	0.00	76.200	1.027	0.00	0.000	0.000	76.20	0.000	1	5.10	1.687E+06	.034
160004.503	1	3	125.06	1.52	0.00	88.900	1.025	0.00	0.000	0.000	88.90	0.000	1	5.10	1.687E+06	.041
160005.004	1	3	127.63	-.51	0.00	91.470	1.000	0.00	0.000	0.000	91.47	0.000	1	5.10	3.179E+06	.043
160005.014	1	3	81.33	-.51	0.00	45.725	1.000	0.00	0.000	0.000	45.73	0.000	1	5.10	3.179E+06	.034
160005.024	1	3	41.24	-.51	0.00	5.080	1.000	0.00	0.000	0.000	5.08	0.000	1	5.10	3.179E+06	.024
160005.208	1	3	61.56	.25	0.00	25.400	.771	0.00	0.000	0.000	25.40	0.000	1	5.10	3.179E+06	.029
160005.309	1	3	86.96	.15	0.00	50.800	.551	0.00	0.000	0.000	50.80	0.000	1	5.10	3.179E+06	.035
160005.409	1	3	112.36	.15	0.00	76.200	.564	0.00	0.000	0.000	76.20	0.000	1	5.10	3.179E+06	.040
160005.509	1	3	125.16	.15	0.00	88.900	.444	0.00	0.000	0.000	88.90	0.000	1	5.10	3.179E+06	.042
160006.010	1	3	102.20	-.51	0.00	66.045	1.000	0.00	.127	0.000	66.05	2.032	1	5.10	1.624E+06	.030
160006.020	1	3	51.39	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	2.032	1	5.10	1.624E+06	.020
160006.030	1	3	125.10	0.00	.25	88.336	.392	0.00	.127	0.000	88.94	2.032	1	5.10	1.624E+06	.041
160006.040	1	3	76.30	0.00	.25	40.645	.368	0.00	.127	0.000	40.65	2.032	1	5.10	1.624E+06	.024
160006.050	1	3	38.70	0.00	.25	2.545	.341	0.00	.127	0.000	2.55	2.032	1	5.10	1.624E+06	.017
160006.060	1	3	102.20	0.00	.51	66.045	.353	0.00	.127	0.000	66.05	2.032	1	5.10	1.624E+06	.030
160006.074	1	3	41.24	0.00	.51	5.080	.033	0.00	.127	0.000	5.08	2.032	1	5.10	1.624E+06	.018
160007.010	1	3	102.20	-.51	0.00	66.045	1.000	0.00	.127	0.000	66.05	2.032	1	5.10	3.270E+06	.030
160007.020	1	3	51.39	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	2.032	1	5.10	3.270E+ 5	.027
160007.030	1	3	125.10	0.0	.25	88.936	.630	0.00	.127	0.000	88.94	2.032	1	5.10	3.270E+06	.042
160007.040	1	3	76.80	0.00	.25	40.645	.587	0.00	.127	0.000	40.65	2.032	1	5.10	3.270E+06	.033
160007.050	1	3	38.70	0.00	.25	2.545	.259	0.00	.127	0.000	2.55	2.032	1	5.10	3.270E+06	.024
160007.060	1	3	102.20	0.0	.51	66.045	.301	0.00	.127	0.000	66.05	2.032	1	5.10	3.270E+06	.038

[illegible]	1	3	[illegible]	[illegible]	.51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	.020
160098.008	1	3	112.37	-.51	0.00	76.218	1.000	0.00	.127	0.000	76.22	2.032	1	5.10	6.359E+06	.064
160008.018	1	3	61.56	-.51	0.00	25.403	1.000	0.00	.127	0.000	25.40	2.032	1	5.10	6.359E+06	.049
160008.028	1	3	137.16	0.00	.25	94.008	.624	0.00	.127	0.000	94.01	2.032	1	5.10	6.359E+06	.070
160008.038	1	3	96.36	0.00	.25	50.808	.672	0.00	.127	0.000	50.81	2.032	1	5.10	6.359E+06	.056
160008.048	1	3	43.77	0.00	.25	7.613	.283	0.00	.127	0.000	7.61	2.032	1	5.10	6.359E+06	.041
160008.059	1	3	117.31	0.00	.51	71.159	.359	0.00	.127	0.000	71.15	2.032	1	5.10	6.359E+06	.062
160008.069	1	3	56.48	0.00	.51	20.323	.433	0.00	.127	0.000	20.32	2.032	1	5.10	6.359E+06	.047
160009.112	1	3	47.59	0.00	.25	11.433	.339	0.00	.127	0.000	11.43	2.032	1	5.10	1.656E+06	.019
160009.207	1	3	61.56	.51	0.00	25.400	1.000	0.00	.127	0.000	25.40	2.032	1	5.10	1.656E+06	.022
160009.307	1	3	96.36	.51	0.00	50.803	1.000	0.00	.127	0.000	50.80	2.032	1	5.10	1.656E+06	.026
160009.406	1	3	112.35	.75	0.00	76.203	.398	0.00	.127	0.000	76.20	2.032	1	5.10	1.656E+06	.034
160009.507	1	3	125.36	.51	0.00	88.903	1.000	0.00	.127	0.000	88.90	2.032	1	5.10	1.656E+06	.041
160010.109	1	3	47.59	.25	0.00	11.430	.910	0.00	.127	0.000	11.43	2.032	1	5.10	3.112E+06	.025
160010.119	1	3	47.59	0.00	1.90	11.433	.001	0.00	.127	0.000	11.43	2.032	1	5.10	3.112E+06	.025
160010.214	1	3	61.56	0.00	.64	25.403	.114	0.00	.127	0.000	25.40	2.032	1	5.10	3.112E+06	.029
160010.312	1	3	96.36	0.00	.25	50.800	.968	0.00	.127	0.000	50.80	2.032	1	5.10	3.112E+06	.035
160010.411	1	3	112.36	0.00	.15	76.200	.761	0.00	.127	0.000	76.20	2.032	1	5.10	3.112E+06	.040
160010.510	1	3	125.36	.04	.04	88.900	.896	0.00	.127	0.000	88.90	2.032	1	5.10	3.112E+06	.042
160011.108	1	3	47.59	.25	0.00	11.430	1.013	0.00	.127	0.000	11.43	2.032	1	5.10	6.430E+06	.044
160011.119	1	3	47.59	0.00	1.90	11.430	.002	0.00	.127	0.000	11.43	2.032	1	5.10	6.430E+06	.044
160011.215	1	3	51.56	0.00	.89	25.403	.370	0.00	.127	0.000	25.40	2.032	1	5.10	6.430E+06	.058
160011.310	1	3	56.36	.04	.04	50.800	.922	0.00	.127	0.000	50.80	2.032	1	5.10	6.430E+06	.057
160011.407	1	3	112.36	.51	0.00	76.203	1.000	.00	.127	0.000	76.20	2.032	1	5.10	6.430E+06	.065
160011.417	1	3	112.35	0.00	1.40	76.203	.362	0.00	.127	0.000	76.20	2.032	1	5.10	6.430E+06	.065
160011.513	1	3	125.36	0.00	.38	88.900	.577	0.00	.127	0.000	88.90	2.032	1	5.10	6.430E+06	.070
160012.005	1	3	125.39	-.51	0.00	88.936	1.000	0.00	0.000	0.000	88.94	0.000	1	5.10	6.579E+06	.071
160012.015	1	3	76.30	-.51	0.00	40.645	1.000	0.00	0.000	0.000	40.65	0.000	1	5.10	6.579E+06	.055
160012.025	1	3	38.70	-.51	0.00	2.545	1.000	0.00	0.000	0.000	2.55	0.000	1	5.10	6.579E+06	.039
160012.210	1	3	61.56	.04	.04	25.403	.462	0.00	0.000	0.000	25.40	0.000	1	5.10	6.579E+06	.051
160012.310	1	3	56.36	.04	.04	50.800	.423	0.00	0.000	0.000	50.80	0.000	1	5.10	6.579E+06	.058
160012.410	1	3	112.36	.04	.04	76.200	.428	0.00	0.000	0.000	76.20	0.000	1	5.10	6.579E+06	.066
160012.510	1	3	125.36	.04	.04	88.900	.447	0.00	0.000	0.000	88.90	0.000	1	5.10	6.579E+06	.071
160013.011	1	3	97.12	-.51	0.00	60.965	1.000	0.00	.127	0.000	60.97	3.810	1	5.10	6.335E+06	.060
160013.021	1	3	48.36	-.51	0.00	12.705	1.000	0.00	.127	0.000	12.71	3.810	1	5.10	6.335E+06	.044
160013.111	1	3	47.59	0.00	.15	11.430	.562	0.00	.127	0.000	11.43	3.810	1	5.10	6.335E+06	.043
160013.211	1	3	61.56	0.00	.15	25.400	.761	0.00	.127	0.000	25.40	3.810	1	5.10	6.335E+06	.049
160013.311	1	3	96.36	0.00	.15	50.800	.626	0.00	.127	0.000	50.80	3.810	1	5.10	6.335E+06	.056
160013.507	1	3	125.36	.51	0.00	88.900	.836	0.00	.127	0.000	88.90	3.810	1	5.10	6.335E+06	.069
160013.517	1	3	125.36	0.00	1.40	88.900	.072	0.00	.127	0.000	88.90	3.810	1	5.10	6.335E+06	.069
160014.009	1	3	107.31	-.51	0.00	71.150	1.000	0.00	.127	0.000	71.15	3.810	1	5.10	3.411E+06	.040
160014.019	1	3	56.48	-.51	0.00	20.323	1.000	0.00	.127	0.000	20.32	3.810	1	5.10	3.411E+06	.029
160014.108	1	3	47.59	.25	0.00	11.430	.849	0.00	.127	0.000	11.43	3.810	1	5.10	3.411E+06	.027
160014.210	1	3	61.56	.04	.04	25.400	.597	0.00	.127	0.000	25.40	3.810	1	5.10	3.411E+06	.030
160014.312	1	3	96.36	0.00	.25	50.800	.334	0.00	.127	0.000	50.80	3.810	1	5.10	3.411E+06	.036
160014.511	1	3	125.35	0.00	.15	88.900	.719	0.00	.127	0.000	88.90	3.810	1	5.10	3.411E+06	.043
160015.005	1	3	125.39	-.51	0.00	88.936	1.000	0.00	.127	0.000	88.94	3.810	1	5.10	1.707E+06	.041
160015.015	1	3	76.30	-.51	0.00	40.645	1.000	0.00	.127	0.000	40.65	3.810	1	5.10	1.707E+06	.025
160015.025	1	3	38.70	-.51	0.00	2.545	1.000	0.00	.127	0.000	2.55	3.810	1	5.10	1.707E+06	.018
160015.115	1	3	47.59	0.00	.89	11.430	.319	0.00	.127	0.000	11.43	3.810	1	5.10	1.707E+06	.020
160015.215	1	3	61.56	0.00	.89	25.400	.313	0.00	.127	0.000	25.40	3.810	1	5.10	1.707E+06	.022

[illegible]	1	3	[illegible]	[illegible]	1.14	[illegible]	[illegible]	[illegible]	.127	[illegible]	[illegible]	3.810	1	5.10	[illegible]	[illegible]
160015.514	1	3	125.06	0.00	.64	88.900	[illegible]	0.00	.127	0.000	88.90	3.810	1	5.10	1.707E+06	.041
160016.010	1	3	132.2	-.51	0.00	66.045	1.000	0.00	.127	0.000	66.05	1.016	1	5.10	6.597E+06	.063
160016.020	1	3	51.39	-.51	0.00	15.235	1.000	0.00	.127	0.000	15.23	1.016	1	5.10	6.597E+06	.047
160016.110	1	3	47.59	.04	.04	11.430	.604	0.00	.127	0.000	11.43	1.016	1	5.10	6.597E+06	.045
160016.215	1	3	61.06	.04	.04	25.400	.885	0.00	.127	0.000	25.40	1.016	1	5.10	6.597E+06	.051
160016.310	1	3	86.96	.04	.04	50.800	.772	0.00	.127	0.000	50.80	1.016	1	5.10	6.597E+06	.058
160016.410	1	3	112.36	.04	.04	76.200	.694	0.00	.127	0.000	76.20	1.016	1	5.10	6.597E+06	.066
160016.510	1	3	125.06	.04	.04	88.900	.701	0.00	.127	0.000	88.90	1.016	1	5.10	6.597E+06	.071
160017.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	1.016	1	5.10	3.405E+06	.043
160017.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	1.016	1	5.10	3.405E+06	.033
160017.103	1	3	47.59	1.52	0.00	11.430	.373	0.00	.127	0.000	11.43	1.016	1	5.10	3.405E+06	.027
160017.205	1	3	51.56	1.52	0.00	25.400	.997	0.00	.127	0.000	25.40	1.016	1	5.10	3.405E+06	.030
160017.308	1	3	86.96	.25	0.00	50.800	.727	0.00	.127	0.000	50.80	1.016	1	5.10	3.405E+06	.036
160017.408	1	3	112.36	.25	0.00	76.200	.837	0.00	.127	0.000	76.20	1.016	1	5.10	3.405E+06	.041
160017.509	1	3	125.06	.15	0.00	88.900	.773	0.00	.127	0.000	88.90	1.016	1	5.10	3.405E+06	.043
160018.006	1	3	122.56	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	1.016	1	5.10	1.553E+06	.039
160018.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	1.016	1	5.10	1.553E+06	.023
160018.103	1	3	47.59	1.52	0.00	11.430	.971	0.00	.127	0.000	11.43	1.016	1	5.10	1.553E+06	.019
160018.205	1	3	51.56	1.52	0.00	25.400	.957	0.00	.127	0.000	25.40	1.016	1	5.10	1.553E+06	.022
160018.305	1	3	86.96	.25	0.00	50.800	.751	0.00	.127	0.000	50.80	1.016	1	5.10	1.553E+06	.026
160018.409	1	3	112.36	.15	0.00	76.200	.622	0.00	.127	0.000	76.20	1.016	1	5.10	1.553E+06	.034
160018.511	1	3	125.06	0.00	.15	88.900	.509	0.00	.127	0.000	88.90	1.016	1	5.10	1.553E+06	.041
160019.013	1	3	86.36	-.51	0.00	50.808	1.000	0.00	.127	0.000	50.81	2.032	1	5.10	1.465E+06	.025
160019.023	1	3	43.77	-.51	0.00	7.610	1.000	0.00	.127	0.000	7.61	2.032	1	5.10	1.465E+06	.016
160019.113	1	3	39.97	0.00	.38	3.810	.215	0.00	.127	0.000	3.81	2.032	1	5.10	1.465E+06	.017
160019.211	1	3	46.32	0.00	.15	10.160	.530	0.00	.127	0.000	10.16	2.032	1	5.10	1.465E+06	.018
160019.413	1	3	56.48	0.00	.38	20.320	.190	0.00	.127	0.000	20.32	2.032	1	5.10	1.465E+06	.020
160019.514	1	3	64.17	0.00	.64	27.940	.313	0.00	.127	0.000	27.94	2.032	1	5.10	1.465E+06	.022
160020.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	2.032	1	5.10	3.273E+06	.032
160020.103	1	3	39.97	1.52	0.00	3.810	.935	0.00	.127	0.000	3.81	2.032	1	5.10	3.273E+06	.024
160020.205	1	3	46.32	1.52	0.00	10.160	.311	0.00	.127	0.000	10.16	2.032	1	5.10	3.273E+06	.026
160020.409	1	3	[illegible]	.15	0.00	20.320	.255	0.00	.127	0.000	20.32	2.032	1	5.10	3.273E+06	.028
160020.511	1	3	64.17	0.00	.15	27.940	.653	0.00	.127	0.000	27.94	2.032	1	5.10	3.273E+06	.030
160021.017	1	3	86.36	-.51	0.00	50.808	1.000	0.00	.254	0.000	50.81	2.032	1	5.10	1.815E+06	.027
160021.023	1	3	43.77	-.51	0.00	7.610	1.000	0.00	.254	0.000	7.61	2.032	1	5.10	1.815E+06	.019
160021.113	1	3	39.97	0.00	.38	3.810	54	0.00	.254	0.000	3.81	2.032	1	5.10	1.815E+06	.018
160021.212	1	3	46.32	0.00	.25	10.160	.538	0.00	.254	0.000	10.16	2.032	1	5.10	1.815E+06	.020
160021.412	1	3	[illegible]	0.00	.25	20.320	.473	0.00	.254	0.000	20.32	2.032	1	5.10	1.815E+06	.022
160021.513	1	3	64.17	0.00	.38	27.940	.330	0.00	.254	0.000	27.94	2.032	1	5.10	1.815E+06	.023
160022.015	1	3	[illegible]	-.51	0.00	40.645	1.000	0.00	.254	0.000	40.65	2.032	1	5.10	3.058E+06	.032
160022.025	1	3	[illegible]	-.51	0.00	2.545	1.000	0.00	.254	0.000	2.55	2.032	1	5.10	3.058E+06	.023
160022.115	1	3	39.37	0.00	.89	3.310	[illegible]	0.00	.254	0.000	3.81	2.032	1	5.10	3.058E+06	.023
160022.407	1	3	56.48	.51	0.00	20.320	.443	0.00	.254	0.000	20.32	2.032	1	5.10	3.058E+06	.027
160022.507	1	3	64.1	.51	0.00	27.940	.639	0.00	.254	0.000	27.94	2.032	1	5.10	3.058E+06	.029
160023.019	1	3	[illegible]	-.51	0.00	20.323	1.000	.09	.254	0.000	20.32	2.032	1	5.10	1.705E+06	.021
160023.044	1	3	[illegible]	0.00	.25	20.323	.358	.09	.254	0.000	20.32	2.032	1	5.10	1.705E+06	.021
160023.10[illegible]	1	3	39.37	.25	0.00	3.810	1.134	.09	.254	0.000	3.31	2.032	1	5.10	1.705E+06	.018
160023.20[illegible]	1	3	46.32	.25	0.00	10.160	1.329	.09	.254	0.000	10.16	2.032	1	5.10	1.705E+06	.019
160023.219	1	3	46.32	0.00	1.90	10.160	.312	.09	.254	0.000	10.16	2.032	1	5.10	1.705E+06	.019
160023.414	1	3	[illegible]	0.00	.64	20.320	.383	.09	.254	0.000	20.32	2.032	1	5.10	1.705E+06	[illegible]

160023.[illegible]	1	[illegible]	54.1	[illegible]	.35	27.94[illegible]	.42[illegible]	[illegible]	.254	[illegible]	27.94	2.032	1	5.10	1.[illegible]E+06	.023
160024.321	1	3	44.96	-.51	0.00	12.705	1.000	.09	.254	0.000	12.71	2.032	1	5.10	3.247E+06	.026
160024.046	1	3	49.35	[illegible]	.25	12.705	.69[illegible]	.09	.254	0.000	12.71	2.032	1	5.10	3.247E+06	.026
160024.111	1	3	39.37	[illegible]	.15	3.810	.391	.09	.254	0.000	3.81	2.032	1	5.10	3.247E+06	.024
160024.211	1	3	46.32	0.0[illegible]	.15	10.160	1.650	.09	.254	0.000	10.16	2.032	1	5.10	3.247E+06	.026
160024.408	1	3	56.48	.2[illegible]	0.00	20.320	1.104	.09	.254	0.000	20.32	2.032	1	5.10	3.247E+06	.028
160024.418	1	3	56.48	0.0	1.65	20.320	.335	.09	.254	0.000	20.32	2.032	1	5.10	3.247E+06	.028
160024.514	1	3	64.19	0.0[illegible]	.64	27.940	.163	.09	.254	0.000	27.94	2.032	1	5.10	3.247E+06	.030
160025.020	1	3	51.39	-.51	0.00	15.235	1.010	.09	.127	0.000	15.23	2.032	1	5.10	1.858E+06	.021
160025.045	1	3	51.39	0.[illegible]	.25	15.235	.283	.09	.127	0.000	15.23	2.032	1	5.10	1.858E+06	.021
160025.110	1	3	39.97	.04	.04	3.810	.797	.09	.127	0.000	3.81	2.032	1	5.10	1.858E+06	.019
160025.210	1	3	46.32	.04	.04	10.160	.651	.09	.127	0.000	10.16	2.032	1	5.10	1.858E+06	.020
160025.411	1	3	56.48	0.00	.15	20.320	.373	.09	.127	0.000	20.32	2.032	1	5.10	1.858E+06	.022
160025.512	1	3	64.10	0.00	.25	27.940	.404	.09	.127	0.000	27.94	2.032	1	5.10	1.858E+06	.023
160026.020	1	3	51.39	-.51	0.00	15.235	1.000	.09	.127	0.000	15.23	2.032	1	5.10	3.208E+06	.027
160026.045	1	3	51.39	0.[illegible]	.25	15.235	.277	.09	.127	0.000	15.23	2.032	1	5.10	3.208E+06	.027
160026.110	1	3	39.37	.04	.04	3.810	.975	.09	.127	0.000	3.81	2.032	1	5.10	3.208E+06	.024
160026.210	1	3	46.32	.04	.04	10.160	.700	.09	.127	0.000	10.16	2.032	1	5.10	3.208E+06	.025
160026.412	1	3	56.48	0.0[illegible]	.25	20.320	.329	.09	.127	0.000	20.32	2.032	1	5.10	3.208E+06	.028
160026.513	1	3	64.17	0.00	.38	27.940	.247	.09	.127	0.000	27.94	2.032	1	5.10	3.208E+06	.030
160027.025	1	3	38.7[illegible]	-.51	0.00	2.545	1.000	.17	.127	0.000	2.55	2.032	1	5.10	1.633E+06	.017
160027.103	1	3	39.97	1.52	0.00	3.810	.995	.17	.127	0.000	3.81	2.032	1	5.10	1.633E+06	.018
160027.203	1	3	46.32	1.52	0.00	10.160	1.087	.17	.127	0.000	10.16	2.032	1	5.10	1.633E+06	.019
160027.219	1	3	46.32	0.0[illegible]	1.90	10.160	.364	.17	.127	0.000	10.16	2.032	1	5.10	1.633E+06	.019
160027.414	1	3	56.48	0.00	.64	20.320	.331	.17	.127	0.000	20.32	2.032	1	5.10	1.633E+06	.021
160027.513	1	3	64.17	0.00	.38	27.940	.265	.17	.127	0.000	27.94	2.032	1	5.10	1.633E+06	.022
160028.020	1	3	51.39	-.51	0.00	15.235	1.000	.17	.127	0.000	15.23	2.032	1	5.10	3.270E+06	.027
160028.045	1	3	51.39	0.00	.25	15.235	.275	.17	.127	0.000	15.23	2.032	1	5.10	3.270E+06	.027
160028.110	1	3	39.37	.04	.04	3.810	.989	.17	.127	0.000	3.81	2.032	1	5.10	3.270E+06	.024
160028.210	1	3	46.32	.04	.04	10.160	.659	.17	.127	0.000	10.16	2.032	1	5.10	3.270E+06	.026
160028.412	1	3	56.48	0.00	.25	20.320	.446	.17	.127	0.000	20.32	2.032	1	5.10	3.270E+06	.028
160028.512	1	3	64.17	0.00	.25	27.940	.431	.17	.127	0.000	27.94	2.032	1	5.10	3.270E+06	.030
160029.022	1	3	46.31	-.51	0.00	10.155	1.00[illegible]	.17	.254	0.000	10.15	2.032	1	5.10	1.786E+06	.019
160029.047	1	3	46.31	0.0[illegible]	.25	10.155	.34[illegible]	.17	.254	[illegible]	10.15	2.032	1	5.10	1.786E+06	.019
160029.112	1	3	39.97	0.00	.25	3.810	.568	.17	.254	0.000	3.81	2.032	1	5.10	1.786E+06	.018
160029.212	1	3	46.32	0.00	.25	10.160	.578	.17	.254	0.000	10.16	2.032	1	5.10	1.786E+06	.019
160029.409	1	3	56.48	.1[illegible]	0.00	20.320	1.198	.17	.254	0.000	20.32	2.032	1	5.10	1.786E+06	.021
160029.50	1	3	64.17	.25	0.00	27.940	.983	.17	.254	0.000	27.94	2.032	1	5.10	1.786E+06	.023
160030.019	1	3	51.56	-.51	0.00	25.403	1.000	.17	.254	0.000	25.40	2.032	1	5.10	3.225E+06	.029
160030.043	1	3	51.56	0.0	.25	25.403	.291	.17	.254	0.000	25.40	2.032	1	5.10	3.225E+06	.029
160030.107	1	3	39.37	.51	0.00	3.810	1.175	.17	.254	0.000	3.81	2.032	1	5.10	3.225E+06	.024
160030.207	1	3	46.32	.51	0.00	10.160	1.328	.17	.254	0.000	10.16	2.032	1	5.10	3.225E+06	.025
160030.406	1	3	56.48	.76	0.00	20.320	.944	.17	.254	0.000	20.32	2.032	1	5.10	3.225E+06	.028
160030.506	1	3	64.17	.76	0.00	27.940	1.046	.17	.254	0.000	27.94	2.032	1	5.10	3.225E+06	.030
160030.516	1	3	64.17	0.00	1.1	27.940	.[illegible]13	.17	.254	0.000	27.94	2.032	1	5.10	3.225E+06	.030
160031.023	1	3	43.77	-.51	0.00	7.610	1.000	.26	.254	0.000	7.61	2.032	1	5.10	3.454E+06	.026
160031.048	1	3	43.77	0.00	.25	7.610	.430	.26	.254	0.000	7.61	2.032	1	5.10	3.454E+06	.026
160031.113	1	3	39.97	0.00	.38	3.810	.431	.26	.254	0.000	3.81	2.032	1	5.10	3.454E+06	.025
160031.213	1	3	46.32	0.00	.38	10.160	.[illegible]1	.26	.254	0.000	10.16	2.032	1	5.10	3.454E+06	.027
160031.403	1	3	56.48	.13	0.00	20.320	.952	.26	.254	0.000	20.32	2.032	1	5.10	3.454E+06	.029
160031.509	1	3	54.1[illegible]	.1[illegible]	0.00	27.940	.55[illegible]	.26	.2[illegible]	0.000	27.94	2.032	1	5.10	3.454E+06	.031

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[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
160032.046	1	3	48.36	0.00	.25	12.715	.276	.26	.254	0.000	12.71	2.032	1	5.10	1.700E+06	.020
160032.111	1	3	39.37	0.00	.15	3.810	.889	.26	.254	0.000	3.81	2.032	1	5.10	1.700E+06	.018
160032.211	1	3	46.32	0.00	.15	10.160	.577	.26	.254	0.000	10.16	2.032	1	5.10	1.700E+06	.019
160032.409	1	3	56.48	.15	0.00	20.320	1.013	.26	.254	0.000	20.32	2.032	1	5.10	1.700E+06	.021
160032.507	1	3	64.16	.51	0.00	27.940	.954	.26	.254	0.000	27.94	2.032	1	5.10	1.700E+06	.023
160033.019	1	3	56.48	-.51	0.00	20.320	1.000	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	.027
160033.044	1	3	56.48	0.00	.25	20.323	.292	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	.027
160033.108	1	3	39.37	.25	0.00	3.810	1.145	.26	.127	0.000	3.81	2.032	1	5.10	3.070E+06	.023
160033.208	1	3	46.32	.25	0.00	10.160	.937	.26	.127	0.000	10.16	2.032	1	5.10	3.070E+06	.025
160033.411	1	3	56.48	0.00	.15	20.320	.698	.26	.127	0.000	20.32	2.032	1	5.10	3.070E+06	.027
160033.511	1	3	64.16	0.00	.15	27.940	.610	.26	.127	0.000	27.94	2.032	1	5.10	3.070E+06	.029
160034.023	1	3	51.39	-.51	0.00	15.235	1.000	.26	.127	0.000	15.23	2.032	1	5.10	1.658E+06	.020
160034.045	1	3	51.39	0.00	.25	15.235	.263	.26	.127	0.000	15.23	2.032	1	5.10	1.658E+06	.020
160034.113	1	3	39.37	.04	.04	3.810	.820	.26	.127	0.000	3.81	2.032	1	5.10	1.658E+06	.018
160034.213	1	3	46.32	.04	.04	10.160	.777	.26	.127	0.000	10.16	2.032	1	5.10	1.658E+06	.019
160034.409	1	3	56.46	.15	0.00	20.320	.900	.26	.127	0.000	20.32	2.032	1	5.10	1.658E+06	.021
160034.307	1	3	64.17	.51	0.00	27.940	2.321	.26	.127	0.000	27.94	2.032	1	5.10	1.658E+06	.022
160034.520	1	3	64.16	0.00	2.29	27.940	.016	.26	.127	0.000	27.94	2.032	1	5.10	1.658E+06	.022
160035.312	1	3	92.04	-.51	0.00	55.888	1.000	.26	.127	0.000	55.89	2.032	1	5.10	6.488E+06	.059
160035.112	1	3	111.39	0.00	.25	74.933	.672	.26	.127	0.000	74.93	2.032	1	5.10	6.488E+06	.064
160035.205	1	3	117.44	1.02	0.00	81.280	.975	.26	.127	0.000	81.28	2.032	1	5.10	6.488E+06	.068
160035.217	1	3	117.44	0.00	1.40	81.280	.110	.26	.127	0.000	81.28	2.032	1	5.10	6.488E+06	.068
160035.412	1	3	127.50	0.00	.25	91.440	.474	.26	.127	0.000	91.44	2.032	1	5.10	6.488E+06	.071
160035.509	1	3	135.22	.15	0.00	99.063	.983	.26	.127	0.000	99.06	2.032	1	5.10	6.488E+06	.072
160035.519	1	3	135.22	0.00	1.90	99.060	.023	.26	.127	0.000	99.06	2.032	1	5.10	6.488E+06	.072
160036.013	1	3	102.20	-.51	0.00	66.045	1.000	.26	.254	0.000	66.05	2.032	1	5.10	6.516E+06	.062
160036.113	1	3	111.39	.64	.64	74.933	1.668	.26	.254	0.000	74.93	2.032	1	5.10	6.516E+06	.064
160036.120	1	3	111.39	0.00	2.29	74.930	.020	.26	.254	0.000	74.93	2.032	1	5.10	6.516E+06	.064
160036.216	1	3	117.44	0.00	1.14	81.280	.700	.26	.254	0.000	81.28	2.032	1	5.10	6.516E+06	.068
160036.411	1	3	127.50	0.00	.15	91.440	.578	.26	.254	0.000	91.44	2.032	1	5.10	6.516E+06	.071
160036.506	1	3	135.22	.76	0.00	99.063	.861	.26	.254	0.000	99.06	2.032	1	5.10	6.516E+06	.072
160036.516	1	3	135.22	0.00	1.14	99.060	.362	.26	.254	0.000	99.06	2.032	1	5.10	6.516E+06	.072
160037.007	1	3	117.47	-.51	0.00	81.315	1.000	.17	.254	0.000	81.32	2.032	1	5.10	6.583E+06	.069
160037.105	1	3	111.39	1.02	0.00	74.933	1.003	.17	.254	0.000	74.93	2.032	1	5.10	6.583E+06	.065
160037.117	1	3	111.39	0.00	1.40	74.933	.136	.17	.254	0.000	74.93	2.032	1	5.10	6.583E+06	.065
160037.212	1	3	117.44	0.00	.25	81.280	1.363	.17	.254	0.000	81.28	2.032	1	5.10	6.583E+06	.069
160037.409	1	3	127.50	.15	0.00	91.440	.667	.17	.254	0.000	91.44	2.032	1	5.10	6.583E+06	.072
160037.419	1	3	127.50	0.00	1.90	91.440	.189	.17	.254	0.000	91.44	2.032	1	5.10	6.583E+06	.072
160037.514	1	3	135.22	0.00	.64	99.060	.110	.17	.254	0.000	99.06	2.032	1	5.10	6.583E+06	.073
160038.005	1	3	125.19	-.51	0.00	88.935	1.000	.17	.127	0.000	88.94	2.032	1	5.10	6.662E+06	.072
160038.015	1	3	76.30	-.51	0.00	40.645	1.000	.17	.127	0.000	40.65	2.032	1	5.10	6.662E+06	.055
160038.115	1	3	111.39	0.00	.89	74.933	.390	.17	.127	0.000	74.93	2.032	1	5.10	6.662E+06	.065
160038.211	1	3	117.44	0.00	.15	81.280	.941	.17	.127	0.000	81.28	2.032	1	5.10	6.662E+06	.070
160038.408	1	3	127.50	.25	0.00	91.440	.337	.17	.127	0.000	91.44	2.032	1	5.10	6.662E+06	.072
160038.506	1	3	135.22	.76	0.00	99.060	.900	.17	.127	0.000	99.06	2.032	1	5.10	6.662E+06	.074
160038.516	1	3	135.22	0.00	1.14	99.060	.366	.17	.127	0.000	99.06	2.032	1	5.10	6.662E+06	.074
160039.007	1	3	117.47	-.51	0.00	81.315	1.000	.09	.127	0.000	81.32	2.032	1	5.10	6.606E+06	.069
160039.105	1	3	111.39	1.02	0.00	74.930	.969	.09	.127	0.000	74.93	2.032	1	5.10	6.606E+06	.065
160039.117	1	3	111.39	0.00	1.49	74.930	.106	.09	.127	0.000	74.93	2.032	1	5.10	6.606E+06	.065
160039.212	1	3	117.44	0.00	.25	81.280	.795	.09	.127	0.000	81.28	2.032	1	5.10	6.606E+06	.069
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]

160039.409	1	3	127.5[illegible]	[illegible]	0.00	91.440	.72[illegible]	.09	.127	0.000	91.44	2.032	1	5.10	6.606E+06	.072
160039.507	1	3	135.22	.51	0.00	99.060	.909	.09	.127	0.000	99.06	2.032	1	5.10	6.606E+06	.073
160039.517	1	3	135.22	0.00	1.40	99.060	.034	.09	.127	0.000	99.06	2.032	1	5.10	6.606E+06	.073
160040.008	1	3	112.37	-.51	0.00	76.219	1.000	.09	.254	0.000	76.22	2.032	1	5.10	6.594E+06	.066
160040.107	1	3	111.39	.51	0.00	74.930	.999	.09	.254	0.000	74.93	2.032	1	5.10	6.594E+06	.065
160040.118	1	3	111.39	0.00	1.65	74.930	.363	.09	.254	0.000	74.93	2.032	1	5.10	6.594E+06	.065
160040.215	1	3	117.44	0.00	.89	81.280	.969	.09	.254	0.000	81.28	2.032	1	5.10	6.594E+06	.069
160040.410	1	3	127.60	.04	.04	91.440	.019	.09	.254	0.000	91.44	2.032	1	5.10	6.594E+06	.072
160040.420	1	3	127.60	0.00	2.29	91.440	.012	.09	.254	0.000	91.44	2.032	1	5.10	6.594E+06	.072
160040.515	1	3	135.22	0.00	.89	99.060	.116	.09	.254	0.000	99.06	2.032	1	5.10	6.594E+06	.073
160041.006	1	3	122.56	-.51	0.00	86.398	1.000	0.00	.254	0.000	86.40	2.032	1	5.10	6.378E+06	.069
160041.107	1	3	111.39	1.02	0.00	74.930	.923	0.00	.254	0.000	74.93	2.032	1	5.10	6.378E+06	.063
160041.116	1	3	111.39	0.00	1.14	74.930	.158	0.00	.254	0.000	74.93	2.032	1	5.10	6.378E+06	.063
160041.211	1	3	117.44	0.00	.15	81.280	.977	0.00	.254	0.000	81.28	2.032	1	5.10	6.378E+06	.067
160041.408	1	3	127.60	.25	0.00	91.440	.775	0.00	.254	0.000	91.44	2.032	1	5.10	6.378E+06	.070
160041.418	1	3	127.60	0.00	1.65	91.440	.167	0.00	.254	0.000	91.44	2.032	1	5.10	6.378E+06	.070
160041.513	1	3	135.22	0.00	.38	99.060	.247	0.00	.254	0.000	99.06	2.032	1	5.10	6.378E+06	.071
160042.004	1	3	127.63	-.51	0.00	91.473	1.000	0.00	.127	0.000	91.47	2.032	1	5.10	6.448E+06	.070
160042.014	1	3	91.89	-.51	0.00	45.725	1.000	0.00	.127	0.000	45.73	2.032	1	5.10	6.448E+06	.055
160042.114	1	3	111.39	0.00	.64	74.930	.226	0.00	.127	0.000	74.93	2.032	1	5.10	6.448E+06	.064
160042.210	1	3	117.44	.04	.04	81.280	.362	0.00	.127	0.000	81.28	2.032	1	5.10	6.448E+06	.068
160042.407	1	3	127.60	.51	0.00	91.440	.552	0.00	.127	0.000	91.44	2.032	1	5.10	6.448E+06	.070
160042.506	1	3	135.22	.76	0.00	99.060	.885	0.00	.127	0.000	99.06	2.032	1	5.10	6.448E+06	.072
160042.516	1	3	135.22	0.00	1.14	99.060	.064	0.00	.127	0.000	99.06	2.032	1	5.10	6.448E+06	.072
160043.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.254	0.000	81.32	1.016	1	5.10	1.705E+06	.037
160043.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	1.016	1	5.10	1.705E+06	.023
160043.105	1	3	47.59	1.02	0.00	11.430	.866	0.00	.254	0.000	11.43	1.016	1	5.10	1.705E+06	.020
160043.207	1	3	61.56	.51	0.00	25.400	.849	0.00	.254	0.000	25.40	1.016	1	5.10	1.705E+06	.022
160043.309	1	3	86.96	.15	0.00	50.800	.675	0.00	.254	0.000	50.80	1.016	1	5.10	1.705E+06	.027
160043.409	1	3	112.36	.15	0.00	76.200	.748	0.00	.254	0.000	76.20	1.016	1	5.10	1.705E+06	.034
160043.510	1	3	125.06	.04	.04	88.900	.672	0.00	.254	0.000	88.90	1.016	1	5.10	1.705E+06	.041
160044.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.254	0.000	81.32	1.016	1	5.10	2.949E+06	.040
160044.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	1.016	1	5.10	2.949E+06	.029
160044.105	1	3	47.59	1.02	0.00	11.430	.858	0.00	.254	0.000	11.43	1.016	1	5.10	2.949E+06	.025
160044.207	1	3	61.56	.51	0.00	25.400	.715	0.00	.254	0.000	25.40	1.016	1	5.10	2.949E+06	.028
160044.312	1	3	86.96	0.00	.25	50.800	.320	0.00	.254	0.000	50.80	1.016	1	5.10	2.949E+06	.034
160044.412	1	3	112.36	0.00	.25	76.200	.440	0.00	.254	0.000	76.20	1.016	1	5.10	2.949E+06	.039
160044.512	1	3	125.06	0.00	.25	88.900	.592	0.00	.254	0.000	88.90	1.016	1	5.1	2.949E+06	.042
160045.008	1	3	112.37	-.51	0.00	76.219	1.000	0.00	.254	0.000	76.22	1.016	1	5.10	6.578E+06	.066
160045.018	1	3	61.56	-.51	0.00	25.400	1.000	0.00	.254	0.000	25.40	1.016	1	5.10	6.578E+06	.051
160045.107	1	3	47.59	.51	0.00	11.430	.836	0.00	.254	0.000	11.43	1.016	1	5.10	6.578E+06	.045
160045.207	1	3	61.56	.51	0.00	25.400	.066	0.00	.254	0.000	25.40	1.016	1	5.10	6.578E+06	.051
160045.311	1	3	86.96	0.00	.15	50.800	.608	0.00	.254	0.000	50.80	1.016	1	5.10	6.578E+06	.058
160045.411	1	3	112.36	0.00	.15	76.200	.608	0.00	.254	0.000	76.20	1.016	1	5.10	6.578E+06	.066
160045.511	1	3	125.06	0.00	.15	88.900	.551	0.00	.254	0.000	88.90	1.016	1	5.10	6.578E+06	.071
160046.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.254	0.000	81.32	2.032	1	5.10	1.727E+06	.037
160046.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.254	0.000	30.49	2.032	1	5.10	1.727E+06	.023
160046.027	1	3	132.70	0.00	.25	96.548	.538	0.00	.254	0.000	96.55	2.032	1	5.10	1.727E+06	.046
160046.037	1	3	92.10	0.00	.25	55.885	.741	0.00	.254	0.000	55.89	2.032	1	5.10	1.727E+06	.028
160046.047	1	3	46.31	0.00	.25	10.150	.532	0.00	.254	0.000	10.15	2.032	1	5.10	1.727E+06	.019
160046.057	1	3	117.47	0.00	.51	81.316	.233	0.00	.254	0.000	81.32	2.032	1	5.10	1.727E+06	.037

[illegible]	1	[illegible]	[illegible]	[illegible]	.51	[illegible]	.182	0.00	.254	0.000	25.40	2.032	1	5.10	[illegible]	.022
160047.005	1	3	125.19	-.51	0.00	88.936	1.000	0.00	.254	0.000	88.94	2.032	1	5.10	3.130E+06	.042
160047.015	1	3	76.31	-.51	0.00	40.645	1.000	0.00	.254	0.000	40.65	2.032	1	5.10	3.130E+06	.032
160047.025	1	3	[illegible]	-.51	0.00	2.545	1.000	0.00	.254	0.000	2.55	2.032	1	5.10	3.130E+06	.023
160047.035	1	3	[illegible]	0.00	.25	66.345	.911	0.00	.254	0.000	66.05	2.032	1	5.10	3.130E+06	.038
160047.045	1	3	51.39	0.00	.25	15.235	.769	0.00	.254	0.000	15.23	2.032	1	5.10	3.130E+06	.026
160047.055	1	3	125.19	0.00	.51	88.935	.394	0.00	.254	0.000	88.94	2.032	1	5.10	3.130E+06	.042
160047.065	1	3	76.30	0.00	.51	40.645	[illegible]	0.00	.254	0.000	40.65	2.032	1	5.10	3.130E+06	.032
160048.001	1	3	135.24	-.51	0.00	99.383	1.000	0.00	.254	0.000	99.38	2.032	1	5.10	6.617E+06	.073
160048.012	1	3	92.04	-.51	0.00	55.888	[illegible]	0.00	.254	0.000	55.89	2.032	1	5.10	6.617E+06	.060
160048.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.254	0.000	10.15	2.032	1	5.10	6.617E+06	.044
160048.032	1	3	117.47	0.00	.25	81.315	.525	0.00	.254	0.000	81.32	2.032	1	5.10	6.617E+06	.069
160048.042	1	3	56.66	0.00	.25	30.495	.977	0.00	.254	0.000	30.49	2.032	1	5.10	6.617E+06	.052
160048.053	1	3	130.16	0.00	.51	94.008	.364	0.00	.254	0.000	94.01	2.032	1	5.10	6.617E+06	.072
160048.063	1	3	86.96	0.00	.51	50.808	.433	0.00	.254	0.000	50.81	2.032	1	5.10	6.617E+06	.058
160048.073	1	3	43.77	0.00	.51	7.510	.300	0.00	.254	0.000	7.51	2.032	1	5.10	6.617E+06	.043
160049.115	1	3	47.59	0.00	.89	11.430	.364	0.00	.254	0.000	11.43	2.032	1	5.10	6.739E+06	.046
160049.215	1	3	61.56	0.00	.89	25.400	.395	0.00	.254	0.000	25.40	2.032	1	5.10	6.739E+06	.052
160049.313	1	3	86.96	0.00	.38	50.800	.729	0.00	.254	0.000	50.80	2.032	1	5.10	6.739E+06	.059
160049.409	1	3	112.36	.15	0.00	76.200	.847	0.00	.254	0.000	76.20	2.032	1	5.10	6.739E+06	.067
160049.506	1	3	125.06	.76	0.00	88.900	1.051	0.00	.254	0.000	88.90	2.032	1	5.10	6.739E+06	.072
160049.516	1	3	125.06	0.00	1.14	88.900	.147	0.00	.254	0.000	88.90	2.032	1	5.10	6.739E+06	.072
160050.113	1	3	47.59	0.00	.38	11.430	.350	0.00	.254	0.000	11.43	2.032	1	5.10	1.615E+06	.019
160050.211	1	3	61.56	0.00	.15	25.400	.932	0.00	.254	0.000	25.40	2.032	1	5.10	1.615E+06	.022
160050.312	1	3	86.96	0.00	.25	50.800	.926	0.00	.254	0.000	50.80	2.032	1	5.10	1.615E+06	.026
160050.410	1	3	112.36	.04	.04	76.200	.383	0.00	.254	0.000	76.20	2.032	1	5.10	1.615E+06	.034
160050.508	1	3	125.06	.25	0.00	88.900	.389	0.00	.254	0.000	88.90	2.032	1	5.10	1.615E+06	.041
160051.107	1	3	47.59	.51	0.00	11.430	1.000	0.00	.254	0.000	11.43	2.032	1	5.10	3.303E+06	.026
160051.203	1	3	61.56	1.52	0.00	25.400	.858	0.00	.254	0.000	25.40	2.032	1	5.10	3.303E+06	.030
160051.308	1	3	86.96	.25	0.00	50.800	1.369	0.00	.254	0.000	50.80	2.032	1	5.10	3.303E+06	.036
160051.318	1	3	86.96	0.00	1.65	50.800	.027	0.00	.254	0.000	50.80	2.032	1	5.10	3.303E+06	.036
160051.415	1	3	112.36	0.00	.89	76.200	.214	0.00	.254	0.000	76.20	2.032	1	5.10	3.303E+06	.041
160051.512	1	3	125.06	0.00	.25	88.900	.736	0.00	.254	0.000	88.90	2.032	1	5.10	3.303E+06	.042
160052.004	1	3	127.63	-.51	0.00	91.470	1.000	0.00	.063	0.000	91.47	2.032	1	5.10	1.637E+06	.043
160052.014	1	3	81.88	-.51	0.00	45.725	1.000	0.00	.063	0.000	45.73	2.032	1	5.10	1.637E+06	.025
160052.024	1	3	41.24	-.51	0.00	5.080	1.000	0.00	.063	0.000	5.08	2.032	1	5.10	1.637E+06	.018
160052.114	1	3	47.59	0.00	.64	11.430	.013	0.00	.063	0.000	11.43	2.032	1	5.10	1.637E+06	.019
160052.308	1	3	86.96	.25	0.00	50.800	.745	0.00	.063	0.000	50.80	2.032	1	5.10	1.637E+06	.026
160052.509	1	3	125.06	.15	0.00	88.900	.344	0.00	.063	0.000	88.90	2.032	1	5.10	1.637E+06	.041
160053.006	1	3	122.56	-.51	0.00	86.390	1.000	0.00	.063	0.000	86.40	2.032	1	5.10	3.171E+06	.041
160053.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	2.032	1	5.10	3.171E+06	.031
160053.103	1	3	47.59	1.52	0.00	11.430	.975	0.00	.063	0.000	11.43	2.032	1	5.10	3.171E+06	.026
160053.207	1	3	61.56	.51	0.00	25.400	.917	0.00	.063	0.000	25.40	2.032	1	5.10	3.171E+06	.029
160053.313	1	3	86.96	0.00	.38	50.800	.181	0.00	.063	0.000	50.80	2.032	1	5.10	3.171E+06	.035
160053.514	1	3	125.06	0.00	.64	88.900	.126	0.00	.063	0.000	88.90	2.032	1	5.10	3.171E+06	.042
160054.011	1	3	97.12	-.51	0.00	60.965	0.000	0.00	.254	0.000	60.97	3.810	1	5.10	1.701E+06	.029
160054.021	1	3	48.85	-.51	0.00	12.705	1.000	0.00	.254	0.000	12.71	3.810	1	5.10	1.701E+06	.020
160054.111	1	3	47.59	0.00	.15	11.430	.637	0.00	.254	0.000	11.43	3.810	1	5.10	1.701E+06	.020
160054.211	1	3	61.56	0.00	.15	25.400	.944	0.00	.254	0.000	25.40	3.810	1	5.10	1.701E+06	.022
160054.314	1	3	86.96	0.00	.64	50.800	.371	0.00	.254	0.000	50.80	3.810	1	5.10	1.701E+06	.027
160054.512	1	3	125.06	0.00	.15	88.900	.830	0.00	.254	0.000	88.90	3.810	1	5.10	1.701E+06	.041

[illegible]	1	3	[illegible]	-.51	[illegible]	[illegible]	[illegible]	[illegible]	.254	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
160055.013	1	3	36.36	-.51	0.00	50.808	1.000	0.00	.254	0.000	50.81	3.810	1	5.10	3.178E+06	.035
160055.023	1	3	43.77	-.51	0.00	7.613	1.000	0.00	.254	0.000	7.61	3.810	1	5.10	3.178E+06	.025
160055.113	1	3	47.59	0.00	.38	11.430	.543	0.00	.254	0.000	11.43	3.810	1	5.10	3.178E+06	.026
160055.215	1	3	61.56	0.00	.89	25.400	.275	0.00	.254	0.000	25.40	3.810	1	5.10	3.178E+06	.029
160055.316	1	3	36.36	0.00	1.14	50.800	.343	0.00	.254	0.000	50.80	3.810	1	5.10	3.178E+06	.035
160055.512	1	3	125.16	0.00	.25	88.900	.543	0.00	.254	0.000	88.90	3.810	1	5.10	3.178E+06	.042
160056.002	1	3	132.77	-.51	0.00	96.549	1.000	0.00	.254	0.000	96.55	3.810	1	5.10	6.520E+06	.072
160056.012	1	3	92.04	-.51	0.00	55.888	1.000	0.00	.254	0.000	55.89	3.810	1	5.10	6.520E+06	.059
160056.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.254	0.000	10.15	3.810	1	5.10	6.520E+06	.044
160056.112	1	3	47.59	0.00	.25	11.430	.908	0.00	.254	0.000	11.43	3.810	1	5.10	6.520E+06	.044
160056.212	1	3	61.56	0.00	.25	25.400	1.155	0.00	.254	0.000	25.40	3.810	1	5.10	6.520E+06	.050
160056.315	1	3	96.36	0.00	.89	50.800	.272	0.00	.254	0.000	50.80	3.810	1	5.10	6.520E+06	.057
160056.510	1	3	125.06	.04	.04	88.900	.586	0.00	.254	0.000	88.90	3.810	1	5.10	6.520E+06	.071
160056.520	1	3	125.06	0.00	2.23	88.900	.186	0.00	.254	0.000	88.90	3.810	1	5.10	6.520E+06	.071
160057.011	1	3	97.12	-.51	0.00	60.965	1.000	.17	.254	0.000	60.97	3.810	1	5.10	3.177E+06	.037
160057.021	1	3	48.56	-.51	0.00	12.705	1.000	.17	.254	0.000	12.71	3.810	1	5.10	3.177E+06	.026
160057.111	1	3	47.59	0.00	.15	11.430	1.009	.17	.254	0.000	11.43	3.810	1	5.10	3.177E+06	.026
160057.211	1	3	61.56	0.00	.15	25.400	.632	.17	.254	0.000	25.40	3.810	1	5.10	3.177E+06	.029
160057.313	1	3	96.96	0.00	.38	50.800	.855	.17	.254	0.000	50.80	3.810	1	5.10	3.177E+06	.035
160057.508	1	3	125.06	.25	0.00	88.900	1.208	.17	.254	0.000	88.90	3.810	1	5.10	3.177E+06	.042
160057.518	1	3	125.16	0.00	1.55	88.900	.041	.17	.254	0.000	88.90	3.810	1	5.10	3.177E+06	.042
160058.008	1	3	112.37	-.51	0.00	76.218	1.000	.17	.254	0.000	76.22	3.810	1	5.10	6.596E+06	.066
160058.018	1	3	61.56	-.51	0.00	25.403	1.300	.17	.254	0.000	25.40	3.810	1	5.10	6.596E+06	.051
160058.107	1	3	47.59	.51	0.00	11.430	2.331	.17	.254	0.000	11.43	3.810	1	5.10	6.596E+06	.045
160058.207	1	3	61.56	.51	0.00	25.400	2.388	.17	.254	0.000	25.40	3.810	1	5.10	6.596E+06	.051
160058.310	1	3	96.96	.04	.04	50.800	1.654	.17	.254	0.000	50.80	3.810	1	5.10	6.596E+06	.058
160058.320	1	3	36.96	0.00	2.29	50.800	.338	.17	.254	0.000	50.80	3.810	1	5.10	6.596E+06	.058
160058.515	1	3	125.16	0.00	.69	88.900	.103	.17	.254	0.000	88.90	3.810	1	5.10	6.596E+06	.071
160059.005	1	3	125.19	-.51	0.00	88.936	1.000	.09	.254	0.000	88.94	3.810	1	5.10	3.431E+06	.044
160059.015	1	3	76.37	-.51	0.00	40.645	1.000	.09	.254	0.000	40.65	3.810	1	5.10	3.431E+06	.034
160059.025	1	3	38.77	-.51	0.00	2.545	1.000	.09	.254	0.000	2.55	3.810	1	5.10	3.431E+06	.024
160059.115	1	3	47.59	0.00	.89	11.430	.219	.09	.254	0.000	11.43	3.810	1	5.10	3.431E+06	.027
160059.307	1	3	96.36	.51	0.00	50.800	0.000	.09	.254	0.000	50.80	3.810	1	5.10	3.431E+06	.036
160059.317	1	3	86.36	0.00	1.40	50.800	.237	.09	.254	0.000	50.80	3.810	1	5.10	3.431E+06	.036
160059.512	1	3	125.06	0.00	.25	88.300	.753	.09	.254	0.000	88.90	3.810	1	5.10	3.431E+06	.044
160060.002	1	3	132.77	-.51	0.00	96.548	1.000	.26	.254	0.000	96.55	3.810	1	5.10	3.357E+06	.045
160060.012	1	3	92.04	-.51	0.00	55.888	1.000	.26	.254	0.000	55.89	3.810	1	5.10	3.357E+06	.037
160060.022	1	3	46.31	-.51	0.00	10.150	1.000	.26	.254	0.000	10.15	3.810	1	5.10	3.357E+06	.026
160060.112	1	3	47.59	0.00	.25	11.430	.556	.26	.254	0.000	11.43	3.810	1	5.10	3.357E+06	.026
160060.212	1	3	61.56	0.00	.25	25.400	.581	.26	.254	0.000	25.40	3.810	1	5.10	3.357E+06	.030
160060.316	1	3	96.36	0.00	1.14	50.800	.052	.26	.254	0.000	50.80	3.810	1	5.10	3.357E+06	.036
160060.513	1	3	125.06	0.00	.35	88.900	.513	.25	.254	0.000	88.90	3.810	1	5.10	3.357E+06	.043
160061.004	1	3	127.63	-.51	0.00	91.479	1.000	.26	.127	0.000	91.47	3.810	1	5.10	3.350E+06	.043
160061.014	1	3	81.37	-.51	0.00	45.725	1.000	.26	.127	0.000	45.73	3.810	1	5.10	3.350E+06	.035
160061.024	1	3	41.7	-.51	0.00	5.080	1.000	.26	.127	0.000	5.08	3.810	1	5.10	3.350E+06	.025
160061.114	1	3	47.59	0.00	.64	11.430	.383	.25	.127	0.000	11.43	3.810	1	5.10	3.350E+06	.026
160061.307	1	3	96.36	.51	0.00	50.800	1.123	.26	.127	0.000	50.80	3.810	1	5.10	3.350E+06	.036
160061.506	1	3	125.06	.25	0.00	88.900	.948	.25	.127	0.000	88.90	3.810	1	5.10	3.350E+06	.043
160061.516	1	3	125.16	0.00	1.14	88.300	.321	.25	.127	0.000	88.90	3.810	1	5.10	3.350E+06	.043
160062.008	1	3	112.37	-.51	0.00	76.218	1.000	.17	.127	0.000	76.22	3.810	1	5.10	3.315E+06	.041

[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
160062.107	1	3	47.39	.51	0.00	11.430	1.036	.17	.127	0.000	11.43	3.810	1	5.10	3.315E+06	.026
160062.207	1	3	61.36	.51	0.00	25.400	1.076	.17	.127	0.000	25.40	3.810	1	5.10	3.315E+06	.030
160062.309	1	3	86.96	.13	0.00	50.800	.977	.17	.127	0.000	50.80	3.810	1	5.10	3.315E+06	.036
160062.509	1	3	125.36	.1[illegible]	0.00	88.900	.905	.17	.127	0.000	88.90	3.810	1	5.10	3.315E+06	.043
160063.003	1	3	137.16	-.51	0.00	94.008	1.000	.17	.127	0.000	94.01	3.810	1	5.10	6.416E+06	.071
160063.013	1	3	86.36	-.51	0.00	50.808	1.000	.17	.127	0.000	50.81	3.810	1	5.10	6.416E+06	.057
160063.023	1	3	43.77	-.51	0.00	7.610	1.000	.17	.127	0.000	7.61	3.810	1	5.10	6.416E+06	.041
160063.113	1	3	47.59	0.00	.38	11.430	.232	.17	.127	0.000	11.43	3.810	1	5.10	6.416E+06	.044
160063.213	1	3	61.36	0.00	.89	25.400	.040	.17	.127	0.000	25.40	3.810	1	5.10	6.416E+06	.050
160063.506	1	3	125.36	.76	0.00	88.900	.393	.17	.127	0.000	88.90	3.810	1	5.10	6.416E+06	.070
160063.516	1	3	125.36	0.00	1.14	88.900	.081	.17	.127	0.000	88.90	3.810	1	5.10	6.416E+06	.070
160064.009	1	3	107.31	-.51	0.00	71.150	1.000	.09	.127	0.000	71.15	3.810	1	5.10	3.134E+06	.039
160064.019	1	3	56.48	-.51	0.00	20.323	1.000	.09	.127	0.000	20.32	3.810	1	5.10	3.134E+06	.028
160064.108	1	3	47.59	.25	0.00	11.430	.998	.09	.127	0.000	11.43	3.810	1	5.10	3.134E+06	.025
160064.208	1	3	61.36	.25	0.00	25.400	1.002	.09	.127	0.000	25.40	3.810	1	5.10	3.134E+06	.029
160064.312	1	3	86.96	0.00	.25	50.800	.437	.09	.127	0.000	50.80	3.810	1	5.10	3.134E+06	.035
160064.512	1	3	125.36	0.00	.25	88.900	.518	.09	.127	0.000	88.90	3.810	1	5.10	3.134E+06	.042
160065.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	2.032	1	5.10	6.908E+06	.074
160065.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	2.032	1	5.10	6.908E+06	.056
160065.103	1	3	47.59	1.52	0.00	11.430	.955	0.00	.063	0.000	11.43	2.032	1	5.10	6.908E+06	.047
160065.203	1	3	61.36	1.52	0.00	25.400	.995	0.00	.063	0.000	25.40	2.032	1	5.10	6.908E+06	.053
160065.310	1	3	86.96		.04	50.800	.614	0.00	.063	0.000	50.80	2.032	1	5.10	6.908E+06	.060
160065.511	1	3	125.36	[illegible]	.15	88.900	.619	0.00	.063	0.000	88.90	2.032	1	5.10	6.908E+06	.074
160066.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	1.016	1	5.10	1.504E+06	.039
160066.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	1.016	1	5.10	1.504E+06	.023
160066.103	1	3	47.59	1.52	0.00	11.430	.392	0.00	.063	0.000	11.43	1.016	1	5.10	1.504E+06	.019
160066.205	1	3	61.36	1.52	0.00	25.400	.399	0.00	.063	0.000	25.40	1.016	1	5.10	1.504E+06	.021
160066.308	1	3	86.96	.25	0.00	50.800	.762	0.00	.063	0.000	50.80	1.016	1	5.10	1.504E+06	.026
160066.408	1	3	112.36	.25	0.00	76.200	.752	0.00	.063	0.000	76.20	1.016	1	5.10	1.504E+06	.034
160066.509	1	3	125.36	.15	0.00	88.900	.61[illegible]	0.00	.063	0.000	88.90	1.016	1	5.10	1.504E+06	.041
160067.005	1	3	125.30	-.51	0.00	88.936	1.000	0.00	.063	0.000	88.94	1.016	1	5.10	3.305E+06	.042
160067.015	1	3	76.37	-.51	0.00	40.645	1.000	0.00	.063	0.000	40.65	1.016	1	5.10	3.305E+06	.032
160067.025	1	3	38.70	-.51	0.00	2.545	1.000	0.00	.063	0.000	2.55	1.016	1	5.10	3.305E+06	.024
160067.115	1	3	47.59	0.00	.99	11.430	.903	0.00	.063	0.000	11.43	1.016	1	5.10	3.305E+06	.026
160067.309	1	3	86.96	.13	0.00	50.800	.582	0.00	.063	0.000	50.80	1.016	1	5.10	3.305E+06	.036
160067.410	1	3	112.36	.04	.04	76.200	.378	0.00	.063	0.000	76.20	1.016	1	5.10	3.305E+06	.041
160067.511	1	3	125.36	0.00	.15	88.900	.512	0.00	.063	0.000	88.90	1.016	1	5.10	3.305E+06	.042
160068.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.063	0.000	86.40	1.016	1	5.10	6.426E+06	.069
160068.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.063	0.000	35.57	1.016	1	5.10	6.426E+06	.053
160068.103	1	3	47.59	1.52	0.00	11.430	.951	0.00	.063	0.000	11.43	1.016	1	5.10	6.426E+06	.044
160068.205	1	3	61.36	1.52	0.00	25.400	.941	0.00	.063	0.000	25.40	1.016	1	5.10	6.426E+06	.059
160068.309	1	3	86.96	.13	0.00	50.800	.536	0.00	.063	0.000	50.80	1.016	1	5.10	6.426E+06	.057
160068.410	1	3	112.36	.04	.04	76.200	.644	0.00	.063	0.000	76.20	1.016	1	5.10	6.426E+06	.064
160068.510	1	3	125.36	0.00	.04	88.900	.558	0.00	.063	0.000	88.90	1.016	1	5.10	6.426E+06	.070
160069.005	[illegible]	3	[illegible]	-.51	0.00	88.936	1.000	0.00	.063	0.000	88.94	.508	1	5.10	6.455E+06	.070
160069.015	1	3	76.37	-.51	0.00	40.645	1.000	0.00	.063	0.000	40.65	.508	1	5.10	6.455E+06	.054
160069.025	1	3	38.7[illegible]	-.51	0.00	2.545	1.000	0.00	.063	0.000	2.55	.508	1	5.10	6.455E+06	.038
160069.203	1	3	61.36	1.52	0.00	25.400	.933	0.00	.063	0.000	25.40	.508	1	5.10	6.455E+06	.050
160069.310	1	3	86.96	.04	.04	50.800	.587	0.00	.063	0.000	50.80	.508	1	5.10	6.455E+06	.057
160069.411	1	3	112.36	[illegible]	.15	76.200	.317	0.00	.063	0.000	76.20	.508	1	5.10	6.455E+06	.065
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]

160069.512	1	3	125.[illegible]	[illegible]	.25	55.[illegible]	.[illegible]4	[illegible]	.063	0.000	88.90	.508	1	5.10	6.[illegible]E+06	.078
160070.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.063	0.000	81.32	.508	1	5.10	1.723E+06	.037
160070.017	1	3	56.54	-.51	0.00	30.485	1.000	0.00	.063	0.000	30.49	.508	1	5.10	1.723E+06	.023
160070.105	1	3	47.59	1.02	0.00	11.430	.953	0.00	.063	0.000	11.43	.508	1	5.10	1.723E+06	.028
160070.207	1	3	61.56	.51	0.00	25.400	.338	0.00	.063	0.000	25.40	.508	1	5.10	1.723E+06	.022
160070.310	1	3	86.95	.04	.04	50.300	.546	0.00	.063	0.000	50.80	.508	1	5.10	1.723E+06	.027
160070.411	1	3	112.35	0.00	.15	76.200	.446	0.00	.063	0.000	76.20	.508	1	5.10	1.723E+06	.035
160070.511	1	3	125.06	0.00	.15	85.900	.447	0.00	.063	0.000	88.90	.508	1	5.10	1.723E+06	.041
160071.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.063	0.000	81.32	.508	1	5.10	3.043E+06	.040
160071.017	1	3	56.54	-.51	0.00	30.485	1.000	0.00	.063	0.000	30.49	.508	1	5.10	3.043E+06	.029
160071.105	1	3	47.59	1.02	0.00	11.430	.962	0.00	.063	0.000	11.43	.508	1	5.10	3.043E+06	.025
160071.205	1	3	61.55	1.02	0.00	25.400	.992	0.00	.063	0.000	25.40	.508	1	5.10	3.043E+06	.028
160071.309	1	3	86.36	.15	0.00	50.900	.577	0.00	.063	0.000	50.80	.508	1	5.10	3.043E+06	.034
160071.410	1	3	112.36	.04	.04	76.200	.552	0.00	.063	0.000	76.20	.508	1	5.10	3.043E+06	.039
160071.511	1	3	125.06	0.00	.15	88.900	.539	0.00	.063	0.000	88.90	.508	1	5.10	3.043E+06	.042
160072.006	1	3	122.35	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	.508	1	5.10	1.628E+06	.040
160072.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	.508	1	5.10	1.628E+06	.024
160072.103	1	3	47.59	1.52	0.00	11.430	.970	0.00	.127	0.000	11.43	.508	1	5.10	1.628E+06	.019
160072.203	1	3	61.56	1.52	0.00	25.400	.973	0.00	.127	0.000	25.40	.508	1	5.10	1.628E+06	.022
160072.309	1	3	96.96	.15	0.00	50.900	.646	0.00	.127	0.000	50.80	.508	1	5.10	1.628E+06	.026
160072.409	1	3	112.36	.15	0.00	76.200	.670	0.00	.127	0.000	76.20	.508	1	5.10	1.628E+06	.034
160072.511	1	3	125.06	0.00	.15	88.900	.535	0.00	.127	0.000	88.90	.508	1	5.10	1.628E+06	.041
160073.007	1	3	117.47	-.51	0.00	81.316	1.000	0.00	.127	0.000	81.32	.508	1	5.10	3.142E+06	.040
160073.017	1	3	66.54	-.51	0.00	30.485	1.000	0.00	.127	0.000	30.49	.508	1	5.10	3.142E+06	.030
160073.105	1	3	47.59	1.02	0.00	11.430	.948	0.00	.127	0.000	11.43	.508	1	5.10	3.142E+06	.025
160073.205	1	3	61.56	1.02	0.00	25.400	.970	0.00	.127	0.000	25.40	.508	1	5.10	3.142E+06	.029
160073.309	1	3	86.36	.15	0.00	50.800	.634	0.00	.127	0.000	50.80	.508	1	5.10	3.142E+06	.035
160073.410	1	3	112.36	.04	.04	76.200	.513	0.00	.127	0.000	76.20	.508	1	5.10	3.142E+06	.049
160073.511	1	3	125.06	0.00	.15	88.900	.577	0.00	.127	0.000	88.90	.508	1	5.10	3.142E+06	.042
160074.006	1	3	122.36	-.51	0.00	86.398	1.000	0.00	.127	0.000	86.40	.508	1	5.10	6.478E+06	.070
160074.016	1	3	71.72	-.51	0.00	35.565	1.000	0.00	.127	0.000	35.57	.508	1	5.10	6.478E+06	.053
160074.103	1	3	47.59	1.02	0.00	11.430	.919	0.00	.127	0.000	11.43	.508	1	5.10	6.478E+06	.044
160074.205	1	3	61.56	1.02	0.00	25.400	.900	0.00	.127	0.000	25.40	.508	1	5.10	6.478E+06	.050
160074.309	1	3	96.96	.15	0.00	50.800	.791	0.00	.127	0.000	50.80	.508	1	5.10	6.478E+06	.057
160074.410	1	3	112.35	.04	.04	76.200	.678	0.00	.127	0.000	76.20	.508	1	5.10	6.478E+06	.065
160074.511	1	3	125.06	0.00	.15	88.900	.610	0.00	.127	0.000	88.90	.508	1	5.10	6.478E+06	.070
160075.012	1	3	92.14	-.51	0.00	55.889	1.000	0.00	.127	0.000	55.89	3.810	1	5.10	1.682E+06	.026
160075.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.127	0.000	10.15	3.810	1	5.10	1.682E+06	.019
160075.112	1	3	39.37	0.00	.25	3.810	.351	0.00	.127	0.000	3.81	3.810	1	5.10	1.682E+06	.018
160075.212	1	3	46.32	0.00	.25	10.160	.355	0.00	.127	0.000	10.16	3.810	1	5.10	1.682E+06	.019
160075.313	1	3	56.48	0.00	.38	20.320	.126	0.00	.127	0.000	20.32	3.810	1	5.10	1.682E+06	.021
160075.511	1	3	64.1[illegible]	0.00	.15	27.340	.330	0.00	.127	0.000	27.94	3.810	1	5.10	1.682E+06	.023
160076.012	1	3	92.14	-.51	0.00	55.888	1.000	0.00	.127	0.000	55.89	3.810	1	5.10	3.179E+06	.036
160076.022	1	3	46.31	-.51	0.00	10.150	1.005	0.00	.127	0.000	10.15	3.810	1	5.10	3.179E+06	.025
160076.112	1	3	39.37	[illegible]	.25	3.810	.4[illegible]	0.00	.127	0.000	3.81	3.810	1	5.10	3.179E+06	.024
160076.212	1	3	46.32	0.00	.25	10.160	.379	0.00	.127	0.000	10.16	3.810	1	5.10	3.179E+06	.025
160076.316	1	3	56.48	0.[illegible]	1.14	20.320	.915	0.00	.127	0.000	20.32	3.810	1	5.10	3.179E+06	.028
160076.511	1	3	64.1[illegible]	0.[illegible]	.15	27.340	.569	0.00	.127	0.000	27.94	3.810	1	5.10	3.179E+06	.030
160077.012	1	3	92.[illegible]4	-.51	0.00	55.888	[illegible]	0.00	.127	0.000	55.89	3.810	1	5.10	6.421E+06	.059
160077.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.127	0.000	10.15	3.810	1	5.10	6.421E+06	.043
160077.112	1	3	39.37	0.00	.25	3.810	.422	0.00	.127	0.000	3.81	3.810	1	5.10	6.421E+06	.039

160077.212	1	[illegible]	46.32	[illegible]	.25	1[illegible].160	.599	.09	.127	0.000	10.16	3.810	1	5.10	6.421E+06	.045
160077.313	1	3	56.49	0.00	.38	20.320	.611	0.00	.127	0.000	20.32	3.810	1	5.10	6.421E+06	.048
160077.509	1	3	64.1	.1	0.00	27.940	[illegible]	0.00	.127	0.000	27.94	3.810	1	5.10	6.421E+06	.050
160078.019	1	3	56.49	-.51	0.00	20.323	1.000	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160078.044	1	3	56.48	0.00	.25	20.323	.301	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160078.108	1	3	39.37	.2	0.00	3.310	.961	.09	.127	0.000	3.81	3.810	1	5.10	1.702E+06	.018
160078.208	1	3	46.32	.25	0.00	10.160	.911	.09	.127	0.000	10.16	3.810	1	5.10	1.702E+06	.019
160078.313	1	3	56.49	0.00	.39	20.320	.162	.09	.127	0.000	20.32	3.810	1	5.10	1.702E+06	.021
160078.412	1	3	59.12	0.00	.25	22.860	.321	.09	.127	0.000	22.86	3.810	1	5.10	1.702E+06	.022
160079.023	1	3	43.77	-.51	0.00	7.610	1.397	.09	.127	0.000	7.61	3.810	1	5.10	3.184E+06	.025
160079.048	1	3	43.77	0.00	.25	7.610	.306	.09	.127	0.000	7.61	3.810	1	5.10	3.184E+06	.025
160079.113	1	3	39.37	0.00	.38	3.813	.325	.09	.127	0.000	3.81	3.810	1	5.10	3.184E+06	.024
160079.306	1	3	56.49	.76	0.00	20.320	.001	.09	.127	0.000	20.32	3.810	1	5.10	3.184E+06	.028
160079.320	1	3	56.46	0.00	2.29	20.320	.010	.09	.127	0.000	20.32	3.810	1	5.10	3.184E+06	.028
160079.515	1	3	64.1	0.00	.89	27.940	.014	.09	.127	0.000	27.94	3.810	1	5.10	3.184E+06	.030
160080.025	1	3	38.77	-.51	0.00	2.545	1.100	.17	.127	0.000	2.55	3.810	1	5.10	3.122E+06	.023
160080.050	1	3	38.77	0.00	.25	2.545	.262	.17	.127	0.000	2.55	3.810	1	5.10	3.122E+06	.023
160080.115	1	3	39.97	0.00	.89	3.813	.125	.17	.127	0.000	3.81	3.810	1	5.10	3.122E+06	.023
160080.309	1	3	56.49	.13	0.00	20.320	.790	.17	.127	0.000	20.32	3.810	1	5.10	3.122E+06	.027
160080.510	1	3	64.10	.04	.04	27.940	.615	.17	.127	0.000	27.94	3.810	1	5.10	3.122E+06	.029
160081.020	1	3	51.39	-.51	0.00	15.235	1.300	.17	.127	0.000	15.23	3.810	1	5.10	1.726E+06	.020
160081.045	1	3	51.39	0.00	.25	15.235	.263	.17	.127	0.000	15.23	3.810	1	5.10	1.726E+06	.020
160081.110	1	3	39.37	.04	.04	3.810	.774	.17	.127	0.000	3.81	3.810	1	5.10	1.726E+06	.018
160081.210	1	3	46.32	.04	.04	10.160	.671	.17	.127	0.000	10.16	3.810	1	5.10	1.726E+06	.019
160081.312	1	3	56.49	0.00	.25	20.320	.297	.17	.127	0.000	20.32	3.810	1	5.10	1.726E+06	.021
160081.510	1	3	64.10	.04	.04	27.940	.627	.17	.127	0.000	27.94	3.810	1	5.10	1.726E+06	.023
160082.020	1	3	51.39	-.51	0.00	15.235	1.000	.26	.127	0.000	15.23	3.810	1	5.10	1.666E+06	.020
160082.045	1	3	51.39	0.00	.25	15.235	.254	.26	.127	0.000	15.23	3.810	1	5.10	1.666E+06	.020
160082.110	1	3	39.37	.04	.04	3.810	.874	.26	.127	0.000	3.81	3.810	1	5.10	1.666E+06	.018
160082.210	1	3	46.32	.04	.04	10.160	.742	.26	.127	0.000	10.16	3.810	1	5.10	1.666E+06	.019
160082.311	1	3	56.49	0.00	.15	20.320	.001	.26	.127	0.000	20.32	3.810	1	5.10	1.666E+06	.021
160082.508	1	3	64.10	.20	0.00	27.940	.913	.26	.127	0.000	27.94	3.810	1	5.10	1.666E+06	.023
160083.018	1	3	51.59	-.51	0.00	25.403	1.000	.26	.127	0.000	25.40	3.810	1	5.10	3.146E+06	.023
160083.043	1	3	51.59	0.00	.25	25.403	.237	.26	.127	0.000	25.40	3.810	1	5.10	3.146E+06	.029
160083.107	1	3	39.37	.51	0.00	3.510	1.117	.26	.127	0.000	3.81	3.810	1	5.10	3.146E+06	.024
160083.207	1	3	46.32	.51	0.00	10.160	.908	.26	.127	0.000	10.16	3.810	1	5.10	3.146E+06	.025
160083.312	1	3	56.49	0.00	.25	20.320	.320	.26	.127	0.000	20.32	3.810	1	5.10	3.146E+06	.028
160083.510	1	3	64.10	.04	.04	27.940	.628	.26	.127	0.000	27.94	3.810	1	5.10	3.146E+06	.029
160084.020	1	3	51.39	-.51	0.00	15.235	1.000	.26	.254	0.000	15.23	3.810	1	5.10	3.235E+06	.027
160084.045	1	3	51.39	0.00	.25	15.235	.291	.26	.254	0.000	15.23	3.810	1	5.10	3.235E+06	.027
160084.110	1	3	39.37	.04	.04	3.510	.989	.26	.254	0.000	3.81	3.810	1	5.10	3.235E+06	.024
160084.210	1	3	46.32	.04	.04	10.160	.352	.26	.254	0.000	10.16	3.810	1	5.10	3.235E+06	.025
160084.313	1	3	56.49	0.00	.39	20.320	.273	.26	.254	0.000	20.32	3.810	1	5.10	3.235E+06	.028
160084.512	1	3	64.10	0.00	.25	27.940	.568	.26	.254	0.000	27.94	3.810	1	5.10	3.235E+06	.030
160085.022	1	3	46.31	-.51	0.00	10.150	1.000	.26	.254	0.000	10.15	3.810	1	5.10	1.589E+06	.019
160085.047	1	3	46.31	0.00	.25	10.150	.375	.26	.254	0.000	10.15	3.810	1	5.10	1.589E+06	.019
160085.112	1	3	39.37	0.00	.25	3.810	.596	.26	.254	0.000	3.81	3.810	1	5.10	1.589E+06	.017
160085.212	1	3	46.32	0.00	.25	10.160	.434	.26	.254	0.000	10.16	3.810	1	5.10	1.589E+06	.019
160085.314	1	3	56.49	0.00	.64	20.320	.067	.26	.254	0.000	20.32	3.810	1	5.10	1.589E+06	.021
160085.512	1	3	64.1	0.00	.25	27.940	.519	.26	.254	0.000	27.94	3.810	1	5.10	1.589E+06	.022
160086.012	1	3	92.[illegible]	-.51	0.00	55.889	1.000	0.26	.254	0.000	55.89	3.810	1	5.10	1.667E+06	.027

[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.254	[illegible]	[illegible]	[illegible]	1	5.10	[illegible]	[illegible]
160086.112	1	3	39.37	0.00	.25	3.810	.353	0.00	.254	0.000	3.81	3.810	1	5.10	1.667E+06	.018
160086.212	1	3	46.32	0.00	.25	10.160	.497	0.00	.254	0.000	10.16	3.810	1	5.10	1.667E+06	.019
160086.310	1	3	56.40	.04	.04	20.320	.807	0.00	.254	0.000	20.32	3.810	1	5.10	1.667E+06	.021
160086.506	1	3	64.10	.75	0.00	27.940	.625	0.00	.254	0.000	27.94	3.810	1	5.10	1.667E+06	.023
160087.006	1	3	122.55	-.51	0.00	86.398	1.000	0.00	.254	0.000	86.40	3.810	1	5.10	3.274E+06	.042
160087.016	1	3	71.72	-.51	0.00	35.565	0.000	0.00	.254	0.000	35.57	3.810	1	5.10	3.274E+06	.032
160087.103	1	3	39.37	1.52	0.00	3.810	.955	0.00	.254	0.000	3.81	3.810	1	5.10	3.274E+06	.024
160087.203	1	3	46.32	1.52	0.00	10.160	.955	0.00	.254	0.000	10.16	3.810	1	5.10	3.274E+06	.026
160087.217	1	3	46.32	0.00	1.40	10.160	.310	0.00	.254	0.000	10.16	3.810	1	5.10	3.274E+06	.026
160087.317	1	3	56.45	0.00	1.40	20.320	.739	0.00	.254	0.000	20.32	3.810	1	5.10	3.274E+06	.028
160087.512	1	3	64.10	0.00	.25	27.940	.500	0.00	.254	0.000	27.94	3.810	1	5.10	3.274E+06	.030
160088.012	1	3	92.24	-.51	0.00	55.889	1.000	0.00	.254	0.000	55.89	3.810	1	5.10	6.370E+06	.058
160088.022	1	3	46.31	-.51	0.00	10.150	1.000	0.00	.254	0.000	10.15	3.810	1	5.10	6.370E+06	.043
160088.112	1	3	39.37	0.00	.25	3.810	.234	0.00	.254	0.000	3.81	3.810	1	5.10	6.370E+06	.039
160088.212	1	3	46.32	0.00	.25	10.160	.530	0.00	.254	0.000	10.16	3.810	1	5.10	6.370E+06	.043
160088.310	1	3	56.49	.04	.04	20.320	0.999	0.00	.254	0.000	20.32	3.810	1	5.10	6.370E+06	.048
160088.507	1	3	64.10	.51	0.00	27.940	0.000	0.00	.254	0.000	27.94	3.810	1	5.10	6.370E+06	.058
160089.007	1	3	117.47	-.51	0.00	81.315	1.000	0.00	.127	0.000	81.32	2.032	1	5.10	1.650E+06	.037
160089.017	1	3	66.64	-.51	0.00	30.485	1.000	0.00	.127	0.000	30.49	2.032	1	5.10	1.650E+06	.023
160089.105	1	3	39.37	1.02	0.00	3.810	.954	0.00	.127	0.000	3.81	2.032	1	5.10	1.650E+06	.018
160089.205	1	3	46.32	1.02	0.00	10.160	.348	0.00	.127	0.000	10.16	2.032	1	5.10	1.650E+06	.019
160089.308	1	3	56.48	.25	0.00	20.320	.909	0.00	.127	0.000	20.32	2.032	1	5.10	1.650E+06	.021
160089.508	1	3	64.1	.25	0.00	27.940	.828	0.00	.127	0.000	27.94	2.032	1	5.10	1.650E+06	.022
160090.008	1	3	112.37	-.51	0.00	76.215	1.000	0.00	.127	0.000	76.22	2.032	1	5.10	3.192E+06	.040
160090.018	1	3	61.56	-.51	0.00	25.403	1.000	0.00	.127	0.000	25.40	2.032	1	5.10	3.192E+06	.029
160090.107	1	3	39.97	.51	0.00	3.810	.926	0.00	.127	0.000	3.81	2.032	1	5.10	3.192E+06	.024
160090.207	1	3	46.32	.51	0.00	10.160	.994	0.00	.127	0.000	10.16	2.032	1	5.10	3.192E+06	.025
160090.312	1	3	56.48	0.00	.25	20.320	.356	0.00	.127	0.000	20.32	2.032	1	5.10	3.192E+06	.028
160090.513	1	3	64.1	0.00	.38	27.940	.279	0.00	.127	0.000	27.94	2.032	1	5.10	3.192E+06	.030
160091.009	1	3	107.31	-.51	0.00	71.150	1.000	0.00	.127	0.000	71.15	3.810	1	5.10	6.588E+06	.063
160091.108	1	3	111.09	.25	0.00	74.930	.885	0.00	.127	0.000	74.93	3.810	1	5.10	6.588E+06	.065
160091.310	1	3	117.44	.04	.04	81.280	.825	0.00	.127	0.000	81.28	3.810	1	5.10	6.588E+06	.069
160091.406	1	3	127.60	.76	0.00	91.440	.391	0.00	.127	0.000	91.44	3.810	1	5.10	6.588E+06	.072
160091.416	1	3	127.50	0.00	1.14	91.440	.019	0.00	.127	0.000	91.44	3.810	1	5.10	6.588E+06	.072
160091.513	1	3	135.22	0.00	.38	99.060	.454	0.00	.127	0.000	99.06	3.810	1	5.10	6.588E+06	.073
160092.003	1	3	130.16	-.51	0.00	94.008	1.000	.26	.127	0.000	94.01	3.810	1	5.10	6.374E+06	.070
160092.013	1	3	86.96	-.51	0.00	50.808	1.000	.26	.127	0.000	50.81	3.810	1	5.10	6.374E+06	.056
160092.113	1	3	111.09	0.00	.38	74.930	.443	.26	.127	0.000	74.93	3.810	1	5.10	6.374E+06	.063
160092.315	1	3	117.44	0.00	.89	81.280	.215	.26	.127	0.000	81.28	3.810	1	5.10	6.374E+06	.067
160092.410	1	3	127.60	.04	.04	91.440	.895	.26	.127	0.000	91.44	3.810	1	5.10	6.374E+06	.070
160092.506	1	3	135.22	.76	0.00	99.060	.972	.26	.127	0.000	99.06	3.810	1	5.10	6.374E+06	.071
160092.516	1	3	135.22	0.00	1.14	99.060	.129	.26	.127	0.000	99.06	3.810	1	5.10	6.374E+06	.071
160093.006	1	3	122.55	-.51	0.00	86.399	1.000	.26	.254	0.000	86.40	3.810	1	5.10	6.656E+06	.071
160093.103	1	3	111.09	1.52	0.00	74.930	1.310	.26	.254	0.000	74.93	3.810	1	5.10	6.656E+06	.065
160093.307	1	3	117.44	.51	0.00	81.280	.944	.26	.254	0.000	81.28	3.810	1	5.10	6.656E+06	.070
160093.318	1	3	117.44	0.00	1.65	81.280	.921	.26	.254	0.000	81.28	3.810	1	5.10	6.656E+06	.070
160093.413	1	3	127.60	0.00	.38	91.440	.775	.26	.254	0.000	91.44	3.810	1	5.10	6.656E+06	.072
160093.503	1	3	135.22	.25	0.00	99.060	.493	.26	.254	0.000	99.06	3.810	1	5.10	6.656E+06	.074
160093.519	1	3	135.22	0.00	1.65	99.060	.175	.26	.254	0.000	99.06	3.810	1	5.10	6.656E+06	.074

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AMES 3.5 FT HWT TEST ( ), C.B. BLUMER, IN-LINE RSI GAP RUN( ) 1973

	DELS	SUB-T	HLC	HLC/HREF	NSTT	TW/TE	B.L.	NTOL
160001.011	.224	[illegible]	6.884E-03	.7823	3.537E-04	1.612E-01	3	10
160001.021	.167	[illegible]	9.746E-03	.7561	5.018E-04	1.621E-01	2	20
160001.203	.187	[illegible]	5.530E-03	.8298	4.397E-04	1.626E-01	2	30
160001.306	.221	[illegible]	7.196E-03	.7335	3.692E-04	1.618E-01	3	40
160001.406	.249	[illegible]	6.527E-03	.7419	3.353E-04	1.613E-01	3	50
160001.506	.291	[illegible]	6.724E-03	.6310	3.454E-04	1.612E-01	3	60
160002.006	.351	[illegible]	3.346E-02	.7344	7.836E-04	1.475E-01	3	70
160002.016	.274	[illegible]	3.596E-03	.8398	2.247E-04	1.485E-01	2	80
160002.103	.228	[illegible]	1.233E-02	.8321	2.886E-04	1.516E-01	1	90
160002.301	.370	[illegible]	9.972E-03	.6519	2.339E-04	1.483E-01	3	100
160002.401	.342	[illegible]	2.192E-02	.6564	5.135E-04	1.469E-01	3	110
160002.501	.353	[illegible]	3.597E-02	.7045	8.414E-04	1.467E-01	3	120
160003.001	.327	[illegible]	6.229E-03	1.0955	3.834E-04	1.511E-01	3	130
160003.012	.219	[illegible]	6.933E-03	.782.	3.377E-04	1.513E-01	3	140
160003.022	.151	[illegible]	9.946E-03	.7424	4.841E-04	1.523E-01	1	150
160003.205	.183	[illegible]	8.497E-03	.8237	4.138E-04	1.520E-01	2	160
160003.307	.217	[illegible]	7.105E-03	.6691	3.460E-04	1.526E-01	3	170
160003.407	.246	[illegible]	6.354E-03	.7579	3.095E-04	1.510E-01	3	180
160003.507	.289	[illegible]	6.332E-03	.7905	3.084E-04	1.509E-01	3	190
160004.008	.250	[illegible]	6.539E-03	.8915	3.081E-04	1.573E-01	3	200
160004.018	.169	[illegible]	9.570E-03	.7696	4.008E-04	1.580E-01	1	210
160004.107	.166	[illegible]	9.917E-03	.7428	4.638E-04	1.596E-01	1	220
160004.303	.223	[illegible]	7.215E-03	.8363	3.374E-04	1.581E-01	3	230
160004.403	.250	[illegible]	6.590E-03	.9790	3.092E-04	1.570E-01	3	240
160004.503	.291	[illegible]	6.853E-03	.9244	3.210E-04	1.569E-01	3	250
160005.004	.346	[illegible]	3.650E-02	.7993	8.887E-04	1.533E-01	3	260
160005.014	.281	[illegible]	9.202E-03	.7952	2.234E-04	1.533E-01	3	270
160005.024	.204	[illegible]	1.306E-02	.8253	3.170E-04	1.535E-01	1	280
160005.208	.244	[illegible]	1.025E-02	.6390	2.488E-04	1.541E-01	2	290
160005.309	.292	[illegible]	9.691E-03	.3906	2.353E-04	1.526E-01	3	300
160005.409	.332	[illegible]	2.092E-02	.4406	4.981E-04	1.526E-01	3	310
160005.509	.344	[illegible]	3.355E-02	.3386	8.145E-04	1.520E-01	3	320
160006.013	.227	[illegible]	6.672E-03	1.0570	3.012E-04	1.532E-01	2	330
160006.020	.169	[illegible]	9.465E-03	.8279	4.484E-04	1.550E-01	1	340
160006.030	.290	[illegible]	6.561E-03	.4790	2.804E-04	1.528E-01	2	350
160006.040	.210	[illegible]	7.390E-03	.3278	2.924E-04	1.535E-01	2	360
160006.050	.152	[illegible]	1.093E-02	.2923	5.062E-04	1.536E-01	1	370
160006.060	.227	[illegible]	6.666E-03	.0561	4.222E-05	1.523E-01	2	380
160006.074	.158	[illegible]	1.055E-02	.9290	5.904E-04	1.535E-01	1	390
160007.010	.326	[illegible]	1.497E-02	1.7103	3.504E-04	1.551E-01	2	400
160007.020	.231	[illegible]	1.172E-02	.8084	2.823E-04	1.555E-01	1	410
160007.030	.348	[illegible]	3.579E-02	.87 7	8.397E-04	1.540E-01	2	420
160007.040	.277	[illegible]	9.278E-03	.6481	1.989E-04	1.545E-01	2	430
160007.050	.210	[illegible]	1.351E-02	.2301	3.236E-04	1.534E-01	1	440
160007.060	.326	[illegible]	1.492E-02	.5152	3.327E-04	[illegible]	2	450
160007.071	.226	[illegible]	1.276E-02	.0661	3.634E-04	1.537E-01	1	460
160008.000	.379	[illegible]	5.372E-02	1.3335	7.052E-04	1.548E-01	2	470

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[illegible]	.444	[illegible]	[illegible]	1.[illegible]042	1.670E-04	1.540E-01	2	480
160008.028	.553	0.00	8.053E-02	.5762	9.394E-04	1.539E-01	2	490
160008.038	.514	0.00	2.086E-02	2.6665	2.506E-04	1.536E-01	2	500
160008.048	.369	0.00	1.654E-02	.2541	2.044E-04	1.515E-01	1	510
160008.059	.564	0.000	4.824E-02	.6380	5.608E-04	1.513E-01	2	520
160008.069	.421	0.00	1.463E-02	.5264	1.816E-04	1.506E-01	2	530
160009.112	.165	0.000	9.885E-03	.2552	4.686E-04	1.530E-01	1	540
160009.207	.186	0.000	8.552E-03	.7731	4.054E-04	1.531E-01	1	550
160009.307	.221	0.000	7.134E-03	.7084	3.406E-04	1.526E-01	1	560
160009.405	.249	0.000	6.524E-03	.9419	3.093E-04	1.522E-01	2	570
160009.507	.291	0.000	6.715E-03	.7359	3.183E-04	1.521E-01	3	580
160010.108	.216	0.000	1.231E-02	.7570	2.870E-04	1.495E-01	1	590
160010.119	.216	0.000	1.291E-02	.0108	2.871E-04	1.445E-01	1	600
160010.214	.242	0.000	1.016E-02	.0951	2.428E-04	1.458E-01	1	610
160010.312	.289	0.000	9.553E-03	1.1351	2.286E-04	1.461E-01	2	620
160010.411	.328	0.000	1.967E-02	1.4030	4.702E-04	1.454E-01	2	630
160010.510	.341	0.000	3.192E-02	1.0956	7.631E-04	1.453E-01	3	640
160011.108	.365	0.000	1.626E-02	.7736	1.941E-04	1.570E-01	1	650
160011.119	.365	0.000	1.626E-02	.0013	1.941E-04	1.495E-01	1	660
160011.215	.449	0.000	1.392E-02	.4104	1.661E-04	1.509E-01	2	670
160011.310	.519	0.000	2.113E-02	2.9751	2.522E-04	1.537E-01	2	680
160011.407	.585	0.000	5.973E-02	1.1340	7.129E-04	1.530E-01	2	690
160011.417	.585	0.000	5.968E-02	.3710	7.124E-04	1.487E-01	2	700
160011.513	.542	0.000	7.687E-02	.4604	9.176E-04	1.509E-01	3	710
160012.005	.656	0.000	7.860E-02	.8315	9.289E-04	1.564E-01	3	720
160012.015	.570	0.000	1.541E-02	1.0438	1.821E-04	1.566E-01	2	730
160012.125	.363	0.000	1.754E-02	.7345	2.072E-04	1.565E-01	1	740
160012.219	.458	0.000	1.407E-02	.4140	1.663E-04	1.570E-01	2	750
160012.310	.529	0.000	2.163E-02	.5877	2.556E-04	1.548E-01	2	760
160012.410	.595	0.000	6.138E-02	.5151	7.253E-04	1.546E-01	3	770
160012.510	.655	0.000	7.872E-02	.3948	9.312E-04	1.543E-01	3	780
160013.011	.543	0.000	3.145E-02	2.4719	3.780E-04	1.557E-01	3	790
160013.021	.384	0.000	1.598E-02	.9777	1.920E-04	1.57[illegible]E-01	2	800
160013.111	.380	0.000	1.613E-02	.5394	1.939E-04	1.580E-01	2	810
160013.211	.442	0.000	1.380E-02	1.0166	1.659E-04	1.545E-01	2	820
160013.311	.512	0.000	2.077E-02	2.3230	2.497E-04	1.540E-01	3	830
160013.507	.537	0.000	7.565E-02	.7720	9.092E-04	1.541E-01	3	840
160013.517	.637	0.000	7.553E-02	.0693	9.078E-04	1.511E-01	3	850
160014.009	.344	0.000	1.936E-02	1.7389	4.448E-04	1.563E-01	2	860
160014.019	.247	0.000	1.117E-02	.9231	2.565E-04	1.564E-01	2	870
160014.108	.230	0.000	1.245E-02	.7379	2.858E-04	1.580E-01	1	880
160014.21[illegible]	.250	0.000	1.053E-02	.5741	2.417E-04	1.562E-01	2	890
160014.312	.307	0.000	1.040E-02	.4532	2.387E-04	1.547E-01	2	900
160014.511	.361	0.000	7.757E-02	.9447	8.625E-04	1.556E-01	2	910
160015.005	.292	0.000	6.334E-03	1.0693	3.240E-04	1.579E-01	2	920
160015.015	.214	0.000	7.434E-03	.9808	3.464E-04	1.576E-01	2	930
160015.025	.154	0.000	1.092E-02	.9544	5.080E-04	1.575E-01	1	940
160015.115	.167	0.000	9.940E-03	.0.7	4.631E-04	1.562E-01	1	950
160015.215	.189	0.000	8.584E-03	.3117	4.000E-04	1.557E-01	2	960
160015.315	.224	0.000	7.234E-03	.0151	3.370E-04	1.559E-01	2	970
160015.514	.297	0.000	6.951E-03	.0344	3.239E-04	1.570E-01	2	980

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	990
160016.020	.409	0.000	1.590E-02	.9306	1.875E-04	1.592E-01	3	1000
160016.110	.393	0.000	1.646E-02	.8293	1.941E-04	1.601E-01	3	1010
160016.210	.459	0.000	1.409E-02	1.0304	1.661E-04	1.594E-01	3	1020
160016.310	.530	0.000	2.169E-02	2.4760	2.557E-04	1.562E-01	3	1030
160016.410	.597	0.000	6.159E-02	.9135	7.262E-04	1.555E-01	3	1040
160016.510	.657	0.000	7.995E-02	.6536	9.308E-04	1.556E-01	3	1050
160017.006	.359	0.000	3.460E-02	1.3340	7.959E-04	1.519E-01	3	1060
160017.015	.280	0.000	5.710E-03	.9765	2.234E-04	1.520E-01	2	1070
160017.103	.229	0.000	1.044E-02	.8422	2.860E-04	1.552E-01	1	1080
160017.205	.256	0.000	1.052E-02	.8572	2.419E-04	1.539E-01	2	1090
160017.308	.308	0.000	1.036E-02	.8063	2.383E-04	1.520E-01	2	1100
160017.408	.349	0.000	2.331E-02	1.3054	5.362E-04	1.513E-01	2	1110
160017.509	.361	0.000	3.746E-02	.9717	8.618E-04	1.512E-01	3	1120
160018.005	.260	0.000	6.256E-03	1.0799	3.057E-04	1.473E-01	3	1130
160018.016	.198	0.000	7.433E-03	.8715	3.631E-04	1.483E-01	3	1140
160018.103	.162	0.000	9.773E-03	.8250	4.773E-04	1.502E-01	1	1150
160018.205	.182	0.000	8.493E-03	.8349	4.144E-04	1.492E-01	2	1160
160018.308	.216	0.000	7.087E-03	.6724	3.462E-04	1.477E-01	3	1170
160018.409	.245	0.000	6.311E-03	.6489	3.083E-04	1.470E-01	3	1180
160018.511	.289	0.000	6.228E-03	.5559	3.042E-04	1.470E-01	3	1190
160019.013	.212	0.000	7.019E-03	.8572	3.507E-04	1.397E-01	2	1200
160019.023	.154	0.000	1.011E-02	.9083	5.057E-04	1.414E-01	1	1210
160019.113	.148	0.000	1.052E-02	.2001	5.264E-04	1.412E-01	1	1220
160019.211	.157	0.000	9.820E-03	.4305	4.514E-04	1.404E-01	1	1230
160019.413	.171	0.000	8.893E-03	.1706	4.450E-04	1.395E-01	1	1240
160019.514	.182	0.000	8.118E-03	.0120	4.062E-04	1.351E-01	2	1250
160020.016	.271	0.000	9.537E-03	1.2017	2.232E-04	1.497E-01	2	1260
160020.103	.204	0.000	1.342E-02	.9169	3.141E-04	1.535E-01	1	1270
160020.205	.219	0.000	1.246E-02	.8059	2.916E-04	1.526E-01	1	1280
160020.409	.238	0.000	1.101E-02	.8226	2.575E-04	1.504E-01	2	1290
160020.511	.254	0.000	1.014E-02	.7166	2.374E-04	1.501E-01	2	1300
160021.013	.229	0.000	7.337E-03	1.2253	3.337E-04	1.582E-01	2	1310
160021.023	.165	0.000	1.048E-02	.9627	4.765E-04	1.598E-01	1	1320
160021.113	.160	0.000	1.099E-02	.2429	4.954E-04	1.593E-01	1	1330
160021.212	.163	0.000	1.019E-02	.5144	4.636E-04	1.585E-01	1	1340
160021.412	.185	0.000	9.176E-03	.3731	4.173E-04	1.583E-01	2	1350
160021.513	.194	0.000	8.351E-03	.3498	3.798E-04	1.592E-01	2	1360
160022.015	.265	0.000	4.995E-03	1.9032	2.217E-04	1.464E-01	2	1370
160022.025	.194	0.000	1.316E-02	.9659	3.254E-04	1.475E-01	1	1380
160022.115	.197	0.000	1.301E-02	.8093	3.209E-04	1.466E-01	2	1390
160022.407	.230	0.000	1.071E-02	.4394	2.641E-04	1.470E-01	2	1400
160022.507	.246	0.000	9.878E-03	.8233	2.428E-04	1.474E-01	2	1410
160023.019	.180	0.000	9.087E-03	.7684	4.252E-04	1.571E-01	3	1420
160023.040	.130	0.000	[illegible]	.2753	4.252E-04	1.557E-01	3	1430
160023.109	.158	0.000	1.077E-02	.9532	5.041E-04	1.580E-01	1	1440
160023.209	.165	0.000	1.008E-02	1.1537	4.715E-04	1.576E-01	3	1450
160023.219	.165	0.000	1.006E-02	[illegible]	4.715E-04	1.546E-01	3	1460
160023.414	.190	0.000	[illegible]	[illegible]	4.252E-04	1.555E-01	3	1470
160023.513	.193	0.000	8.278E-03	.3205	3.873E-04	1.557E-01	3	1480
160024.021	.225	0.000	[illegible]	.9214	2.897E-04	[illegible]	1	1490

160024.0[illegible]	.22[illegible]	[illegible]	1.2[illegible]E-02	[illegible]	2.09[illegible]E-04	1.54[illegible]E-01	1	15[illegible]
160024.111	.203	[illegible]	1.336E-02	.8765	3.216E-04	1.565E-01	1	1510
160024.211	.218	[illegible]	1.243E-02	1.5797	2.937E-04	1.555E-01	1	1520
160024.408	.237	[illegible]	1.097E-02	.8495	2.637E-04	1.552E-01	1	1530
160024.413	.237	[illegible]	1.097E-02	.0335	2.638E-04	1.518E-01	1	1540
160024.514	.252	[illegible]	1.011E-02	.1157	2.430E-04	1.531E-01	2	1550
160025.020	.177	[illegible]	9.731E-03	.8537	4.086E-04	1.536E-01	1	1560
160025.045	.177	[illegible]	9.731E-03	.2432	4.086E-04	1.530E-01	1	1570
160025.112	.161	[illegible]	1.034E-02	.73[illegible]	4.697E-04	1.544E-01	1	1580
160025.210	.179	[illegible]	1.024E-02	.5775	4.313E-04	1.537E-01	1	1590
160025.411	.186	[illegible]	9.211E-03	.4381	3.880E-04	1.529E-01	1	1600
160025.512	.200	[illegible]	3.380E-03	.3482	3.530E-04	1.526E-01	1	1610
160026.020	.223	[illegible]	1.153E-02	.9426	2.872E-04	1.536E-01	3	1620
160026.045	.228	[illegible]	1.162E-02	.2335	2.801E-04	1.529E-01	3	1630
160026.110	.201	[illegible]	1.330E-02	.7907	3.275E-04	1.550E-01	1	1640
160026.210	.217	[illegible]	1.236E-02	.5969	2.979E-04	1.538E-01	3	1650
160026.412	.236	[illegible]	1.092E-02	.2315	2.631E-04	1.521E-01	3	1660
160026.513	.251	[illegible]	1.006E-02	.2123	2.423E-04	1.516E-01	3	1670
160027.025	.152	[illegible]	1.084E-02	.8397	5.159E-04	1.516E-01	1	1680
160027.103	.154	[illegible]	1.369E-02	.8165	5.086E-04	1.535E-01	1	1690
160027.203	.163	[illegible]	9.936E-03	.8743	4.756E-04	1.523E-01	1	1700
160027.219	.163	[illegible]	1.000E-02	.0033	4.758E-04	1.495E-01	1	1710
160027.414	.178	[illegible]	9.029E-03	.0229	4.296E-04	1.504E-01	2	1720
160027.513	.189	[illegible]	8.235E-03	.1965	3.916E-04	1.509E-01	3	1730
160028.020	.231	[illegible]	1.172E-02	.8493	2.803E-04	1.549E-01	3	1740
160028.045	.231	[illegible]	1.172E-02	.2332	2.802E-04	1.535E-01	3	1750
160028.110	.203	[illegible]	1.342E-02	.9298	3.208E-04	1.560E-01	1	1760
160028.210	.219	[illegible]	1.246E-02	.5837	2.980E-04	1.548E-01	1	1770
160028.412	.238	[illegible]	1.110E-02	.3968	2.631E-04	1.531E-01	3	1780
160028.512	.254	[illegible]	1.014E-02	.3702	2.425E-04	1.530E-01	3	1790
160029.022	.155	[illegible]	1.338E-02	.9472	4.718E-04	1.584E-01	3	1800
160029.047	.155	[illegible]	1.058E-02	.2880	4.709E-04	1.579E-01	3	1810
160029.112	.156	[illegible]	1.478E-02	.5[illegible]	5.035E-04	1.596E-01	1	1820
160029.212	.160	[illegible]	1.[illegible]E-02	.4394	4.795E-04	1.582E-01	3	1830
160029.409	.180	[illegible]	9.089E-03	.9032	4.246E-04	1.582E-01	3	1840
160029.509	.193	[illegible]	8.250E-03	.834[illegible]	3.868E-04	1.581E-01	3	1850
160030.019	.246	[illegible]	1.032E-02	.7965	2.492E-04	1.537E-01	3	1860
160030.043	.246	[illegible]	1.031E-02	.2239	2.481E-04	1.529E-01	3	1870
160030.107	.202	[illegible]	1.333E-02	1.1597	3.278E-04	1.553E-01	1	1880
160030.207	.218	[illegible]	1.239E-02	1.4723	2.980E-04	1.53[illegible]E-01	3	1890
160030.406	.236	[illegible]	1.094E-02	.7421	2.631E-04	1.527E-01	3	1900
160030.506	.252	[illegible]	1.008E-02	.3279	2.424E-04	1.529E-01	3	1910
160030.516	.252	[illegible]	1.008E-02	.0143	2.425E-04	1.502E-01	3	1920
160031.023	.222	[illegible]	1.338E-02	.8534	3.056E-04	1.561E-01	2	1930
160031.049	.222	[illegible]	1.337E-02	.3574	3.055E-04	1.551E-01	2	1940
160031.113	.213	[illegible]	1.354E-02	.3722	3.197E-04	1.556E-01	1	1950
160031.213	.229	[illegible]	1.265E-02	.0305	2.967E-04	1.739E-01	2	1960
160031.409	.249	[illegible]	1.122E-02	.7729	2.622E-04	1.55[illegible]E-01	3	1970
160031.509	.266	[illegible]	1.035E-02	.4427	2.418E-04	1.544E-01	3	1980
160032.021	.168	[illegible]	9.793E-03	.4893	4.588E-04	1.542E-01	2	1990
160032.[illegible]46	.165	[illegible]	9.794E-03	.2453	4.584E-04	1.536E-01	2	2000

[illegible]	.156	[illegible]	[illegible]	.5343	5.046E-04	1.549E-01	1	2010
160032.211	.165	0.000	1.097E-02	.5955	4.719E-04	1.541E-01	1	2020
160032.469	.185	0.000	9.084E-03	.9045	4.256E-04	1.537E-01	2	2030
160032.507	.192	0.000	8.277E-03	.5519	3.878E-04	1.538E-01	3	2040
160033.019	.231	0.000	1.073E-02	.8655	2.643E-04	1.479E-01	3	2050
160033.044	.231	0.000	1.072E-02	.2526	2.642E-04	1.471E-01	3	2060
160033.108	.197	0.000	1.393E-02	1.0377	3.210E-04	1.500E-01	1	2070
160033.208	.212	0.000	1.212E-02	.0275	2.986E-04	1.486E-01	1	2080
160033.411	.231	0.000	1.072E-02	.6039	2.642E-04	1.465E-01	3	2090
160033.511	.246	0.000	9.858E-03	.5300	2.429E-04	1.461E-01	3	2100
160034.020	.171	0.000	9.499E-03	.8819	4.524E-04	1.555E-01	1	2110
160034.045	.171	0.000	9.498E-03	.2322	4.523E-04	1.550E-01	1	2120
160034.119	.155	0.000	1.072E-02	.7321	5.107E-04	1.567E-01	1	2130
160034.210	.163	0.000	1.003E-02	.6945	4.775E-04	1.560E-01	1	2140
160034.409	.179	0.000	9.049E-03	.8088	4.309E-04	1.553E-01	1	2150
160034.507	.198	0.000	8.248E-03	.9322	3.928E-04	1.554E-01	1	2160
160034.520	.190	0.000	8.246E-03	.0073	3.927E-04	1.532E-01	1	2170
160035.012	.536	0.000	2.604E-02	2.7752	3.136E-04	1.520E-01	3	2180
160035.112	.584	0.000	5.767E-02	1.1002	6.879E-04	1.532E-01	3	2190
160035.205	.613	0.000	6.945E-02	1.0510	8.284E-04	1.541E-01	3	2200
160035.217	.613	0.000	6.917E-02	.1166	8.250E-04	1.497E-01	3	2210
160035.412	.656	0.000	7.987E-02	.4652	9.526E-04	1.596E-01	3	2220
160035.509	.683	0.000	8.695E-02	.8281	1.037E-03	1.513E-01	3	2230
160035.519	.683	0.000	3.693E-02	.0190	1.037E-03	1.484E-01	3	2240
160036.019	.568	0.000	4.027E-02	1.6361	4.791E-04	1.548E-01	3	2250
160036.119	.586	0.000	5.890E-02	2.0756	6.901E-04	1.569E-01	3	2260
160036.120	.586	0.000	5.800E-02	.0253	6.901E-04	1.520E-01	3	2270
160036.216	.615	0.000	6.954E-02	.6898	8.274E-04	1.510E-01	3	2280
160036.411	.559	0.000	8.023E-02	.5528	9.545E-04	1.539E-01	3	2290
160036.506	.686	0.000	8.741E-02	.7309	1.040E-03	1.550E-01	3	2300
160036.516	.686	0.000	8.727E-02	.0527	1.038E-03	1.518E-01	3	2310
160037.007	.621	0.000	7.031E-02	.9819	8.325E-04	1.577E-01	3	2320
160037.105	.591	0.000	5.876E-02	1.2449	6.958E-04	1.599E-01	3	2330
160037.117	.591	0.000	5.877E-02	.1687	6.959E-04	1.552E-01	3	2340
160037.212	.621	0.000	7.042E-02	1.3404	8.338E-04	1.567E-01	3	2350
160037.409	.665	0.000	8.112E-02	.6260	9.605E-04	1.562E-01	3	2360
160037.419	.665	0.000	8.108E-02	.0938	9.600E-04	1.528E-01	3	2370
160037.514	.693	0.000	8.807E-02	.0966	1.043E-03	1.543E-01	3	2380
160038.005	.663	0.000	7.957E-02	.9299	9.394E-04	1.587E-01	3	2390
160038.015	.514	0.000	1.556E-02	1.4675	1.835E-04	1.590E-01	2	2400
160038.115	.597	0.000	5.966E-02	.1105	7.037E-04	1.572E-01	3	2410
160038.211	.528	0.000	7.147E-02	.9858	8.427E-04	1.594E-01	3	2420
160038.405	.577	0.000	8.216E-02	.7370	9.687E-04	1.577E-01	3	2430
160038.506	.701	0.000	8.918E-02	.7246	1.052E-03	1.593E-01	3	2440
160038.516	.701	0.000	8.904E-02	.0527	1.050E-03	1.553E-01	3	2450
160039.007	.623	0.000	7.061E-02	1.1009	8.357E-04	1.589E-01	3	2460
160039.105	.593	0.000	5.903E-02	1.2372	6.986E-04	1.614E-01	3	2470
160039.117	.593	0.000	5.903E-02	.0361	6.987E-04	1.560E-01	3	2480
160039.212	.623	0.000	7.072E-02	.9757	8.370E-04	1.576E-01	3	2490
160039.409	.667	0.000	8.141E-02	.6309	9.635E-04	1.571E-01	3	2500
160039.507	.595	[illegible]	5.845E-02	.7393	1.047E-03	1.574E-01	3	2510
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

160039.517	[illegible]	[illegible]	[illegible]	[illegible]	1.040E-03	1.544E-01	3	2520
160040.008	.597	0.000	6.152E-02	1.2237	7.276E-04	1.607E-01	3	2530
160040.107	.592	0.000	5.890E-02	1.2727	6.966E-04	1.625E-01	3	2540
160040.118	.592	0.000	5.830E-02	.3805	6.966E-04	1.575E-01	3	2550
160040.215	.627	0.000	7.057E-02	1.0445	8.346E-04	1.580E-01	3	2560
160040.413	.666	0.000	8.123E-02	.0170	9.637E-04	1.588E-01	3	2570
160040.420	.666	0.000	8.122E-02	.0110	9.606E-04	1.552E-01	3	2580
160040.515	.694	0.000	5.821E-02	.0939	1.043E-03	1.566E-01	3	2590
160041.006	.528	0.000	7.362E-02	1.1367	8.832E-04	1.498E-01	3	2600
160041.103	.575	0.000	5.638E-02	1.3231	6.763E-04	1.515E-01	3	2610
160041.116	.575	0.000	5.641E-02	.2253	6.767E-04	1.474E-01	3	2620
160041.211	.604	0.000	6.772E-02	1.2043	8.124E-04	1.491E-01	3	2630
160041.408	.646	0.000	7.852E-02	.7626	9.419E-04	1.484E-01	3	2640
160041.418	.646	0.000	7.847E-02	.1645	9.413E-04	1.451E-01	3	2650
160041.513	.572	0.000	8.561E-02	.2346	1.027E-03	1.466E-01	3	2660
160042.004	.652	0.000	7.917E-02	.9105	9.451E-04	1.518E-01	3	2670
160042.014	.512	0.000	1.747E-02	1.5366	2.086E-04	1.513E-01	2	2680
160042.114	.580	0.000	5.713E-02	.3173	6.823E-04	1.507E-01	3	2690
160042.210	.609	0.000	6.855E-02	1.0212	8.183E-04	1.517E-01	3	2700
160042.497	.652	0.000	7.938E-02	.8034	9.475E-04	1.512E-01	3	2710
160042.506	.679	0.000	9.648E-02	.7229	1.037E-03	1.512E-01	3	2720
160042.516	.579	0.000	8.635E-02	.0519	1.03_E-03	1.483E-01	3	2730
160043.007	.266	0.000	6.716E-03	1.5530	3.164E-04	1.563E-01	2	2740
160043.017	.197	0.000	7.972E-03	.9661	3.756E-04	1.571E-01	1	2750
160043.105	.167	0.000	9.937E-03	.8323	4.682E-04	1.592E-01	1	2760
160043.207	.189	0.000	8.585E-03	.8344	4.045E-04	1.577E-01	1	2770
160043.309	.224	0.000	7.232E-03	.7506	3.408E-04	1.563E-01	2	2780
160043.409	.251	0.000	6.624E-03	1.1342	3.121E-04	1.558E-01	2	2790
160043.510	.292	0.000	6.943E-03	1.0787	3.271E-04	1.556E-01	2	2800
160044.007	.323	0.000	2.130E-02	1.9135	5.462E-04	1.483E-01	3	2810
160044.017	.248	0.000	9.435E-03	1.1213	2.420E-04	1.492E-01	2	2820
160044.105	.210	0.000	1.173E-02	.8674	3.008E-04	1.515E-01	2	2830
160044.207	.236	0.000	9.934E-03	.7366	2.548E-04	1.497E-01	2	2840
160044.312	.282	0.000	9.229E-03	.4536	2.367E-04	1.470E-01	2	2850
160044.412	.318	0.000	1.752E-02	.8674	4.494E-04	1.469E-01	2	2860
160044.512	.334	0.000	2.788E-02	.9630	7.150E-04	1.474E-01	3	2870
160045.009	.596	0.000	6.133E-02	1.3145	7.267E-04	1.549E-01	3	2880
160045.018	.453	0.000	1.410E-02	1.9985	1.671E-04	1.552E-01	2	2890
160045.107	.392	0.	1.644E-02	.9303	1.948E-04	1.579E-01	2	2900
160045.207	.458	0.000	1.405E-02	1.2716	1.665E-04	1.558E-01	2	2910
160045.311	.529	0.00	2.163E-02	2.3134	2.564E-04	1.526E-01	3	2920
160045.411	.595	0.00	6.135E-02	.3075	7.270E-04	1.528E-01	3	2930
160045.511	.655	0.00	7.868E-02	.6195	9.324E-04	1.537E-01	3	2940
160046.007	.266	0.000	6.773E-03	2.6327	3.097E-04	1.590E-01	2	2950
160046.017	.198	0.000	7.986E-03	.9364	3.729E-04	1.592E-01	2	2960
160046.027	.321	0.000	7.398E-03	1.5590	3.452E-04	1.568E-01	2	2970
160046.037	.227	0.00	7.118E-03	1.2336	3.192E-04	1.597E-01	2	2980
160046.047	.165	0.000	1.010E-02	.4594	4.780E-04	1.584E-01	2	2990
160046.057	.266	.000	6.775E-03	.6128	2.887E-04	1.580E-01	2	3000
160046.069	.193	0.000	6.598E-03	.1697	4.039E-04	1.581E-01	2	3010
160047.055	.342	0.000	7.273E-02	1.4762	7.939E-04	1.529E-01	2	3020

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	3030
160047.325	.195	[illegible]	[illegible]	.8550	3.381E-04	1.541E-01	1	3040
160047.035	.318	[illegible]	1.338E-02	2.3195	3.355E-04	1.527E-01	2	3050
160047.045	.228	[illegible]	1.151E-02	.8127	2.796E-04	1.522E-01	2	3060
160047.055	.342	[illegible]	3.261E-02	.5515	7.739E-04	1.513E-01	2	3070
160047.063	.271	[illegible]	9.887E-03	1.0034	2.850E-04	1.515E-01	2	3080
160048.001	.697	[illegible]	8.848E-02	.7324	1.825E-03	1.575E-01	2	3090
160048.012	.545	[illegible]	2.665E-02	3.2303	3.183E-04	1.583E-01	2	3100
160048.022	.390	[illegible]	1.665E-02	1.8251	1.963E-04	1.631E-01	2	3110
160048.532	.626	[illegible]	7.892E-02	.5829	8.149E-04	1.571E-01	2	3120
160048.042	.677	[illegible]	1.366E-02	1.5228	1.610E-04	1.575E-01	2	3130
160048.053	.678	[illegible]	8.387E-02	[illegible]	9.391E-04	1.547E-01	2	3140
160048.061	.572	[illegible]	2.178E-02	1.6756	2.568E-04	1.548E-01	2	3150
160048.073	.382	[illegible]	1.696E-02	.2951	2.888E-04	1.561E-01	2	3160
160049.115	.401	[illegible]	1.664E-02	.3423	1.955E-04	1.603E-01	1	3170
160049.219	.468	[illegible]	1.425E-02	.6548	1.674E-04	1.597E-01	2	3180
160049.313	.548	[illegible]	2.228E-02	2.1373	2.688E-04	1.609E-01	2	3190
160049.469	.608	[illegible]	6.336E-02	.8657	7.435E-04	1.676E-01	2	3200
160049.506	.978	[illegible]	[illegible]	.7494	9.512E-04	1.613E-01	3	3210
160049.516	.670	[illegible]	8.977E-02	.1051	9.487E-04	1.585E-01	3	3220
160050.113	.164	[illegible]	9.841E-03	.2889	4.749E-04	1.567E-01	1	3230
160050.211	.185	[illegible]	2.523E-03	.6570	4.113E-04	1.562E-01	1	3240
160050.312	.219	[illegible]	7.147E-03	.9541	3.449E-04	1.556E-01	2	3250
160050.410	.247	[illegible]	6.435E-03	2.0366	3.107E-04	1.555E-01	2	3260
160050.508	.299	[illegible]	6.522E-03	2.3974	3.148E-04	1.585E-01	2	3270
160051.107	.224	[illegible]	1.231E-02	.9203	2.945E-04	1.625E-01	1	3280
160051.293	.252	[illegible]	1.640E-02	.8215	2.488E-04	1.610E-01	1	3290
160051.308	.299	[illegible]	1.870E-02	2.4469	2.392E-04	1.604E-01	2	3300
160051.318	.299	[illegible]	1.812E-02	.8491	2.399E-04	1.573E-01	2	3310
160051.415	.341	[illegible]	2.213E-02	.4119	5.294E-04	1.579E-01	2	3320
160051.812	.381	[illegible]	9.617E-02	.9489	8.658E-04	1.584E-01	3	3330
160052.884	.380	[illegible]	6.655E-03	.9540	3.184E-04	1.562E-01	3	3340
160052.916	.217	[illegible]	[illegible]	1.0196	3.484E-04	1.574E-01	2	3350
160052.024	.156	[illegible]	1.057E-02	.8764	5.855E-04	1.571E-01	1	3360
160052.114	.164	[illegible]	9.865E-03	.8115	4.719E-04	1.566E-01	1	3370
160052.398	.220	[illegible]	7.157E-03	.7228	3.429E-04	1.575E-01	3	3380
160052.949	.298	[illegible]	[illegible]	.3262	3.169E-04	1.563E-01	3	3390
160053.006	.342	[illegible]	3.870E-02	.7828	7.461E-04	1.552E-01	3	3400
160053.226	.766	[illegible]	9.380E-03	.8764	2.289E-04	1.561E-01	3	3410
160053.193	.219	[illegible]	1.218E-02	.7876	2.940E-04	1.593E-01	1	3420
160053.287	.244	[illegible]	1.024E-02	.7444	2.488E-04	1.572E-01	2	3430
160053.313	.292	[illegible]	9.652E-03	.1364	2.353E-04	1.544E-01	3	3440
160053.514	.344	[illegible]	7.339E-02	.0194	8.115E-04	1.535E-01	3	3450
160054.011	.228	[illegible]	6.942E-03	3.0315	3.262E-04	1.535E-01	2	3460
160054.021	.168	[illegible]	9.733E-03	.9997	4.692E-04	1.546E-01	1	3470
160054.111	.168	[illegible]	9.932E-03	.6259	4.667E-04	1.550E-01	1	3480
160054.211	.188	[illegible]	8.550E-03	.9784	4.032E-04	1.538E-01	2	3490
160054.316	.223	[illegible]	7.226E-03	.8734	3.398E-04	1.529E-01	2	3500
160054.511	.292	[illegible]	6.920E-03	2.9398	3.252E-04	1.526E-01	2	3510
160054.783	.348	[illegible]	3.944E-02	1.1580	9.577E-04	1.492E-01	3	3520
160055.013	.292	[illegible]	9.727E-03	2.9453	2.366E-04	1.459E-01	2	3530

[illegible]	.21[illegible]	[illegible]	1.[illegible]E-02	.9430	3.[illegible]E-04	1.[illegible]E-01	2	3540
160055.113	.219	0.000	1.212E-02	.5534	2.943E-04	1.506E-01	2	3550
160055.215	.244	0.000	1.328E-02	.3373	2.488E-04	1.478E-01	2	3560
160055.316	.292	0.000	9.696E-03	1.0242	2.354E-04	1.474E-01	2	3570
160055.512	.344	0.000	3.356E-02	.7619	8.148E-04	1.479E-01	3	3580
160056.002	.678	0.000	6.486E-02	.0303	1.308E-03	1.430E-01	3	3590
160056.012	.539	0.000	2.619E-02	2.2732	3.117E-04	1.525E-01	3	3600
160056.022	.385	0.000	1.653E-02	1.1380	1.962E-04	1.554E-01	2	3610
160056.112	.389	0.000	1.637E-02	1.0705	1.943E-04	1.556E-01	2	3620
160056.212	.454	0.000	1.471E-02	2.4194	1.663E-04	1.523E-01	2	3630
160056.315	.525	0.000	2.143E-02	.9667	2.544E-04	1.499E-01	3	3640
160056.513	.650	0.000	7.734E-02	.5437	9.253E-04	1.516E-01	3	3650
160056.523	.650	0.000	7.793E-02	.3812	9.251E-04	1.482E-01	3	3660
160057.011	.318	0.000	1.219E-02	.6763	2.961E-04	1.525E-01	2	3670
160057.021	.222	0.000	1.194E-02	.8458	2.911E-04	1.542E-01	1	3680
160057.111	.219	0.000	1.212E-02	.9325	2.955E-04	1.549E-01	1	3690
160057.211	.244	0.000	1.025E-02	.6332	2.498E-04	1.529E-01	1	3700
160057.313	.292	0.000	9.694E-03	.6329	2.363E-04	1.513E-01	2	3710
160057.508	.344	0.000	7.347E-02	.6561	8.161E-04	1.518E-01	2	3720
160057.518	.344	0.000	3.352E-02	.8221	8.176E-04	1.502E-01	2	3730
160058.008	.597	0.000	6.154E-02	1.2674	7.303E-04	1.565E-01	3	3740
160058.018	.459	0.000	1.412E-02	.8699	1.675E-04	1.582E-01	1	3750
160058.187	.393	0.000	1.646E-02	1.9071	1.953E-04	1.617E-01	1	3760
160058.207	.459	0.000	1.407E-02	2.0772	1.669E-04	1.594E-01	1	3770
160058.310	.538	0.000	2.169E-02	2.7174	2.573E-04	1.561E-01	3	3780
160058.320	.538	0.000	2.170E-02	.8647	2.575E-04	1.524E-01	3	3790
160058.515	.657	0.000	7.892E-02	.0953	9.364E-04	1.533E-01	3	3800
160059.005	.383	0.000	3.797E-02	1.0513	8.697E-04	1.543E-01	3	3810
160059.015	.288	0.000	9.598E-03	1.0383	2.107E-04	1.548E-01	2	3820
160059.025	.288	0.000	1.358E-02	.5138	3.161E-04	1.565E-01	1	3830
160059.115	.231	0.000	1.248E-02	.2738	2.858E-04	1.544E-01	1	3840
160059.307	.398	0.000	1.844E-02	3.5801	2.391E-04	1.546E-01	2	3850
160059.317	.308	0.000	1.047E-02	.3542	2.399E-04	1.519E-01	2	3860
160059.512	.383	0.000	7.783E-02	.8182	8.667E-04	1.533E-01	3	3870
160060.002	.361	0.000	4.612E-02	.6791	1.092E-03	1.509E-01	2	3880
160060.012	.313	0.000	1.126E-02	.7012	2.668E-04	1.571E-01	2	3890
160060.022	.224	0.000	1.256E-02	.5278	2.979E-04	1.599E-01	1	3900
160060.112	.227	0.000	1.238E-02	.4803	2.933E-04	1.597E-01	1	3910
160060.212	.253	0.000	1.047E-02	.4688	2.479E-04	1.574E-01	1	3920
160060.316	.303	0.000	1.021E-02	.0378	2.417E-04	1.552E-01	2	3930
160060.513	.357	0.000	3.687E-02	.2672	8.732E-04	1.556E-01	2	3940
160061.004	.357	0.000	3.998E-02	.5738	9.476E-04	1.569E-01	3	3950
160061.014	.291	0.000	9.558E-03	.2309	2.267E-04	1.588E-01	2	3960
160061.024	.211	0.000	1.332E-02	.7833	3.160E-04	1.603E-01	1	3970
160061.114	.227	0.000	1.237E-02	.0636	2.935E-04	1.589E-01	1	3980
160061.317	.302	0.000	1.015E-02	.9308	2.418E-04	1.587E-01	3	3990
160061.806	.356	0.000	3.663E-02	.4049	8.688E-04	1.575E-01	3	4000
160061.515	.356	0.000	3.678E-02	.6153	8.723E-04	1.553E-01	3	4010
160062.008	.342	0.000	2.238E-02	.5644	5.338E-04	1.599E-01	3	4020
160062.018	.288	0.000	1.042E-02	.8722	2.482E-04	1.577E-01	2	4030
160062.107	.225	0.000	1.233E-02	.8573	2.935E-04	1.605E-01	1	4040

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160062.389	.388	0.000	1.075E-02	.7585	2.393E-04	1.565E-01	3 4060
160062.509	.357	0.000	3.629E-02	.5229	8.641E-04	1.551E-01	3 4070
160063.003	.658	0.000	8.123E-02	.8799	9.695E-04	1.538E-01	3 4080
160063.013	.518	0.000	2.120E-02	1.0968	2.531E-04	1.543E-01	2 4090
160063.023	.172	0.000	1.671E-02	.9210	1.995E-04	1.558E-01	1 4100
160063.113	.784	0.000	1.624E-02	.2498	1.938E-04	1.547E-01	1 4110
160063.215	.447	0.000	1.389E-02	.8337	1.658E-04	1.500E-01	2 4120
160063.506	.645	0.000	7.676E-02	.8404	9.161E-04	1.731E-01	3 4130
160063.516	.649	0.000	7.658E-02	.9761	9.140E-04	1.497E-01	3 4140
160064.089	.324	0.000	1.664E-02	.6303	4.062E-04	1.529E-01	3 4150
160064.019	.233	0.000	1.032E-02	.8571	2.641E-04	1.545E-01	1 4160
160064.198	.217	0.000	1.255E-02	.8345	2.941E-04	1.572E-01	1 4170
160064.288	.243	0.000	1.019E-02	.8768	2.487E-04	1.558E-01	2 4180
160064.312	.290	0.000	5.607E-03	.3166	2.348E-04	1.522E-01	3 4190
160064.812	.347	0.000	7.268E-02	.3144	7.929E-04	1.518E-01	3 4200
160065.086	.676	0.000	8.057E-02	.9225	9.324E-04	1.617E-01	3 4210
160065.816	.513	0.000	1.432E-02	1.0998	1.657E-04	1.637E-01	2 4220
160065.103	.409	0.00	1.606E-02	.7922	1.951E-04	1.680E-01	1 4230
160065.203	.479	0.000	1.438E-02	.9404	1.664E-04	1.694E-01	2 4240
160065.319	.552	0.00	2.279E-02	1.0199	2.637E-04	1.618E-01	2 4250
160065.511	.686	0.00	8.297E-02	.5401	9.608E-04	1.598E-01	3 4260
160066.006	.279	0.000	6.066E-03	1.0268	3.823E-04	1.435E-01	3 4270
160066.016	.196	0.00	7.400E-03	.8948	3.680E-04	1.445E-01	2 4280
160066.193	.160	0.000	9.719E-03	.8432	4.843E-04	1.464E-01	1 4290
160066.205	.188	0.000	8.450E-03	.8630	4.211E-04	1.454E-01	1 4300
160066.308	.216	0.00	7.840E-03	.6594	3.908E-04	1.442E-01	3 4310
160066.408	.243	0.000	6.210E-03	.7628	3.094E-04	1.439E-01	3 4320
160066.989	.288	0.000	5.999E-03	.6271	2.989E-04	1.432E-01	3 4330
160067.005	.352	0.000	3.634E-02	.6959	8.669E-04	1.532E-01	2 4340
160067.015	.278	0.00	9.356E-03	.8825	2.232E-04	1.642E-01	1 4350
160067.025	.282	0.000	1.365E-02	.8969	3.268E-04	1.548E-01	1 4360
160067.115	.224	0.000	1.232E-02	.0327	2.939E-04	1.526E-01	1 4370
160067.309	.299	0.000	1.091E-02	.5265	2.389E-04	1.536E-01	2 4380
160067.418	.341	0.000	2.219E-02	.3700	5.284E-04	1.529E-01	2 4390
160067.511	.352	0.000	3.619E-02	.3561	8.635E-04	1.528E-01	2 4400
160068.056	.632	0.000	7.425E-02	1.0418	8.899E-04	1.523E-01	3 4410
160068.016	.481	0.000	1.369E-02	1.1048	1.640E-04	1.538E-01	2 4420
160068.103	.385	0.00	1.625E-02	.8482	1.948E-04	1.582E-01	1 4430
160068.205	.448	0.00	1.388E-02	.9373	1.661E-04	1.561E-01	2 4440
160068.309	.515	0.000	2.136E-02	.9937	2.523E-04	1.523E-01	2 4450
160068.419	.584	0.000	5.954E-02	.8834	7.136E-04	1.513E-01	3 4460
160068.510	.641	0.000	7.672E-02	.6571	9.195E-04	1.512E-01	3 4470
160069.005	.644	0.000	7.699E-02	.9960	9.239E-04	1.548E-01	3 4480
160069.015	.499	0.000	1.518E-02	1.2300	1.821E-04	1.554E-01	2 4490
160069.025	.357	0.000	1.739E-02	.9392	2.087E-04	1.562E-01	1 4500
160069.203	.459	0.000	1.388E-02	.9708	1.665E-04	1.576E-01	2 4510
160069.310	.520	0.00	2.119E-02	.9783	2.542E-04	1.542E-01	2 4520
160069.411	.588	0.000	5.988E-02	.6979	7.185E-04	1.534E-01	3 4530
160069.512	.644	0.000	7.799E-02	.3331	9.250E-04	1.534E-01	3 4540
160070.007	.266	0.00	6.761E-03	.9827	3.172E-04	1.566E-01	2 4550

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160070.105	.167	0.000	9.955E-03	.7999	4.071E-04	1.577E-01	1 4570
160070.207	.159	0.000	8.596E-03	.7943	4.033E-04	1.563E-01	1 4580
160070.313	.224	0.000	7.249E-03	.4617	3.401E-04	1.557E-01	2 4590
160070.411	.252	0.000	6.660E-03	.4288	3.124E-04	1.859E-01	2 4600
160070.511	.292	0.000	7.023E-03	.4145	3.295E-04	1.563E-01	2 4610
160071.007	.329	0.000	2.296E-02	.8046	5.635E-04	1.467E-01	2 4620
160071.017	.281	0.000	9.577E-03	.9943	2.378E-04	1.468E-01	1 4630
160071.105	.214	0.000	1.159E-02	.8612	2.941E-04	1.594E-01	1 4640
160071.208	.239	0.000	1.036E-02	.9657	2.489E-04	1.481E-01	1 4650
160071.309	.286	0.000	9.418E-03	.4868	2.330E-04	1.462E-01	2 4660
160071.410	.324	0.000	1.875E-02	.4424	4.639E-04	1.459E-01	2 4670
160071.511	.338	0.000	3.022E-02	.4051	7.476E-04	1.453E-01	2 4680
160072.006	.281	0.000	6.847E-03	.9959	3.128E-04	1.531E-01	3 4690
160072.016	.201	0.000	7.463E-03	.8832	3.875E-04	1.537E-01	3 4700
160072.103	.164	0.000	9.853E-03	.8300	4.797E-04	1.598E-01	1 4710
160072.203	.185	0.000	8.537E-03	.8981	4.879E-04	1.546E-01	1 4720
160072.309	.223	0.000	7.158E-03	.5460	3.420E-04	1.532E-01	3 4730
160072.409	.248	0.000	5.464E-03	.6952	3.888E-04	1.529E-01	3 4740
160072.511	.290	0.000	6.577E-03	.9248	3.142E-04	1.529E-01	3 4750
160073.007	.339	0.000	2.470E-02	.9386	6.065E-04	1.529E-01	3 4760
160073.017	.255	0.000	9.726E-03	.9909	2.388E-04	1.537E-01	2 4770
160073.108	.217	0.000	1.295E-02	.8524	2.959E-04	1.566E-01	1 4780
160073.205	.243	0.000	1.019E-02	.9458	2.803E-04	1.591E-01	2 4790
160073.309	.291	0.000	9.617E-03	.9280	2.361E-04	1.529E-01	3 4800
160073.410	.330	0.000	2.059E-02	.5639	4.923E-04	1.524E-01	3 4810
160073.511	.342	0.000	3.267E-02	.5214	8.020E-04	1.826E-01	3 4820
160074.006	.637	0.000	7.493E-02	1.0189	8.924E-04	1.547E-01	3 4830
160074.016	.484	0.000	1.376E-02	1.1148	1.638E-04	1.556E-01	2 4840
160074.103	.387	0.000	1.632E-02	.8176	1.943E-04	1.598E-01	1 4850
160074.205	.491	0.000	1.392E-02	.9378	1.658E-04	1.578E-01	2 4860
160074.309	.522	0.000	2.124E-02	1.2492	2.528E-04	1.542E-01	2 4870
160074.410	.988	0.000	6.016E-02	.9021	7.168E-04	1.534E-01	3 4880
160074.511	.646	0.000	7.738E-02	.9952	9.217E-04	1.837E-01	3 4890
160075.012	.225	0.000	7.866E-03	.9213	3.327E-04	1.559E-01	2 4900
160075.028	.184	0.000	1.076E-02	.9182	4.734E-04	1.587E-01	1 4910
160075.112	.155	0.000	1.076E-02	.3230	5.082E-04	1.588E-01	1 4920
160075.212	.164	0.000	1.805E-02	.3255	4.733E-04	1.581E-01	1 4930
160075.313	.180	0.000	9.069E-03	.1124	4.270E-04	1.567E-01	2 4940
160075.511	.192	0.000	8.853E-03	.4757	3.898E-04	1.572E-01	2 4950
160076.012	.382	0.000	1.057E-02	.8566	2.559E-04	1.534E-01	2 4360
160076.022	.216	0.000	1.232E-02	.9249	2.982E-04	1.565E-01	1 4970
160076.112	.201	0.000	1.324E-02	.3740	3.297E-04	1.567E-01	1 4980
160076.217	.216	0.000	1.231E-02	.3502	2.961E-04	1.656E-01	1 4990
160076.316	.239	0.000	1.590E-02	.8143	1.634E-04	1.825E-01	2 5000
160076.511	.279	0.000	1.801E-02	.9466	2.428E-04	1.567E-01	2 5010
160077.012	.534	0.000	2.973E-02	3.0932	3.077E-04	1.842E-01	3 5020
160077.022	.380	0.000	1.640E-02	.9498	1.962E-04	1.577E-01	2 5030
160077.112	.359	0.000	1.719E-02	.3865	2.057E-04	1.573E-01	2 5040
160077.212	.300	0.000	1.640E-02	.5648	1.962E-04	1.590E-01	2 5050
160077.313	.425	0.000	1.471E-02	.6795	1.759E-04	1.516E-01	2 5060
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	5070
160078.019	.180	0.500	9.885E-03	.8231	4.238E-04	1.593E-01	2	5080
160078.044	.180	0.000	9.035E-03	.2475	4.238E-04	1.586E-01	2	5090
160078.108	.165	0.000	1.077E-02	.8333	5.024E-04	1.613E-01	1	5100
160078.208	.165	0.000	1.037E-02	.7372	4.699E-04	1.602E-01	1	5110
160078.313	.180	0.000	9.085E-03	.1334	4.238E-04	1.575E-01	1	5120
160078.412	.184	0.000	8.856E-03	.2678	4.131E-04	1.593E-01	2	5130
160079.023	.210	0.000	1.270E-02	.8648	3.860E-04	1.563E-01	3	5140
160079.048	.210	0.000	1.269E-02	.2642	3.068E-04	1.592E-01	3	5150
160079.113	.201	0.000	1.325E-02	.2963	3.203E-04	1.560E-01	1	5160
160079.306	.235	0.500	1.088E-02	.3310	2.629E-04	1.652E-01	3	5170
160079.320	.235	0.000	1.086E-02	.0068	2.638E-04	1.517E-01	3	5180
160079.518	.258	0.000	1.092E-02	.6127	2.422E-04	1.577E-01	3	5190
160080.028	.196	0.000	1.331E-02	.9365	3.258E-04	1.552E-01	1	5200
160080.085	.196	0.300	1.331E-02	.2452	3.258E-04	1.541E-01	1	5210
160080.115	.199	0.500	1.313E-02	.0237	3.285E-04	1.535E-01	1	5220
160080.309	.237	0.000	1.879E-02	.6754	2.639E-04	1.545E-01	2	5230
160080.510	.245	0.000	9.932E-03	.5405	2.428E-04	1.535E-01	3	5240
160081.023	.173	0.000	9.568E-03	.8051	4.454E-04	1.567E-01	1	5250
160081.065	.173	0.000	9.568E-03	.2170	4.453E-04	1.561E-01	1	5260
160081.112	.157	0.300	1.080E-02	.6625	5.828E-04	1.574E-01	1	5270
160081.210	.165	0.000	1.010E-02	.5630	4.701E-04	1.569E-01	1	5280
160081.312	.181	0.300	9.185E-03	.2441	4.238E-04	1.552E-01	1	5290
160081.513	.196	0.000	8.293E-03	.5516	3.868E-04	1.558E-01	2	5300
160082.020	.171	0.000	9.507E-03	.8500	4.582E-04	1.538E-01	1	5310
160082.045	.171	0.000	9.508E-03	.2258	4.581E-04	1.531E-01	1	5320
160082.119	.155	0.000	1.073E-02	.7675	5.082E-04	1.551E-01	1	5330
160082.210	.164	0.000	1.013E-02	.6736	4.752E-04	1.542E-01	1	5340
160082.311	.179	0.000	9.056E-03	.0310	4.288E-04	1.696E-01	1	5350
160082.508	.191	0.300	8.253E-03	.8558	3.938E-04	1.533E-01	2	5360
160083.018	.243	0.00	1.821E-02	.8628	2.488E-04	1.506E-01	2	5370
160083.043	.243	0.350	1.820E-02	.2047	2.487E-04	1.496E-01	2	5380
160083.107	.267	0.300	1.318E-02	.9565	3.211E-04	1.543E-01	1	5390
160083.207	.215	0.300	1.228E-02	.7667	2.985E-04	1.526E-01	1	5400
160083.312	.234	0.000	1.083E-02	.2690	2.639E-04	1.488E-01	1	5410
160083.810	.249	0.000	9.987E-03	.5418	2.429E-04	1.496E-01	2	5420
160084.020	.229	0.300	1.167E-02	.7986	2.809E-04	1.544E-01	3	5430
160084.045	.229	0.300	1.166E-02	.2320	2.858E-04	1.535E-01	3	5440
160084.110	.202	0.00	1.335E-02	.8292	3.214E-04	1.563E-01	2	5450
160084.213	.218	0.300	1.241E-02	.7064	2.987E-04	1.590E-01	3	5460
160084.313	.237	0.300	1.596E-02	.1918	2.637E-04	1.516E-01	3	5470
160084.512	.252	0.300	1.339E-02	.4722	2.430E-04	1.527E-01	3	5480
160085.022	.161	0.00	9.936E-03	.7734	4.796E-04	1.521E-01	1	5490
160085.047	.161	0.300	9.954E-03	.2361	4.795E-04	1.515E-01	1	5500
160085.112	.152	0.300	1.065E-02	.4744	5.131E-04	1.529E-01	1	5510
160085.212	.161	0.300	9.952E-03	.3918	4.794E-04	1.516E-01	1	5520
160085.314	.176	0.300	8.993E-03	.8512	4.332E-04	1.500E-01	1	5530
160085.512	.187	0.35	8.208E-03	.4018	3.950E-04	1.504E-01	2	5540
160086.012	.224	0.00	7.047E-03	1.5521	3.331E-04	1.544E-01	2	5550
160086.022	.164	0.000	1.034E-02	1.0049	4.746E-04	1.586E-01	1	5560
160086.112	.155	0.350	1.073E-02	.3485	5.074E-04	1.564E-01	1	5570
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[illegible].212	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1 5580
160086.310	.179	0.000	9.057E-03	.8148	4.281E-04	1.574E-01	2 5590
160086.906	.191	0.000	8.256E-03	.7766	3.933E-04	1.556E-01	2 5600
160087.004	.368	0.000	3.259E-02	1.4151	7.874E-04	1.543E-01	2 5610
160087.016	.271	0.000	9.539E-03	3.4247	2.284E-04	1.550E-01	2 5620
160087.103	.204	0.000	1.342E-02	.9011	3.214E-04	1.593E-01	2 5630
160087.203	.219	0.000	1.248E-02	.9343	2.984E-04	1.579E-01	2 5640
160087.217	.219	0.000	1.247E-02	.8110	2.986E-04	1.543E-01	2 5650
160087.317	.239	0.000	1.101E-02	.0481	2.636E-04	1.529E-01	2 5660
160087.512	.254	0.000	1.015E-02	1.5737	2.438E-04	1.548E-01	2 5670
160088.012	.527	0.000	2.549E-02	2.9950	3.057E-04	1.530E-01	2 5680
160088.322	.378	0.000	1.634E-02	2.4992	1.962E-04	1.575E-01	2 5690
160088.112	.357	0.000	1.713E-02	.1419	2.055E-04	1.582E-01	2 5700
160088.212	.370	0.000	1.634E-02	1.3266	1.980E-04	1.558E-01	2 5710
160088.310	.422	0.000	1.465E-02	4.4998	1.757E-04	1.551E-01	2 5720
160088.507	.453	0.000	1.358E-02	5.3391	1.629E-04	1.552E-01	2 5730
160089.007	.264	0.000	6.571E-03	.9879	3.120E-04	1.554E-01	3 5740
160089.017	.194	0.000	7.917E-03	.9741	3.768E-04	1.562E-01	3 5750
160089.185	.154	0.000	1.071E-02	.9389	5.086E-04	1.587E-01	2 5760
160089.288	.163	0.000	1.002E-02	.9231	4.756E-04	1.577E-01	2 5770
160089.388	.178	0.000	9.044E-03	.7743	4.294E-04	1.568E-01	3 5780
160089.598	.197	0.000	9.243E-03	.8103	3.914E-04	1.563E-01	3 5790
160090.008	.333	0.000	2.004E-02	1.3221	5.046E-04	1.537E-01	3 5800
160090.018	.245	0.000	1.027E-02	1.0456	2.487E-04	1.572E-01	2 5810
160090.107	.201	0.000	1.327E-02	.8963	3.213E-04	1.579E-01	2 5820
160090.287	.216	0.000	1.233E-02	.8521	2.986E-04	1.564E-01	2 5830
160090.312	.235	0.000	1.030E-02	.3302	2.639E-04	1.532E-01	2 5840
160090.913	.251	0.000	1.093E-02	.2472	2.430E-04	1.531E-01	3 5850
160091.009	.581	0.000	5.855E-02	1.4867	5.979E-04	1.548E-01	3 5860
160091.109	.592	0.000	5.883E-02	1.2350	6.953E-04	1.559E-01	3 5870
160091.310	.621	0.000	7.851E-02	.9796	8.333E-04	1.543E-01	3 5880
160091.406	.666	0.000	8.133E-02	.8461	9.613E-04	1.530E-01	3 5890
160091.416	.666	0.000	8.115E-02	.0178	9.891E-04	1.500E-01	3 5900
160091.513	.694	0.000	8.814E-02	.3852	1.042E-03	1.506E-01	3 5910
160092.003	.654	0.000	8.871E-02	.9285	9.665E-04	1.524E-01	3 5920
160092.013	.515	0.000	2.105E-02	1.0333	2.821E-04	1.527E-01	2 5930
160092.113	.578	0.000	8.836E-02	.5705	6.758E-04	1.524E-01	3 5940
160092.315	.603	0.000	6.767E-02	.2389	8.193E-04	1.553E-01	3 5950
160092.410	.645	0.000	7.042E-02	.8617	9.392E-04	1.507E-01	3 5960
160092.896	.572	0.000	8.558E-02	.7723	1.026E-03	1.520E-01	3 5970
160092.516	.672	0.000	8.559E-02	.1101	1.024E-03	1.479E-01	3 5980
160093.906	.553	0.000	7.727E-02	.9324	9.385E-04	1.580E-01	3 5990
160093.183	.597	0.000	5.980E-02	1.8937	7.898E-04	1.597E-01	3 6000
160093.387	.627	0.000	7.159E-02	1.8321	8.412E-04	1.589E-01	3 6010
160093.318	.527	0.000	7.139E-02	.8233	8.393E-04	1.547E-01	3 6020
160093.413	.572	0.000	8.232E-02	.6531	9.643E-04	1.553E-01	3 6030
160093.908	.791	0.000	8.931E-02	.7372	1.047E-03	1.570E-01	3 6040
160093.510	.751	0.000	8.896E-02	.1047	1.046E-03	1.532E-01	3 6050

6.0 NASA/LaRC, 8 FOOT HTST TESTS OF LARGE GAP PANEL

Gap heating tests were performed in the LaRC 8 Foot High Temperature Structure Tunnel (HTST) to obtain heating data on a large gap panel in the presence of a turbulent boundary layer. The test program at LaRC was under the direction of I. Weinstien. The test panel consisted of eleven LI 900 silica tiles with an interchangeable thin skin metallic center tile. Testing was planned for both the center LI 900 tile and the center metallic tile, but time permitted testing only of the metallic tile. The panel size was 46 x 46 x 6.5 cm. Both the LI 900 and the metallic tiles were heavily instrumented as discussed in Section 6.1. The RSI panel was mounted in a large test sled for free stream testing and permitted variation of angle of attack relative to the tile array. The panel was tested in both the in-line and staggered tile configurations.

The test matrix for the 8 Foot HTST program is summarized in Figure 6.0-1. Five gap settings were employed (0, 0.10, 0.18, 0.30, and 0.41 cm) with the tile thickness of 6.35 cm. Step heights investigated were 0 and +0.254 cm. Tests were run at Reynolds number per meter of 1.9×10^6 and 4.8×10^6, while the test sled angle of attack was varied from 0 to 15 degrees.

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TEST CONDITIONS AND MODEL CONFIGURATIONS FOR GAP HEATING TESTS IN 8 FOOT HTST

TEST NO.	RUN NO.	MODEL CONFIG.	NOMINAL GAP SETTING, cm	STEP, cm	α DEG.	TOTAL TEMP., °K	COMBUSTOR PRESSURE, N/m²	MACH NO.	Re/m	TAW. °K
57	4	STAGGERED	.178	0.00	7.34	1533	7.1016X10⁶	6.35	2.069X10⁶	1423
↓	5	↓	↓	↓	-0.14	1656	7.1706	6.54	2.001	1529
	6				15.15	1700	7.2050	6.61	2.001	1591
	7				7.63	1733	18.0643	6.50	4.823	1608
	8				-0.10	1822	17.9264	6.65	4.692	1691
	9		.102		7.64	1833	7.2050	6.87	1.969	1700
	10		.305		7.40	1639	7.3774	6.60	2.1	1520
	11		.406		7.49	1667	7.1706	6.58	2.001	1545
	12		↓		0.14	1831	18.0643	6.64	4.692	1699
	13	IN-LINE			7.56	1706	7.1706	6.65	2.001	1582
	14	↓	.305		7.53	1711	7.2050	6.65	2.001	1587
	15		.178		7.66	1772	7.1706	6.76	1.969	1643
	16		↓		-0.15	1844	7.0327	6.90	1.903	1702
	18				14.96	1722	7.1361	6.70	2.001	1610
	19			.254	7.63	1886	7.1361	7.00	1.870	1749
	20	STAGGERED		.254	7.49	1767	7.2740	6.76	2.034	1638
	21	↓	0	0.0	7.53	1492	7.1016	6.21	2.001	1385
	22		0	0.0	7.30	1689	7.1706	6.60	2.034	1566
58	1	CAL. PLATE	—	—	7.70	1694	7.1016	6.60	1.969	1572
↓	3	↓	—	—	0.10	1722	6.5500	6.70	1.870	1590
	4		—	—	0.08	1719	17.8574	6.45	4.692	1588

FIGURE 6.0-1

6.1 Model Description - A large gap panel was fabricated for performing heating tests in the presence of a turbulent boundary layer. The same test panel was to be used in both the HTST and the AFFDL 50 MW Arc Tunnel Tests. The panel was originally scheduled for testing at AFFDL but was switched to the LaRC HTST due to fabrication difficulties with the test fixture by the vendor. The 50 MW tests were intended to determine the effects of higher enthalpy on the heating in a field of RSI gaps, and would have also provided a comparison of arc and wind tunnel gap heating data. The AFFDL test program was subsequently cancelled.

The test panel as shown in Figure 6.1-1 consisted of eleven LI 900 silica tiles with an interchangeable thin skin metallic center tile. Testing was planned for both the center LI 900 tile and the center metallic tile, but time permitted testing only of the metallic tile. The panel size was 46 x 46 x 6.5 cm.

Both the LI 900 and the metallic tiles were heavily instrumented with the thermocouple locations for the thin wall metallic center tile shown in Figure 6.1-2. The RSI panel was mounted in a large test sled for free stream testing and permitted variation of angle of attack relative to the tile array. The panel was tested in both the in-line and staggered tile configurations. Figure 6.1-3 shows the flow orientation for the RSI tile array. Tile numbers affixed to the tiles are also shown. Gaps between the tiles were adjustable to study the effects of gap width, and shims were used under the tiles to study the effects of step heights. A companion plate that fitted into the same opening as the test panel was used for calibration purposes.

The following drawings (Figures 6.1-4 thru 6.1-10) were prepared to define the various detail parts and assemblies:

a. 70J037004 50 MW Arc Tunnel Plasma Wedge/RSI Tile Interface
b. 70J037005 Study Enclosure of Fwd End in 50 MW Plasma Wedge Test Compartment
c. 70T037039 RSI/Sponge Assy 50 MW Plasma Wedge
d. 70T030740 Tile Assy - 50 MW Plasma Wedge
e. 70T030741 Shim & Spacers 50 MW Arc Tunnel Plasma Wedge
f. 70T037042 Support Assy - 50 MW Plasma Wedge
g. 70T037043 Installation Assy - 50 MW Arc Plasma Wedge Sheets 1 and 2

Thermocouple locations were confirmed and/or determined with the use of x-rays of the instrumented tiles. When x-rays were used, the effects of parallax were accounted for in the measurement. The x-rays are documented in Figures 6.1-11 thru 6.1-19.

46x46 CM RSI GAP HEATING EVALUATION PANEL MINIMUM GAP SETTING

LaRC 8 - FOOT HTST TESTS

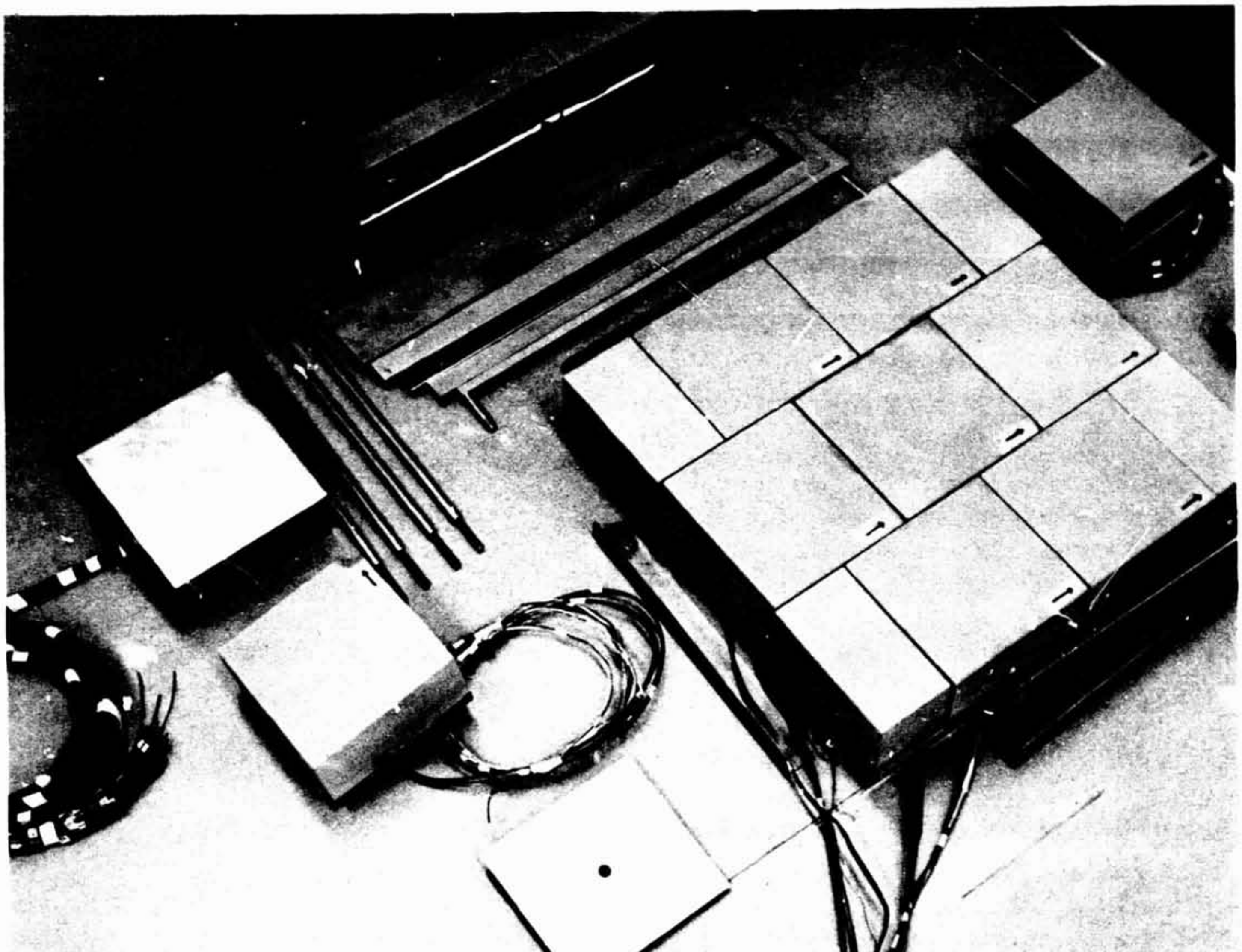


FIGURE 6.1-1

46x46 CM RSI GAP HEATING EVALUATION PANEL MAXIMUM GAP SETTING

LaRC 8 - FOOT HTST TESTS

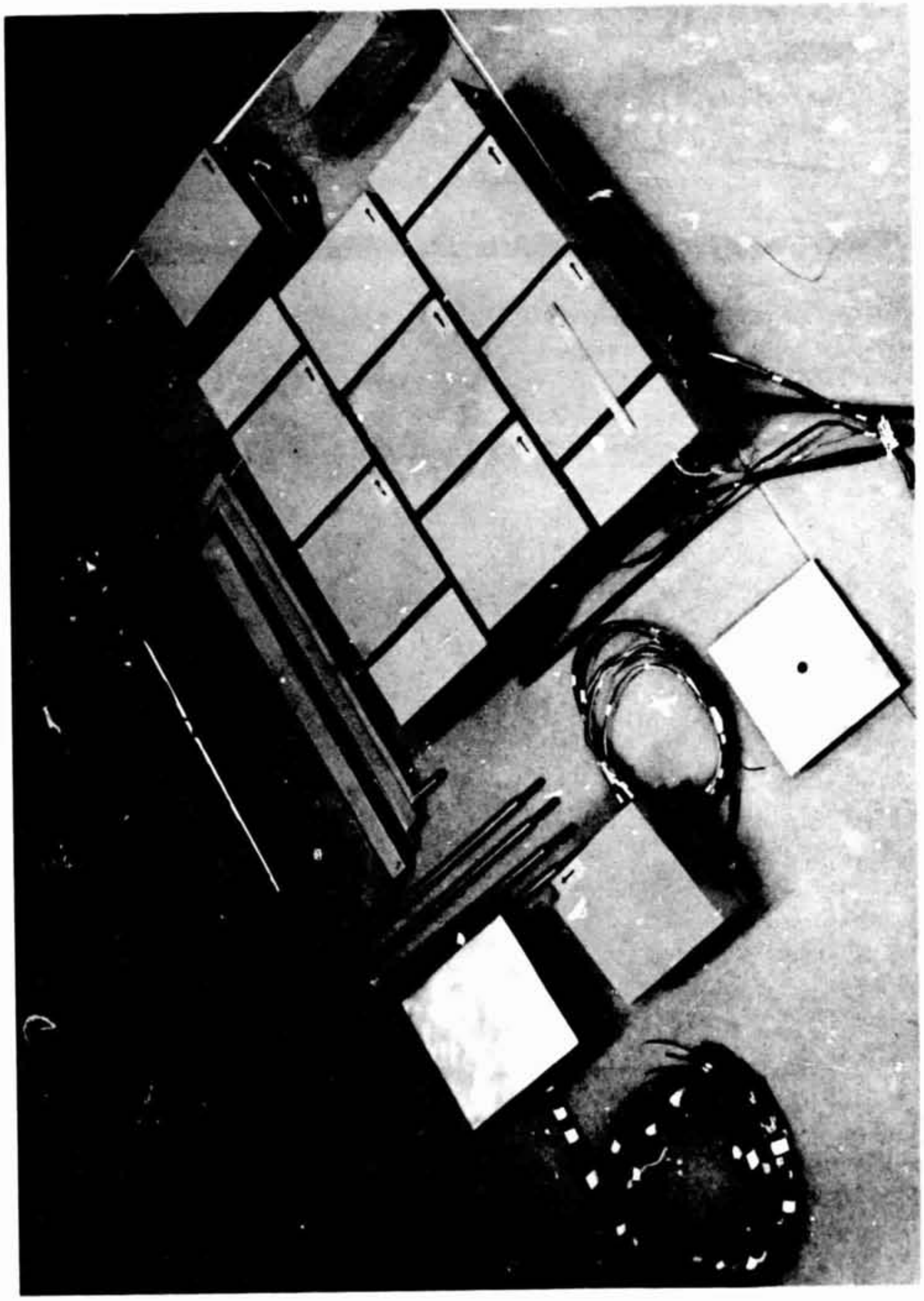


FIGURE 6.1-1 CONC.

THERMOCOUPLE LOCATIONS ON THIN WALL METALLIC CENTER TILE

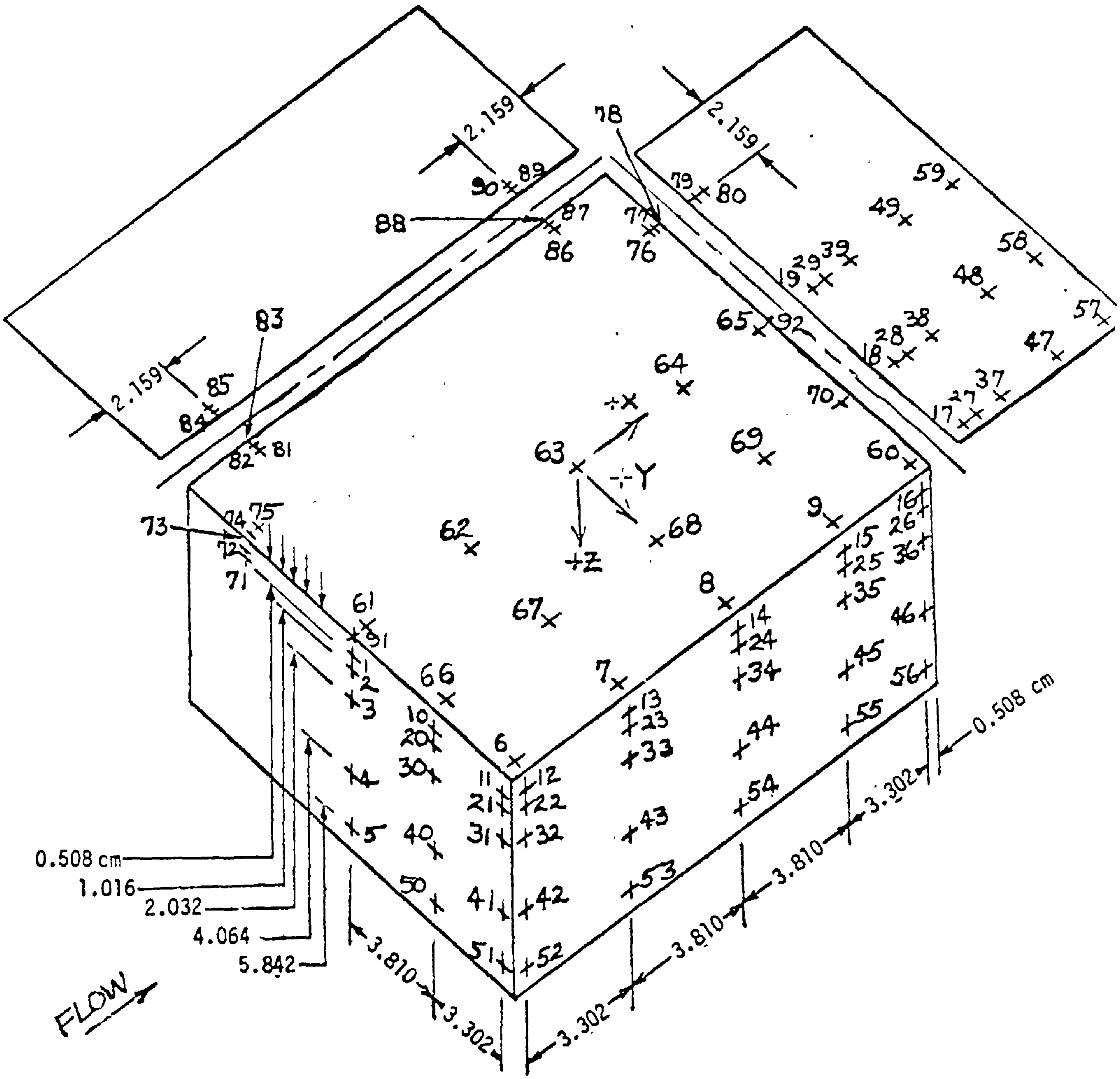


FIGURE 6.1-2

FLOW ORIENTATION FOR TESTS OF RSI TILE ARRAY

(TILE NUMBERS ARE SHOWN ON SKETCH.)

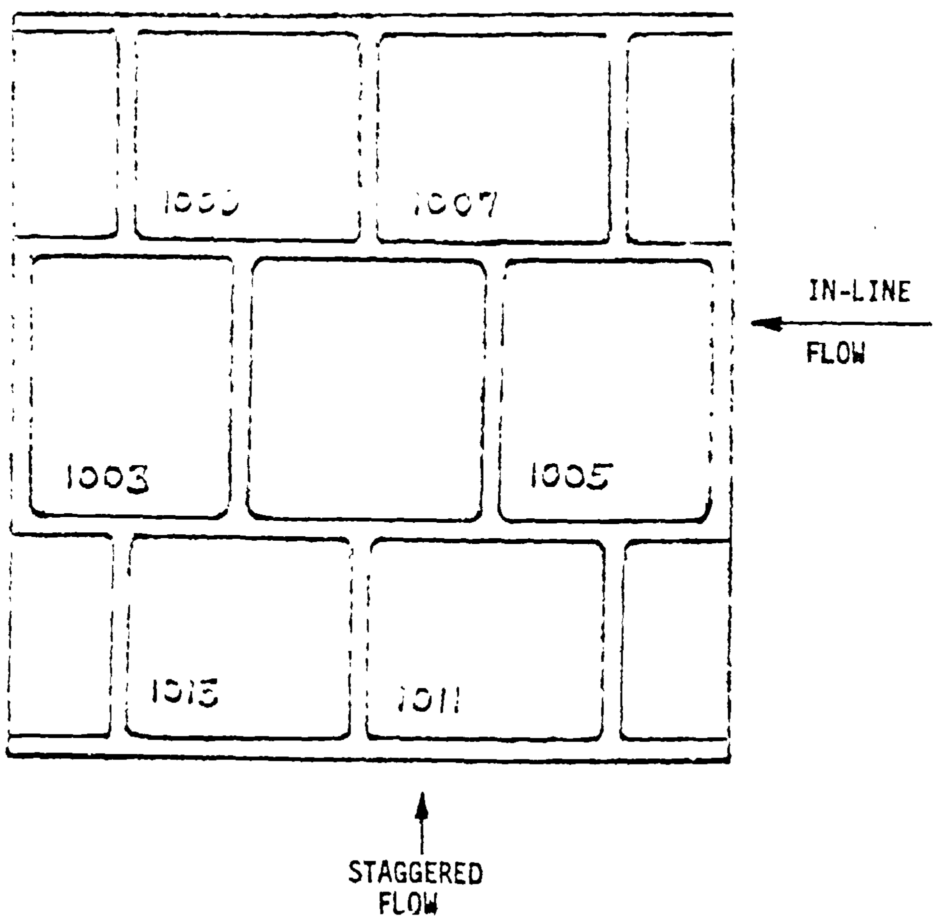
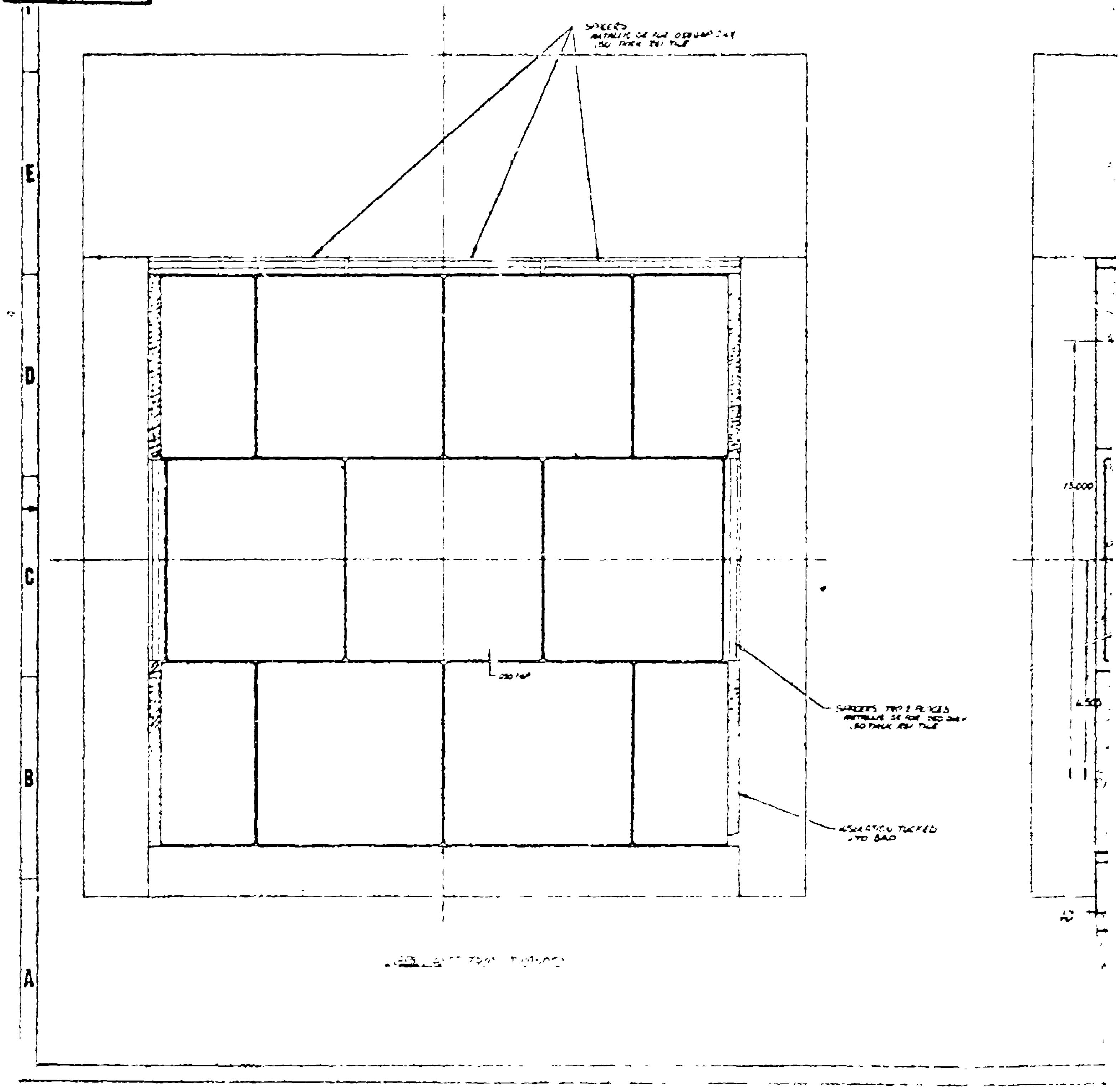
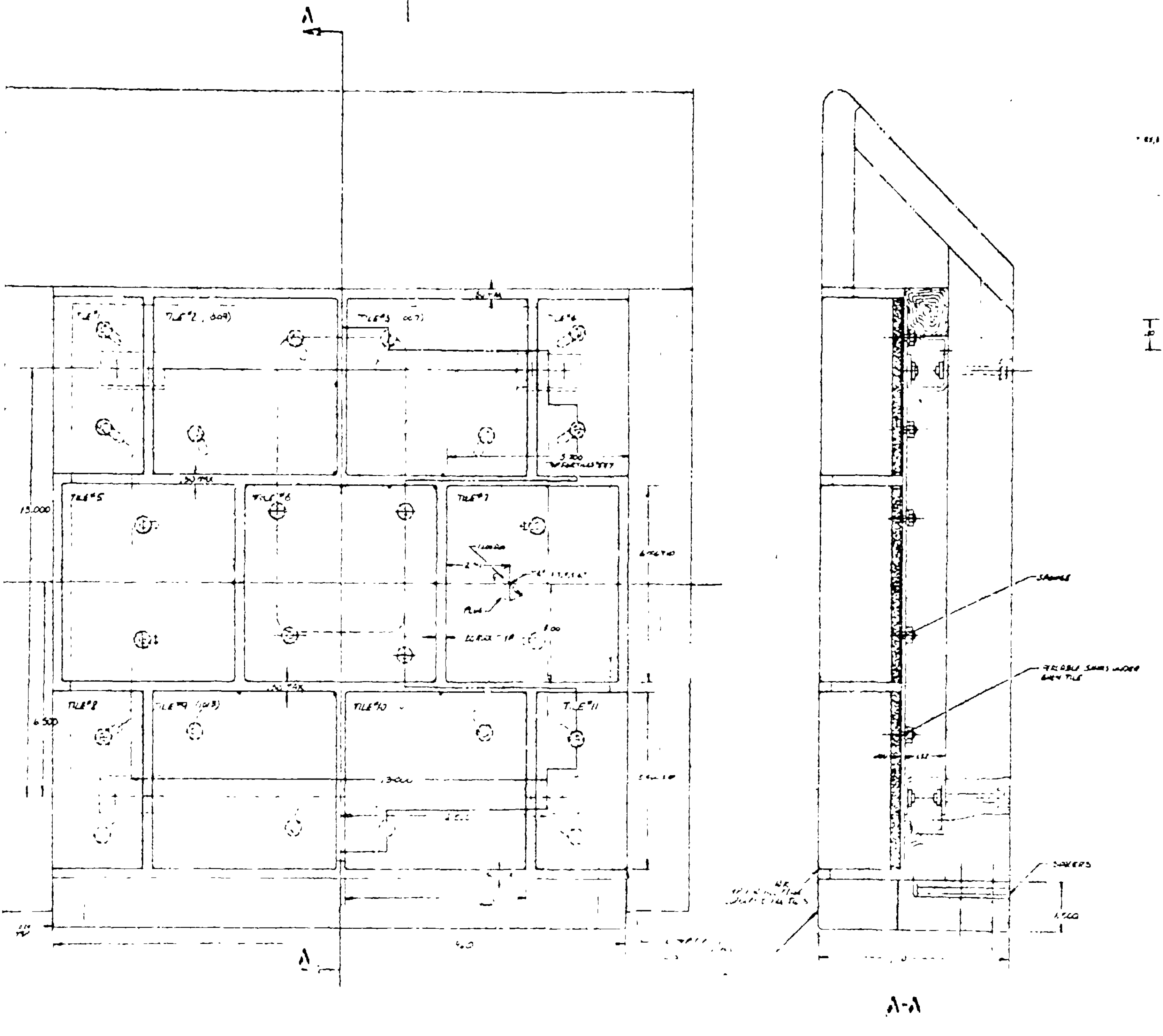


FIGURE 6.1-3



FOLDOU



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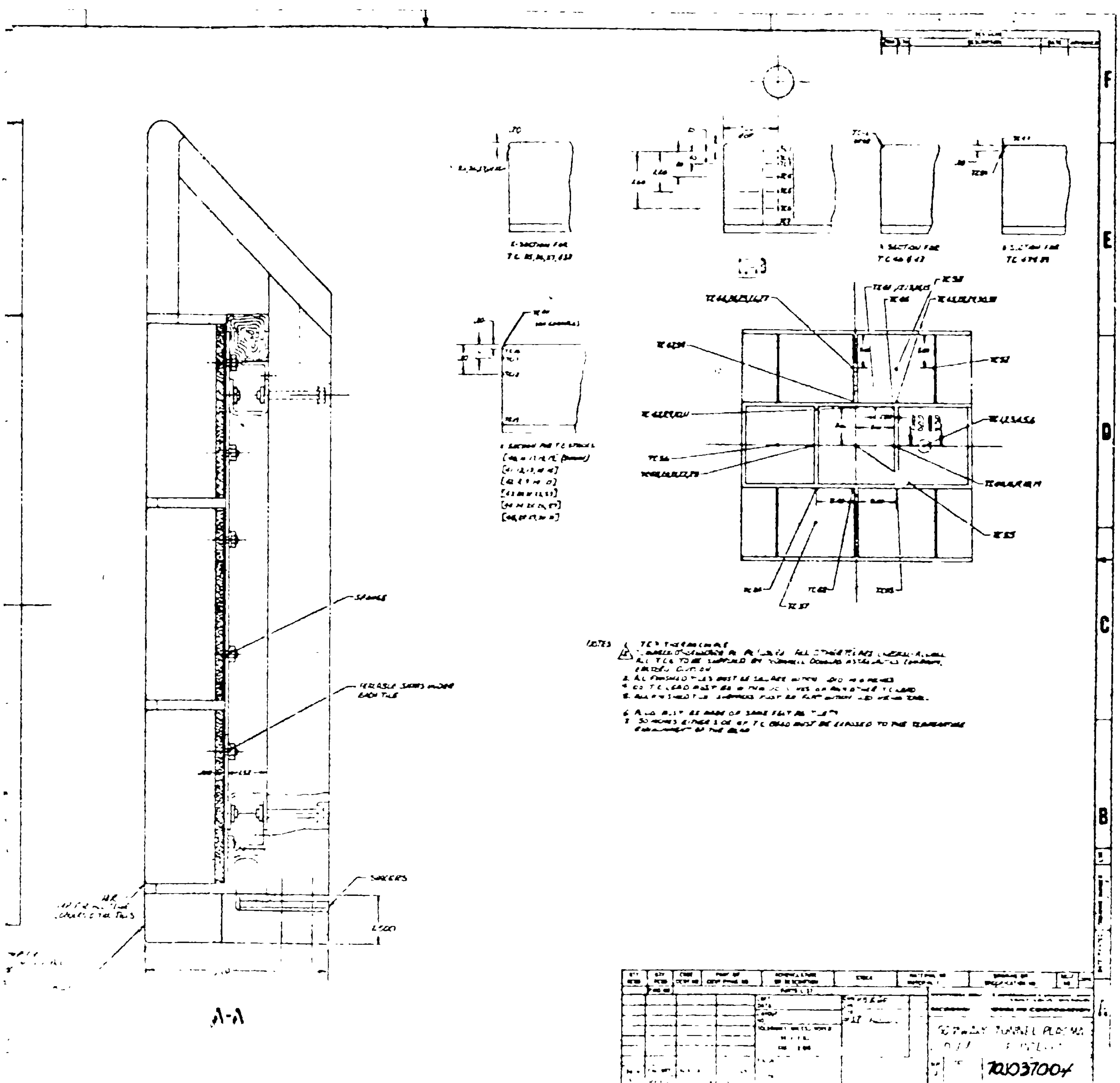
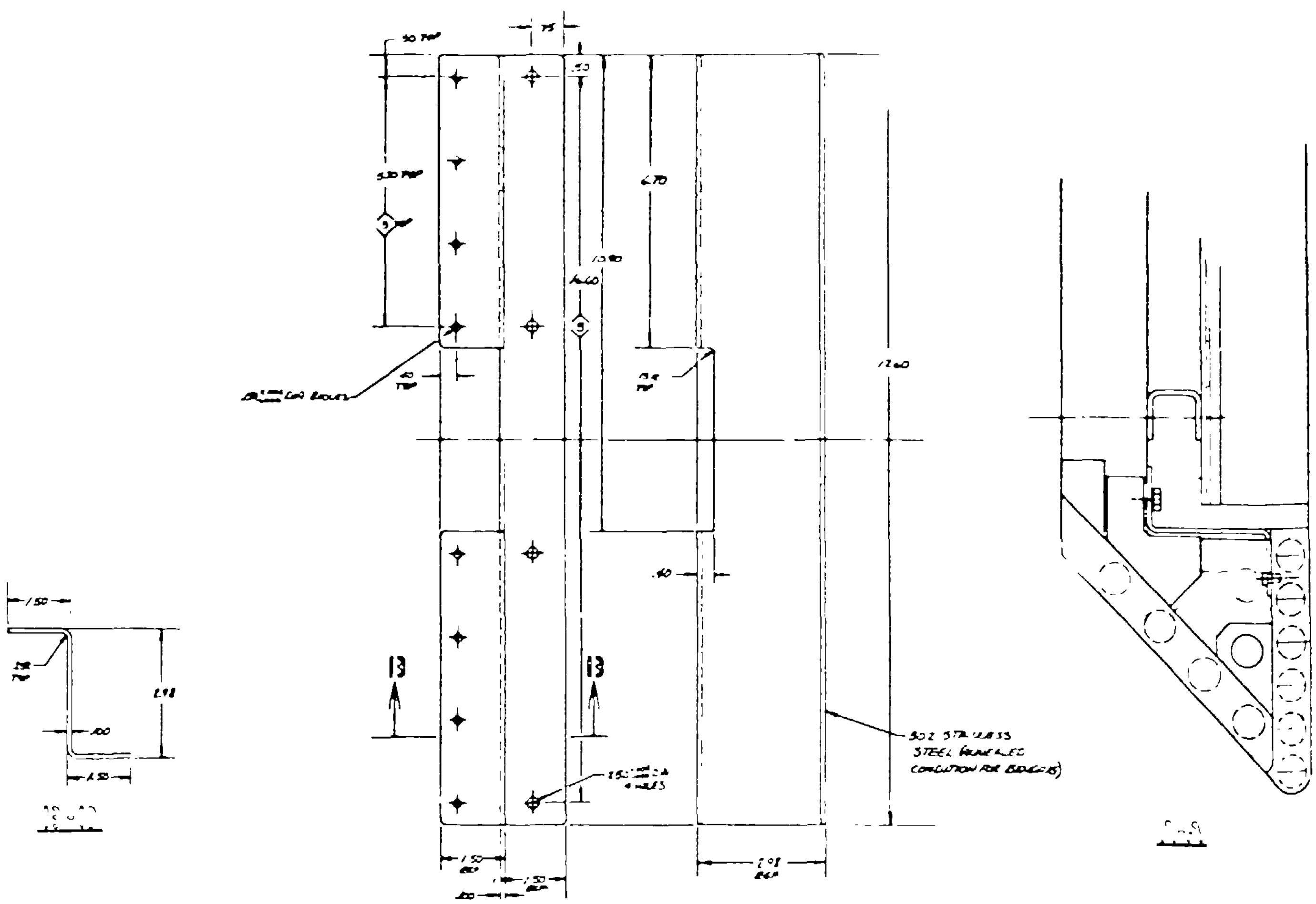
FOLDOUT FRAME 2



FOLDOUT FRAME

FIGURE 6.1-4



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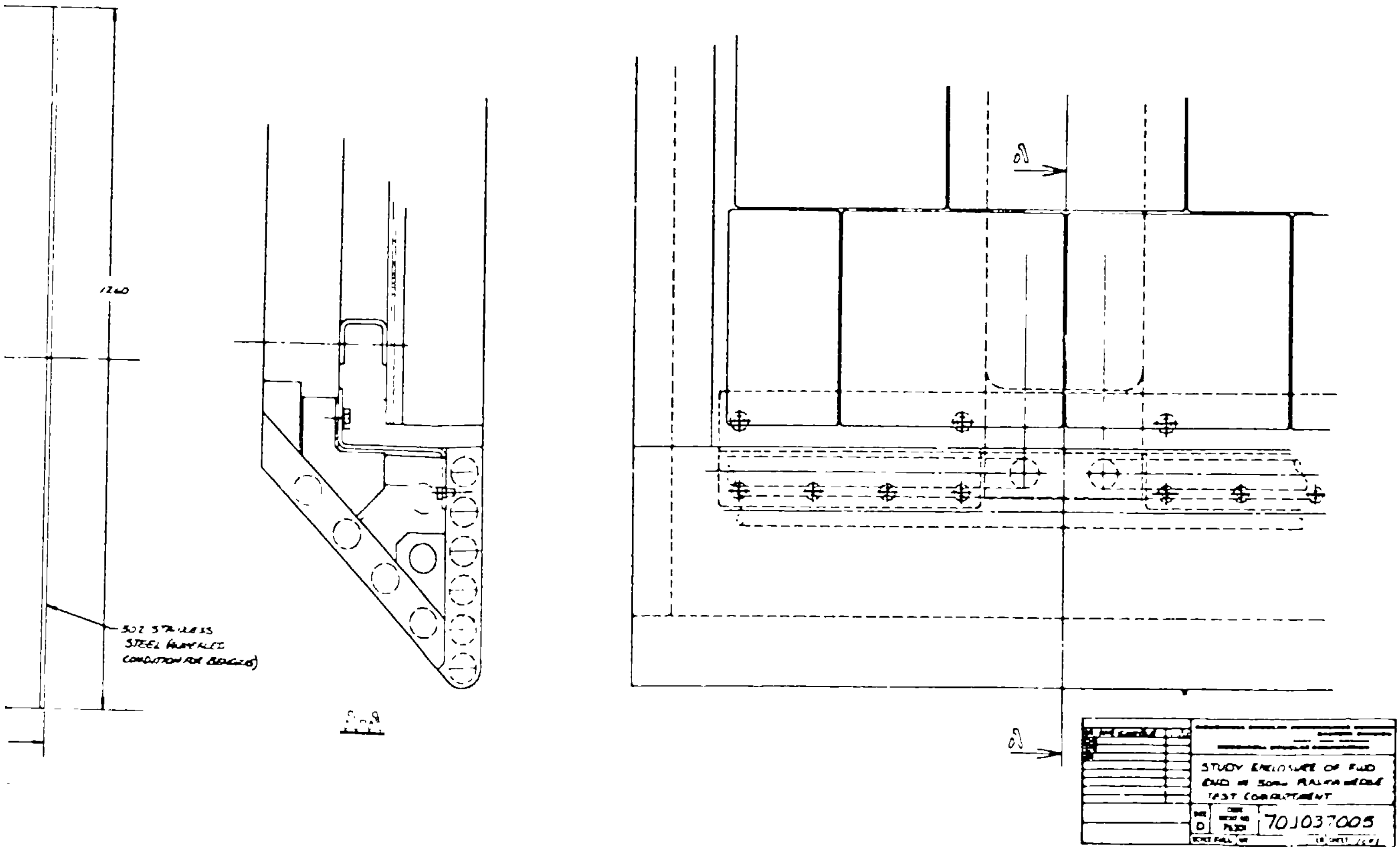
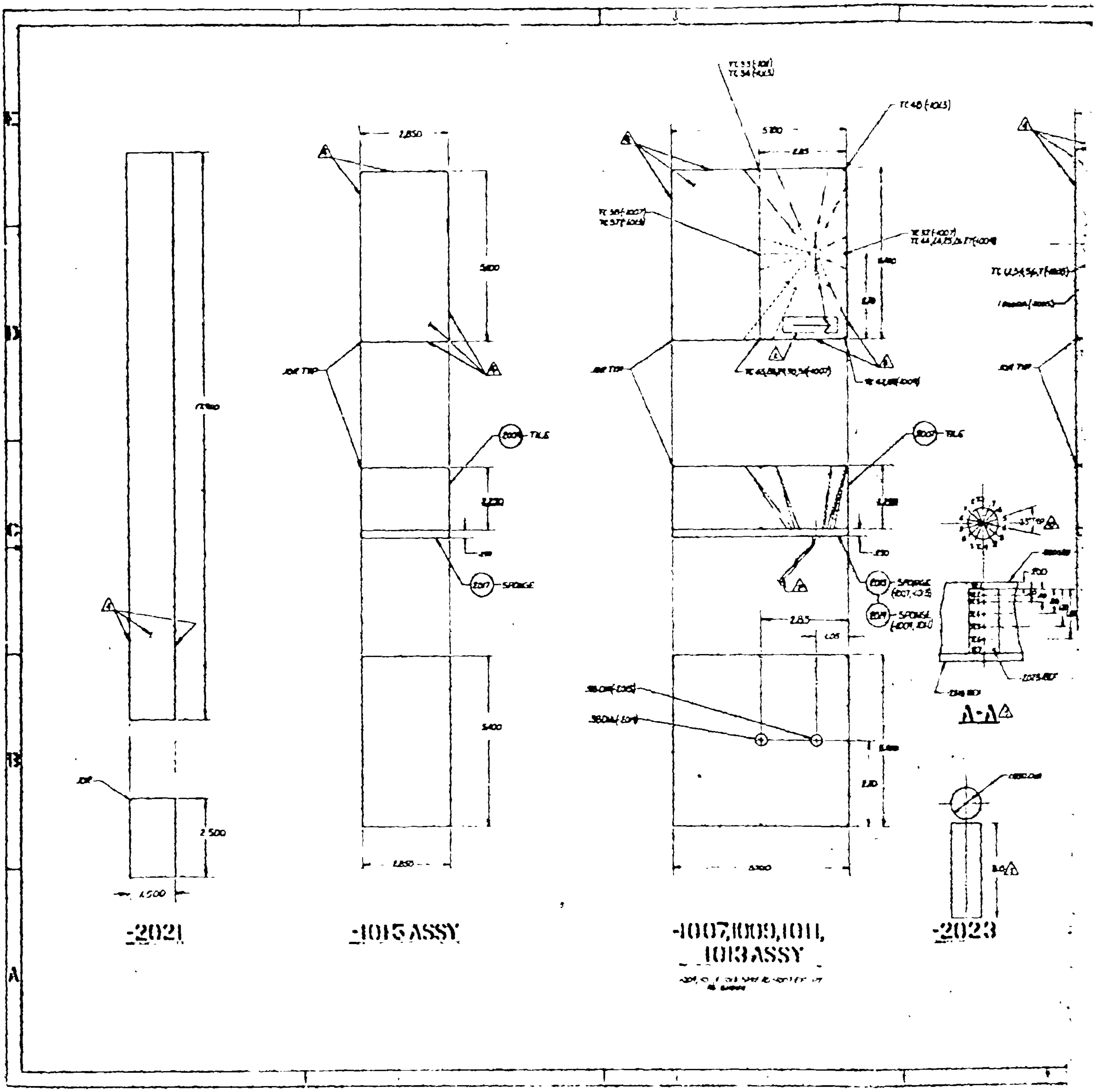
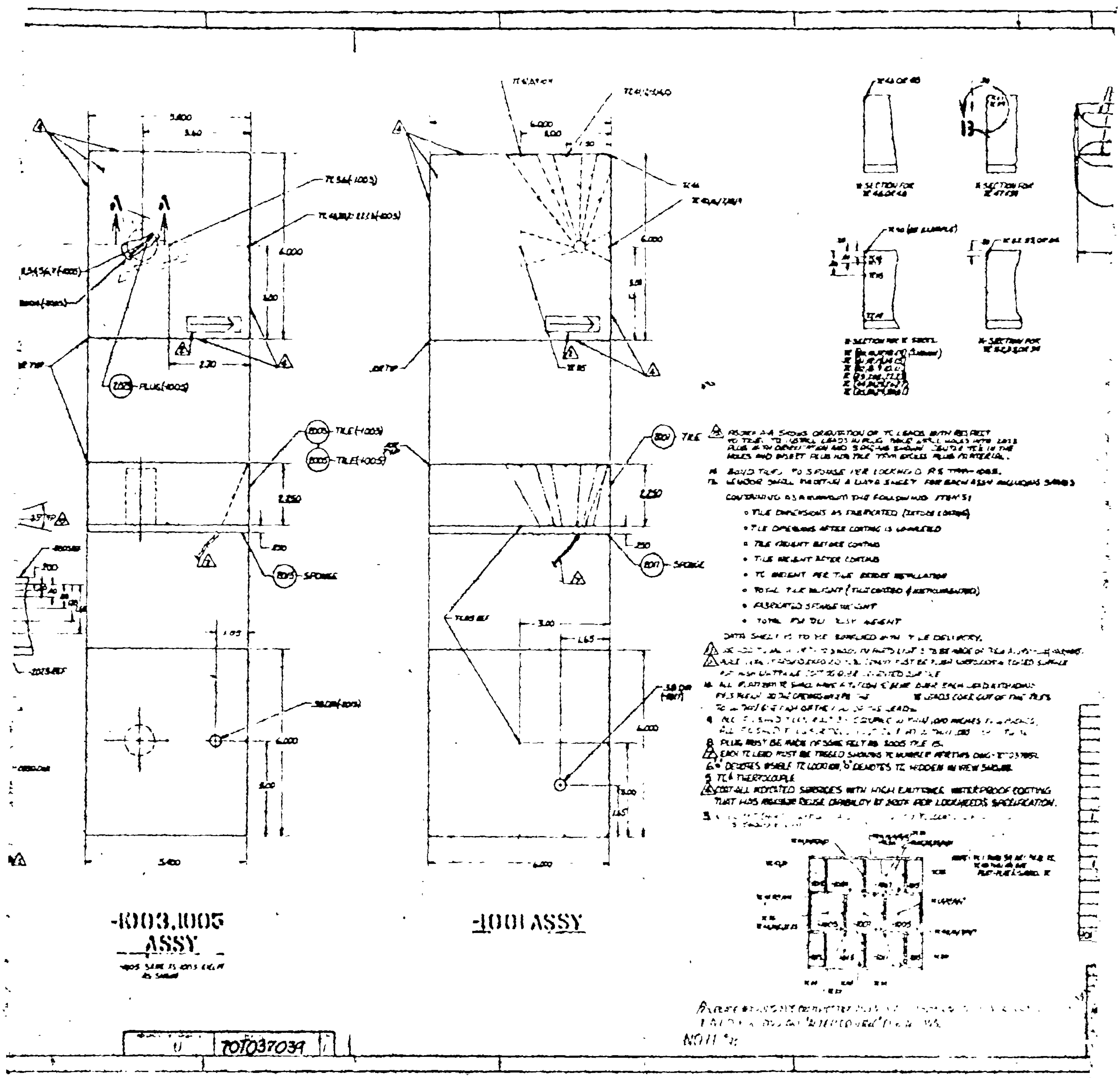


FIGURE 6.1-5


-2021
-1015 ASSY
-1007,1009,1011,
1013 ASSY
-2023
A-A
TILE
SPONGE
2.850
5.400
2.500
1.500



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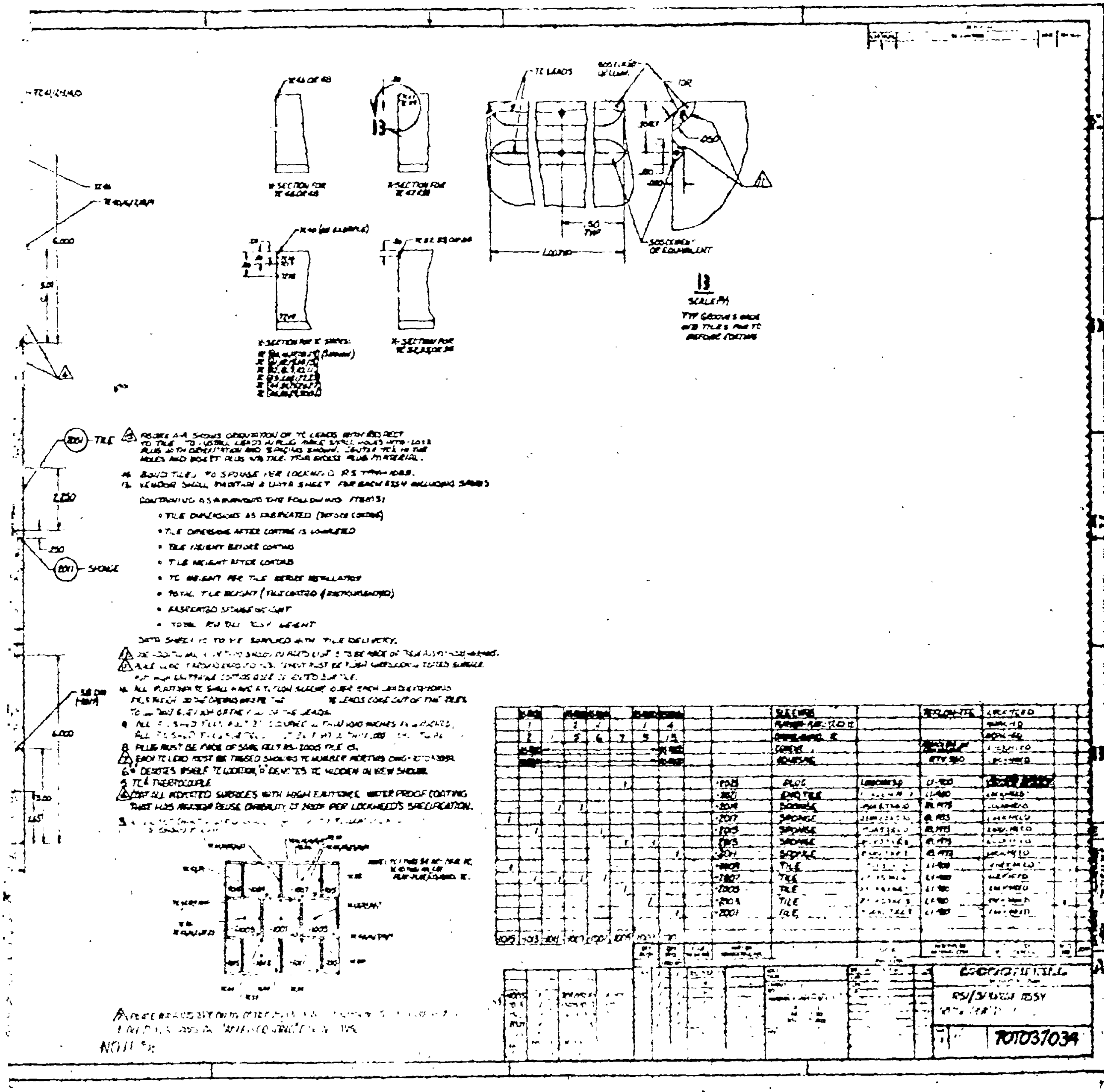
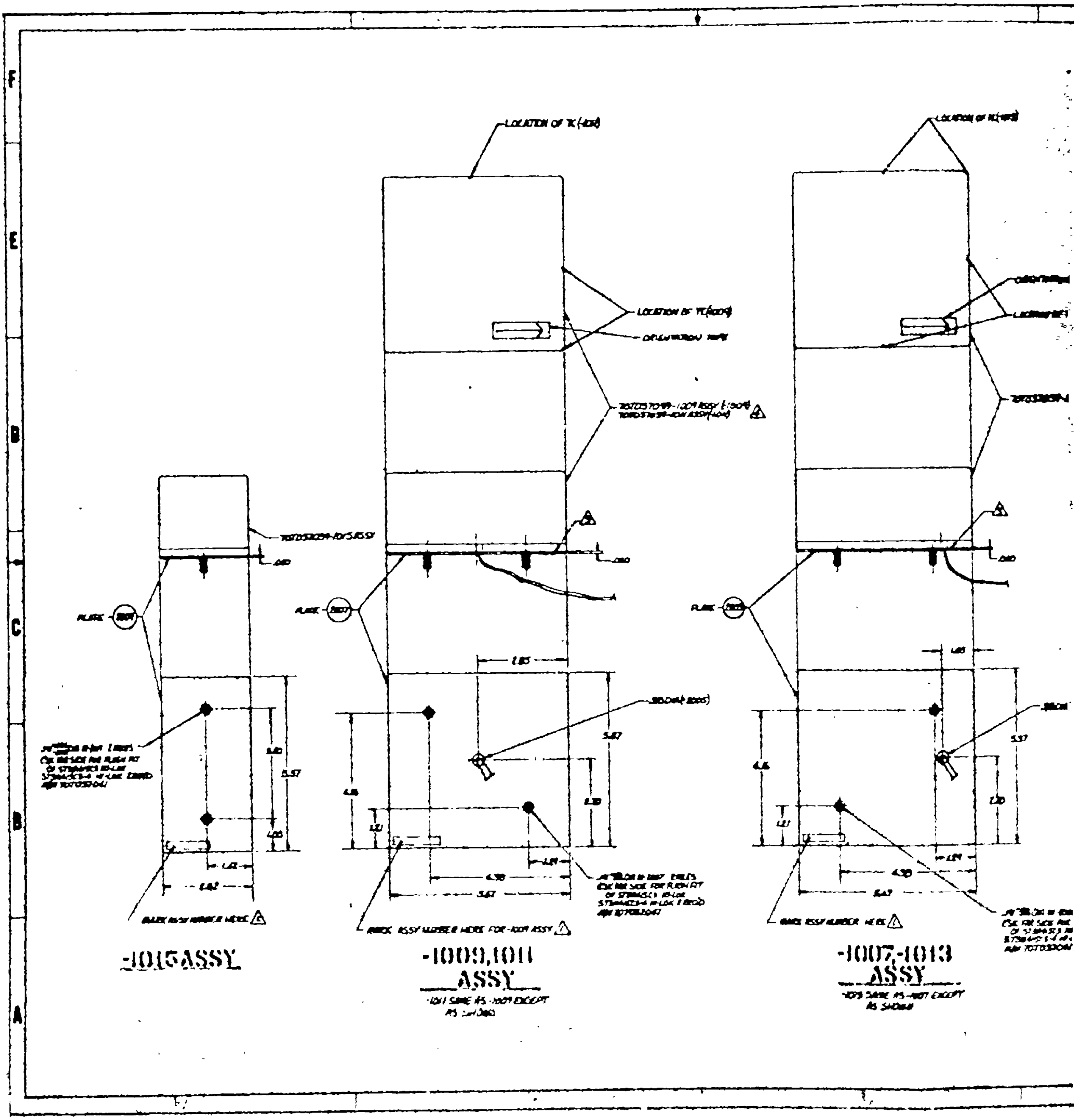
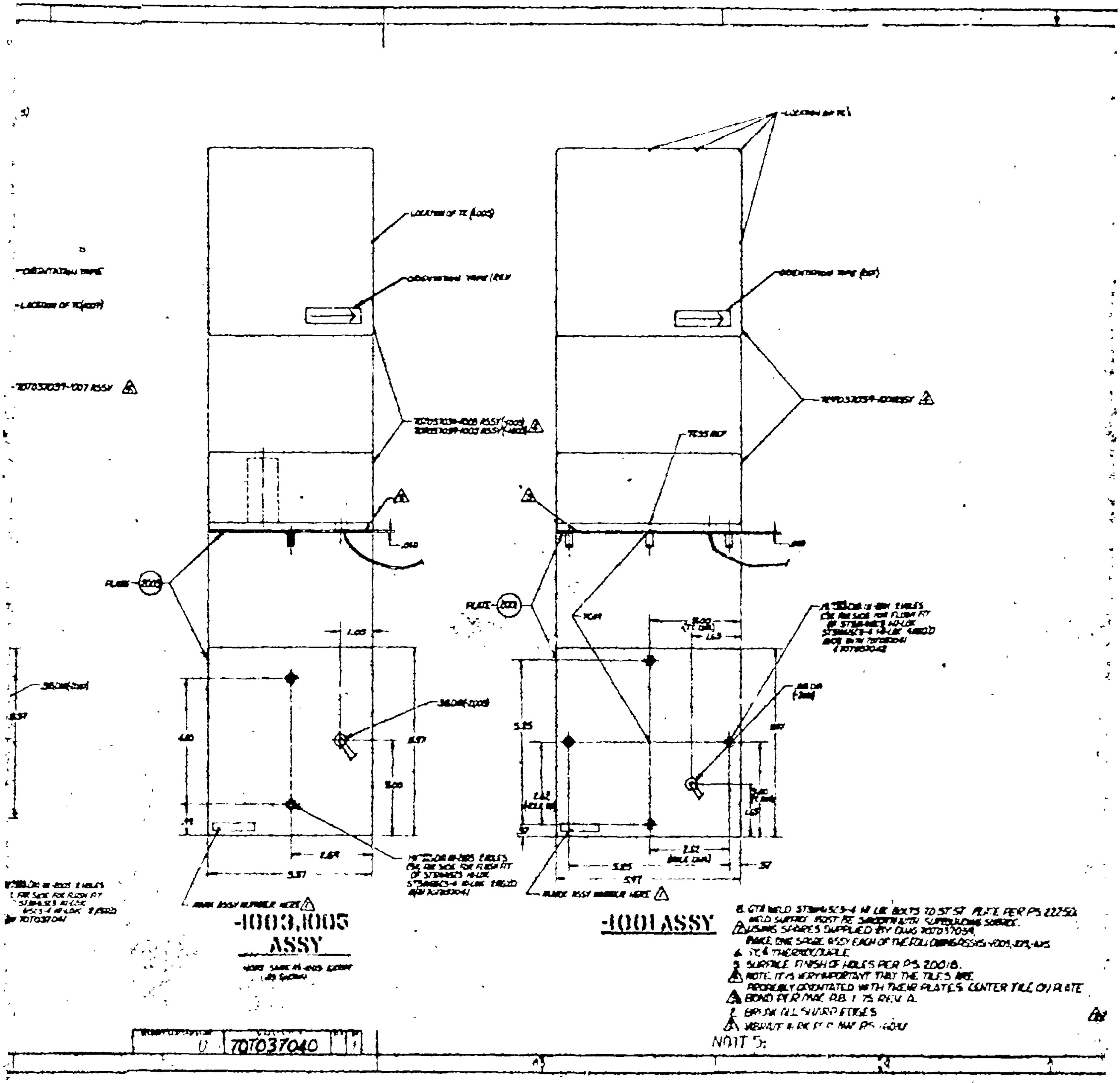


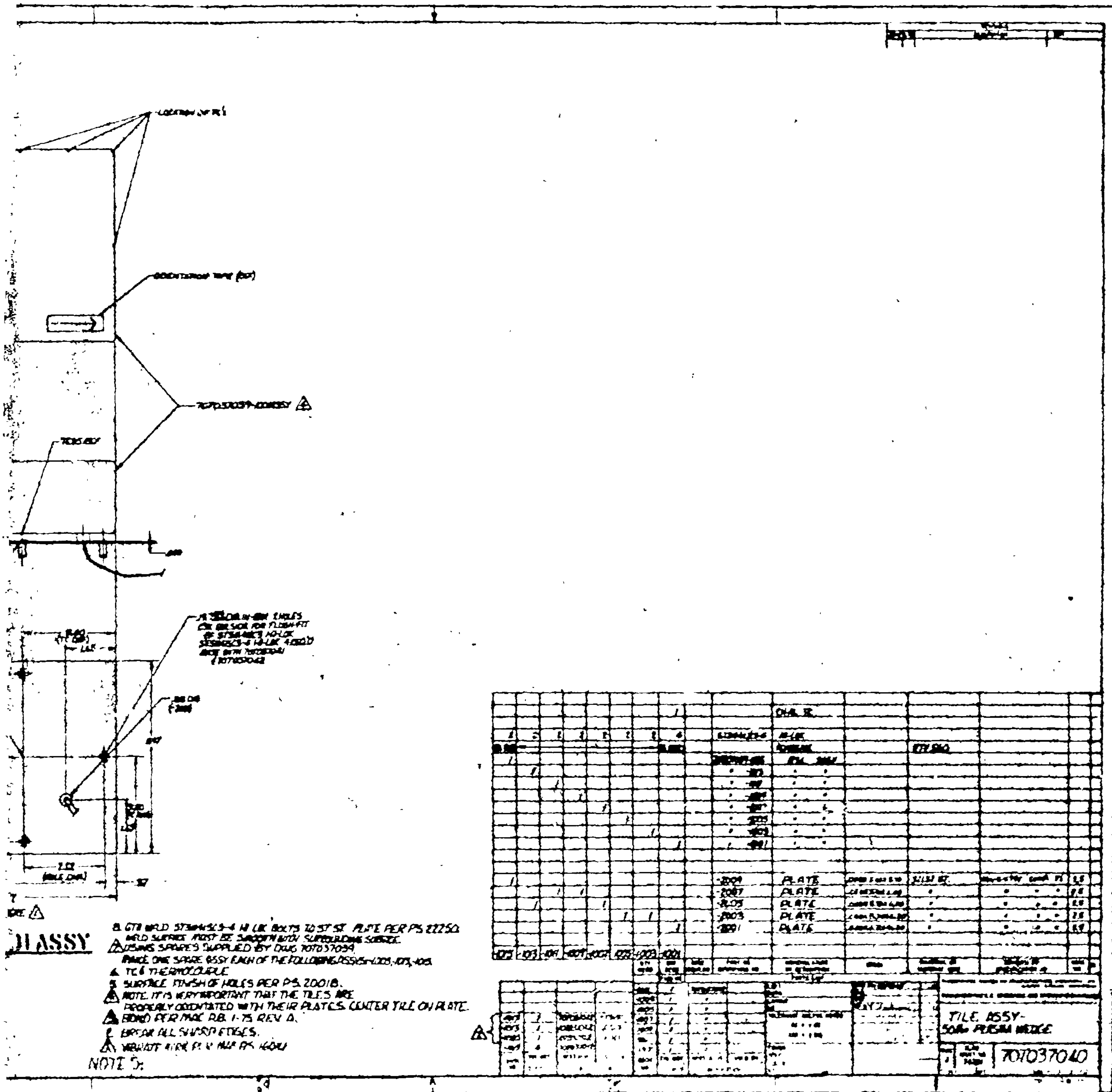
FIGURE 6.1-

FOLDOUT FRAME 3

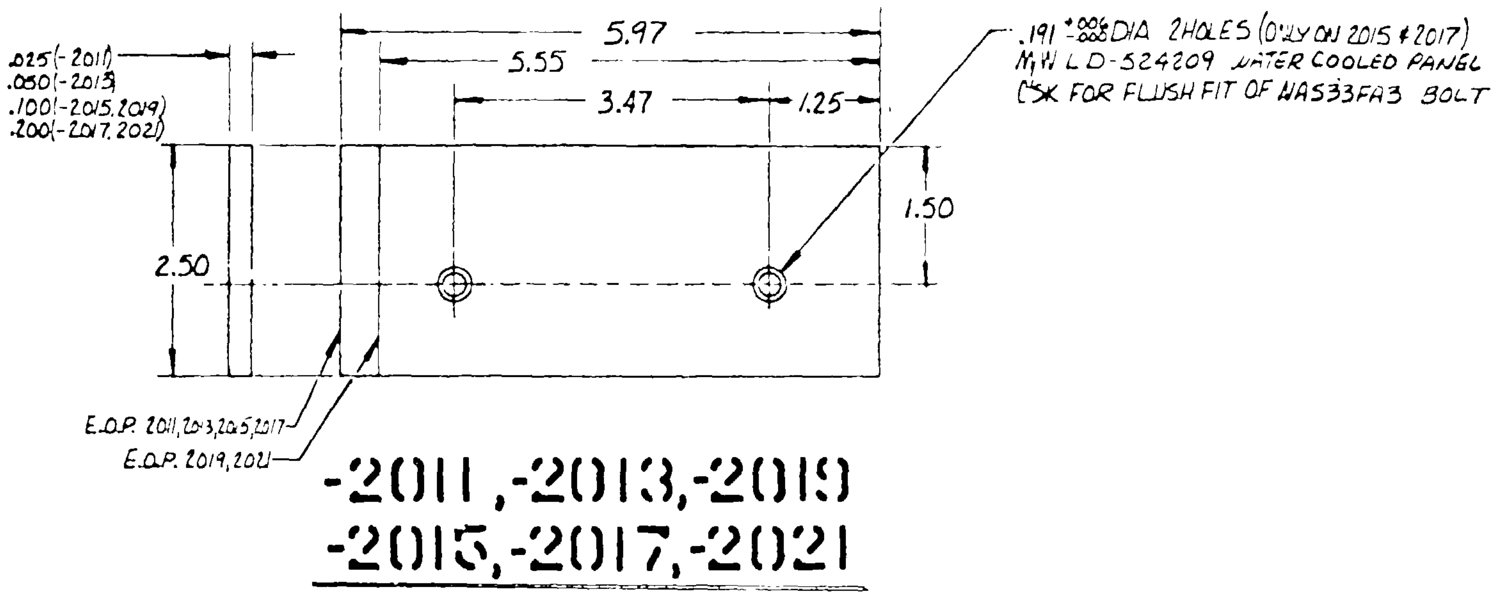

F
E
D
C
B
A
-1015ASSY
-1009,1011
ASSY
-1007,-1013
ASSY
FOLDOUT FRAME

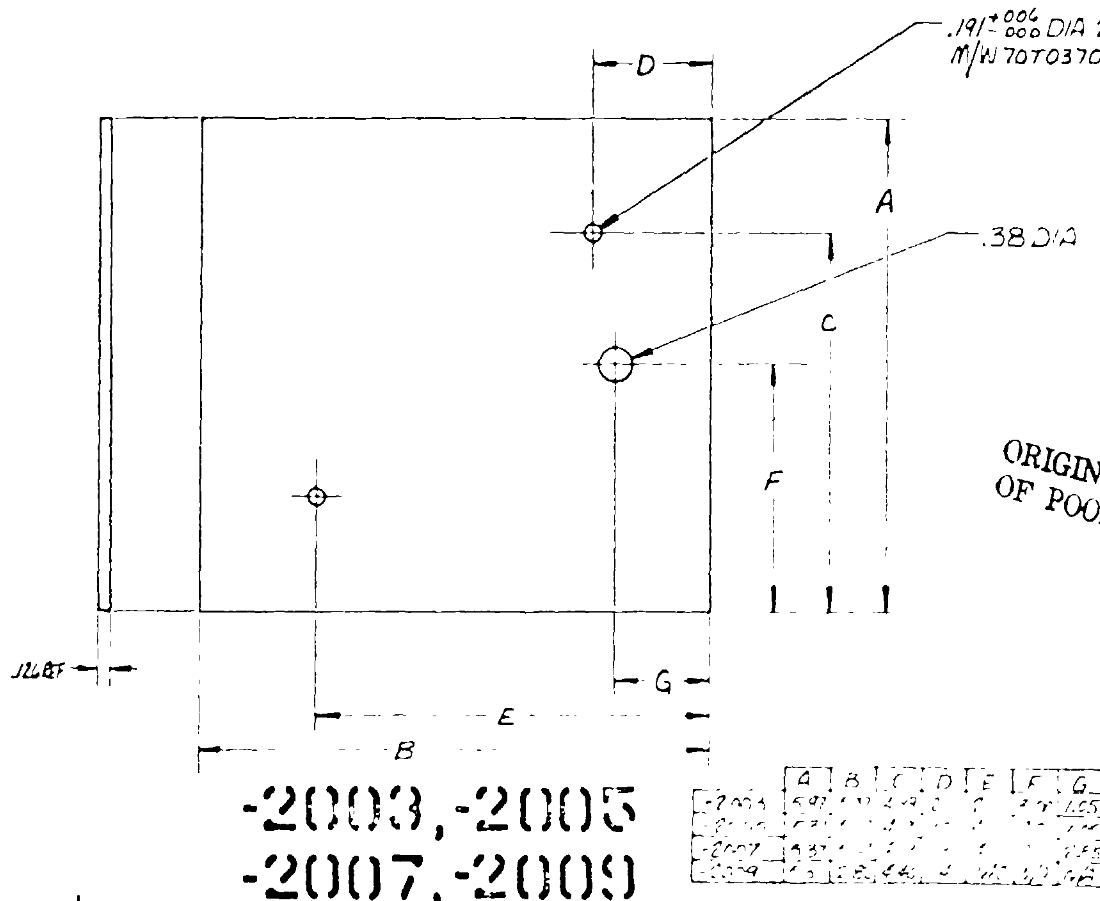


FOLDOUT FRAME 2



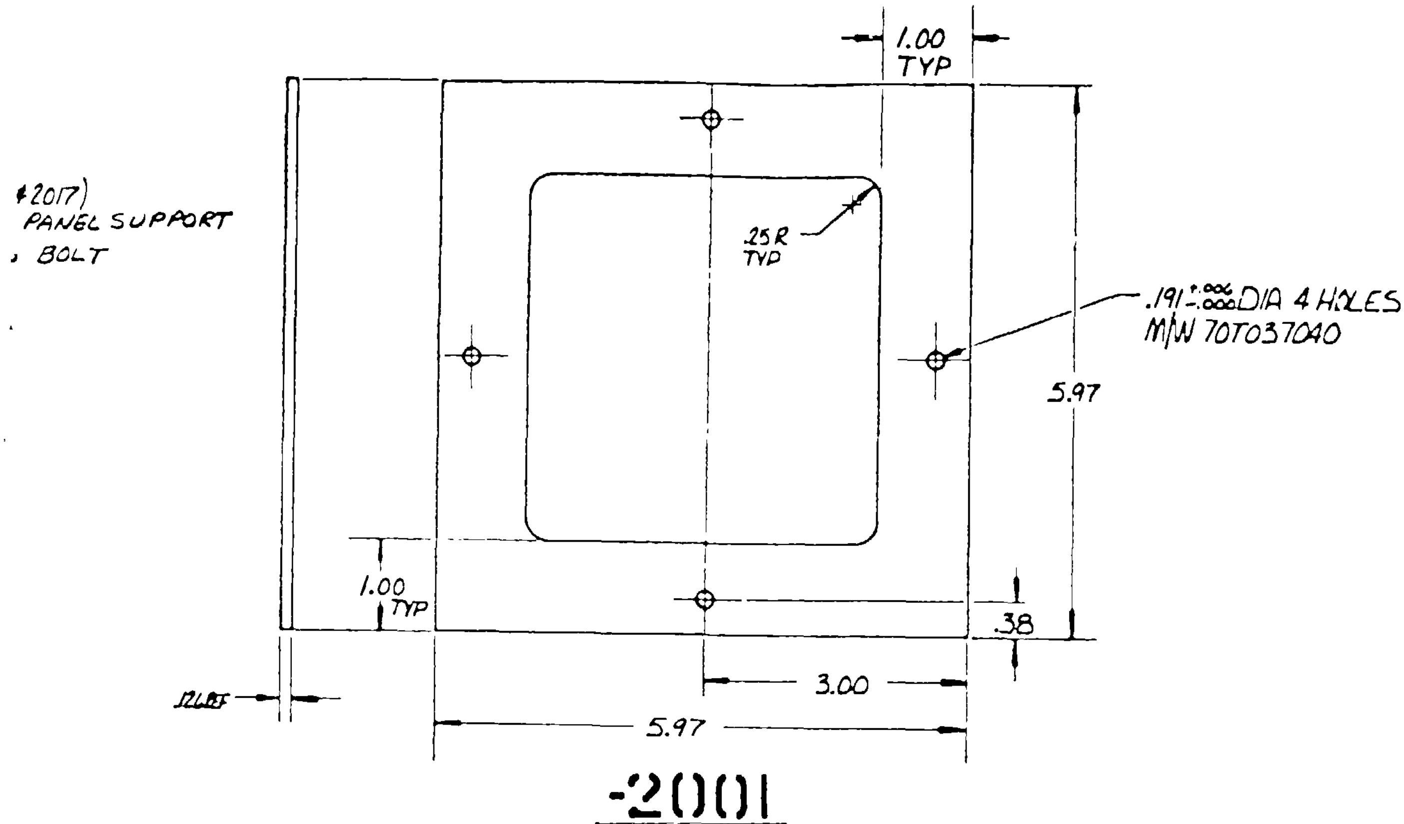
FOLDOUT FRAME FIGURE 6.1-7





FOLDOUT FRAME

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



QTY REQD	QTY REQD	CODE IDENT NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	STOCK	MATERIAL OR MATERIAL CODE	DRAWING OR SPECIFICATION NO	NOTE NO	ZONE
	8		-2021	SPACER	.188 [illegible]	[illegible] ST	[illegible]-S-2721 COMP TI		
	[illegible]		-2019	SPACER	[illegible]	" "	" "		
	10		-2017	SPACER	188 X [illegible]	" "	" "		
	[illegible]		-2015	SPACER	.100 X [illegible]	" "	" "		
	[illegible]		-2013	SPACER	050 X [illegible]	" "	" "		
	2		-2011	SPACER	.025 X [illegible]	" "	" "		
	4		-2009	SHIM	.126 X [illegible] 5.7	[illegible] LAM SHIM STK	[illegible]-S-2224[illegible]		
	2		-2007	SHIM	.126 X 5.7 X 6.3	" "	" "		
	2		-2005	SHIM	.126 X 5.7 X 6.3	" "	" "		
	2		-2003	SHIM	.126 X 5.7 X 6.0	" "	" "		
	1		-2001	SHIM	.126 X [illegible] 3	" "	" "		
	FIND NO	PARTS LIST							

DASH NO	FIN ART QTY REQD	NEXT ASSY	USED ON
[illegible]	[illegible]	70T037043	
2011	[illegible]	70T037043	
[illegible]	4	[illegible]	
[illegible]7	2	"	
[illegible]	2	"	
[illegible]	2	"	
[illegible]	1		
		APPLICATION	

LOFT DATA

LAYOUT NO

TOLERANCE UNLESS NOTED
XX = ±.03
XXX = ±.00

FINISH SPEC

CONTR NO

DRN [illegible] 3/19/75
CHK
STR
GP

MCDONNELL DOUGLAS ASTRONAUTICS COMPANY - EAST
SAINT LOUIS MISSOURI

MCDONNELL DOUGLAS CORPORATION

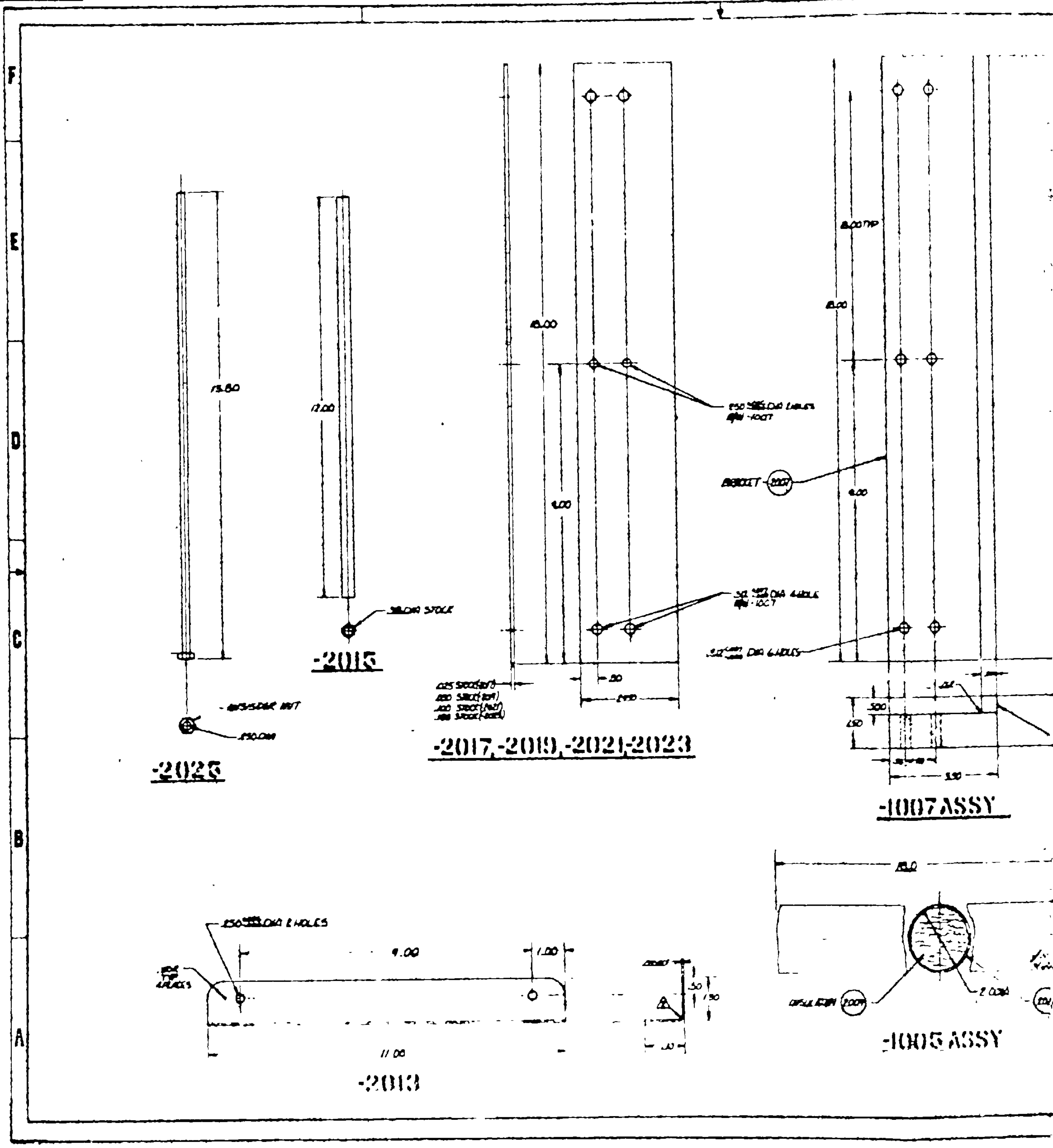
SHIM & SPACERS-
50MW ARC TUNNEL PLASMA WEDGE

SIZE	CODE IDENT NO	
D	76301	70T037041

SCALE

FIGURE 6.1-8

FOLDOUT FRAME



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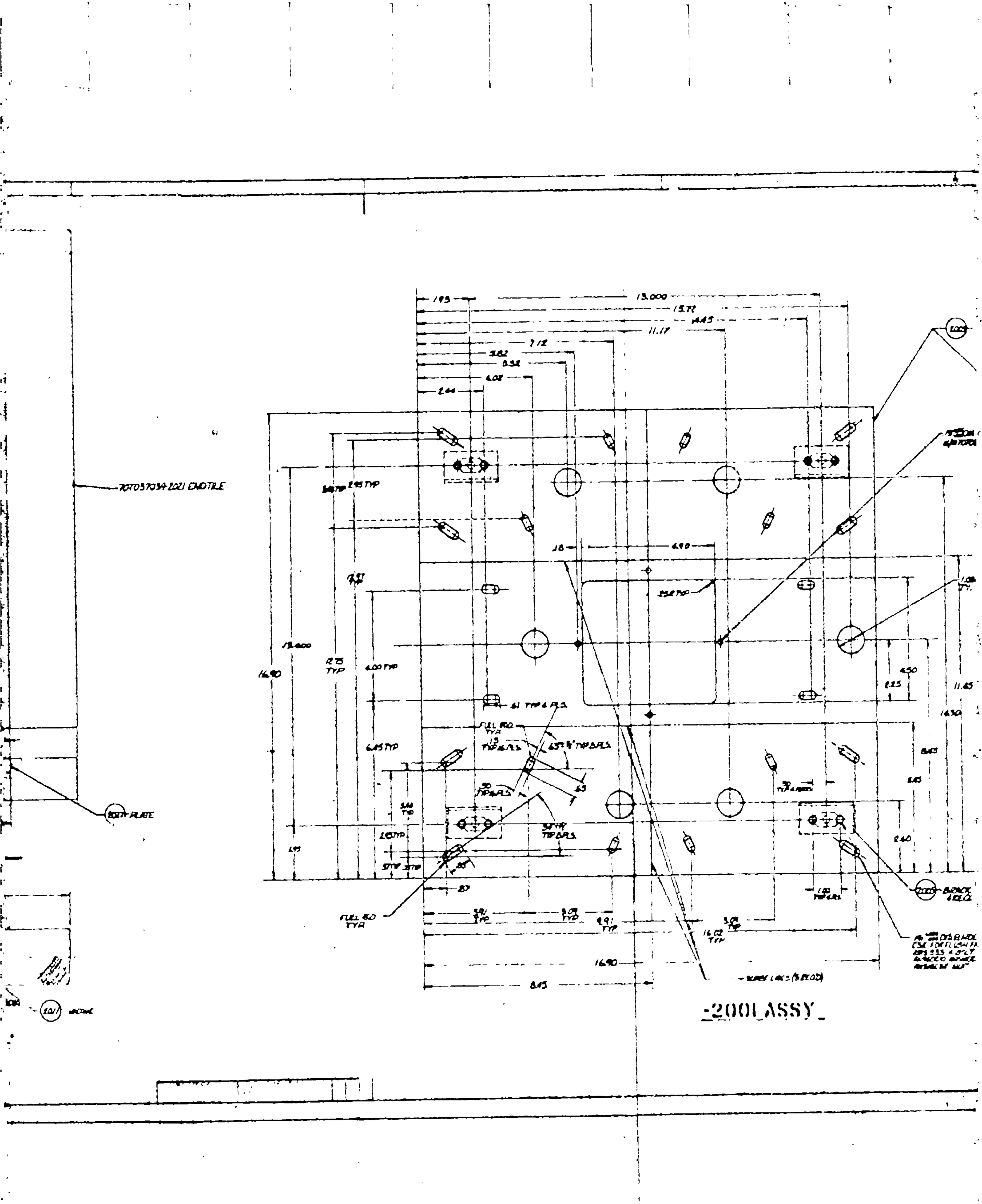
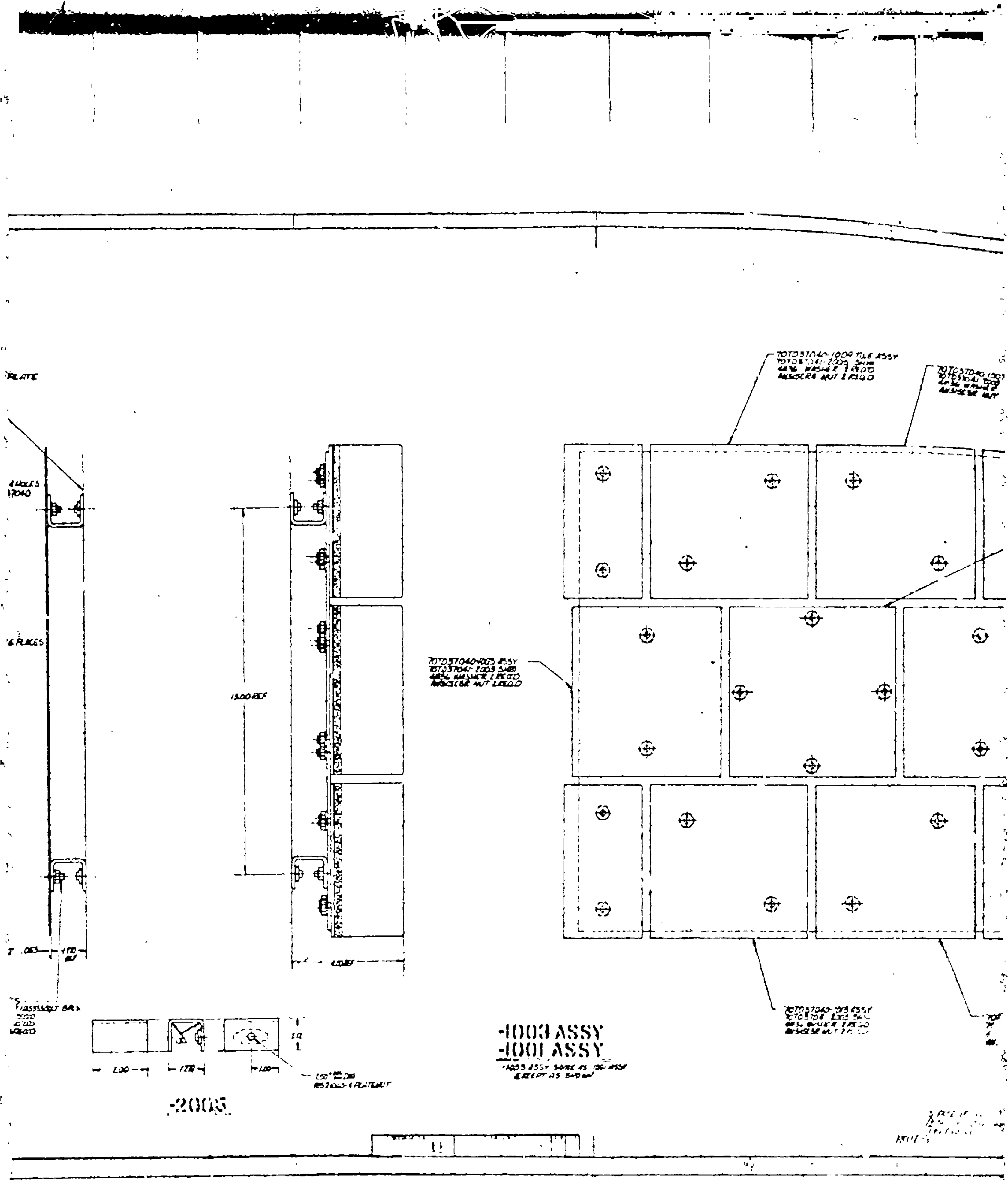


FOLDOUT FRAME 2



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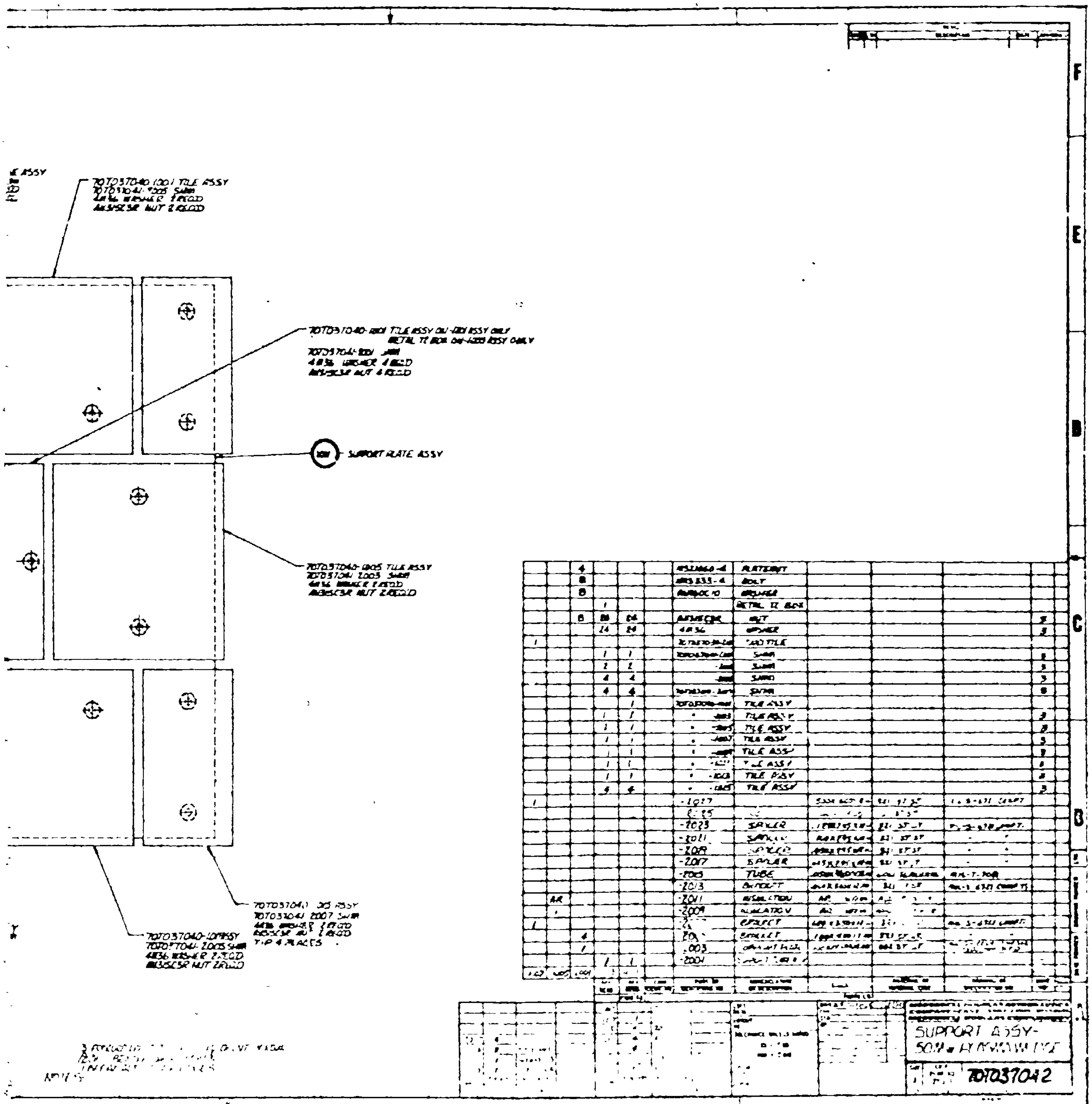
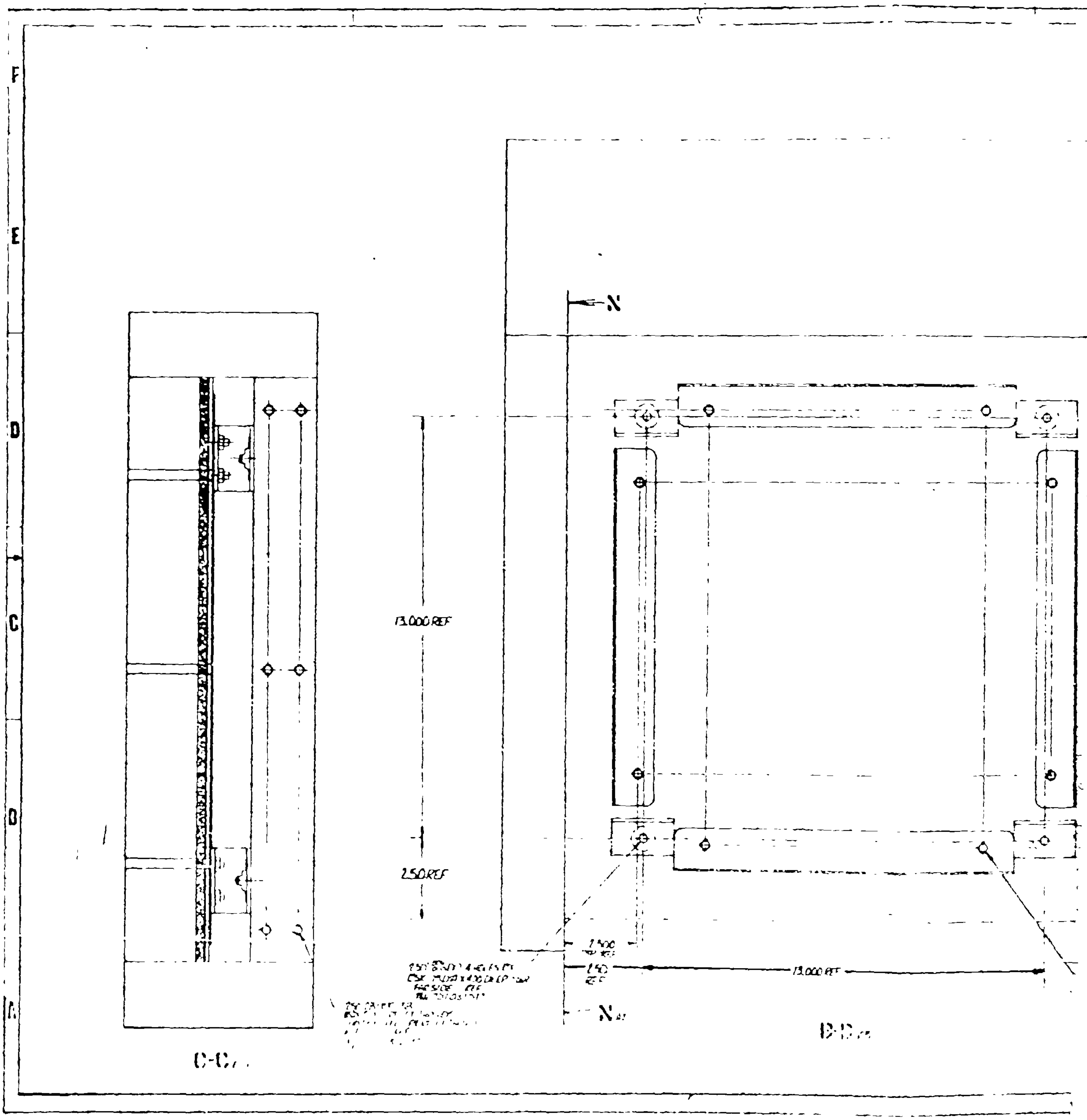
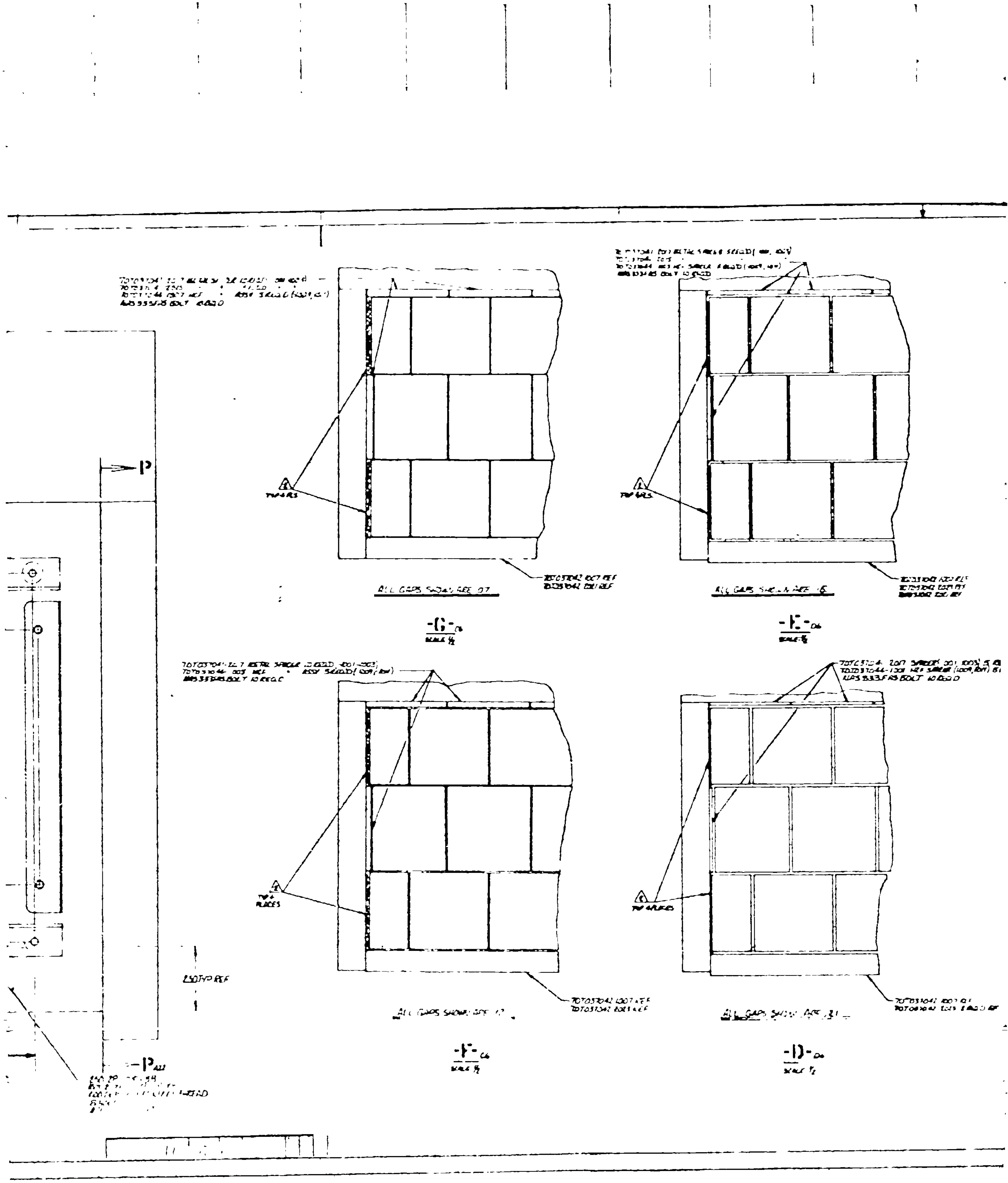


FIGURE 6.1-9

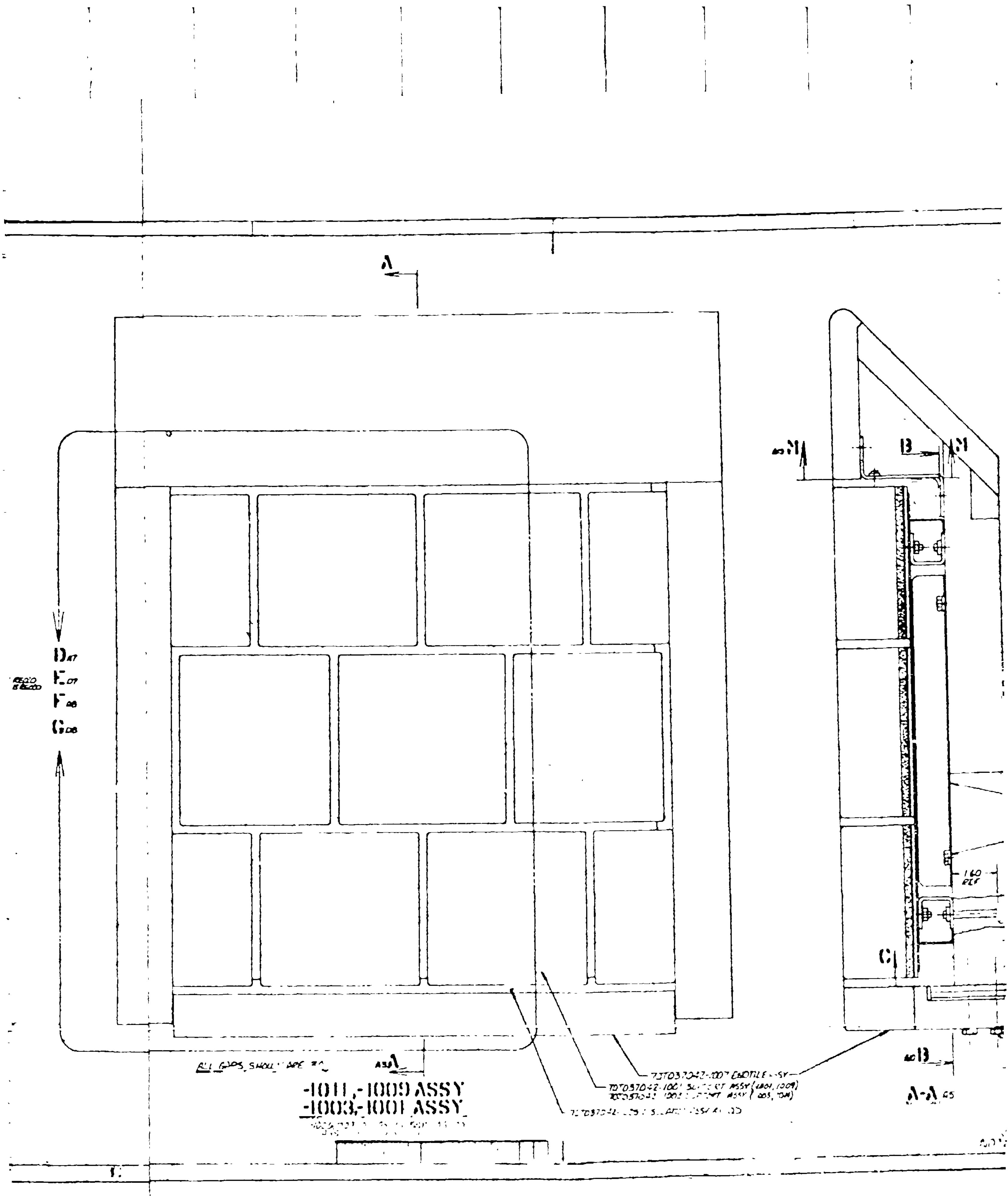
FOLDOUT FRAME 4



FOLDOUT FRAME



FOLDOUT FRAME 2



OLDOUT FRAME 3

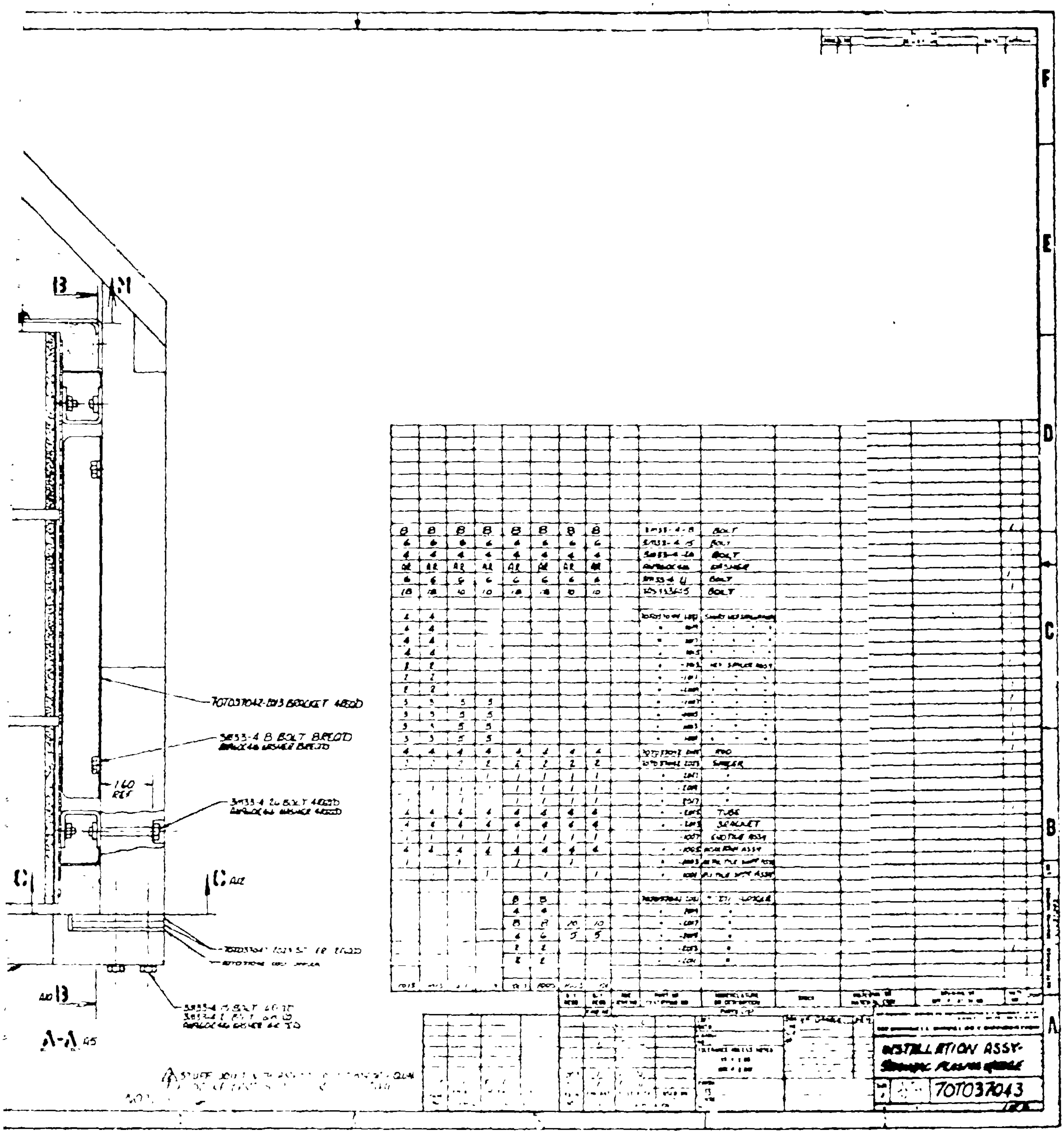
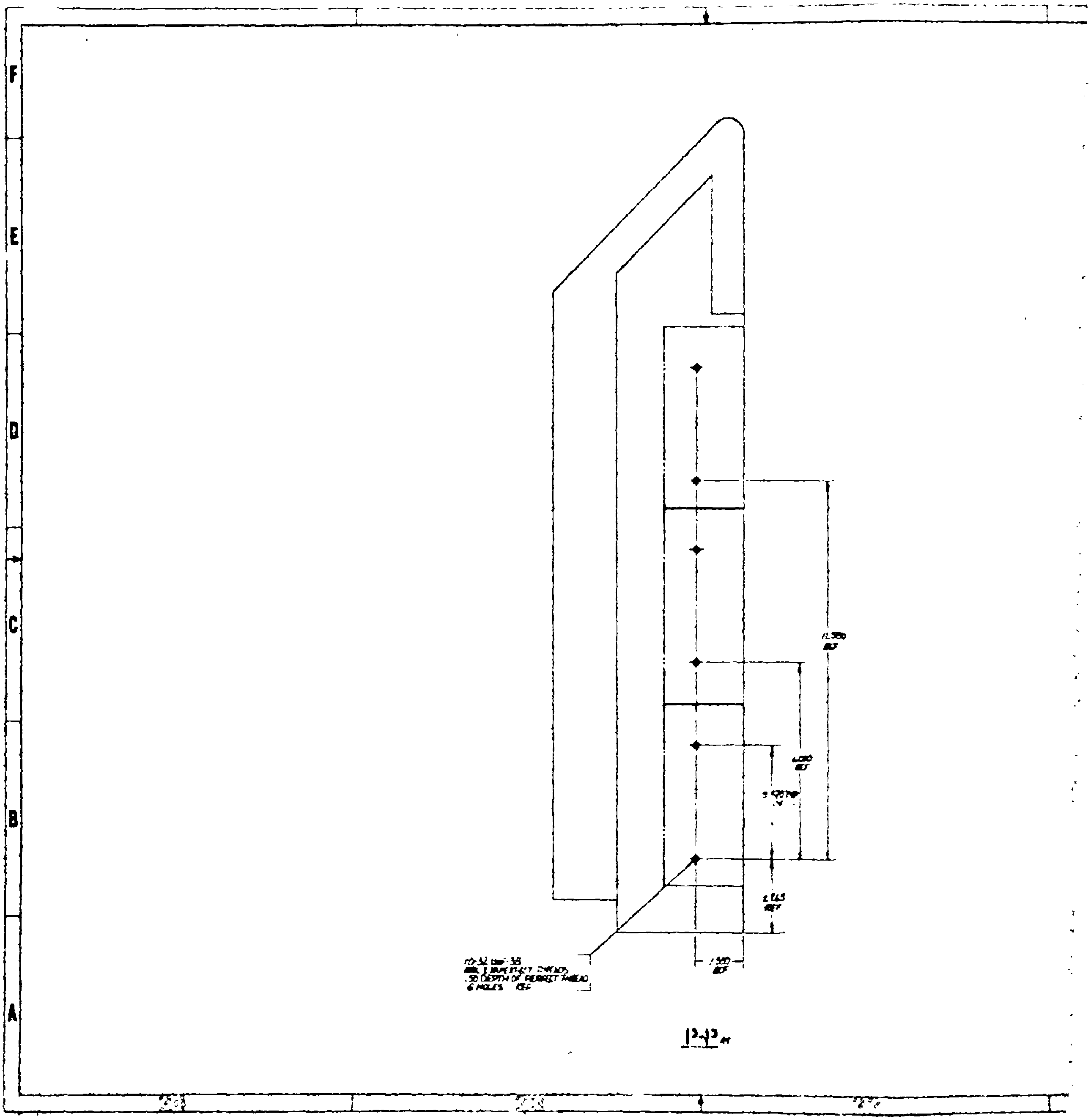
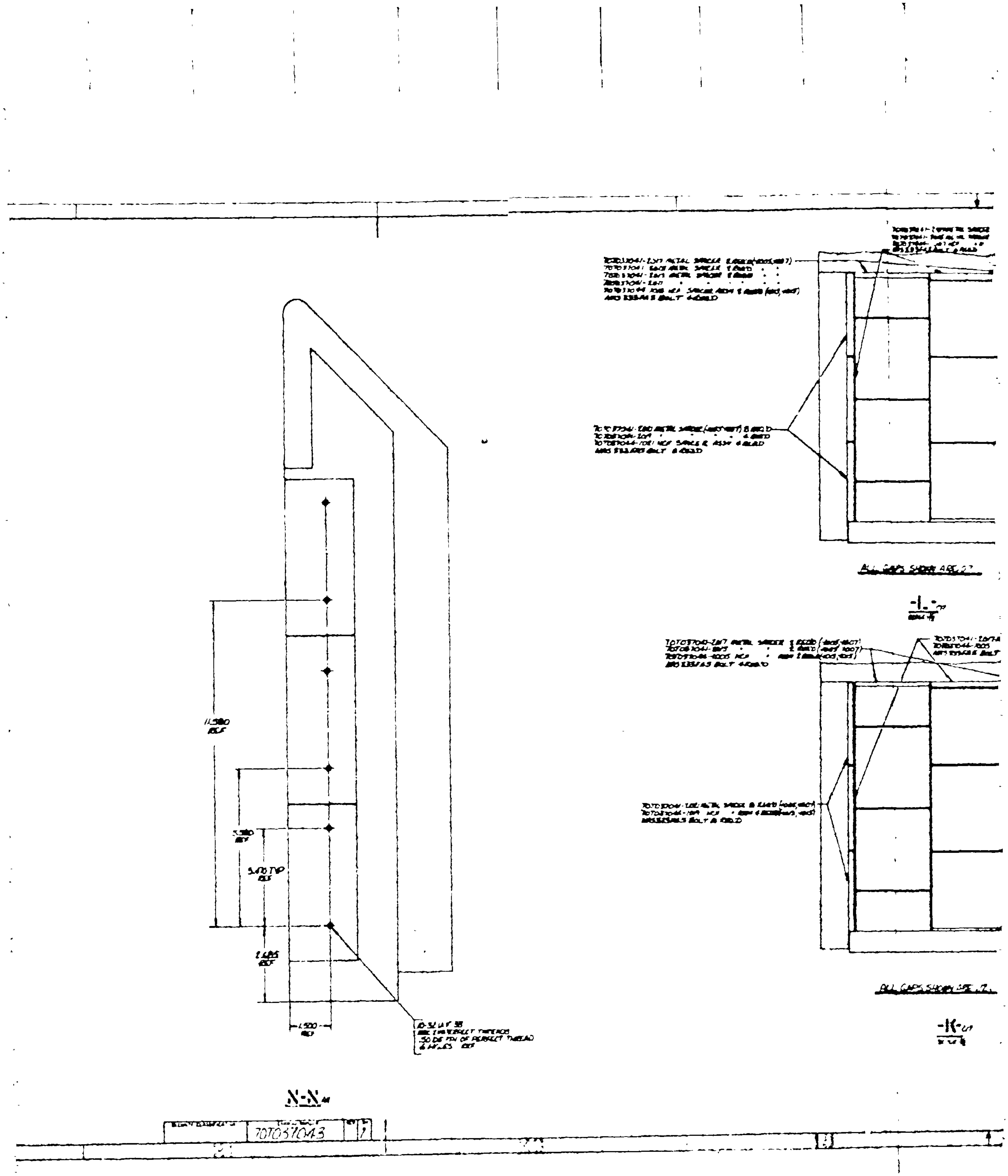


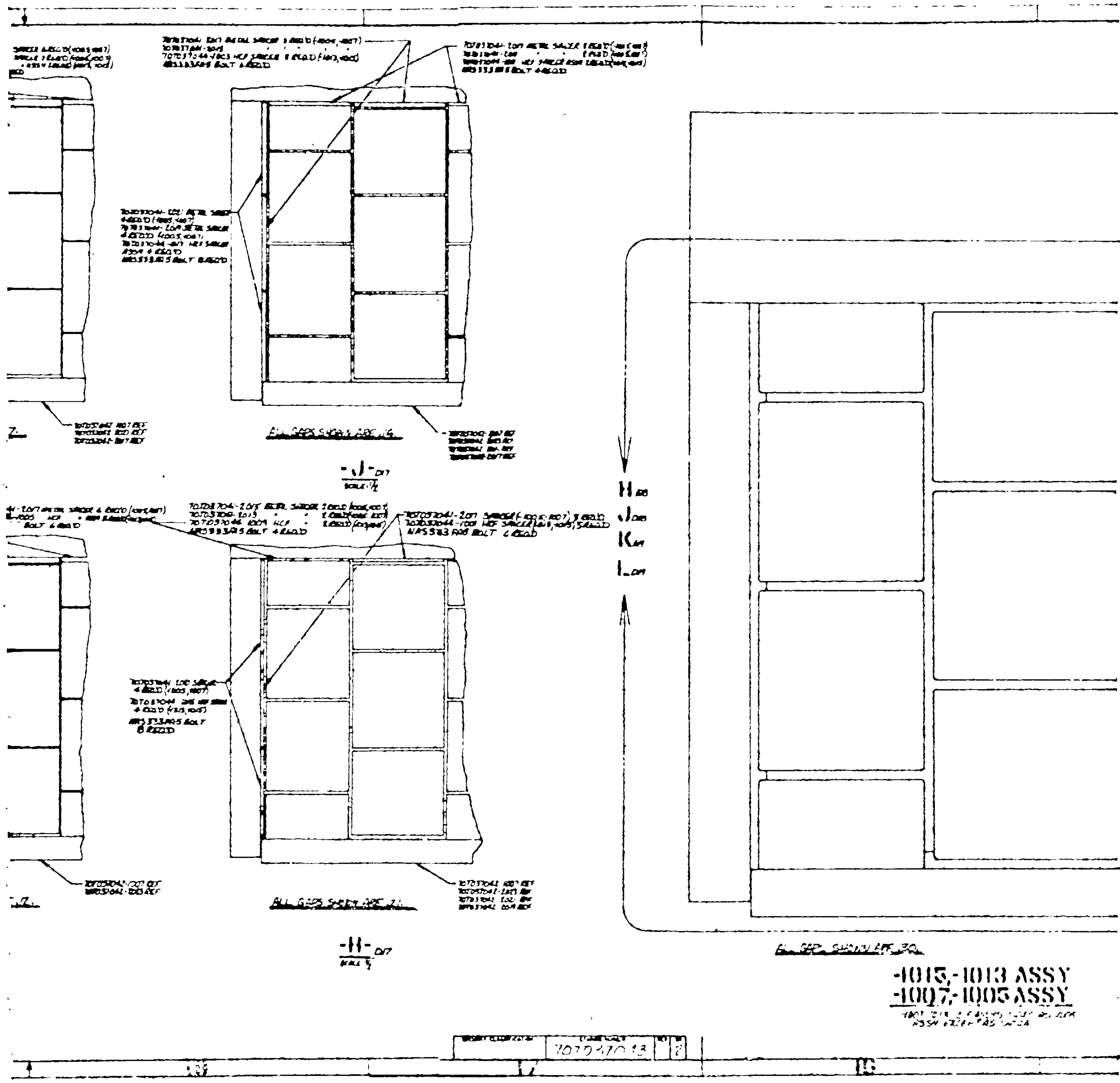
FIGURE 6.1-10

FOLDOUT FRAME 4





FOLDOUT FRAME 2



FOLDOUT FRAME 3

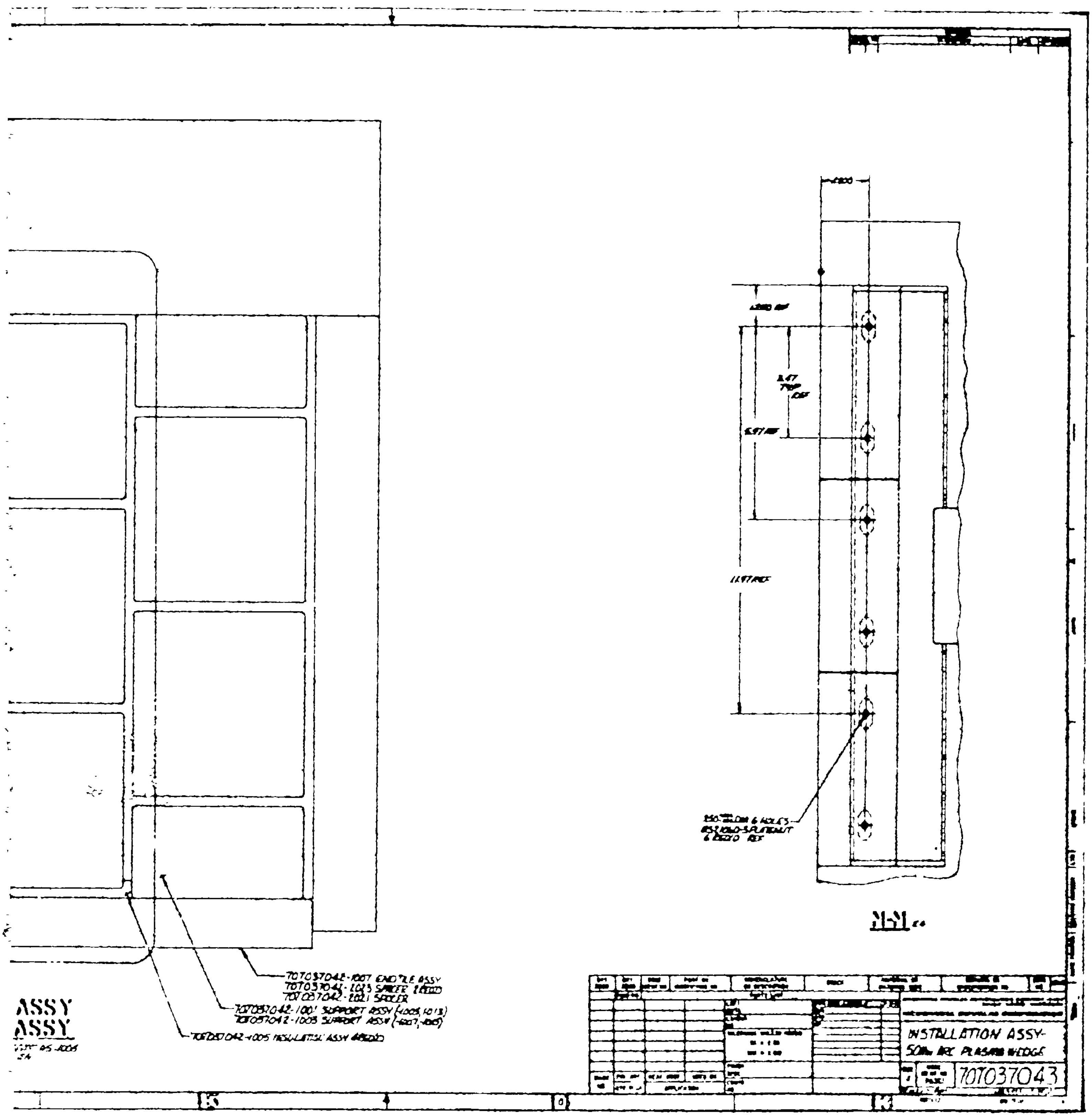


FIGURE 6.1-10
CONC.

FOLDOUT FRAME 4

RADIOGRAPH OF TILE ASSEMBLY 1001-31
46x46 CM RSI GAP HEATING EVALUATION PANEL

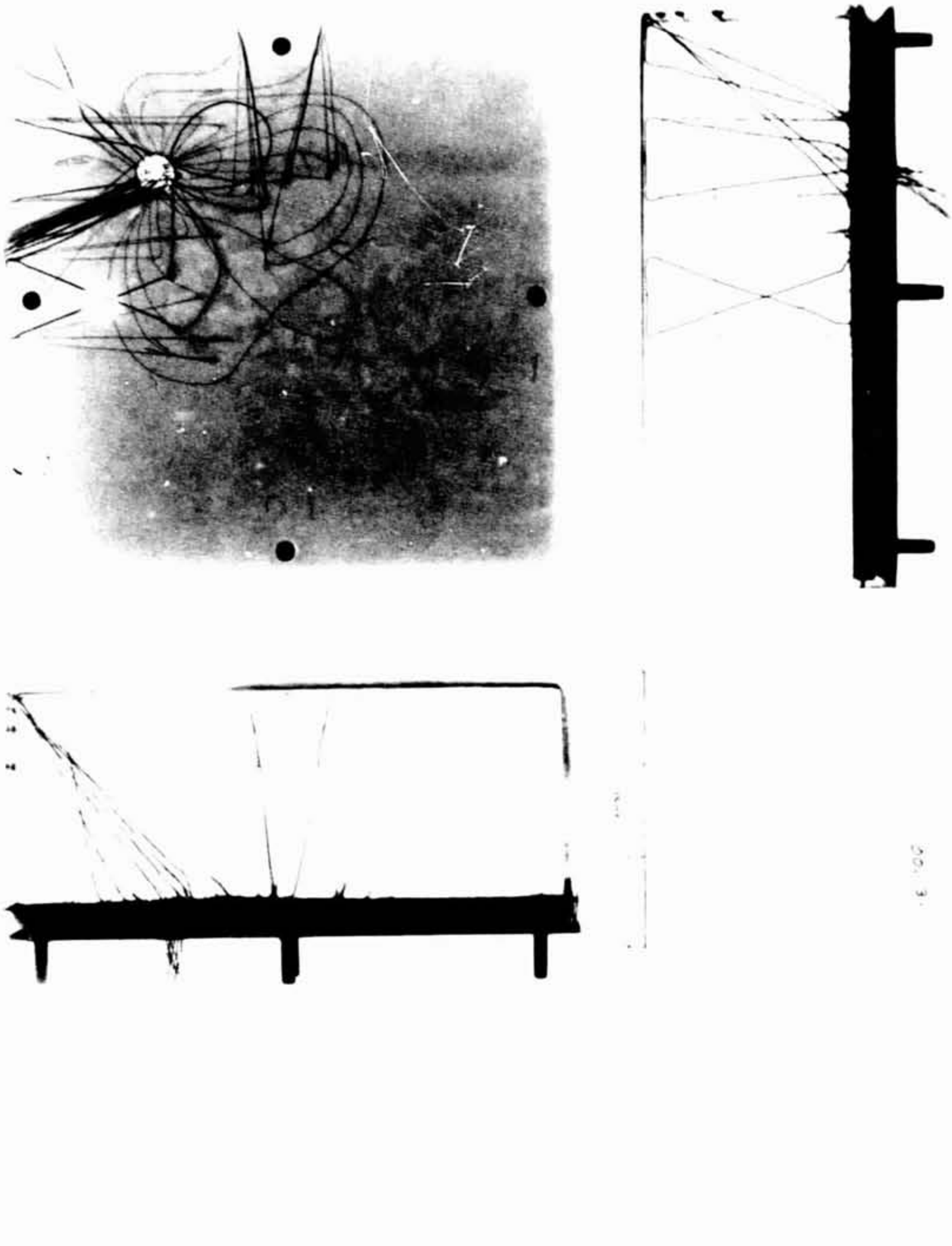


FIGURE 6.1-11

RADIOGRAPH OF TILE ASSEMBLY 1003-29
46x46 CM RSI GAP HEATING EVALUATION PANEL

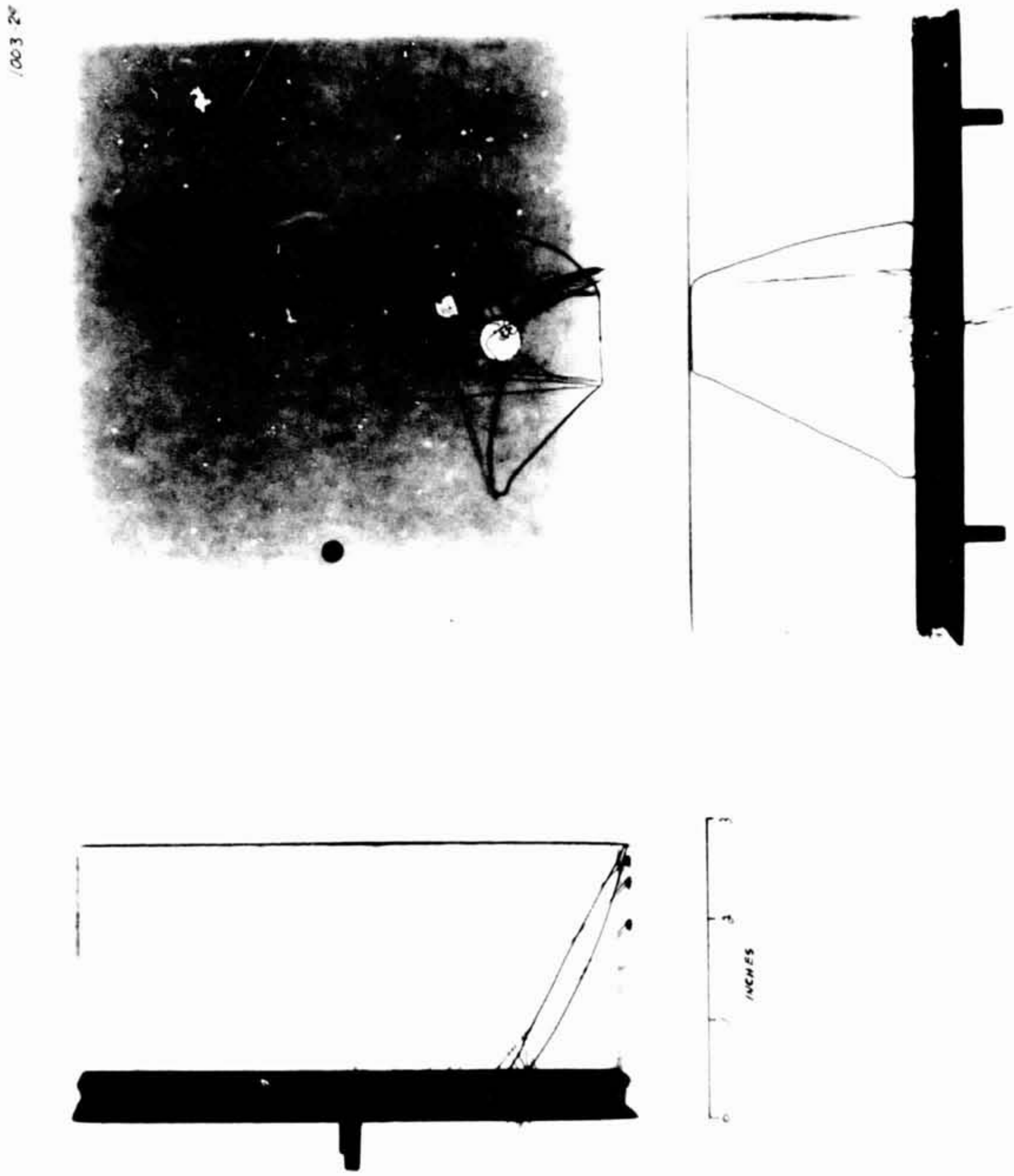


FIGURE 6.1-12

RADIOGRAPH OF TILE ASSEMBLY 1003-35
46x46 CM RSI GAP HEATING EVALUATION PANEL

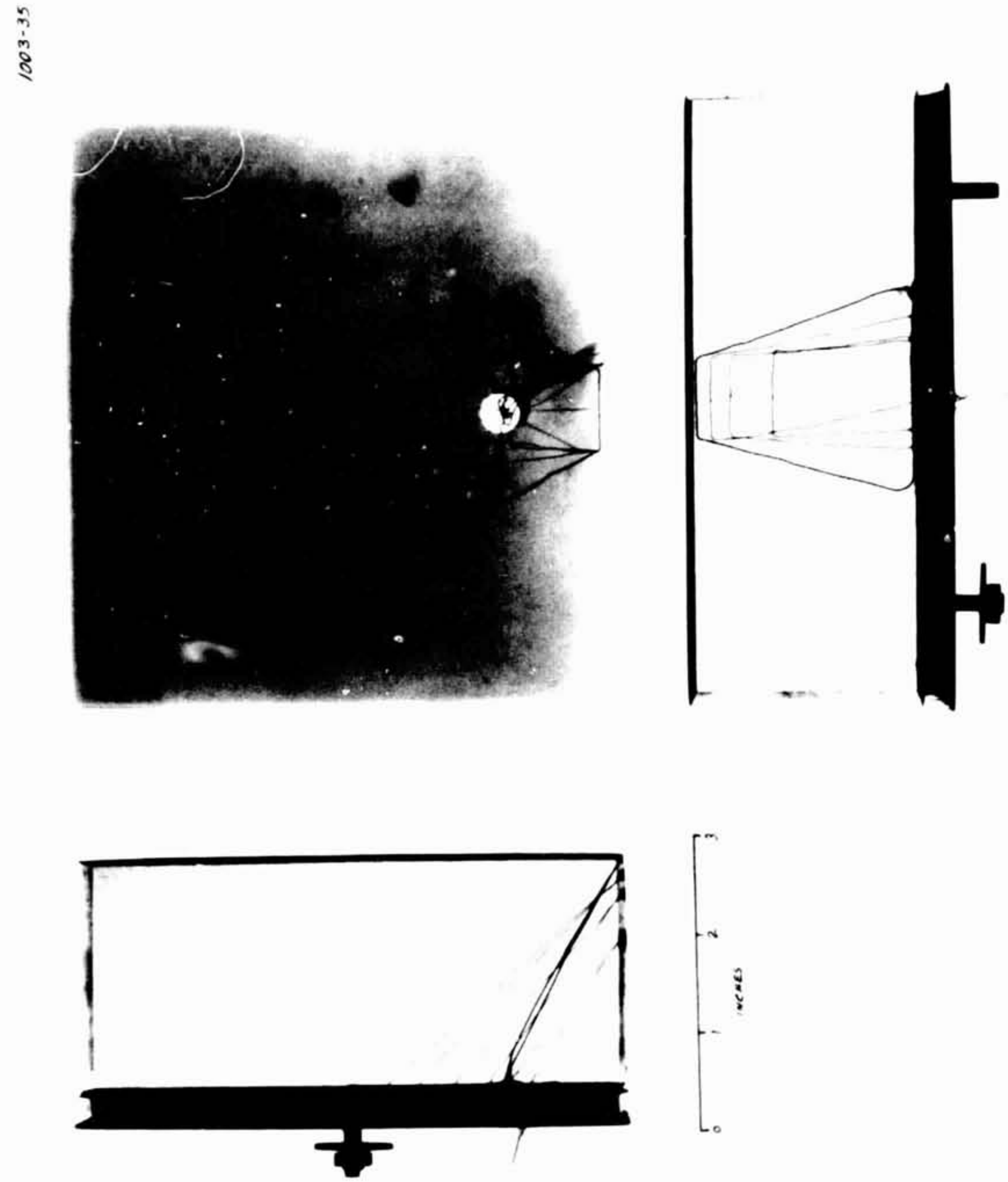


FIGURE 6.1-13

RADIOGRAPH OF TILE ASSEMBLY 1005-20
46x46 CM RSI GAP HEATING EVALUATION PANEL

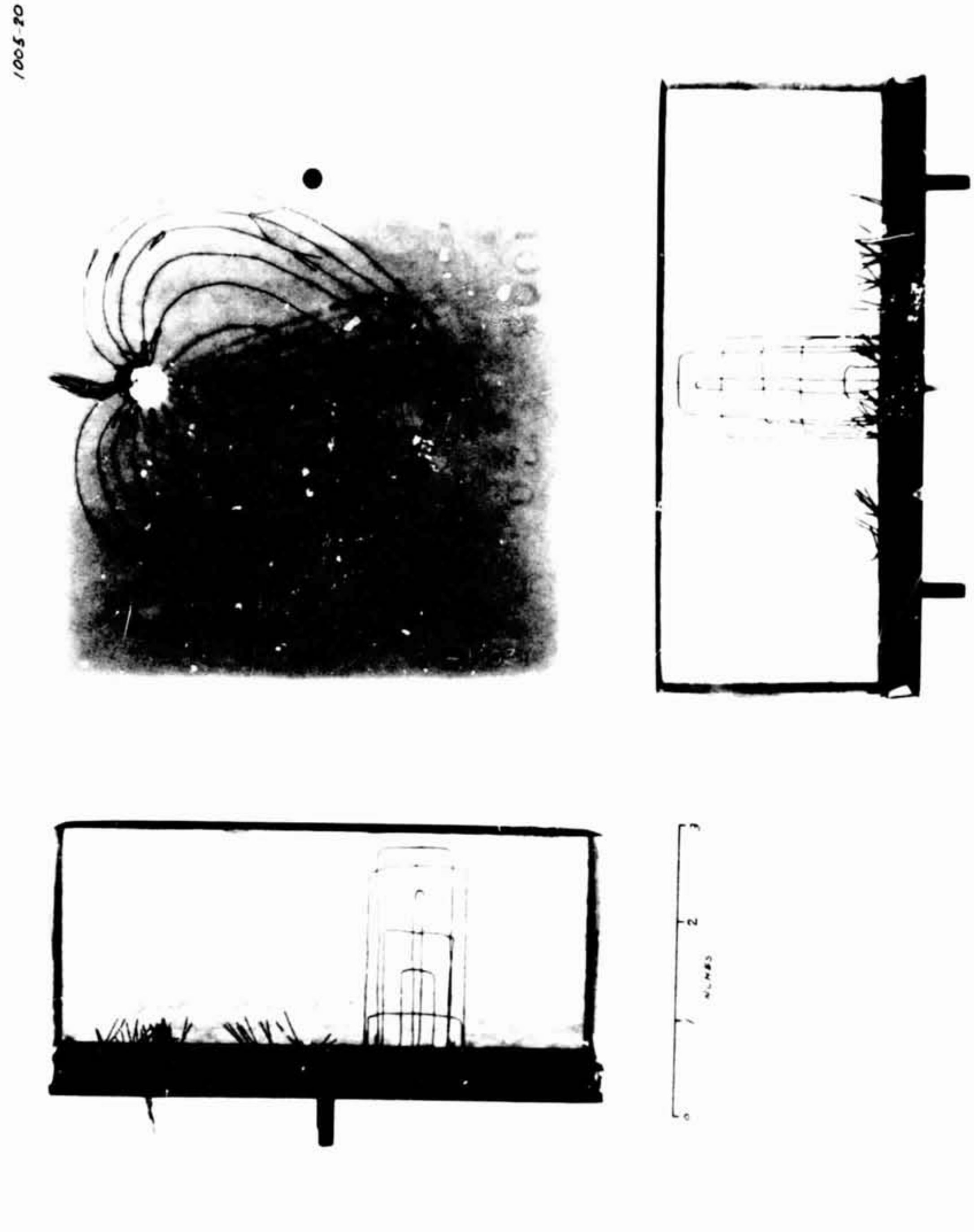


FIGURE 6.1-14

RADIOGRAPH OF TILE ASSEMBLY 1007-30
46x46CM RSI GAP HEATING EVALUATION PANEL

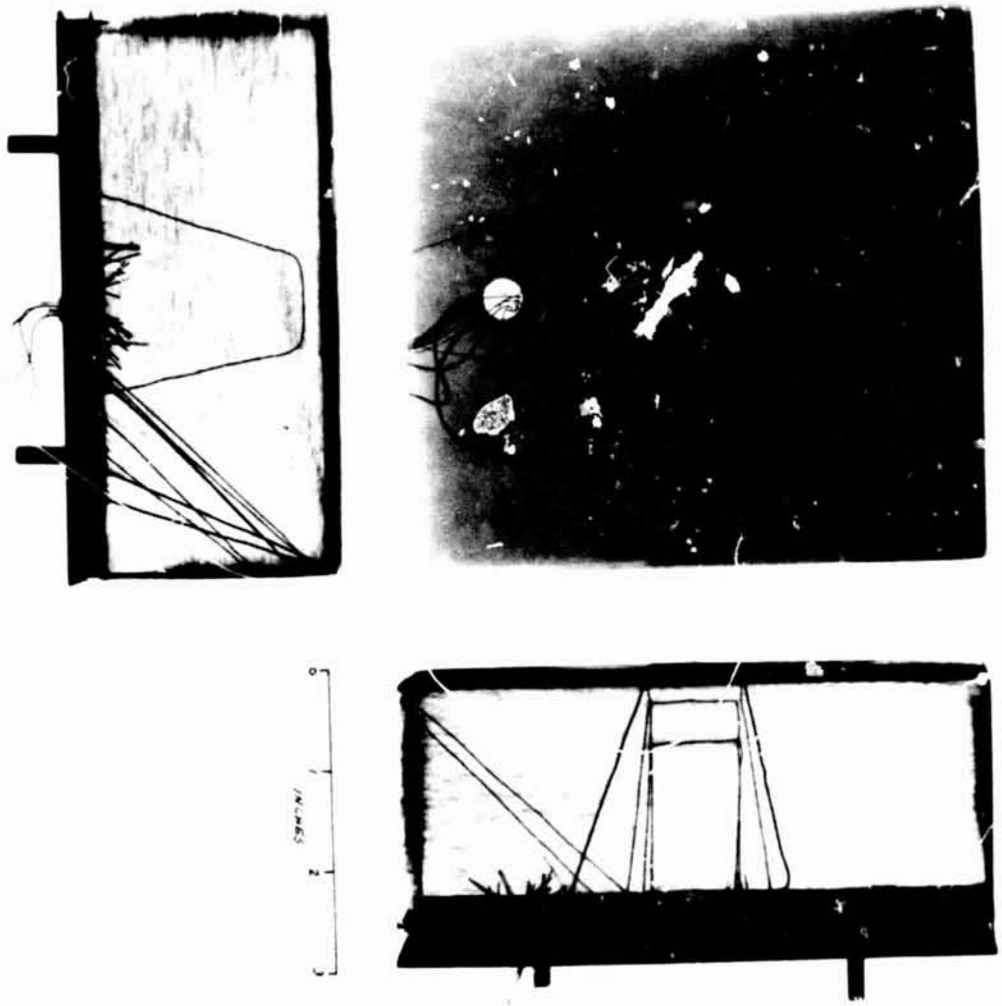


FIGURE 6.1-15

RADIOGRAPH OF TILE ASSEMBLY 1009-28
46x46 CM RSI GAP HEATING EVALUATION PANEL

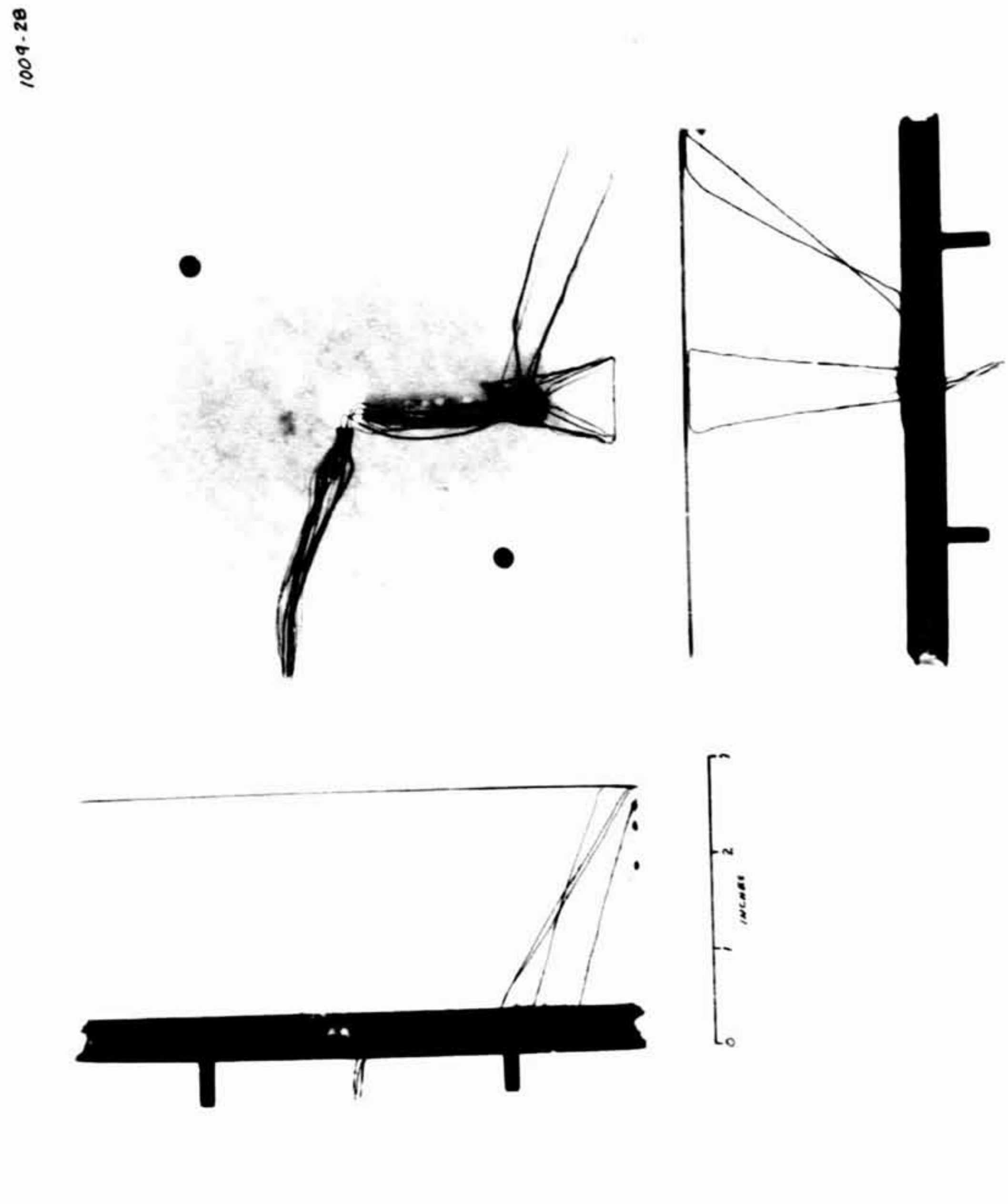


FIGURE 6.1-16

RADIOGRAPH OF TILE ASSEMBLY 1011-26
46x46 CM RSI GAP HEATING EVALUATION PANEL

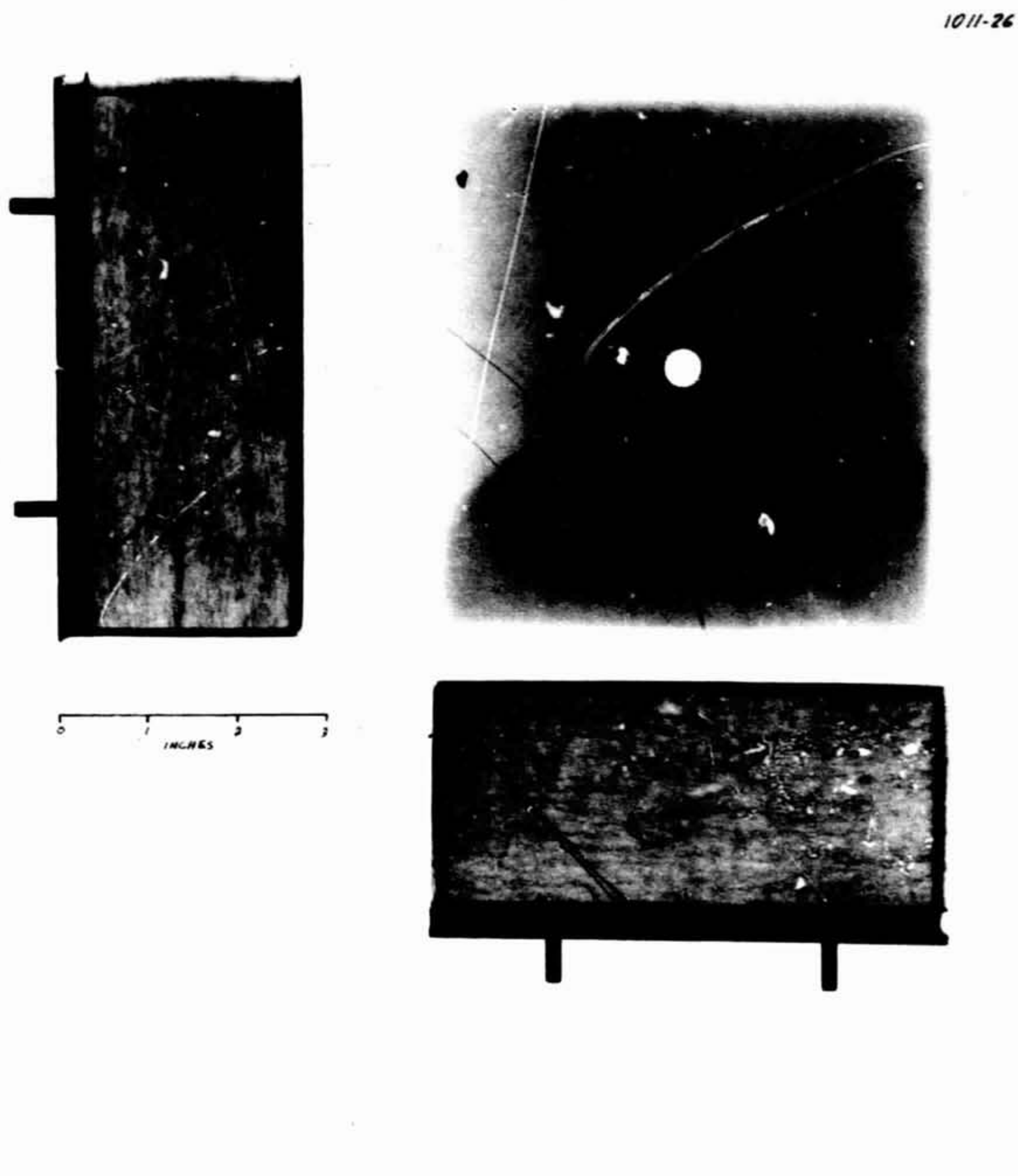


FIGURE 6.1-17

RADIOGRAPH OF TILE ASSEMBLY 1013-19
46x46 CM RSI GAP HEATING EVALUATION PANEL

1013-19

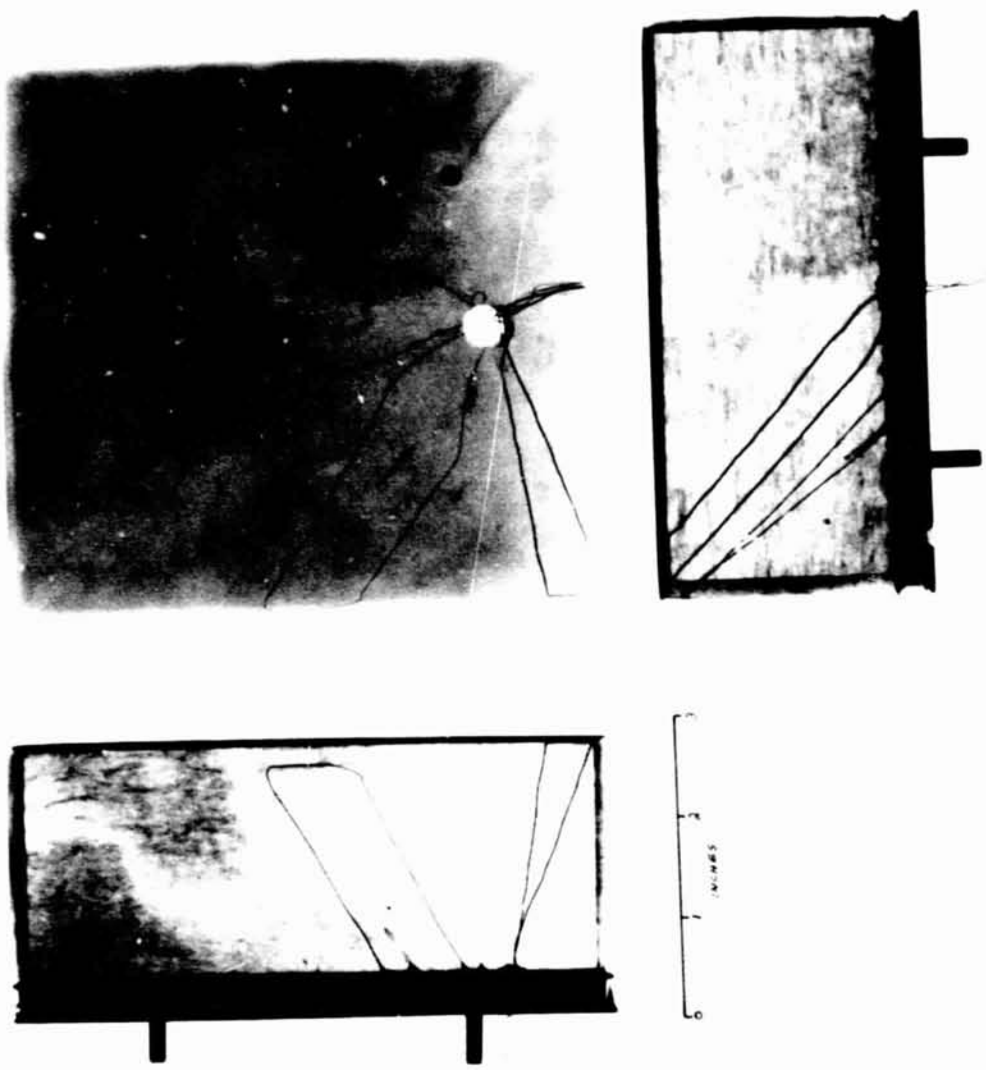


FIGURE 6.1-18

RADIOGRAPH OF TILE ASSEMBLY 1013-23
46x46 CM RSI GAP HEATING EVALUATION PANEL

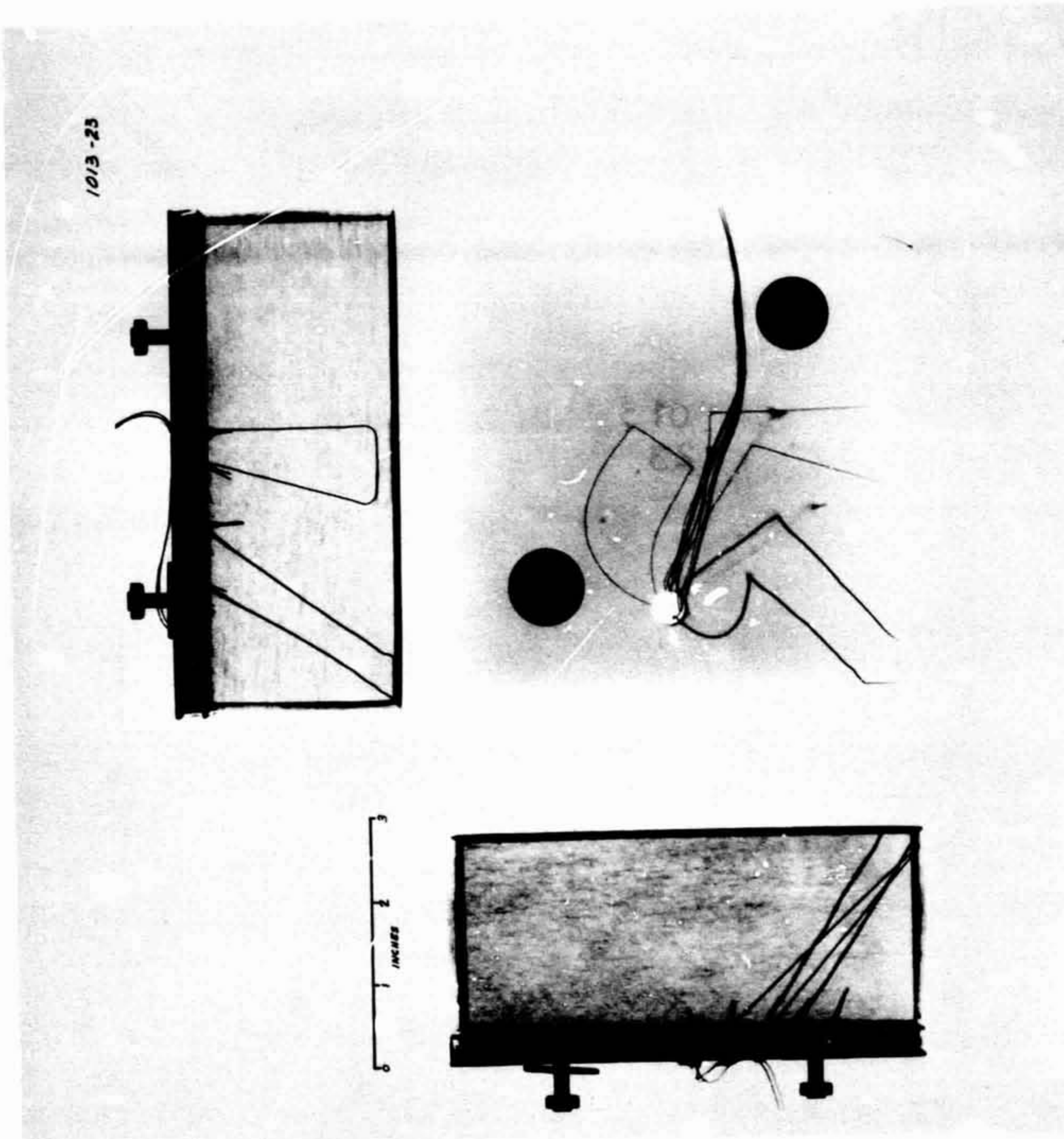


FIGURE 6.1-19

6.2 Explanation of Terminology Used in Data Listing - Results from the HTST tests presented in Section 6.3 are organized by run number and contain information about test conditions, model configuration and thermocouple location, heat transfer parameters and boundary layer parameters. The data listing was prepared by analyzing and combining information recorded during calibration and test runs with boundary layer information.

The terminology used in the data listing is as follows:

TT	=	Free stream total temperature
PTC	=	Combustor pressure
TAW	=	Adiabatic wall temperature
MACH	=	Mach number
PT(I)	=	Total pressure ahead of normal shock
P(F)	=	Free stream pressure
T(FS)	=	Free stream temperature
D-PRESS(FS)	=	Free stream dynamic pressure
(RHO-V)FS	=	Product of free stream density and velocity
(CP-RHO-V)FS	=	Product of free stream specific heat, density, and velocity
(RHO-TAU-CP)M	=	Product of metal tile density, thickness, and specific heat
RE/METER	=	Free stream Reynolds number
H(FLAT PLATE)	=	Tunnel reference flat plate heat transfer coefficient
TTIME	=	Test time at which computations were obtained
STEP	=	Step height
GAP	=	Gap width
CP(GAS)	=	Gas specific heat
RECOVERY FACTOR	=	TAW/TT
T/C	=	Thermocouple number
CH	=	Channel number
X	=	X-coordinate of instrumentation point, origin at center of tile
Y	=	Y-coordinate of instrumentation point, origin at center of tile
Z	=	Distance from top of tile (X, Y, Z for right hand coordinate system)
XBAR	=	Surface distance from tile center
YBAR	=	Lateral surface distance from tile center
Q	=	Convective heating rate

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HT	=	Turbulent convective heat transfer coefficient (0.912 recovery factor), uncorrected
HTDHP	=	Heat transfer ratioed to theoretical flat plate heat transfer coefficient, uncorrected.
HT/HF	=	Convective heat transfer ratioed to calibration plate heating
NSTT	=	Stanton number based on free stream conditions and HT
T	=	Local temperature recorded on the thin skin tile at TTIME
HTC/HF	=	Conduction corrected HT ratioed to calibration plate heating
HTC/HEC	=	Conduction corrected HT ratioed to heat transfer coefficient on tile surface near gap (conduction corrected)
HT/H-CNTR	=	Heat transfer coefficient ratioed to heat transfer coefficient at center of tile

6.3 Data Tabulation for LaRC 8 Foot HTST Gap Heating Tests - This section contains the program for transcribing data from the HTST into the Data Bank and the tabulation generated by the program. The program listing is included for completeness and also documents those steps necessary to process the data into the Data Bank. The data listing begins on Page 6.3-26. This listing employs the "24 Attribute Word List" (described in Volume I, Section 5) used in the data selection and data correlation programs.

```
      PROGRAM RSIHTST(INPUT=100,OUTPUT,TAPE5=INPUT,TAPE6=OUTPUT,
     1        TAPE14=102,TAPE15=1022,TAPE22=102,TAPE23=102,TAPE24)
C                                                 H.E.CHRISTENSEN    1974
C     HEAT TRANSFER TAPE LISTING FROM GAP TESTS AT LARC 8 FT HTST
C
C
      DIMENSION          X(100), Y(100), Z(100), TCAL(100),Q(100),
     1          HT(100), HTOMP(100),  STT(100),  DATO(100)
      DIMENSION REPH(21) ,B(370)
      DIMENSION XTAB(9), H1TAB(9), H3TAB(9), H4TAB(9), HTOMF(100)
      DIMENSION  JTC(7,15),KTC(123), JTCR(7,15), KTCR(123), ITC(100)
      DIMENSION W(4,100),IW(4,100), HTCOMF(100),DT20X(2)
      DIMENSION WORD(24),IWORD(24),WORDT(24,200)
      DIMENSION ITEC(6), MREF(100)
      EQUIVALENCE (W,IW)
      EQUIVALENCE (WORD,IWORD)
      DATA REPH/ 2.067E+06, 2.001E+06, 2.001E+06, 4.823E+06, 4.692E+06,
     1           [illegible]
     2           2.001E+06, 1.968E+06, 1.903E+06, 2.001E+06, 1.870E+06,
     3           3.034E+06, 2.001E+06, 2.034E+06, 1.968E+06, 1.870E+06,
     4           4.692E+06/
      EQUIVALENCE (JTC(1,1),KTC(19)), (JTCR(1,1), KTCR(19))
      DATA KTC / 63,61,66,6,7,8,9,68,70,69,68,67,62,64,75,81,86,76,
     1           61, 1, 2, 3, 4, 5, [illegible]
     2           [illegible]
     3           [illegible]
     4           [illegible]
     5           [illegible]
     6           [illegible]
     7           [illegible]
     8           78,77,78,79,80,80, 80/
      DATA XTAB/ -20., -15., -10., -5., 0.0, 5., 10., 15., 20./
      DATA H1TAB/ [illegible] ,.0594,.0633/
      DATA H3TAB/ [illegible]
      DATA H4TAB/ .0492,.0478,.0472,.0470,.0472,.0478,.0482,.05 ,.0527/
      DATA KM,NTOL,NTAPE, MSKIP,NSKIP, JONE /0,0,1,0,10 , 0/
      DATA ITEC/73,78,83,88,91,92/
C
C     TAPE14 = TAPE BEING READ
C     TAPE15 = TAPE BEING PREPARED FOR SELECT
C
      NRUN = 0
      IPAGE = 0
      LAST = 0
      NTOL=0
      KM=0
      ISPACE = 0
      STAR= 1H*
      BLK =1H
      RFACT = 0.912
      DALPHA = 7.7
      DP     = 17.9E+06 - 6.55E+06
      AJ     = 7.0
      PJ     = 6.55E+06
      IORDER=2
      ISPRED=1
      DELTA =0.1
```

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```
      DIST1=13.716
      DIST2=13.716
      CONF =9HSTAGGERED
      IF(MTAPE.EQ.3) GO TO 10
      WRITE(22,430) ITEST,IRUN,IPAGE
      WRITE(23,430) ITEST,IRUN,IPAGE
      WRITE(22,620)
      WRITE(23,630)
   10 CONTINUE
      IN = 3
C
   20 READ(24,490) B
      IF(EOF,24) 420,30
   30 J = 0
      DO 40 I=1,370
      IF(B(I).EQ.STAR) J=1
   40 CONTINUE
      IF(J.EQ.0) GO TO 50
      WRITE(6,500) B
      READ(14,510) ITEST
      GO TO 20
C
   50 READ(14,510) ITEST, IRUN, CONFIG
      IF(EOF,14) 420,60
   60 IF(ITEST.EQ. 58 ) GO TO 70
      READ(14,520) TT1, PTC,ALPHA,GAP,STEP,TAW,
     1             MACH, TTIME, PT1, PFS, TFS, QFS, RHOV1, RHOTCP,
     2             RHOVCP, XRPFT, HFP, DATAC,O,IV ,IV2,XR, YR, ZR,
     3             TCALR, SLOPE,QR, HTR,HTDMPR,ST (
      IF(EOF,14) 420,80
C
C     ITEST 58 IS A CALIBRATION TEST
   70 STEP = 0.0
      GAP = 0.0
      READ(14,530) TT1,PTC,ALPHA,TAW,
     1             MACH, TTIME, PT1, PFS, TFS, QFS, RHOV1, RHOTCP,
     2             RHOVCP, XRPFT, HFP, DATAC,O,IV1,IV2,XR, YR, ZR,
     3             TCALR, SLOPE,QR, HTR,HTDMPR,STTR
      IF(EOF,14)420,80
   80 IF(IV2.EQ.1H ) GO TO 100
      II = 33555555555555555558
      DO 90 L=1,10
      IF(IV2.NE.II) GO TO 90
      IV1 =10*IV1+L-1
      GO TO 100
   90 II=II+010000000000000000008
  100 CONTINUE
CCC   IF(IRUN.GT.5) GO TO 100
C
      IF(MRUN.EQ.IRUN .OR.(MRUN.EQ.6)) GO TO 340
C
  110 DO 120 I=1,123
  120 KTCR(I) = 9999
C
      M = M
      DO 150 I=1,123
      DO 130 N=1,M
      IF(ITC(N).EQ. KTC(I)) GO TO 140
```

```
      130 CONTINUE                                                      MTST1150
      140 KTCR(I) = N                                                   MTST1160
      150 CONTINUE                                                      MTST1170
C                                                                       MTST1180
C         CONDUCTION CORRECTED HEAT TRANSFER COEFFICIENT RATIO          MTST1190
          DO 160 N=1,M                                                  MTST1200
          CALL DT2DY2(M,N,IORDER,ISPRED,DELTA,M,DT2DX,IN)               MTST1210
          HTCOMF(N) = HTOMF(N) -59.392686*(DT2DX(1)+DT2DX(2))/          MTST1220
         1                     (HREF(N)*CPG*(TAW-TCAL(N)))              MTST1230
C        59.392686 = 0.1 BTU-IN/FT2-HR(.02 IN)*1.8*1055.87*10000)/(144*3600MTST1240
          IF(IN.LT.2) WRITE(6,610) N, HTCOMF(N), HTOMF(N),DT2DX,HREF(N),CPG,MTST1250
         1                         TAW, TCAL(N)                         MTST1260
      160 CONTINUE                                                      MTST1270
C         CROSS REFERENCE ESTABLISHED                                   MTST1280
C                                                                       MTST1290
          JJ = KTCR(1)                                                  MTST1300
          DO 330 N = 1,M                                                MTST1310
          IF(N.EQ.M .AND. LAST.EQ. 1) LAST=-1
          HTOME = 9999.                                                 MTST1320
          HTOMC = 9999.                                                 MTST1330
C                                                                       MTST1340
          DO 170 K=1,15                                                 MTST1350
          DO 170 J=1,7                                                  MTST1360
          IF(ITC(N).EQ.JTC(J,K)) GO TO 180                              MTST1370
      170 CONTINUE                                                      MTST1380
          GO TO 200                                                     MTST1390
      180 KKK = JTCR(J,K)                                               MTST1400
          KK = JTCR(1,K)                                                MTST1410
          IF(KKK.NE.9999.AND.KK.NE.9999) GO TO 190                      MTST1420
          HTOME = -.001                                                 MTST1430
          GO TO 200                                                     MTST1440
      190 HTCOMEC = HTCOMF(N)/HTCOMF(KK)                                MTST1450
C                                                                       MTST1460
      200 DO 210 K= 1,18                                                MTST1470
          IF(ITC(N).EQ.KTC(K)) GO TO 220                                MTST1480
      210 CONTINUE                                                      MTST1490
          GO TO 240                                                     MTST1500
      220 IF(HT(JJ).GT. 0.0) GO TO 230                                  MTST1510
          HTOMC = -.001                                                 MTST1520
          GO TO 240                                                     MTST1530
      230 HTOMC = HT(N )/HT(JJ)                                         MTST1540
C         HTOMC = RATIOED TO TILE CENTER                                MTST1550
      240 CONTINUE                                                      MTST1560
          LINE =LINE +1                                                 MTST1570
          ISPACE =ISPACE + 1                                            MTST1580
          IF(ISPACE.LT. 11) GO TO 250                                   MTST1590
          ISPACE = 0                                                    MTST1600
          LINE=LINE+1                                                   MTST1610
          WRITE(6,440)                                                  MTST1620
      250 CONTINUE                                                      MTST1630
          IF(LINE.LT.57) GO TO 260                                      MTST1640
          IPAGE = IPAGE +1                                              MTST1650
          LINE =5                                                       MTST1660
          WRITE(6,430) MTEST, NRUN, IPAGE                               MTST1670
          WRITE(6,460)                                                  MTST1680
      260 CONTINUE                                                      MTST1690
          XBAR = X(1,N)                                                 MTST1700
          YBAR = X(2,N)                                                 MTST1710
```

```
000831          IF(Q(N).GT. 0.0) GO TO 270                                        HTST1720
000833          WRITE(6,470) ITC(N), DATO(N), X(N), Y(N), Z(N)                    HTST1730
000650          GO TO 330                                                         HTST1740
000651      270 CONTINUE                                                          HTST1750
000651          IF(HTOHC.NE. 9999. .AND. HTCOHEC.NE. 9999.)                       HTST1760
               1WRITE(6,470) ITC(N), DATO(N), X(N), Y(N), Z(N), XBAR, YBAR, Q(N), HTST1770
               $              HT(N), HTOHP(N), HTOHF(N), STT(N), TCAL(N),         HTST1780
               $              HTCOHF(N), HTCOHEC, HTOHC                           HTST1790
000729          IF(HTCOHEC.NE.9999. .AND. HTOHC.EQ. 9999.)                        HTST1800
               1WRITE(6,470) ITC(N), DATO(N), X(N), Y(N), Z(N), XBAR, YBAR, Q(N), HTST1810
               $              HT(N), HTOHP(N), HTOHF(N), STT(N), TCAL(N),         HTST1820
               $              HTCOHF(N), HTCOHEC                                  HTST1830
000777          IF(HTCOHEC.EQ.9999. .AND. HTOHC.NE. 9999.)                        HTST1840
               1WRITE(6,540) ITC(N), DATO(N), X(N), Y(N), Z(N), XBAR, YBAR, Q(N), HTST1850
               $              HT(N), HTOHP(N), HTOHF(N), STT(N), TCAL(N),         HTST1860
               $              HTCOHF(N), HTOHC                                    HTST1870
001051          IF(HTOHC.EQ.9999. .AND. HTCOHEC.EQ. 9999.)                        HTST1880
               1WRITE(6,470) ITC(N), DATO(N), X(N), Y(N),Z(N), XBAR, YBAR, Q(N),  HTST1890
               $              HTOHP(N),HTOHF(N),STT(N),TCAL(N),                   HTST1900
               $              HTCOHF(N)                                           HTST1910
        C                                                                         HTST1920
        C                                                                         HTST1930
        C       PREPARING TAPE 15 FOR SELECT                                      HTST1940
001117          IF(NTAPE.EQ.0  ) GO TO 330
001120          IF(HTCOHEC.LE.0.0 .OR. HTCOHF(N).LE.0.0) GO TO 330                HTST1960
001131           IF(ITEST.EQ.56) GO TO 330                                        HTST1970
001133          AB = ITC(N)                                                       HTST1980
001135          WORD( 1) = 130000.0 + NRUN + AB/1000.                             HTST1990
        C
        C       IWORD( 2) = 1. BUTT JOINT                                         HTST2000
001141          IWORD( 2) = 1                                                     HTST2010
        C       IOWRD( 3)  1. UP-STREAM WALL OF GAP                               HTST2020
        C                  2. DOWN-STREAM WALL OF GAP                             HTST2030
        C                  3. PARALLEL WALL                                       HTST2040
        C                  4. STAGNATION POINT                                    HTST2050
        C                  5. TILE TOP,UPSTREAM SIDE OF GAP                       HTST2060
        C                  6.TILE TOP,DOWNSTREAM SIDE OF GAP                      HTST2070
        C                                                                         HTST2080
001142          IF(Z(N) .EQ. 0.0) IWORD(3)= 5                                     HTST2090
001145           IF(Z(N) .EQ. 0.0 .AND. X(N).LE. 0.0) IWORD(3)=5                  HTST2100
001156          IF(X(N).GT. 7.3) IWORD(3) = 1                                     HTST2110
001162          IF(X(N).LT.-7.3) IWORD(3)= 2                                      HTST2120
001166          IF(ABS(Y(N)) .GT. 7.3) IWORD(3)=3                                 HTST2130
        C                                                                         HTST2140
        C       IWORD(14)  0. STAGGERED                                           HTST2150
        C       IWORD(14)  1. IN-LINE                                             HTST2160
001173          IWORD(14) = 0                                                     HTST2170
001174          IF CONF .NE. CONFO ) IWORD(14) = 1                                HTST2180
001177          IF(IWORD(14).EQ.0 .AND.(X(N).LT. 7.3) .AND.(ABS(Y(N)).LT.6.5))    HTST2190
               1 IWORD(3) = 4                                                     HTST2200
        C        WORD( 4) . X COORDINATE                                          HTST2210
001217           WORD( 4) = X(N)                                                  HTST2220
        C        WORD( 5) = X(N)                                                  HTST2230
        C        WORD( 5) . Y COORDINATE                                          HTST2240
001221           WORD( 5) = Y(N)                                                  HTST2250
        C        WORD( 6) . Z COORDINATE                                          HTST2260
001223           WORD( 6) = Z(N)                                                  HTST2270
        C        WORD(7) , X-MEASURED FROM TILE LEADING EDGE                      HTST2280
```

```
001225  C        WORD(7) , X/M(EDGE)
                 WORD(7) = X(M) * 7.62
001227  C        WORD(8) = HTCOMEC
                 WORD(9) , FLOW ORIENTATION
001231           WORD(9) = 0.0
        C
        C        WORD(10), GAP WIDTH
001232           WORD(10)= GAP
        C        WORD(11), STEP HEIGHT
001233           WORD(11)= STEP
        C        WORD(12)= FLOW LENGTH
001235          IF(IWORD(14).EQ.1) GO TO 280
        C       STAGGERED
001237           WORD(12)= GAP + WORD(7)
001241          IF(ABS(Y(M)).GT.7.3) GO TO 290
001246           WORD(12)= WORD(12) + DIST1
001250          GO TO 290
        C
        C       IN-LINE TILES
001250      280  WORD(12)= DIST2 + GAP  + WORD(7)
001253      290 CONTINUE
        C        WORD(13), TILE TH  KNESS
001253           WORD(13) = 6.477
        C       IWORD(15), LOCAL MACH NUMBER
001255          IWORD(15) = MACH
        C        WORD(16), REYNOLDS NO/METER
001256           WORD(16) = REPM(IREPM)
        C        WORD(17), MOMENTUM THICKNESS
001260           WORD(17)= 0.182
        C        WORD(18), DISPLACEMENT THICKENSS
001262           WORD(18)= M18
        C        WORD(19), SUB-LAYER THICKENSS
001263           WORD(19) = M19
        C        WORD(20),HEAT TRANSFER COEFF. (COND CORRECTED)
001265           WORD(20) = HTCOMF(N)*HT(N)/HTCOMF(N)
        C        WORD(21), H/HREF(N) (COND. CORRECTED)
001270           WORD(21) = HTCOMF(N)
        C        WORD(22), STANTON NO. (NOT CORRECTED YET)
001272           WORD(22) = STT(N)
        C        WORD(23),    TW/TE
001274           WORD(23) = TCAL(N)/TAW
        C       IWORD(24), 1 LAMINAR
        C                  2 TRANSITIONAL
        C                  3 TURBULENT
001276          IWORD(24) = 3
        C
001277          NTOL = NTOL + 1
001301          KN = KN + 1
001302          DO 300 KM = 1,24
001303      300 WORDT(KM,KN) = WORD(KM)
001311          IF(KN.LT.200) GO TO 310
001313          WRITE(6,670) KN
001321          WRITE(15) KN,((WORDT(KM,JN), KM=1,24),JN=1,KN)
001342          KN = 0
001343      310 CONTINUE
001343          IF(ILAST.NE.-1) GO TO 320
001345          IF(KN.EQ. 0) GO TO 320
001346          WRITE(6,670) KN
```

```
      WRITE(15) KN,((WORDT(KM,JN), KM=1,24),JN=1,KN)
      KN = 0
  320 MSKIP = MSKIP + 1
      IF(MSKIP.LT.NSKIP) GO TO 330
      MSKIP = 0
      WRITE(22,640) WORD(1),IWORD(2),IWORD(3),(WORD(KM),KM=4,13),
     1IWORD(14),WORD(15),WORD(16),WORD(17)
      WRITE(23,650) WORD(1),(WORD(KM),KM=18,23),IWORD(24),NTOL
  330 CONTINUE
C
C
      IF(LAST.EQ. -1) STOP 330
  340 CONTINUE
CCC   IF(IRUN.GT.4)  IN=1
      N = N+1
      IF(MRUN.NE.IRUN) N=1
      IF(MRUN.EQ.IRUN) GO TO 350
C     SIU CONVERSION
      CPG = RHOVCP/(RHOV1*2.3885E-04)
      TT1 = TT1/1.8
      W18 = (0.32-0.01647*(ALPHA-15.0) -3.63036E-05*(PTC-1000.0))*2.54
      W19 = 1.757858-0.017017*(ALPHA-15.0)-4.398E-04*(PTC-1020.)
      W19 = EXP(0.003846*W19)
      PTC = PTC*6894.75729
      GAP = GAP*2.54
      STEP = STEP*2.54
      TAW = TAW/1.8
      PT1 = PT1*6894.75729
      TFS = TFS/1.8
      QFS = QFS*6894.75729
      RHOV1 = RHOV1*4.882342

      RHOTCP = RHOTCP*20429.
      RHOVCP = RHOVCP*20429.
      HFP = HFP*20429./CPG
      IREPM=1
      IF(ITEST.EQ.57 .AND.IRUN.LT.17) IREPM = IRUN-3
      IF(ITEST.EQ.57 .AND. IRUN.GT.17) IREPM= IRUN-2
      IF(ITEST.EQ.58 .AND. IRUN.LT. 2) IREPM= 19
      IF(ITEST.EQ.58 .AND. IRUN.GT. 2) IREPM= IRUN+17
      MRUN  = IRUN
      MTEST = ITEST
      IPAGE = IPAGE + 1
      WRITE(6,430) ITEST, IRUN, IPAGE
      WRITE(6,450) TT1,CONFIG, PTC, STEP, TAW, GAP, MACH, ALPHA,
     1             PT1,CPG, PFS, RFACT, TFS, QFS, RHOV1, RHOVCP,
     2             RHOTCP, REPM(IREPM),     HFP,TTIME
      WRITE(6,660)
      LINE=20
      CONFO=CONFIG
      ILAST = 2
      AB     =(ALPHA-AJ)/DALPHA
      BC     =(PTC-PJ)/DP
      BCO     = 1.0-AB-BC
      WRITE(6,460)
C
  350 X(N)      = XR  *2.54
      Y(N)      = YR  *2.54
```

```
            Z(N)    = ZR   *2.54                                          HTST33900
            ITC(N)  = ITI                                                 HTST34000
C           CORRECT T/C LOC. 73,78,83,88,91 AND 92                        HTST34100
            DO 360 I=1,6                                                  HTST34200
            IF(ITC(N).EQ.ITEC(I)) GO TO 370                               HTST34300
        360 CONTINUE                                                      HTST34400
            GO TO 390                                                     HTST34500
        370 Z(N) = 0.074                                                  HTST34600
C              0.074 CM =2.54*(.1)*(1-COS45)                              HTST34700
            IF(ITC(N).EQ.91 .OR. ITC(N) .EQ.92) GO TO 380                 HTST34800
            Y(N) = -7.5456                                                HTST34900
C           7.5456=7.62-(1-COS45)                                         HTST35000
            GO TO 390                                                     HTST35100
        380 X(N) = 7.5456*X(N)/ABS(X(N))                                  HTST35200
        390 CONTINUE                                                      HTST35300
C           CORRECTING T/C LOCATIONS
            IF(ITC(N).EQ.73) Y(N)=-5.207
            IF(ITC(N).EQ.78) Y(N)=-5.118
            TCAL(N) = TCALR  /1.8                                         TST35400
            Q(N)    = QR    * 11348.931                                   HTST35500
            HT(N) = HTR   *20429./CPG                                     HTST35600
            HT(N) = HT(N)*0.93333
C              0.93333=.112/.12 SPECIFIC HEAT CORRECTION
            HTDHP(N)= HTDHPR   *1.0                                       HTST35700
            STT(N)   =STTR                                                HTST35800
            DATD(N) = DATAC                                               HTST35900
            XBAR = X(N)                                                   HTST36000
            IF(ABS(X(N)).LT. 7.4) GO TO 400                               HTST36100
            SIGN = X(N)/ABS(X(N))                                         HTST36200
            XBAR = (ABS(X(N))+ Z(N))* SIGN                                HTST363
            IF(Z(N).EQ. 0.074) XBAR = (ABS(XBAR)-0.05461)*SIGN            HTST36400
            IF(Z(N).GT. 0.074) XBAR = (ABS(XBAR)- 0.1092)*SIGN            HTST36500
        400 YBAR = Y(N)
            IF(ABS(Y(N)).LT. 7.4) GO TO 410                               HTST36700
            SIGN = Y(N)/ABS(Y(N))                                         HTST36800
            YBAR = (ABS(Y(N))+ Z(N))*SIGN                                 HTST36900
C           CORRECTING FOR EDGE LENGTH                                    HTST37000
            IF(Z(N).EQ. 0.074) YBAR = (ABS(YBAR)-0.05461)*SIGN            HTST37100
            IF(Z(N).GT. 0.074) YBAR = (ABS(YBAR)-0.1092)*SIGN             HTST37200
        410 W(1,N) = XBAR                                                 HTST37300
            W(2,N) = YBAR                                                 HTST37400
            W(3,N) = TCAL(N)                                              HTST37500
            IW(4,N) = ITC(N)                                              HTST37600
            CALL TBLU3(ILAST,9, X(N), XTAB, H1, H1TAB, H3, H3TAB, H4, H4TAB)  HTST37700
            HREF(N)  = H3*BCD +H1*AB + H4*BC                              HTST37800
            HREF(N) = HREF(N)*0.88333
C              0.88333=0.106/0.12 SPECIFIC HEAT CORRECTION
C           HREF(N)  IS OBTAINED BY STAIGHT LINEING 3 CALIBRATION TESTS   HTST37900
            HTOHF(N) = HT(N)/HREF(N)                                      HTST38000
C                                                                         HTST38100
            GO TO 20                                                      HTST38200
C                                                                         HTST38300
        420 LAST =1                                                       HTST38400
            GO TO 110                                                     HTST38500
        430 FORMAT(*1              LARC 8 FOOT HTST, HRSI GAP HEATING TEST*I4,  HTST38600
           1*   RUN(*I3,*)  1974          PAGE*I4/)                       HTST38700
        440 FORMAT(* *)                                                   HTST38800
        450 FORMAT(16X*TT              =*F9.2,* K*,                       HTST38900
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            1 13X*CONFIGURATION     =*A10/                                   MTST39000
            2 6X*PC                  =*E9.2,* N/M2*,                         MTST39100
            3 10X*STEP               =*F6.3,* CM*/                           MTST39200
            4 6X*TAW                 =*F9.2,* K*,                            MTST3
            5 13X*GAP                =*F6.3,* CM*/                           MTST
            6 6X*MACH                =*F9.2,                                 MTST
            7 10X*ANGLE OF ATTACK    =*F6.3,* DEG*/                          MTST
            8 6X*PT(I)               =*E9.2,* N/M2*,                         MTST
            9 10X*CP(GAS)            =*F6.1,* J/KG-K*/                       MTST
            A 6X*P(F)                =*E9.2,* N/M2*,                         MTST39900
            B 10X*RECOVERY FACTOR    =*F7.3/                                 MTST40000
            C 6X*T(FS)               =*F9.2,* K*/6X*D-PRES(FS)    =*E9.2,* N/M2*/   MTST40100
            D 6X*(RHO-V)FS           =*E9.2,* KG/M2-S*/                      MTST40200
            E 6X*(CP-RHO-V)FS        =*E9.2,* J/M2-S-K*/                     MTST40300
            F 6X*(RHO-TAU-CPIN       =*E9.2,* J/M2-S*/                       MTST40400
            G 6X*RE/METER            =*E9.2/                                 MTST40500
            H 6X*M(FLAT PLATE)       =*E9.2,* KG/M2-S*/                      MTST40600
            I 6X*TIME                =*F9.2,* SEC*6X*SPECIFIC HEAT CORRECTED*//)
002143  460 FORMAT(*  T/C  CM     X      Y      Z      XBAR   YBAR   Q      MTMTST40800
           1     HTOMP  HT/HF    NSTT   *6X,*T    HTC/HP HTC/HEC  HT/H-CNTR*/MTST40900
           2 12X*(CM)  (CM)  (CM)   (CM)   (CM)    (W/M2)    (KG/M2-S)*30X*(K)*)MTST41000
002143  470 FORMAT(1X2I4,F7.2,F6.2,3F7.3,E11.3,F8.4,2X,2F7.3,E12.3,F8.2,3F7.3)MTST41100
002143  490 FORMAT(130A1)                                                    MTST41300
002143  500 FORMAT(1X,130A1)                                                 MTST41400
002143  510 FORMAT(2I4,A10)                                                  MTST41500
002143  520 FORMAT(10E13.6/7E13.6,I4,A4,I1,A1,2X/9E13.6)                     MTST41600
002143  530 FORMAT(3E13.6,20X,5E13.6/7E13.6,I4,A4,I1,A1,2X/9E13.6)           MTST41700
002143  540 FORMAT(1X2I4,F7.2,F6.2,3F7.3,E11.3,F8.4,2X,2F7.3,E12.3,F8.2,F7.3, MTST41800
           1 7X,F7.3)
002143  610 FORMAT(* N,HTCOMP,HTOMP,DTZDX(1),DTZDX(2),HREF,CPG,TAW,T*I4,     MTST42600
           1 8E10.3)                                                         MTST42700
002143  620 FORMAT(13X,*G-CF LOC       X          Y          Z    X(BAR) HTC/HEC G(RAD)MTST42800
           1   GAP     STEP  FLOW-L   GAP-D PATH  MACH    RE/M         M-TMK*)  MTST42900
002143  630 FORMAT(14X,*DELS      SUB-T        H             HTC/HREF    NSTT        TW/TEMTST43000
           1    M-L   NTOL*)                                                 MTST43100
002143  640 FORMAT(F12.3,2I5,2F8.2,F6.2,2F8.3,F7.2,2F6.3,F8.2,F7.3,I5,F7.2,E'1MTST43200
           1 1,3,F8.3)                                                       MTST43300
002143  650 FORMAT(F12.3,2F8.3,E11.3,F9.4,2E11.3,2I5)                        MTST43400
002143  660 FORMAT(6X,*XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER*/)MTST43500
002143  670 FORMAT(* KN=*I6,* DATA POINTS PLACED ON TAPE 15*)
002143      END
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```
      SUBROUTINE DT2DY2(KT,WSTORE,IORCER,ISPRED,DELTA,K   ,DT2DX,IW)
C
C     CONDUCTION CORRECTION (THIN SKIN TITLES)    DT2/DX2     DT2/DY2
C
C                                         M.E.CHRISTENSEN AUG 74
C
C     KT     = TOTAL NO.  T/C  FOR THAT RUN
C     WSTORE = STORAGE ARRAY FOR T/C INFORMATION
C     IORDER= ORDER OF CURVE FIT
C     ISPRED= NO. OF POINT ON EACH SIDE OF T/C TO BE USED IN CURVE FIT
C     DELTA = BAND WIDTH (INCH) USED TO SELECT T/C FOR STRING
C     K     = CHANNEL NO. FOR WHICH DT2/DX2 AND DT2/DY2 TO BE DETERMINED
C     DT2DX = SECOND DERIVATIVE (1) FOR X, (2) FOR Y     ( F/INCH**2)
C     TMEAN = TEST MEAN TEMP. ( R)
C     DT     = ALLOWED TEMP. CHANGE ( F)
C     IW     = DETAIL PRINT OUT WHEN IW.LT.2
C     WSTORE(1,I) = XBAR (CM)
C     WSTORE(2,I) = YBAR (CM)
C     WSTORE(3,I) = TEMP. (K)
C     WSTORE(4,I) = T/C NO.
C
      DIMENSION WSTORE(4,100),DT2DX(2),IP(30,2),DD(30),IK(2),AA(50),
     1          CC(10)
      EQUIVALENCE (AICH,ICH)
      DATA LB,TMEAN,DT,    INT/0,385.,115.,  3/
C
      IF(LB.EQ.1) GO TO 10
      IF(2*ISPRED.GE. IORDER) GO TO 10
      I= ISPRED
      ISPRED = IORDER/2
      WRITE(6,190) IORDER,I,ISPRED
   10 CONTINUE
      LB = 1
C     IP(30,J) = CHANNEL NO. IN STRING
C           J  = 1 X-STRING
C           J  = 2 Y-STRING
C
      DT2DX(1) = 0.0
      DT2DX(2) = 0.0
      II = IORDER + 1
      IIP1 = II + 1
C
      IF(ABS(WSTORE( 3,K)  - TMEAN) .GT. DT) GO TO 180
C
C
      DO 80 J=1,2
      IK(J) = 0
      DO 20 I=1,30
   20 DD(I) =  1.0E+30
      JCM= 2
      KCM =1
      IF(J.EQ. 1) GO TO 30
      JCM =1
      KCM =2
   30 CONTINUE
C     FORMING THE STRING (WORK FORM UPPER END)
C
```

```
      DO 60 I=1,KI
      IN = IR(J) + 1
      IF(ABS(WSTORE(J,I) - TMEAN) .GT. DT) GO TO 60
      IF(ABS(WSTORE(KCH,I)).GT. 20.0) GO TO 60
      IF(ABS(WSTORE(JCH,I) - WSTORE(JCH,K))   .GT. DELTA) GO TO 60
C
   40 IF(WSTORE(KCH,I) .GT. DD(IN))  GO TO 50
      DD(IN+1) = DD(IN)
      IP(IN+1,J)= IP(IN,J)
      IN = IN - 1
      IF(IN.GT.0) GO TO 40
   50 IN = IN+1
      DD(IN) = WSTORE(KCH,I)
      IP(IN,J)= I
      IK( J)  = IK(J) + 1
   60 CONTINUE
C
C     IK(1)= NO. OF POINTS IN X-STRING
C     IK(2)= NO. OF POINTS IN Y-STRING
      IF(IN.GE.INT) GO TO 80
      WRITE(6,200) K,J,IK(J),WSTORE(KCH,K), WSTORE(JCH,K)
      LLL = IK(J)
      DO 70 LL=1,LLL
      KJ = IP(LL,J)
      AICH = WSTORE(4,KJ)
   70 WRITE(6,210) LL,DD(LL),IP(LL,J),ICH
   80 CONTINUE
C
      DO 170 J=1,2
      KNN = IK(J)
      DO 90 KN=1,KNN
      IF(IP(KN,J) .EQ. K) GO TO 100
   90 CONTINUE
  100 CONTINUE
      ILOW = KN -ISPRED
      IF(ILOW.LT.1) ILOW= 1
      IHIGH = ILOW + 2*ISPRED
      IF(IHIGH.LE.KNN  ) GO TO 110
      IHIGH = KNN
      ILOW = IHIGH  -2*ISPRED
      IF(ILOW.LT.1) GO TO 170
  110 CONTINUE
      IF(IN.LT.INT)
     1WRITE(6,220) ILOW,IHIGH,ISPRED
C
      DO 120 LL=1,50
  120 AA(LL) = 0.0
C
      CC(1) =1.0
      KCH =1
      IF(J.EQ.1) GO TO 130
      KCH = 2
  130 DO 150 JI = ILOW,IHIGH
            KJ = IP(JI,J)
      DO 140 LL = 1,IORDER
  140 CC(LL+1) =CC(LL)*WSTORE(KCH,KJ)
      CC(IIP1) = WSTORE( 3,KJ)
C
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000372           IF(IW.LT.INT)                                                    DT2011600
                1WRITE(6,230) K,WSTORE(KCH,KJ),(CC(LLL),LLL=1,IIP1)               DT2011700
000430           KK = 0                                                           DT2011800
000431           DO 150 I=1,II                                                    DT2011900
       C                                                                          DT2012000
000433           DO 150 JJ=I,IIP1                                                 DT2012100
000434           KK = KK + 1                                                      DT2012200
000436       150 AA(KK) = AA(KK) + CC(I)*CC(JJ)                                   DT2012300
000452           IF(IW.LT.INT) WRITE(6,250) (AA(LLL),LLL=1,KK)                    DT2012400
       C                                                                          DT2012500
000473           CALL MARILN(II,AA)                                               DT2012600
       C                                                                          DT2012700
000475           IF(IW.LT.INT) WRITE(6,260) (AA(LLL),LLL=1,I')                    DT2012800
       C                                                                          DT2012900
       C         EVALUATE  DT2DX                                                  DT2013000
       C                                                                          DT2013100
000522           DO 160  I=3,II                                                   DT2013200
000524           AB =(I-1)*(I-2)                                                  DT2013300
000532           AB = AB*AA(I)                                                    DT2013400
000534           IF(I.GT.3)  AB = AB*( WSTORE(KCH,K)**(I-3))                      DT2013500
000546           DT2DX(J) = AB + DT2DX(J)                                         DT2013600
000552       160 CONTINUE                                                         DT2013700
       C                                                                          DT2013800
000554       170 CONTINUE                                                         DT2013900
000556           IF(IW.LT.INT)                                                    DT2014000
                1WRITE(6,240) K,DT2DX                                             DT2014100
000576       180 RETURN                                                           DT2014200
000577       190 FORMAT(' ORDER OF EQ.(',I4,') CAUSED SPRED TO BE CHANGED TO 'I4,' DT2014300
                1FROM'I4)                                                         DT2014400
000577       200 FORMAT(' STRING K,J,IK(J)'3I4,'  X='E13.4,'  Y='E13.4/          DT2014500
                1 1X'DIST.        IP    CHANNEL')                                 DT2014600
000577       210 FORMAT(I4,E13.4,2I4)                                             DT2014700
000577       220 FORMAT(' ILOW,IHIGH,ISPRED'3I5)                                  DT2014800
000577       230 FORMAT(' K='I4,' DIST,CC'11E11.3)                                DT2014900
000577       240 FORMAT(' K='I4,' DT2DX='E12.4,' DT2DY='E12.4,' (K/CM**2)')       DT2015000
000577       250 FORMAT(' AA MATRIX'/11E11.3)                                     DT2015100
000577       260 FORMAT(' EQ. COEFF.'11E11.3)                                     DT2015200
000577           END
```

```
      SUBROUTINE MARILN(MCLAM,MC4)
      DIMENSION MBM(1)
      XKJF(N1,N2) = NCA*(N1-1) + N2 + (N1-1) - (N1*(N1-1))/2
      NCA=MCLAM
C     MBM IS DIMENSIONED AS = (NCA*(NCA+3))/2
      NCAMX=(NCA*(NCA+3))/2
      NCM=NCA-1
      NC = NCA+1
      DO 50  L=1,NCM
      NCAMA =XKJF(L,L)
      AD = MBM(NCAMA)
      LP = L+1
      NN=NCAMA+1
      DO 40 I = LP,NCA
      NNN=NN
      AM = MBM(NN)/AD
      NP=XKJF(I,I)
      IF(AM)10,30,10
   10 CONTINUE
      DO 20 J = I,NC
      MBM(NP)=MBM(NP)-AM*MBM(NNN)
      NNN=NNN+1
      NP=NP+1
   20 CONTINUE
   30 CONTINUE
      NN=NN+1
   40 CONTINUE
   50 CONTINUE
      MBM(NCAMX) = MBM(NCAMX)/MBM(NCAMX-1)
      DO 90  I = 2,NCA
      KJ = XKJF(NCA-I+1,NC)
      TS = MBM(KJ)
      IP=NCA+2-I
      DO 70 J = IP,NCA
      KD = KJ-NC+J
      NK =XKJF(J,NC)
   70 TS = TS-MBM(KD)*MBM(NK)
      NK = XKJF ((IP-1),(IP-1))
      MBM(KJ) = TS/MBM(NK)
   90 CONTINUE
      NN=1
      DO 100 I=1,NCA
      NP=XKJF(I,NC)
      MBM(NN)=MBM(NP)
  100 NN=NN+1
      RETURN
      END
```

```
      SUBROUTINE TBLU3(I,IT,X,XTAB,Y1,Y1TAB,Y2,Y2TAB,Y3,Y3TAB)
C
C     ONE DIMENSIONAL TABLE LOOKUP WITH MEMO-0
C
      DIMENSION XTAB(1), Y1TAB(1), Y2TAB(1),Y3TAB(1)
C     FIND BRACKET
      IF(X.LT.XTAB(IT-1)) GO TO 10
      I=IT
      GO TO 40
   10 IF(XTAB(I).GT.X) GO TO 30
   20 I=I+1
      IF(I.EQ.IT) GO TO 40
      IF(XTAB(I).GT.X) GO TO 40
      GO TO 20
C
   30 IF(XTAB(I-1).LE.X) GO TO 40
      I=I-1
      IF(I.EQ.2) GO TO 40
      GO TO 30
   40 CONTINUE
      IF(I.LT.2) I=2
C     I DESIGNATES THE XTAB POINT TO THE RIGHT
      AB=(X-XTAB(I))/(XTAB(I-1)-XTAB(I))
      Y1 = AB*Y1TAB(I-1) + (1.0-AB)*Y1TAB(I)
      Y2 = AB*Y2TAB(I-1) + (1.0-AB)*Y2TAB(I)
      Y3 = AB*Y3TAB(I-1) + (1.0-AB)*Y3TAB(I)
      RETURN
      END
```

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(41) 1974 PAGE 1

TT	= 1533.33 K	CONFIGURATION	=STAGGERED
PTC	= 7.13E+06 N/M2	STEP	= 0.000 CM
TAW	= 1422.78 K	GAP	= .178 CM
MACH	= 6.35	ANGEL OF ATTACK	= 7.340 DEG
PT(2)	= 2.50E+06 N/M2	CP(GAS)	=1080.0 J/KG-K
P(FS)	= 1.16E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 193.33 K		
Q-PRESS(FS)	= 2.23E+04 N/M2		
(RHO-V)FS	= 2.49E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.71E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 2.07E+06		
H(FLAT PLATE)	= 4.90E-02 KG/M2-S		
TTIME	= 27.31 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.992	-.051	1.341E+05	.1094	2.578	2.234	4.667E-03	362.01	2.308	1.928	
2	21	-7.62	-.05	.965	-8.476	-.051	5.590E+04	.0454	1.032	.907	1.869E-03	318.33	.863	.385	
3	22	-7.62	-.05	1.981	-9.492	-.051	2.034E+03	.0015	.032	.032	6.660E-05	295.55	.026	.011	
4	23	-7.62	-.08	4.051	-11.562	-.076	1.180E+02	.0001	.002	.002	3.601E-06	294.87	-.002	-.002	
5	24	-5.11	7.11	0.000	-5.115	7.899	3.353E+04	.0289	.918	.589	1.115E-03	317.57	.576	1.000	.598
7	25	-3.78	7.89	0.000	-3.785	7.887	6.178E+04	.0484	1.141	1.003	2.083E-03	327.61	1.010	1.000	.944
8	26	0.00	7.89	0.000	0.000	7.887	6.389E+04	.0495	[illegible]	1.027	2.133E-03	327.37	1.029	1.000	.987
9	27	3.85	7.89	0.000	3.835	7.887	6.278E+04	.0491	[illegible]	1.023	2.116E-03	327.42	1.027	1.000	.959
10	28	-7.62	3.71	.498	-8.006	3.708	1.139E+04	.0087	[illegible]	.182	3.751E-04	298.62	.158	.137	
11	29	-7.62	7.04	.432	-7.943	7.036	2.395E+03	.0020	.047	.041	8.504E-05	296.34	.026	.047	
12	30	-7.14	7.62	.457	-7.137	7.960	3.224E+03	.0025	.058	.051	1.057E-04	298.43	.039	.071	
13	31	-3.85	7.62	.478	-3.835	7.981	1.972E+04	.0128	.289	.259	8.176E-04	308.95	.237	.262	
14	32	0.00	7.62	.508	0.000	8.019	2.339E+04	.0179	.427	.370	7.726E-04	305.35	.366	.356	
15	33	3.81	7.62	.521	3.810	8.031	2.925E+04	.0225	.435	.459	9.686E-04	308.33	.459	.528	
16	34	7.12	7.62	.551	7.126	8.031	3.493E+04	.0269	.641	.544	1.168E-03	310.89	.553	.577	
17	35	7.62	5.10	.578	7.585	5.107	6.217E+04	.0494	1.481	1.507	2.087E-03	341.67	1.481	1.559	
18	36	7.62	3.18	.470	7.981	3.797	1.919E+04	.0147	.351	.297	6.350E-04	306.79	.299	.319	
19	37	7.62	-.01	.457	7.948	-.010	2.833E+04	.0203	.488	.409	8.731E-04	300.19	.420	.708	
20	38	-7.62	3.78	.374	-8.005	3.785	4.569E+03	.0035	.083	.073	1.497E-04	298.78	.070	.060	
21	39	-7.62	7.07	.991	-9.493	7.874	9.550E+02	.0007	.017	.015	3.094E-05	298.11	.013	.025	
22	40	-7.12	7.62	.978	-7.128	8.469	3.208E+02	.0004	.009	.008	1.708E-05	295.43	.007	.313	
23	41	-3.81	7.62	.991	-3.818	8.301	1.199E+03	.0009	.022	.019	3.928E-05	298.62	.013	.013	
24	42	0.00	7.62	.991	0.000	8.801	3.331E+03	.0027	.065	.052	1.158E-04	298.71	.043	.051	
25	43	3.86	7.62	1.016	3.835	8.527	8.645E+03	.0066	.157	.135	2.839E-04	298.61	.124	.126	
26	44	7.13	7.62	1.003	7.137	8.516	1.986E+04	.0152	.362	.307	6.530E-04	301.65	.301	.320	
27	45	7.62	7.07	.978	8.439	7.875	6.306E+04	.0469	1.116	.945	2.020E-03	326.07	.932	.951	
28	46	7.62	3.80	.991	8.531	3.797	5.357E+03	.0046	.115	.098	2.094E-04	299.01	.087	.131	
29	47	7.62	-.01	.991	8.591	-.013	2.387E+04	.0160	.381	.323	6.995E-04	305.54	.321	.566	
30	48	-7.62	3.80	1.996	-9.505	3.797	1.694E+03	.0013	.031	.027	5.547E-05	299.50	.027	.023	
31	49	-7.62	7.09	1.968	-9.479	7.087	3.332E+02	.0003	.006	.006	1.186E-05	295.05	.006	.010	
32	50	-7.12	7.62	2.032	-7.129	9.343	1.097E+02	.0001	.003	.003	4.550E-06	295.10	.002	.002	
33	51	-3.80	7.62	2.032	-3.797	9.343	3.544E+02	.0003	.006	.006	1.160E-05	295.27	.005	.005	
34	52	0.03	7.62	2.019											

RSI GAP HEATING ANALYSIS – II
VOLUME II

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(4) 1974 PAGE 2

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTONP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	[illegible]	9.543	1.339E+03	.0010	.025	.021	6.532E-05	293.95	.020	.020	
36	54	7.62	7.62	2.032	[illegible]	9.543	7.389E+03	.0044	.125	.109	2.327E-04	[illegible]	.107	.114	
37	55	7.62	7.87	1.819	[illegible]	7.976	2.179E+04	.0167	.390	.337	7.190E-04	305.19	.325	.348	
38	56	7.62	3.81	1.854	[illegible]	3.810	3.377E+03	.0027	.065	.055	1.173E-04	298.95	.045	.079	
39	57	7.62	-.01	1.996	[illegible]	-.013	8.924E+03	.0068	.162	.137	2.931E-04	298.77	.135	.247	
40	58	-7.62	3.81	4.037	-11.[illegible]	3.810	3.766E+01	.0000	.001	.001	1.226E-06	294.72	.000	.000	
41	59	-7.62	7.11	4.826	-11.537	7.112	4.526E+01	.0000	.001	.001	1.501E-06	294.75	.001	.001	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.119E+02	.0001	.002	.002	3.635E-06	294.78	.002	.003	
43	61	-3.81	7.62	4.064	-3.810	11.575	4.202E+02	.0003	.008	.007	1.493E-05	294.80	.007	.007	
44	62	0.00	7.62	4.089	0.038	11.600	5.956E+02	.0005	.011	.009	1.949E-05	294.88	.011	.007	
45	63	3.84	7.62	4.051	3.835	11.562	1.038E+03	.0008	.019	.016	3.398E-05	295.17	.015	.015	
46	64	7.11	7.62	4.064	7.112	11.575	3.746E+03	.0029	.068	.058	1.228E-04	296.94	.056	.060	
47	65	7.62	4.55	4.039	11.549	4.547	4.914E+03	.0037	.089	.075	1.612E-04	297.31	.075	.080	
49	66	7.62	-.03	4.026	11.537	-.028	2.305E+03	.0018	.042	.035	7.556E-05	296.76	.034	.062	
60	67	7.18	7.10	0.000	7.175	7.099	5.972E+04	.0467	1.111	.942	2.011E-03	326.13	.940	1.000	.912
61	68	-7.09	-.05	0.000	-7.087	-.051	1.340E+05	.1080	2.570	2.254	4.651E-03	358.82	2.245	1.000	2.109
62	69	-3.78	-.03	0.000	-3.785	-.025	7.421E+04	.0583	1.388	1.213	2.512E-03	332.37	1.209	1.000	1.139
63	70	0.00	0.00	0.000	0.000	0.000	6.514E+04	.0512	1.219	1.087	2.200E-03	329.12	1.055	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	5.689E+04	.0445	1.058	.908	1.915E-03	326.15	.968	1.000	.868
65	72	7.10	0.00	0.000	7.099	0.000	3.466E+04	.0269	.639	.552	1.157E-03	316.65	.547	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	7.392E+04	.0557	1.325	1.163	2.399E-03	331.35	1.171	1.000	1.088
67	74	-3.78	3.78	0.000	-3.785	3.785	6.714E+04	.0526	1.252	1.091	2.266E-03	328.86	1.092	1.000	1.027
68	75	0.00	3.76	0.000	0.000	3.759	3.651E+04	.0281	.668	.579	1.209E-03	308.07	.577	1.000	.548
69	76	3.81	3.81	0.000	3.810	3.810	6.466E+04	.0507	1.206	1.035	2.183E-03	329.46	1.036	1.000	.990
70	77	7.13	3.75	0.000	7.125	3.747	3.665E+04	.0284	.676	.574	1.224E-03	317.32	.575	1.000	.995
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.938	-5.194	3.346E+03	.0029	.061	.053	1.097E-04	296.74	.039	.369	
73	80	-7.40	-5.21	.074	-7.423	-5.207	1.188E+04	.0091	.216	.189	3.907E-04	300.26	.210	.319	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	2.732E+03	.0021	.049	.043	8.984E-05	296.[illegible]	-.117	-.179	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	4.328E+04	.0312	.743	.651	1.364E-03	316.54	.657	1.000	.609
76	83	6.93	-5.18	0.000	[illegible]	-5.182	4.986E+04	.0388	.924	.785	1.673E-03	322.46	.787	1.000	.758
77	84	7.14	-5.18	0.000	7.137	-5.182	4.264E+04	.0330	.786	.667	1.422E-03	315.71	.682	.765	
78	85	7.42	-5.12	.074	7.436	-5.118	4.488E+04	.0342	.813	.689	1.471E-03	316.49	.695	.884	
79	86	7.62	-5.16	.4[illegible]	7.958	-5.156	4.433E+04	.0343	.816	.691	1.477E-03	315.80	.698	.886	
81	87	-5.27	-6.93	0.020	-5.270	-7.034	6.387E+04	.0501	1.192	1.042	2.156E-03	329.90	1.064	1.000	.978
82	88	-5.31	-7.20	0.000	-5.309	-7.201	5.595E+04	.0438	1.042	.911	1.886E-03	327.34	.932	.877	
83	89	-5.24	-7.55	.074	-5.245	-7.564	3.897E+04	.0302	.720	.629	1.303E-03	318.49	.662	.622	
84	90	-5.26	-7.82	.394	-5.220	-7.904	1.650E+04	.0126	.300	.262	5.436E-04	301.09	.220	.207	
85	91	-5.26	-7.82	.622	-5.258	-8.133	4.202E+03	.0032	.076	.067	1.377E-04	296.63	.024	.023	
86	92	5.25	-6.83	0.000	5.245	-6.833	6.339E+04	.0497	1.182	1.009	2.139E-03	328.52	1.018	1.000	.970
87	93	5.22	-7.11	0.000	5.220	-7.112	6.582E+04	.0516	1.229	1.050	2.224E-03	330.12	1.058	1.340	
88	94	5.22	-7.55	.074	5.220	-7.565	6.314E+04	.0495	1.178	1.006	2.132E-03	329.62	1.039	1.021	
89	95	5.22	-7.62	.394	5.220	-7.904	4.825E+04	.0375	.892	.762	1.615E-03	319.67	.793	.783	
90	96	5.21	-7.62	.572	5.207	-8.082	3.382E+04	.0261	.621	.530	1.123E-03	311.29	.561	.552	
91	97	-7.55	-.09	.074	-7.565	-.089	1.600E+05	.1321	3.143	2.700	5.689E-03	[illegible]	2.872	1.760	
92	98	7.55	0.00	.074	7.565	0.000	2.693E+04	.0207	.492	.417	8.910E-04	307.15	.390	.714	

ORIGINAL PAGE IS
OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(5) 1974 PAGE 3

TT	= 1655.[illegible] K	CONFIGURATION	=STAGGERED
PTC	= 7.17E+06 N/M2	STEP	= 0.000 CM
TAW	= 1526.89 K	GAP	= .178 CM
MACH	= 6.54	ANGEL OF ATTACK	= -.140 DEG
PT(I)	= [illegible]E+06 N/M2	CP(GAS)	=1008.9 J/KG-K
P(F)	= 1.15E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 202.22 K		
D-PRESS(FS)	= 2.34E+04 N/M2		
(RHO-V)FS	= 2.49E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.71E+04 J/M2-S-K		
(RHO-TAU-CP)N	= 2.04E+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 2.3[illegible]E-02 KG/M2-S		
TTIME	= 28.09 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	[illegible]	[illegible]	-7.99[illegible]	[illegible]	[illegible]E+04	.0161	.678	.646	[illegible]E-04	[illegible]	.623	.374	
2	21	-7.62	-.85	.555	-8.476	-.051	5.230E+03	.0076	.165	.157	1.571E-05	300.55	.121	.073	
3	22	-7.62	[illegible]	1.78[illegible]	-9.492	[illegible]	[illegible]	[illegible]	.005	.005	[illegible]	297.32	.003	.002	
4	23	-7.62	[illegible]	4.051	-11.55[illegible]	-.076	[illegible]	.0001	.003	.003	2.9[illegible]E-06	297.05	.001	.001	
6	24	-7.31	7.1[illegible]	[illegible]	[illegible]	7.[illegible]	[illegible]	.0153	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.000	[illegible]
7	25	-3.78	7.89	0.000	-3.785	7.887	[illegible]	.0199	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.000	.784
8	26	0.0[illegible]	7.89	0.000	0.000	7.887	3.3[illegible]E+04	.0236	1.061	1.029	1.016E-03	[illegible]	[illegible]	1.000	.971
9	27	3.8[illegible]	7.89	0.000	3.835	7.887	3.456E+04	.0249	1.101	1.057	1.054E-03	318.81	1.065	1.000	.985
10	28	-7.62	3.71	.495	-8.806	3.708	3.556E+03	.0025	.111	.106	1.066E-04	298.45	.111	1.508	
11	29	-7.62	7.0[illegible]	.432	-7.95[illegible]	7.[illegible]	1.[illegible]E+03	.0011	.050	.04[illegible]	[illegible]E-05	297.97	.02[illegible]	[illegible]	
12	30	-7.16	7.[illegible]	[illegible]	-7.137	7.[illegible]	2.3[illegible]E+03	.0016	.072	.069	6.921E-05	297.96	.05[illegible]	[illegible]	
13	31	[illegible]	7.[illegible]	.570	[illegible]	7.[illegible]	[illegible]	.0037	[illegible]	[illegible]	[illegible]E-04	[illegible]	[illegible]	[illegible]	
14	32	0.00	7.[illegible]	.308	0.000	7.[illegible]	[illegible]	.0061	.278	.269	[illegible]E-04	[illegible]	.232	.24[illegible]	
15	33	3.81	7.[illegible]	.521	3.810	8.031	1.1[illegible]E+04	.0085	.376	.361	3.597E-04	303.56	.35[illegible]	.33[illegible]	
16	34	7.12	7.[illegible]	.621	7.125	8.031	1.[illegible]E+04	.0109	.489	.466	[illegible]E-04	305.11	.458	.501	
17	35	7.62	7.[illegible]	[illegible]	7.[illegible]	7.[illegible]	7.[illegible]E+03	[illegible]	[illegible]	[illegible]	[illegible]E-04	[illegible]	[illegible]	1.0[illegible]	
18	36	7.62	3.80	.473	7.981	3.797	7.11[illegible]E+03	.0051	.230	.218	2.197E-04	301.01	.231	.338	
19	37	7.62	-.03	.557	7.960	-.025	9.246E+03	.0065	.291	.276	2.761E-04	[illegible]	.276	.479	
20	38	-7.62	3.78	.976	-8.489	3.785	3.1[illegible]E+02	.0002	.01[illegible]	.009	9.5[illegible]E-06	297.43	.0[illegible]7	.391	
21	39	-7.62	7.07	.953	-5.463	7.674	7.127E+01	.0000	.002	.002	2.134E-06	297.06	-.00[illegible]	-.001	
22	40	-7.12	7.6[illegible]	.978	[illegible]125	8.469	1.7[illegible]E+02	.0001	.006	.006	5.702E-06	297.52	.0[illegible]5	.008	
23	41	-3.81	7.62	.991	-3.81[illegible]	8.5[illegible]	3.[illegible]E+02	.0003	.011	.011	1.[illegible]9E-05	297.55	.0[illegible]7	.0[illegible]8	
24	42	[illegible]	7.62	.991	[illegible]	8.5[illegible]	7.383E+02	[illegible]	.023	.022	2.212E-05	297.78	.009	.009	
25	43	3.84	7.62	1.116	3.835	8.527	1.774E+03	.0012	.056	.053	5.317E-05	298.18	.021	.039	
26	44	7.1[illegible]	7.62	[illegible]	8.137	8.514	[illegible]E+03	.0063	[illegible]	.272	8.732E-04	[illegible]	[illegible]	.292	
27	45	7.62	7.37	.978	8.459	7.374	2.3[illegible]E+04	.0167	.792	.715	7.134E-04	313.04	.7[illegible]3	.776	
28	46	7.62	3.8[illegible]	.991	8.501	3.797	1.126E+03	.0011	.051	.048	4.873E-05	297.85	.041	.065	
29	47	7.62	-.01	.991	8.501	-.013	6.721E+03	.0047	.211	.201	2.020E-04	301.36	.201	.349	
30	48	-7.62	3.8[illegible]	1.934	-9.505	3.797	4.421E+01	.0000	.001	.001	1.324E-06	297.27	.001	.013	
31	49	-7.62	7.39	1.968	-9.479	7.387	1.291E+02	.0001	.004	.004	3.868E-06	297.31	.004	.007	
32	50	-7.12	7.6[illegible]	2.032	-7.125	9.543	9.[illegible]E+01	.0001	.003	.003	2.73[illegible]E-06	297.3[illegible]	.002	.004	
33	51	-3.81	7.6[illegible]	2.032	-3.797	9.543	1.[illegible]E+02	.0001	.003	.003	3.175E-06	297.39	.003	.003	
34	52	[illegible]	7.62	2.019											

RSI GAP HEATING ANALYSIS – II
VOLUME II

REPORT MDC E1248
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LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(5) 1974 PAGE 4

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HI (KG/M2-S)	HTOHP	HT/HF	NSTT	T (K)	HTL/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	5.442E+01	.0000	.002	.002	1.519E-06	297.11	.001	.001	
36	54	7.12	7.62	2.032	7.125	9.543	2.825E+03	.0020	.089	.084	8.470E-05	298.38	.082	.090	
37	55	7.62	7.37	2.019	9.830	7.874	8.544E+03	.0060	.268	.255	2.569E-04	301.8	.250	.273	
38	56	7.62	3.81	1.994	9.535	3.810	1.569E+03	.0011	.049	.047	4.698E-05	297.13	.042	.064	
39	57	7.65	-.01	1.994	9.505	-.013	1.812E+03	.0013	.057	.054	5.431E-05	298.15	.052	.090	
40	58	-7.62	3.81	4.039											
41	59	-7.62	7.11	4.026	-11.537	7.112	2.990E+01	.0000	.001	.001	8.952E-07	296.85	.001	.002	
42	60	-7.11	7.62	4.051											
43	61	-3.81	7.62	4.064	-3.810	11.575	3.151E+00	.0000	.000	.000	9.434E-08	296.80	-.000	-.000	
44	62	0.00	7.62	4.089	0.000	11.600	2.545E+00	.0000	.000	.000	7.620E-08	296.85	.003	-.000	
45	63	3.84	7.62	4.051	3.835	11.562	4.695E+01	.0000	.001	.001	1.406E-06	296.90	.001	.001	
46	64	7.11	7.62	4.064	7.112	11.575	9.056E+02	.0006	.028	.027	2.713E-05	297.66	.025	.027	
47	65	7.62	4.55	4.039	11.549	4.547	1.405E+03	.0010	.044	.042	4.210E-05	297.90	.042	.046	
49	66	7.62	-.03	4.026	11.537	-.025	9.360E+00	.0000	.000	.000	2.803E-07	297.02	-.001	-.002	
50	67	7.18	7.1	0.000	7.175	7.099	3.012E+04	.0213	.958	.912	9.166E-04	316.82	.916	1.000	.840
51	68	-7.19	-.05	0.000	-7.187	-.051	5.403E+04	.0388	1.744	1.664	1.669E-03	334.51	1.668	1.000	1.529
52	69	-3.79	-.03	0.000	-3.785	-.025	4.585E+04	.0326	1.467	1.406	1.404E-03	324.42	1.406	1.000	1.297
53	70	0.00	0.00	0.000	0.000	0.000	3.579E+04	.0254	1.140	1.102	1.091E-03	319.37	1.101	1.000	1.030
54	71	3.79	.03	0.000	3.785	.025	2.906E+04	.0200	.923	.987	8.835E-04	315.47	.867	1.000	.809
55	72	7.1	0.00	0.000	7.099	0.000	1.896E+04	.0133	.599	.571	5.735E-04	309.62	.577	1.000	
56	73	-7.11	3.77	0.000	-7.112	3.772	2.731E+03	.0019	.085	.081	8.172E-05	296.14	.074	1.000	.075
57	74	-3.78	3.78	0.000	-3.785	3.785	3.459E+04	.0245	1.101	1.055	1.054E-03	318.18	1.057	1.000	.967
58	75	0.00	3.76	0.000	0.000	3.759	3.081E+04	.0217	.975	.942	9.331E-04	310.9	.940	1.000	.855
59	76	3.81	3.81	0.000	3.810	3.810	3.269E+04	.0231	1.040	.993	9.951E-04	317.37	[illegible]	1.000	.912
70	77	7.12	3.75	0.000	7.125	3.747	2.067E+04	.0145	.654	.623	6.294E-04	309.76	.626	1.000	.573
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.319	-7.930	-5.194	1.378E+03	.0010	.043	.041	4.100E-05	297.99	.065	.088	
73	80	-7.40	-5.21	.074	-7.423	-5.207	6.632E+03	.0045	.202	.193	1.932E-04	300.70	.219	.357	
74	81	-7.09	-5.21	0.000											
75	82	-6.86	-5.14	0.000	-6.858	-5.144	2.012E+04	.0142	.637	.607	6.092E-04	310.34	.614	1.000	.558
76	83	6.93	-5.18	0.000	6.934	-5.182	2.598E+04	.0183	.825	.786	7.893E-04	314.67	.788	1.000	.723
77	84	7.15	-5.18	0.000	7.137	-5.184	[illegible]	.0189	.716	.680	[illegible]	311.10	[illegible]	.591	
78	85	7.42	-5.12	.074	7.436	-5.118	1.876E+04	.0132	.593	.564	5.671E-04	307.23	.534	.277	
79	86	7.62	-5.18	.399	7.938	-5.138	1.629E+04	.0116	.520	.495	4.981E-04	307.46	.465	.290	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	[illegible]	.0181	.813	.777	7.785E-04	314.71	.797	.800	.713
82	88	-5.31	-7.20	0.000	-5.309	-7.201	2.072E+04	.0146	.626	.627	6.282E-04	312.11	.647	.812	
83	89	-5.29	-7.55	.074	-5.245	-7.569	1.337E+04	.0094	.421	.405	4.032E-04	306.11	.410	.314	
84	90	-5.26	-7.62	.399	-5.238	-7.963	[illegible]	.0035	.157	.150	1.507E-04	299.35	.112	.121	
85	91	-5.26	-7.62	.622	-5.258	-8.133	1.193E+03	.0008	.037	.036	3.575E-05	297.85	-.002	-.003	
86	92	5.25	-7.03	0.000	5.255	-7.033	3.661E+04	.0258	1.135	1.087	1.086E-03	319.35	1.097	1.000	.995
87	93	5.22	-7.11	0.000	5.220	-7.112	3.646E+04	.0259	1.163	1.114	1.113E-03	320.73	1.134	1.025	
88	94	5.22	-7.55	.074	5.220	-7.565	3.173E+04	.0225	1.011	.969	9.679E-04	319.45	.918	.920	
89	95	5.22	-7.62	.399	5.220	-7.964	2.166E+04	.0152	.686	.657	6.562E-04	311.28	.702	.634	
90	96	5.21	-7.62	.572	5.207	-8.088	1.320E+04	.0093	.418	.401	4.083E-04	304.76	.449	.402	
91	97	-7.55	-.09	.074	-7.565	-.089	4.368E+04	.0314	1.410	1.345	1.350E-03	331.99	1.430	.862	
92	98	7.55	0.00	.074	7.565	0.000	1.079E+04	.0075	.338	.322	3.236E-04	303.03	.296	.513	

ORIGINAL PAGE IS OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(6) 1974 PAGE 5

TT	= 1700.00 K	CONFIGURATION	=STAGGERED
PTC	= 7.21E+06 N/M2	STEP	= 0.000 CM
TAW	= 1590.56 K	GAP	= .178 CM
MACH	= 6.61	ANGEL OF ATTACK	=15.150 DEG
PT(I)	= 8.56E+06 N/M2	CP(GAS)	=1088.2 J/KG-K
P(F)	= 1.15E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 207.22 K		
Q-PRESS(FS)	= 2.64E+04 N/M2		
(RHO-V)FS	= 2.49E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.71E+04 J/M2-S-K		
(RHO-TAU-CP)M	= .046+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 7.59E-02 KG/M2-S		
TTIME	= 28.34 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.998	-.081	1.995E+05	.1988	2.083	1.909	4.321E-03	425.30	2.036	.937	
2	21	-7.62	-.05	.965	-8.476	-.051	1.080E+05	.0746	1.059	1.011	3.212E-03	368.31	.969	.445	
3	22	-7.62	-.05	1.981	-9.492	-.051	9.811E+03	.0063	.090	.086	2.729E-04	298.97	.077	.033	
4	23	-7.62	-.08	4.051	-11.962	-.076	1.735E+03	.0011	.016	.016	4.953E-05	296.39	.007	.003	
6	24	-7.11	7.18	0.000	-7.112	7.099	9.169E+04	.0631	.898	.855	3.749E-03	329.76	.872	1.019	.717
7	25	-3.78	7.89	0.020	-3.785	7.087	1.223E+05	.0859	1.219	1.151	3.699E-03	369.36	1.161	1.389	.975
8	26	0.00	7.09	0.000	0.000	7.087	1.279E+05	.0899	1.277	1.194	3.873E-03	370.77	1.201	1.000	1.021
9	27	3.85	7.09	0.000	3.832	7.087	1.282E+05	.0901	1.279	1.181	3.886E-03	370.73	1.186	1.000	1.023
10	28	-7.62	3.71	.495	-8.006	3.708	3.429E+04	.0279	.329	.311	9.872E-04	307.49	.319	23.893	
11	29	-7.62	7.06	.432	-7.943	7.036	9.360E+03	.0066	.088	.084	5.678E-04	299.07	.068	.069	
12	30	-7.16	7.62	.457	-7.137	7.968	1.086E+04	.0072	.102	.098	3.106E-04	299.31	.078	.089	
13	31	-3.81	7.62	.470	-3.835	7.981	3.715E+04	.0249	.353	.334	1.074E-03	312.79	.321	.276	
14	32	0.00	7.62	.508	0.000	8.019	5.336E+04	.0361	.512	.479	1.554E-03	322.03	.474	.395	
15	33	3.81	7.62	.521	3.818	8.031	8.122E+04	.0556	.789	.728	2.393E-03	336.75	.735	.518	
16	34	7.12	7.62	.521	7.125	8.031	9.536E+04	.0655	.910	.849	2.822E-03	342.12	.856	.712	
17	35	7.62	7.09	.445	7.959	7.087	2.216E+05	.1673	2.378	2.164	7.207E-03	355.11	2.249	1.871	
18	36	7.62	3.80	.470	7.981	3.797	6.530E+04	.0444	.630	.574	1.912E-03	328.65	.584	.933	
19	37	7.62	-.03	.457	7.968	-.025	7.829E+04	.0535	.760	.692	2.306E-03	336.19	.719	1.115	
20	38	-7.62	3.78	.978	-8.489	3.785	1.609E+04	.0107	.152	.145	4.613E-04	301.73	.141	10.183	
21	39	-7.62	7.07	.953	-8.463	7.074	4.215E+03	.0028	.040	.038	1.204E-04	297.11	.036	.041	
22	40	-7.12	7.62	.978	-7.125	8.489	2.946E+03	.0020	.028	.027	8.438E-05	297.40	.025	.029	
23	41	-3.81	7.62	.991	-3.810	8.501	4.084E+03	.0027	.038	.036	1.167E-04	297.55	.026	.022	
24	42	0.00	7.62	.991	0.000	8.501	1.782E+04	.0119	.169	.158	5.113E-04	302.86	.146	.122	
25	43	3.84	7.62	1.016	3.835	8.527	3.716E+04	.0249	.394	.327	1.074E-03	312.50	.314	.264	
26	44	7.15	7.62	1.003	7.137	9.514	5.450E+04	.0368	.522	.477	1.585E-03	320.29	.465	.387	
27	45	7.62	7.07	.978	8.489	7.475	1.673E+05	.1196	1.697	1.546	5.149E-03	368.63	1.528	1.261	
28	46	7.62	3.80	.991	8.501	3.797	2.889E+04	.0193	.274	.250	8.321E-04	317.76	.235	.314	
29	47	7.62	-.01	.991	8.501	-.013	5.782E+04	.0392	.556	.507	1.688E-03	324.81	.512	.778	
30	48	-7.62	3.80	1.994	-9.505	3.797	7.398E+03	.0049	.070	.067	2.115E-04	298.35	.066	4.779	
31	49	-7.62	7.09	1.968	-9.479	7.087	2.455E+03	.0016	.023	.022	7.010E-05	296.44	.022	.025	
32	50	-7.12	7.62	2.032	-7.125	9.543	1.816E+03	.0012	.017	.016	5.168E-05	296.47	.016	.019	
33	51	-3.80	7.62	2.032	-3.797	9.543	1.596E+03	.0011	.015	.015	4.545E-05	296.57	.014	.012	
34	52	0.00	7.62	2.019	0.000	9.530	1.420E+03	.0009	.013	.012	4.044E-05	293.36	.010	.009	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(6) 1974 PAGE 6

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	7.62	7.62	8.032	3.823	9.523	9.799E+03	.0065	.098	.085	9.094E-04	299.95	.083	.070	
36	54	7.12	7.62	8.032	7.125	9.523	2.504E+04	.0167	.238	.217	7.286E-04	306.70	.218	.179	
37	55	7.62	7.87	8.019	9.530	7.874	9.764E+04	.0439	.552	.500	1.972E-03	381.86	.478	.381	
38	56	7.62	5.81	1.994	9.505	5.810	2.380E+04	.0159	.226	.206	6.646E-04	305.92	.191	.306	
39	57	7.62	-.01	1.994	9.505	-.013	3.001E+04	.0265	.291	.265	8.035E-04	318.05	.263	.207	
40	58	-7.62	3.81	6.039	-11.549	3.810	1.286E+03	.0009	.012	.012	3.665E-05	298.82	.011	.004	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.126E+03	.0007	.011	.010	3.212E-05	295.95	.010	.012	
42	60	-7.11	7.62	4.021	-7.112	11.562	1.027E+03	.0007	.010	.009	3.016E-05	[illegible]	.009	.011	
43	61	-3.81	7.62	4.464	-3.810	11.575	1.969E+03	.0015	.019	.017	5.621E-05	[illegible]	.017	.013	
44	62	0.00	7.62	4.519	0.000	11.600	2.011E+03	.0017	.020	.021	7.528E-05	[illegible]	.021	.018	
45	63	3.84	7.62	4.051	3.835	11.562	3.763E+03	.0025	.035	.032	1.058E-04	[illegible]	.030	.025	
46	64	7.11	7.62	4.065	7.112	11.575	1.440E+04	.0096	.136	.124	4.129E-04	[illegible]	.122	.102	
47	65	7.62	4.55	4.039	11.949	4.547	1.232E+04	.0129	.156	.141	4.684E-04	[illegible]	.141	.117	
59	66	7.62	-.03	4.028	11.537	-.025	1.076E+04	.0125	.178	.162	5.300E-04	[illegible]	[illegible]	.248	
60	67	7.18	7.14	0.000	7.175	7.099	1.330E+05	.0934	1.326	1.210	4.023E-03	[illegible]	[illegible]	1.000	1.060
61	68	-7.09	-.05	0.000	-7.087	-.051	2.102E+05	.1610	2.285	2.178	6.937E-03	[illegible]	[illegible]	1.000	1.027
62	69	-3.78	-.03	0.000	-3.785	-.025	1.390E+05	.0984	1.397	1.319	4.238E-03	[illegible]	1.318	1.030	1.117
63	70	0.00	0.03	0.000	0.000	0.000	1.253E+05	.0881	1.250	1.169	3.794E-03	370.76	1.169	1.000	1.030
64	71	3.78	.03	0.000	3.785	.025	1.134E+05	.0792	1.124	1.038	3.410E-03	362.10	1.238	1.000	.993
65	72	7.14	0.00	0.021	7.099	0.000	7.226E+04	.0495	.703	.642	2.114E-03	339.64	.645	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	2.439E+03	.0017	.024	.023	7.239E-05	295.68	.014	1.000	.019
67	74	-3.78	3.78	0.000	-3.785	3.785	1.210E+05	.0856	1.215	1.147	3.665E-03	369.00	1.144	1.000	[illegible]
68	75	0.00	3.76	0.000	0.000	3.759	1.208E+05	.0846	1.201	1.123	3.645E-03	365.65	1.123	1.000	[illegible]
KN=	200 DATA POINTS PLACED ON TAPE 15														
69	76	3.81	3.81	0.000	3.810	3.810	1.177E+05	.0825	1.171	1.081	3.582E-03	366.24	1.082	1.000	.936
70	77	7.12	3.75	0.000	7.125	3.747	7.071E+04	.0483	.683	.626	2.082E-03	336.02	.626	1.000	.94
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	9.806E+03	.0065	.093	.088	2.807E-04	299.95	.094	.097	
73	80	-7.40	-5.21	.074	-7.423	-5.207	2.841E+04	.0190	.270	.237	8.166E-04	308.20	.296	.385	
74	81	-7.09	-5.23	0.000											
75	82	-6.86	-5.14	0.030	-6.858	-5.144	1.027E+05	.0709	1.007	.959	3.055E-03	349.03	.969	1.000	.805
76	83	6.93	-5.18	0.000	6.934	-5.182	9.773E+04	.0678	.962	.879	2.919E-03	353.62	.881	1.000	.769
77	84	7.14	-5.18	0.030	7.137	-5.182	9.426E+04	.0648	.920	.843	2.791E-03	342.92	.722	.819	
78	85	7.42	-5.12	.074	7.436	-5.110	1.266E+05	.0882	1.252	1.142	3.799E-03	359.16	1.164	1.322	
79	86	7.62	-5.16	.444	7.595	-5.156	1.364E+05	.0956	1.357	1.236	4.117E-03	370.03	1.259	1.429	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	1.343E+05	.0919	1.305	1.237	3.958E-03	374.93	1.257	1.300	1.043
82	88	-5.31	-7.20	0.000	-5.309	-7.201	1.183E+05	.0830	1.179	1.118	3.577E-03	368.79	1.136	.905	
83	89	-5.25	-7.25	.074	-5.258	-7.262	9.006E+04	.0620	.892	.845	2.705E-03	352.59	.899	.715	
84	90	-5.26	-7.62	.394	-5.270	-7.944	4.239E+04	.0289	.405	.384	1.220E-03	314.20	.336	.267	
85	91	-5.26	-7.62	.622	-5.258	-8.133	1.467E+04	.0098	.138	.131	4.282E-04	301.05	.084	.067	
86	92	5.25	-6.83	0.030	[illegible]	-6.833	1.259E+05	.0886	1.258	1.156	3.815E-03	370.97	1.162	1.060	1.006
87	93	5.22	-7.11	0.000	[illegible]	-7.112	1.333E+05	.0952	1.337	1.229	4.396E-03	376.40	1.235	1.063	
88	94	5.22	-7.45	.074	[illegible]	-7.465	1.376E+05	.0977	1.386	1.274	4.206E-03	381.70	1.320	1.136	
89	95	5.22	-7.62	.394	5.220	-7.984	1.211E+05	.0847	1.202	1.105	3.648E-03	363.91	1.153	.993	
90	96	5.21	-7.62	.572	5.207	-8.082	9.820E+04	.0670	.962	.885	2.919E-03	350.71	.932	.903	
91	97	-7.55	-.09	.074	-7.569	-.089	2.388E+05	.1817	2.580	2.463	7.828E-03	463.54	2.374	1.185	
92	98	7.55	0.00	.074	7.565	0.000	6.956E+04	.0472	.678	.611	2.033E-03	326.23	.577	.894	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(7) 1974 PAGE 7

TT	= 1733.33 K	CONFIGURATION	=STAGGERED
PTC	= 1.81E+07 N/M2	STEP	= 0.000 CM
TAW	= 1600.33 K	GAP	= .178 CM
MACH	= 6.98	ANGEL OF ATTACK	= 7.630 DEG
PT(2)	= 8.34E+06 N/M2	CP(GAS)	=1888.7 J/KG-K
P(FS)	= 3.06E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 218.67 K		
D-PRESS(FS)	= 6.16E+04 N/M2		
(RHO-V)FS	= 6.16E+01 KG/M2-S		
(CP-RHO-V)FS	= 6.92E+04 J/M2-S-K		
(RHO-TAU-CP)N	= 2.64E+03 J/M2-S		
RE/METER	= 4.82E+06		
H(FLAT PLATE)	= 8.59E-02 KG/M2-S		
TTIME	= 28.02 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.88	.983	-7.993	-.851	2.291E+05	.1719	2.152	2.568	2.829E-03	469.99	2.088	.960	
2	21	-7.62	-.85	.989	-8.476	-.851	1.442E+05	.1065	1.253	1.493	1.693E-03	377.96	1.453	.925	
3	22	-7.62	-.05	1.991	-9.922	-.871	[illegible]E+04	.0162	.202	.252	2.132E-04	303.22	.229	.081	
4	23	-7.62	-.88	4.051	-11.962	-.876	2.276E+03	.0017	.022	.026	2.941E-05	294.02	.013	.005	
6	24	-7.11	7.16	0.000	-7.112	7.899	9.924E+04	.0688	.858	1.026	1.160E-03	372.12	1.052	1.000	.707
7	25	-3.18	7.09	0.000	-3.785	7.887	1.274E+05	.0894	1.119	1.325	[illegible]	386.89	1.337	1.000	.918
8	26	0.03	7.09	0.000	0.000	7.887	1.322E+05	.0920	1.198	1.364	1.964E-03	387.09	1.375	1.000	.953
9	27	3.81	7.09	0.000	3.835	7.887	1.388E+05	.0913	1.130	1.388	[illegible]	387.69	1.333	1.000	.937
10	28	-7.62	3.71	.495	-8.106	3.706	5.441E+04	.0334	.416	.498	5.628E-04	314.47	.910	3.394	
11	29	-7.62	6.96	.337	-7.937	7.878	2.005E+04	.0132	.162	.197	2.271E-04	301.92	.163	.155	
12	30	-7.15	6.23	.557	-7.137	7.868	2.167E+04	.0151	.178	.216	2.376E-04	303.20	.180	.171	
13	31	-3.85	7.63	.978	-3.835	7.901	3.996E+04	.0307	.318	.383	3.301E-04	318.74	.273	.288	
14	32	0.00	7.62	.968	0.000	8.019	4.984E+04	.0332	.414	.488	5.995E-04	321.64	.479	.345	
15	33	3.81	7.62	.521	3.719	8.031	6.997E+04	.0478	.586	.663	7.956E-04	334.71	.888	.510	
16	34	7.12	7.62	.521	7.125	8.031	1.076E+05	.0735	.916	1.057	1.256E-03	349.96	1.060	.745	
17	35	7.62	7.09	.444	7.959	7.887	1.552E+05	.1228	1.531	1.765	2.069E-03	464.88	1.851	1.300	
18	36	7.62	3.81	.476	7.981	3.797	[illegible]	.0585	.731	.828	8.777E-04	[illegible]	.601	.691	
19	37	7.62	-.03	.457	7.968	-.025	8.906E+04	.0587	.732	.844	9.896E-04	[illegible]	.864	1.063	
20	38	-7.62	7.10	.978	-8.589	7.195	[illegible]	.0188	[illegible]	.839	1.090E-04	[illegible]	.633	1.538	
21	39	-7.62	7.07	.953	-8.463	7.076	9.718E+03	.0064	[illegible]	.099	1.071E-04	297.20	.089	.085	
22	40	-7.12	7.62	.978	-7.128	8.389	[illegible]	.0067	.069	.083	9.329E-05	298.42	.080	.076	
23	41	-3.81	7.62	.991	-3.818	8.387	[illegible]	.0037	.046	.054	6.169E-05	296.03	.041	.031	
24	42	0.00	7.62	.991	0.000	8.381	[illegible]	.0103	.128	.151	[illegible]	302.95	.134	.188	
25	43	3.81	7.62	1.016	3.835	8.327	2.931E+04	.0194	.241	.281	3.262E-04	310.36	.266	.280	
26	44	7.12	7.62	1.004	7.137	8.314	6.131E+04	.0411	.512	.591	6.918E-04	322.96	.576	.515	
27	45	7.62	7.87	.978	8.686	7.874	1.329E+05	.0940	1.172	1.382	1.584E-03	356.35	1.329	.934	
28	46	7.62	3.86	.991	8.501	3.797	3.201E+04	.0212	.265	.305	3.577E-04	315.50	.281	.324	
29	47	7.62	-.01	.991	8.491	-.017	6.418E+04	.0273	.339	.672	7.289E-04	338.00	.615	.784	
30	48	-7.62	3.81	1.994	-9.490	3.797	1.110E+04	.0073	.091	.108	1.224E-04	297.57	.107	.719	
31	49	-7.98	7.09	1.919	-9.779	7.887	5.620E+03	.0037	.046	.051	6.198E-05	293.97	.054	.052	
32	50	-7.12	7.64	2.032	-7.779	9.543	5.251E+03	.0034	.043	.051	5.776E-05	293.35	.051	.046	
33	51	-3.80	7.62	2.032	-3.797	9.543	2.432E+03	.0016	.020	.024	2.674E-05	294.71	.023	.017	
34	52	0.00	7.62	2.519											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(7) 1974 PAGE 8

T/C	CH	X (CM)	Y (CM)	Z (CM)	XHAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTF	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	9.382E+03	.0081	.076	.088	1.026E-04	328.93	.086	.065	
36	54	7.12	7.62	2.032	7.125	9.543	2.997E+04	.0198	.247	.286	1.344E-04	313.92	.284	.199	
37	55	7.28	7.87	2.019	9.230	7.874	6.441E+04	.0468	.558	.643	7.543E-04	330.52	.623	.438	
38	56	7.62	3.81	1.994	9.505	3.810	1.816E+04	.0123	.149	.172	2.014E-04	335.35	.149	.172	
39	57	7.62	-.01	1.994	9.505	-.013	3.022E+04	.0200	.250	.288	3.378E-04	316.26	.264	.348	
40	58	-7.62	3.81	4.839	-11.859	3.810	1.389E+03	.0018	.012	.018	1.637E-05	293.06	.015	.092	
41	59	-7.62	7.11	4.826	-11.537	7.112	1.828E+03	.0012	.015	.018	2.007E-05	293.03	.017	.017	
42	60	-7.11	7.62	4.851	-7.112	11.562	1.692E+03	.0011	.013	.016	1.800E-05	293.47	.016	.015	
43	61	-3.81	7.62	4.856	-3.810	11.575	2.365E+03	.0015	.019	.023	2.599E-05	293.92	.023	.017	
44	62	0.00	7.62	[illegible]	0.000	11.600	4.465E+03	.0029	.036	.043	4.911E-05	298.26	.042	.017	
45	63	3.84	7.62	4.841	3.835	11.562	6.343E+03	.0041	.052	.060	6.986E-05	296.94	.058	.344	
46	64	7.11	7.62	4.864	7.112	11.275	2.190E+04	.0144	.180	.208	2.432E-04	307.47	.206	.145	
47	65	7.62	4.55	4.839	11.449	4.547	2.380E+04	.0157	.196	.226	2.644E-04	308.18	.226	.158	
49	66	7.62	-.03	4.826	11.537	-.025	1.775E+04	.0117	.146	.168	1.971E-04	307.89	.165	.282	
60	67	7.18	7.10	0.000	7.177	7.099	1.411E+05	.0993	1.238	1.429	1.673E-03	389.57	1.424	1.000	1.020
61	68	-7.09	-.05	0.060	-7.087	-.051	2.489E+05	.1853	2.310	2.762	3.121E-03	456.32	2.768	1.300	1.902
62	69	-3.78	-.03	0.008	-3.785	-.025	1.590E+05	.1162	1.373	1.633	1.856E-03	402.34	1.632	1.000	1.131
63	70	0.00	0.00	0.000	0.000	0.000	1.379E+05	.0974	1.214	1.431	1.641E-03	394.48	1.430	1.000	1.000
64	71	3.78	.03	0.008	3.785	.025	1.225E+05	.0857	1.068	1.245	1.444E-03	382.71	1.245	1.000	.880
65	72	7.10	0.00	0.008	7.099	0.000	6.256E+04	.0565	.704	.813	9.520E-04	395.59	.816	1.000	
66	73	-7.11	3.77	0.008	-7.112	3.772	1.642E+04	.0108	.134	.161	1.817E-04	302.96	.160	1.000	.111
67	74	-3.74	3.78	0.000	-3.785	3.785	1.311E+05	.0921	1.140	1.365	1.552E-03	387.59	1.368	1.060	.946
68	75	0.00	3.76	0.008	0.000	3.759	1.163E+05	.0817	1.018	1.200	1.376E-03	366.50	1.198	1.000	.838
69	76	3.81	3.81	0.000	3.810	3.810	1.274E+05	.0895	1.116	1.300	1.508E-03	387.86	1.301	1.000	.919
70	77	7.12	3.75	0.000	7.125	3.747	8.411E+04	.0603	.751	.867	1.115E-03	356.43	.866	1.000	.619
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.938	-5.194	2.036E+04	.0134	.167	.200	2.255E-04	303.99	.222	.185	
73	80	-7.40	-5.21	.079	-7.423	-5.207	4.332E+04	.0288	.359	.432	5.656E-04	320.23	.515	.428	
74	81	-7.09	-5.23	0.060	-7.087	-5.232	2.609E+03	.0017	.021	.025	2.861E-05	291.11	-.467	-.388	
75	82	-6.86	-5.14	0.008	-5.858	-5.144	1.139E+05	.0795	.991	1.185	1.339E-03	380.02	1.202	1.000	.816
76	83	6.93	-5.18	0.060	6.934	-5.182	1.080E+05	.0749	.933	1.078	1.261E-03	372.23	1.079	1.000	.769
77	84	7.14	-5.18	0.008	7.137	-5.182	1.186E+05	.0818	1.023	1.178	1.379E-03	384.84	1.040	.963	
78	85	7.42	-5.12	.076	7.436	-5.118	1.375E+05	.0970	1.209	1.394	1.633E-03	392.14	1.454	1.347	
79	86	7.62	-5.16	.414	7.755	-5.156	1.218E+05	.0861	1.073	1.237	1.450E-03	394.76	1.296	1.201	
81	87	-5.27	-6.93	0.000	-5.278	-6.934	1.383E+05	.0978	1.219	1.405	1.648E-03	396.04	1.483	1.000	1.004
82	88	-5.31	-7.20	0.018	-5.309	-7.201	1.294E+05	.0874	1.090	1.301	1.473E-03	380.45	1.329	.896	
83	89	-5.23	-7.55	.074	-5.245	-7.557	9.226E+04	.0537	.795	.948	1.074E-03	367.94	1.014	.684	
84	90	-5.27	-7.62	.354	-5.258	-7.904	4.717E+04	.0304	.392	.466	5.297E-04	322.01	.416	.280	
85	91	-5.26	-7.60	.622	-5.259	-8.133	1.277E+04	.0130	.162	.193	2.187E-04	332.65	.142	.196	
86	92	5.24	-7.44	0.000	5.245	-6.833	1.335E+05	.0941	1.173	1.361	1.586E-03	391.41	1.373	1.000	.966
87	93	5.22	-7.11	0.008	5.220	-7.112	1.362E+05	.0963	1.201	1.393	1.623E-03	396.08	1.405	1.023	
88	94	5.22	-7.55	.074	5.230	-7.569	1.317E+05	.0931	1.161	1.347	1.569E-03	396.27	1.398	1.018	
89	95	5.22	-7.52	.394	5.220	-7.904	1.130E+05	.0790	.985	1.142	1.331E-03	373.45	1.194	.870	
90	96	5.21	-7.60	.572	5.207	-8.082	9.175E+04	.0627	.781	.906	1.056E-03	353.41	.953	.694	
91	97	.55	-.09	.074	7.565	-.085	2.647E+05	.2055	2.562	3.086	3.462E-03	503.96	3.066	1.100	
92	98	7.55	0.00	.074	7.565	0.003	5.715E+04	.0590	.736	.848	9.942E-04	342.06	.867	.989	

LARC 8 FOOT HTST, HPSI GAP HEATING TEST 87 RUN(8) 1974 PAGE 9

TT	= 1822.22 K	CONFIGURATION	=STAGGERED
PTC	= 1.79E+07 N/M2	STEP	= 0.000 CM
TAW	= 1690.56 K	GAP	= .178 CM
MACH	= 6.65	ANGEL OF ATTACK	= -.100 DEG
PT(T)	= 9.63E+06 N/M2	CP(GAS)	=1088.5 J/KG-K
P(F)	= 2.94E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 222.22 K		
D-PRESS(FS)	= 6.21E+04 N/M2		
(RHO-V)FS	= [illegible] KG/M2-S		
(CP-RHO-V)FS	= 6.72E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 4.69E+06		
H(FLAT PLATE)	= 4.47E-02 KG/M2-S		
TTIME	= 28.29 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.155E+05	.0748	1.793	1.809	[illegible]	369.81	1.846	.893	
2	21	-7.62	-.05	.969	-8.476	-.051	4.043E+04	.0304	.728	.735	9.269E-04	322.53	.692	.335	
3	22	-7.62	-.05	1.981	-9.492	-.051	2.210E+03	.0614	.033	.033	2.363E-05	298.18	.026	.012	
4	23	-7.62	[illegible]	4.051	-11.562	[illegible]	1.4[illegible]E+02	.0001	.002	.002	1.[illegible]E-06	296.96	-.005	-.002	
6	24	-7.11	7.13	0.000	-7.112	7.899	3.363E+04	.0211	.505	.510	3.656E-04	321.32	.522	1.000	.941
7	25	-3.78	7.89	0.000	-3.785	7.887	6.063E+04	.0383	.920	.929	6.6[illegible]E-04	33[illegible].70	.937	1.000	.984
8	26	0.00	7.89	0.000	0.000	7.887	6.8[illegible]E+04	.0431	1.034	1.0[illegible]	7.4[illegible]E-04	33[illegible].73	1.050	1.000	1.106
9	27	3.8[illegible]	7.89	0.000	3.835	7.887	6.992E+04	.0417	1.001	.998	7.241E-04	33[illegible].62	1.0[illegible]	1.000	1.071
10	28	-7.62	3.71	.499	-8.006	3.708	1.146E+04	.0068	.164	.165	1.189E-04	302.30	.172	86.929	
11	29	-7.62	7.93	.432	-7.943	7.936	2.761E+03	.0017	.041	.041	2.955E-05	299.82	.027	.045	
12	30	-7.14	7.62	.457	-7.137	7.968	4.122E+03	.0025	.061	.062	4.413E-05	300.15	.047	.090	
13	31	-3.8[illegible]	7.62	.47[illegible]	-3.835	7.981	1.[illegible]E+04	.009[illegible]	[illegible]	[illegible]	1.[illegible]E-04	30[illegible].92	[illegible]	.229	
14	32	0.00	7.62	.508	0.000	8.019	2.151E+04	.0134	.320	.323	2.317E-04	308.79	.315	.300	
15	33	3.81	7.62	.521	3.810	8.031	2.829E+04	.0176	.422	.421	3.056E-04	312.70	.420	.418	
16	34	7.1[illegible]	7.[illegible]	.521	7.1[illegible]	8.0[illegible]	[illegible]E+04	.0[illegible]	.71[illegible]	.707	[illegible]E-04	[illegible]	.71[illegible]	.789	
17	35	7.62	7.09	.444	7.955	7.087	8.603E+04	.0552	1.323	1.310	9.376E-04	353.52	1.362	1.390	
18	36	7.62	3.80	.476	7.901	3.797	1.078E+04	.0116	.279	.276	2.020E-04	309.51	.278	.531	
19	37	7.62	-.03	.457	7.980	-.026	1.690E+04	.0102	.245	.243	1.776E-04	307.71	.244	.949	
20	38	-7.[illegible]	3.78	.970	-8.489	3.785	4.563E+03	.0028	.067	.068	4.8[illegible]E-05	299.42	.065	32.489	
21	39	-7.62	7.07	.953	-8.463	7.074	9.739E+02	.0006	.014	.015	1.041E-05	297.81	.012	.023	
22	40	-7.12	7.62	.970	-7.125	8.589	5.[illegible]E+02	.0004	.009	.009	6.2[illegible]E-06	298.30	.007	.014	
23	41	-3.81	7.62	.991	-3.810	8.501	1.303E+03	.0006	.019	.019	1.072E-05	298.57	.008	.309	
24	42	0.00	7.62	.991	0.000	8.591	3.[illegible]E+03	.0021	.051	.051	3.[illegible]E-05	299.50	.038	.037	
25	43	3.84	7.62	1.016	3.835	8.527	7.823E+03	.0048	.116	.116	8.382E-05	301.56	.104	.103	
26	44	7.14	7.62	1.0[illegible]3	7.137	8.514	2.549E+04	.0158	.380	.377	2.750E-04	310.80	.366	.374	
27	45	7.62	7.07	.978	8.489	7.074	5.3[illegible]E+04	.0336	.807	.799	5.838E-04	327.41	.779	.795	
28	46	7.62	3.8[illegible]	.991	8.501	3.797	6.676E+03	.0041	.099	.098	7.151E-05	301.04	.088	.169	
29	47	7.62	-.01	.991	8.501	-.013	1.[illegible]E+04	.0069	.157	.156	1.130E-04	303.47	.152	.3[illegible]	
30	48	-7.62	3.8[illegible]	1.994	-9.505	3.797	1.367E+03	.0008	.020	.020	1.461E-05	297.57	.020	10.300	
31	49	-7.62	7.09	1.9[illegible]	-9.479	7.087	4.321E+02	.0003	.00[illegible]	.006	4.61[illegible]E-06	297.17	.006	.012	
32	50	-7.12	7.62	2.032	-7.125	9.543	3.681E+02	.0002	.005	.005	3.933E-06	297.40	.005	.010	
33	51	-3.80	7.62	2.032	-3.797	9.543	3.314E+02	.0002	.005	.005	3.540E-06	297.48	.049	.005	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 67 RUN(8) 1974 PAGE 10

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	7.62	7.62	2.032	7.623	9.543	9.903E+02	.0006	.015	.015	1.098E-05	297.74	.013	.013	
36	54	7.12	7.62	2.032	7.125	9.543	1.042E+04	.0064	.154	.153	1.117E-04	302.53	.151	.154	
37	55	7.62	7.07	2.019	9.530	7.074	2.143E+04	.0133	.319	.316	2.308E-04	308.76	.297	.303	
38	56	7.62	3.81	1.994											
39	57	7.62	-.01	1.994	9.505	-.013	5.143E+03	.0032	.076	.075	5.504E-05	299.67	.074	.166	
40	58	-7.62	3.81	4.039	-11.549	3.810	1.280E+02	.0001	.002	.002	1.387E-06	296.79	.001	.728	
41	59	-7.62	7.11	4.026	-11.537	7.112	9.443E+01	.0001	.001	.001	1.008E-06	296.85	.001	.002	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.136E+02	.0001	.002	.002	1.213E-06	296.89	.001	.003	
43	61	-3.81	7.62	4.064	-3.810	11.575	2.614E+02	.0002	.004	.004	2.792E-06	296.93	.004	.004	
44	62	0.00	7.62	4.089	0.000	11.600	3.860E+02	.0002	.006	.006	4.123E-06	296.97	.007	.004	
45	63	3.84	7.62	4.051	3.835	11.562	5.912E+02	.0004	.009	.009	6.315E-06	297.13	.008	.308	
46	64	7.11	7.62	4.064	7.112	11.575	3.334E+03	.0021	.049	.049	3.565E-05	298.79	.047	.048	
47	65	7.62	4.55	4.039	11.549	4.547	4.246E+03	.0026	.063	.062	4.543E-05	299.39	.062	.063	
49	66	7.62	-.03	4.026	11.537	-.025	9.143E+02	.0006	.013	.013	[illegible].768E-06	297.33	.013	.028	
60	67	7.18	7.10	0.038	7.175	7.099	6.526E+04	.0413	.990	.981	7.166E-04	334.94	.980	1.003	1.060
61	68	-7.09	-.05	0.000	-7.087	-.051	1.319E+05	.0856	2.053	2.072	1.408E-03	369.58	2.066	1.000	2.197
62	69	-3.78	-.03	0.000	-3.785	-.025	7.784E+04	.0489	1.174	1.186	8.434E-04	340.76	1.185	1.000	1.256
63	70	0.00	0.00	0.000	0.000	0.000	6.165E+04	.0390	.934	.941	6.761E-04	333.38	.939	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	5.263E+04	.0332	.795	.793	5.755E-04	329.61	.794	1.000	.891
65	72	7.10	0.00	0.000	7.099	0.000	2.989E+04	.0187	.448	.444	3.242E-04	316.16	.447	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	6.681E+02	.0004	.010	.010	7.138E-06	295.00	.002	1.000	.011
67	74	-3.78	3.78	0.000	-3.785	3.785	6.739E+04	.0426	1.022	1.033	7.397E-04	335.53	1.035	1.000	1.094
68	75	0.00	3.76	0.000	0.000	3.759	3.442E+04	.0214	.513	.516	3.711E-04	318.17	.513	1.000	.549
69	76	3.81	3.81	0.000	3.810	3.810	6.210E+04	.0392	.941	.939	6.812E-04	333.60	.940	1.000	1.007
70	77	7.12	3.75	0.000	7.125	3.747	3.496E+04	.0219	.525	.520	3.796E-04	319.60	.521	1.000	.561
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	3.257E+03	.0020	.048	.049	3.487E-05	300.16	.060	.113	
73	80	-7.40	-5.21	.074	-7.423	-5.207	1.028E+04	.0064	.152	.154	1.103E-04	304.33	.141	.288	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	4.334E+04	.0269	.646	.652	4.676E-04	310.94	.617	1.167	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	3.473E+04	.0217	.521	.526	3.773E-04	320.52	.529	1.000	.558
76	83	6.93	-5.18	0.000	6.934	-5.182	4.807E+04	.0302	.725	.719	5.247E-04	327.06	.721	1.000	.776
77	84	7.14	-5.18	0.000	7.137	-5.182	4.086E+04	.0251	.601	.596	4.350E-04	320.06	.534	.740	
78	85	7.42	-5.12	.074	7.436	-5.118	3.689E+04	.0230	.553	.548	4.000E-04	319.59	.536	.743	
79	86	7.62	-5.16	.444	7.955	-5.156	3.616E+04	.0227	.544	.539	3.938E-04	323.95	.527	.731	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	5.892E+04	.0373	.894	.904	6.469E-04	335.09	.927	1.000	.957
82	88	-5.31	-7.20	0.000	-5.309	-7.201	4.947E+04	.0312	.749	.757	5.419E-04	331.71	.780	.842	
83	89	-5.25	-7.55	.074	-5.245	-7.565	3.154E+04	.0198	.474	.479	3.429E-04	321.61	.506	.546	
84	90	-5.26	-7.62	.394	-5.258	-7.904	1.399E+04	.0087	.208	.210	1.503E-04	305.49	.169	.182	
85	91	-5.26	-7.62	.622	-5.258	-8.133	4.491E+03	.0028	.066	.067	4.888E-05	300.18	.026	.028	
86	92	5.25	-6.83	0.000	5.245	-6.833	6.724E+04	.0426	1.021	1.019	7.391E-04	336.51	1.028	1.000	1.093
87	93	5.22	-7.11	0.003	5.220	-7.112	6.973E+04	.0442	1.061	1.055	7.677E-04	338.71	1.068	1.038	
88	94	5.22	-7.55	.074	5.220	-7.565	6.648E+04	.0421	1.011	1.005	7.314E-04	337.69	1.043	1.015	
89	95	5.22	-7.62	.394	5.220	-7.904	5.042E+04	.0317	.760	.756	5.500E-04	326.07	.793	.771	
90	96	5.21	-7.62	.572	5.207	-8.082	3.439E+04	.0214	.514	.511	3.720E-04	316.34	.549	.533	
91	97	-7.55	-.09	.074	-7.565	-.089	1.430E+05	.0943	2.263	2.283	1.638E-03	390.83	2.395	1.159	
92	98	7.55	0.00	.074	7.565	0.000	2.348E+04	.0146	.350	.347	2.533E-04	310.55	.337	.753	

ORIGINAL PAGE IS
OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(9) 1974 PAGE 11

TT	= 1833.33 K		CONFIGURATION	=STAGGERED
PTC	= 7.21E+06 N/M2		STEP	= 0.000 CM
TAW	= 1700.00 K		GAP	= .102 CM
MACH	= 6.87		ANGEL OF ATTACK	= 7.640 DEG
PT(I)	= 4.54E+06 N/M2		CP(GAS)	=1000.3 J/KG-K
P(FS)	= 1.09E-01 N/M2		RECOVERY FACTOR	= .912
T(FS)	= 211.11 K			
D-PRESS(FS)	= 2.46E+04 N/M2			
(RHO-V)FS	= 2.63E+01 KG/M2-S			
(CP-RHO-V)FS	= 2.64E+04 J/M2-S-K			
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S			
RE/METER	= 1.97E+06			
H(FLAT PLATE)	= 4.20E-02 KG/M2-S			
TTIME	= 30.70 SEC		SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.310E+05	.0857	2.184	1.749	3.781E-03	389.46	1.000	.790	
2	21	-7.62	-.05	.965	-8.476	-.051	4.947E+04	.0307	.783	.627	1.356E-03	325.58	.562	.297	
3	22	-7.62	-.05	1.981	-9.492	-.051	1.775E+03	.0011	.028	.022	4.786E-05	297.36	.014	.006	
4	23	-7.62	-.05	2.991											
5	24	-7.11	7.10	0.000	-7.112	7.099	1.926E+04	.0245	.624	.499	1.079E-03	324.16	.513	1.000	.504
7	25	-3.70	7.09	0.000	-3.785	7.087	[illegible]	.0473	1.206	.958	2.087E-03	344.47	.968	1.000	.974
8	26	0.00	7.09	0.000	0.000	7.087	6.436E+04	.0535	1.364	1.078	2.362E-03	348.35	1.086	1.000	1.102
9	27	[illegible]	7.09	0.000	[illegible]	7.087	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	346.86	1.029	1.000	1.000
10	28	-7.62	3.71	.499	-8.006	3.708	1.412E+04	.0087	.221	.177	3.820E-04	301.92	.183	10.984	
11	29	-7.62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0021	.054	.043	[illegible]	298.23	.032	[illegible]	
12	30	-7.14	7.62	.457	-7.137	7.988	3.996E+03	.0024	.062	.053	1.078E-04	298.09	.031	.061	
13	31	-3.84	7.62	.470	-3.835	7.981	2.228E+04	.0137	.350	.278	6.057E-04	308.14	.265	.274	
14	32	0.00	7.62	.500	0.000	8.119	[illegible]	.0241	.615	.486	[illegible]	318.47	.509	.491	
15	33	3.81	7.62	.521	3.810	8.131	4.865E+04	.0303	.772	.603	1.336E-03	322.93	.612	.595	
16	[illegible]	7.12	7.62	.521	7.128	[illegible]	[illegible]	.0319	.815	.659	[illegible]	[illegible]	.647	.631	
17	35	7.62	7.09	.444	7.955	7.087	1.389E+05	.0704	1.795	1.385	3.107E-03	373.94	1.463	1.449	
18	36	7.62	[illegible]	.470	7.901	3.792	[illegible]	.0155	.397	.304	6.849E-04	314.38	.307	.806	
19	37	7.62	-.03	.457	7.968	-.025	[illegible]	.0219	.557	.430	9.649E-04	319.88	.450	.850	
20	38	-7.62	[illegible]	.978	-8.509	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
21	39	-7.62	7.07	.953	-8.483	7.074	5.017E+02	.0003	.008	.006	1.352E-05	296.61	[illegible]	.007	
22	40	-7.12	7.62	.978	-7.128	8.509	3.205E+02	.0002	.005	.004	8.645E-06	297.30	.003	.007	
23	41	-3.81	7.62	.991	-3.810	8.501	1.829E+03	.0011	.029	.023	4.934E-05	297.49	.011	.012	
24	42	0.00	7.62	.991	0.000	8.501	8.446E+03	.0052	.132	.104	2.283E-04	300.73	.084	.077	
25	43	3.84	7.62	1.016	3.835	8.527	1.523E+04	.0094	.238	.186	4.127E-04	303.60	.167	.162	
26	44	7.14	7.62	1.013	7.137	8.514	2.112E+04	.0130	.331	.256	5.731E-04	306.26	.240	.237	
27	45	7.62	7.07	.978	8.509	7.074	6.322E+04	.0397	1.010	.780	1.749E-03	337.86	.748	.751	
28	46	7.62	3.80	.991	8.501	3.797	9.334E+03	.0055	.141	.109	2.443E-04	300.99	.098	.190	
29	47	7.62	-.01	.991	8.501	-.013	1.915E+04	.0118	.300	.232	5.200E-04	306.96	.221	.417	
30	48	-7.62	3.84	1.994	-9.505	3.797	1.922E+03	.0012	.030	.024	5.183E-05	297.26	.024	1.414	
KN=	200 DATA POINTS PLACED ON TAPE 15														
31	49	-7.62	7.09	1.968	-9.479	7.087	1.826E+02	.0001	.003	.002	4.382E-06	296.49	.002	.004	
32	50	-7.12	7.62	2.032	-7.129	9.543	1.784E+02	.0001	.003	.002	4.799E-06	296.61	.002	.004	
33	51	-3.80	7.62	2.032	-3.797	9.543	3.309E+01	.0000	.001	.000	8.920E-07	296.53	.000	.000	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST. HRSI GAP HEATING TEST 97 RUN(9) 1974 PAGE 12

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	1.019E+03	.0006	.016	.012	2.748E-05	297.05	.019	.019	
36	54	7.12	7.62	2.032	7.125	9.543	6.693E+03	.0041	.144	.081	1.609E-04	300.13	.079	.079	
37	55	7.62	7.07	2.019	9.530	7.074	1.976E+04	.0122	.310	.239	5.366E-04	307.67	.209	.207	
38	56	7.62	3.81	1.994	9.505	3.810	5.128E+03	.0031	.080	.062	1.384E-04	298.62	.050	.399	
39	57	7.62	-.01	1.994	9.505	-.013	6.829E+03	.0042	.107	.082	1.842E-04	299.79	.080	.152	
40	58	-7.62	3.81	4.039	-11.549	3.810	8.098E+01	.0000	.001	.001	2.182E-06	296.21	.001	.045	
41	59	-7.62	7.11	4.026	-11.537	7.112	9.042E+01	.0001	.001	.001	2.437E-06	296.26	.001	.002	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.651E+02	.0001	.003	.002	4.450E-06	296.36	.002	.004	
43	61	-3.81	7.62	4.064	-3.810	11.575	5.453E+01	.0000	.001	.001	1.467E-06	296.24	.000	.000	
44	62	0.00	7.62	4.089	0.000	11.600	8.471E+01	.0001	.001	.001	2.283E-06	296.14	.001	.000	
45	63	3.84	7.62	4.051	3.835	11.562	1.993E+02	.0001	.003	.002	5.371E-06	296.26	.001	.001	
46	64	7.11	7.62	4.064	7.112	11.575	1.736E+03	.0011	.027	.021	4.681E-05	297.07	.020	.019	
47	65	7.62	4.37	4.039	11.549	4.547	2.393E+03	.0015	.037	.029	6.467E-05	297.46	.029	.029	
48	66	7.62	-.03	4.026	11.537	-.025	1.277E+03	.0008	.020	.014	3.442E-05	296.43	.014	.026	
60	67	7.18	7.10	0.000	7.175	7.099	8.133E+04	.0514	1.120	1.013	2.268E-03	343.19	1.010	1.000	1.058
61	68	-7.09	-.05	0.000	-7.087	-.051	1.499E+05	.1170	2.855	2.283	4.941E-03	402.22	2.278	1.000	2.306
62	69	-3.78	-.03	0.000	-3.785	-.025	9.640E+04	.0615	1.567	1.245	2.713E-03	358.68	1.244	1.000	1.266
63	70	0.00	0.00	0.000	0.000	0.000	7.671E+04	.0486	1.230	.978	2.143E-03	345.88	.978	1.000	1.000
64	71	3.76	.03	0.000	3.785	.025	6.679E+04	.0421	1.073	.838	1.857E-03	339.23	.839	1.000	.866
65	72	7.10	0.00	0.000	7.099	0.000	4.295E+04	.0268	.663	.528	1.182E-03	322.48	.529	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	3.105E+03	.0013	.031	.026	6.671E-05	295.55	.017	1.000	.026
67	74	-3.78	3.78	0.000	-3.785	3.785	7.855E+04	.0497	1.263	1.007	2.193E-03	349.16	1.009	1.000	1.023
68	75	0.00	3.76	0.048	0.000	3.759	7.186E+04	.0453	1.193	.913	1.997E-03	338.48	.912	1.000	.932
69	76	3.81	3.81	0.000	3.810	3.810	7.334E+04	.0464	1.181	.923	2.043E-03	343.00	.922	1.000	.954
70	77	7.12	3.75	0.020	7.125	3.747	4.128E+04	.0257	.655	.506	1.134E-03	323.62	.507	1.000	.529
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.030	-5.194	2.142E+03	.0013	.033	.027	5.760E-05	297.21	.017	.030	
73	80	-7.40	-5.21	.074	-7.423	-5.207	1.031E+04	.0063	.161	.129	2.795E-04	302.30	.155	.282	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	8.611E+02	.0005	.013	.011	2.321E-05	296.77	-.213	-.394	
75	82	-6.85	-5.14	0.000	-6.858	-5.144	4.296E+04	.0268	.683	.546	1.182E-03	328.43	.554	1.100	.887
76	83	6.93	-5.18	0.000	6.934	-5.182	5.804E+04	.0365	.929	.719	1.608E-03	334.52	.721	1.000	.759
77	84	7.14	-5.18	0.000	7.137	-5.182	5.259E+04	.0328	.837	.647	1.449E-03	326.89	.539	.747	
78	85	7.42	-5.12	.074	7.438	-5.118	5.670E+04	.0356	.907	.701	1.570E-03	333.08	.735	1.020	
80	86	-7.62	-5.46	.444	-7.956	-5.436	4.815E+04	.0301	.768	.593	1.379E-03	329.45	.617	.870	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	7.468E+04	.0473	1.206	.961	2.087E-03	346.43	.988	1.300	.974
82	88	-5.31	-7.20	0.000	-5.309	-7.201	6.502E+04	.0411	1.046	.834	1.811E-03	341.99	.861	.871	
83	89	-5.25	-7.35	.074	-5.245	-7.565	4.462E+04	.0279	.711	.567	1.231E-03	329.16	.608	.615	
84	90	-5.26	-7.62	.394	-5.258	-7.904	1.956E+04	.0120	.307	.244	5.310E-04	306.48	.186	.188	
85	91	-5.26	-7.62	.622	-5.258	-8.133	6.340E+03	.0039	.099	.079	1.713E-04	299.50	.021	.026	
86	92	5.25	-6.83	0.048	5.245	-6.833	8.234E+04	.0523	1.331	1.036	2.305E-03	348.53	1.040	1.006	1.075
87	93	5.22	-7.11	0.020	5.220	-7.112	8.840E+04	.0563	1.434	1.116	2.482E-03	352.39	1.120	1.078	
88	94	5.22	-7.55	.074	5.220	-7.565	9.210E+04	.0588	1.499	1.167	2.595E-03	357.37	1.220	1.173	
89	95	5.22	-7.62	.394	5.220	-7.904	8.195E+04	.0519	1.322	1.029	2.288E-03	349.27	1.166	1.064	
90	96	5.21	-7.62	.572	5.207	-8.082	6.301E+04	.0395	1.006	.783	1.741E-03	331.09	.860	.827	
91	97	-7.55	-.09	.074	-7.565	-.089	1.721E+05	.1159	2.954	2.369	5.114E-03	426.75	2.512	1.102	
92	98	7.55	0.00	.074	7.565	0.000	4.350E+04	.0271	.690	.532	1.194E-03	321.35	.527	.996	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(10) 1974 PAGE 13

TT = 1638.89 K		CONFIGURATION	=STAGGERED
PTC = 7.38E+06 N/M2		STEP	= 0.000 CM
TAW = 1520.00 K		GAP	= .305 CM
MACH = 6.60		ANGEL OF ATTACK	= 7.400 DEG
PT(I) = 3.36E+06 N/M2		CP(GAS)	=1008.2 J/KG-K
P(F) = 1.19E-01 N/M2		RECOVERY FACTOR	= .912
T(FS) = 196.67 K			
D-PRESS(FS) = 2.47E+04 N/M2			
(RHO-V)FS = 2.63E+01 KG/M2-S			
(CP-RHO-V)FS = 2.86E+04 J/M2-S-K			
(RHO-TAU-CP)M = 2.04E+03 J/M2-S			
RE/METER = 2.10E+06			
H(FLAT PLATE) = 4.32E-02 KG/M2-S			
TTIME = 27.31 SEC		SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

I/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.503	-7.993	-.051	1.972E+05	.1856	3.037	3.187	6.294E-03	420.17	3.293	1.255	
2	21	-7.62	-.05	.965	-8.476	-.051	1.139E+05	.0842	2.090	1.736	3.428E-03	360.19	1.662	.635	
3	22	-7.62	-.05	1.981	-9.492	-.051	1.291E+04	.0091	.220	.188	3.712E-04	303.60	.173	.055	
4	23	-7.62	-.08	4.051	-11.562	-.076	6.897E+02	.0005	.012	.010	1.974E-05	299.90	-.005	-.002	
6	24	-7.11	7.14	0.000	-7.112	7.899	5.985E+04	.0381	.977	.793	1.590E-03	334.22	.752	1.000	.895
7	25	-3.78	7.09	0.000	-3.785	7.087	6.905E+04	.0504	1.251	1.032	2.093E-03	345.67	1.141	1.000	.973
8	26	0.00	7.09	0.000	0.000	7.087	7.051E+04	.0514	1.270	1.046	2.093E-03	345.12	1.032	1.000	.991
9	27	3.84	7.09	0.000	3.835	7.087	6.730E+04	.0491	1.218	.988	1.992E-03	343.81	.994	1.000	.946
10	28	-7.62	3.71	.495	-8.006	3.708	2.603E+04	.0191	.473	.393	7.796E-04	311.04	.355	.223	
11	29	-7.62	7.84	.432	-7.943	7.836	2.033E+04	.0144	.358	.297	5.867E-04	309.25	.279	.371	
12	30	-7.14	7.62	.457	-7.137	7.968	1.710E+04	.0121	.301	.250	4.935E-04	309.95	.236	.313	
13	31	-3.81	7.62	.478	-3.810	7.981	2.098E+04	.0152	.391	.337	6.917E-04	314.82	.285	.373	
14	32	0.00	7.62	.508	0.000	8.019	2.329E+04	.0166	.413	.337	6.721E-04	313.59	.329	.313	
15	33	3.81	7.62	.521	3.818	8.031	2.790E+04	.0199	.495	.402	8.121E-04	317.01	.398	.500	
16	34	7.12	7.62	.521	7.125	8.031	3.564E+04	.0255	.632	.508	1.030E-03	320.83	.509	.540	
17	35	7.62	7.09	.533	7.955	7.087	7.284E+04	.0536	1.336	1.044	2.132E-03	357.02	1.162	1.192	
18	36	7.62	3.81	.470	7.981	3.797	3.232E+04	.0232	.575	.461	9.430E-04	324.24	.472	.774	
19	37	7.62	-.03	.457	7.968	-.029	1.920E+04	.0138	.339	.271	5.542E-04	310.22	.263	.409	
20	38	-7.62	3.78	.978	-8.489	3.785	1.492E+04	.0105	.262	.217	4.293E-04	306.46	.211	.133	
21	39	-7.62	7.87	.953	-8.463	7.074	1.022E+04	.0072	.179	.149	2.937E-04	305.63	.144	.192	
22	40	-7.12	7.62	.978	-7.125	8.509	1.455E+04	.0103	.255	.212	4.190E-04	306.50	.210	.279	
23	41	-3.81	7.62	.991	-3.810	8.501	3.178E+03	.0022	.055	.046	9.049E-05	300.82	.035	.053	
24	42	0.00	7.62	.991	0.000	8.501	6.278E+03	.0044	.110	.090	1.808E-04	303.03	.084	.080	
25	43	3.84	7.62	1.016	3.835	8.527	1.055E+04	.0075	.185	.150	3.034E-04	305.93	.139	.150	
26	44	7.14	7.62	1.003	7.137	8.514	2.201E+04	.0156	.388	.311	6.363E-04	312.19	.342	.323	
27	45	7.62	7.07	.978	8.489	7.074	5.724E+04	.0415	1.038	.825	1.690E-03	337.59	.813	.570	
28	46	7.62	3.80	.991	8.501	3.797	1.790E+04	.0127	.318	.253	5.173E-04	311.62	.243	.399	
29	47	7.62	-.01	.991	8.501	-.013	1.636E+04	.0116	.287	.230	4.715E-04	308.47	.230	.426	
30	48	-7.62	3.80	1.994	-9.505	3.797	5.900E+03	.0042	.103	.086	1.694E-04	302.94	.085	.093	
31	49	-7.62	7.09	1.968	-9.479	7.087	6.195E+03	.0044	.108	.090	1.776E-04	302.20	.089	.119	
32	50	-7.12	7.62	2.032	-7.125	9.543	9.140E+03	.0064	.160	.133	2.622E-04	302.92	.132	.176	
33	51	-3.80	7.62	2.032	-3.797	9.543	9.701E+02	.0007	.017	.014	2.770E-05	299.82	.014	.013	
34	52	0.00	7.62	2.019	0.000	9.530	4.700E+03	.0033	.081	.067	1.335E-04	290.81	.061	.098	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(10) 1974 PAGE 14

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDNP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	3.306E+03	.0023	.058	.047	9.473E-05	301.46	.046	.026	
36	54	7.12	7.62	2.032	7.125	9.543	1.221E+04	.0115	.289	.229	4.674E-04	309.11	.228	.244	
37	55	7.62	7.62	2.019	9.530	7.874	3.033E+04	.0217	.538	.431	8.820E-04	314.35	.419	.448	
38	56	7.62	3.81	1.994											
39	57	7.62	-.01	1.994	9.505	-.013	8.694E+03	.0061	.152	.122	2.496E-04	304.08	.120	.224	
40	58	-7.62	3.81	4.039	-11.549	3.810	6.891E+02	.0005	.012	.010	1.971E-05	299.24	.009	.008	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.177E+03	.0012	.031	.026	4.094E-05	299.70	.025	.033	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.540E+03	.0014	.034	.028	9.552E-05	299.78	.027	.037	
43	61	-3.81	7.62	4.064	-3.818	11.575	5.324E+02	.0004	.009	.008	1.523E-05	299.31	.007	.007	
44	62	0.00	7.62	4.089	0.000	11.600	1.814E+03	.0013	.032	.026	5.195E-05	299.90	.021	.027	
45	63	3.84	7.62	4.051	3.835	11.562	3.446E+03	.0024	.060	.049	9.853E-05	301.06	.047	.048	
46	64	7.11	7.62	4.064	7.112	11.575	1.159E+04	.0081	.201	.162	3.305E-04	306.48	.161	.172	
47	65	7.62	4.55	4.039	11.549	4.547	1.179E+04	.0083	.207	.166	3.390E-04	306.00	.166	.177	
49	66	7.62	-.03	4.026	11.537	-.028	5.852E+03	.0034	.085	.068	1.391E-04	301.79	.067	.128	
60	67	7.18	7.10	0.000	7.175	7.099	6.445E+04	.0469	1.164	.934	1.910E-03	341.72	.935	1.000	.905
61	68	-7.09	-.05	0.000	-7.087	-.051	1.692E+05	.1294	3.211	2.664	5.287E-03	398.23	2.646	1.000	2.495
62	69	-3.78	-.03	0.000	-3.785	-.025	8.489E+04	.0625	1.550	1.278	2.542E-03	354.16	1.276	1.000	1.204
63	70	0.00	0.00	0.000	0.000	0.000	7.098E+04	.0519	1.287	1.055	2.111E-03	347.20	1.057	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.218E+04	.0452	1.123	.911	1.841E-03	341.01	.911	1.000	.872
65	72	7.10	0.00	0.000	7.099	0.000	3.719E+04	.0267	.664	.533	1.089E-03	327.15	.530	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.027E+05	.0765	1.897	1.574	3.113E-03	368.08	1.590	1.000	1.475
67	74	-3.78	3.78	0.000	-3.785	3.785	7.226E+04	.0528	1.310	1.081	2.150E-03	346.29	1.079	1.000	1.018
68	75	0.00	3.76	0.000	0.000	3.759	6.734E+04	.0500	1.242	1.018	2.037E-03	365.63	1.021	1.000	.965
69	76	3.81	3.81	0.000	3.810	3.810	6.815E+04	.0497	1.233	1.001	2.023E-03	343.95	1.001	1.000	.959
70	77	7.12	3.75	0.000	7.125	3.747	4.260E+04	.0307	.761	.611	1.248E-03	328.56	.610	1.000	.591
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.491E+04	.0106	.262	.218	4.296E-04	308.21	.262	.366	
73	80	-7.40	-5.21	.074	-7.423	-5.207	2.276E+04	.0162	.402	.334	6.603E-04	315.57	.355	.495	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	6.983E+02	.0005	.011	.009	1.854E-05	314.05	-.124	-.173	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	4.788E+04	.0346	.858	.712	1.408E-03	332.29	.717	1.000	.667
76	83	6.93	-5.18	0.000	6.934	-5.182	5.430E+04	.0394	.977	.785	1.603E-03	337.11	.787	1.000	.759
77	84	7.15	-5.18	0.000	7.137	-5.182	4.790E+04	.0339	.840	.674	1.378E-03	329.38	.631	.882	
78	85	7.42	-5.12	.074	7.436	-5.118	4.429E+04	.0318	.789	.633	1.295E-03	329.29	.603	.766	
79	86	7.62	-5.16	.444	7.955	-5.156	4.727E+04	.0341	.847	.679	1.390E-03	332.64	.648	.823	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	7.210E+04	.0529	1.313	1.066	2.155E-03	350.35	1.114	1.000	1.021
82	88	-5.31	-7.20	0.000	-5.309	-7.201	6.493E+04	.0472	1.171	.968	1.921E-03	347.04	.996	.894	
83	89	-5.25	-7.55	.074	-5.245	-7.565	4.814E+04	.0349	.865	.715	1.419E-03	335.56	.763	.685	
84	90	-5.26	-7.62	.394	-5.258	-7.984	2.367E+04	.0168	.417	.345	6.845E-04	312.44	.298	.267	
85	91	-5.26	-7.62	.622	-5.258	-8.133	1.033E+04	.0073	.181	.149	2.965E-04	303.62	.103	.092	
86	92	5.25	-6.83	0.000	5.245	-6.833	7.055E+04	.0516	1.280	1.033	2.099E-03	346.40	1.051	1.000	.994
87	93	5.22	-7.11	0.000	5.220	-7.112	7.191E+04	.0527	1.307	1.056	2.144E-03	349.10	1.073	1.021	
88	94	5.22	-7.55	.074	5.220	-7.565	6.604E+04	.0483	1.198	.968	1.966E-03	347.09	1.012	.963	
89	95	5.22	-7.62	.394	5.220	-7.904	6.139E+04	.0371	.921	.744	1.511E-03	332.59	.769	.731	
90	96	5.21	-7.62	.572	5.207	-8.082	3.764E+04	.0270	.669	.540	1.097E-03	322.48	.565	.537	
91	97	-7.95	-.09	.074	-7.965	-.089	2.072E+05	.1651	4.098	3.403	6.722E-03	443.82	3.548	1.341	
92	98	7.59	0.00	.074	7.569	0.000	2.529E+04	.0180	.446	.398	7.325E-04	314.55	.341	.635	

ORIGINAL PAGE IS
OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(11) 1974 PAGE 19

TT	= 1666.67 K	CONFIGURATION	=STAGGERED
PTC	= 7.17E+06 N/M2	STEP	= 0.000 CM
TAW	= 1545.80 K	GAP	= .406 CM
MACH	= 6.58	ANGEL OF ATTACK	= 7.490 DEG
PT(T)	= 3.36E+06 N/M2	CP(GAS)	=1088.2 J/KG-K
P(F)	= 1.19E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 209.00 K		
Q-PRESS(FS)	= 2.37E+04 N/M2		
(RHO-V)FS	= 2.49E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.70E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 4.21E-02 KG/M2-S		
TTIME	= 27.45 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	H(/H-CNTR
1	20	-7.62	-.05	.984	-7.993	-.051	1.898E+05	.1538	3.668	2.968	9.288E-03	413.58	3.044	1.288	
2	21	-7.62	-.05	.484	-8.476	-.051	1.025E+05	.0736	1.876	1.519	3.177E-03	350.78	1.471	.622	
3	22	-7.62	-.05	1.581	-9.492	-.051	1.365E+04	.0094	.241	.195	5.075E-04	305.57	.184	.078	
4	23	-7.62	-.08	4.051	-11.362	-.076	7.457E+02	.0005	.012	.010	2.090E-05	300.14	-.001	-.000	
6	24	-7.11	7.10	6.000	-7.112	7.099	8.218E+04	.0478	.952	.783	1.897E-03	339.83	.774	1.000	.717
7	25	-3.78	7.09	0.000	-3.785	7.087	6.943E+04	.0497	1.266	1.018	2.144E-03	346.88	1.026	1.000	.963
8	26	0.00	7.09	0.000	0.000	7.087	7.055E+04	.0505	1.287	1.029	2.179E-03	346.69	1.036	1.000	.979
9	27	3.81	7.09	0.000	3.835	7.087	8.748E+04	.0482	1.229	.978	8.884E-03	345.26	.977	1.000	.935
10	28	-7.62	3.71	.495	-8.006	3.708	2.786E+04	.0194	.494	.400	8.359E-04	311.85	.364	.228	
11	29	-7.62	7.04	.432	-7.943	7.038	1.109E+04	.0076	.198	.158	3.295E-04	305.59	.136	.176	
12	30	-7.14	7.62	.457	-7.137	7.988	1.613E+04	.0112	.285	.230	4.822E-04	307.06	.216	.280	
13	31	-3.81	7.62	.978	-3.835	7.981	2.283E+04	.0156	.373	.317	6.756E-04	312.31	.307	.299	
14	32	0.00	7.62	.508	0.000	8.019	2.586E+04	.0179	.443	.356	7.535E-04	314.58	.349	.337	
15	33	3.81	7.62	.521	3.810	8.031	2.979E+04	.0208	.531	.420	8.986E-04	318.27	.416	.426	
16	34	7.13	7.62	.521	7.125	8.031	4.077E+04	.0286	.730	.571	1.235E-03	323.82	.570	.623	
17	35	7.62	7.09	.447	7.935	7.087	8.903E+04	.0617	1.571	1.287	2.648E-03	342.88	1.264	1.383	
18	36	7.62	3.80	.470	7.981	3.797	2.864E+04	.0201	.512	.400	8.667E-04	322.41	.409	.671	
19	37	7.62	-.03	.457	7.968	-.025	1.536E+04	.0106	.271	.212	4.593E-04	307.76	.199	.389	
20	38	-7.62	3.78	.978	-8.489	3.785	1.289E+04	.0087	.222	.180	3.759E-04	306.39	.173	.186	
21	39	-7.62	7.07	.953	-8.463	7.074	7.437E+03	.0051	.131	.106	2.215E-04	302.84	.103	.133	
22	40	-7.12	7.62	.978	-7.125	8.489	4.867E+03	.0034	.086	.069	1.449E-04	302.35	.065	.084	
23	41	-3.81	7.62	.991	-3.810	8.501	3.510E+03	.0024	.062	.050	1.044E-04	301.62	.039	.036	
24	42	0.00	7.62	.991	0.000	8.501	7.306E+03	.0050	.129	.103	2.178E-04	303.80	.091	.088	
25	43	3.84	7.62	1.016	3.835	8.527	1.239E+04	.0086	.218	.173	3.697E-04	306.96	.163	.166	
26	44	7.13	7.62	1.003	7.137	8.514	2.524E+04	.0176	.448	.351	7.591E-04	314.00	.341	.372	
27	45	7.62	7.07	.978	8.489	7.074	6.443E+04	.0460	1.172	.919	1.984E-03	341.92	.903	.986	
28	46	7.62	3.80	.991	8.501	3.797	1.485E+04	.0103	.263	.208	4.447E-04	309.08	.195	.320	
29	47	7.62	-.01	.991	8.501	-.013	1.127E+04	.0077	.199	.155	3.366E-04	306.49	.154	.301	
30	48	-7.62	3.80	1.994	-9.505	3.797	5.873E+03	.0041	.103	.084	1.748E-04	302.15	.083	.052	
31	49	-7.62	7.09	1.968	-9.479	7.087	3.709E+03	.0026	.065	.053	1.108E-04	301.24	.052	.088	
32	50	-7.12	7.62	2.032	-7.125	9.543	3.470E+03	.0021	.054	.044	9.133E-05	301.21	.043	.056	
33	51	-3.80	7.62	2.032	-3.797	9.543	1.630E+03	.0011	.029	.023	4.849E-05	300.86	.023	.022	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(11) 1974 PAGE 16

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	MT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	5.973E+03	.0035	.089	.071	1.911E-04	302.96	.069	.071	
36	54	7.12	7.62	2.032	7.125	9.543	2.251E+04	.0157	.400	.313	6.769E-04	314.42	.313	.342	
37	55	7.62	7.87	2.019	9.530	7.874	3.675E+04	.0258	.658	.513	1.113E-03	323.90	.501	.549	
38	56	7.62	3.81	1.994	9.505	3.810	1.124E+04	.0078	.197	.154	3.344E-04	301.29	.144	.237	
39	57	7.62	-.01	1.994	9.505	-.013	7.862E+03	.0054	.138	.109	2.345E-04	305.18	.107	.209	
40	58	-7.62	3.81	4.039	-11.549	3.810	5.111E+02	.0004	.009	.007	1.519E-05	300.10	.007	.004	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.397E+03	.0009	.024	.019	4.036E-05	308.40	.019	.025	
42	60	-7.11	7.62	4.051	-7.112	11.392	1.307E+03	.0009	.023	.019	3.885E-05	300.36	.018	.024	
43	61	-3.81	7.62	4.064	-3.810	11.379	1.475E+03	.0010	.026	.021	4.388E-05	300.78	.021	.020	
44	62	0.00	7.62	4.089	0.000	11.989	2.989E+03	.0020	.052	.042	8.638E-05	301.52	.042	.020	
45	63	3.84	7.62	4.051	3.835	11.962	5.065E+03	.0035	.089	.070	1.909E-04	302.87	.069	.071	
46	64	7.11	7.62	4.064	7.112	11.575	1.420E+04	.0099	.251	.196	4.259E-04	308.55	.197	.215	
47	65	7.62	4.55	4.039	11.549	4.547	1.495E+04	.0104	.264	.206	4.472E-04	308.76	.206	.225	
49	66	7.62	-.03	4.026	11.537	-.025	8.177E+03	.0057	.144	.112	2.430E-04	303.84	.112	.219	
60	67	7.18	7.14	0.000	7.175	7.099	6.640E+04	.0459	1.171	.916	1.962E-03	342.97	.915	1.000	.890
61	68	-7.09	-.05	0.000	-7.087	-.051	1.657E+05	.1155	2.923	2.381	4.903E-03	380.69	2.363	1.000	2.239
62	69	-3.78	-.03	0.000	-3.785	-.025	8.531E+04	.0615	1.467	1.229	2.652E-03	354.85	1.258	1.000	1.192
63	70	0.00	0.00	0.000	0.000	0.000	7.197E+04	.0516	1.318	1.051	2.226E-03	348.71	1.051	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.264E+04	.0447	1.138	.900	1.927E-03	342.36	.900	1.000	.866
65	72	7.10	0.00	0.000	7.099	0.000	3.609E+04	.0254	.648	.507	1.047E-03	327.36	.512	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.051E+05	.0769	1.960	1.565	3.118E-03	372.59	1.601	1.000	1.491
67	74	-3.78	3.78	0.000	-3.785	3.785	7.290E+04	.0522	1.331	1.070	2.293E-03	347.94	1.069	1.000	1.012
68	75	0.00	3.76	0.000	0.000	3.759	7.017E+04	.0501	1.278	1.023	2.160E-03	342.84	1.019	1.000	.970
69	76	3.81	3.81	0.000	3.810	3.810	6.119E+04	.0487	1.242	.982	2.103E-03	345.10	.983	1.000	.945
70	77	7.12	3.75	0.000	7.125	3.747	4.329E+04	.0305	.778	.609	1.318E-03	329.46	.609	1.000	.592
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.574E+04	.0109	.278	.225	4.784E-04	307.14	.244	.266	
73	80	-7.40	-5.21	.074	-7.423	-5.207	3.166E+04	.0221	.564	.457	9.550E-04	318.37	.526	.575	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	5.036E+01	.0000	.001	.001	1.499E-06	301.77	-.315	-.345	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	6.164E+04	.0439	1.119	.904	1.894E-03	340.86	.915	1.000	.851
76	83	6.93	-5.18	0.000	6.934	-5.182	5.554E+04	.0395	1.006	.788	1.704E-03	338.68	.793	1.000	.765
77	84	7.14	-5.18	0.000	7.137	-5.182	4.763E+04	.0336	.857	.671	1.452E-03	330.77	.641	.811	
78	85	7.42	-5.12	.074	7.436	-5.118	4.221E+04	.0297	.756	.591	1.280E-03	325.75	.557	.785	
79	86	7.62	-5.16	.444	7.955	-5.156	4.758E+04	.0336	.856	.668	1.449E-03	332.43	.633	.882	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	7.485E+04	.0538	1.370	1.106	2.320E-03	351.38	1.129	1.000	1.042
82	88	-5.31	-7.20	0.000	-5.309	-7.201	6.776E+04	.0486	1.238	.997	2.096E-03	348.57	1.022	.985	
83	89	-5.25	-7.55	.074	-5.245	-7.565	5.095E+04	.0362	.922	.743	1.562E-03	338.01	.788	.699	
84	90	-5.26	-7.62	.394	-5.258	-7.904	2.525E+04	.0176	.449	.362	7.597E-04	315.05	.327	.289	
85	91	-5.26	-7.62	.622	-5.258	-8.133	1.169E+04	.0081	.206	.166	3.488E-04	305.14	.111	.116	
86	92	5.25	-6.83	0.000	5.245	-6.833	7.118E+04	.0510	1.299	1.023	2.200E-03	347.87	1.038	1.000	.986
87	93	5.22	-7.11	0.000	5.220	-7.112	7.276E+04	.0522	1.331	1.048	2.254E-03	350.46	1.064	1.024	
88	94	5.22	-7.55	.074	5.220	-7.565	6.633E+04	.0475	1.211	.954	2.051E-03	348.35	.991	.954	
89	95	5.22	-7.62	.394	5.220	-7.904	5.168E+04	.0366	.933	.735	1.579E-03	334.34	.759	.731	
90	96	5.21	-7.62	.572	5.207	-8.082	3.824E+04	.0269	.684	.539	1.159E-03	324.18	.564	.543	
91	97	-7.55	-.09	.074	-7.565	-.089	1.966E+05	.1520	3.874	3.136	6.559E-03	436.18	3.281	1.388	
92	98	7.55	0.00	.074	7.565	0.000	2.326E+04	.0162	.413	.323	6.999E-04	314.59	.313	.611	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(12) 1974 PAGE 17

TT	= 1830.56 K	CONFIGURATION	=STAGGERED
PTC	= 1.81E+07 N/M2	STEP	= 0.000 CM
TAW	= 1698.89 K	GAP	= .406 CM
MACH	= 6.64	ANGEL OF ATTACK	= .140 DEG
PT(I)	= 9.70E+06 N/M2	CP(GAS)	=1088.7 J/KG-K
P(F)	= 2.95E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 223.33 K		
D-PRESS(FS)	= 6.20E+04 N/M2		
(RHO-V)FS	= 6.18E+01 KG/M2-S		
(CP-RHO-V)FS	= 6.73E+04 J/M2-S-K		
(RHO-TAU-CP)½	= 2.04E+03 J/M2-S		
RE/METER	= 4.69E+06		
H(FLAT PLATE)	= 4.45E-02 KG/M2-S		
TTIME	= 28.38 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.784E+05	.1182	2.788	2.649	1.945E-03	396.75	2.725	1.280	
2	21	-7.62	-.05	.965	-8.476	-.051	8.420E+04	.0532	1.282	1.256	9.227E-04	341.82	1.202	.929	
3	22	-7.62	-.05	1.981	-9.492	-.051	9.645E+03	.0059	.143	.140	1.029E-04	305.23	.129	.057	
KN- 20. DATA POINTS PLACED ON TAPE 15															
4	23	-7.62	-.08	4.051	-11.562	-.076	9.478E+02	.0006	.015	.015	1.000E-05	300.91	.003	.001	
6	24	-7.11	7.14	0.000	-7.112	7.099	5.121E+04	.0322	.778	.760	5.579E-04	334.07	.772	1.000	.696
7	25	-3.78	7.09	0.000	-3.785	7.087	6.910E+04	.0437	1.052	1.032	7.572E-04	341.92	1.040	1.080	.945
8	26	0.00	7.09	0.000	0.018	7.087	7.228E+04	.0457	1.100	1.076	7.925E-04	342.18	1.085	1.080	.989
9	27	3.84	7.09	0.000	3.835	7.087	6.866E+04	.0433	1.044	1.011	7.517E-04	340.62	1.017	1.000	.938
10	28	-7.62	3.71	.495	-8.006	3.708	2.077E+04	.0128	.309	.303	2.227E-04	311.86	.267	.173	
11	29	-7.62	7.04	.432	-7.943	7.036	1.131E+04	.0070	.168	.165	1.210E-04	308.44	.144	.107	
12	30	-7.16	7.62	.457	-7.137	7.988	1.488E+04	.0096	.288	.285	1.599E-04	309.80	.189	.245	
13	31	-3.84	7.62	.470	-3.836	7.981	1.984E+04	.0123	.295	.290	2.127E-04	311.95	.278	.226	
14	32	0.00	7.62	.508	0.000	8.019	2.481E+04	.0152	.367	.359	2.643E-04	315.30	.352	.325	
15	33	3.81	7.62	.521	3.818	8.031	2.863E+04	.0176	.428	.414	3.079E-04	316.41	.410	.403	
16	34	7.12	7.62	.521	7.125	8.031	3.990E+04	.0249	.595	.576	4.311E-04	322.80	.575	.585	
17	35	7.62	7.09	.444	7.955	7.087	8.341E+04	.0532	1.281	1.231	9.223E-04	354.17	1.272	1.348	
18	36	7.62	3.80	.470	7.981	3.797	2.645E+04	.0165	.396	.381	2.894E-04	320.36	.389	.636	
19	37	7.62	-.03	.457	7.968	-.025	1.308E+04	.0080	.193	.186	1.398E-04	307.83	.172	.321	
20	38	-7.62	3.78	.978	-8.489	3.785	1.020E+04	.0063	.151	.148	1.089E-04	306.12	.141	.092	
21	39	-7.62	7.07	.953	-8.463	7.074	6.349E+03	.0039	.094	.092	6.771E-05	304.44	.082	.113	
22	40	-7.12	7.62	.978	-7.125	8.489	5.445E+03	.0033	.081	.079	5.808E-05	304.74	.075	.097	
23	41	-3.81	7.62	.991	-3.810	8.501	2.494E+03	.0015	.037	.036	2.692E-05	302.91	.026	.025	
24	42	0.00	7.62	.991	0.000	8.501	6.616E+03	.0041	.098	.096	7.056E-05	304.58	.083	.077	
25	43	3.84	7.62	1.016	3.835	8.527	1.078E+04	.0066	.160	.155	1.149E-04	308.72	.144	.141	
26	44	7.14	7.62	1.003	7.137	8.514	2.496E+04	.0155	.373	.358	2.682E-04	319.08	.349	.368	
27	45	7.62	7.07	.978	8.489	7.074	6.125E+04	.0385	.928	.892	6.603E-04	335.91	.879	.926	
28	46	7.62	3.80	.991	8.501	3.797	1.319E+04	.0094	.228	.217	1.828E-04	309.84	.208	.340	
29	47	7.62	-.01	.991	8.501	-.013	1.008E+04	.0062	.149	.144	1.076E-04	306.40	.142	.274	
30	48	-7.62	3.80	1.994	-9.505	3.797	4.176E+03	.0026	.062	.061	4.440E-05	302.97	.060	.039	
31	49	-7.62	7.09	1.968	-9.479	7.087	2.908E+03	.0018	.043	.042	3.096E-05	302.18	.042	.054	
32	50	-7.12	7.62	2.032	-7.125	9.543	3.149E+03	.0019	.047	.046	3.357E-05	302.41	.045	.058	
33	51	-3.83	7.62	2.032	-3.797	9.543	1.176E+03	.0007	.017	.017	1.251E-05	301.56	.017	.016	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(12) 1974 PAGE 18

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	7.62	7.62	2.032	7.623	9.543	4.373E+03	.0027	.065	.063	4.658E-05	303.07	.061	.060	
36	54	7.12	7.62	2.032	7.125	9.543	2.053E+04	.0127	.306	.296	2.202E-04	312.62	.296	.310	
37	55	7.62	7.87	2.819	9.370	7.874	3.361E+04	.0209	.585	.564	3.626E-04	319.80	.571	.597	
38	56	7.62	3.81	1.994	9.505	3.810	2.929E+03	.0018	.043	.042	3.115E-05	302.45	.032	.053	
39	57	7.62	-.01	1.994	9.505	-.013	7.091E+03	.0044	.105	.101	7.562E-05	304.49	.160	.192	
40	58	-7.62	7.81	4.039	-11.349	7.818	5.471E+02	.0003	.008	.008	5.819E-06	300.82	.007	.008	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.434E+03	.0009	.021	.021	1.326E-05	301.15	.020	.026	
42	60	-7.11	7.62	4.071	-7.112	11.362	1.622E+03	.0010	.025	.023	1.723E-05	301.16	.023	.030	
43	61	-3.81	7.62	4.064	-3.810	11.375	1.137E+03	.0007	.017	.016	1.209E-05	301.13	.016	.019	
44	62	0.00	7.62	4.089	0.000	11.600	2.180E+03	.0013	.034	.031	2.299E-05	301.65	.031	.035	
45	63	3.84	7.62	4.051	3.839	11.562	3.921E+03	.0024	.058	.056	4.175E-05	302.64	.059	.054	
46	64	7.11	7.62	4.064	7.112	11.375	1.133E+04	.0070	.168	.162	1.210E-04	309.99	.162	.170	
47	65	7.62	4.95	4.039	11.549	4.947	1.233E+04	.0074	.179	.172	1.286E-04	307.16	.172	.181	
49	66	7.62	-.03	4.028	11.537	-.025	6.260E+03	.0038	.094	.089	6.660E-05	302.96	.089	.171	
60	67	7.18	7.10	0.000	7.175	7.099	6.900E+04	.0410	.987	.949	7.106E-04	338.72	.949	1.003	.887
61	68	-7.09	-.05	0.000	-7.087	-.051	1.495E+05	.0969	2.335	2.290	1.681E-03	376.63	2.270	1.000	2.898
62	69	-3.78	-.03	0.000	-3.785	-.025	8.728E+04	.0554	1.338	1.310	9.614E-04	348.93	1.309	1.000	1.288
63	70	0.03	0.00	0.000	0.000	0.000	7.306E+04	.0462	1.113	1.088	8.013E-04	343.15	1.088	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.250E+04	.0394	.948	.918	6.825E-04	337.29	.918	1.000	.852
65	72	7.10	0.00	0.000	7.099	0.000	3.557E+04	.0222	.535	.514	3.849E-04	325.03	.520	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.005E+05	.0645	1.558	1.523	1.118E-03	362.50	1.539	1.000	1.396
67	74	-3.78	3.78	0.000	-3.785	3.785	7.410E+04	.0469	1.129	1.108	8.128E-04	343.18	1.107	1.000	1.014
68	75	0.00	3.76	0.000	0.000	3.759	7.092E+04	.0447	1.077	1.053	7.751E-04	338.35	1.052	1.000	.967
69	76	3.81	3.81	0.000	3.810	3.810	6.838E+04	.0431	1.039	1.007	7.483E-04	340.10	1.007	1.000	.934
70	77	7.12	3.75	0.000	7.126	3.747	4.218E+04	.0264	.638	.611	4.572E-04	327.89	.611	1.000	.571
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.250E+04	.0077	.186	.182	1.337E-04	308.73	.219	.264	
73	80	-7.60	-5.21	.074	-7.423	-5.207	2.474E+04	.0154	.378	.363	2.664E-04	317.62	.444	.536	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	4.464E+02	.0003	.007	.006	4.748E-06	300.89	-.345	-.417	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	5.508E+04	.0346	.834	.810	6.004E-04	334.74	.829	1.000	.749
76	83	6.93	-5.18	0.000	6.934	-5.182	5.497E+04	.0345	.832	.801	5.992E-04	334.68	.803	1.000	.748
77	84	7.15	-5.18	0.000	7.137	-5.182	4.403E+04	.0280	.693	.667	4.992E-04	327.03	.637	.794	
78	85	7.42	-5.12	.076	7.436	-5.118	3.801E+04	.0237	.570	.548	4.106E-04	322.18	.520	.647	
79	86	7.62	-5.16	.444	7.955	-5.156	3.890E+04	.0243	.585	.562	4.209E-04	324.46	.533	.663	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	7.090E+04	.0449	1.081	1.062	7.785E-04	344.67	1.087	1.000	.972
82	88	-5.31	-7.20	0.000	-5.309	-7.201	6.361E+04	.0402	.968	.951	6.972E-04	342.24	.976	.898	
83	89	-5.25	-7.55	.074	-5.245	-7.565	4.654E+04	.0292	.704	.691	5.068E-04	333.30	.738	.679	
84	90	-5.26	-7.62	.394	-5.258	-7.984	2.178E+04	.0135	.325	.319	2.339E-04	314.14	.280	.258	
85	91	-5.28	-7.62	.622	-5.258	-8.133	9.810E+03	.0060	.145	.143	1.047E-04	306.22	.104	.096	
86	92	5.25	-6.83	0.000	5.245	-6.833	7.195E+04	.0455	1.096	1.058	7.890E-04	342.84	1.076	1.000	.985
87	93	5.22	-7.11	0.000	5.220	-7.112	7.353E+04	.0466	1.122	1.083	8.076E-04	345.99	1.101	1.023	
88	94	5.22	-7.55	.074	5.220	-7.565	6.675E+04	.0422	1.017	.981	7.318E-04	342.49	1.023	.951	
89	95	5.22	-7.62	.394	5.220	-7.904	4.972E+04	.0311	.750	.724	5.399E-04	329.52	.748	.695	
90	96	5.21	-7.62	.572	5.207	-8.082	3.460E+04	.0215	.518	.500	3.732E-04	320.55	.524	.487	
91	97	-7.55	-.09	.074	-7.565	-.089	1.854E+05	.1242	2.992	2.934	2.154E-03	419.11	3.099	1.385	
92	98	7.55	0.00	.074	7.565	0.000	2.143E+04	.0133	.320	.307	2.301E-04	313.96	.297	.372	

ORIGINAL PAGE IS
OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(13) 1974 PAGE 19

TT	= 1708.96 K	CONFIGURATION	=IN-LINE
PTC	= 7.17E+06 N/M2	STEP	= 0.000 CM
TAW	= 1582.72 K	GAP	= .406 CM
MACH	= 6.65	ANGEL OF ATTACK	= 7.560 DEG
PT(1)	= 3.54E+06 N/M2	CP(GAS)	=1088.2 J/KG-K
P(F)	= 1.14E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 288.33 K		
D-PRESS(FS)	= 2.40E+04 N/M2		
(RHO-V)FS	= 2.47E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.69E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 4.21E-02 KG/M2-S		
TTIME	= 29.39 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOH2	HT/HF	HSTT	(K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.07	.483	-7.992	-.051	2.412E+04	.0162	.315	.333	7.033E-05	301.36	.249	.129	
2	21	-7.62	-.05	.969	-8.476	-.051	2.279E+03	.0015	.039	.031	6.684E-05	299.61	.022	.012	
3	22	-7.62	-.09	1.981	-9.492	-.051	2.643E+02	.0002	.004	.004	7.652E-06	298.64	.003	.002	
4	23	-7.62	-.08	4.851	-11.562	-.076	3.003E+02	.0002	.005	.004	8.667E-06	298.20	.004	.002	
6	24	-7.11	7.10	0.000	-7.112	7.899	1.395E+05	.0997	2.540	2.045	4.320E-03	382.06	2.068	1.000	1.866
7	25	-3.78	7.09	0.000	-3.785	7.087	6.114E+04	.0563	1.534	1.157	2.539E-03	349.60	1.149	1.000	1.854
8	26	0.00	7.09	0.000	0.000	7.087	6.425E+04	.0585	1.497	1.186	2.936E-03	347.51	1.191	1.000	1.895
9	27	3.81	7.10	0.000	3.810	7.087	6.556E+04	.0587	1.528	1.178	2.747E-03	347.88	1.188	1.000	1.899
10	28	-7.62	3.71	.495	-8.006	3.708	3.715E+04	.0251	.639	.515	1.087E-03	312.55	.466	.196	
11	29	-7.62	7.05	.432	-7.947	7.838	7.094E+04	.0540	1.396	1.123	2.374E-03	336.05	1.143	.556	
12	30	-7.14	7.62	.457	-7.137	7.968	6.077E+04	.0471	1.201	.967	2.043E-03	331.09	.942	.456	
13	31	-3.81	7.62	.520	-3.835	7.981	5.927E+04	.0411	1.099	.877	1.787E-03	331.79	.858	.798	
14	32	0.00	7.62	.508	0.000	8.019	5.645E+04	.0383	.977	.777	1.681E-03	328.51	.780	.655	
15	33	3.81	7.62	.521	3.810	8.031	6.631E+04	.0456	1.161	.914	1.975E-03	334.18	.920	.780	
16	34	7.12	7.62	.521	7.125	8.031	6.524E+04	.0448	1.142	.899	1.937E-03	333.79	.890	.872	
17	35	7.62	7.09	.454	7.955	7.987	6.318E+04	.0435	1.109	.859	1.880E-03	333.25	.860	.789	
18	36	7.62	3.81	.470	7.981	3.797	2.418E+04	.0163	.416	.323	7.070E-04	312.36	.313	.583	
19	37	7.62	-.03	.497	7.968	-.024	2.016E+04	.0139	.353	.275	6.011E-04	311.17	.273	.535	
20	38	-7.62	3.70	.974	-8.299	3.708	7.492E+03	.0082	.171	.128	3.234E-04	301.71	.095	.039	
21	39	-7.62	7.07	.953	-8.461	7.074	1.001E+04	.0121	.309	.249	5.290E-04	306.89	.209	.101	
22	40	-7.12	7.62	.978	-7.125	8.509	3.643E+04	.0234	.597	.480	1.015E-03	320.87	.479	.231	
23	41	-3.81	7.62	.991	-3.810	8.501	2.714E+04	.0184	.468	.374	7.956E-04	314.55	.362	.315	
24	42	0.00	7.62	.991	0.000	8.501	3.099E+04	.0210	.535	.426	9.199E-04	316.29	.428	.392	
25	43	3.84	7.62	1.016	3.835	8.527	4.190E+04	.0285	.727	.572	1.236E-03	322.11	.566	.480	
26	44	7.14	7.62	1.003	7.137	8.514	4.126E+04	.0281	.716	.557	1.218E-03	322.69	.551	.506	
27	45	7.62	7.07	.978	8.489	7.875	4.429E+04	.0302	.769	.598	1.308E-03	323.63	.596	.547	
28	46	7.62	3.80	.991	8.501	3.797	2.159E+04	.0146	.371	.288	6.310E-04	310.24	.288	.463	
29	47	7.62	-.01	.991	8.501	-.013	1.341E+04	.0096	.230	.178	3.985E-04	306.08	.175	.270	
30	48	-7.62	3.80	1.994	-9.505	3.797	3.063E+03	.0020	.052	.042	8.619E-05	299.86	.041	.017	
31	49	-7.67	7.09	1.968	-9.479	7.087	3.609E+03	.0025	.062	.050	1.057E-04	300.52	.050	.023	
32	50	-7.12	7.62	2.032	-7.125	9.543	5.887E+03	.0039	.101	.081	1.710E-04	302.77	.077	.037	
33	51	-3.80	7.62	2.032	-3.797	9.543	.093E+03	.0054	.138	.111	2.352E-04	303.23	.108	.094	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(13) 1974 PAGE 20

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDWP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	1.790E+04	.0121	.307	.242	5.222E-04	308.44	.239	.283	
36	54	7.12	7.62	2.032	7.125	9.543	2.174E+04	.0147	.374	.291	6.356E-04	310.60	.289	.265	
37	55	7.62	7.87	2.019	9.530	7.874	1.462E+04	.0098	.250	.195	4.259E-04	306.42	.194	.178	
38	56	7.62	3.81	1.994	9.505	3.810	1.385E+04	.0093	.237	.184	4.033E-04	305.69	.189	.297	
39	57	7.62	-.01	1.994	9.505	-.013	7.202E+03	.0048	.123	.096	2.091E-04	302.26	.095	.131	
40	58	-7.62	3.81	4.039	-11.549	3.810	8.168E+02	.0005	.014	.011	2.365E-05	298.35	.011	.005	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.027E+03	.0007	.017	.014	2.973E-05	298.78	.013	.006	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.895E+03	.0013	.032	.026	5.489E-05	299.46	.022	.010	
43	61	-3.81	7.62	4.064	-3.810	11.575	2.636E+03	.0018	.045	.036	7.641E-05	299.77	.033	.029	
44	62	0.00	7.62	4.089	0.000	11.600	2.941E+03	.0020	.050	.040	8.524E-05	299.85	.036	.029	
45	63	3.84	7.62	4.051	3.835	11.562	3.346E+03	.0022	.057	.045	9.703E-05	300.33	.042	.036	
46	64	7.11	7.62	4.064	7.112	11.575	3.710E+03	.0025	.063	.049	1.076E-04	300.83	.047	.043	
47	65	7.62	4.55	4.039	11.549	4.547	2.018E+03	.0013	.034	.027	5.847E-05	299.47	.027	.025	
49	66	7.62	-.03	4.026	11.537	-.025	2.385E+03	.0016	.041	.032	6.906E-05	298.77	.031	.049	
60	67	7.18	7.13	0.000	7.175	7.899	7.878E+04	.0546	1.392	1.083	2.367E-03	345.16	1.090	1.000	1.023
61	68	-7.09	-.05	0.000	-7.087	-.051	1.292E+05	.0920	2.344	1.887	3.986E-03	377.97	1.902	1.000	1.722
62	69	-3.78	-.03	0.000	-3.785	-.025	9.469E+04	.0662	1.686	1.349	2.868E-03	354.85	1.348	1.000	1.239
63	70	0.00	0.00	0.000	0.000	0.000	7.701E+04	.0534	1.361	1.083	2.315E-03	345.65	1.082	1.000	1.080
64	71	3.78	.03	0.000	3.785	.025	6.742E+04	.0465	1.186	.933	2.016E-03	339.48	.933	1.000	.871
65	72	7.10	0.00	0.000	7.099	0.000	4.585E+04	.0314	.800	.623	1.361E-03	330.02	.629	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.480E+05	.1147	2.921	2.352	4.969E-03	399.94	2.378	1.000	2.146
67	74	-3.78	3.78	0.000	-3.785	3.785	7.879E+04	.0546	1.392	1.114	2.368E-03	345.23	1.112	1.000	1.023
68	75	0.00	3.76	0.000	0.000	3.759	7.350E+04	.0500	1.234	1.029	2.200E-03	339.08	1.028	1.000	.950
69	76	3.81	3.81	0.000	3.810	3.810	7.135E+04	.0493	1.257	.989	2.138E-03	342.01	.990	1.000	.924
70	77	7.12	3.75	0.000	7.125	3.747	4.568E+04	.0313	.796	.620	1.354E-03	328.61	.622	1.000	.585
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.827E+04	.0123	.313	.252	5.322E-04	306.40	.223	.165	
73	80	-7.48	-5.21	.074	-7.423	-5.207	6.087E+04	.0420	1.070	.862	1.819E-03	338.50	1.055	.777	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	1.002E+03	.0007	.017	.014	2.900E-05	298.13	-.539	-.397	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	9.384E+04	.0655	1.668	1.342	2.836E-03	352.55	1.357	1.000	1.225
76	83	6.93	-5.18	0.000	6.934	-5.182	5.706E+04	.0393	1.001	.780	1.703E-03	337.05	.783	1.000	.736
77	84	7.14	-5.18	0.000	7.137	-5.182	4.188E+04	.0285	.725	.564	1.233E-03	326.28	.563	.719	
78	85	7.42	-5.12	.074	7.436	-5.118	2.259E+04	.0152	.388	.302	6.604E-04	310.64	.260	.333	
79	86	7.62	-5.16	.444	7.955	-5.156	9.753E+03	.0065	.167	.130	2.836E-04	304.19	.088	.113	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	8.499E+04	.0592	1.508	1.209	2.564E-03	350.32	1.216	1.000	1.108
82	88	-5.31	-7.20	0.000	-5.309	-7.201	8.463E+04	.0589	1.502	1.204	2.554E-03	350.58	1.211	.996	
83	89	-5.25	-7.55	.074	-5.245	-7.565	7.693E+04	.0535	1.363	1.093	2.319E-03	349.15	1.152	.947	
84	90	-5.26	-7.62	.394	-5.258	-7.904	5.591E+04	.0381	.970	.778	1.650E-03	332.06	.795	.654	
85	91	-5.26	-7.62	.622	-5.258	-8.133	3.283E+04	.0223	.568	.455	9.654E-04	318.12	.472	.388	
86	92	5.25	-6.83	0.000	5.245	-6.833	8.169E+04	.0568	1.447	1.134	2.462E-03	348.72	1.139	1.000	1.063
87	93	5.22	-7.11	0.000	5.220	-7.112	8.983E+04	.0627	1.598	1.252	2.718E-03	353.73	1.257	1.104	
88	94	5.22	-7.55	.074	5.220	-7.565	9.396E+04	.0659	1.680	1.316	2.857E-03	359.83	1.365	1.198	
89	95	5.22	-7.62	.394	5.220	-7.904	8.425E+04	.0586	1.493	1.170	2.540E-03	349.32	1.203	1.056	
90	96	5.21	-7.62	.572	5.207	-8.082	7.172E+04	.0495	1.262	.989	2.147E-03	340.37	1.021	.897	
91	97	-7.55	-.09	.074	-7.565	-.089	9.367E+04	.0654	1.665	1.342	2.832E-03	353.09	1.396	.734	
92	98	7.55	0.00	.074	7.565	0.000	2.896E+04	.0196	.500	.388	8.499E-04	315.81	.370	.588	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(14) 1974 PAGE 21

TT	= 1711.11 K	CONFIGURATION	=IN-LINE
PTC	= 7.21E+06 N/M2	STEP	= 0.000 CM
TAW	= 1587.22 K	GAP	= .305 CM
MACH	= 6.85	ANGEL OF ATTACK	= 7.530 DEG
PT(2)	= 3.57E+06 N/M2	CP(GAS)	=1088.8 J/KG-K
P(F)	= 1.15E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 208.89 K		
Q-PRESS(FS)	= 2.42E+04 N/M2		
(RHO-V)FS	= 2.49E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.71E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 4.18E-02 KG/M2-S		
TTIME	= 28.02 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	STT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.959E+04	.0131	.336	.289	9.647E-04	305.43	.196	.115	
2	21	-7.62	-.05	.965	-8.476	-.051	1.523E+03	.0010	.026	.021	4.769E-05	299.30	.016	.008	
3	22	-7.62	-.05	1.981	-9.492	-.051	1.094E+02	.0001	.002	.001	3.136E-06	299.36	.002	.001	
4	23	-7.62	-.08	4.051	-11.562	-.076	9.590E+01	.0000	.001	.001	1.905E-06	298.98	.001	.000	
6	24	-7.11	7.10	0.000	-7.112	7.099	1.275E+05	.0906	2.321	1.861	3.466E-03	381.17	1.886	1.880	1.810
7	25	-3.78	7.09	0.000	-3.785	7.087	7.773E+04	.0537	1.376	1.093	2.3[illegible]E-03	345.34	1.095	1.000	1.071
8	26	0.00	7.09	0.000	0.000	7.087	8.072E+04	.0558	1.429	1.133	2.406E-03	347.64	1.136	1.000	1.114
9	27	3.81	7.69	0.000	3.810	7.087	8.034E+04	.0556	1.423	1.118	2.394E-03	348.17	1.118	1.000	1.110
10	28	-7.62	3.71	.495	-8.026	3.708	3.148E+04	.0211	.541	.434	9.107E-04	310.38	.387	.182	
11	29	-7.62	7.05	.432	-7.943	7.036	7.110E+04	.0490	1.255	1.006	2.110E-03	342.58	1.022	.542	
12	30	-7.14	7.62	.457	-7.137	7.968	5.625E+04	.0382	.977	.785	1.654E-03	323.20	.747	.306	
13	31	-3.84	7.62	.476	-3.835	7.961	6.411E+04	.0439	1.125	.897	1.894E-03	336.62	.914	.834	
14	32	0.00	7.62	.500	0.000	8.019	6.122E+04	.0418	1.071	.849	1.803E-03	332.84	.855	.752	
15	33	3.81	7.62	.521	3.810	8.031	6.633E+04	.0455	1.164	.912	1.959E-03	336.35	.919	.672	
16	34	7.12	7.62	.521	7.125	8.031	6.178E+04	.0423	1.089	.858	1.825E-03	335.62	.859	.869	
17	35	7.62	7.19	.444	7.655	7.867	6.844E+04	.0471	1.206	.933	2.029E-03	341.16	.542	.963	
18	36	7.62	3.80	.470	7.981	3.797	2.716E+04	.0183	.469	.363	7.888E-04	314.95	.355	.607	
19	37	7.62	-.03	.457	7.968	-.025	1.937E+04	.0130	.333	.258	5.609E-04	311.14	.255	.446	
20	38	-7.62	3.70	.978	-8.489	3.705	6.797E+03	.0045	.116	.093	1.984E-04	301.49	.064	.039	
21	39	-7.62	7.07	.953	-8.463	7.074	1.388E+04	.0093	.237	.191	3.997E-04	304.41	.152	.081	
22	40	-7.12	7.62	.778	-7.125	8.489	3.409E+04	.0231	.591	.474	9.944E-04	320.09	.479	.254	
23	41	-3.81	7.62	.991	-3.810	8.501	3.049E+04	.0206	.527	.420	8.888E-04	318.97	.406	.370	
24	42	0.00	7.62	.991	0.000	8.501	3.699E+04	.0290	.641	.508	1.079E-03	320.29	.504	.443	
25	43	3.84	7.62	1.016	3.835	8.527	4.426E+04	.0300	.769	.603	1.295E-03	324.22	.597	.534	
26	44	7.12	7.62	1.003	7.137	8.514	3.981E+04	.0270	.691	.536	1.165E-03	322.56	.526	.539	
27	45	7.62	7.87	.978	8.489	7.874	5.340E+04	.0365	.934	.723	1.572E-03	330.29	.724	.739	
28	46	7.62	3.80	.991	8.501	3.797	2.426E+04	.0163	.418	.323	7.034E-04	312.97	.324	.554	
29	47	7.62	-.01	.991	8.501	-.013	1.334E+04	.0089	.228	.177	3.856E-04	306.12	.173	.304	
30	48	-7.62	3.80	1.994	-9.505	3.797	1.864E+03	.0013	.032	.026	5.406E-05	299.69	.029	.012	
31	49	-7.62	7.89	1.968	-9.479	7.887	3.549E+03	.0024	.061	.049	1.019E-04	300.72	.048	.025	
32	50	-7.12	7.62	2.032	-7.125	9.543	7.289E+03	.0049	.125	.100	2.098E-04	303.63	.096	.051	
33	51	-3.80	7.62	2.032	-3.797	9.543	9.172E+03	.0061	.157	.125	2.642E-04	304.45	.123	.112	
34	52	3.80	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 67 RUN(14) 1974 PAGE 22

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	1.960E+04	.0132	.337	.264	5.667E-04	309.71	.261	.234	
36	54	7.12	7.62	2.032	7.125	9.543	2.059E+04	.0138	.384	.279	5.956E-04	310.86	.273	.279	
37	55	7.62	7.07	2.019	9.550	7.074	1.862E+04	.0103	.264	.203	4.448E-04	306.58	.206	.210	
38	56	7.62	3.81	1.994	9.505	3.810	1.632E+04	.0109	.280	.217	4.711E-04	307.02	.218	.323	
39	57	7.62	-.01	1.994	9.505	-.013	7.510E+03	.0050	.127	.098	2.134E-04	302.81	.098	.172	
40	58	-7.62	3.81	4.039	-11.559	3.810	2.006E+02	.0001	.005	.005	1.098E-05	299.01	.002	.005	
41	59	-7.62	7.11	4.026	-11.537	7.112	5.143E+02	.0003	.009	.007	1.478E-05	299.24	.006	.003	
42	60	-7.11	7.62	4.021	-7.112	11.[illegible]	7.615E+02	.0005	.013	.010	2.185E-05	299.37	.007	.003	
43	61	-3.81	7.62	4.064	-3.810	11.575	1.265E+03	.0007	.018	.014	3.037E-05	299.76	.012	.011	
44	62	0.00	7.62	4.089	0.000	11.609	1.445E+03	.0010	.026	.020	4.147E-05	299.83	.019	.011	
45	63	3.84	7.62	4.051	3.835	11.562	3.250E+03	.0022	.055	.043	9.306E-05	300.90	.041	.036	
46	64	7.11	7.62	4.064	7.112	11.575	2.794E+03	.0019	.048	.037	8.022E-05	300.63	.035	.036	
47	65	7.62	4.55	4.039	11.559	4.547	1.400E+03	.0009	.024	.019	4.036E-05	299.91	.019	.019	
49	66	7.62	-.03	4.026	11.537	-.025	1.510E+03	.0010	.026	.020	4.333E-05	299.44	.019	.034	
60	67	7.18	7.11	0.000	7.175	7.099	7.174E+04	.0491	1.288	.975	3.110E-03	354.39	.979	1.000	.981
61	68	-7.09	-.05	0.000	-7.087	-.051	1.186E+05	.0822	2.105	1.667	3.552E-03	371.15	1.702	1.000	1.651
62	69	-3.78	-.03	0.000	-3.785	-.025	9.945E+04	.0619	1.589	1.263	2.667E-03	353.90	1.262	1.000	1.236
63	70	0.00	0.00	0.000	0.000	0.000	7.250E+04	.0501	1.283	1.016	2.159E-03	344.98	1.016	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.361E+04	.0437	1.119	.877	1.883E-03	339.22	.877	1.000	.872
KN=	20, DATA POINTS PLACED ON TAPE 15														
65	72	7.10	3.81	0.000	7.099	3.800	4.174E+04	.0285	.728	.564	1.228E-03	320.41	.569	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.529E+05	.1026	2.627	2.106	5.421E-03	393.48	2.130	1.000	2.048
67	74	-3.78	3.78	0.000	-3.785	3.785	7.331E+04	.0505	1.294	1.031	2.177E-03	343.15	1.028	1.000	1.009
68	75	0.03	3.76	0.000	0.000	3.799	6.717E+04	.0463	1.188	.939	1.994E-03	342.95	.939	1.000	.924
69	76	3.81	3.81	0.000	3.810	3.810	6.748E+04	.0464	1.189	.932	2.001E-03	341.48	.932	1.000	.927
70	77	7.12	3.79	0.000	7.125	3.747	4.314E+04	.0294	.752	.583	1.266E-03	328.06	.585	1.000	.586
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.100E+04	.0073	.188	.151	3.167E-04	308.79	.137	.123	
73	80	-7.40	-5.21	.074	-7.423	-5.207	4.324E+04	.0294	.752	.603	1.286E-03	325.21	.725	.648	
74	81	-7.82	-5.23	0.000	-7.887	-5.232	1.780E+02	.0001	.002	.002	3.457E-06	299.80	-.430	-.385	
75	82	-6.86	-5.14	0.000	-6.856	-5.144	7.792E+04	.0539	1.380	1.106	2.322E-03	347.44	1.119	1.000	1.076
76	83	9.93	-5.18	0.000	9.939	-5.182	5.239E+04	.0359	.918	.712	1.548E-03	332.00	.718	1.000	.716
77	84	9.14	-5.18	0.000	9.137	-5.182	3.731E+04	.0253	.649	.503	1.091E-03	324.22	.493	.689	
78	85	7.42	-5.12	.074	7.436	-5.118	2.027E+04	.0136	.348	.270	5.864E-04	310.09	.235	.320	
79	86	7.62	-5.16	.444	7.955	-5.156	8.985E+03	.0069	.192	.118	2.564E-04	303.87	.083	.116	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	8.157E+04	.0565	1.446	1.155	2.434E-03	349.06	1.163	1.000	1.128
82	88	-5.31	-7.20	0.400	-5.309	-7.201	8.224E+04	.0570	1.460	1.166	2.457E-03	350.38	1.173	1.009	
83	89	-5.28	-7.55	.074	-5.249	-7.569	7.781E+04	.0539	1.381	1.103	2.324E-03	350.16	1.157	.995	
84	90	-5.26	-7.62	.394	-5.258	-7.904	5.951E+04	.0407	1.043	.833	1.755E-03	335.80	.856	.736	
85	91	-5.26	-7.62	.622	-5.258	-8.133	3.822E+04	.0259	.662	.529	1.115E-03	320.66	.554	.476	
86	92	5.25	-6.83	0.000	5.245	-6.833	7.797E+04	.0539	1.380	1.077	2.323E-03	347.27	1.081	1.100	1.076
87	93	5.22	-7.11	0.000	5.220	-7.112	8.570E+04	.0595	1.523	1.189	2.564E-03	352.25	1.195	1.103	
88	94	5.22	-7.55	.074	5.220	-7.565	9.059E+04	.0632	1.619	1.262	2.723E-03	357.93	1.303	1.283	
89	95	5.22	-7.62	.394	5.220	-7.904	8.297E+04	.0574	1.471	1.148	2.476E-03	349.05	1.180	1.095	
90	96	5.21	-7.62	.572	5.207	-8.082	7.222E+04	.0496	1.271	.992	2.140E-03	340.27	1.030	.951	
91	97	-7.55	-.09	.074	-7.565	-.089	8.210E+04	.0566	1.451	1.164	2.441E-03	344.85	1.149	.709	
92	98	7.65	0.00	.074	7.565	0.000	2.850E+04	.0192	.492	.381	8.286E-04	316.39	.369	.648	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 97 RUN(15) 1974 PAGE 23

TT = 1772.22 K		CONFIGURATION	=IN-LINE
PTC = 7.17E+06 N/M2		STEP	= 0.000 CM
TAW = 1643.33 K		GAP	= .178 CM
MACH = 6.76		ANGEL OF ATTACK	= 7.660 DEG
PT(2) = 4.09E+06 N/M2		CP(GAS)	=1088.4 J/KG-K
P(F) = 1.12E-01 N/M2		RECOVERY FACTOR	= .912
T(FS) = 208.89 K			
Q-PRESS(FS) = 2.43E+04 N/M2			
(RHO-V)FS = 2.46E+01 KG/M2-S			
(CP-RHO-V)FS = 2.68E+04 J/M2-S-K			
(RHO-TAU-CP)M = 2.04E+03 J/M2-S			
RE/METER = 1.97E+06			
H(FLAT PLATE) = 4.11E-02 KG/M2-S			
TTIME = 28.54 SEC			

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.266E+04	.0081	.211	.165	3.529E-04	303.74	.111	.075	
2	21	-7.62	-.05	.965	-8.476	-.051	6.066E+02	.0004	.010	.008	1.686E-05	299.63	.013	.002	
3	22	-7.62	-.05	1.981											
4	23	-7.62	-.08	4.051	-11.562	-.076	8.535E+01	.0000	.001	.001	1.649E-06	299.30	.001	.001	
6	24	-7.11	7.10	0.000	-7.112	7.099	1.271E+05	.0868	2.249	1.737	3.787E-03	379.60	1.770	1.000	1.723
7	25	-3.78	7.09	0.000	-3.785	7.087	8.236E+04	.0549	1.420	1.103	2.373E-03	347.26	1.104	1.000	1.088
8	26	0.00	7.09	0.000	0.000	7.087	8.386E+04	.0554	1.455	1.115	2.413E-03	349.12	1.120	1.000	1.107
9	27	3.84	7.09	0.000	3.835	7.087	8.196E+04	.0540	1.408	1.079	2.352E-03	348.01	1.079	1.000	1.079
10	28	-7.62	3.71	.495	-8.106	3.700	2.560E+04	.0194	.587	.388	[illegible]	[illegible]	.291	.180	
11	29	-7.62	7.04	.432	-7.943	7.036	8.691E+04	.0578	1.507	1.179	2.518E-03	354.29	1.215	.683	
12	30	-7.14	7.62	.457	-7.137	7.968	5.134E+04	.0333	.866	.676	1.450E-03	320.89	.632	.356	
13	31	-3.85	7.62	.470	-3.838	7.981	5.125E+04	.0341	1.177	.919	1.988E-03	337.94	.914	.616	
14	32	0.00	7.62	.508	0.000	8.019	5.848E+04	.0382	.996	.768	1.663E-03	330.08	.774	.691	
15	33	3.81	7.62	.521	3.810	8.031	5.958E+04	.0392	.996	.761	1.665E-03	331.02	.766	.710	
16	34	7.12	7.62	.521	7.128	8.031	6.098E+04	.0399	1.040	.786	1.738E-03	333.78	.808	.659	
17	35	7.62	5.89	.457	7.985	7.887	4.188E+04	.0276	.723	.555	1.182E-03	313.67	.528	.332	
18	36	7.62	3.80	.470	7.981	3.797	1.451E+04	.0093	.243	.183	5.094E-04	306.80	.171	.338	
19	37	7.62	-.03	.457	7.968	-.025	6.588E+03	.0054	.141	.107	2.391E-04	303.28	.094	.182	
20	38	-7.62	3.78	.978	-8.489	3.785	4.287E+03	.0027	.070	.055	1.170E-04	300.79	.046	.024	
21	39	-7.62	7.07	.953	-8.463	7.079	1.329E+04	.0117	.306	.239	5.169E-04	309.53	.194	.169	
22	40	-7.12	7.62	.978	-7.125	8.489	4.735E+04	.0308	.804	.628	1.343E-03	327.10	.645	.363	
23	41	-3.81	7.62	.991	-3.810	8.501	2.946E+04	.0190	.495	.384	8.266E-04	315.41	.367	.332	
24	42	0.00	7.62	.991	0.000	8.501	2.947E+04	.0199	.593	.388	8.238E-04	315.36	.371	.331	
25	43	3.84	7.62	1.016	3.835	8.527	3.299E+04	.0213	.556	.425	9.290E-04	317.34	.417	.386	
26	44	7.14	7.62	1.003	7.137	8.514	2.986E+04	.0188	.489	.379	8.178E-04	318.01	.357	.379	
27	45	7.62	7.07	.978	8.489	7.074	2.936E+04	.0190	.494	.373	8.268E-04	318.13	.371	.393	
28	46	7.62	3.80	.991	8.501	3.797	1.140E+04	.0075	.196	.153	3.284E-04	307.14	.155	.285	
29	47	7.62	-.01	.991	8.531	-.013	2.381E+03	.0015	.026	.030	6.622E-05	300.72	.027	.052	
30	48	-7.62	3.80	1.994	-9.598	3.797	4.937E+02	.0003	.008	.006	1.372E-05	299.61	.006	.003	
31	49	-7.62	7.09	1.968	-9.479	7.087	4.133E+03	.0027	.070	.059	1.166E-04	301.29	.053	.030	
32	50	-7.12	7.62	2.032	-7.125	9.543	8.997E+03	.0058	.150	.117	2.500E-04	304.03	.112	.063	
33	51	-3.80	7.62	2.032	-3.797	9.543	9.024E+03	.0058	.151	.117	2.516E-04	304.32	.115	.104	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(15) 1974 PAGE 24

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.823	9.543	1.111E+04	.0071	.186	.142	1.099E-04	305.02	.139	.129	
36	54	7.12	7.62	2.032	7.125	9.543	1.380E+04	.0067	.178	.132	2.930E-04	304.48	.130	.138	
37	55	7.62	7.87	2.019	9.310	7.076	1.204E+04	.0077	.201	.152	3.362E-04	305.78	.150	.159	
38	56	7.62	3.81	1.994	9.509	3.810	5.963E+03	.0038	.099	.075	1.660E-04	301.74	.075	.147	
39	57	7.62	-.01	1.994	9.508	-.013	9.565E+02	.0006	.016	.012	2.939E-05	299.79	.012	.023	
40	58	-7.62	3.81	4.039	-11.549	3.810	5.693E+01	.0000	.001	.001	1.582E-06	299.39	.000	.000	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.000E+02	.0001	.002	.002	4.098E-06	299.80	.001	.001	
42	60	-7.11	7.62	4.051	-7.112	11.562	3.000E+02	.0002	.006	.005	1.000E-05	299.86	-.000	-.000	
43	61	-3.81	7.62	4.064	-3.810	11.575	6.241E+02	.0004	.010	.008	1.734E-05	299.79	.006	.003	
44	62	0.00	7.62	4.089	0.000	11.600	4.398E+02	.0003	.007	.006	1.222E-05	299.64	.003	.005	
45	63	3.84	7.62	4.051	3.835	11.562	9.536E+02	.0006	.017	.013	2.762E-05	299.96	.010	.009	
46	64	7.11	7.62	4.064	7.112	11.575	1.382E+03	.0009	.023	.017	3.841E-05	300.10	.015	.016	
47	65	7.62	4.55	4.039	11.549	4.547	8.117E+02	.0005	.015	.010	2.256E-05	299.90	.010	.011	
49	66	7.62	-.01	4.026	11.537	-.025	3.674E+02	.0002	.006	.005	1.021E-05	298.98	.005	.009	
60	67	7.18	7.11	0.000	7.175	7.099	7.101E+04	.0474	1.236	.934	2.065E-03	344.88	.942	1.000	.947
61	68	-7.09	-.05	0.000	-7.087	-.051	1.086E+05	.0718	1.864	1.406	3.114E-03	368.07	1.472	1.000	1.420
62	69	-3.78	-.03	0.000	-3.785	-.025	9.321E+04	.0626	1.631	1.267	2.725E-03	356.69	1.266	1.000	1.250
63	70	0.00	0.00	0.000	0.000	0.000	7.869E+04	.0500	1.308	1.007	2.186E-03	346.89	1.007	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.594E+04	.0434	1.132	.864	1.890E-03	340.78	.864	1.000	.867
65	72	7.10	0.00	0.000	7.099	0.000	3.969E+04	.0289	.675	.510	1.127E-03	328.49	.516	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	1.377E+05	.0941	2.454	1.917	4.099E-03	389.15	1.939	1.000	1.880
67	74	-3.78	3.78	0.000	-3.785	3.785	7.779E+04	.0514	1.341	1.041	2.240E-03	346.43	1.039	1.000	1.027
68	75	0.00	3.76	0.000	0.000	3.759	7.164E+04	.0470	1.226	.947	2.049E-03	340.96	.946	1.000	.940
69	76	3.81	3.81	0.000	3.810	3.810	7.096E+04	.0468	1.220	.932	2.038E-03	343.00	.932	1.000	.935
70	77	7.12	3.75	0.000	7.125	3.747	3.948E+04	.0257	.670	.506	1.120E-03	326.69	.509	1.000	.514
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.519	-7.930	-5.194	5.300E+03	.0034	.088	.069	1.478E-04	302.30	.062	.072	
73	80	-7.49	-5.21	.074	-7.423	-5.207	5.320E+04	.0150	.390	.305	6.516E-04	313.00	.360	.452	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	3.011E+02	.0002	.008	.004	8.367E-06	299.60	-.310	-.364	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	6.278E+04	.0413	1.077	.841	1.799E-03	340.38	.851	1.000	.825
76	83	6.93	-5.18	0.000	6.934	-5.182	5.622E+04	.0369	.963	.728	1.609E-03	338.37	.731	1.000	.738
77	84	7.14	-5.18	0.000	7.137	-5.182	3.998E+04	.0260	.679	.513	1.134E-03	327.10	.520	.712	
78	85	7.42	-5.12	.074	7.436	-5.118	1.766E+04	.0113	.296	.223	4.942E-04	309.13	.179	.245	
79	86	7.62	-5.16	.444	7.955	-5.156	4.063E+03	.0026	.066	.051	1.131E-04	301.97	.007	.010	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	8.622E+04	.0573	1.494	1.163	2.495E-03	353.15	1.168	1.000	1.145
82	88	-5.31	-7.20	0.000	-5.309	-7.201	8.840E+04	.0588	1.535	1.194	2.563E-03	355.56	1.200	1.027	
83	89	-5.25	-7.55	.074	-5.245	-7.565	8.470E+04	.0565	1.472	1.146	2.499E-03	357.22	1.209	1.035	
84	90	-5.26	-7.62	.394	-5.258	-7.904	6.668E+04	.0439	1.144	.894	1.911E-03	340.19	.917	.785	
85	91	-5.26	-7.62	.622	-5.258	-8.133	4.411E+04	.0287	.748	.582	1.249E-03	324.41	.649	.521	
86	92	5.25	-6.83	0.000	5.245	-6.833	8.154E+04	.0541	1.410	1.072	2.356E-03	351.02	1.074	1.000	1.081
87	93	5.22	-7.11	0.000	5.220	-7.112	9.025E+04	.0601	1.568	1.192	2.619E-03	356.57	1.193	1.112	
88	94	5.22	-7.55	.074	5.220	-7.565	9.844E+04	.0660	1.721	1.309	2.874E-03	364.96	1.347	1.255	
89	95	5.22	-7.62	.394	5.220	-7.904	9.592E+04	.0640	1.669	1.269	2.787E-03	358.33	1.319	1.229	
90	96	5.21	-7.62	.572	5.207	-8.082	8.593E+04	.0569	1.484	1.128	2.479E-03	349.06	1.179	1.098	
91	97	-7.55	-.09	.074	-7.565	-.089	6.465E+04	.0423	1.105	.863	1.843E-03	333.75	.867	.889	
92	98	7.55	0.00	.074	7.565	0.000	2.127E+04	.0137	.357	.273	5.971E-04	313.15	.260	.504	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(16) 1974 PAGE 29

TT	= 1844.44 K	CONFIGURATION	=IN-LINE
PTC	= 7.03E+06 N/M2	STEP	= 0.000 CM
TAM	= 1701.67 K	GAP	= .178 CM
MACH	= 6.90	ANGEL OF ATTACK	= -.150 DEG
PT(T)	= 4.52E+06 N/M2	CP(GAS)	=1088.8 J/KG-K
P(F)	= 1.06E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 212.22 K		
D-PRESS(FS)	= 2.41E+04 N/M2		
(RHO-V)FS	= 2.38E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.59E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 1.96E+06		
H(FLAT PLATE)	= 2.18E-02 KG/M2-S		
TTIME	= 34.56 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	6.340E+03	.0039	.191	.169	1.794E-04	303.59	.113	.092	
2	21	-7.62	-.05	.965	-8.476	-.051	3.533E+02	.0002	.012	.010	1.086E-05	301.42	.006	.005	
3	22	-7.62	-.05	1.981	-9.492	-.051	1.311E+02	.0001	.004	.003	3.618E-06	300.76	.003	.003	
4	23	-7.62	-.08	4.051											
6	24	-7.11	7.10	0.000	-7.112	7.099	8.830E+04	.0366	1.000	1.000	1.632E-03	338.03	1.618	1.000	1.365
7	25	-3.78	7.09	0.000	-3.785	7.087	4.276E+04	.0267	1.312	1.162	1.202E-03	326.72	1.169	1.000	.994
8	26	0.00	7.09	0.000	0.000	7.087	4.230E+04	.0264	1.298	1.160	1.190E-03	326.88	1.169	1.000	.993
9	27	3.84	7.09	0.000	3.835	7.087	4.198E+04	.0262	1.288	1.143	1.180E-03	326.29	1.151	1.000	.975
10	28	-7.62	3.71	.495	-8.006	3.708	1.060E+04	.0065	.320	.282	2.934E-04	304.97	.241	.143	
11	29	-7.62	7.04	.432	-7.943	7.036	1.947E+04	.0120	.591	.521	5.414E-04	311.93	.507	.314	
12	30	-7.14	7.62	.457	-7.137	7.968	1.973E+04	.0121	.598	.527	5.479E-04	308.70	.499	.309	
13	31	-3.81	7.62	.470	-3.835	7.981	1.838E+04	.0113	.557	.494	5.107E-04	311.09	.489	.318	
14	32	0.00	7.62	.508	0.000	8.019	1.514E+04	.0093	.456	.409	4.200E-04	308.22	.468	.342	
15	33	3.81	7.62	.521	3.818	8.031	1.966E+04	.0121	.596	.530	5.468E-04	310.09	.528	.329	
16	34	7.12	7.62	.521	7.125	8.031	1.768E+04	.0109	.536	.472	4.913E-04	310.93	.475	.343	
17	35	7.62	7.09	.444	7.955	7.087	9.639E+03	.0059	.291	.259	2.391E-04	309.15	.209	.182	
18	36	7.62	3.83	.470	7.981	3.797	2.349E+03	.0014	.071	.062	6.485E-05	302.42	.040	.062	
19	37	7.62	-.03	.457	7.968	-.025	2.808E+03	.0019	.076	.066	6.922E-05	302.35	.036	.064	
20	38	-7.62	3.78	.976	-8.489	3.785	1.338E+03	.0008	.040	.036	3.696E-05	301.53	.028	.016	
21	39	-7.62	7.07	.993	-8.463	7.074	2.624E+03	.0016	.079	.070	7.245E-05	301.38	.047	.029	
22	40	-7.12	7.62	.978	-7.125	8.589	4.002E+03	.0025	.121	.106	1.106E-04	302.06	.096	.059	
23	41	-3.81	7.62	.991	-3.810	8.501	2.641E+03	.0016	.080	.071	7.298E-05	302.35	.055	.057	
24	42	0.00	7.62	.991	0.000	8.591	2.183E+03	.0013	.066	.059	6.031E-05	302.19	.040	.034	
25	43	3.84	7.62	1.016	3.835	8.527	5.147E+03	.0032	.155	.138	1.423E-04	303.46	.123	.107	
26	44	7.14	7.62	1.003	7.137	8.514	3.593E+03	.0022	.108	.095	9.932E-05	302.96	.079	.090	
27	45	7.62	7.07	.978	8.489	7.075	2.012E+03	.0012	.061	.053	5.559E-05	302.33	.049	.056	
28	46	7.62	3.80	.991	8.501	3.797	5.196E+02	.0003	.016	.014	1.435E-05	301.33	.010	.016	
29	47	7.62	-.01	.991	8.501	-.013	4.165E+02	.0003	.013	.011	1.150E-05	301.17	.009	.016	
30	48	-7.62	3.80	1.994	-9.505	3.797	8.759E+01	.0001	.003	.002	2.418E-06	300.77	.002	.001	
31	49	-7.62	7.09	1.968	-9.479	7.087	4.493E+02	.0003	.014	.012	1.240E-05	300.97	.011	.007	
32	50	-7.12	7.62	2.032	-7.125	9.543	5.712E+02	.0003	.017	.015	1.576E-05	300.56	.014	.008	
33	51	-3.80	7.62	2.032	-3.797	9.543	3.687E+02	.0002	.011	.010	1.018E-05	300.72	.009	.007	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 37 RUN(16) 1974 PAGE 26

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	[illegible]	7.62	2.032	[illegible]	[illegible]	5.168E+02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
36	54	7.12	7.62	2.032	7.125	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
37	55	7.62	7.87	2.819	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
38	56	7.62	3.81	1.994	9.538	7.874	[illegible]	.0001	.004	.004	[illegible]	308.73	-.008	-.008	
39	57	7.62	-.01	1.994	9.506	-.013	3.310E+01	.0003	.001	.001	9.133E-07	308.43	.000	.001	
40	58	-7.62	3.81	4.039											
41	59	-7.62	7.11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
42	60	-7.11	7.62	4.851	-7.112	11.582	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
43	61	-3.81	7.62	4.064	-3.810	11.575	4.315E+01	.0000	.001	.001	1.191E-06	300.47	.003	.000	
44	62	[illegible]	[illegible]	4.089											
45	63	3.84	7.62	4.051											
46	64	7.11	[illegible]	4.465											
47	65	7.62	4.39	4.039											
[illegible]	66	7.62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	67	7.18	7.10	[illegible]	7.175	7.099	3.118E+04	[illegible]	[illegible]	[illegible]	[illegible]	322.96	[illegible]	[illegible]	.739
61	68	-7.09	[illegible]	[illegible]	-7.087	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
62	69	-3.78	[illegible]	[illegible]	-3.785	[illegible]	[illegible]	[illegible]	[illegible]	1.522	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
63	70	[illegible]	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
64	71	3.78	.03	[illegible]	3.785	.025	3.463E+04	.0218	1.060	.941	[illegible]	323.26	.941	[illegible]	.883
65	72	7.10	[illegible]	0.000	7.099	0.000	2.109E+04	.0131	.643	.566	[illegible]	317.30	.573	1.000	
66	73	-7.11	[illegible]	[illegible]	-7.112	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
67	74	-3.78	3.76	[illegible]	-3.785	3.765	[illegible]	.0282	1.387	1.228	1.271E-03	[illegible]	1.228	[illegible]	[illegible]
68	75	0.00	3.76	0.000	0.000	3.759	[illegible]	.0200	.987	.881	[illegible]	[illegible]	[illegible]	1.000	.747
69	76	3.81	[illegible]	[illegible]	3.810	[illegible]	[illegible]	.0245	1.206	1.071	[illegible]	[illegible]	1.072	1.000	[illegible]
70	77	7.12	[illegible]	[illegible]	7.125	3.747	[illegible]	.0144	[illegible]	.624	[illegible]	[illegible]	.631	[illegible]	[illegible]
71	78	-7.62	[illegible]	.597											
72	79	-7.62	[illegible]	.619	-7.930	[illegible]	[illegible]	.0023	.115	.101	[illegible]	[illegible]	[illegible]	.059	
73	80	-7.40	[illegible]	.074	-7.423	[illegible]	[illegible]	.0090	.444	.391	[illegible]	[illegible]	.474	[illegible]	
74	81	-7.09	[illegible]	[illegible]	-7.087	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
75	82	-6.86	-5.14	[illegible]	-6.858	-5.144	2.820E+04	.0175	.862	.760	7.897E-04	320.72	.770	1.000	.653
76	83	6.93	-5.18	0.000	6.934	-5.182	3.142E+04	.0195	.962	.847	8.811E-04	322.92	.850	1.000	.728
77	84	7.14	-5.18	0.000	7.137	[illegible]	[illegible]	[illegible]	.744	[illegible]	[illegible]	[illegible]	.678	.797	
78	85	7.42	-5.12	.076	7.436	-5.118	1.472E+04	.0091	.446	.392	[illegible]	309.15	.350	.412	
79	86	7.62	-5.16	[illegible]	7.955	-5.156	4.853E+03	.0030	.146	.129	1.342E-04	[illegible]	.087	.102	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	4.043E+04	.0252	1.241	1.096	1.137E-03	[illegible]	1.110	1.000	.940
82	88	-5.31	-7.20	0.000	-5.309	-7.201	4.132E+04	[illegible]	1.270	[illegible]	1.163E-03	[illegible]	1.138	1.023	
83	89	-5.25	-7.85	.074	-5.245	-7.565	3.788E+04	.0236	1.164	1.028	1.066E-03	328.16	1.114	1.004	
84	90	-5.26	-7.62	.394	-5.228	-7.985	[illegible]	.0145	.714	.630	6.540E-04	310.83	.747	.673	
85	91	-5.26	-7.62	.622	-5.258	-8.133	3.904E+03	.0024	.120	.106	1.100E-04	300.97	.222	.200	
86	92	5.25	-6.83	0.000	5.245	-6.833	4.293E+04	.0268	1.319	1.168	1.209E-03	328.27	1.172	1.000	.999
87	93	5.22	-7.11	0.000	5.220	-7.112	4.877E+04	.0305	1.502	1.330	1.376E-03	331.47	1.335	1.138	
88	94	5.22	-7.55	.074	5.220	-7.565	5.342E+04	.0338	1.651	1.462	1.518E-03	335.86	1.534	1.308	
89	95	[illegible]	-7.62	.394	[illegible]	[illegible]	[illegible]	.0279	1.378	[illegible]	[illegible]	328.70	1.297	[illegible]	
90	96	5.21	-7.62	.572	5.207	-8.082	3.343E+04	.0208	1.022	.905	9.363E-04	321.03	.983	.839	
91	97	-7.55	-.09	.074	-7.569	-.089	2.311E+04	.0155	.760	.674	[illegible]	317.43	.690	.564	
92	98	7.55	0.03	.074	7.565	0.000	1.316E+04	.0081	.399	.351	3.694E-04	309.43	.352	.614	

LARC 8 FOOT HTST, MRSI GAP HEATING TEST 57 RUN(18) 1974 PAGE 27

TT	= 1722.22 K		CONFIGURATION	=IN-LINE
PTC	= 7.14E+06 N/M2		STEP	= 0.000 CM
TAW	= 1618.[illegible] K		GAP	= .178 CM
MACH	= 6.70		ANGEL OF ATTACK	=14.96[illegible] DEG
PT(I)	= 3.77[illegible]E+0[illegible] N/M2		CP(GAS)	=1000.[illegible] J/KG-K
P(F)	= 1.13[illegible]-01 N/M2		RECOVERY FACTOR	= .912
T(FS)	= 20[illegible].67 K			
Q-PRESS(FS)	= 2.62E+04 N/M2			
(RHO-V)FS	= 2.48[illegible]E+01 KG/M2-S			
(CP-RHO-V)FS	= 2.70E+04 J/M2-S-K			
(RHO-TAU-CPIN	= 2.0[illegible]E+03 J/M2-S			
RE/METER	= 3.03E+06			
H(FLAT PLATE)	= 7.[illegible]E-02 KG/M2-S			
TTIME	= 28.66 SEC		SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.08	.[illegible]	-7.99[illegible]	-.0[illegible]	3.[illegible]E+04	.0287	.337	.325	1.0[illegible]E-03	30[illegible].91	.838	.112	
2	21	-7.62	-.05	.965	-8.476	-.051	1.[illegible]E+03	.0012	.017	.017	3.254E-05	299.57	.009	.005	
3	22	-7.62	-.05	1.981	-9.[illegible]	-.0[illegible]	[illegible]E+02	.0003	.005	.005	1.285E-05	299.10	.005	.002	
4	23	-7.62	-.06	4.[illegible]	-1[illegible]	-.076	2.216E+02	.0001	.002	.002	6.237E-06	299.1[illegible]	.002	.001	
6	24	-7.[illegible]	7.[illegible]	[illegible]	-7.[illegible]	7.[illegible]	2.136E+05	.1[illegible]	[illegible]	2.[illegible]	[illegible]E-03	55[illegible]	2.[illegible]	1.[illegible]	1.095
7	25	-3.78	7.89	0.000	-3.785	7.087	1.321E+05	.0927	1.317	1.256	4.087E-03	368.36	1.256	1.000	1.032
8	26	0.00	7.89	0.000	0.000	7.087	1.414E+05	.0999	1.410	1.339	4.314E-03	395.90	1.344	1.000	1.133
9	27	3.[illegible]	7.[illegible]	[illegible]	3.[illegible]	7.[illegible]	1.[illegible]E+05	.0[illegible]	1.358	1.2[illegible]	[illegible]E-03	[illegible]	1.[illegible]	1.[illegible]	1.077
10	28	-7.62	3.71	.399	-8.026	3.706	7.410E+04	.0495	.702	.677	2.130E-03	325.40	.626	.201	
11	29	-7.62	7.04	.[illegible]	-7.[illegible]	7.0[illegible]	1.[illegible]E+05	.0968	1.375	1.3[illegible]	[illegible]E-03	387.[illegible]	1.349	.[illegible]	
12	30	-7.14	7.62	.457	-7.137	7.[illegible]	1.07[illegible]E+05	.0732	1.040	1.001	3.164E-03	346.39	.950	.431	
13	31	-3.[illegible]	7.[illegible]	.[illegible]	-3.[illegible]	[illegible]	1.[illegible]E+05	.[illegible]	1.[illegible]	1.[illegible]	[illegible]E-03	[illegible]	1.[illegible]	.[illegible]	
14	32	0.00	7.62	.508	0.000	[illegible]	1.330E+05	.0706	1.002	.946	3.090E-03	358.26	.954	.710	
15	33	3.[illegible]	7.[illegible]	.321	3.[illegible]	8.[illegible]	1.[illegible]E+05	.0710	1.308	.951	3.069E-03	39[illegible]	.943	.757	
16	34	7.12	7.62	.821	7.12[illegible]	8.[illegible]	1.164E+05	.0808	1.147	1.038	3.492E-03	374.26	1.080	.961	
17	35	7.[illegible]	7.[illegible]	.555	7.[illegible]	7.[illegible]	[illegible]E+04	.0[illegible]	.[illegible]	.[illegible]	[illegible]E-0[illegible]	[illegible]	.[illegible]	.[illegible]	
18	36	7.62	3.30	.470	7.981	3.797	1.[illegible]E+04	.0127	.180	.166	5.481E-04	308.65	.150	.270	
19	37	7.62	-.03	.457	7.960	-.025	2.000E+04	.0133	.183	.173	5.730E-04	311.40	.165	.264	
20	38	-7.6[illegible]	3.76	.9[illegible]	-8.[illegible]	3.7[illegible]	1.7[illegible]E+04	.0116	.16[illegible]	.1[illegible]9	[illegible]E-04	30[illegible]	.15[illegible]	.[illegible]	
21	39	-7.62	7.07	.953	-8.463	7.074	3.000E+04	.0198	.281	.271	8.534E-04	310.23	.223	.1[illegible]	
22	40	-7.12	7.62	.978	-7.125	8.589	[illegible]E+04	.0575	.817	.786	2.485E-03	33[illegible].38	.842	.3[illegible]	
23	41	-3.81	7.62	.991	-3.810	8.581	5.460E+04	.0366	.520	.496	1.583E-03	330.16	.480	.3[illegible]	
24	42	0.00	7.62	.991	0.000	8.[illegible]	[illegible]E+04	.0349	.[illegible]	.[illegible]	1.[illegible]E-03	328.91	.[illegible]	.3[illegible]	
25	43	3.81	7.62	1.016	3.839	8.527	7.129E+04	.0481	.683	.637	2.080E-03	340.48	.632	.501	
26	44	7.1[illegible]	7.62	1.003	7.137	8.514	6.917E+04	.0467	.663	.611	2.017E-03	339.[illegible]	.59[illegible]	.3[illegible]	
27	45	7.62	7.07	.978	8.489	7.074	6.892E+04	.0466	.662	.609	2.014E-03	341.71	.618	.562	
28	46	7.62	3.[illegible]	.991	8.601	3.797	1.563E+04	.0103	.14[illegible]	.134	4.452E-04	306.19	.133	.2[illegible]	
29	47	7.62	-.01	.991	8.501	-.013	5.566E+03	.0036	.052	.048	1.578E-04	301.50	.042	.067	
30	48	-7.62	3.[illegible]	1.994	-9.505	3.797	4.226E+03	.0028	.039	.038	1.196E-04	300.07	.037	.015	
31	49	-7.6[illegible]	7.[illegible]	1.968	-9.479	7.987	1.107E+04	.0073	.1[illegible]	.099	3.1[illegible]E-04	303.41	.099	.045	
32	50	-7.12	7.62	2.032	-7.125	9.543	2.508E+04	.0166	.236	.227	7.172E-04	31[illegible]	.222	.101	
33	51	-3.80	7.62	2.032	-3.797	9.543	1.977E+04	.0131	.185	.177	5.640E-04	310.[illegible]	.175	.139	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(18) 1974 PAGE 28

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.82	7.62	2.032	3.821	9.543	2.877E+04	.0191	.271	.252	8.237E-04	315.46	.258	.198	
36	54	7.12	7.62	2.032	7.125	9.543	2.961E+04	.0196	.278	.257	8.470E-04	314.46	.254	.231	
KN= 280 DATA POINTS PLACED ON TAPE 15															
37	55	7.62	7.07	2.019	9.530	7.074	3.280E+04	.0217	.309	.284	9.396E-04	315.58	.293	.267	
38	56	7.62	3.81	1.994	9.505	3.810	1.008E+04	.0066	.094	.086	2.856E-04	302.71	.086	.155	
39	57	7.62	-.01	1.994	9.505	-.013	1.323E+03	.0009	.012	.011	3.741E-05	299.21	.011	.017	
40	58	-7.62	3.81	4.039	-11.549	3.810	3.345E+02	.0003	.003	.003	1.511E-05	299.00	.004	.002	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.034E+03	.0007	.010	.009	2.925E-05	299.58	.008	.005	
42	60	-7.11	7.62	4.051	-7.112	11.562	1.701E+03	.0011	.016	.015	4.812E-05	299.79	.010	.003	
43	61	-3.81	7.62	4.064	-3.810	11.575	2.881E+03	.0019	.027	.025	8.066E-05	300.45	.023	.018	
44	62	0.00	7.62	4.089	0.000	11.600	2.508E+03	.0016	.023	.022	7.098E-05	300.17	.018	.018	
45	63	3.84	7.62	4.051	3.835	11.562	4.650E+03	.0030	.043	.040	1.314E-04	301.30	.037	.030	
46	64	7.11	7.62	4.064	7.112	11.575	6.767E+03	.0044	.063	.058	1.919E-04	303.38	.055	.050	
47	65	7.62	4.55	4.039	11.549	4.547	4.475E+03	.0029	.042	.038	1.267E-04	301.45	.038	.035	
49	66	7.62	-.03	4.026	11.537	-.025	4.313E+02	.0003	.004	.004	1.219E-05	299.22	.003	.005	
60	67	7.18	7.10	0.000	7.175	7.099	1.189E+05	.0833	1.103	1.020	3.599E-03	385.81	1.100	1.000	.945
61	68	-7.09	-.05	0.000	-7.087	-.051	2.020E+05	.1487	2.112	2.033	6.426E-03	445.97	2.053	1.000	1.688
62	69	-3.78	-.03	0.000	-3.785	-.025	1.405E+05	.0994	1.411	1.345	4.293E-03	397.38	1.344	1.000	1.127
63	70	0.00	0.00	0.000	0.000	0.000	1.256E+05	.0881	1.251	1.182	3.808E-03	387.45	1.182	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	1.110E+05	.0792	1.125	1.048	3.420E-03	376.65	1.048	1.000	.898
65	72	7.10	0.00	0.000	7.099	0.000	6.879E+04	.0470	.668	.616	2.031E-03	350.83	.623	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	2.371E+05	.1802	2.559	2.464	7.786E-03	481.80	2.492	1.000	2.045
67	74	-3.78	3.78	0.000	-3.785	3.785	1.192E+05	.0838	1.190	1.135	3.621E-03	382.62	1.132	1.000	.951
68	75	0.00	3.76	0.000	0.000	3.759	1.375E+05	.0972	1.380	1.303	4.198E-03	396.11	1.304	1.000	1.103
69	76	3.81	3.81	0.000	3.810	3.810	1.185E+05	.0806	1.148	1.080	3.484E-03	381.88	1.088	1.000	.915
70	77	7.12	3.75	0.000	7.125	3.747	6.197E+04	.0421	.598	.551	1.820E-03	348.05	.555	1.000	.478
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.390E+04	.0091	.130	.125	3.943E-04	303.96	.086	.068	
73	80	-7.40	-5.21	.074	-7.423	-5.287	5.920E+04	.0398	.565	.545	1.720E-03	334.63	.649	.517	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	1.927E+03	.0013	.018	.017	5.448E-05	299.44	-.450	-.309	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	1.289E+05	.0908	1.290	1.241	3.925E-03	392.99	1.257	1.000	1.031
76	83	6.93	-5.18	0.000	6.934	-5.182	8.933E+04	.0617	.876	.809	2.667E-03	360.92	.813	1.000	.700
77	84	7.14	-5.18	0.000	7.137	-5.182	6.498E+04	.0441	.626	.577	1.906E-03	346.64	.571	.703	
78	85	7.42	-5.12	.074	7.436	-5.118	2.942E+04	.0195	.277	.255	8.424E-04	315.83	.205	.282	
79	86	7.62	-5.16	.444	7.955	-5.156	1.070E+04	.0070	.100	.092	3.038E-04	305.79	.042	.051	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	1.390E+05	.0982	1.395	1.335	4.243E-03	396.80	1.346	1.000	1.114
82	88	-5.31	-7.20	0.000	-5.309	-7.201	1.387E+05	.0983	1.393	1.336	4.245E-03	398.96	1.348	1.001	
83	89	-5.25	-7.55	.074	-5.245	-7.565	1.288E+05	.0911	1.294	1.239	3.937E-03	398.10	1.298	.964	
84	90	-5.26	-7.62	.394	-5.258	-7.904	1.149E+05	.0726	1.031	.987	3.136E-03	371.07	1.216	.903	
85	91	-5.26	-7.62	.622	-5.258	-8.133	4.339E+03	.0028	.040	.039	1.225E-04	297.27	.261	.195	
86	92	5.25	-6.83	0.000	5.245	-6.833	1.309E+05	.0919	1.305	1.212	3.972E-03	392.15	1.214	1.000	1.043
87	93	5.22	-7.11	0.000	5.220	-7.112	1.397E+05	.0989	1.404	1.303	4.271E-03	398.32	1.309	1.075	
88	94	5.22	-7.55	.074	5.220	-7.565	1.492E+05	.1036	1.470	1.364	4.472E-03	407.86	1.401	1.155	
89	95	5.22	-7.62	.394	5.220	-7.904	1.391E+05	.0982	1.394	1.295	4.243E-03	394.78	1.338	1.103	
90	96	5.21	-7.62	.572	5.207	-8.082	1.250E+05	.0872	1.238	1.149	3.767E-03	380.71	1.193	.983	
91	97	-7.55	-.09	.074	-7.565	-.089	1.519E+05	.1067	1.515	1.460	4.609E-03	389.09	1.501	.731	
92	98	7.55	0.00	.074	7.565	0.000	4.194E+04	.0280	.393	.356	1.210E-03	325.56	.350	.561	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(19) 1974 PAGE 29

TT	= 1066.11 K	CONFIGURATION	=IN-LINE
PTC	= 7.14E+06 N/M2	STEP	= .254 CM
TAW	= 1740.89 K	GAP	= .170 CM
MACH	= 7.00	ANGEL OF ATTACK	= 7.630 DEG
PT(I)	= 4.95E+06 N/M2	CP(GAS)	=1088.9 J/KG-K
P(F)	= 1.05E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 213.33 K		
Q-PRESS(FS)	= 2.45E+04 N/M2		
(RHO-V)FS	= 8.37E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.58E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 2.00E+06		
H(FLAT PLATE)	= 4.30E-02 KG/M2-S		
TTIME	= 29.27 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.051	1.910E+05	.1313	3.024	2.481	5.483E-03	390.59	2.438	.764	
2	21	-7.62	-.05	.965	-8.476	-.051	6.356E+04	.0385	.961	.788	1.742E-03	334.39	.722	.218	
3	22	-7.62	-.05	1.981	-9.492	-.051	2.103E+04	.0138	.344	.282	6.231E-04	316.28	.276	.085	
4	23	-7.62	-.08	4.051	-11.562	-.076	7.810E+03	.0046	.116	.095	2.101E-04	308.16	.091	.027	
6	24	-7.11	7.10	0.000	-7.112	7.899	2.443E+05	.1590	3.965	3.249	7.189E-03	431.83	3.245	1.000	3.170
7	25	-3.78	7.09	0.000	-3.785	7.087	8.017E+04	.0490	1.223	.996	2.217E-03	351.55	.994	1.000	.978
8	26	0.00	7.09	0.000	0.000	7.087	8.407E+04	.0518	1.286	1.041	2.331E-03	350.97	1.043	1.000	1.020
9	27	3.84	7.09	0.000	3.835	7.087	8.687E+04	.0529	1.319	1.056	2.391E-03	353.70	1.061	1.000	1.055
10	28	-7.62	3.71	.495	-8.006	3.708	2.247E+05	.1450	3.616	2.967	6.557E-03	420.67	3.034	.883	
11	29	-7.62	7.04	.432	-7.943	7.036	1.831E+05	.1177	2.936	2.409	5.323E-03	410.21	2.455	.757	
12	30	-7.14	7.62	.457	-7.137	7.960	2.733E+05	.1853	4.621	3.788	8.379E-03	484.84	3.901	1.227	
13	31	-3.81	7.62	.478	-3.835	7.981	9.772E+04	.0603	1.503	1.229	2.727E-03	369.83	1.265	1.307	
14	32	0.00	7.62	.508	0.000	8.119	7.741E+04	.0472	1.178	.964	2.135E-03	343.73	.968	.928	
15	33	3.81	7.62	.321	3.810	8.031	6.512E+04	.0389	.970	.777	1.759E-03	337.91	.776	.732	
16	34	7.12	7.62	.521	7.125	8.031	8.795E+04	.0542	1.352	1.072	2.452E-03	356.73	1.122	1.256	
17	35	7.62	7.69	.444	7.955	7.987	2.347E+04	.0140	.350	.277	6.345E-04	315.12	.253	.283	
18	36	7.62	3.84	.470	7.981	3.797	6.546E+03	.0039	.097	.077	1.759E-04	308.38	.060	.105	
19	37	7.62	-.03	.457	7.968	-.025	4.814E+03	.0029	.071	.066	1.293E-04	305.35	.034	.056	
20	38	-7.62	3.78	.978	-8.489	3.785	8.488E+04	.0518	1.292	1.060	2.345E-03	355.89	.985	.290	
21	39	-7.62	7.07	.953	-8.463	7.074	1.148E+05	.0708	1.766	1.449	3.203E-03	360.01	1.409	.434	
22	40	-7.12	7.62	.978	-7.125	8.589	9.812E+04	.0605	1.509	1.236	2.735E-03	358.51	1.124	.346	
23	41	-3.81	7.62	.991	-3.810	8.581	6.586E+04	.0400	.999	.813	1.811E-03	339.23	.864	.313	
24	42	0.00	7.62	.991	0.000	8.591	4.761E+04	.0287	.716	.585	1.299E-03	326.48	.574	.558	
25	43	3.84	7.62	1.016	3.835	8.527	4.027E+04	.0243	.605	.485	1.097E-03	325.97	.480	.453	
26	44	7.15	7.62	1.013	7.137	8.514	3.453E+04	.0207	.517	.410	9.381E-04	322.37	.378	.421	
27	45	7.62	7.07	.978	8.489	7.074	1.566E+04	.0094	.233	.186	4.228E-04	313.27	.185	.207	
28	46	7.62	3.80	.991	8.501	3.797	1.700E+03	.0010	.025	.020	4.563E-05	304.51	.018	.032	
29	47	7.62	-.01	.991	8.501	-.013	3.250E+02	.0003	.008	.006	1.488E-05	303.81	.004	.007	
30	48	-7.62	3.81	1.996	-9.505	3.797	3.466E+04	.0208	.519	.426	9.418E-04	327.50	.421	.112	
31	49	-7.62	7.09	1.968	-9.479	7.087	5.457E+04	.0331	.828	.677	1.498E-03	334.55	.671	.287	
32	50	-7.12	7.62	2.032	-7.125	9.543	2.904E+04	.0174	.434	.356	7.875E-04	319.61	.347	.107	
33	51	-3.80	7.62	2.032	-3.797	9.543	1.827E+04	.0109	.272	.222	4.936E-04	313.99	.216	.218	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(19) 1974 PAGE 30

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	MT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	7.62	7.62	2.032	7.620	9.563	1.713E+02	.0102	.255	.295	4.628E-04	314.90	.293	.191	
36	54	7.12	7.62	2.032	7.125	9.563	1.082E+04	.0064	.161	.127	2.919E-04	309.97	.125	.140	
37	55	7.62	7.87	1.962	8.130	5.875	[illegible]	.0058	.174	.188	[illegible]	[illegible]	.104	.118	
38	56	7.62	3.81	1.944	8.505	3.810	4.883E+03	.0028	.069	.055	1.256E-04	303.50	.053	.094	
39	57	7.62	-.01	1.994	9.505	-.013	3.227E+02	.0002	.005	.004	8.655E-06	303.87	.004	.006	
40	58	-7.62	7.11	[illegible]	-11.837	7.118	[illegible]	.0078	.195	.159	[illegible]	318.71	.158	[illegible]	
41	59	-7.62	7.11	4.026	-11.837	7.112	2.332E+04	.0162	.379	.311	6.864E-04	319.27	.305	.094	
42	60	-7.11	7.62	4.021	-7.112	11.262	1.520E+04	.0091	.226	.186	5.185E-04	315.03	.176	.054	
43	61	-3.81	7.62	4.064	-3.810	11.575	2.908E+03	.0017	.043	.035	7.869E-05	305.74	.029	.030	
44	62	0.00	7.62	4.087	0.000	11.608	[illegible]	.0019	[illegible]	.014	[illegible]	[illegible]	.013	[illegible]	
45	63	3.81	7.62	4.051	3.835	11.562	2.362E+03	.0014	.038	.028	6.342E-05	303.37	.026	.025	
46	64	7.11	7.62	4.065	7.112	11.575	1.670E+03	.0020	.028	.020	5.481E-05	304.88	.017	.019	
47	65	7.62	4.55	4.039	11.549	4.547	1.558E+03	.0009	.021	.017	3.887E-05	304.61	.017	.019	
49	66	7.62	-.13	4.028	11.537	-.025	[illegible]	.0002	.008	.007	[illegible]	[illegible]	.008	.008	
60	67	7.16	7.13	0.000	7.175	7.099	7.337E+04	.0449	1.119	.887	2.029E-03	347.60	.893	1.000	.895
61	68	-7.09	-.05	0.000	-7.087	-.051	2.445E+05	.1611	4.018	3.293	7.285E-03	448.12	3.312	1.000	3.213
62	69	-3.78	-.03	0.000	-3.785	-.028	9.398E+04	.0580	1.339	1.177	[illegible]	[illegible]	1.173	1.000	1.186
63	70	0.00	0.00	0.000	0.000	0.000	8.178E+04	.0501	1.251	1.013	2.264E-03	351.03	1.013	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	7.219E+04	.0441	1.099	.881	1.993E-03	345.18	.880	1.000	.879
65	72	7.10	0.00	0.000	7.099	0.000	4.920E+04	.0299	.745	.590	1.350E-03	336.56	.599	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	2.758E+05	.1818	4.538	3.786	8.310E-03	467.28	3.772	1.000	3.665
67	74	-3.78	3.76	0.000	-3.785	3.785	8.174E+04	.0501	1.249	1.018	2.266E-03	350.42	1.013	1.000	.999
68	75	0.00	3.76	0.000	0.000	3.759	8.113E+04	.0497	1.238	1.003	2.246E-03	348.32	1.003	1.000	.990
69	76	3.81	3.81	0.000	3.810	3.810	7.295E+04	.0446	1.111	.890	2.015E-03	345.78	.890	1.000	.889
70	77	7.12	3.75	0.000	7.125	3.747	4.686E+04	.0284	.708	.561	1.284E-03	333.96	.566	1.000	.566
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.930E+05	.1240	3.093	2.538	5.609E-03	414.93	3.171	1.437	
73	80	-7.58	-5.21	.874	-7.423	-5.207	[illegible]	.1731	4.316	3.539	7.825E-03	528.67	3.539	1.404	
74	81	-7.09	-5.23	0.000											
75	82	-6.86	-5.14	0.000	-6.858	-5.144	1.666E+05	.1068	2.663	2.182	4.829E-03	395.37	2.208	1.000	2.130
76	83	6.93	-5.18	0.000	6.934	-5.182	6.515E+04	.0398	.992	.786	1.798E-03	345.90	.788	1.000	.793
77	84	7.13	-5.18	0.000	7.137	-5.182	[illegible]	.0330	.828	.652	[illegible]	[illegible]	.648	.868	
78	85	7.42	-5.12	.874	7.436	-5.118	3.129E+04	.0188	.469	.371	8.49[illegible]	321.59	.329	.418	
79	86	7.62	-5.16	.544	7.955	-5.156	2.066E+04	.0124	.308	.244	5.586E-04	315.21	.242	.256	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	8.780E+04	.0538	1.343	1.096	2.435E-03	355.31	1.079	1.000	1.074
82	88	-5.31	-7.20	0.000	-5.309	-7.201	9.059E+04	.0557	1.398	1.135	2.520E-03	359.59	1.117	1.036	
83	89	-5.25	-7.55	.074	-5.245	-7.565	9.469E+04	.0585	1.468	1.192	2.646E-03	362.03	1.231	1.141	
84	90	-5.26	-7.62	.394	-5.258	-7.904	8.845E+04	.0545	1.359	1.109	2.463E-03	357.19	1.299	1.204	
85	91	-5.26	-7.62	.622	-5.258	-8.133	[illegible]	.0319	.795	.649	1.442E-03	325.10	.837	.776	
86	92	5.25	-6.83	0.000	5.245	-6.833	8.542E+04	.0525	1.310	1.045	2.375E-03	355.22	1.045	1.000	1.048
87	93	5.22	-7.11	0.000	5.220	-7.112	9.174E+04	.0566	1.411	1.126	2.559E-03	359.16	1.126	1.077	
88	94	5.22	-7.55	.074	5.220	-7.565	9.754E+04	.0604	1.507	1.202	2.733E-03	365.42	1.231	1.178	
89	95	5.22	-7.62	.394	5.220	-7.904	[illegible]	.0579	1.444	1.182	2.618E-03	[illegible]	1.215	1.162	
90	96	5.21	-7.62	.572	5.207	-8.082	8.325E+04	.0511	1.274	1.016	2.309E-03	351.62	1.079	1.332	
91	97	-7.55	-.09	.874	-7.565	-.089	2.940E+05	.1790	4.465	3.662	8.094E-03	529.91	3.662	1.196	
92	98	7.55	0.00	.074	7.565	0.000	2.243E+04	.0134	.335	.265	6.071E-04	316.94	.252	.422	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(20) 1974 PAGE 31

TT	= 1766.67 K		CONFIGURATION	=STAGGERED	
P C	= 7.27E+06 N/M2		STEP	= .254 CM	
TAW	= 1638.33 K		GAP	= .178 CM	
MACH	= 6.76		ANGEL OF ATTACK	= 7.490 DEG	
PT(T)	= 4.15E+06 N/M2		CP(GAS)	=1088.9 J/KG-K	
P(F)	= 1.14E-01 N/M2		RECOVERY FACTOR	= .912	
T(FS)	= 206.67 K				
D-PRESS(FS)	= 2.48E+04 N/M2				
(RHO-V)FS	= 2.53E+01 KG/M2-S				
(CP-RHO-V)FS	= 2.75E+04 J/M2-S-K				
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S				
RE/METER	= 2.03E+06				
H(FLAT PLATE)	= 4.37E-02 KG/M2-S				
TTIME	= 27.73 SEC		SPECIFIC HEAT CORRECTED		

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.983	-7.993	-.051	1.728E+05	.1189	2.918	2.448	9.042E-03	396.78	2.414	.929	
2	21	-7.62	-.05	.965	-8.476	-.051	9.635E+04	.0369	.903	.758	1.563E-03	327.62	.686	.264	
3	22	-7.62	-.05	1.981	-9.492	-.051	1.930E+04	.0125	.306	.256	9.289E-04	312.30	.253	.097	
5	23	-7.62	-.08	4.821	-11.562	-.076	9.061E+03	.0089	.141	.120	2.473E-03	319.79	.119	.138	
6	24	-7.11	7.10	8.821	-7.112	7.059	2.191E+05	.1549	3.788	3.174	6.552E-03	423.16	3.193	1.000	2.905
7	25	-3.78	7.09	9.069	-3.785	7.087	6.746E+04	.0445	1.091	.909	1.888E-03	339.89	.903	1.000	.837
8	26	0.00	7.09	9.090	0.000	7.087	7.454E+04	.0494	1.211	1.003	2.095E-03	345.35	1.044	1.000	.929
9	27	3.81	7.09	8.808	3.835	7.087	7.823E+05	.0580	1.279	1.043	8.293E-03	348.93	1.158	1.000	.977
10	28	-7.62	3.71	.495	-8.006	3.708	1.894E+05	.1305	3.200	2.684	5.535E-03	394.96	2.728	.734	
11	29	-7.62	7.05	.532	-7.943	7.036	1.173E+05	.0792	1.942	1.629	3.360E-03	366.96	1.630	.810	
12	30	-7.14	7.62	.459	-7.137	7.968	2.048E+05	.1461	3.531	2.959	6.108E-03	419.70	3.092	.968	
13	31	-3.81	7.62	.571	-3.835	7.901	7.320E+04	.0491	1.202	1.018	2.042E-03	346.72	1.044	1.183	
14	32	0.00	7.62	.508	0.000	6.019	7.241E+04	.0479	1.174	.972	2.031E-03	342.69	1.000	.997	
15	33	3.81	7.62	.521	3.810	8.031	6.668E+04	.0440	1.078	.883	1.869E-03	338.77	.903	.864	
16	34	7.12	7.62	.521	7.138	8.031	7.224E+04	.0478	1.168	.946	2.024E-03	347.94	.981	.785	
17	35	7.62	7.09	.444	7.935	7.087	1.252E+05	.0846	2.075	1.678	3.509E-03	385.88	1.756	1.396	
18	36	7.62	3.84	.470	7.981	3.797	1.127E+04	.0073	.178	.144	3.076E-04	308.91	.125	.228	
19	37	7.62	-.03	.587	7.968	-.025	6.315E+03	.0041	.099	.080	1.721E-04	304.61	.059	.101	
20	38	-7.62	3.78	.978	-8.489	3.785	6.686E+04	.0444	1.086	.894	1.851E-03	335.55	.828	.223	
21	39	-7.62	7.07	.953	-8.463	7.074	6.335E+04	.0418	1.025	.859	1.772E-03	333.05	.831	.260	
22	40	-7.12	7.62	.978	-7.125	8.489	2.444E+04	.0158	.387	.325	6.701E-04	312.78	.212	.086	
23	41	-3.81	7.62	.991	-3.810	8.501	2.593E+04	.0168	.412	.345	7.128E-04	316.18	.317	.351	
24	42	0.00	7.62	.991	0.000	8.501	3.383E+04	.0216	.526	.436	9.185E-04	319.77	.415	.414	
25	43	3.84	7.62	1.016	3.835	8.527	2.978E+04	.0193	.474	.388	8.196E-04	317.60	.371	.354	
26	44	7.14	7.62	1.063	7.137	8.514	3.164E+04	.0205	.503	.408	8.703E-04	317.23	.390	.310	
27	45	7.62	7.07	.978	8.489	7.074	6.533E+04	.0430	1.052	.862	1.822E-03	334.97	.815	.648	
28	46	7.62	3.80	.991	8.501	3.797	8.329E+03	.0054	.131	.106	2.272E-04	306.04	.104	.189	
29	47	7.62	-.01	.991	8.501	-.013	2.402E+03	.0015	.038	.031	6.550E-05	303.34	.028	.059	
30	48	-7.62	3.80	1.994	-9.505	3.797	2.818E+04	.0183	.448	.376	7.734E-04	317.47	.373	.130	
31	49	-7.62	7.09	1.968	-9.479	7.087	2.817E+04	.0183	.449	.376	7.759E-04	318.96	.373	.117	
32	50	-7.12	7.62	2.032	-7.125	9.543	4.833E+03	.0031	.076	.064	1.318E-04	305.43	.061	.119	
33	51	-3.80	7.62	2.032	-3.797	9.543	4.793E+02	.0003	.007	.006	1.293E-05	302.71	.002	.002	
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(20) 1974 PAGE 32

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HI (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	7.62	7.62	2.032	9.823	9.543	6.230E+03	.0040	.098	.080	1.698E-04	309.41	.077	.074	
36	54	7.12	7.62	2.032	7.125	9.543	6.888E+03	.0044	.109	.088	1.878E-04	309.39	.085	.068	
37	55	7.62	7.07	2.019	9.530	7.074	1.899E+04	.0123	.301	.243	5.207E-04	312.59	.268	.165	
38	56	7.62	3.81	1.994	9.505	3.810	2.981E+04	.0191	.467	.378	8.082E-04	309.99	.377	.604	
39	57	7.62	-.01	1.994	9.505	-.013	1.056E+03	.0007	.017	.013	2.872E-05	302.74	.015	.023	
40	58	-7.62	3.81	4.039	-11.549	3.810	1.230E+04	.0079	.199	.163	3.381E-04	308.40	.159	.033	
41	59	-7.62	7.11	4.026	-11.537	7.112	1.238E+04	.0080	.196	.164	3.385E-04	308.89	.161	.050	
42	60	-7.11	7.62	4.051	-7.112	11.562	8.054E+03	.0052	.127	.106	2.190E-04	306.00	.104	.033	
43	61	-3.81	7.62	4.064	-3.810	11.575	1.612E+03	.0010	.025	.021	4.390E-05	303.42	.017	.019	
44	62	0.00	7.62	4.089	0.000	11.600	9.274E+02	.0006	.015	.012	2.524E-05	302.97	.009	.019	
45	63	3.84	7.62	4.051	3.835	11.562	5.244E+02	.0003	.008	.007	1.427E-05	302.81	.004	.003	
46	64	7.11	7.62	4.064	7.112	11.575	3.755E+02	.0002	.006	.005	1.019E-05	302.84	.002	.001	
47	65	7.62	4.55	4.039	11.549	4.547	7.727E+02	.0005	.012	.010	2.103E-05	302.91	.010	.008	
59	66	7.62	-.03	4.026	11.537	-.025	6.676E+00	.0000	.000	.000	1.817E-07	3[illegible].74	-.000	-.000	
60	67	7.18	7.10	0.000	7.175	7.099	9.900E+04	.0634	1.555	1.259	2.609E-03	354.51	1.258	1.000	1.192
61	68	-7.09	-.05	0.000	-7.087	-.051	1.840E+05	.1278	3.132	2.624	5.418E-03	404.18	2.598	1.000	2.402
62	69	-3.78	-.03	0.000	-3.785	-.025	9.110E+04	.0689	1.593	1.243	2.582E-03	358.13	1.241	1.000	1.155
63	70	0.00	0.00	0.000	0.000	0.000	7.599E+04	.0532	1.304	1.080	2.255E-03	349.41	1.079	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	6.924E+04	.0458	1.123	.920	1.943E-03	343.10	.920	1.000	.861
65	72	7.10	0.00	0.000	7.099	0.000	4.395E+04	.0288	.707	.573	1.223E-03	331.80	.580	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	2.494E+05	.1799	4.410	3.695	7.620E-03	449.81	3.710	1.000	3.382
67	74	-3.78	3.78	0.000	-3.785	3.785	7.282E+04	.0483	1.183	.985	2.046E-03	344.61	.981	1.000	.907
68	75	0.00	3.76	0.000	0.000	3.759	6.803E+04	.0453	1.111	.920	1.922E-03	340.44	.919	1.000	.852
69	76	3.81	3.81	0.000	3.810	3.810	6.660E+04	.0441	1.081	.885	1.869E-03	341.94	.889	1.000	.829
70	77	7.12	3.75	0.660	7.125	3.747	4.207E+04	.0276	.676	.547	1.169E-03	329.92	.551	1.000	.518
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	1.851E+05	.1288	3.156	2.648	5.460E-03	406.25	3.279	1.458	
73	80	-7.40	-5.21	.074	-7.423	-5.207	2.359E+05	.1790	4.407	3.699	7.623E-03	413.99	3.699	1.643	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	1.379E+02	.0001	.002	.002	3.752E-06	302.91	-.411	-.183	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	1.580E+05	.1084	2.656	2.224	4.594E-03	388.63	2.249	1.000	2.037
76	83	6.93	-5.18	0.000	6.934	-5.182	6.262E+04	.0414	1.014	.822	1.755E-03	341.39	.824	1.000	.778
77	84	7.14	-5.18	0.000	7.137	-5.182	5.973E+04	.0367	.899	.728	1.555E-03	335.97	.732	.888	
78	85	7.42	-5.12	.074	7.436	-5.118	4.429E+04	.0290	.710	.575	1.228E-03	327.47	.547	.664	
79	86	7.62	-5.16	.444	7.955	-5.156	4.257E+04	.0278	.682	.551	1.179E-03	326.05	.524	.636	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	8.393E+04	.0559	1.371	1.144	2.371E-03	351.90	1.141	1.000	1.051
82	88	-5.31	-7.20	0.000	-5.309	-7.201	8.378E+04	.0558	1.369	1.143	2.368E-03	352.46	1.139	.999	
83	89	-5.25	-7.55	.074	-5.245	-7.565	7.755E+04	.0518	1.269	1.059	2.194E-03	354.06	1.133	.993	
84	90	-5.26	-7.62	.394	-5.258	-7.904	5.343E+04	.0352	.862	.719	1.491E-03	336.08	.703	.686	
85	91	-5.26	-7.62	.622	-5.258	-8.133	2.361E+04	.0153	.375	.313	6.482E-04	314.82	.376	.329	
86	92	5.25	-6.83	0.000	5.245	-6.833	1.147E+04	.0074	.180	.147	3.118E-04	341.97	.357	1.000	.138
87	93	5.22	-7.11	0.000	5.220	-7.112	8.500E+04	.0568	1.392	1.135	2.408E-03	354.32	1.350	3.783	
88	94	5.22	-7.55	.074	5.220	-7.565	8.872E+04	.0594	1.457	1.188	2.520E-03	358.90	1.222	3.425	
89	95	5.22	-7.62	.394	5.220	-7.904	8.232E+04	.0549	1.345	1.097	2.326E-03	352.12	1.176	3.236	
90	96	5.21	-7.62	.572	5.207	-8.082	6.834E+04	.0451	1.106	.902	1.913E-03	340.35	.981	2.7[illegible]	
91	97	-7.55	-.09	.074	-7.565	-.089	2.253E+05	.1644	4.028	3.378	6.968E-03	463.25	3.681	1.41[illegible]	
92	98	7.55	0.00	.074	7.565	0.000	2.118E+04	.0137	.336	.272	5.819E-04	315.29	.263	.45[illegible]	

ORIGINAL PAGE IS OF POOR QUALITY

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(22) 1974 PAGE 33

TT	= 1800.89 K	CONFIGURATION	=STAGGERED
PTC	= 7.17E+06 N/M2	STEP	= 0.000 CM
TAW	= 1566.11 K	GAP	= 0.000 CM
MACH	= 6.60	ANGEL OF ATTACK	= 7.300 DEG
PT(2)	= 3.48E+04 N/M2	CP(GAS)	=1088.5 J/KG-K
P(FS)	= 1.15E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 245.44 K		
D-PRESS(FS)	= 2.39E+04 N/M2		
(RHO-V)FS	= 2.50E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.72E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 1.87E+06		
H(FLAT PLATE)	= 4.19E-02 KG/M2-S		
TTIME	= 28.24 SEC	SPECIFIC HEAT CORRECTED	

XBAR ANG YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.05	.483	-7.993	-.091	8.744E+02	.0006	.015	.012	2.543E-05	300.51	.005	.007	
2	21	-7.62	-.05	.985											
3	22	-7.62	-.05	1.981											
5	23	-7.62	-.08	4.851											
6	24	-7.11	7.14	0.000	-7.112	7.899	3.608E+04	.0249	.636	.519	1.067E-03	321.76	.530	1.000	.535
7	25	-3.78	7.09	0.000	-3.785	7.887	5.515E+04	.0386	.987	.796	1.646E-03	332.94	.865	1.000	.826
8	26	0.00	7.09	0.000	0.000	7.887	6.064E+04	.0423	1.082	.872	1.815E-03	335.66	.883	1.000	.910
9	27	3.84	7.09	0.000	3.835	7.887	5.000E+04	.0351	.898	.717	1.507E-03	330.42	.724	1.000	.796
10	28	-7.62	3.71	.495	-8.086	3.708	1.221E+03	.0008	.021	.017	3.550E-05	300.42	-.010	-.011	
11	29	-7.62	7.65	.432	-7.943	7.836	1.725E+03	.0012	.030	.024	5.019E-05	300.72	.006	.011	
12	30	-7.14	7.62	.457	-7.137	7.968	1.323E+03	.0009	.023	.019	3.848E-05	300.62	.001	.001	

KM= 280 DATA POINTS PLACED ON TAPE 15

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
13	31	-3.84	7.62	.478	-3.835	7.981	4.844E+03	.0033	.085	.068	1.409E-04	301.13	.043	.054	
14	32	0.00	7.62	.508	0.000	8.019	2.989E+03	.0020	.050	.041	8.601E-05	300.97	.014	.016	
15	33	3.81	7.62	.521	3.810	8.031	1.618E+03	.0011	.028	.023	4.818E-05	300.78	.008	.009	
16	34	7.12	7.62	.521	7.125	8.031	2.795E+03	.0019	.048	.038	8.132E-05	301.62	.013	.019	
17	35	7.62	7.09	.444	7.955	7.887	1.080E+04	.0073	.188	.150	3.150E-04	304.42	.124	.175	
18	36	7.62	3.86	.470	7.981	3.797	3.895E+03	.0026	.068	.053	1.133E-04	301.28	.039	.091	
19	37	7.62	-.03	.457	7.968	-.025	3.310E+03	.0022	.058	.045	9.614E-05	300.99	.018	.044	
20	38	-7.62	3.78	.978	-8.489	3.785	5.711E+01	.0000	.001	.001	1.661E-06	300.28	.001	.001	
21	39	-7.62	7.07	.953	-8.463	7.074	6.156E+01	.0000	.001	.001	1.790E-06	300.12	-.000	-.000	
22	40	-7.12	7.62	.978	-7.125	8.489	1.947E+02	.0001	.003	.003	5.662E-06	300.47	.003	.005	
23	41	-3.81	7.62	.991	-3.810	8.501	1.113E+02	.0001	.002	.002	3.238E-06	300.39	.001	.001	
24	42	0.00	7.62	.991	0.000	8.501	3.708E+01	.0000	.001	.001	1.078E-06	300.34	-.004	-.004	
25	43	3.84	7.62	1.016	3.835	8.527	1.195E+01	.0000	.000	.000	3.473E-07	300.26	-.000	-.000	
26	44	7.14	7.62	1.003	7.137	8.514	1.064E+02	.0001	.002	.002	3.095E-06	300.58	.001	.001	
27	45	7.62	7.07	.978	8.489	7.074	6.469E+02	.0004	.011	.009	1.881E-05	300.46	.004	.006	
28	46	7.62	3.86	.991	8.531	3.797	5.128E+00	.0000	.000	.000	1.491E-07	300.33	-.001	-.003	
29	47	7.62	-.01	.991	8.501	-.013	1.121E+02	.0001	.002	.002	3.261E-06	300.32	.001	.002	
30	48	-7.62	3.84	1.994	-9.505	3.797	5.972E+01	.0000	.001	.001	1.737E-06	300.32	.001	.001	
31	49	-7.62	7.09	1.968	-9.479	7.087	2.830E+01	.0000	.000	.000	8.230E-07	300.32	.001	.001	
32	50	-7.12	7.62	2.032	-7.125	9.543	6.451E+01	.0000	.001	.001	1.876E-06	300.40	.001	.001	
33	51	-3.80	7.62	2.032											
34	52	0.00	7.62	2.019											

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(22) 1974 PAGE 34

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	53	3.02	7.62	2.032											
36	54	7.12	7.62	2.032	7.125	9.543	4.239E+01	.0600	.001	.001	1.233E-06	300.40	.000	.000	
37	55	7.62	5.07	[illegible]	9.530	7.874	2.291E+01	.0000	.000	.000	6.663E-07	300.36	-.004	-.000	
38	56	7.62	3.81	1.994											
39	57	7.62	-.01	1.994	9.503	-.013	7.054E+00	.0000	.000	.000	2.051E-07	300.16	.000	.000	
40	58	-7.62	3.81	4.039	-11.549	3.810	5.964E+01	.0000	.001	.001	1.616E-06	300.03	.001	.001	
41	59	-7.62	7.11	4.039											
42	60	-7.11	7.62	4.051	-7.112	11.562	3.534E+01	.0000	.001	.000	1.027E-06	300.11	.001	.001	
43	61	-3.81	7.62	4.064	-3.810	11.577	3.971E+01	.0000	.001	.001	1.160E-06	300.07	.001	.001	
44	62	0.03	7.62	4.089	0.000	11.600	5.051E+01	.0000	.001	.001	1.505E-06	299.98	.003	.001	
45	63	3.84	7.62	4.051	3.835	11.562	1.581E+00	.0000	.000	.000	4.537E-08	300.03	.000	.000	
46	64	7.11	7.62	4.064	7.112	11.575	2.986E+01	.0000	.001	.000	8.681E-07	300.23	.000	.001	
47	65	7.62	4.55	4.039	11.549	4.547	3.596E+01	.0000	.001	.000	1.046E-06	300.09	.000	.001	
49	66	7.62	-.03	3.826	11.337	-.035	1.893E+00	.0000	.000	.000	5.516E-08	300.50	-.001	-.000	
60	67	7.18	7.10	0.000	7.175	7.099	4.880E+04	.0340	.878	.686	1.459E-03	334.70	.706	1.000	.732
61	68	-7.09	-.05	0.000	-7.087	-.051	4.336E+04	.0300	.785	.639	1.314E-03	323.64	.649	1.000	.659
62	69	-3.78	-.03	0.000	-3.785	-.025	8.388E+04	.0600	1.535	1.244	2.573E-03	356.38	1.256	1.000	1.291
63	70	0.00	0.00	0.000	0.000	0.000	6.000E+04	.0449	1.149	.959	1.794E-03	337.65	.957	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	5.797E+04	.0403	1.032	.823	1.731E-03	333.32	.824	1.000	.868
65	72	7.10	0.00	0.000	7.099	0.000	2.899E+04	.0199	.510	.403	8.552E-04	318.33	.565	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	6.052E+04	.0420	1.075	.877	1.843E-03	332.57	.886	1.000	.904
67	74	-3.78	3.78	0.000	-3.785	3.785	6.967E+04	.0485	1.241	1.006	2.081E-03	337.42	1.067	1.000	1.044
68	75	0.00	3.76	0.000	0.000	3.759	4.721E+04	.0325	.831	.670	1.393E-03	318.40	.667	1.000	.699
69	76	3.81	3.81	0.000	3.810	3.810	6.415E+04	.0447	1.145	.913	1.919E-03	336.22	.915	1.000	.963
70	77	7.12	3.75	0.000	7.125	3.747	3.081E+04	.0211	.539	.425	9.035E-04	319.21	.428	1.000	.453
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	8.926E+02	.0006	.015	.013	2.596E-05	300.59	-.019	-.019	
73	80	-7.40	-5.21	.074	-7.423	-5.207	1.007E+04	.0074	.189	.154	3.169E-04	303.54	.174	.221	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	1.371E+03	.0011	.029	.023	4.066E-05	300.03	-.090	-.317	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	5.367E+04	.0373	.954	.778	1.600E-03	331.66	.789	1.000	.803
76	83	6.93	-5.18	0.000	6.934	-5.182	4.002E+04	.0276	.706	.558	1.184E-03	322.28	.559	1.000	.594
77	84	7.14	-5.18	0.000	7.137	-5.182	2.929E+04	.0201	.516	.407	8.647E-04	319.57	.456	.617	
78	85	7.42	-5.12	.074	7.436	-5.118	1.564E+04	.0107	.273	.215	4.579E-04	300.16	.185	.331	
79	86	7.62	-5.16	.444	7.955	-5.156	2.282E+03	.0015	.040	.031	6.640E-05	301.16	.001	.002	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	6.893E+04	.0483	1.235	1.004	2.071E-03	341.03	1.041	1.000	1.039
82	88	-5.31	-7.20	0.000	-5.309	-7.201	4.918E+04	.0341	.873	.718	1.464E-03	331.64	.7	.717	
83	89	-5.25	-7.55	.074	-5.245	-7.565	2.462E+04	.0168	.431	.350	7.218E-04	310.82	.3	.293	
84	90	-5.26	-7.62	.394	-5.258	-7.904	4.989E+03	.0034	.087	.070	1.452E-04	301.60	.0	.030	
85	91	-5.26	-7.62	.622	-5.258	-8.133	8.623E+02	.0006	.015	.012	2.507E-05	300.45	-.027	-.026	
86	92	5.25	-6.83	0.000	5.255	-6.833	1.117E+04	.0077	.197	.156	3.298E-04	297.31	.119	1.280	.165
87	93	5.22	-7.11	0.000	5.220	-7.112	5.592E+04	.0390	.998	.792	1.673E-03	335.42	1.059	2.946	
88	94	5.22	-7.55	.074	5.220	-7.565	2.577E+04	.0176	.451	.358	7.565E-04	312.43	.332	.802	
89	95	5.22	-7.62	.394	5.220	-7.904	6.664E+03	.0045	.116	.092	1.940E-04	302.07	.047	.112	
90	96	5.21	-7.62	.572	5.207	-8.082	1.066E+03	.0007	.018	.015	3.102E-05	300.76	-.031	-.074	
91	97	-7.55	-.89	.074	-7.565	-.889	1.199E+04	.0081	.208	.170	3.495E-04	303.04	.131		
92	98	7.59	0.00	.074	7.565	0.000	1.703E+04	.0116	.298	.235	4.997E-04	311.81	.3		

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 57 RUN(21) 1974 PAGE 39

TT	= 1991.67 K	CONFIGURATION	=STAGGERED
PTC	= 7.10E+06 N/M2	STEP	= 0.000 CM
TAW	= 1385.80 K	GAP	= 0.000 CM
MACH	= 6.81	ANGLE OF ATTACK	= 7.530 DEG
PT(I)	= 2.19E+06 N/M2	CP(GAS)	=1000.7 J/KG-K
P(F)	= 1.15E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 195.56 K		
D-PRESS(FS)	= 2.12E+04 N/M2		
(RHO-V)FS	= 2.61E+01 KG/M2-S		
(CP-RHO-V)FS	= 2.62E+04 J/M2-S-K		
(RHO-TAU-CPIN	= 2.89E+03 J/M2-S		
RE/METER	= 1.9 E+06		
H(FLAT PLATE)	= [illegible]E-02 KG/M2-S		
TTIME	= 20.20 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTOMP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-7.62	-.85	.983	-7.993	-.851	8.777E+02	.0005	.012	.009	2.828E-05	298.89	.002	.003	
2	21	-7.62	-.85	.965	-8.476	-.851	4.269E+01	.0000	.001	.001	4.498E-06	298.85	.001	.001	
3	22	-7.62	-.85	1.981											
4	23	-7.62	-.86	4.051											
5	45	-7.11	7.10	[illegible]	-7.112	7.899	2.079E+04	.0338	.588	.477	1.838E-03	318.81	.486	1.000	.530
7	25	-3.78	7.09	[illegible]	-3.765	7.887	4.332E+04	.0351	.892	.719	1.963E-03	326.10	.726	1.000	.813
8	26	0.00	7.09	[illegible]	[illegible]	7.887	4.764E+04	.0388	.983	.787	1.723E-03	338.26	.797	1.000	.896
9	27	3.81	7.09	0.000	3.835	7.887	3.927E+04	.0318	.807	.654	1.515E-03	325.02	.646	1.000	.735
10	28	-7.62	5.71	.455	-8.886	3.788	1.2612E+03	.0013	.029	.022	6.389E-05	[illegible].87	-.008	-.008	
11	29	-7.62	7.86	.432	-7.947	7.836	1.921E+03	.0015	.038	.031	8.745E-05	299.41	.017	.024	
12	30	-7.16	7.62	.457	-7.137	7.868	1.327E+03	.0011	.029	.023	8.119E-05	299.25	.005	.018	
13	31	-3.85	7.68	.978	-3.835	7.881	[illegible]	.0020	[illegible]	.175	[illegible]	299.90	[illegible]	.017	
14	32	0.00	7.62	.308	0.000	8.019	2.788E+03	.0022	.055	.045	9.722E-05	299.45	.025	.031	
15	33	3.81	7.68	.521	3.818	8.031	1.671E+03	.0013	.033	.027	8.867E-05	299.18	.018	.013	
16	34	7.12	7.62	.521	7.125	8.031	1.352E+03	.0019	.047	.037	6.263E-05	299.70	.020	.037	
17	35	7.62	5.09	.444	7.937	5.787	[illegible]	.0034	.180	.099	5.711E-05	300.77	.079	.125	
18	36	7.62	3.80	.470	7.981	3.787	1.769E+03	.0022	.058	.045	9.720E-05	299.69	.033	.045	
19	37	7.62	-.03	.557	7.968	-.028	2.728E+03	.0021	.052	.053	9.593E-05	299.56	.025	.047	
20	38	-7.62	3.79	.978	-8.409	3.785	1.039E+01	.0000	.000	.000	3.634E-07	299.01	.000	.000	
21	39	-7.62	7.07	.953											
22	40	-7.12	7.62	.978	-7.125	8.409	1.288E+02	.0001	.003	.002	4.523E-06	299.15	.002	.004	
23	41	-3.81	7.62	.991	-3.810	8.501	8.557E+01	.0001	.002	.001	3.015E-06	299.11	.001	.001	
24	42	0.00	7.63	.991	0.000	8.501	2.18 E+01	.0000	.000	.000	7.703E-07	299.06	-.001	-.003	
25	43	3.84	7.62	1.016											
26	44	7.14	7.62	1.003	7.137	8.514	9.725E+01	.0001	.002	.002	3.415E-06	299.33	.001	.002	
27	45	7.62	7.07	.978	8.409	7.374	1.159E+02	.0001	.002	.002	4.068E-06	299.08	.000	.000	
28	46	7.62	3.80	.991	8.501	3.797	3.709E+01	.0000	.001	.001	1.302E-06	299.06	-.000	-.000	
29	47	7.62	-.01	.991	8.501	-.013	4.570E+00	.0000	.000	.000	1.604E-07	299.05	-.000	-.001	
30	48	-7.62	3.8	1.994											
31	49	-7.6	7.09	1.968	-9.479	7.087	8.702E+01	.0001	.002	.001	3.155E-06	298.94	.001	.003	
32	50	-7.12	7.62	2.032	-7.125	9.543	1.215E+02	.0001	.002	.002	4.266E-06	299.6	.002	.004	
33	51	-3.81	7.62	2.032	-3.797	9.543	3.682E+01	.0000	.001	.001	1.293E-06	298.9	.000	.001	
34	52	0.00	7.62	2.019											

6.3-60

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 67 RUN(21) 1974 PAGE 36

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	HSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	52	5.82	7.62	2.032											
36	53	7.12	7.62	2.032											
37	54	7.62	5.87	2.019											
34	56	7.62	3.81	1.994	9.505	3.810	8.348E+02	.0007	.017	.013	2.931E-05	299.02	.012	.032	
37	57	7.62	-.01	1.994											
40	58	-7.62	3.81	4.039	-11.549	3.810	8.445E+01	.0001	.002	.001	2.964E-06	298.74	.001	.002	
41	59	-7.62	7.11	4.026	-11.537	7.112	9.372E+01	.0001	.002	.001	2.833E-06	298.78	.001	.002	
42	60	-7.11	7.62	4.051	-7.112	11.562	7.192E+01	.0001	.001	.001	2.524E-06	298.77	.001	.002	
43	61	-3.81	7.62	4.064	-3.810	11.575	4.378E+01	.0000	.001	.001	1.537E-06	298.78	.001	.001	
44	62	0.00	7.62	4.089	0.000	11.600	5.197E+00	.0000	.000	.000	1.824E-07	298.78	.002	.001	
45	63	3.84	7.62	4.051	3.835	11.562	4.130E+01	.0000	.001	.001	1.450E-06	298.77	.001	.001	
46	64	7.11	7.62	4.064	7.112	11.575	9.890E-03	.0000	.000	.000	3.471E-10	298.85	-.000	-.000	
47	65	[illegible]	4.55	4.039	11.549	4.547	4.179E+01	.0000	.001	.001	1.467E-06	298.81	.001	.001	
49	66	[illegible]	-.03	4.026	11.537	-.025	9.890E-03	.0000	.000	.000	3.471E-10	298.85	-.000	-.000	
60	67	7.18	7.10	0.000	7.175	7.099	3.308E+04	.0268	.680	.534	1.191E-03	326.30	.547	1.000	.620
61	68	-7.09	-.05	0.000	-7.087	-.051	3.963E+04	.0287	.728	.591	1.278E-03	328.07	.599	1.000	.663
62	69	-3.78	-.03	0.000	-3.785	-.025	6.799E+04	.0557	1.414	1.141	2.478E-03	338.99	1.142	1.000	1.289
63	70	0.00	0.00	0.000	0.000	0.000	5.315E+04	.0432	1.097	.880	1.923E-03	331.03	.879	1.000	1.000
64	71	3.78	.03	0.000	3.785	.025	4.610E+04	.0374	.949	.753	1.662E-03	327.81	.754	1.000	.865
65	72	7.10	0.00	0.000	7.099	0.000	2.308E+04	.0185	.469	.369	8.226E-04	315.93	.371	1.000	
66	73	-7.11	3.77	0.000	-7.112	3.772	4.764E+04	.0386	.980	.796	1.718E-03	327.64	.803	1.000	.893
67	74	-3.78	3.78	0.000	-3.785	3.785	5.549E+04	.0452	1.146	.924	2.008E-03	331.32	.925	1.000	1.044
68	75	0.00	3.76	0.000	0.000	3.759	3.912E+04	.0313	.795	.638	1.393E-03	315.64	.636	1.000	.725
69	76	3.81	3.81	0.000	3.810	3.810	5.159E+04	.0419	1.065	.845	1.865E-03	330.51	.846	1.000	.970
70	77	7.12	3.75	0.004	7.125	3.747	2.369E+04	.0191	.486	.381	8.514E-04	316.37	.384	1.000	.443
71	78	-7.62	-5.19	.597											
72	79	-7.62	-5.19	.419	-7.930	-5.194	8.789E+02	.0007	.018	.014	3.086E-05	299.32	-.002	-.003	
73	80	-7.50	-5.21	.074	-7.423	-5.217	9.911E+03	.0076	.199	.162	3.490E-04	302.42	.180	.252	
74	81	-7.09	-5.23	0.000	-7.087	-5.232	6.654E+02	.0005	.013	.011	2.337E-05	298.69	-.193	-.271	
75	82	-6.86	-5.14	0.000	-6.858	-5.144	4.241E+04	.0343	.871	.707	1.527E-03	325.93	.715	1.000	.794
76	83	6.93	-5.18	0.000	6.934	-5.182	3.135E+04	.0252	.639	.502	1.120E-03	318.21	.543	1.000	.583
77	84	7.14	-5.18	0.048	7.137	-5.182	2.166E+04	.0174	.448	.346	7.715E-04	314.77	.372	.739	
78	85	7.52	-5.12	.074	7.436	-5.118	1.131E+04	.0090	.228	.179	3.995E-04	305.17	.156	.310	
79	86	7.62	-5.16	.445	7.995	-5.186	2.043E+03	.0016	.041	.032	7.176E-05	299.70	.009	.019	
81	87	-5.27	-6.93	0.000	-5.270	-6.934	5.466E+04	.0441	1.119	.905	1.961E-03	334.10	.924	1.000	1.020
82	88	-5.31	-7.20	0.000	-5.309	-7.201	3.737E+04	.0302	.767	.621	1.344E-03	324.20	.639	.692	
83	89	-5.25	-7.55	.074	-5.245	-7.565	2.225E+04	.0177	.449	.364	7.877E-04	308.21	.334	.361	
84	90	-5.26	-7.62	.394	-5.258	-7.904	4.448E+03	.0035	.089	.072	1.563E-04	300.36	.043	.046	
85	91	-5.26	-7.62	.622	-5.258	-8.133	2.699E+02	.0002	.005	.004	9.479E-06	299.39	-.025	-.027	
86	92	5.25	-6.83	0.000	5.245	-6.833	9.661E+03	.0076	.193	.152	3.377E-04	296.67	.348	1.000	.176
87	93	5.22	-7.11	0.000	5.220	-7.112	4.282E+04	.0348	.882	.697	1.546E-03	328.99	.887	2.611	
88	94	5.22	-7.55	.074	5.220	-7.565	2.184E+04	.0174	.442	.349	7.743E-04	309.41	.330	.972	
89	95	5.22	-7.62	.394	5.220	-7.904	5.718E+03	.0045	.118	.091	2.010E-04	300.69	.060	.176	
90	96	5.21	-7.62	.572	5.207	-8.082	1.236E+03	.0010	.025	.020	4.342E-05	299.42	-.011	-.034	
91	97	-7.55	-.09	.074	-7.565	-.089	1.067E+04	.0085	.214	.174	3.758E-04	302.32	.146	.243	
92	98	7.55	0.00	.074	7.565	0.000	1.327E+04	.0106	.268	.210	4.699E-04	308.44	.217	.584	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(1) 1974 PAGE 37

TT	= 1694.44 K	CONFIGURATION	=CALIB
PTC	= 7.10E+06 N/M2	STEP	= 0.000 CM
TAW	= 1572.22 K	GAP	= 0.000 CM
MACH	= 6.60	ANGEL OF ATTACK	= 7.700 DEG
PT(I)	= [illegible] N/M2	CP(GAS)	=1088.7 J/KG-K
P(F)	= 1.13E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= [illegible] K		
Q-PRESS(FS)	= 2.33E+04 N/M2		
(RHO-V)FS	= [illegible] KG/M2-S		
(CP-RHO-V)FS	= 2.66E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.44E+03 J/M2-S		
RE/METER	= 1.97E+06		
H(FLAT PLATE)	= 0. KG/M2-S		
TTIME	= 27.96 SEC		

SPECIFIC HEAT CORRECTED

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-19.05	-17.78	0.000	-19.050	-17.780	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	1.128	1.00?	
2	21	-19.05	-8.89	0.000	-19.050	-8.890	7.281E+04	.0509	0.000	1.037	2.231E-03	344.90	1.037	.997	
3	22	-19.05	0.00	0.000	-19.050	0.000	7.230E+04	.0505	0.000	1.030	[illegible]	[illegible]	1.030	.990	
4	23	-19.05	8.89	0.000	-19.050	8.890	7.177E+04	.0501	0.000	1.022	[illegible]	[illegible]	1.022	.983	
5	24	-19.05	17.78	0.000	-19.050	17.780	6.695E+04	[illegible]	0.000	.951	[illegible]	[illegible]	.951	[illegible]	
6	25	-12.70	-17.78	0.000	-12.700	-17.780	7.226E+04	.0505	0.000	1.036	2.213E-03	344.37	1.035	1.000	.862
7	26	-12.70	-8.89	0.000	-12.700	-8.890	7.402E+04	.0917	0.000	1.061	2.268E-03	345.27	1.061	1.000	.884
8	27	-12.70	0.00	0.000	-12.700	0.000	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	[illegible]	1.000	.875
9	28	-12.70	8.89	0.000	-12.700	8.890	[illegible]	.0516	0.000	1.059	2.263E-03	[illegible]	1.059	1.000	.882
10	29	-12.70	17.78	0.000	-12.700	17.780	7.103E+04	[illegible]	0.000	1.018	[illegible]	344.97	1.018	.980	
11	30	-6.35	-17.78	0.000	-6.350	-17.780	7.173E+04	.0501	0.000	1.019	[illegible]	[illegible]	1.019	[illegible]	
12	31	-6.35	-8.89	0.000	-6.350	-8.890	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
13	32	-6.35	0.00	0.000	-6.350	0.000	7.367E+04	[illegible]	0.000	[illegible]	2.265E-03	346.24	1.050	.990	
14	33	-6.35	8.89	0.000	-6.350	8.890	[illegible]	[illegible]	0.000	1.065	2.295E-03	[illegible]	1.065	[illegible]	
15	34	-6.35	17.78	0.000	-6.350	17.780	6.992E+04	[illegible]	0.000	.992	[illegible]	[illegible]	.992	.937	
16	35	0.00	-17.78	0.000	0.000	-17.780	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
17	36	0.00	-8.89	0.000	0.000	-8.890	7.644E+04	.0535	0.000	1.077	2.347E-03	347.93	1.077	[illegible]	
18	37	0.00	0.00	0.000	0.000	0.000	7.441E+04	.0920	0.000	1.047	2.282E-03	346.12	1.047	1.007	
19	38	0.00	8.89	0.000	0.000	8.890	[illegible]	[illegible]	0.000	1.020	[illegible]	[illegible]	1.020	.981	
20	39	0.00	17.78	0.000	0.000	17.780	7.181E+04	.0502	0.000	1.011	2.204E-03	345.26	1.011	.973	
21	40	6.35	-17.78	0.000	6.350	-17.780	[illegible]	[illegible]	0.000	1.026	[illegible]	[illegible]	1.026	[illegible]	
22	41	6.35	-8.89	0.000	6.350	-8.890	[illegible]	.0527	0.000	1.041	[illegible]	[illegible]	1.041	[illegible]	
23	42	6.35	0.00	0.000	6.350	0.000	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	1.023	.984	
24	43	6.35	8.89	0.000	6.350	8.890	7.388E+04	.0529	0.000	1.037	2.304E-03	346.77	1.037	.987	
25	44	6.35	17.78	0.000	6.350	17.780	[illegible]	[illegible]	0.000	1.023	2.273E-03	[illegible]	1.023	.986	
26	45	12.70	-17.78	0.000	12.700	-17.780	[illegible]	[illegible]	0.000	[illegible]	[illegible]	[illegible]	1.064	1.023	
27	46	12.70	-8.89	0.000	12.700	-8.890	[illegible]	[illegible]	0.000	1.027	[illegible]	[illegible]	1.027	.988	
28	47	12.70	0.00	0.000	12.700	0.000	7.987E+04	.0531	0.000	1.013	[illegible]	348.29	1.013	.974	
29	48	12.70	8.89	0.000	12.700	8.890	7.722E+04	.0541	0.000	1.032	2.374E-03	349.11	1.032	.992	
30	49	12.70	-17.78	0.000	12.700	-17.780	7.612E+04	[illegible]	0.000	1.017	[illegible]	[illegible]	1.017	.978	
31	50	19.05	-17.78	0.000	19.050	-17.780	[illegible]	.0586	0.000	[illegible]	[illegible]	353.01	1.041	[illegible]	
32	51	19.05	-8.89	0.000	19.050	-8.890	[illegible]	.0599	0.000	[illegible]	[illegible]	[illegible]	1.069	[illegible]	
33	52	19.05	0.00	0.000	19.050	0.000	8.560E+04	.0603	0.000	1.071	2.644E-03	355.08	1.071	1.009	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(1) 1974 PAGE 38

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDHP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	54	19.05	17.78	0.000	19.050	17.780	8.323E+04	.0585	0.000	1.040	2.566E-03	352.74	1.040	.982	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(3) 1974 PAGE 39

TT	= 1722.22 K		CONFIGURATION	=CALIB
PTC	= 6.55E+06 N/M2		STEP	= 0.000 CM
TAW	= 1590.00 K		GAP	= 0.000 CM
MACH	= 6.70		ANGEL OF ATTACK	= .100 DEG
PT(I)	= [illegible] N/M2		CP(GAS)	=1088.[illegible] J/KG-K
P(F)	= 1.03[illegible]E-01 N/M2		RECOVERY FACTOR	= .912
T(FS)	= 205.80 K			
Q-PRESS(FS)	= 2.21E+04 N/M2			
(RHO-V)FS	= 2.27E+01 KG/M2-S			
(CP-RHO-V)FS	= 2.47E+04 J/M2-S-K			
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S			
RE/METER	= 1.87E+06			
M(FLAT PLATE)	= 0. KG/M2-S			
TTIME	= 28.18 SEC		SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-19.05	-17.78	0.000	-19.050	-17.780	3.464E+04	.0230	0.000	1.064	1.088E-03	321.90	1.064	1.014	
2	21	-19.05	-8.89	0.000	-19.050	-8.890	3.022E+04	.0204	0.000	.943	9.628E-04	319.54	.943	.889	
3	22	-19.05	0.00	0.000	-19.050	0.000	3.252E+04	.0220	0.000	1.015	1.036E-03	320.28	1.016	.987	
4	23	-19.05	8.89	0.000	-19.050	8.890	3.257E+04	.0219	0.000	1.014	1.035E-03	327.17	1.014	.966	
5	24	-19.05	17.78	0.000	-19.050	17.780	3.526E+04	.0238	0.000	1.102	1.124E-03	321.30	1.102	1.050	
6	25	-12.70	-17.78	0.000	-12.700	-17.780	3.504E+04	.0237	0.000	1.036	1.118E-03	321.89	1.036	1.000	.891
7	26	-12.70	-8.89	0.000	-12.700	-8.890	3.490E+04	.0236	0.000	1.031	1.113E-03	321.83	1.031	1.000	.888
8	27	-12.70	0.00	0.000	-12.700	0.000	3.636E+04	.0246	0.000	1.079	1.160E-03	322.23	1.079	1.000	.925
9	28	-12.70	8.89	0.000	-12.700	8.890	3.575E+04	.0242	0.000	1.056	1.140E-03	321.69	1.056	1.000	.909
10	29	-12.70	17.78	0.000	-12.700	17.780	3.614E+04	.0244	0.000	1.068	1.153E-03	321.78	1.068	1.017	
11	30	-6.35	-17.78	0.000	-6.350	-17.780	3.582E+04	.0242	0.000	1.051	1.144E-03	322.50	1.051	1.015	
12	31	-6.35	-8.89	0.000	-6.350	-8.890	3.537E+04	.0239	0.000	1.037	1.129E-03	322.30	1.037	1.002	
13	32	-6.35	0.00	0.000	-6.350	0.000	3.638E+04	.0246	0.000	1.067	1.161E-03	322.62	1.067	1.035	
14	33	-6.35	8.89	0.000	-6.350	8.890	3.712E+04	.0251	0.000	1.089	1.185E-03	322.33	1.089	1.013	
15	34	-6.35	17.78	0.000	-6.350	17.780	3.626E+04	.0245	0.000	1.064	1.158E-03	321.88	1.064	1.007	
16	35	0.00	-17.78	0.000	0.000	-17.780	3.669E+04	.0248	0.000	1.090	1.171E-03	322.83	1.090	1.036	
17	36	0.00	-8.89	0.000	0.000	-8.890	3.578E+04	.0242	0.000	1.062	1.142E-03	322.42	1.062	1.012	
18	37	0.00	0.00	0.000	0.000	0.000	3.607E+04	.0244	0.000	1.071	1.151E-03	322.51	1.071	1.020	
19	38	0.00	8.89	0.000	0.000	8.890	3.484E+04	.0235	0.000	1.034	1.112E-03	321.64	1.034	.985	
20	39	0.00	17.78	0.000	0.000	17.780	3.620E+04	.0245	0.000	1.074	1.155E-03	321.91	1.074	1.024	
21	40	6.35	-17.78	0.000	6.350	-17.780	3.618E+04	.0245	0.000	1.061	1.155E-03	322.96	1.061	1.025	
22	41	6.35	-8.89	0.000	6.350	-8.890	3.435E+04	.0232	0.000	1.007	1.096E-03	322.29	1.007	.973	
23	42	6.35	0.00	0.000	6.350	0.000	3.565E+04	.0241	0.000	1.046	1.138E-03	322.46	1.046	1.014	
24	43	6.35	8.89	0.000	6.350	8.890	3.560E+04	.0241	0.000	1.044	1.136E-03	322.18	1.044	.971	
25	44	6.35	17.78	0.000	6.350	17.780	3.627E+04	.0245	0.000	1.063	1.157E-03	321.85	1.063	1.007	
26	45	12.70	-17.78	0.000	12.700	-17.780	3.647E+04	.0247	0.000	1.036	1.164E-03	322.92	1.036	.987	
27	46	12.70	-8.89	0.000	12.700	-8.890	3.484E+04	.0236	0.000	.989	1.112E-03	322.01	.989	.943	
28	47	12.70	0.00	0.000	12.700	0.000	3.600E+04	.0244	0.000	1.023	1.149E-03	322.49	1.023	.974	
29	48	12.70	8.89	0.000	12.700	8.890	3.671E+04	.0248	0.000	1.043	1.172E-03	322.90	1.043	.994	
30	49	12.70	17.78	0.000	12.700	17.780	3.663E+04	.0248	0.000	1.040	1.169E-03	322.32	1.040	.991	
31	50	19.05	-17.78	0.000	19.050	-17.780	3.807E+04	.0258	0.000	1.018	1.217E-03	324.15	1.018	.983	
32	51	19.05	-8.89	0.000	19.050	-8.890	3.896E+04	.0264	0.000	1.042	1.243E-03	324.41	1.042	1.006	
33	52	19.05	0.00	0.000	19.050	0.000	3.975E+04	.0269	0.000	1.064	1.271E-03	324.45	1.063	1.031	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(3) 1974 PAGE 40

T/C	CH	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	HT (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
35	54	19.05	17.78	0.000	19.050	17.780	3.924E+04	.0266	0.000	1.050	1.254E-03	324.30	1.090	.994	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(4) 1974 PAGE 41

TT	= [illegible] K	CONFIGURATION	=CALIB
PTC	= 1.792E+07 N/M2	STEP	= 0.000 CM
TAW	= 1987.78 K	GAP	= 0.000 CM
MACH	= 6.45	ANGEL OF ATTACK	= .000 DEG
PT(T)	= [illegible] N/M2	CP(GAS)	=1080.0 J/KG-K
P/PT	= 3.022E-01 N/M2	RECOVERY FACTOR	= .912
T(FS)	= 221.67 K		
Q-PRESS(FS)	= 6.012E+04 N/M2		
(RHO-V)FS	= 6.17E+01 KG/M2-S		
(CP-RHO-V)FS	= 6.712E+04 J/M2-S-K		
(RHO-TAU-CP)M	= 2.04E+03 J/M2-S		
RE/METER	= 5.69E+06		
M(FLAT PLATE)	= 0. KG/M2-S		
TTIME	= 33.48 SEC	SPECIFIC HEAT CORRECTED	

XBAR AND YBAR ARE SURFACE DISTANCES FROM TILE CENTER

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	MI (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
1	20	-19.05	-17.78	0.000	-19.050	-17.780	7.001E+04	.0483	0.000	1.111	8.386E-04	341.80	1.111	1.065	
2	21	-19.05	-8.89	0.000	-19.050	-8.890	6.468E+04	.0445	0.000	1.029	7.731E-04	341.44	1.029	.964	
3	22	-19.05	0.00	0.000	-19.050	0.000	6.371E+04	.0438	0.000	1.002	7.610E-04	340.91	1.002	.949	
4	23	-19.05	8.89	0.000	-19.050	8.890	6.466E+04	.0445	0.000	1.024	7.732E-04	341.10	1.024	.964	
5	24	-19.05	17.78	0.000	-19.050	17.780	6.648E+04	.0457	0.000	1.052	7.933E-04	340.85	1.052	.989	
6	25	-12.70	-17.78	0.000	-12.700	-17.780	6.386E+04	.0439	0.000	1.041	7.637E-04	340.47	1.041	1.000	.891
7	26	-12.70	-8.89	0.000	-12.700	-8.890	6.518E+04	.0452	0.000	1.049	7.686E-04	339.93	1.049	1.000	.898
8	27	-12.70	0.00	0.000	-12.700	0.000	6.326E+04	.0438	0.000	1.031	7.539E-04	339.97	1.031	1.000	.882
9	28	-12.70	8.89	0.000	-12.700	8.890	6.504E+04	.0447	0.000	1.063	7.767E-04	340.41	1.060	1.000	.906
10	29	-12.70	17.78	0.000	-12.700	17.780	6.599E+04	.0455	0.000	1.077	7.690E-04	341.70	1.077	1.013	
11	30	-6.35	-17.78	0.000	-6.350	-17.780	6.562E+04	.0457	0.000	1.050	7.691E-04	340.86	1.050	1.006	
12	31	-6.35	-8.89	0.000	-6.350	-8.890	[illegible]	.0449	0.000	1.042	[illegible]	340.80	1.048	1.011	
13	32	-6.35	0.00	0.000	-6.350	0.000	6.299E+04	.0443	0.000	1.037	7.322E-04	340.23	1.037	.980	
14	33	-6.35	8.89	0.000	-6.350	8.890	6.459E+04	.0450	0.000	1.079	7.827E-04	341.16	1.079	1.057	
15	34	-6.35	17.78	0.000	-6.350	17.780	6.551E+04	.0450	0.000	1.077	7.815E-04	341.13	1.077	1.018	
16	35	0.00	-17.78	0.000	0.000	-17.780	6.581E+04	.0454	0.000	1.084	7.902E-04	342.08	1.084	1.018	
17	36	0.00	-8.89	0.000	0.000	-8.890	6.588E+04	.0451	0.000	1.077	7.838E-04	341.71	1.017	1.013	
18	37	0.00	0.00	0.000	0.000	0.000	6.316E+04	.0437	0.000	1.045	7.597E-04	340.61	1.044	.982	
19	38	0.00	8.89	0.000	0.000	8.890	[illegible]	.0429	0.000	1.078	7.598E-04	340.13	1.078	.965	
20	39	0.00	17.78	0.000	0.000	17.780	6.519E+04	.0448	0.000	1.070	7.790E-04	341.14	1.070	1.007	
21	40	6.35	-17.78	0.000	6.350	-17.780	6.611E+04	.0460	0.000	1.082	7.994E-04	342.60	1.082	1.039	
22	41	6.35	-8.89	0.000	6.350	-8.890	6.427E+04	.0452	0.000	1.050	7.684E-04	341.76	1.050	.999	
23	42	6.35	0.00	0.000	6.350	0.000	6.315E+04	.0441	0.000	1.038	7.698E-04	341.28	1.038	.989	
24	43	6.35	8.89	0.000	6.350	8.890	6.313E+04	.0448	0.000	1.054	7.785E-04	341.57	1.054	1.022	
25	44	6.35	17.78	0.000	6.350	17.780	6.588E+04	.0453	0.000	1.064	7.854E-04	341.27	1.064	1.004	
26	45	12.70	-17.78	0.000	12.700	-17.780	6.752E+04	.0465	0.000	1.064	8.069E-04	342.83	1.064	1.001	
27	46	12.70	-8.89	0.000	12.700	-8.890	6.604E+04	.0455	0.000	1.041	7.897E-04	341.93	1.041	.979	
28	47	12.70	0.00	0.000	12.700	0.000	6.978E+04	.0452	0.000	1.036	7.858E-04	341.97	1.036	.975	
29	48	12.70	8.89	0.000	12.700	8.890	6.712E+04	.0462	0.000	1.059	8.032E-04	343.01	1.059	.996	
30	49	12.70	17.78	0.000	12.700	17.780	6.645E+04	.0457	0.000	1.048	7.946E-04	343.37	1.048	.946	
31	50	19.05	-17.78	0.000	19.050	-17.780	7.157E+04	.0496	0.000	1.066	8.585E-04	345.81	1.066	1.024	
32	51	19.05	-8.89	0.000	19.050	-8.890	7.133E+04	.0492	0.000	1.083	8.554E-04	345.58	1.063	1.021	
33	52	19.05	0.00	0.000	19.050	0.000	7.090E+04	.0488	0.000	1.050	8.451E-04	344.99	1.050	1.000	

LARC 8 FOOT HTST, HRSI GAP HEATING TEST 58 RUN(4) 1974 PAGE 42

T/C	CM	X (CM)	Y (CM)	Z (CM)	XBAR (CM)	YBAR (CM)	Q (W/M2)	MI (KG/M2-S)	HTDMP	HT/HF	NSTT	T (K)	HTC/HF	HTC/HEC	HT/H-CNTR
34	54	19.05	17.78	0.000	19.050	17.780	7.134E+04	.0493	0.000	1.063	8.558E-04	345.86	1.063	1.003	

KN= 86 DATA POINTS PLACED ON TAPE 15

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LARC 8 FOOT HTST, HRSI GAP HEATING TEST 0 RUN(0) 1974 PAGE 0

	G-CF	LOC	X	Y	Z	X(BAR)	HTC/HCC	Q(RAD)	GAP	STEP	FLOW-L	GAP-D	PATH	MACH	RE/M	M-THK
130004.012	1	3	-7.14	7.62	.46	.483	.071	0.00	.070	0.000	.55	6.477	0	6.54	2.067E+06	.182
130004.022	1	3	-7.12	7.64	.98	.499	.013	0.00	.070	0.000	.57	6.477	0	6.54	2.067E+06	.182
130004.032	1	3	-7.12	7.62	2.03	.499	.005	0.00	.070	0.000	.57	6.477	0	6.54	2.067E+06	.182
130004.043	1	3	-3.81	7.62	4.06	3.810	.007	0.00	.070	0.000	3.88	6.477	0	6.54	2.067E+06	.182
130004.064	1	4	3.78	.03	0.00	11.405	1.000	0.00	.070	0.000	25.19	6.477	0	6.54	2.067E+06	.182
130004.076	1	5	6.93	-5.18	0.00	14.554	1.000	0.00	.070	0.000	28.34	6.477	0	6.54	2.067E+06	.182
130004.087	1	5	5.22	-7.11	0.00	12.840	1.040	0.00	.070	0.000	26.63	6.477	0	6.54	2.067E+06	.182
130005.006	1	6	-7.11	7.10	0.00	.508	1.000	0.00	.070	0.000	14.29	6.477	0	6.61	2.001E+06	.182
130005.016	1	3	7.12	7.62	.92	14.745	.501	0.00	.070	0.000	14.81	6.477	0	6.61	2.001E+06	.182
130005.027	1	1	7.62	7.07	.98	15.240	.774	0.00	.070	0.000	29.03	6.477	0	6.61	2.001E+06	.182
130005.038	1	1	7.62	3.81	1.99	15.240	.064	0.00	.070	0.000	29.03	6.477	0	6.61	2.001E+06	.182
130005.065	1	4	3.78	.03	0.00	11.405	1.000	0.00	.070	0.000	25.19	6.477	0	6.61	2.001E+06	.182
130005.076	1	5	6.93	-5.18	0.00	14.554	1.000	0.00	.070	0.000	28.34	6.477	0	6.61	2.001E+06	.182
130005.088	1	3	5.22	-7.35	.07	12.840	.920	0.00	.070	0.000	12.91	6.477	0	6.61	2.001E+06	.182
130006.007	1	5	-3.78	7.09	0.00	3.835	1.000	0.00	.070	0.000	17.62	6.477	0	6.50	2.001E+06	.182
130006.017	1	1	7.62	7.09	.44	15.240	1.071	0.00	.070	0.000	29.03	6.477	0	6.50	2.001E+06	.182
130006.027	1	1	7.62	7.07	.98	15.240	1.271	0.00	.070	0.000	29.03	6.477	0	6.50	2.001E+06	.182
130006.037	1	1	7.62	7.07	2.02	15.240	.461	0.00	.070	0.000	29.03	6.477	0	6.50	2.001E+06	.182
130006.047	1	1	7.62	4.55	4.04	15.240	.117	0.00	.070	0.000	29.03	6.477	0	6.50	2.001E+06	.182
130006.060	1	5	0.00	3.76	0.00	7.620	1.000	0.00	.070	0.000	21.41	6.477	0	6.50	2.001E+06	.182
130006.081	1	5	-5.27	-6.93	0.00	2.393	1.000	0.00	.070	0.000	16.14	6.477	0	6.50	2.001E+06	.182
130006.091	1	4	-7.55	-.09	.07	.074	1.185	0.00	.070	0.000	13.86	6.477	0	6.50	2.001E+06	.182
130007.010	1	2	-7.62	3.71	.50	0.000	3.394	0.00	.070	0.000	13.79	6.477	0	6.65	4.823E+06	.182
130007.020	1	2	-7.62	3.78	.98	0.000	1.538	0.00	.070	0.000	13.79	6.477	0	6.65	4.823E+06	.182
130007.030	1	2	-7.62	3.80	1.99	0.000	.715	0.00	.070	0.000	13.79	6.477	0	6.65	4.823E+06	.182
130007.041	1	2	-7.62	7.11	4.03	0.000	.017	0.00	.070	0.000	13.79	6.477	0	6.65	4.823E+06	.182
130007.062	1	4	-3.78	-.03	0.00	3.835	1.000	0.00	.070	0.000	17.62	6.477	0	6.65	4.823E+06	.182
130007.073	1	2	-7.40	-5.21	.07	.216	.528	0.00	.070	0.000	14.09	6.477	0	6.65	4.823E+06	.182
130007.085	1	3	-5.26	-7.62	.62	2.362	.096	0.00	.070	0.000	2.43	6.477	0	6.65	4.823E+06	.182
130008.003	1	4	-7.62	-.05	1.98	0.003	.012	0.00	.040	0.000	13.76	6.477	0	6.87	4.692E+06	.182
130008.015	1	3	3.81	7.62	.52	11.430	.418	0.00	.040	0.000	11.47	6.477	0	6.87	4.692E+06	.182
130008.025	1	3	3.84	7.62	1.02	11.455	.193	0.00	.040	0.000	11.50	6.477	0	6.87	4.692E+06	.182
130008.036	1	3	7.12	7.62	2.03	14.745	.154	0.00	.040	0.000	14.78	6.477	0	6.87	4.692E+06	.182
130008.047	1	1	7.62	4.55	4.04	15.240	.063	0.00	.040	0.000	29.00	6.477	0	6.87	4.692E+06	.182
130008.068	1	5	0.00	3.76	0.00	7.620	1.000	0.00	.040	0.000	21.38	6.477	0	6.87	4.692E+06	.182
130008.079	1	1	7.62	-5.16	.44	15.240	.731	0.00	.040	0.000	29.00	6.477	0	6.87	4.692E+06	.182
130008.093	1	3	5.21	-7.62	.57	12.827	.533	0.00	.040	0.000	12.87	6.477	0	6.87	4.692E+06	.182
130009.013	1	2	-7.62	3.71	.50	0.000	10.904	0.00	.120	0.000	13.84	6.477	0	6.60	1.968E+06	.182
130009.023	1	2	-7.62	3.78	.98	0.000	3.558	0.00	.120	0.000	13.84	6.477	0	6.60	1.968E+06	.182
130009.030	1	2	-7.62	3.80	1.99	0.000	1.414	0.00	.120	0.000	13.84	6.477	0	6.60	1.968E+06	.182
130009.041	1	2	-7.62	7.11	4.03	0.000	.002	0.00	.120	0.000	13.84	6.477	0	6.60	1.968E+06	.182
130009.062	1	4	-3.78	-.03	0.00	3.839	1.000	0.00	.120	0.000	17.67	6.477	0	6.60	1.968E+06	.182
130009.073	1	2	-7.40	-5.21	.07	.216	.282	0.00	.120	0.000	14.05	6.477	0	6.6[illegible]	1.968E+06	.182
130009.085	1	3	-5.26	-7.62	.62	2.362	.021	0.00	.120	0.000	2.48	6.477	0	6.63	1.968E+06	.182
130010.003	1	4	-7.62	-.05	1.98	0.003	.065	0.00	.160	0.000	13.88	6.477	0	6.58	2.100E+06	.182
130010.015	1	3	3.81	7.62	.52	11.430	.400	0.00	.160	0.000	11.59	6.477	0	6.58	2.100E+06	.182
130010.025	1	3	3.84	7.62	1.02	11.455	.140	0.00	.160	0.000	11.62	6.477	0	6.58	2.100E+06	.182
130010.035	1	3	3.82	7.62	2.03	11.443	.046	0.00	.160	0.000	11.60	6.477	0	6.58	2.100E+06	.182
130010.046	1	3	7.11	7.62	4.06	14.732	.172	0.00	.160	0.000	14.89	6.477	0	6.58	2.100E+06	.182
130010.067	1	5	-3.78	3.78	0.00	3.835	1.000	0.00	.160	0.000	17.71	6.477	0	6.58	2.100E+06	.182
130010.079	1	1	7.62	-5.16	.44	15.240	.823	0.00	.160	0.000	29.12	6.477	0	6.58	2.100E+06	.182
130010.090	1	3	6.21	-7.62	.57	12.827	.537	0.00	.160	0.000	12.99	6.477	0	6.58	2.100E+06	.182
130011.010	1	2	-7.62	3.71	.50	0.000	.228	0.00	.160	0.000	13.88	6.477	0	6.64	2.001E+06	.182
130011.020	1	2	-7.62	3.78	.98	0.000	.108	0.00	.160	0.000	13.88	6.477	0	6.64	2.001E+06	.182
130011.030	1	2	-7.62	3.80	1.99	0.000	.052	0.00	.160	0.000	13.88	6.477	0	6.64	2.001E+06	.182
130011.041	1	2	-7.62	7.11	4.03	0.000	.025	0.00	.160	0.000	13.88	6.477	0	6.64	2.001E+06	.182
130011.062	1	4	-3.78	-.03	0.00	3.835	1.000	0.00	.160	0.000	17.71	6.477	0	6.64	2.001E+06	.182
130011.073	1	2	-7.40	-5.21	.07	.216	.975	0.00	.160	0.000	14.09	6.477	0	6.64	2.001E+06	.182
130011.085	1	3	-5.26	-7.62	.62	2.362	.116	0.00	.160	0.000	2.52	6.477	0	6.64	2.001E+06	.182
130012.003	1	4	-7.62	-.05	1.98	0.000	.057	0.00	.160	0.000	13.88	6.477	0	6.65	4.692E+06	.182
130012.014	1	3	0.00	7.62	.51	7.620	.325	0.00	.160	0.000	7.78	6.477	0	6.65	4.692E+06	.182
130012.024	1	3	0.00	7.62	.99	7.620	.077	0.00	.160	0.000	7.78	6.477	0	6.65	4.692E+06	.182

130.12.035	1	3	3.82	7.62	2.03	11.463	.960	0.00	.160	0.000	11.60	6.477	0	6.65	4.692E+06	.182
130.12.045	1	3	3.84	7.62	4.05	11.459	.354	0.00	.160	0.000	11.62	6.477	0	6.65	4.692E+06	.182
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
130.24.018	1	5	0.00	0.00	0.00	7.623	.982	0.00	0.000	0.000	21.34	6.477	1	6.45	4.692E+06	.182
130.4.028	1	1	12.73	0.00	0.00	20.320	.975	0.00	0.000	0.000	34.04	6.477	1	6.45	4.692E+06	.182

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LARC 8 FOOT HTST. HRSI GAP HEATING TEST 0 RUN(0) 1974 PAGE 8

	DELS	SUB-T	H	HTC/HREF	HSTT	TW/TE	B.L.	NTOL
130604.812	1.130	1.006	1.893E-03	.8387	1.887E-04	1.077E-01	3	10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
130612.824	1.285	1.004	3.540E-03	.0834	7.056E-05	1.169E-01	3	620

133J04.018	1.290	1.084	4.373E-02	1.8437	7.597E-04	1.192E-01	3 1270
133JC4.028	1.294	1.304	4.523E-02	1.8361	7.858E-04	1.197E-01	3 1280

7.0 NASA-JSC 10 MW ARC TUNNEL EDGE RADIUS TESTS

Gap heating tests were conducted by C. D. Scott (NASA, Johnson Space Center) in the JSC 10 MW Arc Tunnel to provide heating data in the presence of a high enthalpy laminar boundary layer. The test parameters, model description and data were obtained from Reference 4. The 50.8 cm diameter conical nozzle produced the flow field. The test parameters are shown below and conditions on the wedge are shown on Figure 7.0-1. The primary purpose of the tests was to investigate the effect of tile edge radius on gap heating.

The tests employed sets of thin skin metallic tiles mounted in a wedge test fixture shown on Figure 7.0-2. Four edge radii (0.157, 0.3175, 0.635, and 1.27 cm) were parametrically tested at gap widths of 0.127, 0.254, and 0.381 cm, at 15° angle of attack. The joint configuration was an in-line butt, and the tile height was 4.1275 cm for all tests. During each run the model was inserted three times into the flow for approximately three seconds each while the thermocouple responded to the incident heating. The reported data are averages of the three measurements. The reference model and pitot pressure probe were inserted into the flow during each run to determine the repeatability of the test condition. A run schedule is shown on Figure 7.0-3. The reference model, flat surface without gaps, instrumented with Gardon gauge calorimeters was used to measure reference heating rates.

TEST PARAMETERS

MACH NO.	9.6
ANGLE OF ATTACK, DEG.	15.0
TOTAL ENTHALPY, M_J/K_g	13.9
REYNOLDS NO./METER	1741.0
PITOT PRESSURE, N/M^2	145.0

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CONDITIONS ON WEDGE

Distance from Leading Edge* of Wedge	Distance from Leading Edge* of Tiles	Calculated Pressure	Calculated Heat Flux	Measured Heat Flux	Displacement Thickness
cm	cm	N/m^2	W/cm^2	W/cm^2	cm
10.92	0	265.	11.12		.77
16.15	5.04	242.	9.06		.95
	7.62			10.44	
26.4	15.24	220.	7.02	8.62	1.22
	22.86			7.49	
36.6	25.40	208.	5.95		1.44
41.7	30.48	204.	5.57		1.54

*Leading Edge Radius = 0.95 cm

FIGURE 7.0-1

TEST PANEL CONFIGURATION, EDGE RADIUS STUDY AT NASA JSC 10 MW ARC TUNNEL

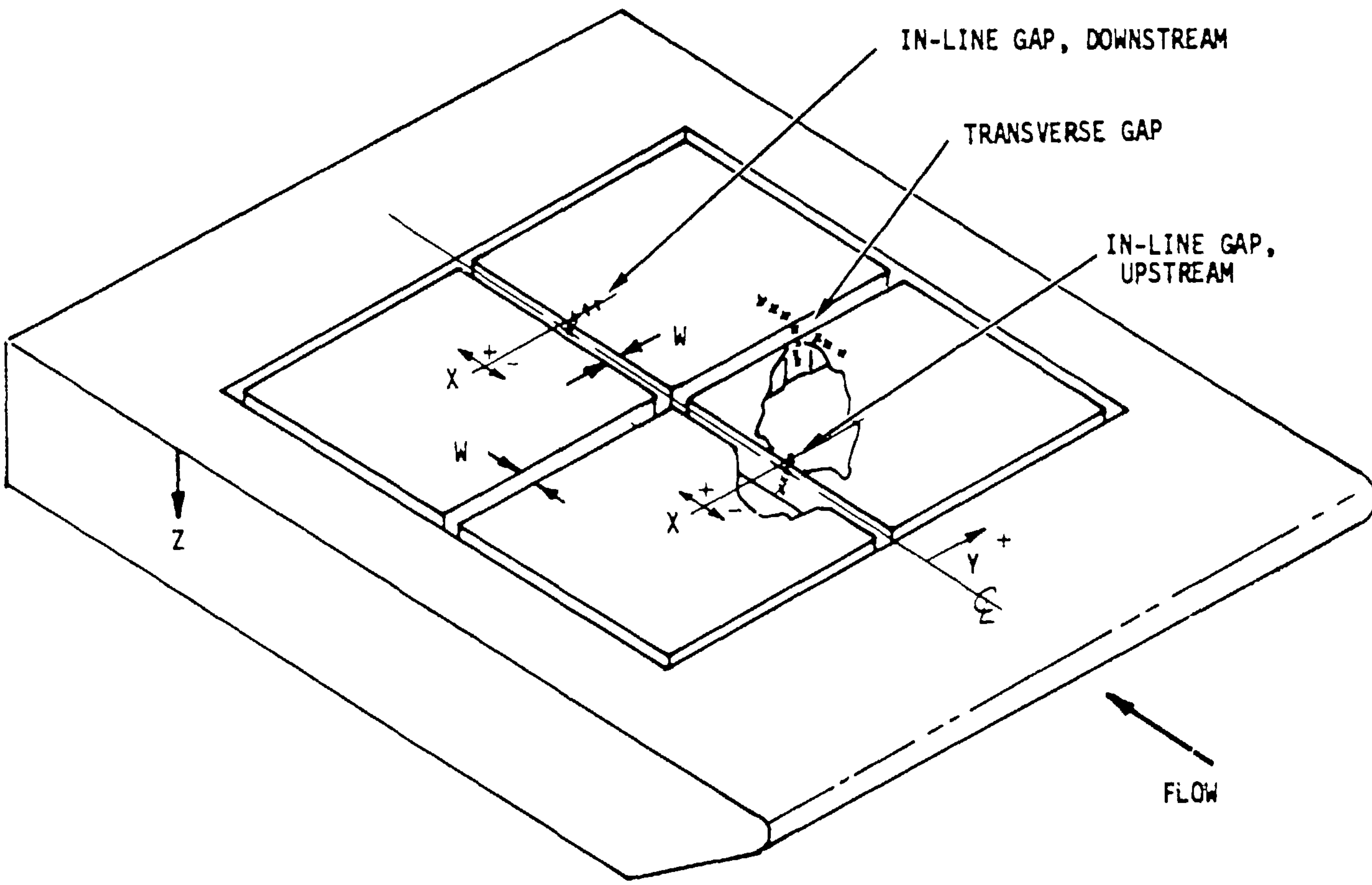


FIGURE 7.0-2

JSC 10 MW RUN SCHEDULE FOR EDGE RADIUS TESTS

RUN	EDGE RADIUS (cm)	GAP WIDTH (cm)
779	0.1575	0.127
780	↓	0.381
781	↓	0.254
782	0.3175	0.127
783	↓	0.254
784	↓	0.381
785	0.635	0.127
786	↓	0.254
787	↓	0.381
788	1.27	0.127
789	↓	0.254
790	↓	0.381

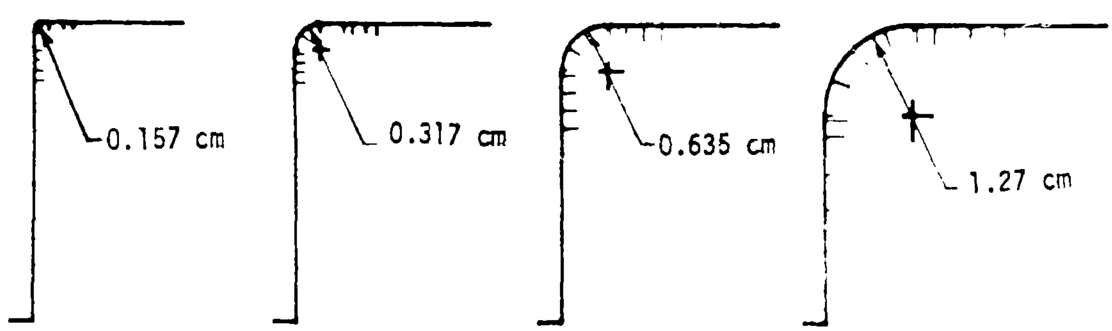
FIGURE 7.0-3

7.1 Model Description - The test article consis'. of 15.24 cm square stainless steel tiles with various edge radii mounted in a wedge (15° angle-of-attack), Figure 7.0-2. The parametric variation of edge radii was 0.1575, 0.3175, 0.635, and 1.27 centimeters with gap widths of 0.127, 0.254, and 0.381 centimeters. The tiles were aligned in an "in-line" arrangement, thereby creating gaps both perpendicular and parallel to the flow direction. Thermocouples were attached to the inner surface of the tiles in a row around the gap shown in Figure 7.0-2. Figure 7.1-1 shows the nominal locations of Sets of instrumentation on the gaps and also shows the locations of thermocouples on a Set for various edge radii.

The thickness of the skin is about .029 inch on the upper surface and rounded edge of the tiles, while it is about .010 inch on the sides of the tiles. Forty-gauge iron-constantan thermocouples were attached to the thin areas and 36-gauge chromel-alumel were attached to the thicker areas. The ratio of wire diameter to skin thickness was chosen to minimize the effects of conduction along the wires. The inside of the tiles were packed with fibrous silica to minimize cross radiative effects.

NOMINAL LOCATIONS OF SETS OF INSTRUMENTATION ON THE GAPS

Description	X CM	Y CM
Longitudinal Gap (upstream)	7.62	0
Longitudinal Gap (Downstream)	22.86	0
Transverse Gap Upstream Side	15.34	7.62
Transverse Gap Downstream Side	15.34	7.62



NOMINAL T/C LOCATIONS INDICATED BY TICK MARKS

FIGURE 7.1-1

7.2 Explanation of Terminology Used in Data Listing - Results from the 10 MW Arc Tunnel edge radius tests presented in Section 7.3 are organized by instrumentation location and within each location are segregated by edge radius and gap width. The data listing was prepared by analyzing and combining information recorded during calibration and test runs.

The terminology used in the data listing is as follows:

TEST-RUN-T/C	=	Test, run and thermocouple numbers
G-CF	=	Gap configuration
LOC	=	Instrumentation location
X	=	X coordinate of instrumentation point, origin at center of tile (see Figure 7.0-2)
Y	=	Y coordinate of instrumentation point, origin at centerline between tiles (see Figure 7.0-2)
Z	=	Distance from top of tile (see Figure 7.0-2)
X(BAR)	=	Distance from leading edge of tile
E	=	Tile edge radius
GAMMA	=	Flow orientation
GAP	=	Gap width
STEP	=	Step height
FLOW	=	Gap flow length
PATN	=	Tile pattern (0=staggered, 1=in-line)
M	=	Mach number
RE/METER	=	Unit Reynolds number
DELS	=	Displacement thickness
Q/QREF	=	Convective heating in gap ratioed to convective heating on flat plate at the same location
BL	=	Boundary layer state (1=laminar)

7.3 Data Tabulation for 10 MW Arc Tunnel Edge Radius Gap Heating Tests - This section contains the data from the 10 MW Arc Tunnel which is stored in the Data Bank. The data listing begins on Page 7.3-2.

This listing employs the "24 Attribute Word List" (described in Volume 1, Section 5) used in the data selection and data correlation programs.

IN-LINE GAP - UPSTREAM OF TRANSVERSE GAP

TEST-RUN-T/C	G-CF	LOC	X	Y	Z	X(BAR)	E	GAMMA	GAP	STEP	FLOW	PATN	M	RE/METER	DELS	Q/QREF	BL
40779. A5	1	3	0.000	0.000	.158	7.620	.157	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40779. A4	1	3	0.000	0.000	.315	7.620	.157	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40779. A3	1	3	0.000	0.000	.472	7.620	.157	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	.189	1
40779. A2	1	3	0.000	0.000	.630	7.620	.157	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40781. A5	1	3	0.000	0.000	.158	7.620	.157	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40781. A4	1	3	0.000	0.000	.315	7.620	.157	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40781. A3	1	3	0.000	0.000	.472	7.620	.157	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40781. A2	1	3	0.000	0.000	.630	7.620	.157	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40780. A5	1	3	0.000	0.000	.158	7.620	.157	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40780. A4	1	3	0.000	0.000	.315	7.620	.157	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40780. A3	1	3	0.000	0.000	.472	7.620	.157	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40780. A2	1	3	0.000	0.000	.630	7.620	.157	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40782. D5	1	3	0.000	0.000	.160	7.620	.318	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40782. D4	1	3	0.000	0.000	.391	7.620	.318	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40782. D3	1	3	0.000	0.000	.549	7.620	.318	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40782. D2	1	3	0.000	0.000	.706	7.620	.318	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40782. D1	1	3	0.000	0.000	.864	7.620	.318	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40783. D5	1	3	0.000	0.000	.160	7.620	.318	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40783. D4	1	3	0.000	0.000	.391	7.620	.318	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40783. D3	1	3	0.000	0.000	.549	7.620	.318	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40783. D2	1	3	0.000	0.000	.706	7.620	.318	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40783. D1	1	3	0.000	0.000	.864	7.620	.318	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40784. D5	1	3	0.000	0.000	.160	7.620	.318	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40784. D4	1	3	0.000	0.000	.391	7.620	.318	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40784. D3	1	3	0.000	0.000	.549	7.620	.318	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40784. D2	1	3	0.000	0.000	.706	7.620	.318	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40784. D1	1	3	0.000	0.000	.864	7.620	.318	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E6	1	3	0.000	0.000	.084	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E5	1	3	0.000	0.000	.318	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E4	1	3	0.000	0.000	.709	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E3	1	3	0.000	0.000	.963	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E2	1	3	0.000	0.000	1.217	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40785. E1	1	3	0.000	0.000	1.471	7.620	.635	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E6	1	3	0.000	0.000	.084	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E5	1	3	0.000	0.000	.318	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E4	1	3	0.000	0.000	.709	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E3	1	3	0.000	0.000	.963	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E2	1	3	0.000	0.000	1.217	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40786. E1	1	3	0.000	0.000	1.471	7.620	.635	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40787. E6	1	3	0.000	0.000	.084	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40787. E5	1	3	0.000	0.000	.318	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40787. E4	1	3	0.000	0.000	.709	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40787. E3	1	3	0.000	0.000	.963	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	.159	1
40787. E2	1	3	0.000	0.000	1.217	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	.117	1
40787. E1	1	3	0.000	0.000	1.471	7.620	.635	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H7	1	3	0.000	0.000	.097	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H6	1	3	0.000	0.000	.371	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H5	1	3	0.000	0.000	.785	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H4	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H2	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40788. H1	1	3	0.000	0.000	2.616	7.620	1.270	0.000	.127	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H7	1	3	0.000	0.000	.097	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H6	1	3	0.000	0.000	.371	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H5	1	3	0.000	0.000	.795	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H4	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H2	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40789. H1	1	3	0.000	0.000	2.616	7.620	1.270	0.000	.254	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40790. H7	1	3	0.000	0.000	.097	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40790. H6	1	3	0.000	0.000	.371	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40790. H5	1	3	0.000	0.000	.795	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40790. H4	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	.329	1
40790. H2	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	[illegible]	1
40790. H1	1	3	0.000	0.000	2.616	7.620	1.270	0.000	.381	0.000	7.620	1	9.60	1741.0	1.03	.867	1

IN-LINE GAP - DOWNSTREAM OF TRANSVERSE GAP

TEST-RUN-T/C	G-CF	LOC	X	Y	Z	X(BAR)	E	GAMMA	GAP	STEP	FLOW	PATN	M	RE/METER	DELS	Q/QREF	BL
40779.B14	1	3	0.000	0.000	.158	7.620	.157	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.476	1
40779.B13	1	3	0.000	0.000	.315	7.620	.157	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40779.B12	1	3	0.000	0.000	.472	7.620	.157	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40779.B11	1	3	0.000	0.000	.630	7.620	.157	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40779.B10	1	3	0.000	0.000	.787	7.620	.157	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40781.B14	1	3	0.000	0.000	.158	7.620	.157	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40781.B13	1	3	0.000	0.000	.315	7.620	.157	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.237	1
40781.B12	1	3	0.000	0.000	.472	7.620	.157	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40781.B11	1	3	0.000	0.000	.630	7.620	.157	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40781.B10	1	3	0.000	0.000	.787	7.620	.157	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40780.B14	1	3	0.000	0.000	.158	7.620	.157	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40780.B13	1	3	0.000	0.000	.315	7.620	.157	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40780.B12	1	3	0.000	0.000	.472	7.620	.157	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.121	1
40780.B11	1	3	0.000	0.000	.630	7.620	.157	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.067	1
40780.B10	1	3	0.000	0.000	.787	7.620	.157	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40782.C14	1	3	0.000	0.000	.160	7.620	.318	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.012	1
40782.C13	1	3	0.000	0.000	.391	7.620	.318	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40782.C11	1	3	0.000	0.000	.706	7.620	.318	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40782.C10	1	3	0.000	0.000	.864	7.620	.318	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40783.C14	1	3	0.000	0.000	.160	7.620	.318	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40783.C13	1	3	0.000	0.000	.391	7.620	.318	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40783.C11	1	3	0.000	0.000	.706	7.620	.318	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40783.C10	1	3	0.000	0.000	.864	7.620	.318	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40784.C14	1	3	0.000	0.000	.160	7.620	.318	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.016	1
40784.C13	1	3	0.000	0.000	.391	7.620	.318	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.091	1
40784.C11	1	3	0.000	0.000	.706	7.620	.318	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40784.C10	1	3	0.000	0.000	.864	7.620	.318	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.027	1
40785.F16	1	3	0.000	0.000	.084	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.719	1
40785.F15	1	3	0.000	0.000	.318	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.501	1
40785.F14	1	3	0.000	0.000	.709	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.276	1
40785.F13	1	3	0.000	0.000	.963	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.023	1
40785.F12	1	3	0.000	0.000	1.217	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40785.F11	1	3	0.000	0.000	1.471	7.620	.635	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.005	1
40786.F16	1	3	0.000	0.000	.084	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40786.F15	1	3	0.000	0.000	.318	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40786.F14	1	3	0.000	0.000	.709	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.543	1
40786.F13	1	3	0.000	0.000	.963	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40786.F12	1	3	0.000	0.000	1.217	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40786.F11	1	3	0.000	0.000	1.471	7.620	.635	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.015	1
40787.F16	1	3	0.000	0.000	.084	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40787.F15	1	3	0.000	0.000	.318	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40787.F14	1	3	0.000	0.000	.709	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40787.F13	1	3	0.000	0.000	.963	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.027	1
40787.F12	1	3	0.000	0.000	1.217	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.039	1
40787.F11	1	3	0.000	0.000	1.471	7.620	.635	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.022	1
40788.G18	1	3	0.000	0.000	.097	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40788.G17	1	3	0.000	0.000	.371	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.470	1
40788.G16	1	3	0.000	0.000	.836	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.118	1
40788.G15	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.058	1
40788.G14	1	3	0.000	0.000	1.598	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40788.G13	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.003	1
40788.G12	1	3	0.000	0.000	2.616	7.620	1.270	0.000	.127	0.000	22.860	1	9.60	1741.0	1.39	.003	1
40789.G18	1	3	0.000	0.000	.097	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.940	1
40789.G17	1	3	0.000	0.000	.371	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.600	1
40789.G16	1	3	0.000	0.000	.836	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.230	1
40789.G15	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.099	1
40789.G14	1	3	0.000	0.000	1.598	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.016	1
40789.G13	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	.007	1
40789.G12	1	3	[illegible]	[illegible]	[illegible]	7.620	1.270	0.000	.254	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40790.G18	1	3	0.000	0.000	.097	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	1.048	1
40790.G17	1	3	0.000	0.000	.371	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	[illegible]	1
40790.G16	1	3	0.000	0.000	.836	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.220	1
40790.G15	1	3	0.000	0.000	1.344	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.093	1
40790.G14	1	3	0.000	0.000	1.598	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.017	1
40790.G13	1	3	0.000	0.000	2.106	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.009	1
40790.G12	1	3	0.000	0.000	2.616	7.620	1.270	0.000	.381	0.000	22.860	1	9.60	1741.0	1.39	.009	1

ORIGINAL PAGE IS OF POOR QUALITY

TRANSVERSE GAP - UPSTREAM WALL

TEST-RUN-T/C	G-CF	LOC	X	Y	Z	X(BAR)	E	GAMMA	GAP	STEP	FLOW	PATH	M	RE/METER	DELS	Q/QREF	BL
40779.A14	1	1	7.620	7.620	.158	15.240	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40779.A13	1	1	7.620	7.620	.315	15.240	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40779.A12	1	1	7.620	7.620	.472	15.240	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40779.A11	1	1	7.620	7.620	.630	15.240	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40781.A14	1	1	7.620	7.620	.158	15.240	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40781.A13	1	1	7.620	7.620	.315	15.240	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40781.A12	1	1	7.620	7.620	.472	15.240	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40781.A11	1	1	7.620	7.620	.630	15.240	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.A14	1	1	7.620	7.620	.158	15.240	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.A13	1	1	7.620	7.620	.315	15.240	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.A12	1	1	7.620	7.620	.472	15.240	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.A11	1	1	7.620	7.620	.630	15.240	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40782.D14	1	1	7.620	7.620	.160	15.240	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40782.D13	1	1	7.620	7.620	.391	15.240	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40782.D12	1	1	7.620	7.620	.549	15.240	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.091	1
40782.D11	1	1	7.620	7.620	.706	15.240	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40782.D10	1	1	7.620	7.620	.864	15.240	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.D14	1	1	7.620	7.620	.160	15.240	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.D13	1	1	7.620	7.620	.391	15.240	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.D12	1	1	7.620	7.620	.549	15.240	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.D11	1	1	7.620	7.620	.766	15.240	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40783.D10	1	1	7.620	7.620	.864	15.240	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40784.D14	1	1	7.620	7.620	.160	15.240	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40784.D13	1	1	7.620	7.620	.391	15.240	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40784.D12	1	1	7.620	7.620	.549	15.240	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40784.D11	1	1	7.620	7.620	.706	15.240	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40784.D10	1	1	7.620	7.620	.864	15.240	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E16	1	1	7.620	7.620	.084	15.240	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E15	1	1	7.620	7.620	.318	15.240	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E14	1	1	7.620	7.620	.709	15.240	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E13	1	1	7.620	7.620	.963	15.240	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E11	1	1	7.620	7.620	1.471	15.240	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40785.E16	1	1	7.620	7.620	.084	15.240	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40786.E15	1	1	7.620	7.620	.318	15.240	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40786.E14	1	1	7.620	7.620	.709	15.240	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40786.E13	1	1	7.620	7.620	.963	15.240	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40786.E11	1	1	7.620	7.620	1.471	15.240	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40787.F16	1	1	7.620	7.620	.084	15.240	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40787.F15	1	1	7.620	7.620	.318	15.240	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40787.F14	1	1	7.620	7.620	.709	15.240	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40787.F13	1	1	7.620	7.620	.963	15.240	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40787.F11	1	1	7.620	7.620	1.471	15.240	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40788.H17	1	1	7.620	7.620	.371	15.240	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40788.H16	1	1	7.620	7.620	.789	15.240	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40788.H15	1	1	7.620	7.620	1.344	15.240	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40788.H14	1	1	7.620	7.620	1.598	15.240	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40788.H13	1	1	7.620	7.620	2.106	15.240	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40789.H17	1	1	7.620	7.620	.371	15.240	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40789.H16	1	1	7.620	7.620	.789	15.240	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40789.H15	1	1	7.620	7.620	1.344	15.240	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40789.H14	1	1	7.620	7.620	1.598	15.240	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40789.H13	1	1	7.620	7.620	2.106	15.240	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40790.H17	1	1	7.620	7.620	.371	15.240	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40790.H16	1	1	7.620	7.620	.789	15.240	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40790.H15	1	1	7.620	7.620	1.344	15.240	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1
40790.H14	1	1	7.620	7.620	1.598	15.240	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.116	1
40790.H13	1	1	7.620	7.620	2.106	15.240	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	[illegible]	1

TRANSVERSE GAP – DOWNSTREAM WALL

TEST-RUN-T/C	G-CF	LOC	X	Y	Z	X(BAR)	E	GAMMA	GAP	STEP	FLOW	PATH	M	RE/METER	DELS	Q/QREF	BL
40779. B5	1	2	-7.620	7.620	.158	0.000	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.698	1
40779. B3	1	2	-7.620	7.620	.472	0.000	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.193	1
40779. B1	1	2	-7.620	7.620	.787	0.000	.157	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.130	1
40781. B5	1	2	-7.620	7.620	.158	0.000	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	1.080	1
40781. B4	1	2	-7.620	7.620	.315	0.000	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.232	1
40781. B3	1	2	-7.620	7.620	.472	0.000	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.193	1
40781. B1	1	2	-7.620	7.620	.787	0.000	.157	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.101	1
40780. B5	1	2	-7.620	7.620	.158	0.000	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	1.102	1
40780. B4	1	2	-7.620	7.620	.315	0.000	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.344	1
40780. B3	1	2	-7.620	7.620	.472	0.000	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.318	1
40780. B1	1	2	-7.620	7.620	.787	0.000	.157	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.215	1
40782. C5	1	2	-7.620	7.620	.160	0.000	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.307	1
40782. C3	1	2	-7.620	7.620	.549	0.000	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.326	1
40782. C2	1	2	-7.620	7.620	.706	0.000	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.056	1
40782. C1	1	2	-7.620	7.620	.864	0.000	.318	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.032	1
40783. C5	1	2	-7.620	7.620	.160	0.000	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	1.037	1
40783. C3	1	2	-7.620	7.620	.549	0.000	.318	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.533	1
40783. C2	1	2	-7.620	7.620	.706	0.000	.318	1.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.095	1
40783. C1	1	2	-7.620	7.620	.864	0.000	.318	0.000	.354	0.000	15.240	1	9.60	1741.0	1.22	.076	1
40784. C5	1	2	-7.620	7.620	.160	0.000	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	1.110	1
40784. C3	1	2	-7.620	7.620	.549	0.000	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.606	1
40784. C2	1	2	-7.620	7.620	.706	0.000	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.134	1
40784. C1	1	2	-7.620	7.620	.864	0.000	.318	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.089	1
40785. F6	1	2	-7.620	7.620	.084	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.932	1
40785. F5	1	2	-7.620	7.620	.318	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.811	1
40785. F4	1	2	-7.620	7.620	.709	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.589	1
40785. F3	1	2	-7.620	7.620	.963	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.068	1
40785. F2	1	2	-7.620	7.620	1.217	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.014	1
40785. F1	1	2	-7.620	7.620	1.471	0.000	.635	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.005	1
40786. F6	1	2	-7.620	7.620	.084	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.974	1
40786. F5	1	2	-7.620	7.620	.318	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.790	1
40786. F4	1	2	-7.620	7.620	.709	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.593	1
40786. F3	1	2	-7.620	7.620	.963	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.083	1
40786. F2	1	2	-7.620	7.620	1.217	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.022	1
40786. F1	1	2	-7.620	7.620	1.471	0.000	.635	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.027	1
40787. F6	1	2	-7.620	7.620	.084	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.971	1
40787. F5	1	2	-7.620	7.620	.318	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.744	1
40787. F4	1	2	-7.620	7.620	.709	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.526	1
40787. F3	1	2	-7.620	7.620	.963	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.112	1
40787. F2	1	2	-7.620	7.620	1.217	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.034	1
40787. F1	1	2	-7.620	7.620	1.471	0.000	.635	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.049	1
40788. G7	1	2	-7.620	7.620	.097	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	1.080	1
40788. G6	1	2	-7.620	7.620	.371	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.640	1
40788. G5	1	2	-7.620	7.620	.836	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.173	1
40788. G4	1	2	-7.620	7.620	1.344	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.033	1
40788. G3	1	2	-7.620	7.620	1.598	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.011	1
40788. G2	1	2	-7.620	7.620	2.106	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.013	1
40788. G1	1	2	-7.620	7.620	2.616	0.000	1.270	0.000	.127	0.000	15.240	1	9.60	1741.0	1.22	.016	1
40789. G7	1	2	-7.620	7.620	.097	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	1.240	1
40789. G6	1	2	-7.620	7.620	.371	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.760	1
40789. G5	1	2	-7.620	7.620	.836	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.257	1
40789. G4	1	2	-7.620	7.620	1.344	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.084	1
40789. G3	1	2	-7.620	7.620	1.598	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.028	1
40789. G2	1	2	-7.620	7.620	2.106	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.021	1
40789. G1	1	2	-7.620	7.620	2.616	0.000	1.270	0.000	.254	0.000	15.240	1	9.60	1741.0	1.22	.044	1
40790. G7	1	2	-7.620	7.620	.097	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	1.128	1
40790. G6	1	2	-7.620	7.620	.371	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.678	1
40790. G5	1	2	-7.620	7.620	.836	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.280	1
40790. G4	1	2	-7.620	7.620	1.344	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.147	1
40790. G3	1	2	-7.620	7.620	1.598	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.023	1
40790. G1	1	2	-7.620	7.620	2.616	0.000	1.270	0.000	.381	0.000	15.240	1	9.60	1741.0	1.22	.030	1

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