

First Time



# D.L. RICCI CORP. PWHT JOB ANALYSIS SHEET

CUSTOMER: Major Tool  
 JOBSITE: Indianapolis Indiana  
 DATE: 1-31-06 CUSTOMER CONTACT: Doug McCorkle  
 TECHNICIAN: Eric, Herb, Bret, Joe, Seth, Kevin PROCEDURE/MATERIAL: In Cond/stainless steel  
 WORK ORDER#: 65678/1.0 JOB LOCATION: Major tool shop  
 SYSTEM #: \_\_\_\_\_ RECORDER S/N#: R-91, RC-088, RC-074, RC-079  
 I.S.O. LINE #: \_\_\_\_\_ RC-070, RC-093, RC-037, RC-092, R-94, R-93, R-95  
 SPOOL #: \_\_\_\_\_  
 FIELD WELD #: \_\_\_\_\_  
 CHART #: 11 TOTAL WELDS: \_\_\_\_\_ TOTAL TC'S: 101

WORK DESCRIPTION: ran a bake at 707° on the vessel and 275°-311° on the parts.

HEAT CYCLE: 300° at 50°/hr 120 min. at 300° held 24 hours  
70 min. at 707° held 24 hours.  
 AMBIENT TO 707° F AT 50°/hr F/HR, ABOVE \_\_\_\_\_ F AT \_\_\_\_\_ F/HR  
 HOLD FOR \_\_\_\_\_ HRS AT \_\_\_\_\_ F/HR, +/- \_\_\_\_\_ F, COOL TO \_\_\_\_\_ F AT \_\_\_\_\_ F/HR.  
 COOL TO AMBIENT UNDER INSULATION Y/N \_\_\_\_\_

### PWHT CYCLE INFORMATION:

started at Ambient and ramped up 50° every 70 min on the vessel till 707  
started at Ambient and slowly ramped up on the parts 50° every  
2 hours or so.  
When the vessel got to 700° we held it the first time 24 hours First Time  
when the parts got to 300° we held them 24 hours the First Time  
when hold time was complete we ramp Down on the vessel 50° per ~~hour~~ 70 min  
till about 500° and then the parts fell out of soak and then we

\* TO INCLUDE ALL INFORMATION RELEVANT TO PWHT CYCLE\*

Neal Jacobs 2/11/06  
 TECHNICIAN DATE

CUSTOMER ACCEPTANCE\*: [Signature]  
 \* SIGNATURE ACCEPTS ABOVE HEAT CYCLE PROCEDURE

DATE: 11 Feb 2006

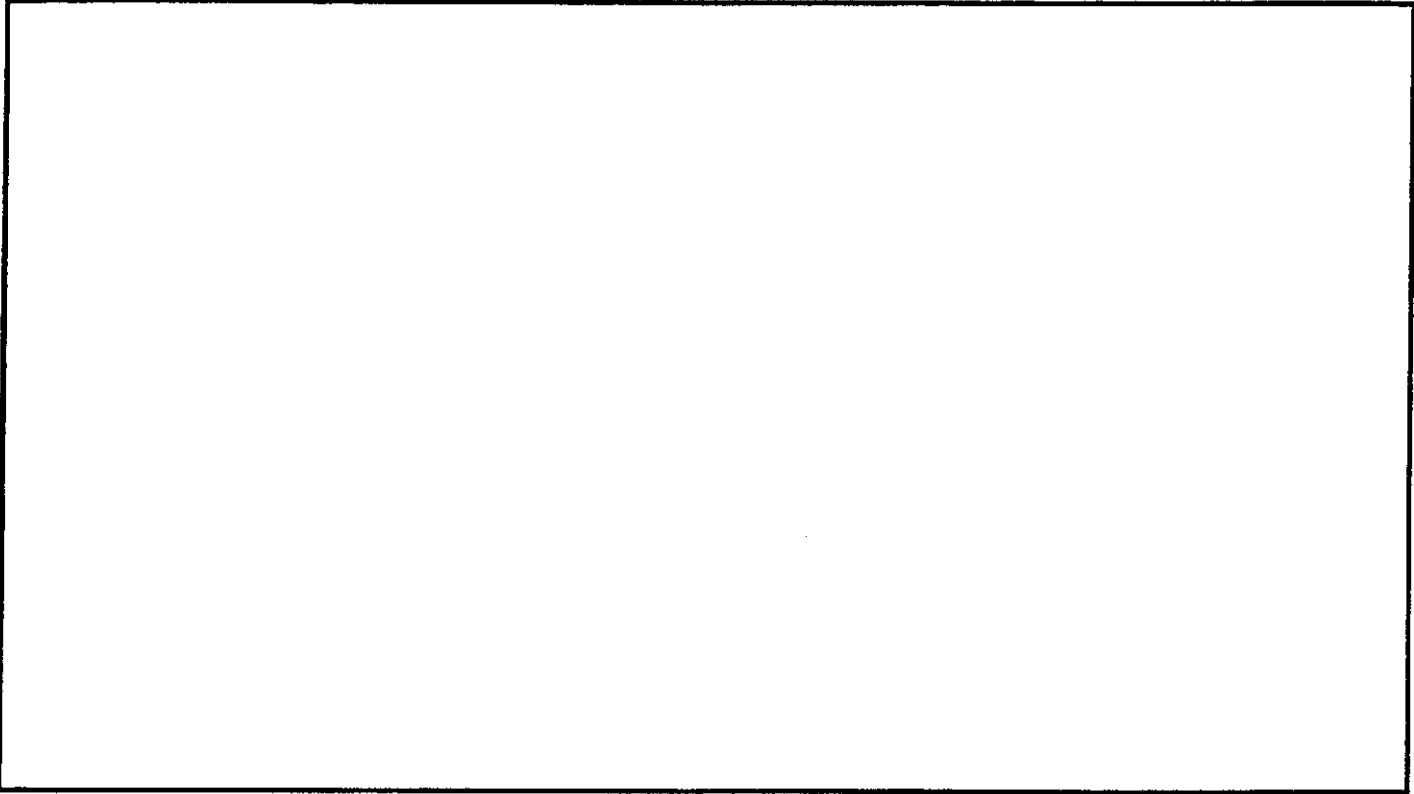
K Drive: Job Sheet- Excel File

Start to ramp the parts Down 50° per ~~hour~~ 70 min to 200°  
and at 500° we changed the ramp rate on the vessel to 90° per hour  
and target temp to 100° per ~~hour~~ step and we would hold each step till  
we were within 10° Top to Bottom



**D.L. RICCI CORP.**  
**WELD AND THERMOCOUPLE IDENTIFICATION**

DATE: 1-31-06 CUSTOMER CONTACT: Doug McCorkle  
 TECHNICIAN: Eric, Herb, Brad, Joe, Seth, Kevin PROCEDURE/MATERIAL: Inconel / Stainless Steel  
 WORK ORDER#: \_\_\_\_\_ JOB LOCATION: Major Tool shop  
 SYSTEM #: \_\_\_\_\_ RECORDER S/N#: R-91, RC-088, RC-074, RC-079  
 \_\_\_\_\_ RC-070, RC-093, RC-037, RC-092, R-94, R-93, R-95  
 I.S.O. LINE #: \_\_\_\_\_  
 SPOOL #: \_\_\_\_\_  
 FIELD WELD #: \_\_\_\_\_  
 CHART #: 11 Recorders TOTAL WELDS: \_\_\_\_\_ TOTAL TC'S: 101



WELD IDENTIFICATION AND THERMOCOUPLE LAYOUT  
 THIS I.S.O. DRAWING IS COMPLETED BY THE PWHT TECHNICIAN

Herb Proctor 2-11-06  
 TECHNICIAN DATE



## PWHT QUALITY CONTROL SHEET

CUSTOMER Major Tool W/O# \_\_\_\_\_

DATE: 2-11-06

1. Customer has given specific direction to D.L. Ricci, as to which welds need PWHT. Heat Treating Documentation packet has been given to the technician. The technician as reviewed the procedure.  
Herb Spade  
Technician
2. Drawings of each spool piece have been completed. Each drawing shows the spool piece number and describes each weld on the spool.  
Herb Spade  
Technician
3. Welds are wrapped and troubleshooting is complete. All zones are working properly. Technician has reviewed procedure (ramp rate, soak temperature, soak time).  
Herb Spade  
Technician
4. Welds are at soak temperature. Technician has reviewed chart (checking ramp rate up to soak).  
Herb Spade  
Technician
5. When soak is complete, technician has reviewed chart, checked soak time/temperature and reviewed ramp rate to completion.  
Herb Spade  
Technician
6. PWHT is complete. Technician has reviewed chart and everything is correct. (Do not unwrap welds until this stage is signed off)  
Herb Spade  
Technician
7. Unwrap welds. Take hardness test if required and record results.  
\_\_\_\_\_  
Technician

2<sup>nd</sup> Time



# D.L. RICCI CORP. PWHT JOB ANALYSIS SHEET

CUSTOMER: Major Tool  
 JOBSITE: Indianapolis Indiana  
 DATE: 2-9-06 CUSTOMER CONTACT: Doug McCorkle  
 TECHNICIAN: Eric, Herb, Bret, Joe, Seth, Kevin PROCEDURE/MATERIAL: Inconel/stainless steel  
 WORK ORDER#: \_\_\_\_\_ JOB LOCATION: Major Tool Shop  
 SYSTEM #: \_\_\_\_\_ RECORDER S/N#: R-91, RC-088, 074, 079, 070  
 I.S.O. LINE #: \_\_\_\_\_ RC-093, RC037, RC-092, R-94, R-93, R-95  
 SPOOL #: \_\_\_\_\_  
 FIELD WELD #: \_\_\_\_\_  
 CHART #: 11 charts TOTAL WELDS: \_\_\_\_\_ TOTAL TC'S: 101

WORK DESCRIPTION: When Temps were all Lower then 212° we ~~started~~ started ramping up the vessel and ports. till we got the parts back up to 300° & vessel Back up to 707° and then held parts at Temp for 21 hours & The vessel for 18 hours so the both had a total of 42 hours of soak

Ports from 200° to 300° at 50°/per 120 min; then Held 21 hours  
 HEAT CYCLE From 200° to 707° at 50°/per 70 min Then Held 18 hours.  
 AMBIENT TO \_\_\_\_\_ F AT \_\_\_\_\_ F/HR, ABOVE \_\_\_\_\_ F AT \_\_\_\_\_ F/HR  
 HOLD FOR \_\_\_\_\_ HRS AT \_\_\_\_\_ F/HR, +/- \_\_\_\_\_ F, COOL TO \_\_\_\_\_ F AT \_\_\_\_\_ F/HR.  
 COOL TO AMBIENT UNDER INSULATION Y/N \_\_\_\_\_

PWHT CYCLE INFORMATION:  
When hold time was complete we ramped down on the vessel at 50° per hour till 500° to ~~keep~~ keep parts in soak for 3 extra hours so we would have 42 hours on both parts and vessel after we were at 500° we set the ramp to 90° per hour and the target temp Down 100° and held at each target temp till even and then set Target temp 100° less untill we were and 200° Then we shut off machs. and let cool.

\* TO INCLUDE ALL INFORMATION RELEVANT TO PWHT CYCLE\*

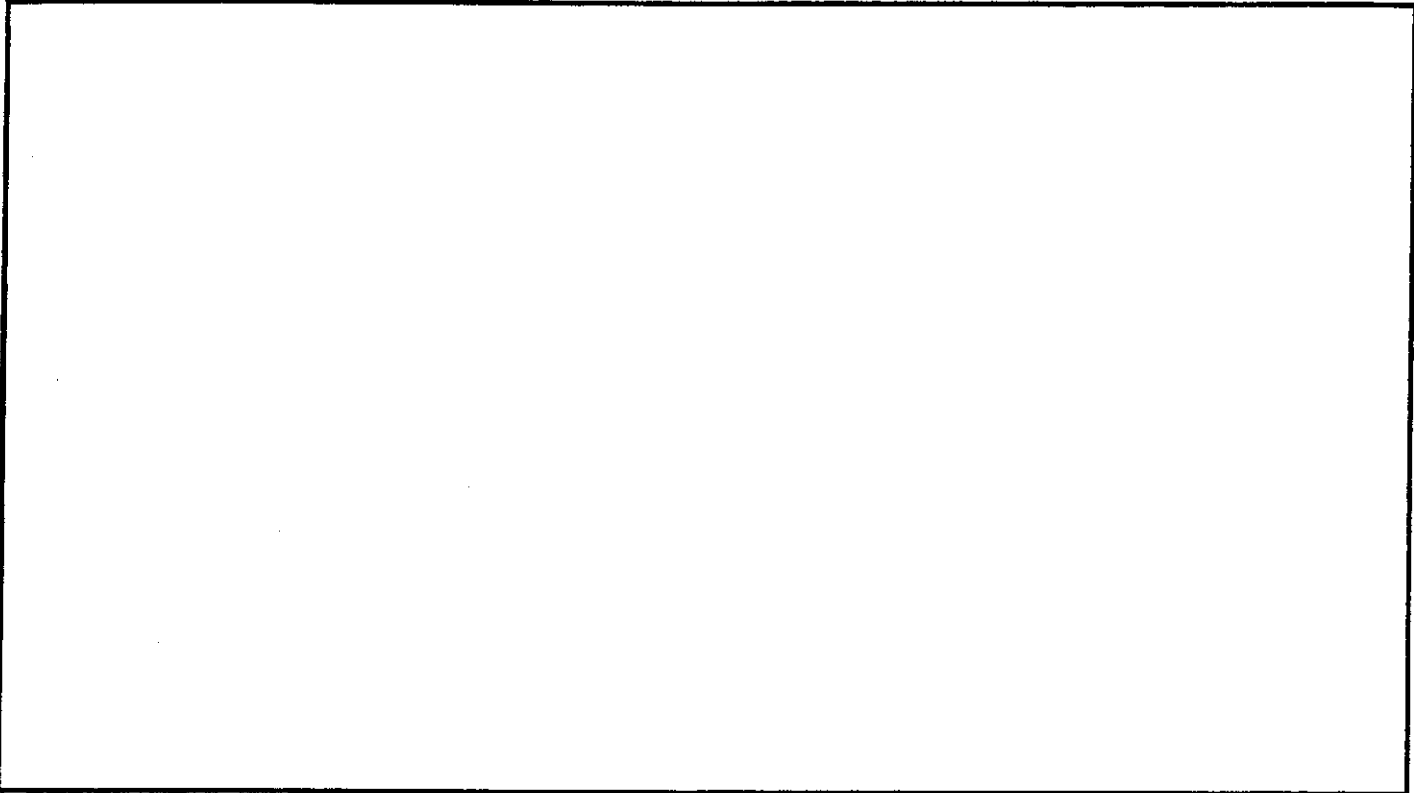
Herb Jacobs 2/11/06  
 TECHNICIAN DATE

CUSTOMER ACCEPTANCE\*: [Signature] DATE: 11 Feb 2006  
 \* SIGNATURE ACCEPTS ABOVE HEAT CYCLE PROCEDURE



**D.L. RICCI CORP.**  
**WELD AND THERMOCOUPLE IDENTIFICATION**

DATE: 2-9-06 CUSTOMER CONTACT: Doug McCorkle  
 TECHNICIAN: Eric, Herb, Brad, Joe, Seth, Kevin PROCEDURE/MATERIAL: Inconel/stainless steel  
 WORK ORDER#: \_\_\_\_\_ JOB LOCATION: \_\_\_\_\_  
 SYSTEM #: \_\_\_\_\_ RECORDER S/N#: R-91, Rc-088, Rc-074, Rc-079  
 \_\_\_\_\_ Rc-070, Rc-093, Rc-037, Rc-092, R-44, R-93, R-95  
 I.S.O. LINE #: \_\_\_\_\_  
 SPOOL #: \_\_\_\_\_  
 FIELD WELD #: \_\_\_\_\_  
 CHART #: 11 Records TOTAL WELDS: \_\_\_\_\_ TOTAL TC'S: 101



WELD IDENTIFICATION AND THERMOCOUPLE LAYOUT  
 THIS I.S.O. DRAWING IS COMPLETED BY THE PWHT TECHNICIAN

\_\_\_\_\_  
 TECHNICIAN

\_\_\_\_\_  
 DATE



## PWHT QUALITY CONTROL SHEET

CUSTOMER Major Tool W/O# \_\_\_\_\_

DATE: 2-9-06

1. Customer has given specific direction to D.L. Ricci, as to which welds need PWHT. Heat Treating Documentation packet has been given to the technician. The technician as reviewed the procedure.  
Nest Jacob  
Technician
2. Drawings of each spool piece have been completed. Each drawing shows the spool piece number and describes each weld on the spool.  
Nest Jacob  
Technician
3. Welds are wrapped and troubleshooting is complete. All zones are working properly. Technician has reviewed procedure (ramp rate, soak temperature, soak time).  
Nest Jacob  
Technician
4. Welds are at soak temperature. Technician has reviewed chart (checking ramp rate up to soak).  
Nest Jacob  
Technician
5. When soak is complete, technician has reviewed chart, checked soak time/temperature and reviewed ramp rate to completion.  
Nest Jacob  
Technician
6. PWHT is complete. Technician has reviewed chart and everything is correct. (Do not unwrap welds until this stage is signed off)  
Nest Jacob  
Technician
7. Unwrap welds. Take hardness test if required and record results.  
\_\_\_\_\_  
Technician



# D.L. RICCI CORP. TIME TEMPERATURE TABULATIONS

**CUSTOMER:** \_\_\_\_\_  
**DATE:** 2-6 **CUSTOMER CONTACT:** \_\_\_\_\_  
**TECHNICIAN:** \_\_\_\_\_ **PROCEDURE/MATERIAL:** \_\_\_\_\_  
**WORK ORDER#:** \_\_\_\_\_ **JOB LOCATION:** \_\_\_\_\_  
**SYSTEM #:** \_\_\_\_\_ **RECORDER SERIAL #:** AH0396057 7-91  
**I.S.O. LINE #:** \_\_\_\_\_  
**SPOOL #:** \_\_\_\_\_  
**FIELD WELD #:** \_\_\_\_\_  
**CHART #:** \_\_\_\_\_ **TOTAL WELDS:** \_\_\_\_\_ **TOTAL TC'S:** \_\_\_\_\_

TIME/TC	13	15	17	18	20	22	22 cont.
14:12	70	69	69	70	74	68	
14:42	74	89	75	105	66	66	
15:12	82	73	77	119	57	67	
15:42	89	78	95	120	94	68	
16:12	94	85	100	121	97	89	
16:42	98	91	103	121	99	91	
17:12	101	96	102	120	101	94	
17:42	103	106	107	119	102	98	
18:12	104	109	108	118	102	97	97
18:42	—	—	—	117	—	—	98
19:12	—	—	—	116	—	—	99
19:42	—	—	—	119	—	—	101
20:12	—	—	—	137	—	—	100
20:42				155			114
21:12				159			120
21:42				<del>175</del> 175			127
22:12				195			137
22:42				209			147
23:12				230			159
23:42				244			171
00:12				245			179
00:42				243			185
1:12				240			190
1:42				237			195
2:12				235			199
2:42				233			203
3:12				231			206
3:42				229			210
4:12				227			213

\* Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.



# D.L. RICCI CORP. TIME TEMPERATURE TABULATIONS

CUSTOMER: \_\_\_\_\_

DATE: 2-6

CUSTOMER CONTACT: \_\_\_\_\_

TECHNICIAN: \_\_\_\_\_

PROCEDURE/MATERIAL: \_\_\_\_\_

WORK ORDER#: \_\_\_\_\_

JOB LOCATION: \_\_\_\_\_

SYSTEM #: \_\_\_\_\_

RECORDER SERIAL #: AH039057 8-91

I.S.O. LINE #: \_\_\_\_\_

SPOOL #: \_\_\_\_\_

FIELD WELD #: \_\_\_\_\_

CHART #: \_\_\_\_\_

TOTAL WELDS: \_\_\_\_\_

TOTAL TC'S: \_\_\_\_\_

TIME/TC	1	2	3	5	6	7	9	10	12
14:12	69	70	69	70	70	68	69	69	70
14:42	76	149	112	84	148	113	72	145	78
15:12	84	138	115	99	118	111	82	122	98
15:42	90	159	119	106	118	110	90	116	93
16:12	94	159	120	108	118	110	96	114	97
16:42	97	130	121	109	118	111	100	113	100
17:12	100	159	121	110	120	111	109	113	102
17:42	101	—	122	110	121	112	113	123	102
18:12	102	—	122	112	122	113	115	113	103
18:42	—	—	121	112	123	113	—114	119	103
19:12	—	—	122	112	123	113	—	112	103
19:42	—	—	127	114	130	120	—	125	109
20:12	—	—	146	124	152	140	—126	155	110
20:42	—	—	161	139	168	153	139	165	120
21:12	—	—	165	146	170	155	145	160	126
21:42	—	—	186	158	193	175	158	182	134
22:12	—	—	209	174	216	195	175	215	146
22:42	—	—	225	188	231	209	188	225	156
23:12	—	—	248	205	255	229	207	249	170
23:42	—	—	261	221	267	239	223	249	182
00:12	—	—	265	227	269	241	231	243	190
00:42	—	—	267	230	271	242	236	241	194
1:12	—	—	269	231	273	242	240	239	196
1:42	—	—	269	231	275	244	243	239	198
2:12	—	—	269	232	277	245	244	239	199
2:42	—	—	268	232	279	246	246	241	200
3:12	—	—	267	232	280	246	246	242	200
3:42	—	—	266	232	282	248	247	244	201
4:12	—	—	266	232	284	249	247	245	201

\* Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.





# D.L. RICCI CORP. TIME TEMPERATURE TABULATIONS

CUSTOMER: \_\_\_\_\_

DATE: 2-7

CUSTOMER CONTACT: \_\_\_\_\_

TECHNICIAN: \_\_\_\_\_

PROCEDURE/MATERIAL: \_\_\_\_\_

WORK ORDER#: \_\_\_\_\_

JOB LOCATION: \_\_\_\_\_

SYSTEM #: \_\_\_\_\_

RECORDER SERIAL #: AH039C057 R-91

I.S.O. LINE #: \_\_\_\_\_

SPOOL #: \_\_\_\_\_

FIELD WELD #: \_\_\_\_\_

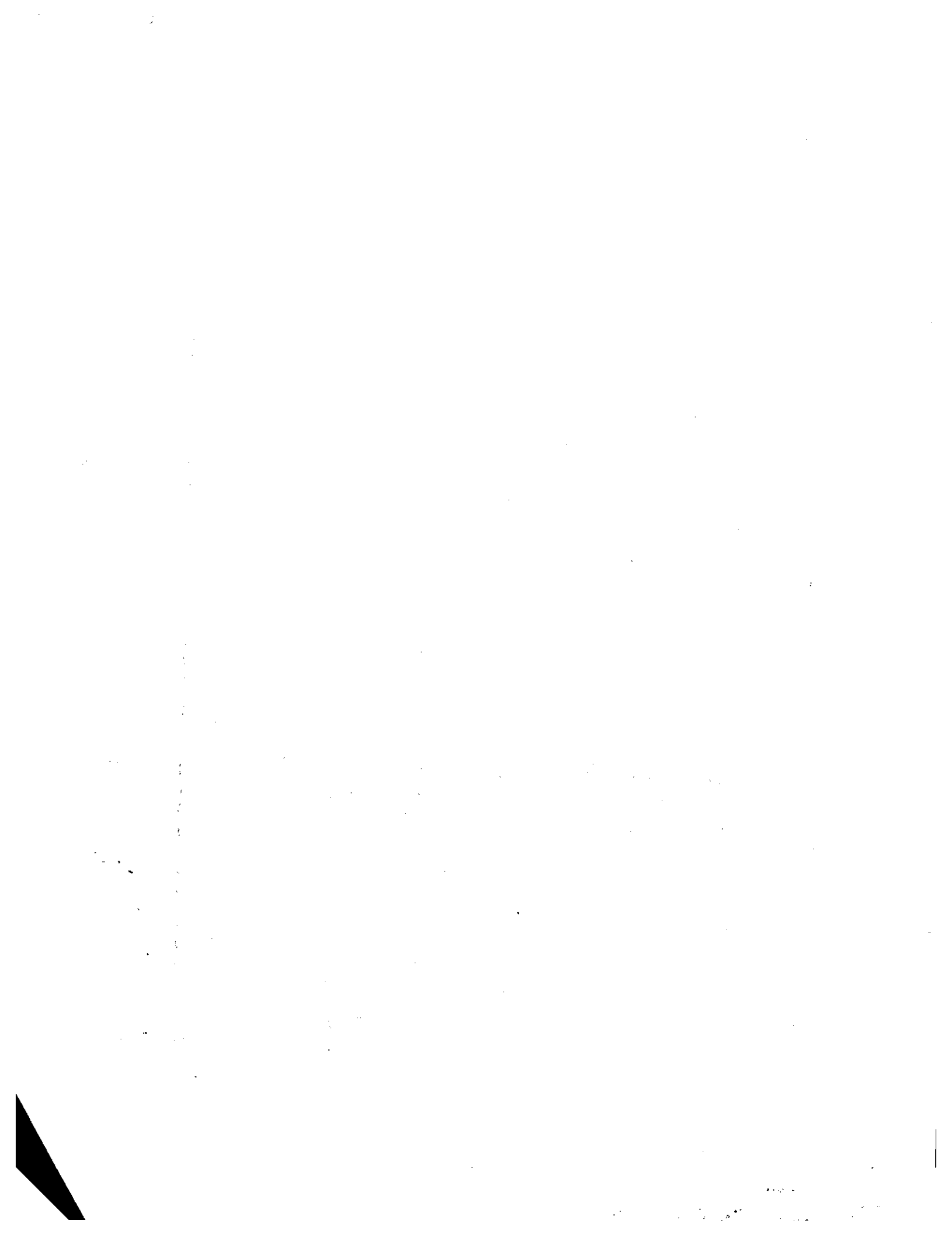
CHART #: \_\_\_\_\_

TOTAL WELDS: \_\_\_\_\_

TOTAL TC'S: \_\_\_\_\_

TIME/TC	Flang #3	Flang #5	Flang #6	Flang #7	Flang #9	Flang #10	Flang #12	Flang #18	Flang #22	Flang 13
4:12	266	232	284	249	247	245	201	227	213	
4:42	265	232	286	250	248	245	201	225	216	
5:12	264	232	287	251	249	246	200	223	219	
5:42	264	232	289	252	248	248	200	221	222	
6:12	265	232	291	253	249	250	200	219	224	
6:42	264	232	272	294	249	252	201	217	227	
7:12	264	232	275	256	249	254	201	215	230	
7:42	263	232	282	257	250	256	202	214	233	
8:12	261	232	287	259	250	258	203	ON	237	
8:42	260	232	275	261	250	262	203	15	241	
9:12	260	232	257	262	251	267	203	15	246	
9:42	259	232	243	264	253	271	203	54	246	
10:12	253	232	248	265	294	275	264		256	
10:42	267	236	273	278	259	296	207	226	262	236
11:12	279	246	297	292	266	306	215	227	252	240
11:42	282	253	284	294	270	298	219	230	254	245
12:12	282	256	273	295	272	299	221	230	259	249
12:42	283	257	289	296	274	298	223	229	264	252
13:12	283	260	302	300	275	299	254	303	268	254
13:42	283	261	300	301	275	299	212	294	271	255
14:12	283	262	302	301	276	300	276	309	276	256
14:42	283	262	302	301	276	300	277	298	276	257
15:12	284	263	294	301	277	301	277	303	277	256
15:42	284	262	303	302	277	304	277	301	277	257
16:12	284	264	294	303	278	302	277	299	278	265
16:42	283	264	303	304	277	302	lost TC	298	279	271
17:12	283	267	297	303	277	303	305	294	279	275
17:42	283	277	284	284	285	277	309	303	280	278
18:12	283	282	286	285	278	303	266	274	303	281

\* Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.





# D.L. RICCI CORP.

## TIME TEMPERATURE TABULATIONS

*one*

CUSTOMER: \_\_\_\_\_

DATE: 2-8

CUSTOMER CONTACT: \_\_\_\_\_

TECHNICIAN: \_\_\_\_\_

PROCEDURE/MATERIAL: \_\_\_\_\_

WORK ORDER#: \_\_\_\_\_

JOB LOCATION: \_\_\_\_\_

SYSTEM #: \_\_\_\_\_

RECORDER SERIAL #: AH039 6057 A-91

I.S.O. LINE #: \_\_\_\_\_

SPOOL #: \_\_\_\_\_

FIELD WELD #: \_\_\_\_\_

CHART #: \_\_\_\_\_

TOTAL WELDS: \_\_\_\_\_

TOTAL TC'S: \_\_\_\_\_

TIME/TC	3	5	6	7	Flange 9	10	Flange 12	Flange 13	Flange 19	Flange 22
18:42	283	286	—	284	277	303	282	275	297	282
19:42	283	287	—	311	277	303	299	283	302	281
19:42	283	288	310	303	278	303	299	283	302	281
20:42	283	289	302	296	277	303	292	286	301	281
20:42	283	289	295	290	277	303	287	281	286	281
21:42	284	290	283	279	277	303	282	291	294	281
22:42	284	290	290	286	277	304	280	292	306	281
23:42	284	291	293	287	277	303	293	294	294	281
00:42	283	290	281	279	277	303	283	292	298	280
1:42	283	292	288	285	277	303	284	292	295	281
2:42	283	292	299	294	277	304	294	292	290	281
3:42	283	292	285	282	277	303	285	292	292	281
4:42	283	292	294	291	277	304	292	292	285	281
5:42	283	292	297	294	277	304	290	292	290	281
6:42	283	292	300	296	277	304	293	292	301	281
7:42	283	291	304	302	284	305tc	297	292	298	282
8:42	291	292	299	297	284	309	297	292	309	283
9:42	282	292	289	289	294	304	293	294	281	282
10:42	283	292	284	285	284	301	292	296	277	280
11:42	284	291	292	293	284	297	296	299	287	278
12:42	285	291	284	288	294	292	294	301	290	276
13:42	287	279	284	291	283	288	296	305	303	277
14:42	287	278	284	292	284	283	287	304	296	276
15:42	252	255	238	250	264	229	256	271	232	263
16:42	231	232	210	225	243	209	229	246	197	249
17:42	190	205	180	196	223	149	203	212	174	237
18:42	161	183	158	173	205	174	180	185	156	225
19:42	139	164	140	155	188	160	162	165	142	214
20:42	122	147	125	140	174	149	146	148	130	202

\* Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.



# D.L. RICCI CORP. TIME TEMPERATURE TABULATIONS

CUSTOMER: \_\_\_\_\_

DATE: 2-9

CUSTOMER CONTACT: \_\_\_\_\_

TECHNICIAN: \_\_\_\_\_

PROCEDURE/MATERIAL: \_\_\_\_\_

WORK ORDER#: \_\_\_\_\_

JOB LOCATION: \_\_\_\_\_

SYSTEM #: \_\_\_\_\_

RECORDER SERIAL #: AH 039657 R-91

I.S.O. LINE #: \_\_\_\_\_

SPOOL #: \_\_\_\_\_

FIELD WELD #: \_\_\_\_\_

CHART #: \_\_\_\_\_

TOTAL WELDS: \_\_\_\_\_

TOTAL TC'S: \_\_\_\_\_

Start to Bring it up

K Drive

TIME/TC	3	5	6	7	9	10	12	13	18	Flange
21:42	110	135	115	124	162	140	135	136	121	192
22:42	102	121	107	119	152	132	125	126	114	184
23:42	95	116	104	112	142	124	116	118	107	175
00:42	90	109	95	105	134	110	110	111	102	167
1:26	88	105	92	101	124	114	106	107	100	161
2:26	115	113	109	115	123	114	116	120	145	153
3:26	145	130	136	140	133	158	136	142	179	153
4:26	181	161	168	169	159	194	168	177	202	158
5:26	224	196	202	202	192	229	203	217	234	177
6:26	263	234	236	234	229	259	240	257	249	192
7:26	270	246	235	236	245	248	248	268	264	206
8:26	289	252	244	246	257	263	256	277	293	214
9:26	293	266	256	256	273	270	269	290	269	226
10:26	294	270	270	270	279	267	279	292	296	236
11:26	291	273	282	281	282	269	277	294	300	244
12:26	299	275	278	278	287	274	276	292	299	253
13:26	289	276	295	293	290	290	289	289	306	258
14:26	288	277	293	290	295	292	283	291	301	269
15:26	289	277	290	287	297	298	280	290	299	290
16:26	289	277	289	286	295	303	279	290	295	297
17:26	289	279	303	297	289	307	283	290	296	300
18:26	288	279	299	294	284	310	281	290	292	301
19:26	287	279	295	292	285	307	279	291	306	301
20:26	288	286	292	290	284	302	279	291	306	301
21:26	288	280	290	289	284	304	279	290	306	301
22:26	288	280	288	288	284	301	279	290	300	301
23:26	287	286	287	287	284	300	278	290	294	301
00:26	288	286	287	288	284	299	278	290	290	302
1:26	286	280	286	287	287	284	298	278	290	302

33 Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.

*a*



# D.L. RICCI CORP.

## TIME TEMPERATURE TABULATIONS

CUSTOMER: \_\_\_\_\_

DATE: 2-9/2-10

CUSTOMER CONTACT: \_\_\_\_\_

TECHNICIAN: \_\_\_\_\_

PROCEDURE/MATERIAL: \_\_\_\_\_

WORK ORDER#: \_\_\_\_\_

JOB LOCATION: \_\_\_\_\_

SYSTEM #: \_\_\_\_\_

RECORDER SERIAL #: AH039057 R-91

I.S.O. LINE #: \_\_\_\_\_

SPOOL #: \_\_\_\_\_

FIELD WELD #: \_\_\_\_\_

CHART #: 6 TOTAL WELDS: \_\_\_\_\_

TOTAL TC'S: \_\_\_\_\_

TIME/TC	3	5	6	7	9	10	12	13	18	22
TC	3	5	6	7	9	10	12	13	18	22
2:26	287	280	286	287	284	297	278	296	306	302
3:26	287	280	286	287	283	297	278	290	306	302
4:26	288	280	285	287	287	295	278	289	294	302
5:26	286	280	285	286	283	295	278	290	287	302
6:26	287	280	285	286	283	294	278	290	299	302
7:26	287	280	294	293	284	296	282	299	300	302
8:26	289	279	302	301	286	298	291	291	298	301
9:26	291	279	294	295	288	299	284	293	304	297
10:26	294	279	288	292	289	300	281	295	300	291
11:26	281	273	274	278	283	279	276	297	276	282
12:26	248	244	233	240	264	253	248	242	272	272
13:26	223	225	211	220	244	231	225	215	243	259
14:26	199	201	184	194	226	214	202	189	232	247
15:26	167	181	162	173	209	196	181	165	192	233
16:26	145	164	145	156	193	188	165	147	167	219
17:26	128	150	132	142	178	167	150	131	149	206
18:26	121	142	125	136	171	160	144	125	141	199

\* Time/Temperature Log shall be used to record temperatures above 800 Degrees F (or per applicable procedure) every hour during the heating and cooling cycles and every one-half hour during PWHT cycle.



Electric Heating Systems, Inc.

109 North Gold Drive  
Robbinsville, NJ 08691

Phone: 609.259.4116  
Fax: 609.259.4119

**CERTIFICATE OF CALIBRATION**

**CERT #** 2005663

**NAME**

**JOB #**

MODEL : AH 3745-N00	SERIAL NUMBER: AH-039C057
THERMOCOUPLE TYPE : K	RANGE: 0 / 2000 degF
CALIBRATION DATE : 8/1/2005	DUE DATE : 8/1/2006

TEST EQUIPMENT USED:	
MANUFACTURER : FLUKE	CALIBRATION DATE : 6/24/2005
MODEL No 714	ACCURACY : +/-10 DEG F
SERIAL No 7216012	

**AMBIENT TEMPERATURE: 72**

**HUMIDITY: 69%**

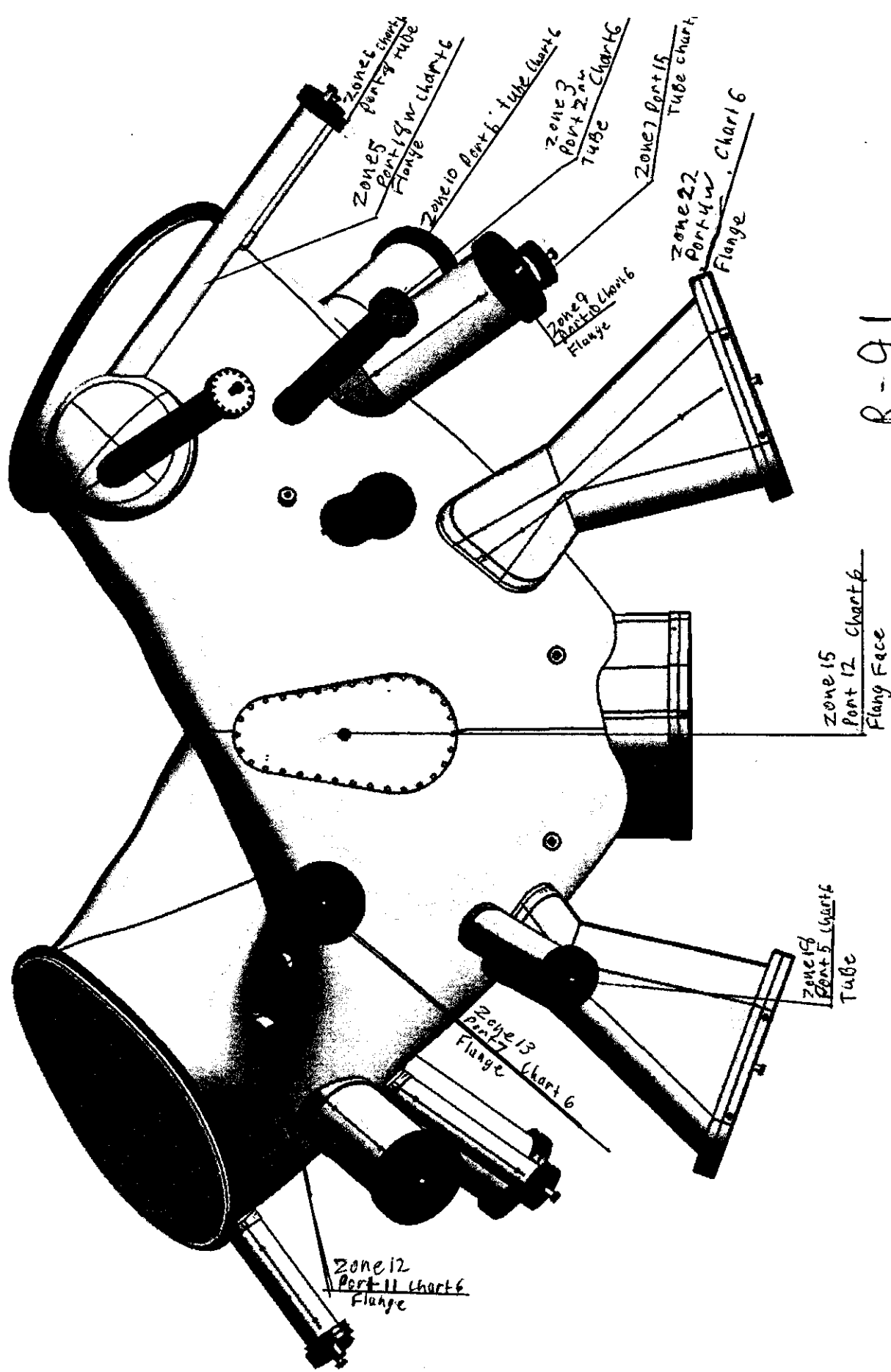
INPUT	AS FOUND	AS LEFT	ACCURACY
200	200	200	+/-10 DEG F
800	800	800	+/-10 DEG F
1000	1000	1000	+/-10 DEG F
1200	1200	1200	+/-10 DEG F
1600	1600	1600	+/-10 DEG F
1800	1800	1800	+/-10 DEG F

THIS INSTRUMENT HAS BEEN CALIBRATED WITHIN MANUFACTURERS SPECIFICATION.  
THIS CALIBRATION IS TRACEABLE TO THE N. I. S. T.  
WE GUARANTEE THAT THIS PRODUCT HAS PASSED THROUGH E. H. S. STANDARD  
TESTING AND SATISFIES ALL SPECIFICATIONS

**CALIBRATED BY:-**

PHIL ISAACSON

**SIGNATURE :-**



R-91  
 Chart 6  
 North Recorder