NTS – Huntsville Operations
7800 Highway 20 West
Huntsville, Alabama 35806
Phone (256) 837-4411 • Fax (256) 830-2109
www.nts.com

TEST DATA PACKAGE

FOR

ENVIRONMENTAL AND DYNAMIC TESTING OF VOTING MACHINES

PRO V & V
700 Boulevard South
Huntsville, AL 35802

September 15, 2017

NTS JOB NO. PR066450
PURCHASE ORDER NO. 2017-008

HA: 091517

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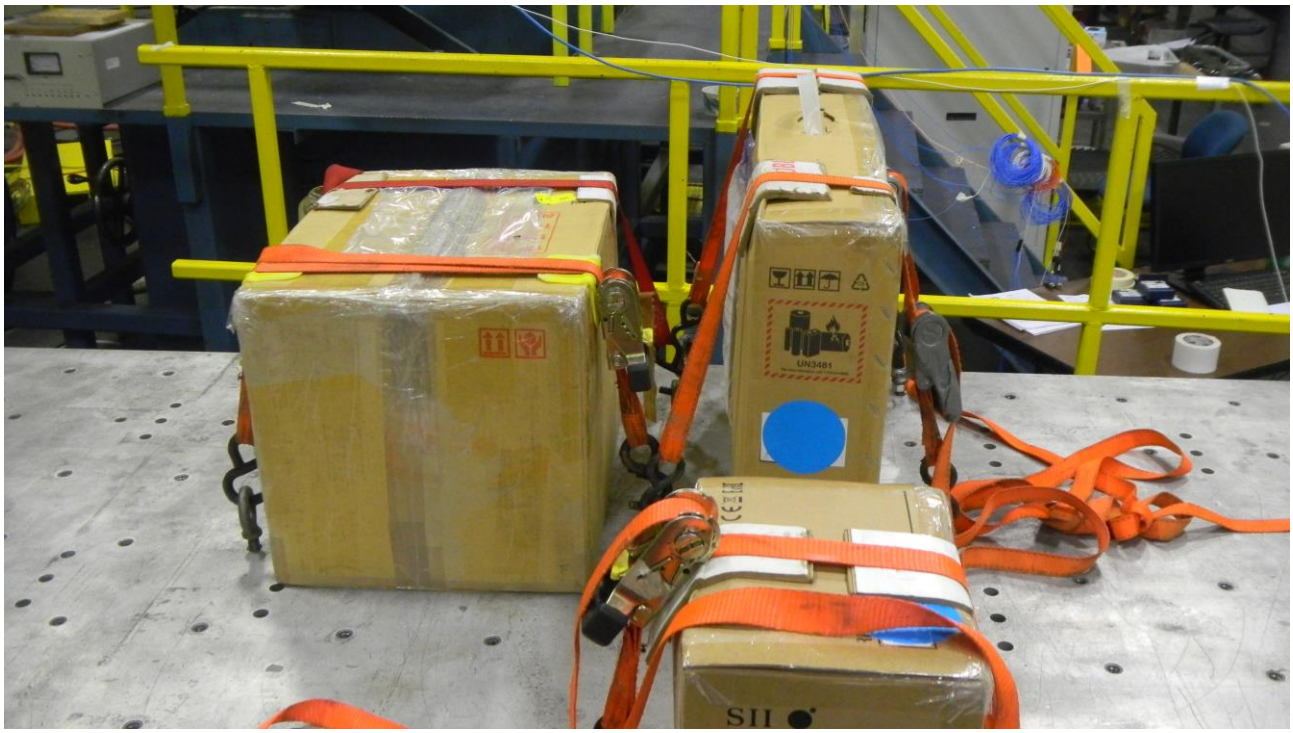

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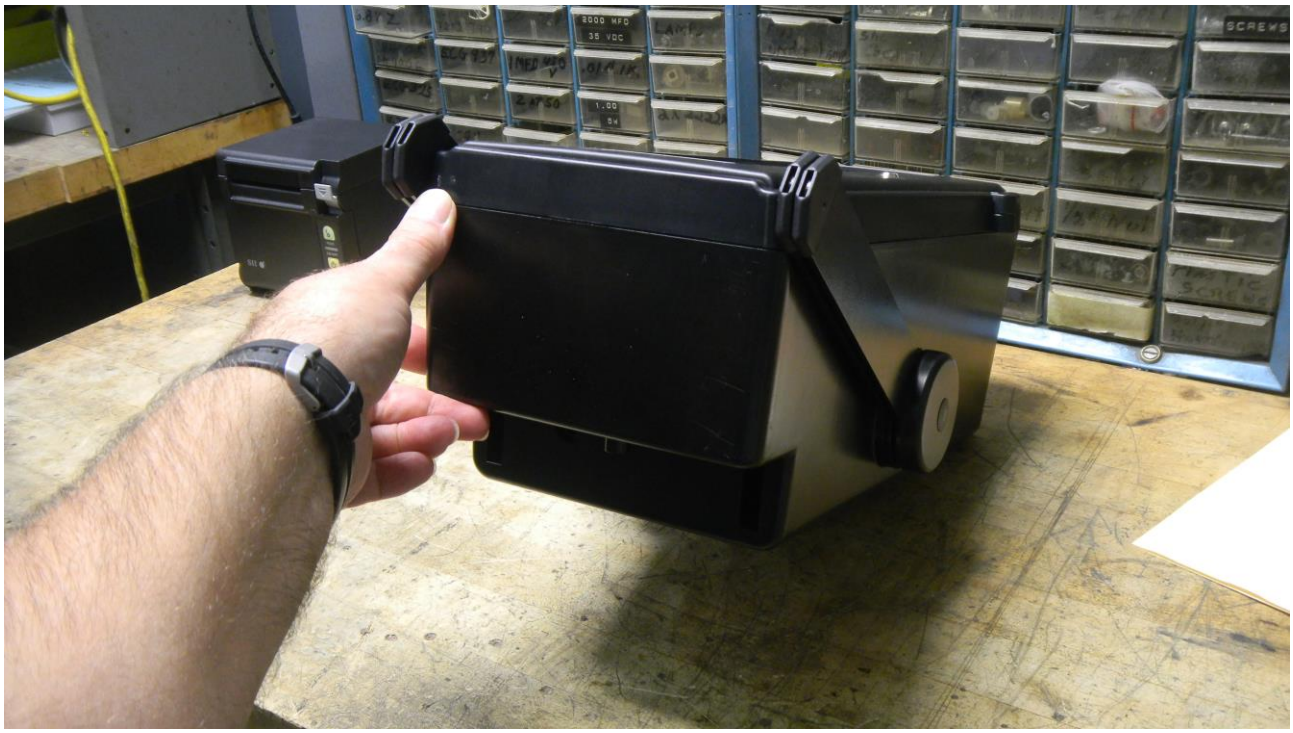
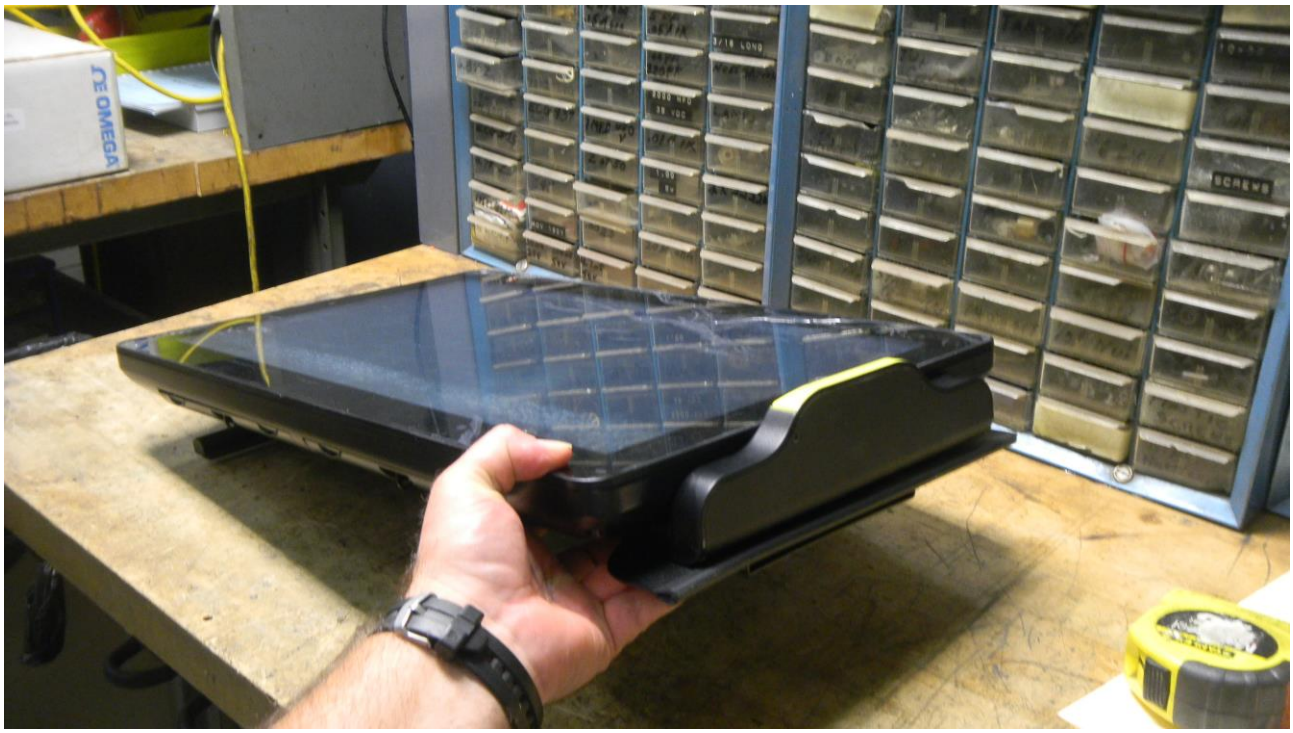


Photograph 9
VVPAT Bench Handling Test



Photograph 10
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NON-OPERATIONAL HUMIDITY TEST DATA

NTS
WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Datasheet

Project No. PR066450
Customer Pro V&V
Procedure MIL-STD-810D
Method 507.2 Procedure I
Paragraph N/A
Test Title Non-Op Humidity

Laboratory Ambient Conditions
Temperature 72°F **Humidity** 47% **Pressure** 30.01"

Specimen Voting Machine
Part No. See Below **Start Date** 07/31/2017
Serial No. See Below **End Date** 08/14/2017
Sheet 1 **of** 1

Date	Time	Temperature (°F)	Relative Humidity (%)	Comments
07/31	1046	71	47	Start chamber, ramp to 73°F 50% RH
08/01	0801	94	80	Change Chart
08/02	0823	92	82	Change Chart
08/03	0759	94	80	Change Chart
08/04	0808	92	82	Change Chart
08/05	0800	92	82	Change Chart
08/05	1200	88	88	5th cycle complete. Place Chamber on Hold
08/06	0812	88	88	Change Chart. Chamber Holding
08/07	0813	88	88	Change Chart.
08/08	0800	91	84	Change Chart.
08/09	0807	90	84	Change Chart.
08/10	0800	91	83	Change Chart.
	0830	88	88	Power cycle temp controller. Cycle resumed without issue
08/11	0757	88	88	Change Chart.
08/12	0808	88	88	Change Chart. 10th Cycle complete. Place Chamber on Hold
08/13	0759	88	88	Change Chart.
08/14	0801	88	88	Change Chart.
	1018	88	87	Ramp to Ambient
	1022	74	65	Chamber power off. Test complete.

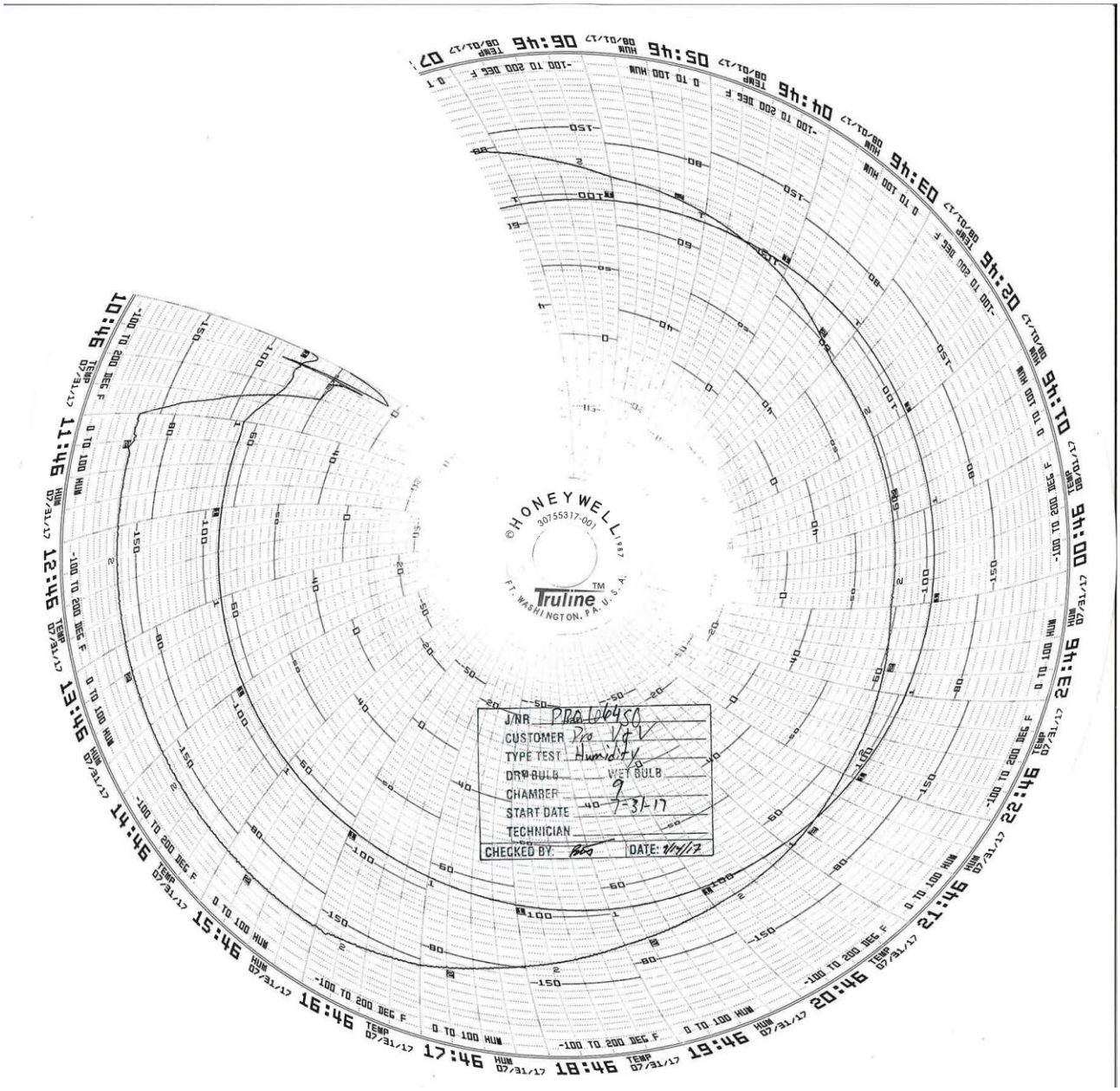
Item Number	Quantity Tested	Serial Number	Description
1	1	1707101552	ICX Tablet
2	1	715	VVPAT
3	1	1115271A	Printer

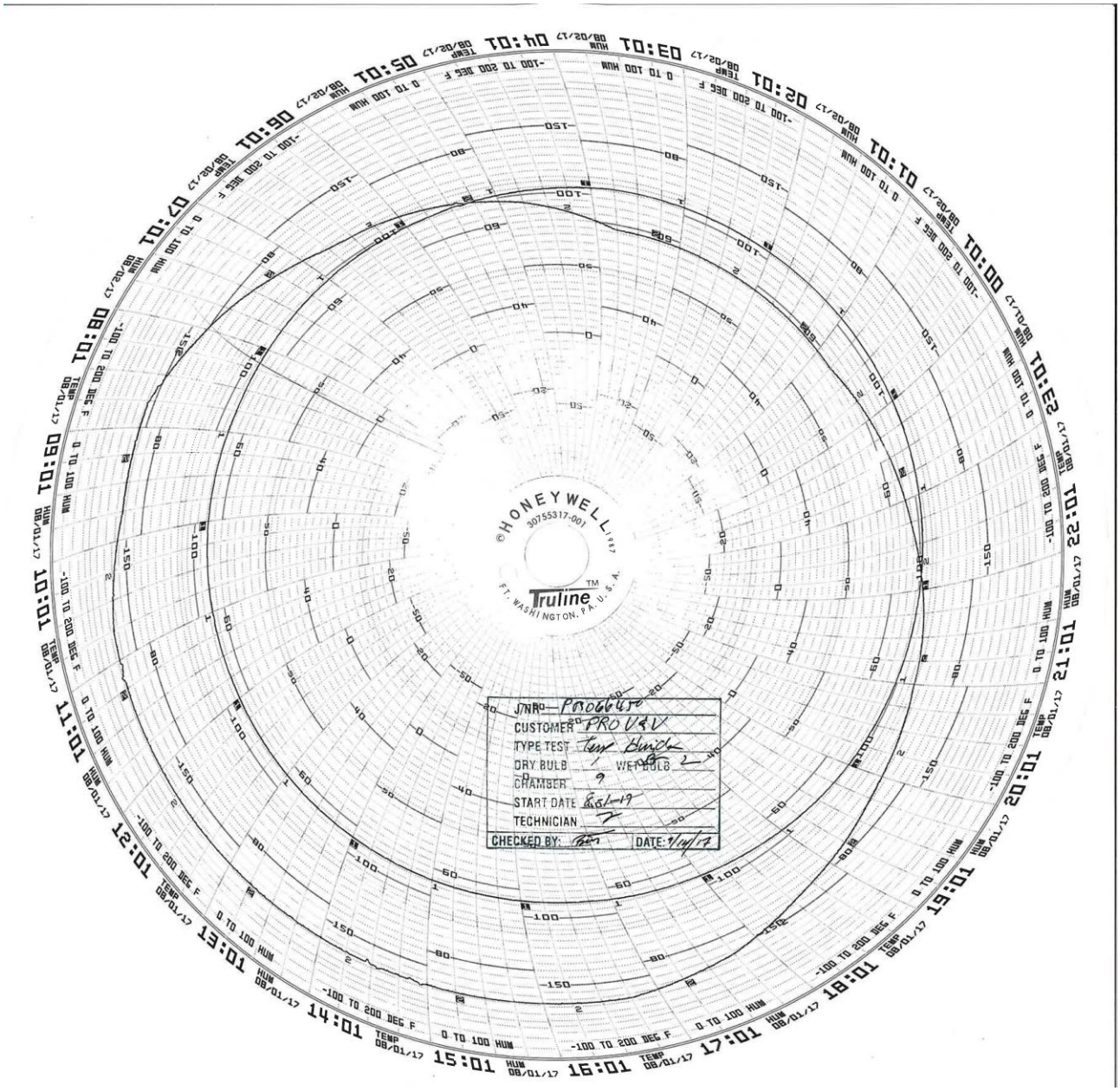
Tested By Donald Albrecht Technician **Date** 15 Aug 2017

Notice of Deviation None

Approved Project Engineer **Date** 15 Aug 2017

NTSH-0614, Rev. DEC '15


©HONEYWELL 1987
30755317-001
Truline™
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER Pro V&V
TYPE TEST Humidity
DRY BULB
WET BULB
CHAMBER 9
START DATE 7-31-17
TECHNICIAN
CHECKED BY: DATE: 8/4/17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Truline
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PROVAV
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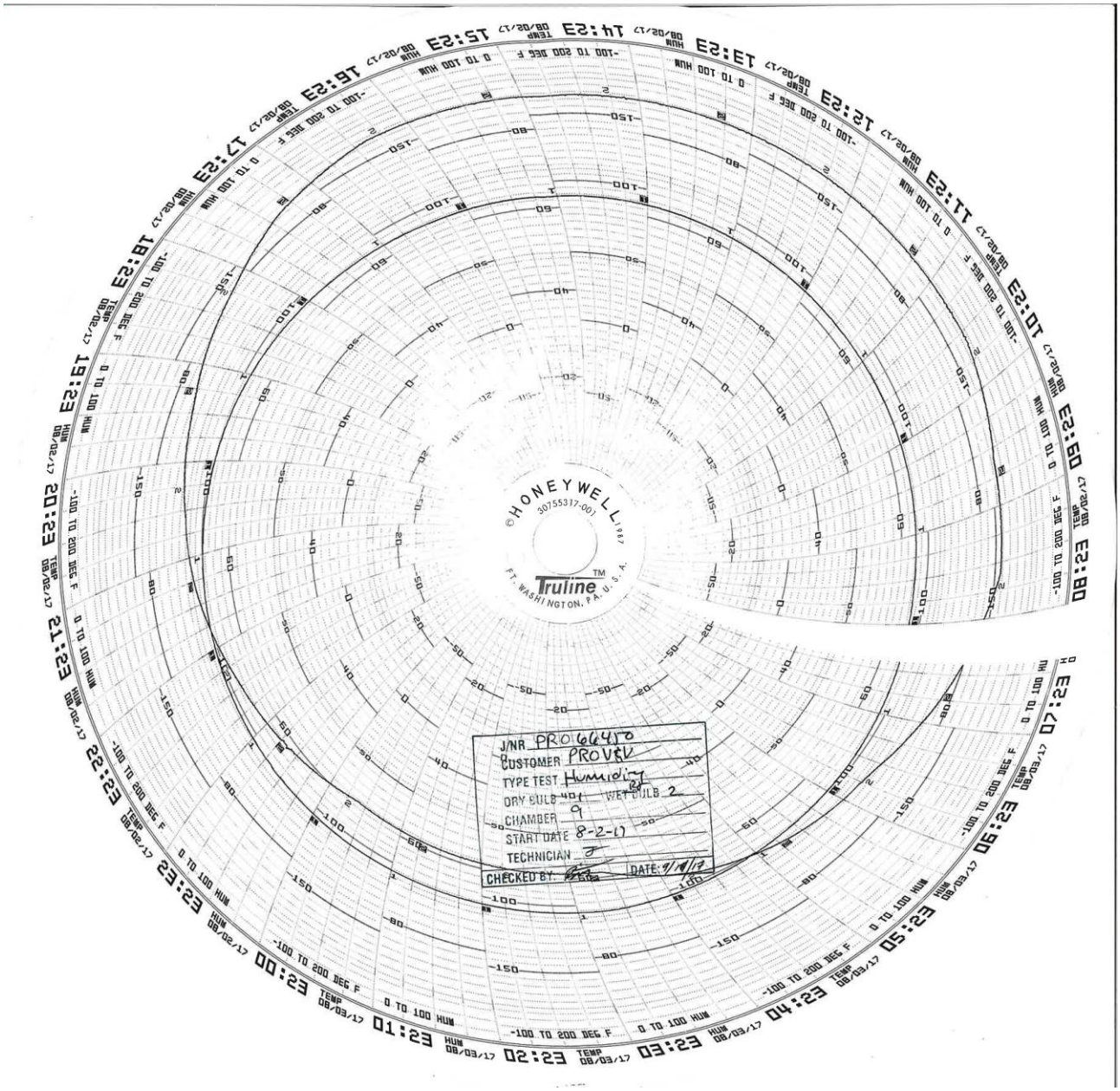
CHAMBER 9
START DATE 8/31/17
TECHNICIAN
CHECKED BY: DATE: 9/14/17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30755317-001
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Truline
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PROVEV
TYPE TEST Humidity
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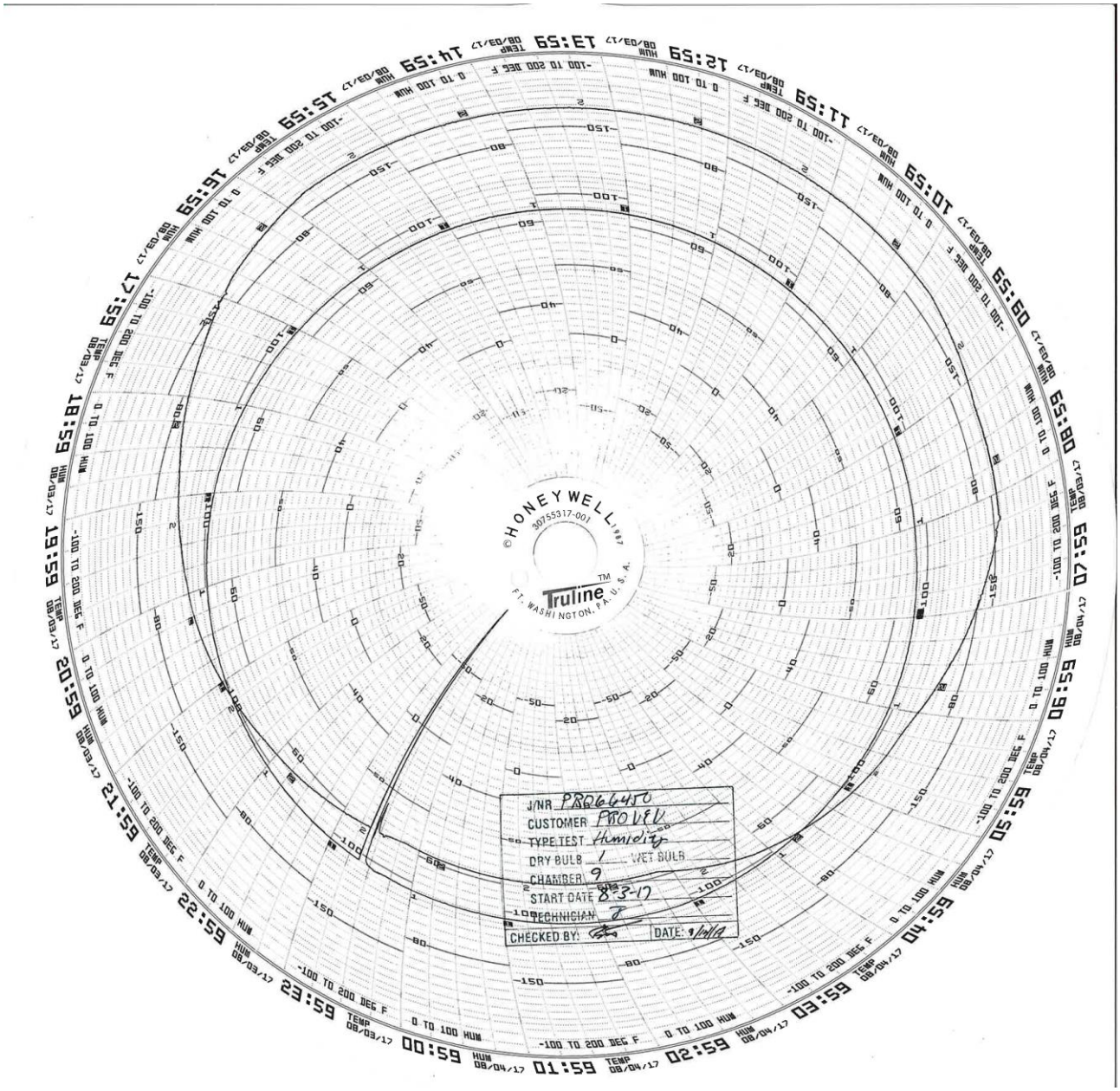
CHAMBER 9
START DATE 8-2-17
TECHNICIAN
CHECKED BY:
DATE: 8/4/17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J/NR PR066450
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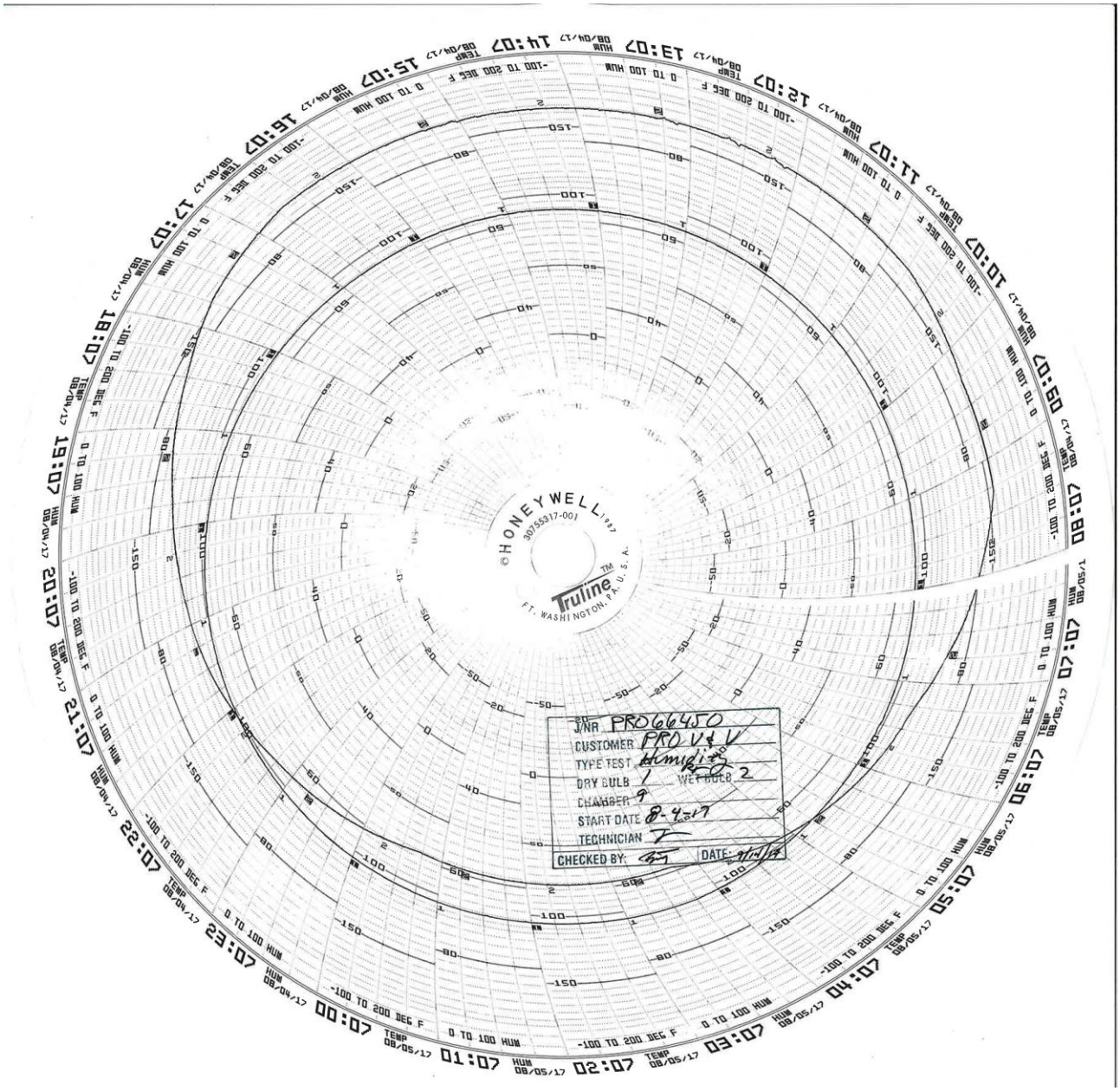
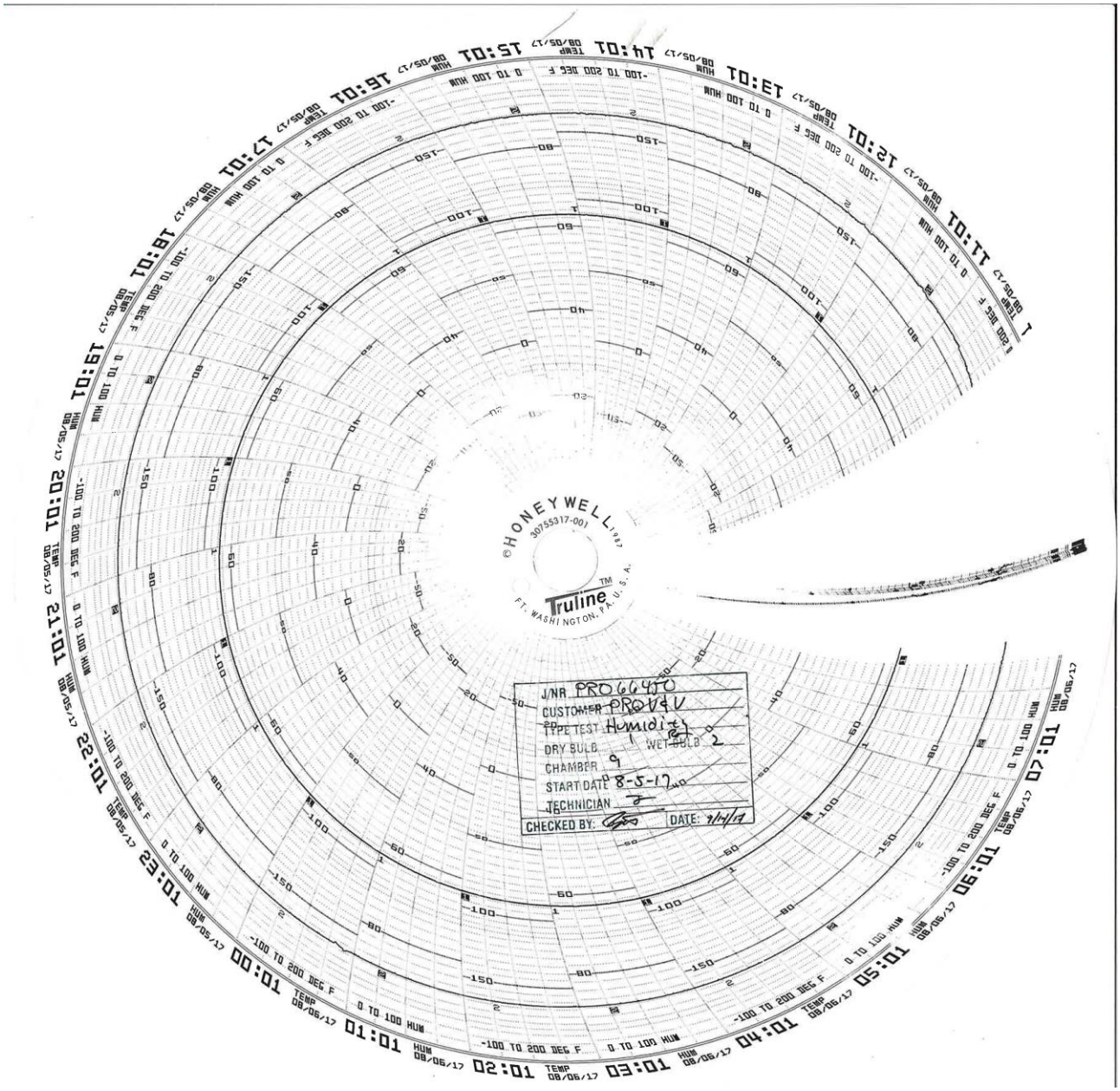
CHAMBER 9
START DATE 8-3-17
TECHNICIAN
CHECKED BY:
DATE: 9/14/17


HONEYWELL 1987
30155317-001
Truline TM
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PRO V&V
TYPE TEST Humidity
DRY BULB 1 WET BULB 2
CHAMBER 9
START DATE 8-4-17
TECHNICIAN
CHECKED BY: DATE: 8/14/17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J/NR PR066450
CUSTOMER PROVAV
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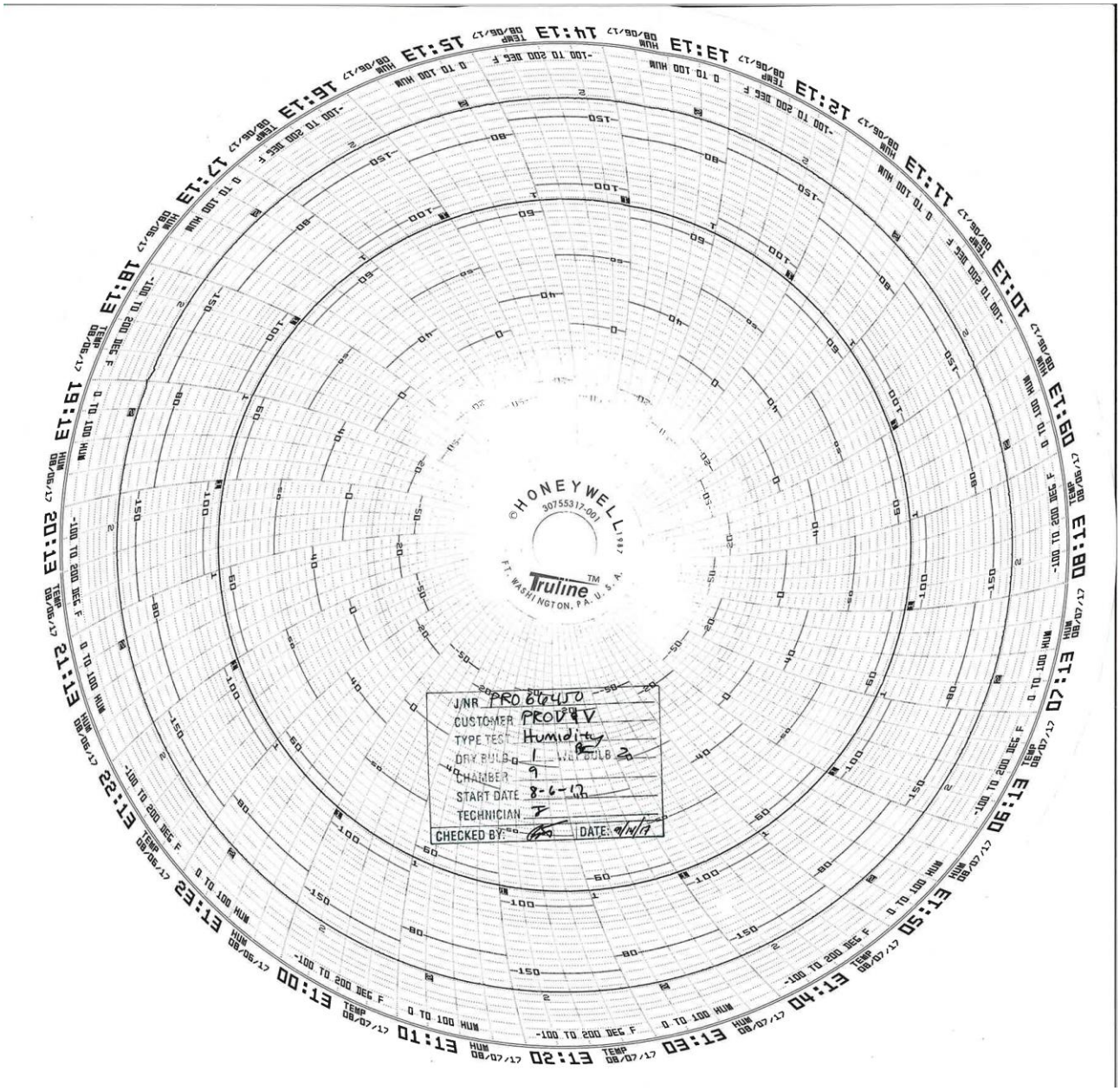
CHAMBER 9
START DATE 8-5-17
TECHNICIAN JB
CHECKED BY: DATE: 8/14/17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FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PROTEV
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WET BULB 2
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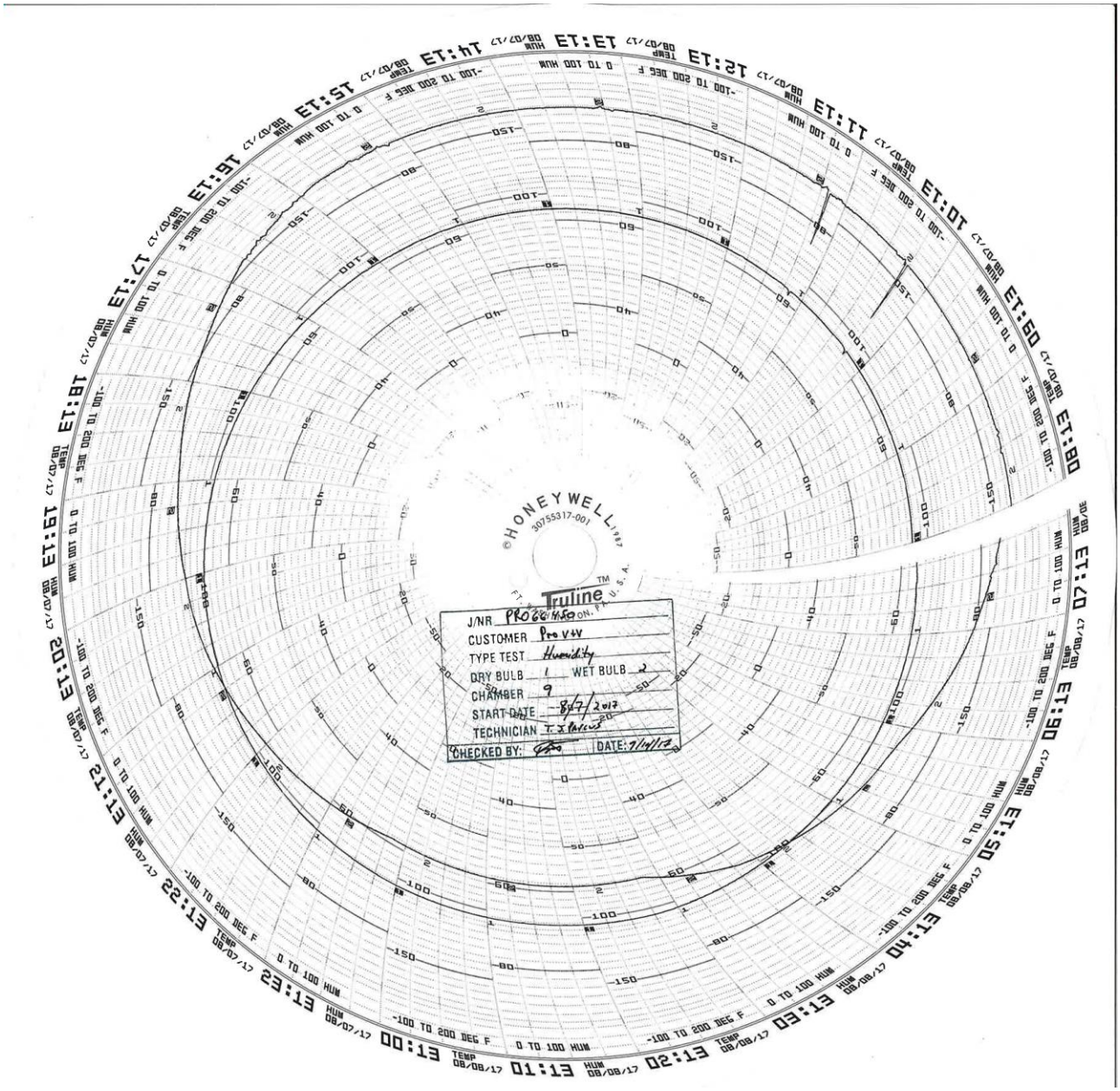
START DATE 8-6-17
TECHNICIAN
CHECKED BY:
DATE: 8/14/17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Truline
J/NR PR066450
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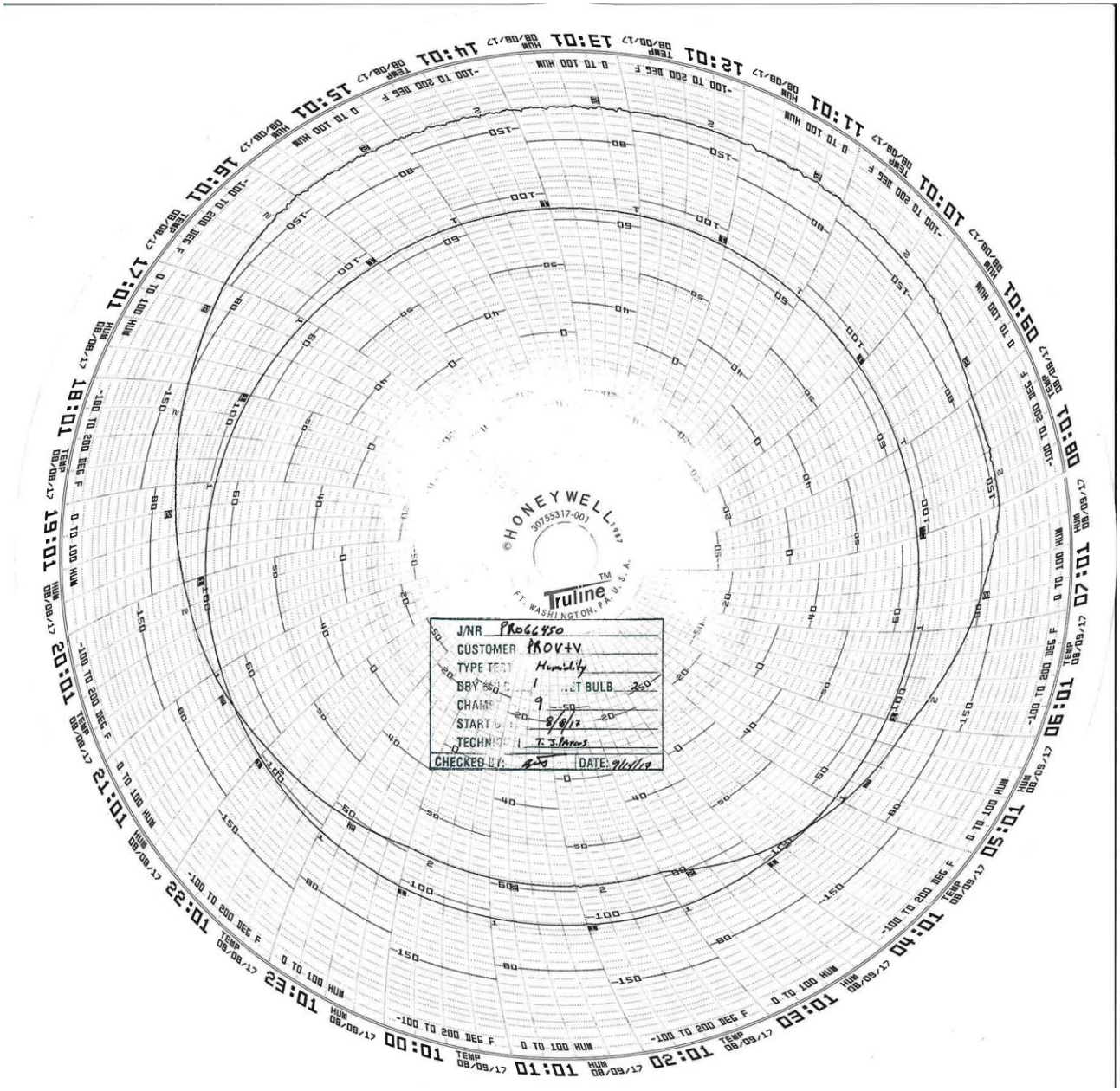
TECHNICIAN T. Marcus
CHECKED BY:
DATE: 7/24/17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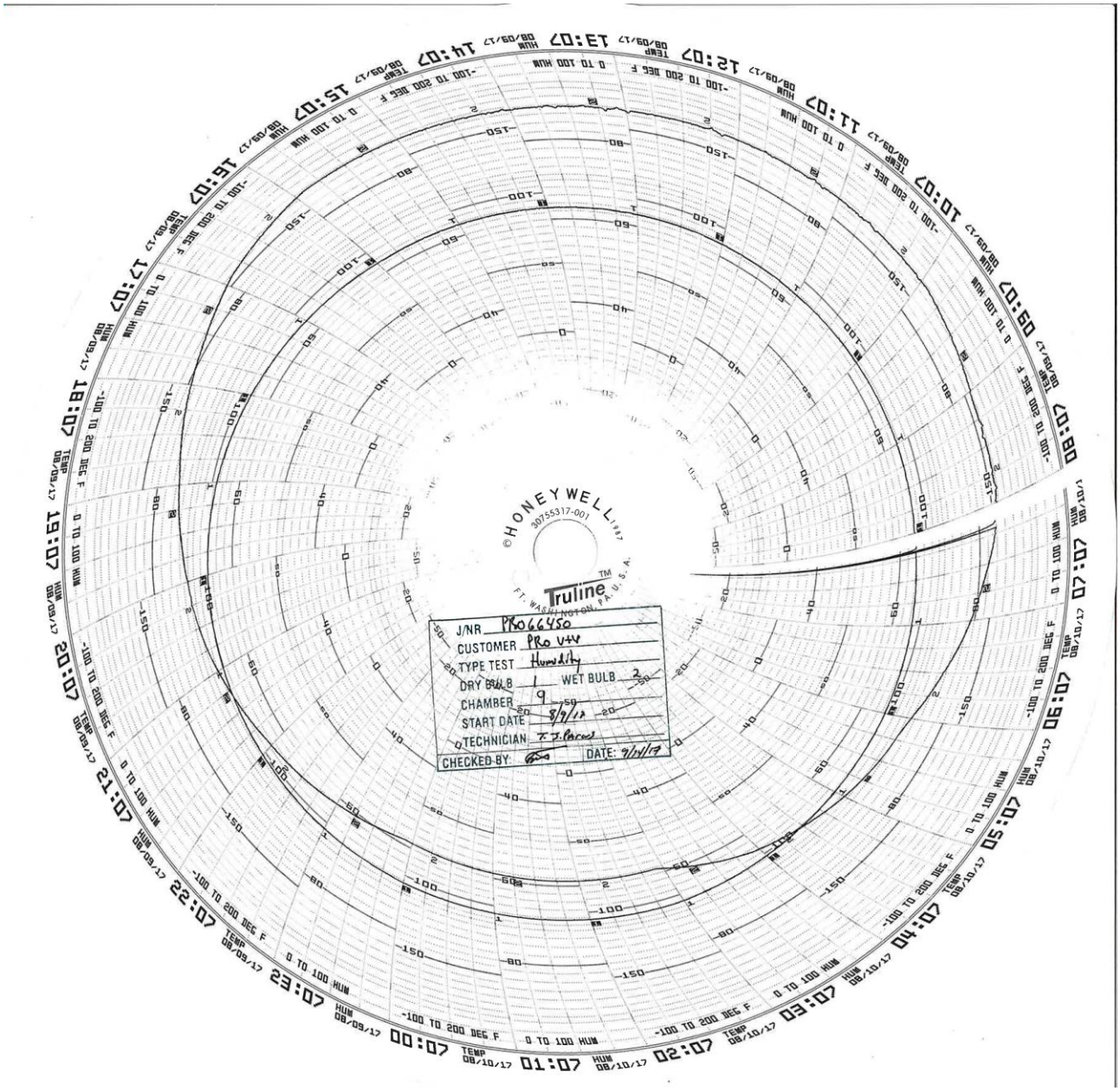
Truline
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PROVTV
TYPE TEST Humidity
CHECKED BY: DATE: 9/11/17


HONEYWELL
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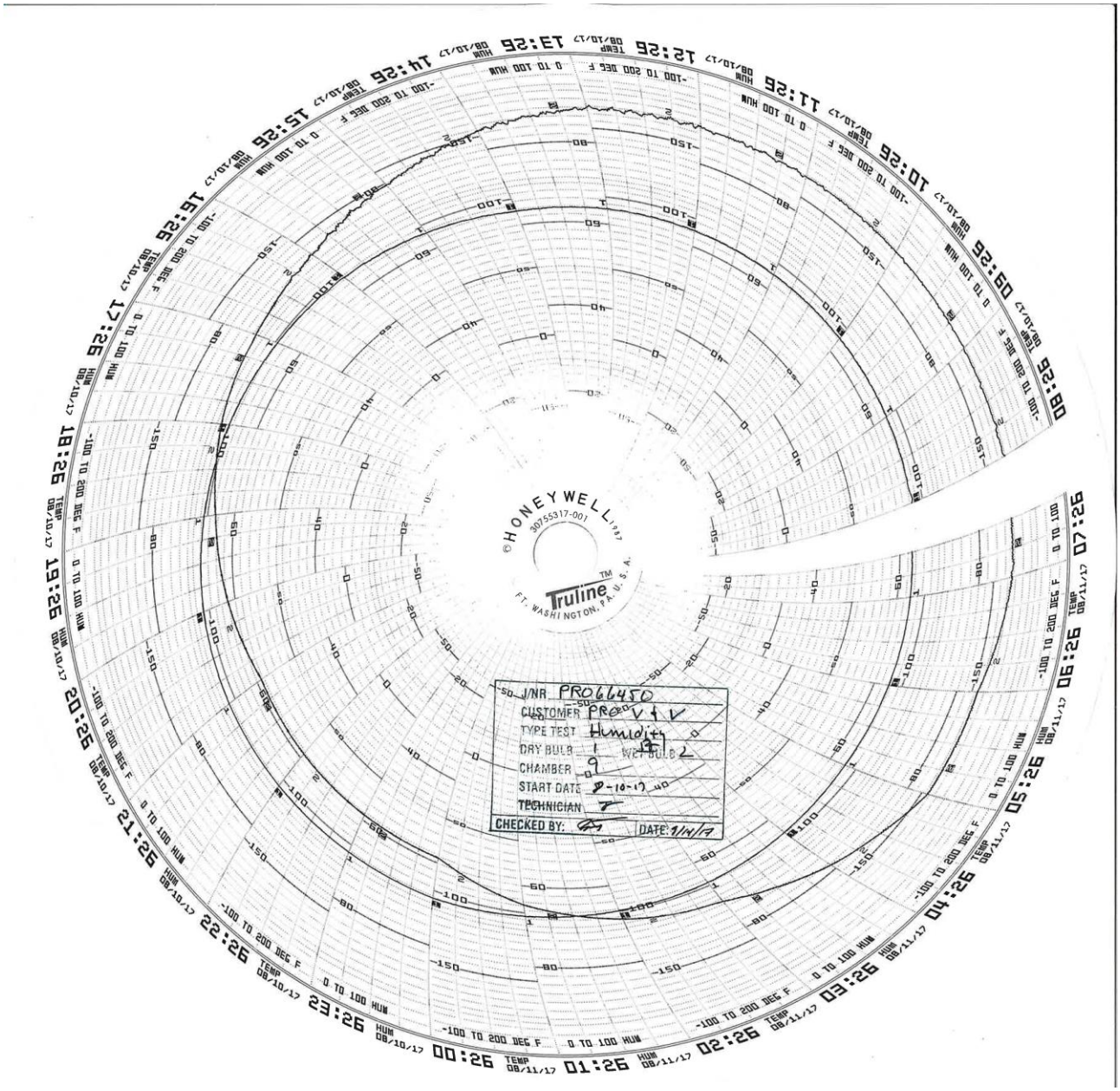
Truline
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PRO V+V
TYPE TEST Humidity
DRY BULB 1 WET BULB 2
CHAMBER 9
START DATE 8/9/17
TECHNICIAN T.J. Farrell
CHECKED BY: DATE: 9/14/17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J/NR PR066450
CUSTOMER PRO-V+V
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CHAMBER 9
START DATE 8-10-17 40
TECHNICIAN T
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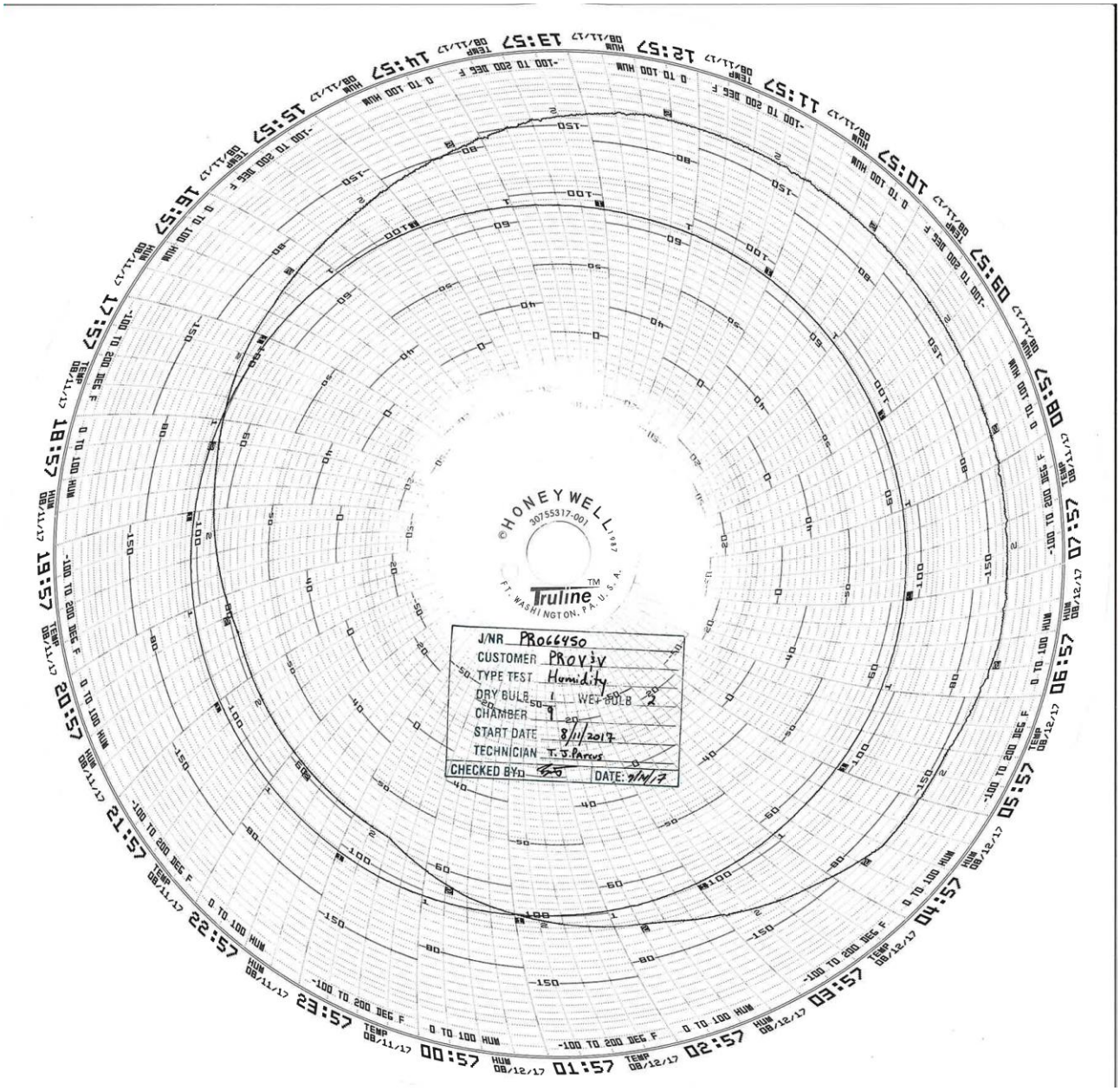
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J/NR PR066450
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TYPE TEST Humidity
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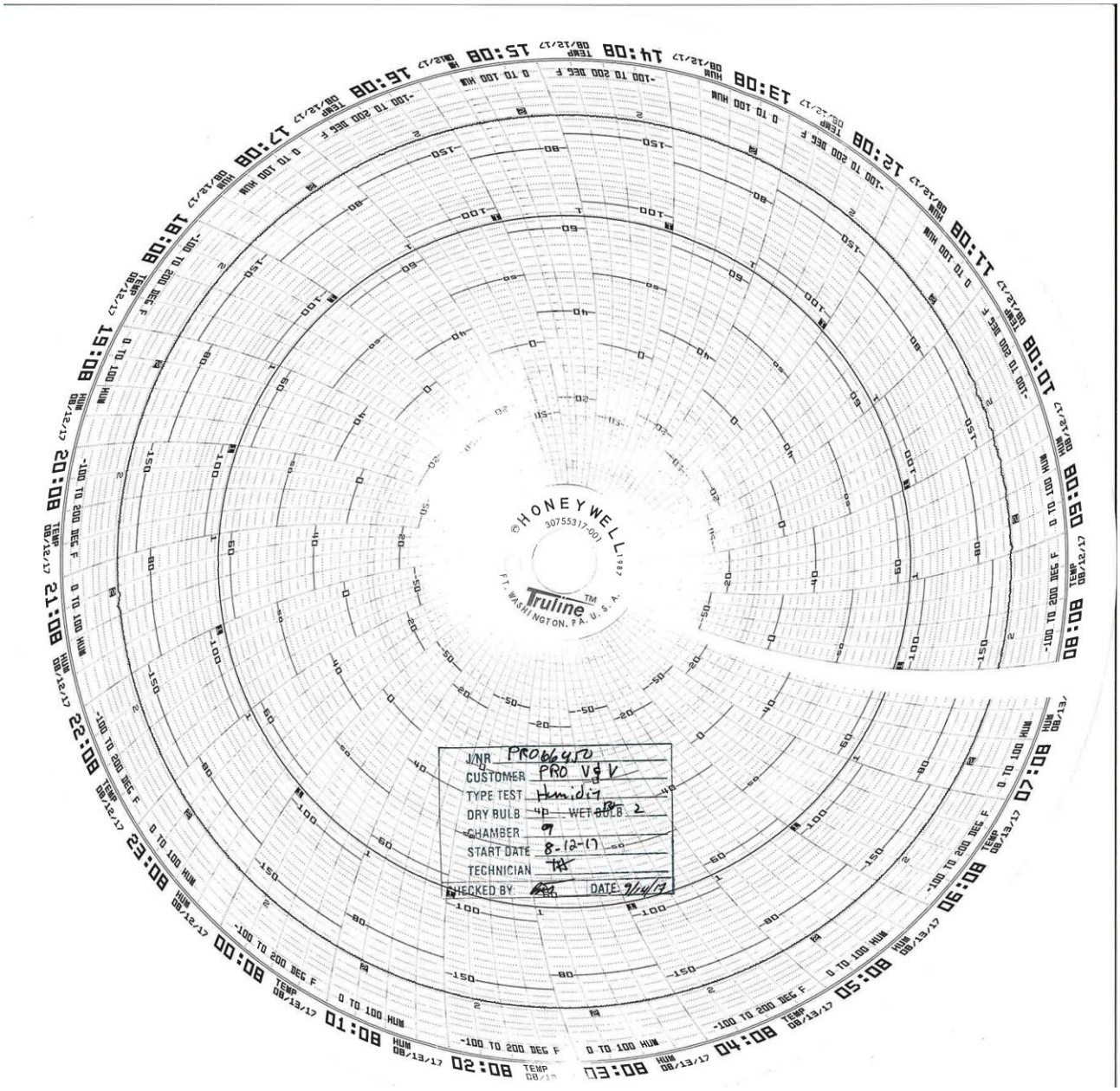
CHAMBER 9
START DATE 8/11/2017
TECHNICIAN T. J. Parcus
CHECKED BY
DATE: 9/14/17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J/N PR066450
CUSTOMER PRO V&V
TYPE TEST Humidity
DRY BULB 40 WET BULB 25
CHAMBER 9
START DATE 8-12-17
TECHNICIAN TH
CHECKED BY DATE: 8/14/17


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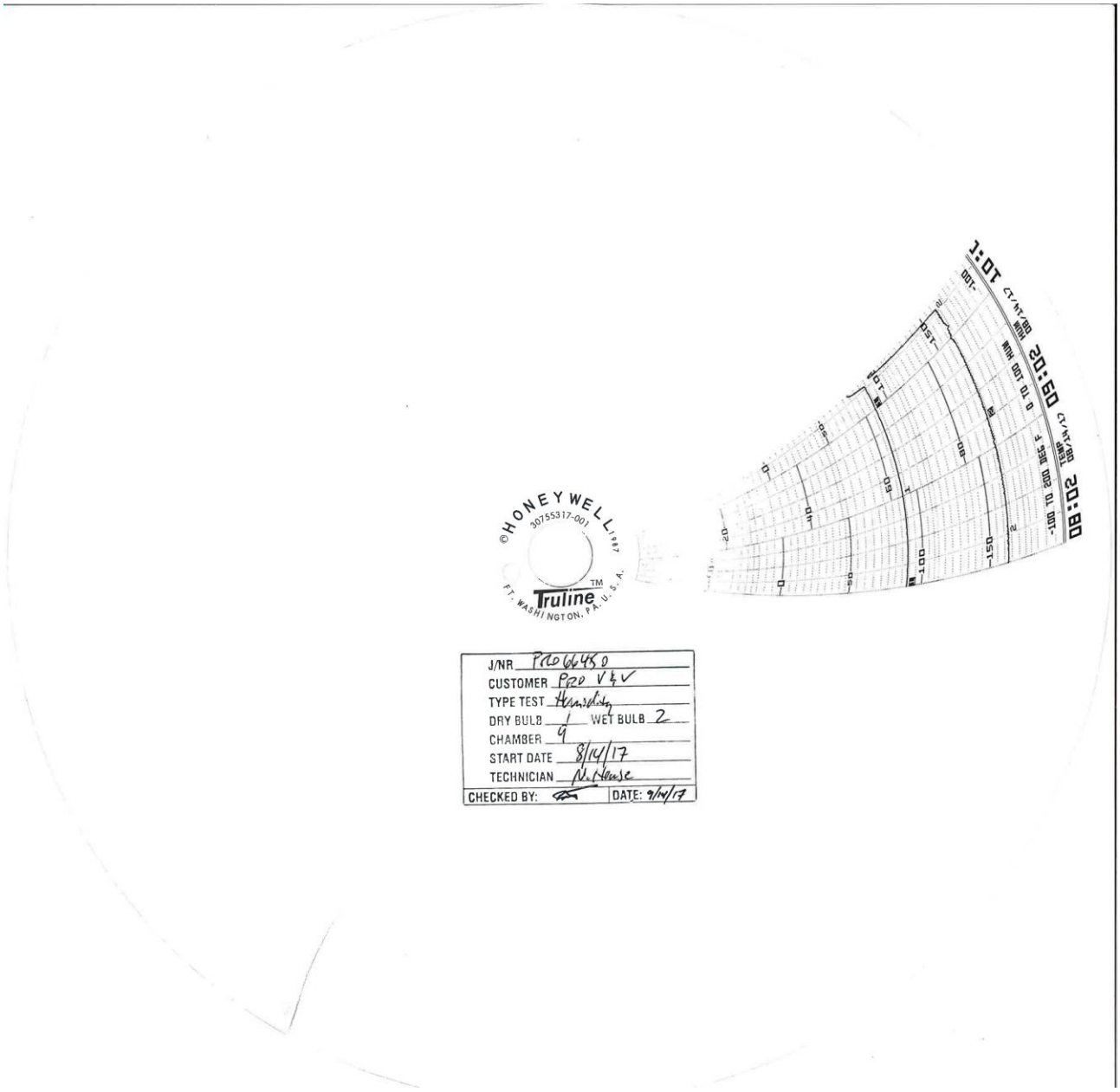
J/NR PR066450
CUSTOMER PROVEN
TYPE SOST Humon
DRY BULB 2
WET BULB 2
CHAMBER 9
START DATE 8-13-17
TECHNICIAN
CHECKED BY: DATE: 8/14/17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30755317-001
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FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER PRO V&V
TYPE TEST Humidity
DRY BULB 1 WET BULB 2
CHAMBER 9
START DATE 8/14/17
TECHNICIAN N. House
CHECKED BY:
DATE: 8/14/17
1:01
20:60
20:80

HIGH TEMPERATURE AND LOW TEMPERATURE STORAGE TEST DATA

NTS WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Temperature Datasheet

Project No. PR066450
Customer Pro V&V
Procedure MIL-STD-810D
Method 501.2 & 502.2
Paragraph N/A
Test Title High Temperature and Low Temperature Storage

Laboratory Ambient Conditions
Temperature 70° **Humidity** 60% **Pressure** 29.93"

Specimen Voting Machine
Part No. See Below **Start Date** 08/15/2017
Serial No. See Below **End Date** 08/16/2017
Sheet 1 **of** 1

DATE	TIME	Chamber Temp (°F)	COMMENTS
08/15	1115	66	Ramp to -4°F at 5°F/min
	1137	-4	Begin 4 hour soak
	1545	-3	Soak Complete. Ramp to Ambient at 5°F/min
	1644	70	Chamber off.
08/16	0941	71	Start chamber. Ramp to 140°F at 5°F/min
	1005	140	Begin 4 hour soak
	1421	140	Soak Complete. Ramp to Ambient at 5°F/min
	1531	73	Chamber off.

Item Number	Quantity Tested	Serial Number	Description
1	1	1707101552	ICX Tablet
2	1	715	VVPAT
3	1	1115271A	Printer

Tested By Donald C. Rhinehart Technician **Date** 17 Aug 2017

Notice of Deviation None

Approved Project Engineer **Date** 18 Aug 2017

NTSH-0614, Rev. DEC '15


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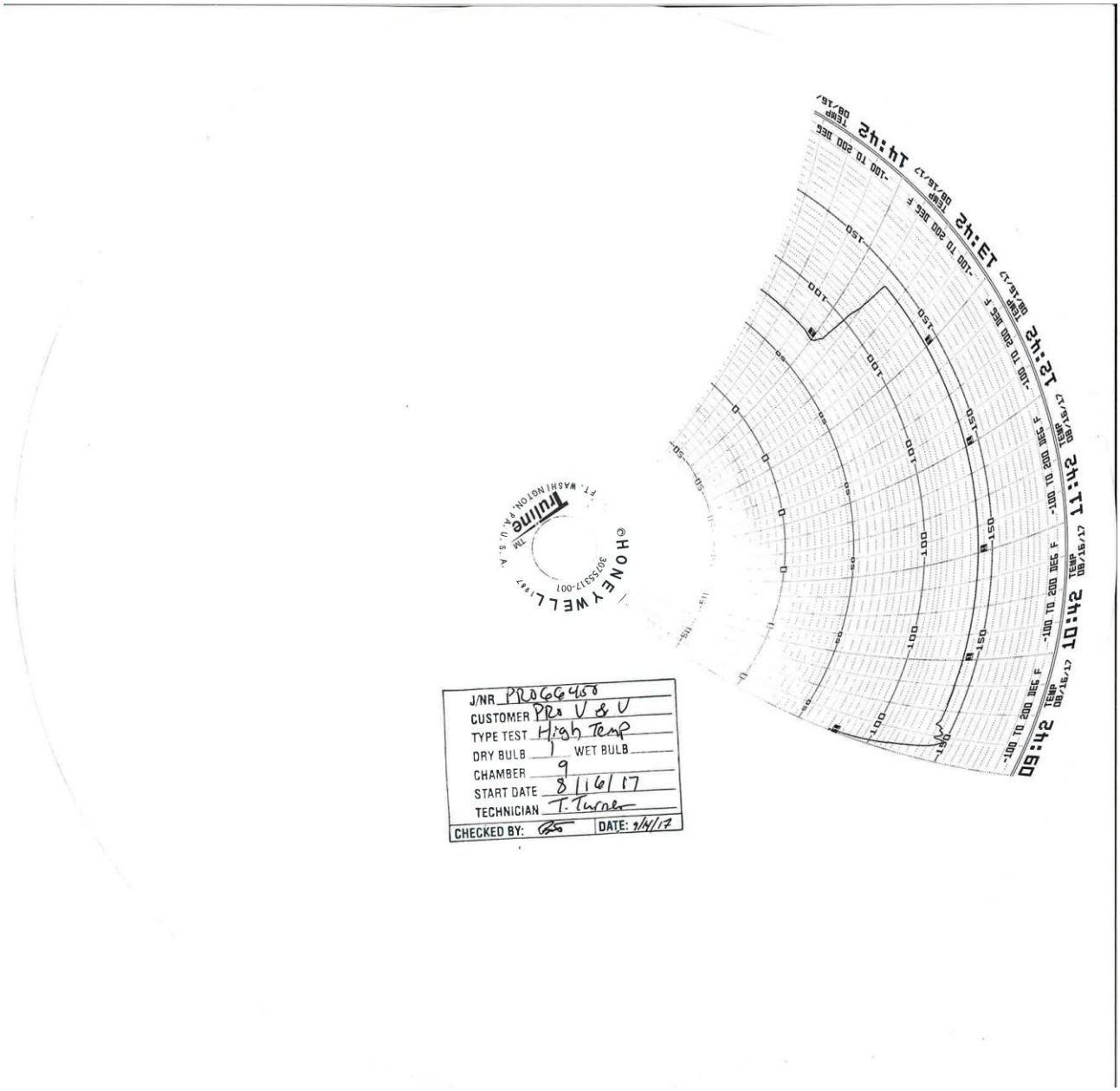
FT. WASHINGTON, PA. U.S.A.
J/NR PR066450
CUSTOMER Pro Vand V
TYPE TEST Cold op
DRY BULB 1 WET BULB
CHAMBER #9
START DATE 8/15/17
TECHNICIAN D. Baker
CHECKED BY:
DATE: 9/19/17


J/NR PR066458
CUSTOMER PRo V & V
TYPE TEST High Temp
DRY BULB 1 WET BULB
CHAMBER 9
START DATE 8/16/17
TECHNICIAN T. Turner
CHECKED BY:
DATE: 8/17/17
10:42
08/16/17
-100 TO 200 DEG F
TEMP
DB/RH

TRANSPORTATION VIBRATION TEST DATA

NTS
WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

VIBRATION TEST DATASHEET

Project No. PR066450 **Customer** Pro V & V

Procedure MIL-STD-810D **Specimen** Voting Machine

Method 516.3 **Part No.** N/A

Paragraph N/A **Serial No.** 1707101552, 715, 1115271A

Test Title Transportation Vibe

Laboratory Ambient Conditions
Temperature 70°F **Humidity** 48% **Pressure** 29.95"

Start Date 08/19/2017
End Date 08/20/2017
Sheet 1 **of** 2

				SINUSOIDAL			RANDOM			TOTAL	TEST	
DATE	TIME	AXIS	TEMP (°F)	FREQ (cps)	DISP (in)	ACCEL (g)	FREQ (cps)	PSD (g2/Hz)	SLOPE (dB/oct)	ACCEL (grms)	TIME (mm:ss)	COMMENTS TEST REQUIREMENT
8/19/2017	14:16	Vert	Amb				10	0.01500			60:01	Run 1 Voting Machine
							40	0.01500				
							500	0.00015		1.0438		
8/20/2017	14:47	Trans	Amb				10	0.00013			60:01	Run 2 Voting Machine
							20	0.00065				
							30	0.00065				
							78	0.00002				
							79	0.00019				
							120	0.00019				
							500	0.00001		0.2051		

Signed: M. Boyd Technician **Date:** 8/21/2017 **Approved:** Project Engineer **Date:** 25 Aug 2017

NTSH-1028, Rev. DEC '15

NTS
HUNTSVILLE OPERATIONS

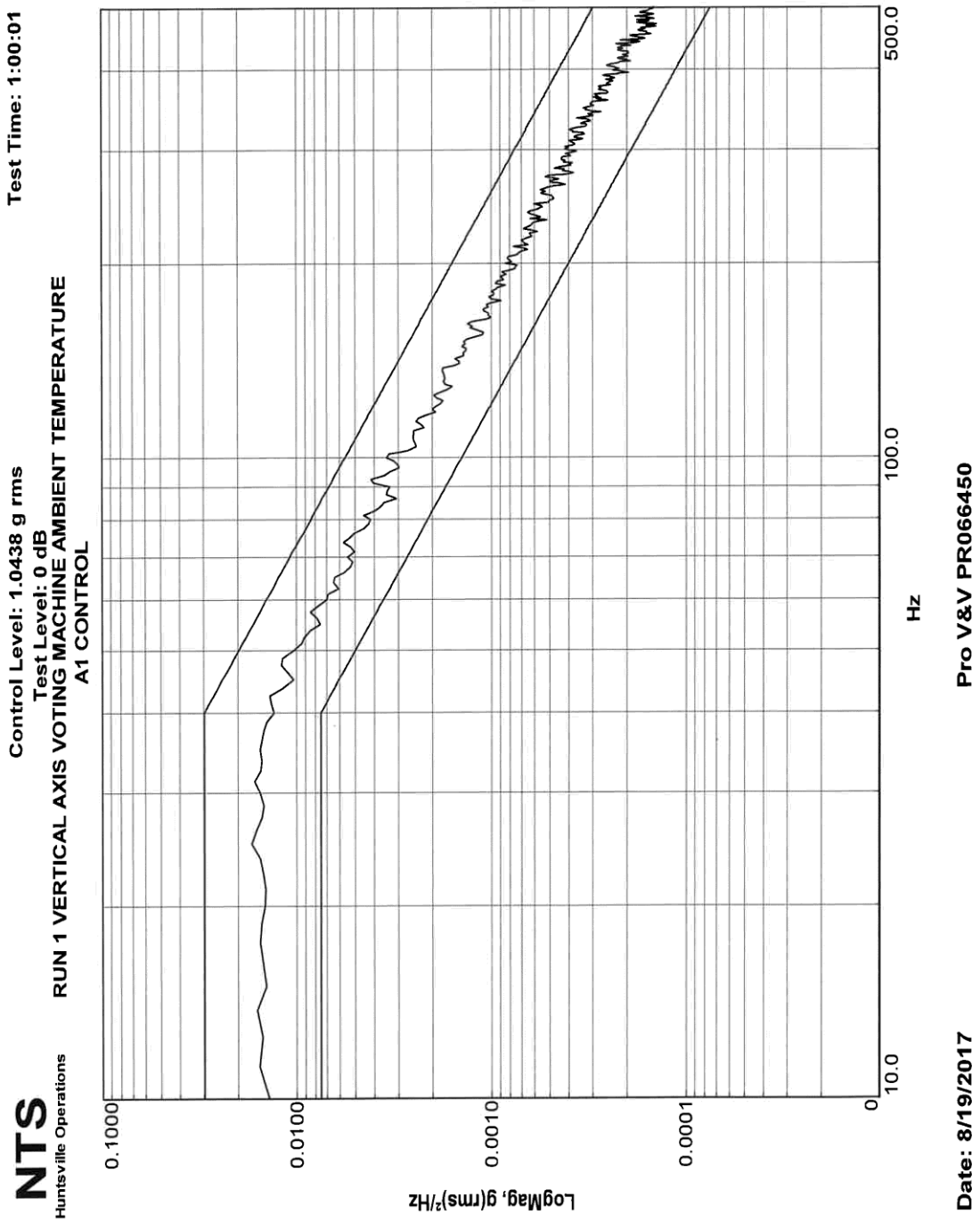
VIBRATION TEST DATASHEET

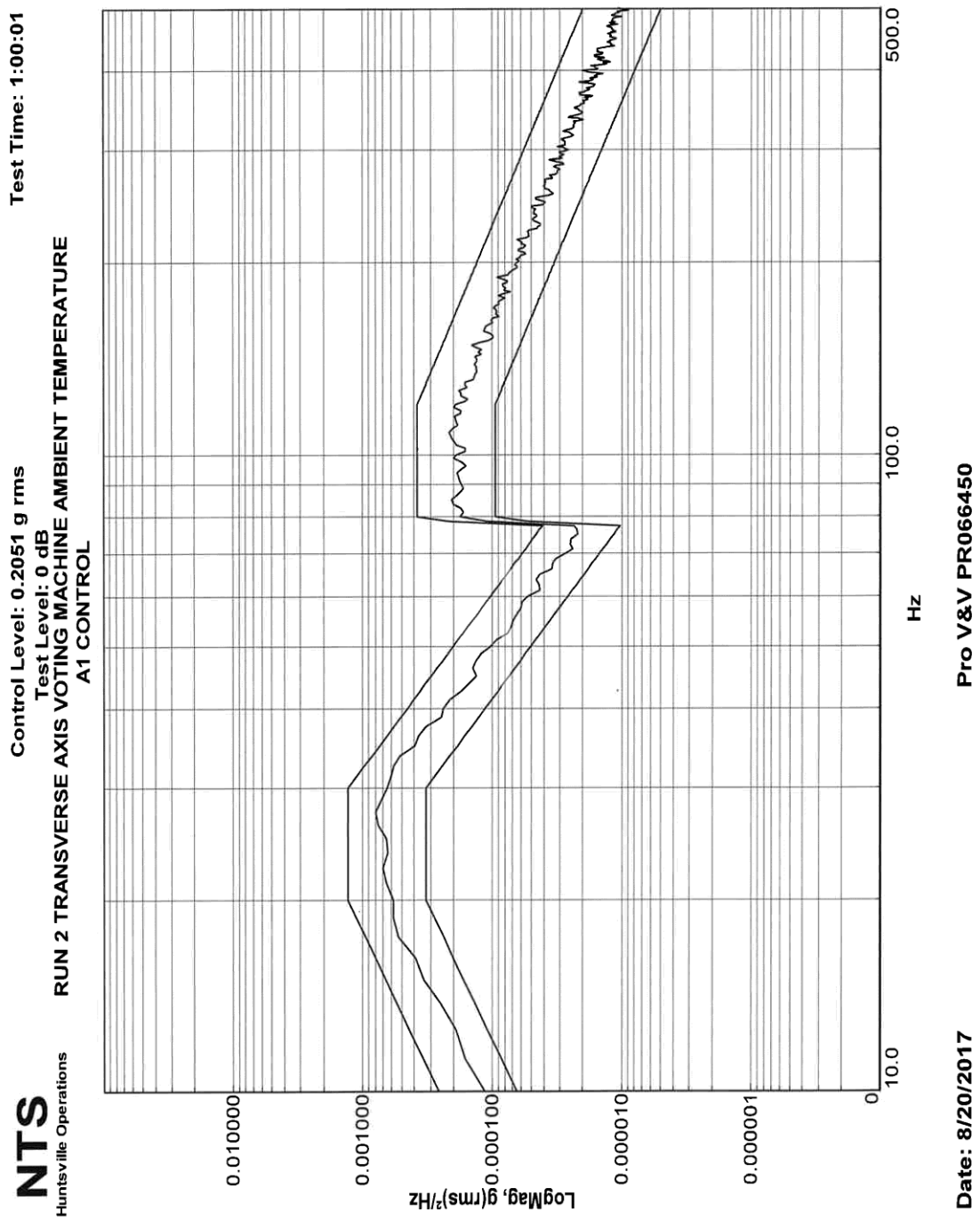
Report No: PR066450-01DP

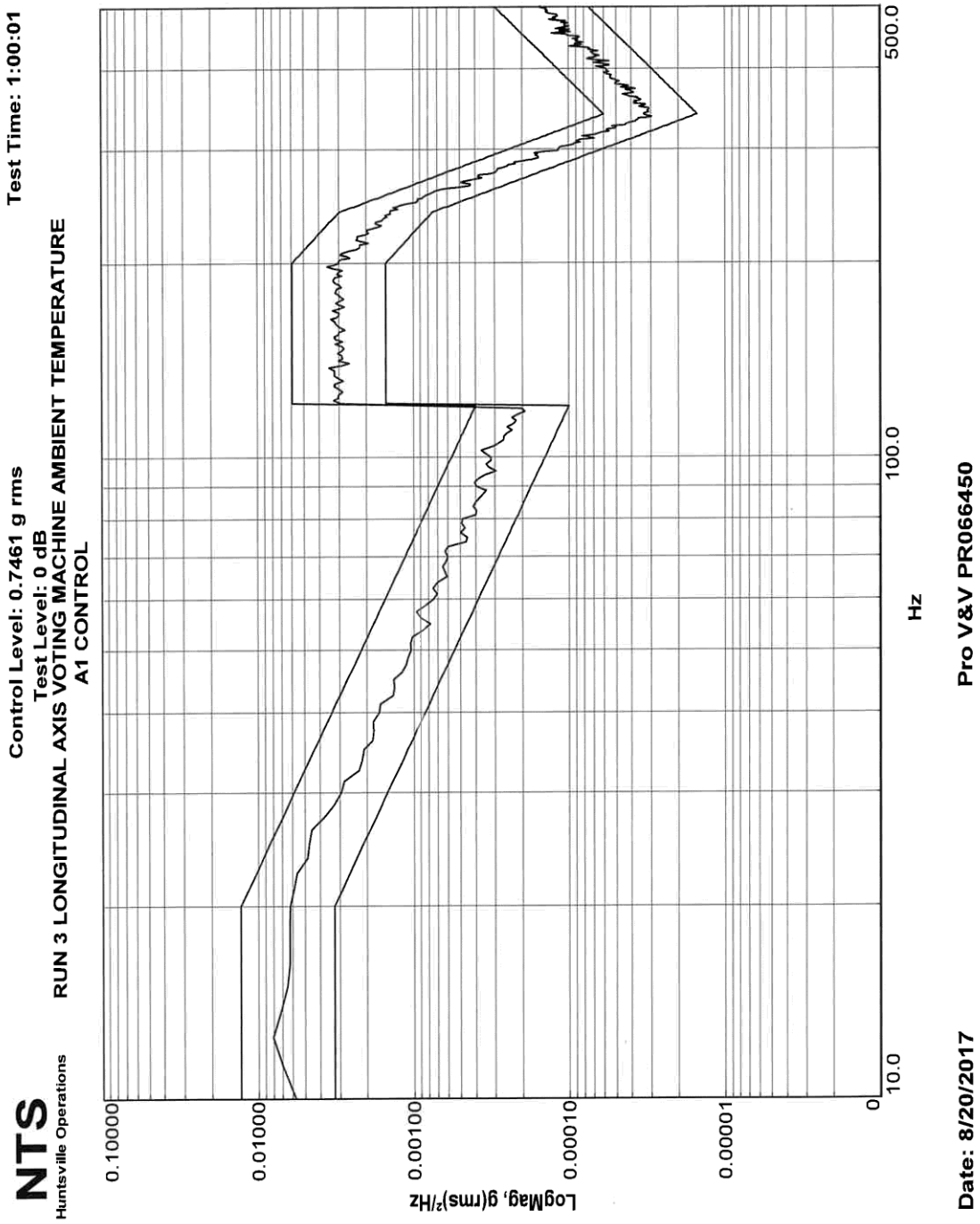
DATE	TIME	AXIS	TEMP (°F)	SINUSOIDAL FREQ (cps)	SINUSOIDAL DISP (in)	SINUSOIDAL ACCEL (g)	RANDOM FREQ (cps)	RANDOM PSD (g2/Hz)	RANDOM SLOPE (dB/oct)	TOTAL ACCEL (grms)	TEST TIME (mm:ss)	COMMENTS TEST REQUIREMENT
8/20/2017	16:13	Long	Amb				10	0.00650			60:01	Run 3 Voting Machine
							20	0.00650				
							120	0.0020				
							121	0.00300				
							200	0.00300				
							240	0.00150				
							340	0.00003				
							500	0.00015		0.7461		

Signed: M. Pyon Technician Date: 8/21/2017 Approved: Project Engineer Date: 25 Aug 2017

NTSH-1028, Rev. DEC '15


NTS
Huntsville Operations
RUN 1 VERTICAL AXIS VOTING MACHINE AMBIENT TEMPERATURE
A1 CONTROL
Control Level: 1.0438 g rms
Test Level: 0 dB
Test Time: 1:00:01
LogMag, g(rms)²/Hz
0.1000
0.0100
0.0010
0.0001
0
10.0
100.0
500.0
Hz
Date: 8/19/2017
Pro V&V PR066450


NTS
Huntsville Operations
RUN 2 TRANSVERSE AXIS VOTING MACHINE AMBIENT TEMPERATURE
A1 CONTROL
Control Level: 0.2051 g rms
Test Level: 0 dB
Test Time: 1:00:01
LogMag, g(rms)²/Hz
0.010000
0.001000
0.000100
0.000010
0.000001
10.0
100.0
500.0
Hz
Date: 8/20/2017
Pro V&V PR066450


NTS
Huntsville Operations
Control Level: 0.7461 g rms
Test Level: 0 dB
RUN 3 LONGITUDINAL AXIS VOTING MACHINE AMBIENT TEMPERATURE
A1 CONTROL
Test Time: 1:00:01
0.10000
0.01000
0.00100
0.00010
0.00001
LogMag, g(rms)²/Hz
0
10.0
100.0
500.0
Hz
Pro V&V PR066450
Date: 8/20/2017

BENCH HANDLING TEST DATA

NTS WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Drop Test Datasheet

Project No. PR066450
Customer Pro V & V
Procedure MIL-STD-810D
Method 516.3
Paragraph N/A
Test Title Bench Handling

Laboratory Ambient Conditions
Temperature 68.1F **Humidity** 59.9% **Pressure** 29.39

Specimen Thermal Printer
Part No. N/A **Start Date** 08/22/2017
Serial No. 1115271A **End Date** 08/22/2017
Sheet 1 of 2

Date	Time	Temp	Drop Heigh	Axis / Corner No.	Comments
08/22/17	11:07	Ambient	Tipping Point	Bottom Face	Drop#1 Thermal Printer
	11:07	Ambient	Tipping Point	Bottom Face	Drop#2 Thermal Printer
	11:08	Ambient	Tipping Point	Bottom Face	Drop#3 Thermal Printer
	11:08	Ambient	Tipping Point	Bottom Face	Drop#4 Thermal Printer
	11:10	Ambient	Tipping Point	Top Face	Drop#5 Thermal Printer
	11:11	Ambient	Tipping Point	Top Face	Drop#6 Thermal Printer
	11:11	Ambient	Tipping Point	Top Face	Drop#7 Thermal Printer
	11:11	Ambient	Tipping Point	Top Face	Drop#8 Thermal Printer
	11:14	Ambient	Tipping Point	Front Face	Drop#9 Thermal Printer
	11:15	Ambient	Tipping Point	Front Face	Drop#10 Thermal Printer
	11:15	Ambient	Tipping Point	Front Face	Drop#11 Thermal Printer
	11:15	Ambient	Tipping Point	Front Face	Drop#12 Thermal Printer
	11:17	Ambient	Tipping Point	Back Face	Drop#13 Thermal Printer
	11:17	Ambient	Tipping Point	Back Face	Drop#14 Thermal Printer
	11:18	Ambient	Tipping Point	Back Face	Drop#15 Thermal Printer
	11:18	Ambient	Tipping Point	Back Face	Drop#16 Thermal Printer
	11:20	Ambient	Tipping Point	Right Face	Drop#17 Thermal Printer
	11:21	Ambient	Tipping Point	Right Face	Drop#18 Thermal Printer
	11:21	Ambient	Tipping Point	Right Face	Drop#19 Thermal Printer
	11:21	Ambient	Tipping Point	Right Face	Drop#20 Thermal Printer

Tested By _____ Technician **Date** 8/22/17

Notice of Deviation None

Approved _____ Project Engineer **Date** 25 Aug 2017

NTSH-1656, Rev. DEC '15

NTS WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Drop Test Datasheet

Project No. PR066450
Customer Pro V & V
Procedure MIL-STD-810D
Method 516.3
Paragraph N/A
Test Title Bench Handling

Laboratory Ambient Conditions
Temperature 68.1F **Humidity** 59.9% **Pressure** 29.39

Specimen Thermal Printer
Part No. N/A **Start Date** 08/22/2017
Serial No. 1115271A **End Date** 08/22/2017
Sheet 2 of 2

Date	Time	Temp	Drop Heigh	Axis / Corner No.	Comments
08/22/17	11:22	Ambient	Tipping Point	Left Face	Drop#21 Thermal Printer
	11:22	Ambient	Tipping Point	Left Face	Drop#22 Thermal Printer
	11:23	Ambient	Tipping Point	Left Face	Drop#23 Thermal Printer
	11:23	Ambient	Tipping Point	Left Face	Drop#24 Thermal Printer

Tested By Daniel Mallory Technician **Date** 8/22/17

Notice of Deviation None

Approved Project Engineer **Date** 25 Aug 2017

NTSH-1656, Rev. DEC '15

NTS WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Drop Test Datasheet

Project No. PR066450
Customer Pro V & V
Procedure MIL-STD-810D
Method 516.3
Paragraph N/A
Test Title Bench Handling

Laboratory Ambient Conditions
Temperature 68.1F **Humidity** 59.9% **Pressure** 29.39

Specimen VVPAT
Part No. N/A **Start Date** 08/22/2017
Serial No. 715 **End Date** 08/22/2017
Sheet 1 of 1

Date	Time	Temp	Drop Heigh	Axis / Corner No.	Comments
08/22/17	11:25	Ambient	4"	Back Face	Drop#1 VVPAT
	11:25	Ambient	4"	Back Face	Drop#2 715 ABS
	11:26	Ambient	4"	Back Face	Drop#3 715 ABS
	11:26	Ambient	4"	Back Face	Drop#4 715 ABS
	11:28	Ambient	4"	Front Face	Drop#5 715 ABS
	11:28	Ambient	4"	Front Face	Drop#6 715 ABS
	11:29	Ambient	4"	Front Face	Drop#7 715 ABS
	11:29	Ambient	4"	Front Face	Drop#8 715 ABS
	11:30	Ambient	Tipping Point	Bottom Face	Drop#9 715 ABS
	11:31	Ambient	Tipping Point	Bottom Face	Drop#10 715 ABS
	11:31	Ambient	Tipping Point	Bottom Face	Drop#11 715 ABS
	11:31	Ambient	Tipping Point	Bottom Face	Drop#12 715 ABS
	11:33	Ambient	4"	Right Face	Drop#13 715 ABS
	11:33	Ambient	4"	Right Face	Drop#14 715 ABS
	11:34	Ambient	Tipping Point	Right Face	Drop#15 715 ABS
	11:34	Ambient	Tipping Point	Right Face	Drop#16 715 ABS
	11:35	Ambient	4"	Left Face	Drop#17 715 ABS
	11:35	Ambient	4"	Left Face	Drop#18 715 ABS
	11:35	Ambient	Tipping Point	Left Face	Drop#19 715 ABS
	11:36	Ambient	Tipping Point	Left Face	Drop#20 715 ABS
					*Top Face Not Practical for Service

Tested By Jaime Melly Technician **Date** 8/22/17

Notice of Deviation None

Approved Project Engineer **Date** 25 Aug 2017

NTSH-1656, Rev. DEC '15

NTS WE ENGINEER SUCCESS
HUNTSVILLE OPERATIONS

Drop Test Datasheet

Project No. PR066450
Customer Pro V & V
Procedure MIL-STD-810D
Method 516.3
Paragraph N/A
Test Title Bench Handling

Laboratory Ambient Conditions
Temperature 68.1F **Humidity** 59.9% **Pressure** 29.39

Specimen ICX Tablet
Part No. N/A **Start Date** 08/22/2017
Serial No. 1707101552 **End Date** 08/22/2017
Sheet 1 **of** 1

Date	Time	Temp	Drop Heigh	Axis / Corner No.	Comments
08/22/17	13:33	Ambient	4"	Back Face	Drop#1 Voting Machine
	13:33	Ambient	4"	Back Face	Drop#2 Voting Machine
	13:34	Ambient	4"	Back Face	Drop#3 Voting Machine
	13:34	Ambient	4"	Back Face	Drop#4 Voting Machine
	13:38	Ambient	4"	Front Face	Drop#5 Voting Machine
	13:38	Ambient	4"	Front Face	Drop#6 Voting Machine
	13:39	Ambient	4"	Front Face	Drop#7 Voting Machine
	13:39	Ambient	4"	Front Face	Drop#8 Voting Machine
					* Top, Bottom, Left, Right Face not Practical for Service

Tested By _____ Technician **Date** 8/22/17

Notice of Deviation None

Approved _____ Project Engineer **Date** 25 Aug 2017

NTSH-1656, Rev. DEC '15

TEMPERATURE AND POWER VARIATION

NTS HUNTSVILLE OPERATIONS

Temperature Datasheet

Project No. PR066450
Customer Pro V&V
Procedure MIL-STD-810D
Method 501.2 & 502.2
Paragraph N/A
Test Title Temperature & Power Variation

Laboratory Ambient Conditions
Temperature 70° **Humidity** 60% **Pressure** 29.93"

Specimen Voting Machine
Part No. See Below **Start Date** 09/05/2017
Serial No. See Below **End Date** 09/09/2017
Sheet 1 **of** 1

DATE	TIME	Chamber Temp (°F)	COMMENTS
09/05	1100	78	Ramp to 50°F
09/06	0808	50	Changed chart.
	2320	44	Temp alarm tripped. Reset chamber. Restart interval 7.
09/07	0044	60	Stop Program. Ramp chamber to 50°F. Continue in Manual Mode.
	0812	50	Changed chart.
	1104	50	Ramp to 95°F
	1200	95	Chamber temp stabilized.
	2300	95	Ramp to ambient
	2313	72	Ramp complete.
09/08	0807	70	Changed chart.
	1801	81	Reset chamber cooling packages. Return to ambient.
	1830	72	Chamber temp stabile
09/09	0755	72	Changed chart.
	1102	72	End test.

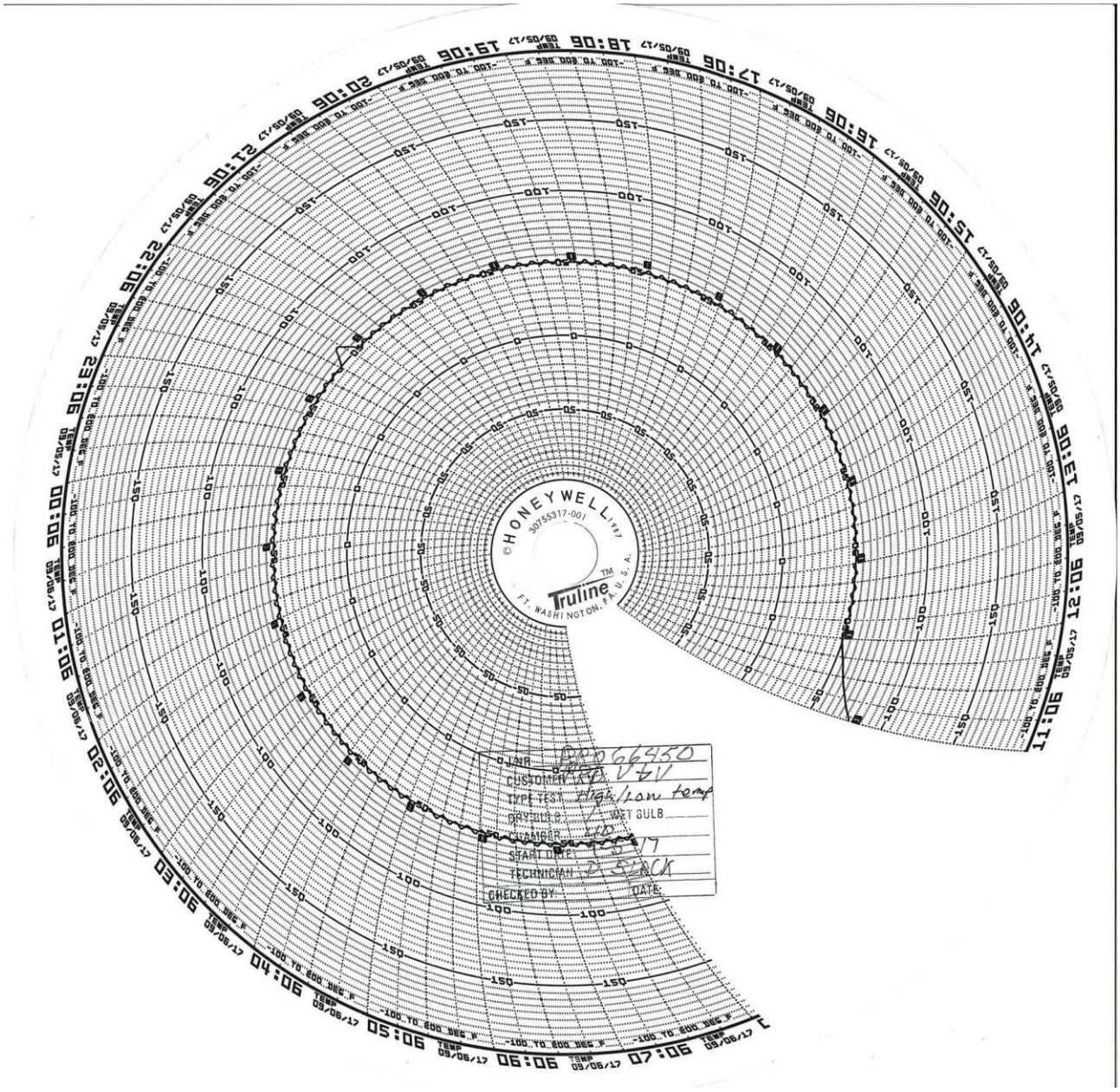
Serial Numbers tested:
1707101720
1707101845
1707101722
1707101778

Tested By _____ Technician **Date** 9-15-2017

Notice of Deviation None

Approved _____ Project Engineer **Date** 15Sept2017

NTSH-0614, Rev. DEC '15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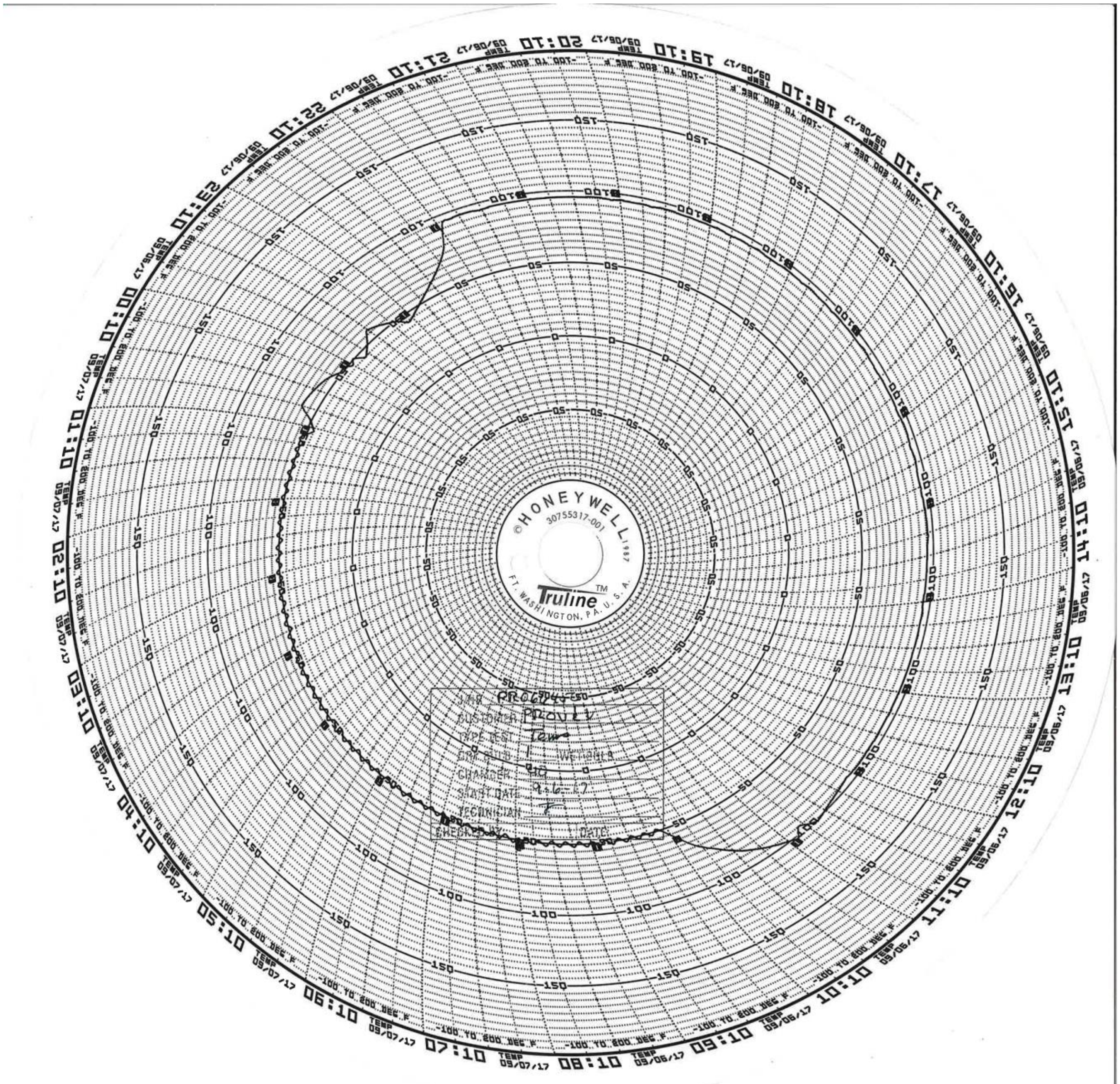
30755317-001
Truline
FT. WASHINGTON, PA. U.S.A.
JNR PR066450
CUSTOMER V-22
TYPE TEST High/Low temp
DRY BULB WET BULB
CHAMBER
START DATE 5-5-17
TECHNICIAN J. SACK
CHECKED BY DATE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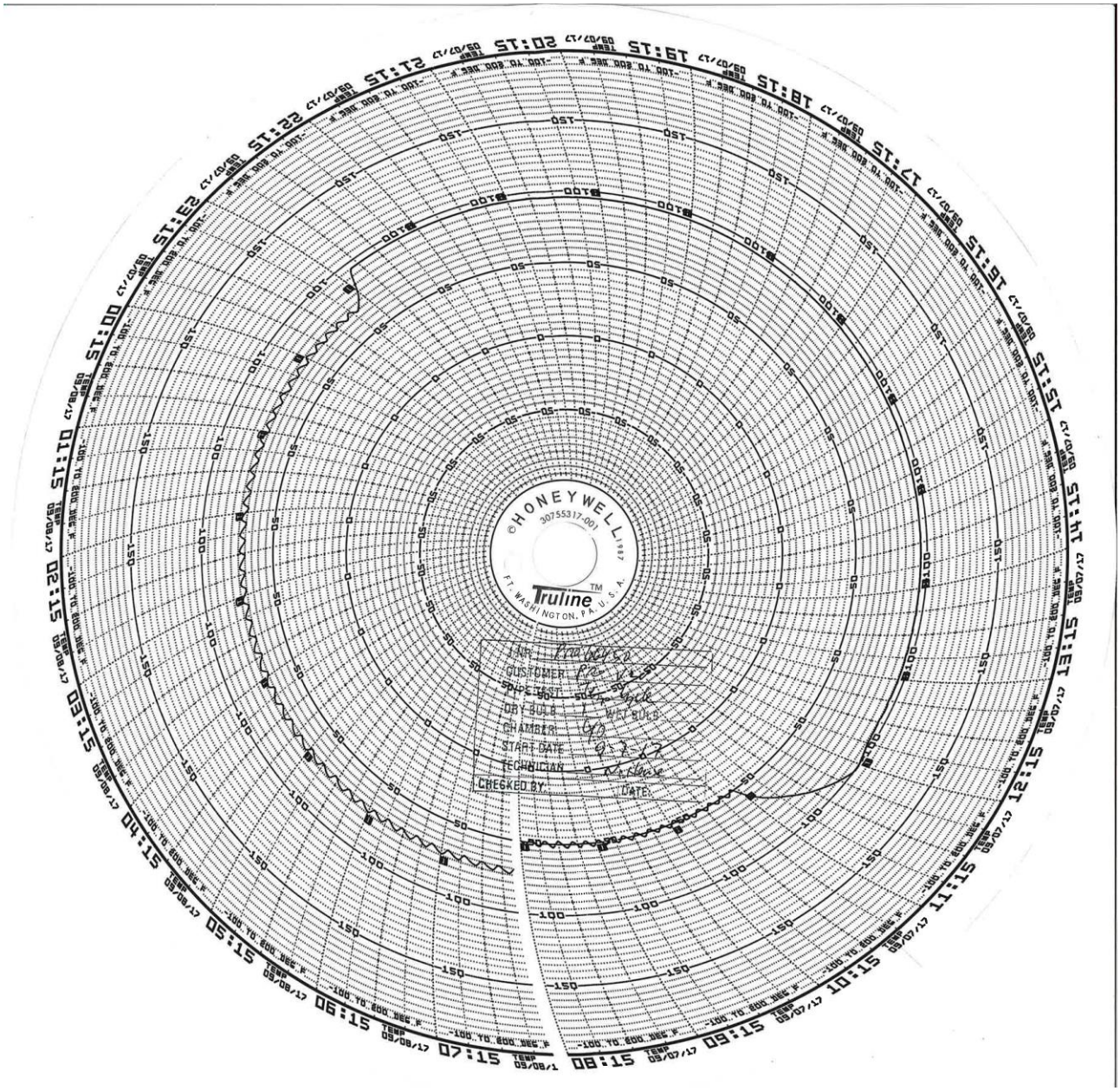
Truline
FT. WASHINGTON, PA. U.S.A.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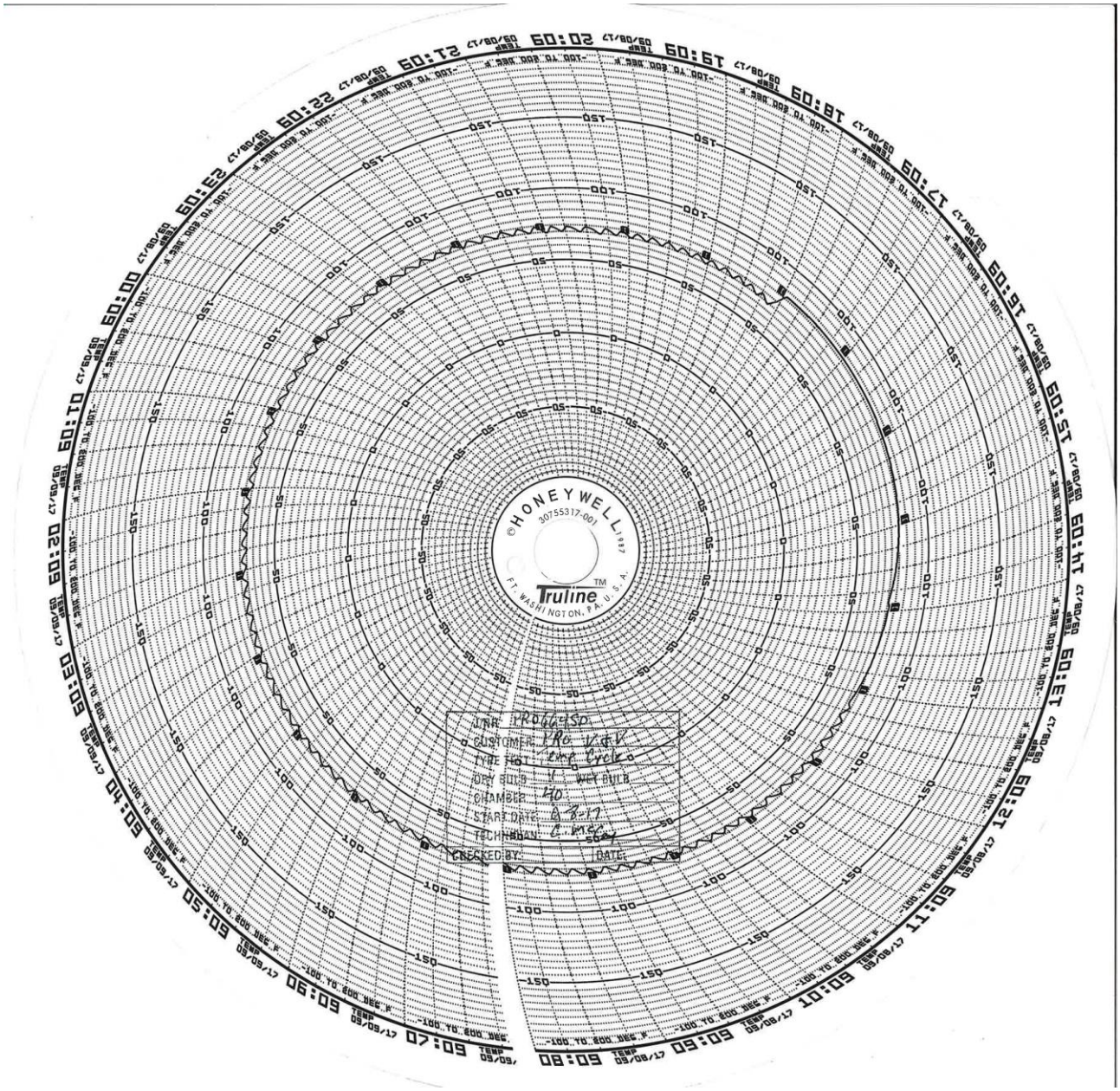
Truline
FT. WASHINGTON, PA. U.S.A.
JOB
CUSTOMER
TYPE TEST
DRY BULB
WET BULB
CHAMBER
START DATE
TECHNICIAN
CHECKED BY
DATE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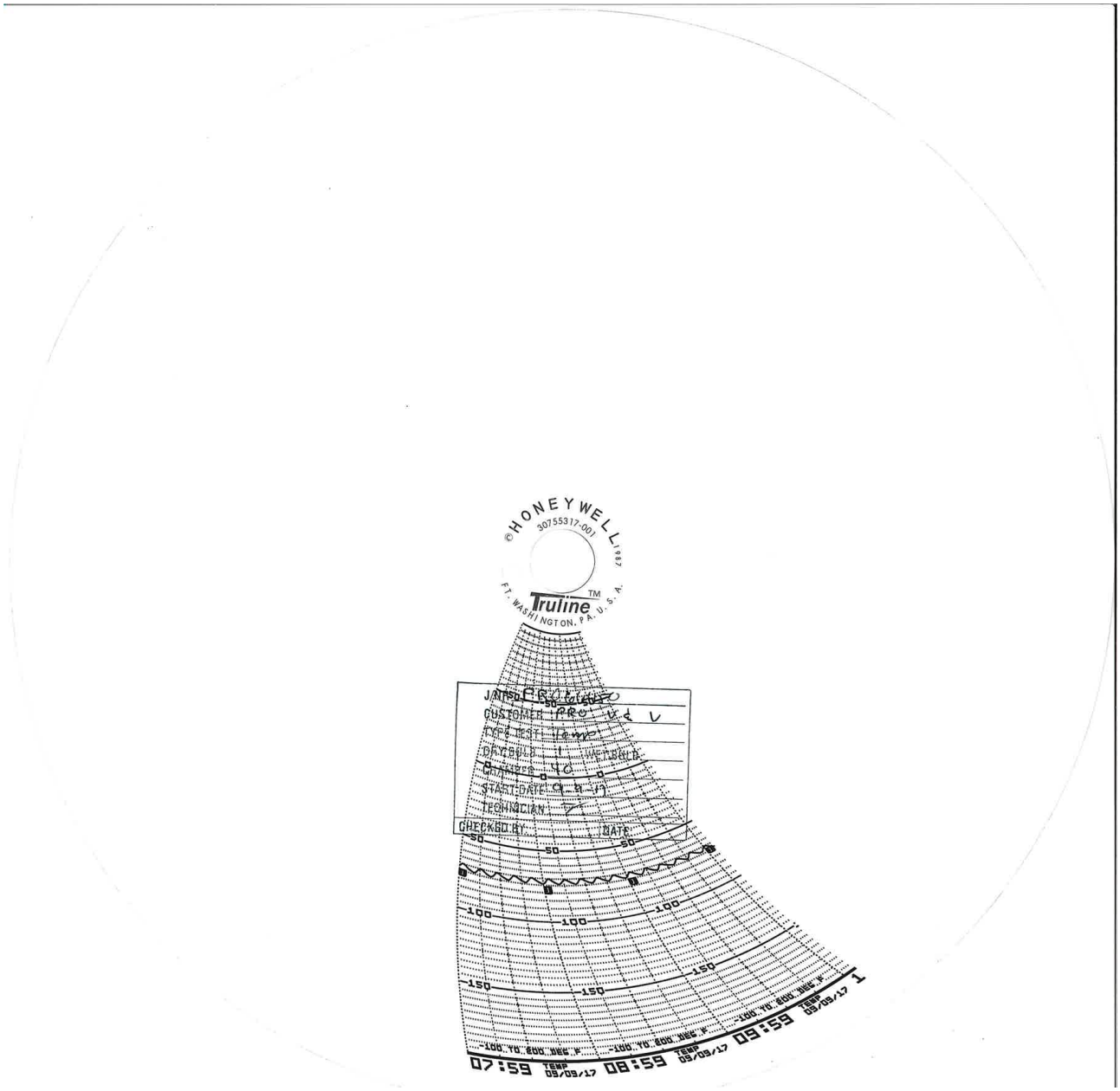
Truline
FT. WASHINGTON, PA. U.S.A.
JOB PR066450
CUSTOMER RC VAV
TYPE TEST Temp Cycle
DRY BULB WET BULB
CHAMBER HD
START DATE 8-3-17
TECHNICIAN C. Mez
CHECKED BY: DATE: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30755317-001
Truline
FT. WASHINGTON, PA. U.S.A.
CUSTOMER
DAY/DATE
CHANGES
START DATE
TECHNICIAN
CHECKED BY
DATE
07:59
08:59
09:59
TEMP
05/09/17

INSTRUMENTATION EQUIPMENT SHEETS

INSTRUMENTATION EQUIPMENT SHEET

Date:	07/31/2017	Job Number:	PR066450	Type of Test:	Humidity
Technician:	D Risinger	Customer:	Pro V&V	Test Area:	Env Chamber 9

	Description	Manufacturer	Model	Serial#	Asset #		Range	Accuracy	Cal Date	Cal Due
1	Controller	Watlow	F4T	001517	118354	•	Multi	MFG	05/11/2017	05/11/2018
2	Controller	Watlow	PM6L	304491	118212	•	Multi	MFG	05/11/2017	05/11/2018
3	Humidity\temp Mtr	Vaisala	HMT315	L4620667	WC043094	•	Multi	MFG	07/06/2017	01/06/2018
4	Temp Recorder	Honeywell	DR450T	9244885050004	109831	•	-200-600°f	.4°F	05/11/2017	05/11/2018

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

Instrumentation: Donald Risinger 31/Jul/2017 Check & Received By: 31 July 2017

QA: 7/31/2017

INSTRUMENTATION EQUIPMENT SHEET

Date:	8/15/2017	Job Number:	PRO66450	Type of Test:	High/Low Temp op.
Technician:	D.B.	Customer:	Pro V&V	Test Area:	Chamber 9

Description	Manufacturer	Model	Serial#	Asset #	Range	Accuracy	Cal Date	Cal Due
1 Controller	Watlow	F4T	001517	118354	Multi	MFG	5/11/2017	5/11/2018
2 Controller	Watlow	PM6L	304491	118212	Multi	MFG	5/11/2017	5/11/2018
3 Temp Recorder	Honeywell	DR450T	9244885050004	109831	-200-600°f	.4°F	5/11/2017	5/11/2018

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

Instrumentation: 8/15/2017 Check & Received By: 15 Aug 2017

QA: Blanca Mora 8/15/2017

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INSTRUMENTATION EQUIPMENT SHEET

Date:	8/18/2017	Job Number:	PR066450	Type of Test:	VIBRATION
Technician:	MPRYOR	Customer:	PRO V&V	Test Area:	DYN LAB

	Description	Manufacturer	Model	Serial#	Asset #	Range	Accuracy	Cal Date	Cal Due
1	Accelerometer	Endevco	7704A-50	12608	04868	50pc/G	±5%	2/24/2017	8/24/2017
2	Dyn Sig Analyzer	Data Physics Corp	70921	15005246	118165	Multi	MFG	4/17/2017	4/17/2018
3	Sig Cond	Endevco	2775B	AC49	117134	Gain	±1.5%	10/6/2016	10/6/2017
4	Sig Cond	Endevco	2775B	AM12	02327	Gain	±1.5%	9/9/2016	9/9/2017

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

Instrumentation: 8/18/17

Check & Received By: 8-18-17

QA: Brenda Mease 8/18/2017

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INSTRUMENTATION EQUIPMENT SHEET

Date:	8/22/2017	Job Number:	PR066450	Type of Test:	Bench Handling
Technician:	D.Medley	Customer:	Pro V&V	Test Area:	Dyn Lab

	Description	Manufacturer	Model	Serial#	Asset #	Range	Accuracy	Cal Date	Cal Due
1	Ruler	Production Proc	PEC-16104D	NSN	04469	48"	±0.5 DIV	11/18/2015	11/18/2020
2	Temp/Hum/Bar Ind	Extech	SD700	A027767	WC043049	Multi	MFG	2/16/2017	2/16/2018

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

Instrumentation: D.M Medley 8/22/17 Check & Received By: 22 Aug 2017

QA: [signature] 8/22/17

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Page 1 of 1

INSTRUMENTATION EQUIPMENT SHEET

Date:	9/5/2017	Job Number:	PR066450	Type of Test:	HIGH/LOW
Technician:	D.SLACK	Customer:	PRO V&V	Test Area:	CH 40

	Description	Manufacturer	Model	Serial#	Asset #	Range	Accuracy	Cal Date	Cal Due
1	Temp Controller	Thermotron	7800		03843	Type T	±1°C	11/30/2016	11/30/2017
2	Temp Recorder	Honeywell	DR450T	9244885050005	109830	-200-600°f	.4°F	11/30/2016	11/30/2017

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

Instrumentation: 9-5-17

Check & Received By: 5 Sept 2017

QA: 9/5/2017

NTSH-1029A, REV, MAR '14