



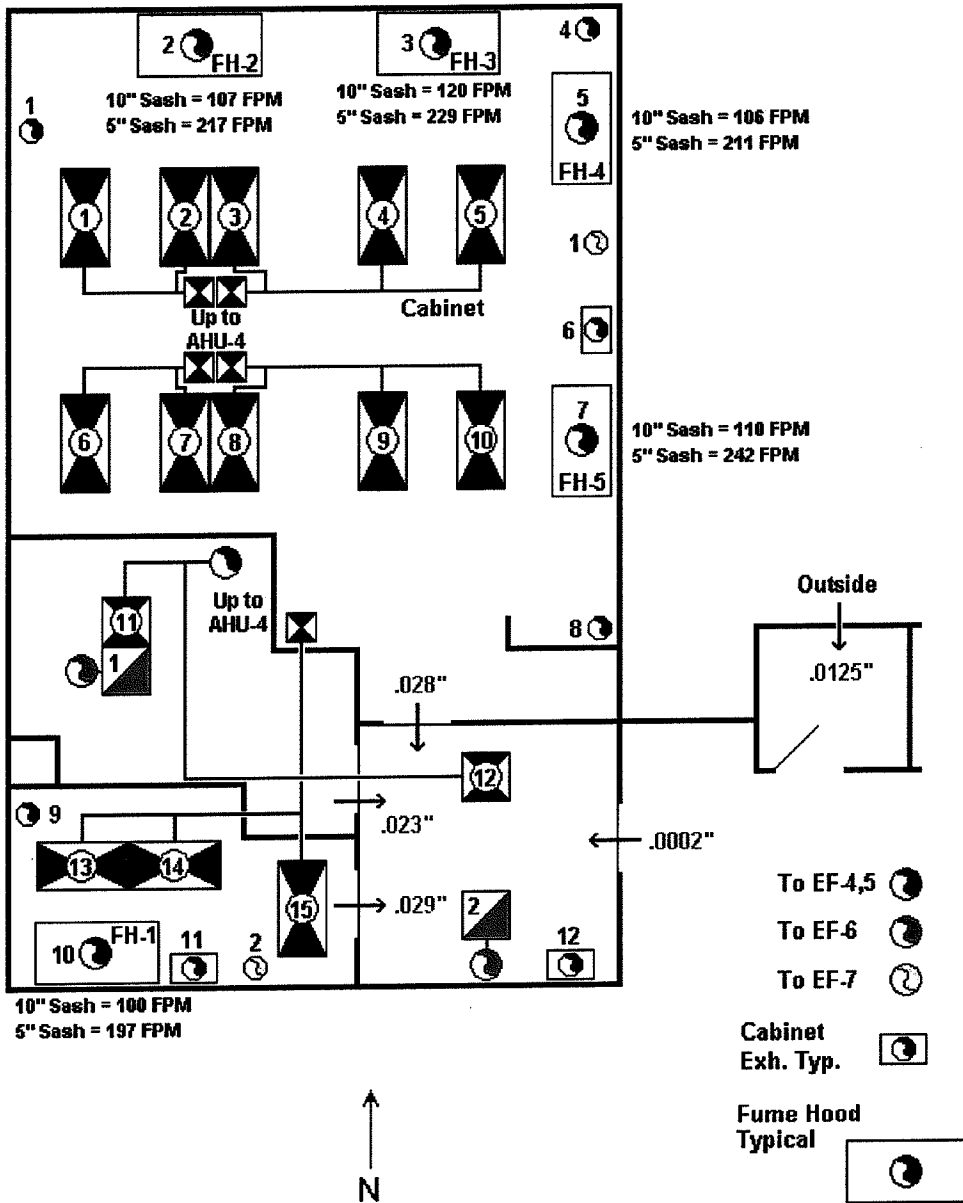
**Cosmogenic Nuclide  
Laboratory  
Delehanty Hall  
University Of Vermont  
Burlington, Vermont  
NEAS # RC646-S  
Precision Balancing # 1987  
June, 2008**

# PRECISION BALANCING LLC

SAVE ENERGY • BE COMFORTABLE • GET BALANCED!

Cosmogenic Nuclide Laboratory  
 Delehanty Hall  
 University Of Vermont  
 Burlington, Vermont  
 NEAS # RC646-S  
 Precision Balancing # 1987

June, 2008



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 Not to Scale

# PRECISION BALANCING LLC

**SAVE ENERGY • BE COMFORTABLE • GET BALANCED!**

Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: DC & TC	
Project: 1987AHU4	Location: Burlington, Vermont	Date: 6-27-08	

## Air Apparatus Test Report

System/Unit: AHU-4

### UNIT DATA

Make	Clean PAK	Class/Discharge	/
Model No.	Size 22 Fanwall	Tag No.	AHU-1
Serial No.	A09 AH-01	Location	Rooftop

### MOTOR DATA

Make	Toshiba (Two Motors)	Model / Part No.	B0154FLF2USH02	RPM	1775
Frame	254T	Volts / Phase /Hz	230-460, 3, 60	S.F.	1.15
H.P.	15	Full Load Amps	37 - 18.5	Flac	N/A
Measured Volts	66.5% (Freq)	Measured Amps	16.0 (Freq)	BHP	N/A

### DRIVE DATA

Fan Data		Motor Data			
Sheave Size / Make	Direct Drive	Sheave Size / Make	Direct Drive		
Bushing / Bore Size	Direct Drive	Bushing / Bore Size	Direct Drive		
No. Belts / Make / Size	Direct Drive	Sheave C to C	Direct Drive		
Fan Design RPM	2222 (74 Hz)	Fan Actual RPM	1752	Motor Actual RPM	1752

### AIR DATA

	Design	Actual		Design	Actual
Total CFM	7,500 Rated	7,077	Total S.P.	6.0"	N/A
O.A. CFM	/	7,077	Disch. S. P.	/	.80" Control
Ret. Air CFM	/	/	Suc. S. P.	/	N/A
Pre-Heat S.P. Drop	N/A	Cooling Coil S.P. Drop	N/A	Re-Heat S.P. Drop	N/A
Pre-Filter S.P. Drop	N/A	Hi Eff. Filter S.P. Drop	N/A		
Vortex Damp. Pos.	57.8 Hz	O.A. Damper Pos.	100% OP	Ret. Air Damp Pos.	/

### NOTES

- 1.) Unable to drill unit for pressure readings.
- 2.) Control point readout equals .80".
- 3.) System balance with 'B' fan running.

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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: DC & PM	
Project: 1987ah4d	Location: Burlington, Vermont	Date: 6-27-08	

## Diffuser, Register, & Grille Test Report

System/Unit: AHU-4

Area Served	Outlet Number	Type	Size	"K" Factor	Design		Pre CFM	Final		%Diff CFM	Refer to Note	
					FPM	CFM		FPM	CFM			
	1	HEPA	12"	1	500	500		518	518	3.6%		
	2	HEPA	12"	1	500	500		510	510	2.0%		
	3	HEPA	12"	1	500	500		541	541	8.2%		
	4	HEPA	12"	1	500	500		508	508	1.6%		
	5	HEPA	12"	1	500	500		537	537	7.4%		
	6	HEPA	12"	1	500	500		528	528	5.6%		
	7	HEPA	12"	1	500	500		514	514	2.8%		
	8	HEPA	12"	1	500	500		474	474	-5.2%		
	9	HEPA	12"	1	500	500		532	532	6.4%		
	10	HEPA	12"	1	500	500		501	501	0.2%		
	11	CD	10"	1	250	250		255	255	2.0%		
	12	CD	6"	1	100	100		95	95	-5.0%		
	13	HEPA	12"	1	500	500		497	497	-0.6%		
	14	HEPA	12"	1	500	500		521	521	4.2%		
	15	HEPA	12"	1	500	500		546	546	9.2%		
<b>Total from Previous Page(s)</b>								<b>Previous Total</b>				
							<b>Total</b>	<b>6850</b>	<b>Total</b>	<b>7077</b>		

**NOTES**

1.) Refer to drawing for diffuser location.  
 2.) Flowhood used 'K' factor equals (1) one.

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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: DC & TC	
Project: 1987ef4	Location: Burlington, Vermont	Date: 6-13-08	

## Air Apparatus Test Report

System/Unit: EF-4

### UNIT DATA

Make	Hartzell Fan	Class/Discharge	/
Model No.	A41-9-222FA100FGFEN3	Tag No.	PO # RC622
Serial No.	Order # 0821763-01	Location	Rooftop

### MOTOR DATA

Make	Westinghouse	Model / Part No.	S # GSP407607	RPM	1755
Frame	215T	Volts / Phase / Hz	230-460, 3, 60	S.F.	1.15
H.P.	10	Full Load Amps	23.2 - 11.6	Flac	25.7
Measured Volts	206.6, 207.3, 207.9	Measured Amps	18.0, 17.6, 18.0	BHP	7.70

### DRIVE DATA

Fan Data			Motor Data		
Sheave Size / Make	5 3/8" OD		Sheave Size / Make	2BK57H / Power Drive	
Bushing / Bore Size	B 1 11/16		Bushing / Bore Size	H X 1 3/8"	
No. Belts / Make / Size	2 / Browning / BX66		Sheave C to C	26"	
Fan Design RPM	1808	Fan Actual RPM	1821	Motor Actual RPM	1767

### AIR DATA

	Design	Actual		Design	Actual
Total CFM	5,665	5,947	Total S.P.	5.0"	N/A
O.A. CFM	/	Exh. Fan	Disch. S. P.	/	N/A
Ret. Air CFM	/	Exh. Fan	Suc. S. P.	/	4.65" Control
Pre-Heat S.P. Drop	/	Cooling Coil S.P. Drop	/	Re-Heat S.P. Drop	/
Pre-Filter S.P. Drop	/	Hi Eff. Filter S.P. Drop	/		
Vortex Damp. Pos.	/	O.A. Damper Pos.	/	Ret. Air Damp Pos.	/

### NOTES

- 1.) Unable to drill coated exhaust duct for pressures.
- 2.) Control point readout equals 4.65".
- 3.) Fan is rated for 6,500 CFM at 5.0".

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Precision Balancing No. 1987		Contractor No. NEAS # RC646-3	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: PM & TC	
Project: 1987ef5	Location: Burlington, Vermont	Date: 6-17-08	

## Air Apparatus Test Report

System/Unit: EF-5

### UNIT DATA

Make	Hartzell Fan	Class/Discharge	/
Model No.	A41-9-222FA100FGFEN3	Tag No.	PO # RC622
Serial No.	Order # 0821763-02	Location	Rooftop

### MOTOR DATA

Make	Westinghouse	Model / Part No.	S # GSP407607	RPM	1755
Frame	215T	Volts / Phase / Hz	230-460, 3, 60	S.F.	1.15
H.P.	10	Full Load Amps	23.2 - 11.6	Flac	25.7
Measured Volts	206.5, 207.1, 208	Measured Amps	16.8, 16.9, 17.4	BHP	7.34

### DRIVE DATA

Fan Data		Motor Data	
Sheave Size / Make	5 3/8" OD	Sheave Size / Make	2BK57H / Power Drive
Bushing / Bore Size	B 1 11/16	Bushing / Bore Size	H X 1 3/8"
No. Belts / Make / Size	2 / Browning / BX66	Sheave C to C	26"
Fan Design RPM	1808	Fan Actual RPM	1827
		Motor Actual RPM	1770

### AIR DATA

	Design	Actual		Design	Actual
Total CFM	5,665	5,590	Total S.P.	5.0"	N/A
O.A. CFM	/	Exh. Fan	Disch. S. P.	/	N/A
Ret. Air CFM	/	Exh. Fan	Suc. S. P.	/	4.30" Control
Pre-Heat S.P. Drop	/	Cooling Coil S.P. Drop	/	Re-Heat S.P. Drop	/
Pre-Filter S.P. Drop	/	Hi Eff. Filter S.P. Drop	/		
Vortex Damp. Pos.	/	O.A. Damper Pos.	/	Ret. Air Damp Pos.	/

### NOTES

1.) Unable to drill coated exhaust duct for pressures.

2.) Control point readout equals 4.30".

3.) Fan is rated for 6,500 CFM at 5.0".



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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: TC & PM	
Project: 1987ef6	Location: Burlington, Vermont	Date: 6-13-08	

## Air Apparatus Test Report

System/Unit: EF-6

### UNIT DATA

Make	Greenheck	Class/Discharge	/
Model No.	8-BISW-41-X-10-1	Tag No.	EF
Serial No.	11221500 0802	Location	Rooftop

### MOTOR DATA

Make	WEG	Model / Part No.	1UTOICGNXX1/204E	RPM	1750
Frame	B56	Volts / Phase / Hz	208-230-460, 3, 60	S.F.	1.25
H.P.	1/2	Full Load Amps	2.21 - 2.0 - 1.0	Flac	2.22
Measured Volts	207, 207.1, 207.3	Measured Amps	2.2, 1.9, 1.6	BHP	.43

### DRIVE DATA

Fan Data			Motor Data		
Sheave Size / Make	AK34 x QT		Sheave Size / Make	AK44	
Bushing / Bore Size	QT x 1"		Bushing / Bore Size	QT x 5/8"	
No. Belts / Make / Size	1 / Carlisle / 4L300R		Sheave C to C	8 3/4"	
Fan Design RPM	1808	Fan Actual RPM	1369	Motor Actual RPM	1771

### AIR DATA

	Design	Actual		Design	Actual
Total CFM	410	548	Total S.P.	1.5"	.641"
O.A. CFM	/	Exh. Fan	Disch. S. P.	/	.001" pos
Ret. Air CFM	/	Exh. Fan	Suc. S. P.	/	.64" neg
Pre-Heat S.P. Drop	/	Cooling Coil S.P. Drop	/	Re-Heat S.P. Drop	/
Pre-Filter S.P. Drop	/	Hi Eff. Filter S.P. Drop	/		
Vortex Damp. Pos.	/	O.A. Damper Pos.	/	Ret. Air Damp Pos.	/

### NOTES

1.) Exhaust set to room pressure.





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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: DC & TC	
Project: 1987ef7	Location: Burlington, Vermont	Date: 6-12-08	

## Air Apparatus Test Report

System/Unit: EF-7

### UNIT DATA

Make	M.K. Plastics	Class/Discharge	/
Model No.	CNW250	Tag No.	EF-6
Serial No.	/	Location	Rooftop

### MOTOR DATA

Make	WEG	Model / Part No.	Part # HT003404P	RPM	1765
Frame	182T	Volts / Phase / Hz	208-230-460, 3, 60	S.F.	1.25
H.P.	3	Full Load Amps	7.8 - 3.9	Flac	7.83
Measured Volts	206.9, 207.1, 207.3	Measured Amps	4.6, 4.9, 4.8	BHP	1.88

### DRIVE DATA

Fan Data			Motor Data		
Sheave Size / Make	2B40SH		Sheave Size / Make	2VP45 x 1 1/8	
Bushing / Bore Size	SH 15/16		Bushing / Bore Size	1 1/8"	
No. Belts / Make / Size	2 / Carlisle / BP30		Sheave C to C	10 1/2"	
Fan Design RPM	Not Given	Fan Actual RPM	1600	Motor Actual RPM	1777

### AIR DATA

	Design	Actual		Design	Actual
Total CFM	1,105 (Rated)	Note 3	Total S.P.	5.5"	N/A
O.A. CFM	/	Exh. Fan	Disch. S. P.	/	.01" pos
Ret. Air CFM	/	Exh. Fan	Suc. S. P.	/	1.45" Control
Pre-Heat S.P. Drop	/	Cooling Coil S.P. Drop	/	Re-Heat S.P. Drop	/
Pre-Filter S.P. Drop	/	Hi Eff. Filter S.P. Drop	/		
Vortex Damp. Pos.	/	O.A. Damper Pos.	/	Ret. Air Damp Pos.	/

### NOTES

- 1.) Adjustable sheave on motor set two turns from maximum.
- 2.) Control setpoint readout equals 1.45".
- 3.) Unable to drill fan for total airflow and pressure.
- 4.) Fan has an inlet bleed on the roof (set near full open).



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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: PM & TC	
Project: 1987Pump	Location: Burlington, Vermont	Date: 6-13-08	

## Pump Test Report

**System/Unit:** Pump-1 (AHU-4 Hot Water Coil)

### PUMP DATA

Pump Number	Pump 1
Service / Location	H.W. Coil AHU-4 / Penthouse
Pump Manuf.	Bell & Gossett
Model Number	60
Impeller Size	1x5.25
RPM	Not Given
Design GPM	Not Given
Design Head (FT)	Not Given

### MOTOR DATA

Motor Manuf.	Bell & Gossett
Motor Part# /Frm	48T175BP / 48Y
Horsepower	1/2
RPM	1725
Volts / Ph	208-230-460 / 3
F.L. Amps / S.F.	2.1-2.2-1.1 / 1.25
NEMA Eff. / P.F.	/

### TEST DATA

Pump Off Pres.	N/A	
Valve Shut Diff	N/A	
Actual Impell. Dia	N/A	
Valve Open Diff.	35.6-33=2.6 psig (6.01 ft/hd)	
Valve Open GPM	47	
Final Suction Pr.	33.2 psig	
Final Disch. Pr.	36.4 psig	
Final Differential	3.2 psig (7.39 ft/hd)	
Final GPM	35	
Voltage	T1-T2	204
	T2-T3	206.5
	T3-T1	206.7
Amps	T1	2.0
	T2	1.9
	T3	1.8

### NOTES

1.) Pump trips on overloads.
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Precision Balancing No. 1987		Contractor No. NEAS # RC646-S	
Contract No.	Job Name: Delehanty Hall, UVM	Technician: PM DC	
Project: 1987CS	Location: Burlington, Vermont	Date: 6-13-08	

## Circuit Setter Flow Test Report

System/Unit: Chilled Water & Hot Water Coils

Area Served or Device #	Model	Size	C.S. Set Point	C.S. Pressure Drop (FT.)	Design GPM	Actual GPM	Notes
AHU-4							
C.W. Coil	T/A	3"	5.0	1.0	61	41	1
H.W. Coil	T/A	2 1/2"	4.0	1.75	34	35	
Re-Heats							
RH-26	T/A	1 1/4"	1.25	46.1	12.4	13.1	
RH-27	T/A	1"	.7	36	3.3	3.4	
RH-28	T/A	3/4"	.5	32.4	1.3	2.3	2
End of Line							
By-Pass	T/A	1/2"	.6	80	1.0	1.0	
Unit Heater	T/A	3/4"	.5		3.0		3
U.H. By-Pass	T/A	3/4"	.5	63	3.0	3.2	

**NOTES**

1.) Circuit setter on its highest graphable setting (1.0 ft).  
 2.) Circuit setter on its lowest graphable setting (0.5).  
 3.) Broken control valve.

# AIRDATA MULTIMETER CERTIFICATE OF RECALIBRATION

Customer ID: 011144 S/N: M951030  
 Customer: PRECISION BALANCING LLC City: ESSEX JUNCTION State: VT  
 As-Received Model #: ADM-870 Converted to Model #: \_\_\_\_\_ Order #: R072913  
 PO #: \_\_\_\_\_ Customer Eqpt ID#: \_\_\_\_\_ Calibration Due Date: \_\_\_\_\_

This instrument has been calibrated using Calibration Standards which are traceable to NIST (National Institute of Standards and Technology). Quality Assurance Program and calibration procedures meet the requirements for ANSI/NCSL Z540-1-1994; MIL-STD 45662A and manufacturer's specifications. Calibration accuracy is certified when meters are used with properly functioning accessories only. All Uncertainties are expressed in expanded terms (twice the calculated uncertainty). This report shall not be reproduced, except in full, without the written approval of Shortridge Instruments, Inc. Results relate only to the item calibrated. For limitations on use, see Shortridge Instruments, Inc. Instruction Manual for the use of AirData Multimeters. Procedure used: Procedure for Differential Pressure, Absolute Pressure and Temperature Recalibration of AirData Multimeters SIP-CP02 Revision: 26 Dated: 03/31/06

Calibration Technician(s): A. Jounoff Z. Laubner Calibration Date: 09/19/2007  
 Calibration Approved by: Ray Barlow Title: Calma Date: 09/20/2007

AS-Received By <u>ag</u>	Final Test By <u>ZL</u>	Test By _____
Date <u>09/17/07</u> Rh <u>54</u> %	Date <u>09/19/07</u> Rh <u>41</u> %	Date _____ Rh _____ %
Ambient Temperature <u>74</u> °F	Ambient Temperature <u>75</u> °F	Ambient Temperature <u>NA</u> °F
Barometric Pressure <u>28.36</u> in Hg	Barometric Pressure <u>28.41</u> in Hg	Barometric Pressure _____ in Hg
Within spec <u>YES</u> NO NA	Within spec <u>YES</u> NO	Within spec YES NO

### ABSOLUTE PRESSURE TEST (in Hg)

TEST METER TOLERANCE = ± 2.0 % ± .1 in Hg		AS-RECEIVED TEST WITHIN SPEC <u>YES</u> NO N/A
Pressure Standard: Heise #02-R	S/N: 41741/42451	Calibration Date: 02/28/07
Pressure Standard: Heise #04-R	S/N: 41743/42453	Calibration Date: 10/25/06
Pressure Standard: Heise #06-R	S/N: 41742/42452	Calibration Date: 02/08/07
Pressure Standard: Heise #08-R	S/N: 42186/43328	Calibration Date: 11/15/06
Pressure Standard: Heise #10-R	S/N: 42203/43352	Calibration Date: 01/15/07
Pressure Standard: Heise #12-R	S/N: 43166/44731	Calibration Date: 03/26/07
Pressure Standard: Heise #14-R	S/N: 43412/45043	Calibration Date: 06/08/07

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
14.0	14.35	14.3	-0.35	13.95	13.9	-0.36			
28.4	28.36	28.3	-0.21	28.41	28.2	-0.74		NA	
40.0	40.38	40.2	-0.45	42.53	42.2	-0.78			

### DIFFERENTIAL PRESSURE TEST (in wc)

TEST METER TOLERANCE = ± 2.0 % ± 0.001 in wc		AS-RECEIVED TEST WITHIN SPEC <u>YES</u> NO N/A
Pressure Standard: Heise #01-L	S/N: 41739/42449	Calibration Date: 03/06/07
Pressure Standard: Heise #01-R	S/N: 41739/42446	Calibration Date: 03/06/07
Pressure Standard: Heise #02-L	S/N: 41741/42454	Calibration Date: 03/06/07
Pressure Standard: Heise #03-L	S/N: 41738/42448	Calibration Date: 11/03/06
Pressure Standard: Heise #03-R	S/N: 41738/42445	Calibration Date: 11/02/06
Pressure Standard: Heise #04-L	S/N: 41743/42456	Calibration Date: 11/02/06
Pressure Standard: Heise #05-L	S/N: 41740/42450	Calibration Date: 02/15/07
Pressure Standard: Heise #05-R	S/N: 41740/42447	Calibration Date: 02/15/07
Pressure Standard: Heise #06-L	S/N: 41742/42455	Calibration Date: 02/13/07
Pressure Standard: Heise #07-L	S/N: 42185/42186	Calibration Date: 11/29/06
Pressure Standard: Heise #07-R	S/N: 42185/43326	Calibration Date: 11/29/06
Pressure Standard: Heise #08-L	S/N: 42186/43329	Calibration Date: 11/22/06
Pressure Standard: Heise #09-L	S/N: 42202/43351	Calibration Date: 01/13/07
Pressure Standard: Heise #09-R	S/N: 42202/43350	Calibration Date: 01/13/07
Pressure Standard: Heise #10-L	S/N: 42203/43353	Calibration Date: 01/23/07
Pressure Standard: Heise #11-L	S/N: 43165/44551	Calibration Date: 03/27/07
Pressure Standard: Heise #11-R	S/N: 43165/44730	Calibration Date: 03/27/07
Pressure Standard: Heise #12-L	S/N: 43166/44732	Calibration Date: 03/27/07
Pressure Standard: Heise #13-L	S/N: 43415/45041	Calibration Date: 06/12/07
Pressure Standard: Heise #13-R	S/N: 43415/45039	Calibration Date: 06/11/07
Pressure Standard: Heise #14-L	S/N: 43412/45045	Calibration Date: 06/12/07

Differential Pressure Standards: Heise Model PPM1 Manufactured by Dresser Industries  
 #01-L, 03-L, 05-L, 07-L, 09-L, 11-L, 13-L Rated Accuracy: > 0.07% fs (0.000175 in wc) Range: 0.0-0.25 in wc Res.: 0.00001 Uncertainty: < 0.00035  
 #01-R, 03-R, 05-R, 07-R, 09-R, 11-R, 13-R Rated Accuracy: > 0.06% fs (0.003 in wc) Range: 0.0-5.0 in wc Res.: 0.0001 Uncertainty: < 0.00348  
 #02-L, 04-L, 06-L, 08-L, 10-L, 12-L, 14-L Rated Accuracy: > 0.06% fs (0.03 in wc) Range: 0.0-50.0 in wc Res.: 0.001 Uncertainty: < 0.0346

Approx Set Pt	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff	Standard	Test Meter	% Diff
.0500	.0505	.0504	-0.20	.0521	.0520	-0.19			
.1250	.1264	.1262	-0.16	.1282	.1284	.16			
.2250	.2214	.2211	-0.14	.2239	.2232	-0.31			
.2700	.2723	.2734	.40	.2733	.2739	.22			
2.000	2.007	2.009	.10	2.013	2.012	-0.05			
3.600	3.644	3.644	0	3.677	3.673	-0.11			
4.400	4.433	4.466	.74	4.475	4.479	.09			
27.00	27.06	27.20	.52	27.10	27.11	.04			
50.00	50.56	50.57	.02	49.60	49.42	-0.36			
Overrange	NA	✓	NA	NA	✓	NA	NA		NA

**Shortridge Instruments, Inc.**

7855 East Redfield Road Scottsdale, Arizona 85260

(480) 991-6744 • Fax (480) 443-1267 • www.shortridge.com • info@shortridge.com

Customer: Precision Balancing LLC City: Essex Junction State: VT

Model #: HDM250 PO #: \_\_\_\_\_ Calibration Due Date: \_\_\_\_\_ Order #: 071458

T by R. Ciechanowicz Date 07/16/2007 Rh 52 % Ambient Temperature 76 °F Barometric Pressure 28.28 in Hg

HDM Pressure Standard Heise #1-L: S/N: 41744/42459 Calibration Date: 08/30/06 Calibration Due Date: 08/2007 ✓  
 HDM Pressure Standard Heise #3-L: S/N: 41745/42460 Calibration Date: 02/13/07 Calibration Due Date: 02/2008 ✓  
 Model PPM-1 Manufactured by Dresser Industries Rated Accuracy: 0.06% fs Range: 0.0 to 15.0 in wc Res: 0.001 in wc Uncertainty: < 0.00651 in wc  
 Used at Set Points: 3.0; 14.0

HDM Pressure Standard Heise #1-R: S/N: 41744/42457 Calibration Date: 08/30/06 Calibration Due Date: 08/2007 ✓  
 HDM Pressure Standard Heise #3-R: S/N: 41745/42458 Calibration Date: 02/13/07 Calibration Due Date: 02/2008 ✓  
 Model PPM-1 Manufactured by Dresser Industries Rated Accuracy: 0.06% fs Range: 0.0 to 150.0 in wc Res: 0.01 in wc Uncertainty: < 0.07540 in wc  
 Used at Set Points: 25.0; 31.0; 140.0

HDM Pressure Standard Heise #2-L: S/N: 41747/42464 Calibration Date: 08/24/06 Calibration Due Date: 08/2007 ✓  
 HDM Pressure Standard Heise #4-L: S/N: 41746/42463 Calibration Date: 02/08/07 Calibration Due Date: 02/2008 ✓  
 Model PPM-2 Manufactured by Dresser Industries Rated Accuracy: 0.05% fs Range: 0.0 to 50.0 psi Res: 0.1 in wc Uncertainty: < 0.479 in wc  
 Used at Set Points: 225.0; 275.0; 1025

HDM Pressure Standard Heise #2-R: S/N: 41747/42462 Calibration Date: 08/24/06 Calibration Due Date: 08/2007 ✓  
 HDM Pressure Standard Heise #4-R: S/N: 41746/42461 Calibration Date: 02/08/07 Calibration Due Date: 02/2008 ✓  
 Model PPM-2 Manufactured by Dresser Industries Rated Accuracy: 0.05% fs Range: 0.0 to 300 psi Res: 1 in wc Uncertainty: < 2.77 in wc  
 Used at Set Points: 1620; 2000; 4500; 6930

DIFFERENTIAL PRESSURE TEST (in wc)  
 TEST METER TOLERANCE = ± 2.0 % ± .28 in wc

Approx Set Pt	Standard	Test Meter	% Diff
3.0	3.10	3.1	0
14.0	14.38	14.4	.14
25.0	25.26	25.4	.55
31.0	31.38	31.4	.06
140.0	140.80	140.9	.07
225.0	225.4	225.9	.22
275.0	275.4	276.4	.36
1025	1007.3	1007	-.03
1620	1644	1639	-.30
2000	2001	2000	-.05
4500	4512	4509	-.07
6930	6925	6910	-.22

GAGE PRESSURE (P<sub>2</sub>) TEST (in wc)  
 TEST METER TOLERANCE = ± 2.0 % ± .28 in wc

Approx Set Pt	Standard	Test Meter	% Diff
3.0	3.10	3.1	0
14.0	14.38	14.5	.83
25.0	25.26	25.5	.95
31.0	31.50	31.5	0
140.0	139.69	139.8	.08
225.0	230.9	231.2	.13
275.0	277.0	277.2	.07
1025	1006.9	1006	-.09
1620	1630	1625	-.31
2000	2012	2013	.05
4500	4510	4509	-.02
30	6914	6894	-.29

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