Report By:

SAMPLE COMPANY A
1 MAIN STREET
SUITE 204
ANYWHERE, AK 55555

Report: **Test and Balance**
Date: **2/25/2014**

PROJECT

JOB TEST

1 PIPER LANE
KANSAS CITY, MO 64105

Client

MY CLIENT
1 FOX STREET
SUITE 15
BOUMONT, CA 90210

SAMPLE COMPANY A

Project: JOB TEST

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SAMPLE COMPANY A

Project: JOB TEST

Project Summary

All units are tested to the design specification requirements, per required testing standards.

- ALL HVAC SAMPLE SUMMARY & COMMENTS CAN BE TYPED AND LOADED INTO THE REPORT, DIRECTLY FROM FACILIBUILD!

- ATTACH USER FILES TO INCLUDE EXCEL, WORD, PDF AND PHOTO FILES DIRECTLY TO THE REPORT GENERATOR. THEN CUSTOMIZE THE FILE NAME TO AUTO POPULATE THE TABLE OF CONTENTS

- CREATE YOUR OWN COVER PAGE LOGO OR ICON

- CREATE EACH SECTION WITH UPPER LEFT AND RIGHT LOGO, ICON'S, OR OTHER REQUIRED DETAILS.

- CREATE REPORTS FOR ANY SET OF ASSETS, FOR ALL ASSETS, AND ORDER THEM IN A VARIETY OF WAYS

- MOVE REPORT SECTIONS UP AND DOWN THE TABLE OF CONTENTS TO FURTHER CUSTOMIZE YOUR REPORT

SAMPLE COMPANY A

Project: JOB TEST

OPERATIONAL CHECKLIST

Assigned Organization: SAMPLE COMPANY A

Status: Submitted

Asset: RTU1

RTU FINAL PERFORMANCE	
UNIT DESIGN CFM ESTABLISHED	YES - WITHIN 5% OF DESIGN
UNIT OUTDOOR AIR DESIGN CFM ESTABLISHED	Yes
UNIT MOTOR PERFORMANCE IS WITHIN NAMEPLATE RATING	Yes
FINAL SYSTEM PRESSURE VERIFIED	1.15" W.C. SETPOINT
DATE VERFIED	2/26/2014
VAV FINAL PERFORMANCE	
UNITS CALIBRATED	Yes
UNITS RELEASED TO AUTO	Yes
DATE VERIFIED	2/26/2014

Notes/Comments:

SAMPLE COMPANY A

Project: JOB TEST

System/Unit: AHU/RTU

Asset: AHU2 AREA: COMMON AREA

Unit Data

	Design	Actual
MFG	RTU - MFG	RTU - MFG
Model Num	MODEL NO.	MODEL NO.
Serial Num		1234
Type	CHW-FC	CHW-FC
Configuration	HORIZONTAL	HORIZONTAL
Num OA Filters 1		2
OA Filter Size 1		16X20X1
Num OA Filters 2		1
OA Filter Size 2		20X20X1

Motor Data

	Design	Actual
Motor MFG		WEG
Frame		56HZ
Horsepower	1	1
Motor Rpm	1725	1710
Phase	1	1
Rated Voltage	208	115-208/230
Rated Amperage		5.4
Service Factor		1.15
Efficiency		78%
Power Factor		85%

Drive Data

	Design	Actual
Motor Sheave MFG		BROWNING
Motor Sheave Size		1-VP44
Motor Bore Size		5/8"
Motor Sheave SetPt		3 TURNS OUT
Fan Sheave MFG		BROWNING
Fan Sheave Size		AK65
Fan Sheave Bore		1"
Belt CL Distance		14"
Num of Belts		1
Belt Size		AX35
Belt MFG		BROWNING
Belt Alignment		INLINE-VERIFIED

Test Data

	Design	Actual
SF CFM (Initial)		2016
SF CFM	1800	1789
SF RPM (Initial)		967
SF RPM	980	858
RA CFM	1500	1485
OA CFM	300	304
RL Voltage		208-209-209
RL Amperage		4.5-4.3-4.3
SF Rotation		CCW
VFD Max SetPt		60 HZ
VFD Min SetPt		60 HZ
SF System SetPt		N/A
RA Damper Position		100%
RA Damper Type		OBD-RETURN MOUNT
OA Damper Position		15% (1.25" OPEN)
OA Damper Type		ECONOMIZER
Brake Horse Power		0.79

Performance Data

	Design	Actual
Return Duct SP		-0.30"
Fan Suction SP		-0.55"
Fan Discharge SP		0.33"
Total ESP	0.75"	0.63"
Fan Total SP	1"	0.88"
OA Temp (db/wb)		88 F.
RA Temp (db/wb)		71 F.
SA Temp (db/wb)	55 F.	57.4. F.

Notes: THIS UNIT SERVES THE AREA'S COMMON AREA.

SAMPLE COMPANY A

Project: JOB TEST

System/Unit: AHU/RTU

Asset: AHU2 AREA: COMMON AREA

Diffuser Supply (GRD)

AHU2

Asset	Area Served	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
AHU2-SGRD1	ENTRY	4-WAY	24X24-10"	300	1	-	421	-	303	303	101.0
AHU2-SGRD2	ENTRY	4-WAY	24X24-10"	400	1	-	333	-	405	405	101.3
AHU2-SGRD3	RECEPTION	PERFORATED	12X12-6"	150	1	-	254	-	165	165	110.0
AHU2-SGRD4	WAITING	4-WAY	24X24-8"	250	1	-	219	-	255	255	102.0
AHU2-SGRD5	WAITING	4-WAY	24X24-8"	250	1	-	303	-	230	230	92.0
AHU2-SGRD6	WAITING	4-WAY	24X24-8"	250	1	-	255	-	226	226	90.4
AHU2-SGRD7	COMMON RESTROOM	GRILLE	24X10-8"	200	0.77	300	231	267	205	205	102.5

Asset	Area Served	Notes
AHU2-SGRD6	WAITING	Line damper is 100% open

SAMPLE COMPANY A

Project: JOB TEST

System/Unit: AHU/RTU

Asset: RTU1 AREA: 2ND FLOOR ZONE'S

Unit Data		
	Design	**Actual**
MFG	RTU - MFG	RTU - MFG
Model Num	MODEL NO.	MODEL NO.
Serial Num		0987
Type	PACKAGED - DX	PACKAGED - DX
Configuration	VERTICAL	VERTICAL
Num OA Filters 1		2
OA Filter Size 1		20X20X2
Num OA Filters 2		2
OA Filter Size 2		20X25X2

Motor Data		
	Design	**Actual**
Motor MFG		BALDOR
Frame		182T
Horsepower	2	2
Motor Rpm	1725	1725
Phase	3	3
Rated Voltage	208	208-230/460
Rated Amperage		8.4
Service Factor		1.15
Efficiency		82%
Power Factor		88%

Drive Data		
	Design	**Actual**
Motor Sheave MFG		BROWNING
Motor Sheave Size		1VL65
Motor Bore Size		5/8"
Motor Sheave SetPt		-
Fan Sheave MFG		BROWING
Fan Sheave Size		AK78
Fan Sheave Bore		1"
Belt CL Distance		18.5"
Num of Belts		1
Belt Size		AX45
Belt MFG		BROWNING
Belt Alignment		INLINE-VERIFIED

Test Data		
	Design	**Actual**
SF CFM (Initial)		2345
SF CFM	2000	2002
SF RPM (Initial)		1123
SF RPM	1115	958
RA CFM	1600	1589
OA CFM	400	413
RL Voltage		208-209-209
RL Amperage		7.7-7.5-7.2
SF Rotation		CCW
VFD Max SetPt		51 HZ
VFD Min SetPt		33 HZ
SF System SetPt		1.15" W.C.
RA Damper Position		NONE
RA Damper Type		NONE
OA Damper Position		15%
OA Damper Type		ECONOMIZER
Brake Horse Power		-

Performance Data		
	Design	**Actual**
Return Duct SP		-0.35"
Fan Suction SP		-0.65"
Fan Discharge SP		0.73"
Total ESP	1"	1.08"
Fan Total SP	1.5"	1.38"
OA Temp (db/wb)		89.2 F.
RA Temp (db/wb)		70.5 F.
SA Temp (db/wb)	55 F.	56.3 F.

Notes: SERVED BY VAV 1, 2, & 3

SAMPLE COMPANY A

Project: JOB TEST

System/Unit: AHU/RTU

Asset: RTU1 AREA: 2ND FLOOR ZONE'S

VAV - Single Duct

RTU1

Asset	Area Served											
RTU1-VAV1	CONFERENCE 215	**MFG**	**Model Num**	**Serial Num**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**	**Ak (min)**
		VAV-MFG	VAV-MODEL	1234	700	689	150	155	450	455	1.15	1.10
		Ak (heat)	**EAT (F - db/wb)**	**Inlet SP**								
		1.13	55	0.45								
RTU1-VAV2	2ND FLOOR OFFICE	**MFG**	**Model Num**	**Serial Num**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**	**Ak (min)**
		VAV-MFG	VAV-MODEL	5678	700	710	150	160	450	465	1.28	1.0
		Ak (heat)	**EAT (F - db/wb)**	**Inlet SP**								
		1.15	56.5	0.5								
RTU1-VAV3	CAFE	**MFG**	**Model Num**	**Serial Num**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**	**Ak (min)**
		VAV-MFG	VAV-MODEL	91011	600	603	125	128	230	235	0.99	1.05
		Ak (heat)	**EAT (F - db/wb)**	**Inlet SP**								
		1.01	55.7	0.49								

Asset	Area Served	Notes
RTU1-VAV1	CONFERENCE 215	VAV satisfied with zone damper 100% open
RTU1-VAV3	CAFE	CAFE SEATING AREA

SAMPLE COMPANY A

Project: JOB TEST

System/Unit: AHU/RTU

Asset: RTU1 AREA: 2ND FLOOR ZONE'S

Diffuser Supply (GRD)

RTU1-VAV1

Asset	Area Served	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
RTU1-VAV1-SGRD1	CONFERENCE 215-N	4-WAY	24X24-10"	300	1	-	333	-	323	315	105.0
RTU1-VAV1-SGRD2	CONFERENCE 215-S	4-WAY	24X24-8"	200	1	-	215	-	213	205	102.5
RTU1-VAV1-SGRD3	CONFERENCE 215-E	4-WAY	24X24-8"	200	1	-	189	-	178	197	98.5

RTU1-VAV2

Asset	Area Served	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
RTU1-VAV2-SGRD1	OFFICE 210	CD-2	24X24-10"	300	1	-	414	-	323	312	104.0
RTU1-VAV2-SGRD2	OFFICE 212	CD-3	24X24-8"	200	1	-	212	-	210	197	98.5
RTU1-VAV2-SGRD3	WOMENS RESTROOM	CD-1	12X12-6"	100	1	-	167	-	115	103	103.0
RTU1-VAV2-SGRD4	MENS RESTROOM	CD-1	12X12-6"	100	1	-	133	-	113	98	98.0

RTU1-VAV3

Asset	Area Served	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
RTU1-VAV3-SGRD1	CAFE 101	PERFORATED	24X24-12"	300	1	-	315	-	318	304	101.3
RTU1-VAV3-SGRD2	CAFE SERVE LINE	PERFORATED	24X24 - 12"	300	1	-	330	-	310	299	99.7

Asset	Area Served	Notes
RTU1-VAV1-SGRD3	CONFERENCE 215-E	Line damper is 100% open
RTU1-VAV2-SGRD4	MENS RESTROOM	Line damper is 100% open
RTU1-VAV3-SGRD2	CAFE SERVE LINE	Line damper is 100% open

SAMPLE COMPANY A

Project: JOB TEST

Round Duct Traverse Report

System: AHU2 (RTU - MFG-MODEL NO.-COMMON AREA)

Service: AHU2-SGRD7 (CD1-MFG-MFG MODEL #-COMMON RESTROOM)

Altitude: Density: Factor:

Duct		**Design**	**Actual**
Diameter: 8	Readings: 4	SCFM:	SCFM:
Area: 0.35		FPM: 585	FPM: 587
S.P.:	Temp:	CFM: 200	CFM: 205

Notes:

K FACTOR TRAVERSE

Duct Traverse Data Points