Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

NATIONAL TAB

Comfort. Under control.

Report: FINAL TAB REPORT
Function: Test, Adjust, & Balance
Date: 7/18/2022

PROJECT

07-11 CULVERS - FULSHEAR, TX

6677 FLEWELLEN WAY

FULSHEAR, TX

Client

Accurex
400 Ross Ave

Schofield, WI 54476

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

Table Of Contents

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units)
Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

Kitchen Exhaust Hood & Associated Fans
Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow.

General Exhaust Fans
The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests
After completing the test and balance, the final building pressure was recorded at +0.011" W.C. average. This pressure falls within the recommended tolerances by the International Mechanical Code of +0.02" W.C. to -0.02" W.C. The building is designed for a net positive pressure and this measurement coincides with that requirement.
The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat "off" and 100% capture was observed. Cooking equipment was not able to be turned on while the technician was on site.

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07-11 CULVERS - FULSHEAR, TX

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	
Perforated diffusers are installed on the cook line? (4-ways will disrupt hood capture)	
All hood filters installed and accounted for?	
Hoods are wired and have power?	
Thermostats have power?	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	
On the cookline diffusers neck is there 18" (12" minimum) straight rigid duct run attached?	

Notes/Comments :

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CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's

Economizers are assembled and functional?	
Thermostat wire run from OCP on the RTU to the Ec terminal at the thermostat? If no, jumper can be installed from R to OCP temporarily. (The economizers will not open without OCP being energized.)	
Motors are all operating below the FLA rating?	
Are belts tight?	
If direct drive unit is the speed controller working.	
Is gas piping installed and valves turned on?	
Unit free of noticeable noise and vibration	

EF's

Rotation is correct?	
Belts are tight?	
Grease cup installed on hood fan?	
Hinge kit installed installed on hood fan?	
Lean grease rated fans back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	

Flex conduit is long enough so that fan can be completely tilted back?	
There is no major leakage around base of fan?	
Is the motor operating below the motor FLA rating?	
For restroom fan(s) is the back draft damper installed and can it fully open?	
Unit free of noticeable noise and vibration?	
The hood exhaust fans are installed in correct positions and are not switched?	
HOODS	
Kitchen equipment installed in proper places?	
Can kitchen equipment be turned on for final smoke test?	
Second stage Grease Grabber filters are installed on the griddle hood?	
DOCUMENTATION	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	

Notes/Comments :

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CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?	
Is space comfortable in all areas?	
Is the space free of ventilation noise?	
If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".	

Notes/Comments :

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CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

FINAL TESTS	
HOOD CAPTURE TEST	
List equipment turned on for testing	
List smoke candle type used	
Smoke test capture - Perimeter of hood	
Smoke test capture - Top of cooking surface	
WITNESS	
Date test was completed	
TAB tech name / Firm	
Site super name / Firm	
Owner representative name / Firm (if Applicable)	
Building pressure at front & back doors (All Systems On)	
ADDITIONAL	
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	
Thermostats are programmed?	
PRODIGY SETTINGS FOR RTU'S	
Parameter 65 set to 0	

Parameter 78 set to 0	
Parameter 105 set to 6	
Parameter 156 set to 70 (Dining unit only)	
Parameter 156 set to 65 (Kitchen Unit Only)	
Parameter 170 set to 75 (Dining Unit Only)	
Parameter 170 set to 70 (Kitchen Unit Only)	
Parameter 131 set to the same % as OA minimum position?	
Parameter 117 set to the same % as OA minimum position?	

Notes/Comments :

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: AHU/RTU

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Asset: RTU1 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5622C08920
Model Num	LGH-240-H4B	LGH240H4BS4Y
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	3
OA Filter Size 1	-	16x24
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2
Num Final Filter 2	-	N/A
Final Filter Size 2	-	N/A

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	184TZ
Horsepower	-	5
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	208/230	208
Rated Amperage	-	13.8

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	1VP50
Motor Bore Size	-	1 1/8"
Motor Sheave SetPt	-	1.0 TURN OPEN
Fan Sheave Size	-	BK100
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	20 1/2"
Num of Belts	-	1
Belt Size	-	BX61
Belt Alignment	-	CORRECT

Test Data		
	Design	**Actual**
SF CFM	6150	5908
SF RPM	-	870
RA CFM	4400	4119
OA CFM	1750	1789
RL Voltage	-	207/209/210
RL Amperage	-	9.7/9.6/9.9
SF Rotation	-	CCW
RA Damper Position	-	66%
Min OA Damper Position	-	34%
Min OA Damper Type	-	OPPOSED BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.76"
Fan Suction SP	-	-1.02"
Fan Discharge SP	-	0.51"
Total ESP	-	1.27"
Fan Total SP	-	1.53"

General		
	Design	**Actual**
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Wesley John

Notes:

Diffuser Supply (GRD)

RTU1/DINING

Asset							
SGRD1	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	MAIN ENTRY	SD4	8"	150	1.0	192	202
	FINAL CFM	**% to design**					
	143	95.3					
SGRD2	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	MENS RR	SD4	8"	150	1.0	252	259
	FINAL CFM	**% to design**					
	158	105.3					
SGRD3	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	WOMENS RR	SD4	8"	150	1.0	228	244
	FINAL CFM	**% to design**					
	157	104.7					
SGRD4	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	HALL	SD1	12"	450	1.0	510	537
	FINAL CFM	**% to design**					
	439	97.6					
SGRD5	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	237	255
	FINAL CFM	**% to design**					
	152	101.3					
SGRD6	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	139	140
	FINAL CFM	**% to design**					
	143	95.3					
SGRD7	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	155	166
	FINAL CFM	**% to design**					
	140	93.3					
SGRD8	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	140	147
	FINAL CFM	**% to design**					
	137	91.3					
SGRD9	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	152	160
	FINAL CFM	**% to design**					
	162	108.0					
SGRD10	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	102	108
	FINAL CFM	**% to design**					
	138	92.0					
SGRD11	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	155	164
	FINAL CFM	**% to design**					

	160	106.7					
SGRD12	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	114	119
	FINAL CFM	**% to design**					
	136	90.7					
SGRD13	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	43	45
	FINAL CFM	**% to design**					
	137	91.3					
SGRD14	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DRINKS & CONDIMENTS	SD1	10"	300	1.0	253	275
	FINAL CFM	**% to design**					
	305	101.7					
SGRD15	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	SIDE ENTRY	SD1	8"	150	1.0	249	258
	FINAL CFM	**% to design**					
	157	104.7					
SGRD16	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	CUSTOMER ORDER AREA	SD1	12"	450	1.0	327	339
	FINAL CFM	**% to design**					
	411	91.3					
SGRD17	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	192	204
	FINAL CFM	**% to design**					
	153	102.0					
SGRD18	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	215	223
	FINAL CFM	**% to design**					
	148	98.7					
SGRD19	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	141	143
	FINAL CFM	**% to design**					
	139	92.7					
SGRD20	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	188	197
	FINAL CFM	**% to design**					
	157	104.7					
SGRD21	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	179	188
	FINAL CFM	**% to design**					
	160	106.7					
SGRD22	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DINING	SD1	8"	150	1.0	114	120
	FINAL CFM	**% to design**					
	137	91.3					
SGRD23	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	CUSTOMER SERVICE	SD1	10"	350	1.0	328	347
	FINAL CFM	**% to design**					
	322	92.0					
SGRD24	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	CUSTOMER SERVICE	SD1	10"	350	1.0	392	408
	FINAL CFM	**% to design**					
	319	91.1					
SGRD25	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**

	CUSTOMER SERVICE	SD1	10"	350	1.0	137	144
	FINAL CFM	**% to design**					
	328	93.7					
SGRD26	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	CUSTOMER SERVICE	SD1	10"	350	1.0	215	223
	FINAL CFM	**% to design**					
	320	91.4					
SGRD27	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DRIVE THRU	SD1	12"	500	1.0	256	267
	FINAL CFM	**% to design**					
	461	92.2					
SGRD28	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	OFFICE	SD1	8"	200	1.0	176	182
	FINAL CFM	**% to design**					
	189	94.5					

Completed By:Brianna Biggs on

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU2 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5622C08912
Model Num	LGH-240-H4B	LGH240H4BS4Y
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	3
OA Filter Size 1	-	16x24
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2
Num Final Filter 2	-	N/A
Final Filter Size 2	-	N/A

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	184TZ
Horsepower	-	5
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	208/230	208
Rated Amperage	-	13.8

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	1VP50
Motor Bore Size	-	1 1/8"
Motor Sheave SetPt	-	1.0 TURN OPEN
Fan Sheave Size	-	BK100
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	20 1/2"
Num of Belts	-	1
Belt Size	-	BX61
Belt Alignment	-	CORRECT

Test Data		
	Design	**Actual**
SF CFM	6225	5849
SF RPM	-	871
RA CFM	4525	4102
OA CFM	1700	1747
RL Voltage	-	209/210/211
RL Amperage	-	9.0/9.0/9.3
SF Rotation	-	CCW
RA Damper Position	-	68%
Min OA Damper Position	-	32%
Min OA Damper Type	-	OPPOSED BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.82"
Fan Suction SP	-	-1.09"
Fan Discharge SP	-	0.53"
Total ESP	-	1.35"
Fan Total SP	-	1.62"

General		
	Design	**Actual**
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

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Notes:

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Project:07-11 CULVERS - FULSHEAR, TX

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU2/KITCHEN

Asset							
SGRD1	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	SUNDAE SERVICE	SD1	12"	600	1.0	421	450
	FINAL CFM	**% to design**					
	572	95.3					
SGRD2	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	SUNDAE SERVICE	SD1	12"	600	1.0	399	453
	FINAL CFM	**% to design**					
	556	92.7					
SGRD3	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	COOKLINE	SD5	10"	275	1.0	246	279
	FINAL CFM	**% to design**					
	269	97.8					
SGRD4	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	COOKLINE	SD5	10"	250	1.0	146	154
	FINAL CFM	**% to design**					
	234	93.6					
SGRD5	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	FOOD PREP	SD5	12"	400	1.0	421	449
	FINAL CFM	**% to design**					
	387	96.8					
SGRD6	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	FOOD PREP	SD5	12"	400	1.0	147	161
	FINAL CFM	**% to design**					
	381	95.3					
SGRD7	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	COOKLINE	SD5	12"	375	1.0	72	80
	FINAL CFM	**% to design**					
	348	92.8					
SGRD8	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	COOKLINE	SD5	10"	200	1.0	546	583
	FINAL CFM	**% to design**					
	188	94.0					
SGRD9	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	FOOD PREP	SD5	12"	350	1.0	508	546
	FINAL CFM	**% to design**					
	342	97.7					
SGRD10	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DISHWASHING	SD5	12"	350	1.0	684	735
	FINAL CFM	**% to design**					
	330	94.3					
SGRD11	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DISHWASHING	SD5	12"	350	1.0	413	443
	FINAL CFM	**% to design**					

	329	94.0					
SGRD12	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	EMPLOYEE RR	SD4	12"	75	1.0	90	101
	FINAL CFM	**% to design**					
	72	96.0					
SGRD13	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DRY GOODS	SD1	12"	600	1.0	241	261
	FINAL CFM	**% to design**					
	549	91.5					
SGRD14	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DRY GOODS	SD1	10"	200	1.0	332	373
	FINAL CFM	**% to design**					
	189	94.5					
SGRD15	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	DRY GOODS	SD1	12"	600	1.0	381	426
	FINAL CFM	**% to design**					
	556	92.7					
SGRD16	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	UTILITY ROOM	SD1	12"	600	1.0	302	385
	FINAL CFM	**% to design**					
	547	91.2					

Completed By:Brianna Biggs on

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-A1 AREA:MOP ROOM

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XCR-B80	XCR-B80
Serial Num	-	19862130
Type	CEILING	CENTRIFUGAL
Configuration	VERTICAL	CEILING

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	-	NL
Motor Rpm	900	900
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.16
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	75	69
Fan RPM	885	900
Fan Rotation	-	CW
Motor RPM	-	900
System SetPt	-	MEDIUM
RL Voltage	-	117
RL Amperage	-	0.11
Total ESP	0.125"	NA
Fan Inlet SP	-	N/A
Fan Discharge SP	-	NA

Completed By: Wesley John

Notes:

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-A1 AREA:EMPLOYEE RESTROOM

Unit Data		
	Design	**Actual**
MFG	ACCUREX	BROAN
Model Num	XCR-B80	AE80BL-B
Serial Num	-	NL
Type	CEILING	CENTRIFUGAL
Configuration	VERTICAL	CEILING

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	900	NL
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.5
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	75	73
Fan RPM	885	DIRECT DRIVE
Fan Rotation	-	CW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	SINGLE SPEED
RL Voltage	-	118
RL Amperage	-	0.34
Total ESP	0.125"	N/A
Fan Inlet SP	-	NA
Fan Discharge SP	-	N/A

Completed By: Wesley John

Notes:

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: PRV1 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XRED-095-D	XRED-090-VG-1-17-X
Serial Num	-	19872570
Type	DOWNBLAST	CENTRIFUGAL
Configuration	HORIZONTAL	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BROAD-OCEAN
Frame	-	NL
Horsepower	0.0667	0.10
Motor Rpm	1550	1750
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.38
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	300	285
Fan RPM	1479	DIRECT DRIVE
Fan Rotation	-	CW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	6/10
RL Voltage	-	119
RL Amperage	-	1.0
Total ESP	0.5"	0.32"
Fan Inlet SP	-	-0.32"
Fan Discharge SP	-	ATM

Completed By: Wesley John

Notes:

National TAB

Project:07-11 CULVERS - FULSHEAR, TX

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

PRV1/RESTROOM

Asset							
EGRD1	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	MENS RR	EG1	10X10	150	1.0	152	222
	FINAL CFM	**% to design**					
	140	93.3					
EGRD2	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**
	WOMENS RR	EG1	10X10	150	1.0	303	234
	FINAL CFM	**% to design**					
	145	96.7					

Completed By:Brianna Biggs on

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: PRV2 AREA:HD1 GRIDDLE

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XRUB-160XP-15	XRUB-160XP-15 -1-26-G
Serial Num	-	19873047
Type	UPLBAST	CENTRIFUGAL
Configuration	VERTICAL	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	NA
Horsepower	1.5	1.5
Motor Rpm	1725	1725
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	NA
Service Factor	-	NA

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4"
Motor Bore Size	-	5/8"
Motor Sheave SetPt	-	1.0 TURN OPEN
Fan Sheave Size	-	AK30
Fan Sheave Bore	-	1"
Belt CL Distance	-	6 1/4"
Num of Belts	-	1
Belt Size	-	AX24

Test Data		
	Design	**Actual**
CFM	1500	1579
Fan RPM	2411	2277
Fan Rotation	-	CW
Motor RPM	-	1772
RL Voltage	-	213/211/211
RL Amperage	-	3.7/3.5/3.5
Suction ESP	-	-2.04"
Discharge ESP	-	ATM
Total ESP	2.337"	2.04"

Completed By: Wesley John

Notes:

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: PRV3 AREA:HD2 FRYER

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XRUB-140-7	XRUB-140-7-1-26-G
Serial Num	-	19873403
Type	UPBLAST	CENTRIFUGAL
Configuration	VERTICAL	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.75	0.75
Motor Rpm	1725	1725
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	2.54
Service Factor	-	1.00

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VP34
Motor Bore Size	-	5/8"
Motor Sheave SetPt	-	5.0 TURNS OPEN
Fan Sheave Size	-	AK41
Fan Sheave Bore	-	3/4"
Belt CL Distance	-	5"
Num of Belts	-	1
Belt Size	-	AP23

Test Data		
	Design	**Actual**
CFM	1500	1607
Fan RPM	1377	1013
Fan Rotation	-	CW
Motor RPM	-	1783
RL Voltage	-	213/212/211
RL Amperage	-	1.5/1.7/1.8
Suction ESP	-	-0.83"
Discharge ESP	-	ATM
Total ESP	1.0"	0.83"

Completed By: Wesley John

Notes:

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: Kitchen Hood Type I

Comfort. Under control.

Asset: HD1 AREA:GRIDDLE

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XGEP-64-S	XGEP-64.00-S
Job / Serial Num	-	19856085
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	64"	64
Hood Width	23"	23

Test Data Exhaust		
	Design	**Actual**
Filter Type	GREASE GRABBER	GREASE GRABBER
Filter Size 1	16X16	16x16
Filter Qty 1	4	4
Filter AK factor size 1	1.53	1.53
Filter Total AK Area	6.12	6.12
Filter1 FPM	-	301
Filter2 FPM	-	218
Filter3 FPM	-	230
Filter4 FPM	-	283
Filter Ave FPM(corr)	-	258
CFM	-	1579

Cooking Equipment		
	Design	**Actual**
Item 1	-	GRIDDLE

Performance Data		
	Design	**Actual**
Smoke Generation Type	-	45 SECOND SMOKE CARTRIDGE
Hood Capture %	-	100
End Panels Installed (Y/N)	-	YES

General		
	Design	**Actual**
Third Party Witness	-	ROB BRUSS
Third Party Company	-	CAMPBELL CONSTRUCTION
Tech Witness	-	WESLEY JOHN

Completed By: Wesley John

Notes:

Asset	Notes

National TAB

Project: 07-11 CULVERS - FULSHEAR, TX

System/Unit: Kitchen Hood Type I

Comfort. Under control.

Asset: HD2 AREA:FRYER

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XXEP-83-S	XXEP-83.00-S
Job / Serial Num	-	19856078
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	83"	83
Hood Width	23"	23

Test Data Exhaust		
	Design	**Actual**
Filter Type	X-TRACTOR	X-TRACTOR
Filter Size 1	16X16	16x16
Filter Qty 1	5	5
Filter AK factor size 1	1.53	1.53
Filter Total AK Area	7.65	7.65
Filter1 FPM	-	230
Filter2 FPM	-	199
Filter3 FPM	-	193
Filter4 FPM	-	191
Filter5 FPM	-	238
Filter Ave FPM(corr)	-	210
CFM	-	1607

Cooking Equipment		
	Design	**Actual**
Item 1	-	FRYERS

Performance Data		
	Design	**Actual**
Smoke Generation Type	-	45 SECOND SMOKE CARTRIDGE
Hood Capture %	-	100
End Panels Installed (Y/N)	-	YES

General		
	Design	**Actual**
Third Party Witness	-	ROB BRUSS
Third Party Company	-	CAMPBELL CONSTRUCTION
Tech Witness	-	WESLEY JOHN

Completed By: Wesley John

Notes:

Asset	Notes