**Report By:**

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

NATIONAL TAB

Comfort. Under control.

**Report: TAB Report**
**Function: Test, Adjust, & Balance**
**Date: 6/24/2022**

# PROJECT

## WENDY'S - BROKEN ARROW, OK

500 W STONEWOOD DRIVE

BROKEN ARROW, OK

**Client**

AIR COMFORT HEAT & AIR (OK)
517 WEST H STREET

JENKS, OK 74037

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## 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) w/ Diffusers
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 (Halton)
Each kitchen exhaust fan was measured by taking static pressure at the exhaust plenum and comparing to OEM performance data. The total flow of the exhaust was then adjusted to tolerance of the engineer's design flow.

General Exhaust Fans w/ Grilles
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 measured. It was confirmed that the building pressure fell within acceptable tolerances and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.
The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

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## WENDY'S - BROKEN ARROW, OK

### Project Issue Information

**Issue Name :** RTU-1 and 2 economizers

**Description :** Economizers do not function as intended and cannot currently be set at the thermostat. Manually set outside air and physically marked damper position. Once repaired recommend setting to the permanently marked position.

**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough

**Status :** Open

**Originated Date :** 06/24/2022 - Will Turnbough - National TAB

**STOREFRONT**

**RTU1 KITCHEN**

**RTU2 DINING**

**EF1 GRIDDLE**

**EF2 FRYER**

**EF3 RESTROOMS**

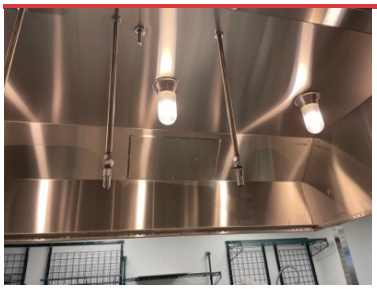
**ROOFTOP**

**HD2 GRIDDLE**

**HD1 FRYER**


**RTU1 MINIMUM DAMPER POSITION**


**RTU2 MINIMUM DAMPER POSITION**



**DOUBLE PRESSURE PORTS HD2**

## EXTRA EXHAUST FROM HD2 ABOVE CEILING

## EXTRA EXHAUST FROM HD2 BELOW CEILING

NATIONAL TAB

## AIR BALANCE SCHEDULE

| UNIT | AREA SERVED | HVAC SUPPLY | | HVAC RETURN | | HVAC OUTDOOR | | OA % | | HOOD MAKE-UP | | HOOD EXHAUST | | GENERAL EXH. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL |
| RTU-1 | KITCHEN | 4500 | 4295 | 2900 | 2635 | 1600 | 1660 | 35.6% | 38.6% | | | | | | |
| RTU-2 | DINING | 4500 | 4227 | 2900 | 2590 | 1600 | 1637 | 35.6% | 38.7% | | | | | | |
| EF-1 | HD1 GRILL | | | | | | | | | | | 1200 | 1201 | | |
| EF-2 | HD2 FRYER | | | | | | | | | | | 1500 | 1425 | | |
| EF-3 | RESTROOM | | | | | | | | | | | | | 300 | 285 |
| **TOTALS** | | 9000 | 8522 | 5800 | 5225 | 3200 | 3297 | | | 0 | 0 | 2700 | 2626 | 300 | 285 |

### NET BUILDING AIRFLOW CALCULATION

| TOTALS | DESIGN | ACTUAL |
|---|---|---|
| TOTAL OA | 3200 | 3297 |
| TOTAL EXHAUST | 3000 | 2911 |
| **NET AIRFLOW** | 200 | 386 |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H20) |
|---|---|
| FRONT | 0.0059 |
| SIDE | 0.0087 |
| REAR | -0.0024 |
| **AVERAGE** | **0.0041** |

### FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

Comfort. Under control.

# WENDY'S - BROKEN ARROW, OK

## CheckList Information

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

### CheckList Item Details

**INITIAL SITE WALKTHROUGH**

| | |
|---|---|
| All diffusers and grilles are installed and match design? | YES |
| All hood filters installed and accounted for? | YES |
| Hoods are wired and have power? | YES |
| Hood is free of alarms? | YES |
| Thermostats have power? | YES |
| Have trades/general contractor been notified about any issues and are they created on FaciliBuild? | N/A |

**Notes/Comments :**

Comfort. Under control.

# WENDY'S - BROKEN ARROW, OK

## 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? | ASSEMBLED, NOT FUNCTIONING PROPERLY |
| DCV Max damper opening position is set to minimum? | YES, MANUALLY SET |
| Free cooling enthalpy set point set for lowest setting (Typically "D") | N/A |
| Motors are all operating below the FLA rating? | YES |
| Are belts tight? | N/A |
| If direct drive unit is the speed controller working. | YES |
| Is gas piping installed and valves turned on? | YES |
| Unit free of noticeable noise and vibration | YES |
| **EF's** | |
| Rotation is correct? | YES |
| Belts are tight? | N/A DD units |
| Grease cup installed on hood fan? | YES |
| Hinge kit installed installed on hood fan? | YES |
| Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan? | YES |

| | |
|---|---|
| Flex conduit is long enough so that fan can be completely tilted back? | YES |
| There is no major leakage around base of fan? | YES, NO MAJOR LEAKAGE |
| Is the motor operating below the motor FLA rating? | YES |
| For restroom fan(s) is the back draft damper installed and can it fully open? | YES |
| Unit free of noticeable noise and vibration? | YES |
| **HOODS** | |
| Kitchen equipment installed in proper places? | YES |
| Can kitchen equipment be turned on for final smoke test? | NO |
| **DOCUMENTATION** | |
| Have trades/general contractor been notified about any issues and are they created on FaciliBuild? | YES |

**Notes/Comments :**

Comfort. Under control.

# WENDY'S - BROKEN ARROW, OK

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

**Notes/Comments :**

Comfort. Under control.

# WENDY'S - BROKEN ARROW, OK

## 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 | NONE, STARTUPS NOT DONE |
| List smoke candle type used | 45 SECOND SMOKE EMITTER |
| Smoke test capture - Perimeter of hood | 100% |
| Smoke test capture - Top of cooking surface | 100% |
| **WITNESS** | |
| Date test was completed | 05/25/2022 |
| TAB tech name / Firm | JACOB DAVIDSON/ NATIONAL TAB |
| Site super name / Firm | CHASE BOLIN / CRV CONSTRUCTION |
| Owner representative name / Firm (if Applicable) | |
| Building pressure at front & back doors (All Systems On) | FRONT 0.0059" BACK -0.0024 |
| **ADDITIONAL** | |
| Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative) | YES |

**Notes/Comments :**

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: AHU/RTU

**Asset: RTU1** AREA:KITCHEN

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | AAON | AAON |
| **Serial Num** | - | 202201-BNG96458 |
| **Model Num** | RN-0148-0-GA | RN-0148-0-GA05-244 |
| **Type** | - | RTU |
| **Configuration** | - | VERTICAL |
| **Num OA Filters 1** | - | 3 |
| **OA Filter Size 1** | - | 18.5x23.5 |
| **Num Final Filter 1** | - | 6 |
| **Final Filter Size 1** | - | 20X25X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR ELECTRIC CO |
| **Frame** | - | 213T |
| **Horsepower** | 2 | 3 |
| **Motor Rpm** | - | 1165 |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 208 | 230/460 |
| **Rated Amperage** | - | 9/4.5 |

| Drive Data | | |
|---|---|---|
| | **Design** | **Actual** |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4500 | 4295 |
| **SF RPM** | - | 1165 |
| **RA CFM** | 2900 | 2635 |
| **OA CFM** | 1600 | 1660 |
| **RL Voltage** | - | 189 |
| **RL Amperage** | - | 6.8 |
| **SF Rotation** | - | CW |
| **RA Damper Position** | - | [1] |
| **Min OA Damper Position** | - | [1] |
| **Min OA Damper Type** | - | ECONOMIZER |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.53" |
| **Fan Suction SP** | - | -0.73" |
| **Fan Discharge SP** | - | 0.18" |
| **Total ESP** | 0.8" | 0.71" |
| **Fan Total SP** | - | 0.91" |

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

Completed By: Wendy Biggs

Notes:[1] ECONOMIZER DID NOT RESPOND TO INPUT FROM CONTROL. MANUALLY SET MINIMUM. SEE PICTURE.

## Diffuser Supply (GRD)

### RTU1/KITCHEN

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD1 | BOH | SD3 | 12 | 400 | 1 | 820 | 484 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 395 | 98.8 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD2 | FOOD BRAB | SD3 | 12 | 500 | 1 | 34 | 438 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 457 | 91.4 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD3 | FOOD BRAB | SD2 | 10 | 350 | 1 | 56 | 328 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 324 | 92.6 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD4 | FOOD RAB | SD2 | 10 | 350 | 1 | 46 | 315 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 349 | 99.7 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD5 | DRIVE THRU | SD3 | 12 | 450 | 1 | 86 | 457 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 424 | 94.2 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD6 | COOK LINE | SD2 | 10 | 300 | 1 | 56 | 270 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 289 | 96.3 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD7 | COOK LINE | SD2 | 10 | 300 | 1 | 449 | 307 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 323 | 107.7 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD8 | DRIVE THRU | SD3 | 12 | 450 | 1 | 754 | 520 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 418 | 92.9 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD9 | FOOD BREB | SD2 | 10 | 300 | 1 | 349 | 235 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 264 | 88.0 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD10 | FOOD BREB | SD2 | 10 | 300 | 1 | 391 | 263 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 283 | 94.3 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| SGRD11 | FOOD BREB | SD2 | 10 | 300 | 1 | 367 | 248 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 276 | 92.0 | | | | | |

| | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
|---|---|---|---|---|---|---|---|
| SGRD12 | FOOD BREB | SD3 | 12 | 500 | 1 | 676 | 451 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 493 | 98.6 | | | | | |

**Completed By:Brianna Biggs on**

| Asset | Notes |
|---|---|

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: AHU/RTU

**Asset: RTU2** AREA:DINING

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | AAON | AAON |
| **Serial Num** | - | 202201-BNGB96459 |
| **Model Num** | RN-014-8-0-GA | RN-014-8-0-GA05-244 |
| **Type** | - | RTU |
| **Configuration** | - | VERTICAL |
| **Num OA Filters 1** | - | 3 |
| **OA Filter Size 1** | - | 18.5X23.5 |
| **Num Final Filter 1** | - | 6 |
| **Final Filter Size 1** | - | 20X25X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | BALDOR ELECTRIC CO |
| **Frame** | - | 213T |
| **Horsepower** | 2 | 3 |
| **Motor Rpm** | - | 1165 |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 208 | 230/460 |
| **Rated Amperage** | - | 9/4.5 |

| Drive Data | | |
|---|---|---|
| | **Design** | **Actual** |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 4500 | 4227 |
| **SF RPM** | - | 1165 |
| **RA CFM** | 2900 | 2590 |
| **OA CFM** | 1600 | 1637 |
| **RL Voltage** | - | 186 |
| **RL Amperage** | - | 6.8 |
| **SF Rotation** | - | CW |
| **RA Damper Position** | - | [1] |
| **Min OA Damper Position** | - | [1] |
| **Min OA Damper Type** | - | ECONOMIZER |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.58" |
| **Fan Suction SP** | - | -0.83" |
| **Fan Discharge SP** | - | 0.15" |
| **Total ESP** | 0.8" | 0.73" |
| **Fan Total SP** | - | 0.98" |

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

Completed By: Wendy Biggs

Notes:[1] ECONOMIZER DID NOT RESPOND TO INPUT FROM CONTROL. MANUALLY SET MINIMUM. SEE PICTURE.

## Diffuser Supply (GRD)

### RTU2/DINING

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| SGRD1 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 592 | 493 |
| | FINAL CFM | % to design | | | | | |
| | 524 | 99.8 | | | | | |
| SGRD2 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD2 | 12 | 525 | 1 | 539 | 461 |
| | FINAL CFM | % to design | | | | | |
| | 499 | 95.0 | | | | | |
| SGRD3 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 357 | 443 |
| | FINAL CFM | % to design | | | | | |
| | 472 | 89.9 | | | | | |
| SGRD4 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 387 | 485 |
| | FINAL CFM | % to design | | | | | |
| | 474 | 90.3 | | | | | |
| SGRD5 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 435 | 450 |
| | FINAL CFM | % to design | | | | | |
| | 490 | 93.3 | | | | | |
| SGRD6 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 615 | 487 |
| | FINAL CFM | % to design | | | | | |
| | 496 | 94.5 | | | | | |
| SGRD7 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 497 | 452 |
| | FINAL CFM | % to design | | | | | |
| | 487 | 92.8 | | | | | |
| SGRD8 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | DINING | SD1 | 12 | 525 | 1 | 96 | 453 |
| | FINAL CFM | % to design | | | | | |
| | 473 | 90.1 | | | | | |
| SGRD9 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | OFFICE | SD3 | 8 | 100 | 1 | 223 | 239 |
| | FINAL CFM | % to design | | | | | |
| | 109 | 109.0 | | | | | |
| SGRD10 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | RESTROOM | SD4 | 8 | 100 | 1 | 185 | 96 |
| | FINAL CFM | % to design | | | | | |
| | 108 | 108.0 | | | | | |
| SGRD11 | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
| | RESTROOM | SD4 | 8 | 100 | 1 | 191 | 101 |
| | FINAL CFM | % to design | | | | | |
| | 95 | 95.0 | | | | | |

**Completed By:Brianna Biggs on**

| Asset | Notes |
| --- | --- |

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: FAN - Exhaust

**Asset: EF1** AREA:HOOD 1 DRIDDLE

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CAPTIVEAIRE | FLOAIRE |
| **Model Num** | DUBSHFA | DU85H |
| **Serial Num** | - | 5213182 |
| **Type** | UPBLAST | UPBLAST |
| **Configuration** | VERTIZALE | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | TELCO GREEN |
| **Frame** | - | NL |
| **Horsepower** | 0.750 | 3/4 |
| **Motor Rpm** | - | 1800 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 208 | 208 |
| **Amperage (rated)** | - | 5.2 |
| **Service Factor** | - | 1 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 1200 | 1201 |
| **Fan RPM** | 1254 | 1260 |
| **Fan Rotation** | - | CCW |
| **Motor RPM** | - | 1260 |
| **System SetPt** | - | 66 |
| **RL Voltage** | - | 207 |
| **RL Amperage** | - | NOT SAFE |
| **Total ESP** | 1.250" | -1.50" |
| **Fan Inlet SP** | - | -1.50" |
| **Fan Discharge SP** | - | ATM |

Completed By: Wendy Biggs

Notes:

| Asset | Notes |
|---|---|

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: FAN - Exhaust

**Asset: EF2** AREA:HOOD 2 FRYER

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CAPTIVEAIRE | FLOAIRE |
| **Model Num** | DUBSHFA | DU85H |
| **Serial Num** | - | 5213182 |
| **Type** | UPBLAST | UPBLAST |
| **Configuration** | HORZANTIOL | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | TELCO GREEN |
| **Frame** | - | NL |
| **Horsepower** | 0.750 | 3/4 |
| **Motor Rpm** | - | 1800 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 208 | 208 |
| **Amperage (rated)** | - | 5.2 |
| **Service Factor** | - | 1 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 1500 | 1425 |
| **Fan RPM** | 1332 | 1080 |
| **Fan Rotation** | - | CCW |
| **Motor RPM** | - | 1080 |
| **System SetPt** | - | 58p |
| **RL Voltage** | - | 208 |
| **RL Amperage** | - | NOT SAFE |
| **Total ESP** | 1.250" | -1.10" |
| **Fan Inlet SP** | - | -1.10" |
| **Fan Discharge SP** | - | ATM |

Completed By: Wendy Biggs

Notes:

| Asset | Notes |
|---|---|

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: FAN - Exhaust

**Asset: EF3** AREA:RESTROOM

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CAPTIVEAIRE | FLOAIRE |
| **Model Num** | DR10HFA | DR12H |
| **Serial Num** | - | 5213182 |
| **Type** | CELLING | DOWNBLAST |
| **Configuration** | HORZANTIOL | VERTICAL |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | HSSA |
| **Frame** | - | 42Y |
| **Horsepower** | 0.166 | 1/6 |
| **Motor Rpm** | - | 1625 |
| **Phase** | 1 | 1 |
| **Voltage (rated)** | 115 | 115/230 |
| **Amperage (rated)** | - | 1.9/0.96 |
| **Service Factor** | - | 1 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 300 | 285 |
| **Fan RPM** | 1500 | UTO |
| **Fan Rotation** | - | DD |
| **Motor RPM** | - | UTO |
| **System SetPt** | - | SEE PIC |
| **RL Voltage** | - | NOT SAFE |
| **RL Amperage** | - | NOT SAFE |
| **Total ESP** | 0.340 " | -0.31" |
| **Fan Inlet SP** | - | -0.31" |
| **Fan Discharge SP** | - | ATM |

Completed By: Wendy Biggs

Notes:

# FAN - Exhaust

## Diffuser Ret/Exh (GRD)

### EF3/RESTROOM

| Asset | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| EGRD1 | RESTROOM | RG2 | 8 | 150 | 1 | 191 | 180 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 147 | 98.0 | | | | | |
| | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** |
| EGRD2 | RESTROOM | RG2 | 8 | 150 | 1 | 175 | 167 |
| | **FINAL CFM** | **% to design** | | | | | |
| | 138 | 92.0 | | | | | |

**Completed By:Brianna Biggs on**

| Asset | Notes |
|---|---|

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: Kitchen Hood Type I

**Asset: HD1** AREA:

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | HALTON | HALTON |
| **Model Num** | KVE-L0806 | KVE-L0806 |
| **Job / Serial Num** | - | 110030-461 |
| **Type** | - | LOW PROXIMITY |
| **Hood length** | - | 91" |
| **Hood Width** | - | 64" |

| Test Data Exhaust | | |
|---|---|---|
| | **Design** | **Actual** |
| **Filter Size 1** | - | 10X20 |
| **Filter Qty 1** | - | 3 |
| **Plenum SP** | - | -0.43" |
| **CFM** | - | 1201 |

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

| Test Data Supply | | |
|---|---|---|
| | **Design** | **Actual** |
| **Plenum SP** | - | 0.25" |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Smoke Generation Type** | - | 45 SECOND SMOKE EMITTER |
| **Hood Capture %** | - | 100% |

| General | | |
|---|---|---|
| | **Design** | **Actual** |
| **Third Party Witness** | - | CHASE BOLIN |
| **Third Party Company** | - | CRV CONSTRUCTION |
| **Tech Witness** | - | JACOB DAVIDSON |
| **Tech Company** | - | NATIONAL TAB |

Completed By: Wendy Biggs

Notes:CAPTURE JET PRESSURE 0.25" EXHAUST COMING FROM EXTRA DIFFUSER OFF HOOD -50CFM

| Asset | Notes |
|---|---|

# National TAB

**Project: WENDY'S - BROKEN ARROW, OK**

## System/Unit: Kitchen Hood Type I

**Asset: HD2** AREA:

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | HALTON | HALTON |
| **Model Num** | KVM-L0503 | KVM-L0503 |
| **Job / Serial Num** | - | 110030-499 |
| **Type** | - | TYPE I LOW PROXIMITY |
| **Hood length** | - | 126" |
| **Hood Width** | - | 48" |

| Test Data Exhaust | | |
|---|---|---|
| | **Design** | **Actual** |
| **Filter Size 1** | - | 10X20 |
| **Filter Qty 1** | - | 6 |
| **Plenum SP** | - | -0.14" |
| **CFM** | - | 1425 |

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

| Test Data Supply | | |
|---|---|---|
| | **Design** | **Actual** |
| **Plenum SP** | - | 0.23" |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Smoke Generation Type** | - | 45 SECOND SMOKE EMITTER |
| **Hood Capture %** | - | 100% |

| General | | |
|---|---|---|
| | **Design** | **Actual** |
| **Third Party Witness** | - | CHASE BOLIN |
| **Third Party Company** | - | CRV CONSTRUCTION |
| **Tech Witness** | - | JACOB DAVIDSON |
| **Tech Company** | - | NATIONAL TAB |

Completed By: Wendy Biggs

Notes:CAPTURE JET PRESSURE 0.23"

| Asset | Notes |
|---|---|