

**Report By:**

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



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 02/25/2026**  
**Completed By: National TAB**

# PROJECT

**03-02-26 QT #0739 TUCKER, GA**

4330 CHAMBLEE TUCKER RD

TUCKER, GA

**Client**

QUIKTRIP  
4705 SOUTH 129TH EAST AVENUE  
TULSA, OK 74134

# National TAB

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## Project Summary

### Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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 was measured with a flow hood to establish total flow. The total flow was then adjusted via the VFD so that airflow fell within design tolerances. All diffusers on the kitchen RTU were balanced to the engineer's design flow. The diffusers on the sales floor were only adjusted when there were noticeable issues present like drafting or dampers that were found completely closed. The Hoods On outside air rate was set by first establishing the typical QT set point at the Emerson controller and then making manually adjustments on the roof. The hoods off airflow setpoint was found by adjusting the damper position at the Emerson controller until the design airflow was achieved. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. After completion of TAB all overrides were released.

### Kitchen Exhaust Hood & Associated Fans

The 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.

### Restroom Exhaust Fans

The restroom exhaust fans were measured with a flow hood. The total flow was balanced for the fan with the exception of the new grille over the combi-oven, which was balanced to the listed design.

### 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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- [Open QT\\_Balance\\_Schedule.xlsx](#)

## Issue List

- Faded RTU Label
- RTU-1 Duct Leakage



**03-02-26 QT #0739 TUCKER, GA**

**Project Issue Information**

**Issue Name :** Faded RTU Label  
**Description :** RTU-1 label is faded and is not readable. All data inputted is directly from the motor.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** InfoOnly                                      **Asset Tag :**  
**Originated Date :** 03/04/2026 - Anthony Taylor - National TAB



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**Project Issue Information**

**Issue Name :** RTU-1 Duct Leakage  
**Description :** At the supply drop of RTU-1 there is a duct leakage causing the unit to be unable to be balanced.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 03/04/2026 - Anthony Taylor - National TAB

Project Issue File Details



03/04/2026

## CheckList List

- 01: RTU's/AHU's
- 02: Exhaust Fans
- 03: Hoods
- 04: Final Tests



**03-02-26 QT #0739 TUCKER, GA**

**CheckList Information**

**Name :** 01: RTU's/AHU's **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/25/2026 - Trinity Dodds - National TAB  
**Completed Date :** 03/04/2026 - Anthony Taylor - National TAB

**CheckList Item Details**

RTU's/AHU's

---

Evaporator coils are clean? Pass

Comment:

---

Condenser coils are clean? Pass

Comment:

---

Gas piping is installed and valves are turned on? Pass

Comment:

---

Unit free of noticeable noise and vibration Pass

Comment:

---



**03-02-26 QT #0739 TUCKER, GA**

**CheckList Information**

**Name :** 02: Exhaust Fans **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/25/2026 - Trinity Dodds - National TAB  
**Completed Date :** 03/04/2026 - Anthony Taylor - National TAB

**CheckList Item Details**

EF's

Hinge kit installed installed on hood fan? Pass

Comment:

Flex conduit is long enough so that fan can be completely tilted back? Pass

Comment:

No major leakage around the fan base Pass

Comment:

Unit is free of noise and vibration Pass

Comment:



**03-02-26 QT #0739 TUCKER, GA**

**CheckList Information**

**Name :** 03: Hoods **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/25/2026 - Trinity Dodds - National TAB  
**Completed Date :** 03/04/2026 - Anthony Taylor - National TAB

**CheckList Item Details**

**HOODS**

---

**Hood is free of alarms?** Pass

**Comment:**

---

**Hood is free of damage?** Pass

**Comment:**

---

**End panels are installed per prototype?** Fail

**Comment:**

---



03-02-26 QT #0739 TUCKER, GA

**CheckList Information**

**Name :** 04: Final Tests **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/25/2026 - Trinity Dodds - National TAB  
**Completed Date :** 03/04/2026 - Anthony Taylor - National TAB

**CheckList Item Details**

**FINAL CHECKS**

**HOOD CAPTURE TEST**

**List kitchen equipment turned on for testing**

**Comment:**

Fryer

**List smoke candle type used**

**Comment:**

NTAB

**Smoke test capture % - Perimeter of hood**

**Comment:**

100%

**Smoke test capture % - Top of cooking surface**

**Comment:**

100%

**WITNESS**

**Date test was completed**

03/04/2026

**Comment:**

---

**TAB tech name / Firm**

---

**Comment:**

Anthony Taylor

---

**Site super name / Firm**

---

**Comment:**

QT

---

**Owner representative name / Firm (if Applicable)**

---

**Comment:**

QT

---

**BUILDING PRESSURE**

---

**Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)**

Pass

---

**Comment:**

---



# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

System/Unit: AHU/RTU

Asset: RT-1

AREA:RESTROOM

Unit Data	
	Actual
MFG	AAON
Serial Num	200503-AMEF04120
Model Num	RN-006-B-AA01-132
Num OA Filters 1	1
OA Filter Size 1	12X35
Num Final Filter 1	4
Final Filter Size 1	16X20X2

Motor Data	
	Actual
Motor MFG	A.O SMITH
Frame	66HZ
Horsepower	1
Motor Rpm	1725
Phase	3
Rated Voltage	208
Rated Amperage	3.3

Test Data		
	Design	Actual
SF CFM	2000	
SF RPM	-	
OA CFM (Hoods On)	400	387
OA CFM (Hoods Off)	400	387
RL Voltage	-	
RL Amperage	-	
VFD Max SetPt	-	BELT
VFD Min SetPt	-	BELT
OA Damper Position (Hoods On)	-	MANUAL ADJUSTMENT
OA Damper Position (Hoods Off)	-	MANUAL ADJUSTMENT

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
Fan Total SP	-	

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

**Unit Data - PHOTO LOG**



**03/04/2026**



# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

System/Unit: AHU/RTU

Asset: RT-2

AREA:SALES

Unit Data	
	Actual
MFG	AAON
Serial Num	200503-AMEK041102
Model Num	RN-013-8-0-AB02-162
Num OA Filters 1	1
OA Filter Size 1	18X40
Num Final Filter 1	6
Final Filter Size 1	16X20X2

Motor Data	
	Actual
Motor MFG	A.O. SMITH
Frame	56HZ
Horsepower	3
Motor Rpm	1725
Phase	3
Rated Voltage	208
Rated Amperage	9.4

Test Data		
	Design	Actual
SF CFM	4300	4180
SF RPM	-	1662
OA CFM (Hoods On)	700	755
OA CFM (Hoods Off)	700	755
RL Voltage	-	209
RL Amperage	-	7.6/7.7/7.8
OA Damper Position (Hoods On)	-	MANUAL ADJUSTMENT
OA Damper Position (Hoods Off)	-	MANUAL ADJUSTMENT

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.68"
Fan Suction SP	-	-0.92"
Fan Discharge SP	-	0.56"
Total ESP	-	1.24"
Fan Total SP	-	1.48"

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

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**Unit Data - PHOTO LOG**



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# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

System/Unit: AHU/RTU

Asset: RT-3

AREA:KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	201405-ANEJI0433
Model Num	RN-010-8-0-FB09-16A
Num OA Filters 1	1
OA Filter Size 1	18X28
Num Final Filter 1	4
Final Filter Size 1	16X20X2

Motor Data	
	Actual
Motor MFG	AAON
Horsepower	1
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	4.6

Test Data		
	Design	Actual
SF CFM	1350	1342
SF RPM	-	1760
OA CFM (Hoods On)	1350	1342
OA CFM (Hoods Off)	0	0
RL Voltage	-	129 - VFD
RL Amperage	-	1.6 - VFD
VFD Max SetPt	-	55 hz
VFD Min SetPt	-	24 hz
OA Damper Position (Hoods On)	-	MANUL ADJUSTMENT
OA Damper Position (Hoods Off)	-	MANUAL ADJUSTMENT

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.29"
Fan Suction SP	-	-0.35"
Fan Discharge SP	-	0.12"
Total ESP	-	0.41"
Fan Total SP	-	0.47"

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

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## Unit Data - PHOTO LOG



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## AHU/RTU

### Diffuser Supply (GRD)

#### RT-3/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SERVICE AREA	SI	16"	675	1	446	657	657	97.3
SGRD2	SERVICE AREA	SI	16"	675	1	474	685	685	101.5
Total				1350		920	1342	1342	99.41%



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Project: 03-02-26 QT #0739 TUCKER, GA

## System/Unit: FAN - Exhaust

Asset: EF-1

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	NA	LOREN COOK
Model Num	NA	120 ACE 120C3B
Serial Num	-	050S826529- 00/0000710
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	LOREN COOK
Horsepower	-	0.250
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115

Test Data		
	Design	Actual
CFM	625	728
Fan RPM	-	1725
Fan Rotation	-	CCW
Motor RPM	-	1725
System SetPt	-	BELT
Total ESP	-	-0.14"
Fan Inlet SP	-	-0.14"
Fan Discharge SP	-	ATM

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**Unit Data - PHOTO LOG**



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# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

## System/Unit: FAN - Exhaust

Asset: EF-3

AREA: KITCHEN HOOD

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	8469131
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Horsepower	0.5	0.5
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	3.8

Test Data		
	Design	Actual
CFM	1350	1347
Fan RPM	-	1227
Fan Rotation	-	CCW
Motor RPM	-	1227
System SetPt	-	54.8 hz
RL Voltage	-	210
RL Amperage	-	2.46
Total ESP	0.75"	0.46"
Fan Inlet SP	-	-0.46"
Fan Discharge SP	-	ATM

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## Unit Data - PHOTO LOG



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# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

## System/Unit: Kitchen Hood Type I

Asset: HD-1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	8189645
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	20X16	20X16
Filter Qty 1	6	6
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	12.48	12.48
Filter1 FPM	-	111
Filter2 FPM	-	108
Filter3 FPM	-	119
Filter4 FPM	-	113
Filter5 FPM	-	98
Filter6 FPM	-	99
Filter Ave FPM(corr)	-	108
CFM	1350	1348

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	PIZZA OVEN

Completed By: Anthony Taylor on 03/04/2026

**Unit Data - PHOTO LOG**



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# National TAB

Project: 03-02-26 QT #0739 TUCKER, GA

## System/Unit: FAN - Exhaust

Asset: EF-2

AREA:COMBI-OVEN GRILLE

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	SIFIODD-SS
Serial Num	-	8189645
Type	INLINE	INILINE
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	CAPTIVEAIRE
Horsepower	0.3	0.25
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.9
Service Factor	-	

Test Data		
	Design	Actual
CFM	150	152
Fan RPM	-	544
Fan Rotation	-	CCW
Motor RPM	-	544
System SetPt	-	30%
Fan Discharge SP	-	ATM

Completed By: Anthony Taylor on 03/04/2026

