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**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 01/08/2026**  
**Completed By: National TAB**

**PROJECT**  
**01-05-26 QT #1713 STONECREST, GA**

7170 COVINGTON HWY

STONECREST, GA

**Client**

QUIKTRIP  
4705 SOUTH 129TH EAST AVENUE  
TULSA, OK 74134

# National TAB

Project: 01-05-26 QT #1713 STONECREST, GA

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Project: 01-05-26 QT #1713 STONECREST, GA  
Function: Test, Adjust, & Balance

## 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.

### AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HOOD ON OA		HOOD OFF OA		HOOD ON EXHAUST		HOOD OFF EXHAUST	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU 1	SALES	800	791	350	344				
RTU-2	SALES	800	763	350	337				
RTU-3	BOH/KITCHEN	800	805	350	351				
EF-1	RR/JANITOR					750	758	750	758
EF-3	HOOD					1350	1348	0	0
<b>TOTALS</b>		<b>2400</b>	<b>2359</b>	<b>1050</b>	<b>1032</b>	<b>2100</b>	<b>2106</b>	<b>750</b>	<b>758</b>

#### HOODS ON

##### NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2359
TOTAL EXHAUST	2100	2106
<b>NET AIRFLOW</b>	<b>300</b>	<b>253</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0134
SIDE	0.0091
REAR	0.0076
<b>AVERAGE</b>	<b>0.01</b>

#### HOODS OFF

##### NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1032
TOTAL EXHAUST	750	758
<b>NET AIRFLOW</b>	<b>300</b>	<b>274</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0126
SIDE	0.0104
REAR	0.0055
<b>AVERAGE</b>	<b>0.0095</b>

NOTES:

## CheckList List

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



**01-05-26 QT #1713 STONECREST, GA**

**CheckList Information**

**Name :** 01: RTU's/AHU's **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 12/08/2025 - Trinity Dodds - National TAB  
**Completed Date :** 01/08/2026 - Sagar Patel - 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:



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**CheckList Information**

**Name :** 02: Exhaust Fans **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 12/08/2025 - Trinity Dodds - National TAB  
**Completed Date :** 01/08/2026 - Sagar Patel - 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:

---



**01-05-26 QT #1713 STONECREST, GA**

**CheckList Information**

**Name :** 03: Hoods **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 12/08/2025 - Trinity Dodds - National TAB  
**Completed Date :** 01/08/2026 - Sagar Patel - 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?** Pass

**Comment:**



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CheckList Information

**Name :** 04: Final Tests **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 12/08/2025 - Trinity Dodds - National TAB

**Completed Date :** 01/08/2026 - Sagar Patel - National TAB

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

Fryer and Oven

List smoke candle type used

Comment:

45 Second Smoke Emitter

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed

01/08/2026

**Comment:**

Video

---

**TAB tech name / Firm**

**Comment:**

Sagar Patel / National TAB Intelligence

---

**Site super name / Firm**

**Comment:**

Not on Site

---

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

**Comment:**

N/A

---

**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: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: AHU/RTU

Asset: RT-1

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202103-ANEK21820
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	Actual
SF CFM	4200	4233
SF RPM	-	1408
OA CFM (Hoods On)	800	791
OA CFM (Hoods Off)	350	344
RL Voltage	-	170 VFD
RL Amperage	-	7.99 VFD
VFD Max SetPt	-	48 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-0.90"
Fan Discharge SP	-	0.48"
Total ESP	-	1.46"
Fan Total SP	-	1.38"

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

Completed By: Sagar Patel on 01/08/2026

Unit Data - PHOTO LOG



01/08/2026



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# National TAB

Project: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: AHU/RTU

Asset: RT-2

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202103-ANEK21822
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	Actual
SF CFM	4200	4272
SF RPM	-	1408
OA CFM (Hoods On)	800	763
OA CFM (Hoods Off)	350	337
RL Voltage	-	170 VFD
RL Amperage	-	8.12 VFD
VFD Max SetPt	-	48 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.53"
Fan Suction SP	-	-0.73"
Fan Discharge SP	-	0.54"
Total ESP	-	1.26"
Fan Total SP	-	1.27"

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

Completed By: Sagar Patel on 01/08/2026

**Unit Data - PHOTO LOG**



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# National TAB

Project: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: AHU/RTU

Asset: RT-3

AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	202103-ANEK21821
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	Actual
SF CFM	4200	4214
SF RPM	-	1408
OA CFM (Hoods On)	800	805
OA CFM (Hoods Off)	350	351
RL Voltage	-	170 VFD
RL Amperage	-	8.19 VFD
VFD Max SetPt	-	48 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.69"
Fan Suction SP	-	-0.92"
Fan Discharge SP	-	0.57"
Total ESP	-	1.61"
Fan Total SP	-	1.49"

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

Completed By: Sagar Patel on 01/08/2026

**Unit Data - PHOTO LOG**



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# National TAB

Project:01-05-26 QT #1713 STONECREST, GA

## AHU/RTU

### Diffuser Supply (GRD)

#### RT-3/BOH/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SUPPORT SERVICE	SI	12"	800	1	703	738	738	92.3
SGRD2	SUPPORT SERVICE	SI	12"	800	1	813	819	819	102.4
SGRD3	SUPPORT SERVICE	SI	12"	800	1	824	826	826	103.3
SGRD4	SUPPORT SERVICE	SI	12"	800	1	861	807	807	100.9
SGRD5	DOCK	ES	10"	500	1	526	524	524	104.8
SGRD6	WORKROOM	ES	8"	250	1	234	239	239	95.6
SGRD7	WORKROOM	ES	8"	250	1	257	261	261	104.4
Total				4200		4218	4214	4214	100.33%

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Project: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: FAN - Exhaust

Asset: EF1

AREA:RR/JANITOR'S CLOSET

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DR50HFA
Serial Num	-	4821037
Type	-	DOWNBLSAT
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	N/L
Horsepower	-	0.5
Motor Rpm	-	1625
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	5.6
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	750	758
Fan Rotation	-	CCW
System SetPt	-	LOW
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	-	0.21"
Fan Inlet SP	-	-0.21"
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 01/08/2026

Notes:  
[1] UNABLE TO READ VOLTS AND AMPS SAFELY

Written By: Sagar Patel on 01/08/2026

**Unit Data - PHOTO LOG**



**01/08/2026**



# National TAB

Project:01-05-26 QT #1713 STONECREST, GA

Diffuser Ret/Exh (GRD)

## EF1/RR/JANITOR'S CLOSET

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD4	COMBI	RI	8"	150	1	103	148	148	98.7
Total				150		103	148	148	98.67%

Completed By: Sagar Patel on 01/08/2026



# National TAB

Project: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: FAN - Exhaust

Asset: EF3

AREA:KITCHEN HD

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	7644847
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	48
Horsepower	1/2	0.5
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	3.6
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	1350	1348
Fan RPM	-	1175
Fan Rotation	-	CCW
Motor RPM	-	1175
System SetPt	-	51.8 Hz
RL Voltage	-	215
RL Amperage	-	1.5
Total ESP	-	0.28"
Fan Inlet SP	-	-0.28"
Fan Discharge SP	-	ATM

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## Unit Data - PHOTO LOG



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# National TAB

Project: 01-05-26 QT #1713 STONECREST, GA

## System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:GRIDDLE

### Unit Data

	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	7644847
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	-	108"
Hood Width	-	60"

### Test Data Exhaust

	Design	Actual
Filter Type	-	CAPTRATE SOLO FILTER
Filter Size 1	-	16X20
Filter Qty 1	-	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	99
Filter2 FPM	-	105
Filter3 FPM	-	119
Filter4 FPM	-	127
Filter5 FPM	-	107
Filter6 FPM	-	94
Filter Ave FPM(corr)	-	108
CFM	1350	1348

### Cooking Equipment

	Actual
Item 1	FRYER
Item 2	OVEN

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**Unit Data - PHOTO LOG**



**01/08/2026**

