

Report By:

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



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 06/06/2025
Completed By: National TAB

PROJECT

**06-09-25 WHATABURGER #1381 DUNCAN,
SC**

1537 E MAIN ST

DUNCAN , SC

Client

Whataburger Restaurants
300 Concord Plaza Dr

San Antonio, TX 78216

National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

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Issue List

- Diffuser not matching Design
- KEF-1 motor replacement/ building pressure
- RTU-2 Choked diffuser

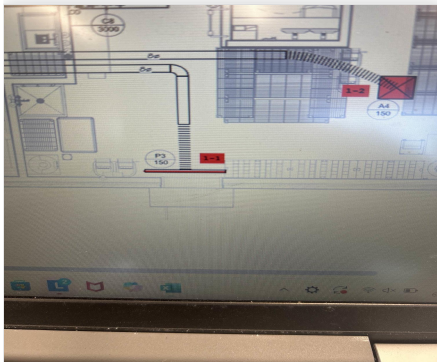


06-09-25 WHATABURGER #1381 DUNCAN, SC

Project Issue Information

Issue Name : Diffuser not matching Design
Description : RTU-1 on 1-1 linear diffuser wasn't installed. A4 style diffuser installed.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : InfoOnly **Asset Tag :** RTU1
Originated Date : 06/11/2025 - Jearod Ferrette - National TAB

Project Issue File Details



06/11/2025



06/11/2025



06-09-25 WHATABURGER #1381 DUNCAN, SC

Project Issue Information

Issue Name : KEF-1 motor replacement/ building pressure
Description : KEF-1 motor is blown. Per the GC awaiting replacement. Unable to do final building pressure test.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : Urgent **Asset Tag :** KEF1
Originated Date : 06/11/2025 - Jearod Ferrette - National TAB

Project Issue File Details



06/11/2025



06-09-25 WHATABURGER #1381 DUNCAN, SC

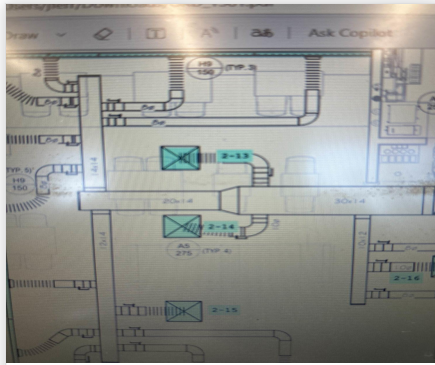
Project Issue Information

Issue Name : RTU-2 Choked diffuser
Description : RTU-2 diffuser 2-14 ductwork too close to trunk diffuser being choked.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : Urgent **Asset Tag :** RTU2
Originated Date : 06/11/2025 - Jearod Ferrette - National TAB

Project Issue File Details



06/11/2025



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CheckList List

- 01: RTU's
- 02: EF's
- 03: Hoods
- 04: Final Checks



06-09-25 WHATABURGER #1381 DUNCAN, SC

CheckList Information

Name : 01: RTU's **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/30/2025 - Tara Metcalf - National TAB

Completed Date : 06/11/2025 - Jearod Ferrette - National TAB

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power?	Pass
--	------

Comment:

THERMOSTATS ARE INSTALLED AND LOCATED IN UNITS BUT BMS IS NOT INSTALLED AT THIS TIME

All diffusers and grilles are installed and match design?	Fail
--	------

Comment:

SEE REMARKS

Motors are all operating below the FLA rating?	Pass
---	------

Comment:

Is gas piping installed and valves turned on?	Pass
--	------

Comment:

Unit free of noticeable noise and vibration	Pass
--	------

Comment:

Final outside air damper position is set manually and marked with permanent marker?	Pass
--	------

Comment:

Supply airflow is 0 to +10%?

Pass

Comment:

Outside airflow is 0 to +10%?

Pass

Comment:

Return balance dampers are confirmed to be 100% open (if installed)?

Pass

Comment:

Screenshot of the GRD marked up with supply and return traverse locations for RTU-1 (Add picture here)

Fail

Comment:

RTU1 & RTU2 RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE

Screenshot of the GRD marked up with supply and return traverse locations for RTU-2 (Add picture here)

Fail

Comment:

RTU1 & RTU2 RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE

For each unit supply, is the flow hood reading within 10% of the final traverse reading? If not do you feel any major points of leakage

Fail

Comment:

RTU1 & RTU2 RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE

For each unit return, is the flow hood reading within 10% of the final traverse reading? If not do you feel any major points of leakage

Fail

Comment:

RTU1 & RTU2 RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE



06-09-25 WHATABURGER #1381 DUNCAN, SC

CheckList Information

Name : 02: EF's **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/30/2025 - Tara Metcalf - National TAB

Completed Date : 06/10/2025 - Jearod Ferrette - National TAB

CheckList Item Details

EF's

Rotation is correct?	Pass
----------------------	------

Comment:

Belts are tight?	N/A
------------------	-----

Comment:

Hinge kit installed installed on hood fan?	Pass
--	------

Comment:

Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Pass
---	------

Comment:

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

Comment:

There is no major leakage around base of fan?	Pass
---	------

Comment:

Is the motor operating below the motor FLA rating?

Pass

Comment:

For restroom fan(s) is the back draft damper installed and can it fully open?

Pass

Comment:

Unit free of noticeable noise and vibration?

Pass

Comment:

Exhaust airflow is 0 to +10%?

Pass

Comment:



06-09-25 WHATABURGER #1381 DUNCAN, SC

CheckList Information

Name : 03: Hoods **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 05/30/2025 - Tara Metcalf - National TAB
Completed Date : 06/11/2025 - Jearod Ferrette - National TAB

CheckList Item Details

HOODS

All hood filters installed and accounted for? Pass

Comment:

Hoods are wired and have power? Pass

Comment:

Hood is free of alarms? Pass

Comment:

Hood is free of damage? Pass

Comment:

Quarter or full vertical end panels are installed if specified? Pass

Comment:



06-09-25 WHATABURGER #1381 DUNCAN, SC

CheckList Information

Name : 04: Final Checks **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/30/2025 - Tara Metcalf - National TAB

CheckList Item Details

FINAL CHECKS

Is space free of drafting? Pass

Comment:

Is space comfortable in all areas? Pass

Comment:

Is the space free of ventilation noise? Pass

Comment:

List kitchen equipment turned on for testing

Comment:

KITCHEN EQUIPMENT UNABLE TO BE TURNED ON FOR SMOKE TEST

List smoke candle type used

Comment:

SMOKE EMITTER

HOOD CAPTURE TEST

- [Open](#) 1381_WHATABURGER_FRYER_382270814.mov
06/11/2025

Smoke test capture % - Perimeter of hood

Comment:

FRYER STATION 100% PENDING GRILL STATION - SEE REMARKS

Smoke test capture % - Top of cooking surface

Comment:

FRYER STATION 100% PENDING GRILL STATION - SEE REMARKS

WITNESS

Date test was completed

06/11/2025

Comment:

TAB tech name / Firm

Comment:

NTAB JEAROD FERRETTE

Site super name / Firm

Comment:

JASON

Owner representative name / Firm (if Applicable)

Comment:

NA

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)

Comment:

PENDING KEF-1 MOTOR REPLACEMENT

Is the building pressure at least +0.02"? If not, do you see any obvious areas of external building that aren't sealed?

Comment:

PENDING KEF-1 MOTOR REPLACEMENT

Notes/Comments :

CAN NOT PERFORM BUILDING PRESSURE TEST UNTIL KEF-1 MOTOR REPLACEMENT.

National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	202501-BNGK120851
Model Num	RN-015-8-0-GB04-I69
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	-	NL
Frame	-	NL
Horsepower	-	3
Motor Rpm	-	1170
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	NL

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	3000	3027
SF RPM	-	DD/36HZ
MOTOR RPM	-	DD/36HZ
RA CFM	1100	1215
OA CFM	1900	1812
RL Voltage	-	213/214/213
RL Amperage	-	4.32
SF System SetPt	-	36HZ
RA Damper Position	-	1.5"
Min OA Damper Position	-	1.25
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.13"
Fan Suction SP	-	-0.30"
Fan Discharge SP	-	0.22"
Total ESP	1.00"	0.35"
Fan Total SP	-	0.52"

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

Completed By: Jearod Ferrette on 06/11/2025

Unit Data - PHOTO LOG



06/10/2025

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Project:06-09-25 WHATABURGER #1381 DUNCAN, SC

AHU/RTU



Diffuser Supply (GRD)

RTU1/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	KITCHEN	A4	10"	150	1	161	136	149	99.3
SGRD2	KITCHEN	A4	10"	150	1	158	126	149	99.3
SGRD3	KITCHEN	A3	10"	70	1	96	91	70	100.0
SGRD4	KITCHEN	A5	10"	375	1	409	358	380	101.3
SGRD5	KITCHEN	A5	10"	375	1	487	442	381	101.6
SGRD6	KITCHEN	A5	10"	375	1	399	362	378	100.8
SGRD7	KITCHEN	A5	10"	375	1	460	389	386	102.9
SGRD8	KITCHEN	A5	10"	375	1	188	174	378	100.8
SGRD9	KITCHEN	A5	10"	250	1	292	245	249	99.6
SGRD10	KITCHEN	A5	10"	200	1	364	326	205	102.5
SGRD11	KITCHEN	B3	6"	60	1	98	91	58	96.7
SGRD12	KITCHEN	A4	10"	170	1	209	185	171	100.6
SGRD13	KITCHEN	B3	6"	75	1	98	89	73	97.3
Total				3000		3419	3014	3027	100.9%

Completed By: Jearod Ferrette on 06/11/2025

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Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data	
	Actual
MFG	AAON
Serial Num	202501-BNGP120858
Model Num	RN-015-8-0-GB04-I69
Num OA Filters 1	2
OA Filter Size 1	18.5X23.5
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	2
Motor Rpm	-	1170
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	NL

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	3000	3004
SF RPM	-	DD/67.2HZ
MOTOR RPM	-	DD/67.2HZ
RA CFM	1100	1199
OA CFM	1900	1805
RL Voltage	-	213/213/214
RL Amperage	-	4.01
SF System SetPt	-	67.2HZ
RA Damper Position	-	0.6 on dail
Min OA Damper Position	-	1.5"
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.19"
Fan Suction SP	-	-0.42"
Fan Discharge SP	-	0.39
Total ESP	1.00"	0.58"
Fan Total SP	-	0.81"

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

Completed By: Jearod Ferrette on 06/11/2025

Unit Data - PHOTO LOG



06/10/2025

National TAB

Project:06-09-25 WHATABURGER #1381 DUNCAN, SC

AHU/RTU



Diffuser Supply (GRD)

RTU2/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	P3	8"	100	0.71	196	195	103	103.0
SGRD2	DINING	H9	8"	100	0.45		166	105	105.0
SGRD3	DINING	H9	8"	150	0.45		167	153	102.0
SGRD4	DINING	H9	8"	150	0.45		134	152	101.3
SGRD5	DINING	H9	8"	150	0.45		148	154	102.7
SGRD6	DINING	H9	8"	150	0.45		169	158	105.3
SGRD7	DINING	H9	8"	150	0.45		165	152	101.3
SGRD8	DINING	H9	8"	150	0.45		149	157	104.7
SGRD9	DINING	H9	8"	150	0.45		147	155	103.3
SGRD10	DINING	H9	8"	150	0.45		147	162	108.0
SGRD11	DINING	H9	8"	150	0.45		177	159	106.0
SGRD12	DINING	H9	8"	150	0.45	1971	177	160	106.7
SGRD13	DINING	A5	10"	275	1	135	135	277	100.7
SGRD14	DINING	A5	10"	275	1	94	94	206	74.9
SGRD15	DINING	H9	8"	275	1	208	208	276	100.4
SGRD16	DINING	H9	10"	275	1	186	186	277	100.7
SGRD17	DINING	H9	10"	200	0.45	130	114	198	99.0
Total				3000		2920	2678	3004	100.13%

Diffuser Ret/Exh (GRD)

RTU2/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	DINING	C8	30X14		1	1631	1269	1035	-
Total				0		1631	1269	1035	0%

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Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOM

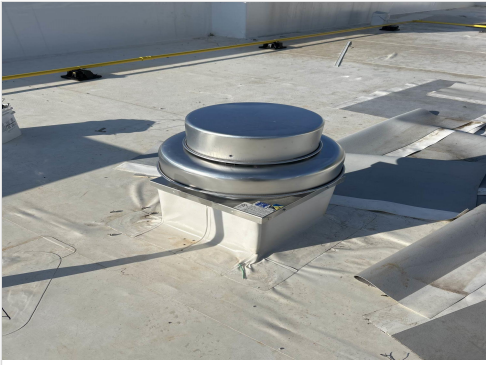
Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G	G
Serial Num	-	25733923
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	1/8	1/8
Motor Rpm	-	1050
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.6
Service Factor	-	1

Test Data		
	Design	Actual
CFM	300	299
Fan RPM	-	DD/set to low
Fan Rotation	-	CW
Motor RPM	-	DD
System SetPt	-	50% ON DAIL
RL Voltage	-	116
RL Amperage	-	2.2
Total ESP	0.50"	0.16"
Fan Inlet SP	-	-0.16"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

National TAB

Project:06-09-25 WHATABURGER #1381 DUNCAN, SC

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF1/RESTROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RESTROOM	F1	6X6	150	1	236	126	151	100.7
EGRD2	RESTROOM	F1	6X6	150	1	215	110	148	98.7
Total				300		451	236	299	99.67%

National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:GRILL HOOD

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	CUE-VG	CUE-VG
Serial Num	-	25734388
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	US MOTORS
Frame	-	56H
Horsepower	.75	1
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	15.0
Service Factor	-	1.25

Drive Data	
	Actual
Motor Sheave Size	VP40
Motor Bore Size	5/8
Motor Sheave SetPt	
Fan Sheave Size	4"
Fan Sheave Bore	3/4
Belt CL Distance	5 1/4"
Num of Belts	1
Belt Size	0624

Test Data		
	Design	Actual
CFM	1995	
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.00"	

Unit Data - PHOTO LOG



06/10/2025

National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:FRYER HOOD

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	CUE-VG	CUE-VG
Serial Num	-	25734391
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	US MOTORS
Frame	-	NL
Horsepower	1/2	1/2
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	7.5
Service Factor	-	1.25

Drive Data	
	Actual
Motor Sheave Size	VP34S
Motor Bore Size	1/2
Motor Sheave SetPt	2 TURNS IN
Fan Sheave Size	AK34X3/4
Fan Sheave Bore	3/4
Belt CL Distance	5"
Num of Belts	1
Belt Size	4L200

Test Data		
	Design	Actual
CFM	1216	1151
Fan RPM	-	1312
Fan Rotation	-	CW
Motor RPM	-	1762
RL Voltage	-	118
RL Amperage	-	3.3
Suction ESP	-	-0.37"
Discharge ESP	-	ATMO
Total ESP	.75"	0.37"

Completed By: Jearod Ferrette on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:GRILL HOOD

Unit Data		
	Design	Actual
MFG	NAH&K INTERNATIONAL	NAH&K INTERNATIONAL
Model Num	HKD027	HKD027
Job / Serial Num	-	8157825-001
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	87"	87"
Hood Width	56"	56"

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	12"X20"	12"X20"
Filter Qty 1	8	8
Filter AK factor size 1	1.55	1.55
Filter Total AK Area	-	12.4
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1995	

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	GRIDDLE

Unit Data - PHOTO LOG



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National TAB

Project: 06-09-25 WHATABURGER #1381 DUNCAN, SC

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:FRYER HOOD

Unit Data		
	Design	Actual
MFG	NA	H&K INTERNATIONAL
Model Num	NA	HKD0023
Job / Serial Num	-	8157825-001
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	73"	73"
Hood Width	26"	26"

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	-	19.5"X11.5"
Filter Size 2	-	15.75"X11.5"
Filter Qty 1	1	1
Filter Qty 2	3	3
Filter AK factor size 1	1.59	1.59
Filters AK factor size 2	1.23	1.23
Filter Total AK Area	5.28	5.28
Filter1 FPM	-	200
Filter2 FPM	-	209
Filter3 FPM	-	242
Filter4 FPM	-	220
Filter Ave FPM(corr)	-	218
CFM	1216	1151

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	FRYER

Completed By: Jearod Ferrette on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

