

SDV Job #: 5890574 - Braxton Brewery (CVG)**Service Region:** 361 - Cincinnati OH Service
Service Person: Dave King**Customer Number:** 866644 **Customer Name:** NATIONAL TAB**Address:** CVG Airport
3087 Terminal Drive
Concourse A Space A-006 (Braxton)
Hebron, KY 41048**Region Job #:** 5842662
Region Job Name: Braxton Brewery (CVG)**Sales Region:** 120 - Air Solutions
Sales Person: Joe Hertenstein**Created By:** Dave King **Creation Date:** 3/30/2023 8:52 AM
Last Modified By: Dave King **Last Modified Date:** 4/10/2023 2:29 PM**Dining Room Pressure:** 0.0 **Kitchen Pressure:** 0.0
Hours On Job: 0.0 **Extra Hours:** 0.0**Completed:** Yes **Completed By:** Dave King
Completion Date: 4/10/2023 2:29 PM**UDS**

NONE

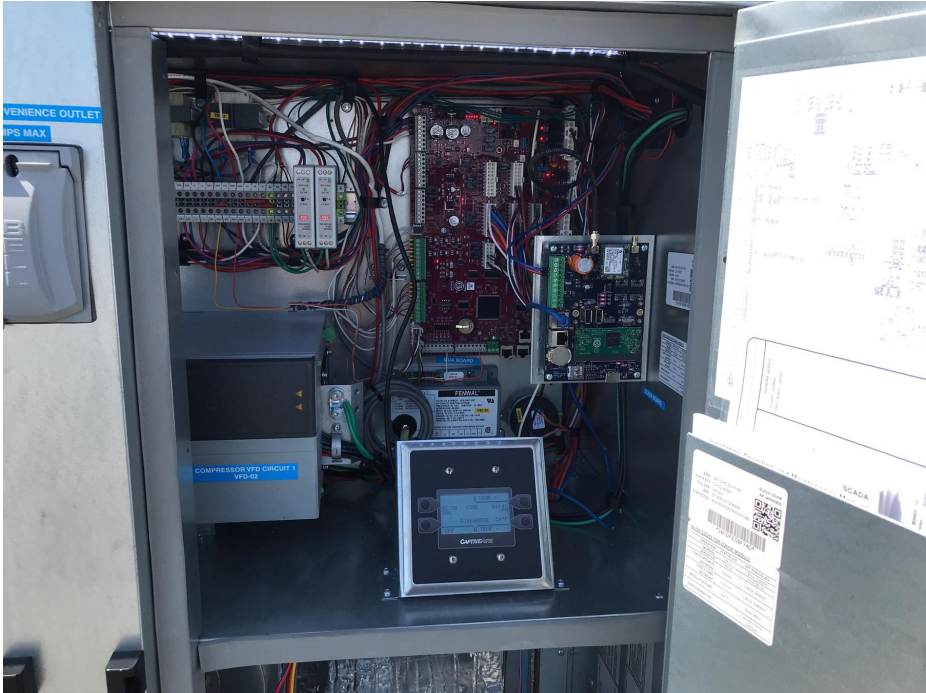
Hood Group 1**Exhaust CFM:** Design = 0 Initial = 0 Final = 0 (0.0% of design)**Hood 1 (Misc HD Items) (Misc HD Items) - NOT AVAILABLE!****Model:** MISC-OPTIONS **Length:** 8' 0.00"
Exhaust CFM: Design = 0 Initial = 0 Final = 0 (0.0% of design)**Installation**

Hung Using appropriate material to safely secure hood.	N/A
COOKING EQUIPMENT ON AND OPERATING	N/A
COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE	N/A
END PANELS INSTALLED CORRECTLY	N/A
Was a smoke test performed on Hood System?	N/A

AQEs

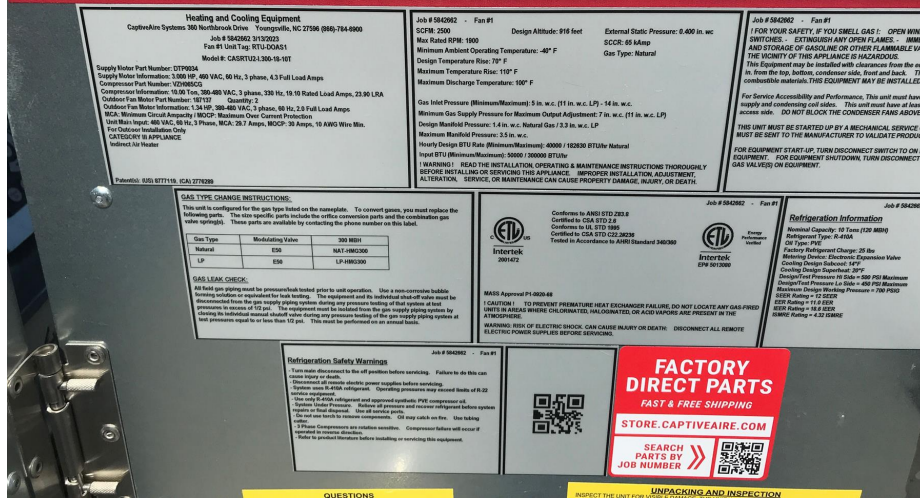
NONE

Fans**Fan 1 - CASRTU2-I.300-18-10T (RTU-DOAS1) (RTU-DOAS1)****Model:** CASRTU2-I.300-18-10T**Other Notes:**



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Supply

Supply CFM: Design = 2500 Actual = 2500 (100.0% of design)

Installation Notes:

Sales office said they would handle doing cfm and setting OA for equipment as site wasn't fully ready for balancing on DOAS when CAS Service was on site.

VOLTS	Design: 460	Actual: 489
HP	Design: 3	Actual: 3
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1285	Actual: 1491
RPM - MAX	Design: 1900	Actual: N/A
RPM - MAX RECOMMENDED	Design: 1600	Actual: N/A
Is blower door tamper switch operational? Does blower shut down when the door is opened?	Design: Yes	Actual: Yes
Record the VFD HZ		Actual: 51
How was supply airflow measured for the T&B?		Actual: Flowhood
Design OA %	Design: 8%	Actual: N/A
Design OA CFM	Design: 200	Actual: 2000
Damper voltage at design outside air?		Actual: 7.5
How was outside air measured?		Actual: Flowhood
Blower motor actual amperage at design airflow?	Design: Less than or equal to 4.3	Actual: 4.2
Record pressure off the sampling tube of the air proving switch. For MUA Board: Note the differential pressure displayed on the HMI.		Actual: 0.66
Modulate the blower to the minimum speed that will be required for the application. Modulate the damper to the minimum position required for the application. Calibrate the airflow proving	Design: Complete	Actual: Complete

proving.

With the blower still at minimum speed and damper at minimum position, calibrate the clogged filter switch.

Design: **Complete**

Actual: **Complete**

Is the return duct installed and sealed to the unit?

Design: **Yes**

Actual: **Yes**

Design OA CFM at Interlock 1

Design: **2025**

Actual: **0**

Damper voltage at design Interlock 1

Actual: **0**

Design OA CFM at Interlock 2

Design: **2025**

Actual: **0**

Damper voltage at design Interlock 2

Actual: **0**

Design OA CFM at Interlock 3

Design: **2025**

Actual: **0**

Damper voltage at design Interlock 3

Actual: **0**

Design OA CFM at Interlock 4

Design: **2500**

Actual: **0**

Damper voltage at design Interlock 4

Actual: **0**

Design OA CFM at Interlock 5

Design: **2500**

Actual: **0**

Damper voltage at design Interlock 5

Actual: **0**

Design OA CFM at Interlock 6

Design: **2500**

Actual: **0**

Damper voltage at design Interlock 6

Actual: **0**

Design OA CFM at Interlock 7

Design: **2500**

Actual: **0**

Damper voltage at design Interlock 7

Actual: **0**

DOAS

Take pictures of all four sides of the unit.

Design: **Complete**

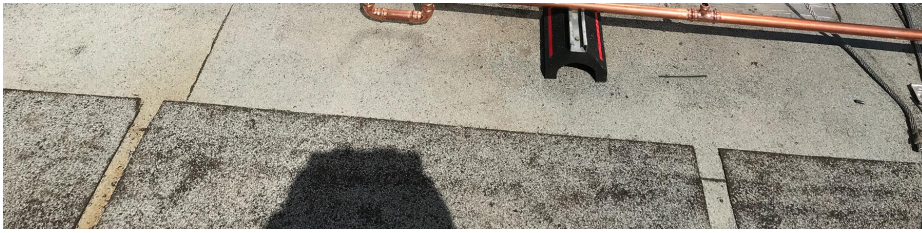
Actual: **Complete**

Other Notes:

N/A







Other Notes:

Site requires copper drains

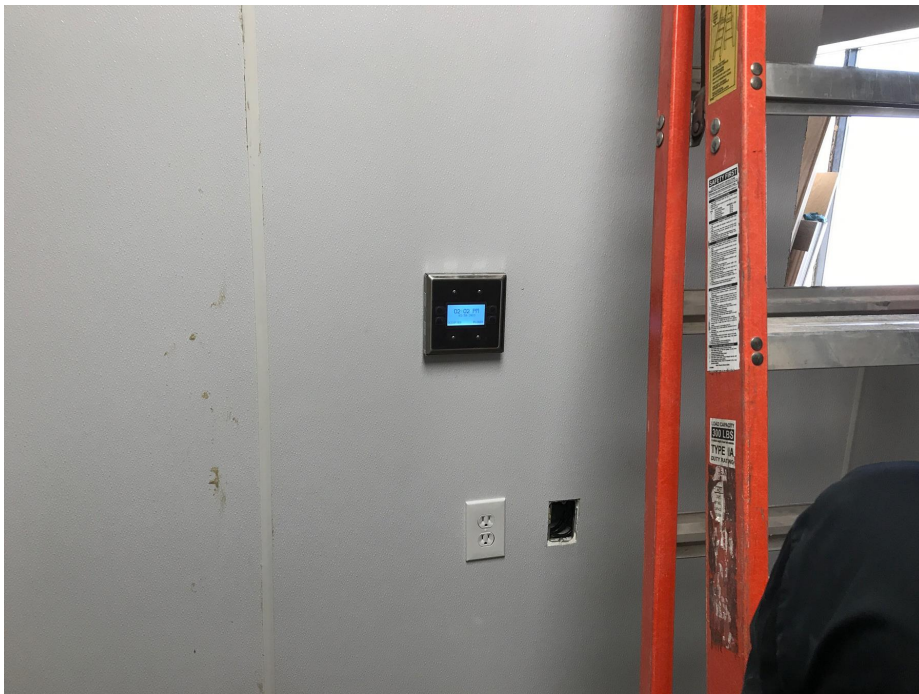
Is condensate pan float switch free of debris and able to slide up and down?	Design: Yes	Actual: Yes
Is there any damage to refrigerant piping, distributor lines, or coils?	Design: No	Actual: No
Confirm field wiring shown on wiring diagrams are complete and check for loose connections. Correct as needed.	Design: Complete	Actual: Complete
Program the list of setting changes through the HMI that were obtained from DOAS@captiveaire.com.		Actual: Complete
Has SCADA been registered, activated and obtained a CASLink heartbeat?	Design: Yes	Actual: Yes

Temp Verification

Measure intake temp with meter and confirm it is within 10F of HMI readout.	Design: True	Actual: True
Measure return temp with meter and confirm it is within 10F of HMI readout.	Design: True	Actual: True
Measure evap coil temp with meter and confirm it is within 10F of HMI readout.	Design: True	Actual: True
Review intake humidity on HMI. Does it appear to be reporting correctly?	Design: Yes	Actual: Yes
Review discharge humidity on HMI. Does it appear to be reporting correctly?	Design: Yes	Actual: Yes
Are extra HMIs being used? Do not count the HMI in the unit. Upload picture of space HMI(s) and surrounding area.		Actual: Yes

Other Notes:

N/A



Record number of extra HMI's used.		Actual: 1
Is HMI address 56 being used for space temperature and humidity readings?		Actual: No
Is HMI address 57 being used for space temperature and humidity readings?		Actual: No
Is HMI address 58 being used for space temperature and humidity readings?		Actual: No
Is HMI address 59 being used for space temperature and humidity readings?		Actual: No
Is wired space wall temp/humidity sensor (not HMI) being used?		Actual: No
Measure space temp with meter and confirm it is within 10F of HMI readout.	Design: True	Actual: True
Record Humidity readout on HMI.		Actual: 32

Heater Gas

Gas Type	Design: Natural	Actual: Natural
Inlet Gas Pressure		Actual: 11
Set mod valve low fire setting using the IOM and STB20-1011. Record manifold gas pressure.	Design: 0.15	Actual: 0.15
Theoretical low fire temperature rise. Use STB20-1011 Calculator		Actual: 14.8
With unit maintaining steady state low fire, record intake temperature.		Actual: 58
With unit maintaining steady state low fire, record discharge temperature.		Actual: 74
Min Temp Rise. If the low fire temperature rise is not within 5 deg of the calculated theoretical, contact DOAS@captiveaire.com		Actual: 16
Set high fire pressure using test menu procedure in O&IM and record manifold gas pressure on pressure gauge.	Design: 3.5" W.C.	Actual: 3.5
Recorded Inlet Gas Pressure With Unit in high fire	Design: 7" - 14" W.C.	Actual: 5
Confirm the discharge air temp sensor is reading accurately in high fire. Reference STB20-1007 and modulate the burner to the highest capacity heat that can be achieved. Record the discharge air temp reading on the HMI.		Actual: 155
With unit still holding highest capacity heat, go into space and record discharge temp at the supply diffuser closest to unit using a handheld temp probe. Record Temperature.		Actual: 160
Difference between measured and actual temperature.		Actual: -5

Cooling

Check status of Oil Sensor Level in HMI. Is status open or closed? Open means oil level is low. Do not operate compressor if the OLS is open.	Design: Closed	Actual: Closed
Measure the outside air temp and record the value.		Actual: 58
For IBT, verify superheat controller settings. For MUA, verify EEV model in settings match the valve install on the unit.	Design: Yes	Actual: Yes
Verify compressor VFD settings. Do settings match schematic?	Design: Yes	Actual: Yes
Place the system in evacuation mode and record the pressure at the suction service port with a gauge set.		Actual: 168
With the unit still in evacuation mode, record the suction pressure reading from HMI.		Actual: 166
With the unit still in evacuation mode, record the discharge pressure reading from HMI.		Actual: 167
For MUA controls, record the liquid pressure reading from the HMI. If the unit has IBT controls, write N/A.		Actual: 166
Difference between measured and actual?		Actual: 2

Over 50F

Start a cooling test. Do condensing fans turn on and modulate?	Design: Yes	Actual: Yes
Does EEV modulate to maintain 20F superheat?		Actual: Yes
Does Compressor ramps up to max speed (200Hz or 330Hz) depending on model?	Design: Yes	Actual: Yes
Cooling superheat measured? (Target is 20)		Actual: 20
Record discharge pressure reading from HMI.		Actual: 395
Record liquid line pressure.		Actual: 382
Record liquid line temperature.		Actual: 193
Record Subcool reading. Contact DOAS Support if subcooling is outside of the range of 12F - 20F. Do not adjust refrigerant charge until directed to by DOAS Support.		Actual: 18

Final Checks

FINAL STEPS OF SDV. ONLY PERFORM FOLLOWING QUESTIONS IF REST OF SDV HAS BEEN COMPLETED!		Actual: Ok
Is the fire alarm input (terminal F) wired and functional?		Actual: No
Is either the wired occupied override or unit interlock being utilized and operational?		Actual: Occupied Override
Once all SDV adjustments are complete, update the factory	Design: Complete	Actual: Complete

default settings through the service menu.

Once all SDV adjustments are complete, download the CAAL file from the board, label it with the fan number, software revision and upload it to the NOLA job docs.

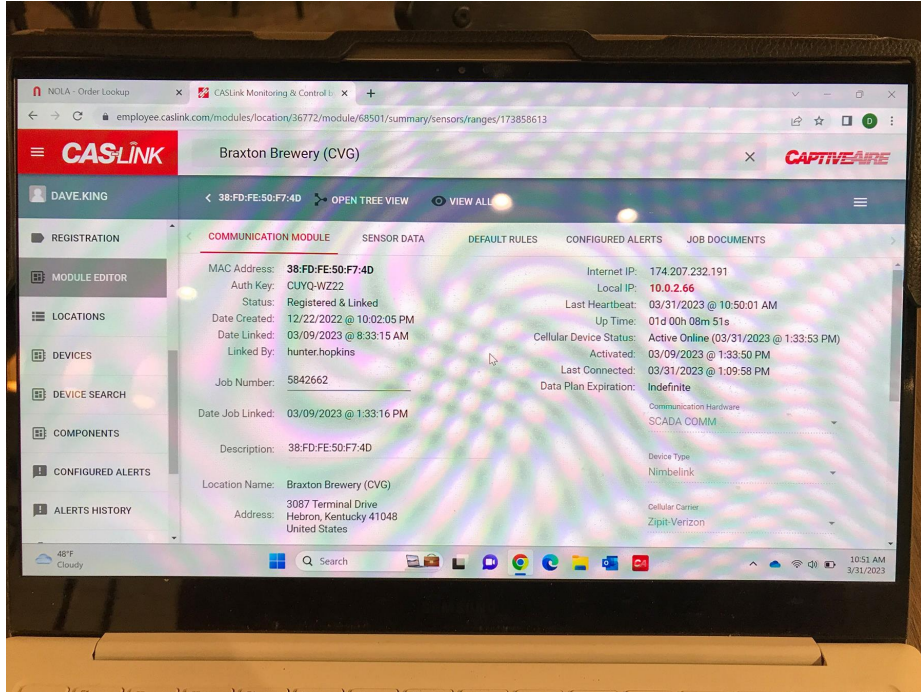
Actual: **Complete**

Take picture of CASLink showing last heartbeat.

Actual: **Complete**

Other Notes:

N/A



DOAS data is visible on CASLink, tagged unique from other equipment and matches field labeling

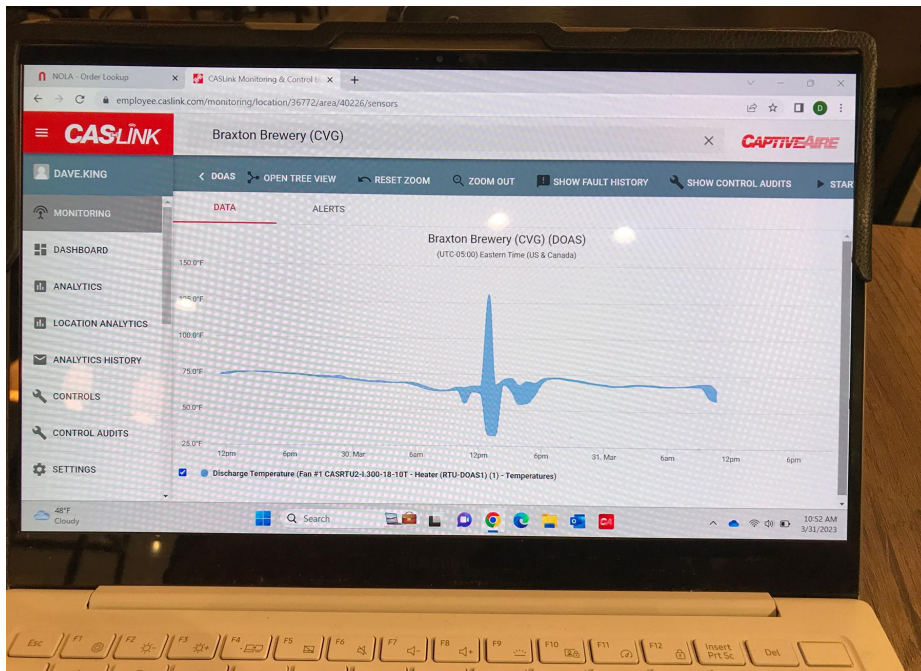
Actual: **Yes**

Take picture of CASLink showing DOAS data responding.

Actual: **Complete**

Other Notes:

N/A



All other equipment on job labeled and can see data on CASLink?

Actual: **Yes**

Has someone from DOAS_support@captiveaire.com confirmed they are seeing data on this job?

Actual: **Yes**

Fan 2 - DU200HFA (EF1) (EF1)

Model: DU200HFA

Other Notes:

N/A



Exhaust CFM: Design = 3800 Actual = 3800 (100.0% of design)

Installation Notes:

Sales office said they would handle doing cfm for equipment.

Record the VFD HZ		Actual: 58.9
VOLTS	Design: 460	Actual: 487
HP	Design: 2	Actual: 2
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1129	Actual: 1128
RPM - MAX	Design: 1600	Actual: N/A
RPM - MAX RECOMMENDED	Design: 1450	Actual: N/A
FLA	Design: 3.8	Actual: 3
PHASE	Design: 3	Actual: 3
FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	Design: No	Actual: No

ECPs

NONE

CORE

NONE