

TIMESHEET REPORT

CUSTOMER NAME OPEN UNIVERSITY MILTON KEYNES		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) ALAN REID - FACILITIES		SHEET NUMBER 12286
SITE NAME & ADDRESS (PLANT OWNER F-GAS) OPEN UNIVERSITY, WALTON HALL, MILTON KEYNES. MK7 6AA		ENGINEER DANIEL CONDELLO	CLIENT ASSET NUMBER 01010	
REASON FOR VISIT QUOTED REPAIRS	MANUFACTURER ROBUR	MODEL	GAHP GS LT	
JOB NUMBER ORAC.2778_EST366671	SERIAL No. SEE ATTACHMENT	YEAR INSTALLED	01/01/2010	
PLANT LOCATION GROUND FLOOR PLANT ROOM	REFRIGERANT TYPE R717	TOTAL REF. CHARGE	28.0 KG	
PLANT REFERENCE ABSORPTION UNDER FLOOR HEATING	REFRIGERANT GWP 0	IND. REF SYS. CHARGE	40 KG H2O	
LOADS SERVED WALTON HALL BUILDING	EQUIV. TONNES CO2E 0	FGAS LEAK CHECK FREQ.	NOT REQUIRED	

WORK CARRIED OUT:

CARRIED OUT REPAIRS ON SEALED AMMONIA CIRCUIT ON ROBUR HEAT PUMP N.4

RECOVERED AMMONIA SOLUTION FROM INSIDE SEALED CIRCUIT, CUT OUT FAULTY SPARES, REPLACED WITH NEW, RE-CHARGED WITH EXISTING AMMONIA SOLUTION AND ADDED AN EXTRA 400 G OF AMMONIA AS A TOP UP.

TESTED FOR ANY LEAKS NONE FOUND

ENGINEERS TIME ON SITE & TRAVEL									MATERIALS USED	
DAY	DATE	START	FINISH	TRAVEL	TOTAL	COMPLETE Y/N	MILEAGE	No. ENG	QUANTITY	DESCRIPTION
MON									1	SOLUTION PUMP
TUES									1	SOLUTION RESTRICTOR
WED									1	INTERNAL SAFETY GAS BY PASS VALVE
THUR	16/01/2020	08:00	15:00	2	9	N	142	2	1	CONTROL BRAHAMA BOX
FRI	17/01/2020	08:00	16:00	2	10	Y	142	3		
SAT										
SUN										

CUSTOMER TO SIGN FOR ENGINEERS TIME ON SITE

ENGINEER SIGNATURE: Daniel Condello

CUSTOMERS SIGNATURE: _____

F-GAS QUALIFICATION: C&G 2079 PART 1

CUSTOMER NAME: ALAN REID

SIGNATURE DATE: 17/01/2020

CUSTOMERS JOB TITLE: FACILITIES

ADDITIONAL WORKS RECOMMENDED / REQUIRED:

ISO9001:2008. CUSTOMER SATISFACTION: 1 = UNSATISFIED 2 = BELOW AVERAGE 3 = MET EXPECTATION 4 = ABOVE AVERAGE 5 = EXCELLENT

CUSTOMER COMMENTS ABOUT PERFORMANCE ON THIS JOB / CONTRACT:

PPM REPORT - ROBUR AMMONIA ABSORBER

CUSTOMER NAME OPEN UNIVERSITY MILTON KEYNES		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) ALAN REID - FACILITIES		SHEET NUMBER 12286
SITE NAME & ADDRESS OPEN UNIVERSITY, WALTON HALL, MILTON KEYNES. MK7 6AA		ENGINEER DANIEL CONDELLO	CLIENT ASSET NUMBER 01010	
REASON FOR VISIT QUOTED REPAIRS	COMPANY GAS SAFE. 0	ENGINEER GAS SAFE NO.	3814612	
JOB NUMBER ORAC.2778_EST366671	MANUFACTURER ROBUR	MODEL	GAHP GS LT	
PLANT LOCATION GROUND FLOOR PLANT ROOM	SERIAL No. SEE ATTACHMENT	YEAR INSTALLED	01/01/2010	
PLANT REFERENCE ABSORPTION UNDER FLOOR HEATING	REFRIGERANT R717	QUANTITY (KG)	28.0 KG	
CLG / HTG LOAD SERVED WALTON HALL BUILDING	REFRIGERANT GWP 0	EQUIV. TONNES CO2E	0	

BOX CODES Y YES N NO G GOOD F FAIR P POOR B BAD N/A NOT APPLICABLE

COMBUSTION CHAMBER Min

<input type="checkbox"/>	Check Seals / Silicon Gaskets
<input type="checkbox"/>	Check Fixings
<input type="checkbox"/>	Check Burner
<input type="checkbox"/>	Check Flame Sensor
<input type="checkbox"/>	Check Ignitor
<input type="checkbox"/>	Check Leads

COMBUSTION CHAMBER Maj

<input type="checkbox"/>	Check Chamber
<input type="checkbox"/>	Replace Burner Silicon Gasket
<input type="checkbox"/>	Check Condense Discharge
<input type="checkbox"/>	Gas Valve Oper.
<input type="checkbox"/>	Clean Combustion Chamber
<input type="checkbox"/>	Clean Burner
<input type="checkbox"/>	Clean Electrodes
<input type="checkbox"/>	Clean Flame Sensor

GAS FUEL CHECKS Min

<input type="checkbox"/>	Gas Pressure from Meter
<input type="checkbox"/>	Gas Pressure to the Burner
<input type="checkbox"/>	Gas Pressure After Gas Valve
<input type="checkbox"/>	CO2 % Value
<input type="checkbox"/>	Check Flue Cleanliness

GAS FUEL CHECKS Maj

<input type="checkbox"/>	Gas Pressure from Meter
<input type="checkbox"/>	Gas Pressure to the Burner
<input type="checkbox"/>	Gas Pressure After Gas Valve
<input type="checkbox"/>	O2
<input type="checkbox"/>	CO2 % Value
<input type="checkbox"/>	CO PPM
<input type="checkbox"/>	Flue Temp
<input type="checkbox"/>	Inlet
<input type="checkbox"/>	Net
<input type="checkbox"/>	Eff
<input type="checkbox"/>	Losses
<input type="checkbox"/>	Xair %
<input type="checkbox"/>	CO/CO2
<input type="checkbox"/>	Drop Test

GENERAL COND. Min/Maj

<input type="checkbox"/>	Panelling
<input type="checkbox"/>	Drive Belt Condition
<input type="checkbox"/>	1.5 BarG Chilled Water Circ Press.
<input type="checkbox"/>	1.5 BarG Expansion Vessel Press.
<input type="checkbox"/>	G Hydraulic Oil Cond.
<input type="checkbox"/>	G Hydraulic Oil Level.
<input type="checkbox"/>	Y Hydraulic Oil Replaced.
<input type="checkbox"/>	0.2 BarG Hydraulic Oil Pressure.
<input type="checkbox"/>	G AV Mounts

ROBUR UNIT SAFETIES Min/Maj

<input type="checkbox"/>	3.017	PCB Firmware release
<input type="checkbox"/>	115.0 Deg C	Gen H.T Cut-Out
<input type="checkbox"/>	2.2 Deg C	LTL Cut-Out
<input type="checkbox"/>	115.0 Deg C	Generator Max Cut Out Temp
<input type="checkbox"/>	250.0 Deg C	Flue Max Cut out Temp
<input type="checkbox"/>	G	Air Pressure Switch Operation
<input type="checkbox"/>	45.0 Deg C	High Ambient Cut-out Temp
<input type="checkbox"/>	-25.0 Deg C	Low Ambient Cut-out Temp
<input type="checkbox"/>	115.0 Deg C	Generator Temp High Limit
<input type="checkbox"/>	G	Chilled Water Flow Switch Oper.
<input type="checkbox"/>	G	Oil Pump Rotation Sensor Check.

DDC CONTROLS Min/Maj

<input type="checkbox"/>	G	Check Electrical Harnesses
<input type="checkbox"/>	G	Check Main Controller
<input type="checkbox"/>	N	Schedule Timer Updated
<input type="checkbox"/>	4.010"	DDC Firmware Release
<input type="checkbox"/>	G	Check xRAM Board
<input type="checkbox"/>	Y	Service Checker Downloaded
<input type="checkbox"/>	24.0 VAC	Record DDC Supply Voltage
<input type="checkbox"/>	Y	Correct CanBus Cable Used
<input type="checkbox"/>	G	BRAM Battery Operation
<input type="checkbox"/>	G	Fuse F1 - F4 Condition

DDC CONTROLS CAL. CHECKS Min/Maj

<input type="checkbox"/>	G	Check Chilled Water Inlet Sensor
<input type="checkbox"/>	G	Check Chilled Water Outlet Sensor
<input type="checkbox"/>	G	Check Ambient Sensor
<input type="checkbox"/>	G	Check Condenser Outlet Sensor
<input type="checkbox"/>	G	Check Generator Temp Sensor

UNIT RUN LOG Min/Maj

<input type="checkbox"/>		CHW Inlet Temperature
<input type="checkbox"/>		CHW Outlet Temperature
<input type="checkbox"/>	41.0 DegC	LTHW Inlet Temperature
<input type="checkbox"/>	49.0 DegC	LTHW Outlet Temperature
<input type="checkbox"/>	65.2 DegC	Generator Temperature
<input type="checkbox"/>	26.3 DegC	Ambient Air Temp
<input type="checkbox"/>	N/A	Condenser Air Off Temperature
<input type="checkbox"/>	N/A	Condenser Ref Out Temperature
<input type="checkbox"/>	N/A	Condenser Fan Motor Amps
<input type="checkbox"/>	0.5 Amps 1~	Blower Motor Amps
<input type="checkbox"/>	2.2 Amps 1~	Hydraulic Pump Motor Amps
<input type="checkbox"/>	N/A	17 Way Valve Condition
<input type="checkbox"/>		Chilled Water Flow Rate
<input type="checkbox"/>	17 BAR	High Side Pressure
<input type="checkbox"/>	3 BAR	Low Side Pressure
<input type="checkbox"/>	3.4 BAR	Hydraulic Pump Deflection Pressure
<input type="checkbox"/>		Hours Run
<input type="checkbox"/>	N	IS FURTHER WORK NEEDED. (Identify Below)

SOLUTION MAKE UP

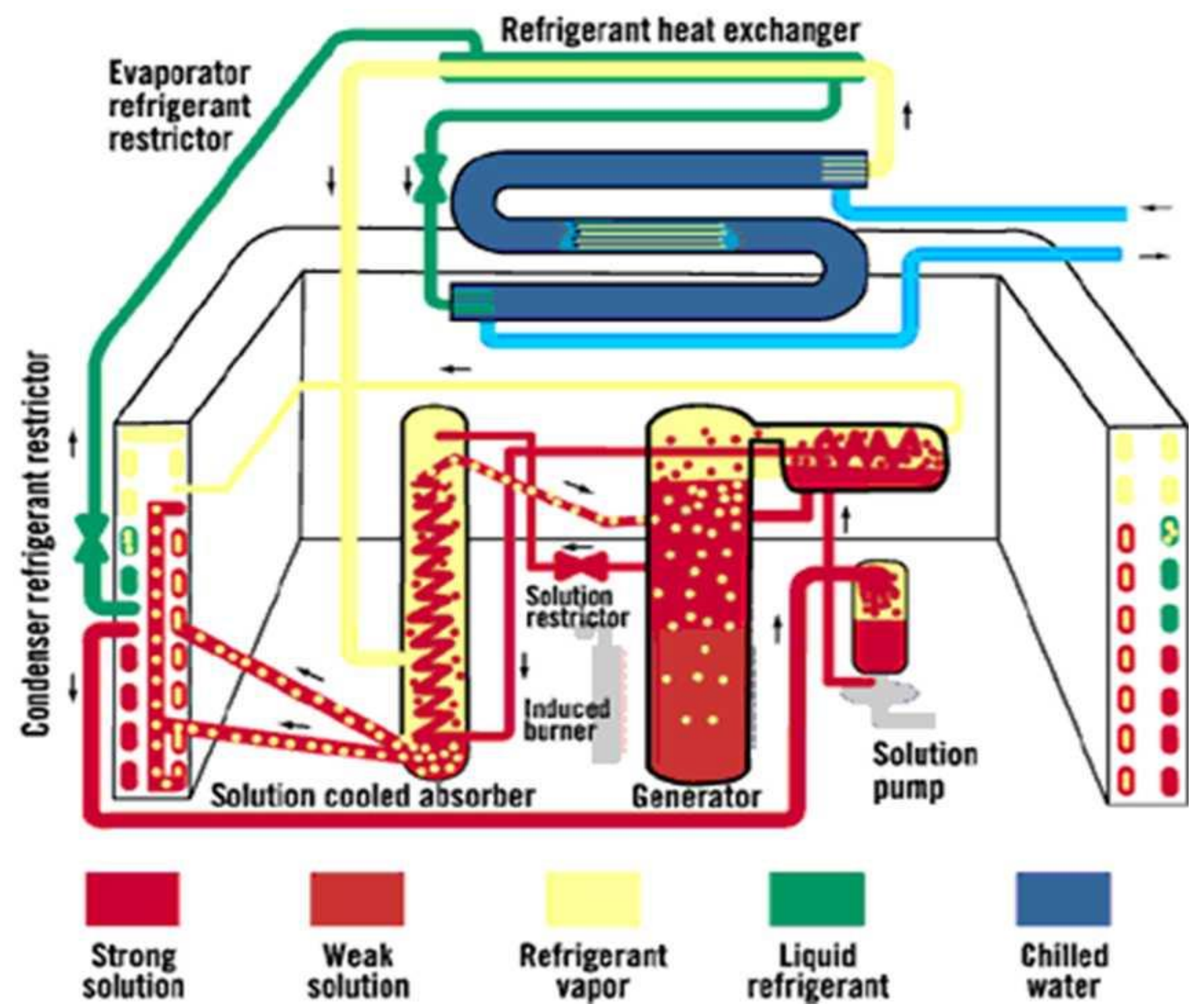
<input type="checkbox"/>	10.0 KG	Refrigerant (H2O)
<input type="checkbox"/>	7.0 KG	Ammonia R717
<input type="checkbox"/>	360.0 CC	Inhibitor (Chromate)

CHILLED WATER MAKE UP

<input type="checkbox"/>	N/A	Glycol %
<input type="checkbox"/>	-	Inhibitor %
<input type="checkbox"/>	N/A	Defoam Agent
<input type="checkbox"/>	N	Water Leaks Present
<input type="checkbox"/>	N	Check CW Strainer

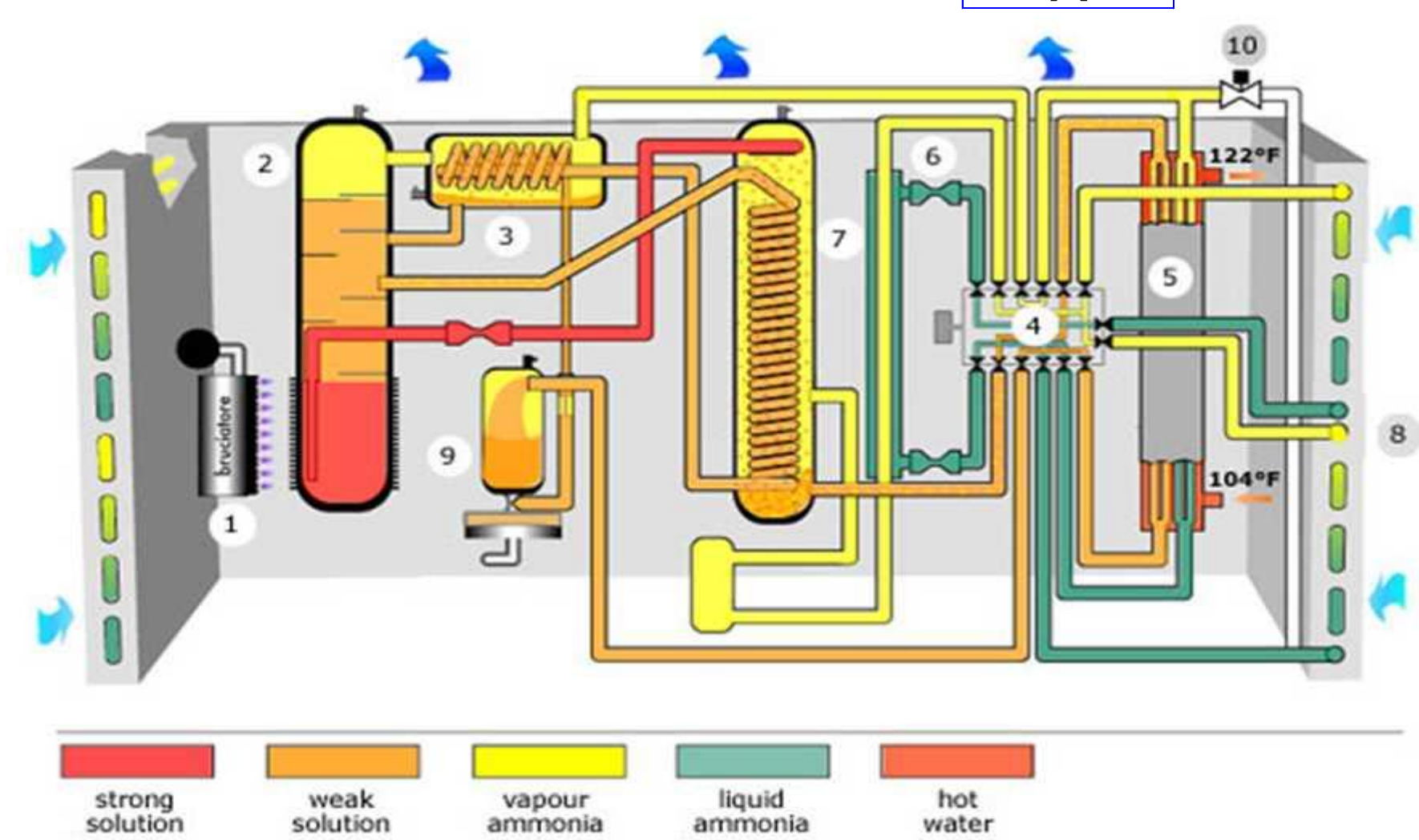
UNIT STYLE ACF SERIES

X



UNIT STYLE GAHP SERIES

X



FAULTS FOUND:

ENGINEER SIGNATURE: Daniel Condello CUSTOMERS SIGNATURE: _____ DATE: 17/01/2020

BOILER ASSET SCHEDULE

CUSTOMER NAME OPEN UNIVERSITY MILTON KEYNES		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) ALAN REID - FACILITIES			SHEET NUMBER 12286	
SITE NAME & ADDRESS OPEN UNIVERSITY, WALTON HALL, MILTON KEYNES. MK7 6AA		ENGINEER DANIEL CONDELLO	CLIENT ASSET NUMBER 01010			
		COMPANY GAS SAFE. 0	ENGINEER GAS SAFE NO. 3814612			
REASON FOR VISIT	QUOTED REPAIRS	MANUFACTURER	ROBUR	MODEL	GAHP GS LT	
JOB NUMBER	ORAC.2778_EST366671	SERIAL No.	SEE ATTACHMENT	YEAR INSTALLED	01/01/2010	
PLANT LOCATION	GROUND FLOOR PLANT ROOM	GAS / FUEL TYPE	R717	QUANTITY (KG)	28.0 KG	
PLANT REFERENCE	ABSORPTION UNDER FLOOR HEATING	HTG LOAD SERVED	WALTON HALL BUILDING			

ROBUR ASSET SCHEDULE

UNIT NODE	MAN. DATE	TYPE	MODEL	SERIAL	R717 AMMONIA CHR. (KG)	R718 REFRIG. CHR. (KG)	GAS TYPE
1	2010	HEAT PUMP	GAHP GS LT	302060005	7.0 KG	10.0 KG	G20
2	2010	HEAT PUMP	GAHP GS LT	302060007	7.0 KG	10.0 KG	G20
3	2010	HEAT PUMP	GAHP GS LT	302060006	7.0 KG	10.0 KG	G20
4	2010	HEAT PUMP	GAHP GS LT	302061004	7.0 KG	10.0 KG	G20

ROBUR DDC & RB CONTROLLERS ASSET SCHEDULE

UNIT NODE	MAN. DATE	MODEL	SERIAL	FIRMWARE VERSION	BMS MODBUS ENA		
1	2010	DDC		4.010"	NO		

LOG - SITE PICTURES

CUSTOMER NAME		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE)			SHEET NUMBER	
OPEN UNIVERSITY MILTON KEYNES		ALAN REID - FACILITIES			12286	
SITE NAME & ADDRESS		ENGINEER	DANIEL CONDELLO		CLIENT ASSET NUMBER	
OPEN UNIVERSITY, WALTON HALL, MILTON KEYNES. MK7 6AA		F-GAS QUALIFICATION	C&G 2079 PART 1		01010	
REASON FOR VISIT	QUOTED REPAIRS	MANUFACTURER	ROBUR	MODEL	GAHP GS LT	
JOB NUMBER	ORAC.2778_EST366671	SERIAL No.	SEE ATTACHMENT		YEAR INSTALLED	01/01/2010
PLANT LOCATION	GROUND FLOOR PLANT ROOM	REFRIGERANT TYPE	R717	QUANTITY (KG)	28.0 KG	
PLANT REFERENCE	ABSORPTION UNDER FLOOR HEATING	CLG LOAD SERVED	WALTON HALL BUILDING			

