CERTIFICATION OF WORK

(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID/Building: Alexandria VA002 Date of Visit: 11/20/19

Contractor Personnel on Site:

1. Patrick Donovan 2. _____

Work Performed:

Preventive Maintenance - Services Completed (Annual, Quarterly, Monthly, equipment identification, etc.)

1. 11119, 11153, 11177, 11207, 11133, 11154 Air handlers, water Heater, Time clocks, Photocell, Condensing units, Chiller, dehumidifier Lights, water Treatment.

Service Calls – Service Call Number and Description

1. CSS# _____
2. CSS# _____
3. CSS# _____

CERTIFICATION OF WORK

To be signed by the Contractor:

Print Name: Patrick Donovan Date: 11/20/19

Signed: _____

To be signed by Facility Manager:

By signing the Certification of Work, the said government representative signature does not constitute acceptance of any work performed by the contractor, it only acknowledges that the contractor was on-site during the identified timeline:

Print Name/Rank: Selina DiBella / SGT Date: 20191120

Signed: _____

E-Mail: selina.a.dibella.mil@mail.com

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

AIR HANDLER

SITE AND BLDG #: Alexandria VA002 MECHANIC SIGNATURE: [signature] DATE: 11/20/19

LOCATION/RM #: Drill Hall WO# 11177 ASSET # 2186+ 2185 START TIME: 10:15 FINISH TIME: 11:30

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
	SPECIAL INSTRUCTIONS			
1	Remove power at Drive or at Breaker Panel. Verify with tester or meter that power has been removed. Install lock out tag out if servicing alone or in confined space for safety precautions.	✓		done
	TO BE PERFORMED AT EACH INSPECTION SERVICE			
1	Check fan blades and moving parts for cracks and excessive wear.	✓		Done
2	Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.-Inspect contactors	✓		L1_____ L2_____ L3_____ See notes
3	Tighten all electrical connectors/lugs to proper torque.	✓		all good
4	If unit is a multi-zone air handler, then check each individual zone damper and associated controls.		N/A	Single Zone air Handlers
5	Check bearing collar set screws on fan shaft to make sure they are tight.	✓		Done / good
6	Replace filters quarterly, replace as necessary. Check belt, repair or replace as necessary.	✓		Done /
7	Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.	✓		all good
8	Lubricate mechanical bearings and connections sparingly.	✓		done
9	Clean coils by brushing, blowing, vacuuming	✓		done / good
10	Check coils for leaking, tightness of fittings.	✓		No leaks visible
11	Use fin comb to straighten coil fins.	✓		Done
12	Report any equipment rust or condensate pan rust -IF found open CM	✓		noted
13	Flush and clean condensate pans and drains. Hose down coils and drain pans and wash with an appropriate EPA approved solution approved solution. Treat condensate pans with an EPA approved biocide.	✓		all clean
14	Check belts for wear and cracks, adjust tension or alignment. Replace belts when necessary. Multi-belt drives shall only be replaced with matched sets.	✓		all good
15	Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.	✓		good

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
16	Check and test freezestat for proper operation	✓		good / done
17	Vacuum interior of unit.	✓		done
18	Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.	✓		all good
19	Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant.	✓		done
20	Clean up work area.	✓		done

Note: The technician shall perform any repairs identified during PM up to $250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding $250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be perfomed by: HVAC Technician

Additional Notes:

Asset 2185 L1 5.6 L2 5.7 L3 5.3

Asset 2186 L1 5.3 L2 5.6 L3 5.5

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

OUTDOOR CONDENSING UNIT

SITE AND BLDG #: Alexandria VA002

MECHANIC SIGNATURE: [signature]

DATE: 11/18/19

LOCATION/RM #: Exterior of Bldg # | WO# 11177

ASSET # see notes

START TIME: 10:00

FINISH TIME: 11:10

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
	SPECIAL INSTRUCTIONS			
1	Schedule outage of unit with personnel in area the unit serves.	✓		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
3	If disposal of the equipment is required, follow regulations concerning removal of refrigerants and disposal of the unit.	✓		
	TO BE PERFORMED AT EACH INSPECTION SERVICE	✓		
1	Remove debris from air screen and clean underneath unit.	✓		done
2	Wash coil with coil cleaning solution - Rinse Thoroughly	✓		done / good
3	Straighten fin tubes with fin comb. as needed.	✓		all good / done
4	Check electrical connections for tightness.	✓		all good
5	Check mounting base for tightness.	✓		all good
6	Inspect fans for bent blades, unbalance, excessive noise and vibrations.	✓		all good
7	Inspect all piping for leaks and tighten loose connections.	✓		done / no leaks visible
8	Check wires at condenser electrical fused safety switches for tightness and burned insulation. Repair as necessary.	✓		all good
9	Check supply air temperature to ensure unit is operating properly. If possible record room temperature.and Humidity	✓		Room temp ____* Room Humidity ____% see notes
10	Inspect unit for overall condition and recommend for replacement or other needed repairs.	✓		all good
11	Clean up work area.	✓		done

Note: The technician shall perform any repairs identified during PM up to $250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding $250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be perfomed by: HVAC Technician

Additional Notes:

Asset # 2179 ✓ good ✓ RT — No Access RH — %

2180 ✓ good ✓ RT — No Access RH — %

2181 ✓ good ✓ RT 72° RH 36%

Asset # 2183 ✓ good ✓ RT 73° RH 32%

2184 ✓ good ✓ RT 73° RH 37%

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST
AIR COOLED CHILLER, PACKAGE UNIT

SITE AND BLDG #: Alexandria VA002 MECHANIC SIGNATURE: [signature] DATE: 11/20/19

LOCATION/RM #: Exterior Bldg #1 WO# 11177 ASSET # 2182 START TIME: 9:55 FINISH TIME: 10:35

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
	SPECIAL INSTRUCTIONS			
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
2	No intentional venting of refrigerants is permitted. During the servicing, maintenance, and repair of refrigeration equipment, the refrigerant must be recovered.	✓		
3	Whenever refrigerant is added or removed from equipment, record the quantities on the appropriate forms. Forms tobe maintainted by technician in universal waste binder.	✓		
4	Recover, recycle, or reclaim the refrigerant as appropriate.	✓		
5	If disposal of the equipment item is required, follow regulations concerning removal of refrigerants and disposal of the item.	✓		
6	If materials containing refrigerants are discarded, comply with EPA regulations as applicable.	✓		
7	Refrigerant oils to be treated as hazardous waste.	✓		
8	Closely follow all safety procedures described in the Safety Data Sheet (SDS) for the refrigerant and all labels on refrigerant containers.	✓		
9	Remove access covers prior to accomplishing check points.	✓		
	TO BE PERFORMED AT EACH INSPECTION SERVICE			
	CONDENSER			
1	Remove debris from air screen and clean underneath unit.	✓		done
2	Pressure wash coil with proper cleaning solution.	✓		clean
3	Straighten fin tubes with fin comb.	✓		done
4	Check electrical wiring and tighten loose connections. Check fused disconnect switches for condition and operation, contactors	✓		all good
5	Check mounting for tightness.	✓		all good
6	Check for corrosion. Clean and treat with inhibitor as needed.	✓		done/good
7	Check fan or blower for bent or damaged blades and imbalance.	✓		done/good

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
8	Lubricate shaft and motor bearings on fans and remove old or excess lubricant. if applicable.	✓		done
9	Inspect pulleys. belts. couplings. etc.: adjust tension and tighten mountings as necessary. Change badly worn belts. Multi-belt drives should be replaced with matched sets.	✓		all good
1	Inspect evaporator for any obvious deficiencies.	✓		done
2	Inspect plumbing. valves and flanges for leaks and correct as needed.	✓		done / no leaks visible
1	Lubricate drive coupling. if applicable.		N/A	
2	Lubricate motor bearings (non-hermetic). if applicable.		N/A	
3	Check bearrings for vibrations or unuasual noises.		N/A	
4	Leak test unit with soap test or electronic device.		N/A	
5	Check compressor oil level., if applicable.		N/A	
6	Run machine: check action of controls. relays. switches. etc. to see that: a. Compressor(s) run at proper settings. b. Suction and discharge pressures are proper.		N/A	
7	Check vibration eliminators. Replace as necessary.		N/A	
	Document AMP draw on compressors		N/A	L1 L2 L3
8	Check safety controls for high pressure cut off.		N/A	
1	Record chilled water supply and return temps and Humidity .		N/A	

Note: The technician shall perform any repairs identified during PM up to $250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding $250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be perfomed by: HVAC Technician

Additional Notes:

unit is shut down for winter mode.

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST
DEHUMIDIFIER

SITE AND BLDG #: Alexandria VA002

MECHANIC SIGNATURE: [signature]

DATE: 11/20/19

LOCATION/RM #: Arms Vault WO# 11177 ASSET # 2217

START TIME: 12:30

FINISH TIME: 12:45

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE YES	TASK COMPLETE NO	NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
	SAFETY INSTRUCTIONS			
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
	SEMI-ANNUAL INSPECTION			
1	Check water inlet and outlet for any leaks, repair as needed.	✓		
2	Clean and/or replace filter as needed. -Record space humidity	✓		done Space Humidity 29.3 %
3	If applicable, check hours per usage, replace tanks's as needed.		N/A	No digital time on unit

Note: The technician shall perform any repairs identified during PM up to $250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding $250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be perfomed by: General Maintenance Worker

Additional Notes: