

## Over and Above Estimate

**Region:** 5

**Location:** VA011

**CSS #:**10088

**Maximo Work Order No.:** 2758

**Date Issued:** 2/16/18

**Original Description:** HVAC is inoperable.

**Diagnosis:** After meeting with the controls contractor and performing a walkthrough at VA011 on April 19th, there were numerous units found inoperable, several of which were known of. In a report dated January 18, 2018, an assessment of all 17 water source heat pumps was conducted aside from HP #13 which wasn't located at that time. In the assessment it was noted that units# 5, 6, 8, and 12 all had leaks. A leak search was performed on those units and none of the leaks could be found. The units would have to be removed from the ceiling and disassembled to do a more intensive leak search.

During the April 19th walkthrough, unit # 13 was found to have no refrigerant as well. Along with the units that have leaks, there was a unit found to have a bad compressor, units #10. Unit# 2 had a stopped-up heat exchanger which was replaced. However, upon startup of unit # 2 it was found to have a bad compressor. The compressor was checked on January 18th and was operational at that time. Also, unit# 16 was found on April 19th to have very little refrigerant in it. On the January 18th assessment, unit# 16 only needed the JW3 jumper cut. It has since lost most of its charge.

Lastly, unit# 14 was found to have very little refrigerant in the circuit. The charge was good on the January 18th assessment. That leaves us with a total of nine units that need extensive repairs. Our recommendation is to replace the units and forego repairs as there is no guarantee that the leaks can be found and it will in all likelihood cost less to replace as opposed to attempting repairs with no guarantee of success. Attached are listed the units and the cost to replace all nine.

**Repair Needed:** Need to replace Unit# 2, Unit# 5, Unit# 6, Unit# 8, Unit# 10, Unit# 12, Unit# 13, Unit#14 and Unit #16.

### Non Pre-Priced Estimate:

Quantity	Line Item Number	Description	Labor Hours	Unit	Labor	Materials	Equipment	Total
1	N/A	Unit# 2 M/N GCH009BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11

1	N/A	Unit# 5 M/N GCH018BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit# 6 MIN GCH024BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit# 8 M/N GCH018BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit #10 M/N GCH009BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit #12 M/N GCH024BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit #13 MIN GCH024BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit #14 M/N GCH024BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.33		\$3,133.11
1	N/A	Unit #16 M/N GCH009BGM30CRSS Install new unit and remove old unit	14.22 (2 men)		\$1,457.78	\$1,675.34		\$3,133.12

Note: RS Means (Pre-Priced) not used in compiling this estimate.

Note: Subcontractor quote attached.

#### Estimate Summary:

Labor Hours	Labor Cost	Material Cost	Equipment Cost	Total Cost	CE Factor	Total Estimate
127.98	\$13,120.02	\$15,077.98		\$28,198.00	102%	\$28,761.96

Please see attached estimate

Note: **This job will take at least 2 weeks to complete with 2- men.**