

Remit To: Auburn Mechanical PO BOX 249 Auburn, WA 98071

Work Order: 23129 Customer #: 10402 Invoice 3 Invoice Date 01 Due Date 02 Terms

32381 01/25/23 02/24/23 Net 30

Bill To: 77 Central Apartments 2630 77th Ave SE Mercer Island, WA 98040 Service Location: 77 Central Apartments 2630 77th Ave SE Mercer Island, WA 98040

## Requested By: Terry Graham

Scope Detail: T&M NTE CU-03 Leak Check and Repair QTE 3424B reports:Terry.Graham@cushwake.com; nora.grant@cushwake.com

**Work Description:** 1/4 - Technicians proceeded with quoted work to perform leak check on CU2. Picked up materials from vendor. Mobilized equipment and supplies to roof. Performed refrigerant recovery. Recovered 55lbs of 115 lb charge. Indicating major loss of refrigerant charge due to leaks. Started setting up pressure gauges on individual branches, lineset and outdoor unit in preparation for pressure testing. Set test pressure with nitrogen and isolated each branch, line and equipment. Allowed equipment to sit overnight for pressure test.

1/5 - Reviewed results of pressure test and found 2 branches had lost pressure branch 14 unit 517 and 16 unit 219 had dropped 20-30 psi indicating small leaks. Received test pressure and removed all testing equipment in preparation for triple evacuation. Kept branch 14 and 16 isolated for time being. Proceeded to triple evac and found system did not hold a deep vacuum. Broke vacuum with nitrogen and let sit overnight.

1/6 - Proceeded to setup entire system for CU2 once again to perform pressure test. Setup test gauges, pressurized system to 600 psi max test pressure using nitrogen and isolated all branches, lines, and equipment. Let sit over weekend on pressure test.

1/9 - Returned to site and reviewed results of pressure test. Found branches 1/520, 4/421, 6/321, 12/530, 13/525 and 14/535 all had 100% leak rate along with other branches indicating signs of leaks. At this point we put immediate repair on hold due to too many branches being out of commission. Cannot restart system with large percentage of capacity unavailable.

1/24 - Subsequent visits were to gather data in preparation for updated repair project being handed over to project manager for more detailed bid. Job complete for now.



## Price Method: Time and Materials

Date of Service	Description	Technician	Quantity	Unit Price	Price Total
Cost Type	: 1 - Labor				
01/04/23	Labor - Service	Morfin, Juan G	5.00	161.50	807.50
01/05/23	Labor - Service	Morfin, Juan G	5.00	161.50	807.50
01/05/23	Labor - Service	Karlson, Nigel I	4.00	161.50	646.00
01/06/23	Labor - Service	Karlson, Nigel I	4.00	161.50	646.00
01/09/23	Labor - Service	Karlson, Nigel I	8.00	161.50	1,292.00
01/09/23	Labor - Service	Carrillo, Arturo-Zean D	6.00	161.50	969.00
01/10/23	Labor - Service	Morfin, Juan G	4.00	161.50	646.00
01/10/23	Labor - Service	Karlson, Nigel I	4.00	161.50	646.00
01/11/23	Labor - Service	Morfin, Juan G	2.00	161.50	323.00
01/12/23	Labor - Service	Karlson, Nigel I	4.00	161.50	646.00
01/12/23	Labor - Service	Morfin, Juan G	2.00	161.50	323.00
01/11/23	Labor - Service	Karlson, Nigel I	5.00	161.50	807.50
01/13/23	Labor - Service	Morfin, Juan G	3.00	161.50	484.50
01/16/23	Labor - Service	Morfin, Juan G	2.00	161.50	323.00
01/18/23	Labor - Service	Morfin, Juan G	1.00	161.50	161.50
Cost Type	: 2 - Materials & Equ				
01/03/23	Purchase - Nitrogen and Gas for Brazing		1.00	431.32	431.32
01/06/23	Purchase - 75lbs R410A		1.00	1,986.27	1,986.27
01/09/23	Purchase - Nitrogen		1.00	194.70	194.70
Cost Type	: 7 - Miscellaneous				
12/23/22	Other - Consumable Fee		1.00	25.00	25.00
12/23/22	Other - Truck Charge		1.00	60.00	60.00
			Subtot	Subtotal	
			Ta		12,225.79 1,234.81
			Tota		13,460.60

A FINANCE CHARGE OF 1.5% PER MONTH (18% PER ANNUM) WILL BE CHARGED ON UNPAID BALANCES.