



# EPA Refrigerant Conservation Services Report



Customer: DuPont Experimental Station

Date: 02/25/2019

Location: E315 Powerhouse

Equipment Type:	
Industrial Process / Com. Refrigeration	
Commercial - Over 50 lbs Refrigerant	<input checked="" type="checkbox"/>
Commercial-Under 50 lbs Refrigerant	

Equipment ID: CHILLER #8 (GACM117864)

### Refrigerant Leak Verification Test - 01/30/2019

Source of Leak: RUPTURE DISK GASKETS (Bottom Of Both Disks)

Corrective Action: Removed / Replaced Gaskets on Both Rupture Disks w/ G49B (GARLOCK 3504) (02/21/2019)

Source of Leak: Oil Cooler Refrig Vapor Return Line 1/2" Angle Valve Threads

Corrective Action: Removed / Replaced w/ New Valve & Refrig Grade Loctite Sealant on Threads (02/22/2019)

Source of Leak: VAPOR RECOVERY ANGLE VALVE PACKING

Corrective Action: Cleaned / Lubed Stem, & Tightened Packing. Leaking Ceased. (01/30/2019)

Source of Leak: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

Initial Leak Verification Test :  Pass  Failed

Was Leak Repaired?  Yes  No  Owner Declined Repair

Verification Test Method: Electronic Refrig Detector (80psig of R-134a Vapor Press in Chiller, before re-charge)

### Refrigerant Usage Recovered Refrigerant Re-Charged to Chiller - 02/22/2019

Refrigerant Type: (Circle One) R-11 R-12 R-22 R-123 R-134a R-407c R-410a Other: \_\_\_\_\_

Refrigerant Lbs. Used: 400 lbs Factory Charge or Approximate Charge: 3,250 lbs

Refrigerant Supplied By:  Customer  JCI  Other, Explain \_\_\_\_\_

### Refrigerant Recovery 02/15/2019 (Technician Certification Cards on File at JCI Local Office)

Recovery Unit Model# YORK RTU-10 / 8416 Serial # 61795205-91012424 Mfg. Date Before 11/15/93 Yes / No

Refrigerant Type: (Circle One) R-11 R-12 R-22 R-123 R-134a R-407c R-410a Other: \_\_\_\_\_

Refrigerant Re-Charged to Sys.?  Yes  No - 02/22/2019 Refrigerant Lbs. Recovered: 2,850 lbs

Refrigerant Not Re-Charged, Explanation: \_\_\_\_\_

### Refrigerant Leak Rate Formula for Units Greater Than 50 Lbs

( 400 lbs. Refrig. Added / 3,250 lbs. in Full Charge ) x ( 365 / 298 # of Days Since Refrig. Added ) x 100

Refrigerant Leak Rate Percent: 15.1%  Minimal refrigerant leaks were found.

Leak Rate found in excess of  15%  35% annual charge which exceeds legal EPA leak rates.

### 30-Day Refrigerant Follow-up Verification Test

Date Test Performed: 02/25/2019  Pass  Failed

Comments: Verified w/ Electronic Detector & Soap Bubbles (Chiller Pressure @ 70psig). After charge installed.

Additional Comments: \_\_\_\_\_

Technician Signature: [Signature]

Customer Signature: \_\_\_\_\_