



# EPA Refrigerant Conservation Services Report



Customer: DuPont Experimental Station

Date: 12/10/2018

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 #10 (S/N: GACM127699)

### Refrigerant Leak Verification Test - 03/23/2018

- [1] Source of Leak: 3/8" COPPER FLARE ON OIL-RETURN LINE (MEDIUM)
- [1] Corrective Action: Isolated, Cut off Leaking Flare, Re-Flared, & Re-Assembled (03/30/2018)
- [2] Source of Leak: 2" HOT GAS VALVE O-RING SEALS (SMALL)
- [2] Corrective Action: Removed / Replaced Hot Gas Valve O-Ring Seals (12/04/2018)
- [3] Source of Leak: GASKETS ON BOTH RUPTURE DISKS (MEDIUM)
- [3] Corrective Action: Removed / Replaced Gaskets on Both Rupture Disks w/ G49B (GARLOCK 3504) (12/05/2018)
- [4] Source of Leak: OIL COOLER THERMOSTATIC VALVE O-RING SEAL (SMALL)
- [4] Corrective Action: Removed / Replaced Leaking O-Ring Seal (12/06/2018)
- [5] Source of Leak: HIGH SPEED THRUST COVER PLATE O-RING SEAL (SMALL)
- [5] Corrective Action: Removed / Replaced Leaking O-Ring Seal (12/07/2018)

Initial Leak Verification Test :  Pass  Failed  
 Was Leak Repaired?  Yes  No  Owner Declined Repair  
 Verification Test Method: Electronic Detector & Soap Bubbles (110psig Nitrogen Pressure w/R-134a Trace)

### Refrigerant Usage Recovered & New Refrigerant Charged to Chiller - 12/07/2018

Refrigerant Type: (Circle One) R-11 R-12 R-22 R-123 R-134a R-407c R-410a Other:  
 Refrigerant Lbs. Used: 130 lbs Factory Charge or Approximate Charge: 3,250 lbs  
 Refrigerant Supplied By:  Customer  JCI  Other, Explain \_\_\_\_\_

### Refrigerant Recovery 12/05/2018 (Technician Certification Cards on File at JCI Local Office)

Recovery Unit Model# YORK RTU-10 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 Refrigerant Lbs. Recovered: 3,120 lbs  
 Refrigerant Not Re-Charged, Explanation: \_\_\_\_\_

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

( 130 lbs. Refrig. Added / 3250 lbs. in Full Charge) x (365 / Lesser of 365 Days or # of Days Since Refrig. Added) x 100  
 Refrigerant Leak Rate Percent: 4 %  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: - 12/10/2018  Pass  Failed  
 Comments: Verified w/ Electronic Detector & Soap Bubbles (Chiller Pressure @ 60psig). After charge installed.

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

Technician Signature: [Signature] Customer Signature: \_\_\_\_\_