

# Fluid Analysis

## TotalSense™ Fluid Analysis Services

- One source for all HVAC&R system fluid analyses
- Laboratory specialized in HVAC&R analyses
- Analytical reports with meaningful service recommendations
- Qualified staff available to answer your tough technical questions

Routine analysis of fluids used in HVAC&R equipment is essential to the proper maintenance and operation of the entire system. TotalSense™ Fluid Analysis Services encompass all analyses necessary to maintain and operate every type of HVAC&R equipment.

With TotalSense™ Fluid Analysis Services, service personnel have a single source for all their analytical testing needs. Information generated from analyses for the entire HVAC system is consolidated and available in a single database.

TotalSense™ Fluid Analysis Services is dedicated to HVAC&R sample analyses. Our technical staff is experienced in the unique chemistry of fluids used in the HVAC&R industry and has the added support of a fully qualified mechanical engineering staff. This experience in the HVAC&R industry is reflected in our analytical reports, which translate the test results into meaningful service recommendations that have real value in providing a successful maintenance program. Questions regarding interpretation of analytical results or recommendations can be addressed to our analytical staff by phone, fax, or email.



### Lubricant Analysis

- Analysis for wear metals, moisture, acidity and oil type in air conditioning or refrigeration systems.
- Optional analysis for chloride content, ion activity, viscosity and % POE are available for certain compressors or system applications.

### Refrigerant Analysis

- Analysis of CFC, HCFC and HFC refrigerants for corrosion and moisture contamination.

### Lithium Bromide Analysis

- Fluid analysis for corrosion and concentration in absorption chiller systems.

### Lithium Chloride Analysis

- Fluid analysis for corrosion and concentration in liquid desiccant systems

### Glycol Heat Transfer Fluid Analysis

- Freeze point and concentration determination
- Fluid analysis for corrosion, inhibitors, decomposition, and concentration
- Optional energy analysis for energy use and optimization

### Water Analysis

- Analysis for hardness and corrosives in cooling towers, evaporative condensers, and closed loop systems.

### Filter Analysis

- Standard analysis includes ID exam and gives relative amounts of metals found in the filter element.

### Toll-Free Technical Support

- Engineering and analytical support is available by calling 1-877-460-7575.

**TOTALINE®**

# TotalSense™ Fluid Analysis Services

Part No.	Description	Available Options
<b>P915-0001</b>	Lithium Bromide Analysis Kit <ul style="list-style-type: none"> <li>• Uninhibited</li> <li>• Nitrate Inhibited</li> <li>• Chromate Inhibited</li> <li>• Molybdate Inhibited</li> <li>• Arsenite Inhibited</li> <li>• Refrigerant Water</li> </ul>	<ul style="list-style-type: none"> <li>• Octyl Alcohol</li> <li>• Ammonia</li> <li>• Arsenite</li> <li>• Molybdate &amp; Nitrate</li> <li>• Purge Gas</li> </ul>
<b>P915-0002</b>	Lithium Chloride Analysis Kit <ul style="list-style-type: none"> <li>• Chromate Inhibited</li> <li>• Molybdate Inhibited</li> </ul>	<ul style="list-style-type: none"> <li>• GCMS test for volatile organic contaminants</li> <li>• Molybdate only</li> <li>• Chromate only</li> <li>• Dissolved Fe</li> <li>• Dissolved Cu</li> </ul>
<b>P915-0003</b>	Brine (Glycol) - Fluid Analysis Kit	<ul style="list-style-type: none"> <li>• BrineServe™ Energy Analysis</li> </ul>
<b>P915-0006</b>	Water Analysis Kit	<ul style="list-style-type: none"> <li>• Ammonia</li> <li>• Other elements</li> </ul>
<b>P915-0007</b>	Standard Oil Analysis Kit	<ul style="list-style-type: none"> <li>• Chlorides/Fluorides</li> <li>• Ion Activity</li> <li>• Viscosity</li> <li>• Mixed Oil Percentage</li> </ul>
<b>P915-0008</b>	Filter (Oil & Refrigerant) Kit Analysis of foreign solids & sludge	<ul style="list-style-type: none"> <li>• Identification of organic constituents by GC/MS test</li> </ul>
<b>P915-0009</b>	Refrigerant Analysis Kit - includes single-use, DOT approved refrigerant cylinder and shipping paperwork	<ul style="list-style-type: none"> <li>• Other refrigerant contamination</li> <li>• Non-condensables</li> </ul>
<b>Standard Service</b>	3 - 5 days turnaround	<ul style="list-style-type: none"> <li>• Oil, LiBr, refrigerant, water and glycol samples</li> </ul>
<b>Rush Service</b>	24 - 48 hours turnaround	<ul style="list-style-type: none"> <li>• Oil, LiBr, refrigerant, water and glycol samples</li> </ul>

*All analyses include sample kit with collection and shipping instructions, information sheets, and sample containers. Analysis reports are available through US mail, fax or e-mail.*

