## SAMPLESENSE OIL

For PerkinElmer<sup>™</sup> Optima/Avio 500 ICP

## Ultra-high Throughput Oil Analysis System

The SampleSense Oil system for Optima and Avio 500 ICP provides ultra-high throughput analysis for in service oil laboratories running ASTM Method D5185. The SampleSense Oil system provides in service lubricant laboratories an entirely new level of performance. SampleSense Oil combines ultra-high throughput ICP-OES analysis, minimizes ICP system maintenance, maximizes profit per sample and provides significantly improved data.

SampleSense Oil is a complete, automated sample introduction system for oil analysis. It combines the DXCi Autocorrecting Autosampler with SampleSense technology to fully automate the sample loading process. After the sample is mixed, the unique SampleSense valve automatically detects the presence of sample as it is loaded rapidly from the autosampler. Once the sample loop fill is confirmed by the sensors, the sample is automatically injected and the ICP-OES analysis is triggered for a tightly timed analytical sequence.



4DXCi SampleSense Oil Analysis System with Avio 500 ICP

## Features:

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- · SampleSense optically monitored sample loading
  - Fully automated sample loading no timings required
  - Automatically adjusts for samples of varying viscosity
  - Unsensed samples are reported to Syngistix<sup>™</sup> software
- DXCi Autocorrecting Autosampler
  - Intelligently autocorrects probe position
    Even if accidentally obstructed
  - Highest speed probe movement
- Gas infusion mixing option provides rapidly controlled sample homogenization just prior to uptake
- Patent-pending probe design that eliminates sample drips and resulting cross contamination

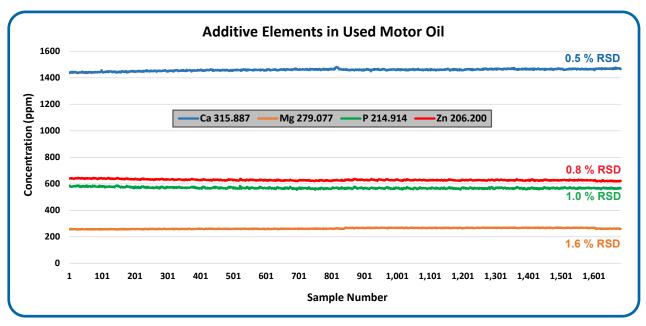
## **Benefits:**

- Reduces carbon buildup on torch
- Maximizes profit per sample
- Eliminates oil drips from sample probe
- · Improves stability for longer, more productive runs
- Up to 180 samples per hour

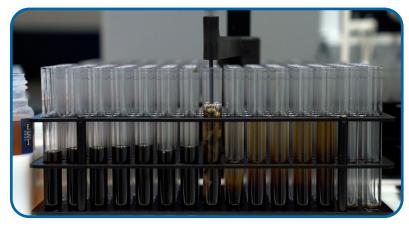


SampleSense Oil Sample Throughput Performance								
	1 Minute	1 Hour	8 Hours	24 Hours				
# Oil Samples Analyzed per	3	180	1440	4320				

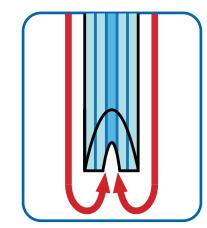




SampleSense Oil System 11+ hour stability run on Avio 500 for 4 additive elements



Controlled gas infusion mixing of used oil and solvent with SampleSense Oil system just prior to analysis on Avio 500 ICP



Closeup diagram of V-shaped tapered tip probe on SampleSense Oil system. The probe design allows the applied vacuum to efficiently remove sample droplets to eliminate contamination of other samples

SampleSense Oil System for PerkinElmer Optima and Avio 500					
Description	Total Sample Capacity	Optima Part Number	Avio 500 Part Number		
2DXCi SampleSense Oil for PerkinElmer ICP	180	2F-SSOil-57	2F-SSOil-37		
4DXCi SampleSense Oil for PerkinElmer ICP	360	4F-SSOil-57	4F-SSOil-37		
8DXCi SampleSense Oil for PerkinElmer ICP	720	8F-SSOil-57	8F-SSOil-37		
14DXCi SampleSense Oil for PerkinElmer ICP	1260	14F-SSOil-57	14F-SSOil-37		

