Cashman Fluids Analysis (CFA) offers the following test packages as a part of our traditional PREPAID fluids analysis program for conventional lubricants* and coolants. This program was designed to allow our customers the flexibility of sampling their equipment either as part of a routine sampling program, or as the need arises due to equipment health concerns. The kits sold in this program are pre-paid. Purchase the kit, receive all the supplies needed to pull a sample, and the analysis is paid for. This allows customers to have kits on the shelves for when they need them, without having to wait for supplies to arrive to pull a sample. Included with each part number available for pre-paid purchase is: 1 (one) pre-paid CFA sample bottle; color-coded sample label; 7-feet of tubing or 1 (one) sample probe (P); and 1 (one) CFA logo biodegradable envelope or 1 (one) MRS labeled pre-paid return envelope.

There are four different analytical levels of oil testing and two analytical levels of coolant testing that can be ordered. These different kits offer increasingly specialized test packages to allow for more advanced testing when equipment is mission critical. Additional contingency tests in these packages can be performed when our analysts have a concern with the results they see from the standard tests.

We're committed to being a value-added partner in your success. Actively listening to your needs and collaborating with you allows us to recommend solutions and build value towards ensuring a solid foundation for your success. We provide quality analytical results with a quick turn-around time in addition to offering the support you need to maintain a top-tier condition monitoring program. We sincerely appreciate the opportunity to earn your business and look forward to following up with you.

Warm Regards,

Cashman Fluids Analysis Team
oillab@cashmanfluidsanalysis.com
(866) 224-3087

These packages are designed for the routine oil analysis of conventional fluids. Please contact a CFA team member to discuss specialty fluids or analytical needs outside of the scope of routine oil analysis.

*Conventional lubricants do not include products such as PAG fluids, water glycol, or phosphate esters.

2023 Oil Analysis Packages

Revised 01/05/2023

Basic Oil and System Condition

Part No.	Description	Tests Included	Method
OA1	**Oil Analysis - Level 1** Designed for cost effective trend analysis and routine sampling. Allow up to 3 business days for processing. ^Standard on Non-Engines [1]ISO Grade Oils *Engines Only [2]Contingent on other testing	Fine Metals by ICP Total Ferrous Debris Oil Condition by FT- IR** Viscosity @ 100°C [1]Viscosity @ 40°C [1]Viscosity Index ^Particle Count by LNF ^Wear Debris Summary by LNF [2]Water (pos/neg) by Crackle [2]Water (ppm) by Karl Fischer *[2]Fuel Dilution by GC [2]Glycol Dilution by GC	ASTM D5185 SOP 725 ASTM D7418/E2412 ASTM D445 ASTM D445 ASTM D2270 ASTM D7596 SOP 745 ASTM D6304(b) ASTM D7593 ASTM D7922

** Soot ASTM D7844, Oxidation ASTM D7414, Sulfate ASTM D7415, Phosphate (anti-wear) ASTM D7412, and Nitration ASTM D7624

Intermediate Oil and System Condition

Part No.	Description	Tests Included	Method
OA2	**Oil Analysis - Level 2** Designed for extending drain intervals and maximizing useful life of in-service lubricant. Allow 3-4 business days for processing. ^Standard on Non-Engines [1]ISO Grade Oils *Engines Only [2]Contingent on other testing	Fine Metals by ICP Total Ferrous Debris Oil Condition by FT- IR** Viscosity @ 100°C [1]Viscosity @ 40°C [1]Viscosity Index ^Particle Count by LNF ^Wear Debris Summary by LNF [2]Water (pos/neg) by Crackle ^Total Acid Number *Total Base Number *[2]Fuel Dilution by GC [2]Glycol Dilution by GC [2]Water (ppm) by Karl Fischer [2]Microscope Membrane Photo and Membrane Patch	ASTM D5185 SOP 725 ASTM D7418/E2412 ASTM D445 ASTM D445 ASTM D2270 ASTM D7596 SOP 745 ASTM D664 ASTM D4739 ASTM D7593 ASTM D7922 ASTM D6304(b) SOP 729

** Soot ASTM D7844, Oxidation ASTM D7414, Sulfate ASTM D7415, Phosphate (anti-wear) ASTM D7412, and Nitration ASTM D7624

Advanced Oil and System Condition

Part No.	Description	Tests Included	Method
OA3	**Oil Analysis - Level 3** Designed for achieving maximum return on investment from systems that have planned life cycles and are capable of reconditioning for multiple lives. Allow 3-4 business days for processing. ^Standard on Non-Engines [1]ISO Grade Oils *Engines Only [2]Contingent on other testing	Fine Metals by ICP Total Ferrous Debris Oil Condition by FT-IR** Viscosity @ 100°C Viscosity @ 40°C Viscosity Index Coarse Metals by RFS ^Particle Count by LNF ^Wear Debris Summary by LNF [2]Water (pos/neg) by Crackle *[2]Fuel Dilution by GC [2]Glycol Dilution by GC [2]Water (ppm) by Karl Fischer [2]Microscope Membrane Photo and Membrane Patch	ASTM D5185 SOP 725 ASTM D7418/E2412 ASTM D445 ASTM D445 ASTM D2270 SOP 800 ASTM D7596 SOP 745 ASTM D7593 ASTM D7922 ASTM D6304(b) SOP 729

** Soot ASTM D7844, Oxidation ASTM D7414, Sulfate ASTM D7415, Phosphate (anti-wear) ASTM D7412, and Nitration ASTM D7624

Premium Oil and System Condition

Part No.	Description	Tests Included	Method
OA4	**Oil Analysis - Level 4** Designed for mission critical systems working under Condition-Based Maintenance practices. Maximizes drain interval of lubricant and return on investment of system. Allow 3-4 business days for processing. ^Standard on Non-Engines [1]ISO Grade Oils *Engines Only [2]Contingent on other testing	Fine Metals by ICP Total Ferrous Debris Oil Condition by FT- IR** Viscosity @ 100°C Viscosity @ 40°C Viscosity Index Coarse Metals by RFS Water (ppm) by Karl Fischer ^Particle Count by LNF ^Wear Debris Summary by LNF [2]Water (pos/neg) by Crackle ^Total Acid Number *Total Base Number *[2]Fuel Dilution by GC [2]Glycol Dilution by GC [2]Microscope Membrane Photo and Membrane Patch	ASTM D5185 SOP 725 ASTM D7418/E2412 ASTM D445 ASTM D445 ASTM D2270 SOP 800 ASTM D6304(b) ASTM D7596 SOP 745 ASTM D664 ASTM D4739 ASTM D7593 ASTM D7922 SOP 729

** Soot ASTM D7844, Oxidation ASTM D7414, Sulfate ASTM D7415, Phosphate (anti-wear) ASTM D7412, and Nitration ASTM D7624