

## KAONA FUTHER 2

**Customer: PTRHTF60010**  
 SYNLUBE INTERNATIONAL CO LTD  
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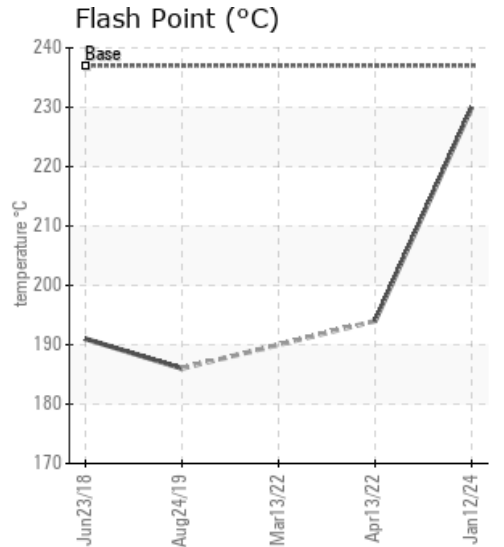
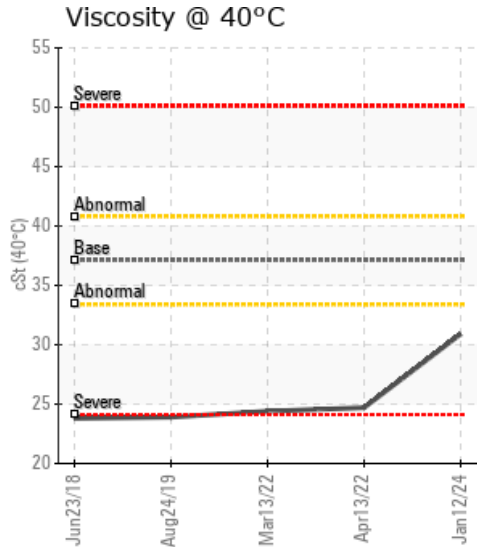
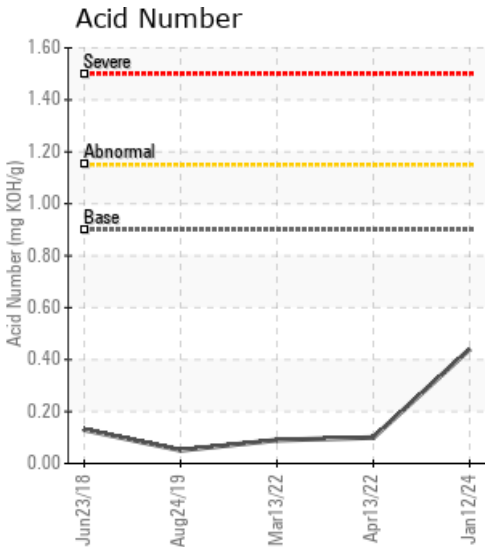
**System Information**  
 System Volume: 4400 ltr  
 Bulk Operating Temp: 545F / 285C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID  
 Make:

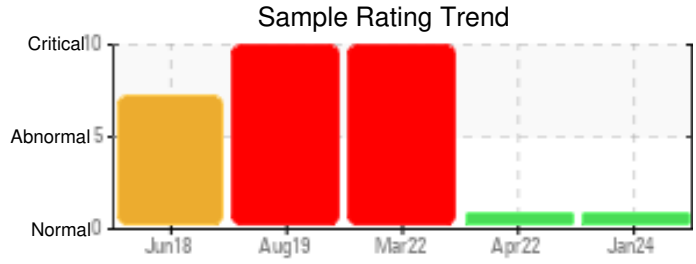
**Sample Information**  
 Lab No: 02619422  
 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I  
 Sample Date: 01/12/24  
 Received Date: 03/01/24  
 Completed: 03/06/24  
 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: The fluid is suitable for further service. Resample at the next service interval to monitor.

Comments: (GCD) 90% Distillation Point is abnormally high.

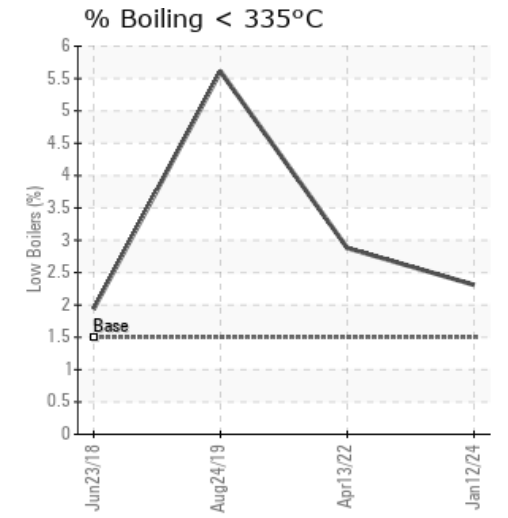
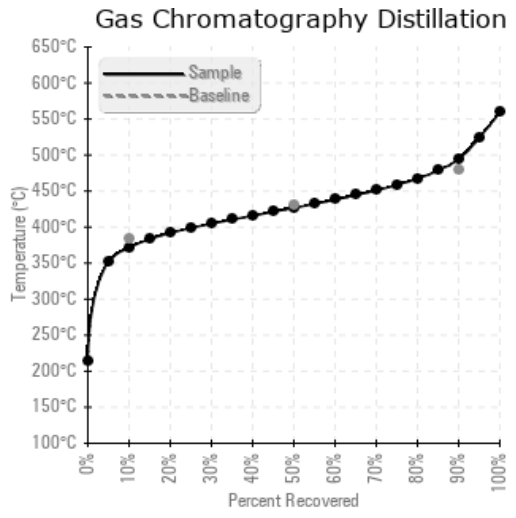
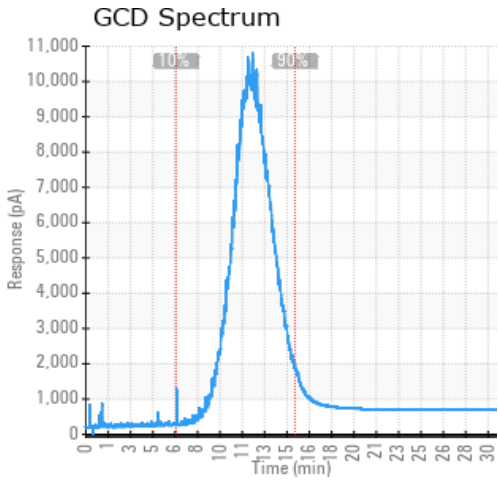
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/12/24	03/01/24	14.0y		446 / 230	10	30.9	0.44	0.037	701 / 372	800 / 427	922 / 494	2.31
04/13/22	04/27/22	12.0y	supply return	381 / 194	16.0	24.7	0.10	0.039	688 / 364	778 / 414	901 / 483	2.88
03/13/22	03/30/22	12.0y	SUPPLY RETURN		1418166	24.4	0.09	0.039				
08/24/19	10/04/19	11.0y	SUPPLY RETURN	367 / 186	8118.0	23.9	0.051	0.040	670 / 355	768 / 409	882 / 472	5.61
06/23/18	07/13/18	10.0y	SUPPLY/RETURN	376 / 191	14555.4	23.8	0.13	0.116	691 / 366	777 / 414	901 / 483	1.94
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
01/12/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
04/13/22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
03/13/22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
08/24/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06/23/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Baseline Data</b>			0	0						0			0	0				0	0				230	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments	
04/13/22	Resample at the next service interval to monitor. There is no indication of any contamination in the fluid. COC Flash Point is marginally low. The condition of the fluid is acceptable for the time in service.
03/13/22	Not a Petro-Canada Fluid so no parameters with which to make an accurate diagnosis. However, the water contamination is extremely high and this causes multiple issues for the fluid, and is a safety concern as the fluid can bump in the system. Regardless of product I would recommend a change and switch to Petro-Canada CALFLO HTF or PURITY FG HTF depending on application. A flush and clean will be essential based on the competitor product and the condition. ppm Water contamination levels are severely high. Water contamination levels are severely high. Could not measure the Boiling Points/SimDis as the water content is too high in this oil.
08/24/19	Not a Petro-Canada Fluid so no parameters with which to make an accurate diagnosis. However, the water contamination is extremely high and this causes multiple issues for the fluid. Regardless of product I would recommend a change and switch to Petro-Canada CALFLO HTF or PURITY FG HTF depending on application. A flush and clean will be essential based on the competitor product and the condition. ppm Water contamination levels are severely high. Water contamination levels are severely high. (GCD) 90% Distillation Point is severely high. (GCD) 10% Distillation Point is marginally high.
06/23/18	The current fluid has normal viscosity. The low flash point is a concern for the 285C high bulk oil temperature. The water content is extremely high. The fluid needs to be changed due to the severe water contamination. Water contamination levels are severely high. Water contamination levels are severely high (GCD) 10% Distillation Point is severely high. (GCD) 90% Distillation Point is severely high.

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