

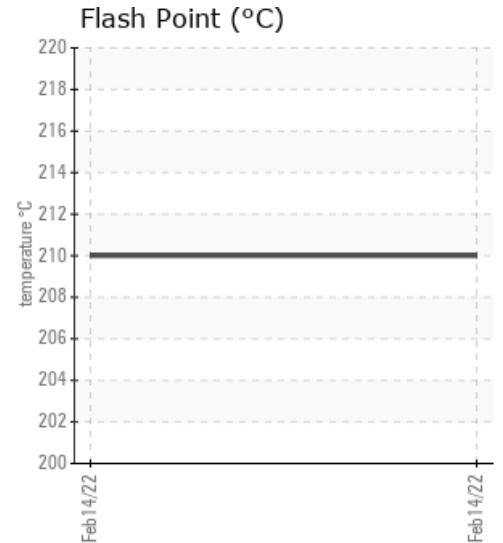
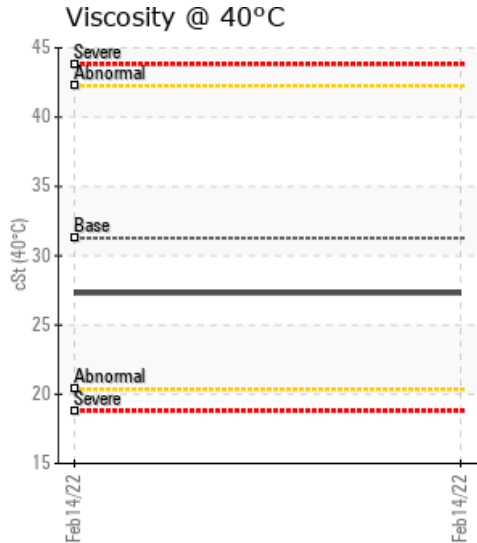
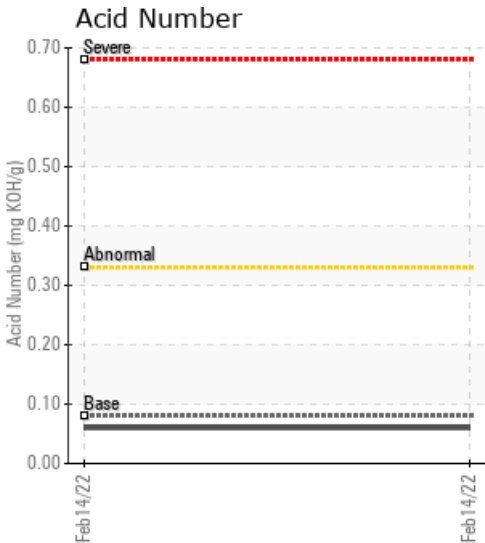
ADVANCE FIBER CO., LTD

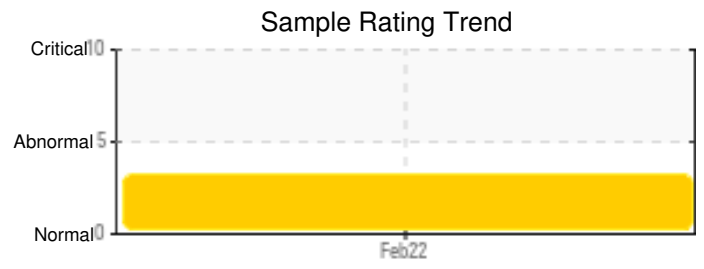
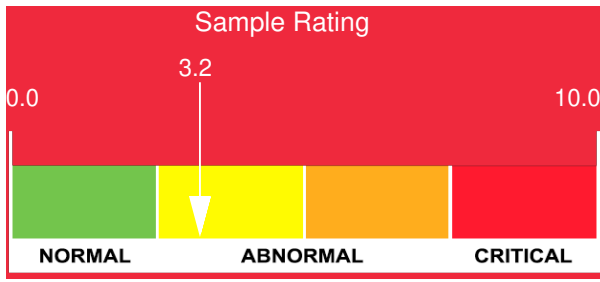
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 200000 ltr Bulk Operating Temp: 536F / 280C Heating Source: Blanket: Fluid: IDEMITSU DAPHNE THERMIC OIL 32-S Make:	Lab No: 02477392 Analyst: Philip Riley Sample Date: 02/14/22 Received Date: 03/15/22 Completed: 03/21/22 Philip Riley philip.riley@hollyfrontier.com

Recommendation: Unfamiliar with the chemistry of the product here, however, there is concern on the level of calcium and sodium in the sample. Has there been top up with wrong fluid or has something migrated into the thermal oil from the system showing there may be a leak of some kind. Please check system thoroughly for any way there could be migration into the oil

Comments: Calcium ppm levels are severely high. Sodium ppm levels are abnormally high. (GCD) 90% Distillation Point is marginally high.

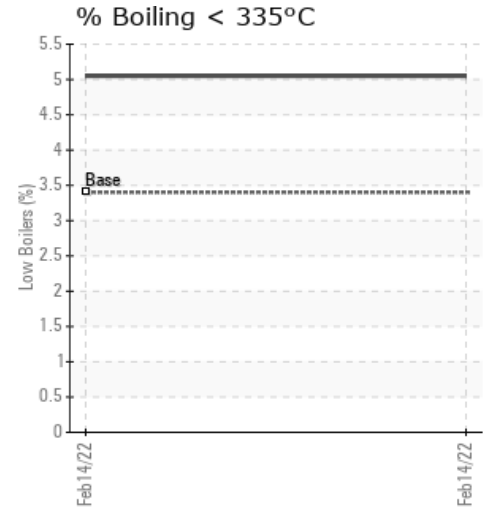
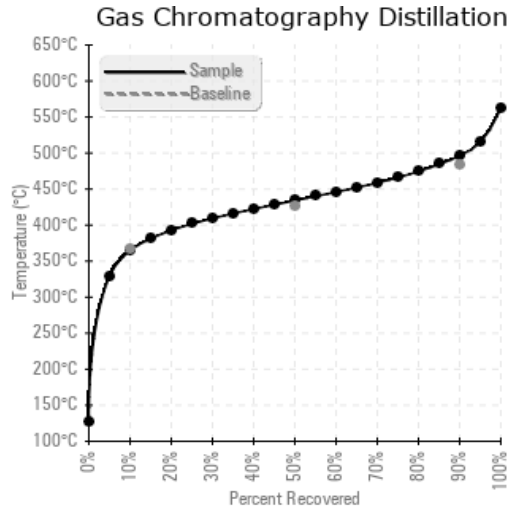
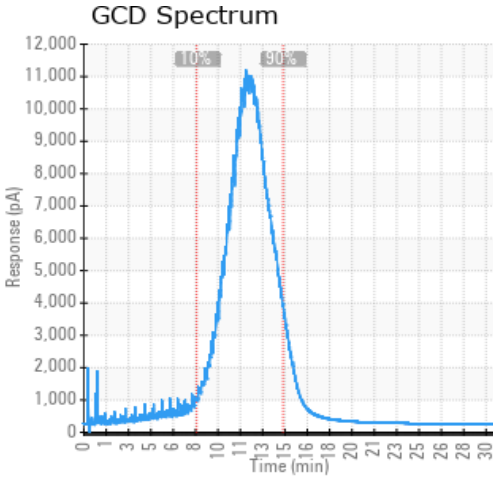
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/14/22	03/15/22	4.0y		410 / 210	36.0	27.3	0.06	0.224	688 / 365	813 / 434	926 / 496	5.05
Baseline Data				439 / 226		31.27	0.08		693 / 367	799 / 426	903 / 484	3.4





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
02/14/22	19	0	0	0	4	0	0	0	0	0	2	24	0	0	0	0	0	0	0	1	327	0	0	1
Baseline Data			0	0						0			0	0				0	0				0	

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



Historical Comments

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