

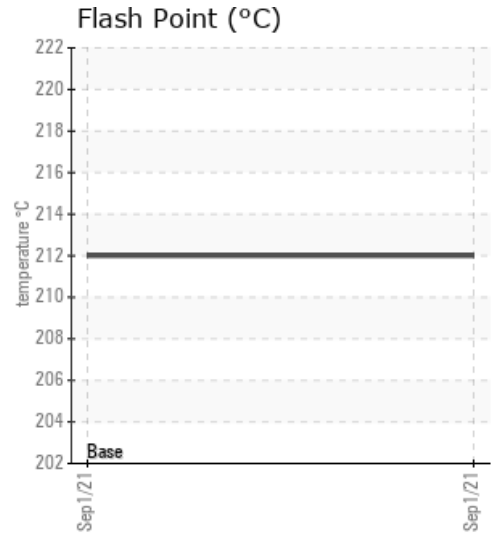
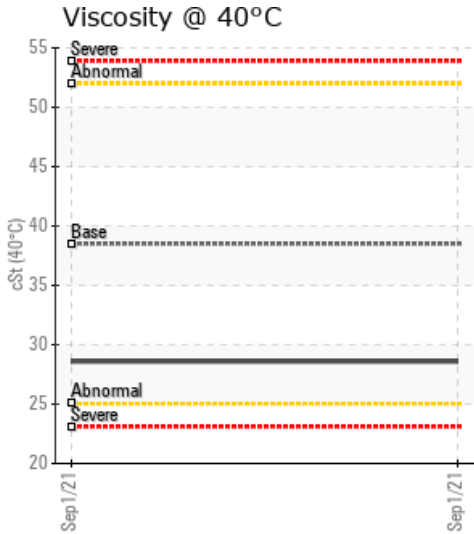
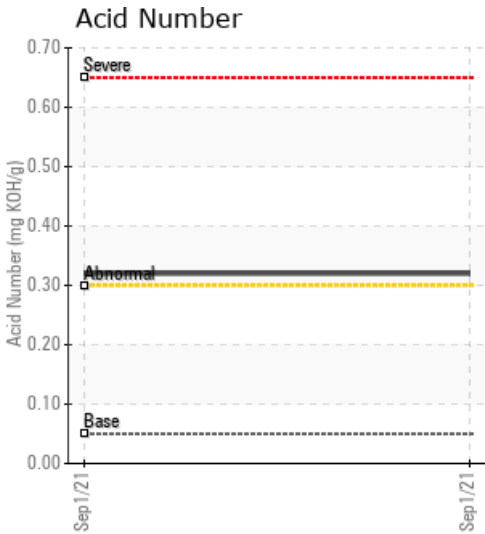
[SYNLUBE (THAILAND)] FOOD FOR THE WORLD

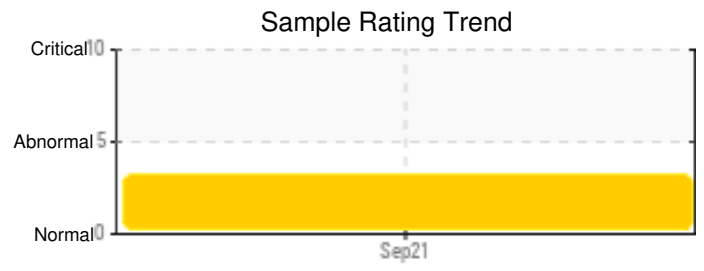
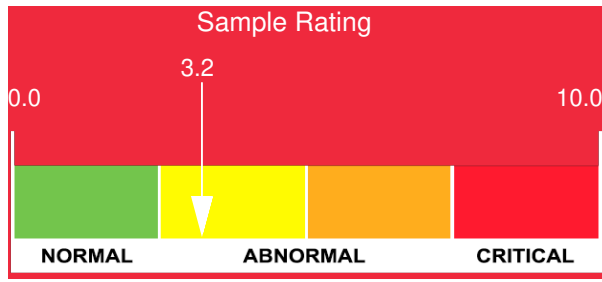
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 20000 ltr Bulk Operating Temp: 527F / 275C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 Make: HOVEL	Lab No: 02448603 Analyst: Philip Riley Sample Date: 09/01/21 Received Date: 10/06/21 Completed: 10/14/21 Philip Riley philip.riley@hollyfrontier.com

Recommendation: Competitor Fluid so do not have full visibility of parameters. Acid number raises some concern as this will trigger the degradation of the fluid.

Comments: (GCD) 90% Distillation Point is severely low. Acid Number (AN) is abnormally high.

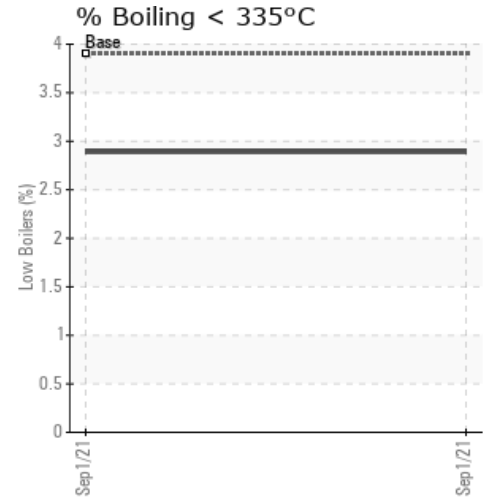
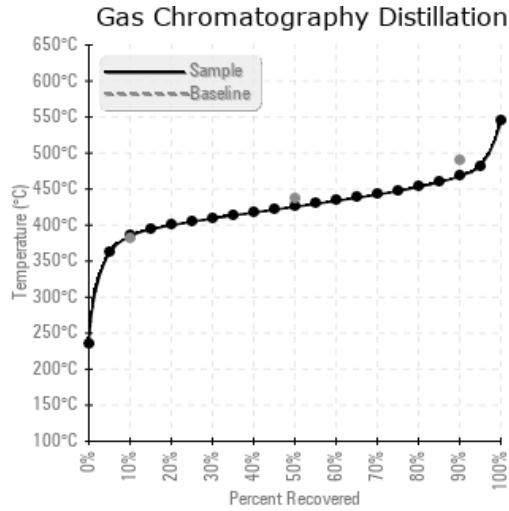
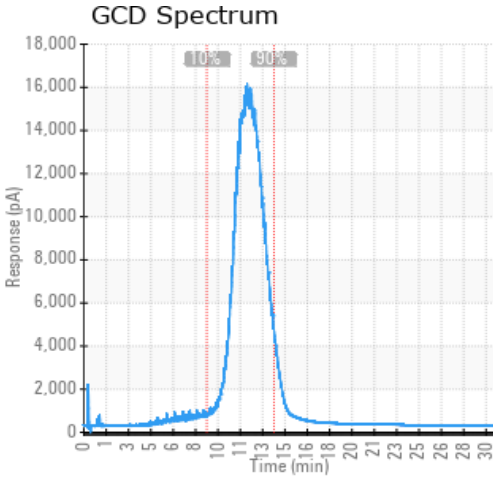
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/01/21	10/06/21	36.0m		414 / 212	44.7	28.6	0.32	0.208	725 / 385	798 / 425	874 / 468	2.89
Baseline Data				383 / 195		38.5	0.05		718 / 381	819 / 437	914 / 490	3.9





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
09/01/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Baseline Data			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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