

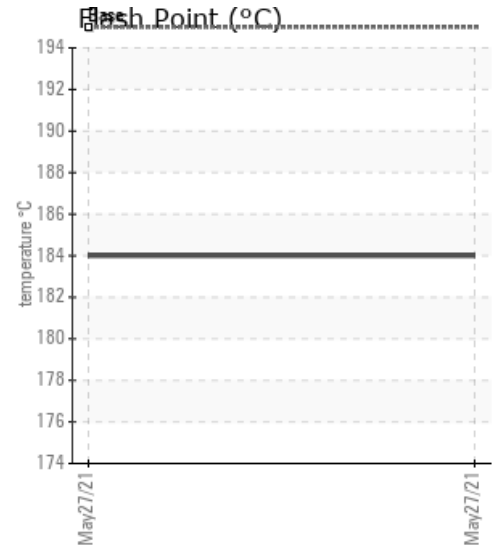
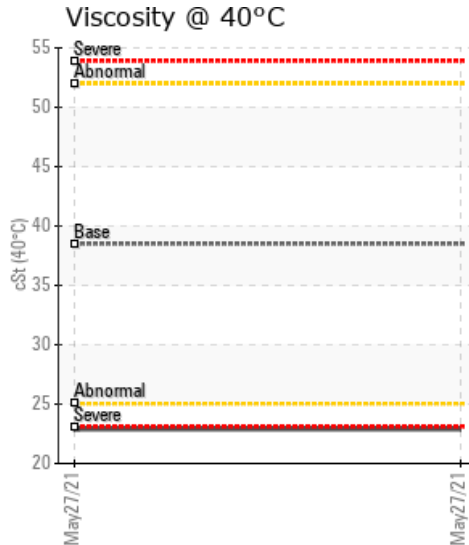
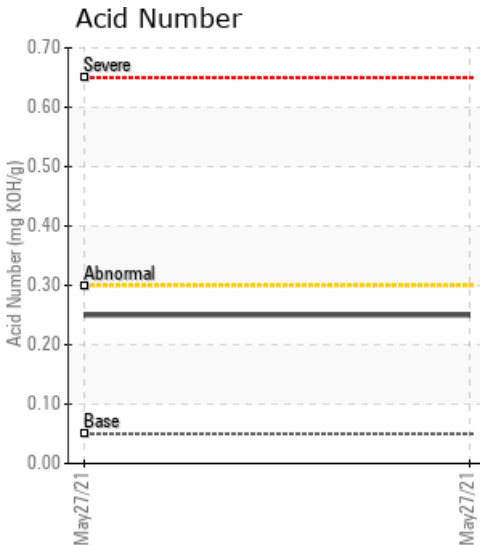
EURASIATIC

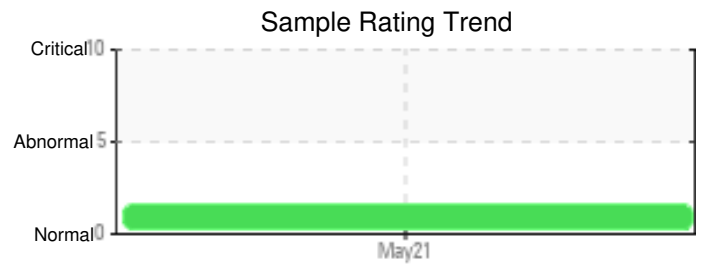
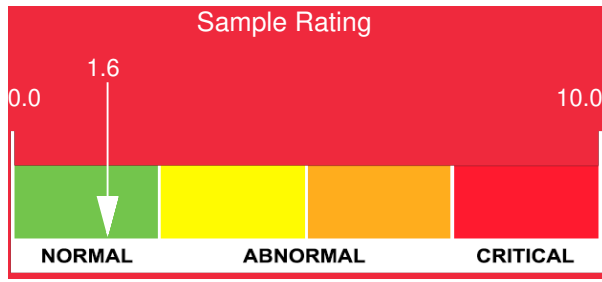
Customer: PTRHTF60031	System Information	Sample Information
GREEN SOLUTION SITIO STO NIÑO BRGY, TORIL DANAOCITY, ZZ 8000 Philippines Attn: Francis Xavier B. Ramirez Tel: 0(928)520-4929 E-Mail: fxbramirez@envireaupacific.com	System Volume: 16000 ltr Bulk Operating Temp: 392F / 200C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 Make: EUROSATIC	Lab No: 02426386 Analyst: Philip Riley Sample Date: 05/27/21 Received Date: 06/10/21 Completed: 07/16/21 Philip Riley philip.riley@hollyfrontier.com

Recommendation: Product viscosity is low, should be ISO 32 and is low at ISO 22. Pentane Insolubles are higher than expected, highlighting and supporting that some degradation and maybe cracking has occurred yielding low viscosity molecules of lower flash point along with heavier molecules that will form the insolubles. COC Flash Point is also a little low, and the distillation curve supports the thought of fluid cracking. Advice is to try and recover flash point by venting if it can be safely done. This fluid is degrading/degraded and should look towards planning a change if fluid characteristics cannot be recovered.

Comments: Pentane Insolubles levels are abnormally high. COC Flash Point is marginally low.

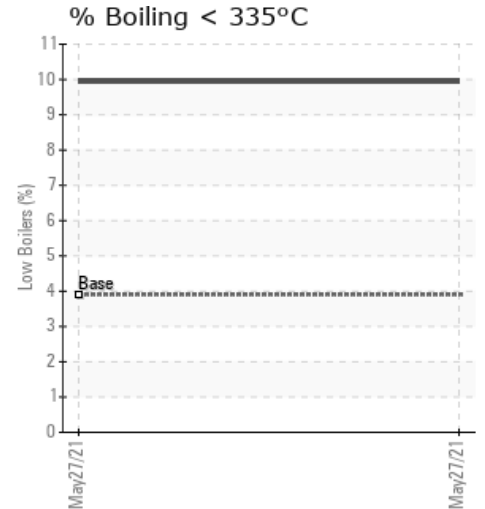
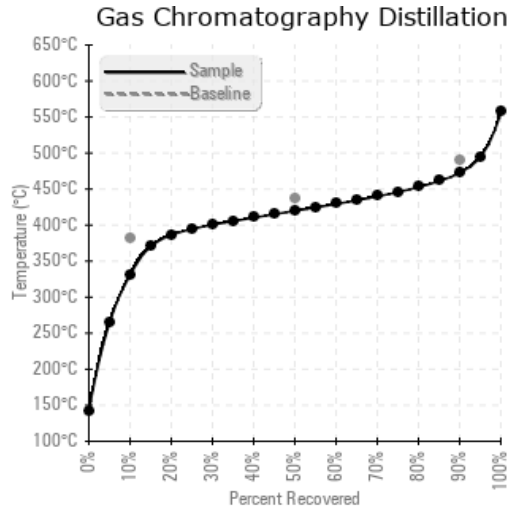
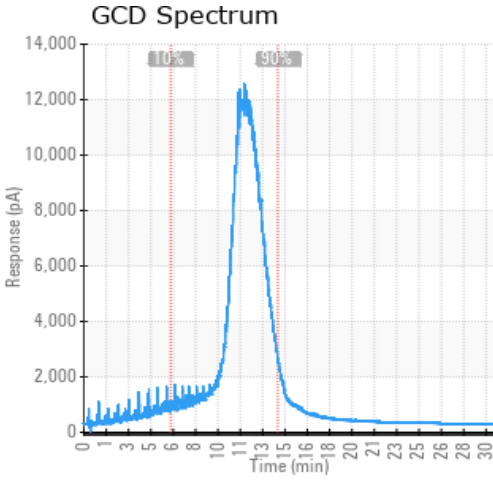
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/27/21	06/10/21	3.0y	DRAIN TANK	363 / 184	214.4	22.9	0.25	0.412	627 / 330	788 / 420	883 / 473	9.94
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
05/27/21	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	22	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