

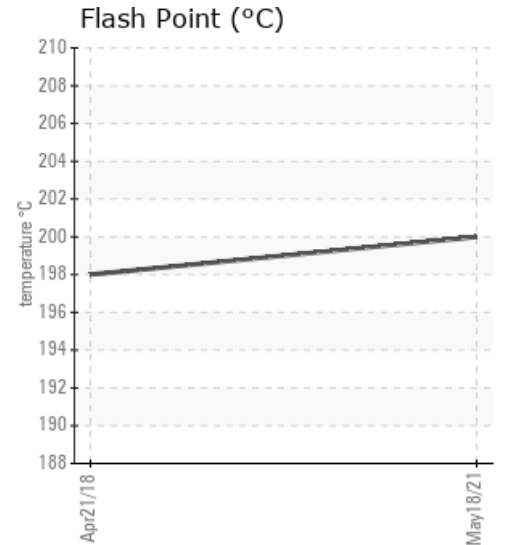
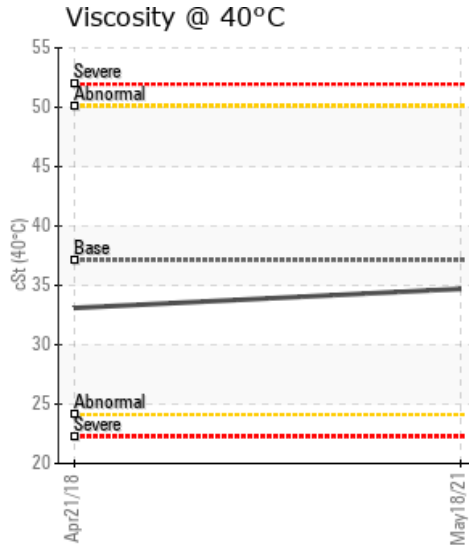
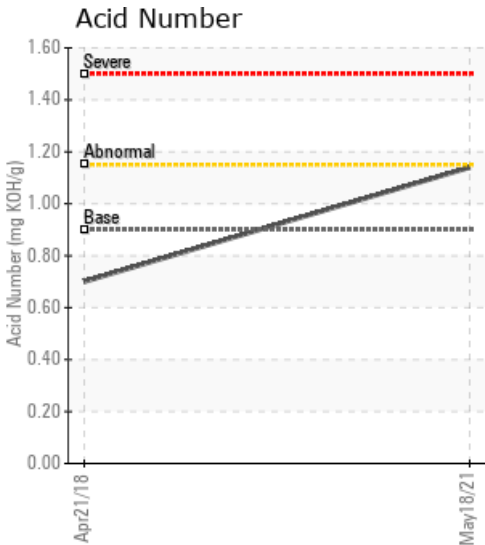
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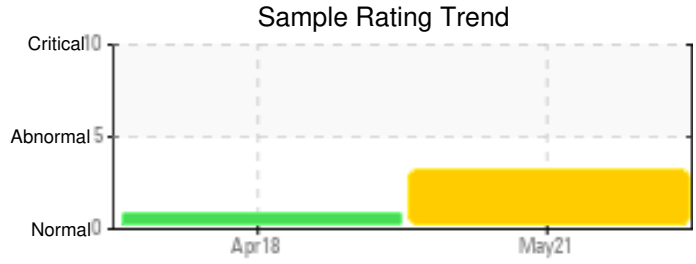
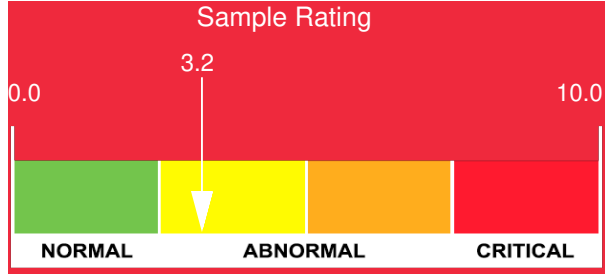
Customer: PTRHTF40074	System Information	Sample Information
LUBRICON LTD STI ATASEHIR ISTANBUL ISTANBUL, 34770 Attn: Murat Baslilar Tel: x: E-Mail: mbaslilar@lubricon.com.tr	System Volume: 10250 kg Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: HEIZA/ WARMETECHNIK	Lab No: 02423515 Analyst: Luis Rodriguez Sample Date: 05/18/21 Received Date: 05/26/21 Completed: 06/15/21 Luis Rodriguez luis.rodriguez@hollyfrontier.com

Recommendation: Oil is fit for further use. Please ensure that the sample is representative for the bulk system e.g. directly from circulating fluid. Pentane Insolubles indicate system contamination with solids that cannot be explained only by the fluid degradation. Check filters if available and change them.

Comments: Pentane Insolubles levels are severely high. (GCD) 90% Distillation Point is marginally high. COC Flash Point is marginally low.

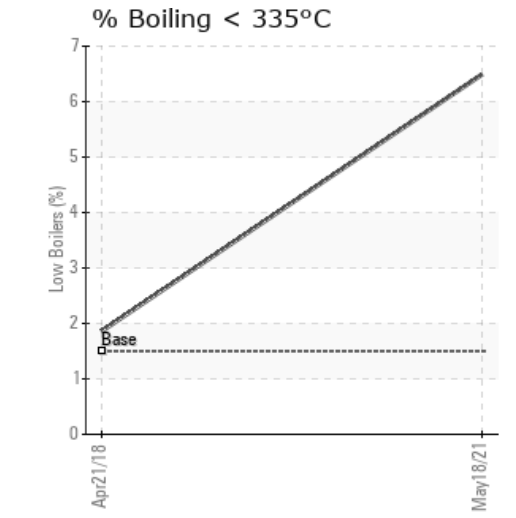
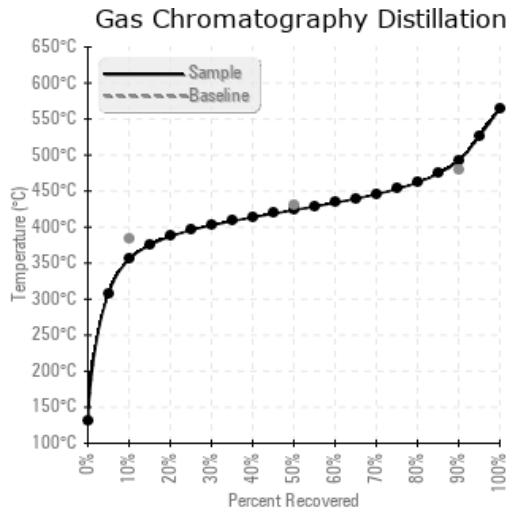
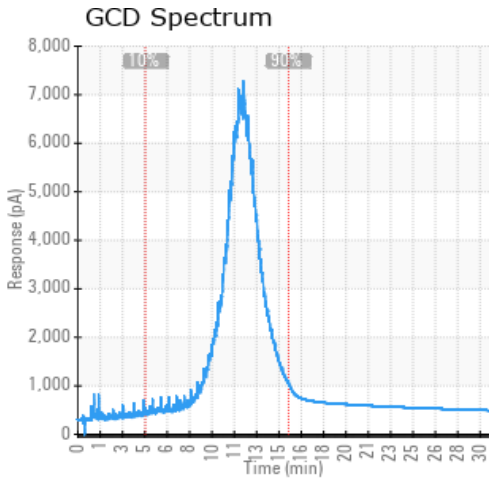
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/18/21	05/26/21	1825.0h	Pump inlet filter	392 / 200	57.7	34.7	1.14	1.15	672 / 355	794 / 424	918 / 492	6.49
04/21/18	04/30/18	16000.0h		388 / 198	26.5	33.1	0.70	0.080	697 / 369	792 / 422	881 / 472	1.86
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
05/18/21	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
04/21/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
Baseline Data			0	0						0			0	0				0	0				230	

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



Historical Comments

04/21/18	All parameters within limits with exception of COC Flash Point that has crept marginally low. The evidence is backed up by light ends on the GCD attached. If possible and safe please attempt to vent the system and reduce light molecules, COC should recover somewhat. COC Flash Point is marginally low.

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