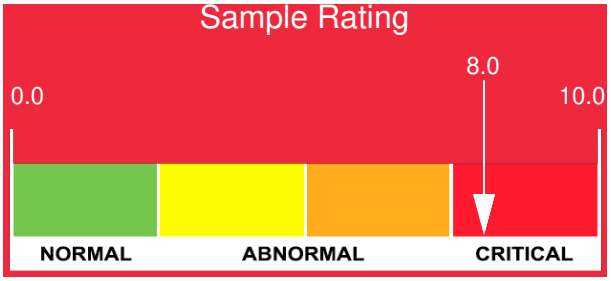
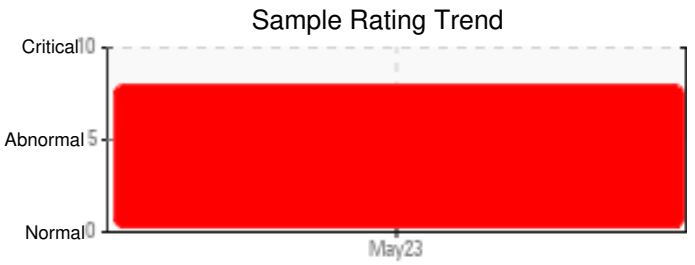




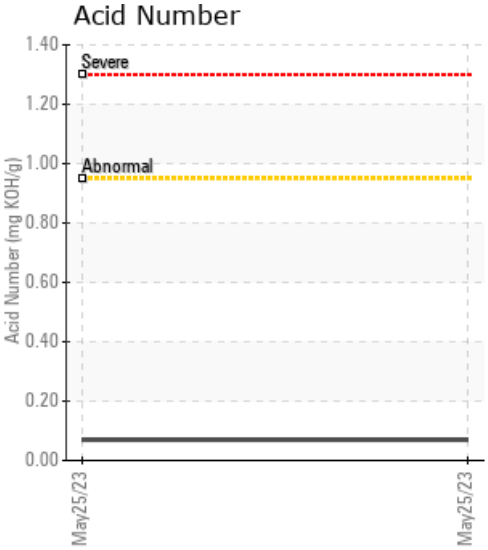
FT-0800-C

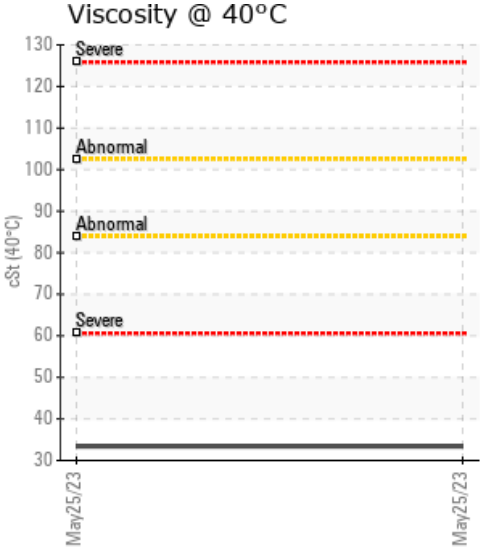
Customer: PTRHTF10255	System Information	Sample Information
MCCALL TERMINALS 5480 NW FRONT AVE PORTLAND, OR 97210 US Attn: Dustin Wilson Tel: (503)320-8886 E-Mail: dustin@mccallterminals.com	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: NOT GIVEN Make: FULTON	Lab No: 02563973 Analyst: Ron LeBlanc Sample Date: 05/25/23 Received Date: 06/13/23 Completed: 07/11/23 Ron LeBlanc Ronald.LeBlancSr@HFSinclair.com

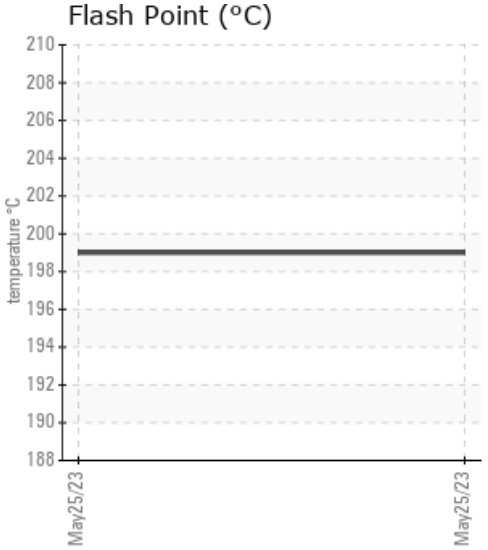
Recommendation: It appears the system is contaminated with a product containing elements not found in HTF. The system also indicates contaminants causing distillation points to increase. The COC flash point is severely high indicating contaminants. The sample could have possibly been pulled without proper purging before collection of sample. If the sample was taken properly the HTF is in poor condition. Cleaning, flushing and refill with new HTF is recommended.

Comments: (GCD) 10% Distillation Point is severely high. (GCD) 50% Distillation Point is severely high. COC Flash Point is severely high. Barium ppm levels are severely high. Visc @ 40°C is severely low. Calcium ppm levels are abnormally high.

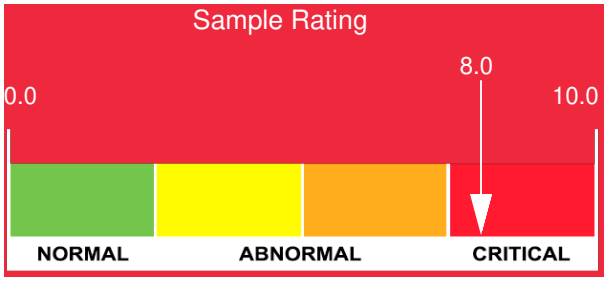
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/25/23	06/13/23	0.0m		390 / 199	30.8	33.4	0.07	0.041	683 / 362	810 / 432	915 / 490	4.58
Baseline Data				32 / 0					315 / 157	399 / 204		

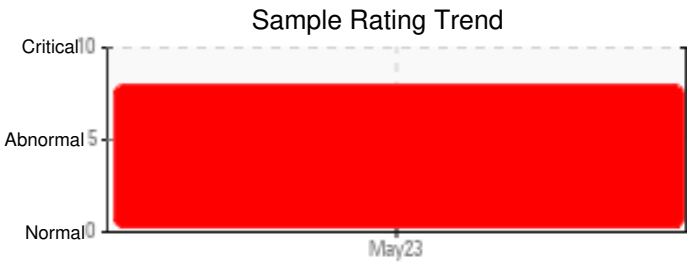






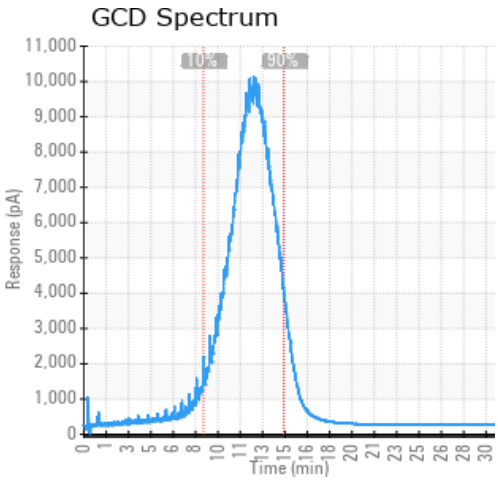
PETRO-CANADA LUBRICANTS

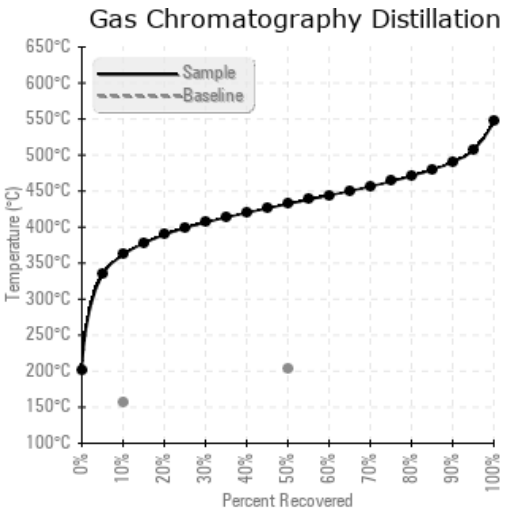


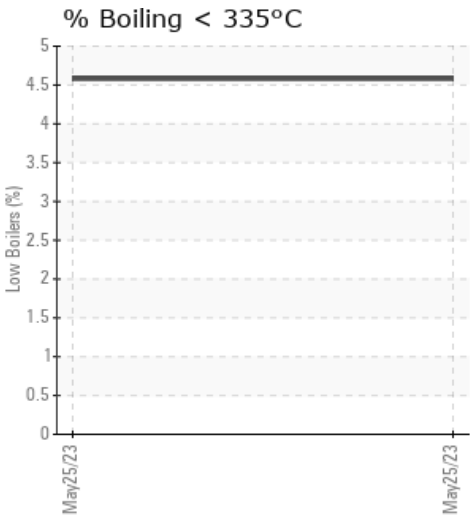


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
05/25/23	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	28	122	0	0
Baseline Data			0	0						0			0	0					0				0	

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







Historical Comments
