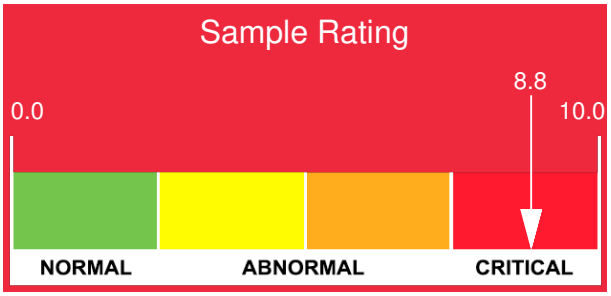
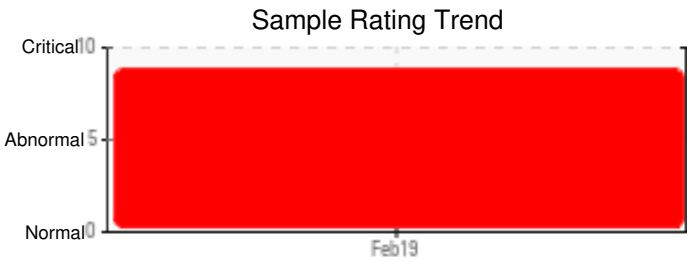
PETRO-CANADA LUBRICANTS





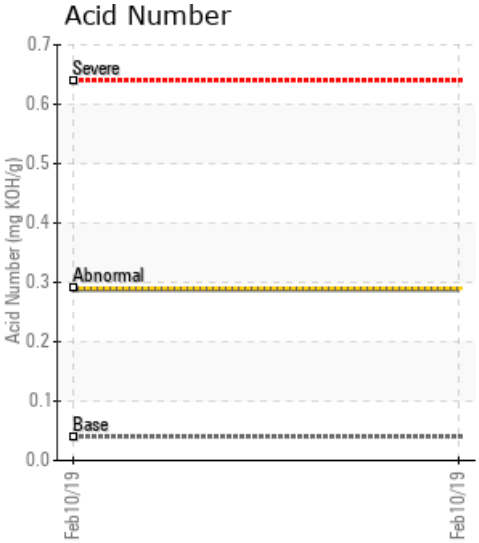
SID AHMAD

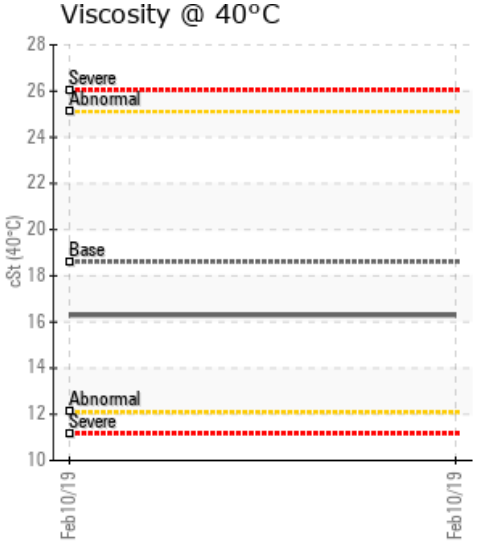
Customer: PTRHTF30125	System Information	Sample Information
Maple Leaf Foods 10 Canning Street Brantford, ON N3T 1P1 Canada Attn: Mel Riego Tel: (519)759-4751 E-Mail: mel.riego@mapleleaf.com	System Volume: 0 ltr Bulk Operating Temp: 530F / 277C Heating Source: Blanket: Fluid: PARATHERM NF Make: FULTON	Lab No: 02267992 Analyst: Lynn Billings Sample Date: 02/10/19 Received Date: 02/14/19 Completed: 02/22/19

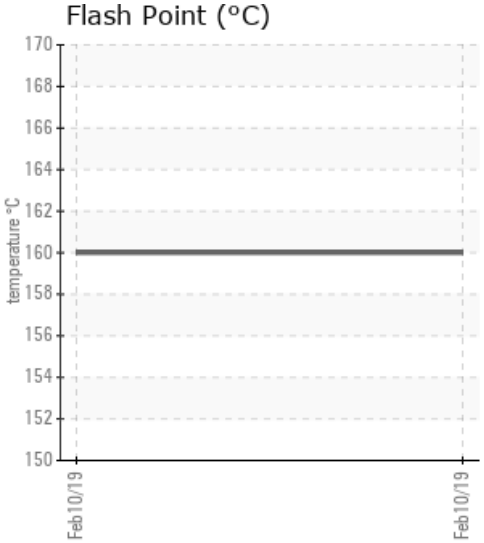
Recommendation: Acid number at 0.3 is getting high. It shows some oxidation.Besides oxidation, the GCD definitely picked up low boiling material so suspect thermal cracking as well.

Comments: (GCD) % < 335°C is severely high. (GCD) 90% Distillation Point is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is abnormally high, when typical is > 147C.

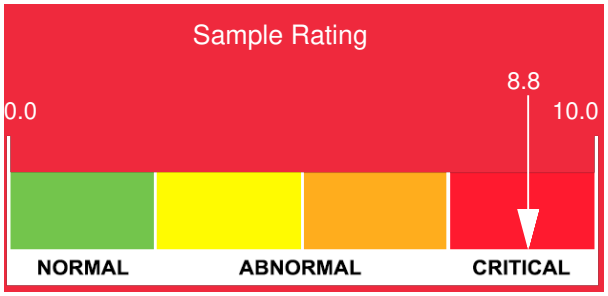
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/10/19	02/14/19	24h	CIRCULATION PUMP SUC	320 / 160	16.8	16.3	0.288	0.087	520 / 271	629 / 332	786 / 419	51.83
Baseline Data				32 / 0		18.6	0.04		615 / 324		747 / 397	16.42

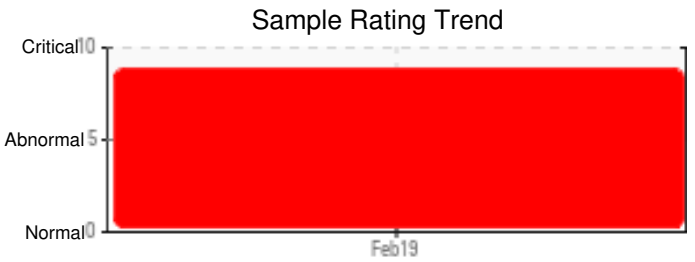






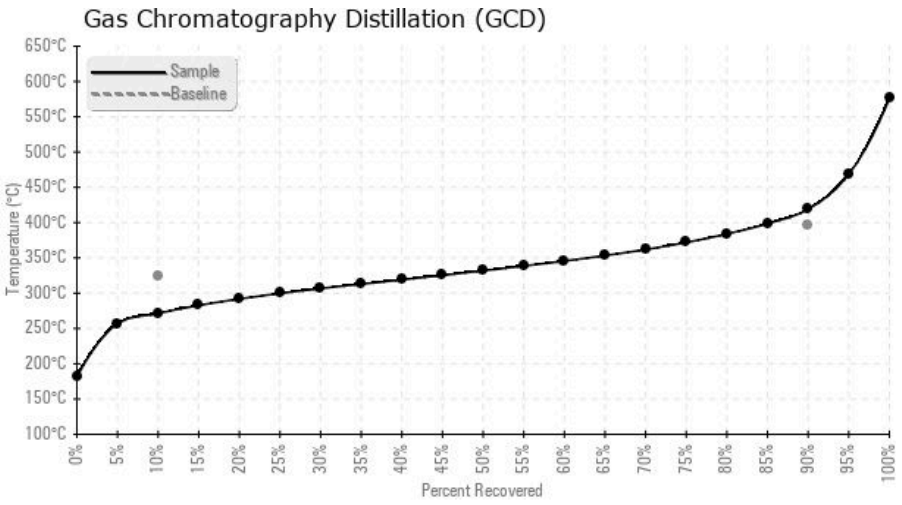
PETRO-CANADA LUBRICANTS

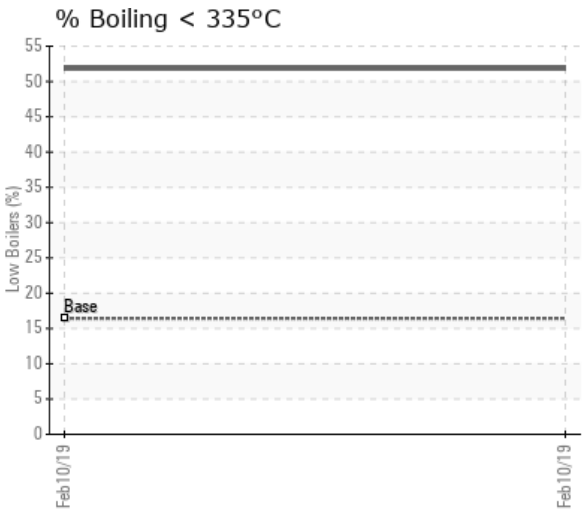




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
02/10/19	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

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





Historical Comments
