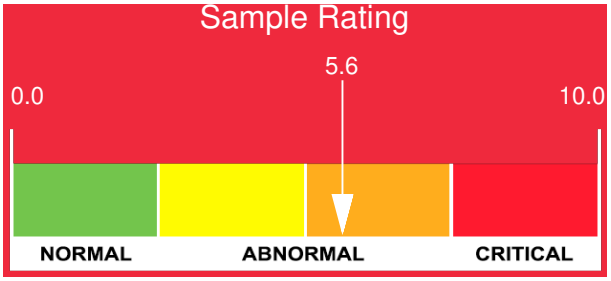
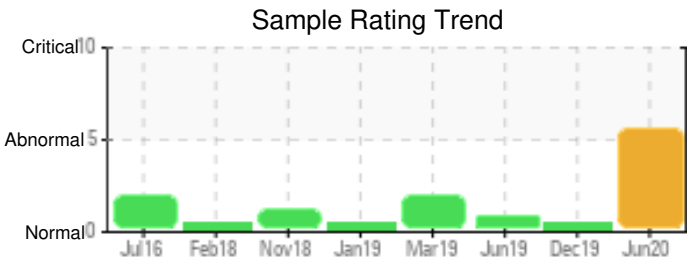




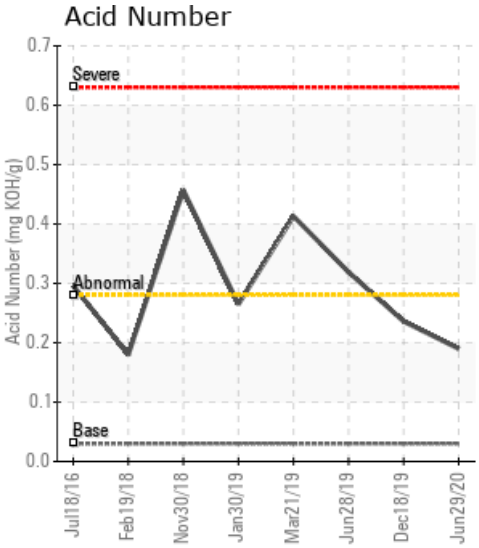
DUPLEX FILTER

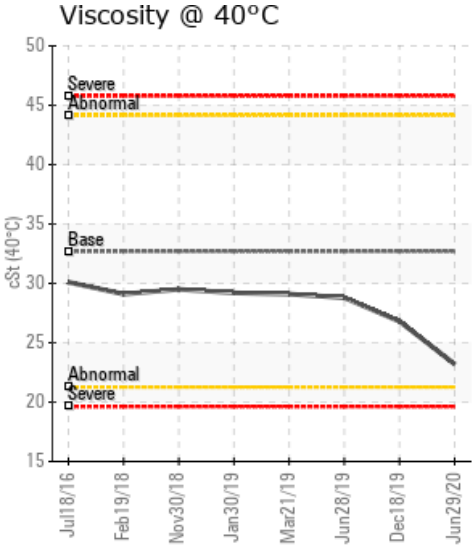
Customer: PTRHTF10028	System Information	Sample Information
PPG AEROSPACE 11601 UNITED ST MOJAVE, CA 93501 USA Attn: Phil Olson Tel: (661)232-6814 E-Mail: phil.olson@ppg.com	System Volume: 1200 gal Bulk Operating Temp: 520F / 271C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: PARKER	Lab No: 02366168 Analyst: Steven Slanker Sample Date: 06/29/20 Received Date: 07/22/20 Completed: 07/29/20 Steven Slanker steven.slanker@petrocanadalsp.com

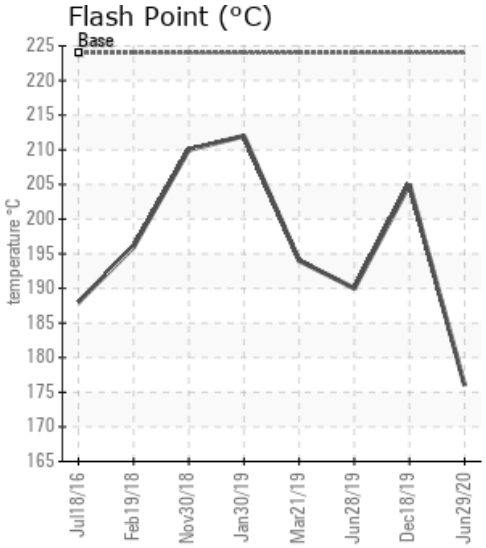
Recommendation: The 10% distillation point is low and the % <335°C high. Vent off the low boilers, check how the heaters are operating and resample.

Comments: (GCD) 10% Distillation Point is severely low. COC Flash Point is abnormally low. (GCD) % < 335°C is marginally high. (GCD) 90% Distillation Point is marginally high.

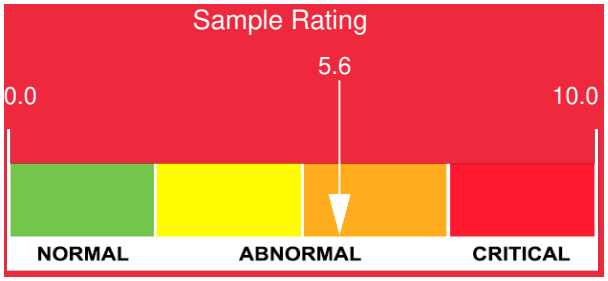
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
06/29/20	07/22/20	6m	Duplex Filter	349 / 176	52.0	23.2	0.19	0.036	579 / 304	807 / 431	912 / 489	10.26
12/18/19	01/03/20	0m	FILTER	401 / 205	19.7	26.8	0.236	0.151	655 / 346	770 / 410	881 / 472	6.56
06/28/19	07/09/19	0m	HIGH SIDE OF FILTER	374 / 190	46.9	28.8	0.319	0.114	676 / 358	784 / 418	891 / 477	4.23
03/21/19	04/17/19	0m	GL1	381 / 194	17.6	29.1	0.413	0.326	687 / 364	798 / 425	904 / 484	3.48
01/30/19	02/07/19	0m		414 / 212	16.4	29.2	0.265	0.111	658 / 348	769 / 409	873 / 467	6.10
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5

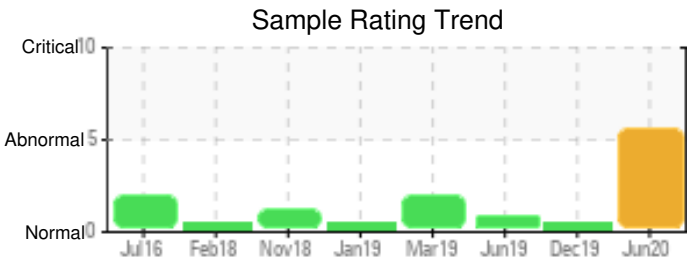






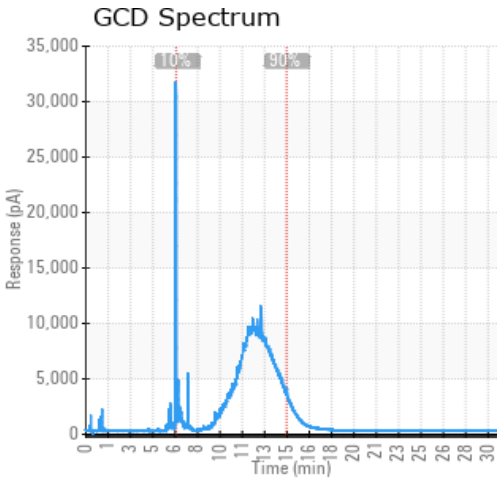
PETRO-CANADA LUBRICANTS

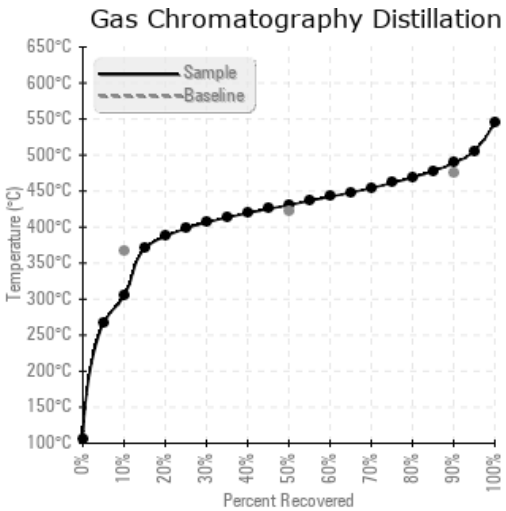


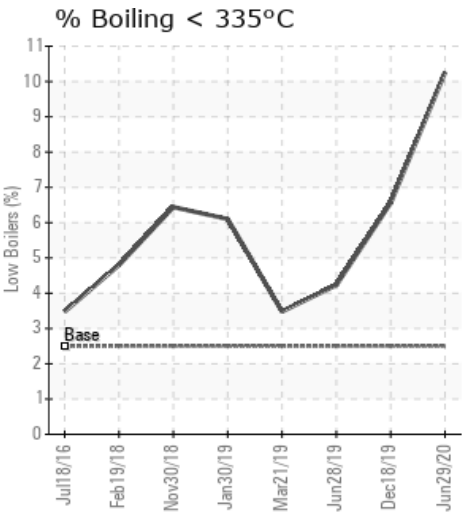


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
06/29/20	6	0	0	0	0	0	0	0	0	0	3	15	0	0	0	0	0	0	0	0	0	0	103	1
12/18/19	36	0	0	0	0	0	1	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	119	1
06/28/19	32	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	108	0
03/21/19	30	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	125	1
01/30/19	33	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	108	0
Baseline Data			0	0						0			0	0					0				270	

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







Historical Comments

12/18/19	This sample is very similar to the last two sample with the exception that the acid value has improved from 0.413 to 0.319 to 0.236. It is suitable for continued use.
06/28/19	The acid number has been reduced but still on the higher side. The flash point is slightly lower than a new sample. Do a partial oil replacement to reduce then acid number to less than 0.25.
03/21/19	Acid number is on the high side. Review and minimize hot fluid's exposure to air. Subsequently consider partial fluid replacement to reduce acid number. Acid Number (AN) is abnormally high. COC Flash Point is marginally low.
01/30/19	Sample appears normal. Resample in 3 months.

