

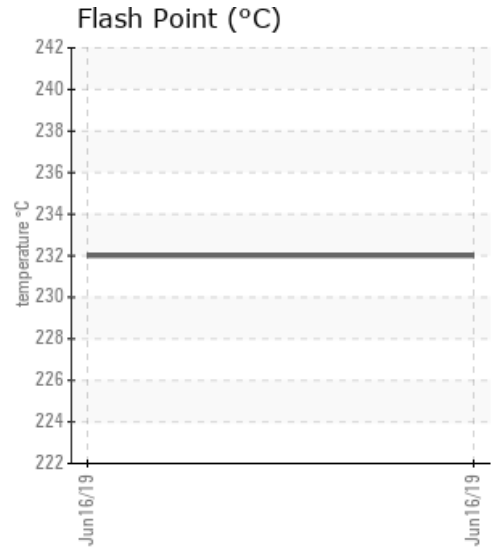
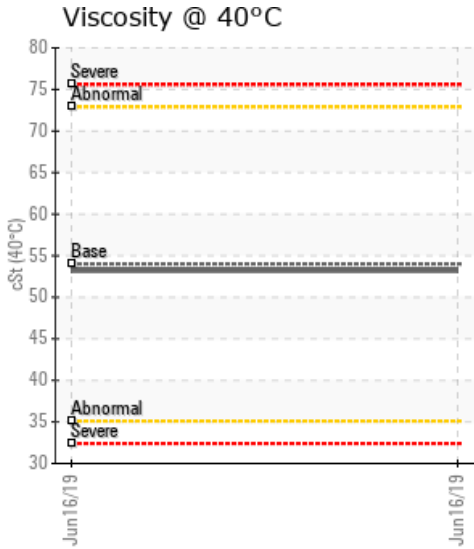
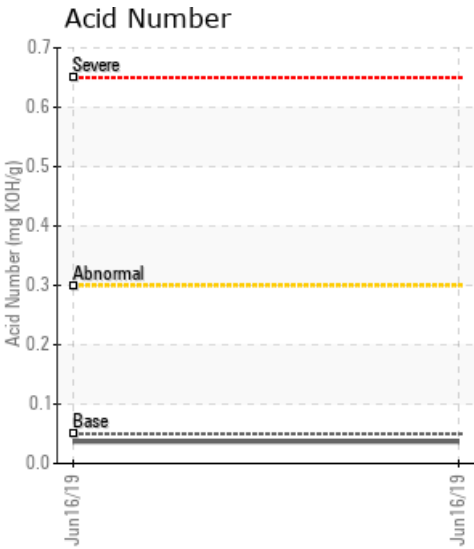
GENERADORA 2

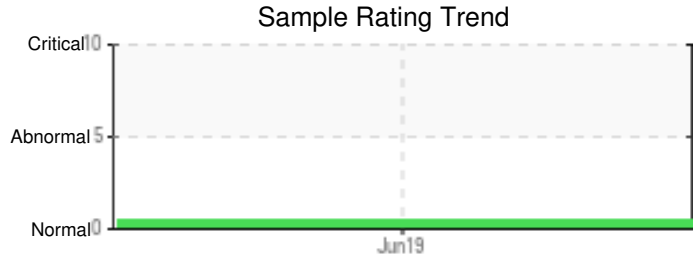
Customer: PTRHTF60023	System Information	Sample Information
INDUSTRIAS del PETROLEO CANAD. SA Contiguo FANAL frente a la Autopista Bernardo Soto Grecia, A Costa Rica Attn: Luis Carlos Garcia Tel: 5(062)494-1598	System Volume: 12480 ltr Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 X Make: AB HEATEC	Lab No: 02298691 Analyst: Manny Garcia Sample Date: 06/16/19 Received Date: 07/23/19 Completed: 08/12/19

Recommendation: Sample is suitable for continued use. Please re-submit sample in June 2020.

Comments: Wear metals and contamination is satisfactory in this fluid sample. Very light debris which a kidney loop filtration system may be able to mitigate during a safe shutdown time.

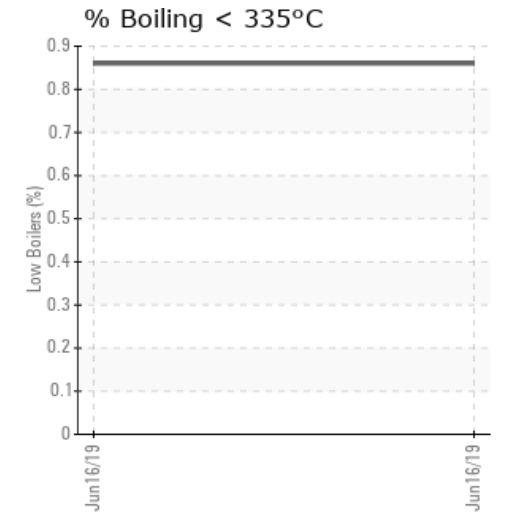
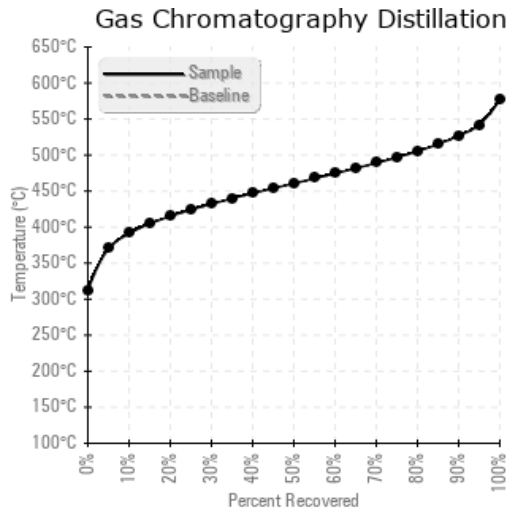
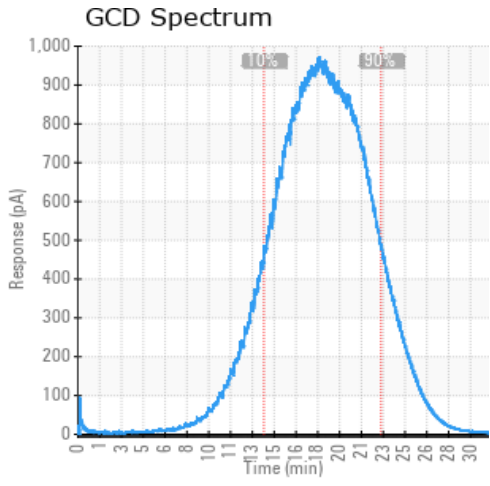
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
06/16/19	07/23/19	3y		450 / 232	46.6	53.2	0.037	0.050	736 / 391	861 / 461	980 / 527	0.86
Baseline Data				500 / 260		54	0.05					





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
06/16/19	6	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 analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments

Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.