

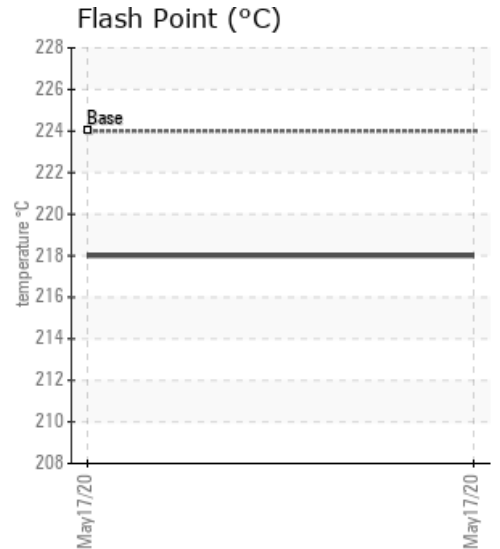
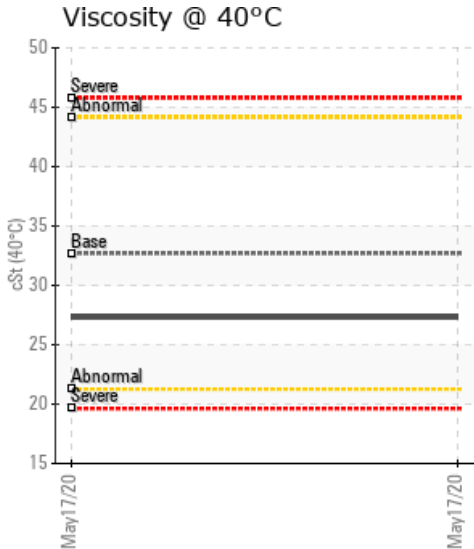
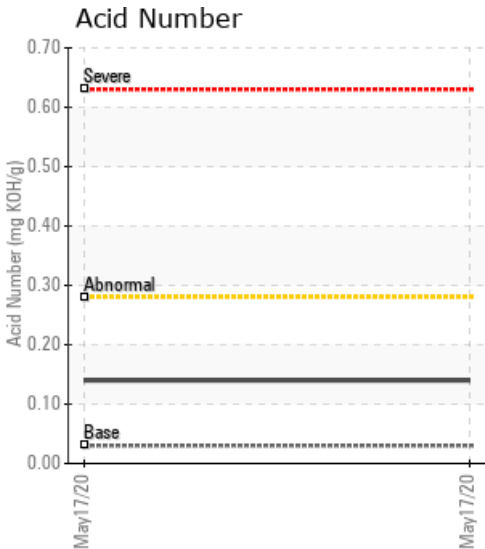
4R

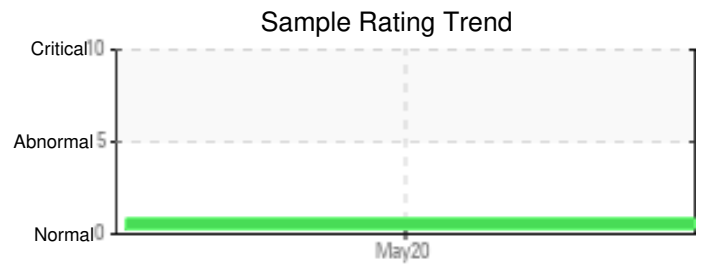
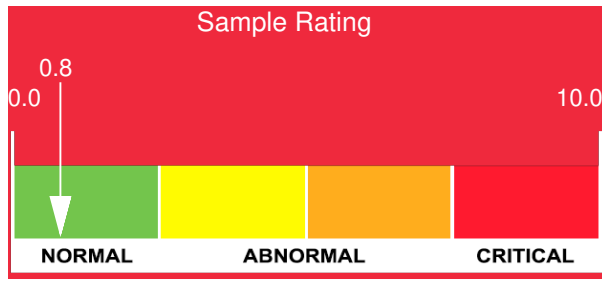
Customer: PTRHTF10189	System Information	Sample Information
HALOCARBON PRODUCTS CORP. P.O. BOX 6369 NORTH AUGUSTA, SC 29841 USA Attn: Michael Holmes Tel: (803)278-3520 E-Mail: mholmes@halocarbon.com	System Volume: 2000 gal Bulk Operating Temp: 482F / 250C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02400936 Analyst: Manny Garcia Sample Date: 05/17/20 Received Date: 02/01/21 Completed: 02/06/21 Manny Garcia manuel.garcia@hollyfrontier.com

Recommendation: Fluid taken from system in May 2020 & stored in drum to be used at later time is suitable for continued use although the fluid could be filtered before use to improve the ISO cleanliness code of 22-20-17.

Comments: (GCD) 90% Distillation Point is abnormally high.

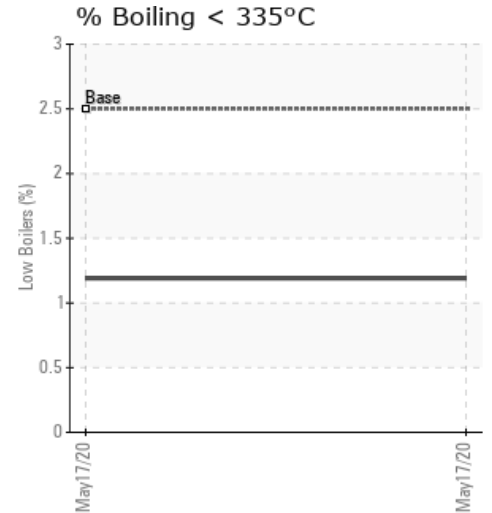
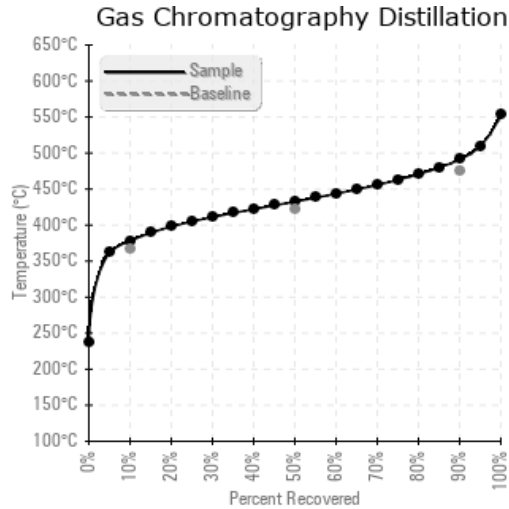
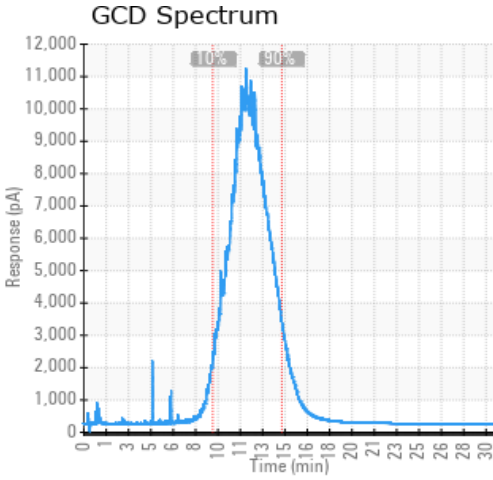
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/17/20	02/01/21	1m	Drum Sample	424 / 218	72.9	27.3	0.14	0.077	712 / 378	811 / 433	916 / 491	1.19
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5





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
05/17/20	4	0	0	0	0	0	10	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0
Baseline Data			0	0						0			0	0					0				270	

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



Historical Comments

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