

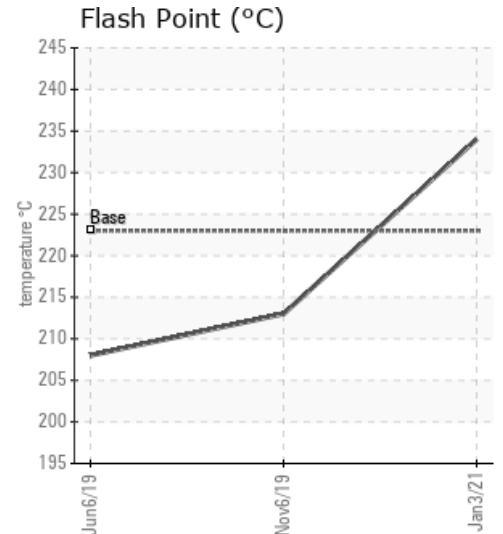
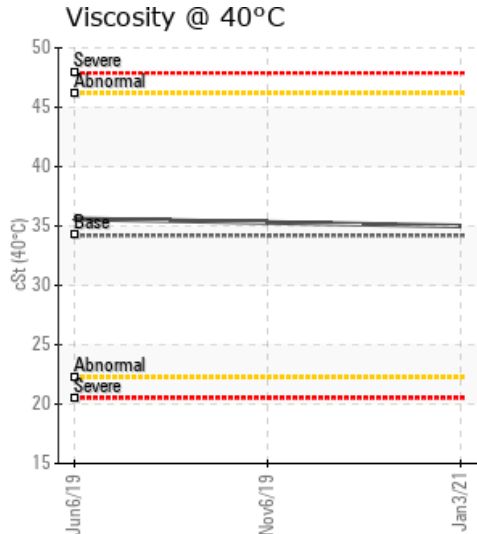
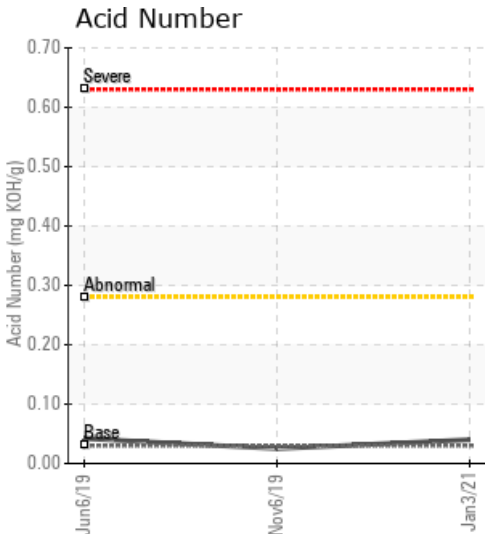
[NORBORD GP / LSD2-6-70-SW6] GTS FURNACES

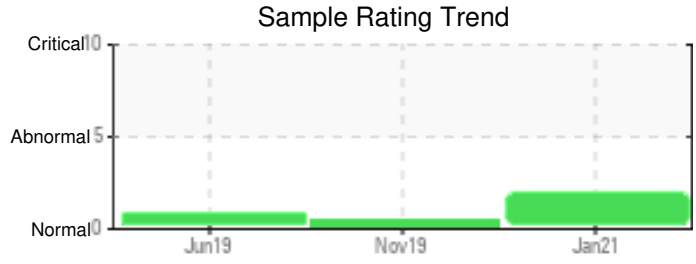
Customer: PTRHTF20184	System Information	Sample Information
NORBORD BAG 6700 HIGHWAY 40 S GRAND PRAIRIE, AB T8V 6Y9 Canada Attn: Clint Swanson Tel: (780)831-2573 E-Mail: clint.swanson@norbord.com	System Volume: 200000 ltr Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: GTS	Lab No: 02396800 Analyst: Clinton Buhler Sample Date: 01/03/21 Received Date: 01/11/21 Completed: 01/14/21 Clinton Buhler Clinton.Buhler@PetroCanadaLSP.com

Recommendation: Sample results indicate that the heat transfer fluid is in suitable condition for continued service. Please re-sample in 12 months.

Comments:

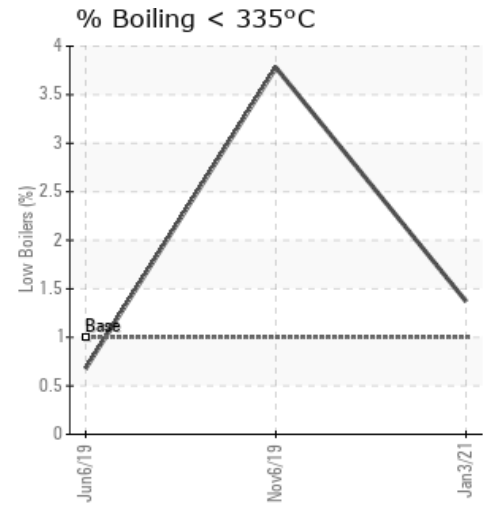
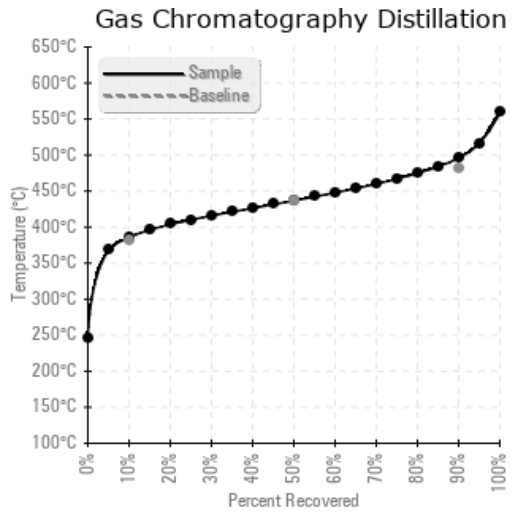
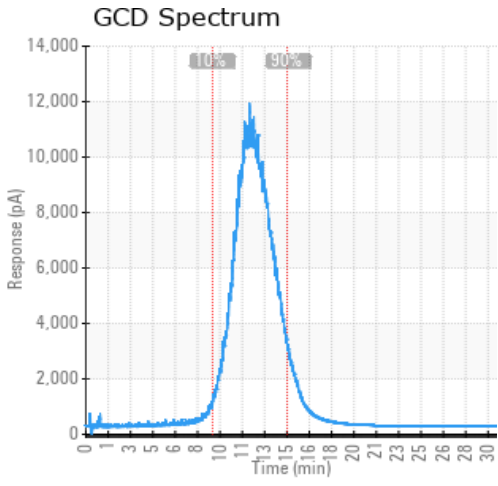
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/03/21	01/11/21	5y	Sample station	453 / 234	38.4	35.0	0.04	0.143	726 / 386	818 / 437	925 / 496	1.37
11/06/19	11/11/19	1y	SAMPLE STATION	415 / 213	44.2	35.3	0.025	0.041	686 / 363	788 / 420	902 / 484	3.78
06/06/19	06/12/19	1y		406 / 208	27.5	35.6	0.042	0.059	717 / 381	815 / 435	927 / 497	0.68
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





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	
01/03/21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/06/19	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06/06/19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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

11/06/19	Results are normal. Re-sample next interval and continue to monitor
06/06/19	(GCD) 90% Distillation Point is marginally high. Otherwise results are normal. Re sample at the next interval and continue to monitor. (GCD) 90% Distillation Point is marginally high.

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