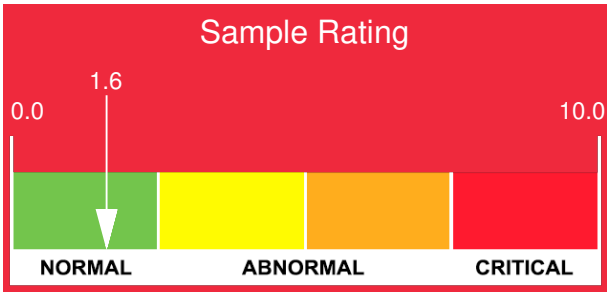
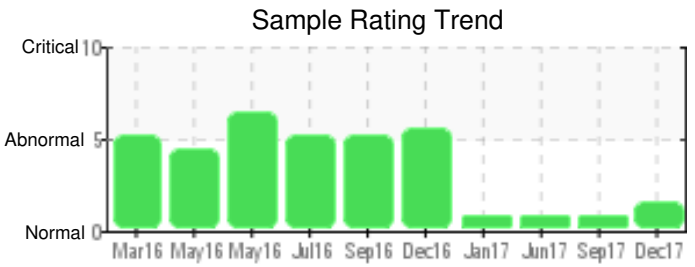




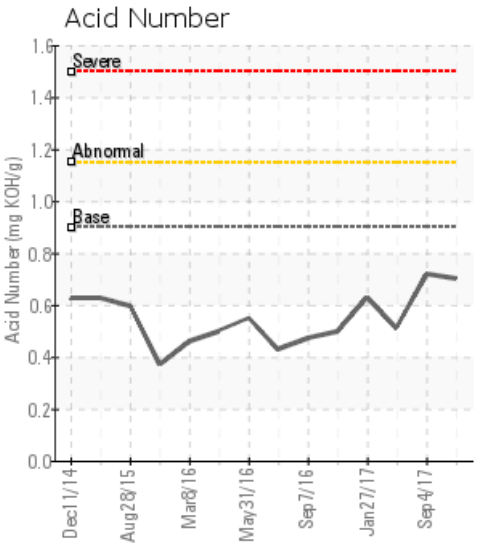
SAINT-VITH PURATOS

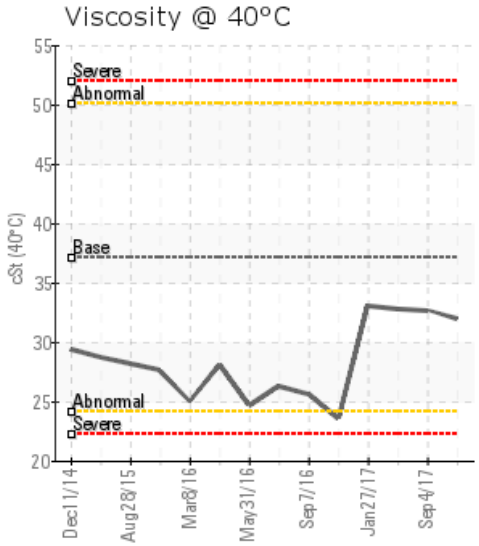
Customer: PTRHTF40077	System Information	Sample Information
BRENNTAG NV NIJVERHFIDSLAAN 38 DEERLIJK, 8540 Belgium Attn: Bart Vandenberghe Tel: 3(247)586-5546 E-Mail: bart.vandenberghe@brenntag.be	System Volume: 15000 ltr Bulk Operating Temp: 565F / 296C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make:	Lab No: 02192817 Analyst: Philip Riley Sample Date: 12/07/17 Received Date: 01/16/18 Completed: 01/26/18 To discuss this report contact Philip Riley at (440)124-4378171

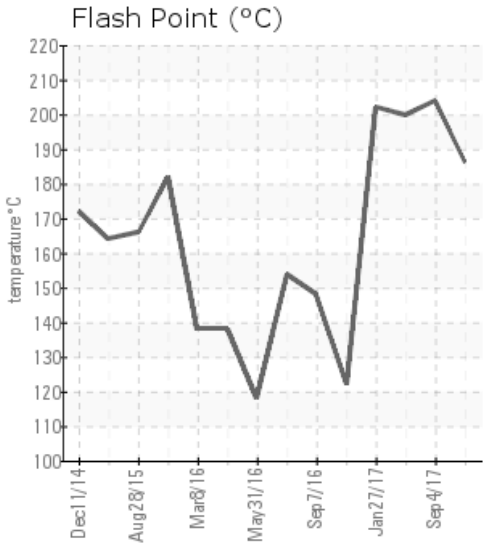
Recommendation: marginally low on COC, but light ends look reduced from previous sample on GC trace. Looks to be sampled quarterly so fit for use until next quarter but must sample on time as flash poin has deteriorated in other samples in this system before change-out

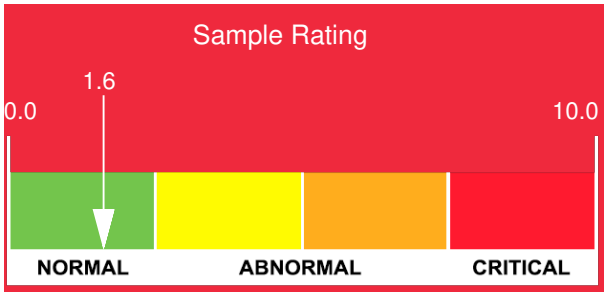
Comments: COC Flash Point is abnormally low.

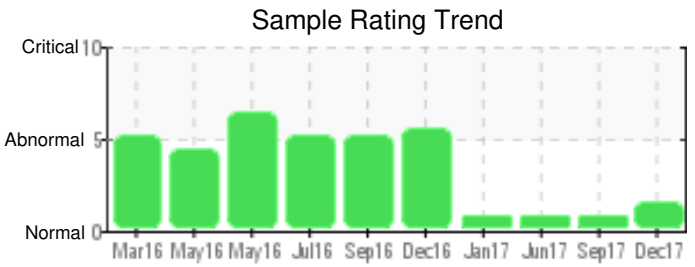
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
12/07/17	01/16/18	12m		367 / 186	11.6	31.9	0.702	0.037	710 / 377	802 / 428	899 / 481	2.22
09/04/17	09/12/17	9m	CHAUDIERE HAUT	399 / 204	0.00	32.7	0.719	0.036	712 / 378	806 / 430	901 / 483	2.38
06/06/17	06/13/17	6m	CHAUDIERE HAUT	392 / 200	6.8	32.8	0.51	0.032	717 / 380	812 / 433	906 / 486	1.96
01/27/17	02/07/17	2m	CHAUDIERE HAUT	396 / 202	5.6	33.1	0.63	0.048	712 / 378	806 / 430	901 / 483	2.22
12/27/16	02/09/17	12m	CHAUDIERE HAUT	252 / 122	22.7	23.6	0.497	0.021	623 / 328	792 / 422	897 / 480	10.32
09/07/16	09/16/16	32m	CHAUDIERE HAUT	298 / 148	7.6	25.6	0.47	0.042	650 / 344	798 / 425	912 / 489	8.33
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





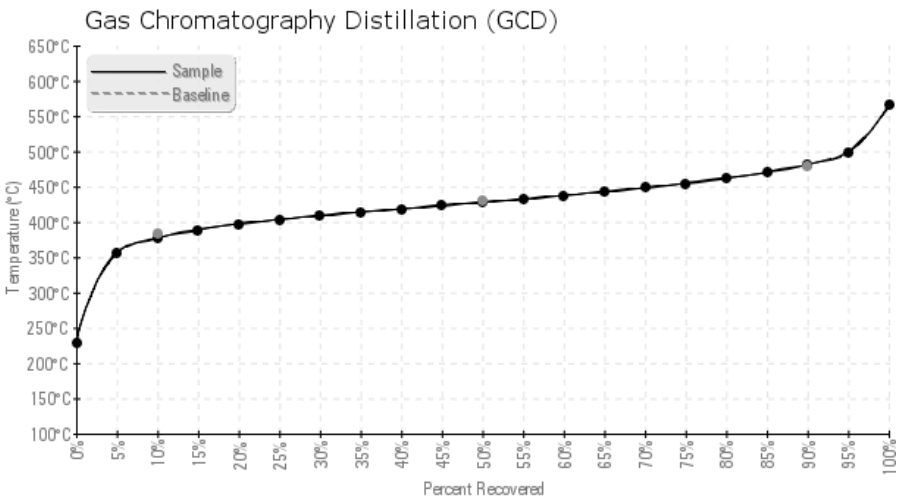


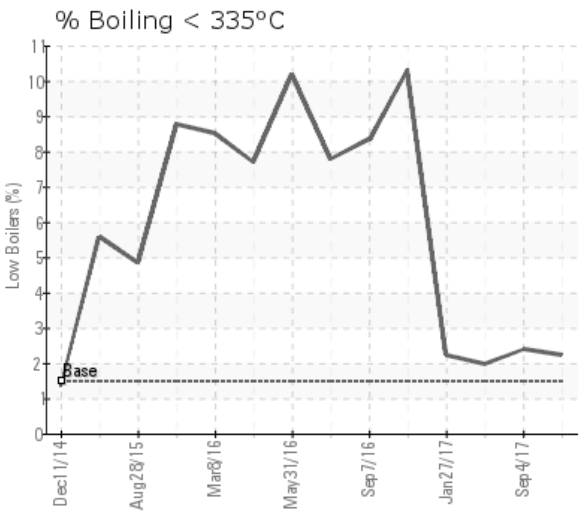




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
12/07/17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
09/04/17	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
06/06/17	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	10	0
01/27/17	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12	0
12/27/16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
09/07/16	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0
Baseline Data			0	0						0			0	0					0				230	

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





Historical Comments

09/04/17	Acid number creeping upwards from previous sample. Fluid darkened with use. IBP dropped, evidence of increased lighter molecules by GC, must monitor going forwards. Otherwise similar to last sample taken. COC Flash Point is marginally low.
06/06/17	Oil appears to be in good condition and fit for further service. Suggest sample at next scheduled maintenance interval. COC Flash Point is marginally low.
01/27/17	Oil appears to be in good condition and fit for further service. Suggest sample at next scheduled interval. COC Flash Point is marginally low.
12/27/16	Consideration should be given to replacing the oil in this system. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. (GCD) % < 335°C is marginally high.
09/07/16	Flash Point is low, viscosity is low suggest prepare for change of oil. COC Flash Point is severely low. (GCD) % < 335°C is marginally high. (GCD) 90% Distillation Point is marginally high. (GCD) 10% Distillation Point is marginally low.