

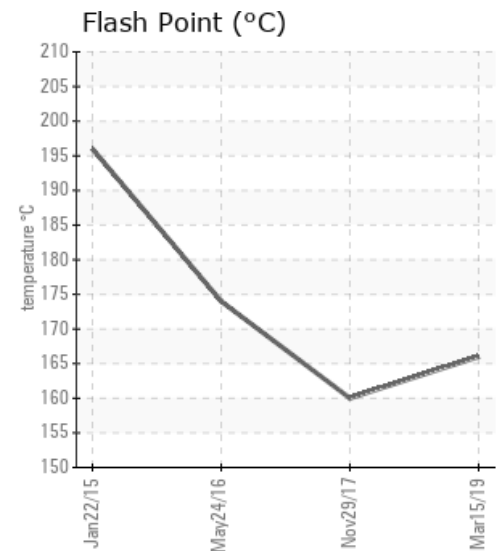
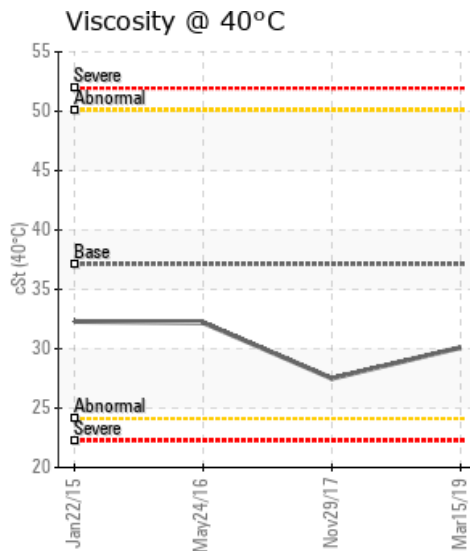
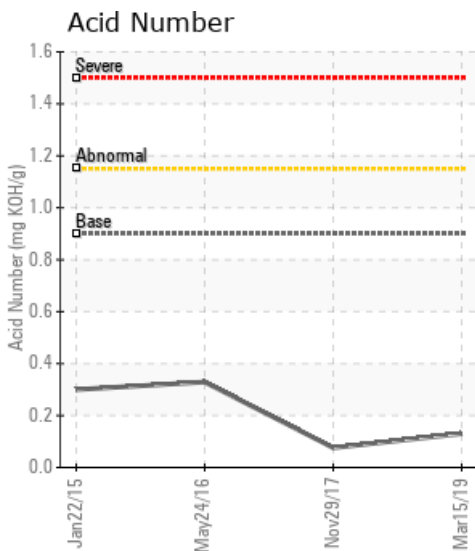
WANSON 250LN

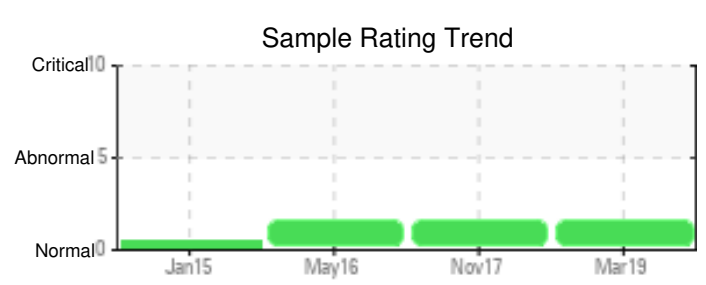
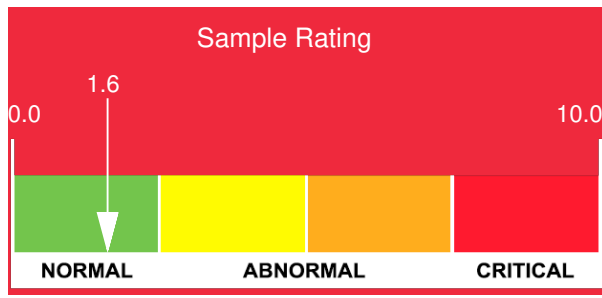
Customer: PTRHTF40022	System Information	Sample Information
MAYONNA BV NOORDGAT 1 FLEVOLAND URK, FLE NETHERLANDS Attn: Maintenance Manager Tel: E-Mail:	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make:	Lab No: 02274594 Analyst: Philip Riley Sample Date: 03/15/19 Received Date: 03/21/19 Completed: 03/25/19

Recommendation: COC remains very low although marginally recovered from previous year, backed up by appearance of GCD. If can be done safely, suggest venting and attempt to recover the flash point further. Based on flash point primary recommendation would be to change fluid.

Comments: COC Flash Point is severely low.

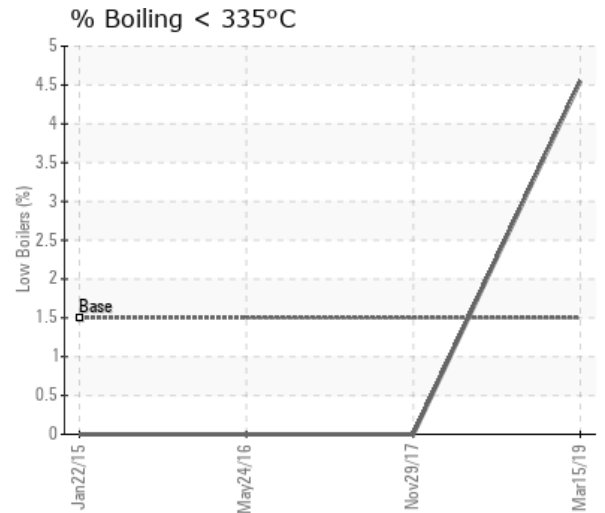
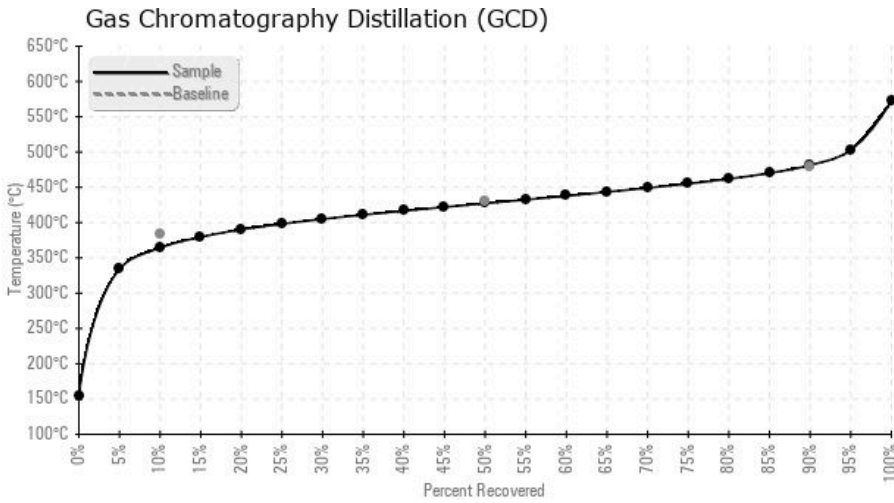
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/15/19	03/21/19	8y		331 / 166	27.8	30.1	0.13	0.060	688 / 364	801 / 427	899 / 481	4.55
11/29/17	12/05/17	8y		320 / 160	9.6	27.5	0.076	0.071	704 / 373	795 / 424	887 / 475	0.00
05/24/16	05/27/16	7y	PTRHTF40022	345 / 174	100.2	32.2	0.329	0.066	711 / 377	799 / 426	900 / 482	0.00
01/22/15	02/06/15	0y		385 / 196	18.4	32.3	0.30	0.043	726 / 386	820 / 438	897 / 481	0.00
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
03/15/19	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
11/29/17	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
05/24/16	28	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	31	0
01/22/15	22	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	42	0
Baseline Data			0	0						0			0	0					0				230	

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



Historical Comments	
11/29/17	Flash Point off spec low, second year running. Viscosity also lower which confirms lighter molecules. Recommended fluid change COC Flash Point is severely low.
05/24/16	Oil has a lower than expected Flash Point but GCD is fine. The oil is in good condition and fit for further service. Suggest sample at next scheduled maintenance interval. COC Flash Point is severely low.
01/22/15	Oil appears to be in good condition. Sample at next scheduled maintenance interval.

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