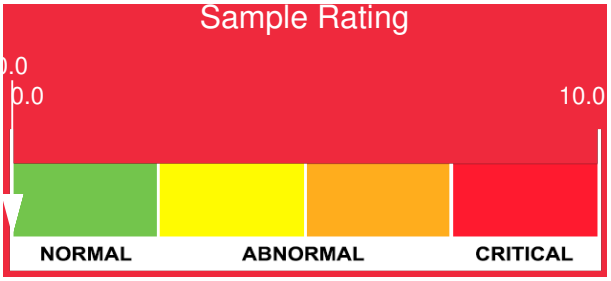
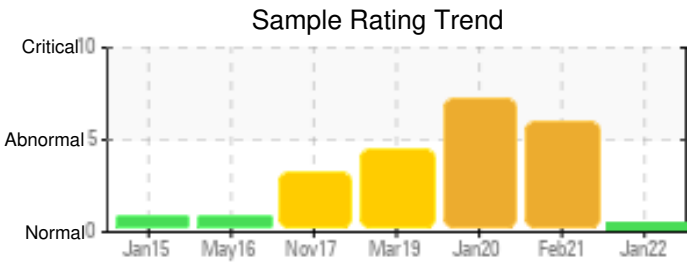




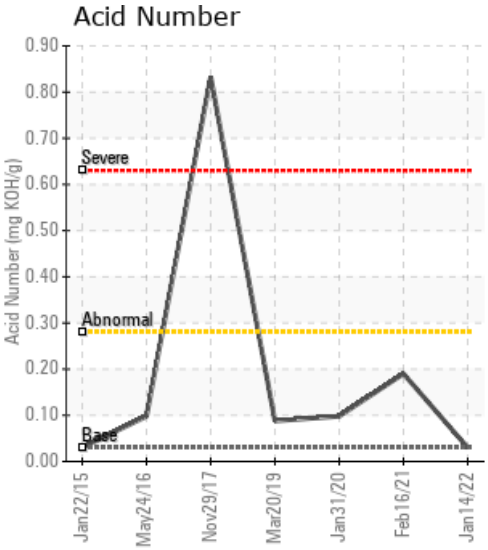
WANSON450 NEW SYSTEM

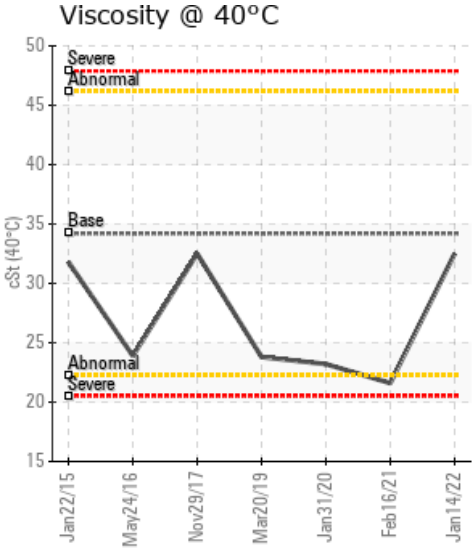
Customer: PTRHTF40022	System Information	Sample Information
MAYONNA BV NOORDGAT 1 FLEVOLAND URK, FLE NETHERLANDS Attn: Maintenance Manager Tel: E-Mail:	System Volume: 1400 ltr Bulk Operating Temp: 500F / 260C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: WANSON	Lab No: 02467253 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I Sample Date: 01/14/22 Received Date: 01/20/22 Completed: 01/26/22 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: Resample at the next service interval to monitor.

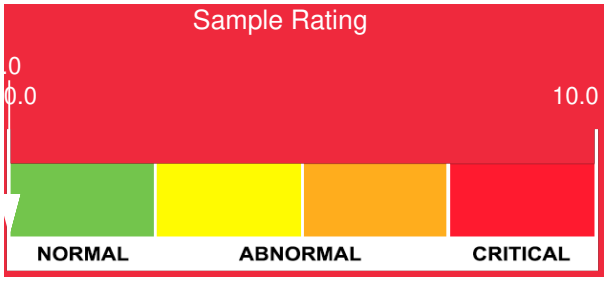
Comments: There is no indication of any contamination in the fluid. The condition of the fluid is suitable for further service.

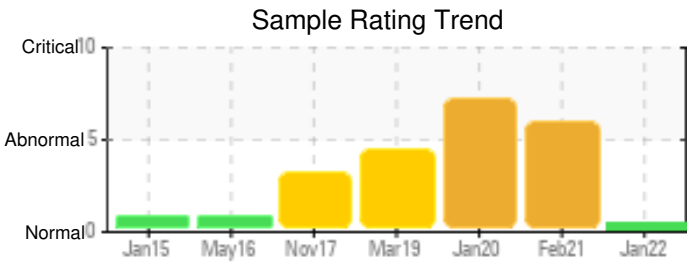
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/14/22	01/20/22	0.0y		424 / 218	19.8	32.5	0.03	0.053	712 / 378	811 / 433	904 / 484	3.32
02/16/21	02/22/21	8.0y		271 / 133	19.4	21.6	0.19	0.207	568 / 298	784 / 418	913 / 489	14.18
01/31/20	02/11/20	7.0y		280 / 138	20.6	23.2	0.098	0.084	606 / 319	756 / 402	872 / 467	12.77
03/20/19	03/21/19	6.0y	031519	262 / 128	8.8	23.8	0.088	0.078	631 / 333	787 / 419	909 / 487	9.85
11/29/17	12/05/17	5.0y		410 / 210	32.5	32.5	0.833	0.160	723 / 384	819 / 437	904 / 484	0.00
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





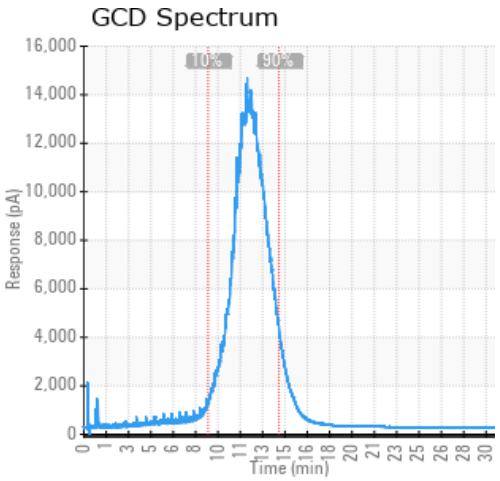
PETRO-CANADA LUBRICANTS

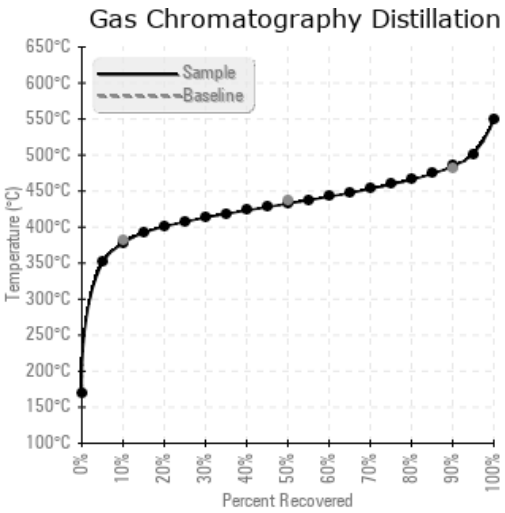


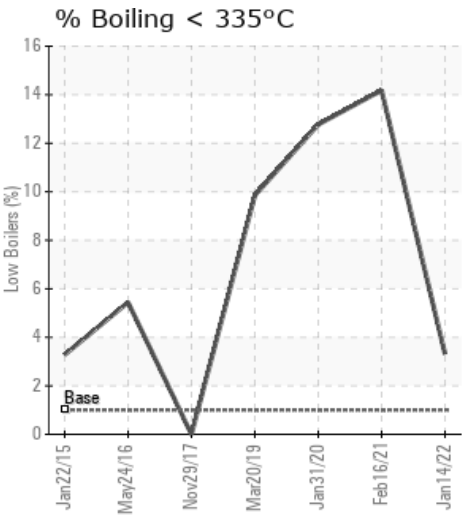


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
01/14/22	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/16/21	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01/31/20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/20/19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/29/17	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	7
Baseline Data			0	0						0			0	0					0				0	

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







Historical Comments

02/16/21	Fluid shows signs of severe degradation and, again, recommend this fluid is changed, including a clean and flush. There is clear evidence of thermal cracking, and also a viscosity loss that would also support this somewhat. The flash point is severely low and has been for some time. The 'shape' of the GCD curve supports the thermal cracking. Recommend fluid change, clean, flush (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. (GCD) % < 335°C is abnormally high. Visc @ 40°C is abnormally low.
01/31/20	Fluid continues to deteriorate in rating. Viscosity very low showing formation of lighter molecules and flash point, although recovered slightly from last sample, remains severely low. Strong evidence of cracking on the distillation curve. Recommend fluid change out (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. (GCD) % < 335°C is abnormally high. (GCD) 90% Distillation Point is abnormally low. (GCD) 50% Distillation Point is marginally low.
03/20/19	COC Flash Pt extremely low. If venting (if can be done safely) does not recover the flash point, recommend change of oil. Viscosity is not consistent with Petrotherm HTF. COC Flash Point is severely low. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high.
11/29/17	Acid number high and above condemnation limits. Most parameters OK except that iron has crept upwards, still within limits but a step change and likely related to acid number. Look to re-sample at 6 months to check, with view to change if fluid has degraded further Acid Number (AN) is severely high.