

## GFPT THAILAND LINE 2/3/4

**Customer: PTRHTF60010**  
 SYNLUBE INTERNATIONAL CO LTD  
 76/1 MOO.7 THACHIN  
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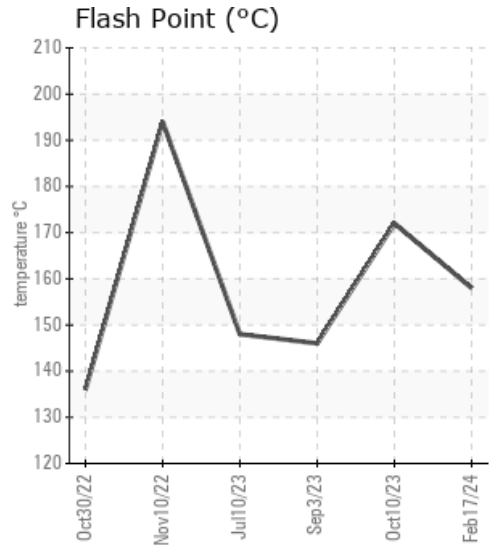
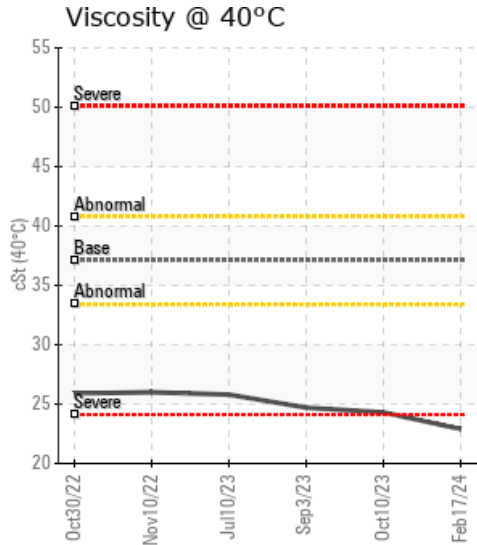
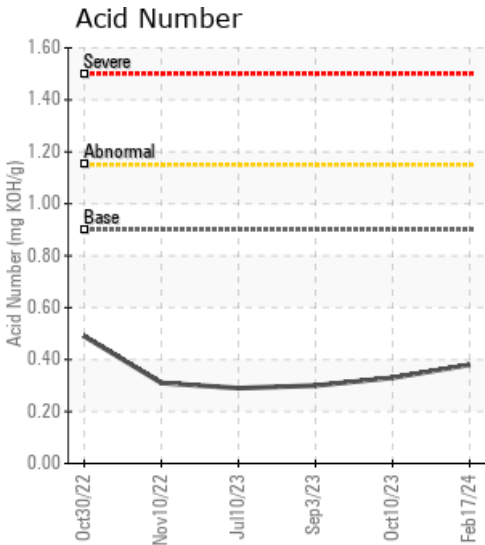
**System Information**  
 System Volume: 16000 ltr  
 Bulk Operating Temp: 554F / 290C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID  
 Make: WANSON

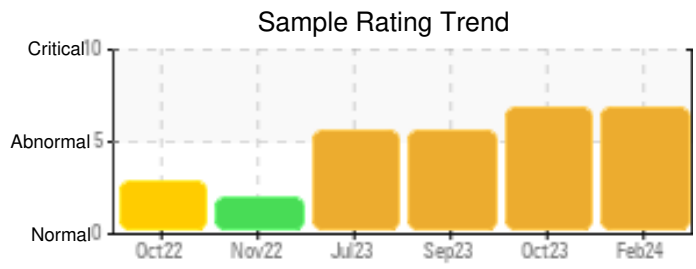
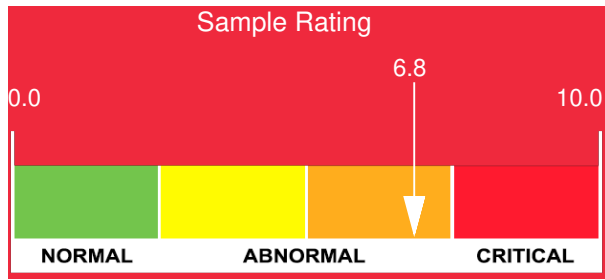
**Sample Information**  
 Lab No: 02619419  
 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I  
 Sample Date: 02/17/24  
 Received Date: 03/01/24  
 Completed: 03/06/24  
 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

**Recommendation:** We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. We recommend an early resample to monitor this condition.

**Comments:** (GCD) 90% Distillation Point is severely high. COC Flash Point is severely low. Visc @ 40°C is abnormally low. (GCD) % < 335°C is marginally high. (GCD) 10% Distillation Point is marginally low.

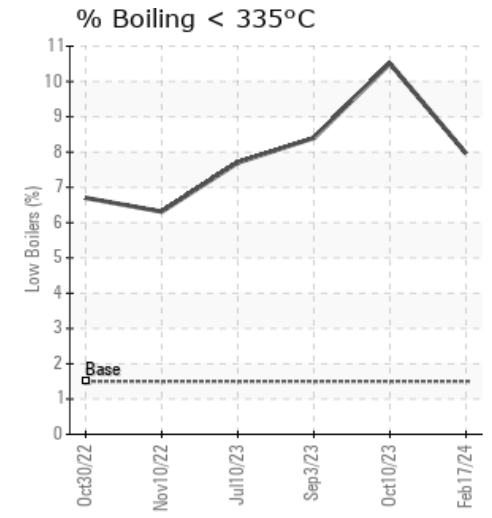
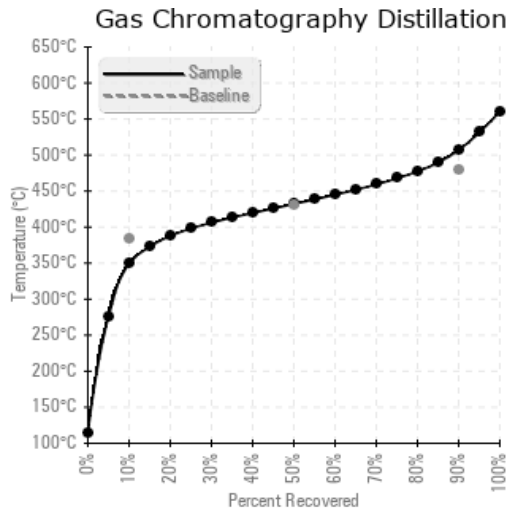
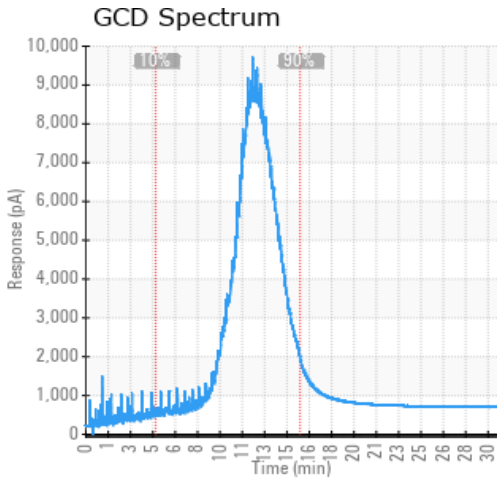
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/17/24	03/01/24	32.0m		316 / 158	18	22.9	0.38	0.037	661 / 349	810 / 432	944 / 507	7.96
10/10/23	10/30/23	30.0m		342 / 172	27.6	24.3	0.33	0.013	618 / 325	800 / 427	918 / 492	10.51
09/03/23	09/13/23	29.0m		295 / 146	18.1	24.7	0.30	0.033	652 / 345	804 / 429	922 / 494	8.40
07/10/23	07/14/23	27.0m	supply return	298 / 148	22.2	25.8	0.29	0.083	661 / 350	806 / 430	921 / 494	7.70
11/10/22	12/22/22	18.0m		381 / 194	17.3	26.0	0.31	0.020	679 / 359	811 / 433	924 / 496	6.31
<b>Baseline Data</b>				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
02/17/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
10/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
09/03/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1
07/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1
11/10/22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
<b>Baseline Data</b>			0	0						0			0	0				0	0				230	

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



**Historical Comments**

10/10/23	We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. We recommend an early resample to monitor this condition. COC Flash Point is severely low. Visc @ 40°C is abnormally low. (GCD) 90% Distillation Point is marginally high.
09/03/23	We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. We recommend an early resample to monitor this condition. COC Flash Point is severely low. Visc @ 40°C is abnormally low. (GCD) 90% Distillation Point is marginally high.
07/10/23	We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. We recommend an early resample to monitor this condition. COC Flash Point is severely low. Visc @ 40°C is abnormally low. (GCD) 90% Distillation Point is marginally high.
11/10/22	The flash point has recovered significantly. We recommend that you continue to vent the expansion tank to remove low boilers every month. We recommend an early resample to continue to monitor this condition. (GCD) 90% Distillation Point is abnormally high. Visc @ 40°C is abnormally low. COC Flash Point is marginally low.

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