

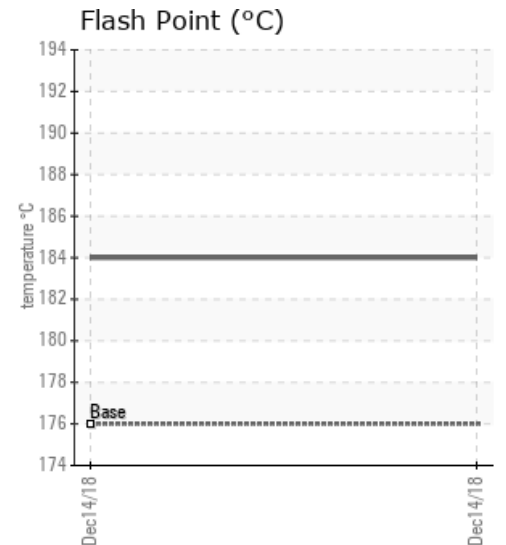
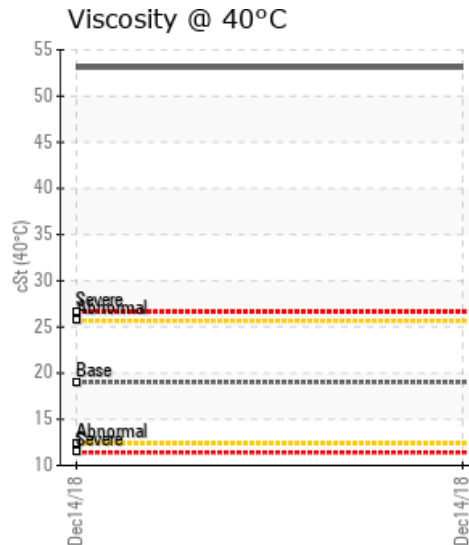
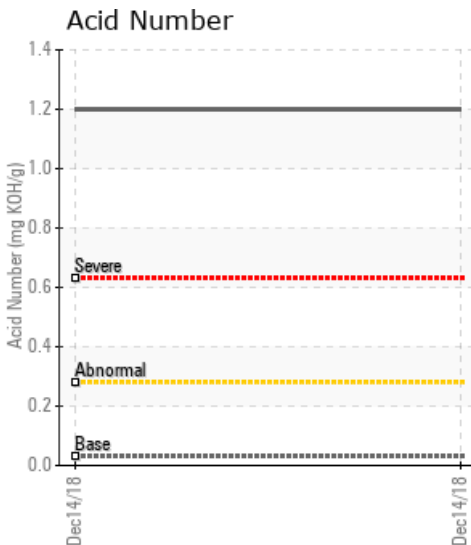
## WA RUBBERMATE SUPPLY

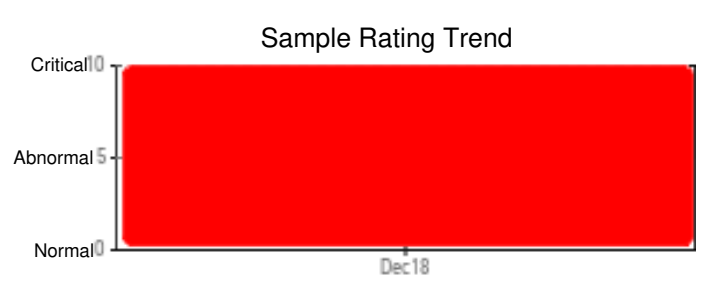
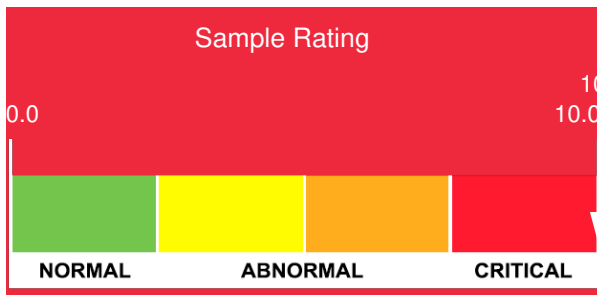
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 14000 ltr Bulk Operating Temp: 500F / 260C Heating Source: Blanket: Fluid: MONSANTO THERMINOL 55 Make: THERMAN	Lab No: 02261060 Analyst: Yutong Gao Sample Date: 12/14/18 Received Date: 01/09/19 Completed: 01/14/19

**Recommendation:** The current fluid contains substantially high level of particles, so that the oil viscosity has been more than doubled. The Acid Number is very high indicating the severe oil oxidation. The carbon deposits and fluid sludge inside the piping and heating coils are expected to high. Please conduct a visual inspection if it is possible and plan a fluid change in the future.

**Comments:** PQ levels are severe. Iron ppm levels are abnormal. Pentane Insolubles levels are severely high. Water contamination levels are marginally high. Acid Number (AN) is severely high. Zinc ppm levels are severely high. Visc @ 40°C is severely high.

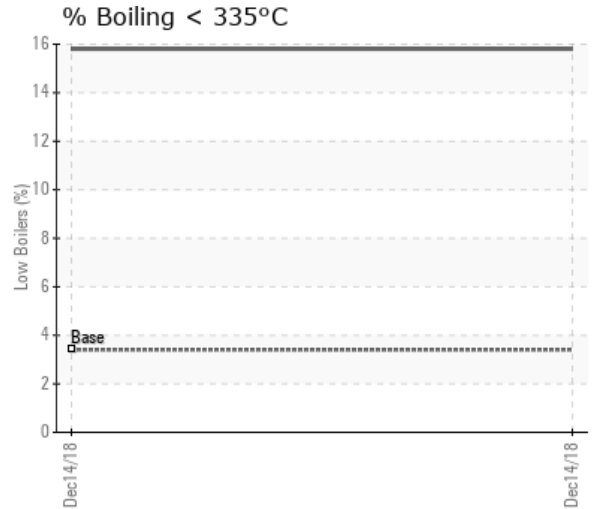
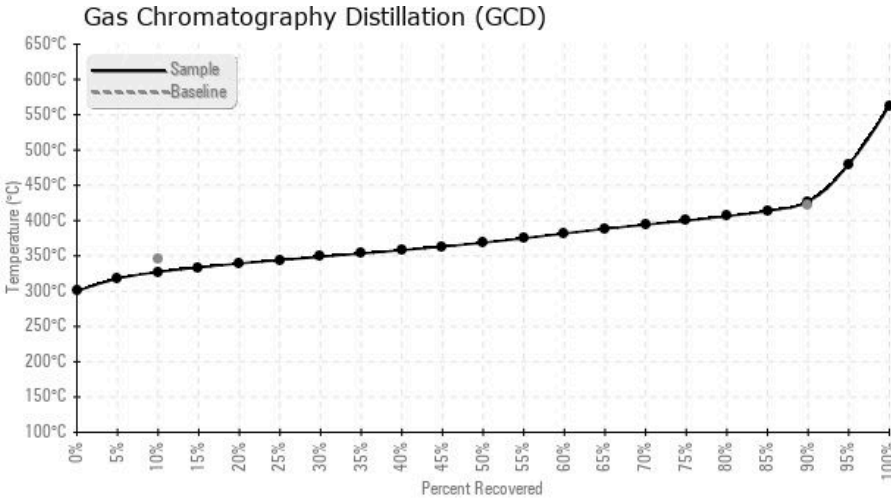
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
12/14/18	01/09/19	9y		363 / 184	539.4	53.1	1.20	13.3	621 / 327	696 / 369	800 / 427	15.81
Baseline Data				349 / 176		19.0	0.03		655 / 346		790 / 421	3.40





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
12/14/18	379	0	0	2	0	0	0	0	0	0	11	3	1	0	0	0	6	0	0	3	15	2	0	85
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


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