

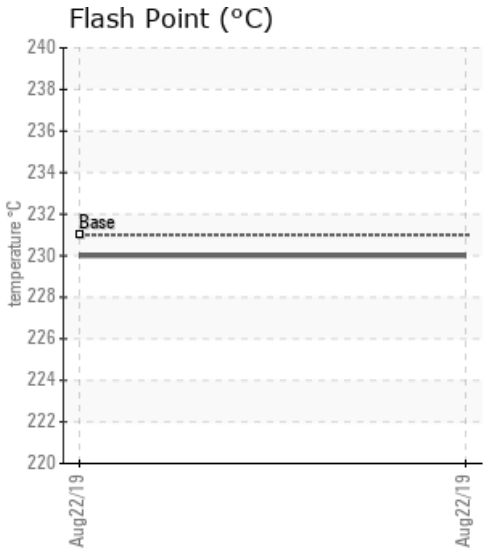
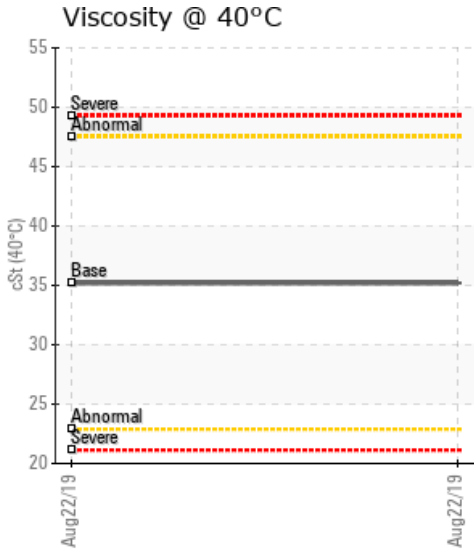
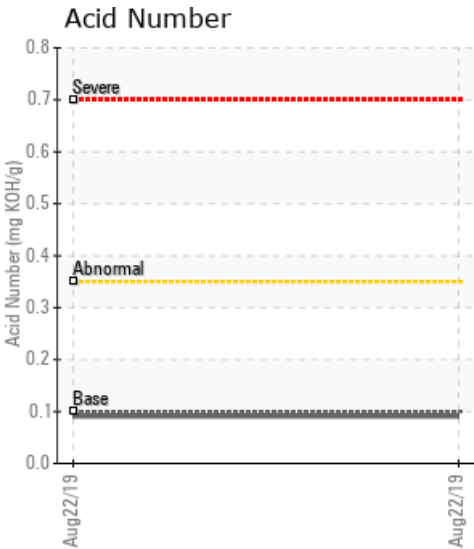
EIAM E-SAN (PLANT 4-NEW PLANT) SUPPLY

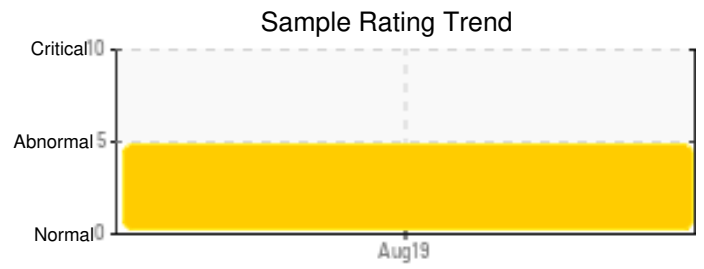
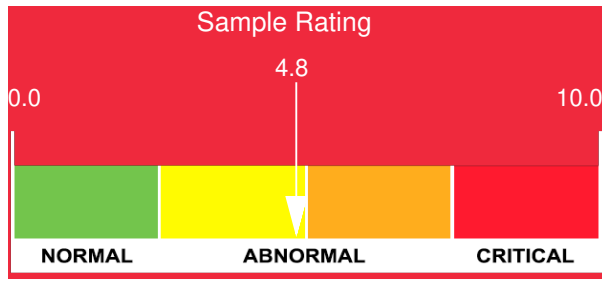
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: Kittisak Suthithanakom Tel: 6(681)850-1907 E-Mail: kittisak@synlube.co.th	System Volume: 12095 ltr Bulk Operating Temp: 374F / 190C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO HTF Make: ECO	Lab No: 02306371 Analyst: Yutong Gao Sample Date: 08/22/19 Received Date: 09/04/19 Completed: 09/05/19

Recommendation: The current fluid has normal viscosity, flash point, and the distillation points. The Acid Number and Solid content are all low, meaning minimum oil oxidation. However, the fluid is contaminated by water, please trouble shoot how the water got into the oil. The water can be boiled off through the expansion tank area. Continue to run the fluid and take one sample in the 12 months.

Comments: Water contamination levels are severely high.

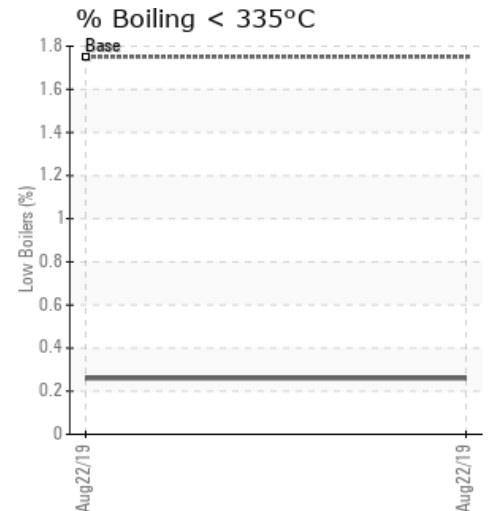
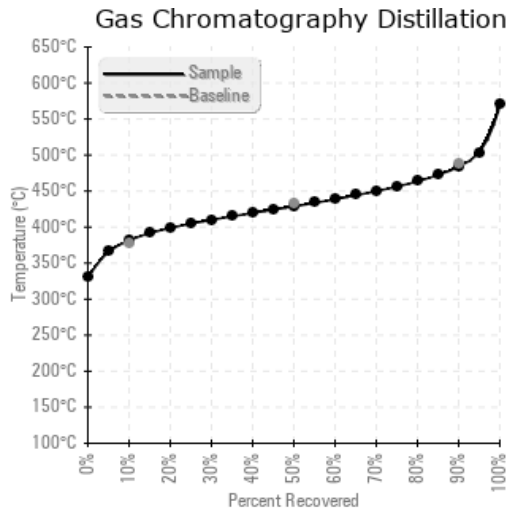
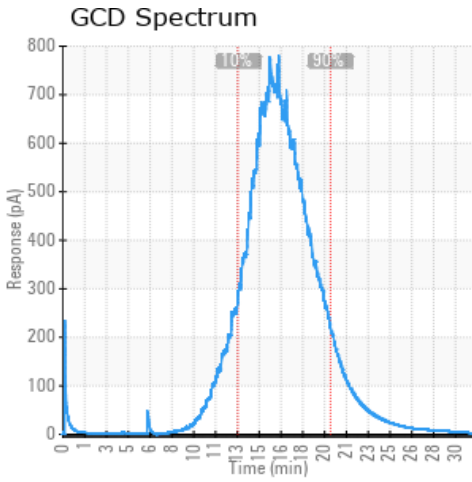
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
08/22/19	09/04/19	3m		446 / 230	1562.0	35.2	0.091	0.109	719 / 381	804 / 429	903 / 484	0.26
Baseline Data				448 / 231		35.20	.1		712 / 378	810 / 432	910 / 488	1.75





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	
08/22/19	27	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	217	0	
Baseline Data			0	0						0			0	0					0					280	

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



Historical Comments

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