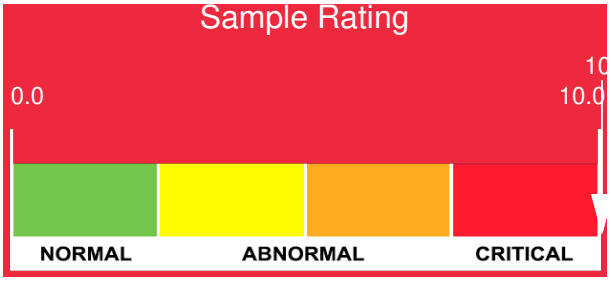
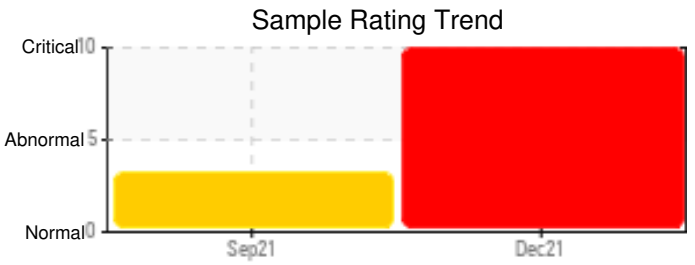




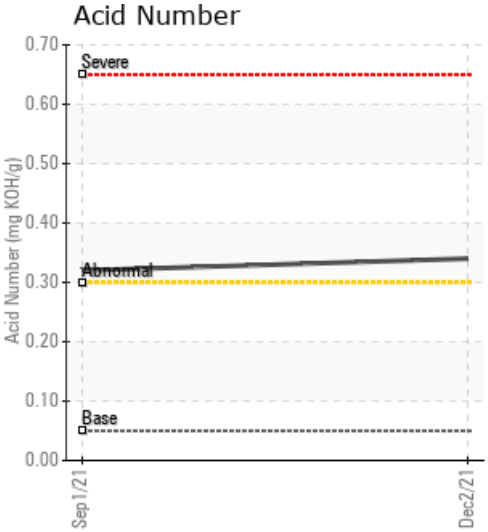
[SYNLUBE (THAILAND)] FOOD FOR THE WORLD

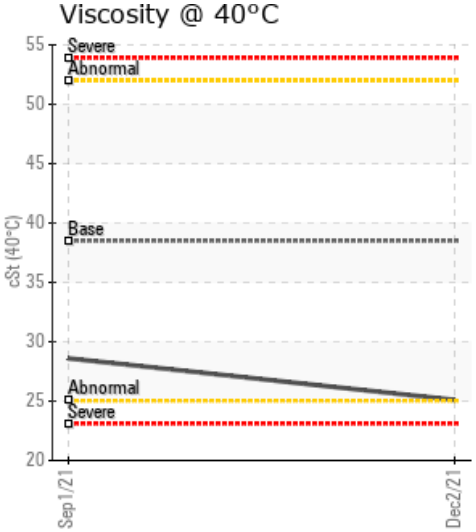
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 20000 ltr Bulk Operating Temp: 527F / 275C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 Make: HOVEL	Lab No: 02463466 Analyst: Philip Riley Sample Date: 12/02/21 Received Date: 12/21/21 Completed: 02/01/22 Philip Riley philip.riley@hollyfrontier.com

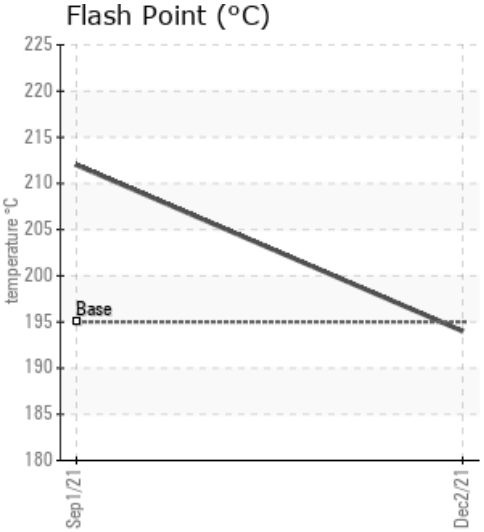
Recommendation: Not familiar with the chemistry of the Shell product.However, water level is extremely high and needs to be removed. SOurce of water ingress should be identified and rectified. Longer term I would expect the water to cause operational issues, acid increase, oxidation and corrosion within the system.Recommend an oil change, clean, flush and refill with CALFLO AF (most likely) but would discuss system conditions to best scope out product

Comments: ppm Water contamination levels are severely high. Water contamination levels are severely high. Water contamination levels are severely high.. Pentane Insolubles levels are severely high. (GCD) 90% Distillation Point is severely low. Acid Number (AN) is abnormally high.

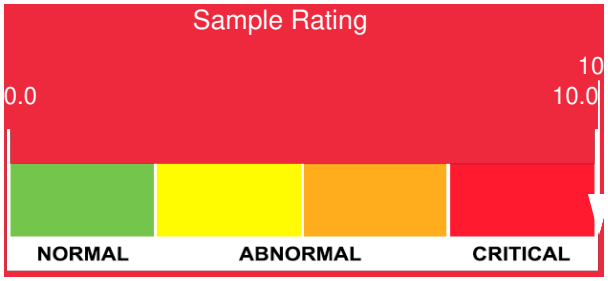
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
12/02/21	12/21/21	48.0m		381 / 194	6654.4	25.1	0.34	0.594	696 / 369	791 / 422	872 / 466	6.08
09/01/21	10/06/21	36.0m		414 / 212	44.7	28.6	0.32	0.208	725 / 385	798 / 425	874 / 468	2.89
Baseline Data				383 / 195		38.5	0.05		718 / 381	819 / 437	914 / 490	3.9

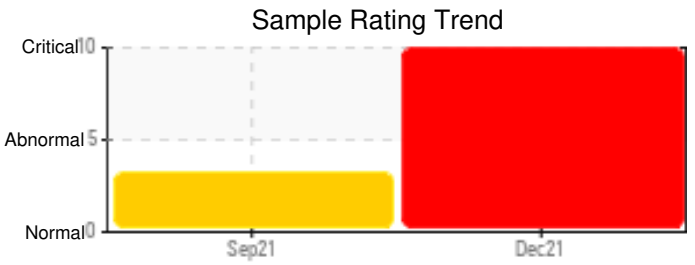






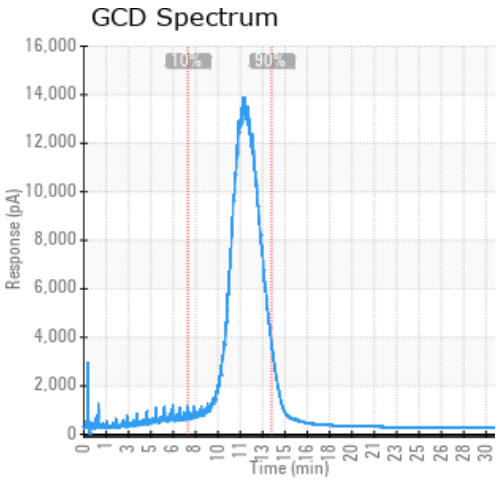
PETRO-CANADA LUBRICANTS

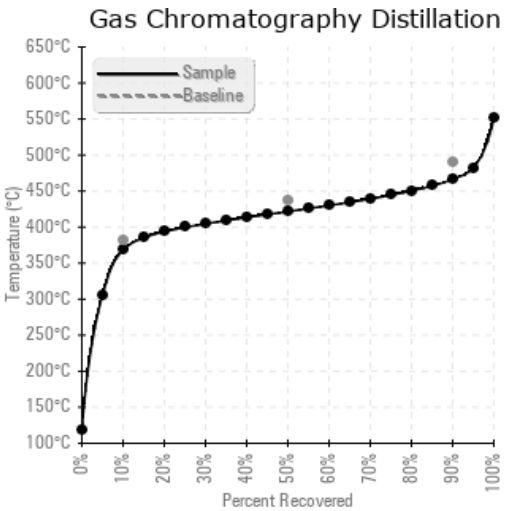


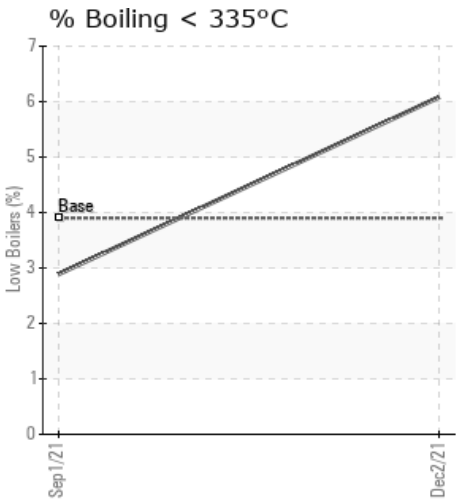


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
12/02/21	22	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0	3	2
09/01/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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

09/01/21	Competitor Fluid so do not have full visibility of parameters. Acid number raises some concern as this will trigger the degradation of the fluid. (GCD) 90% Distillation Point is severely low. Acid Number (AN) is abnormally high.