



ENSAH HEAT TRANSFER

Customer: PTRHTF40074	System Information	Sample Information
LUBRICON LTD STI ATASEHIR ISTANBUL ISTANBUL, 34770 Attn: Murat Baslilar Tel: x: E-Mail: mbaslilar@lubricon.com.tr	System Volume: 10000 ltr Bulk Operating Temp: 536F / 280C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: ENSAH	Lab No: 02251216 Analyst: Philip Riley Sample Date: 11/03/18 Received Date: 11/13/18 Completed: 11/26/18

Recommendation: A number of parameters lead to a poor sample rating and overall recommendation to change fluid, including a flush, based on this sample. It looks to be a stand alone sample and there is no history to draw from this sample. The viscosity is extremely high vs the expected (water ingress may have some influence on this but not to this extent), acid number is very high and so are the insoluble. This points to fluid degradation in the fact there are high levels of insoluble matter, the viscosity is raised. Recommend a fluid change, flush/clean ahead of refill based on this sample

Comments: Pentane Insolubles levels are severely high. Water contamination levels are marginally high. Water contamination levels are marginally high.. ppm Water contamination levels are marginally high. Acid Number (AN) is severely high. Visc @ 40°C is severely high. COC Flash 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	%
11/03/18	11/13/18	36708h		403 / 206	543.8	59.3	1.77	9.34	710 / 376	802 / 428	893 / 479	1.43
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5



