



[ODE YALITIM] MEMBRANE UNIT

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: 25000 ltr Bulk Operating Temp: 435F / 224C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 Make: ERENSAN	Lab No: 02417598 Analyst: Luis Rodriguez Sample Date: 04/16/21 Received Date: 04/28/21 Completed: 05/05/21 Luis Rodriguez luis.rodriguez@hollyfrontier.com

Recommendation: Asphalt contamination visible due to vanadium level. High TAN indicates risk of system corrosion and tendency for sludge deposit. High viscosity reduces fluids ability to transfer heat. Pentane Insolubles confirm contamination, corrosion and oil degradation. ACTION: Fix asphalt leak and replace fluid afterwards. Clean and flush recommended.

Comments: Vanadium ppm levels are marginal. Pentane Insolubles levels are severely high. Visc @ 40°C is severely high. Acid Number (AN) is abnormally high. COC Flash Point is abnormally high. (GCD) 90% Distillation Point is abnormally 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	%
04/16/21	04/28/21	4.0y	BOILER	460 / 238	248.1	106	0.65	5.11	726 / 386	800 / 427	884 / 473	1.10
Baseline Data				383 / 195		38.5	0.05		718 / 381	819 / 437	914 / 490	3.9



