

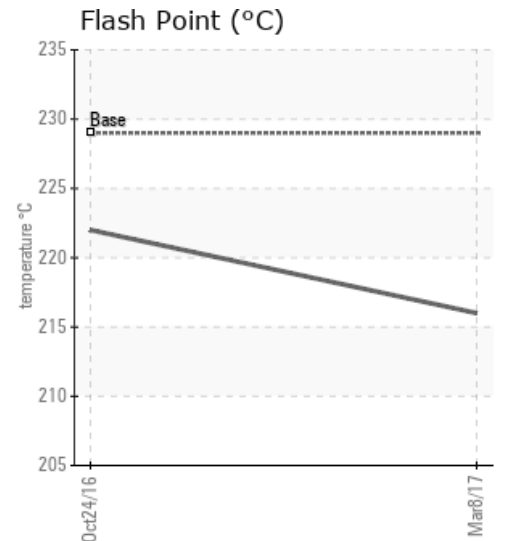
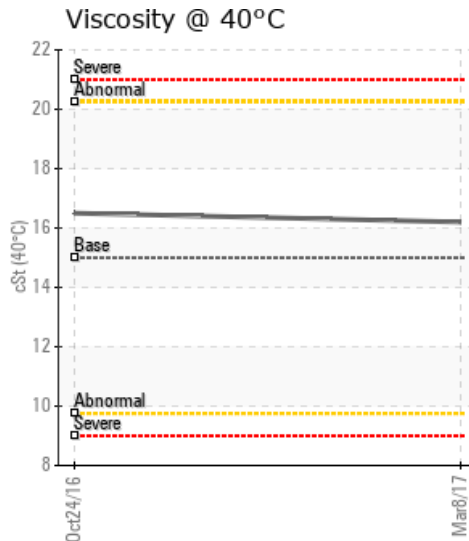
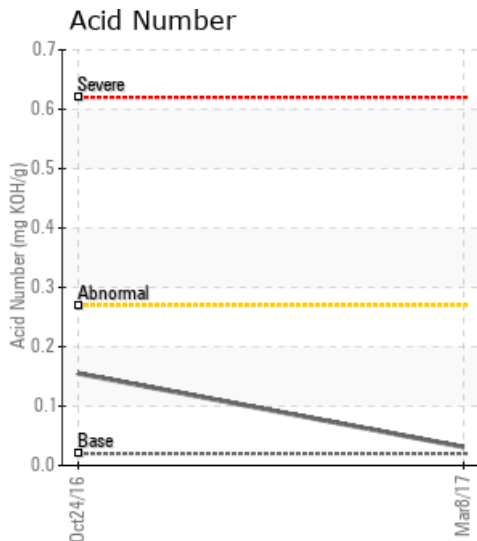
LINE 26 BOILER 4

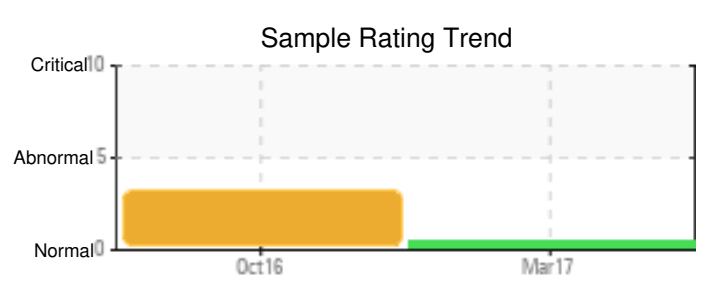
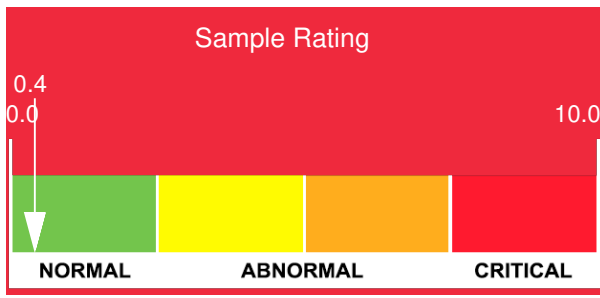
Customer: PTRHTF10179	System Information	Sample Information
SHAW INDUSTRIES PLANT SI 12454 NORTH US HWY 27 CHICKAMAUGA, GA 30707 USA Attn: Randy Visage Tel: (706)375-3121 E-Mail: randy.visage@shawinc.com	System Volume: 250 gal Bulk Operating Temp: 450F / 232C Heating Source: Blanket: Fluid: COASTAL THERMALANE 800 Make:	Lab No: 02132748 Analyst: Manny Garcia Sample Date: 03/08/17 Received Date: 03/15/17 Completed: 03/27/17

Recommendation: The Clean & Flush of this system was performed satisfactory as all of the lab analysis results are satisfactory. Please move forward with the conversion of the system to Petro-Canada Calflo LT and continue annual fluid analysis samples

Comments: All system parameters are satisfactory for this heat transfer fluid system

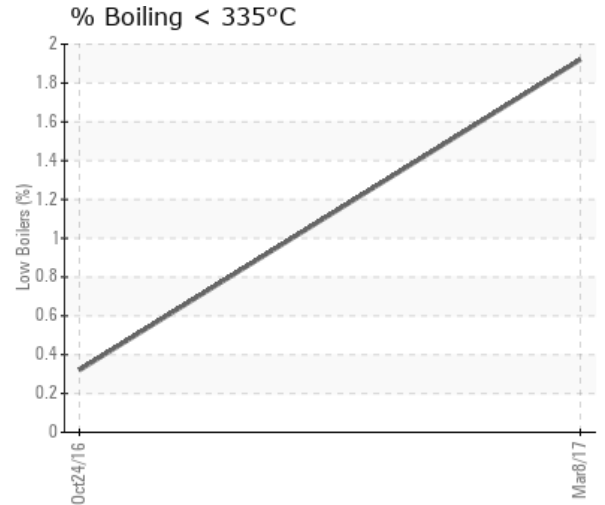
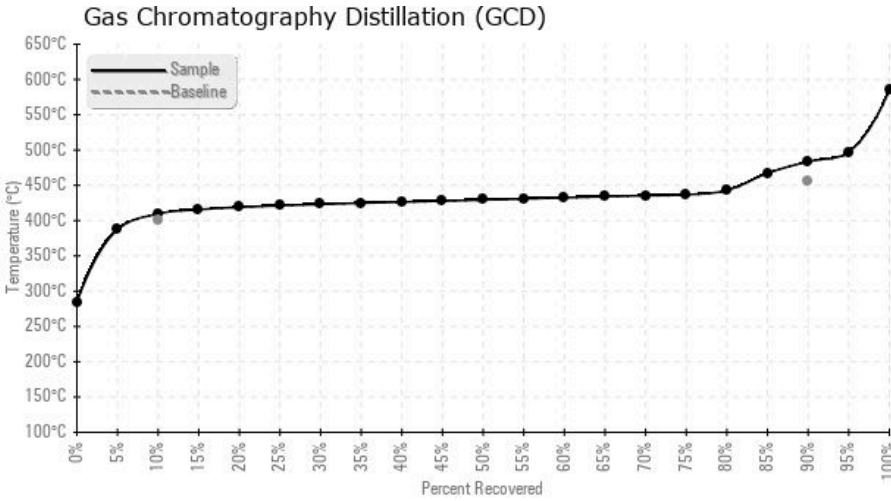
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/08/17	03/15/17	3c	FILL LINE	421 / 216	9.5	16.2	0.031	0.041	769 / 410	805 / 429	903 / 484	1.92
10/24/16	11/01/16	0c	FILL LINE	432 / 222	41.1	16.5	0.155	0.073	751 / 399	809 / 432	898 / 481	0.32
Baseline Data				444 / 229		15	0.02		754 / 401		853 / 456	0.0





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
03/08/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/24/16	12	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	72	0	1	0
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	
10/24/16	The system fluid may be mitigated by 'venting' to improve the low boilers in the fluid and reduce the 90% distillation curve figures/There are some contaminants found in this sample that are not part of this heat transfer fluid chemistry/Contaminant metals may be filtered out to improve efficiency/Depending on the age of this fluid, it may be an opportunity to drain, flush and re-fill with Petro-Canada Heat Transfer Fluid - Cafflo product.Wear Metals are low/Contaminants are present/Calcium ppm levels are severely high/Water is moderate at 41.1ppm/Viscosity is satisfactory/Flash point is Satisfactory/Sodium ppm levels are abnormally high/Pentane In-solubles are satisfactory/Very Light White Metals and Debris/(GCD) 90% Distillation Point is abnormally high.

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