

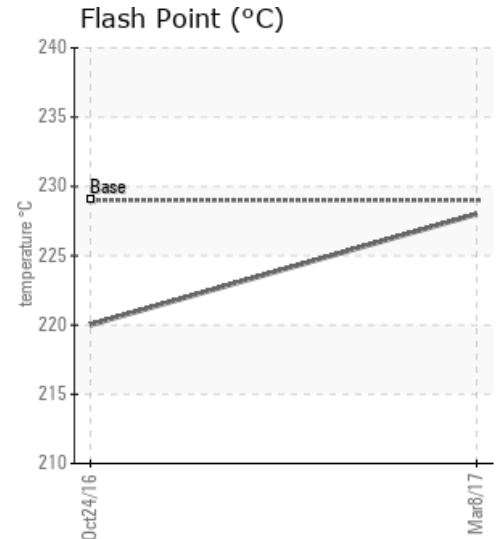
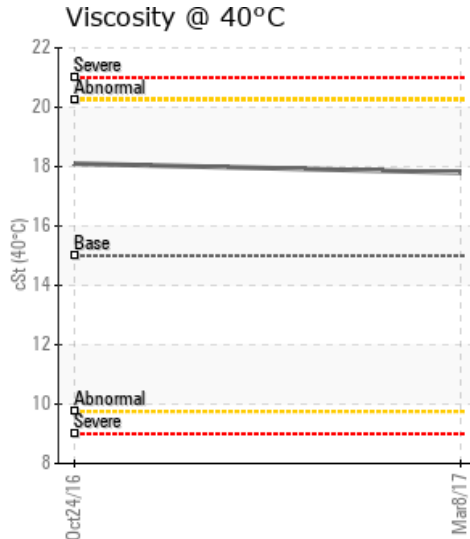
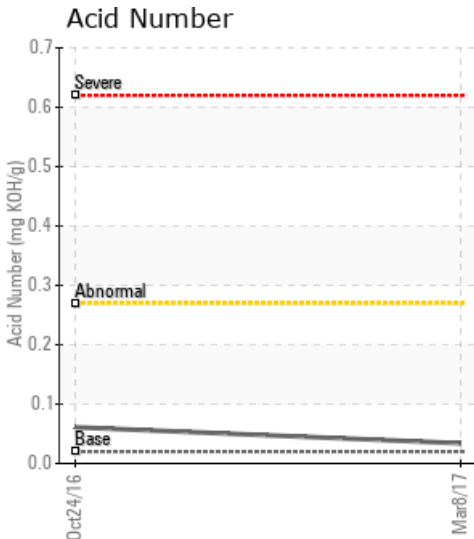
LINE 26 BOILER 3

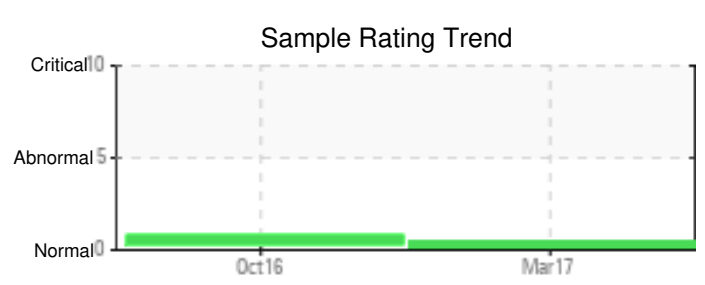
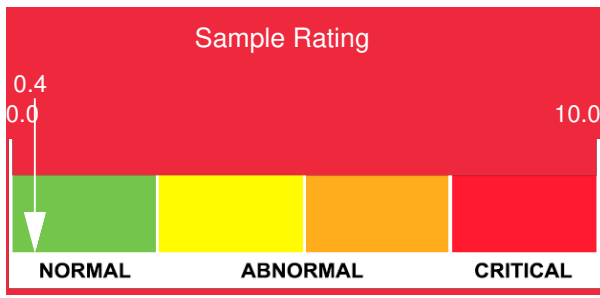
Customer: PTRHTF10179	System Information	Sample Information
SHAW INDUSTRIES PLANT SI 12454 NORTH US HWY 27 CHICKAMAUGA, GA 30707 USA Attn: Randy Visage Tel: (706)375-3121 E-Mail: randy.visage@shawinc.com	System Volume: 250 gal Bulk Operating Temp: 450F / 232C Heating Source: Blanket: Fluid: COASTAL THERMALANE 800 Make:	Lab No: 02132750 Analyst: Manny Garcia Sample Date: 03/08/17 Received Date: 03/15/17 Completed: 03/28/17

Recommendation: All system parameters are satisfactory for this heat transfer fluid system. 90% distillation figures are elevated and 'venting' the system is recommended to mitigate this situation.

Comments: 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

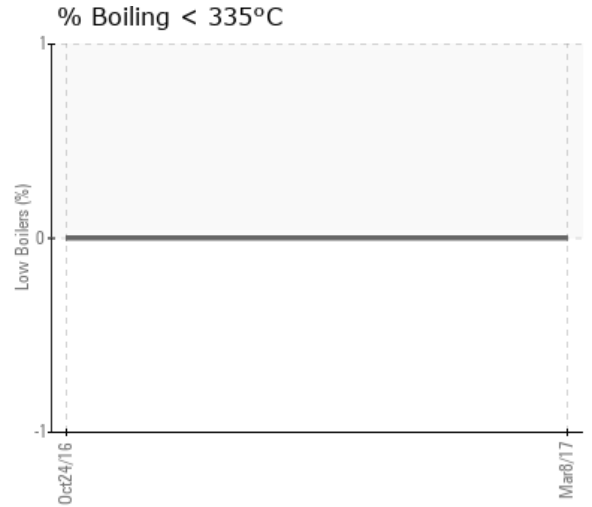
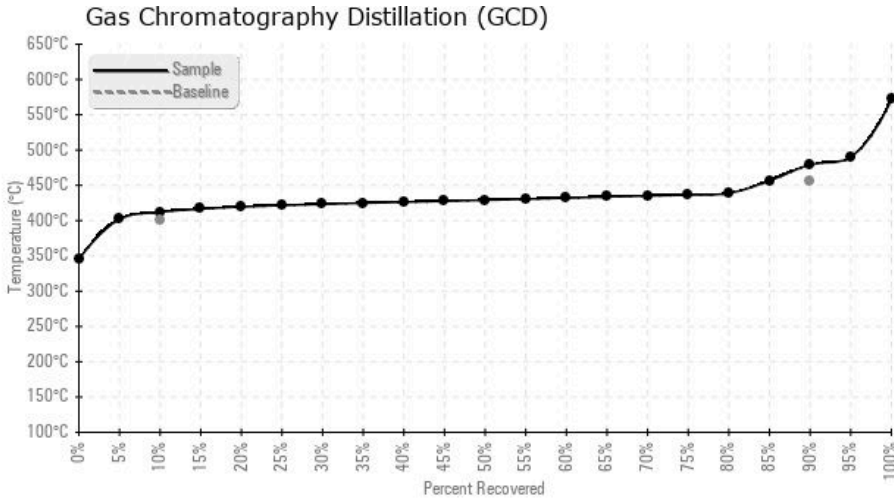
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/08/17	03/15/17	3c	FILL LINE	442 / 228	12.7	17.8	0.034	0.030	774 / 412	804 / 429	895 / 479	0.00
10/24/16	11/01/16	0c	FILL LINE	428 / 220	3.1	18.1	0.061	0.069	778 / 415	811 / 433	898 / 481	0.00
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	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	System Fluid should be filtered to remove some of the metal debris/Venting the system may improve the low boilers improving the 90% distillation curve/Any maintenance work on this system should be backed up with another sample to verify improvement.Wear metals are low/Contamination is low/Water is low at 3.1ppm/Pentane insoluble are low/viscosity is satisfactory/Flash Point is good/(GCD) 90% Distillation Point is abnormally high/Light Debris visible/Very Light White metal