

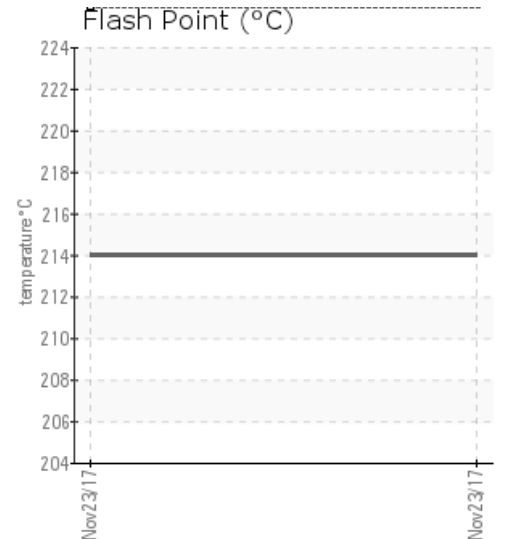
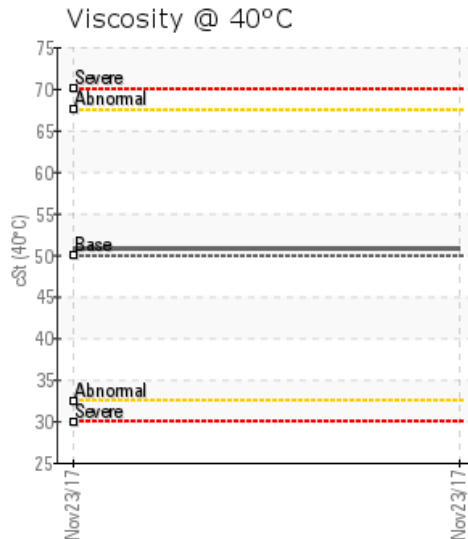
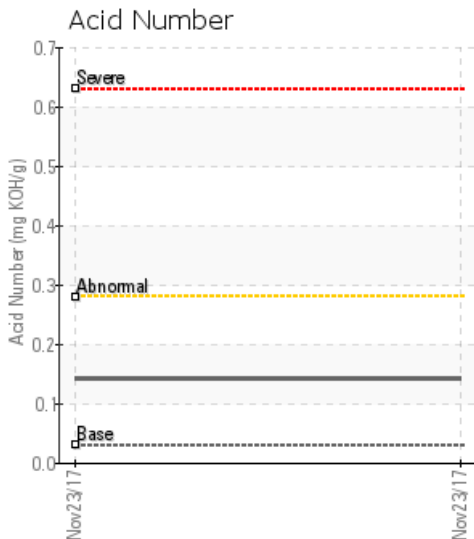
## [SHANGHAI ENERGY / LSD: A-26-K/94-1-11] SHANGHAI ENERGY HEATER

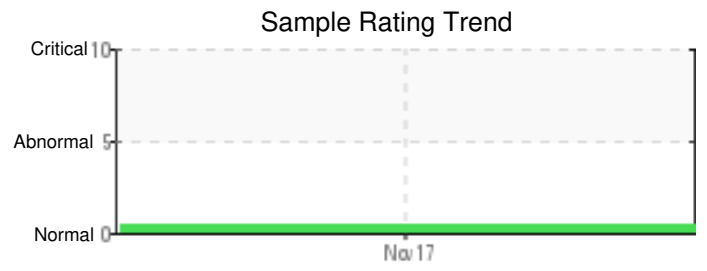
Customer: PTRHTF20175	System Information	Sample Information
QUADRA CHEMICALS 7802 98 STREET CLAIRMONT, AB T0H 0W0 Canada Attn: Daryl Key Tel: (780)296-0137 E-Mail: daryl_key@quadra.ca	System Volume: 25000 ltr Bulk Operating Temp: 392F / 200C Heating Source: Blanket: Fluid: SUNOCO SUN HEAT TRANSFER 21 PD Make:	Lab No: 02194796 Analyst: Clinton Buhler Sample Date: 11/23/17 Received Date: 01/25/18 Completed: 01/29/18 To discuss this report contact Clinton Buhler at 780-516-9920

Recommendation: Sample results indicate that the heat transfer fluid is suitable for continued service. Consider re-sampling in 12 months to continue monitoring of fluid and heater condition. Please include Heater make, model and unit ID for future samples.

Comments:

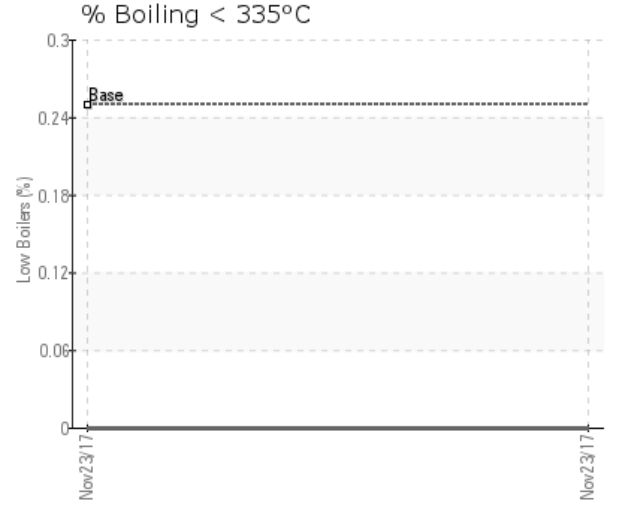
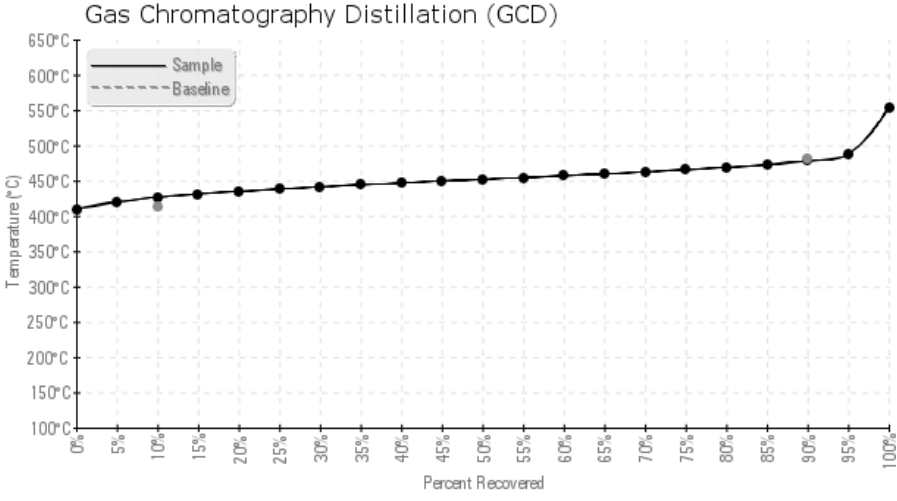
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/23/17	01/25/18	14y		417 / 214	9.1	50.8	0.142	0.068	800 / 426	845 / 452	893 / 478	0.00
Baseline Data				439 / 226		50.0	0.03		777 / 414		900 / 482	0.25





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
11/23/17	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<b>Baseline Data</b>			0	0						0			0	0					0				0	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



### Historical Comments


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