

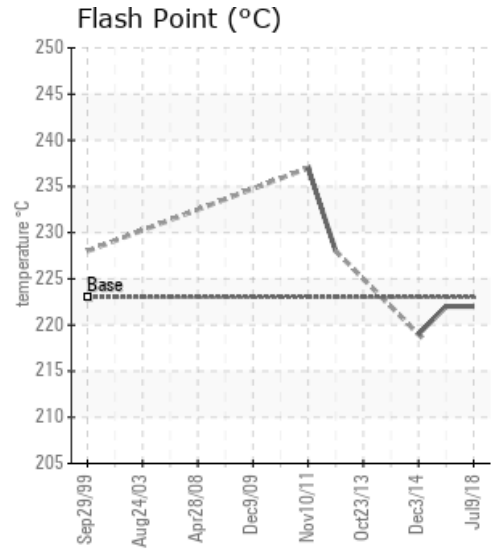
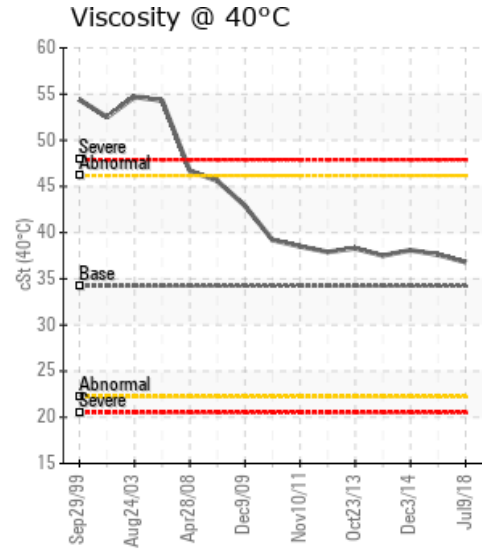
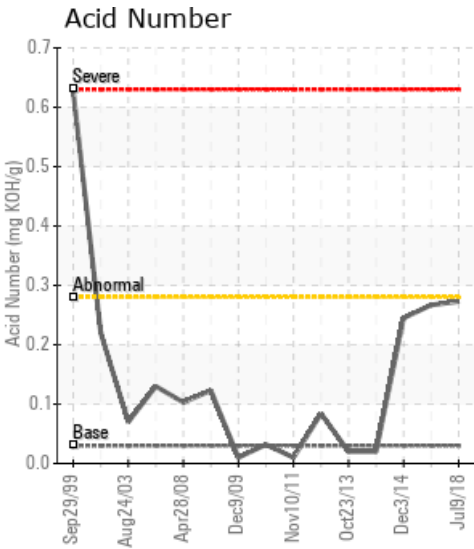
B7 BURNER

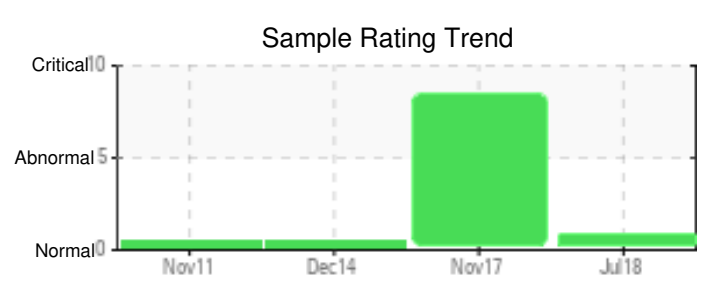
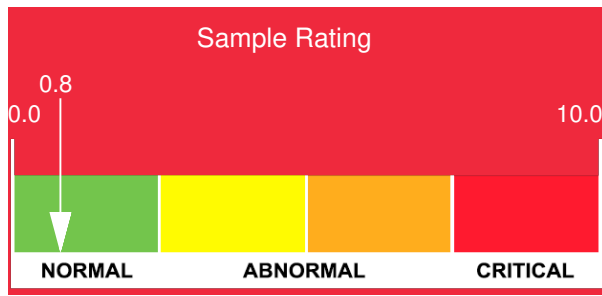
Customer: PTRHTF30052	System Information	Sample Information
I G MACHINES AND FIBER 87 ORENDA RD. BRAMPTON, ON L6W 1V7 Canada Attn: Alan Zhao Tel: (905)457-2880 E-Mail: alan.zhao@iko.com	System Volume: 10000 ltr Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 02230161 Analyst: Lynn Billings Sample Date: 07/09/18 Received Date: 07/24/18 Completed: 07/26/18 To discuss this report contact Lynn Billings at (289)523-0262

Recommendation: Fluid in system has improved from last test. The pentane insoluble are still slightly high and the sodium level has been significantly reduced. Acid number and flash point are relatively stable. Suggest to retest system in 9 months.

Comments: Pentane Insolubles levels are abnormally high.

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	%
07/09/18	07/24/18	10m	BRANCH LINE	432 / 222	42.7	36.8	0.273	0.431	724 / 385	795 / 424	898 / 481	0.00
11/09/17	11/10/17	1m		432 / 222	67.8	37.6	0.267	0.595	707 / 375	784 / 418	872 / 466	0.93
12/03/14	12/03/14	0m		426 / 219	9.3	38.1	0.245	0.070	706 / 374	810 / 432	917 / 492	1.11
11/19/14	11/20/14	0m				37.5	0.02					
10/23/13	10/24/13	0m				38.3	0.02					
08/06/12	08/07/12	0m	HOT OIL BURNER	442 / 228		37.9	0.084					
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00

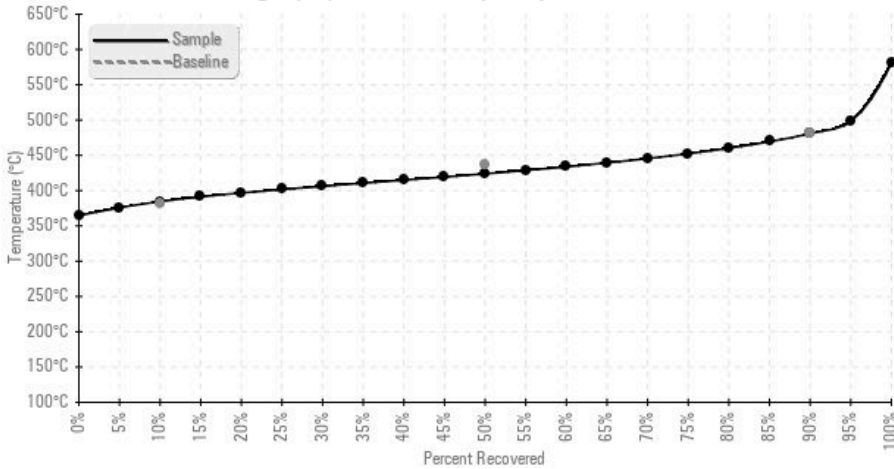




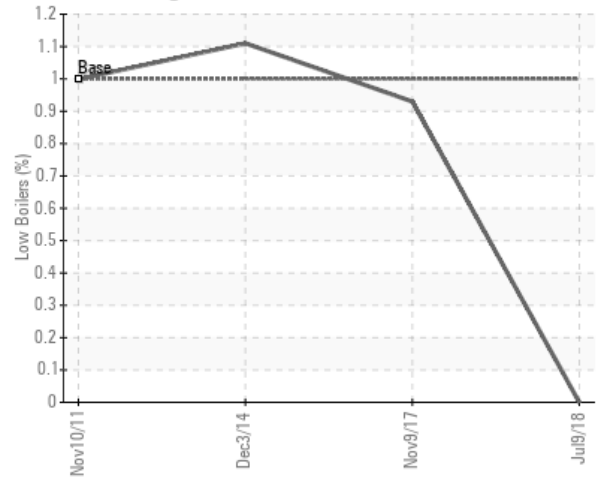
Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
07/09/18	15	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	1	0	0	1	2	0	0	0
11/09/17	37	0	0	0	0	0	1	0	0	0	0	72	3	0	0	0	2	0	0	1	1	0	0	0
12/03/14	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/19/14	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	1	1
10/23/13	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0
08/06/12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Baseline Data			0	0						0		0	0					0				0		

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

Gas Chromatography Distillation (GCD)



% Boiling < 335°C



Historical Comments

11/09/17	This fluid still indicates contamination from the soap that was mistakenly put in the system. (Sodium and Potassium level are abnormal). A discussion with the customer is recommended. Pentane Insolubles levels are severely high. Sodium ppm levels are severely high. (GCD) 90% Distillation Point is abnormally low.
12/03/14	Routine Monitoring - no action required at this time. Resample again in 12 months.
11/19/14	Resample at the next service interval to monitor. WearCheck recommends using HTTFL sample kits for heat transfer fluids. Please contact us at 1-800-268-2131 and provide a purchase order for \$245 + HST in order to conduct additional testing (boiling points @ 10%, 50%, and 90%, percent boiling < 335°C, and solids) to determine the suitability for continued use. All component wear rates are normal. There is no indication of any contamination in the component. (unconfirmed). The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.
10/23/13	Resample at the next service interval to monitor. WearCheck recommends using HTTFL sample kits for heat transfer fluids. Please contact us at 1-800-268-2131 and provide a purchase order for \$245 + HST in order to conduct additional testing (boiling points @ 10%, 50%, and 90%, percent boiling < 335°C, and solids) to determine the suitability for continued use. (not applicable) There is no indication of any contamination in the component. (unconfirmed). The AN level is acceptable for this fluid. The condition of the fluid is acceptable for the time in service (unconfirmed).
08/06/12	We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. Particles >14µm and particles >21µm and particles >6µm are severely high. Particles >38µm are abnormally high. The TAN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

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