

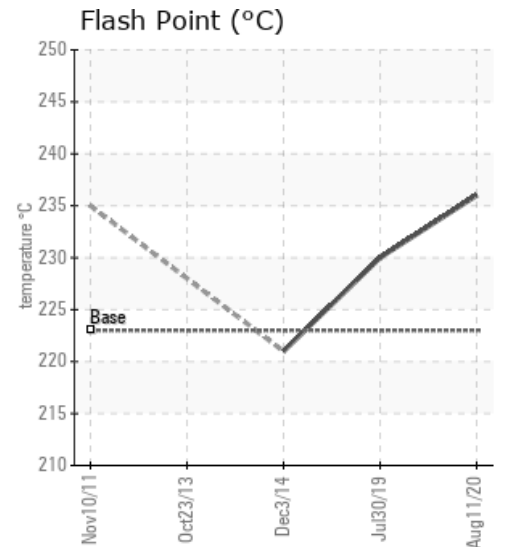
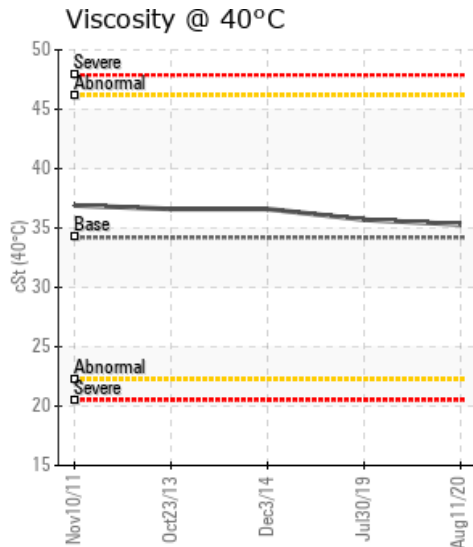
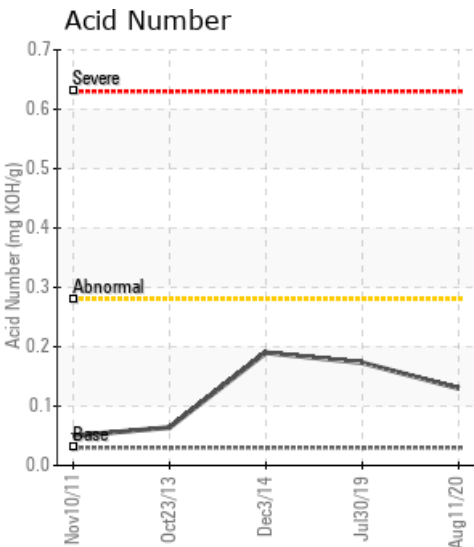
## IKO TANK FARM

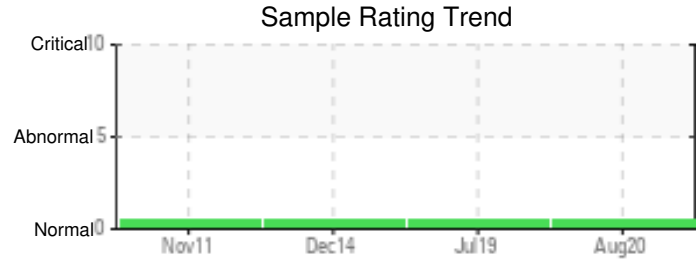
Customer: PTRHTF30052	System Information	Sample Information
I G MACHINES AND FIBER 87 ORENDA RD. BRAMPTON, ON L6W 1V7 Canada Attn: Alan Zhao Tel: (905)457-2880 E-Mail: alan.zhao@iko.com	System Volume: 10000 ltr Bulk Operating Temp: 392F / 200C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 02370648 Analyst: Lynn Billings Sample Date: 08/11/20 Received Date: 08/14/20 Completed: 08/19/20 Lynn Billings lynn.billings@petrocanadalsp.com

Recommendation: Current analysis of Tank Farm sample indicates the fluid is suitable for continued service. The acid number and viscosity are consistent. No indication of wear metals. Pentane insoluble are lower from last sample analysis GCD and Flash Point are good. Resample at next interval.

Comments:

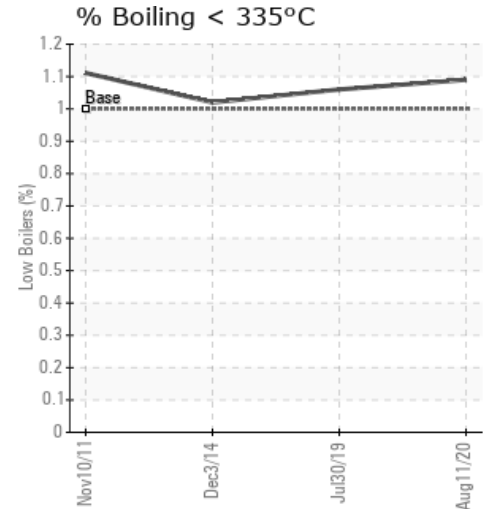
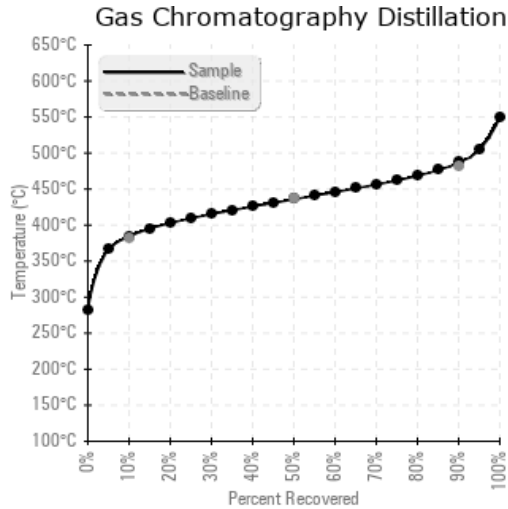
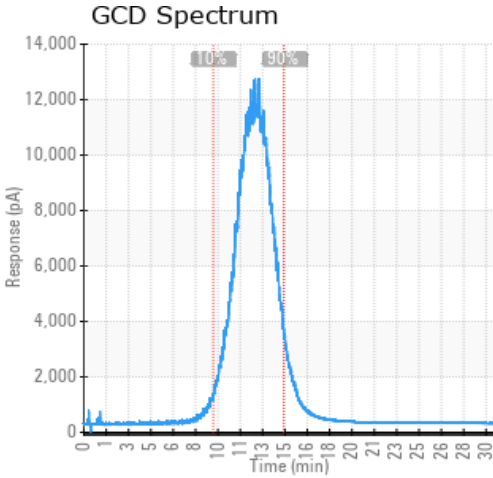
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
08/11/20	08/14/20	0h		457 / 236	3.7	35.3	0.13	0.065	724 / 384	816 / 436	908 / 487	1.09
07/30/19	08/12/19	0h	PIPING	446 / 230	30.3	35.7	0.173	0.159	715 / 380	814 / 434	905 / 485	1.06
12/03/14	12/03/14	0h		430 / 221	9.7	36.6	0.190	0.090	711 / 377	812 / 434	916 / 491	1.02
10/23/13	10/24/13	0h				36.6	0.064					
11/10/11	11/14/11	4h	MAIN SYSTEM	455 / 235	8	36.9	0.05	0.007	717 / 381	814 / 435	898 / 481	1.111
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
08/11/20	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07/30/19	46	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	2	0	0	0	5	0	0	0
12/03/14	16	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
10/23/13	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
11/10/11	2	0	0	0	0	0	1	0	0	0	5	0	0	0	0	1	0	0	3	0	0	1	3	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**

07/30/19	The fluid appears in good condition. All critical parameters are within optimal ranges.
12/03/14	Routine Monitoring - no action required at this time. Resample again in 12 months.
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). There is no indication of any contamination in the component. The condition of the fluid is acceptable for the time in service (unconfirmed).
11/10/11	All the properties tested indicate the fluid appears to be in great condition at this time. No action required other than re-sample in 6-9 months.

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