

# [A-72-F/94-H-3] TOURMALINE CONDY REBOILER

**Customer: PTRHTF20039**  
 BRENNTAG CANADA INC  
 3124-54TH AVENUE SE  
 CALGARY, AB T2C 0A8 CA  
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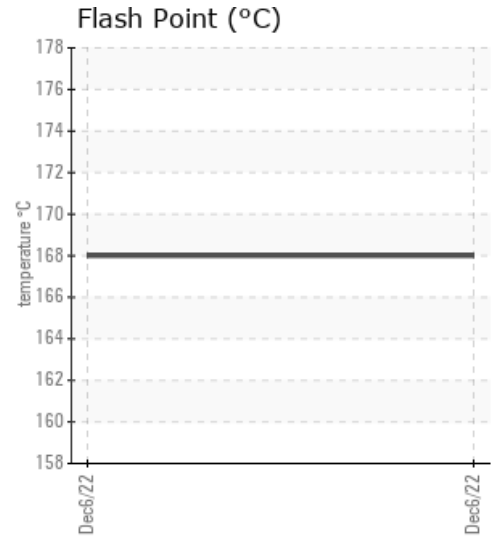
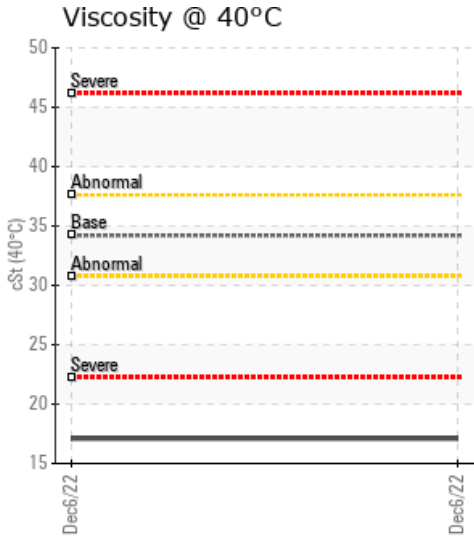
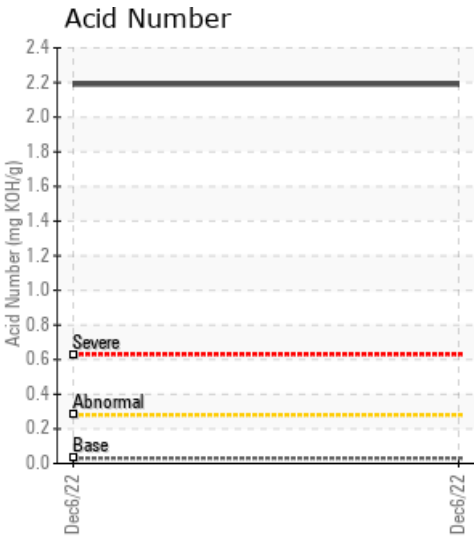
**System Information**  
 System Volume: 6000 ltr  
 Bulk Operating Temp: 356F / 180C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PETRO-THERM  
 Make: LINE HEATER

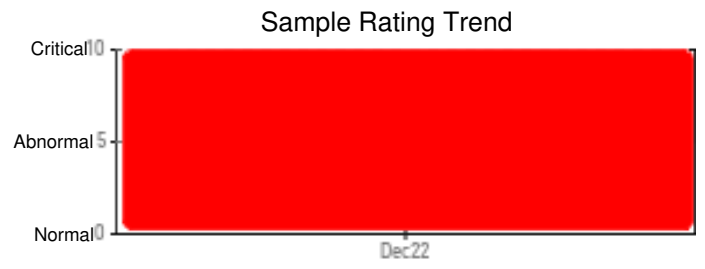
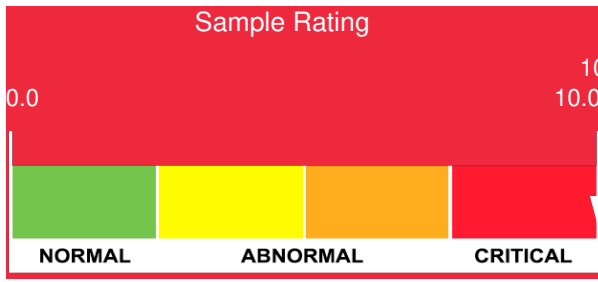
**Sample Information**  
 Lab No: 02533275  
 Analyst: Clinton Buhler  
 Sample Date: 12/06/22  
 Received Date: 01/13/23  
 Completed: 01/18/23  
 Clinton Buhler  
 Clinton.Buhler@HFSinclair.com

Recommendation: Sample results indicate excessive water contamination. It is advised to re-sample system immediately, but ensure that sample is drawn from a representative area that reflects hot fluid (ideally hot fluid in turbulent flow area if equipped with pumps). Do not sample from cool, low points. Thoroughly purge sample valve and related piping/tubing until hot fluid is coming out before drawing sample. If re-sample indicates the same, fluid replacement will be necessary, but we need to ascertain if this was a poor sample or not first. Drain any low points of potential free water and take measures to restrict entry of water into system.

Comments: Water contamination levels are severely high. ppm Water contamination levels are severely high. (GCD) % < 335°C is severely high. Acid Number (AN) is severely high. (GCD) 10% Distillation Point is severely low. (GCD) 50% Distillation Point is severely low. (GCD) 90% Distillation Point is severely low. Visc @ 40°C is severely low. COC Flash Point is abnormally low.

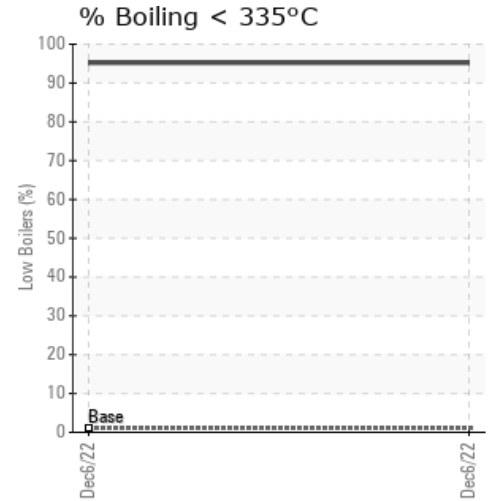
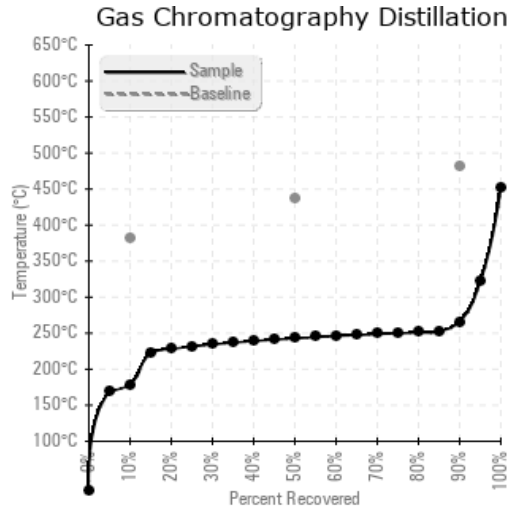
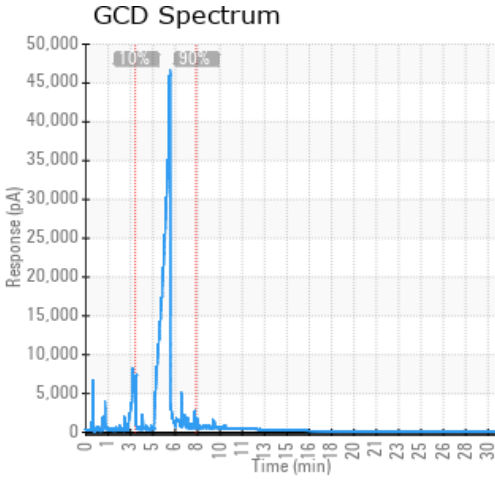
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
12/06/22	01/13/23	8.0y	LINE HEATER	334 / 168	22812.2	17.1	2.19		351 / 177	469 / 243	510 / 266	95.18
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
12/06/22	5	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


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