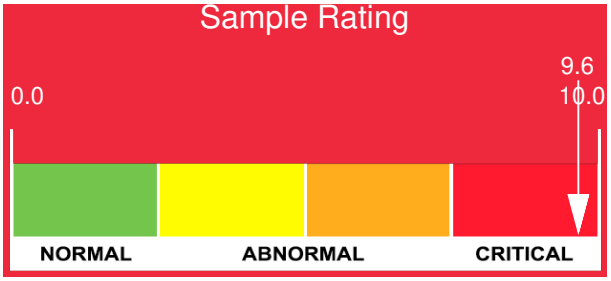
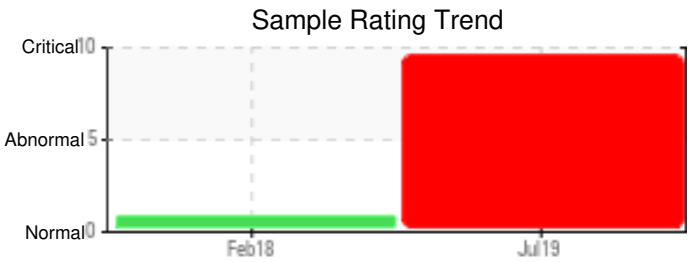




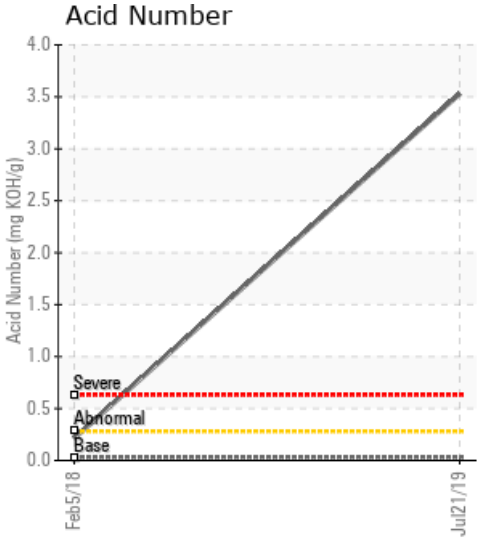
[DAIBER A-54-C/94-B-16] STABILIZER REBOILER

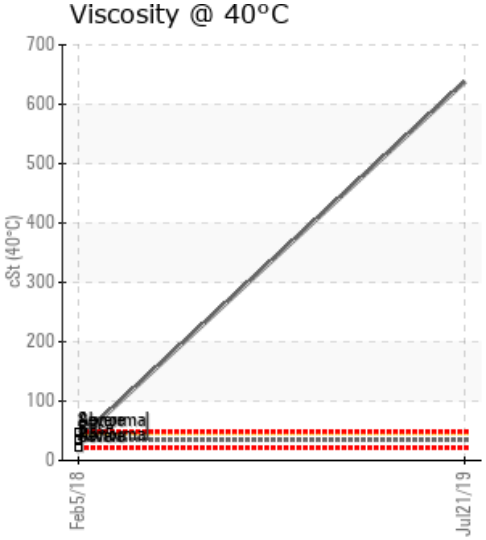
Customer: PTRHTF20194	System Information	Sample Information
KANATA ENERGY GROUP DAIBER GAS PLANT A-54-C/94-B-16 FORT ST. JOHN, BC V1J 0H8 Canada Attn: Jason Carew Tel: (250)261-9197 E-Mail: jason.carew@kanataenergy.com	System Volume: 5580 ltr Bulk Operating Temp: 293F / 145C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: ALCO GAS & OIL	Lab No: 02298380 Analyst: Clinton Buhler Sample Date: 07/21/19 Received Date: 07/22/19 Completed: 07/30/19

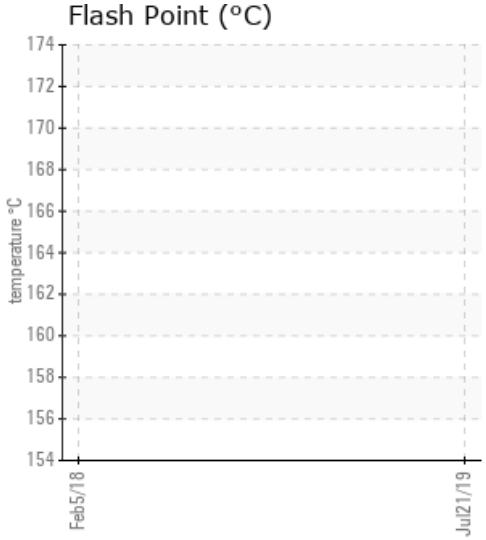
Recommendation: *** Diagnostician`s Note: This sample is mostly water. Suggest the client drain off the water from the reservoir, then take a more representative sample. ***An immediate re-sample is required!Excess water in system. Please note that the fluid's acidity and viscosity is excessive and may not be representative.Please re-sample immediately. Please draw sample from most representative area of the heater vessel as possible. First drain all free water from system. Follow this by a purge of at least 20 liters of fluid until the fluid coming out is hot per normal operating temperatures. Collect sample and submit to the lab for analysis and Petro-Canada Technical Services will review and provide recommendations

Comments: Water contamination levels are severely high. Water contamination levels are severely high.. ppm Water contamination levels are severely high. Acid Number (AN) is severely high. Visc @ 40°C is severely high.

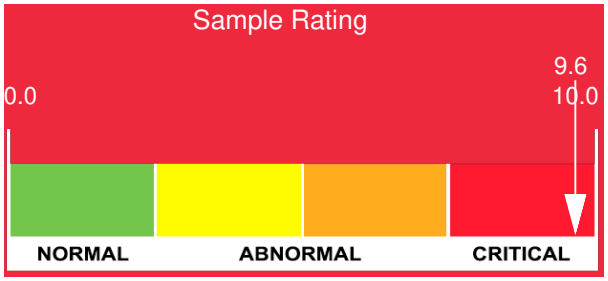
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/21/19	07/22/19	6m	BOTTOM DRAIN		900000	638	3.53					
02/05/18	02/26/18	3m		327 / 164	159.7	34.8	0.214	0.263	707 / 375	808 / 431	912 / 489	2.37
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00

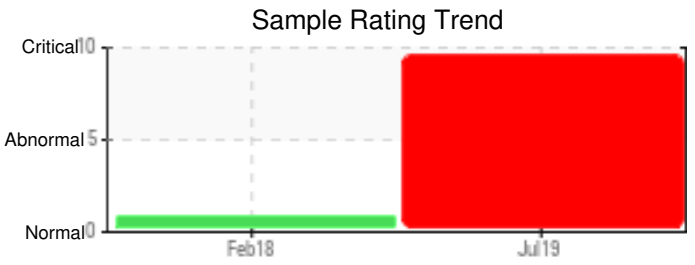






PETRO-CANADA LUBRICANTS

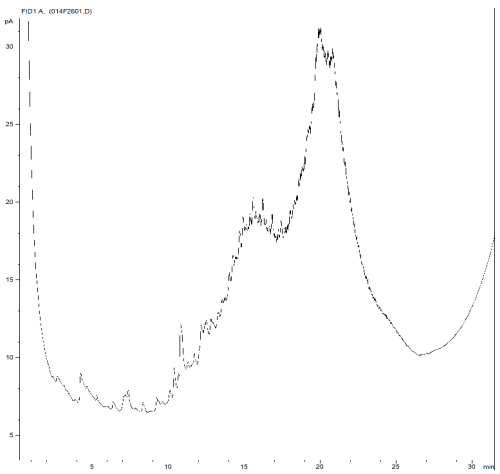


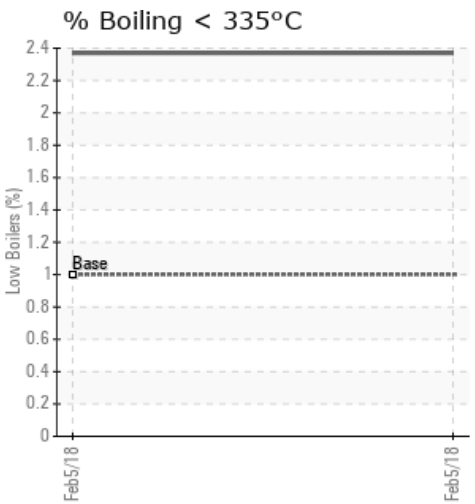


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
07/21/19																								
02/05/18	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

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

GCD Spectrum





Historical Comments

02/05/18	sample results indicate that the fluid is suitable for continued service.However, the reduced flash point, and slightly increased GCD % < 335°C can be indications of thermal degradation (cracking of the fluid molecules creating light ends).To help bring the flash point closer to new spec, perform a venting regime of the expansion tank. During venting, turn off the blanket gas to allow the light end vapors to escape. Re-sample in 6 months. Please ensure sample point is from a fluid zone most representative of system condition and that a thorough purge precedes the sample. COC Flash Point is abnormally low.