

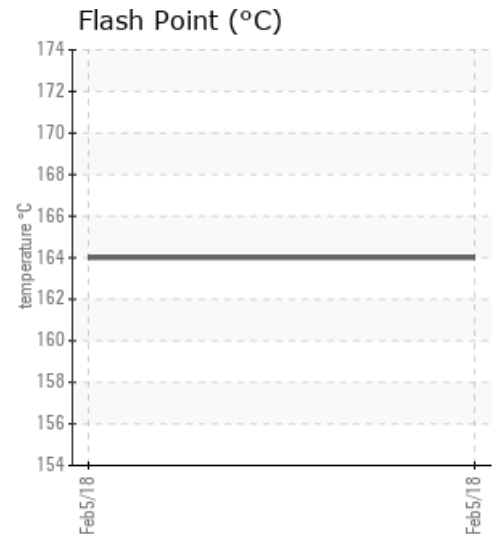
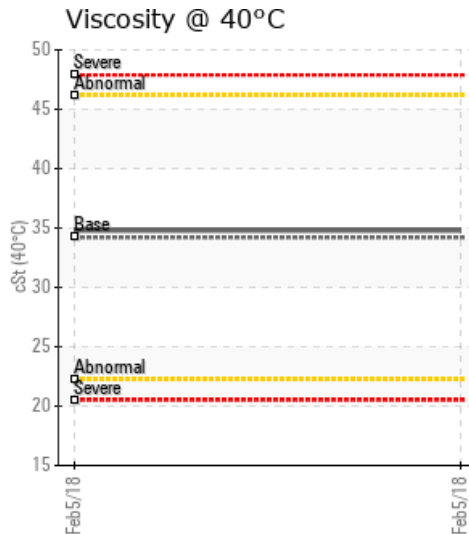
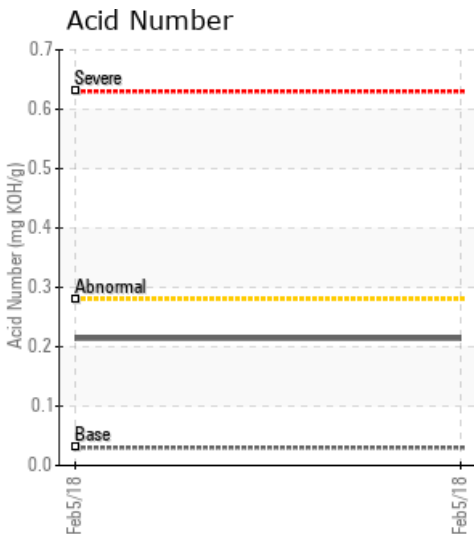
[DAIBER A-54-C/94-B-16] STABILIZER REBOILER

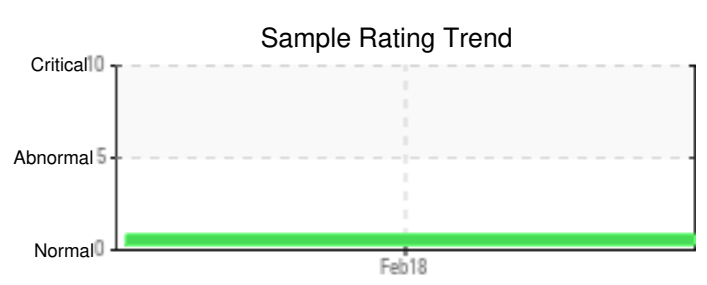
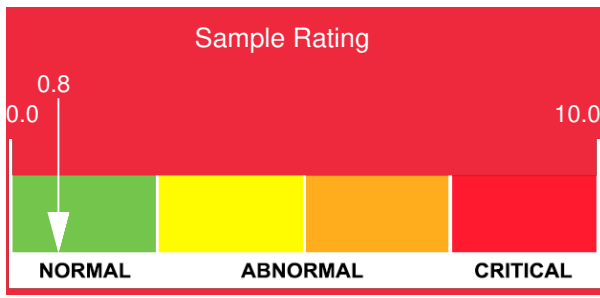
Customer: PTRHTF20194	System Information	Sample Information
KANATA ENERGY GROUP DAIBER GAS PLANT A-54-C/94-B-16 FORT ST. JOHN, BC V1J 0H8 Canada Attn: Jason Carew Tel: (250)261-9197 E-Mail: jason.carew@kanataenergy.com	System Volume: 240 ltr Bulk Operating Temp: 599F / 315C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: ALCO GAS & OIL	Lab No: 02200561 Analyst: Clinton Buhler Sample Date: 02/05/18 Received Date: 02/26/18 Completed: 03/05/18 To discuss this report contact Clinton Buhler at 780-516-9920

Recommendation: 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.

Comments: COC Flash Point is abnormally low.

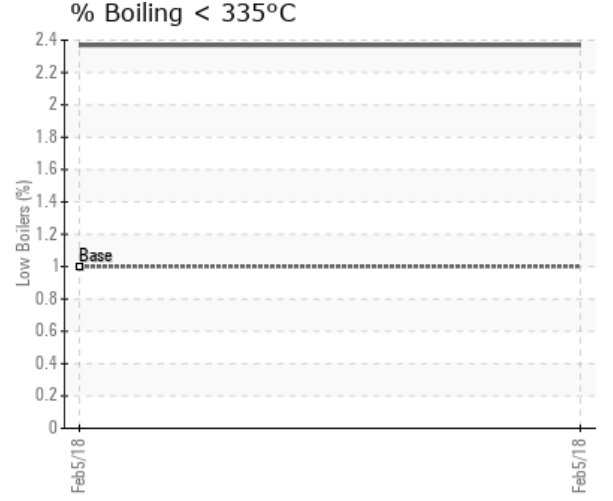
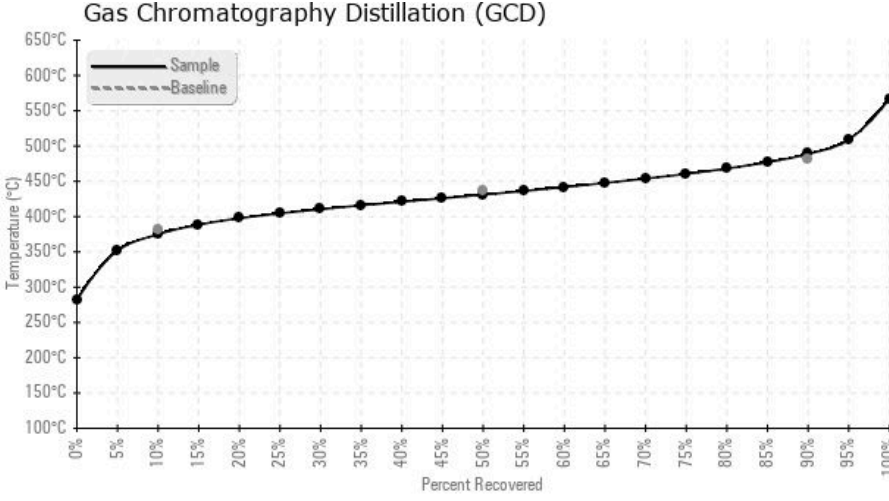
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/05/18	02/26/18	3y		327 / 164	159.7	34.8	0.214	0.263	707 / 375	808 / 431	912 / 489	2.37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





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
02/05/18	7	0	0	1	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 analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments

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