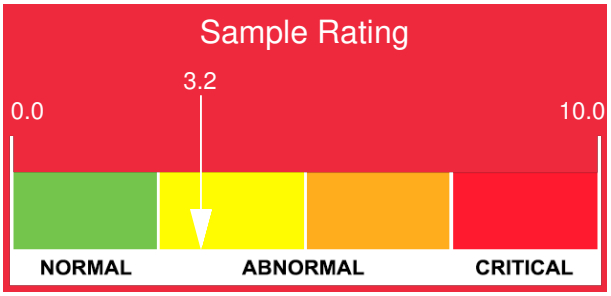
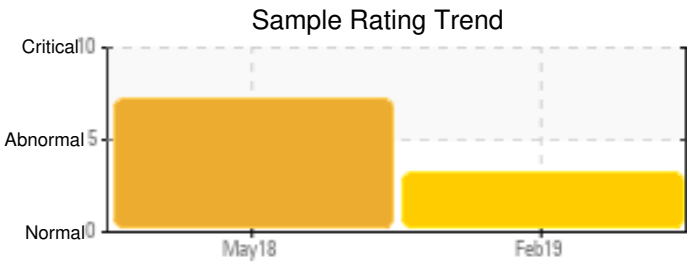




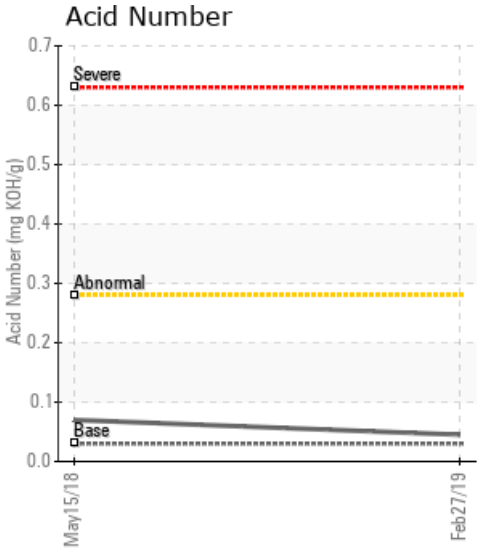
NEW SYSTEM

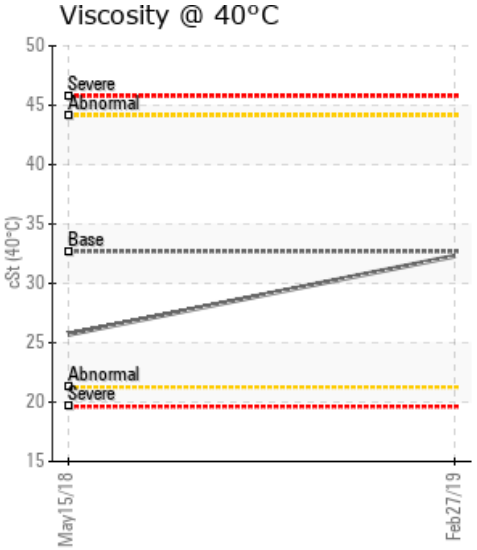
Customer: PTRHTF30115	System Information	Sample Information
BI-AX INTERNATIONAL INC 596 CEDAR AVE WINGHAM, ON N0G 2W0 Canada Attn: Tom Inglis Tel: (519)357-1818 E-Mail: tinglis@biaxinc.com	System Volume: 420 ltr Bulk Operating Temp: 266F / 130C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02271406 Analyst: Lynn Billings Sample Date: 02/27/19 Received Date: 03/05/19 Completed: 03/07/19

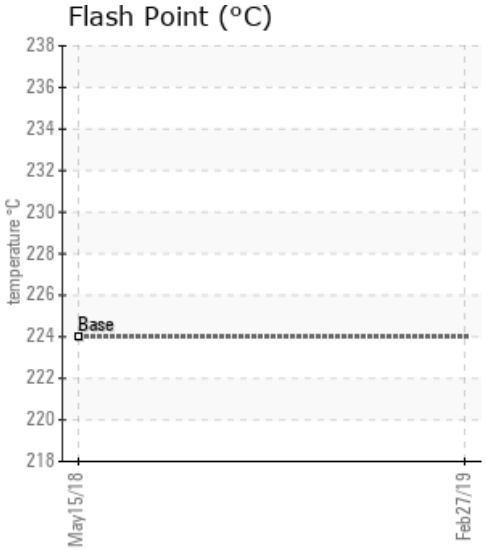
Recommendation: Water contamination appears to be high, around 0.11% (1076 ppm). Try and run system around 95C to drive off the water while venting through the expansion tank. Don't want to go any higher in temperature as you can create cavitation in the pumps due to steam formation. Other parameters appear to be fine.

Comments: Water contamination levels are severely high.

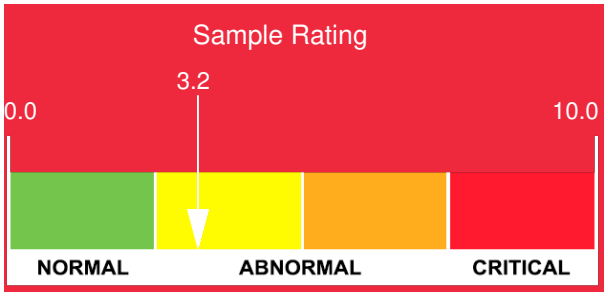
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/27/19	03/05/19	8m		442 / 228	1075.8	32.3	0.045	0.090	690 / 366	788 / 420	892 / 478	1.60
05/15/18	05/17/18	0m			44692.8	25.7	0.07		633 / 334	761 / 405	880 / 471	9.86
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5

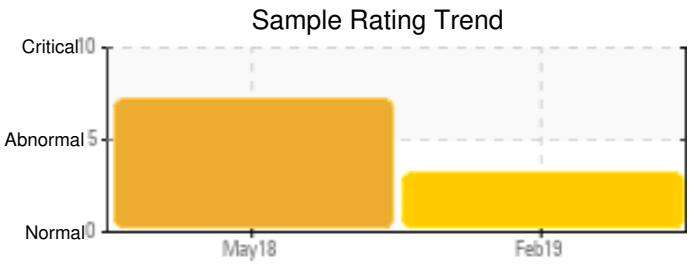






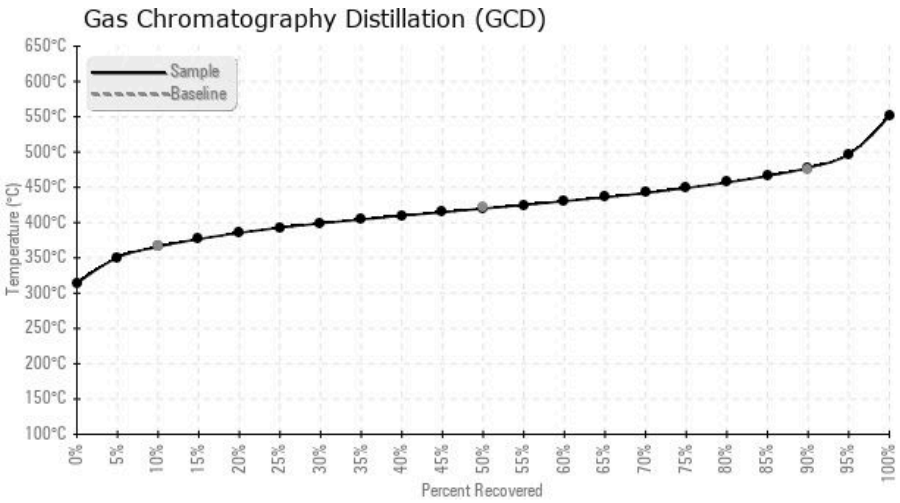
PETRO-CANADA LUBRICANTS

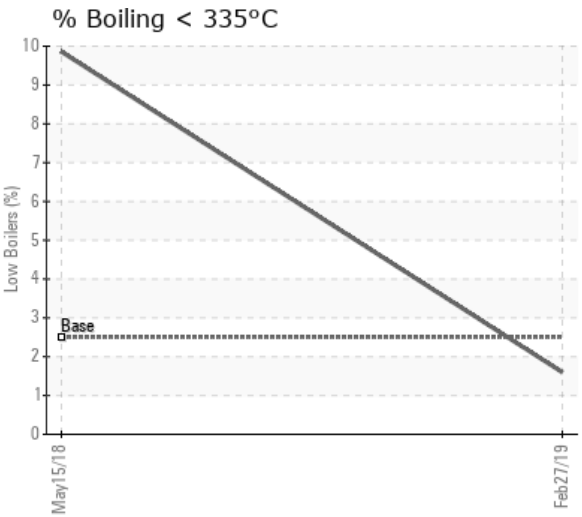




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
02/27/19	58	0	0	0	2	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	6	0	244	3
05/15/18	164	0	0	0	6	2	0	0	0	0	6	4	4	0	0	0	2	0	3	4	22	0	237	9
Baseline Data			0	0						0			0	0					0				270	

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





Historical Comments

05/15/18	this samples exhibits a large amount of water (4.5%). It is also an ISO 22 which Petro-Canada does not carry. It has more iron and sulfur than the other sample. The GCD is marginally high and the 10% distillation point is low. This fluid should be removed from the system and the system should be drained, cleaned and flushed before addition of new fluid. Water contamination levels are severely high. Water contamination levels are severely high.. ppm Water contamination levels are severely high. Insufficient sample was received to conduct all the routine laboratory tests. (GCD) % < 335°C is marginally high. (GCD) 10% Distillation Point is marginally low.