

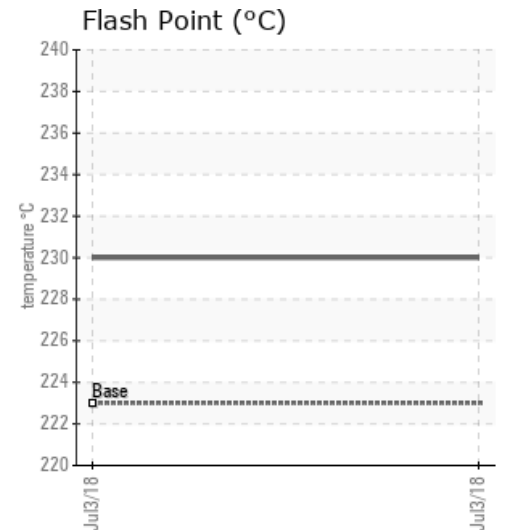
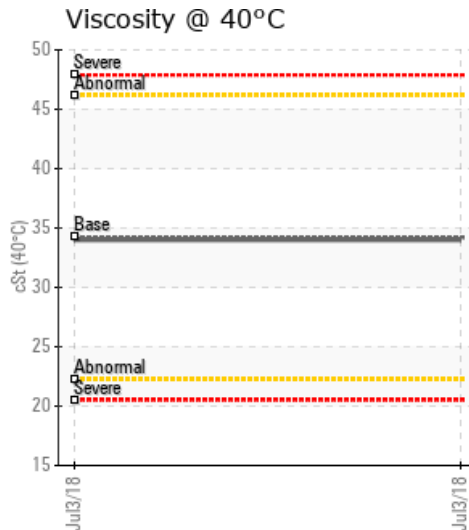
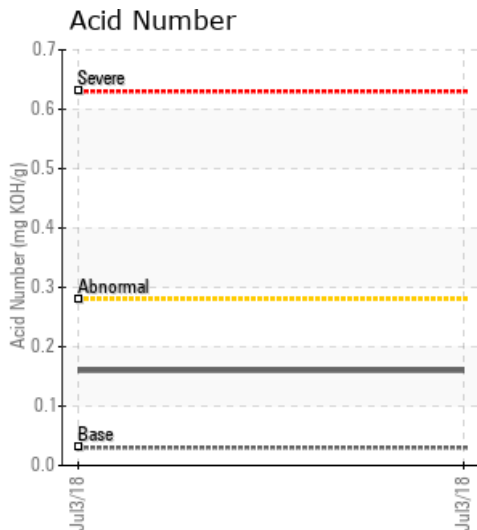
[ELKO ENERGY PLANT] CANFOR SAMPLE PORT 1

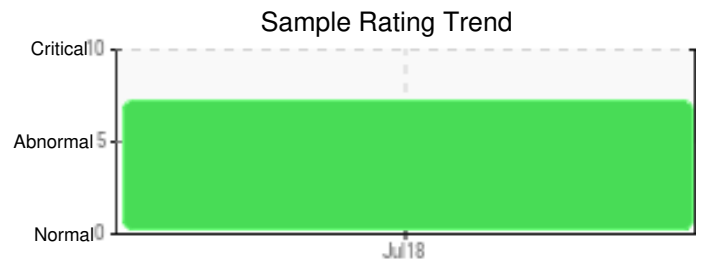
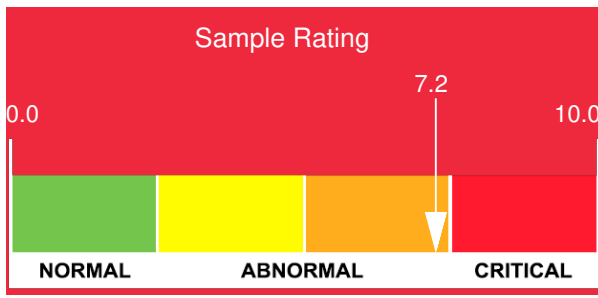
Customer: PTRHTF20200	System Information	Sample Information
CANFOR-ELKO ENERGY PLANT 9600 CASCADE RD ELKO, BC V0B 1T3 Canada Attn: Steve Wilson Tel: (250)464-9101 E-Mail: steven.wilson@canfor.com	System Volume: 70000 ltr Bulk Operating Temp: 482F / 250C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: DELTECH MANUFACT	Lab No: 02227256 Analyst: Ray Rolston Sample Date: 07/03/18 Received Date: 07/10/18 Completed: 09/28/18 To discuss this report contact Ray Rolston at (250)893-4496

Recommendation: Unsure of source of abnormally high Sodium and Calcium Levels. Had discussion with Steve at Canfor Elko. Recommend taking another sample and ensure it is representative of bulk oil circulating in the system. Also make sure that any stagnant oil in the sample port is flushed out before taking sample.

Comments: Sodium ppm levels are severely high. Calcium ppm levels are severely high.

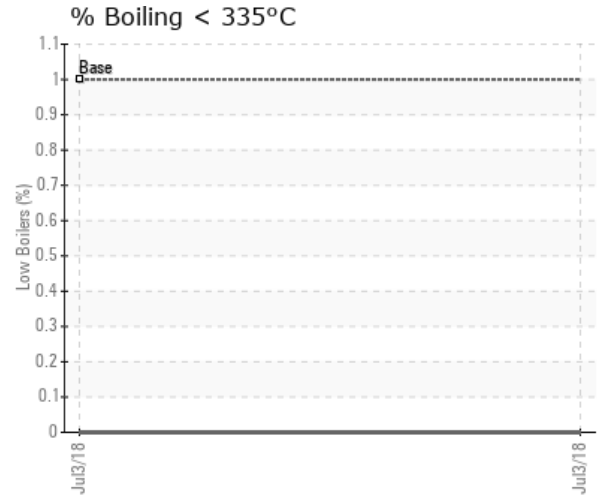
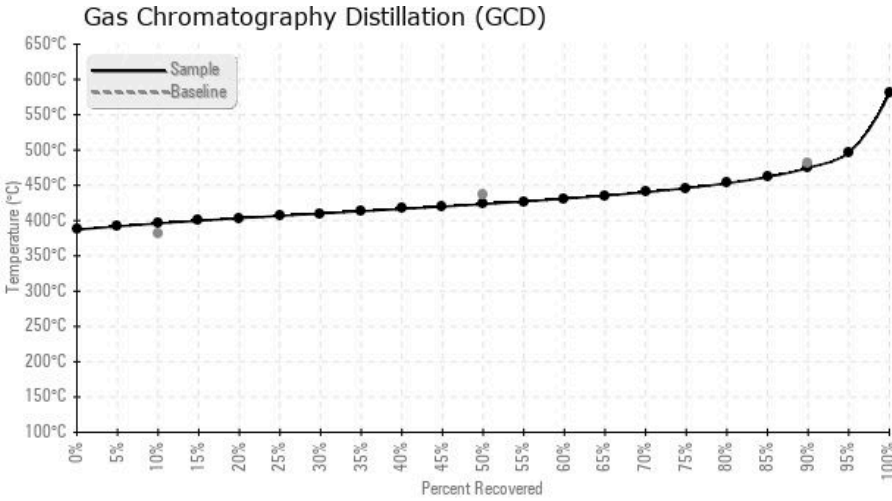
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/03/18	07/10/18	4y		446 / 230	276.0	34.0	0.16	0.089	745 / 396	794 / 423	886 / 475	0.00
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
07/03/18	5	0	0	0	0	0	0	0	0	0	0	271	1	0	0	0	0	0	0	2	379	0	4	2
Baseline Data			0	0									0	0					0				0	

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



Historical Comments	