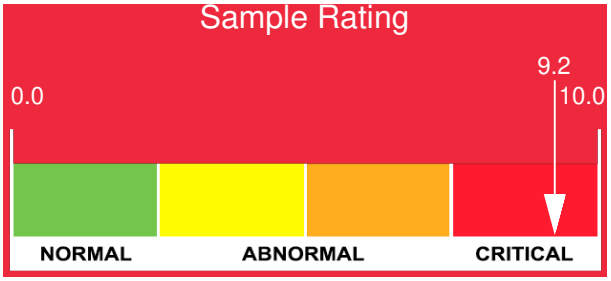
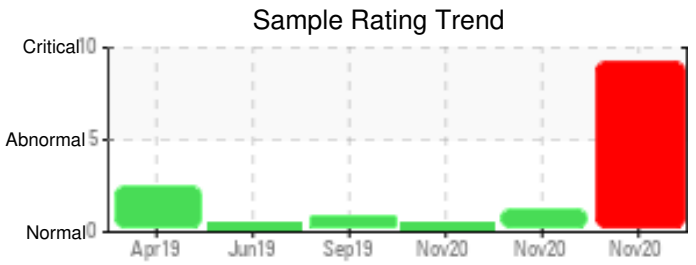




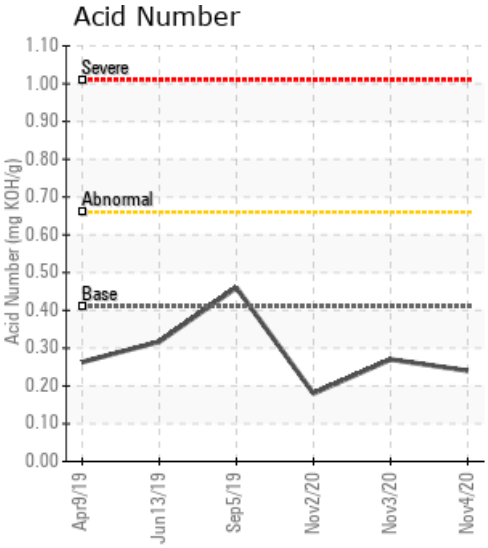
ROSEBURG PEMBROKE

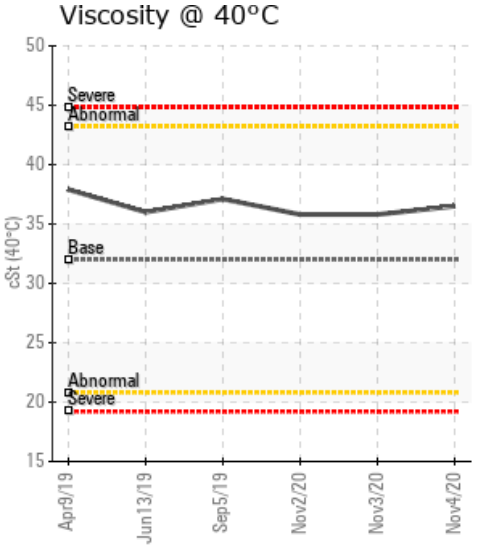
Customer: PTRHTF30101	System Information	Sample Information
Roseburg Pembroke MDF Inc. 777 Fibreboard Drive Pembroke, ON K8A 6W5 Canada Attn: Dan Havis Tel: (613)732-3939 E-Mail: danielh@rfpco.com	System Volume: 100000 gal Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: HEAT TRANSFER FLUID ISO 32 Make:	Lab No: 02385844 Analyst: Pierre Castagne Sample Date: 11/04/20 Received Date: 11/06/20 Completed: 11/13/20 Pierre Castagne pierre.castagne@hollyfrontier.com

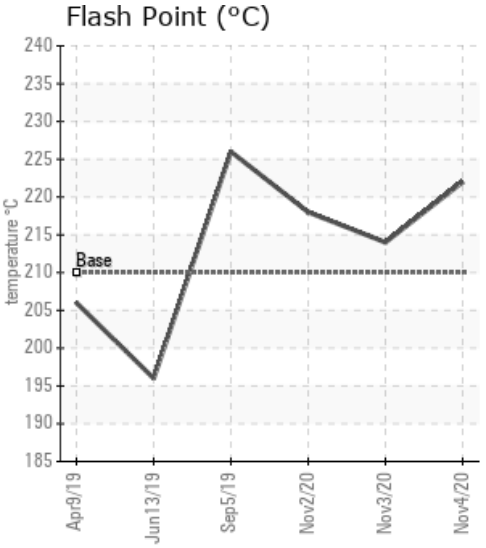
Recommendation: Potassium ppm levels are severely high, investigate source of contamination. Water contamination levels are severely high, identify the source of water entry, eliminate the water. GCD Initial Boiling are low.Vent the system.Retake a sample in 1 months.

Comments: Potassium ppm levels are severely high. Water contamination levels are severely high. ppm Water contamination levels are severely high.

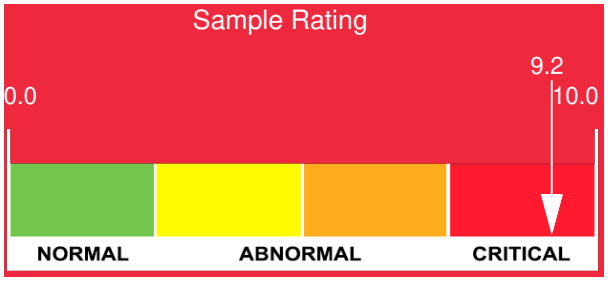
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/04/20	11/06/20	12.0h	after 12 hours	432 / 222	1022.0	36.5	0.24	0.313	719 / 382	817 / 436	925 / 496	2.21
11/03/20	11/06/20	0.0h	cycled once	417 / 214	234.5	35.8	0.27	0.117	719 / 382	816 / 436	926 / 497	2.20
11/02/20	11/06/20	0.0h	Filtration test	424 / 218	18.5	35.8	0.18	0.110	719 / 382	817 / 436	927 / 497	2.26
09/05/19	09/09/19	0.0h		439 / 226	17.8	37.1	0.460	0.168	685 / 363	789 / 421	892 / 478	3.74
06/13/19	06/14/19	0.0h	BOILER	385 / 196	138.4	36.0	0.317	0.059	723 / 384	815 / 435	928 / 498	0.00
Baseline Data				410 / 210		32	0.41		707 / 375	802 / 428	910 / 488	1.5

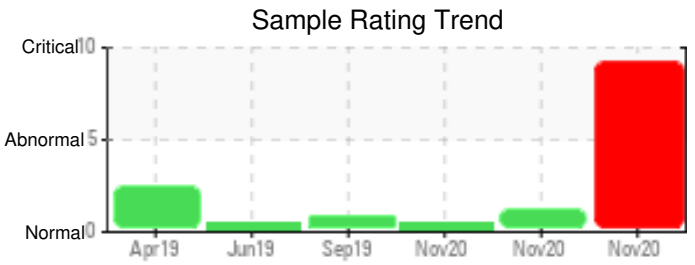






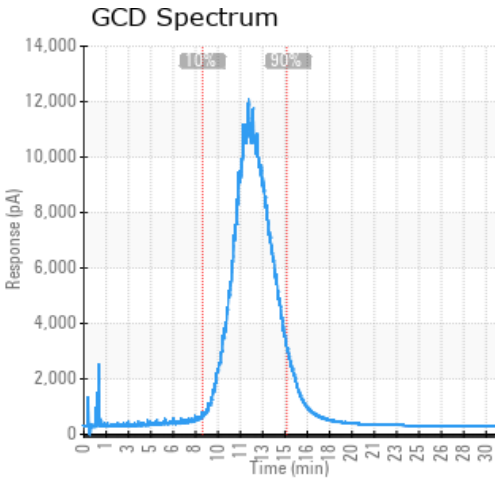
PETRO-CANADA LUBRICANTS

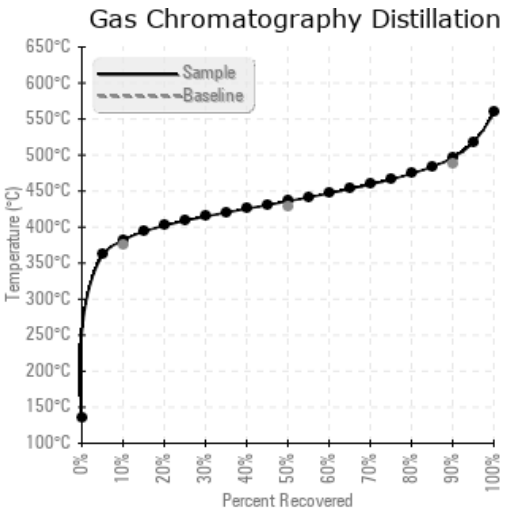


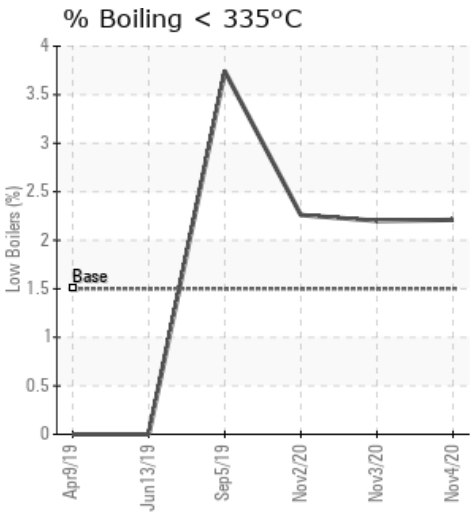


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
11/04/20	46	0	0	0	0	0	0	0	0	0	0	2	153	0	0	0	0	0	0	0	3	0	4	4
11/03/20	11	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	1	0	3	3
11/02/20	3	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	3	3
09/05/19	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	4
06/13/19	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Baseline Data			0	0						0			0	0					5				250	

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







Historical Comments

11/03/20	GCD Initial Boiling are low. Potassium PPM level are abnormally high, investigate the presence of high potassium.Vent the system.Resample in 6 months. Potassium ppm levels are abnormally high.
11/02/20	The oil is good for continuous usage. Resample in 6 months.
09/05/19	Our GCD 90% are marginally high, we have slight oxydation of the oil.The oil is Ok for continuous use. (GCD) 90% Distillation Point is marginally low.
06/13/19	The oil is OK, for continuous use