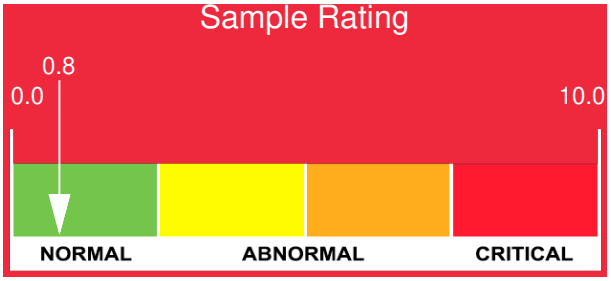
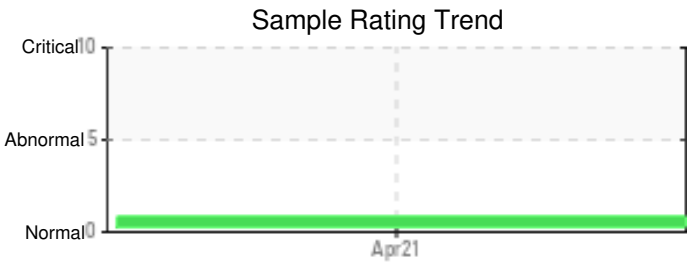




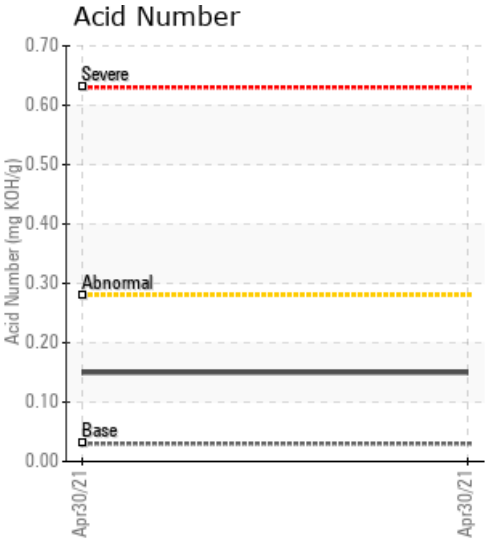
[EDMONTON] SULFUR PLANT HEATING

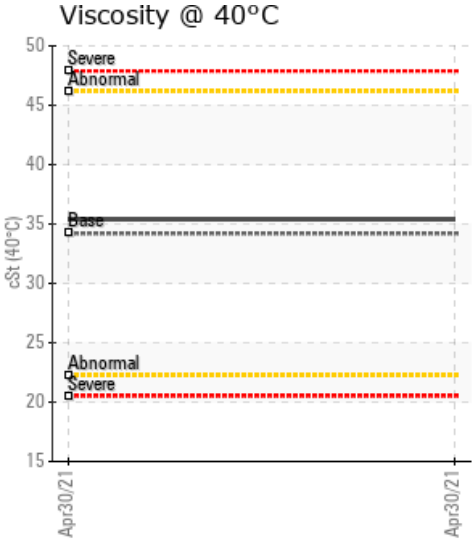
Customer: PTRHTF20251	System Information	Sample Information
KEG RIVER CHEMICAL 10350 21ST EDMONTON, AB T6P 1W4 Canada Attn: Joel Schuster Tel: (780)885-4561 E-Mail: joels@kegriver.com	System Volume: 3000 ltr Bulk Operating Temp: 330F / 166C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: PARKER BOILER	Lab No: 02419971 Analyst: Yutong Gao Sample Date: 04/30/21 Received Date: 05/10/21 Completed: 05/13/21 Yutong Gao yutong.gao@hollyfrontier.com

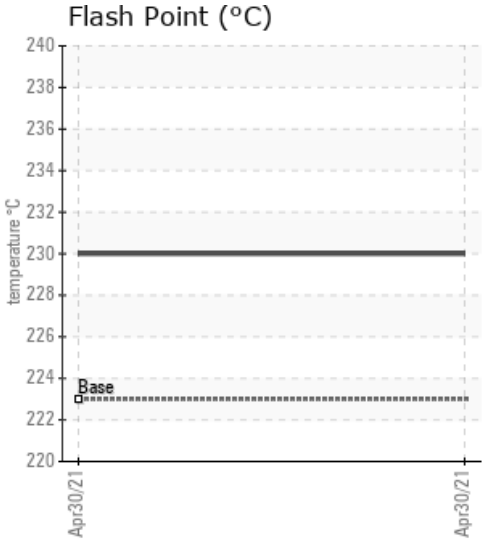
Recommendation: The current fluid has a normal viscosity, decent flash point and minimum particle or water contamination. After 6 years' operation, the fluid has minor oxidation, but it is still well suitable for further operation. Please take one sample in 12 months to monitor the conditions.

Comments:

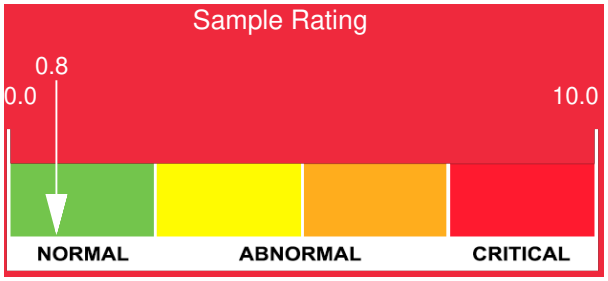
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
04/30/21	05/10/21	6.0y	MAIN 3 LINE	446 / 230	6.5	35.4	0.15	0.074	716 / 380	800 / 427	920 / 493	1.06
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00

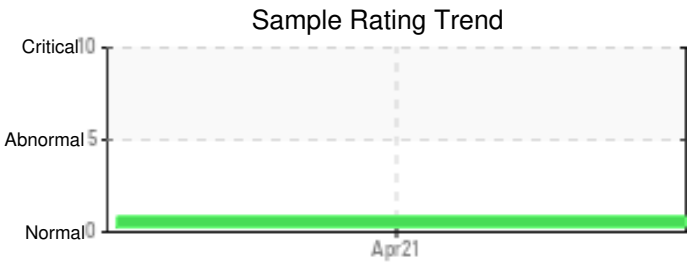






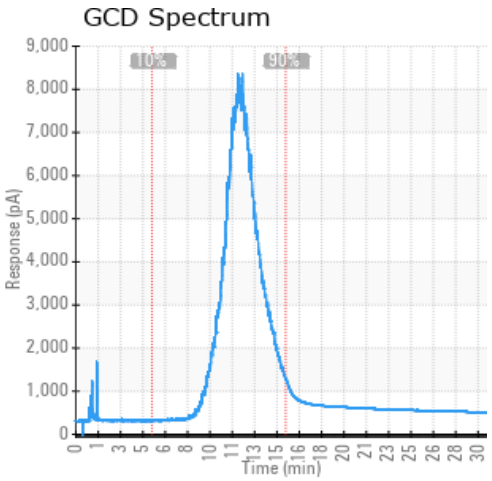
PETRO-CANADA LUBRICANTS

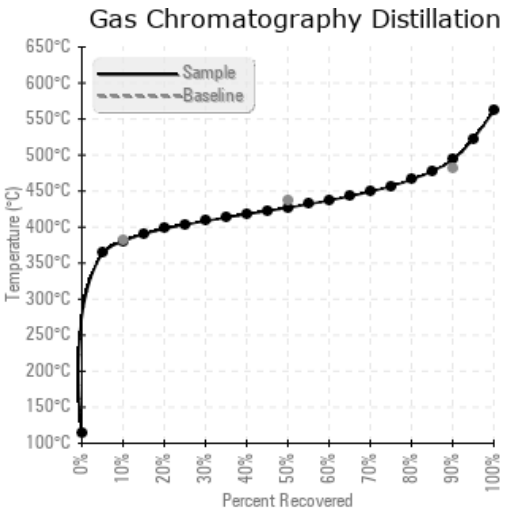


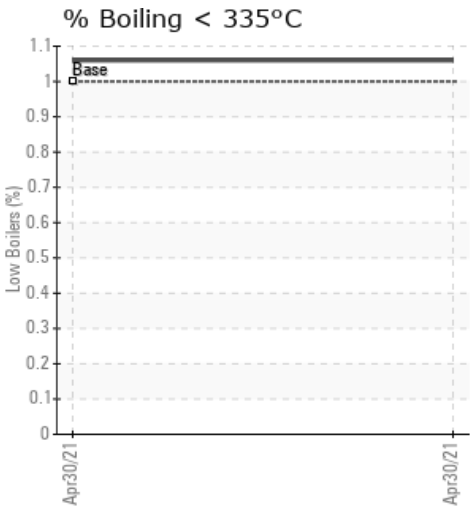


Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
04/30/21	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

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







Historical Comments

