

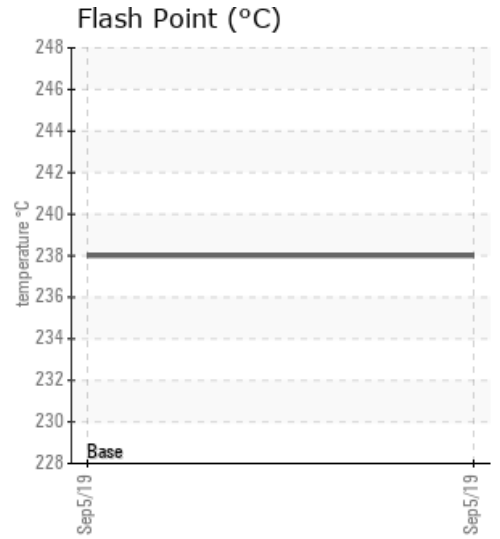
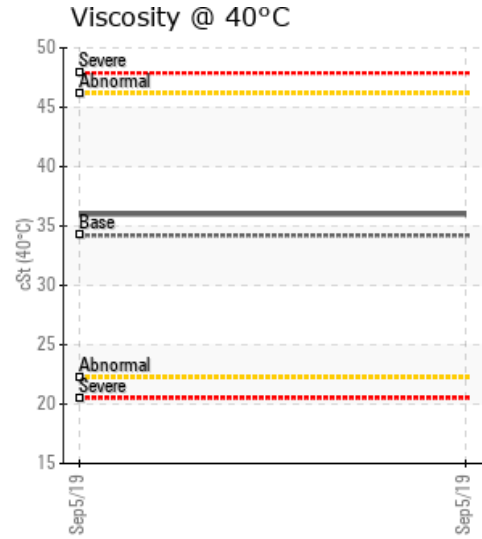
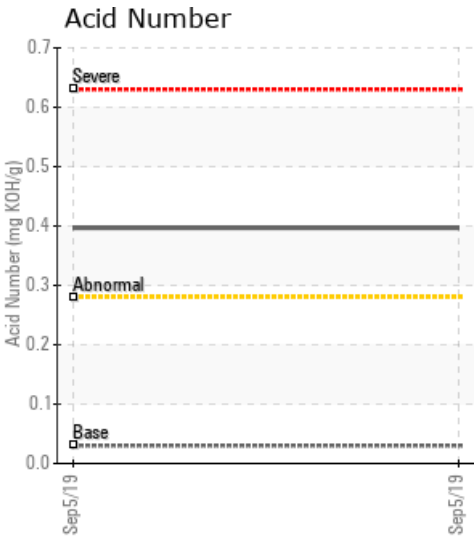
[LSD / 09-15-084-14W5] TIDEWATER SEAL LAKE

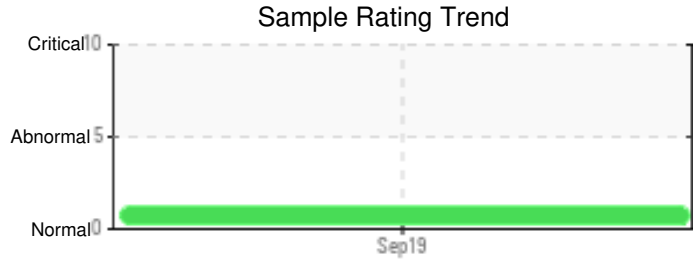
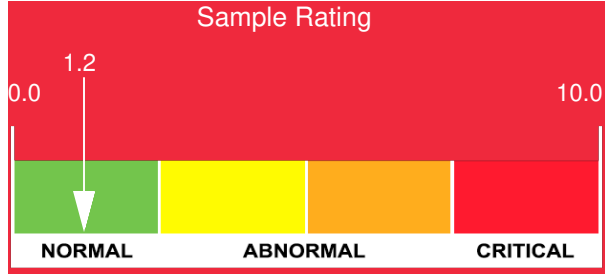
Customer: PTRHTF20224	System Information	Sample Information
Tidewater Midstream 09-15-084-14W5 Slave Lake, AB T0G 2A4 Canada Attn: Barry Anderson Tel: (780)514-8404 E-Mail: banderson@tidewatermidstream.com	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: PROPAK	Lab No: 02308321 Analyst: Peter Harteveld Sample Date: 09/05/19 Received Date: 09/13/19 Completed: 09/17/19

Recommendation: The fluid is in good condition and suitable for further use. Acid Number is elevated but since the AN test is not the most accurate, the condition of a fluid can't be judged on AN alone. The Fe content is low which means there is no corrosive wear ongoing. Please re-sample in 6 months. When sending in the next sample please list system volume and operating temperature of the fluid on the analysis request form.

Comments: Acid Number (AN) is abnormally high.

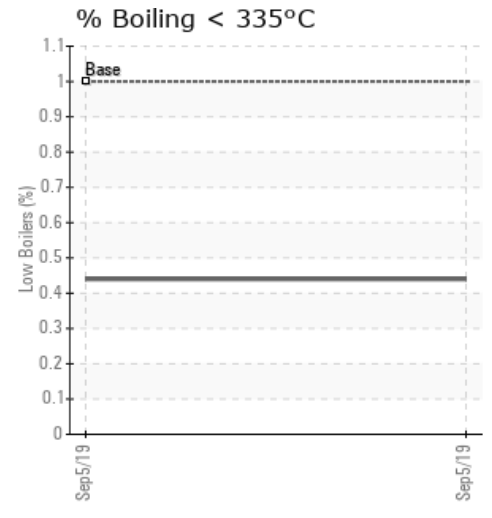
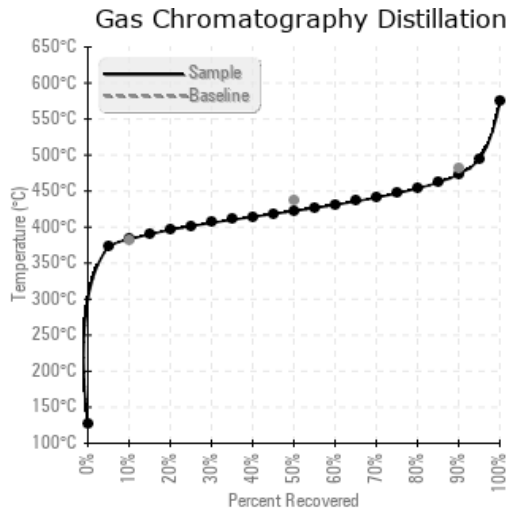
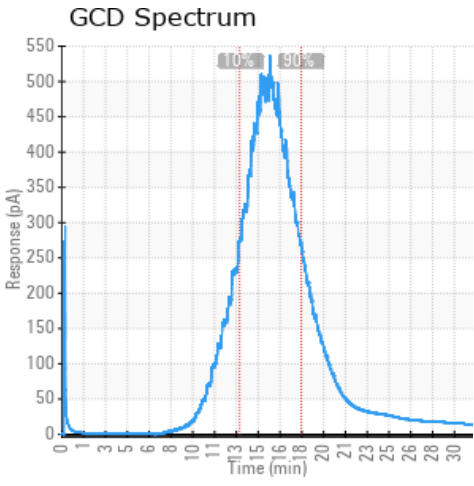
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/05/19	09/13/19	5y	LEVEL CONTROL PORT	460 / 238	0.00	36.0	0.397	0.049	721 / 383	792 / 422	884 / 473	0.44
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
09/05/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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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