

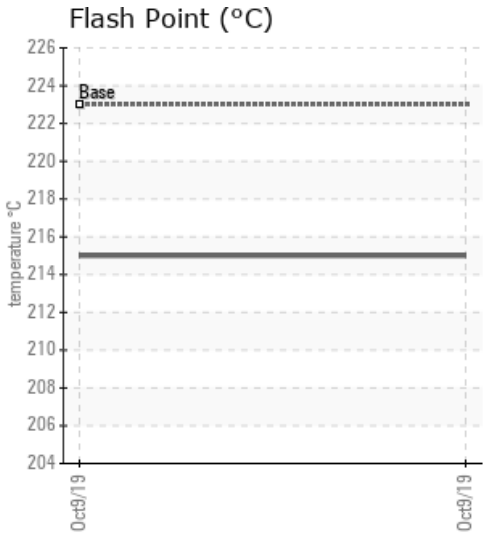
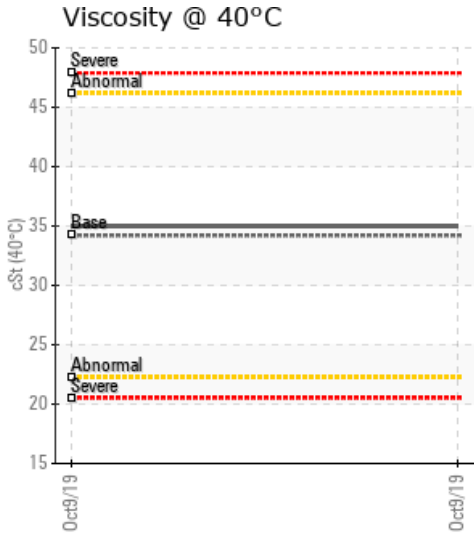
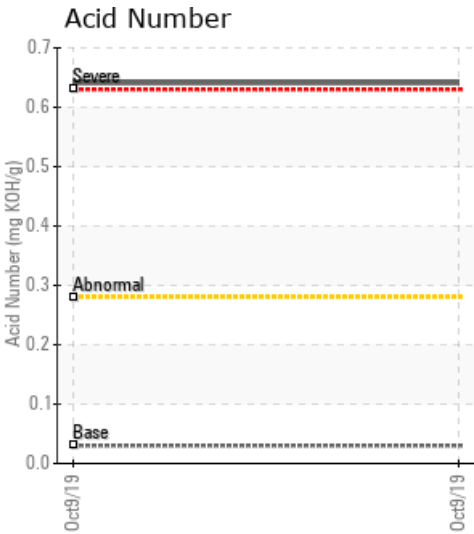
[4-21-55-23-W5] H-1311

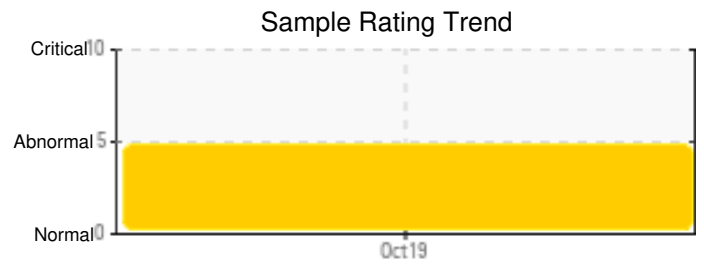
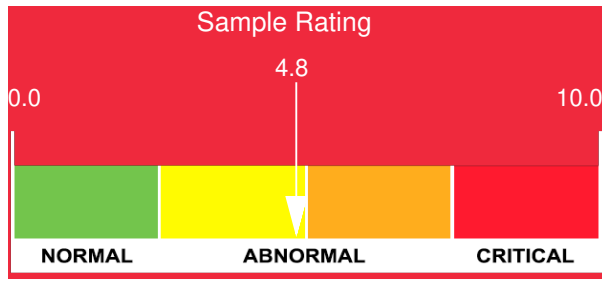
Customer: PTRHTF20089	System Information	Sample Information
PEYTO ENERGY TRUST - WILDHAY WILDHAY 4-21-55-23 , AB T4E 1V4 Canada Attn: Sonny Claybo Tel: (780)817-4339 E-Mail: sclaybo@peyto.com	System Volume: 18000 ltr Bulk Operating Temp: 329F / 165C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: ALCO	Lab No: 02314614 Analyst: Peter Harteveld Sample Date: 10/09/19 Received Date: 10/16/19 Completed: 10/22/19

Recommendation: For a fluid that has been in service for 60 days it is in poor condition. The AN is high, fluid is slightly acidic. Fe content of 30 ppm is indicative of that. (corrosion)The 90% GCD temperature is high. This in combination with the high AN indicates fluid degradation by oxidation. Pentane Insoluble (solids) content is slightly high with 0.46% (reportable limit is 0.5%). Filtration of the fluid has to be considered. To stop the fluid from becoming more acidic, causing further system corrosion, it is recommended the sweeten 25% of the fill with fresh fluid. Please re-sample after sweetening.

Comments: Pentane Insolubles levels are abnormally high. Acid Number (AN) is severely high. (GCD) 90% Distillation Point is abnormally high.

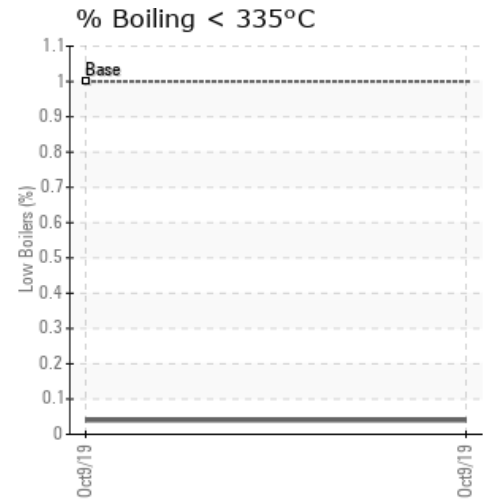
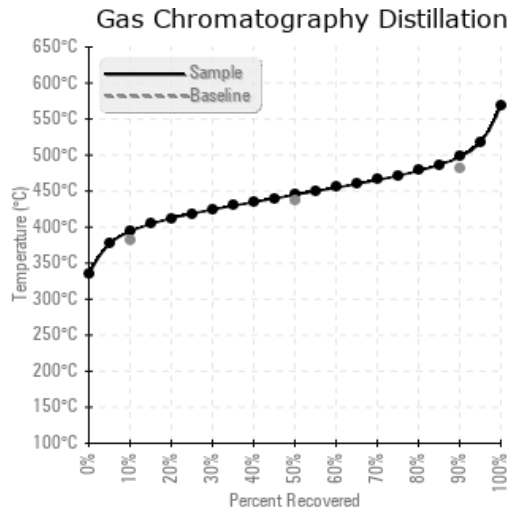
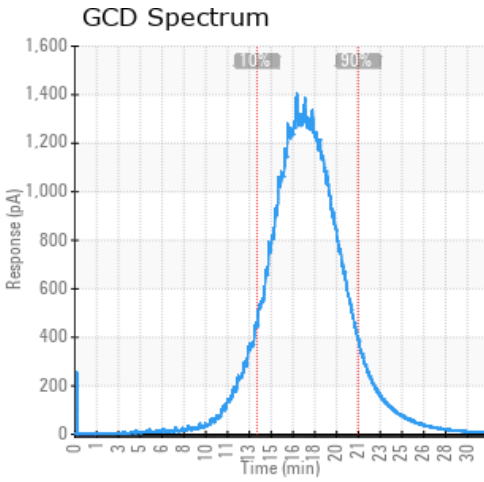
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/09/19	10/16/19	60d		419 / 215	5.8	35.0	0.641	0.462	741 / 394	832 / 445	927 / 497	0.04
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
10/09/19	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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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