

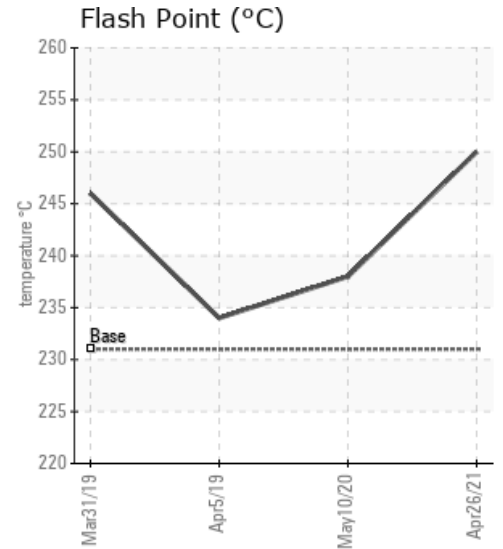
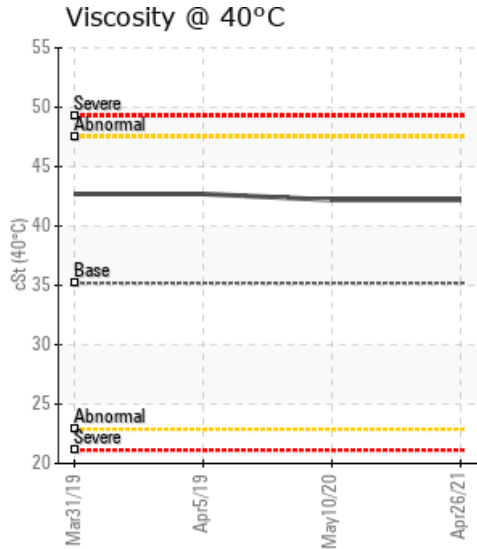
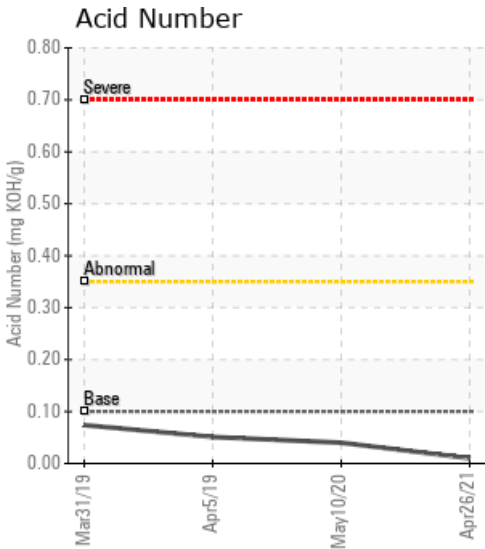
[16-17-064-26W5] H800

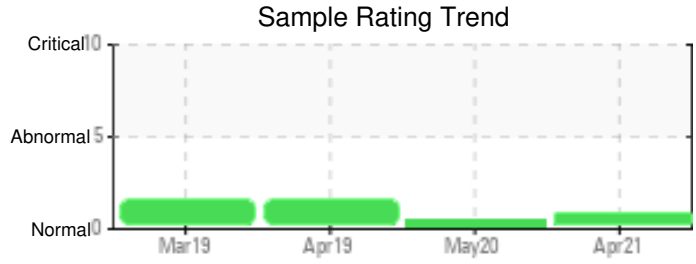
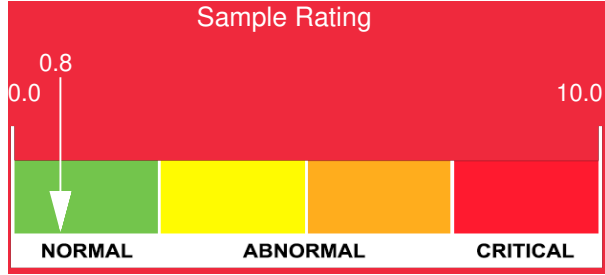
Customer: PTRHTF20211	System Information	Sample Information
Paramount Resources Inc.	System Volume: 6000 ltr	Lab No: 02422372
Simonette, AB Canada	Bulk Operating Temp: 365F / 185C	Analyst: Clinton Buhler
Attn: Ryan Holtet	Heating Source:	Sample Date: 04/26/21
Tel: (780)622-7078	Blanket:	Received Date: 05/19/21
E-Mail: ryan.holtet@paramountres.com	Fluid: PETRO CANADA CALFLO HTF	Completed: 05/28/21
	Make: FOSTER WHEELER	Clinton Buhler
		Clinton.Buhler@hollyfrontier.com

Recommendation: Sample results indicate that the fluid is in suitable condition for continued service. Viscosity and GCD results remain slightly elevated which can indicate mixture with a heavier fluid but there aren't major indicators of fluid degradation. Please re-sample in 12 months.

Comments:

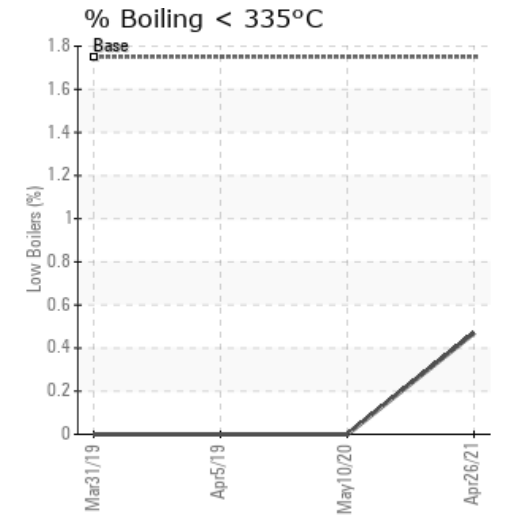
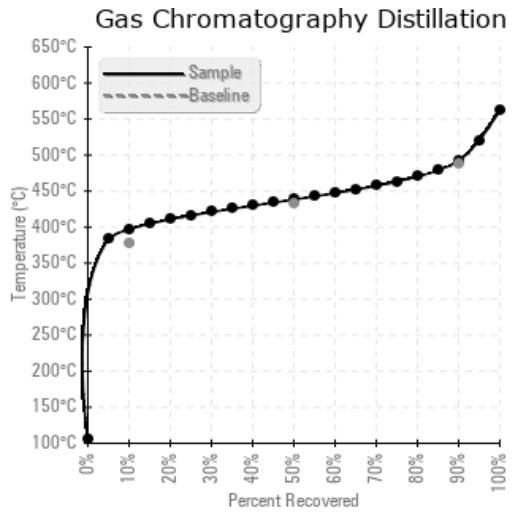
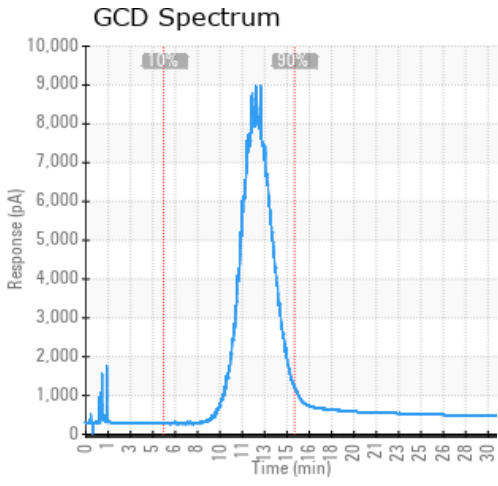
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
04/26/21	05/19/21	10.0y	Pump Discharge	482 / 250	5.6	42.2	0.01	0.104	746 / 397	821 / 438	918 / 492	0.47
05/10/20	06/12/20	5.0y	PUMP SUCTION	460 / 238	0.00	42.2	0.04	0.064	759 / 404	838 / 448	927 / 497	0.00
04/05/19	04/12/19	800.0y	PUMP DISCHARGE	453 / 234	101.6	42.7	0.051	0.070	757 / 403	839 / 449	936 / 502	0.00
03/31/19	04/12/19	0.0y	PUMP DISCHARGE	475 / 246	70.6	42.7	0.074	0.069	760 / 404	839 / 449	933 / 501	0.00
Baseline Data				448 / 231		35.20	.1		712 / 378	810 / 432	910 / 488	1.75





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
04/26/21	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	0	53	0
05/10/20	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	49	0
04/05/19	4	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	1	5	0	54	0
03/31/19	2	0	0	0	0	0	0	0	0	0	0	8	3	0	0	0	0	0	0	2	6	0	62	0
Baseline Data			0	0						0			0	0				0	0				280	

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



Historical Comments	
05/10/20	The fluid is in a good condition and suitable for further use. Viscosity is slightly high. This combined with elevated distillation temperatures indicates that the fill contains a heavier fluid, possibly Sunoil 21. This is not a problem. Please re-sample in 12 months. (GCD) 10% Distillation Point is abnormally high. (GCD) 50% Distillation Point is marginally high.
04/05/19	The fluid is in good condition and suitable for further use. Viscosity is high. This in combination with elevated distillation temperatures indicates that the system fill is a mix of Calflo HTF with a heavier fluid. (GCD) 90% Distillation Point is abnormally high. (GCD) 10% Distillation Point is marginally high.
03/31/19	The fluid is in a good condition and suitable for further use. High viscosity, Flash Point in combination with elevated distillation temperatures indicates that the system fill consists of a mix of Calflo HTF and a heavier fluid. (GCD) 90% Distillation Point is abnormally high. (GCD) 10% Distillation Point is marginally high.

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