

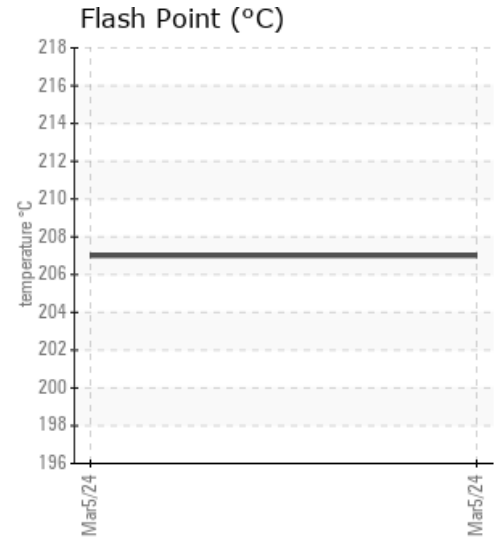
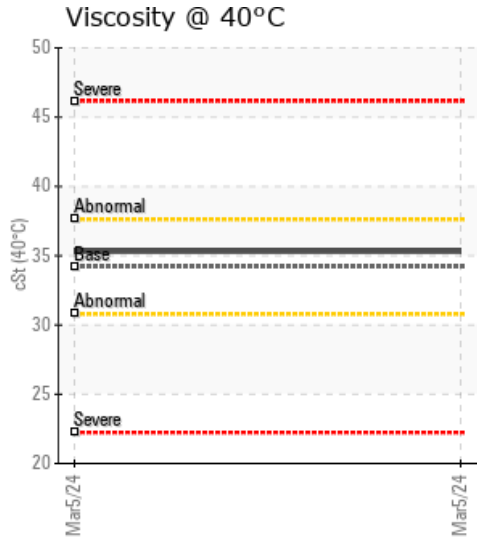
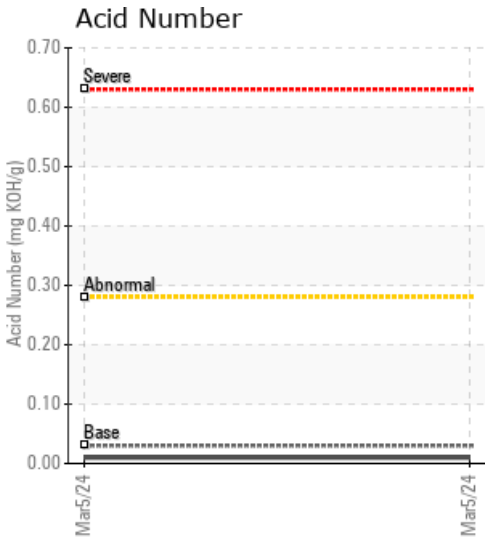
6-19-45-6W5

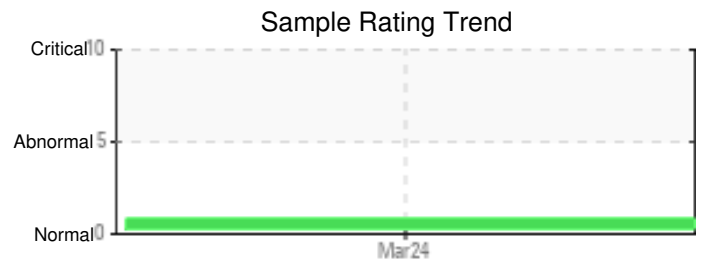
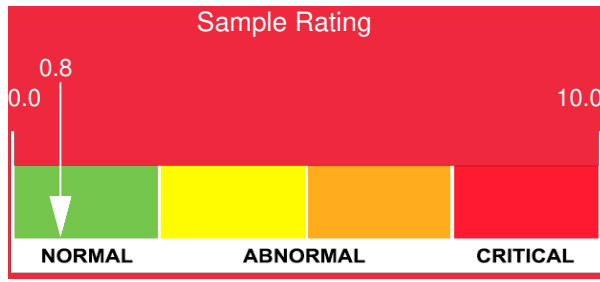
Customer: PTRHTF60065	System Information	Sample Information
MANCAL ENERGY 6-19-45-6W5 CALGARY, AB T2P 3S8 CA Attn: Tim Herle Tel: (780)898-9194 E-Mail: therle@mancal.com	System Volume: 500 ltr Bulk Operating Temp: 347F / 175C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 02623178 Analyst: Lyle Dach Sample Date: 03/05/24 Received Date: 03/19/24 Completed: 04/01/24 Lyle Dach lyle.dach@HFSinclair.com

Recommendation: Overall the fluid appears to be in good condition, 90% GCD is slightly high. if equipped ensure blanket gas is operating properly, ingress of oxygen can cause the fluid to oxidize.

Comments: (GCD) 90% Distillation Point is marginally high.

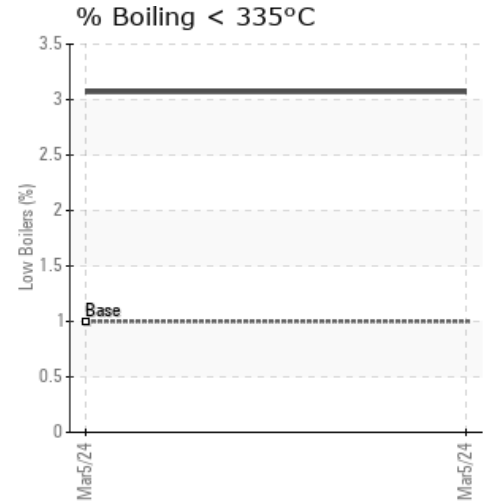
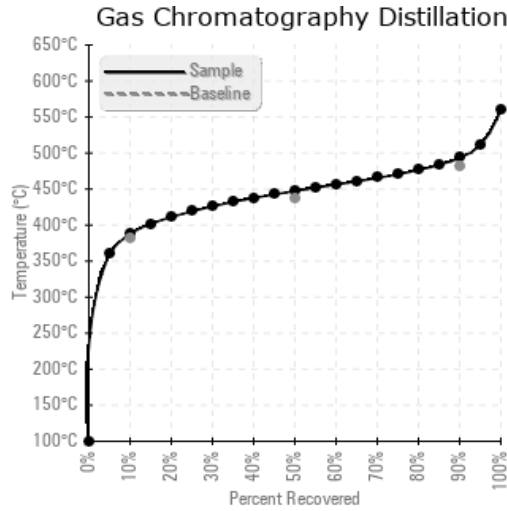
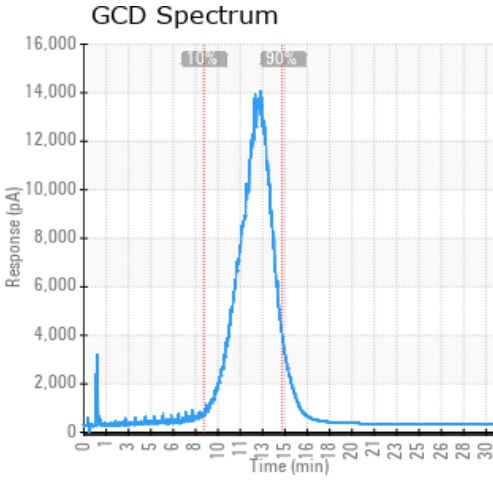
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/05/24	03/19/24	0.0m		405 / 207	29	35.3	0.01	0.285	730 / 388	837 / 447	920 / 493	3.07
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
03/05/24	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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