

[LSD: 06-31-32-24W4] HOT OIL UNIT

Customer: PTRHTF20244

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System Information

System Volume: 6500 ltr
Bulk Operating Temp: 356F / 180C
Heating Source:
Blanket:
Fluid: PETRO CANADA PETRO-THERM
Make: ENEFEN

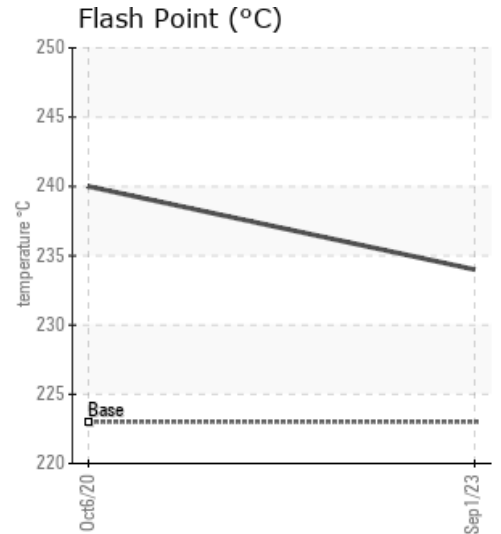
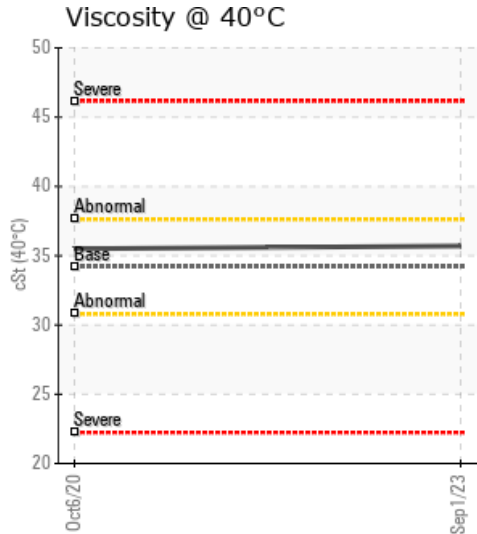
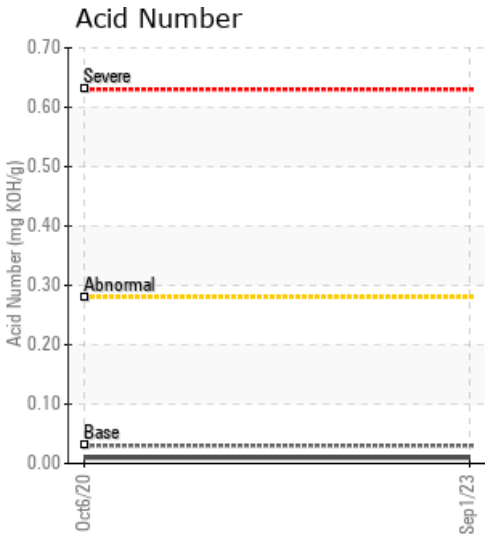
Sample Information

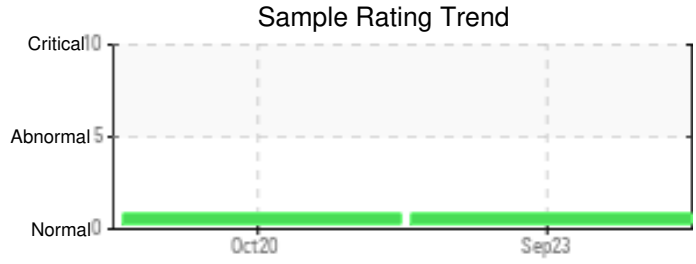
Lab No: 02581205
Analyst: Lyle Dach
Sample Date: 09/01/23
Received Date: 09/08/23
Completed: 09/14/23
Lyle Dach
lyle.dach@HFSinclair.com

Recommendation: Overall the sample shows the fluid to be in good condition and safe for continued use. 90% distillation is marginally high, ensure blanket gas is functioning properly. Resample in 12 months.

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

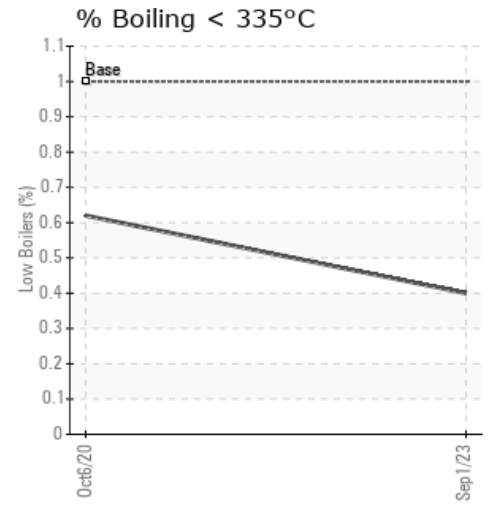
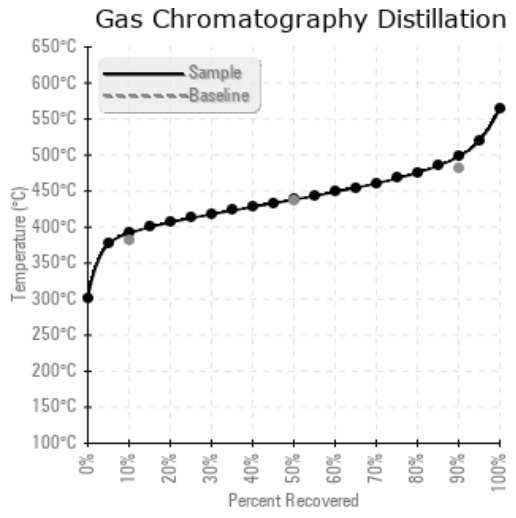
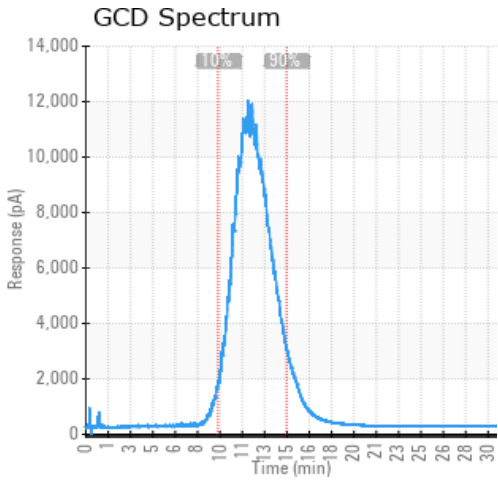
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/01/23	09/08/23	0.0y		453 / 234	15.7	35.7	0.01	0.036	736 / 391	820 / 438	928 / 498	0.40
10/06/20	10/14/20	5.0y	DISCHARGE	464 / 240	29.3	35.5	0.01	0.027	730 / 388	817 / 436	925 / 496	0.62
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	
09/01/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
10/06/20	0	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

10/06/20	This fluid is in excellent condition. Avoid hot fluid exposure to air by keeping vent hatch closed and blanket gas operational. Suggest annual sample submission to proactively monitor fluid condition.

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