

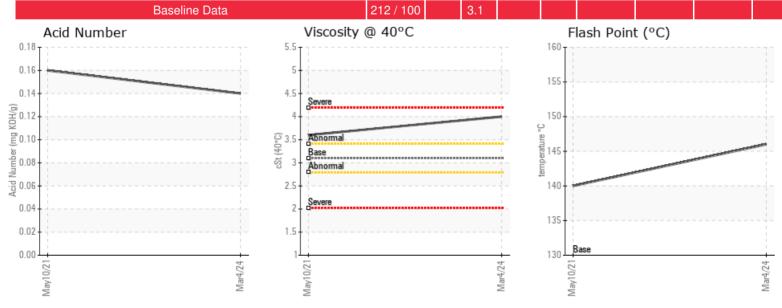
PHASE 1 HOT OIL

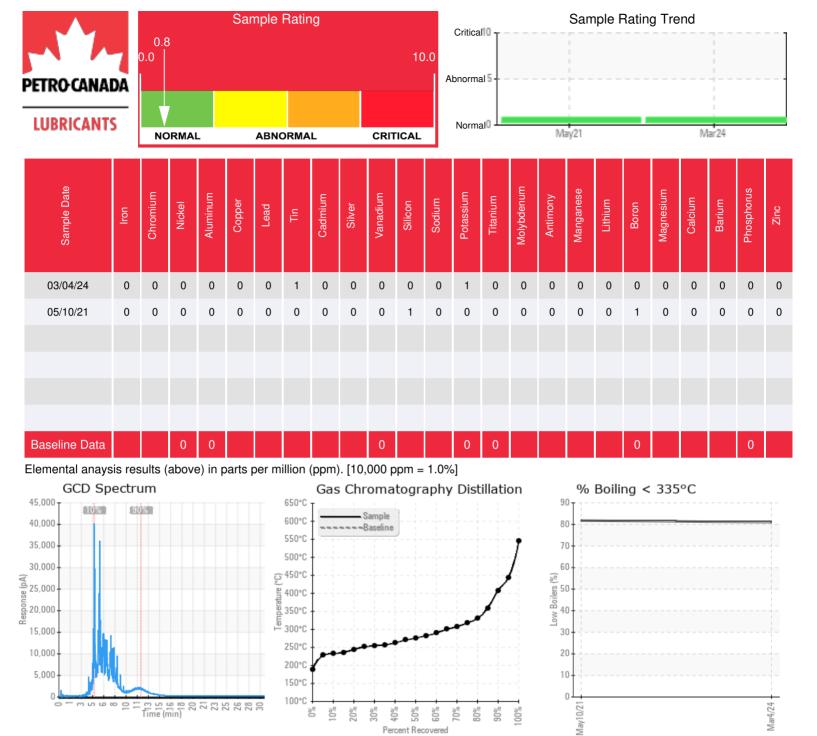
Customer: PTRHTF20253	System Information	Sample Information
Plains Midstream Canada	System Volume: 0 gal	Lab No: 02621856
LCD 1 SOUTH	Bulk Operating Temp: Not Specified	Analyst: Lyle Dach
PO BOX 1150	Heating Source:	Sample Date: 03/04/24
EMPRESS, AB T0J 1E0 CA	Blanket:	Received Date: 03/13/24
Attn: Sandeep Sekhon	Fluid: ESSO OIL 1156	Completed: 03/19/24
Tel:	Make:	Lyle Dach
E-Mail:		lyle.dach@HFSinclair.com

Recommendation: Fluid looks to be acceptable condition for continued use, being a mixture of fluid some of the specs will be slightly off. Water content, acid number, and pentane insolubles are all low. The sample is trending flat and results are very similar to the last sample.

Comments: COC Flash 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	%
03/04/24	03/13/24	52.0y		295 / 146	47	4	0.14	0.292	451 / 233	528 / 276	766 / 408	81.04
05/10/21	05/13/21	0.0y	Phase 1	284 / 140	40.2	3.6	0.16	0.177	451 / 233	525 / 274	765 / 407	81.77





Historical Comments

05/10/21	Fluid condition shows no sign of contamination, thermal degradation or oxidation therefore suitable for continued use. COC Flash Point is abnormally high, likely due to the partial charge of Thermoil 32 / Petro-Therm. Same applies to the slight increase in viscosity.

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