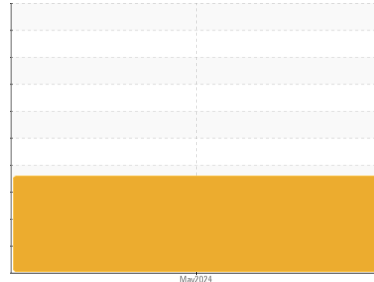


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

PETERBILT 2419

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 5W30 (44 QTS)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

▲ Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Elemental level of silicon (Si) above normal indicating ingress of seal material.

▲ Fluid Condition

The BN level is low.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		HRE0000193	---	---
Sample Date	Client Info		24 May 2024	---	---
Machine Age	mls	Client Info	115690	---	---
Oil Age	mls	Client Info	50000	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	▲ 104	---	---
Chromium	ppm	ASTM D5185m >20	5	---	---
Nickel	ppm	ASTM D5185m >2	<1	---	---
Titanium	ppm	ASTM D5185m >2	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >25	54	---	---
Lead	ppm	ASTM D5185m >40	8	---	---
Copper	ppm	ASTM D5185m >330	18	---	---
Tin	ppm	ASTM D5185m >15	4	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	20	---	---
Barium	ppm	ASTM D5185m 10	5	---	---
Molybdenum	ppm	ASTM D5185m 100	63	---	---
Manganese	ppm	ASTM D5185m	6	---	---
Magnesium	ppm	ASTM D5185m 450	557	---	---
Calcium	ppm	ASTM D5185m 3000	1665	---	---
Phosphorus	ppm	ASTM D5185m 1150	968	---	---
Zinc	ppm	ASTM D5185m 1350	1225	---	---
Sulfur	ppm	ASTM D5185m 4250	2770	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 31	---	---
Sodium	ppm	ASTM D5185m	7	---	---
Potassium	ppm	ASTM D5185m >20	150	---	---

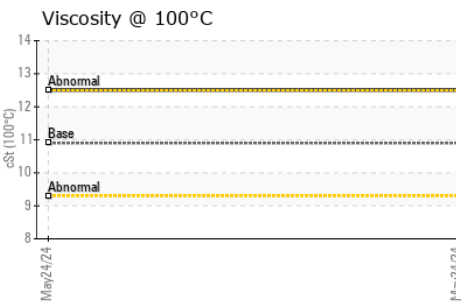
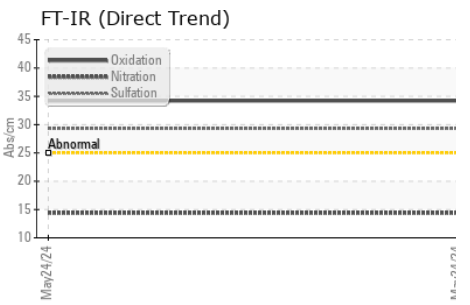
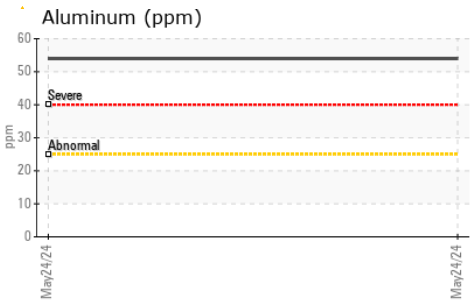
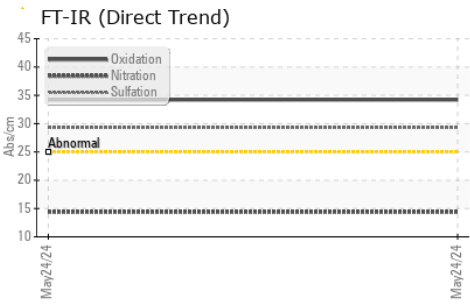
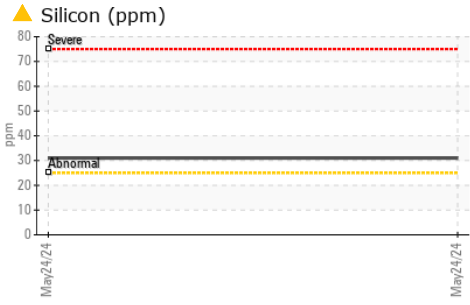
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624 >20	14.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.3	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	34.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	▲ 2.5	---	---

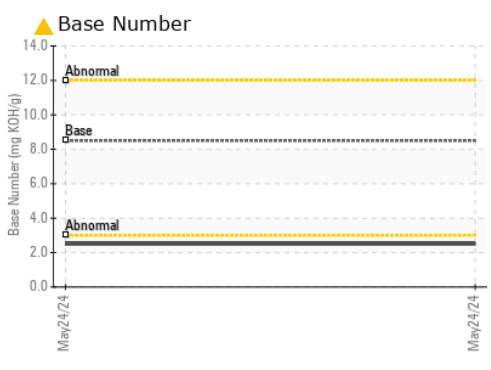
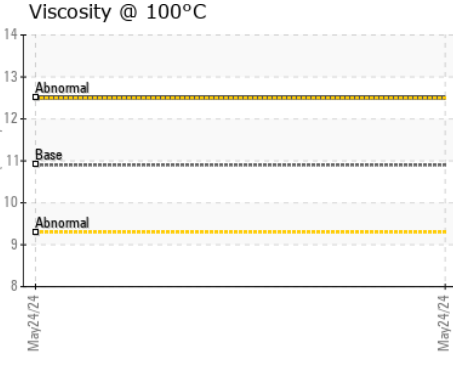
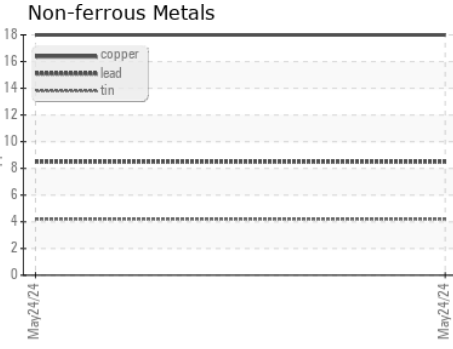
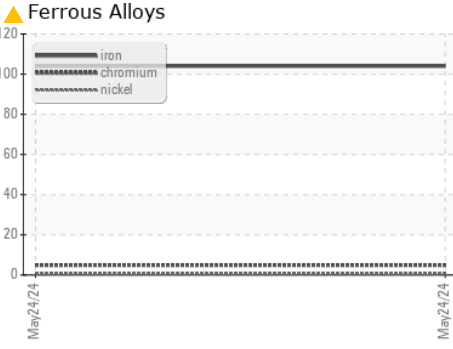
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	12.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000193
Lab Number : 06198783
Unique Number : 11060906
Test Package : FLEET

Received : 04 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 06 Jun 2024 - Sean Felton

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289
 Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)