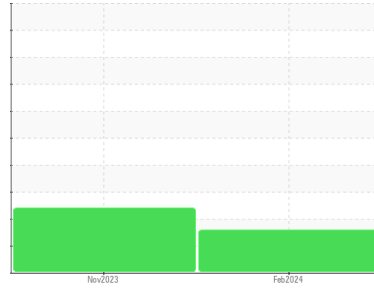


OIL ANALYSIS REPORT

Area
FLEET
Machine Id
Volvo truck (S/N 2227059)
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
The copper level is abnormal. Valve wear is indicated. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0116249	PCA0108157	---
Sample Date	Client Info	26 Feb 2024	07 Nov 2023	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		ABNORMAL	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>100	35	40	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	▲ 11	2	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	5	18	---
Aluminum	ppm	ASTM D5185m	>20	9	● 34	---
Lead	ppm	ASTM D5185m	>40	<1	6	---
Copper	ppm	ASTM D5185m	>330	▲ 338	267	---
Tin	ppm	ASTM D5185m	>15	2	3	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		17	256	---
Barium	ppm	ASTM D5185m		2	<1	---
Molybdenum	ppm	ASTM D5185m		65	119	---
Manganese	ppm	ASTM D5185m		2	3	---
Magnesium	ppm	ASTM D5185m		765	721	---
Calcium	ppm	ASTM D5185m		1009	1453	---
Phosphorus	ppm	ASTM D5185m		897	714	---
Zinc	ppm	ASTM D5185m		1034	840	---
Sulfur	ppm	ASTM D5185m		2700	2401	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	13	▲ 53	---
Sodium	ppm	ASTM D5185m		1	6	---
Potassium	ppm	ASTM D5185m	>20	22	92	---
Fuel	%	ASTM D3524	>5	<1.0	0.4	---

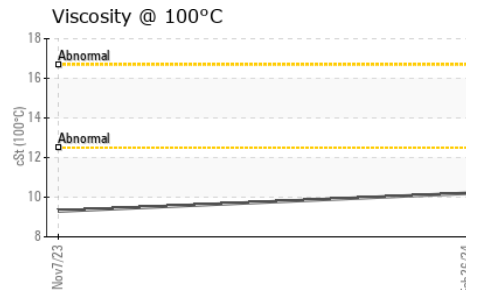
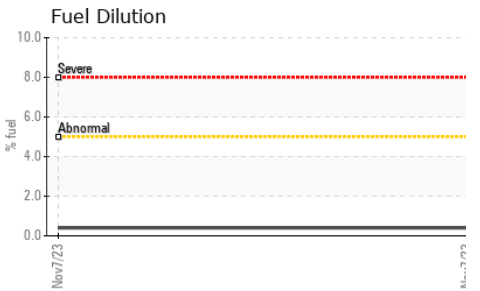
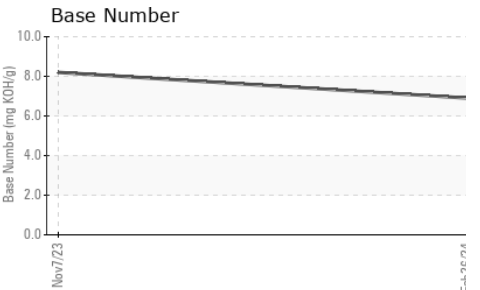
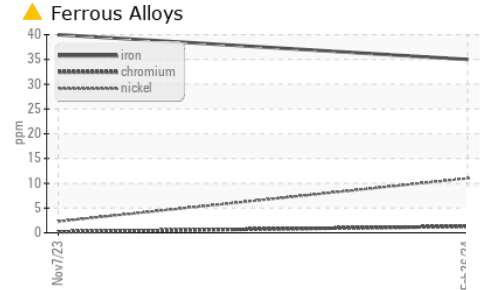
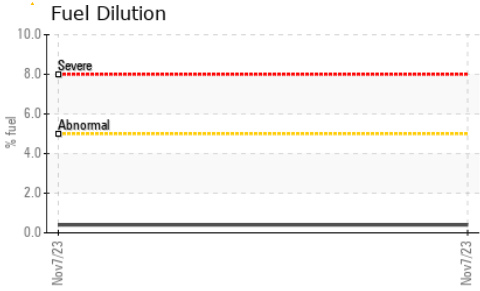
INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	8.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	24.9	---

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	22.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.9	8.2	---

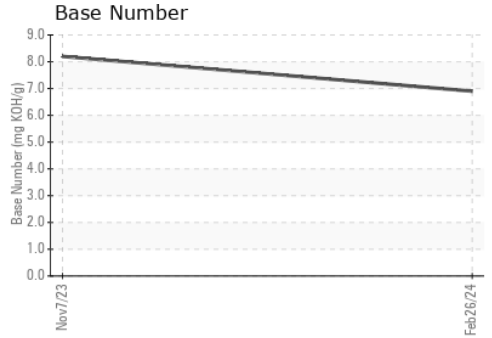
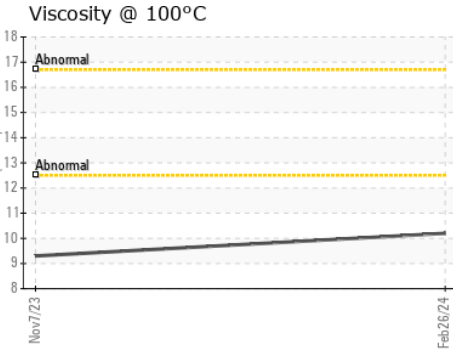
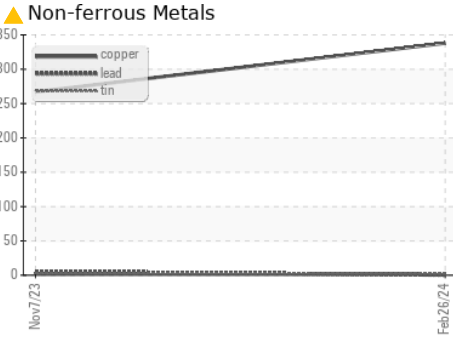
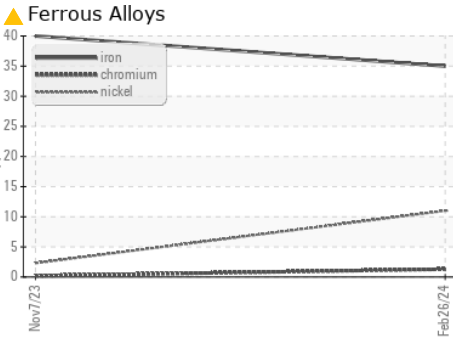
OIL ANALYSIS REPORT



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	10.2	9.3	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0116249 **Received** : 27 Feb 2024
Lab Number : **06101384** **Tested** : 29 Feb 2024
Unique Number : 10899614 **Diagnosed** : 29 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

PERDUE FARMS - DILLON
 2047 HWY 9 WEST
 DILLON, SC
 US 29536
 Contact: KEVIN HOOKS
 kevin.hooks@perdue.com
 T: (843)841-8069
 F: (843)841-8070

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)