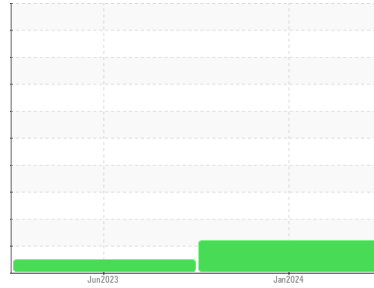


OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

Area
FLEET
 Machine Id
VOLVO 2126927 (S/N 603225)
 Component
1 Diesel Engine
 Fluid
PETRO CANADA DURON ADVANCED 10W30 (36 QTS)



DIAGNOSIS

Recommendation
 The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

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. No other contaminants were detected in the oil.

Fluid Condition
 The BN level is low.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0112370	PCA0098155	---
Sample Date	Client Info		08 Jan 2024	16 Jun 2023	---
Machine Age	mls	Client Info	34740	34740	---
Oil Age	mls	Client Info	34740	34740	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	<1.0	---
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	60	101	---
Chromium	ppm	ASTM D5185m >20	2	2	---
Nickel	ppm	ASTM D5185m >2	1	1	---
Titanium	ppm	ASTM D5185m	0	<1	---
Silver	ppm	ASTM D5185m >2	1	0	---
Aluminum	ppm	ASTM D5185m >25	23	45	---
Lead	ppm	ASTM D5185m >40	3	6	---
Copper	ppm	ASTM D5185m >330	36	178	---
Tin	ppm	ASTM D5185m >15	3	6	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<1	41	---
Barium	ppm	ASTM D5185m 0	0	3	---
Molybdenum	ppm	ASTM D5185m 60	64	123	---
Manganese	ppm	ASTM D5185m 0	2	6	---
Magnesium	ppm	ASTM D5185m 1010	902	672	---
Calcium	ppm	ASTM D5185m 1070	1041	1464	---
Phosphorus	ppm	ASTM D5185m 1150	948	716	---
Zinc	ppm	ASTM D5185m 1270	1236	860	---
Sulfur	ppm	ASTM D5185m 2060	2129	2336	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	45	---
Sodium	ppm	ASTM D5185m	<1	7	---
Potassium	ppm	ASTM D5185m >20	55	119	---

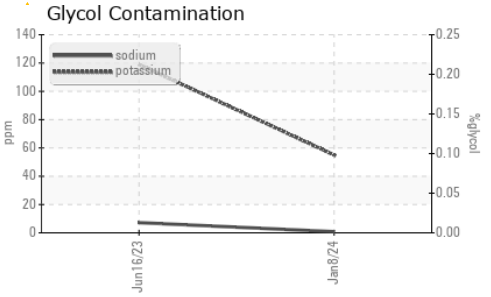
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624 >20	16.0	14.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	26.9	26.9	---

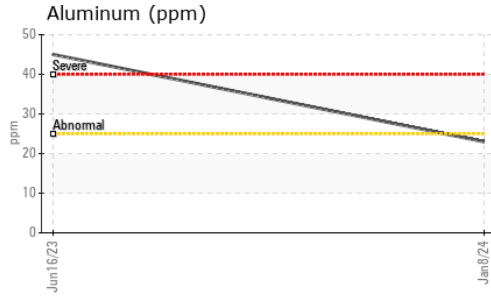
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	30.7	31.7	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.0	▲ 2.0	5.0	---

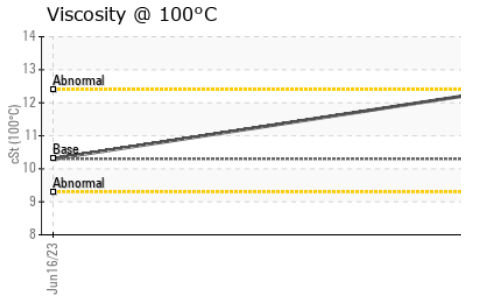
OIL ANALYSIS REPORT



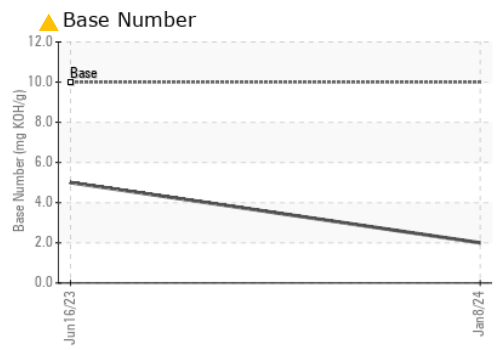
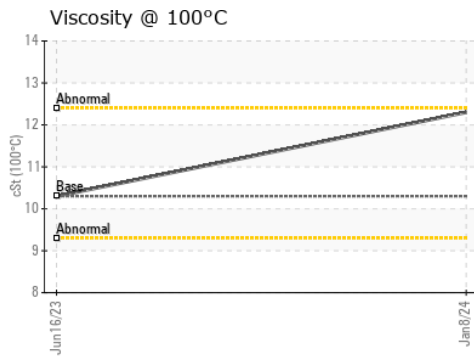
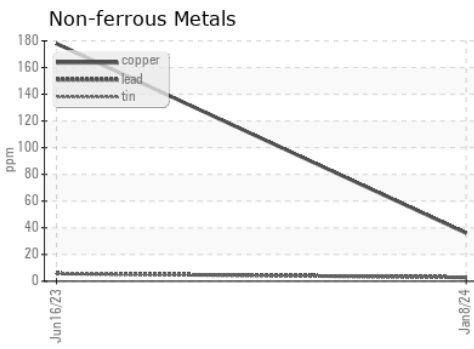
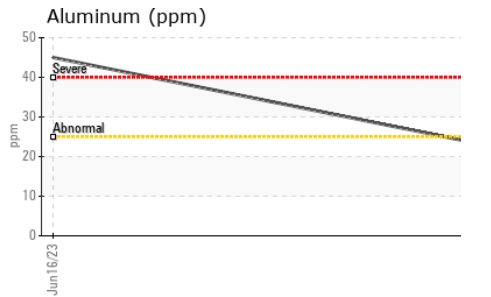
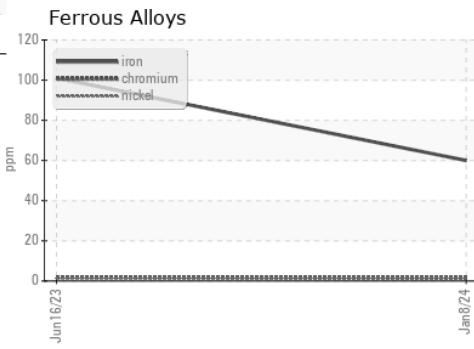
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	10.3	12.3	10.3



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0112370 **Recieved** : 11 Jan 2024
Lab Number : 06057918 **Diagnosed** : 12 Jan 2024
Unique Number : 10829300 **Diagnostician** : Don Baldrige
Test Package : FLEET

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

Certificate L2367
 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)