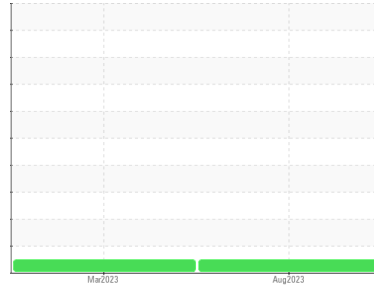


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(50960Z) Walgreens
Machine Id
[Walgreens] 136A63320
Component
Diesel Engine
Fluid
SAE 15W30 (11 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. 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. 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 acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0103549	PCA0092922	---
Sample Date	Client Info	13 Aug 2023	13 Mar 2023	---
Machine Age	mls Client Info	106339	42988	---
Oil Age	mls Client Info	60000	42988	---
Oil Changed	Client Info	Changed	Changed	---
Sample Status		NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	51	53	---
Chromium	ppm ASTM D5185m >5	6	4	---
Nickel	ppm ASTM D5185m >2	<1	1	---
Titanium	ppm ASTM D5185m	<1	<1	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >30	105	148	---
Lead	ppm ASTM D5185m >30	<1	0	---
Copper	ppm ASTM D5185m >150	90	93	---
Tin	ppm ASTM D5185m >5	2	3	---
Vanadium	ppm ASTM D5185m	<1	0	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	30	---
Barium	ppm ASTM D5185m	0	0	---
Molybdenum	ppm ASTM D5185m	61	43	---
Manganese	ppm ASTM D5185m	2	4	---
Magnesium	ppm ASTM D5185m	969	520	---
Calcium	ppm ASTM D5185m	1228	1692	---
Phosphorus	ppm ASTM D5185m	904	680	---
Zinc	ppm ASTM D5185m	1194	880	---
Sulfur	ppm ASTM D5185m	2309	2003	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	8	6	---
Sodium	ppm ASTM D5185m	5	5	---
Potassium	ppm ASTM D5185m >20	201	312	---

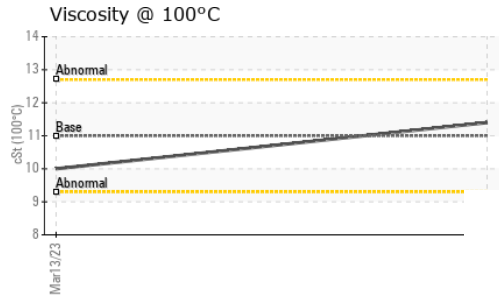
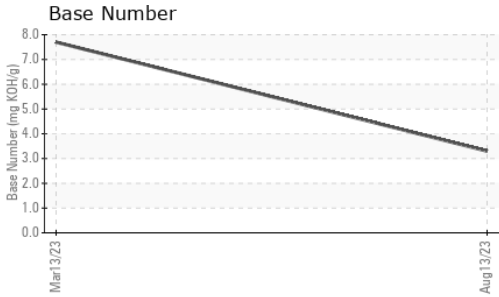
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.8	0.4	---
Nitration	Abs/cm *ASTM D7624 >20	10.7	10.0	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.7	22.4	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	21.2	23.1	---
Base Number (BN)	mg KOH/g ASTM D2896	3.3	7.7	---

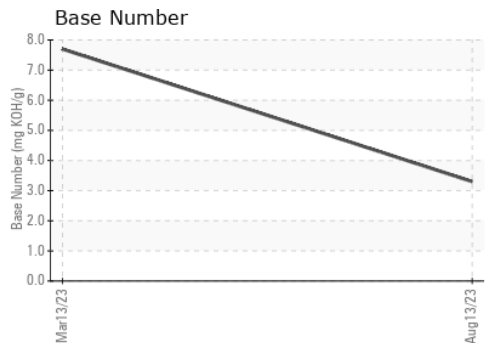
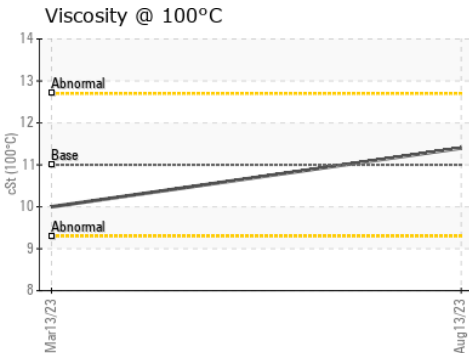
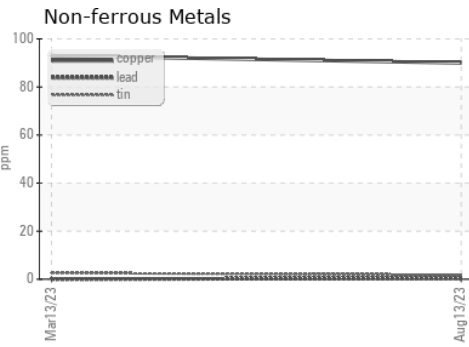
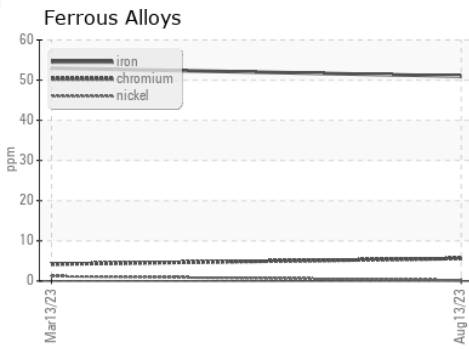
OIL ANALYSIS REPORT



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	11.0	11.4	10.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0103549 **Received** : 21 Aug 2023
Lab Number : 05930259 **Diagnosed** : 23 Aug 2023
Unique Number : 10615530 **Diagnostician** : Jonathan Hester
Test Package : FLEET

Transervice - Shop 1369 - Berkeley-Waxahachie
 710 Ovilla Road
 Waxahachie, TX
 US 75167
 Contact: Robert Beal
 rbeal@transervice.com
 T: (972)923-9928
 F: (972)923-9919

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)