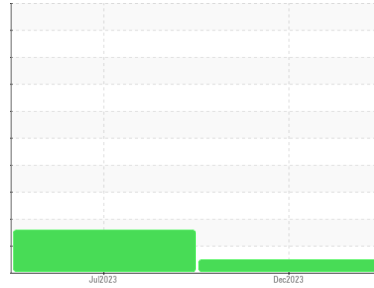


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
REL239430
 Component
Diesel Engine
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

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		PCA0110032	PCA0090760	---
Sample Date	Client Info		21 Dec 2023	14 Jul 2023	---
Machine Age	hrs	Client Info	617	617	---
Oil Age	hrs	Client Info	617	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	0.5	---
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	30	46	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >4	8	11	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	0	<1	---
Aluminum	ppm	ASTM D5185m >20	2	4	---
Lead	ppm	ASTM D5185m >40	0	<1	---
Copper	ppm	ASTM D5185m >330	30	65	---
Tin	ppm	ASTM D5185m >15	1	2	---
Vanadium	ppm	ASTM D5185m	0	<1	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	201	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	63	116	---
Manganese	ppm	ASTM D5185m	1	5	---
Magnesium	ppm	ASTM D5185m	865	676	---
Calcium	ppm	ASTM D5185m	1121	1449	---
Phosphorus	ppm	ASTM D5185m	820	678	---
Zinc	ppm	ASTM D5185m	1105	857	---
Sulfur	ppm	ASTM D5185m	2291	2641	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	▲ 76	---
Sodium	ppm	ASTM D5185m	1	4	---
Potassium	ppm	ASTM D5185m >20	3	10	---

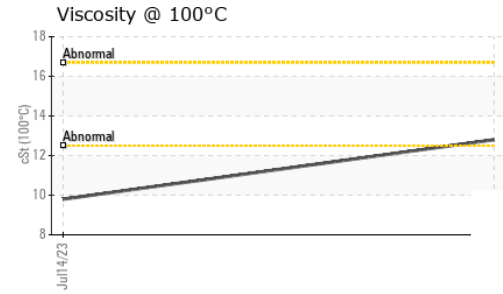
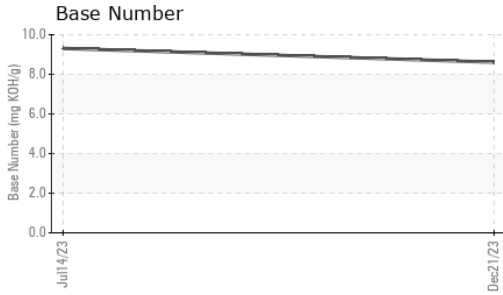
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.7	0.4	---
Nitration	Abs/cm	*ASTM D7624 >20	10.2	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.9	24.7	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.8	22.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.61	9.31	---

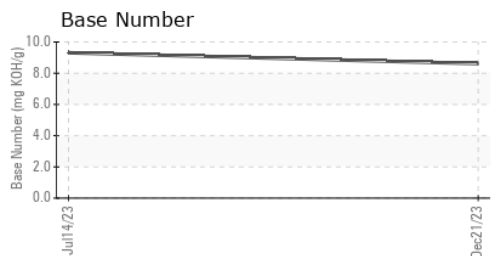
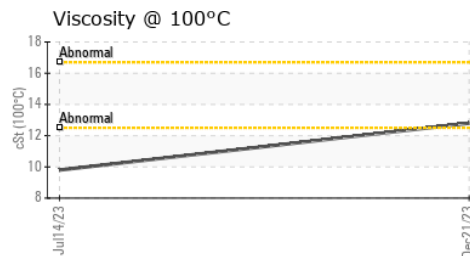
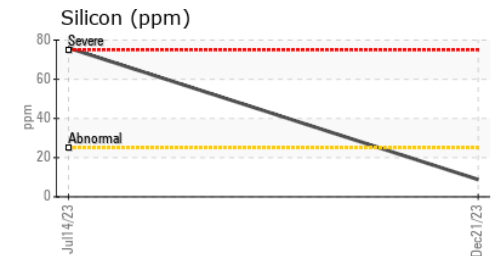
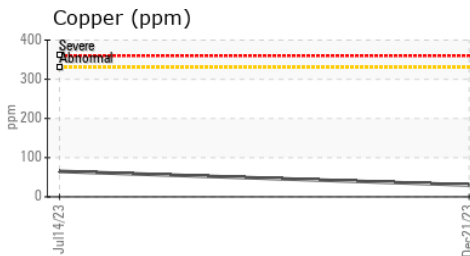
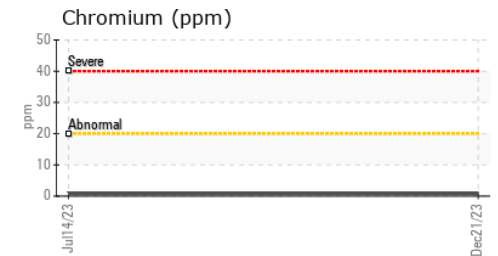
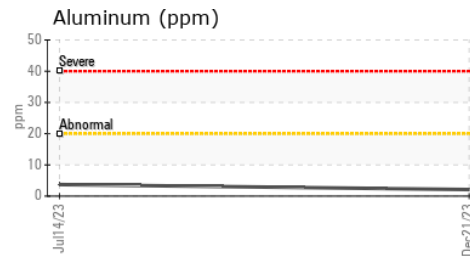
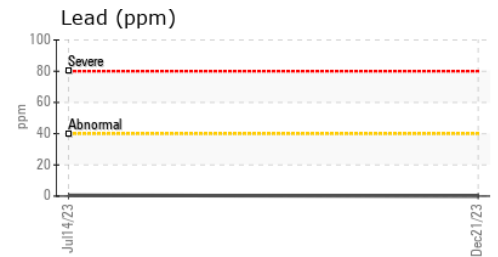
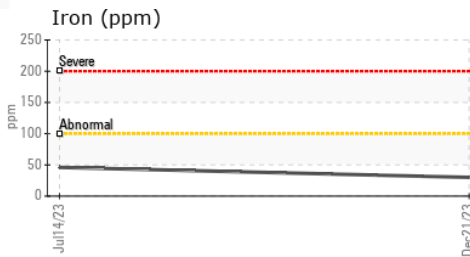
OIL ANALYSIS REPORT



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	12.8	9.8	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0110032 **Recieved** : 28 Dec 2023
Lab Number : **06047007** **Diagnosed** : 29 Dec 2023
Unique Number : 10807615 **Diagnostician** : Wes Davis
Test Package : MOB 2

UMM - Shop 401 - Norton
 186 South Washington Street
 Norton, MA
 US 02766
 Contact: Dave Wilson Jr.
 Dwilson1@win-waste.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)

T:
F: