

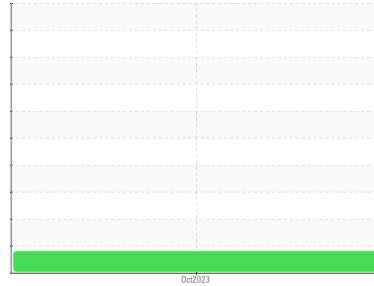
PROBLEM SUMMARY

Sample Rating Trend

WEAR

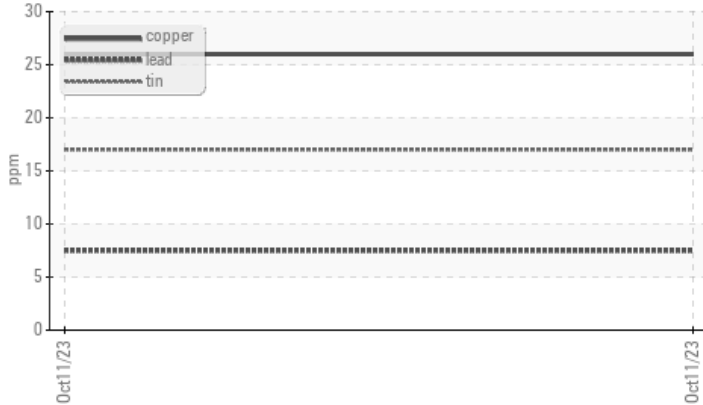


Machine Id
404
 Component
Diesel Engine
 Fluid
ZINC-FREE ENGINE OIL SAE 40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Tin	ppm	ASTM D5185m	>15	▲ 17	---	---

Customer Id: USSCLEFL
 Sample No.: PCA05995908
 Lab Number: 05995908
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

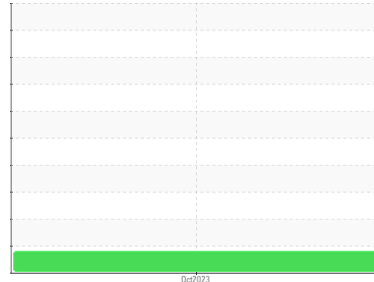
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
404
 Component
Diesel Engine
 Fluid
ZINC-FREE ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

▲ Wear

The tin level is abnormal. All other component wear rates are normal.

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA05995908	---	---
Sample Date	Client Info		11 Oct 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	39	---	---
Chromium	ppm	ASTM D5185m >20	2	---	---
Nickel	ppm	ASTM D5185m >4	1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >20	4	---	---
Lead	ppm	ASTM D5185m >40	8	---	---
Copper	ppm	ASTM D5185m >330	26	---	---
Tin	ppm	ASTM D5185m >15	▲ 17	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	30	---	---
Barium	ppm	ASTM D5185m 5	<1	---	---
Molybdenum	ppm	ASTM D5185m 37	37	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 12	10	---	---
Calcium	ppm	ASTM D5185m 3250	3270	---	---
Phosphorus	ppm	ASTM D5185m 50	0	---	---
Zinc	ppm	ASTM D5185m 5	0	---	---
Sulfur	ppm	ASTM D5185m 5750	3618	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	---	---
Sodium	ppm	ASTM D5185m	6	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

INFRA-RED

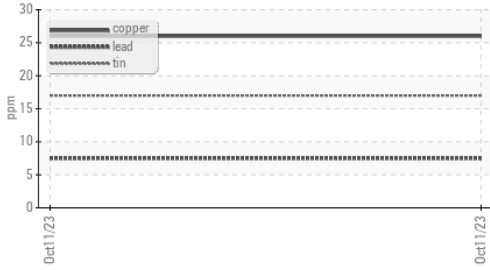
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.4	---	---
Nitration	Abs/cm	*ASTM D7624 >20	9.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.4	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	9.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	14.20	---	---

OIL ANALYSIS REPORT

▲ Non-ferrous Metals

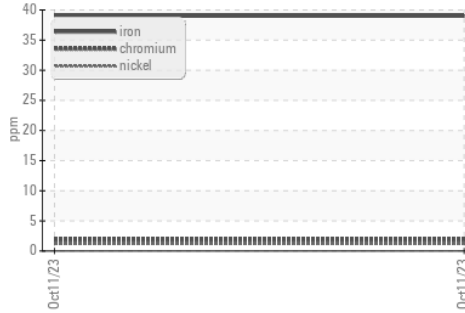


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

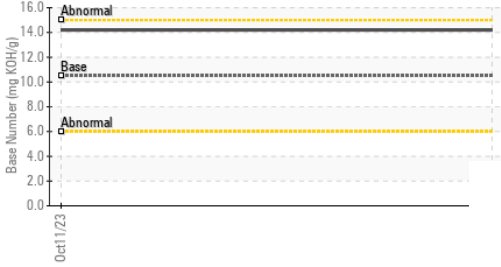
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	15.2	---

GRAPHS

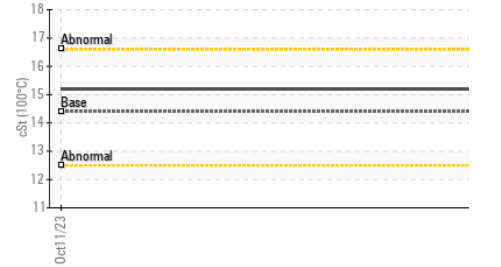
Ferrous Alloys



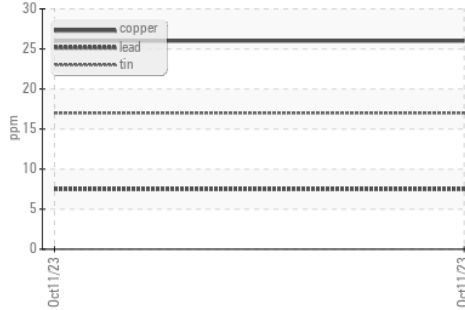
Base Number



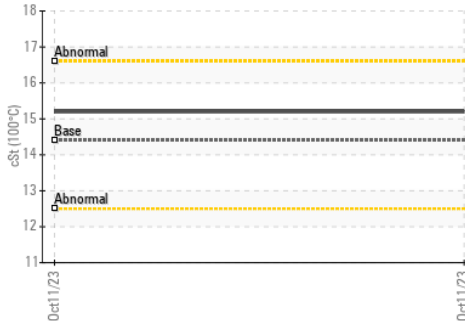
Viscosity @ 100°C



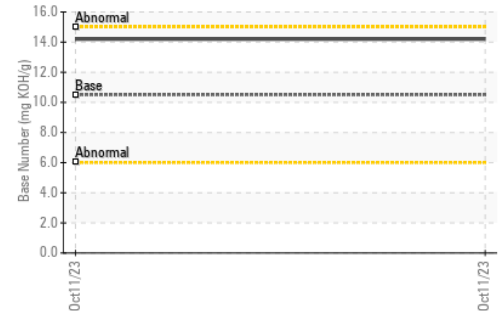
▲ Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA05995908 **Received** : 01 Nov 2023
Lab Number : 05995908 **Diagnosed** : 03 Nov 2023
Unique Number : 10724268 **Diagnostician** : Sean Felton
Test Package : IND 2

U.S. SUGAR CORP
 1731 S W.C. OWEN AVENUE
 CLEWISTON, FL
 US 33440-3032
 Contact: MAT RUDD
 mrudd@ussugar.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: