



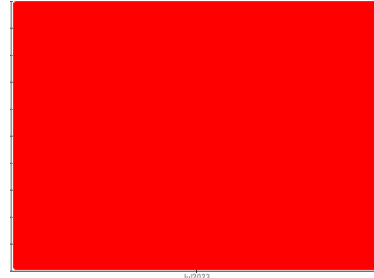
PROBLEM SUMMARY

Sample Rating Trend

WEAR

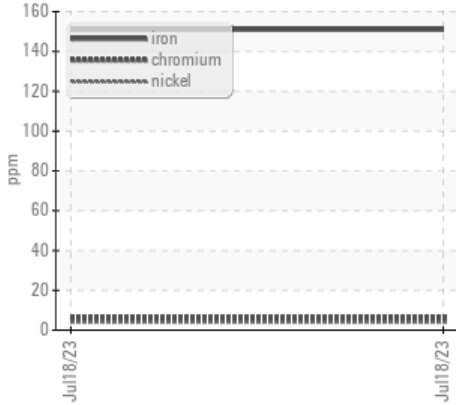


Machine Id
95052
Component
Diesel Engine
Fluid
AG 10W30 (10 GAL)

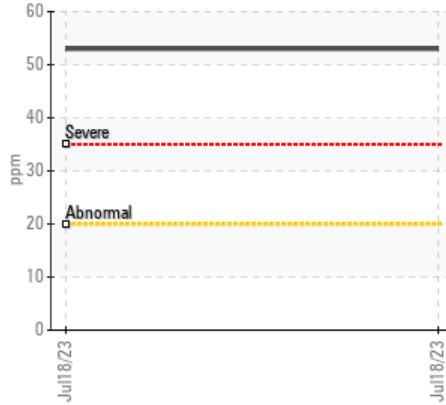


COMPONENT CONDITION SUMMARY

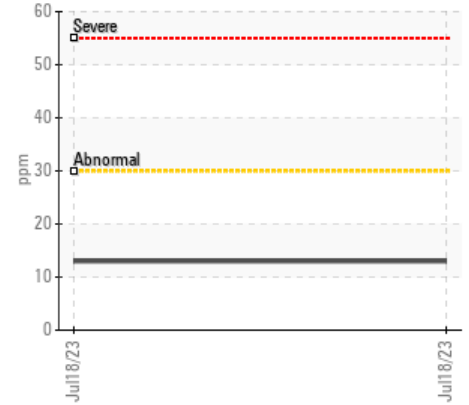
Ferrous Alloys



Silicon (ppm)



Aluminum (ppm)



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>80	151	---	---
Chromium	ppm	ASTM D5185m	>5	6	---	---
Nickel	ppm	ASTM D5185m	>2	4	---	---
Aluminum	ppm	ASTM D5185m	>30	13	---	---
Silicon	ppm	ASTM D5185m	>20	53	---	---

Customer Id: SBTYOR
Sample No.: SBP0004613
Lab Number: 05905090
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

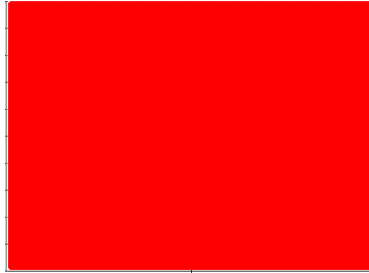
HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
95052
Component
Diesel Engine
Fluid
AG 10W30 (10 GAL)

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Wear

Piston, ring and cylinder wear is indicated. Valve wear is indicated.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. Test for glycol is negative.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants and wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0004613	---	---
Sample Date	Client Info		18 Jul 2023	---	---
Machine Age	mls	Client Info	102215	---	---
Oil Age	mls	Client Info	11000	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	151	---
Chromium	ppm	ASTM D5185m	>5	6	---
Nickel	ppm	ASTM D5185m	>2	4	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>30	13	---
Lead	ppm	ASTM D5185m	>30	1	---
Copper	ppm	ASTM D5185m	>150	5	---
Tin	ppm	ASTM D5185m	>5	<1	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		66	---
Manganese	ppm	ASTM D5185m		2	---
Magnesium	ppm	ASTM D5185m		1062	---
Calcium	ppm	ASTM D5185m		1230	---
Phosphorus	ppm	ASTM D5185m		1096	---
Zinc	ppm	ASTM D5185m		1370	---
Sulfur	ppm	ASTM D5185m		3625	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	53	---
Sodium	ppm	ASTM D5185m		123	---
Potassium	ppm	ASTM D5185m	>20	9	---
Glycol	%	*ASTM D2982		0.0	---

INFRA-RED

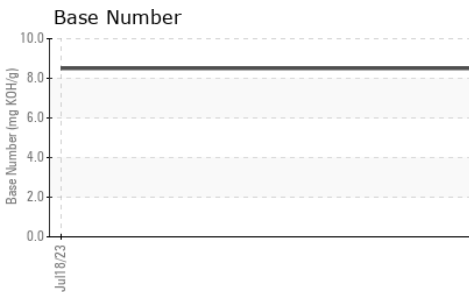
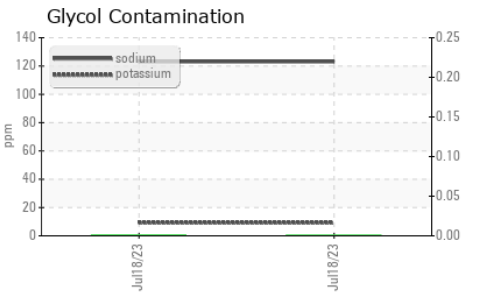
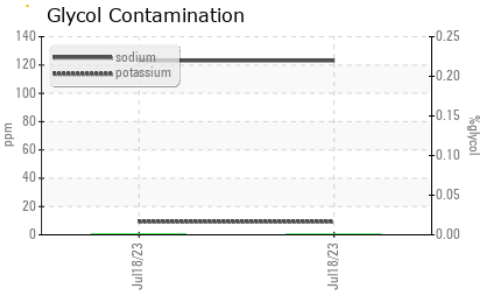
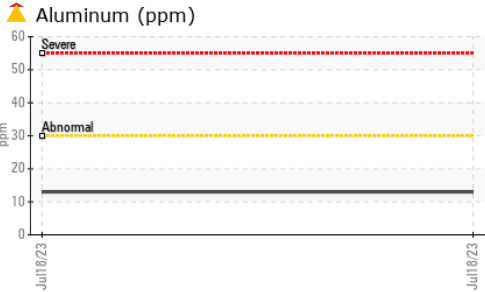
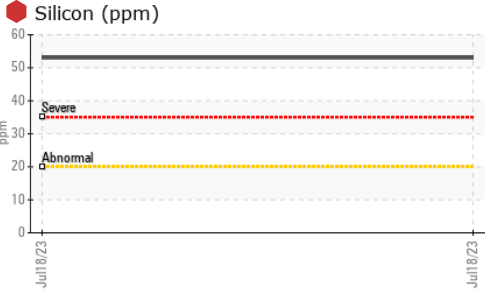
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.3	---
Nitration	Abs/cm	*ASTM D7624	>20	13.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.8	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	---



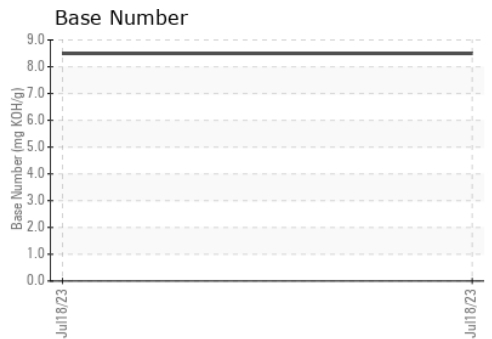
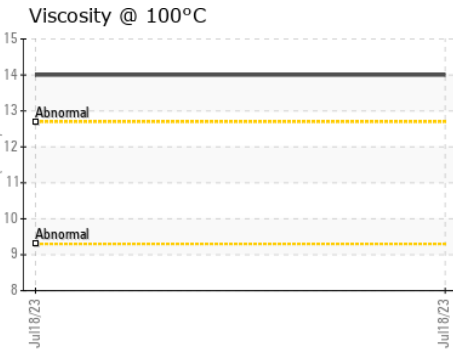
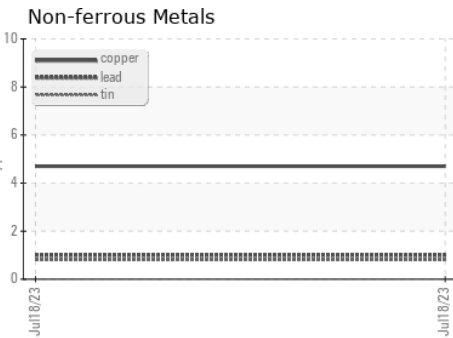
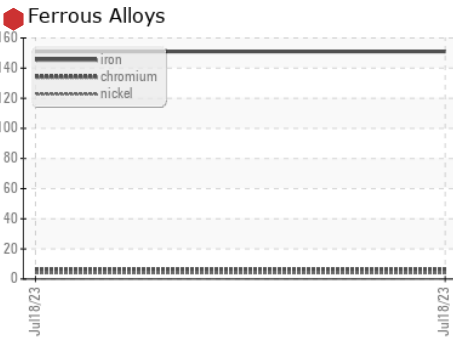
OIL ANALYSIS REPORT



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	14.0	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004613 **Received** : 24 Jul 2023
Lab Number : 05905090 **Diagnosed** : 01 Aug 2023
Unique Number : 10566446 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: Glycol)

Sapp Bros. Fleet - York Location
 US
 Contact: Service Manager

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)

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