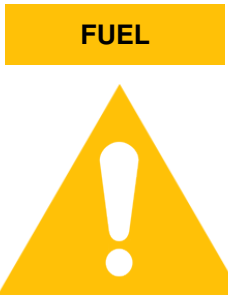
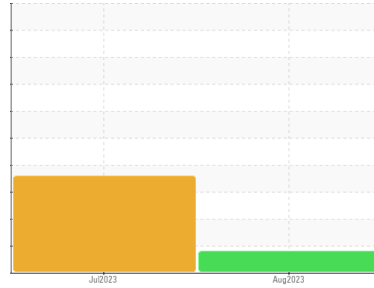




PROBLEM SUMMARY

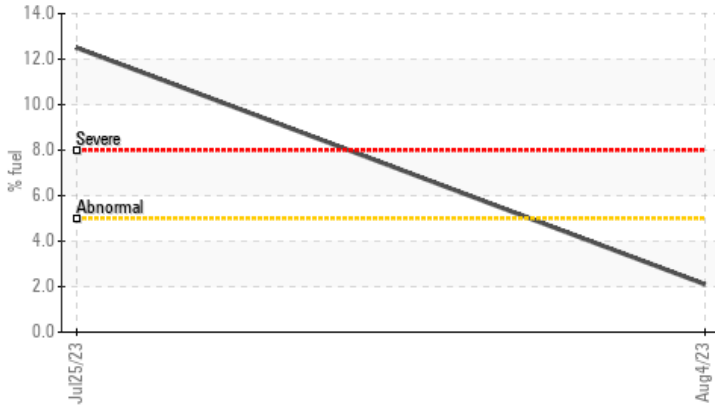
Area
NOT IN UNIT LIST/Tire Warehouse
 Machine Id
91910
 Component
1 Diesel Engine
 Fluid
NOT GIVEN (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Fuel Dilution



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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				MARGINAL	SEVERE	---
Fuel	%	ASTM D3524	>5	▲ 2.1	● 12.5	---

Customer Id: SBTOMA
 Sample No.: SBP0004650
 Lab Number: 05926605
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@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	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

25 Jul 2023 Diag: Jonathan Hester

FUEL



We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN level is low.

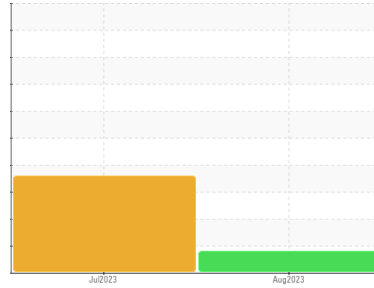
view report





OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
NOT IN UNIT LIST/Tire Warehouse
 Machine Id
91910
 Component
1 Diesel Engine
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

Fuel content negligible. 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		SBP0004650	SBP0003627	---
Sample Date	Client Info		04 Aug 2023	25 Jul 2023	---
Machine Age	mls	Client Info	164255	163164	---
Oil Age	mls	Client Info	164255	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			MARGINAL	SEVERE	---

CONTAMINATION	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	5	17	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >4	<1	<1	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	1	3	---
Lead	ppm	ASTM D5185m >40	0	0	---
Copper	ppm	ASTM D5185m >330	<1	1	---
Tin	ppm	ASTM D5185m >15	<1	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	54	50	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m	838	772	---
Calcium	ppm	ASTM D5185m	993	936	---
Phosphorus	ppm	ASTM D5185m	938	828	---
Zinc	ppm	ASTM D5185m	1105	1007	---
Sulfur	ppm	ASTM D5185m	3113	2745	---

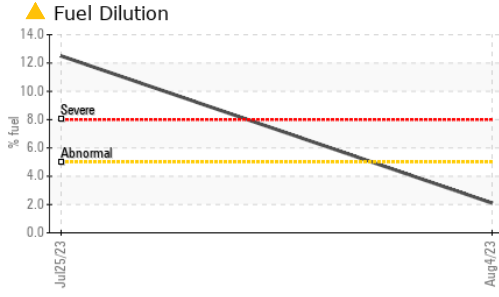
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	9	---
Sodium	ppm	ASTM D5185m	<1	2	---
Potassium	ppm	ASTM D5185m >20	<1	1	---
Fuel	%	ASTM D3524 >5	▲ 2.1	12.5	---

INFRA-RED	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	6.1	11.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.4	31.0	---

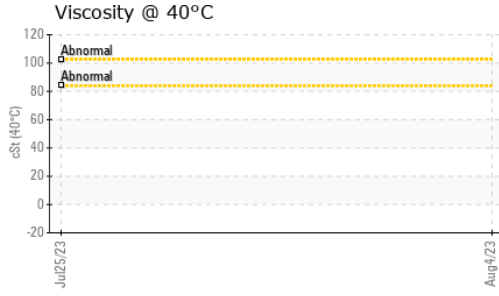
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.7	41.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.3	▲ 3.7	---



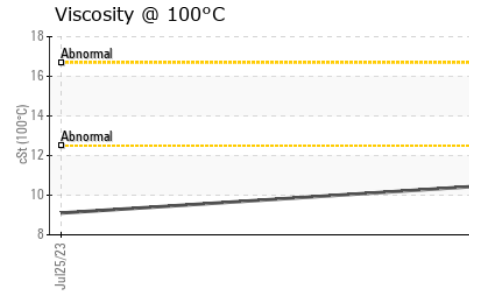
OIL ANALYSIS REPORT



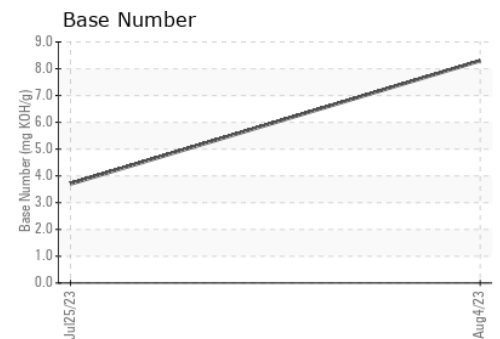
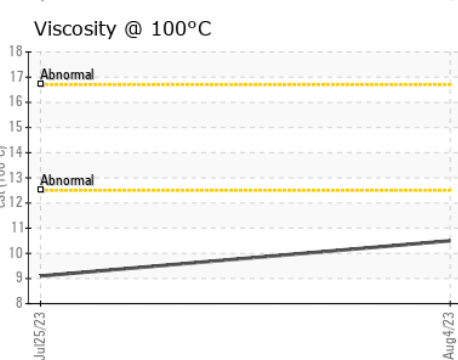
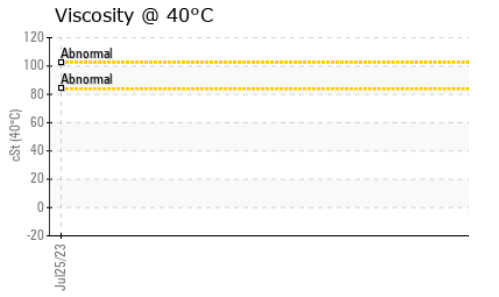
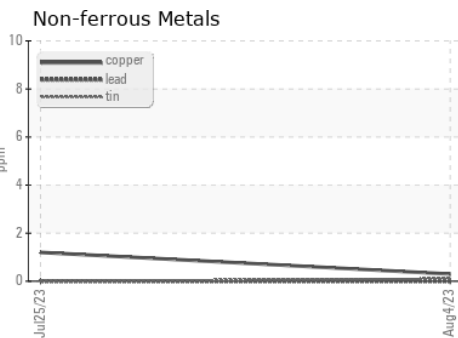
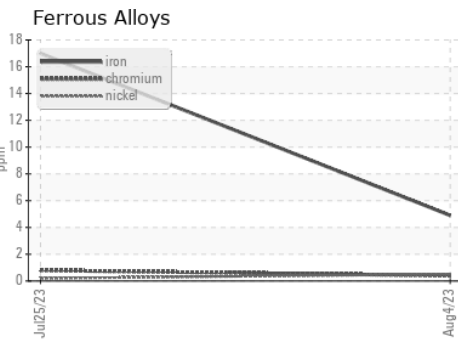
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE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



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.5	▲ 9.1	---



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004650 **Received** : 16 Aug 2023
Lab Number : **05926605** **Diagnosed** : 21 Aug 2023
Unique Number : 10606552 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: KV40, PercentFuel)

Sapp Bros. Fleet - Omaha Petroleum Location
 9915 South 148th
 OMAHA, NE
 US 68138
 Contact: Stephanie Kelly
 skelly@sappbros.net
 T: (800)211-8589
 F:

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)