



PROBLEM SUMMARY

Sample Rating Trend

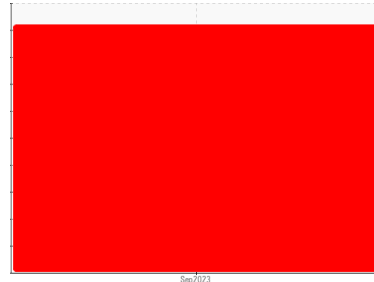
GLYCOL



Machine Id
FSP9408

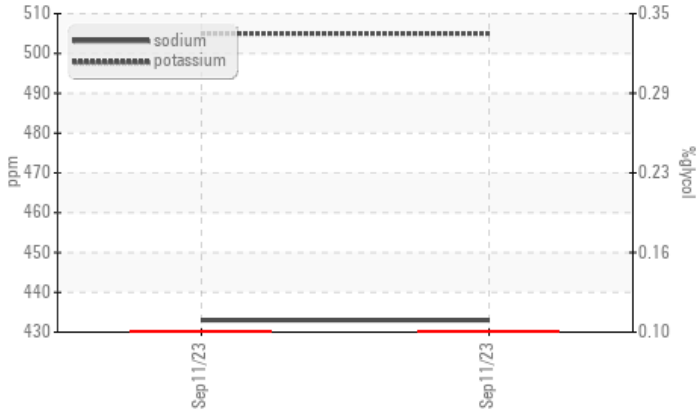
Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

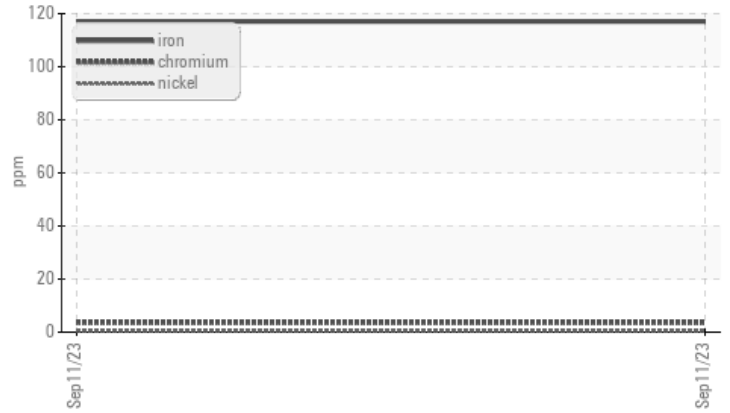


COMPONENT CONDITION SUMMARY

● Glycol Contamination



▲ Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	▲ 117	---	---
Sodium	ppm	ASTM D5185m	>158	▲ 433	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 505	---	---
Glycol	%	*ASTM D2982		● 0.10	---	---

Customer Id: FREORL
Sample No.: WC0840922
Lab Number: 05962682
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

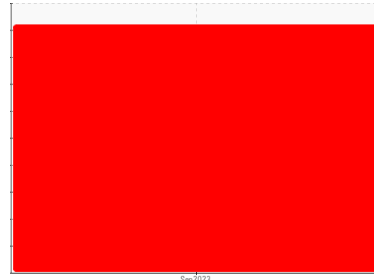
GLYCOL



Machine Id
FSP9408

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0840922	---	---
Sample Date	Client Info		11 Sep 2023	---	---
Machine Age	mls	Client Info	468759	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
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	>100	▲ 117	---
Chromium	ppm	ASTM D5185m	>20	4	---
Nickel	ppm	ASTM D5185m	>4	<1	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>20	17	---
Lead	ppm	ASTM D5185m	>40	0	---
Copper	ppm	ASTM D5185m	>330	2	---
Tin	ppm	ASTM D5185m	>15	<1	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	1	---
Barium	ppm	ASTM D5185m	10	0	---
Molybdenum	ppm	ASTM D5185m	100	100	---
Manganese	ppm	ASTM D5185m		1	---
Magnesium	ppm	ASTM D5185m	450	1163	---
Calcium	ppm	ASTM D5185m	3000	1250	---
Phosphorus	ppm	ASTM D5185m	1150	1110	---
Zinc	ppm	ASTM D5185m	1350	1484	---
Sulfur	ppm	ASTM D5185m	4250	3586	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	11	---
Sodium	ppm	ASTM D5185m	>158	▲ 433	---
Potassium	ppm	ASTM D5185m	>20	▲ 505	---
Glycol	%	*ASTM D2982		● 0.10	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	2.4	---
Nitration	Abs/cm	*ASTM D7624	>20	15.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.5	---

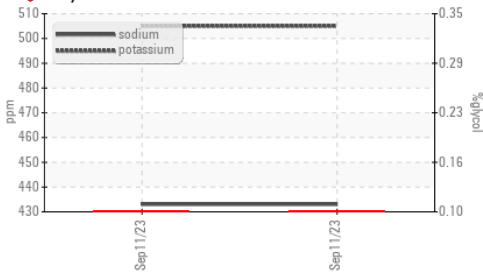
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.2	---

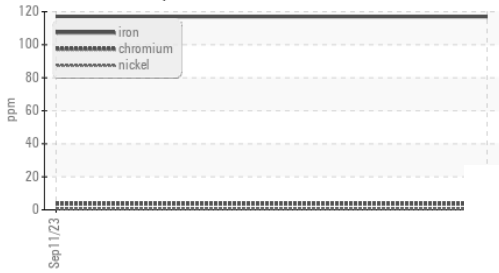


OIL ANALYSIS REPORT

Glycol Contamination



Ferrous Alloys

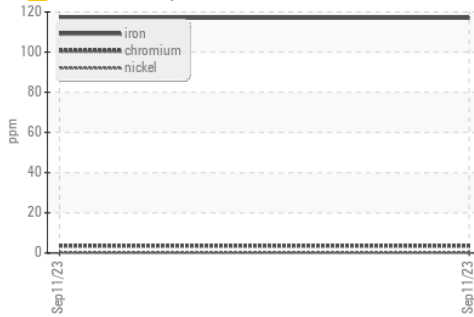


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

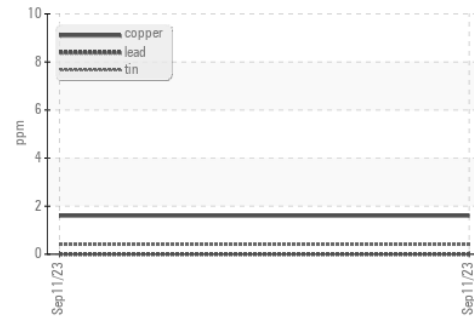
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	---

GRAPHS

Ferrous Alloys



Non-ferrous Metals



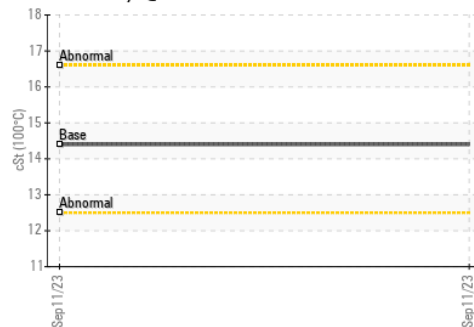
Base Number



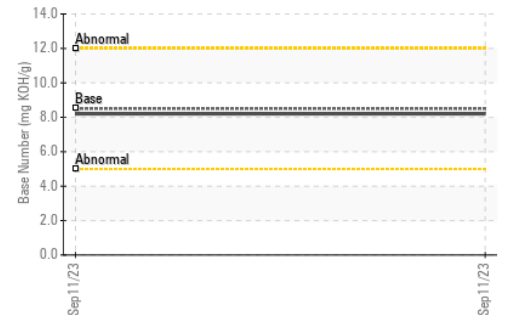
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0840922 **Received** : 27 Sep 2023
Lab Number : 05962682 **Diagnosed** : 28 Sep 2023
Unique Number : 10669233 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: Glycol)

FRESHPOINT
 8801 EXCHANGE DRIVE
 ORLANDO, FL
 US 32809
 Contact: CRAIG EVANS
 evans_craig@sbcglobal.net

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: