



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

F1
Component
Diesel Engine

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

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			RW0005559	---	---
Sample Date	Client Info			02 Apr 2024	---	---
Machine Age	hrs	Client Info		546	---	---
Oil Age	hrs	Client Info		52	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				NORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	---	---
Water	WC Method	>0.2		NEG	---	---
Glycol	WC Method			NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	1	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	<1	---	---
Lead	ppm	ASTM D5185m	>40	3	---	---
Copper	ppm	ASTM D5185m	>330	<1	---	---
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	23	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	7	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	450	135	---	---
Calcium	ppm	ASTM D5185m	3000	2086	---	---
Phosphorus	ppm	ASTM D5185m	1150	914	---	---
Zinc	ppm	ASTM D5185m	1350	1052	---	---
Sulfur	ppm	ASTM D5185m	4250	3965	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	---	---
Sodium	ppm	ASTM D5185m	>158	2	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---

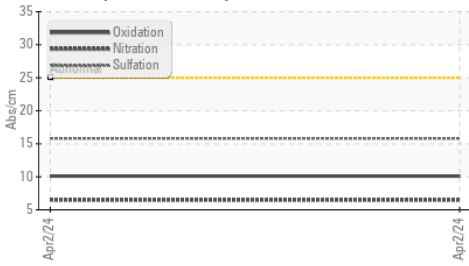
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.8	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.15	---	---

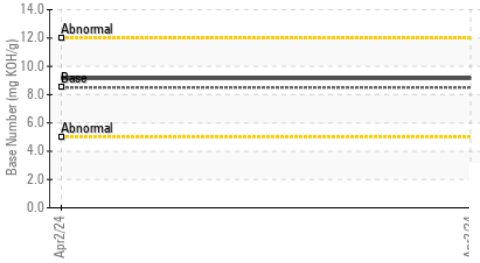


OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Base Number



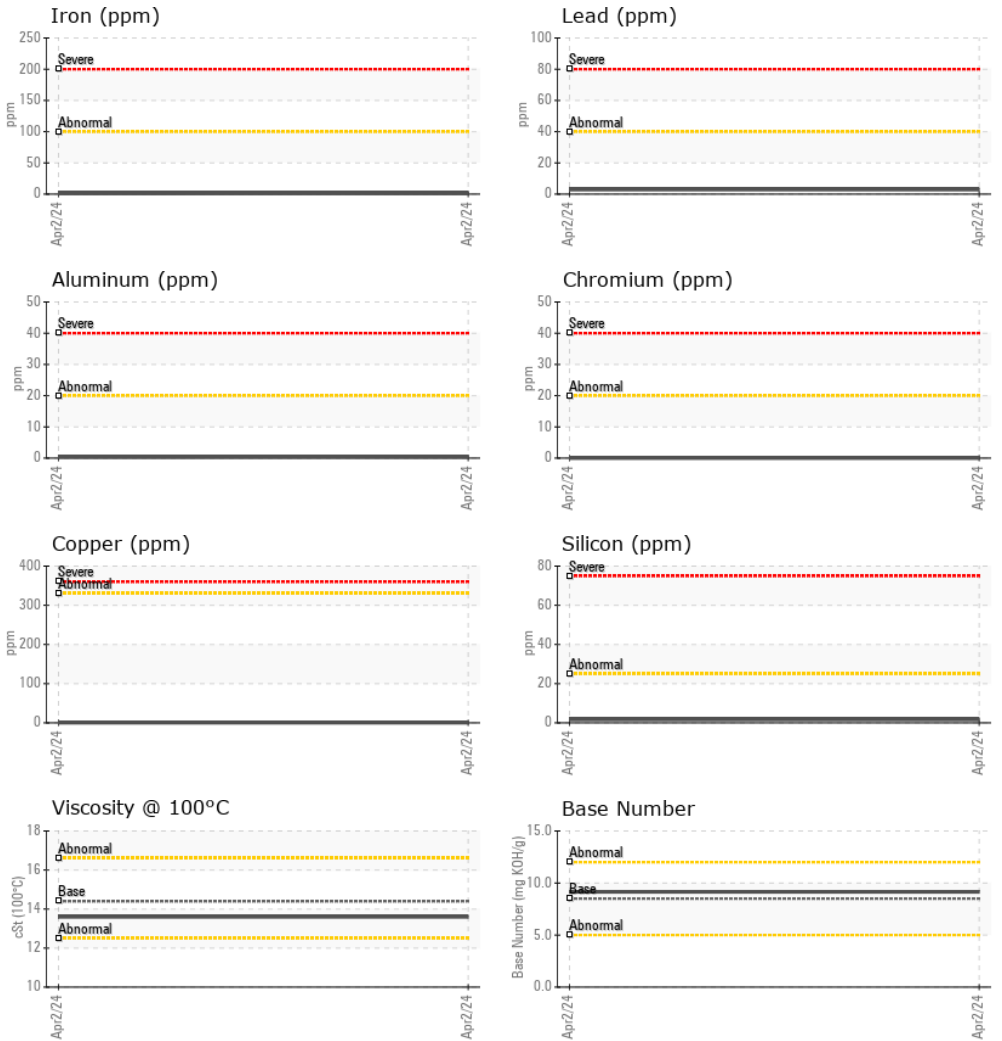
Viscosity @ 100°C



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	13.6	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005559
Lab Number : 06141538
Unique Number : 10966346
Test Package : MOB 2

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Wes Davis

CITY OF SAGINAW - WATER TREATMENT DIVISION
 522 EZRA RUST DR
 SAGINAW, MI
 US 48601
 Contact: Service Manager

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: