



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
9035
 Component
Diesel Engine
 Fluid
VALVOLINE PREMIUM BLUE 2000 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0863937	WC0758869	---
Sample Date		Client Info		23 Feb 2024	02 Dec 2022	---
Machine Age	mls	Client Info		0	0	---
Oil Age	mls	Client Info		15000	15000	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				SEVERE	NORMAL	---

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 299	52	---
Chromium	ppm	ASTM D5185m	>20	6	2	---
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	12	4	---
Lead	ppm	ASTM D5185m	>40	19	7	---
Copper	ppm	ASTM D5185m	>330	5	1	---
Tin	ppm	ASTM D5185m	>15	1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

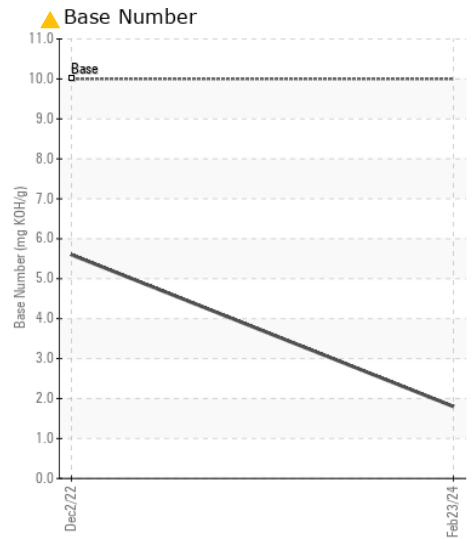
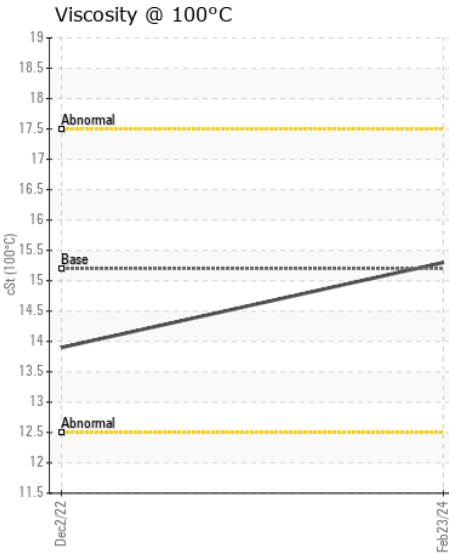
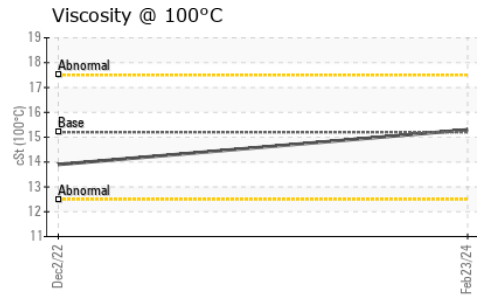
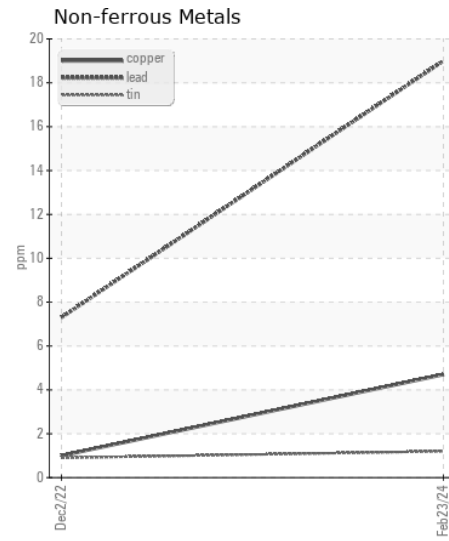
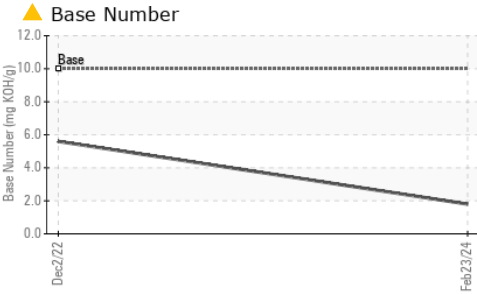
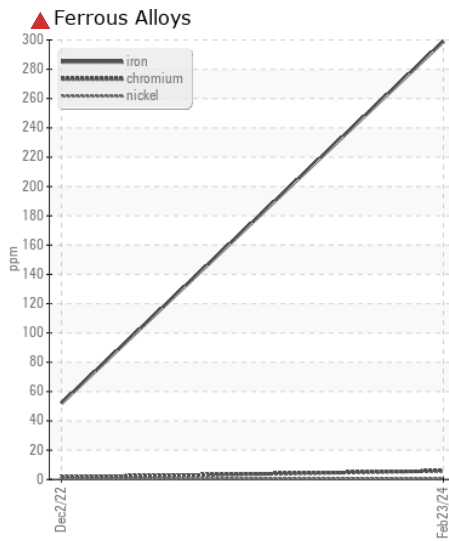
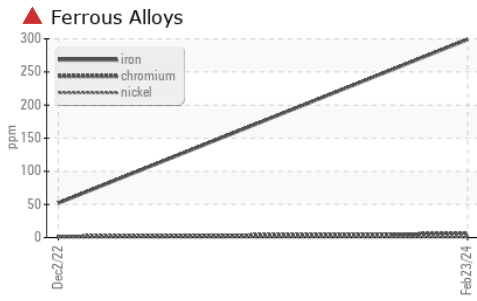
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	15	7	---
Potassium	ppm	ASTM D5185m	>20	14	4	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	14.5	13.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	39.4	26.3	---
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	---

FLUID CONDITION

The BN level is low.

Sodium	ppm	ASTM D5185m		6	7	---
Boron	ppm	ASTM D5185m		35	27	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		84	43	---
Manganese	ppm	ASTM D5185m		4	<1	---
Magnesium	ppm	ASTM D5185m		554	495	---
Calcium	ppm	ASTM D5185m		1880	1817	---
Phosphorus	ppm	ASTM D5185m		1248	748	---
Zinc	ppm	ASTM D5185m		1544	1018	---
Sulfur	ppm	ASTM D5185m		3175	2780	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	45.0	29.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	▲ 1.8	5.6	---
Visc @ 100°C	cSt	ASTM D445	15.2	15.3	13.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863937
Lab Number : 06103562
Unique Number : 10901792
Test Package : FLEET
Received : 28 Feb 2024
Tested : 02 Mar 2024
Diagnosed : 02 Mar 2024 - Don Baldrige

TALLEN TRANSPORT
 262 COUNTY ROAD 580
 MADISONVILLE, TN
 US 37303
 Contact: COBY JOHNSON
 tallentransport@gmail.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)

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F: