



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
2076
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL 10W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0854003	WC0878579	---
Sample Date		Client Info		24 Feb 2024	30 Nov 2023	---
Machine Age	mls	Client Info		46405	30619	---
Oil Age	mls	Client Info		15786	6619	---
Filter Age	mls	Client Info		15786	6619	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	11	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	3	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	<1	<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

Fuel content negligible. There is no indication of any contamination in the oil.

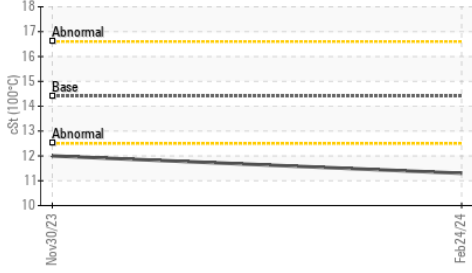
Silicon	ppm	ASTM D5185m	>25	4	4	---
Potassium	ppm	ASTM D5185m	>20	3	7	---
Fuel	%	ASTM D3524	>5	0.5	0.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	19.7	---
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

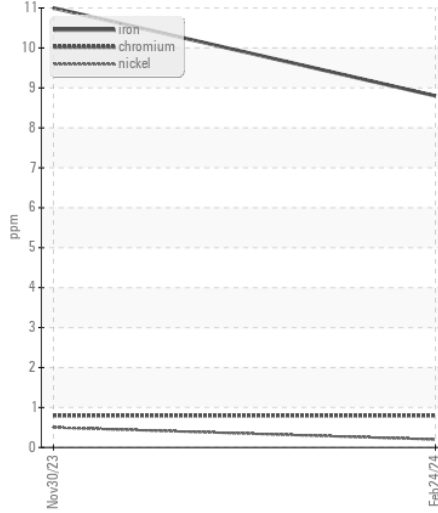
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m	250	2	23	---
Barium	ppm	ASTM D5185m	10	0	3	---
Molybdenum	ppm	ASTM D5185m	100	62	61	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	450	1012	737	---
Calcium	ppm	ASTM D5185m	3000	1160	1313	---
Phosphorus	ppm	ASTM D5185m	1150	1143	1023	---
Zinc	ppm	ASTM D5185m	1350	1318	1236	---
Sulfur	ppm	ASTM D5185m	4250	3531	3247	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.1	8.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	11.3	12.0	---

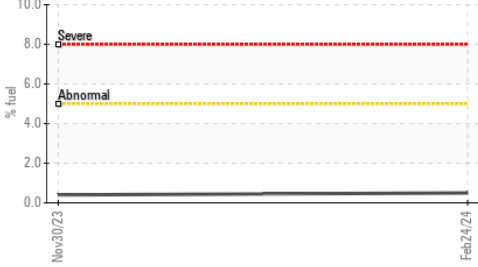
● Viscosity @ 100°C



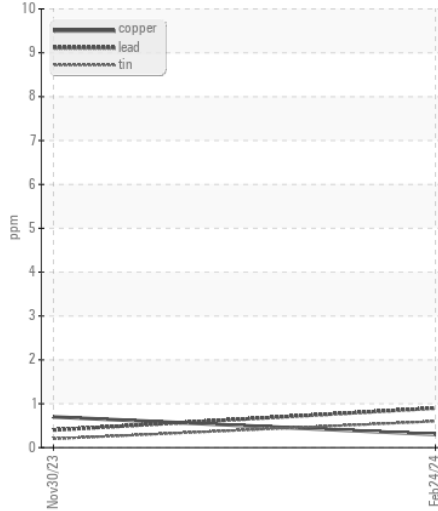
Ferrous Alloys



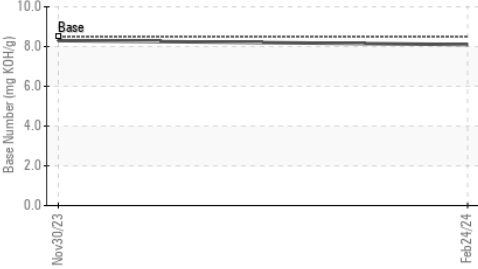
Fuel Dilution



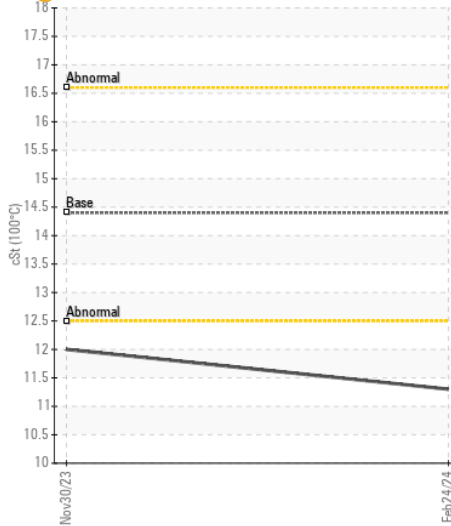
Non-ferrous Metals



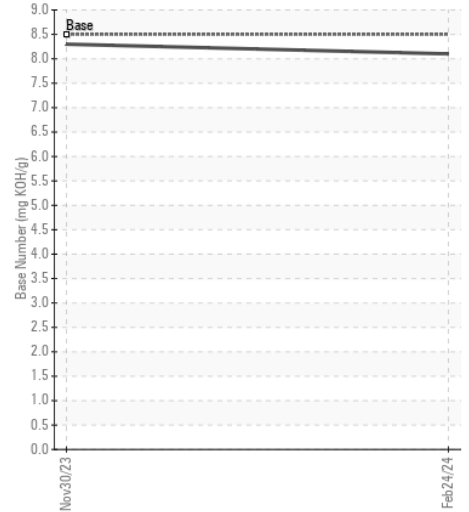
Base Number



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0854003 **Received** : 18 Mar 2024
Lab Number : 06121482 **Tested** : 22 Mar 2024
Unique Number : 10930315 **Diagnosed** : 22 Mar 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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 3403 EAST ROOSEVELT ROAD
 LITTLE ROCK, AR
 US 72206
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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)