IDEALEASE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
7011M
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.
Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

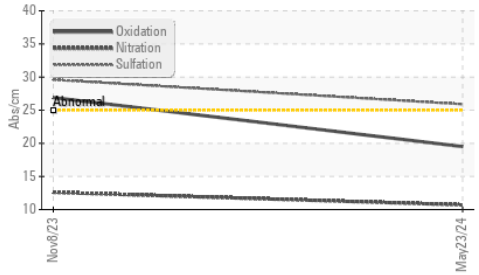
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

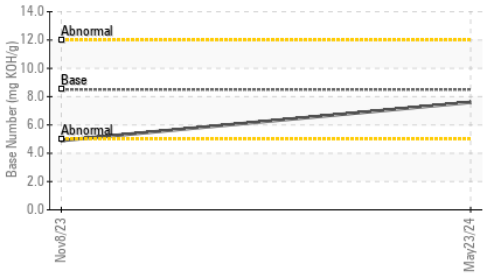
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06214177	IL0032402	---
Sample Date		Client Info		23 May 2024	08 Nov 2023	---
Machine Age	mls	Client Info		40000	39925	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	MARGINAL	---
Iron	ppm	ASTM D5185m	>100	40	72	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	20	20	---
Lead	ppm	ASTM D5185m	>40	1	8	---
Copper	ppm	ASTM D5185m	>330	25	59	---
Tin	ppm	ASTM D5185m	>15	1	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	7	12	---
Potassium	ppm	ASTM D5185m	>20	35	64	---
Fuel		WC Method	>5	<1.0	▲ 2.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	2.4	2.9	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	12.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9	29.6	---
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	---
Sodium	ppm	ASTM D5185m	>216	3	6	---
Boron	ppm	ASTM D5185m	250	5	25	---
Barium	ppm	ASTM D5185m	10	0	<1	---
Molybdenum	ppm	ASTM D5185m	100	64	59	---
Manganese	ppm	ASTM D5185m		2	4	---
Magnesium	ppm	ASTM D5185m	450	955	428	---
Calcium	ppm	ASTM D5185m	3000	1206	1867	---
Phosphorus	ppm	ASTM D5185m	1150	1062	986	---
Zinc	ppm	ASTM D5185m	1350	1298	1206	---
Sulfur	ppm	ASTM D5185m	4250	3424	2623	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	26.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	4.9	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	12.3	---

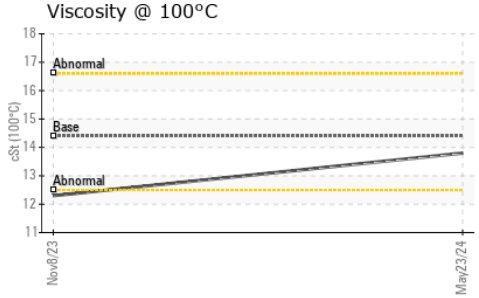
FT-IR (Direct Trend)



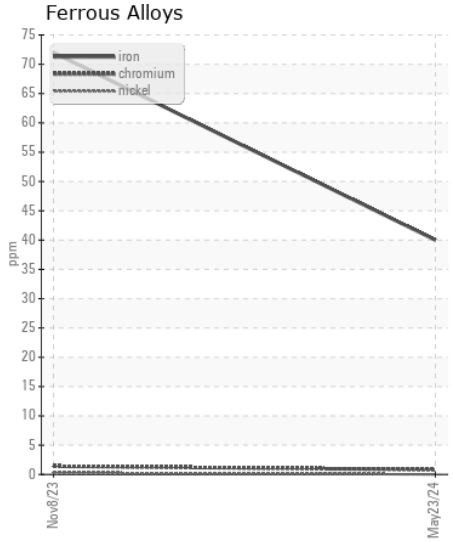
Base Number



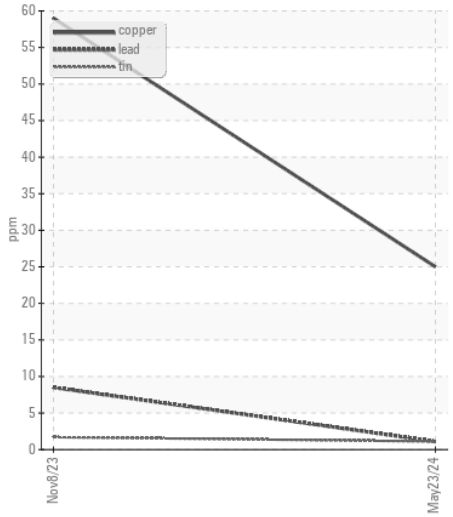
Viscosity @ 100°C



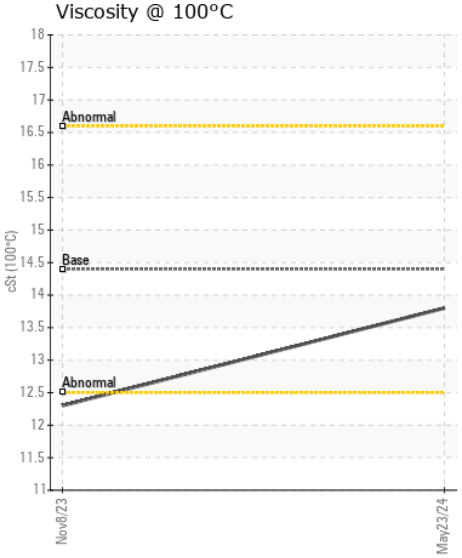
Ferrous Alloys



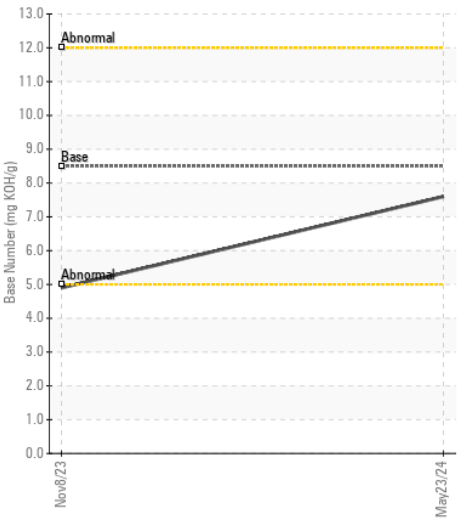
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06214177
Lab Number : 06214177
Unique Number : 11087041
Test Package : FLEET

Received : 18 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Wes Davis

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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