IDEALEASE FLEET

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 441322
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 30 (21 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

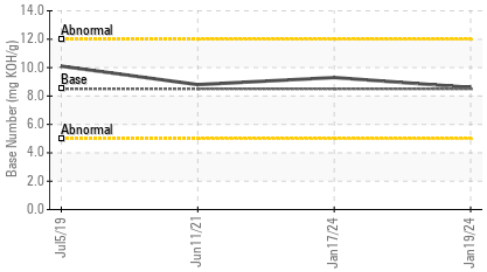
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

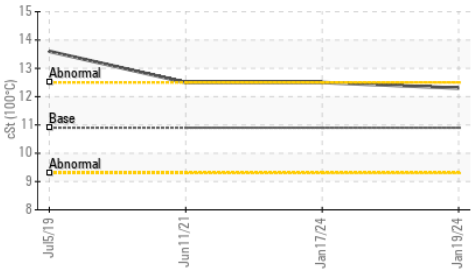
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0030592	IL0030513	IL0021855
Sample Date		Client Info		19 Jan 2024	17 Jan 2024	11 Jun 2021
Machine Age	mls	Client Info		71241	58647	30433
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>130	27	54	46
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	11	18	29
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>125	4	8	15
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	8	9
Potassium	ppm	ASTM D5185m	>20	12	14	▲ 68
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.7	22.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>75	0	3	3
Boron	ppm	ASTM D5185m	250	4	9	60
Barium	ppm	ASTM D5185m	10	14	0	0
Molybdenum	ppm	ASTM D5185m	100	69	60	25
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	450	921	931	645
Calcium	ppm	ASTM D5185m	3000	1101	1148	1591
Phosphorus	ppm	ASTM D5185m	1150	965	1053	782
Zinc	ppm	ASTM D5185m	1350	1217	1248	894
Sulfur	ppm	ASTM D5185m	4250	3358	3201	2581
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	16.5	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	9.3	8.8
Visc @ 100°C	cSt	ASTM D445	10.9	12.3	12.5	12.5

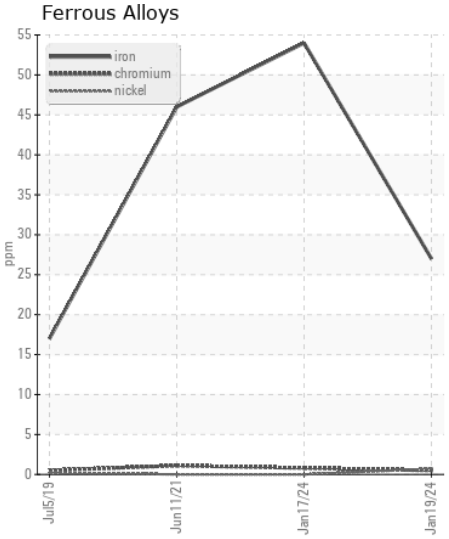
Base Number



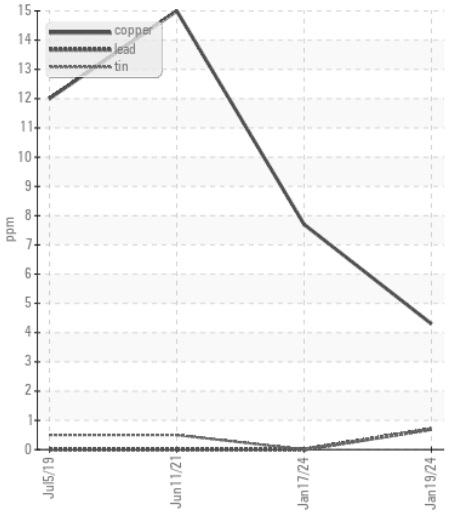
Viscosity @ 100°C



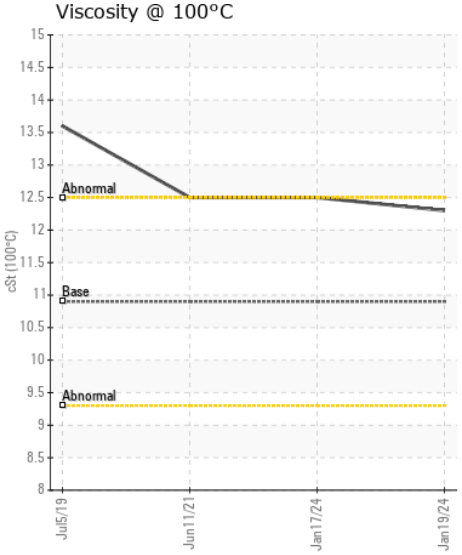
Ferrous Alloys



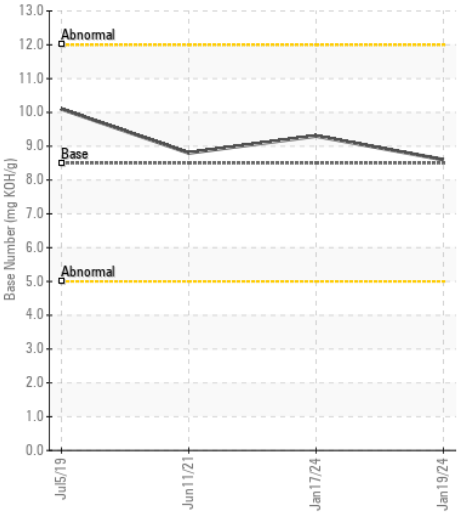
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0030592
Lab Number : 06086563
Unique Number : 10874008
Test Package : FLEET

Received : 12 Feb 2024
Tested : 13 Feb 2024
Diagnosed : 13 Feb 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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