IDEALEASE FLEET

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3004M
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

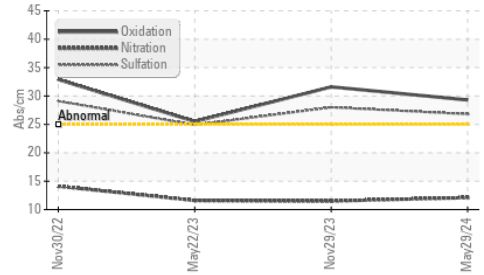
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

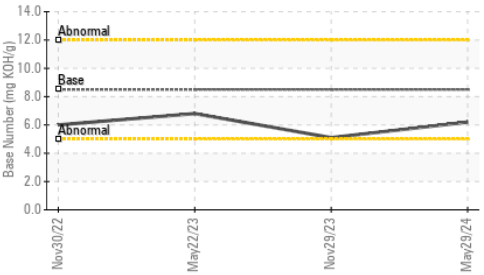
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06214159	IL06026239	IL0028945
Sample Date		Client Info		29 May 2024	29 Nov 2023	22 May 2023
Machine Age	mls	Client Info		65093	48534	33368
Oil Age	mls	Client Info		0	15134	15000
Filter Age	mls	Client Info		0	0	15000
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	44	50	62
Chromium	ppm	ASTM D5185m	>20	4	3	4
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	40	55	53
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	2	6
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	6	9
Potassium	ppm	ASTM D5185m	>20	66	109	117
Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.9	0.9
Nitration	Abs/cm	*ASTM D7624	>20	12.1	11.5	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.8	28.0	24.9
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	>158	3	0	3
Boron	ppm	ASTM D5185m	250	2	0	1
Barium	ppm	ASTM D5185m	10	0	2	0
Molybdenum	ppm	ASTM D5185m	100	57	58	61
Manganese	ppm	ASTM D5185m		1	0	2
Magnesium	ppm	ASTM D5185m	450	924	860	943
Calcium	ppm	ASTM D5185m	3000	996	983	1087
Phosphorus	ppm	ASTM D5185m	1150	982	837	876
Zinc	ppm	ASTM D5185m	1350	1151	1067	1100
Sulfur	ppm	ASTM D5185m	4250	3536	3074	3175
Oxidation	Abs/.1mm	*ASTM D7414	>25	29.3	31.6	25.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.2	5.1	6.8
Visc @ 100°C	cSt	ASTM D445	14.4	12.3	12.6	12.8

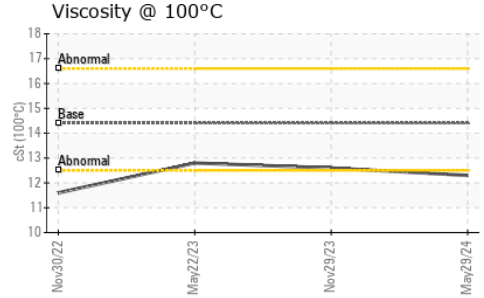
FT-IR (Direct Trend)



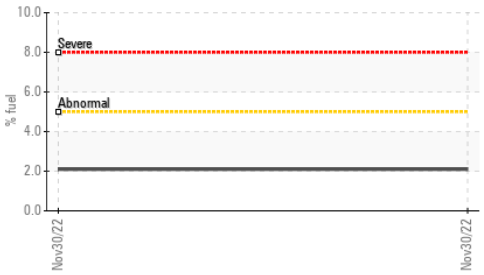
Base Number



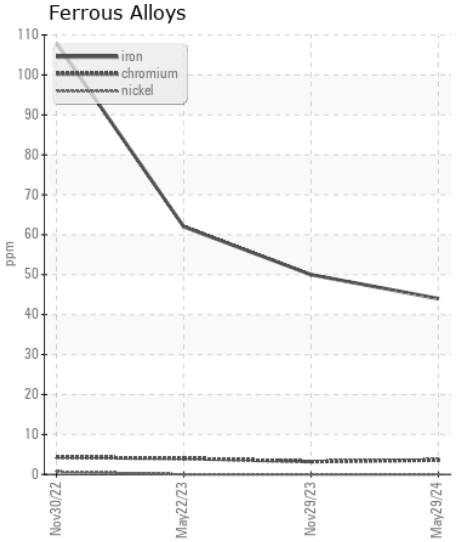
Viscosity @ 100°C



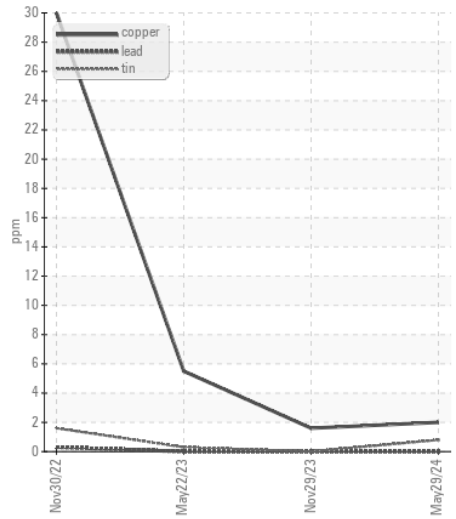
Fuel Dilution



Ferrous Alloys



Non-ferrous Metals



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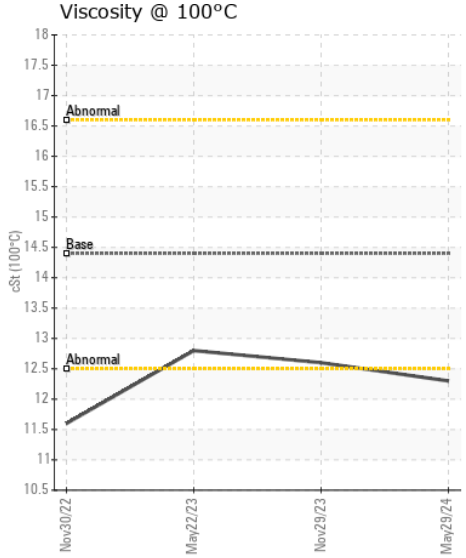

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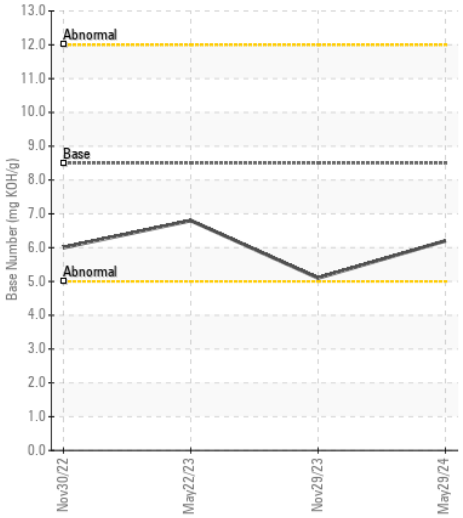

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06214159
Lab Number : 06214159
Unique Number : 11087023
Test Package : FLEET (Additional Tests: FuelDilution)

Received : 18 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Sean Felton

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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