MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
35162
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

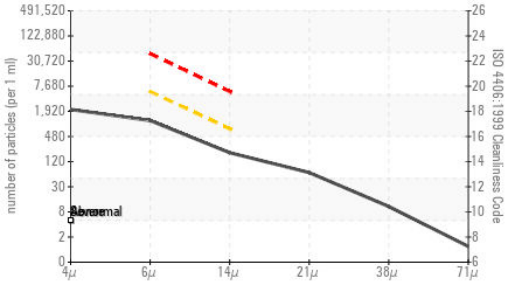
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

FLUID CONDITION

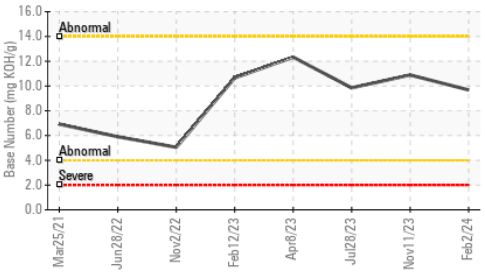
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0012021	KL0012126	KL0012004
Sample Date		Client Info		02 Feb 2024	11 Nov 2023	28 Jul 2023
Machine Age	mls	Client Info		110571	108611	105304
Oil Age	mls	Client Info		108611	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	6	4	8
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<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	5	4	4
Potassium	ppm	ASTM D5185m	>20	3	3	<1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.8	7.0	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	20.3	20.3
Particles >4µm		ASTM D7647		1862	3132	2671
Particles >6µm		ASTM D7647	>5000	1014	1706	1455
Particles >14µm		ASTM D7647	>640	173	290	248
Particles >21µm		ASTM D7647	>160	58	98	83
Particles >38µm		ASTM D7647	>40	9	15	13
Particles >71µm		ASTM D7647	>10	1	2	1
Oil Cleanliness		ISO 4406 (c)	>19/16	17/15	18/15	18/15
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		3	3	4
Boron	ppm	ASTM D5185m		40	73	55
Barium	ppm	ASTM D5185m		11	0	0
Molybdenum	ppm	ASTM D5185m		57	58	54
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		934	1097	906
Calcium	ppm	ASTM D5185m		907	1052	1319
Phosphorus	ppm	ASTM D5185m		908	1090	1014
Zinc	ppm	ASTM D5185m		1111	1341	1229
Sulfur	ppm	ASTM D5185m		3304	3646	4124
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	16.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896		9.68	10.89	9.85
Visc @ 100°C	cSt	ASTM D445		13.1	13.6	13.6

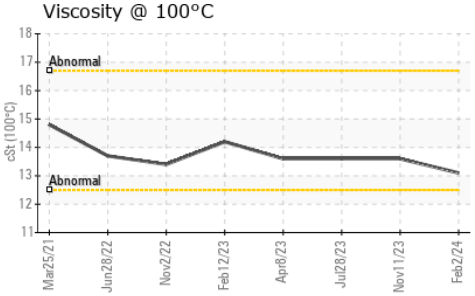
Particle Count



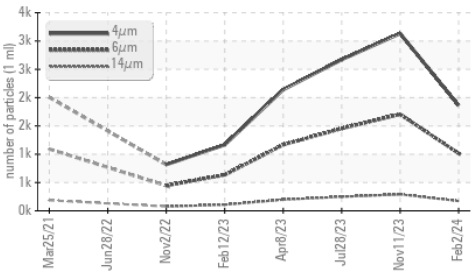
Base Number



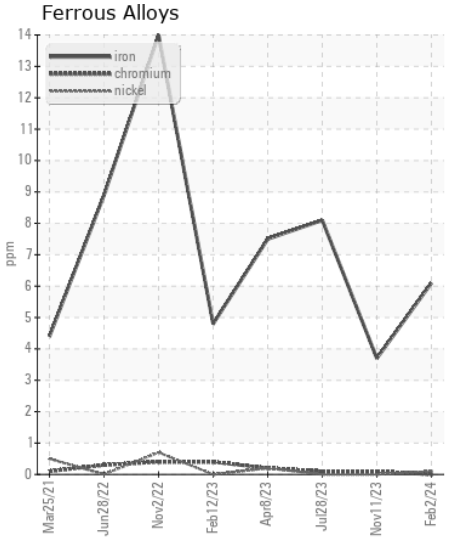
Viscosity @ 100°C



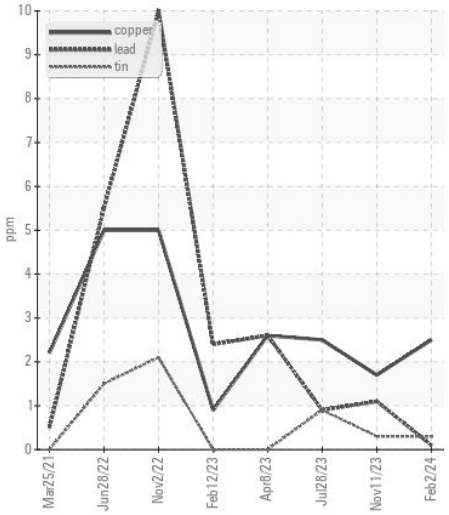
Particle Trend



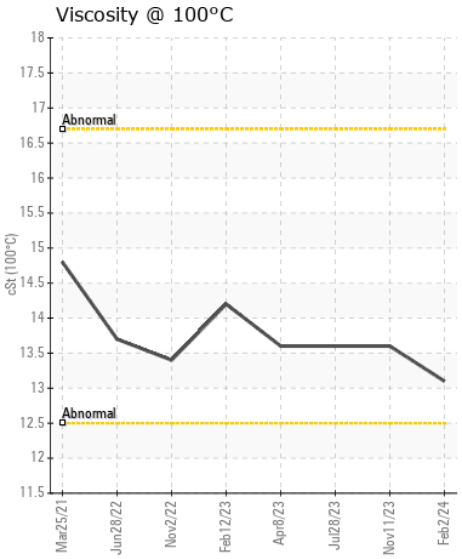
Ferrous Alloys



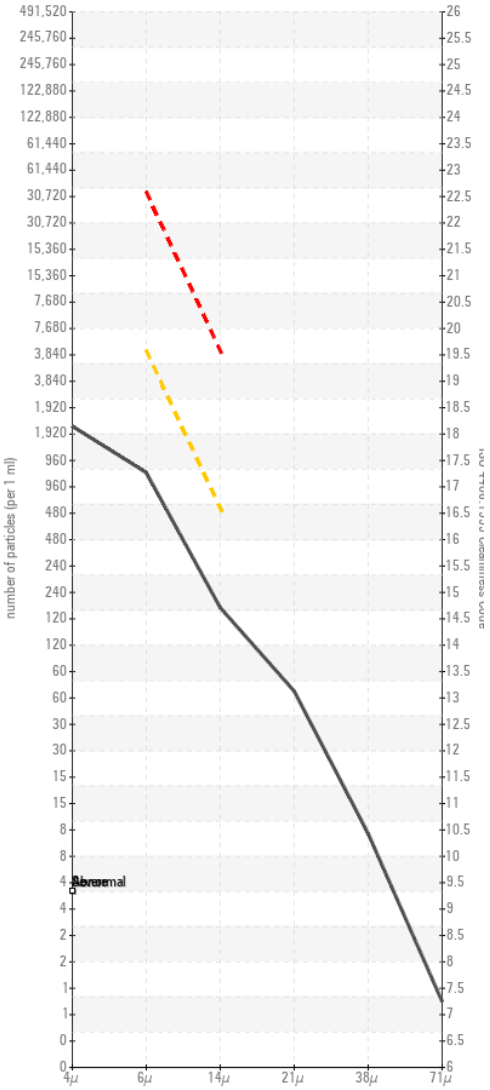
Non-ferrous Metals



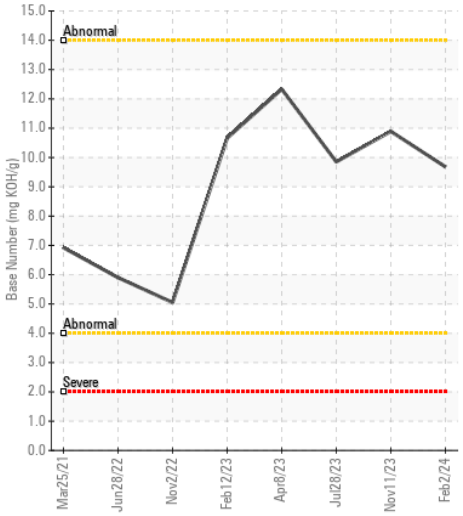
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0012021
Lab Number : 06089650
Unique Number : 10877095
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 14 Feb 2024
Tested : 16 Feb 2024
Diagnosed : 16 Feb 2024 - Jonathan Hester

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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Submitted By: Mike Richardson