MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
27329
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

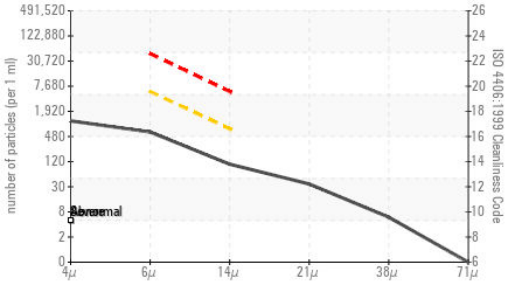
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

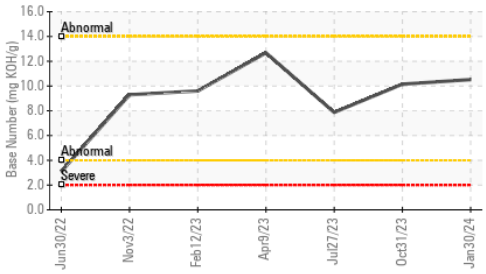
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0012147	KL0012082	KL0012016
Sample Date		Client Info		30 Jan 2024	31 Oct 2023	27 Jul 2023
Machine Age	mls	Client Info		32756	30552	27527
Oil Age	mls	Client Info		30552	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	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	24	13	46
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	8	4	18
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	7	6	30
Tin	ppm	ASTM D5185m	>15	<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	5	4	7
Potassium	ppm	ASTM D5185m	>20	19	8	40
Fuel		WC Method	>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	0.7	0.4	1
Nitration	Abs/cm	*ASTM D7624	>20	9.2	7.2	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	21.0	24.6
Particles >4µm		ASTM D7647		992	19479	2279
Particles >6µm		ASTM D7647	>5000	540	▲ 10611	1242
Particles >14µm		ASTM D7647	>640	92	▲ 1806	211
Particles >21µm		ASTM D7647	>160	31	▲ 608	71
Particles >38µm		ASTM D7647	>40	5	▲ 94	11
Particles >71µm		ASTM D7647	>10	0	▲ 10	1
Oil Cleanliness		ISO 4406 (c)	>19/16	16/14	▲ 21/18	17/15
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	6
Boron	ppm	ASTM D5185m		23	77	30
Barium	ppm	ASTM D5185m		5	0	0
Molybdenum	ppm	ASTM D5185m		53	60	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		874	1130	1136
Calcium	ppm	ASTM D5185m		752	1000	1036
Phosphorus	ppm	ASTM D5185m		761	1122	1020
Zinc	ppm	ASTM D5185m		1038	1359	1342
Sulfur	ppm	ASTM D5185m		2612	3557	3573
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.7	18.3	25.1
Base Number (BN)	mg KOH/g	ASTM D2896		10.52	10.15	7.87
Visc @ 100°C	cSt	ASTM D445		13.2	13.8	13.5

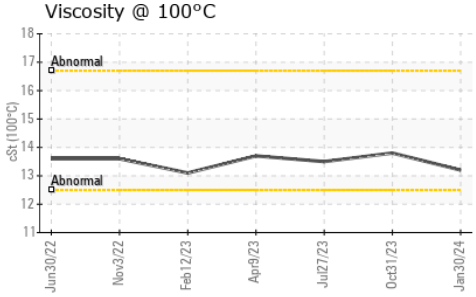
Particle Count



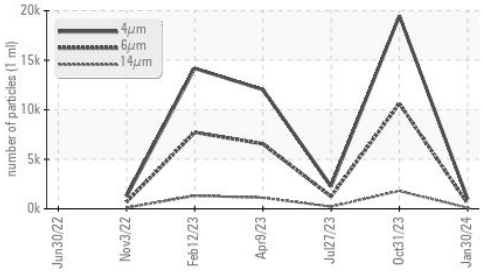
Base Number



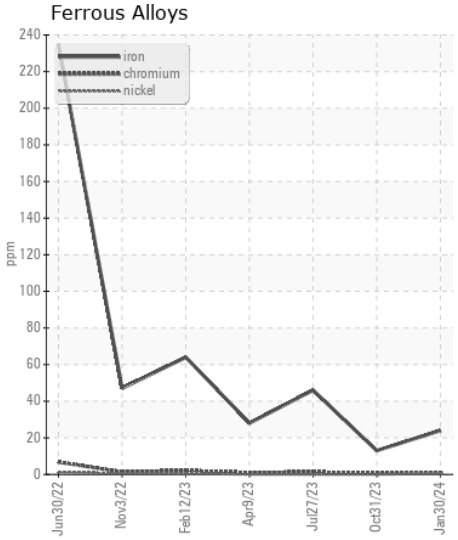
Viscosity @ 100°C



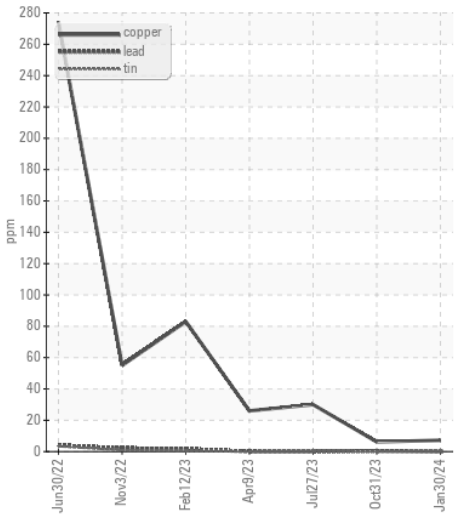
Particle Trend



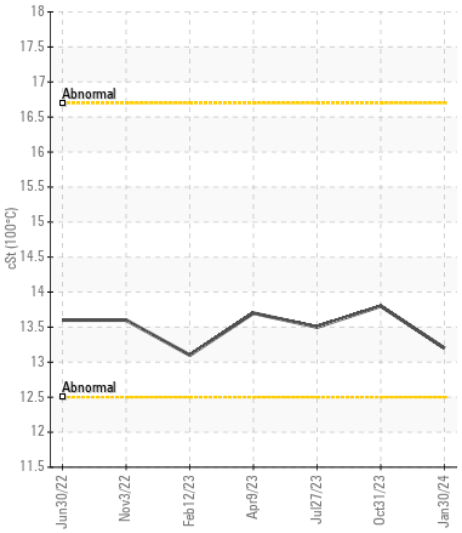
Ferrous Alloys



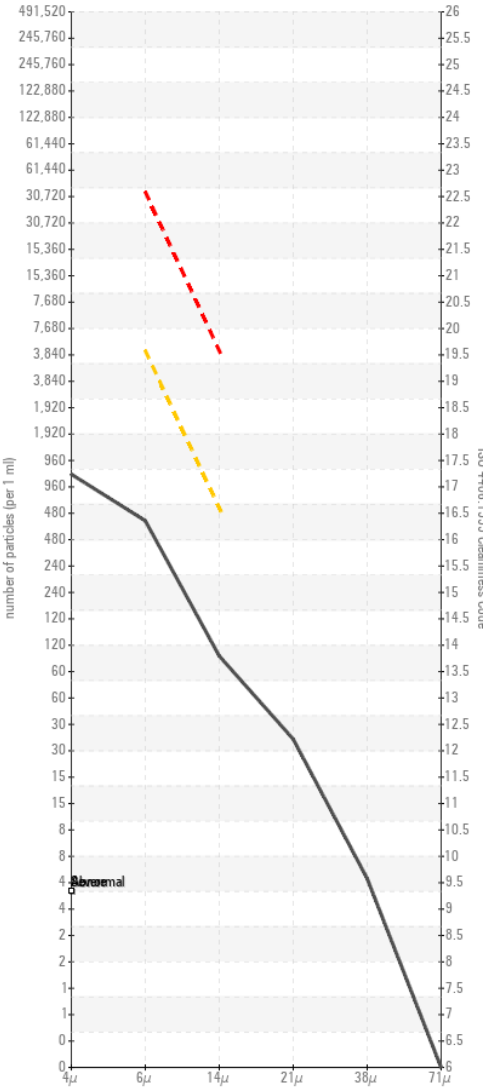
Non-ferrous Metals



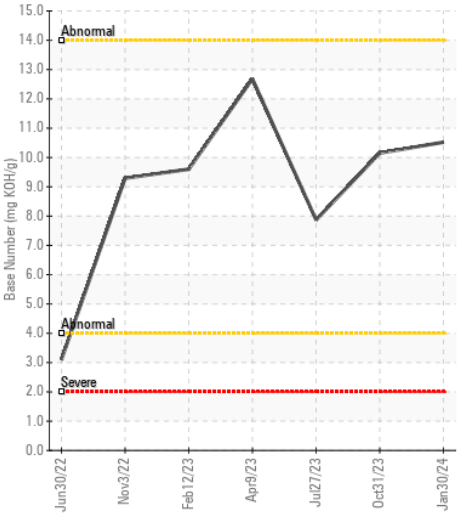
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0012147 **Received** : 14 Feb 2024
Lab Number : 06089623 **Tested** : 15 Feb 2024
Unique Number : 10877068 **Diagnosed** : 16 Feb 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: PrtCount)

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