MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RIG 6
Machine Id
R6-G-03 NKL
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

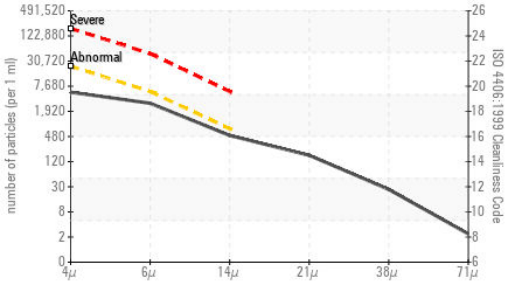
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

FLUID CONDITION

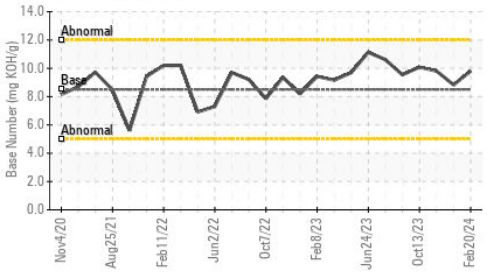
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014028	KL0013986	KL0013180
Sample Date		Client Info		20 Feb 2024	05 Jan 2024	18 Nov 2023
Machine Age	days	Client Info		45342	45297	45248
Oil Age	days	Client Info		0	0	0
Filter Age	days	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	1	4	2
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	1	2	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
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	18	7	23
Potassium	ppm	ASTM D5185m	>20	2	2	0
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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.9	8.3	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	23.9	23.4
Particles >4µm		ASTM D7647	>20000	4811	4411	5585
Particles >6µm		ASTM D7647	>5000	2621	2403	3043
Particles >14µm		ASTM D7647	>640	446	409	518
Particles >21µm		ASTM D7647	>160	150	138	174
Particles >38µm		ASTM D7647	>40	23	21	27
Particles >71µm		ASTM D7647	>10	2	2	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/19/16	19/18/16	20/19/16
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	>216	3	3	11
Boron	ppm	ASTM D5185m	250	309	339	309
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	125	127	129
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	676	678	688
Calcium	ppm	ASTM D5185m	3000	1492	1545	1545
Phosphorus	ppm	ASTM D5185m	1150	695	760	706
Zinc	ppm	ASTM D5185m	1350	851	846	855
Sulfur	ppm	ASTM D5185m	4250	2409	2858	2383
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	18.7	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.80	8.83	9.81
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.5	13.4

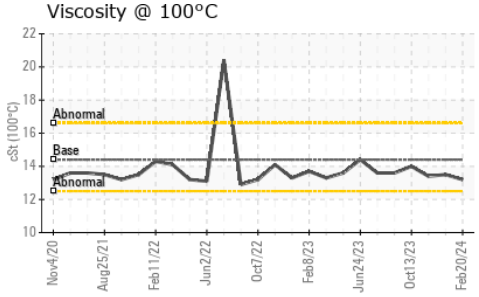
Particle Count



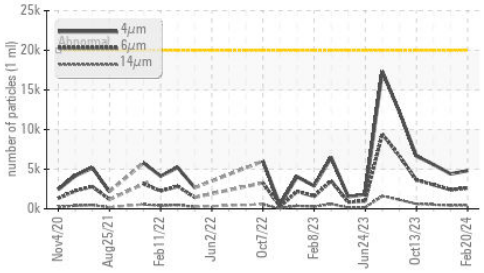
Base Number



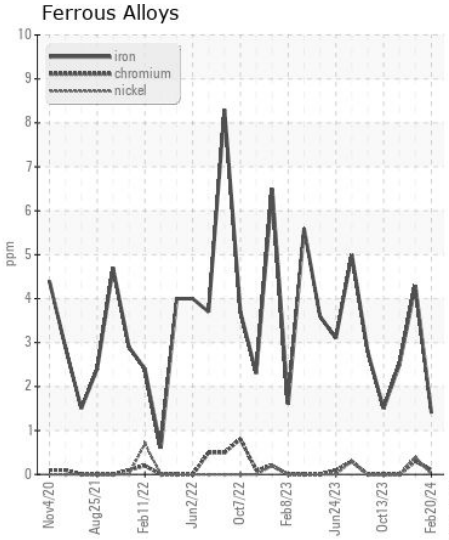
Viscosity @ 100°C



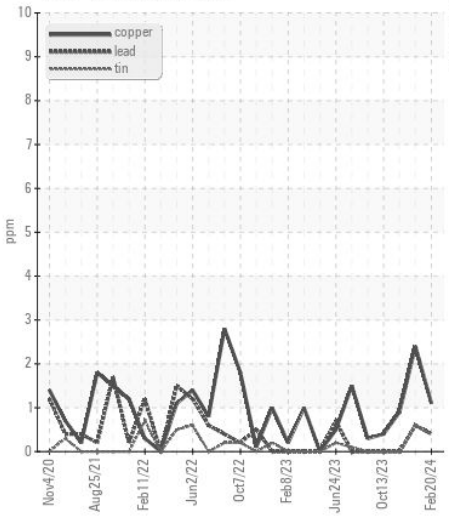
Particle Trend



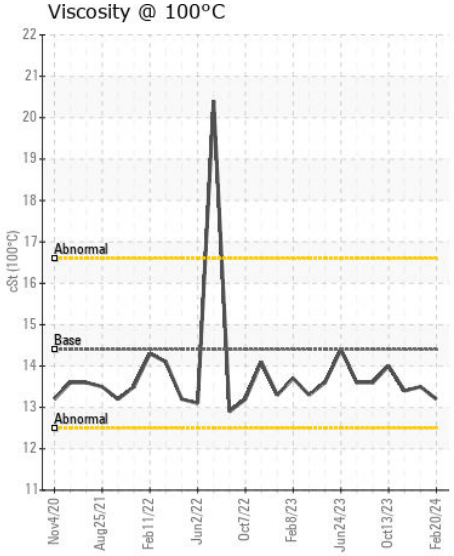
Ferrous Alloys



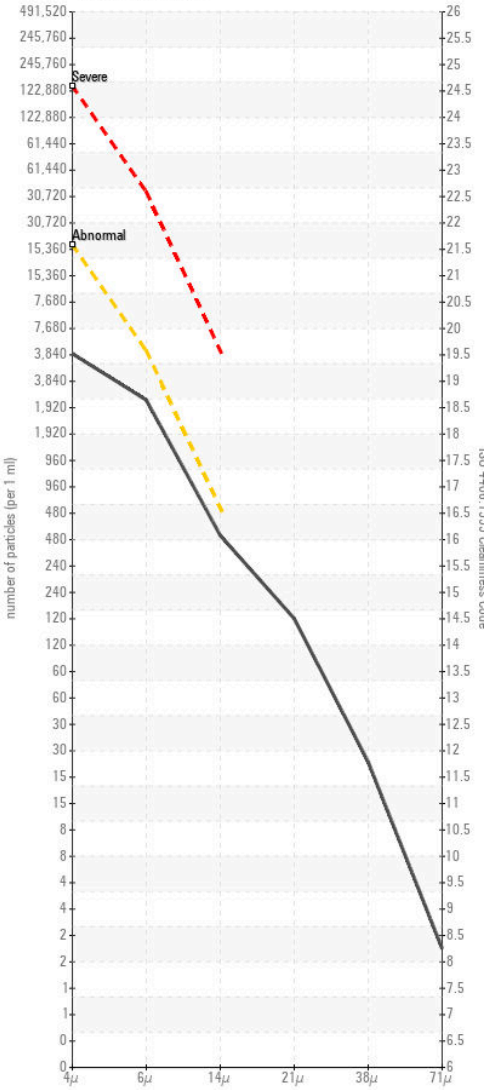
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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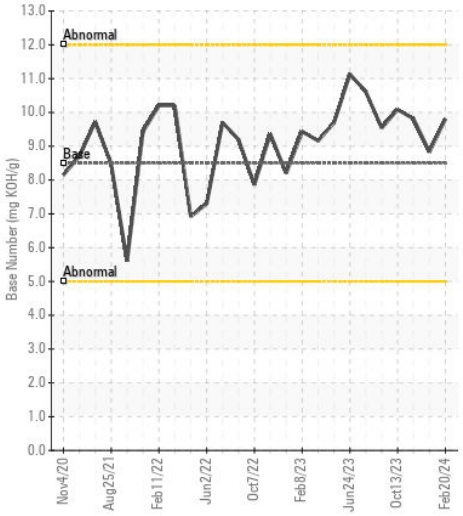

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014028
Lab Number : 06105416
Unique Number : 10903646
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 29 Feb 2024
Tested : 06 Mar 2024
Diagnosed : 06 Mar 2024 - Jonathan Hester

Certificate L2367

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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