MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RIG 8
Machine Id
R8-G-001
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

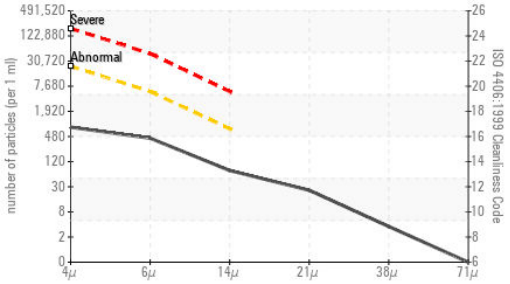
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

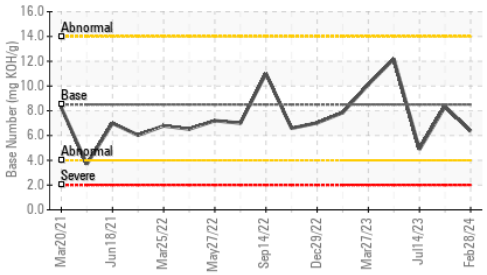
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013844	KL0012538	KL0012586
Sample Date		Client Info		28 Feb 2024	18 Aug 2023	14 Jul 2023
Machine Age	days	Client Info		0	45155	45120
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	23	28	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	<1	2
Lead	ppm	ASTM D5185m	>40	12	13	13
Copper	ppm	ASTM D5185m	>330	8	11	11
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	4	4
Potassium	ppm	ASTM D5185m	>20	1	<1	1
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	0.4	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.5	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	25.3	24.0
Particles >4µm		ASTM D7647	>20000	705	3297	1192
Particles >6µm		ASTM D7647	>5000	384	1796	649
Particles >14µm		ASTM D7647	>640	65	306	110
Particles >21µm		ASTM D7647	>160	22	103	37
Particles >38µm		ASTM D7647	>40	3	16	6
Particles >71µm		ASTM D7647	>10	0	2	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/16/13	19/18/15	17/17/14
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	4	3	4
Boron	ppm	ASTM D5185m	250	110	112	127
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	95	98	100
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	629	671	652
Calcium	ppm	ASTM D5185m	3000	1305	1474	1476
Phosphorus	ppm	ASTM D5185m	1150	735	720	707
Zinc	ppm	ASTM D5185m	1350	882	888	893
Sulfur	ppm	ASTM D5185m	4250	2587	3184	3144
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	23.3	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.36	8.35	4.88
Visc @ 100°C	cSt	ASTM D445	10.9	11.8	12.2	12.1

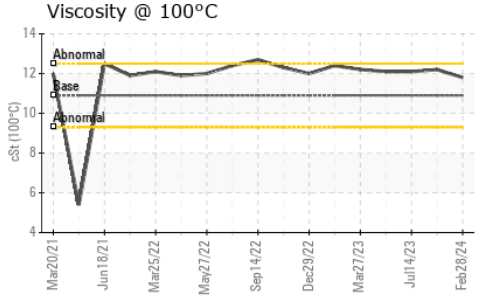
Particle Count



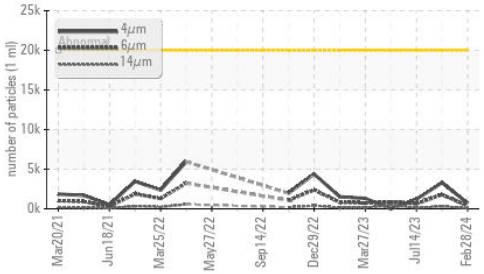
Base Number



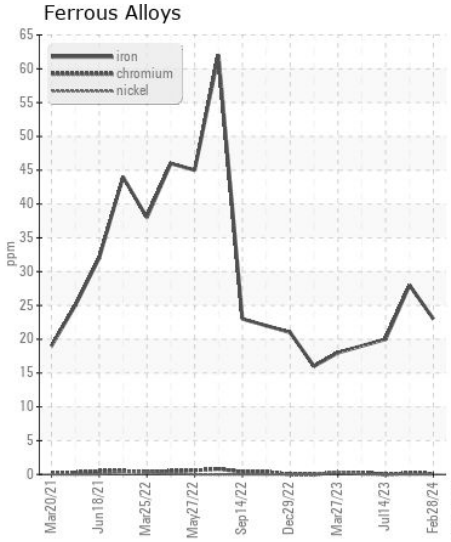
Viscosity @ 100°C



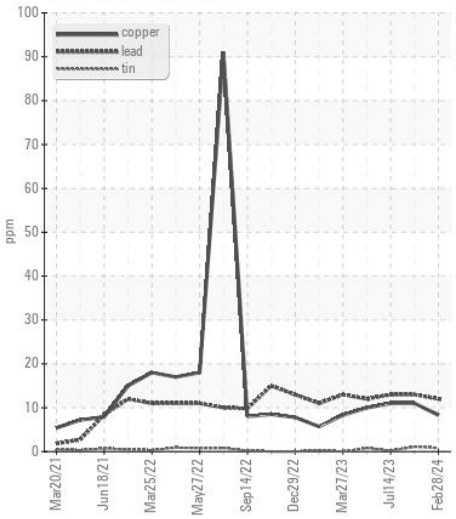
Particle Trend



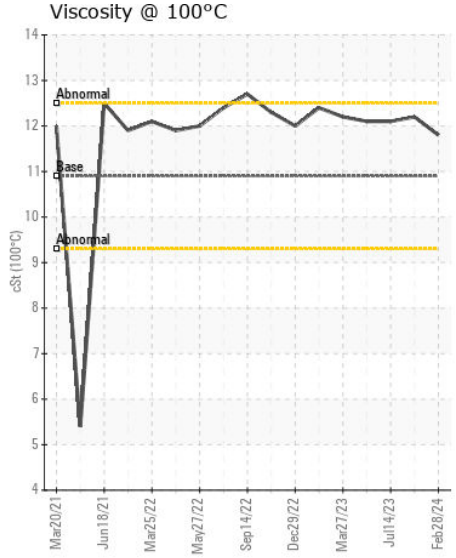
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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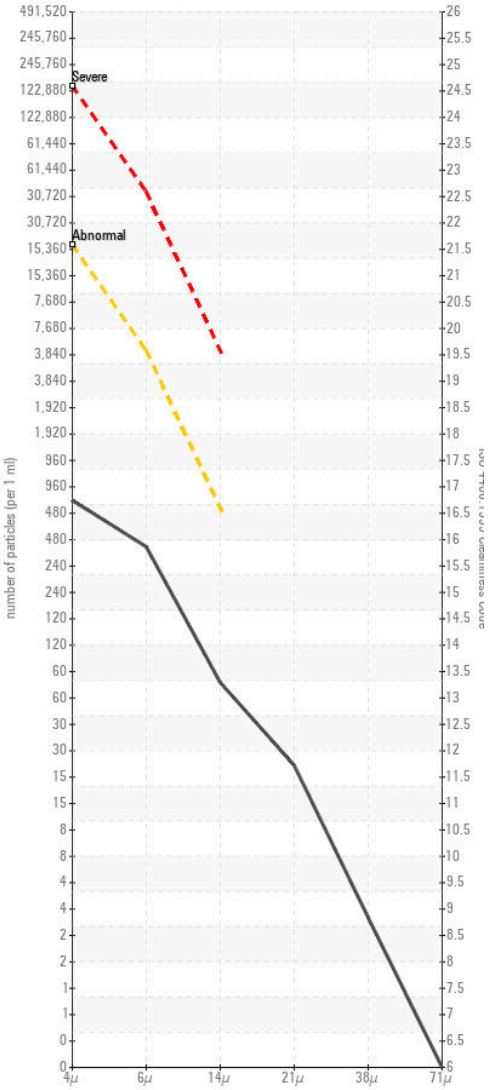

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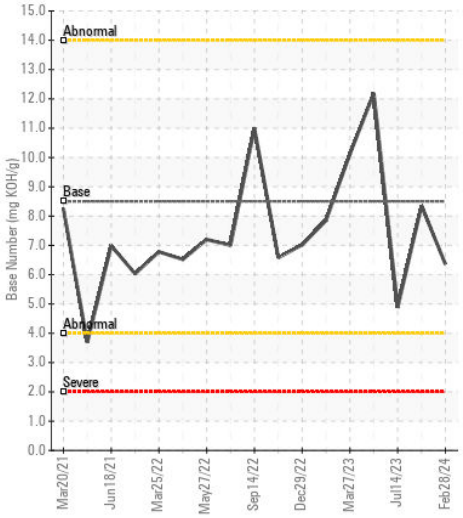

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013844
Lab Number : 06105420
Unique Number : 10903650
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 29 Feb 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Wes Davis

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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