MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[Z20801]
Machine Id
KENWORTH TLL43
Component
Diesel Engine
Fluid
VALVOLINE PREMIUM BLUE (48 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

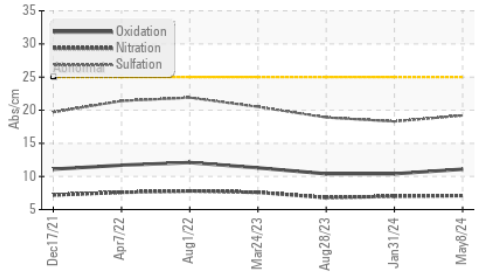
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

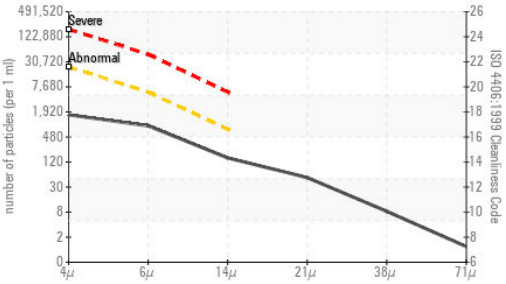
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06189768	WC06114769	WC05954558
Sample Date		Client Info		08 May 2024	31 Jan 2024	28 Aug 2023
Machine Age	kms	Client Info		480062	422712	358557
Oil Age	kms	Client Info		57350	64155	57972
Filter Age	kms	Client Info		57350	64155	57972
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>90	11	13	18
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	6	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	0
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	3	<1	0
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	4	7
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.0	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	18.3	18.9
Particles >4µm		ASTM D7647	>20000	1435	---	---
Particles >6µm		ASTM D7647	>5000	782	---	---
Particles >14µm		ASTM D7647	>640	133	---	---
Particles >21µm		ASTM D7647	>160	45	---	---
Particles >38µm		ASTM D7647	>40	7	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/14	---	---
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		4	2	2
Boron	ppm	ASTM D5185m	2.9	32	8	3
Barium	ppm	ASTM D5185m	0.1	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	65	10	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	18	93	116	23
Calcium	ppm	ASTM D5185m	2936	2094	2193	2518
Phosphorus	ppm	ASTM D5185m	998	991	850	879
Zinc	ppm	ASTM D5185m	1095	1060	1001	1102
Sulfur	ppm	ASTM D5185m	5469	4056	3873	4215
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	10.4	10.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	8.19	6.3	5.9
Visc @ 100°C	cSt	ASTM D445	15.2	13.5	13.6	13.7

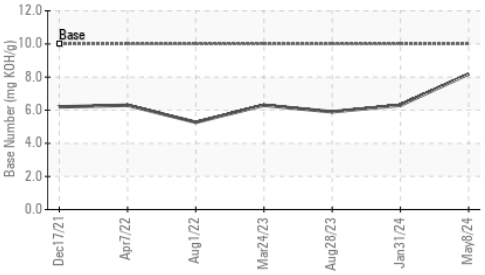
FT-IR (Direct Trend)



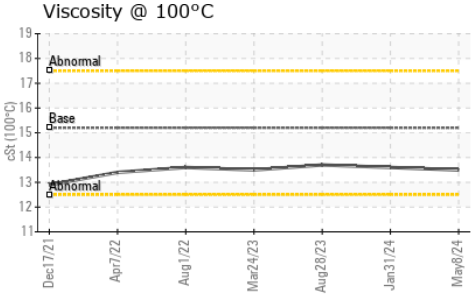
Particle Count



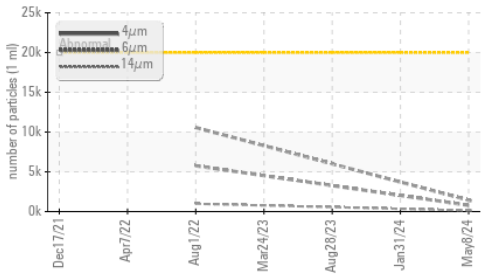
Base Number



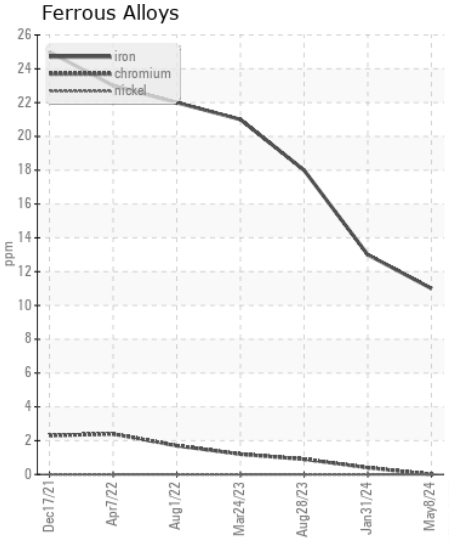
Viscosity @ 100°C



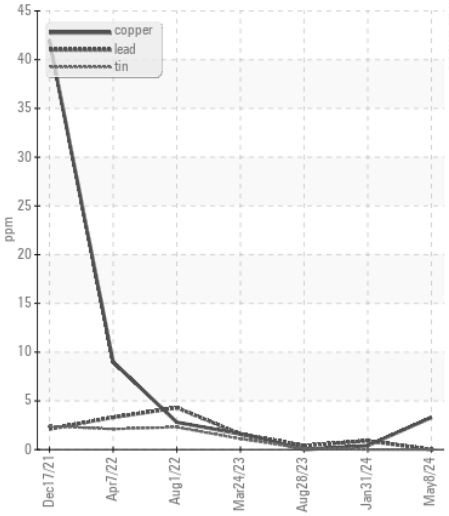
Particle Trend



Ferrous Alloys



Non-ferrous Metals



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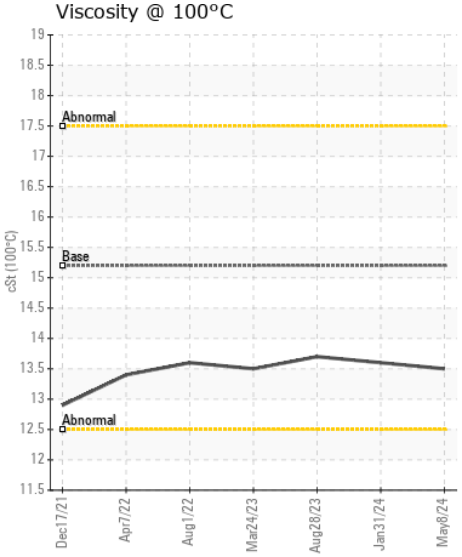
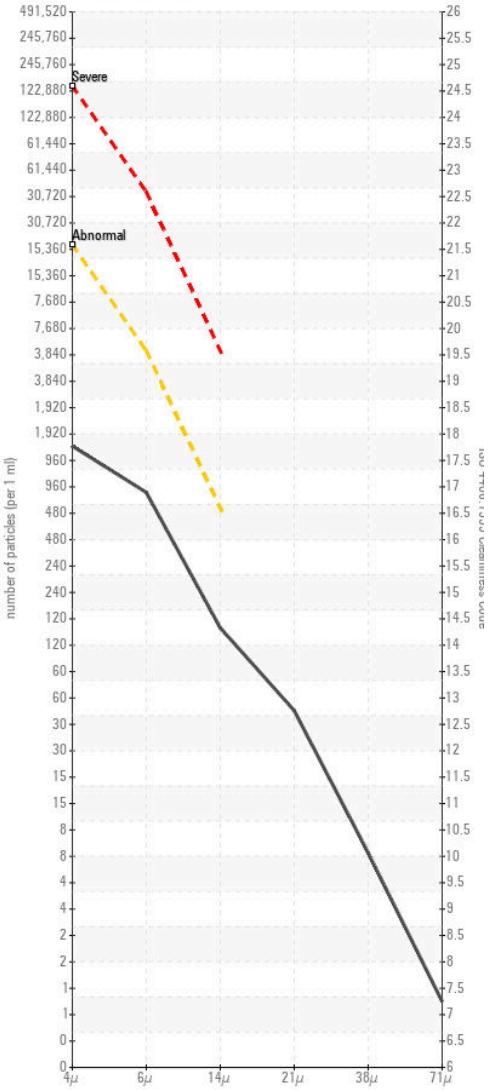


Particle Count



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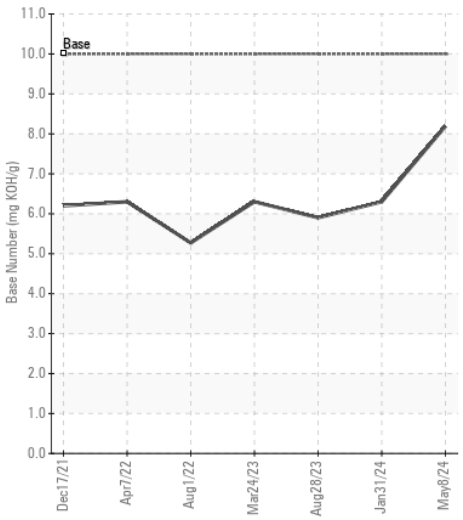

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06189768 **Received** : 23 May 2024
Lab Number : 06189768 **Tested** : 25 May 2024
Unique Number : 11046520 **Diagnosed** : 29 May 2024 - Sean Felton
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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