MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CUMMINS ART VSI
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

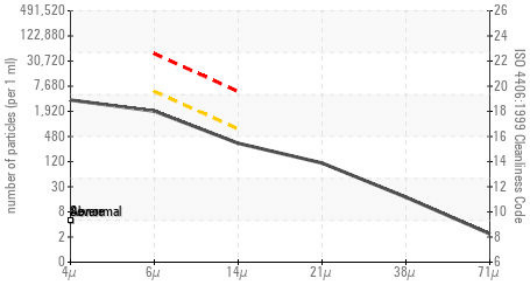
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

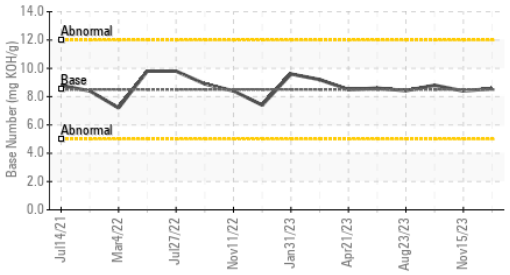
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013145	KL0013260	KL0013242
Sample Date		Client Info		27 Dec 2023	15 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info		45272	0	45200
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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	ABNORMAL
Iron	ppm	ASTM D5185m	>90	16	50	34
Chromium	ppm	ASTM D5185m	>20	2	12	7
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	▲ 11	▲ 8
Lead	ppm	ASTM D5185m	>40	1	3	4
Copper	ppm	ASTM D5185m	>330	2	5	6
Tin	ppm	ASTM D5185m	>15	1	2	3
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	13	▲ 47	▲ 33
Potassium	ppm	ASTM D5185m	>20	2	3	4
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	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.5	6.7	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	20.9	20.2
Particles >4µm		ASTM D7647		3123	---	---
Particles >6µm		ASTM D7647	>5000	1701	---	---
Particles >14µm		ASTM D7647	>640	290	---	---
Particles >21µm		ASTM D7647	>160	98	---	---
Particles >38µm		ASTM D7647	>40	15	---	---
Particles >71µm		ASTM D7647	>10	2	---	---
Oil Cleanliness		ISO 4406 (c)	>19/16	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	>216	0	0	6
Boron	ppm	ASTM D5185m	250	425	300	277
Barium	ppm	ASTM D5185m	10	0	4	4
Molybdenum	ppm	ASTM D5185m	100	87	95	97
Manganese	ppm	ASTM D5185m		1	4	4
Magnesium	ppm	ASTM D5185m	450	420	465	471
Calcium	ppm	ASTM D5185m	3000	1397	1848	1748
Phosphorus	ppm	ASTM D5185m	1150	867	867	867
Zinc	ppm	ASTM D5185m	1350	1090	1052	1054
Sulfur	ppm	ASTM D5185m	4250	3600	2892	3119
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	15.2	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.57	8.4	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	12.7	12.8

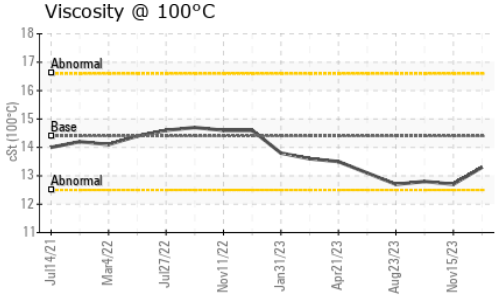
Particle Count



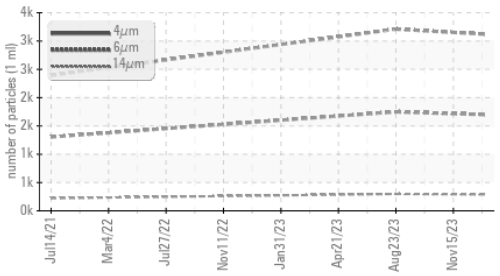
Base Number



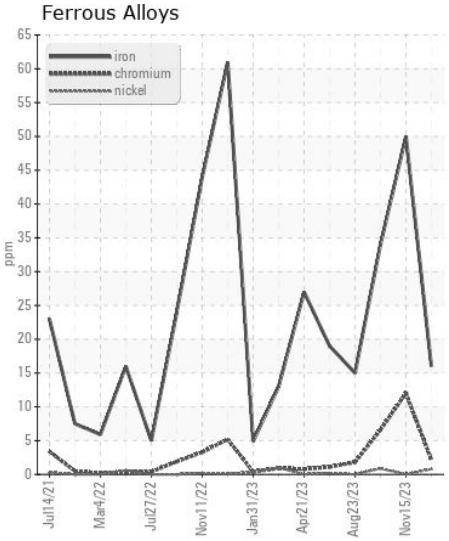
Viscosity @ 100°C



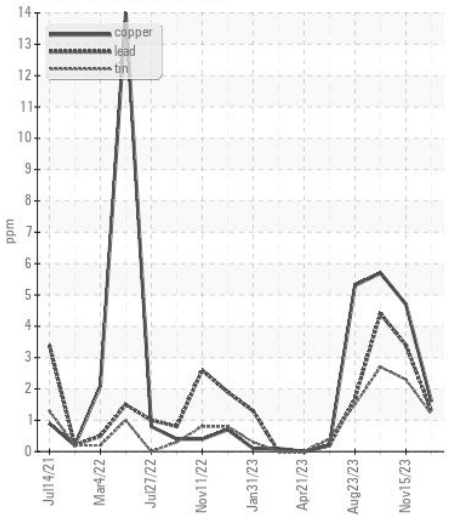
Particle Trend



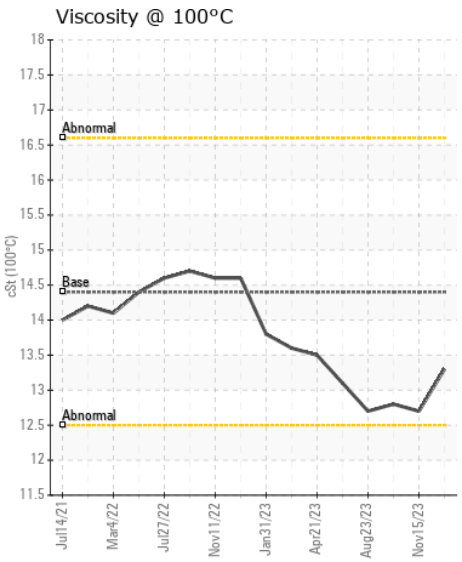
Ferrous Alloys



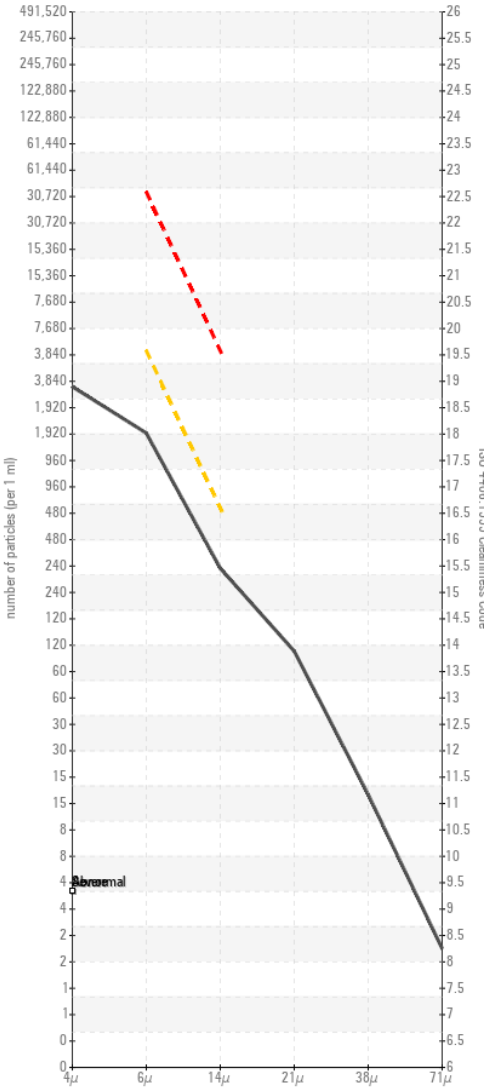
Non-ferrous Metals



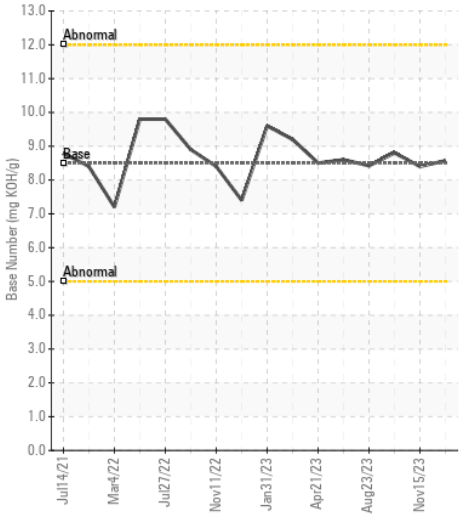
Viscosity @ 100°C



Particle Count



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013145 **Recieved** : 08 Jan 2024
Lab Number : 06055022 **Diagnosed** : 10 Jan 2024
Unique Number : 10820971 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

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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