MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
KEITH LOFETBAUER
Machine Id
PETERBILT TRUCK 68
Component
Diesel Engine
Fluid
SHELL ROTELLA T3 15W40 (50 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

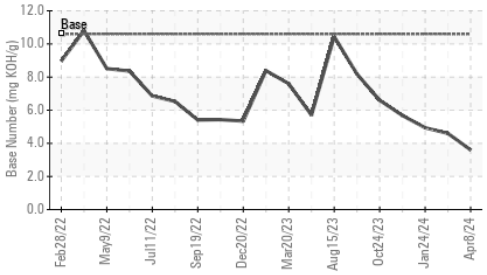
There is no indication of any contamination in the oil.

FLUID CONDITION

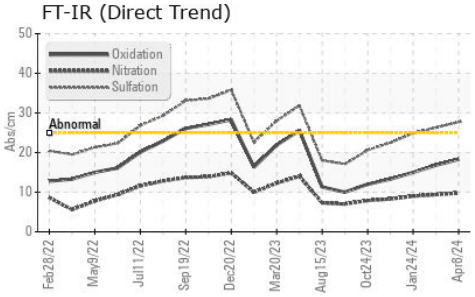
The BN level is low. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011902	KL0011901	KL0011906
Sample Date		Client Info		08 Apr 2024	27 Feb 2024	24 Jan 2024
Machine Age	mls	Client Info		83574	71852	59263
Oil Age	mls	Client Info		71722	60000	47411
Filter Age	mls	Client Info		11722	12589	13225
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL
Iron	ppm	ASTM D5185m	>165	68	58	43
Chromium	ppm	ASTM D5185m	>5	5	4	3
Nickel	ppm	ASTM D5185m	>4	1	<1	0
Titanium	ppm	ASTM D5185m	>2	8	8	6
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	8	7	5
Lead	ppm	ASTM D5185m	>150	6	4	4
Copper	ppm	ASTM D5185m	>90	4	4	2
Tin	ppm	ASTM D5185m	>5	3	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	21	21	20
Potassium	ppm	ASTM D5185m	>20	4	4	3
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	>7.5	1.2	1.1	0.8
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.4	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	26.3	24.9
Particles >4µm		ASTM D7647		2166	731	15085
Particles >6µm		ASTM D7647	>5000	1180	398	▲ 8218
Particles >14µm		ASTM D7647	>640	201	68	▲ 1399
Particles >21µm		ASTM D7647	>160	68	23	▲ 471
Particles >38µm		ASTM D7647	>40	10	4	▲ 73
Particles >71µm		ASTM D7647	>10	1	0	7
Oil Cleanliness		ISO 4406 (c)	>19/16	17/15	16/13	▲ 20/18
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		6	6	4
Boron	ppm	ASTM D5185m	10	5	6	7
Barium	ppm	ASTM D5185m	0	2	0	1
Molybdenum	ppm	ASTM D5185m	10	13	13	13
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m	10	123	137	139
Calcium	ppm	ASTM D5185m	2600	2136	2068	2098
Phosphorus	ppm	ASTM D5185m	1050	955	950	905
Zinc	ppm	ASTM D5185m	1250	1040	1102	1095
Sulfur	ppm	ASTM D5185m	3900	3406	3475	3130
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	16.8	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	▲ 3.60	4.60	4.94
Visc @ 100°C	cSt	ASTM D445	15.5	12.8	● 12.4	● 12.4

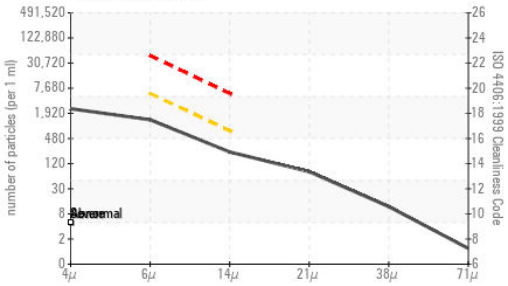
Base Number



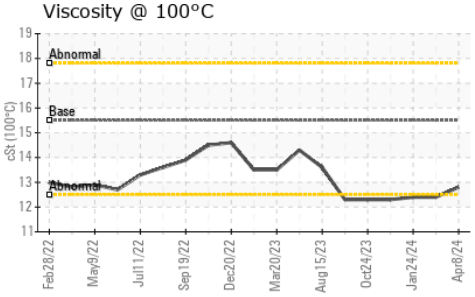
FT-IR (Direct Trend)



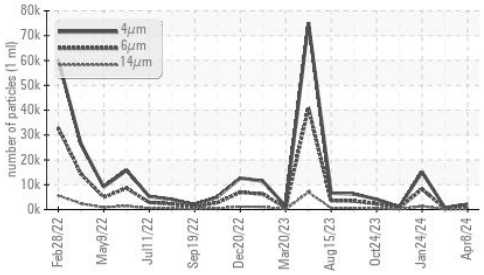
Particle Count



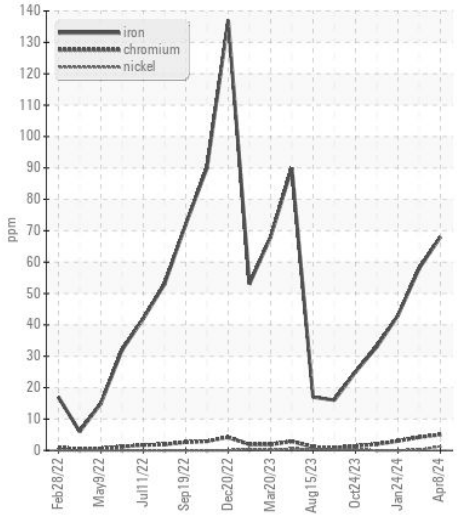
Viscosity @ 100°C



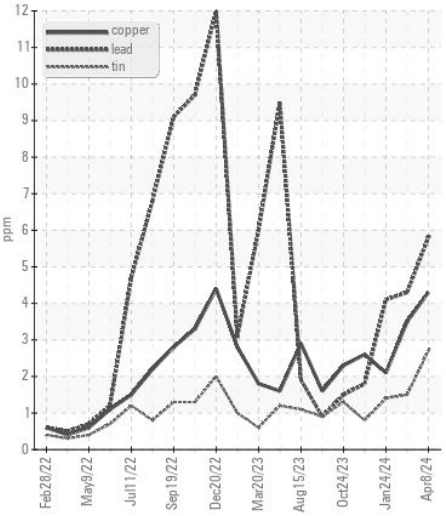
Particle Trend



Ferrous Alloys



Non-ferrous Metals



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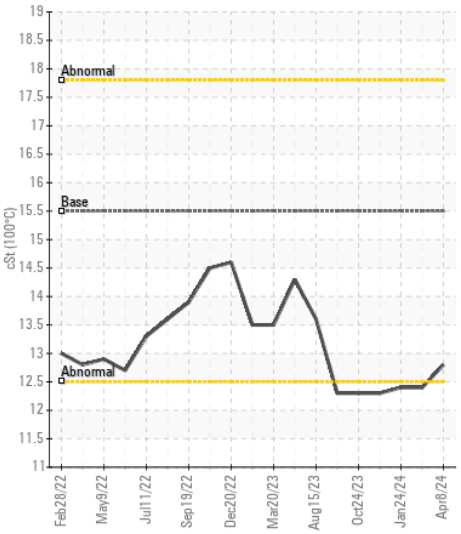
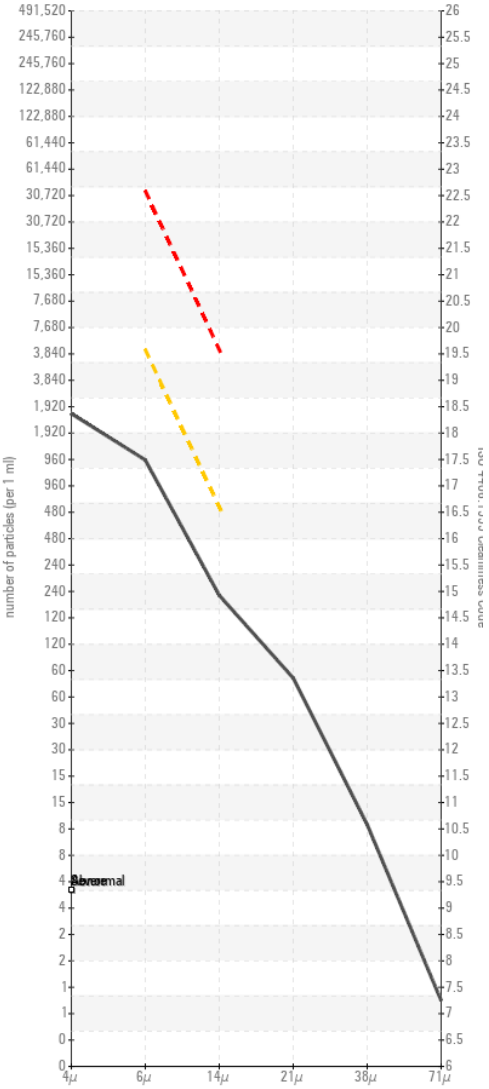


Particle Count



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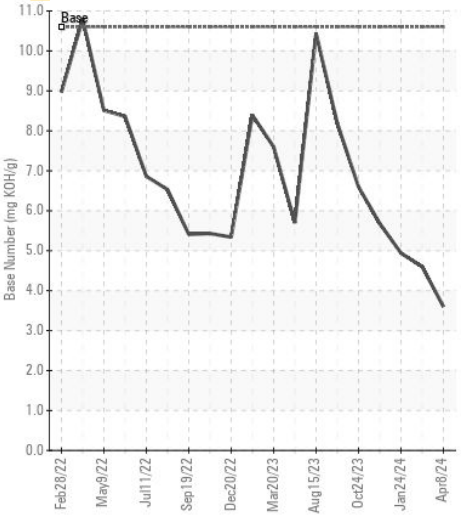

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011902
Lab Number : 06146070
Unique Number : 10976148
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 11 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Don Baldridge

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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