FLEET WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2005 MACK 87
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

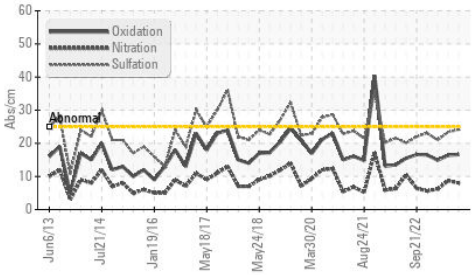
There is no indication of any contamination in the oil.

FLUID CONDITION

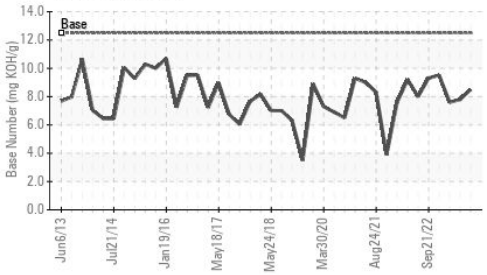
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013648	KL0011746	KL0007250
Sample Date		Client Info		21 May 2024	06 Sep 2023	27 Apr 2023
Machine Age	mls	Client Info		904781	894025	886338
Oil Age	mls	Client Info		23605	12846	5159
Filter Age	mls	Client Info		23605	12846	5159
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>75	66	64	21
Chromium	ppm	ASTM D5185m	>4	2	1	0
Nickel	ppm	ASTM D5185m	>7	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	4	3	3
Lead	ppm	ASTM D5185m	>40	6	6	0
Copper	ppm	ASTM D5185m	>200	7	9	3
Tin	ppm	ASTM D5185m	>4	1	2	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	8	6
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 2.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	1	1.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.7	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	23.4	21.0
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		5	3	<1
Boron	ppm	ASTM D5185m	151	257	279	359
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	132	123	120
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	0	722	663	664
Calcium	ppm	ASTM D5185m	2046	1775	1566	1580
Phosphorus	ppm	ASTM D5185m	1043	809	732	755
Zinc	ppm	ASTM D5185m	943	987	884	934
Sulfur	ppm	ASTM D5185m	5012	3176	2935	2862
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	16.4	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.5	7.8	7.6
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	12.9	12.8

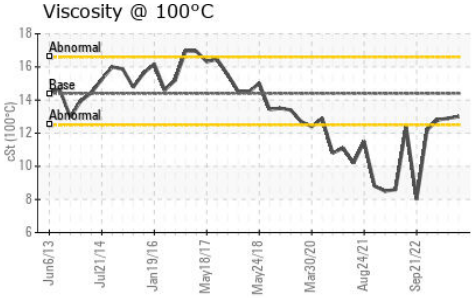
FT-IR (Direct Trend)



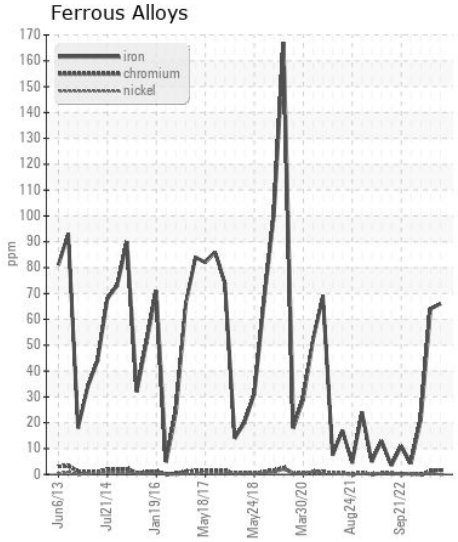
Base Number



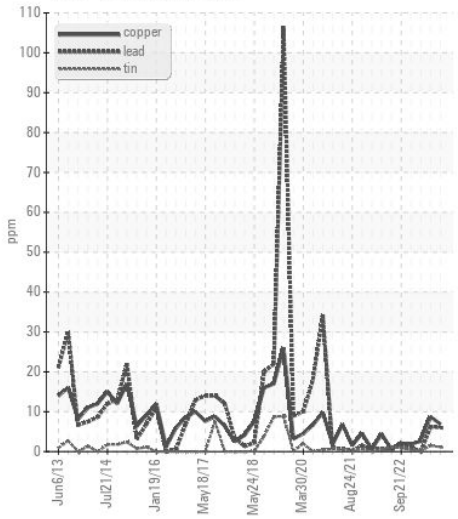
Viscosity @ 100°C



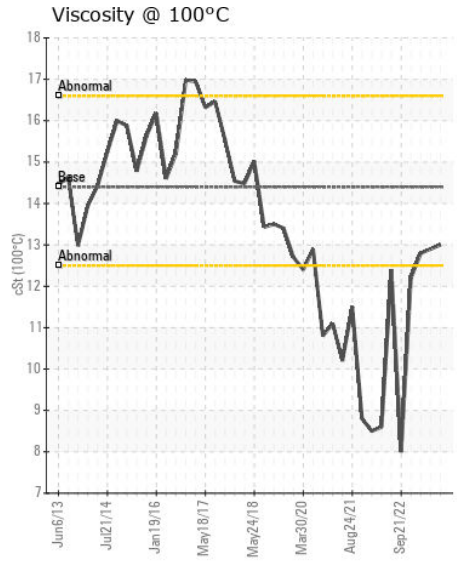
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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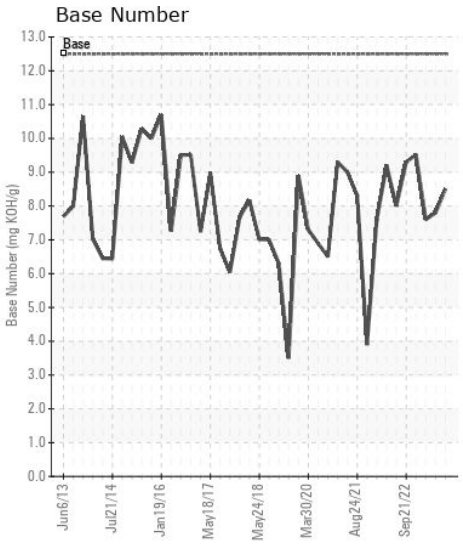

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013648
Lab Number : 06193268
Unique Number : 11050020
Test Package : FLEET

Received : 28 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Wes Davis

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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