



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
2001 MACK 79
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011682	KL0011528	KL0008496
Sample Date		Client Info		14 Mar 2024	27 Jul 2023	17 Mar 2023
Machine Age	mls	Client Info		753784	748620	742113
Oil Age	mls	Client Info		18688	13524	7017
Filter Age	mls	Client Info		18688	13524	7017
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	20	33	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	0	1	<1
Copper	ppm	ASTM D5185m	>330	5	5	3
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

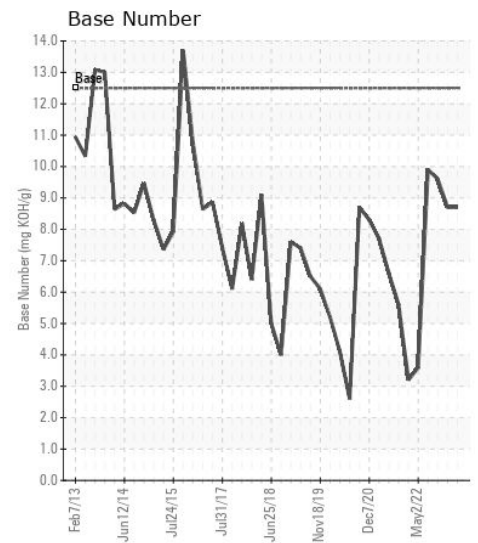
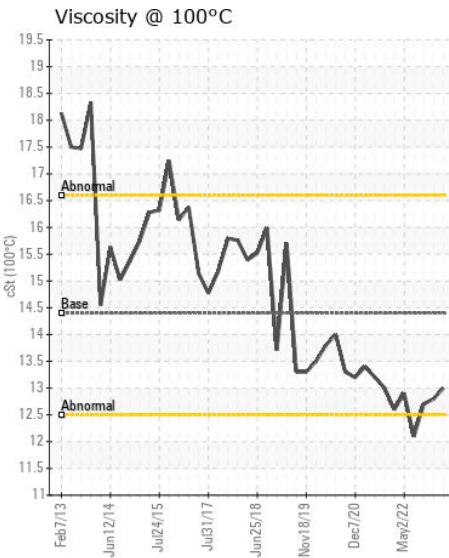
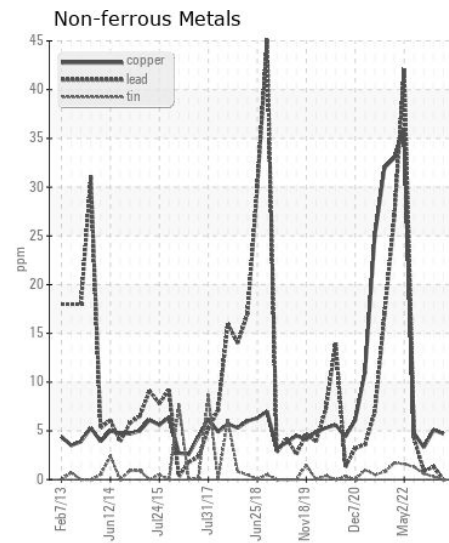
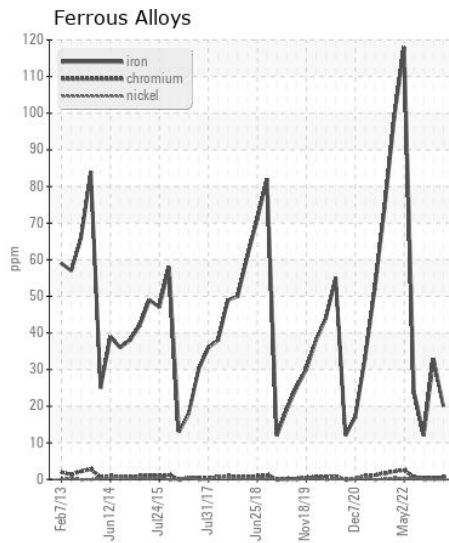
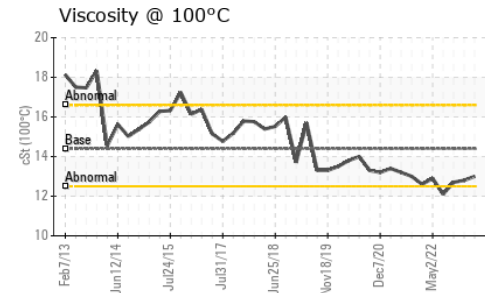
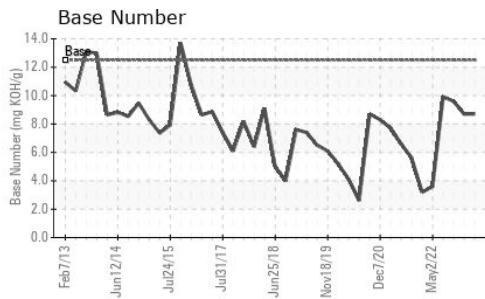
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	5	6
Potassium	ppm	ASTM D5185m	>20	3	1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 3.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.6	1.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	6.0	8.2	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	24.3	23.2
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

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.

Sodium	ppm	ASTM D5185m		4	2	3
Boron	ppm	ASTM D5185m	151	272	246	302
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	119	111	117
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	0	652	648	640
Calcium	ppm	ASTM D5185m	2046	1477	1479	1493
Phosphorus	ppm	ASTM D5185m	1043	696	672	672
Zinc	ppm	ASTM D5185m	943	817	812	836
Sulfur	ppm	ASTM D5185m	5012	2880	2689	2590
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	16.0	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.7	8.7	9.6
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	12.8	12.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KL0011682

Lab Number : 06122988

Unique Number : 10937139

Test Package : FLEET

Received : 19 Mar 2024

Tested : 20 Mar 2024

Diagnosed : 20 Mar 2024 - Wes Davis

H. BROWN

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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)