



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 811
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0778987	WC0707421	WCM2200720
Sample Date		Client Info		14 Dec 2023	21 Feb 2023	07 Feb 2013
Machine Age	mls	Client Info		22239	8203	9760
Oil Age	mls	Client Info		14036	0	0
Filter Age	mls	Client Info		14036	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	29	29	10
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	7	8	4
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>260	57	24	6
Tin	ppm	ASTM D5185m	>4	1	1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

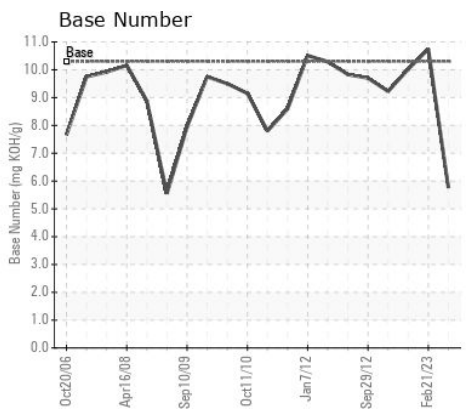
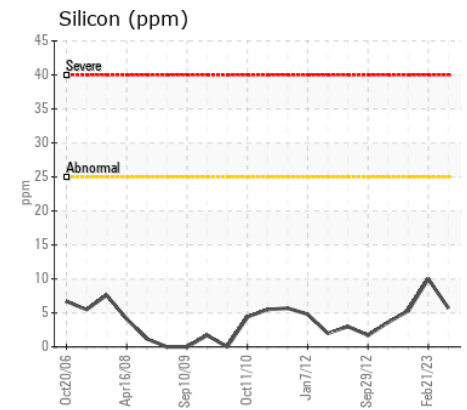
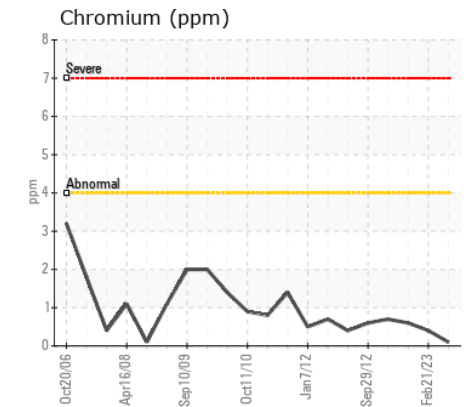
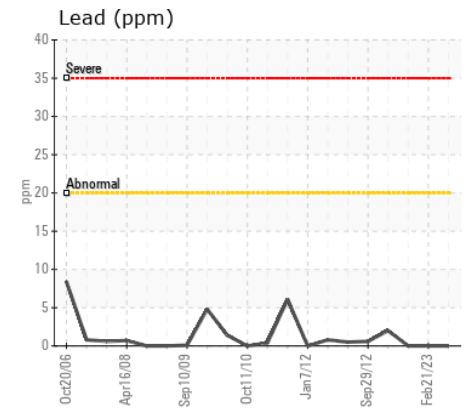
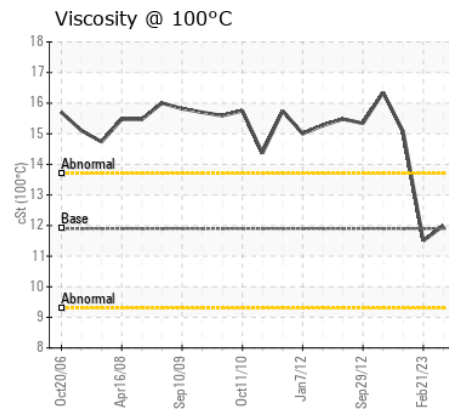
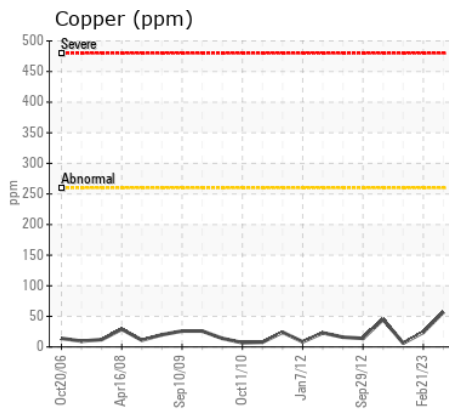
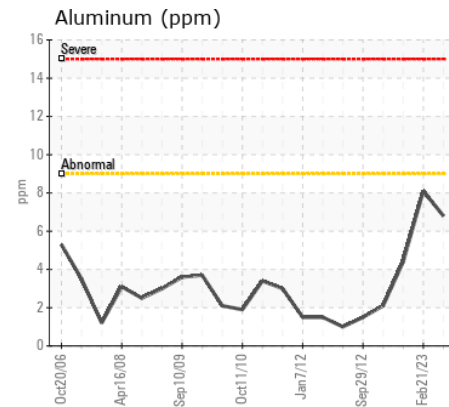
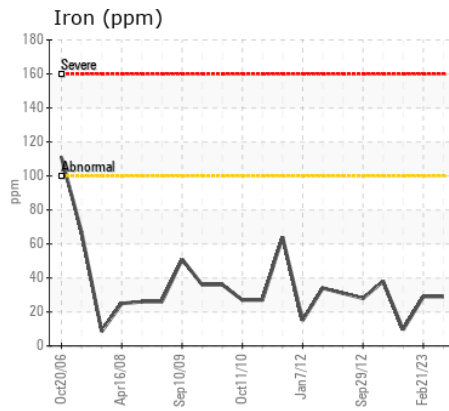
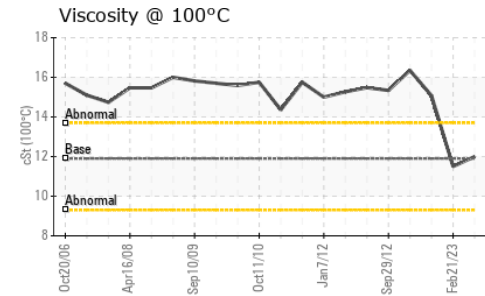
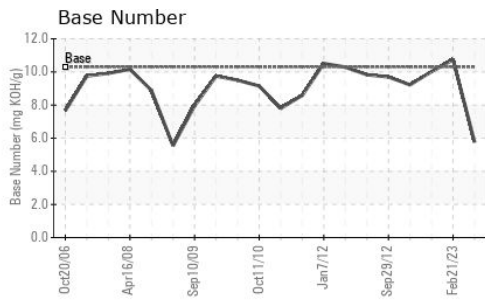
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	10	5
Potassium	ppm	ASTM D5185m	>20	10	16	26
Fuel		WC Method	>5	<1.0	0.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0
Nitration	Abs/cm	*ASTM D7624	>20	11.2	10.0	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	21.1	20.
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		<1	4	7
Boron	ppm	ASTM D5185m		25	54	39
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		5	9	7
Manganese	ppm	ASTM D5185m		<1	2	0
Magnesium	ppm	ASTM D5185m		687	752	12
Calcium	ppm	ASTM D5185m	2900	1336	1420	2318
Phosphorus	ppm	ASTM D5185m	1100	705	735	1027
Zinc	ppm	ASTM D5185m	1200	807	909	1277
Sulfur	ppm	ASTM D5185m	4000	2959	3806	2930
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	16.2	16.
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.76	10.74	10.02
Visc @ 100°C	cSt	ASTM D445	11.9	12.0	▲ 11.5	15.07



Certificate L2367

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

Sample No. : WC0778987

Lab Number : 06097228

Unique Number : 10890081

Test Package : MOB 2

Received : 22 Feb 2024

Tested : 23 Feb 2024

Diagnosed : 23 Feb 2024 - Wes Davis

LYNDEN TRANSPORT - FIFE

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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)