



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 450
Component
Diesel Engine
Fluid
CHEVRON DELO 400 LE 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0081920	PC0064980	PC0054262
Sample Date		Client Info		28 Feb 2024	20 Jul 2023	12 Sep 2021
Machine Age	kms	Client Info		1508577	1402147	1165359
Oil Age	kms	Client Info		106630	148580	122026
Filter Age	kms	Client Info		106630	148580	122026
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>65	15	▲ 96	57
Chromium	ppm	ASTM D5185(m)	>5	<1	4	2
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>35	7	▲ 35	20
Lead	ppm	ASTM D5185(m)	>10	0	0	<1
Copper	ppm	ASTM D5185(m)	>180	3	8	6
Tin	ppm	ASTM D5185(m)	>8	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

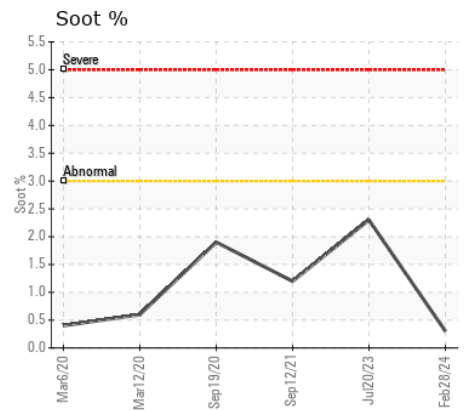
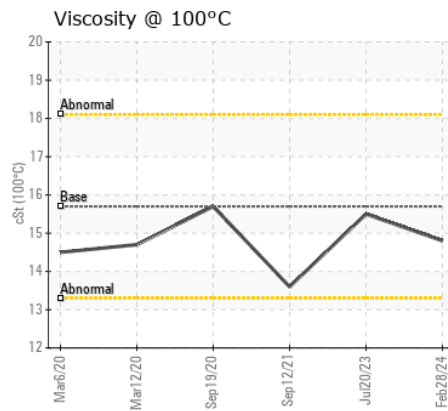
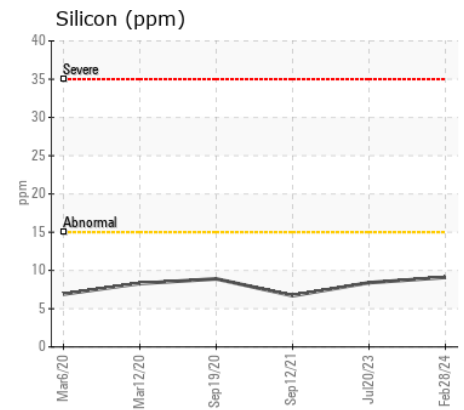
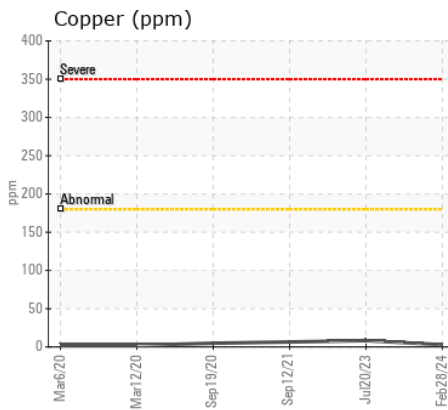
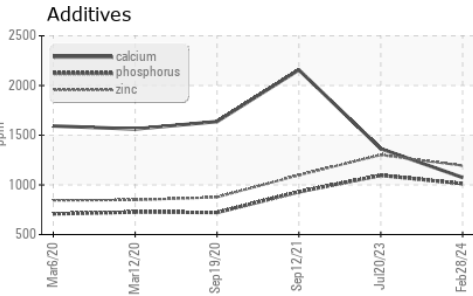
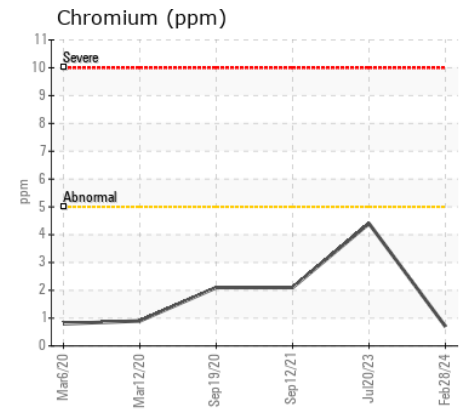
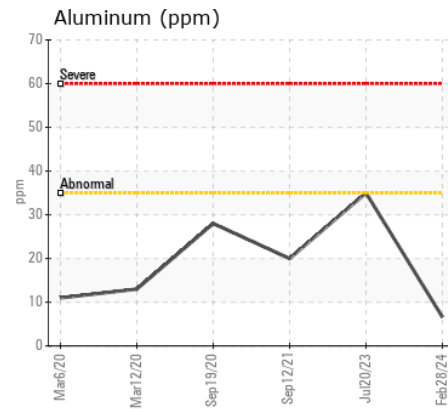
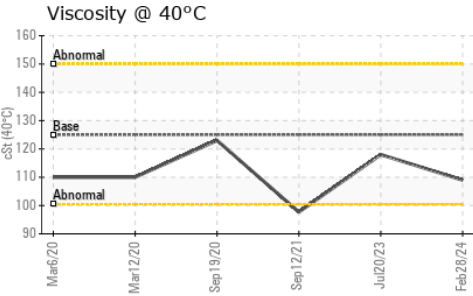
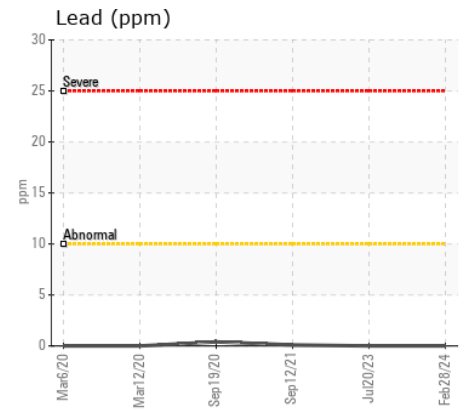
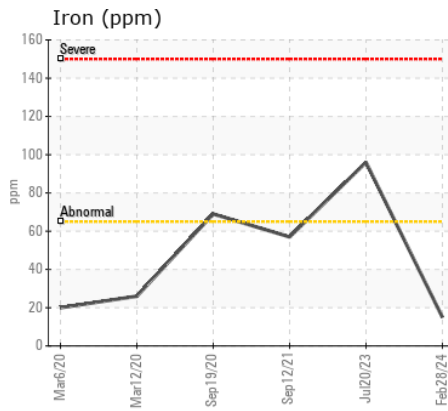
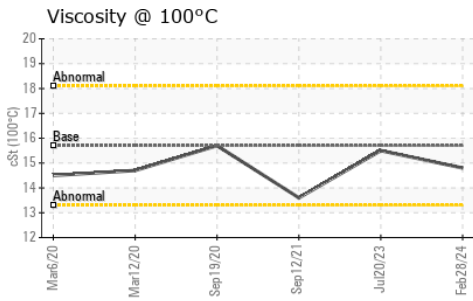
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	9	8	7
Potassium	ppm	ASTM D5185(m)	>20	2	7	9
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	0.0
Soot %	%	ASTM D7844*	>3	0.3	▲ 2.3	1.2
Nitration	Abs/cm	ASTM D7624*	>20	8.2	15.5	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	31.8	26.8
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	9	11
Boron	ppm	ASTM D5185(m)		2	11	11
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		61	65	19
Manganese	ppm	ASTM D5185(m)		0	1	<1
Magnesium	ppm	ASTM D5185(m)		980	997	189
Calcium	ppm	ASTM D5185(m)		1074	1364	2157
Phosphorus	ppm	ASTM D5185(m)	1200	1012	1096	930
Zinc	ppm	ASTM D5185(m)	1300	1193	1301	1098
Sulfur	ppm	ASTM D5185(m)	3200	2564	2107	2670
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	30.8	17.1
Visc @ 40°C	cSt	ASTM D7279(m)	125	109	118	97.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	14.8	15.5	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	131	140	137	139



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0081920 **Received** : 07 Mar 2024
Lab Number : 02620425 **Tested** : 07 Mar 2024
Unique Number : 5737535 **Diagnosed** : 07 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

MCKEVITT TRUCKING LTD.
 1200 CARRICK STREET
 THUNDER BAY, ON
 CA P7B 5G9
 Contact: Keith/Jack
 keith.corbett@mckevitt-trucking.com
 T: (807)623-2249
 F: (807)623-4563

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.