



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 3814T
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915515	WC0864035	WC0813037
Sample Date		Client Info		09 Feb 2024	12 Oct 2023	28 Jan 2023
Machine Age	mls	Client Info		14225	369160	211339
Oil Age	mls	Client Info		14225	29043	14617
Filter Age	mls	Client Info		14225	29043	14617
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>80	31	12	23
Chromium	ppm	ASTM D5185(m)	>5	2	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	14	4	7
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>150	3	1	2
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

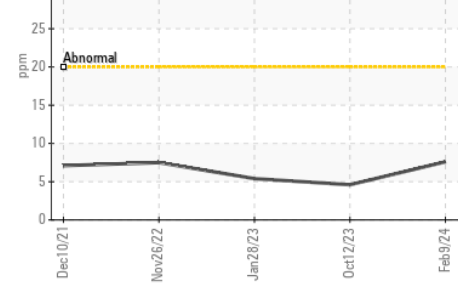
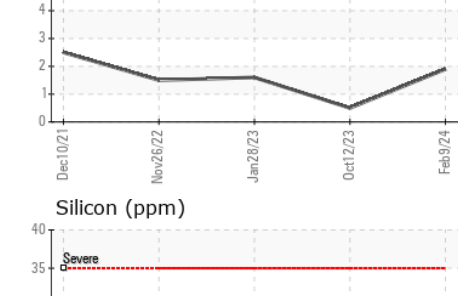
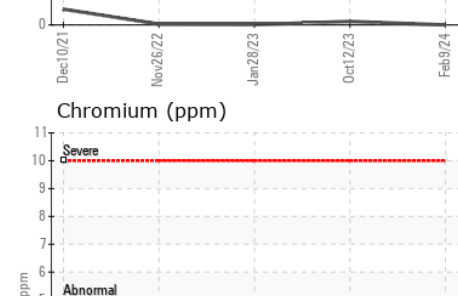
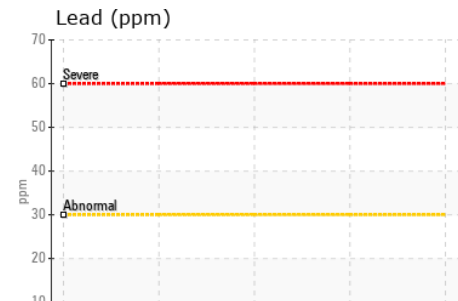
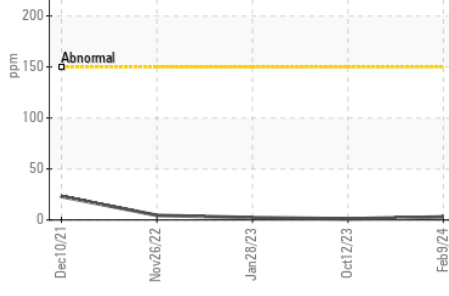
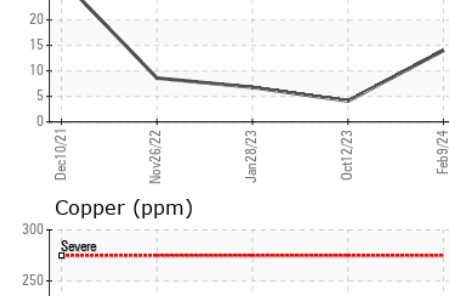
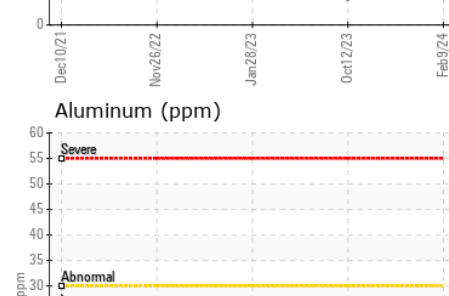
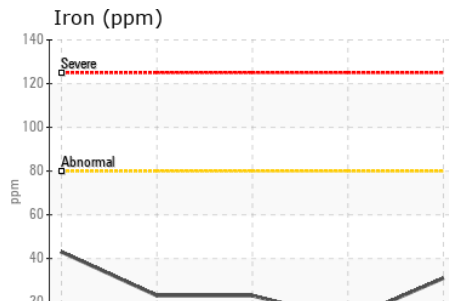
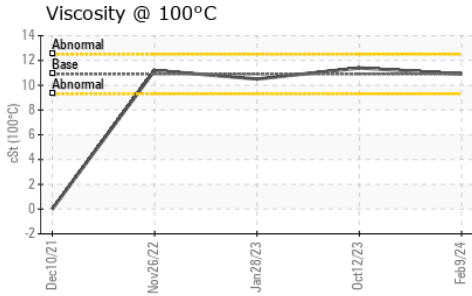
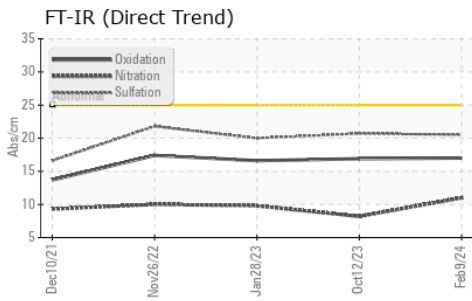
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	8	5	5
Potassium	ppm	ASTM D5185(m)	>20	4	5	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	11.0	8.2	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.5	20.7	20.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		21	3	2
Boron	ppm	ASTM D5185(m)	250	11	107	9
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	56	9	63
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	450	898	141	969
Calcium	ppm	ASTM D5185(m)	3000	1232	2256	1186
Phosphorus	ppm	ASTM D5185(m)	1150	1030	1069	1120
Zinc	ppm	ASTM D5185(m)	1350	1244	1268	1237
Sulfur	ppm	ASTM D5185(m)	4250	2628	3213	2720
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	16.9	16.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	10.9	11.4	10.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915515 **Received** : 08 Apr 2024
Lab Number : 02627239 **Tested** : 08 Apr 2024
Unique Number : 5760371 **Diagnosed** : 08 Apr 2024 - Wes Davis
Test Package : MOB 1

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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.