



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Broker

Machine Id

FREIGHTLINER 370

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934988	WC0417920	WC0288915
Sample Date		Client Info		29 Jun 2024	04 Jan 2020	23 Oct 2017
Machine Age	mls	Client Info		261102	123703	0
Oil Age	mls	Client Info		25000	5557	0
Filter Age	mls	Client Info		25000	5557	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	45	43	19
Chromium	ppm	ASTM D5185(m)	>5	2	2	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	4	3	3
Lead	ppm	ASTM D5185(m)	>30	1	8	6
Copper	ppm	ASTM D5185(m)	>150	2	3	5
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

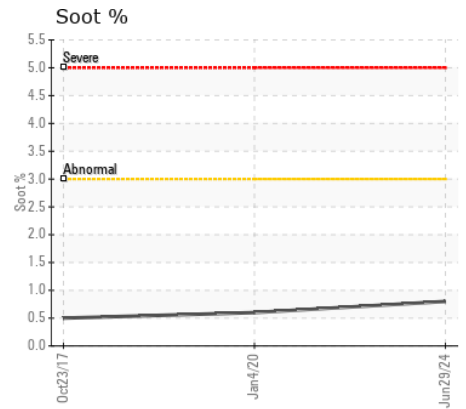
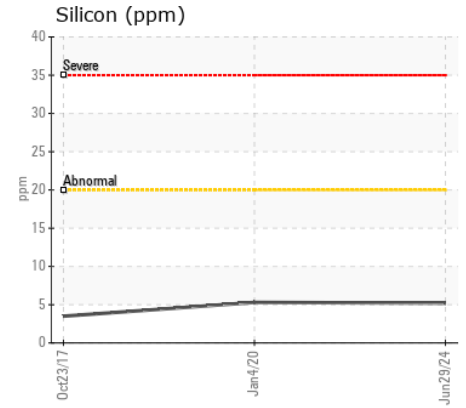
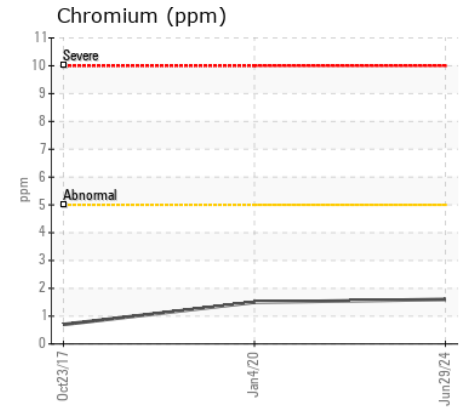
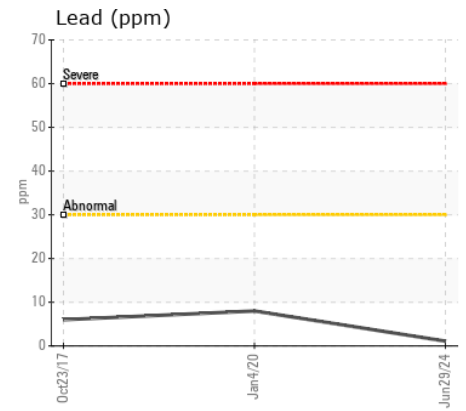
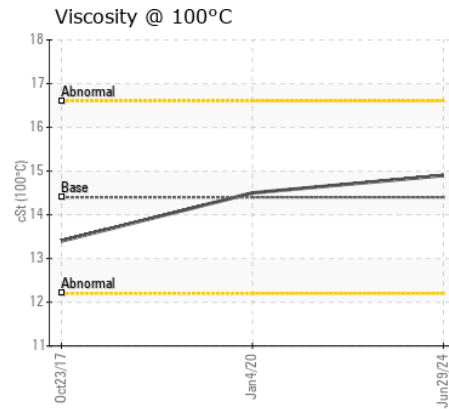
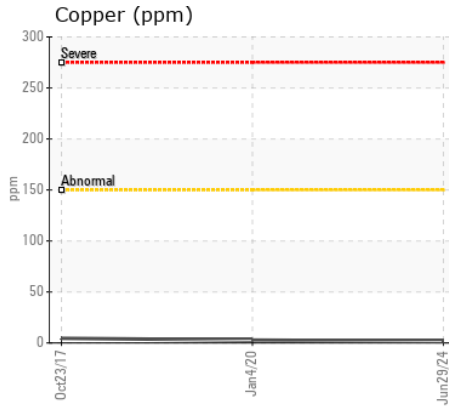
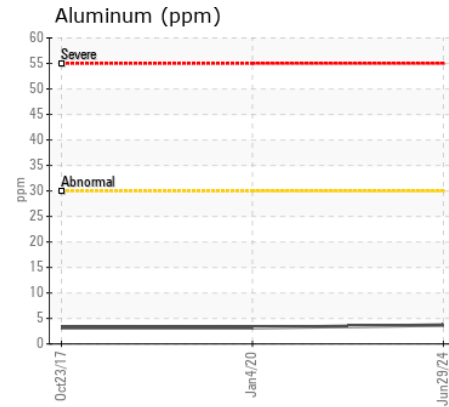
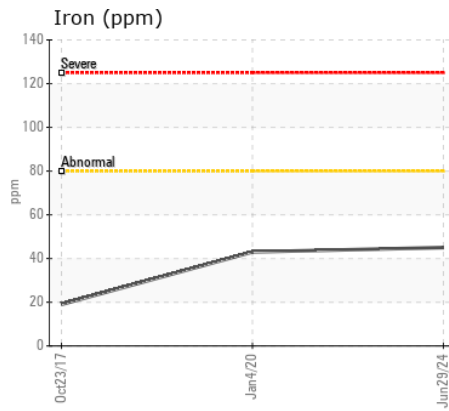
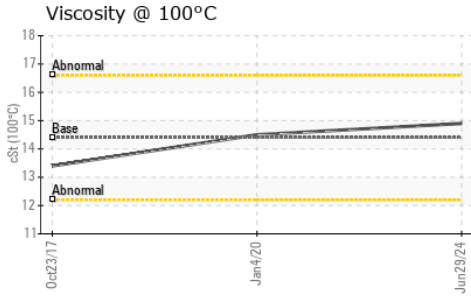
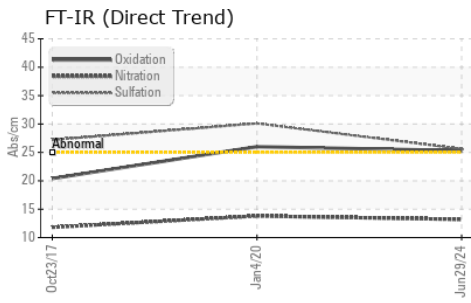
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	5	5	4
Potassium	ppm	ASTM D5185(m)	>20	4	2	3
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	0.8	0.6	0.5
Nitration	Abs/cm	ASTM D7624*	>20	13.2	13.8	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	30.1	27.2
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)	>158	3	2	2
Boron	ppm	ASTM D5185(m)	250	3	1	5
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	65	67	42
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	990	1046	704
Calcium	ppm	ASTM D5185(m)	3000	1140	1163	1534
Phosphorus	ppm	ASTM D5185(m)	1150	1006	1069	1047
Zinc	ppm	ASTM D5185(m)	1350	1242	1325	1313
Sulfur	ppm	ASTM D5185(m)	4250	2440	2512	2823
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.3	26.0	20.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.9	14.5	13.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0934988 **Received** : 05 Jul 2024
Lab Number : **02645811** **Tested** : 05 Jul 2024
Unique Number : 5803350 **Diagnosed** : 05 Jul 2024 - Kevin Marson
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.