



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
51000 series
Machine Id
Freightliner 51903
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 10W30 (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0893700	WC0847650	WC0857740
Sample Date		Client Info		26 Feb 2024	12 Dec 2023	02 Oct 2023
Machine Age	mls	Client Info		29272	517990	785038
Oil Age	mls	Client Info		29272	30399	29026
Filter Age	mls	Client Info		29272	30399	29026
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)	>65	26	24	27
Chromium	ppm	ASTM D5185(m)	>5	1	2	2
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>35	15	18	14
Lead	ppm	ASTM D5185(m)	>10	0	0	<1
Copper	ppm	ASTM D5185(m)	>180	4	4	4
Tin	ppm	ASTM D5185(m)	>8	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

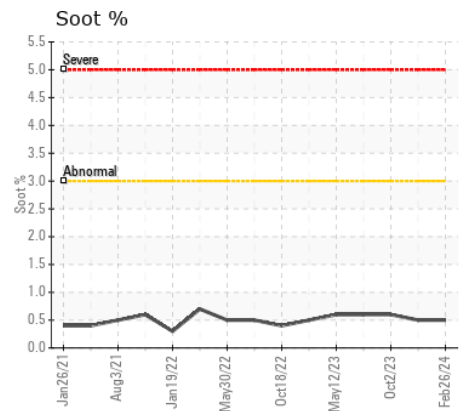
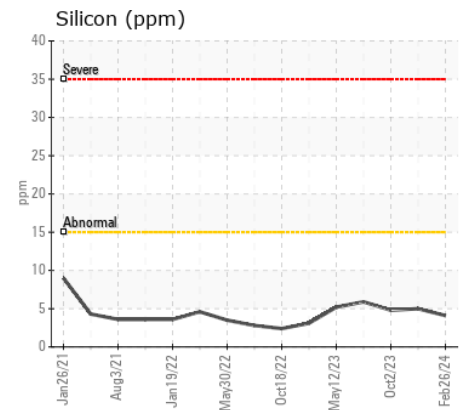
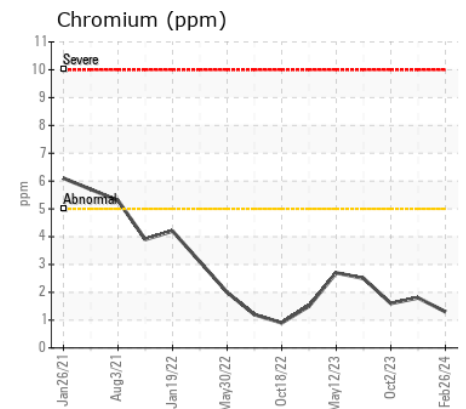
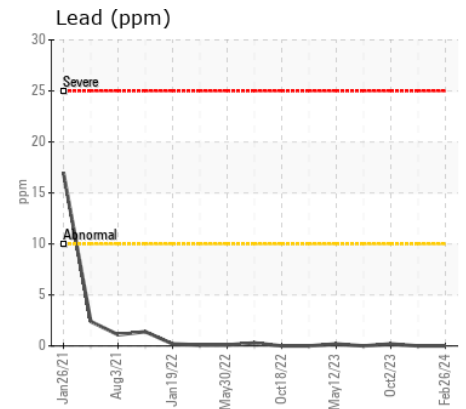
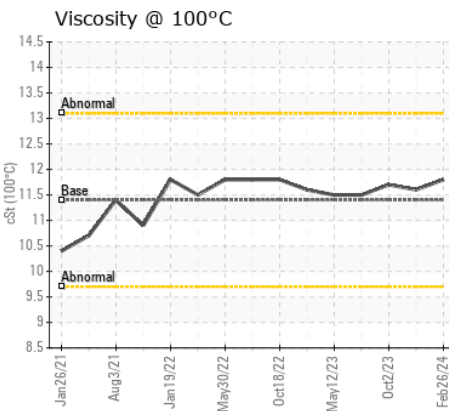
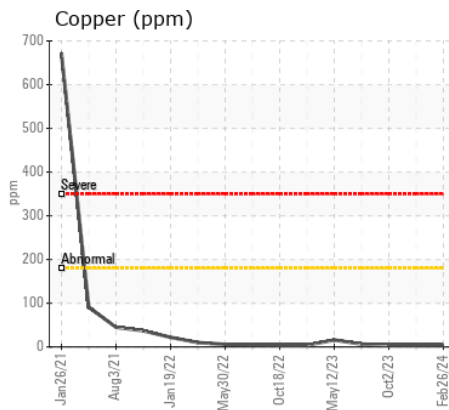
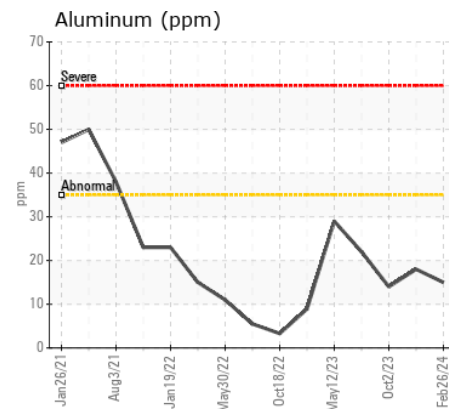
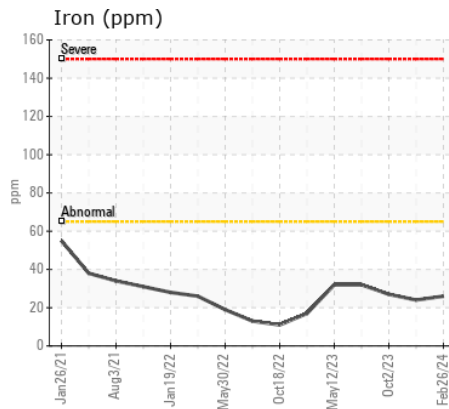
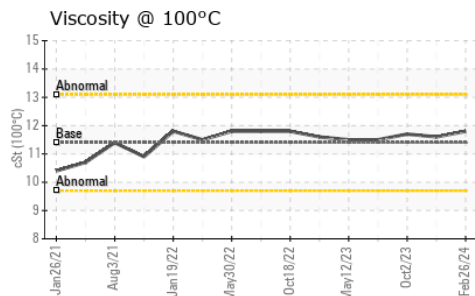
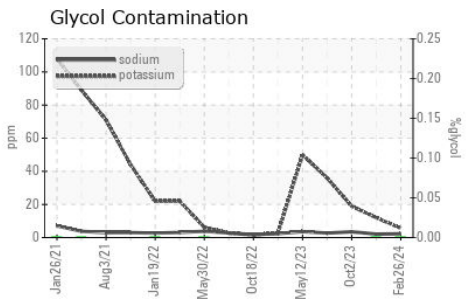
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	4	5	5
Potassium	ppm	ASTM D5185(m)	>20	6	12	19
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	9.4	8.8	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	20.1	21.4
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)		2	2	4
Boron	ppm	ASTM D5185(m)	1	1	<1	1
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	61	60	59
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	10	1011	996	976
Calcium	ppm	ASTM D5185(m)	2942	1092	1095	1103
Phosphorus	ppm	ASTM D5185(m)	1102	990	1008	1006
Zinc	ppm	ASTM D5185(m)	1351	1206	1199	1204
Sulfur	ppm	ASTM D5185(m)	3903	2339	2530	2403
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	16.2	17.3
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.8	11.6	11.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893700 **Received** : 01 Apr 2024
Lab Number : 02625502 **Tested** : 01 Apr 2024
Unique Number : 5750621 **Diagnosed** : 01 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

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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.