



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 51983
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915490	WC0899683	WC0837203
Sample Date		Client Info		20 Mar 2024	03 Mar 2024	04 Dec 2023
Machine Age	mls	Client Info		109642	96845	37693
Oil Age	mls	Client Info		0	29462	35254
Filter Age	mls	Client Info		0	29462	35254
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)	>100	34	22	67
Chromium	ppm	ASTM D5185(m)	>20	2	2	3
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	22	20	36
Lead	ppm	ASTM D5185(m)	>40	1	1	3
Copper	ppm	ASTM D5185(m)	>330	4	1	18
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

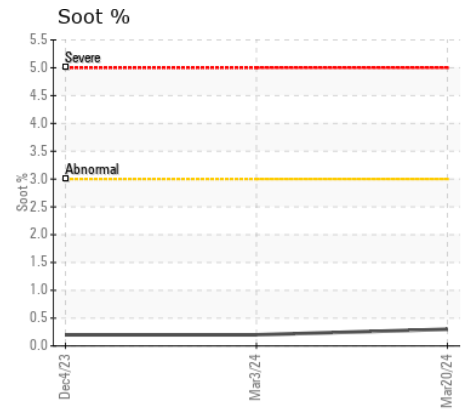
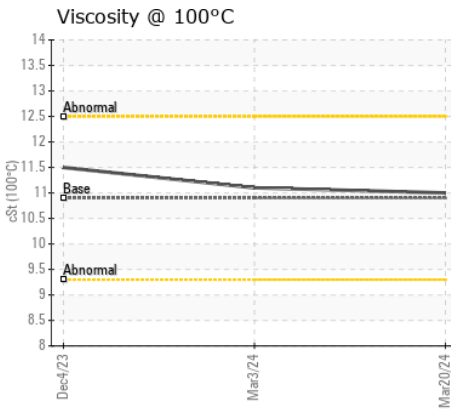
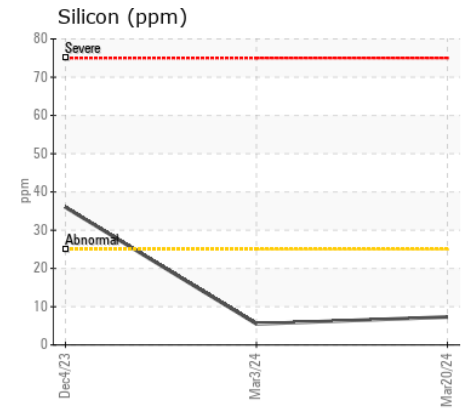
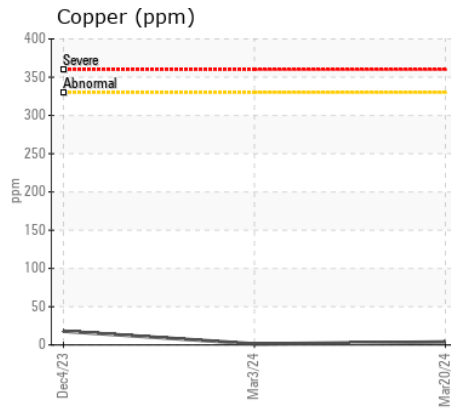
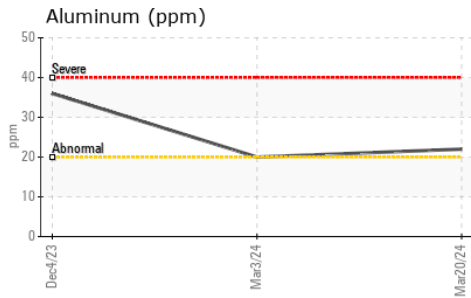
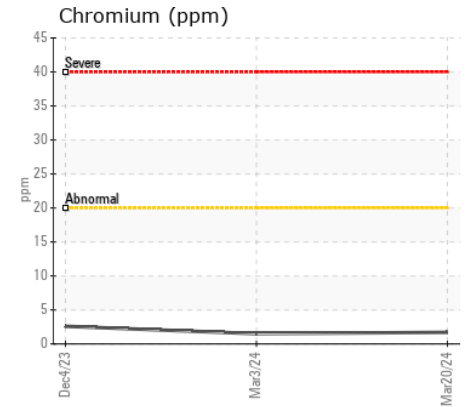
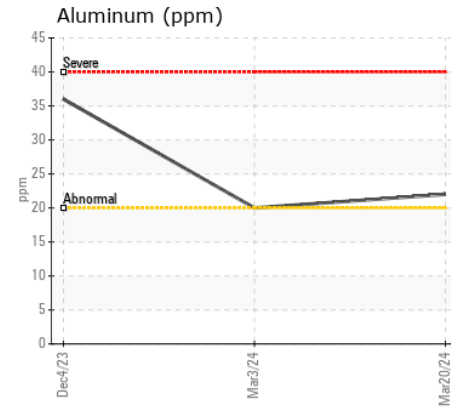
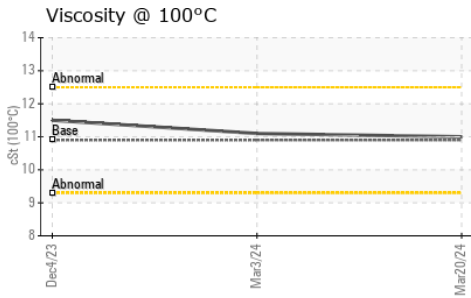
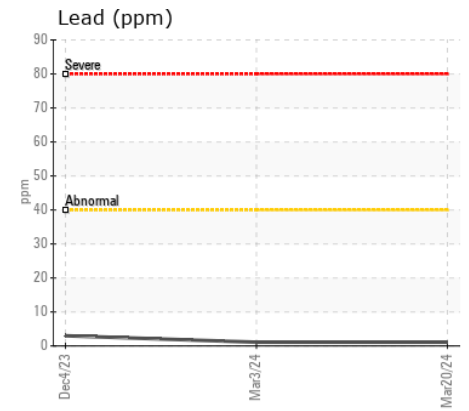
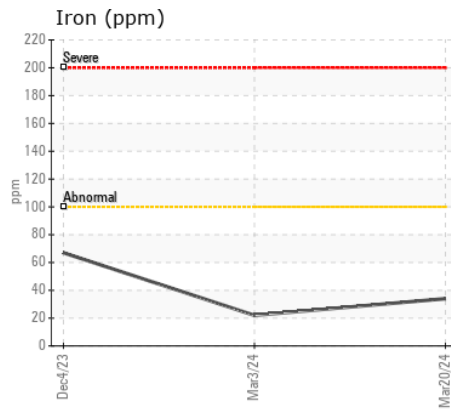
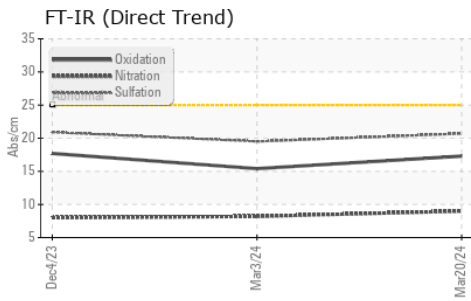
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	6	36
Potassium	ppm	ASTM D5185(m)	>20	53	36	92
Fuel		WC Method	>2.0	<1.0	<1.0	0.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.0	8.2	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	19.5	20.9
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)	250	6	3	57
Barium	ppm	ASTM D5185(m)	10	<1	0	4
Molybdenum	ppm	ASTM D5185(m)	100	62	60	61
Manganese	ppm	ASTM D5185(m)		0	0	4
Magnesium	ppm	ASTM D5185(m)	450	966	965	444
Calcium	ppm	ASTM D5185(m)	3000	1116	1025	1738
Phosphorus	ppm	ASTM D5185(m)	1150	989	998	950
Zinc	ppm	ASTM D5185(m)	1350	1234	1190	1175
Sulfur	ppm	ASTM D5185(m)	4250	2273	2640	2408
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	15.4	17.7
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.0	11.1	11.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915490 **Received** : 08 Apr 2024
Lab Number : 02627262 **Tested** : 08 Apr 2024
Unique Number : 5760394 **Diagnosed** : 08 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Visual)

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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.