MOB I

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
51505
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

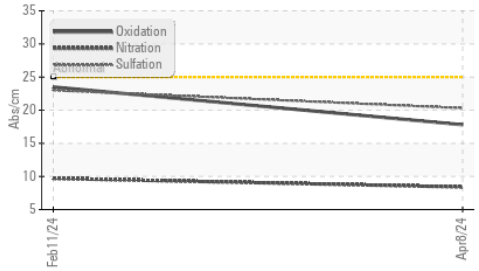
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

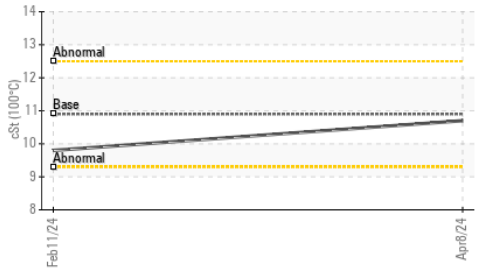
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0915509**	WC0904895	---
Sample Date		Client Info		**08 Apr 2024**	11 Feb 2024	---
Machine Age	mls	Client Info		**63921**	34469	---
Oil Age	mls	Client Info		**29451**	34469	---
Filter Age	mls	Client Info		**29451**	34469	---
Oil Changed		Client Info		**Changed**	Changed	---
Filter Changed		Client Info		**Changed**	Changed	---
Sample Status				**NORMAL**	NORMAL	---
Iron	ppm	ASTM D5185(m)	>65	**32**	60	---
Chromium	ppm	ASTM D5185(m)	>5	**4**	4	---
Nickel	ppm	ASTM D5185(m)	>3	**<1**	1	---
Titanium	ppm	ASTM D5185(m)	>5	**0**	0	---
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>35	**34**	46	---
Lead	ppm	ASTM D5185(m)	>10	**6**	4	---
Copper	ppm	ASTM D5185(m)	>180	**268**	154	---
Tin	ppm	ASTM D5185(m)	>8	**1**	4	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
White Metal	scalar	Visual*	NONE	**VLITE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185(m)	>15	**3**	7	---
Potassium	ppm	ASTM D5185(m)	>20	**73**	121	---
Fuel		WC Method	>3.0	**<1.0**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---
Soot %	%	ASTM D7844*	>3	**0.3**	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	**8.4**	9.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.3**	23.0	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**3**	8	---
Boron	ppm	ASTM D5185(m)	250	**10**	39	---
Barium	ppm	ASTM D5185(m)	10	**0**	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	**57**	39	---
Manganese	ppm	ASTM D5185(m)		**1**	4	---
Magnesium	ppm	ASTM D5185(m)	450	**888**	486	---
Calcium	ppm	ASTM D5185(m)	3000	**1250**	1744	---
Phosphorus	ppm	ASTM D5185(m)	1150	**909**	710	---
Zinc	ppm	ASTM D5185(m)	1350	**1115**	847	---
Sulfur	ppm	ASTM D5185(m)	4250	**1886**	1768	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.8**	23.5	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	**10.7**	9.8	---

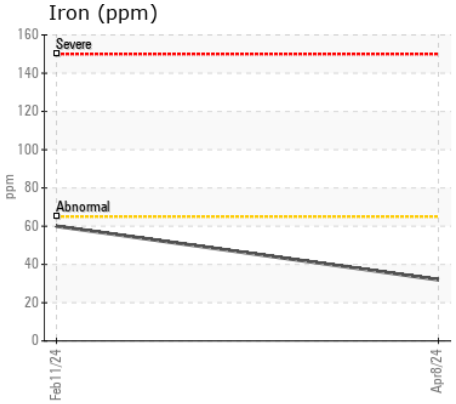
FT-IR (Direct Trend)



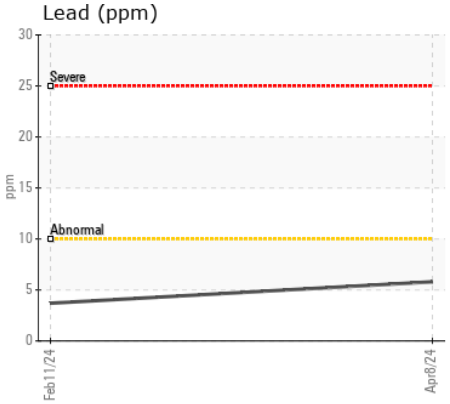
Viscosity @ 100°C



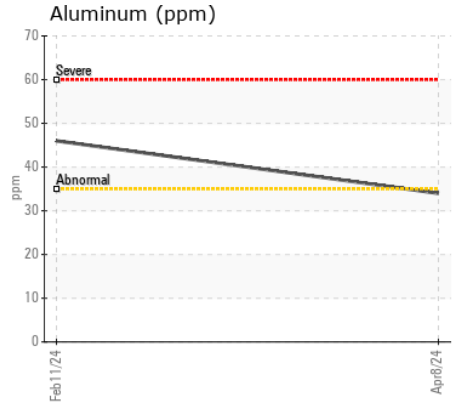
Iron (ppm)



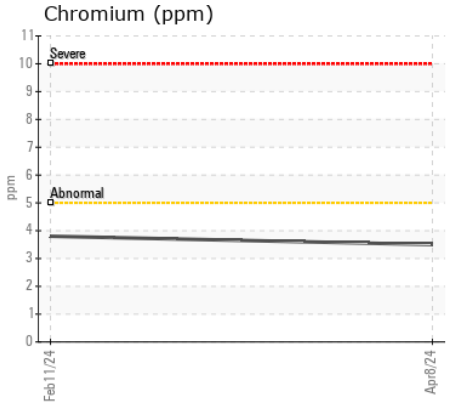
Lead (ppm)



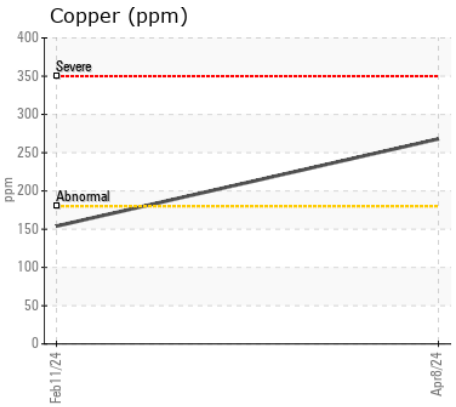
Aluminum (ppm)



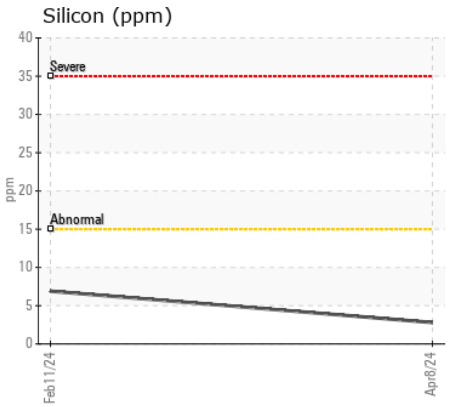
Chromium (ppm)



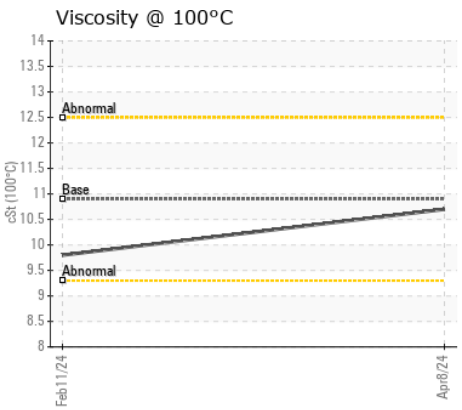
Copper (ppm)



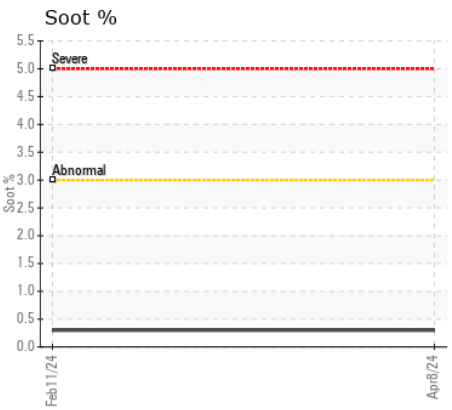
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915509 **Received** : 30 Apr 2024
Lab Number : 02632291 **Tested** : 30 Apr 2024
Unique Number : 5773444 **Diagnosed** : 30 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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.

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