



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**[23847]**  
 Machine Id  
**21-126**  
 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		<b>WC0842840</b>	WC0842889	WC0818031
Sample Date		Client Info		<b>04 Mar 2024</b>	01 Sep 2023	22 Jun 2023
Machine Age	kms	Client Info		<b>3572</b>	43765	34499
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>65	<b>11</b>	20	19
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	4	3
Nickel	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>35	<b>11</b>	46	29
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185(m)	>180	<b>14</b>	24	55
Tin	ppm	ASTM D5185(m)	>8	<b>&lt;1</b>	1	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

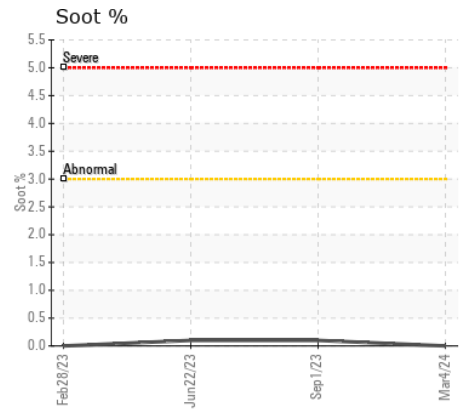
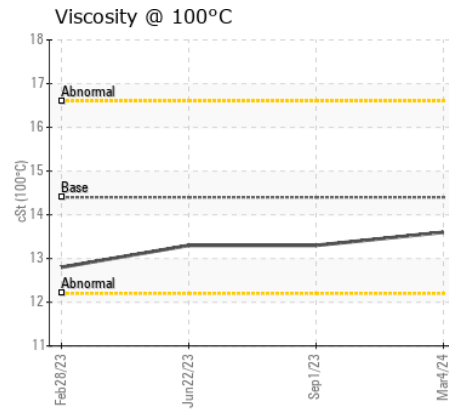
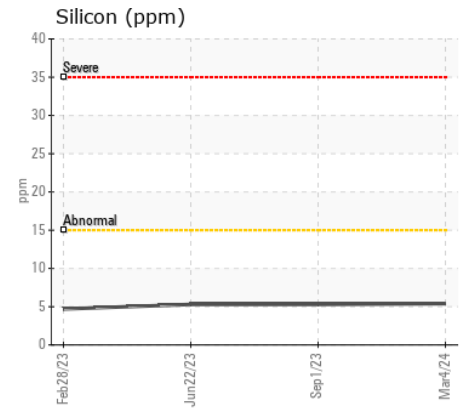
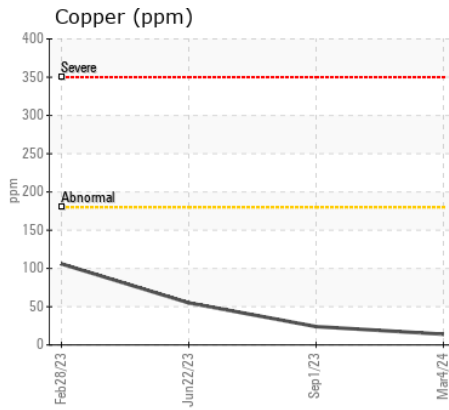
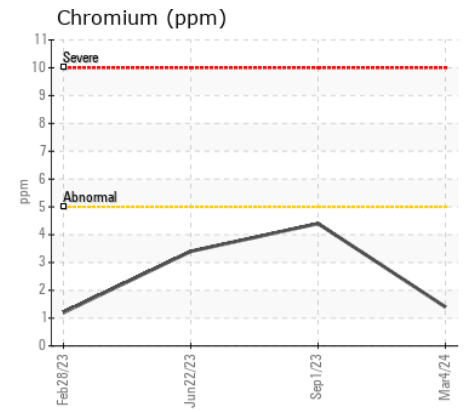
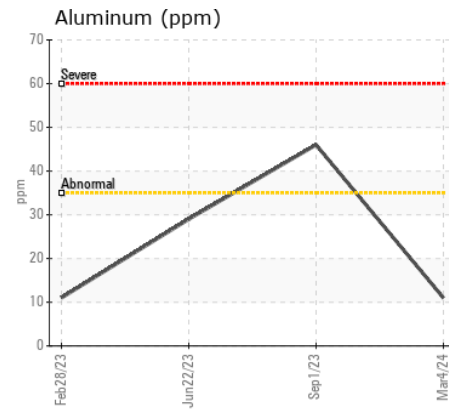
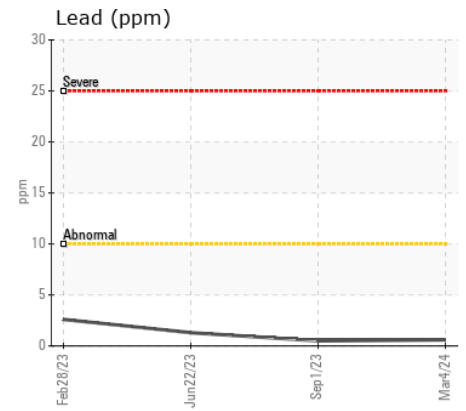
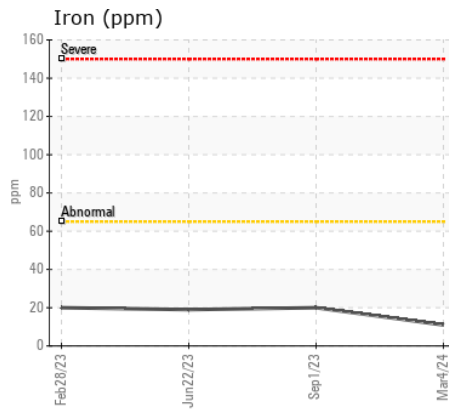
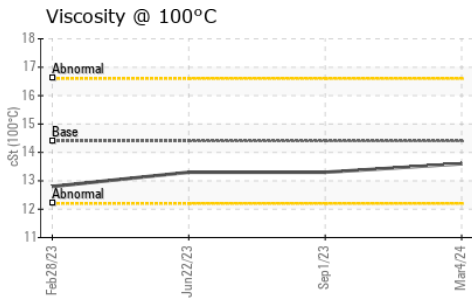
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>5</b>	5	5
Potassium	ppm	ASTM D5185(m)	>20	<b>18</b>	97	56
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.0</b>	8.0	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.6</b>	24.1	22.7
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>158	<b>3</b>	3	3
Boron	ppm	ASTM D5185(m)	250	<b>39</b>	28	29
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>40</b>	39	40
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>504</b>	499	527
Calcium	ppm	ASTM D5185(m)	3000	<b>1694</b>	1649	1685
Phosphorus	ppm	ASTM D5185(m)	1150	<b>754</b>	727	769
Zinc	ppm	ASTM D5185(m)	1350	<b>866</b>	858	878
Sulfur	ppm	ASTM D5185(m)	4250	<b>2181</b>	1901	1902
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.0</b>	22.0	22.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.6</b>	13.3	13.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0842840  
**Lab Number** : 02620080  
**Unique Number** : 5737190  
**Test Package** : MOB 1  
**Received** : 06 Mar 2024  
**Tested** : 06 Mar 2024  
**Diagnosed** : 06 Mar 2024 - Wes Davis

**OX FLEET CARE**  
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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.