



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 52953**  
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		<b>WC0892067</b>	WC0854789	WC0828231
Sample Date		Client Info		<b>23 Feb 2024</b>	01 Nov 2023	12 Jul 2023
Machine Age	mls	Client Info		<b>65029</b>	34218	102659
Oil Age	mls	Client Info		<b>30811</b>	0	0
Filter Age	mls	Client Info		<b>30811</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)	>100	<b>43</b>	91	27
Chromium	ppm	ASTM D5185(m)	>20	<b>3</b>	4	2
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>13</b>	40	44
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	3	2
Copper	ppm	ASTM D5185(m)	>330	<b>138</b>	132	5
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	4	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

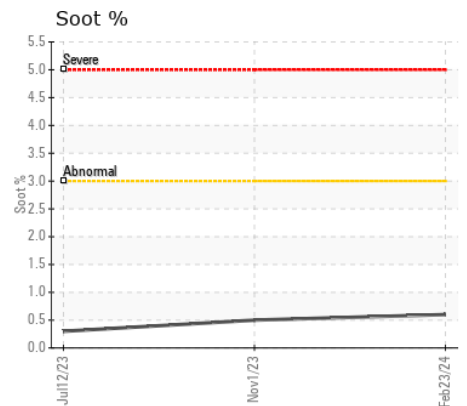
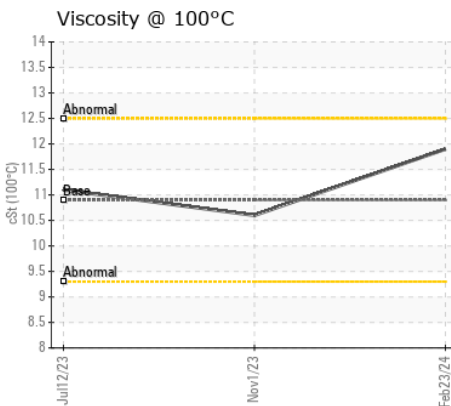
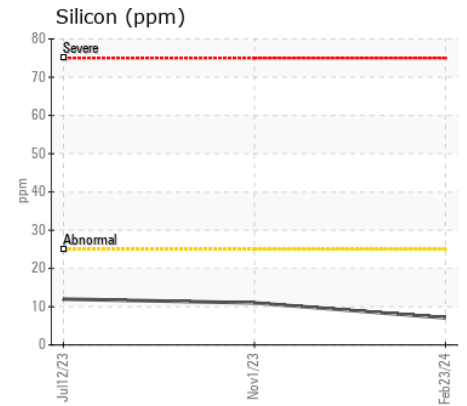
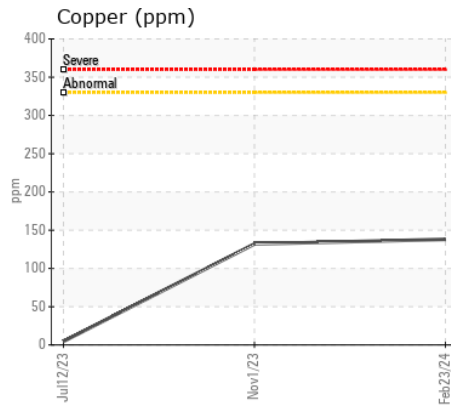
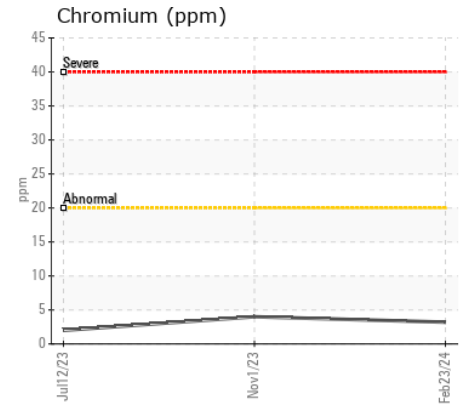
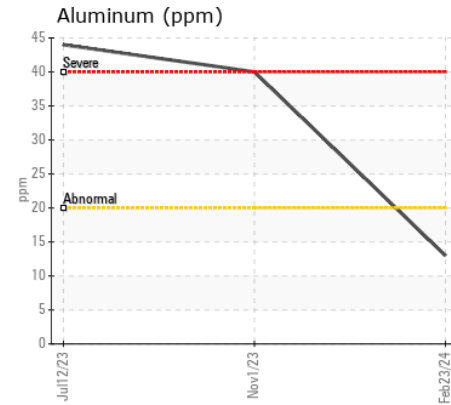
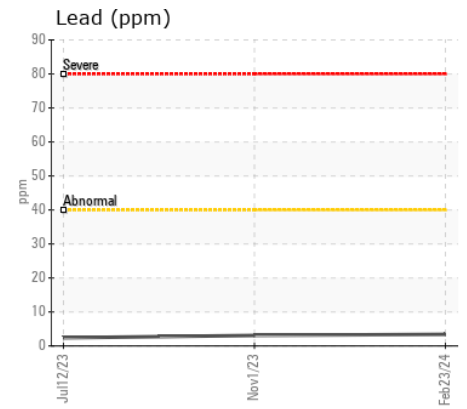
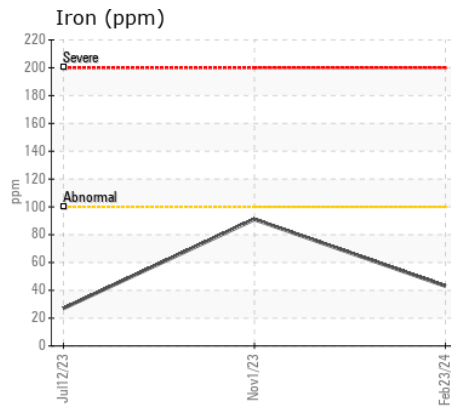
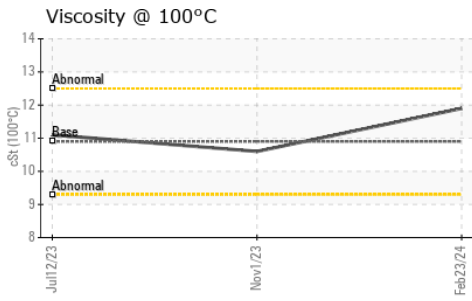
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	11	12
Potassium	ppm	ASTM D5185(m)	>20	<b>22</b>	97	111
Fuel		WC Method	>2.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.6</b>	0.5	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.8</b>	10.7	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.3</b>	23.9	21.1
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)		<b>3</b>	6	2
Boron	ppm	ASTM D5185(m)	250	<b>9</b>	21	6
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>56</b>	49	60
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	4	1
Magnesium	ppm	ASTM D5185(m)	450	<b>866</b>	621	923
Calcium	ppm	ASTM D5185(m)	3000	<b>1273</b>	1861	1143
Phosphorus	ppm	ASTM D5185(m)	1150	<b>920</b>	769	1035
Zinc	ppm	ASTM D5185(m)	1350	<b>1123</b>	964	1197
Sulfur	ppm	ASTM D5185(m)	4250	<b>1979</b>	1790	2308
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.2</b>	24.1	17.4
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.9</b>	10.6	11.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0892067  
**Lab Number** : 02618912  
**Unique Number** : 5736022  
**Test Package** : MOB 1  
**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

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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.