



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 52930**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0892037</b>	WC0720934	WC0844411
Sample Date		Client Info		<b>12 Jan 2024</b>	16 Nov 2023	22 Aug 2023
Machine Age	kms	Client Info		<b>188848</b>	153105	66531
Oil Age	kms	Client Info		<b>0</b>	0	31452
Filter Age	kms	Client Info		<b>0</b>	0	31452
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

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>20</b>	26	38
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	4
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>11</b>	20	40
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	2	2
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	6
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	1	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

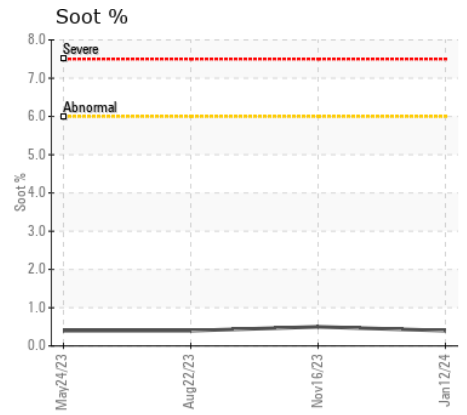
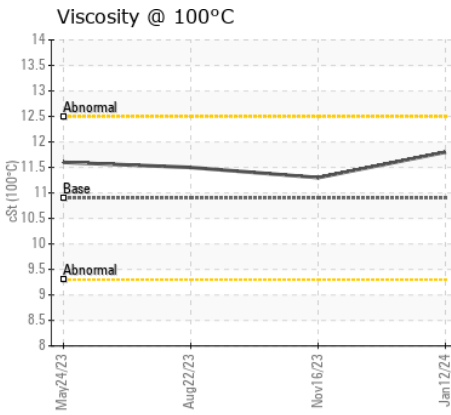
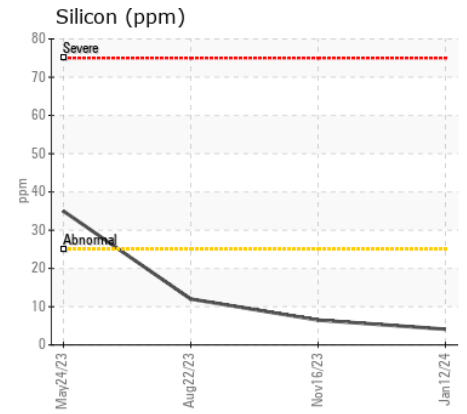
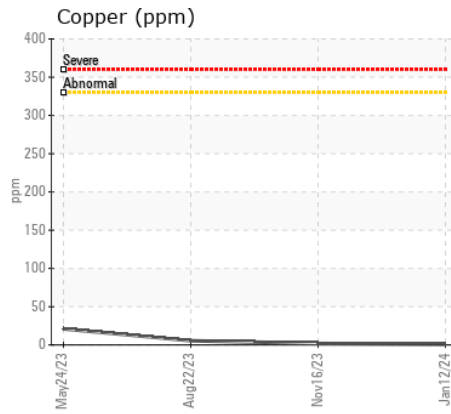
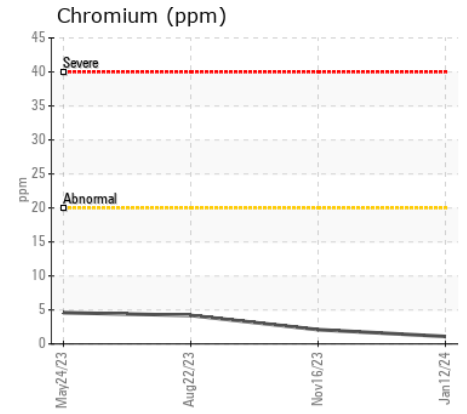
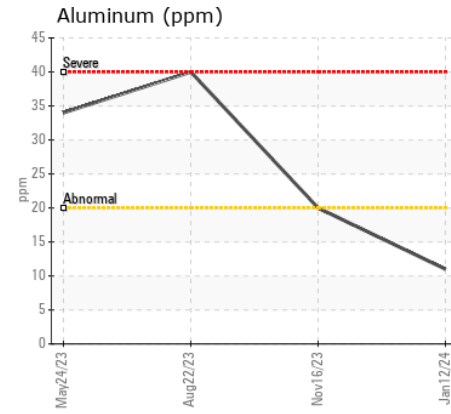
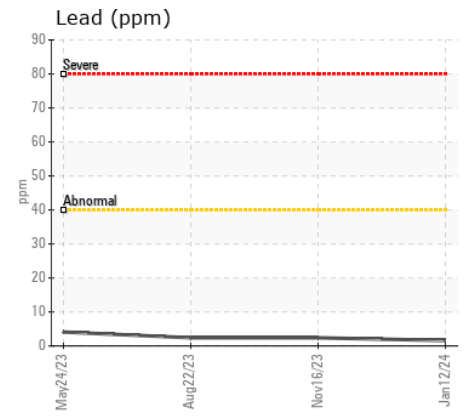
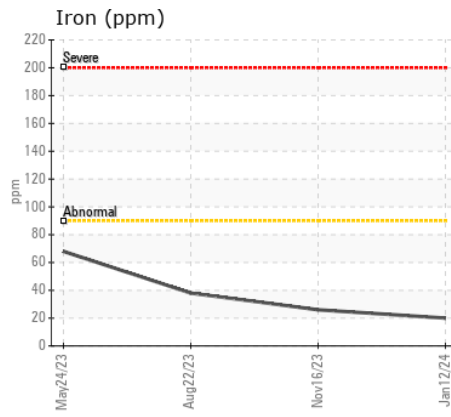
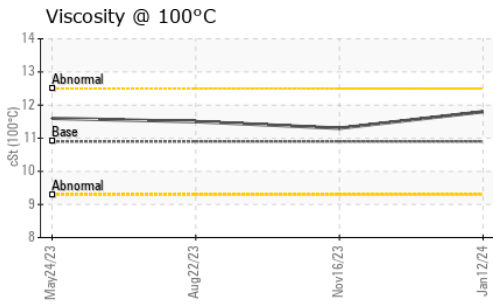
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	12
Potassium	ppm	ASTM D5185(m)	>20	<b>27</b>	45	104
Fuel		WC Method	>3.0	<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*	>6	<b>0.4</b>	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	9.0	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.6</b>	20.3	21.6
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>2</b>	2	2
Boron	ppm	ASTM D5185(m)	250	<b>83</b>	5	5
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>9</b>	60	62
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	450	<b>152</b>	958	930
Calcium	ppm	ASTM D5185(m)	3000	<b>2004</b>	1080	1152
Phosphorus	ppm	ASTM D5185(m)	1150	<b>964</b>	1001	1057
Zinc	ppm	ASTM D5185(m)	1350	<b>1127</b>	1198	1217
Sulfur	ppm	ASTM D5185(m)	4250	<b>2976</b>	2518	2516
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.3</b>	15.9	16.4
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.8</b>	11.3	11.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0892037 **Received** : 18 Jan 2024  
**Lab Number** : 02609673 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 5710759 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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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.