



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**1825**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0925691</b>	WC0895821	WC0883003
Sample Date		Client Info		<b>11 Apr 2024</b>	18 Jan 2024	24 Nov 2023
Machine Age	hrs	Client Info		<b>21820</b>	21370	20811
Oil Age	hrs	Client Info		<b>451</b>	559	500
Filter Age	hrs	Client Info		<b>451</b>	559	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>13</b>	8	5
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

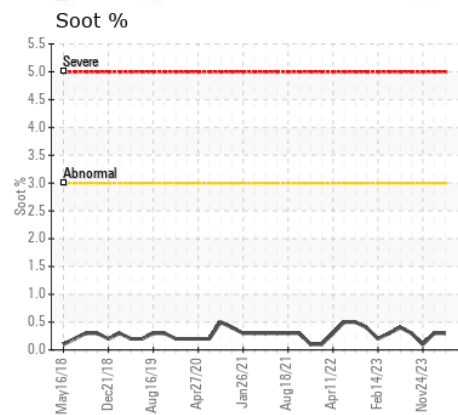
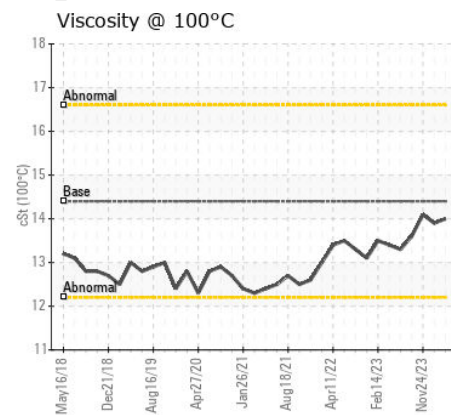
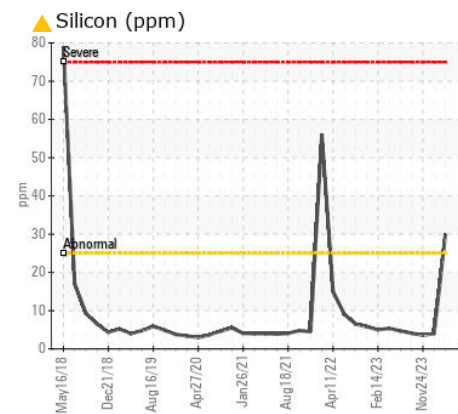
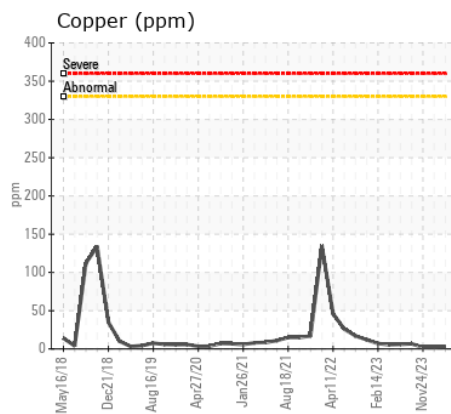
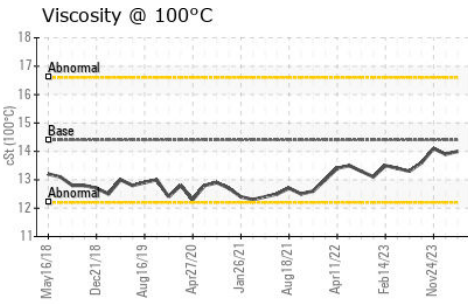
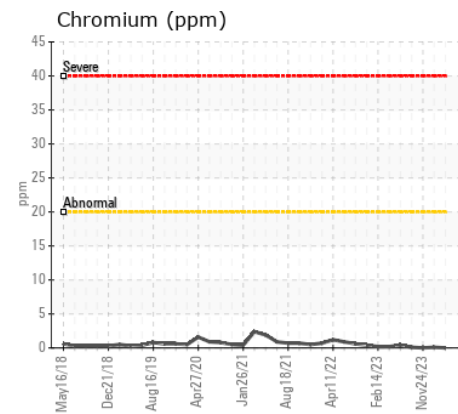
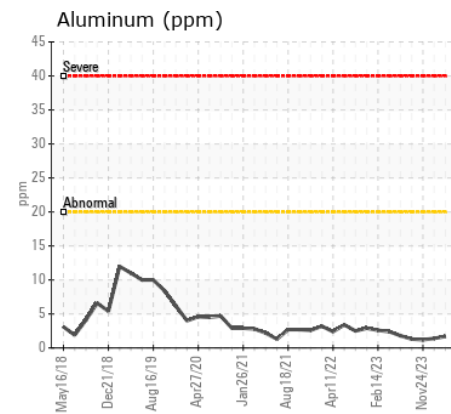
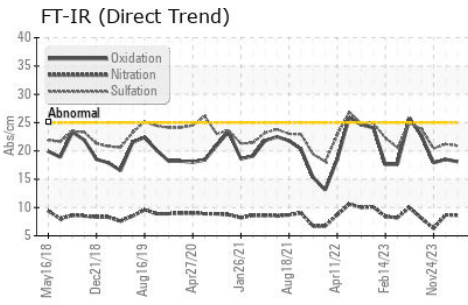
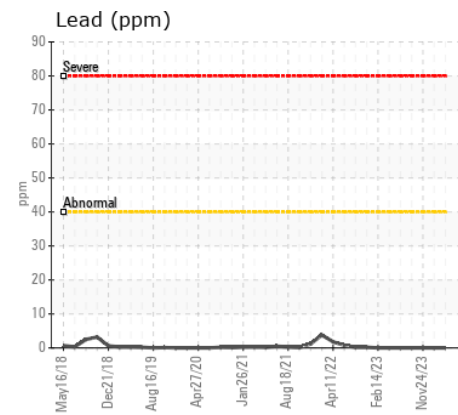
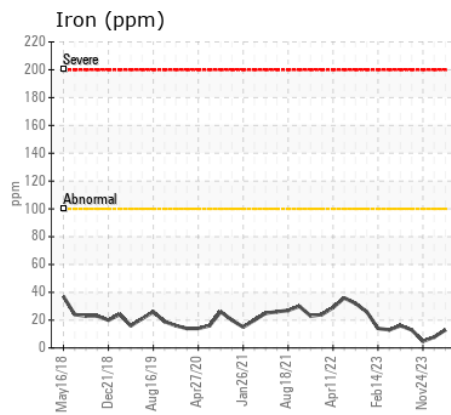
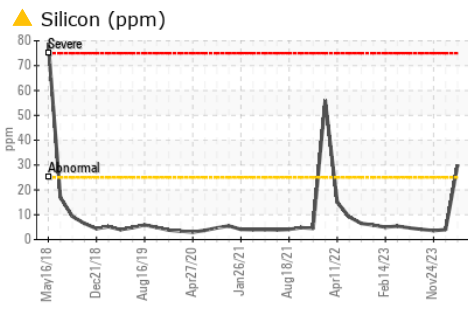
There is a moderate concentration of dirt present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>▲ 30</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Fuel		WC Method	>5	<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>0.3</b>	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.6</b>	8.7	6.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.9</b>	21.2	20.4
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	<b>3</b>	1	1
Boron	ppm	ASTM D5185(m)	250	<b>2</b>	2	3
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>57</b>	58	58
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	450	<b>944</b>	951	950
Calcium	ppm	ASTM D5185(m)	3000	<b>1065</b>	1036	1034
Phosphorus	ppm	ASTM D5185(m)	1150	<b>975</b>	983	969
Zinc	ppm	ASTM D5185(m)	1350	<b>1156</b>	1159	1169
Sulfur	ppm	ASTM D5185(m)	4250	<b>2527</b>	2666	2525
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.1</b>	18.5	17.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.0</b>	13.9	14.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0925691 **Received** : 25 Apr 2024  
**Lab Number** : 02631281 **Tested** : 25 Apr 2024  
**Unique Number** : 5772434 **Diagnosed** : 25 Apr 2024 - Kevin Marson  
**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.