



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**CFR#41900**  
 Machine Id  
**06D0309970**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample  
 Comment: 41900  
 8219 km / 949 hrs )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0876099</b>	PC0077634	WC877472
Sample Date		Client Info		<b>23 May 2024</b>	22 Nov 2023	13 May 2023
Machine Age	kms	Client Info		<b>8107</b>	8107	7846
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>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>101	<b>132</b>	118	2
Chromium	ppm	ASTM D5185(m)	>16	<b>4</b>	4	0
Nickel	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>21	<b>1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>41	<b>8</b>	8	<1
Copper	ppm	ASTM D5185(m)	>21	<b>11</b>	10	9
Tin	ppm	ASTM D5185(m)	>13	<b>24</b>	22	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

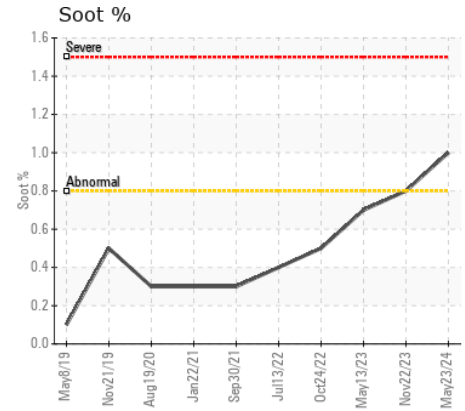
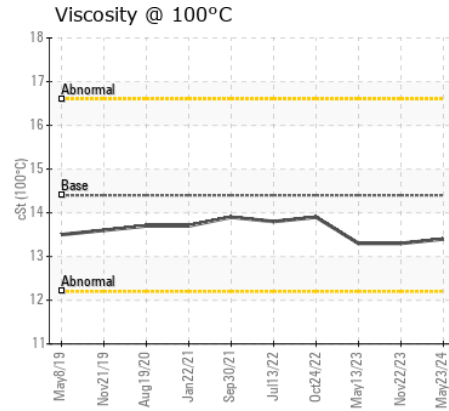
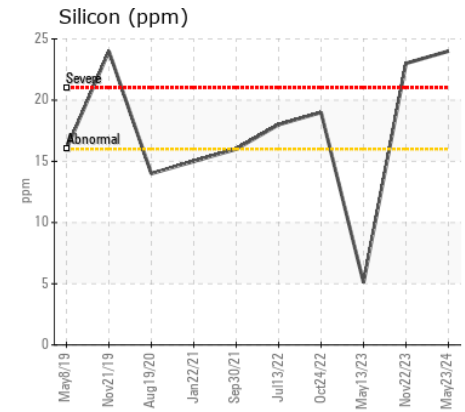
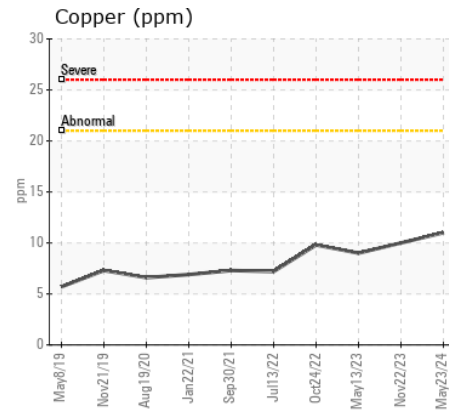
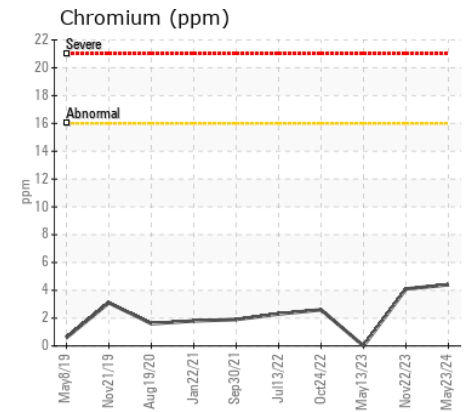
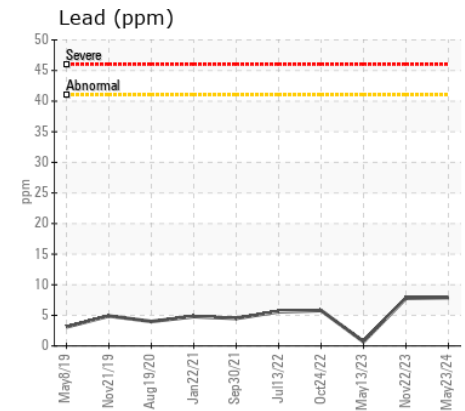
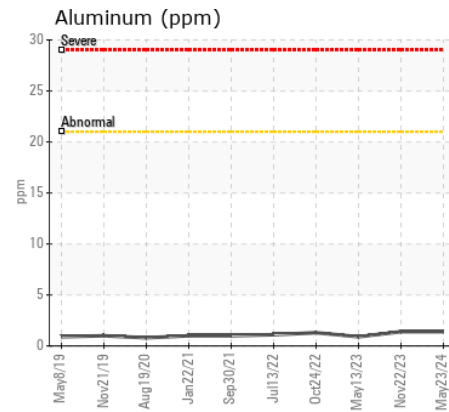
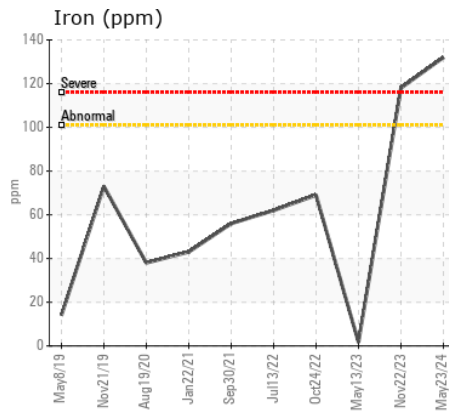
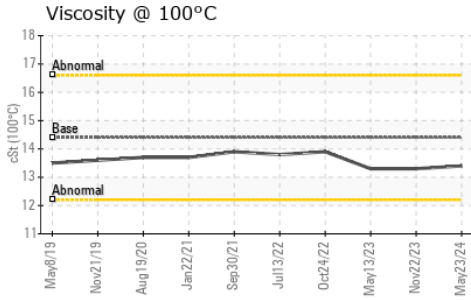
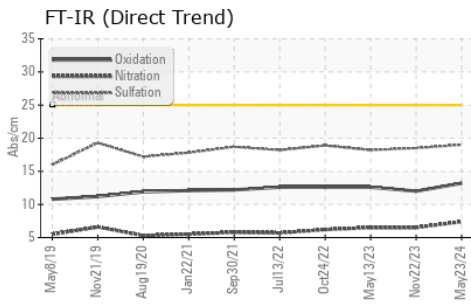
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>16	<b>24</b>	23	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	0
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*	>0.8	<b>1</b>	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.4</b>	6.5	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.0</b>	18.5	18.2
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>15</b>	14	2
Boron	ppm	ASTM D5185(m)	250	<b>3</b>	3	2
Barium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>46</b>	46	59
Manganese	ppm	ASTM D5185(m)		<b>2</b>	1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>702</b>	713	982
Calcium	ppm	ASTM D5185(m)	3000	<b>1499</b>	1509	1106
Phosphorus	ppm	ASTM D5185(m)	1150	<b>950</b>	975	1116
Zinc	ppm	ASTM D5185(m)	1350	<b>1154</b>	1168	1203
Sulfur	ppm	ASTM D5185(m)	4250	<b>2688</b>	2714	2848
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.2</b>	12.0	12.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.4</b>	13.3	13.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0876099 **Received** : 20 Jun 2024  
**Lab Number** : 02643070 **Tested** : 20 Jun 2024  
**Unique Number** : 5800609 **Diagnosed** : 20 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**DEPARTMENT OF NATIONAL DEFENSE**  
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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.