



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**51936**  
 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>WC0935006</b>	WC0915500	WC0844351
Sample Date		Client Info		<b>08 Jun 2024</b>	07 Apr 2024	20 Feb 2024
Machine Age	mls	Client Info		<b>388764</b>	369380	347567
Oil Age	mls	Client Info		<b>0</b>	21813	32738
Filter Age	mls	Client Info		<b>0</b>	21813	32738
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>18</b>	19	29
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	6	8
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>LIGHT</b>	VLITE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

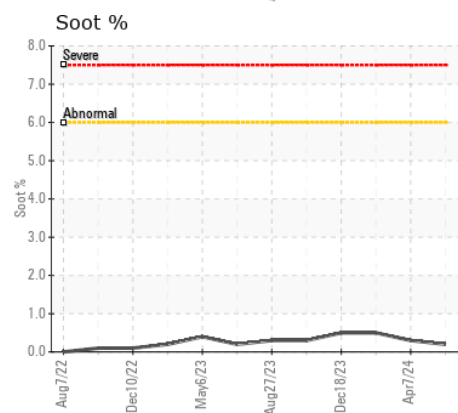
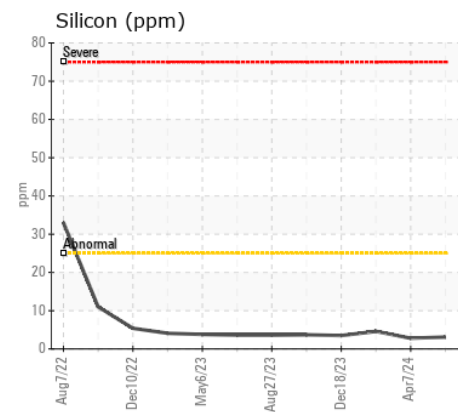
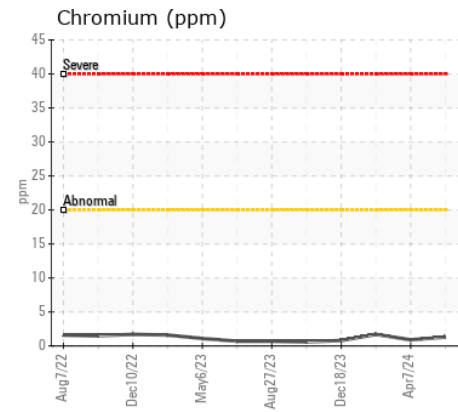
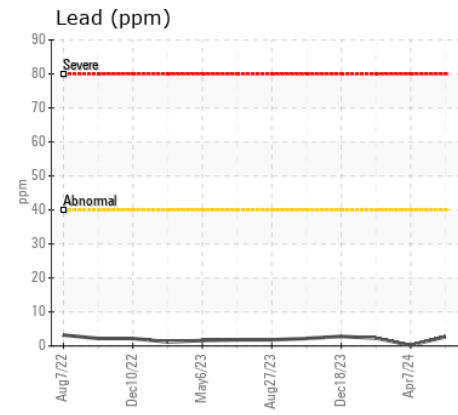
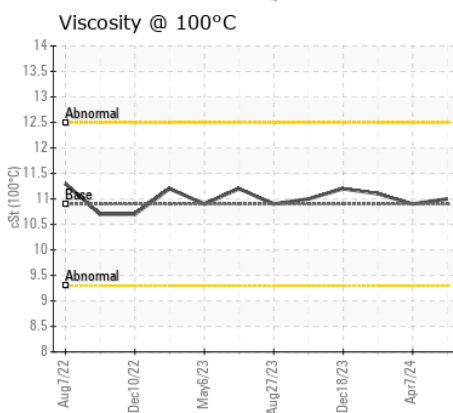
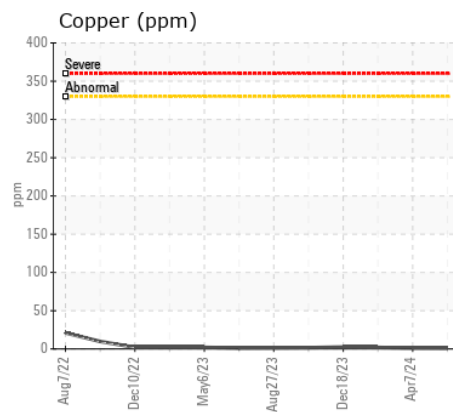
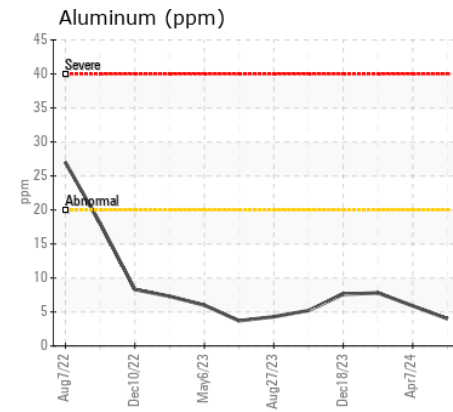
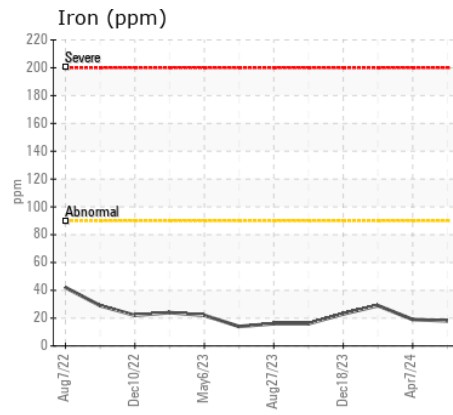
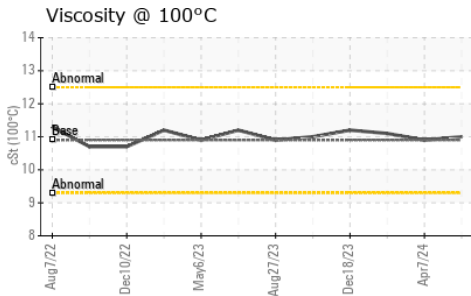
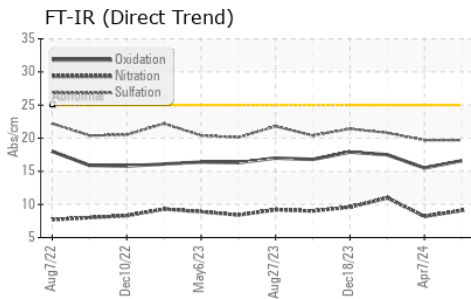
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	6
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>0.2</b>	0.3	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.1</b>	8.2	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	19.7	20.8
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
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)		<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)	250	<b>6</b>	6	5
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>59</b>	60	61
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	450	<b>940</b>	978	988
Calcium	ppm	ASTM D5185(m)	3000	<b>1039</b>	1086	1081
Phosphorus	ppm	ASTM D5185(m)	1150	<b>958</b>	1002	1027
Zinc	ppm	ASTM D5185(m)	1350	<b>1181</b>	1224	1217
Sulfur	ppm	ASTM D5185(m)	4250	<b>2366</b>	2460	2553
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.6</b>	15.5	17.5
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.0</b>	10.9	11.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0935006 **Received** : 05 Jul 2024  
**Lab Number** : 02645794 **Tested** : 05 Jul 2024  
**Unique Number** : 5803333 **Diagnosed** : 05 Jul 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

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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.