



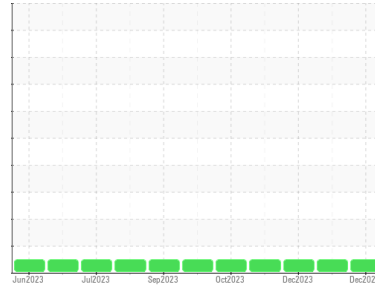
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**KDAC**  
 Machine Id  
**200300**  
 Component  
**Diesel Engine**  
 Fluid  
**TEST OIL GOLD 4 (40 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0864709</b>	WC0888926	WC0864693
Sample Date	Client Info		<b>22 Dec 2023</b>	22 Dec 2023	03 Dec 2023
Machine Age	kms	Client Info	<b>245865</b>	245864	236707
Oil Age	kms	Client Info	<b>1</b>	60118	50961
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>120	<b>4</b>	34	28
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	3	3
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	12	9
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	2	1
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	35	21
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	1	<b>1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>54</b>	61	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>911</b>	965	932
Calcium	ppm	ASTM D5185(m)	980	<b>996</b>	1084	1034
Phosphorus	ppm	ASTM D5185(m)	1100	<b>938</b>	902	893
Zinc	ppm	ASTM D5185(m)	1150	<b>1103</b>	1184	1149
Sulfur	ppm	ASTM D5185(m)	2600	<b>2546</b>	2439	2311
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

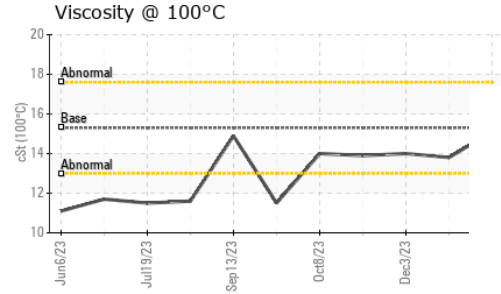
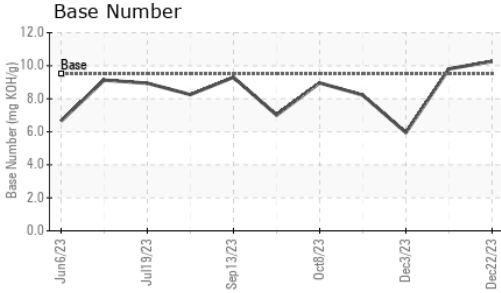
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	5	4
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	12	9

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0</b>	0.9	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.0</b>	9.9	10.1
Nitration(Diff)	Abs/cm	ASTM D7624*		<b>0.2</b>	1.6	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.1</b>	21.3	21.8
Sulfation(Diff)	Abs/cm	ASTM D7415*		<b>0</b>	4.9	---



# OIL ANALYSIS REPORT

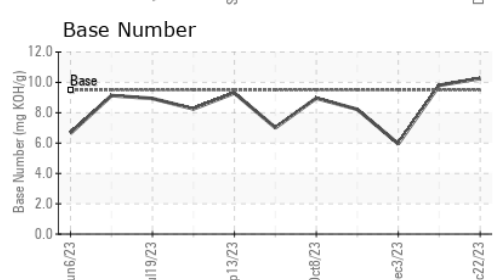
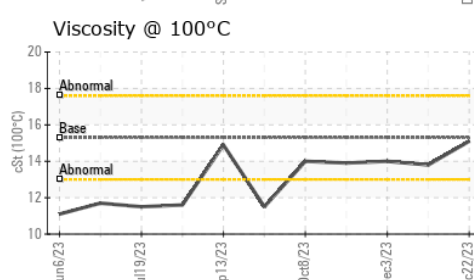
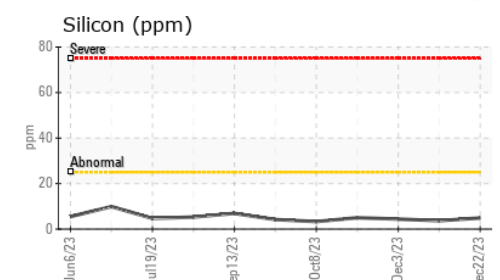
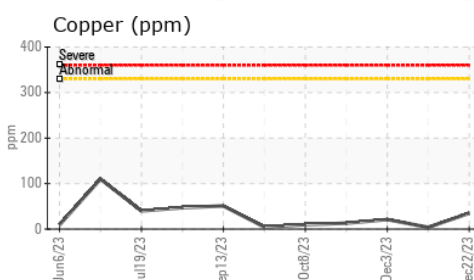
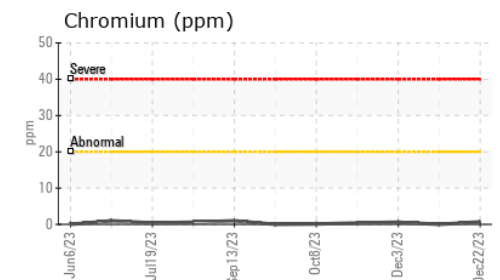
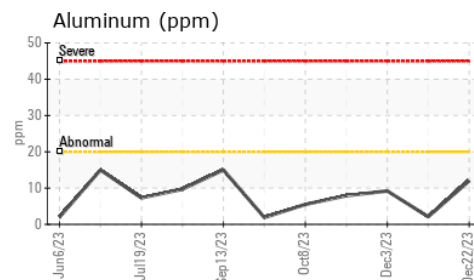
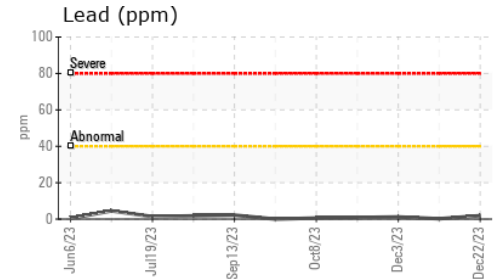
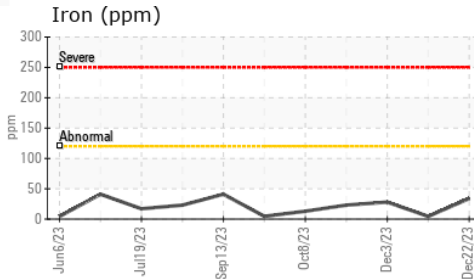


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.2	15.5
Oxidation(Diff)	Abs/cm	ASTM D7414*		0.7	10.7
Base Number (BN)	mg KOH/g	ASTM D2896*	9.5	10.26	9.81

VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.3	15.1	13.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0864709 **Received** : 27 Dec 2023  
**Lab Number** : 02605205 **Diagnosed** : 28 Dec 2023  
**Unique Number** : 5698290 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: FT-IR(Diff) )

**WFR Technical Services**  
 5389 Riverside Drive  
 Burlington, ON  
 CA L7L 3Y1  
 Contact: William Ridley  
 wfr.technical.services@gmail.com

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.

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F: