



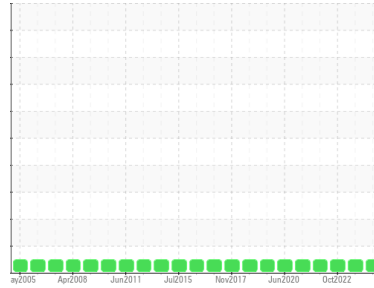
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KEN DIESEL (S/N 4RG01618)**  
 Component  
**Diesel Engine**  
 Fluid  
**CAT DIESEL ENGINE OIL 15W40 (34 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>WC0706208</b>	WC0455727	WC0445195
Sample Date	Client Info		<b>11 Jan 2024</b>	07 Jun 2023	19 Oct 2022
Machine Age	hrs	Client Info	<b>0</b>	0	718
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>40</b>	42	41
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	4	3
Copper	ppm	ASTM D5185(m)	>330	<b>16</b>	18	18
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
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>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>29</b>	33	30
Barium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Molybdenum	ppm	ASTM D5185(m)		<b>22</b>	23	19
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>614</b>	651	650
Calcium	ppm	ASTM D5185(m)		<b>1530</b>	1672	1569
Phosphorus	ppm	ASTM D5185(m)		<b>912</b>	1026	1018
Zinc	ppm	ASTM D5185(m)	1460	<b>1083</b>	1140	1137
Sulfur	ppm	ASTM D5185(m)		<b>3080</b>	3228	3256
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

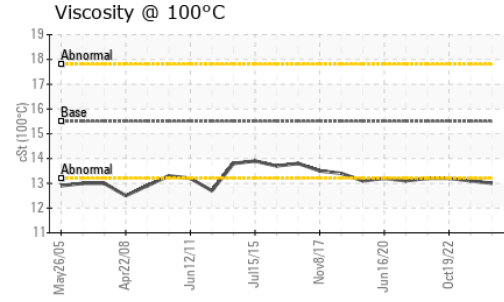
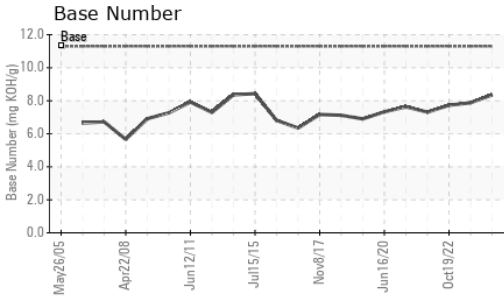
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	7	7
Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.9</b>	8.0	8.6
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>22.3</b>	22.2	22.4



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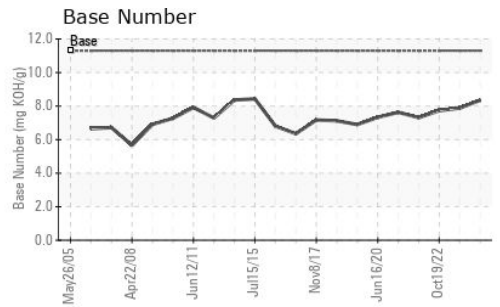
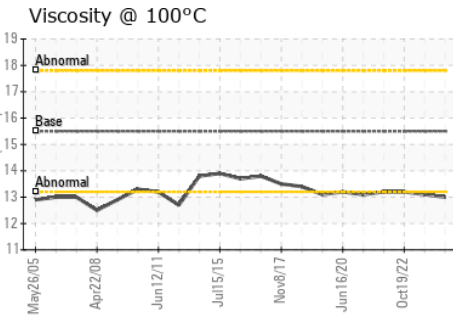
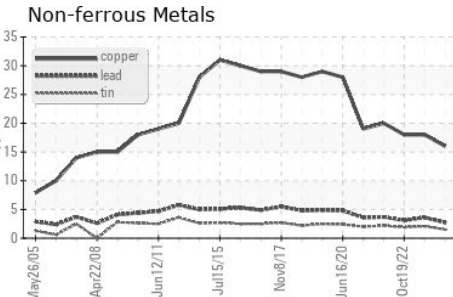
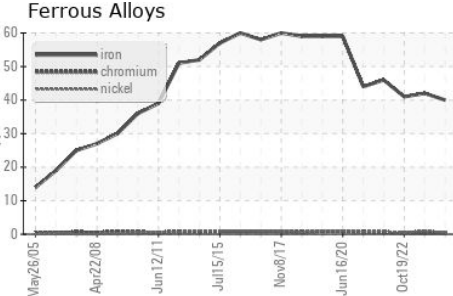


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.7</b>	16.4	16.7
Base Number (BN)	mg KOH/g	ASTM D2896*	11.3	<b>8.35</b>	7.88	7.73

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
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
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>13.0</b>	13.1	13.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0706208 **Received** : 17 Jan 2024  
**Lab Number** : **02609228** **Diagnosed** : 18 Jan 2024  
**Unique Number** : 5710314 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

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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.