



# OIL ANALYSIS REPORT

Sample Rating Trend

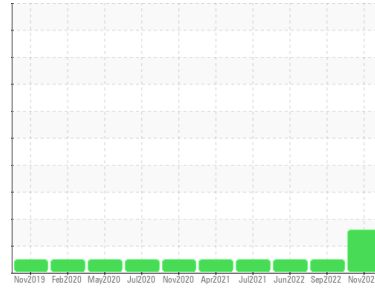
DIRT



Machine Id  
**7205**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0853110</b>	WC0738047	WC0703022
Sample Date	Client Info		<b>02 Nov 2023</b>	30 Sep 2022	07 Jun 2022
Machine Age	kms	Client Info	<b>299002</b>	259502	228878
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>ABNORMAL</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)	>90	<b>29</b>	46	31
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	4	3
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	4	2
Lead	ppm	ASTM D5185(m)	>40	<b>4</b>	6	3
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	5	5
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
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>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	<b>24</b>	6	8
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>1</b>	47	48
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>727</b>	856	915
Calcium	ppm	ASTM D5185(m)	3000	<b>1344</b>	1065	1050
Phosphorus	ppm	ASTM D5185(m)	1150	<b>650</b>	950	1007
Zinc	ppm	ASTM D5185(m)	1350	<b>728</b>	1092	1149
Sulfur	ppm	ASTM D5185(m)	4250	<b>2568</b>	2420	2525
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>▲ 29</b>	4	3
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	3	4

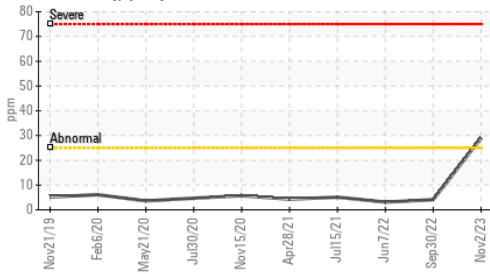
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.3</b>	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.5</b>	12.0	10.3
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>26.4</b>	25.7	23.2



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▲ Silicon (ppm)



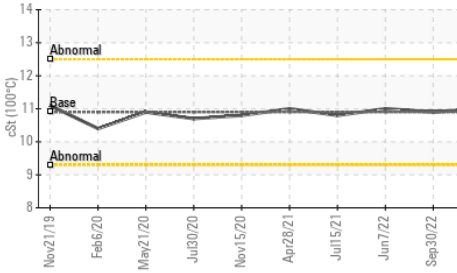
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>24.4</b>	25.6	20.0

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

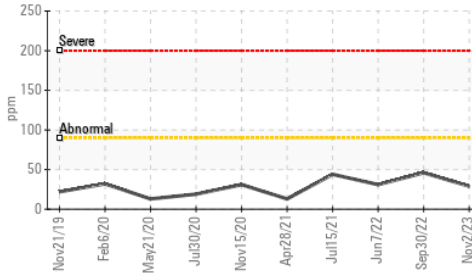
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.0</b>	10.9	11.0

## GRAPHS

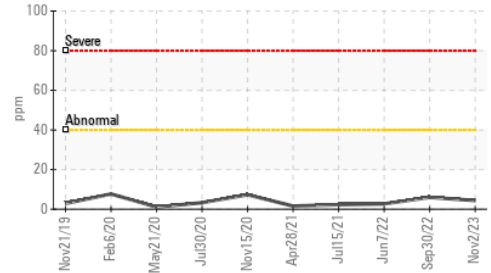
Viscosity @ 100°C



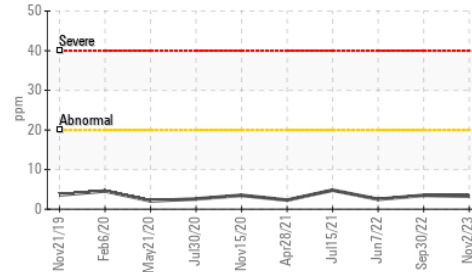
Iron (ppm)



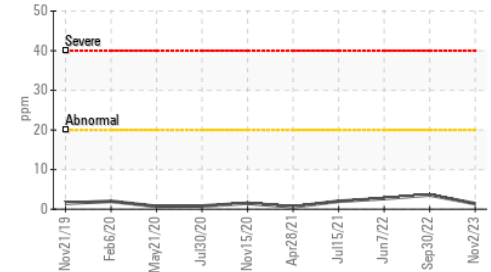
Lead (ppm)



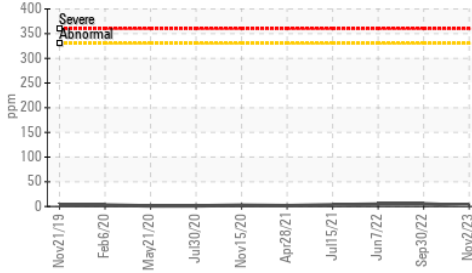
Aluminum (ppm)



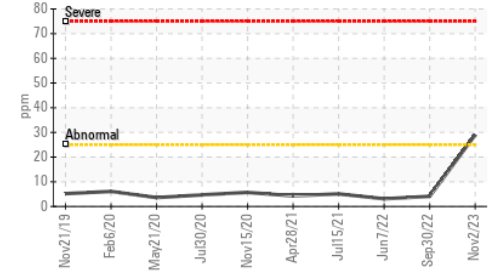
Chromium (ppm)



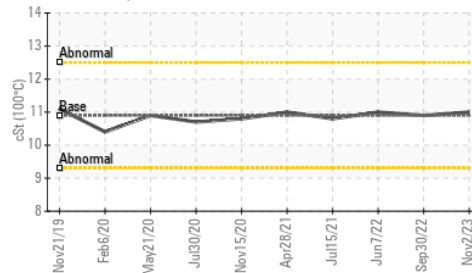
Copper (ppm)



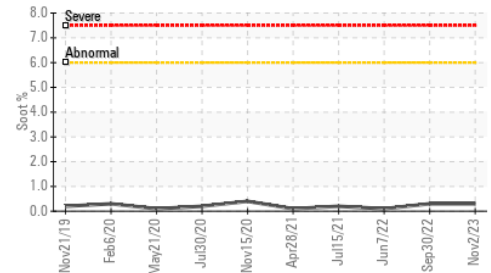
▲ Silicon (ppm)



Viscosity @ 100°C



Soot %



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0853110 **Received** : 19 Jan 2024  
**Lab Number** : 02609906 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 5710992 **Diagnostician** : 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.