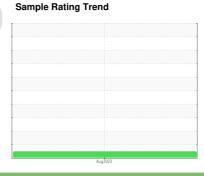


# **OIL ANALYSIS REPORT**

# Area [5958] **NO UNIT WC0790226**

Component Diesel Engine

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





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

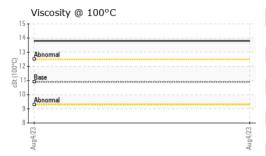
### **Fluid Condition**

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

				Aug2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0790226		
Sample Date		Client Info		04 Aug 2023		
Machine Age	kms	Client Info		611073		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	15		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>2	1		
Titanium	ppm	ASTM D5185(m)	>2	<1		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>30	4		
Lead	ppm	ASTM D5185(m)	>30	0		
Copper	ppm	ASTM D5185(m)	>30	4		
Tin	ppm	ASTM D5185(m)	>15	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	257		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	132		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)	450	690		
Calcium	ppm	ASTM D5185(m)	3000	1761		
Phosphorus	ppm	ASTM D5185(m)	1150	769		
Zinc	ppm	ASTM D5185(m)	1350	862		
Sulfur	ppm	ASTM D5185(m)	4250	2097		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	6		
Sodium	ppm	ASTM D5185(m)		1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.1		
Nitration	Abs/cm	ASTM D7624*	>20	8.7		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.6		
FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7		



## **OIL ANALYSIS REPORT**



VISUAL		method				history2
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
<b>Emulsified Water</b>	scalar	Visual*	>0.2	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	13.8		

Visc @ 100°C	cSt	ASTM D7279(m)	10.9	13.8		
GRAPHS						
Iron (ppm)				Lead (ppm)	)	
400 Severe				Severe		
				1		
<u> </u>				Abnormal		
100				20 -		
0 1/23			Aug4/23	1/23		Aug4/23
Aug4/23			Aug4	Aug4/23		Aug <sup>4</sup>
Aluminum (ppn	n)			Chromium 50 T	(ppm)	
Severe				Severe		
Abnormal 20				Abnormal		
20				20 - Abnormal		
10				10		
Aug4/23			Aug4/23	Aug4/23		Aug4/23
			Aug			Aug
Copper (ppm)				Silicon (ppr	n)	
50				40		
Abnormal				E 30 Abnormal		
20				1		
10				0		
Aug4/23 -			Aug4/23 -	Aug4/23		Aug4/23.
			Au			Au
Viscosity @ 100				Soot %		
14				5.0 Severe		
Abnormal Base				4.0 Abnormal		
Base Abnormal				2.0		
8				0.0		
Aug4/23			Aug4/23	Aug4/23		Aug4/23
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**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5620348

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC0790226 : 02575297

Received Diagnosed

: 11 Aug 2023

Diagnostician : Kevin Marson

: 11 Aug 2023

Test Package : MOB 1 (Additional Tests: Visual) 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.

**CANADA CLEAN FUELS** 

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F: (416)521-9368