



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

## INTERNATIONAL 56173

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SAE 10W30 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

#### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0915060</b>	---	---
Sample Date	Client Info		<b>08 Apr 2024</b>	---	---
Machine Age	mls	Client Info	<b>33857</b>	---	---
Oil Age	mls	Client Info	<b>32894</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>53</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>11</b>	---
Lead	ppm	ASTM D5185(m)	>40	<b>6</b>	---
Copper	ppm	ASTM D5185(m)	>330	<b>229</b>	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

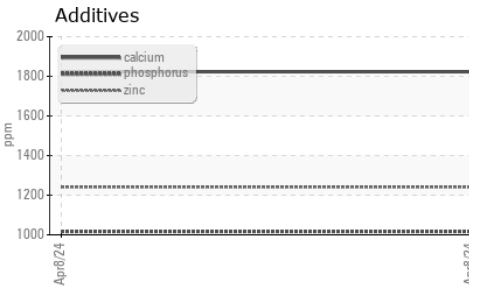
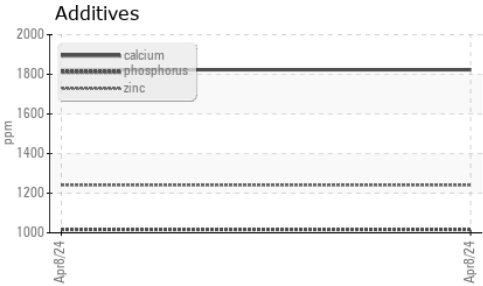
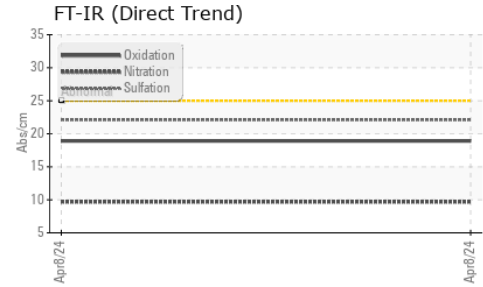
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	<b>23</b>	---
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	---
Molybdenum	ppm	ASTM D5185(m)	1	<b>67</b>	---
Manganese	ppm	ASTM D5185(m)	1	<b>3</b>	---
Magnesium	ppm	ASTM D5185(m)	10	<b>549</b>	---
Calcium	ppm	ASTM D5185(m)	2942	<b>1823</b>	---
Phosphorus	ppm	ASTM D5185(m)	1102	<b>1017</b>	---
Zinc	ppm	ASTM D5185(m)	1351	<b>1241</b>	---
Sulfur	ppm	ASTM D5185(m)	3903	<b>2328</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>12</b>	---
Sodium	ppm	ASTM D5185(m)		<b>4</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>27</b>	---

INFRA-RED	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.6</b>	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.7</b>	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>22.1</b>	---



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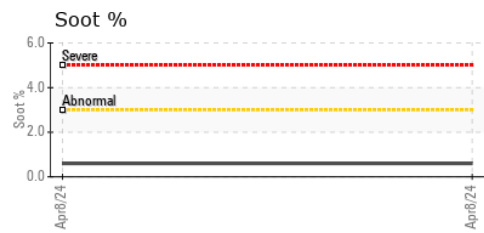
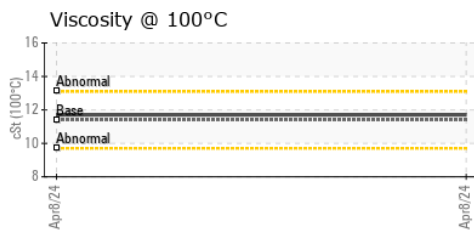
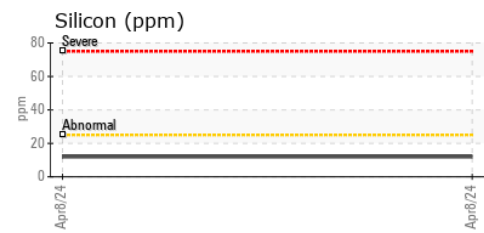
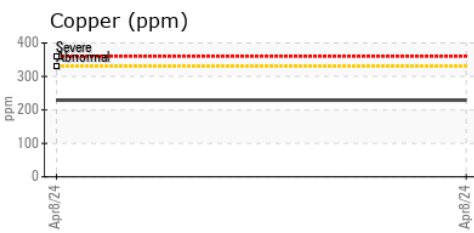
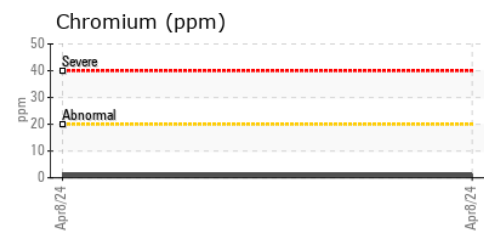
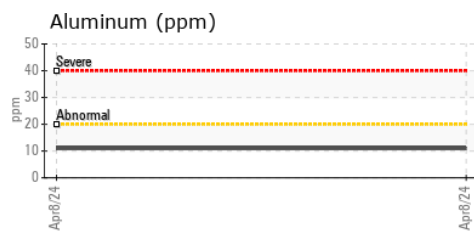
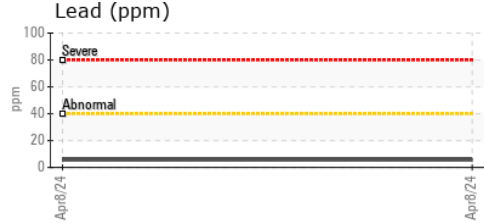
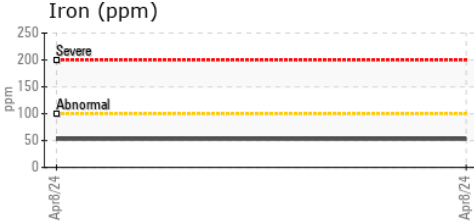


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.9</b>	---	---

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>VLITE</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>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	<b>11.7</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0915060 **Received** : 17 Apr 2024 1335 SHAWSON DRIVE  
**Lab Number** : **02629578** **Tested** : 17 Apr 2024 MISSISSAUGA, ON  
**Unique Number** : 5762710 **Diagnosed** : 17 Apr 2024 - Wes Davis CA L4W 1C4  
**Test Package** : MOB 1 ( Additional Tests: Visual ) Contact: Travis Spence  
 tspence@manitoulintransport.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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