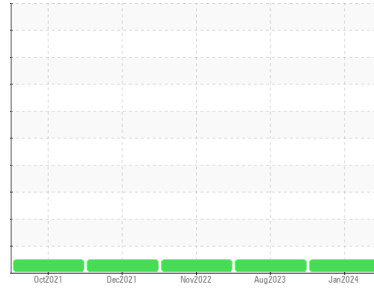


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CR246**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON UHP 5W40 (30 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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0078380</b>	PC0078034	PC0056654
Sample Date	Client Info			<b>17 Jan 2024</b>	11 Aug 2023	09 Nov 2022
Machine Age	hrs	Client Info		<b>3562</b>	3024	1968
Oil Age	hrs	Client Info		<b>500</b>	500	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

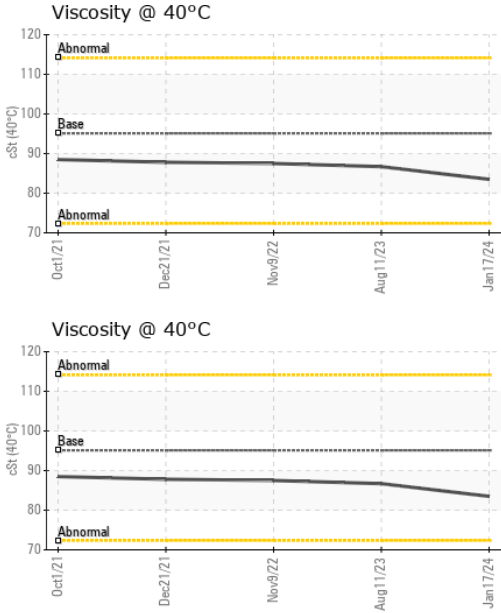
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	<b>12</b>	12	22
Chromium	ppm	ASTM D5185(m)	>10	<b>1</b>	2	6
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m)	>40	<b>7</b>	14	4
Copper	ppm	ASTM D5185(m)	>300	<b>11</b>	29	9
Tin	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<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)	65	<b>33</b>	36	40
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	65	<b>55</b>	55	54
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1061</b>	1085	1013
Calcium	ppm	ASTM D5185(m)	820	<b>809</b>	793	791
Phosphorus	ppm	ASTM D5185(m)	1160	<b>965</b>	1024	1000
Zinc	ppm	ASTM D5185(m)	1260	<b>1147</b>	1173	1122
Sulfur	ppm	ASTM D5185(m)	3000	<b>2791</b>	2655	2704
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>5</b>	6	9
Sodium	ppm	ASTM D5185(m)		<b>4</b>	5	8
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	11.3	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.6</b>	23.0	20.9

# OIL ANALYSIS REPORT

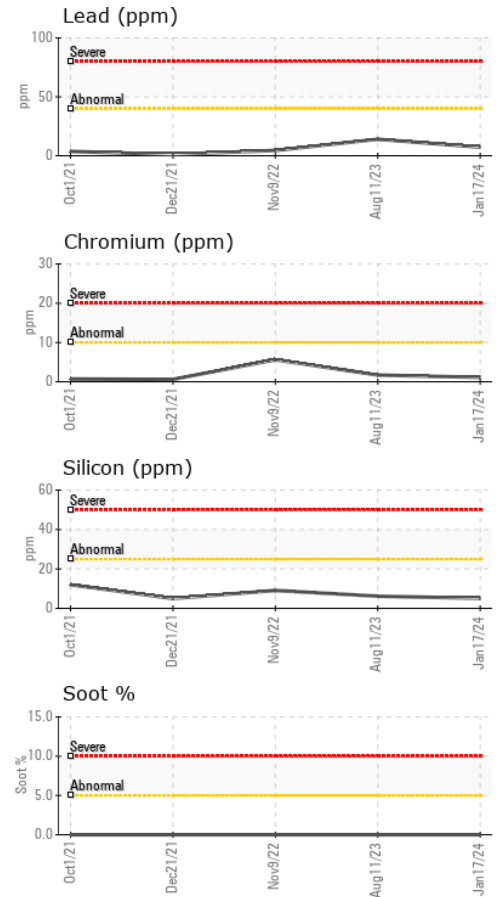
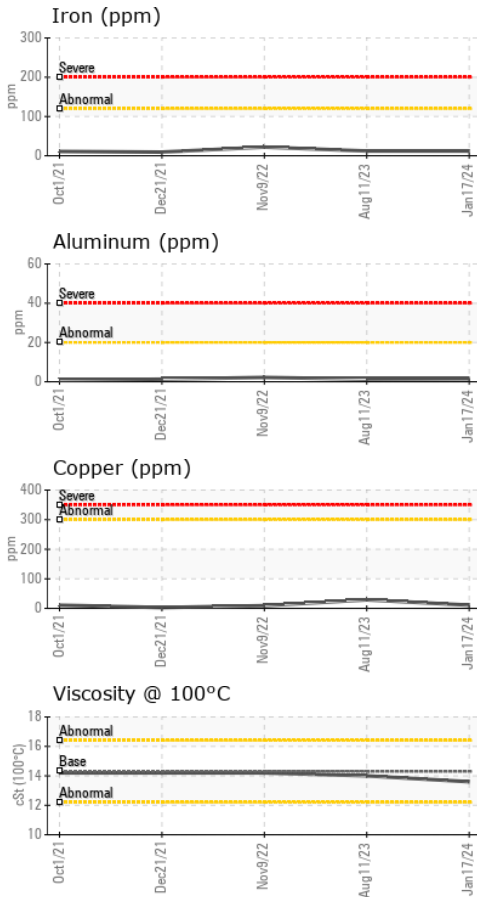


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>25.4</b>	22.6	18.9

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	<b>83.5</b>	86.7	87.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.6</b>	14.0	14.2
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>166</b>	166	168

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0078380 **Received** : 26 Jan 2024  
**Lab Number** : **02611452** **Diagnosed** : 26 Jan 2024  
**Unique Number** : 5720547 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

151 Ram Forest Rd,  
Stouffville, ON  
CA L4A 2G8  
Contact: Bill Acton  
bacton@gipi.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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