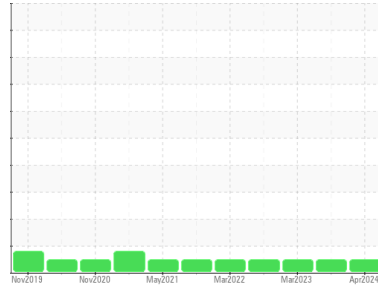


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**CR247**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON UHP 5W40 (31 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>PC0089315</b>	PC0078383	PC0072024
Sample Date	Client Info			<b>18 Apr 2024</b>	25 Jan 2024	02 Mar 2023
Machine Age	hrs	Client Info		<b>10205</b>	9843	8850
Oil Age	hrs	Client Info		<b>0</b>	500	500
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

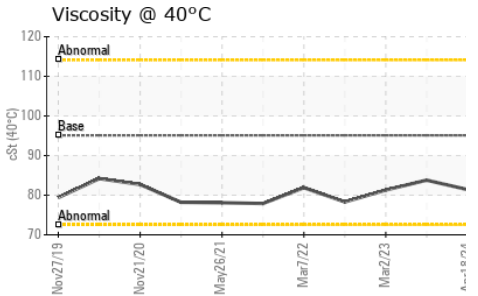
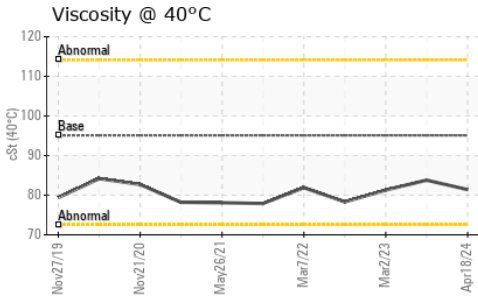
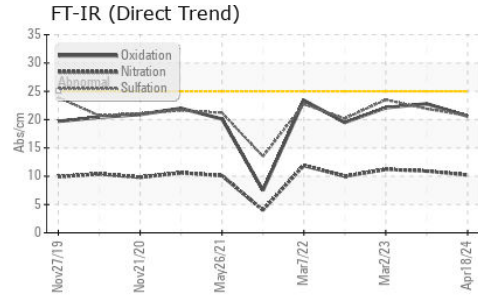
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	<b>5</b>	8	4
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	3	<1
Copper	ppm	ASTM D5185(m)	>300	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
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>42</b>	38	41
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>54</b>	58	58
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1081</b>	1092	1083
Calcium	ppm	ASTM D5185(m)	820	<b>786</b>	817	861
Phosphorus	ppm	ASTM D5185(m)	1160	<b>957</b>	1010	1057
Zinc	ppm	ASTM D5185(m)	1260	<b>1140</b>	1147	1180
Sulfur	ppm	ASTM D5185(m)	3000	<b>2586</b>	2836	2816
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>2</b>	3	3
Sodium	ppm	ASTM D5185(m)		<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.2</b>	10.9	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.7</b>	21.9	23.5

# OIL ANALYSIS REPORT

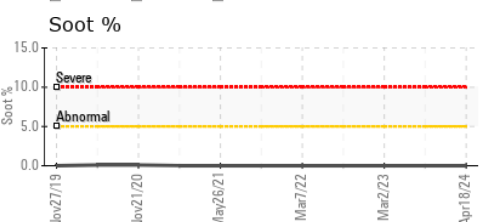
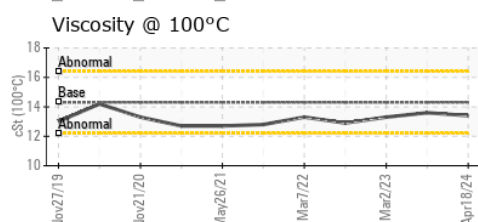
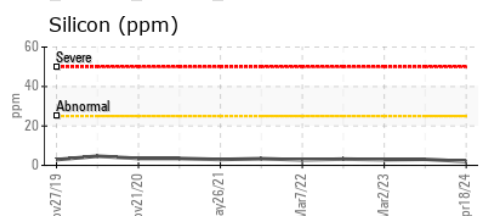
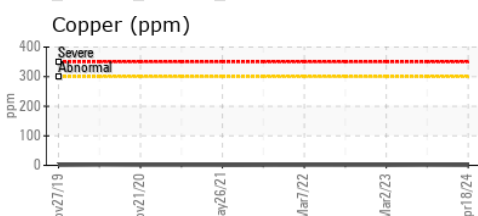
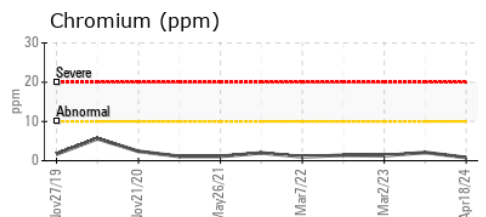
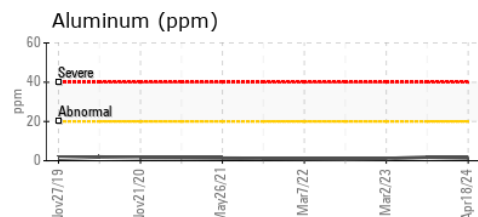
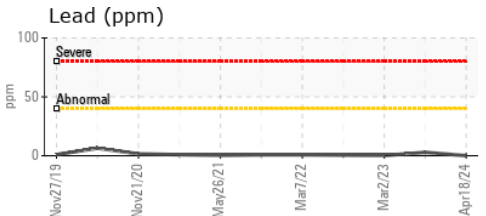
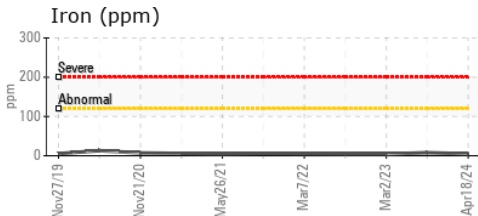


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>20.6</b>	22.8	22.1

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*	>0.1	<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>81.4</b>	83.8	81.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.4</b>	13.6	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>167</b>	165	166

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0089315 **Received** : 25 Apr 2024  
**Lab Number** : 02631266 **Tested** : 25 Apr 2024  
**Unique Number** : 5772419 **Diagnosed** : 25 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual ) 151 Ram Forest Rd,  
Stouffville, ON  
CA L4A 2G8  
Contact: Shannon Abbott  
sabbott@gipi.com  
T: (905)750-5900  
F:

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.