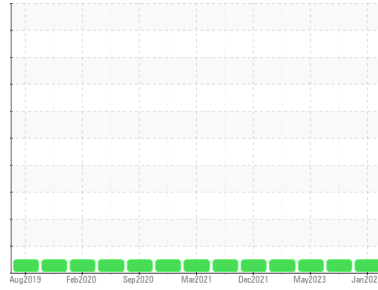


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**OR638**

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>PC0082672</b>	PC0078048	PC0056656
Sample Date	Client Info			<b>12 Jan 2024</b>	23 Sep 2023	22 May 2023
Machine Age	hrs	Client Info		<b>18127</b>	15581	0
Oil Age	hrs	Client Info		<b>500</b>	500	0
Oil Changed	Client Info			<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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

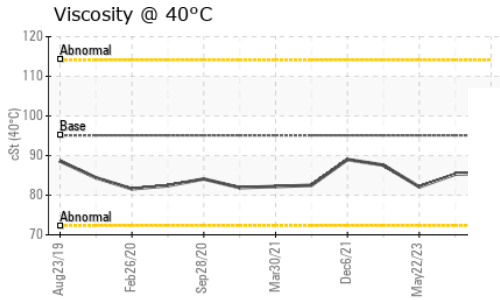
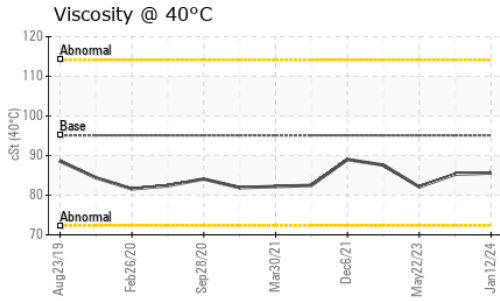
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>8</b>	4	4
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</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>43</b>	32	47
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>55</b>	50	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1067</b>	1014	1022
Calcium	ppm	ASTM D5185(m)	820	<b>813</b>	792	798
Phosphorus	ppm	ASTM D5185(m)	1160	<b>1011</b>	961	1033
Zinc	ppm	ASTM D5185(m)	1260	<b>1154</b>	1127	1135
Sulfur	ppm	ASTM D5185(m)	3000	<b>2964</b>	2751	2786
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>	2	3
Sodium	ppm	ASTM D5185(m)		<b>5</b>	6	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.4</b>	7.7	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.1</b>	19.2	19.1

# OIL ANALYSIS REPORT

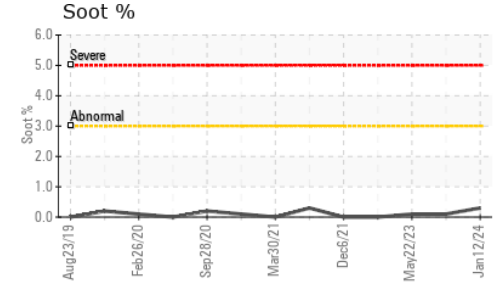
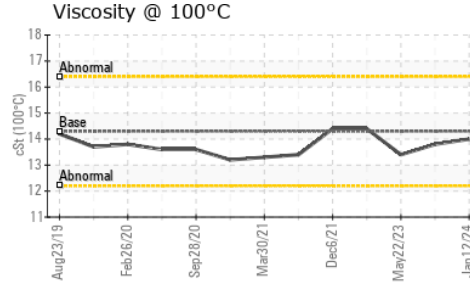
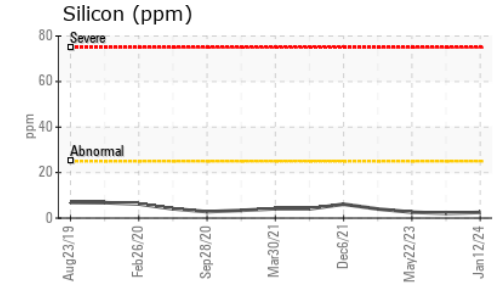
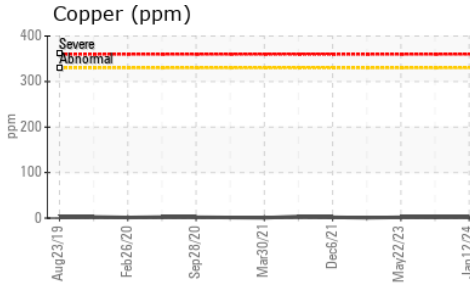
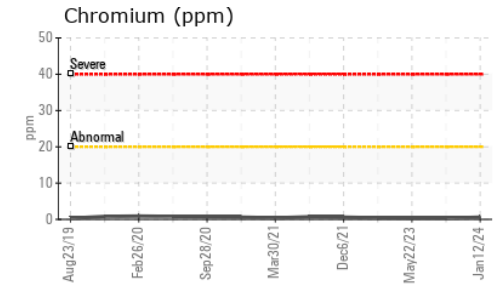
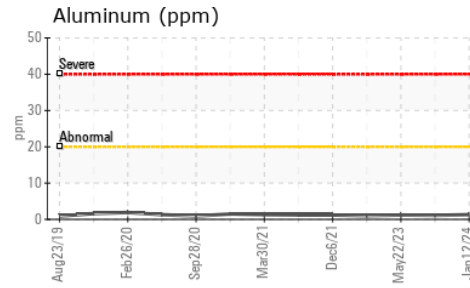
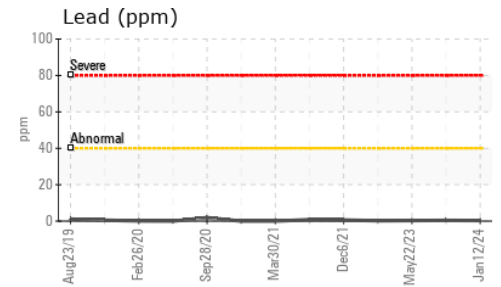
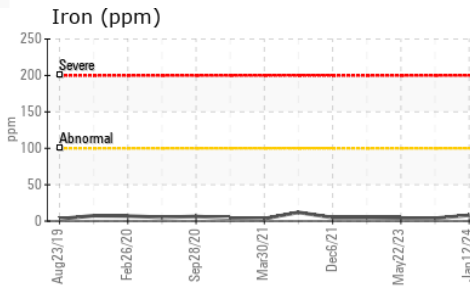


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.2</b>	17.0	16.6

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 @ 40°C	cSt	ASTM D7279(m)	95.1	<b>85.6</b>	85.3	82.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>14.0</b>	13.8	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>168</b>	166	166

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0082672 **Received** : 26 Jan 2024 151 Ram Forest Rd,  
**Lab Number** : **02611392** **Diagnosed** : 26 Jan 2024 Stouffville, ON  
**Unique Number** : 5720487 **Diagnostician** : Wes Davis CA L4A 2G8  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI ) Contact: Shannon Abbott  
sabbott@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. F: