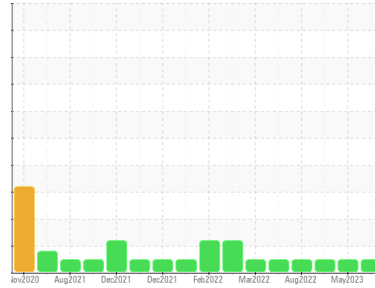


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CR256**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON UHP 5W40 (28 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>PC0078553</b>	PC0058472	PC0056640
Sample Date	Client Info			<b>14 Jul 2023</b>	11 May 2023	23 Nov 2022
Machine Age	hrs	Client Info		<b>0</b>	3340	7110
Oil Age	hrs	Client Info		<b>0</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	>5		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>5</b>	6	3
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
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>&lt;1</b>	3	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	<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

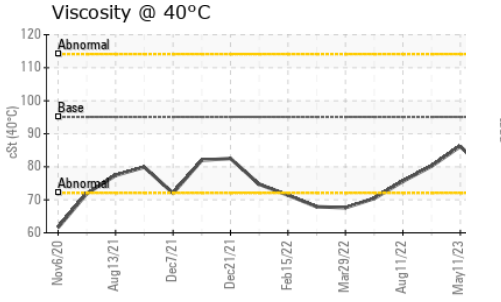
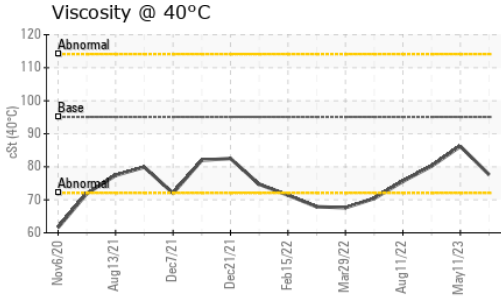
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	65	<b>28</b>	39	25
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>53</b>	57	54
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1025</b>	1063	1026
Calcium	ppm	ASTM D5185(m)	820	<b>765</b>	849	813
Phosphorus	ppm	ASTM D5185(m)	1160	<b>1011</b>	1056	1028
Zinc	ppm	ASTM D5185(m)	1260	<b>1118</b>	1155	1138
Sulfur	ppm	ASTM D5185(m)	3000	<b>2658</b>	2841	2757
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>	4	5
Sodium	ppm	ASTM D5185(m)		<b>3</b>	10	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	5	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.0</b>	9.3	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.7</b>	20.0	21.1

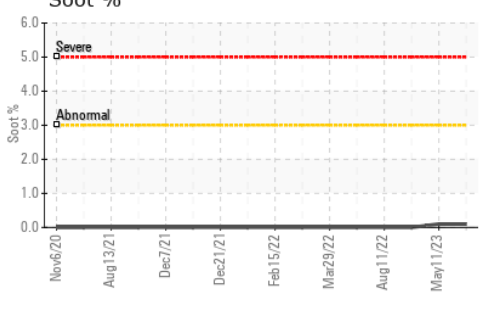
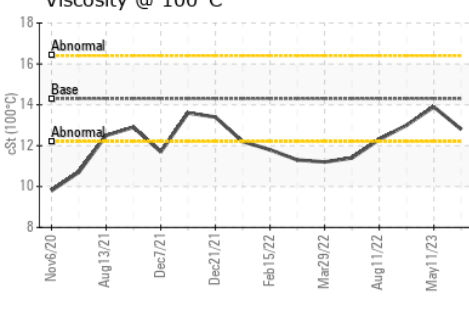
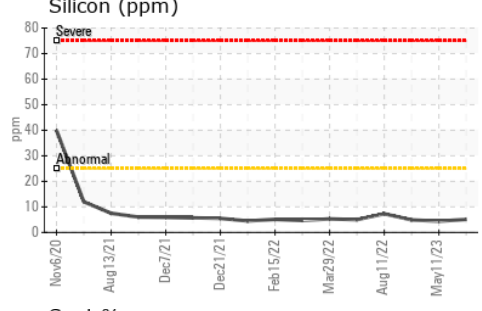
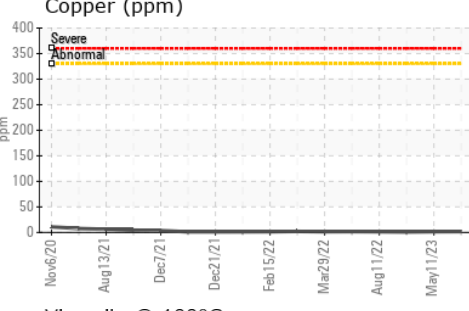
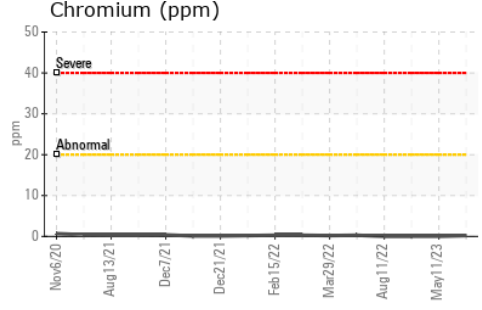
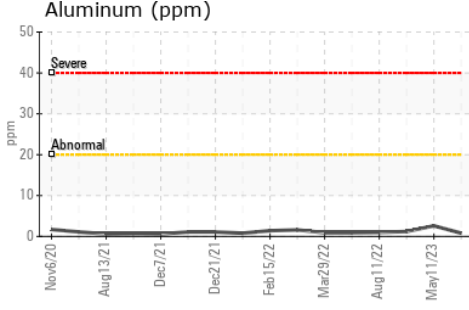
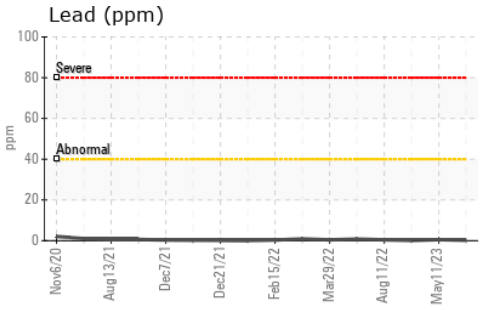
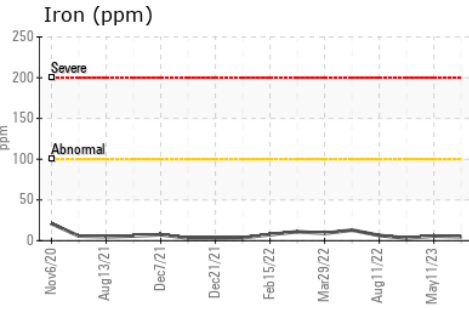
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.6</b>	19.5	19.8

# OIL ANALYSIS REPORT



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>77.6</b>	86.2	80.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>12.8</b>	13.9	13.0
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>165</b>	165	163

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0078553 **Received** : 25 Jul 2023  
**Lab Number** : **02571869** **Diagnosed** : 25 Jul 2023  
**Unique Number** : 5616920 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

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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