

Machine Id  
**DR184**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON UHP 5W40 (40 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078374</b>	PC0078075	PC0072901
Sample Date		Client Info		<b>10 Nov 2023</b>	28 Jun 2023	10 Mar 2023
Machine Age	hrs	Client Info		<b>13541</b>	0	7280
Oil Age	hrs	Client Info		<b>250</b>	0	250
Filter Age	hrs	Client Info		<b>250</b>	0	250
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>10</b>	15	6
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<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>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

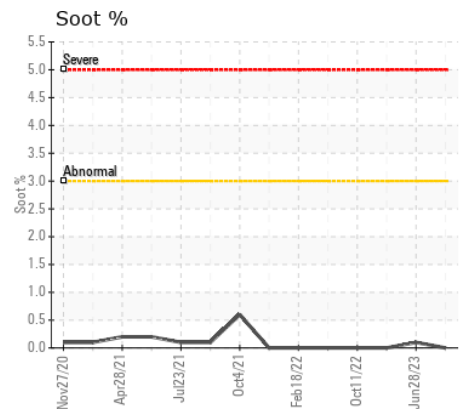
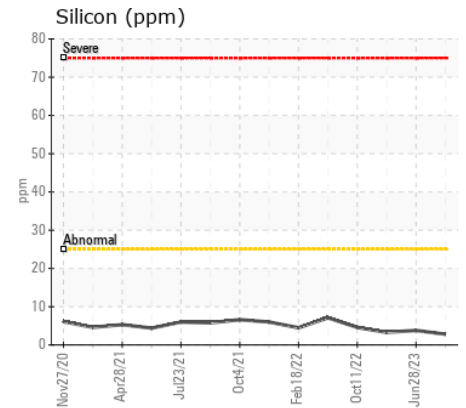
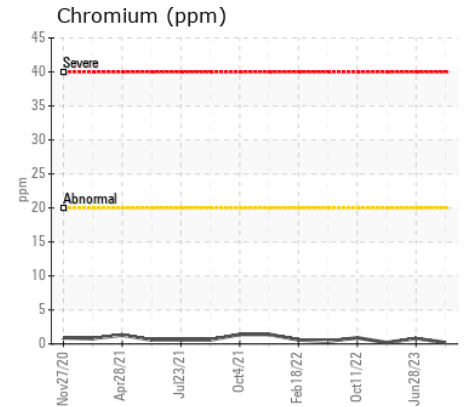
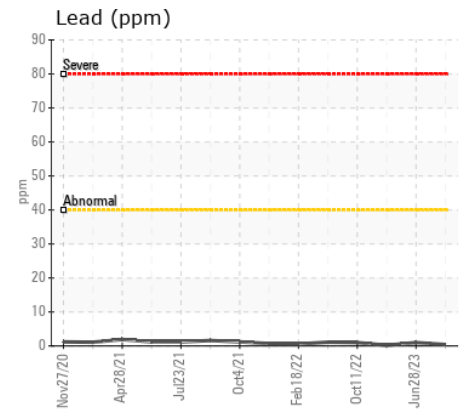
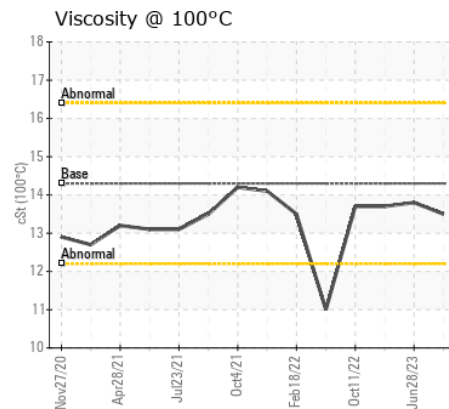
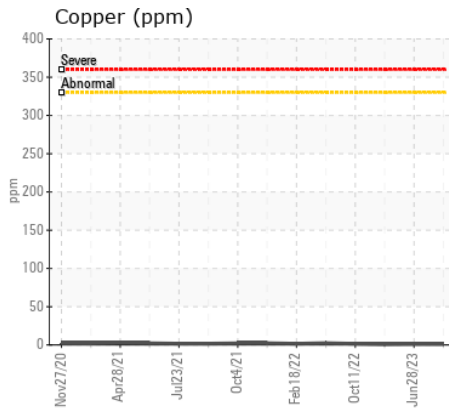
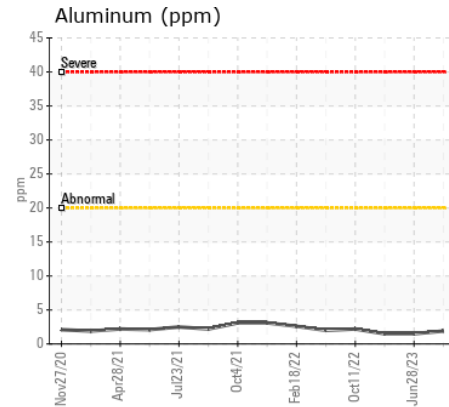
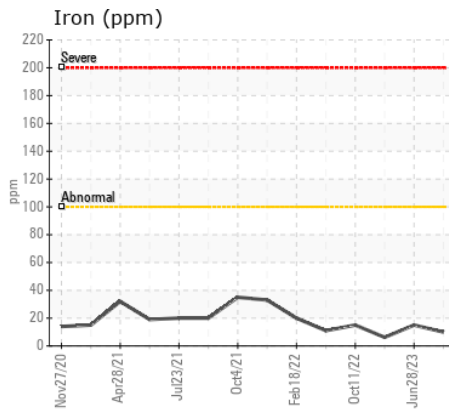
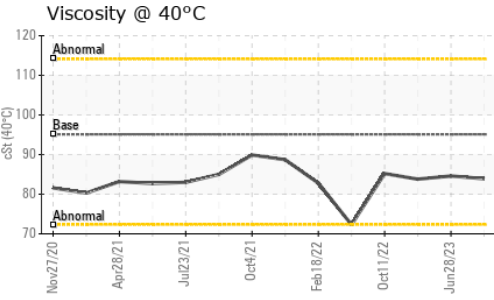
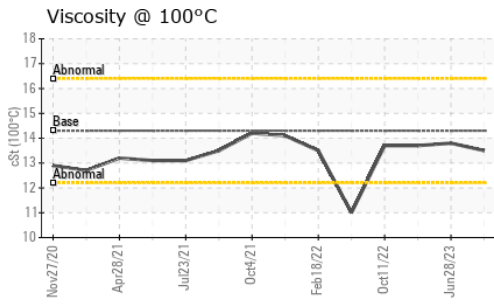
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	4	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
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
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.6</b>	9.8	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.9</b>	21.2	23.0
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>4</b>	4	4
Boron	ppm	ASTM D5185(m)	65	<b>29</b>	22	40
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	65	<b>55</b>	57	63
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	<b>1066</b>	1121	1098
Calcium	ppm	ASTM D5185(m)	820	<b>795</b>	832	829
Phosphorus	ppm	ASTM D5185(m)	1160	<b>973</b>	1049	1058
Zinc	ppm	ASTM D5185(m)	1260	<b>1151</b>	1162	1156
Sulfur	ppm	ASTM D5185(m)	3000	<b>2802</b>	2731	2846
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.7</b>	19.6	19.1
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	<b>83.9</b>	84.6	83.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	<b>13.5</b>	13.8	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	169	<b>163</b>	167	167



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0078374 **Received** : 10 Jan 2024 151 Ram Forest Rd,  
**Lab Number** : 02607739 **Diagnosed** : 10 Jan 2024 Stouffville, ON  
**Unique Number** : 5708825 **Diagnostician** : Wes Davis CA L4A 2G8  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )  
 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.