

Machine Id  
**3722091**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0074746</b>	---	---
Sample Date		Client Info		<b>04 Jul 2023</b>	---	---
Machine Age	mls	Client Info		<b>364028</b>	---	---
Oil Age	mls	Client Info		<b>59000</b>	---	---
Filter Age	mls	Client Info		<b>59000</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>64</b>	---	---
Chromium	ppm	ASTM D5185(m)	>6	<b>3</b>	---	---
Nickel	ppm	ASTM D5185(m)	>3	<b>1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>50	<b>21</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>50	<b>20</b>	---	---
Tin	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

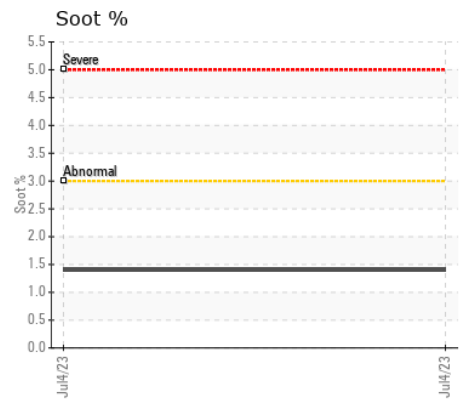
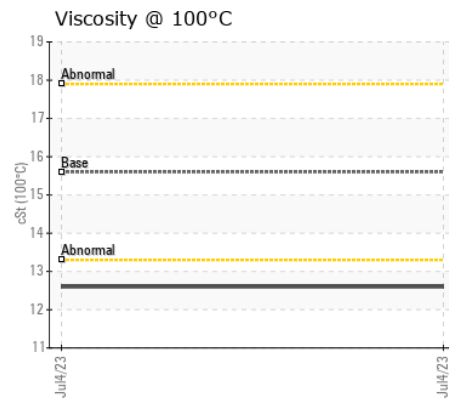
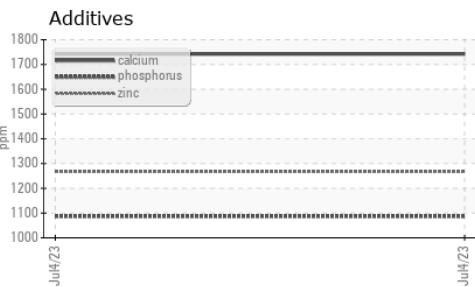
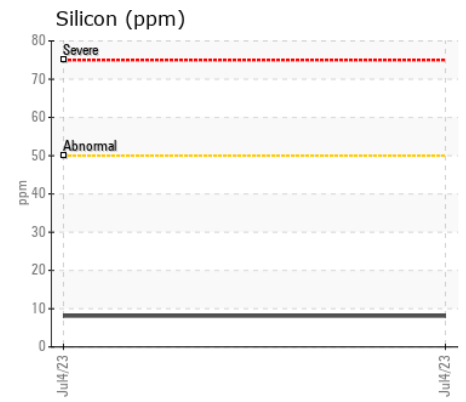
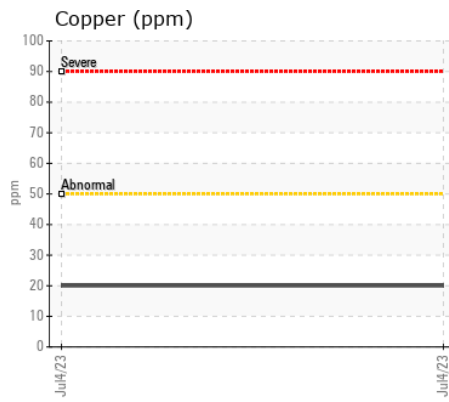
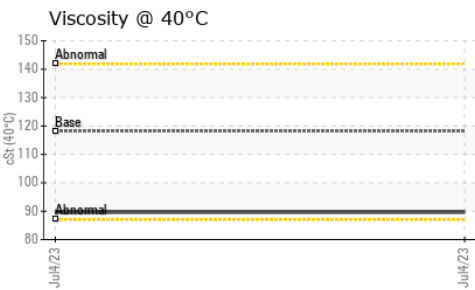
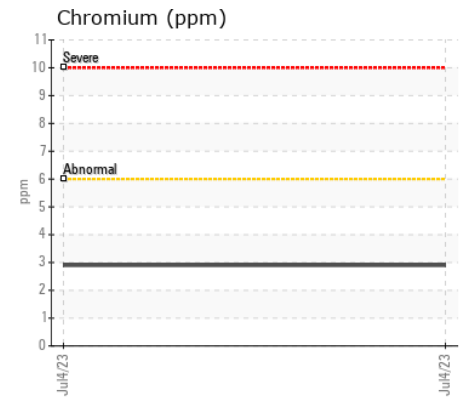
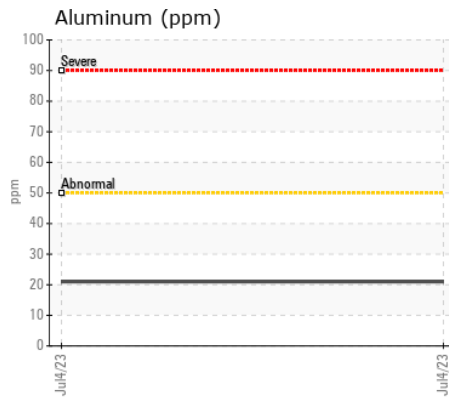
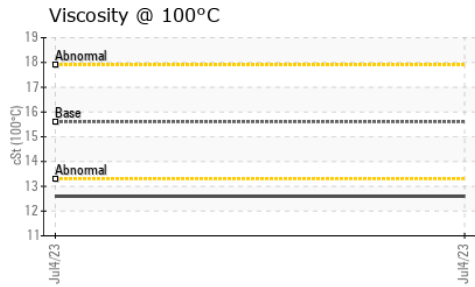
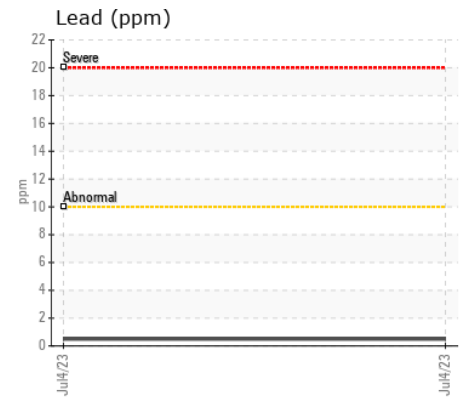
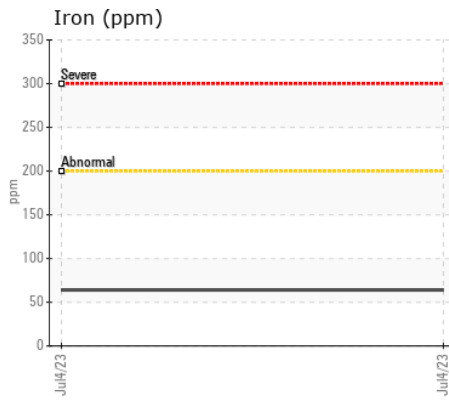
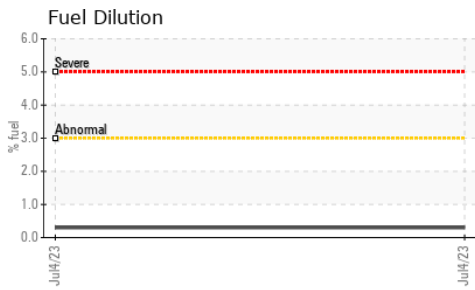
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	<b>8</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>37</b>	---	---
Fuel	%	ASTM D7593*	>3.0	<b>0.3</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>1.4</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.4</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.1</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>5</b>	---	---
Boron	ppm	ASTM D5185(m)	0	<b>13</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>573</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1742</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1087</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1267</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2242</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>23.4</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>89.6</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>12.6</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>137</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0074746 **Received** : 05 Sep 2023  
**Lab Number** : 02580269 **Tested** : 06 Sep 2023  
**Unique Number** : 5633329 **Diagnosed** : 06 Sep 2023 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )

**TRANSPORT BESNER INC**  
 1950, 3e RUE  
 LEVIS, QC  
 CA G6W 5M6  
 Contact: DEMERS GUY  
 gdemers@besner.com  
 T: (418)831-5444  
 F: (418)831-2639

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.