

Machine Id  
**61**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078168</b>	PC0071640	PC0064223
Sample Date		Client Info		<b>26 Feb 2024</b>	22 Mar 2023	21 Oct 2022
Machine Age	kms	Client Info		<b>57326</b>	45192	38319
Oil Age	kms	Client Info		<b>8000</b>	8000	8000
Filter Age	kms	Client Info		<b>8000</b>	8000	8000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	<b>55</b>	74	134
Chromium	ppm	ASTM D5185(m)	>20	<b>6</b>	2	3
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>8</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>2</b>	4	13
Copper	ppm	ASTM D5185(m)	>30	<b>3</b>	4	9
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	3	8
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

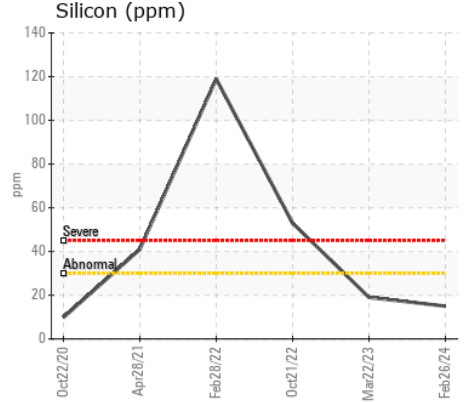
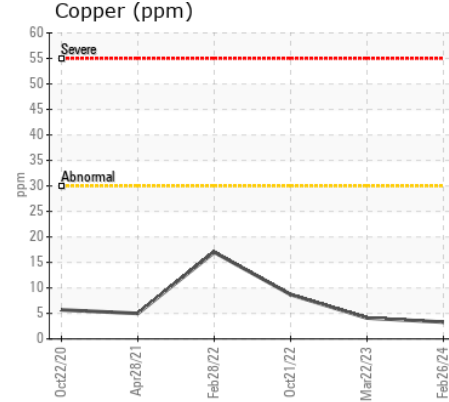
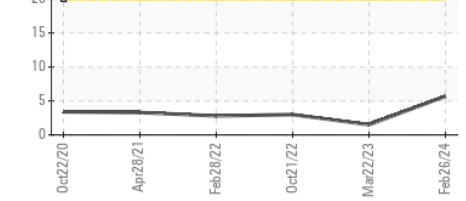
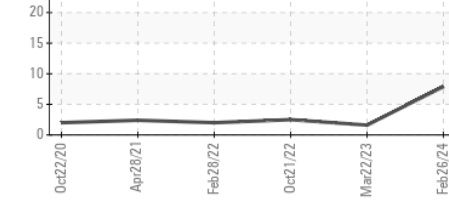
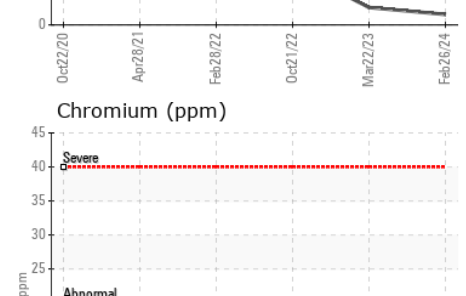
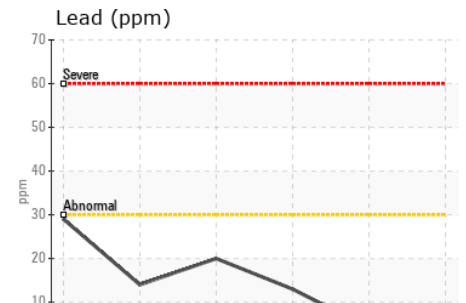
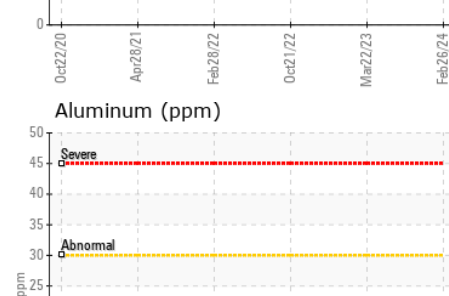
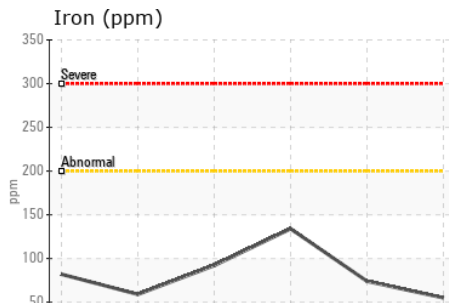
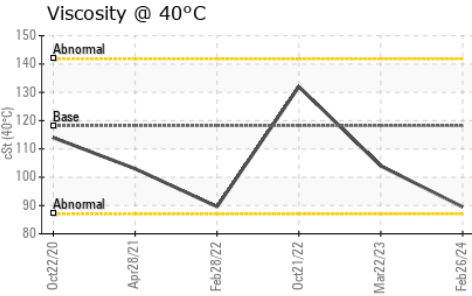
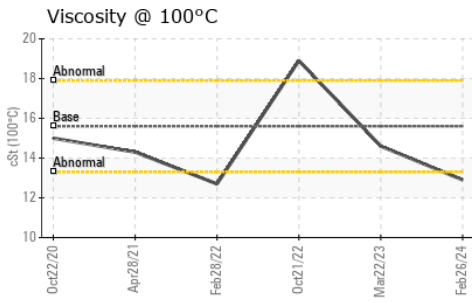
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>15</b>	19	53
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	3
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	▲ 4.5	<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>2.8</b>	▲ 3.4	1.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	9.8	4.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.4</b>	31.5	15.9
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>3</b>	3	7
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	2	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	55	50
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	1010	<b>891</b>	950	852
Calcium	ppm	ASTM D5185(m)	1070	<b>1002</b>	1119	1133
Phosphorus	ppm	ASTM D5185(m)	1150	<b>963</b>	1046	1023
Zinc	ppm	ASTM D5185(m)	1270	<b>1098</b>	1138	1113
Sulfur	ppm	ASTM D5185(m)	2060	<b>2627</b>	2618	2516
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.7</b>	15.8	5.6
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>89.5</b>	104	▲ 132
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>12.9</b>	14.6	▲ 18.9
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>142</b>	144	162



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078168 **Received** : 04 Mar 2024  
**Lab Number** : 02619472 **Tested** : 04 Mar 2024  
**Unique Number** : 5736582 **Diagnosed** : 04 Mar 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

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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.