



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**80**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078531</b>	PC0071715	PC0064205
Sample Date		Client Info		<b>16 Jan 2024</b>	23 Jun 2023	03 Jan 2023
Machine Age	kms	Client Info		<b>92620</b>	86086	78430
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>ABNORMAL</b>	SEVERE	ABNORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	<b>71</b>	69	70
Chromium	ppm	ASTM D5185(m)	>6	<b>7</b>	8	▲ 25
Nickel	ppm	ASTM D5185(m)	>4	<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>5</b>	4	25
Lead	ppm	ASTM D5185(m)	>30	<b>3</b>	6	3
Copper	ppm	ASTM D5185(m)	>30	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>10	<b>2</b>	3	3
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

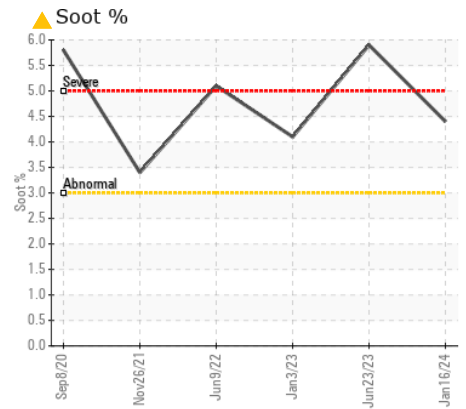
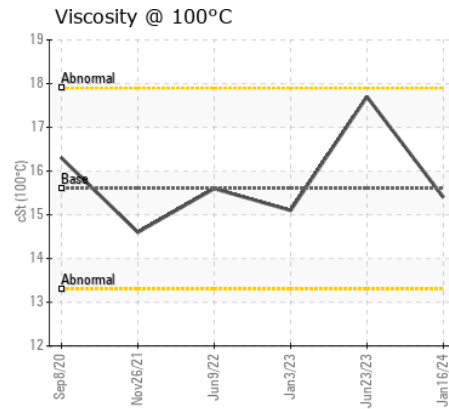
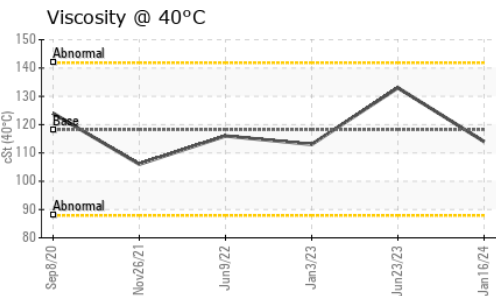
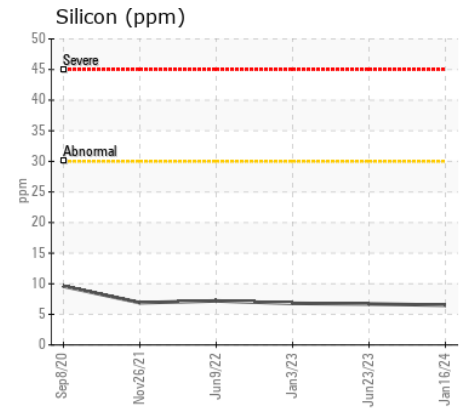
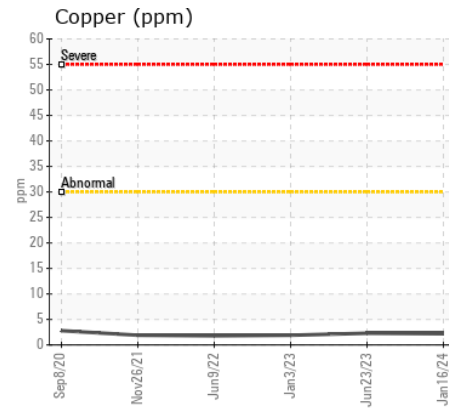
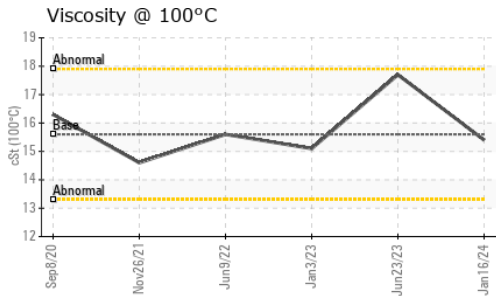
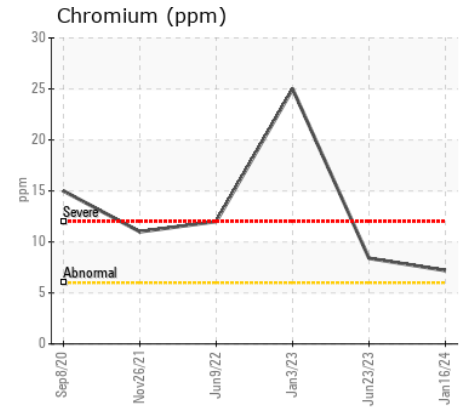
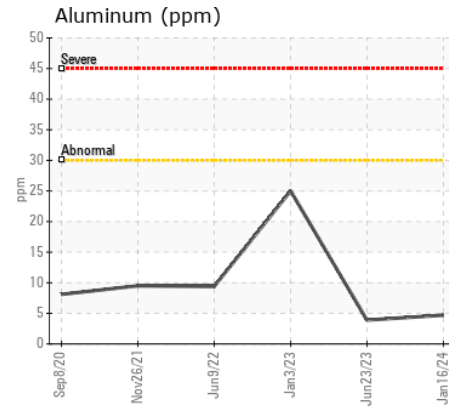
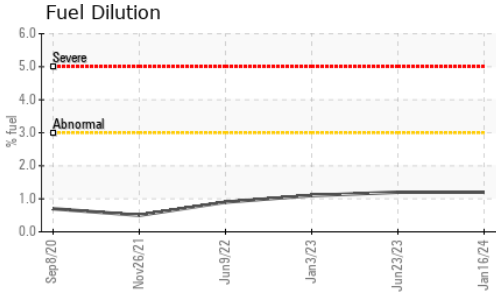
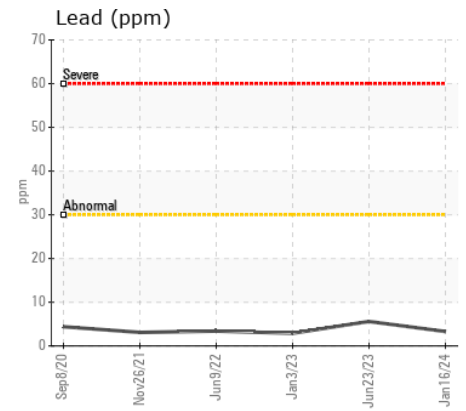
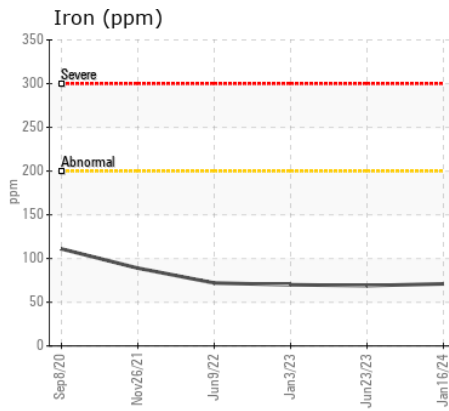
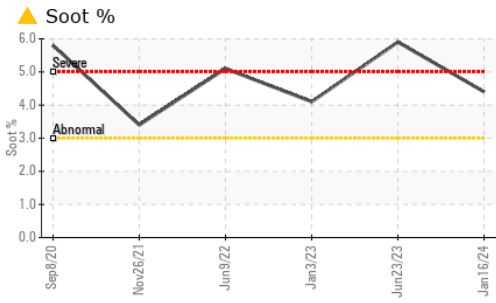
Light fuel dilution occurring. Light concentration of carbon/soot present in the oil. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>6</b>	7	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Fuel	%	ASTM D7593*	>3.0	<b>1.2</b>	1.2	1.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	▲ <b>4.4</b>	● 5.9	▲ 4.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.1</b>	14.5	13.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.4</b>	35.6	31.1
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	4	6
Boron	ppm	ASTM D5185(m)	0	<b>7</b>	6	7
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	58	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>919</b>	965	923
Calcium	ppm	ASTM D5185(m)	1070	<b>1177</b>	1213	1265
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1037</b>	1127	1102
Zinc	ppm	ASTM D5185(m)	1270	<b>1191</b>	1248	1235
Sulfur	ppm	ASTM D5185(m)	2060	<b>2740</b>	2600	2762
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.7</b>	18.7	19.0
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>114</b>	133	113
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>15.4</b>	17.7	15.1
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>141</b>	147	139



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078531 **Received** : 22 Jan 2024  
**Lab Number** : 02610155 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711241 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )

**BEAVER BUS LINES**  
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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.