

Machine Id  
**8422**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (20 LTR)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0123454</b>	GFL0116854	GFL0110713
Sample Date		Client Info		<b>12 Jun 2024</b>	30 May 2024	29 Feb 2024
Machine Age	hrs	Client Info		<b>535</b>	535	535
Oil Age	hrs	Client Info		<b>535</b>	535	535
Filter Age	hrs	Client Info		<b>535</b>	535	535
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	29	11
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

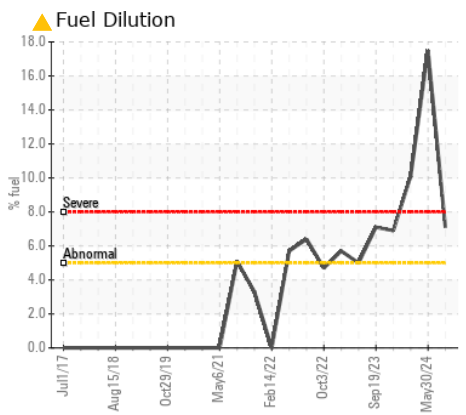
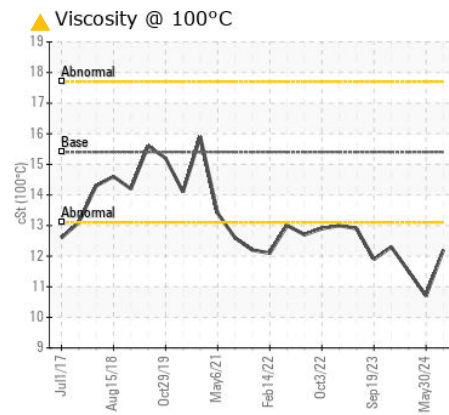
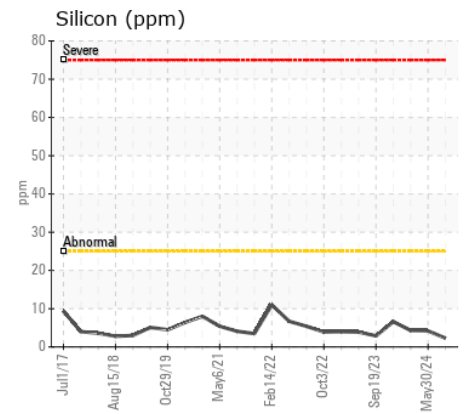
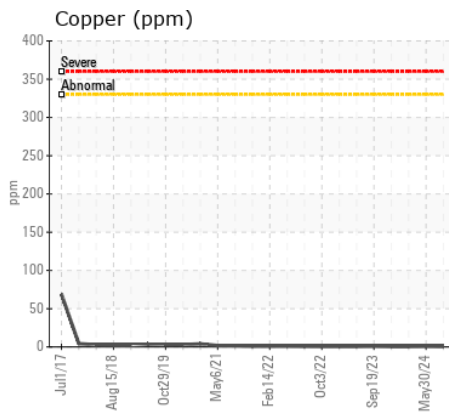
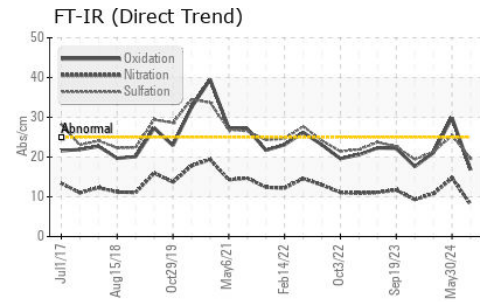
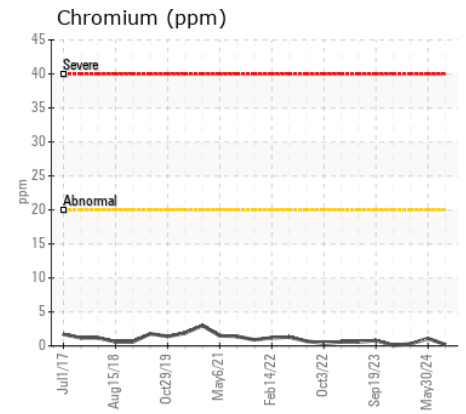
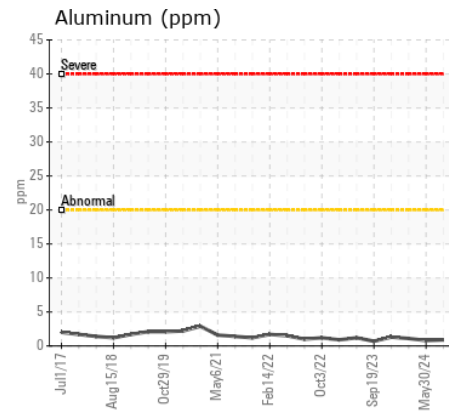
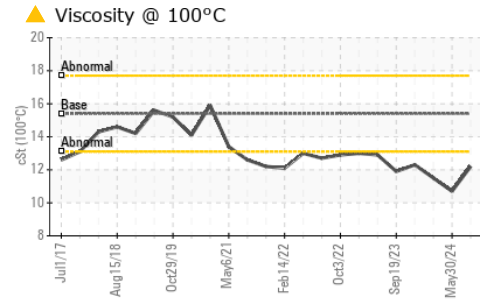
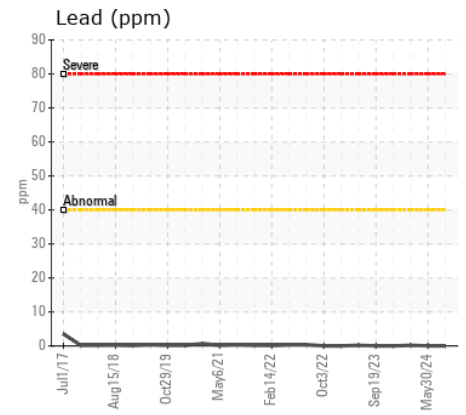
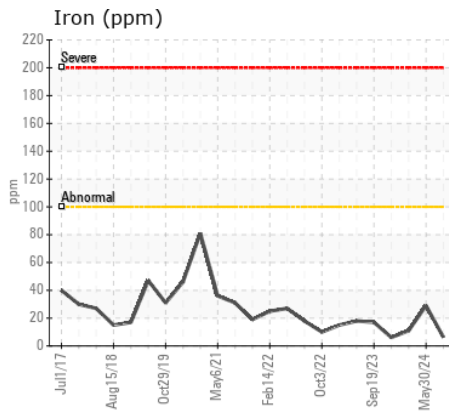
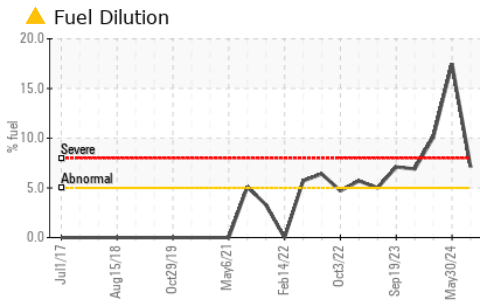
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Fuel	%	ASTM D7593*	>5	<b>▲ 7.1</b>	▲ 17.5	▲ 10.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.5	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	14.7	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.6</b>	25.4	21.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	1
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	3	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>52</b>	45	50
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>844</b>	730	820
Calcium	ppm	ASTM D5185(m)	1070	<b>941</b>	807	890
Phosphorus	ppm	ASTM D5185(m)	1150	<b>898</b>	743	874
Zinc	ppm	ASTM D5185(m)	1270	<b>1072</b>	899	1019
Sulfur	ppm	ASTM D5185(m)	2060	<b>2363</b>	1780	2266
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.8</b>	29.9	21.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲ 12.2</b>	▲ 10.7	▲ 11.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0123454 **Received** : 17 Jun 2024  
**Lab Number** : 02642270 **Tested** : 18 Jun 2024  
**Unique Number** : 5799809 **Diagnosed** : 18 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

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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.