



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



Area  
**GFL207 [1270280]**  
Machine Id  
**800022**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (20 LTR)**

**RECOMMENDATION**

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118502</b>	GFL0102733	GFL0102693
Sample Date		Client Info		<b>02 May 2024</b>	07 Feb 2024	23 Nov 2023
Machine Age	hrs	Client Info		<b>17223</b>	16700	16114
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>SEVERE</b>	SEVERE	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	<b>54</b>	50	60
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	2	4
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	2	4
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

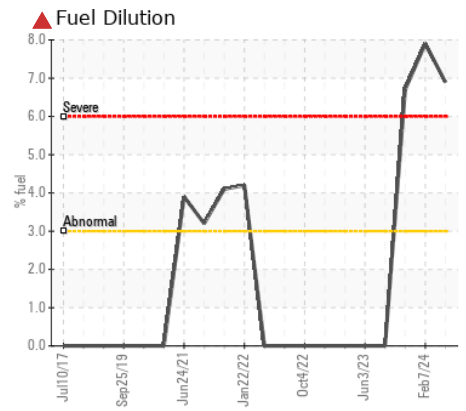
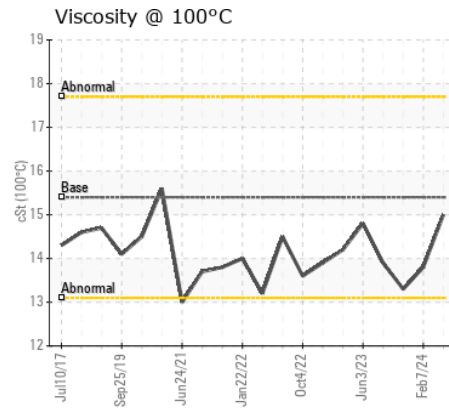
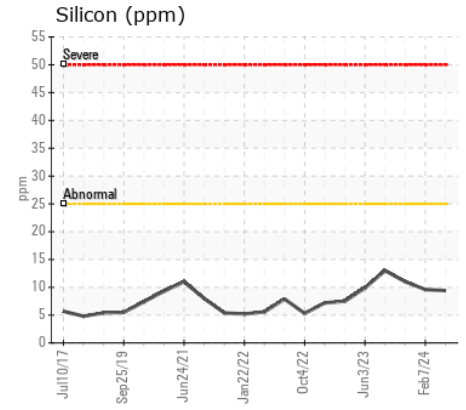
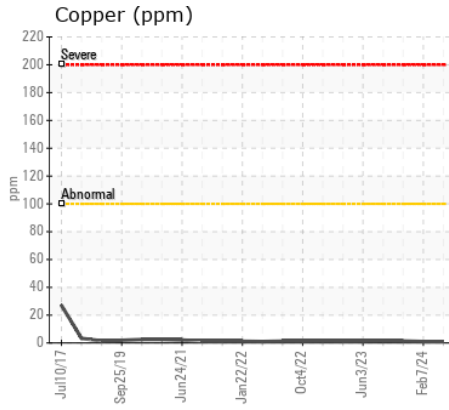
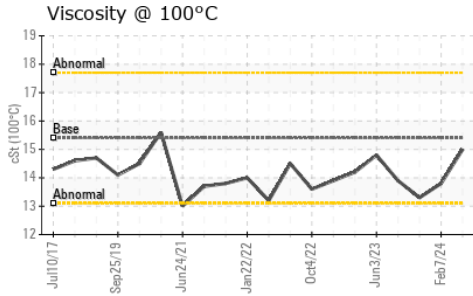
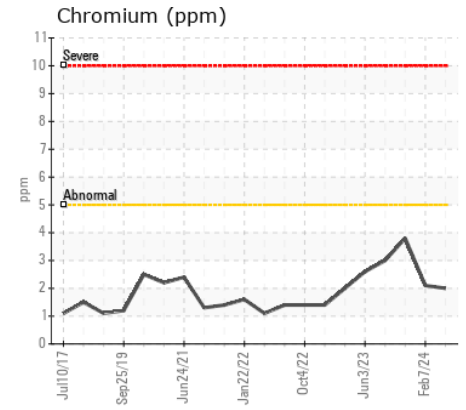
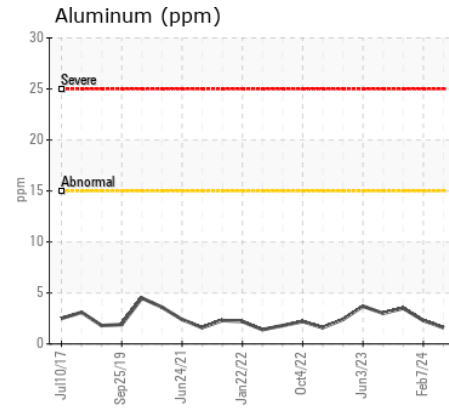
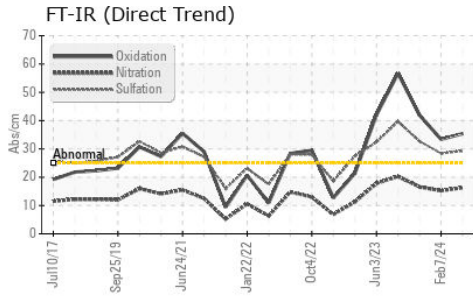
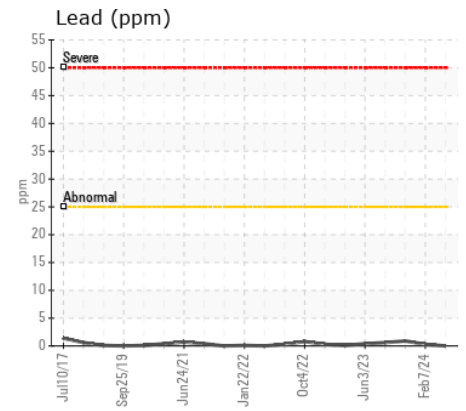
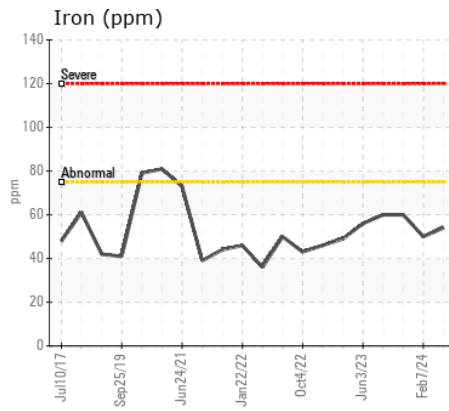
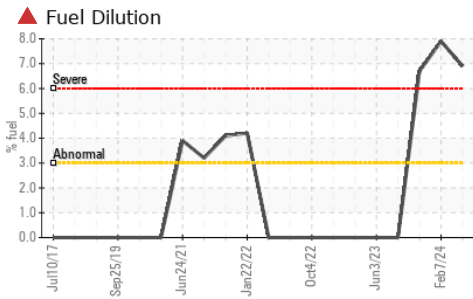
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	10	11
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	2
Fuel	%	ASTM D7593*	>3.0	<b>▲ 6.9</b>	▲ 7.9	▲ 6.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	ASTM D7844*	>6	<b>0.9</b>	0.9	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>16.3</b>	15.2	16.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>29.3</b>	28.4	32.7
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>18</b>	34	132
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	54	52
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>913</b>	884	865
Calcium	ppm	ASTM D5185(m)	1070	<b>987</b>	982	961
Phosphorus	ppm	ASTM D5185(m)	1150	<b>930</b>	917	897
Zinc	ppm	ASTM D5185(m)	1270	<b>1120</b>	1087	1087
Sulfur	ppm	ASTM D5185(m)	2060	<b>2109</b>	2244	2103
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>35.4</b>	33.4	41.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>15.0</b>	13.8	13.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118502  
**Lab Number** : 02633396  
**Unique Number** : 5774549  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**GFL Environmental - 227 - Pickering MTCE**  
 1034 Toy Ave  
 Pickering, ON  
 CA L1W 3P1  
 Contact: Maintenance

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.

T:  
F: