

Area  
**[1281723]**  
Machine Id  
**1200**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118512</b>	GFL0028555	GFL0050664
Sample Date		Client Info		<b>23 May 2024</b>	14 Mar 2024	27 Apr 2022
Machine Age	hrs	Client Info		<b>18402</b>	0	13782
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>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>17</b>	18	5
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	<1
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	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	4	2
Lead	ppm	ASTM D5185(m)	>150	<b>2</b>	2	8
Copper	ppm	ASTM D5185(m)	>90	<b>&lt;1</b>	<1	12
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

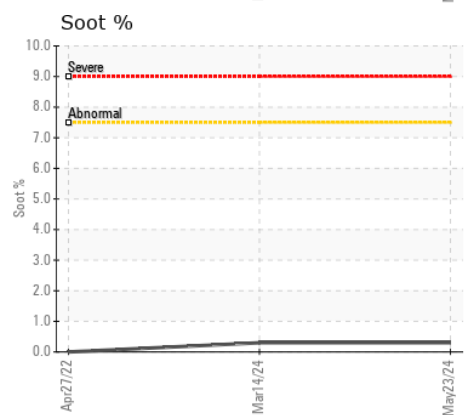
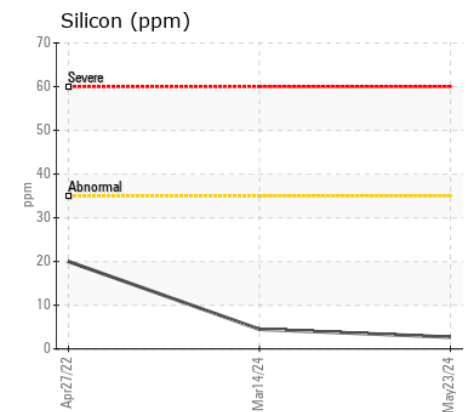
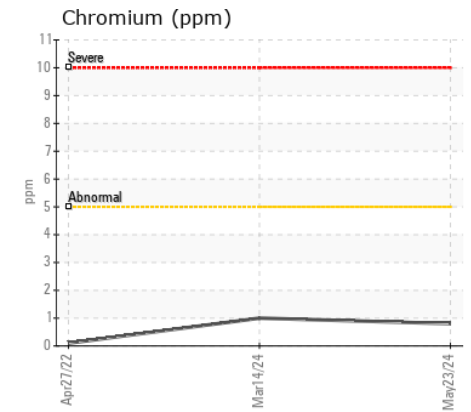
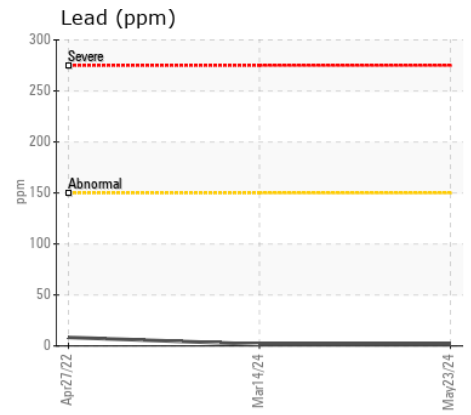
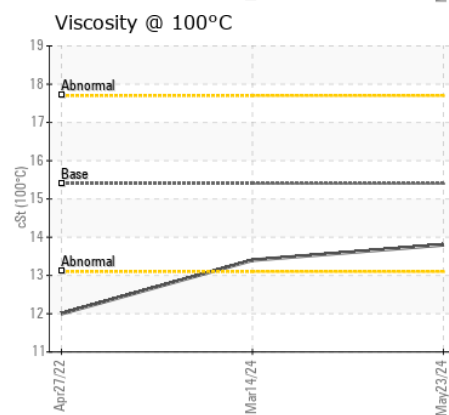
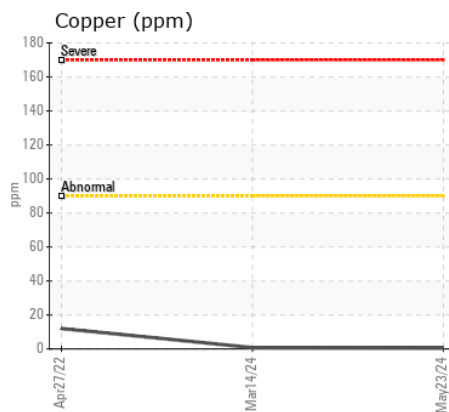
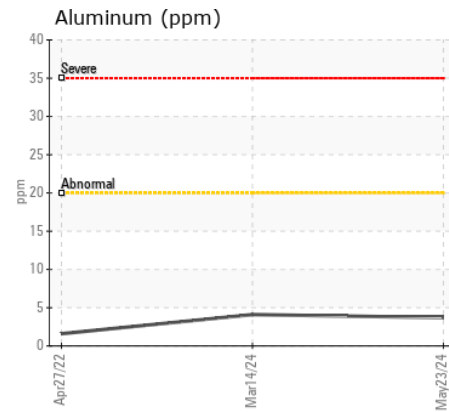
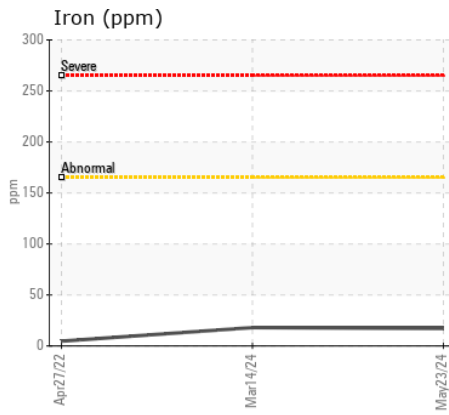
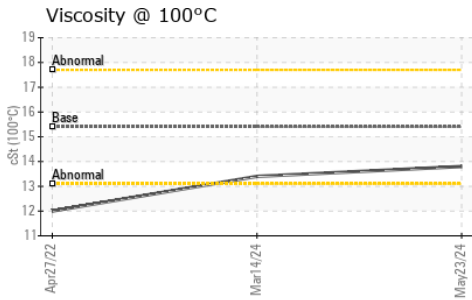
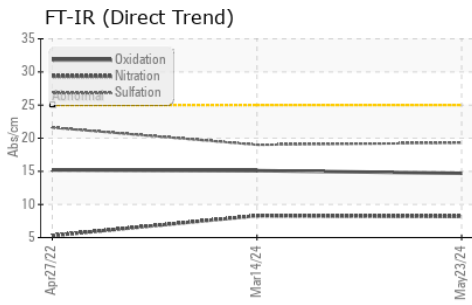
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>3</b>	4	20
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	4	9
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	▲ 1.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	ASTM D7844*	>7.5	<b>0.3</b>	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	8.3	5.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.3</b>	19.0	21.6
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>4</b>	4	6
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	3	151
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	6
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	59	5
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	1
Magnesium	ppm	ASTM D5185(m)	1010	<b>980</b>	971	103
Calcium	ppm	ASTM D5185(m)	1070	<b>1042</b>	1086	1773
Phosphorus	ppm	ASTM D5185(m)	1150	<b>999</b>	1039	963
Zinc	ppm	ASTM D5185(m)	1270	<b>1206</b>	1192	1055
Sulfur	ppm	ASTM D5185(m)	2060	<b>2566</b>	2745	2917
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.7</b>	15.1	15.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.8</b>	13.4	12.0



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118512  
**Lab Number** : 02637616  
**Unique Number** : 5786778  
**Test Package** : MOB 1  
**Received** : 27 May 2024  
**Tested** : 27 May 2024  
**Diagnosed** : 27 May 2024 - Wes Davis

**GFL Environmental - 207 - Pickering SW**  
 1034 TOY AVENUE, PICKERING YARD  
 PICKERING, ON  
 CA L1W 3P1  
 Contact: Ian Patton  
 ipatton@gflenv.com  
 T: (905)831-6297  
 F: (905)426-3577

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.