



Area  
**GFL216**  
Machine Id  
**413112**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0107345</b>	GFL0101397	GFL0093783
Sample Date		Client Info		<b>05 Apr 2024</b>	29 Nov 2023	18 Sep 2023
Machine Age	kms	Client Info		<b>46499</b>	0	19579
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>120	<b>10</b>	13	17
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	2	11
Copper	ppm	ASTM D5185(m)	>330	<b>15</b>	81	393
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

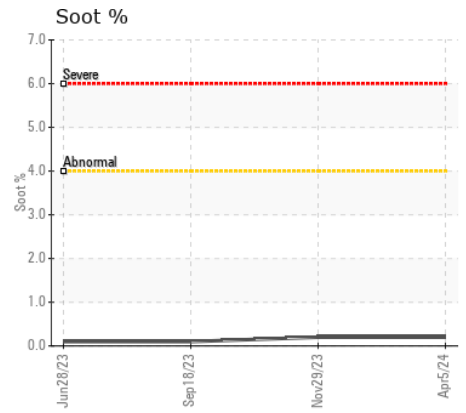
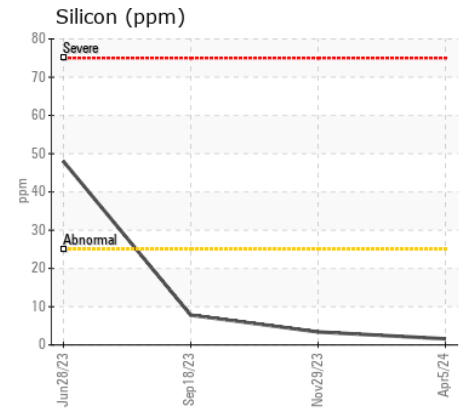
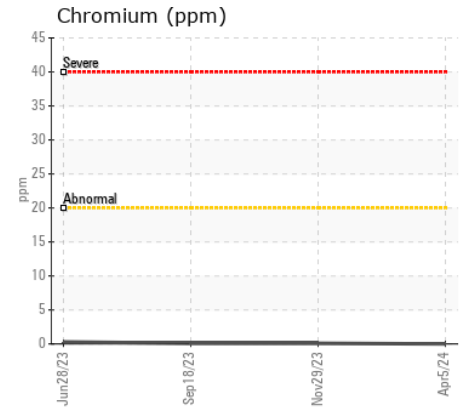
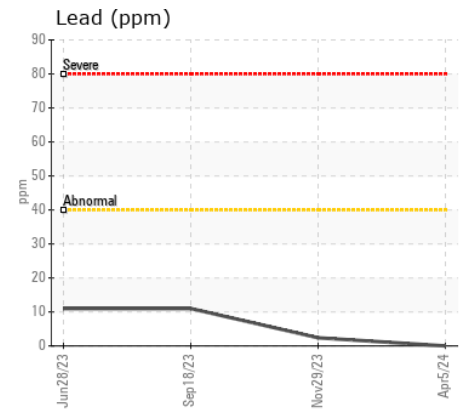
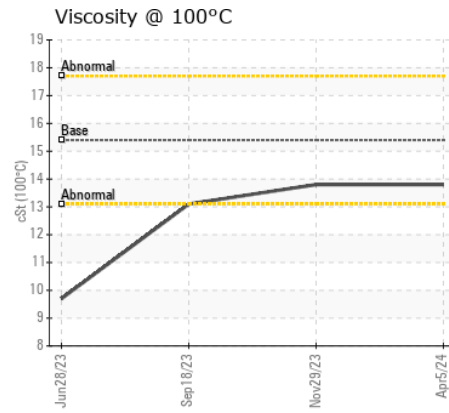
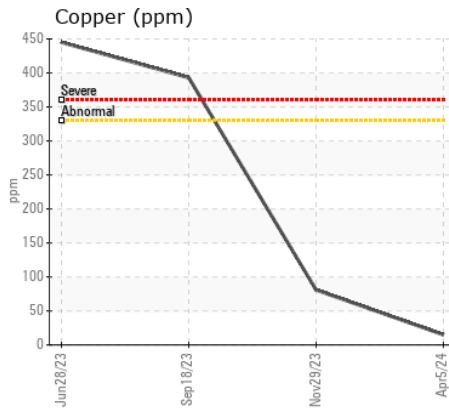
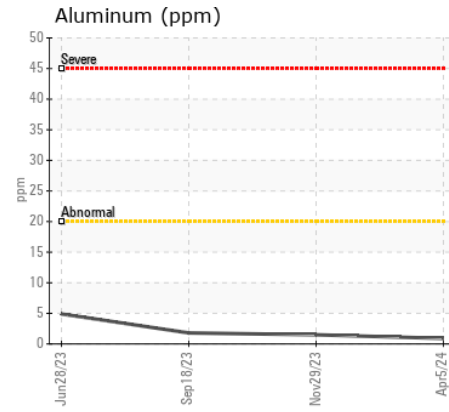
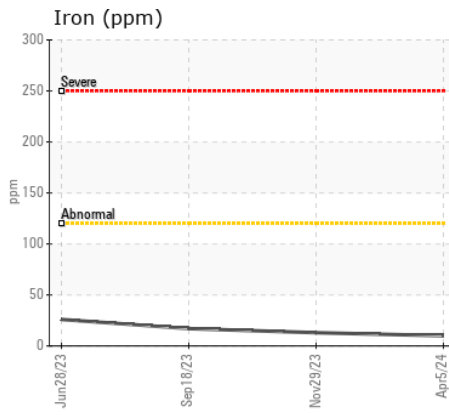
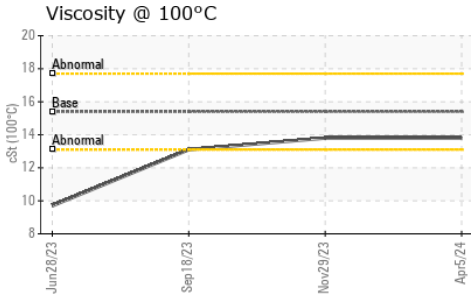
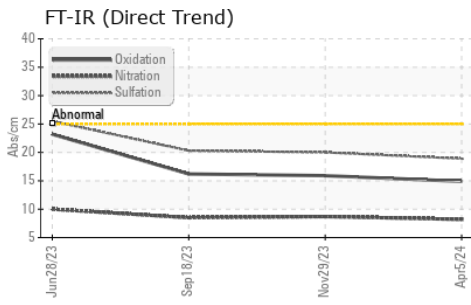
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	8
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	8.7	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.9</b>	20.0	20.3
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>1</b>	1	2
Boron	ppm	ASTM D5185(m)	0	<b>5</b>	3	16
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	59	67
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>962</b>	942	926
Calcium	ppm	ASTM D5185(m)	1070	<b>1054</b>	1032	1092
Phosphorus	ppm	ASTM D5185(m)	1150	<b>989</b>	956	953
Zinc	ppm	ASTM D5185(m)	1270	<b>1176</b>	1173	1137
Sulfur	ppm	ASTM D5185(m)	2060	<b>2493</b>	2334	2274
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.9</b>	15.9	16.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.8</b>	13.8	13.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0107345  
**Lab Number** : 02628111  
**Unique Number** : 5761243  
**Test Package** : MOB 1  
**Received** : 11 Apr 2024  
**Tested** : 11 Apr 2024  
**Diagnosed** : 11 Apr 2024 - Wes Davis

**GFL Environmental - 252 - GTA Hauling**  
 3668 Weston Road  
 North York, ON  
 CA M9L 1W2  
 Contact: Amanda Cipollone  
 acipollone@gflenv.com

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.