

Area

[1297878]

Machine Id

528055

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>GFL0124680</b>	GFL0110665	GFL0094508
Sample Date		Client Info		<b>19 Jun 2024</b>	19 Mar 2024	10 Oct 2023
Machine Age	hrs	Client Info		<b>10304</b>	9809	9238
Oil Age	hrs	Client Info		<b>600</b>	0	9238
Filter Age	hrs	Client Info		<b>600</b>	0	9238
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>13</b>	18	9
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	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	5	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	6	4
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

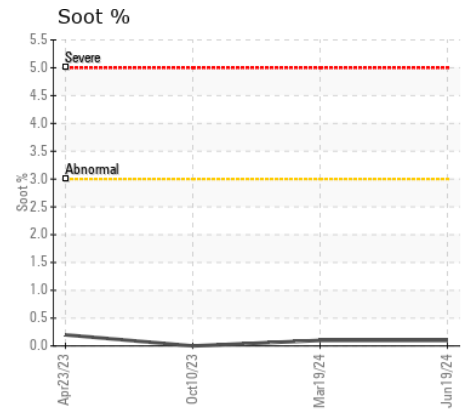
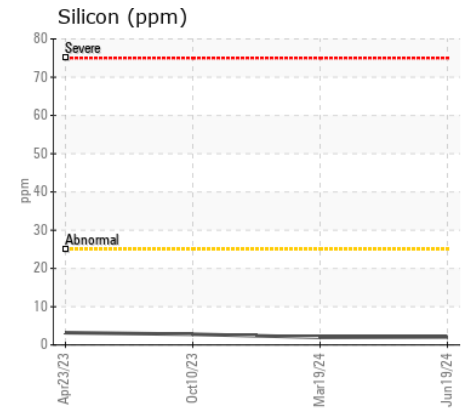
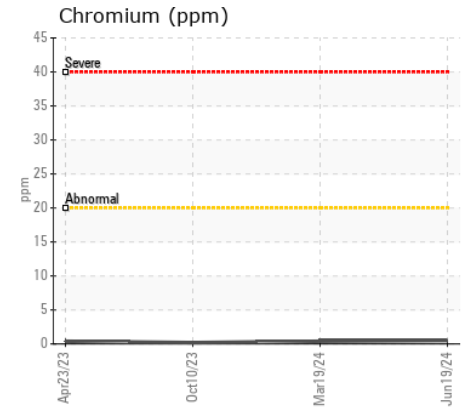
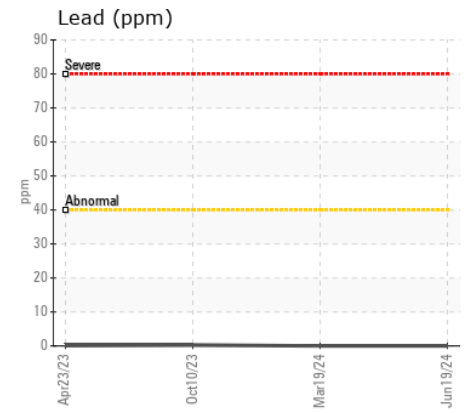
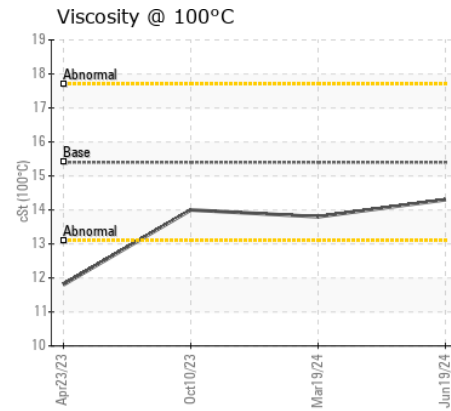
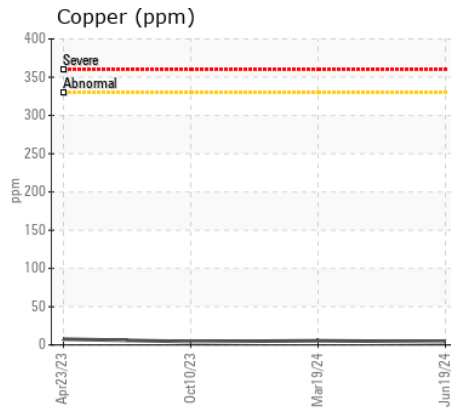
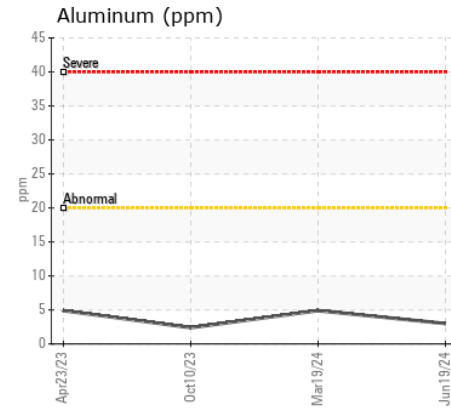
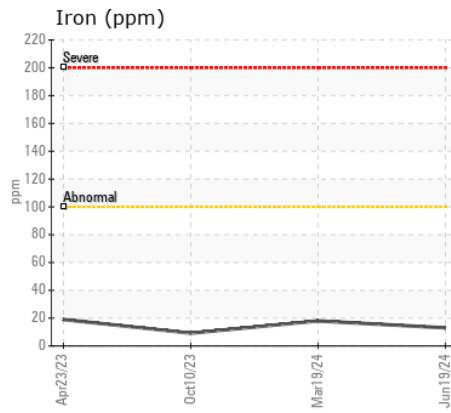
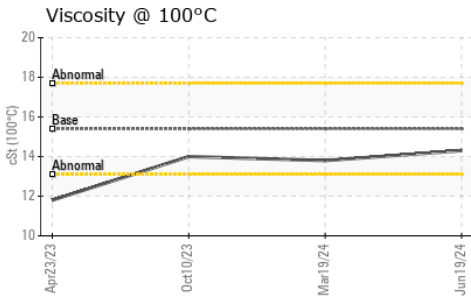
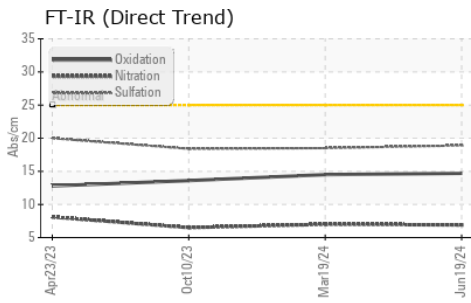
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	<1
Fuel		WC Method	>5	<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*	>3	<b>0.1</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.9</b>	7.0	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.9</b>	18.5	18.4
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>2</b>	<1	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	58	55
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>939</b>	960	801
Calcium	ppm	ASTM D5185(m)	1070	<b>1045</b>	1123	1211
Phosphorus	ppm	ASTM D5185(m)	1150	<b>955</b>	985	972
Zinc	ppm	ASTM D5185(m)	1270	<b>1191</b>	1203	1160
Sulfur	ppm	ASTM D5185(m)	2060	<b>2496</b>	2459	2583
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.7</b>	14.5	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.3</b>	13.8	14.0



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0124680  
**Lab Number** : 02643337  
**Unique Number** : 5800876  
**Test Package** : MOB 1

**GFL Environmental - 207 - Pickering SW**  
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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.