



Machine Id  
**501138**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118972</b>	GFL0112537	GFL0102643
Sample Date		Client Info		<b>18 Jun 2024</b>	01 Apr 2024	07 Jan 2024
Machine Age	hrs	Client Info		<b>0</b>	14532	14002
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>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>20</b>	43	24
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>1</b>	2	1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>6</b>	6	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>6</b>	15	6
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

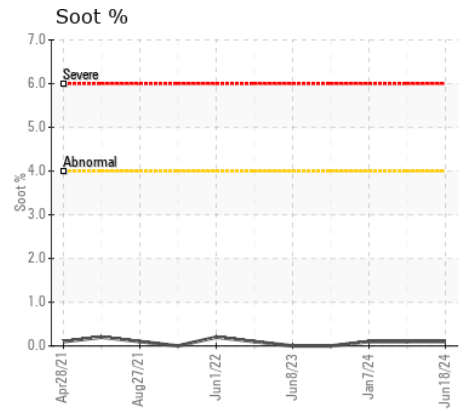
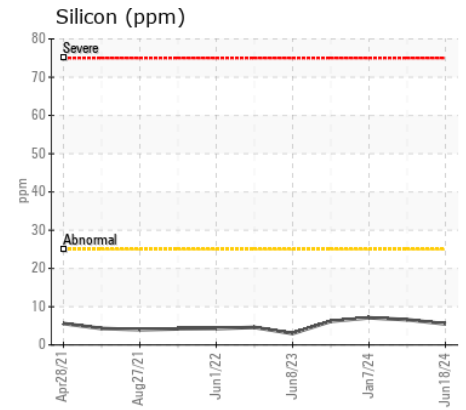
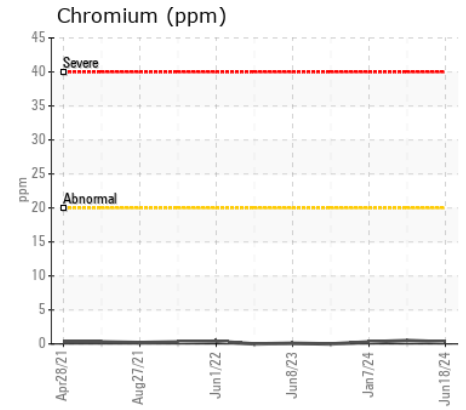
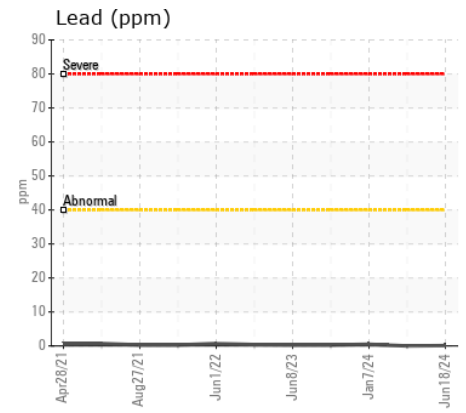
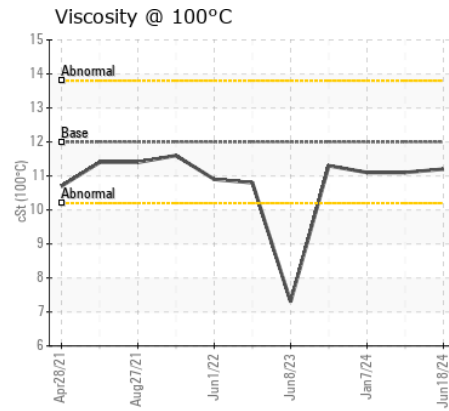
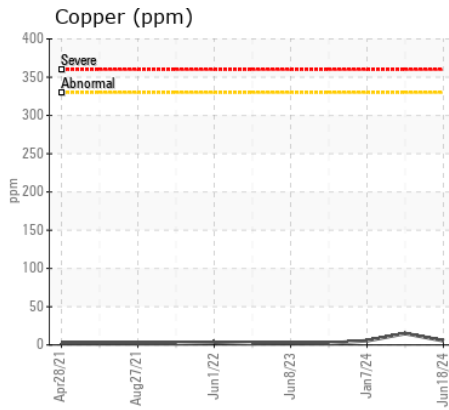
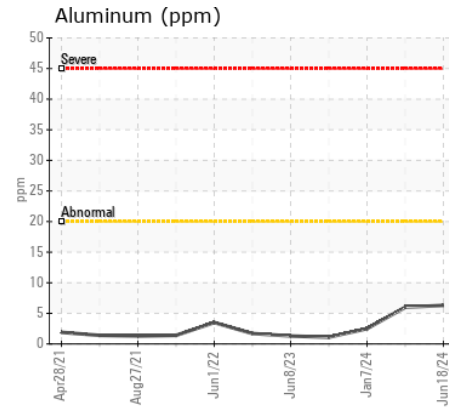
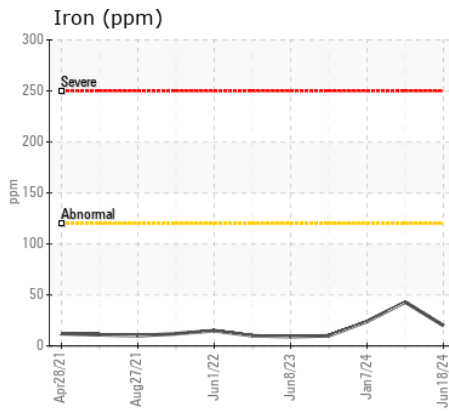
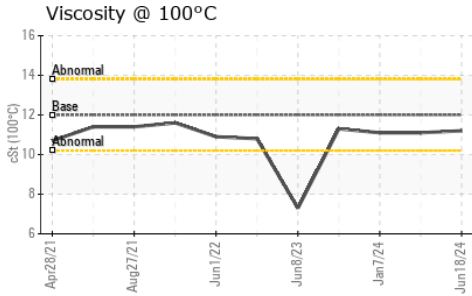
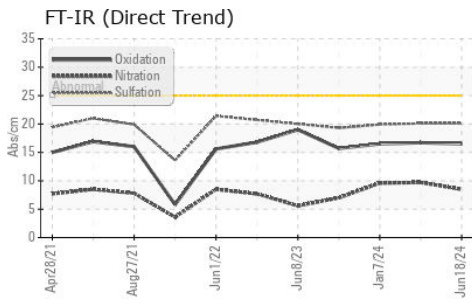
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	7	7
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	15	4
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>	0.0	NEG
Soot %	%	ASTM D7844*	>4	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.5</b>	9.7	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.1</b>	20.1	19.9
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>8</b>	32	10
Boron	ppm	ASTM D5185(m)	2	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	61	59
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>949</b>	980	968
Calcium	ppm	ASTM D5185(m)	1050	<b>1049</b>	1062	1065
Phosphorus	ppm	ASTM D5185(m)	995	<b>1003</b>	994	994
Zinc	ppm	ASTM D5185(m)	1180	<b>1179</b>	1195	1180
Sulfur	ppm	ASTM D5185(m)	2600	<b>2432</b>	2455	2595
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.5</b>	16.7	16.5
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.2</b>	11.1	11.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118972  
**Lab Number** : 02642758  
**Unique Number** : 5800297  
**Test Package** : MOB 1  
**Received** : 19 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Wes Davis

**GFL Environmental - 554 - Edmonton 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.