



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



Machine Id  
**412054**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0111771</b>	GFL0039064	GFL0081962
Sample Date		Client Info		<b>20 Apr 2024</b>	26 Sep 2023	08 Jul 2023
Machine Age	hrs	Client Info		<b>4417</b>	3435	2942
Oil Age	hrs	Client Info		<b>600</b>	480	450
Filter Age	hrs	Client Info		<b>600</b>	480	450
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>10</b>	11	10
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	2	2
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>7</b>	12	10
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<b>7</b>	11	18
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

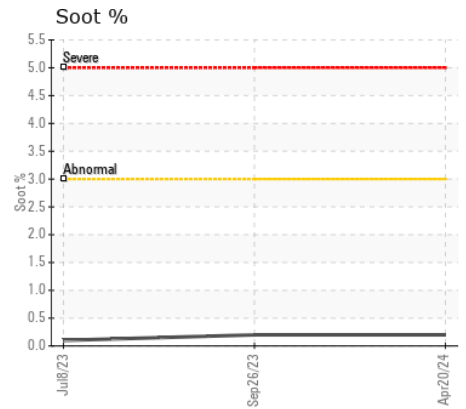
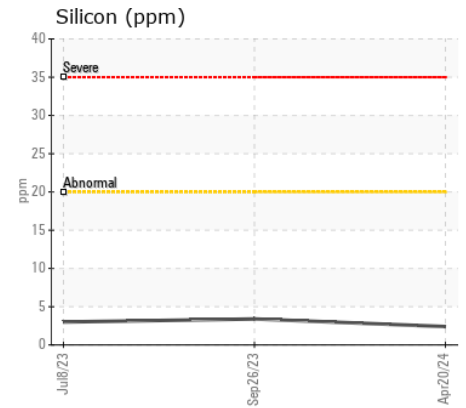
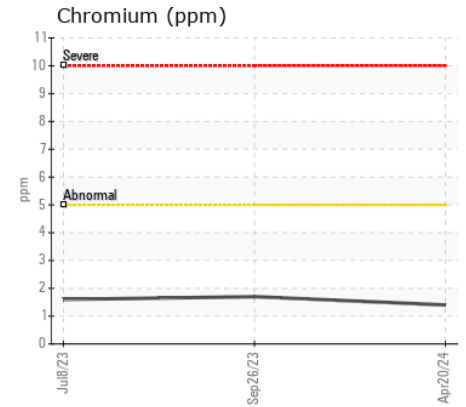
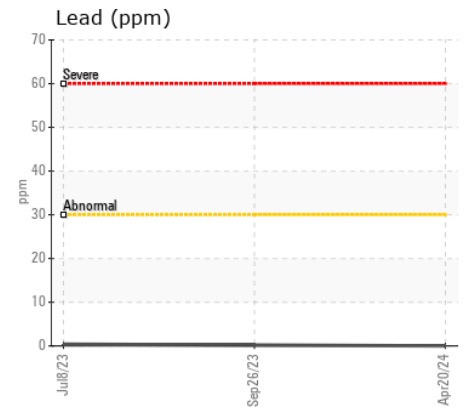
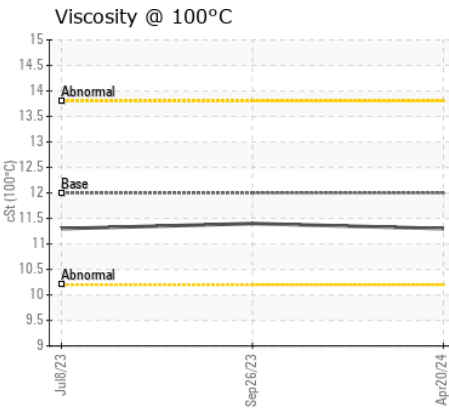
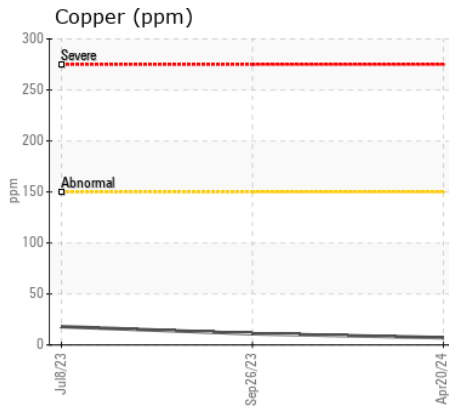
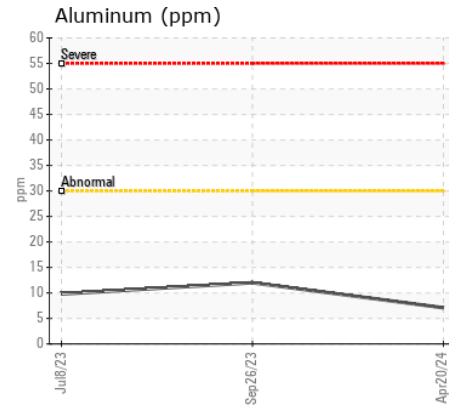
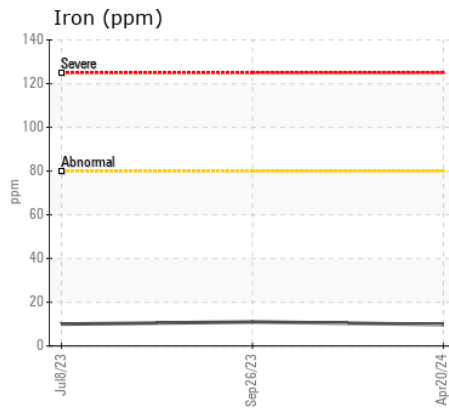
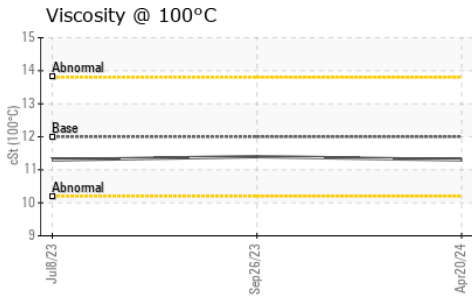
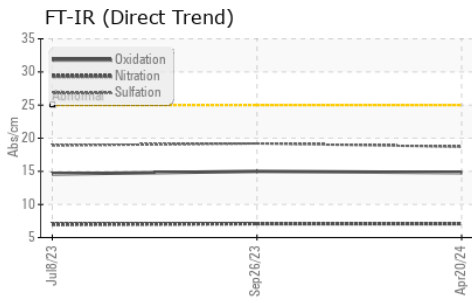
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>9</b>	20	15
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>0.2</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.1</b>	7.1	7.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.7</b>	19.2	18.9
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>2</b>	2	2
Boron	ppm	ASTM D5185(m)	2	<b>4</b>	<1	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>61</b>	61	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>978</b>	975	994
Calcium	ppm	ASTM D5185(m)	1050	<b>1063</b>	1056	1068
Phosphorus	ppm	ASTM D5185(m)	995	<b>973</b>	985	993
Zinc	ppm	ASTM D5185(m)	1180	<b>1161</b>	1188	1205
Sulfur	ppm	ASTM D5185(m)	2600	<b>2371</b>	2379	2385
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.8</b>	15.0	14.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.3</b>	11.4	11.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0111771  
**Lab Number** : 02632729  
**Unique Number** : 5773882  
**Test Package** : MOB 1

**GFL Environmental - 557 - Edson**  
 6615 - 4th Ave,  
 Edson, AB  
 CA T7E 1M5  
 Contact: GFL Tech  
 wcgfldemo@gmail.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.

T:  
F: