

Machine Id  
**4794**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0111779</b>	GFL0111774	GFL0063214
Sample Date		Client Info		<b>20 Jun 2024</b>	12 Apr 2024	22 Jan 2023
Machine Age	hrs	Client Info		<b>22847</b>	22552	20777
Oil Age	hrs	Client Info		<b>350</b>	480	650
Filter Age	hrs	Client Info		<b>350</b>	480	650
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>63</b>	▲ 101	55
Chromium	ppm	ASTM D5185(m)	>20	<b>4</b>	7	6
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>5</b>	12	4
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	6	4
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	6	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

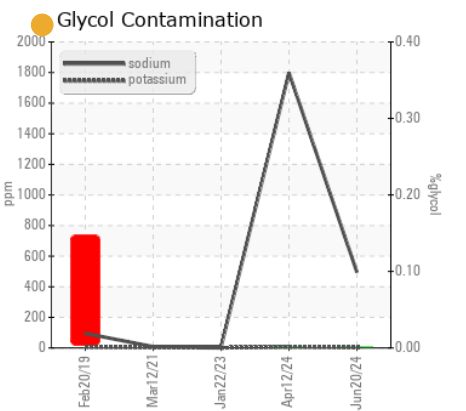
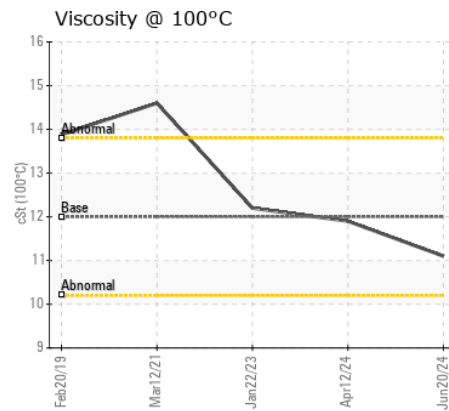
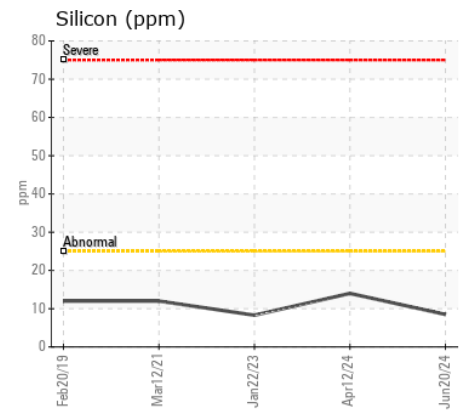
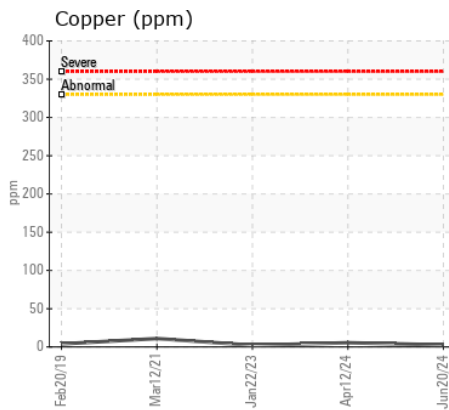
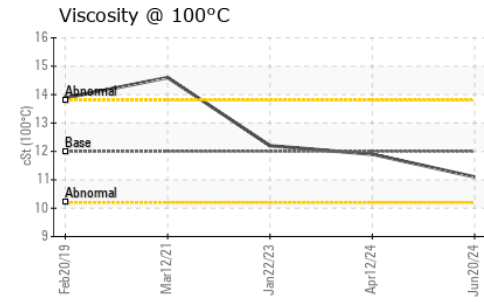
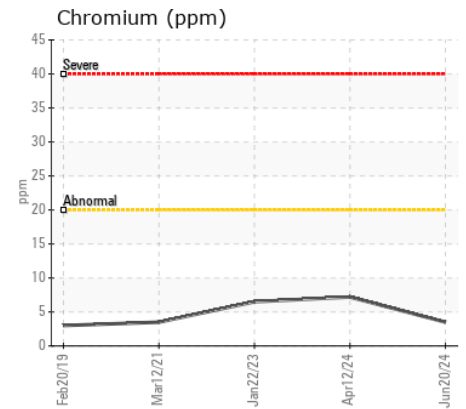
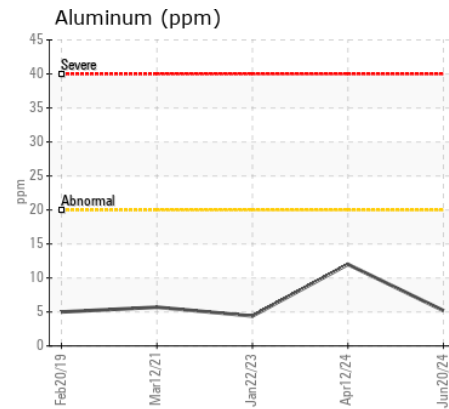
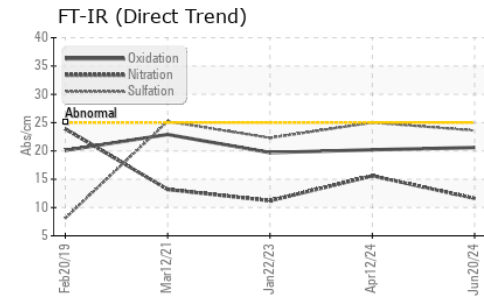
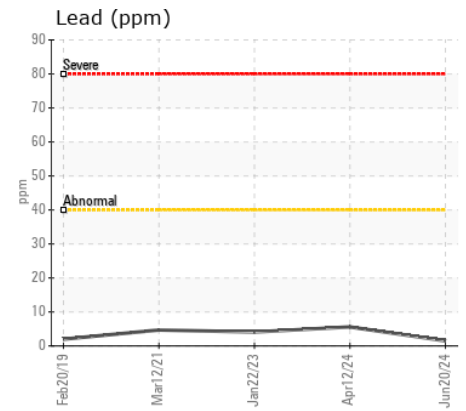
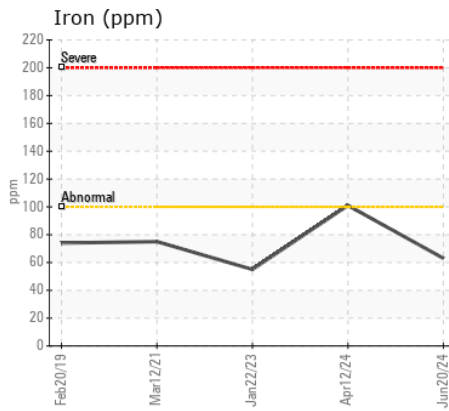
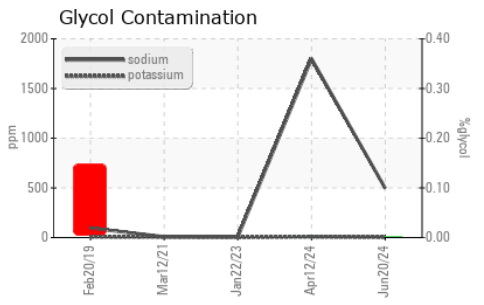
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>8</b>	14	8
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	7	<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	%	ASTM D7922*		<b>0.0</b>	0.0	NEG
Soot %	%	ASTM D7844*	>3	<b>1.2</b>	1.6	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	15.6	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.6</b>	25.0	22.3
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		● <b>496</b>	● 1799	7
Boron	ppm	ASTM D5185(m)	2	<b>4</b>	4	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>77</b>	145	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>898</b>	917	969
Calcium	ppm	ASTM D5185(m)	1050	<b>981</b>	1049	1126
Phosphorus	ppm	ASTM D5185(m)	995	<b>900</b>	863	1066
Zinc	ppm	ASTM D5185(m)	1180	<b>1101</b>	1137	1189
Sulfur	ppm	ASTM D5185(m)	2600	<b>2331</b>	2401	2508
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.6</b>	20.2	19.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.1</b>	11.9	12.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0111779 **Received** : 25 Jun 2024  
**Lab Number** : 02643990 **Tested** : 25 Jun 2024  
**Unique Number** : 5801529 **Diagnosed** : 25 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol, Visual )

**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.