

Machine Id  
**801009**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

We advise that you check for the source of the coolant leak. 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>GFL0069548</b>	GFL0069524	GFL0056901
Sample Date		Client Info		<b>05 Jun 2023</b>	14 Mar 2023	06 Dec 2022
Machine Age	hrs	Client Info		<b>14753</b>	14194	194233
Oil Age	hrs	Client Info		<b>600</b>	600	0
Filter Age	hrs	Client Info		<b>600</b>	600	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>21</b>	27	44
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	4	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

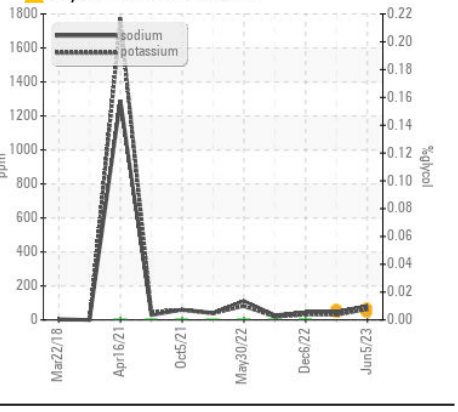
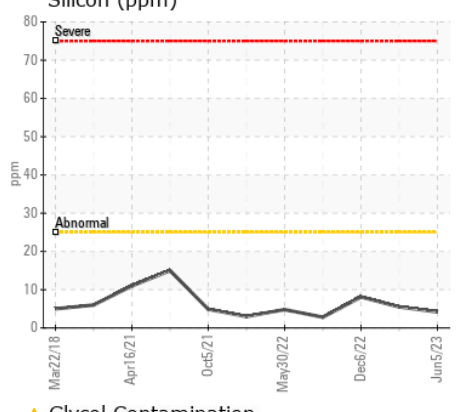
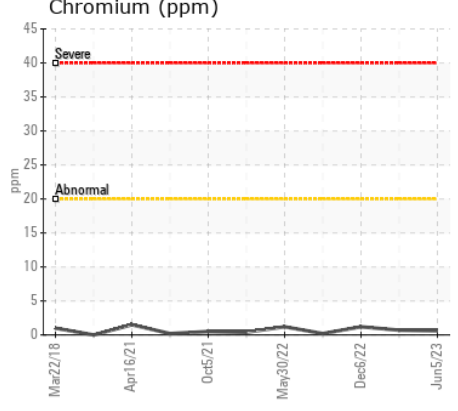
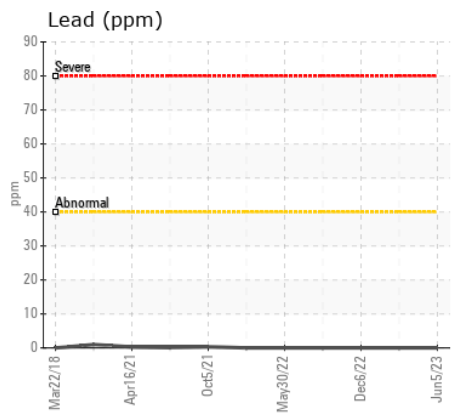
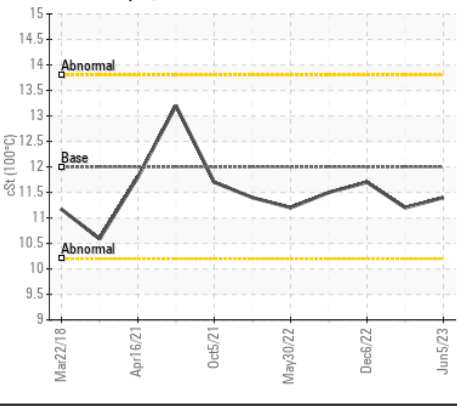
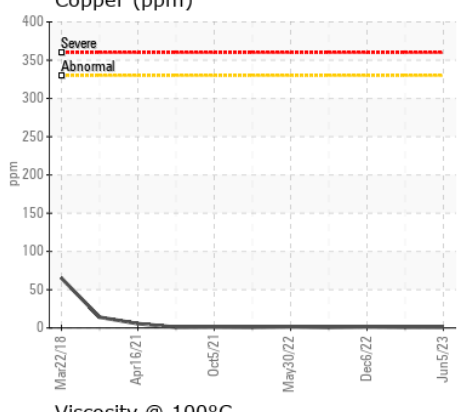
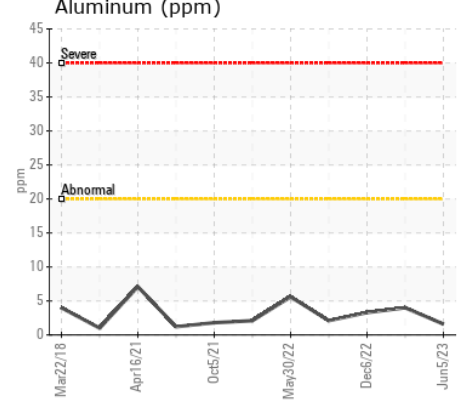
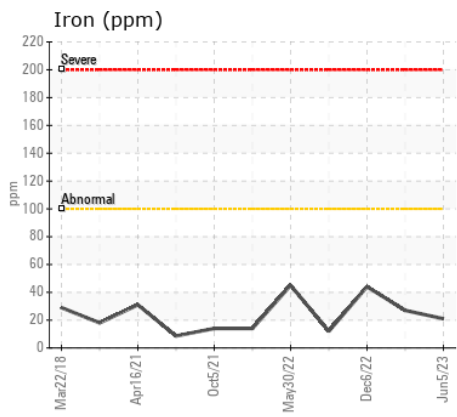
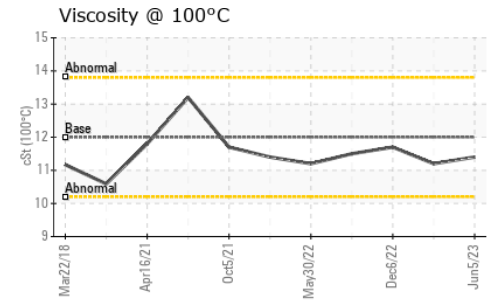
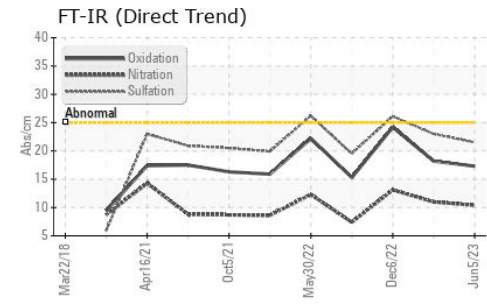
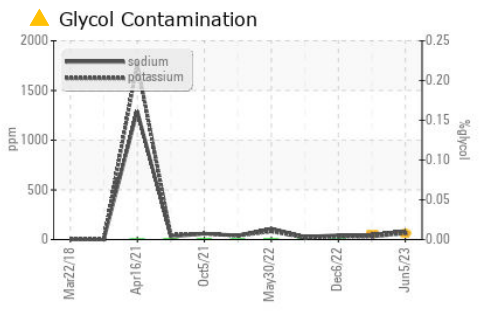
Test for glycol is positive. There is a light concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	8
Potassium	ppm	ASTM D5185(m)	>20	<b>▲ 63</b>	▲ 30	31
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>▲ 0.012</b>	▲ 0.011	0.0
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.2	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.4</b>	11.0	13.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.5</b>	23.0	26.1
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>● 83</b>	● 48	45
Boron	ppm	ASTM D5185(m)	2	<b>6</b>	4	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>69</b>	64	63
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1004</b>	984	1002
Calcium	ppm	ASTM D5185(m)	1050	<b>1131</b>	1131	1141
Phosphorus	ppm	ASTM D5185(m)	995	<b>1106</b>	1094	1065
Zinc	ppm	ASTM D5185(m)	1180	<b>1235</b>	1226	1231
Sulfur	ppm	ASTM D5185(m)	2600	<b>2636</b>	2589	2449
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.3</b>	18.2	24.2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.4</b>	11.2	11.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0069548  
**Lab Number** : 02577113  
**Unique Number** : 5630173  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 565 - Winnipeg**  
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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.*