



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



Machine Id  
**925010**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0100593</b>	GFL0077002	GFL0054661
Sample Date		Client Info		<b>18 Jan 2024</b>	12 Sep 2023	10 Jul 2022
Machine Age	hrs	Client Info		<b>346098</b>	17422	15759
Oil Age	hrs	Client Info		<b>17422</b>	600	0
Filter Age	hrs	Client Info		<b>17422</b>	600	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>20</b>	17	62
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	9
Nickel	ppm	ASTM D5185(m)	>5	<b>2</b>	3	20
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>5</b>	9	6
Lead	ppm	ASTM D5185(m)	>40	<b>4</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	9	21
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

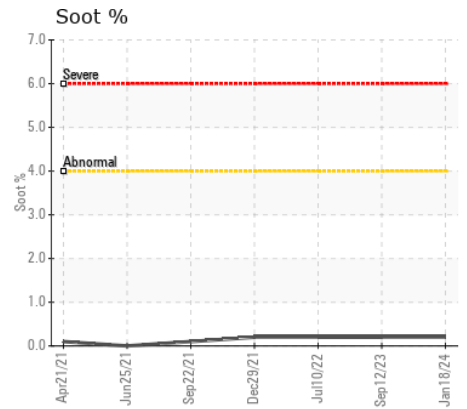
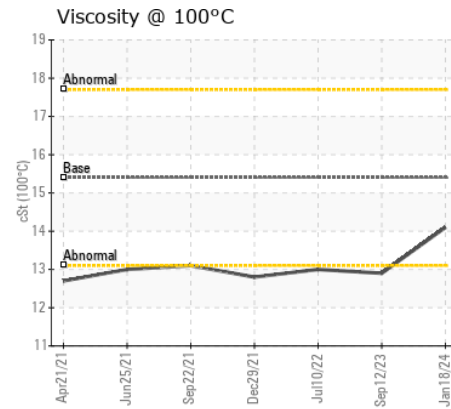
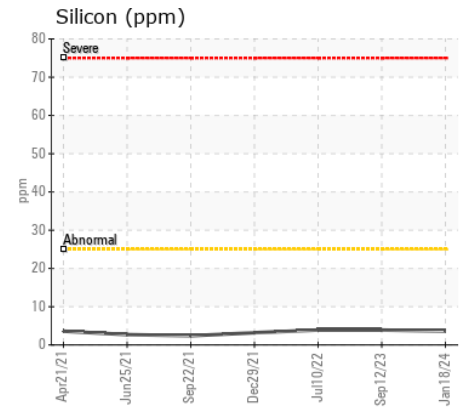
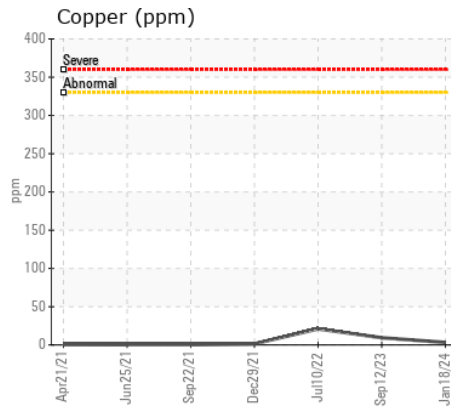
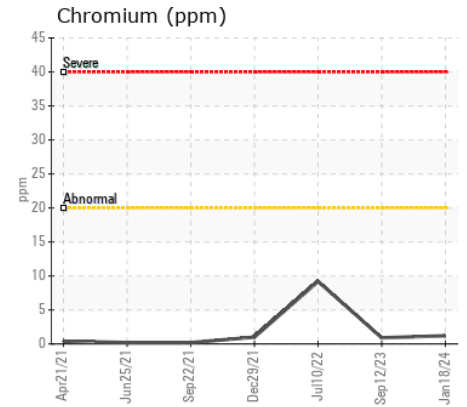
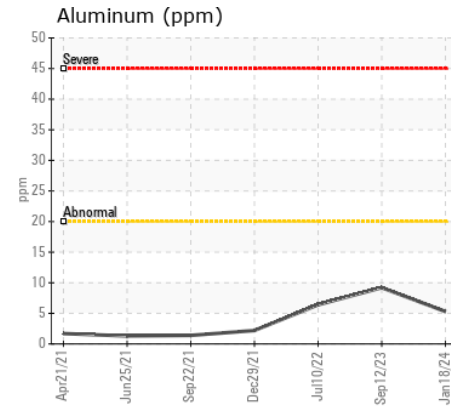
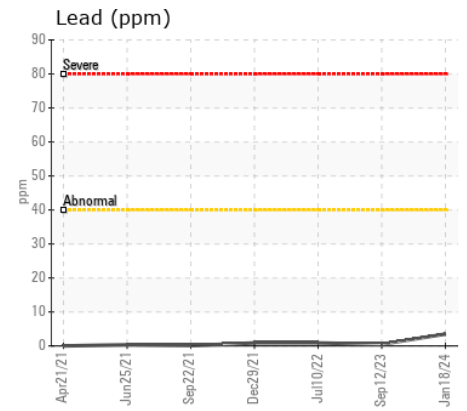
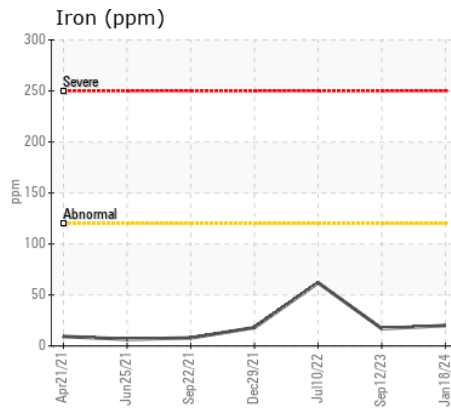
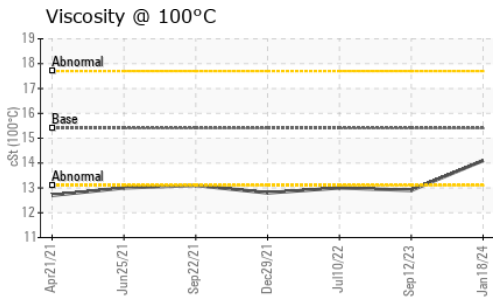
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	8	1
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>0.2</b>	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.6</b>	8.6	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.8</b>	21.6	21.7
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>5</b>	5	19
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	3	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	58	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	1010	<b>955</b>	960	915
Calcium	ppm	ASTM D5185(m)	1070	<b>1062</b>	1012	1050
Phosphorus	ppm	ASTM D5185(m)	1150	<b>943</b>	970	922
Zinc	ppm	ASTM D5185(m)	1270	<b>1157</b>	1141	1177
Sulfur	ppm	ASTM D5185(m)	2060	<b>2366</b>	2125	2368
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.3</b>	19.7	18.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.1</b>	12.9	13.0



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling  
**Sample No.** : GFL0100593 **Received** : 23 Jan 2024  
**Lab Number** : 02610496 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711582 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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.

38950 Queens Way,  
 Squamish, BC  
 CA V8B 0K8  
 Contact: Dean Imbeau  
 dimbeau@gflenv.com  
 T: (604)892-5604  
 F: (604)892-5238