



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



Area  
**GFL216**  
Machine Id  
**401214**  
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>GFL0108429</b>	GFL0099657	GFL0080297
Sample Date		Client Info		<b>18 Jan 2024</b>	23 Oct 2023	20 Mar 2023
Machine Age	hrs	Client Info		<b>331144</b>	323985	305541
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>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>11</b>	15	18
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>2</b>	1	2
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	1	3
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	2	3
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	5
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

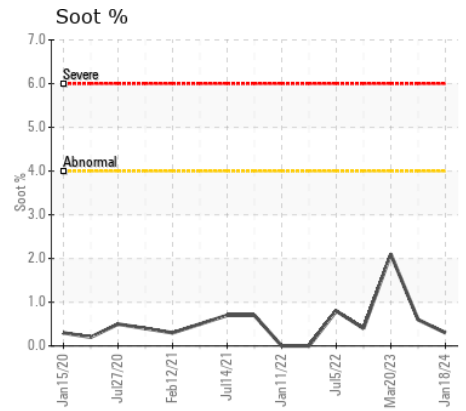
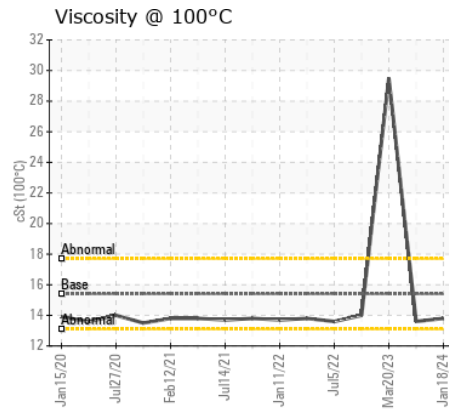
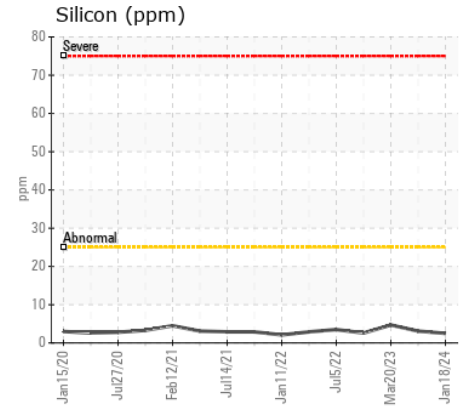
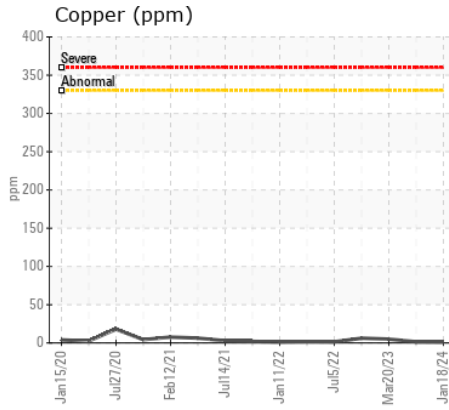
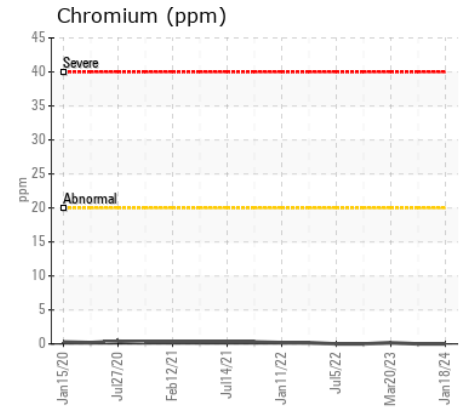
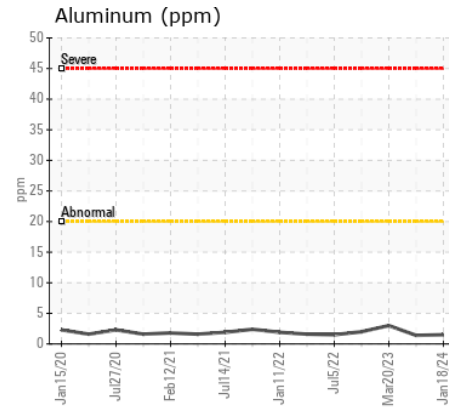
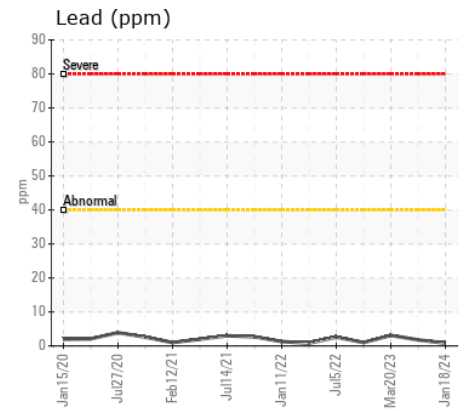
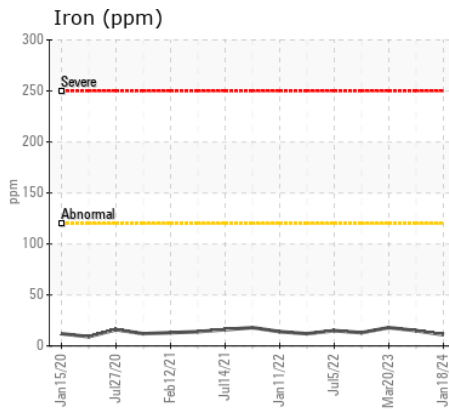
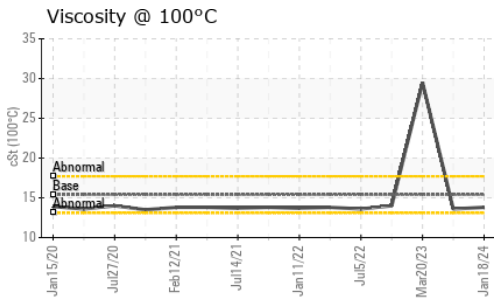
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	0
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	0.124
Soot %	%	ASTM D7844*	>4	<b>0.3</b>	0.6	2.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	7.7	23.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.6</b>	20.0	23.5
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	1%

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	6	27
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	5	9
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	69	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>974</b>	1100	952
Calcium	ppm	ASTM D5185(m)	1070	<b>1072</b>	1202	1134
Phosphorus	ppm	ASTM D5185(m)	1150	<b>992</b>	1081	1033
Zinc	ppm	ASTM D5185(m)	1270	<b>1179</b>	1360	1196
Sulfur	ppm	ASTM D5185(m)	2060	<b>2569</b>	2636	2662
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.7</b>	15.6	49.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.8</b>	13.6	29.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 252 - GTA Hauling  
**Sample No.** : GFL0108429 **Received** : 22 Jan 2024  
**Lab Number** : 02610120 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 5711206 **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.

3668 Weston Road  
 North York, ON  
 CA M9L 1W2  
 Contact: Amanda Cipollone  
 acipollone@gflenv.com

T:  
F: