

Area  
**[1296848]**  
Machine Id  
**112020**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118547</b>	GFL0102700	GFL0082969
Sample Date		Client Info		<b>18 Jun 2024</b>	03 Jan 2024	18 Jul 2023
Machine Age	hrs	Client Info		<b>14325</b>	14154	13970
Oil Age	hrs	Client Info		<b>600</b>	0	0
Filter Age	hrs	Client Info		<b>600</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>13</b>	17	22
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
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)	>30	<b>4</b>	7	5
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>30	<b>1</b>	2	3
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

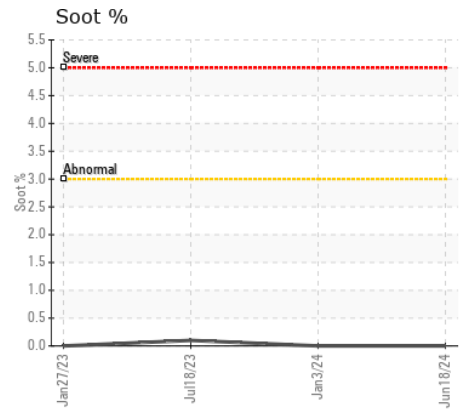
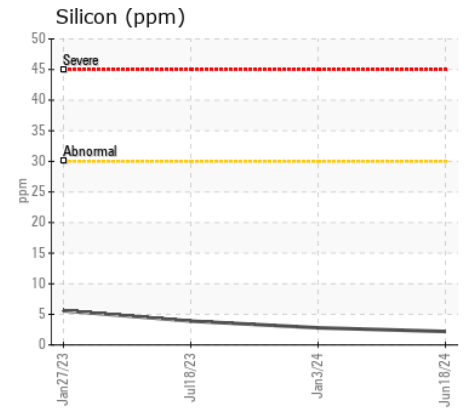
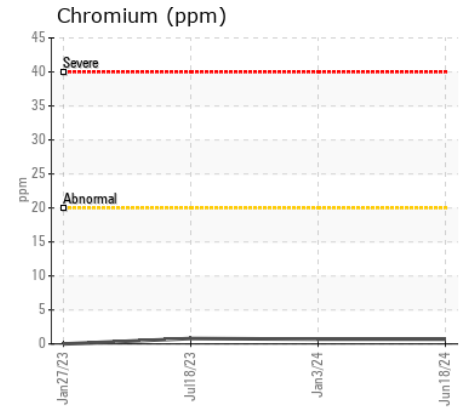
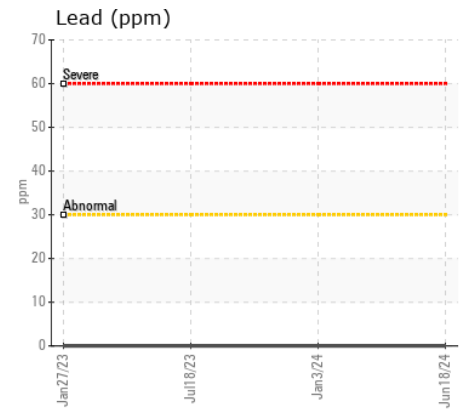
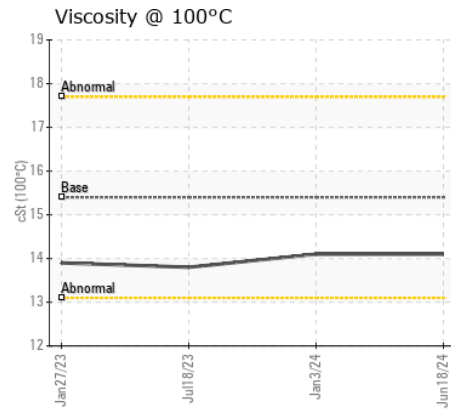
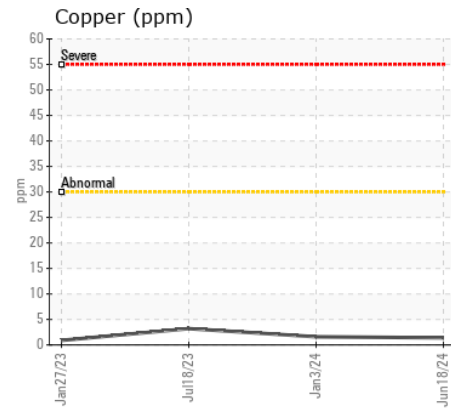
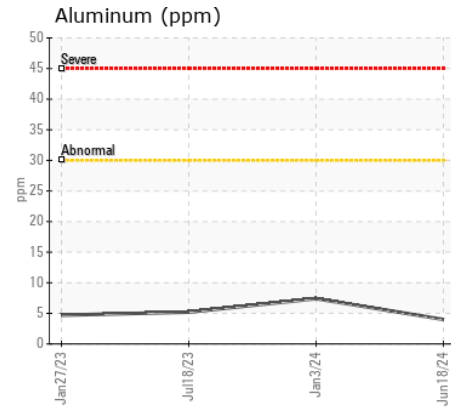
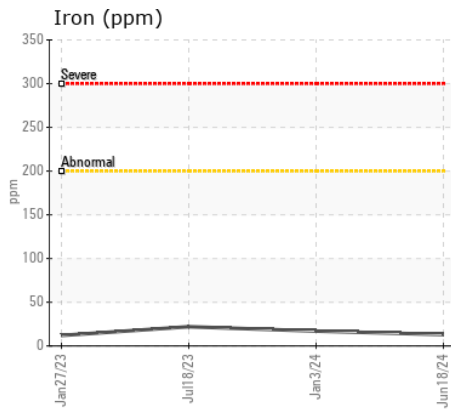
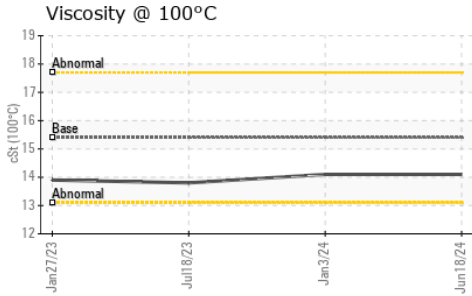
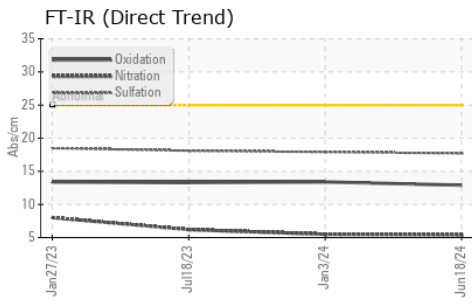
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>2</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	10	3
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>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.4</b>	5.5	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.7</b>	17.9	18.1
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>1</b>	1	2
Boron	ppm	ASTM D5185(m)	0	<b>6</b>	6	20
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	60	63
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>940</b>	935	786
Calcium	ppm	ASTM D5185(m)	1070	<b>1006</b>	1098	1225
Phosphorus	ppm	ASTM D5185(m)	1150	<b>968</b>	1005	1047
Zinc	ppm	ASTM D5185(m)	1270	<b>1141</b>	1181	1156
Sulfur	ppm	ASTM D5185(m)	2060	<b>2579</b>	2828	2702
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.9</b>	13.4	13.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.1</b>	14.1	13.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118547  
**Lab Number** : 02643173  
**Unique Number** : 5800712  
**Test Package** : MOB 1  
**Received** : 20 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Wes Davis

**GFL Environmental - 207 - Pickering SW**  
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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.