



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



Machine Id  
**401156**  
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>GFL0125523</b>	GFL0100589	GFL0077015
Sample Date		Client Info		<b>01 Jul 2024</b>	05 Feb 2024	11 Oct 2023
Machine Age	kms	Client Info		<b>349236</b>	329019	310053
Oil Age	kms	Client Info		<b>0</b>	10600	10600
Filter Age	kms	Client Info		<b>0</b>	10600	10600
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)	>65	<b>23</b>	19	19
Chromium	ppm	ASTM D5185(m)	>5	<b>4</b>	1	1
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>35	<b>9</b>	10	9
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>180	<b>6</b>	7	7
Tin	ppm	ASTM D5185(m)	>8	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

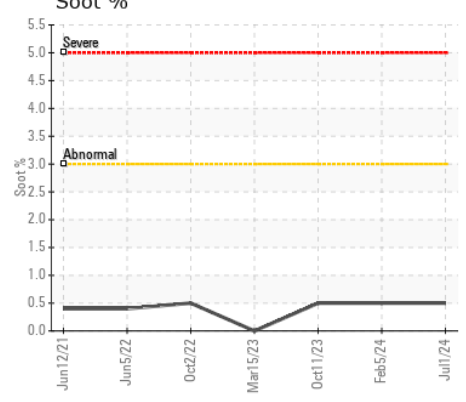
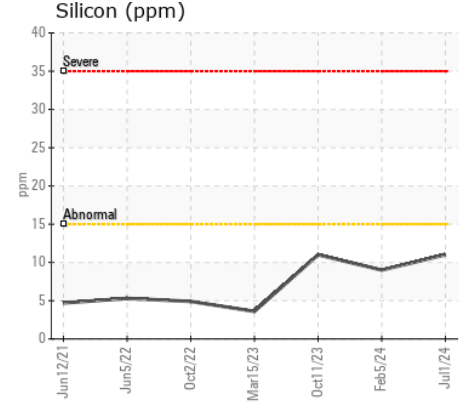
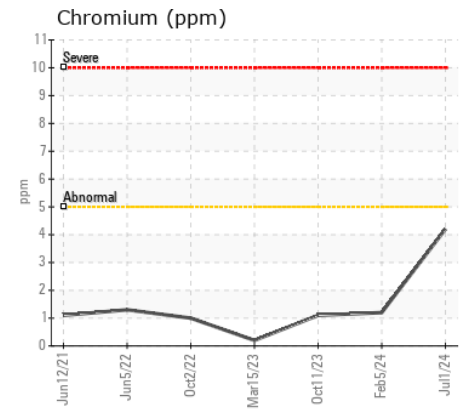
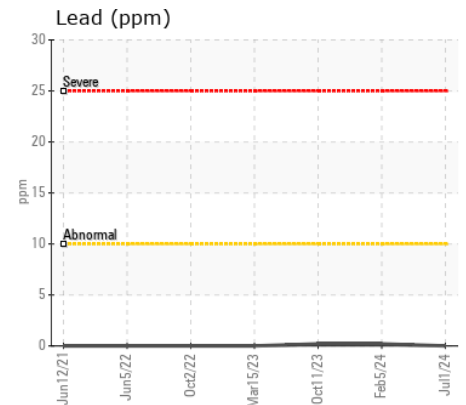
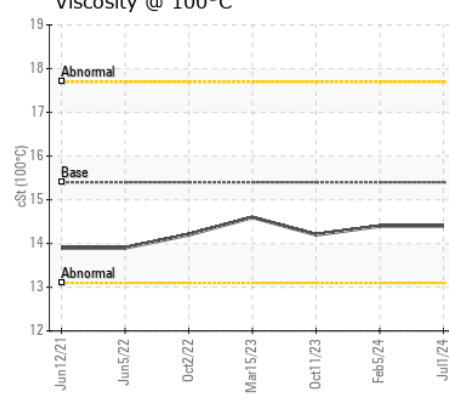
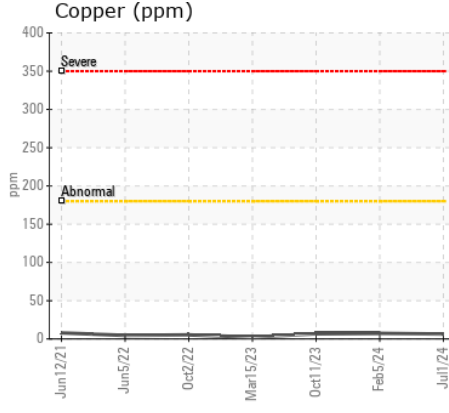
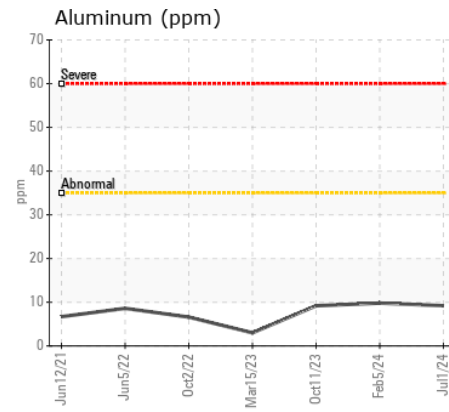
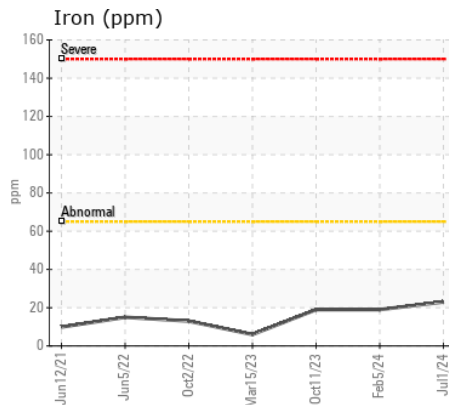
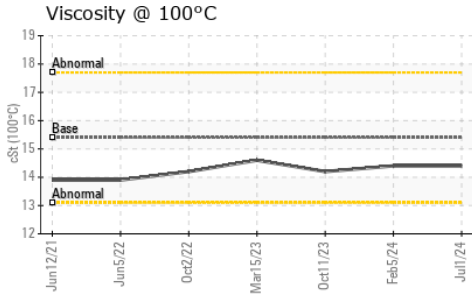
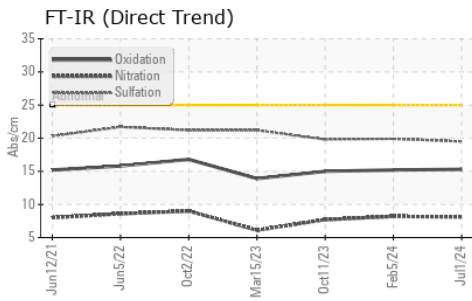
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>11</b>	9	11
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	4	2
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>0.5</b>	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	8.2	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.5</b>	19.9	19.8
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>3</b>	3	3
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	60	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>947</b>	965	988
Calcium	ppm	ASTM D5185(m)	1070	<b>1058</b>	1089	1084
Phosphorus	ppm	ASTM D5185(m)	1150	<b>952</b>	980	956
Zinc	ppm	ASTM D5185(m)	1270	<b>1183</b>	1186	1206
Sulfur	ppm	ASTM D5185(m)	2060	<b>2307</b>	2498	2282
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.3</b>	15.2	15.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.4</b>	14.4	14.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0125523  
**Lab Number** : 02645761  
**Unique Number** : 5803300  
**Test Package** : MOB 1  
**Received** : 05 Jul 2024  
**Tested** : 05 Jul 2024  
**Diagnosed** : 05 Jul 2024 - Wes Davis

**GFL Environmental - 575 - Squamish Hauling**  
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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.