



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



Machine Id  
**401198**  
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>GFL0111993</b>	GFL0090404	GFL0090417
Sample Date		Client Info		<b>21 Mar 2024</b>	22 Jan 2024	03 Nov 2023
Machine Age	kms	Client Info		<b>440064</b>	430886	18985
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>8</b>	12	27
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	2
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	8	▲ 28
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;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**

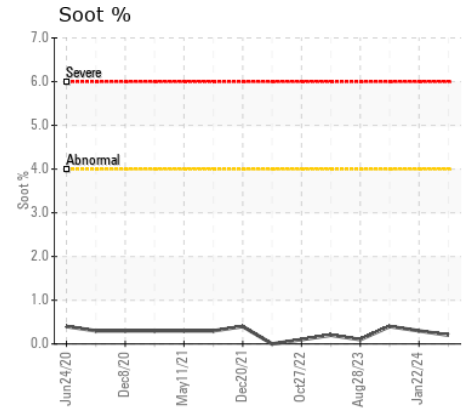
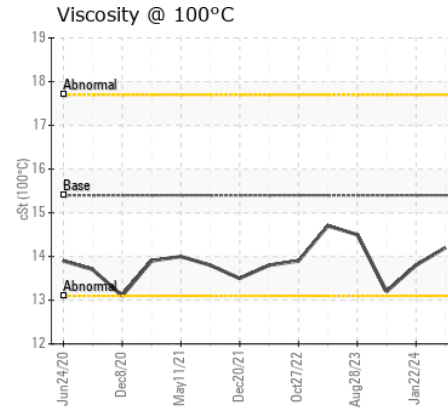
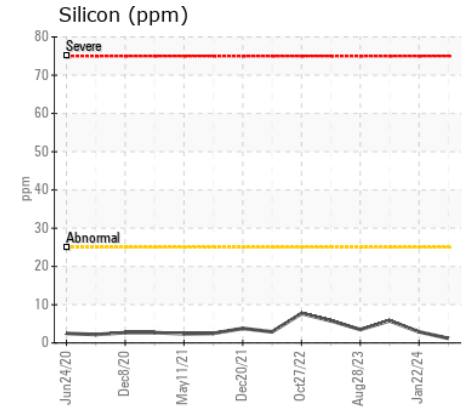
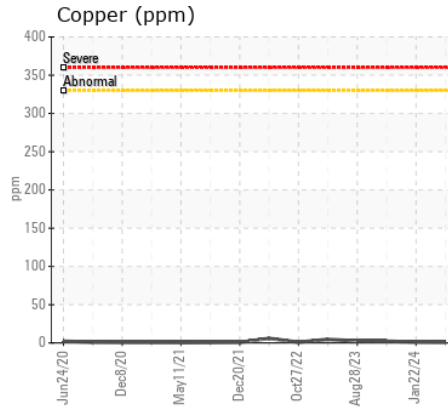
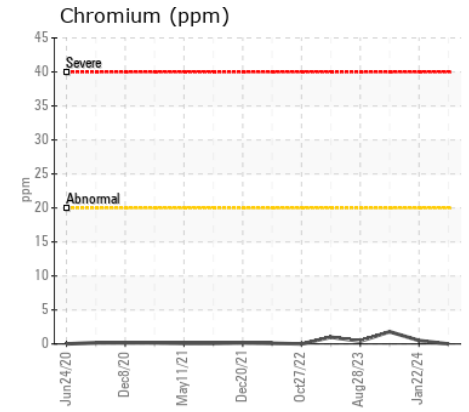
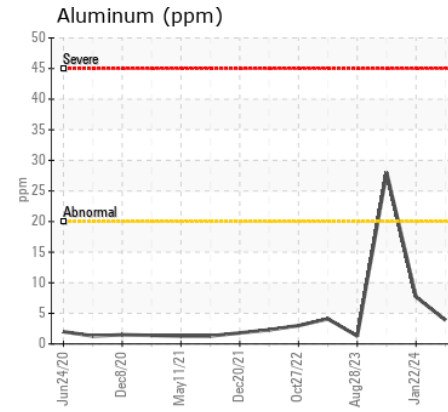
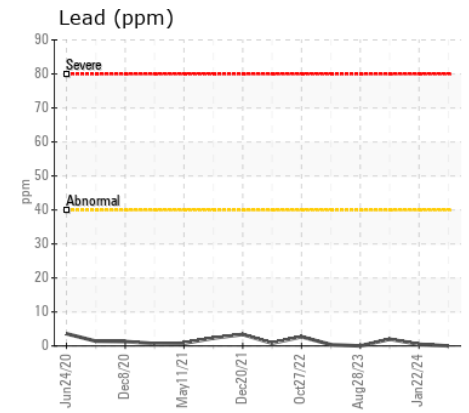
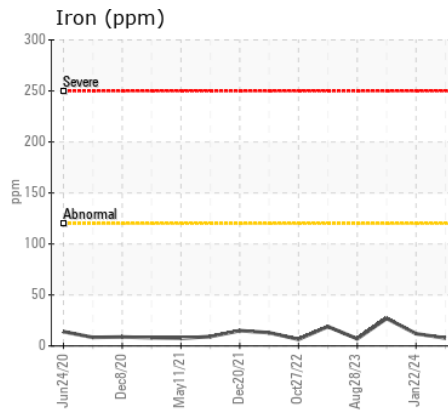
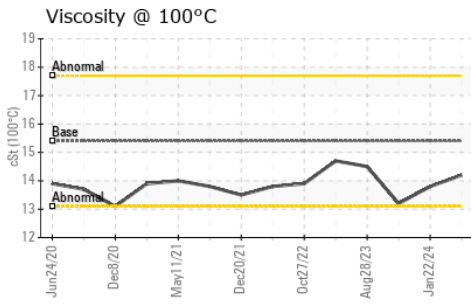
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	3	6
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	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*	>4	<b>0.2</b>	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.5</b>	9.6	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.1</b>	20.3	23.2
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>	4	6
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	4	32
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	59	64
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>985</b>	955	977
Calcium	ppm	ASTM D5185(m)	1070	<b>1058</b>	1038	1112
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1003</b>	1009	966
Zinc	ppm	ASTM D5185(m)	1270	<b>1192</b>	1151	1184
Sulfur	ppm	ASTM D5185(m)	2060	<b>2510</b>	2590	2503
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.9</b>	17.6	20.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.2</b>	13.8	13.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0111993 **Received** : 02 Apr 2024  
**Lab Number** : 02625993 **Tested** : 02 Apr 2024  
**Unique Number** : 5759125 **Diagnosed** : 02 Apr 2024 - Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 216M**  
 2475 Beryl Drive  
 Oakville, ON  
 CA L6J 7X4  
 Contact: Matthew Guinness  
 mgunness@gflenv.com

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.

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F: