



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



Area  
**[1232234]**  
 Machine Id  
**828010**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0093950</b>	GFL0093942	GFL0093934
Sample Date		Client Info		<b>27 Feb 2024</b>	04 Dec 2023	13 Sep 2023
Machine Age	hrs	Client Info		<b>11657</b>	11175	16627
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>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>MARGINAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>17</b>	15	14
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	3	3
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

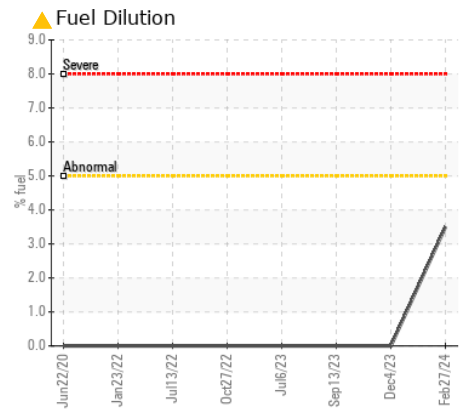
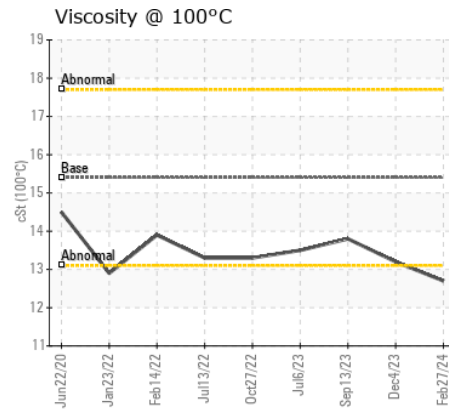
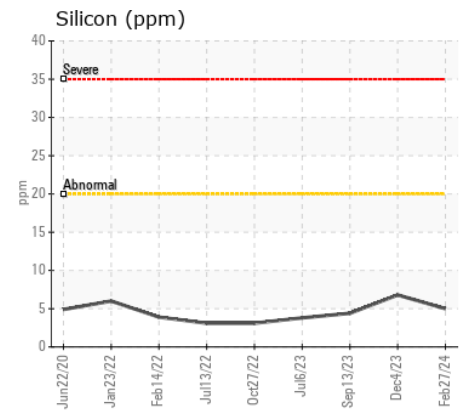
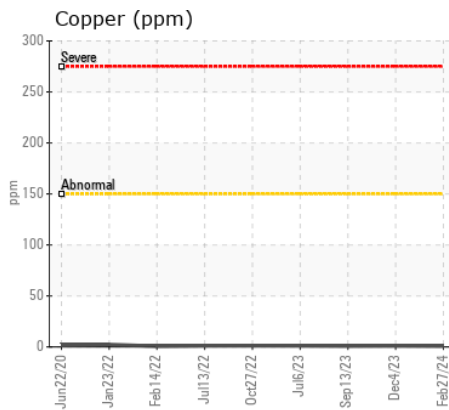
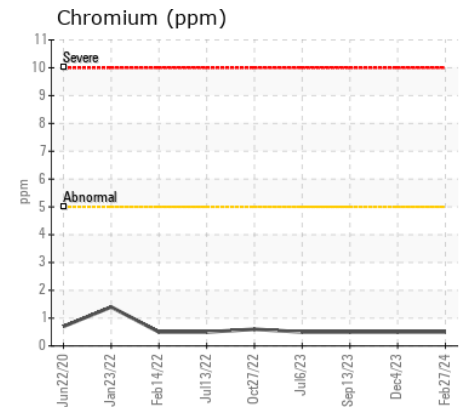
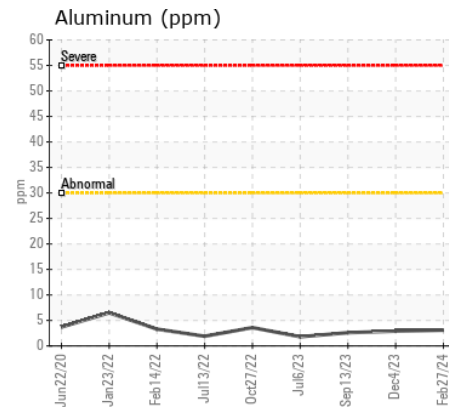
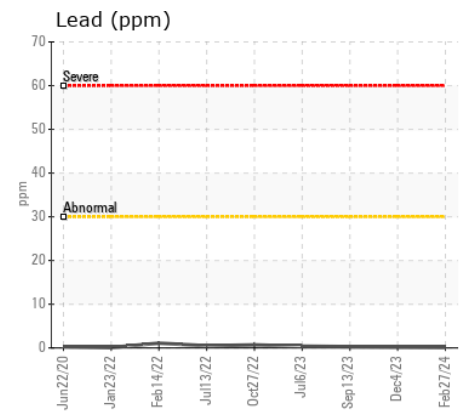
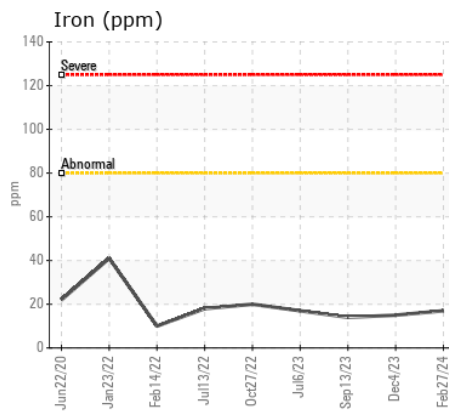
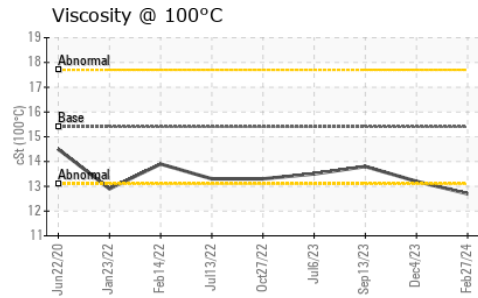
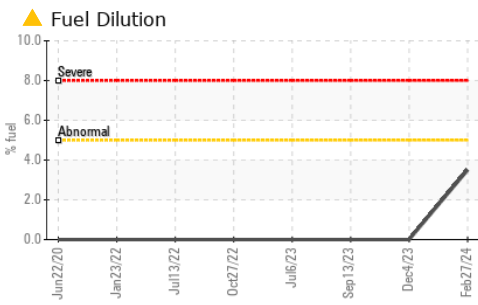
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>5</b>	7	4
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3
Fuel	%	ASTM D7593*	>5	<b>▲ 3.5</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>0.2</b>	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.0</b>	9.0	7.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.5</b>	19.2	19.2
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>6</b>	7	7
Boron	ppm	ASTM D5185(m)	0	<b>6</b>	5	5
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>55</b>	57	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>869</b>	903	932
Calcium	ppm	ASTM D5185(m)	1070	<b>1065</b>	1098	1055
Phosphorus	ppm	ASTM D5185(m)	1150	<b>924</b>	920	1017
Zinc	ppm	ASTM D5185(m)	1270	<b>1101</b>	1139	1164
Sulfur	ppm	ASTM D5185(m)	2060	<b>2465</b>	2370	2448
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.3</b>	15.8	15.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>12.7</b>	13.2	13.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0093950  
**Lab Number** : 02619819  
**Unique Number** : 5736929  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )  
**Received** : 05 Mar 2024  
**Tested** : 06 Mar 2024  
**Diagnosed** : 06 Mar 2024 - Wes Davis

**GFL Environmental - 777 - Belleville-Municipal waste**  
 197 Putman Industrial Road  
 Belleville, ON  
 CA K8N 4Z6  
 Contact: Andrea Michael  
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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.