



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



Machine Id  
**4474**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (38 LTR)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117137</b>	GFL0110214	GFL0097790
Sample Date		Client Info		<b>07 May 2024</b>	12 Feb 2024	09 Nov 2023
Machine Age	hrs	Client Info		<b>33500</b>	32646	5241
Oil Age	hrs	Client Info		<b>1200</b>	600	600
Filter Age	hrs	Client Info		<b>1200</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>8</b>	6	5
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

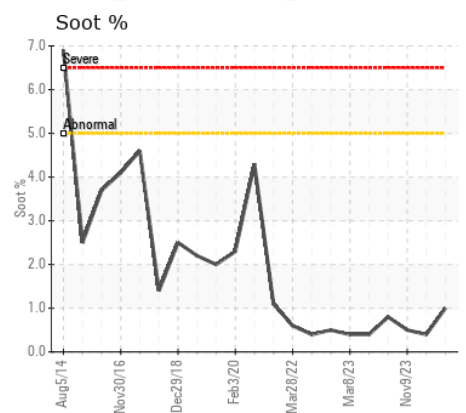
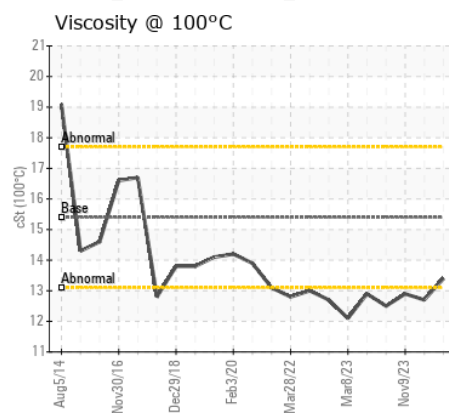
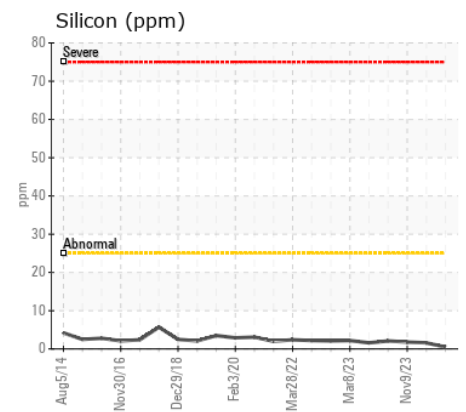
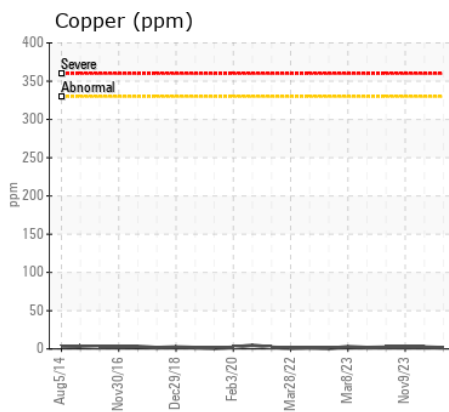
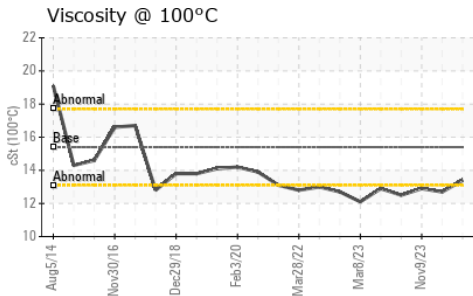
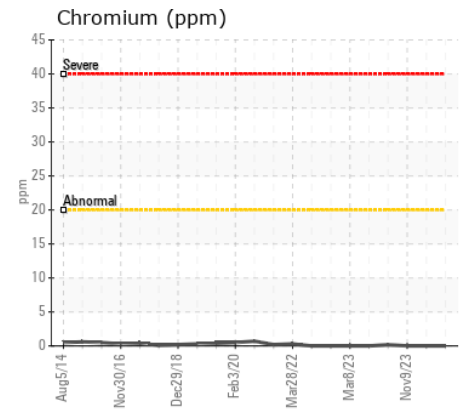
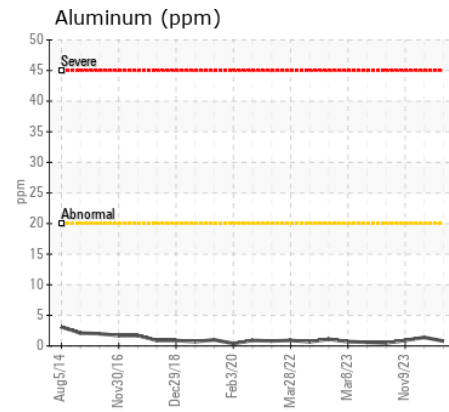
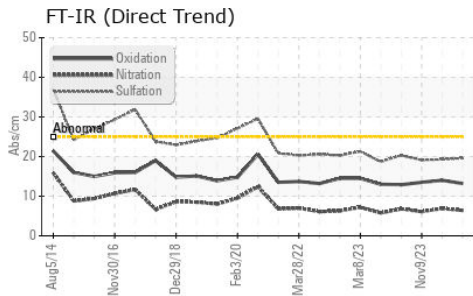
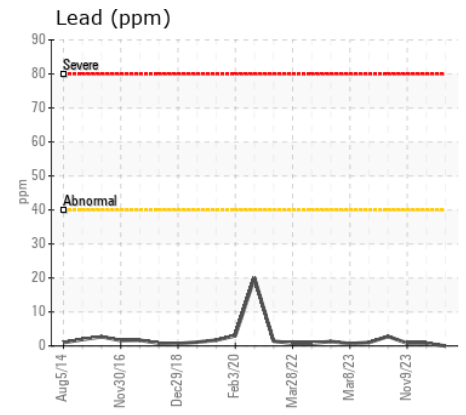
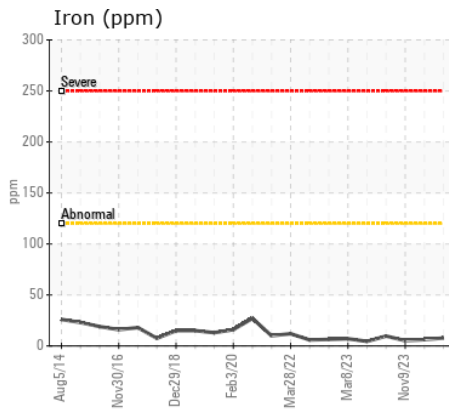
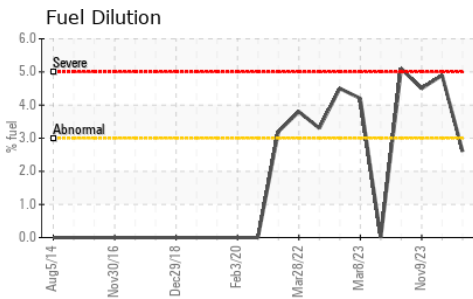
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Fuel	%	ASTM D7593*	>3.0	<b>2.6</b>	▲ 4.9	▲ 4.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>5	<b>1</b>	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.4</b>	6.9	6.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.6</b>	19.3	19.1
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>3</b>	2	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	56	55
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>928</b>	905	898
Calcium	ppm	ASTM D5185(m)	1070	<b>1053</b>	1006	975
Phosphorus	ppm	ASTM D5185(m)	1150	<b>951</b>	968	937
Zinc	ppm	ASTM D5185(m)	1270	<b>1129</b>	1106	1105
Sulfur	ppm	ASTM D5185(m)	2060	<b>2448</b>	2619	2394
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.2</b>	14.0	13.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.4</b>	12.7	12.9



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117137  
**Lab Number** : 02634021  
**Unique Number** : 5775174  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )  
**Received** : 08 May 2024  
**Tested** : 09 May 2024  
**Diagnosed** : 09 May 2024 - Wes Davis

**GFL Environmental - 209 - Hamilton**  
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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.