



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



Machine Id  
**8111**  
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>GFL0107331</b>	GFL0107313	GFL0079215
Sample Date		Client Info		<b>23 Apr 2024</b>	08 Apr 2024	14 Nov 2023
Machine Age	hrs	Client Info		<b>0</b>	19530	18975
Oil Age	hrs	Client Info		<b>0</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	600	600
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	SEVERE

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>34</b>	▲ 115	46
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	▲ 5	2
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>	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>1</b>	3	2
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

### CONTAMINATION

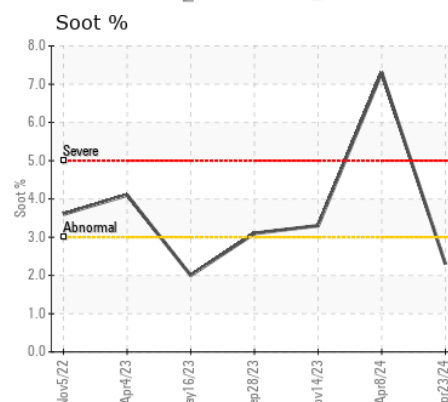
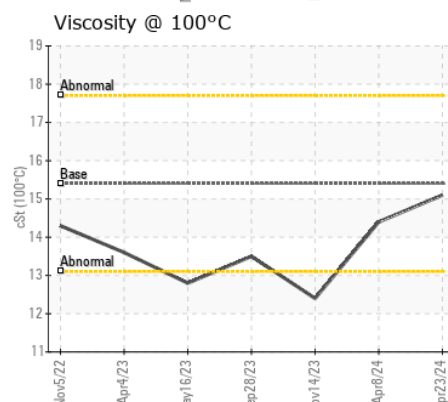
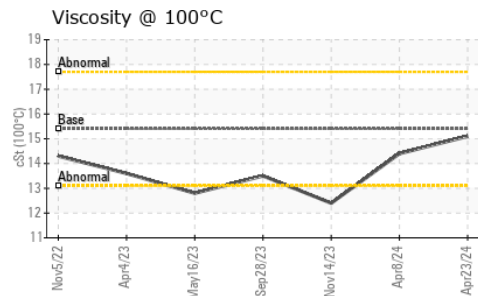
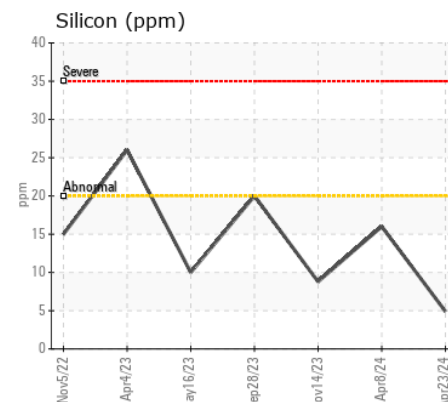
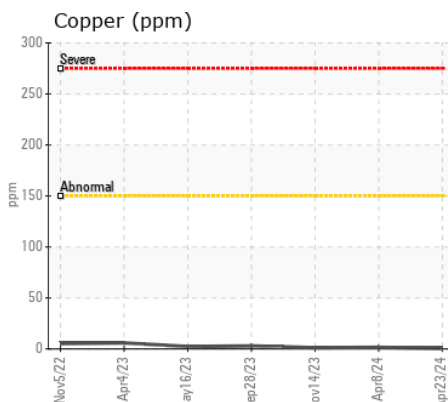
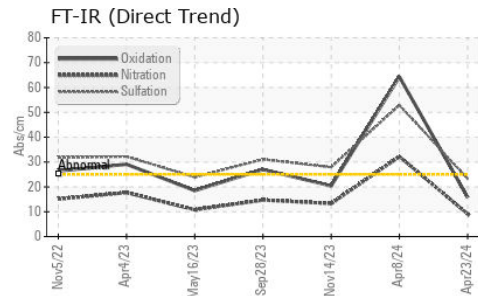
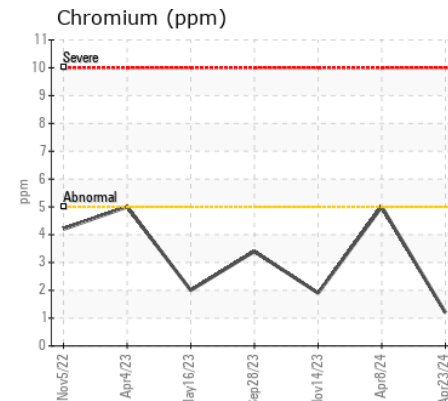
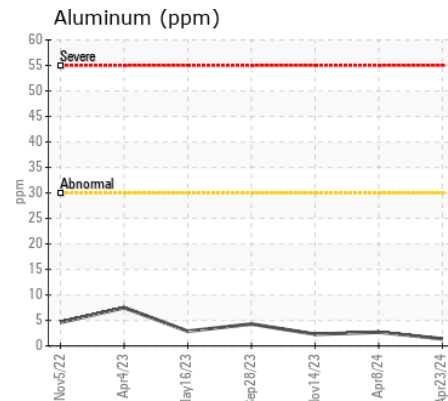
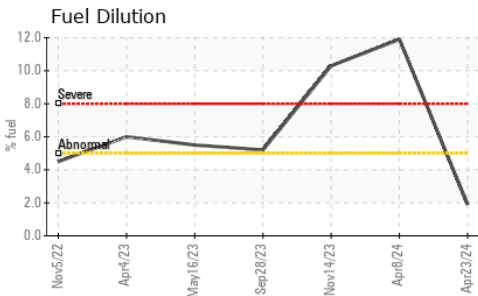
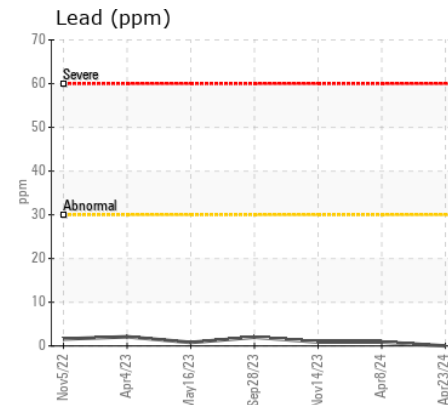
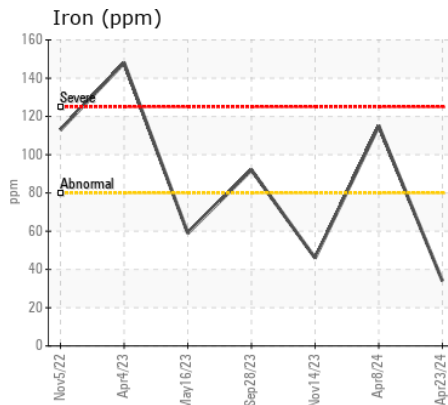
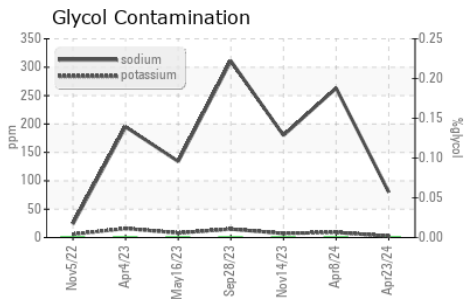
Light fuel dilution occurring. Test for glycol is negative. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>5</b>	16	9
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	9	7
Fuel	%	ASTM D7593*	>5	<b>1.9</b>	▲ 11.9	▲ 10.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>3	<b>2.3</b>	▲ 7.3	▲ 3.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.1</b>	32.2	13.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.3</b>	52.9	27.9
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>80</b>	● 263	● 180
Boron	ppm	ASTM D5185(m)	0	<b>6</b>	3	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	58	59
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>906</b>	776	839
Calcium	ppm	ASTM D5185(m)	1070	<b>989</b>	847	919
Phosphorus	ppm	ASTM D5185(m)	1150	<b>943</b>	782	857
Zinc	ppm	ASTM D5185(m)	1270	<b>1110</b>	949	1043
Sulfur	ppm	ASTM D5185(m)	2060	<b>2447</b>	1951	2198
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.8</b>	64.3	20.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>15.1</b>	14.4	▲ 12.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9    **GFL Environmental - 250 - Sault Ste Marie Hauling + MRF**  
**Sample No.** : GFL0107331    **Received** : 26 Apr 2024    86 Sackville Rd,  
**Lab Number** : 02631548    **Tested** : 29 Apr 2024    Sault Ste. Marie, ON  
**Unique Number** : 5772701    **Diagnosed** : 29 Apr 2024 - Wes Davis    CA P6B 4T6  
**Test Package** : MOB 1 ( Additional Tests: Glycol, PercentFuel, Visual )    Contact: Mike Pelletier  
 To discuss this sample report, contact Customer Service at 1-800-268-2131.    mpelletier@gflenv.com  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.    T: (705)945-7554  
 Validity of results and interpretation are based on the sample and information as supplied.    F: (705)945-7857