



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

Area  
**(FB50678)**  
Machine Id  
**211008**  
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>GFL0108538</b>	GFL0055729	---
Sample Date		Client Info		<b>26 Jan 2024</b>	15 Nov 2022	---
Machine Age	hrs	Client Info		<b>0</b>	500	---
Oil Age	hrs	Client Info		<b>0</b>	500	---
Filter Age	hrs	Client Info		<b>0</b>	500	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>MARGINAL</b>	ABNORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>20</b>	142	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	10	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	2	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>2	<b>2</b>	4	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	8	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	23	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

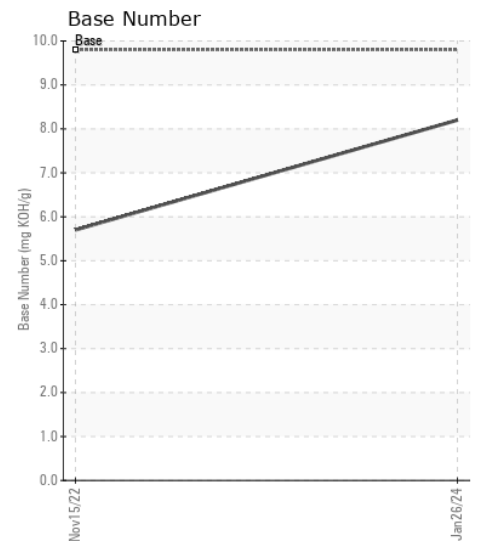
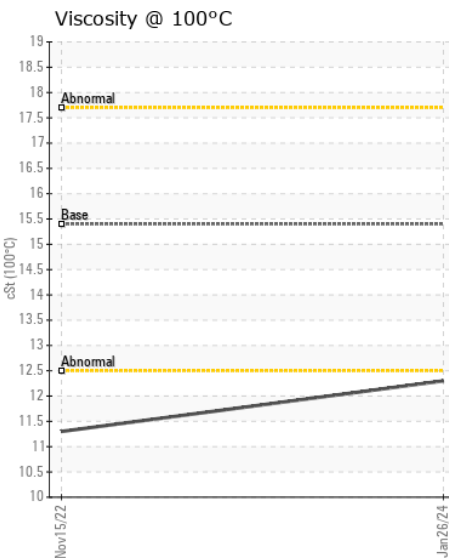
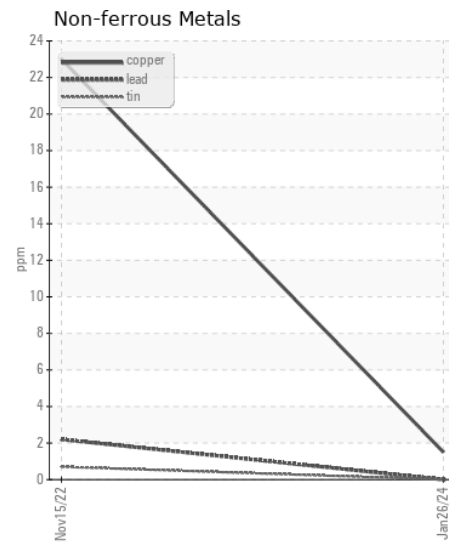
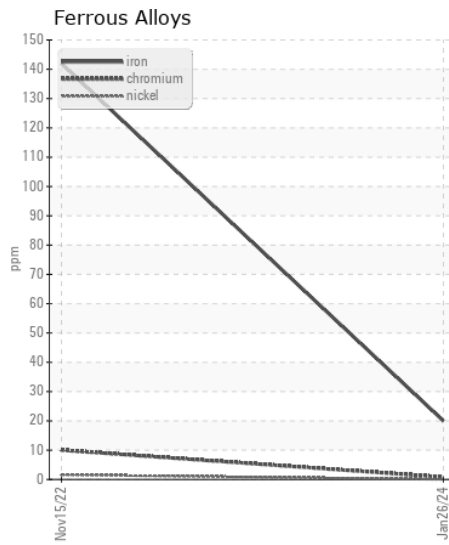
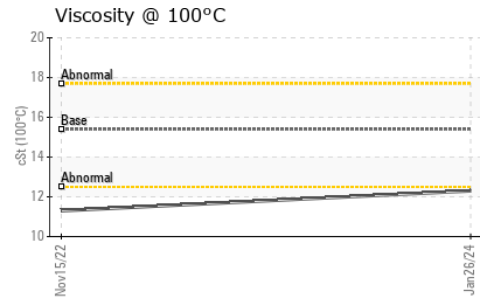
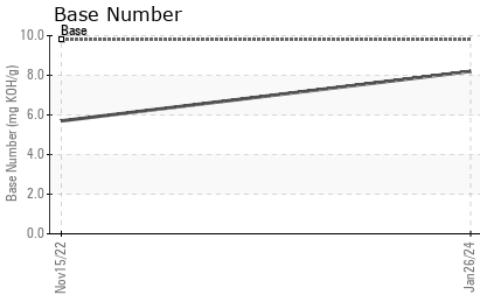
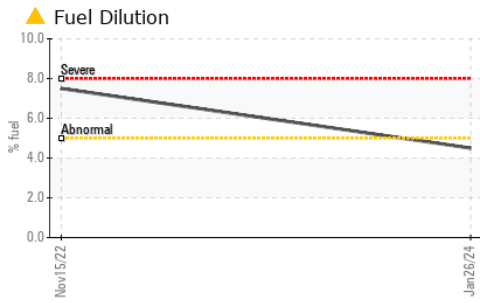
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	14	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	---
Fuel	%	ASTM D3524	>5	<b>▲ 4.5</b>	▲ 7.5	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	1.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.7</b>	17.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	34.5	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	6	---
Boron	ppm	ASTM D5185m	0	<b>3</b>	25	---
Barium	ppm	ASTM D5185m	0	<b>25</b>	0	---
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	71	---
Manganese	ppm	ASTM D5185m	0	<b>0</b>	6	---
Magnesium	ppm	ASTM D5185m	1010	<b>837</b>	258	---
Calcium	ppm	ASTM D5185m	1070	<b>1019</b>	1712	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1020</b>	920	---
Zinc	ppm	ASTM D5185m	1270	<b>1116</b>	1130	---
Sulfur	ppm	ASTM D5185m	2060	<b>3085</b>	3203	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	34.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	5.7	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.3</b>	▲ 11.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108538  
**Lab Number** : 06084533  
**Unique Number** : 10871978  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**Received** : 09 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 13 Feb 2024 - Wes Davis

**GFL Environmental - 904 - Chippewa Falls HC**  
 11888 & 11863 30th Avenue  
 Chippewa Falls, WI  
 US 54729  
 Contact: Andy Kane

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (715)202-3420

F: