



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

Machine Id  
**427112-430**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0108523</b>	GFL0066034	GFL0055737
Sample Date		Client Info		<b>03 Jan 2024</b>	13 Nov 2023	08 Nov 2022
Machine Age	hrs	Client Info		<b>0</b>	0	14892
Oil Age	hrs	Client Info		<b>0</b>	0	500
Filter Age	hrs	Client Info		<b>0</b>	0	500
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>35</b>	32	19
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>10</b>	22	8
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>150	<b>3</b>	4	3
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

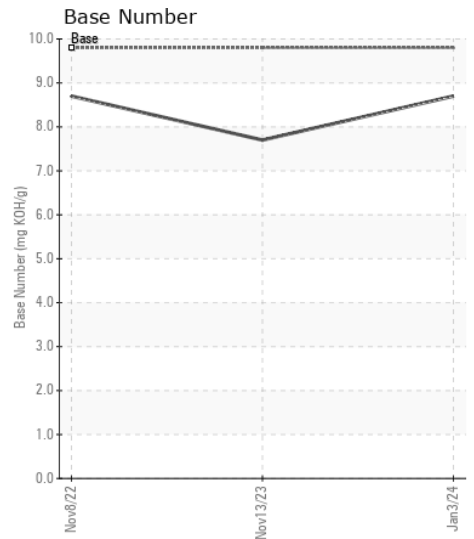
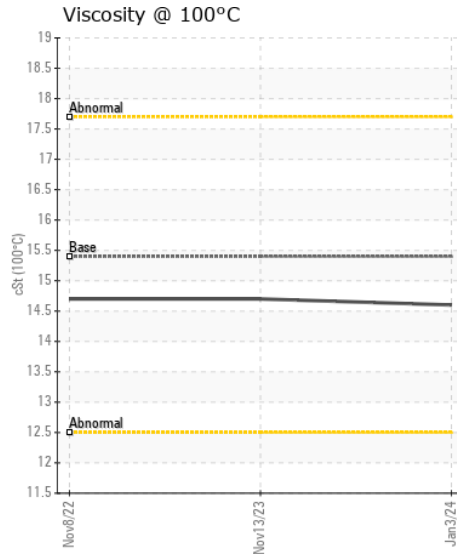
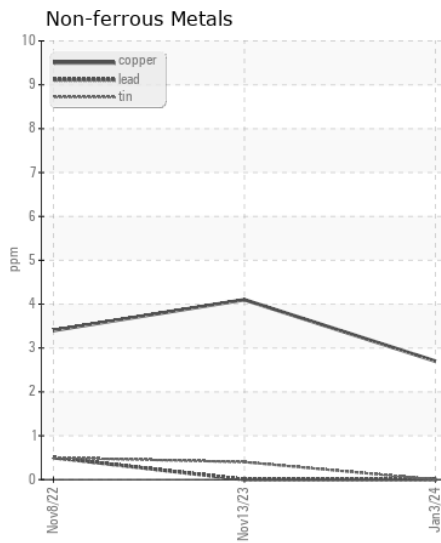
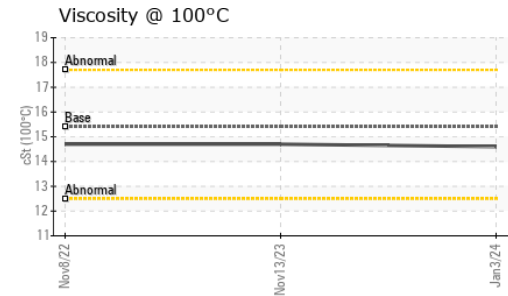
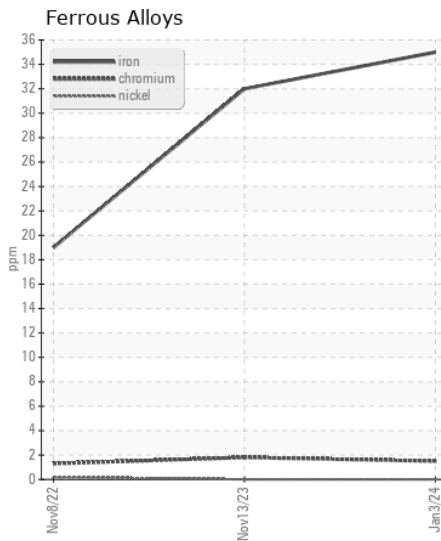
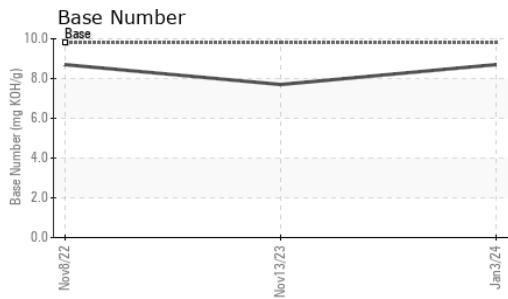
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>9</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	32	17
Fuel		WC Method	>5	<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	>3	<b>0.7</b>	1.5	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	9.5	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	22.4	20.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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>3</b>	5	2
Boron	ppm	ASTM D5185m	0	<b>0</b>	6	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	59	58
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>967</b>	928	825
Calcium	ppm	ASTM D5185m	1070	<b>1100</b>	1101	1391
Phosphorus	ppm	ASTM D5185m	1150	<b>1035</b>	1007	957
Zinc	ppm	ASTM D5185m	1270	<b>1237</b>	1158	1195
Sulfur	ppm	ASTM D5185m	2060	<b>3192</b>	2588	3378
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.3</b>	16.6	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	7.7	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.6</b>	14.7	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108523 **Received** : 09 Jan 2024  
**Lab Number** : 06055750 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821699 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**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: