



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



Machine Id  
**728106-18**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0104818</b>	GFL0104886	GFL0104945
Sample Date		Client Info		<b>22 Apr 2024</b>	07 Mar 2024	12 Feb 2024
Machine Age	mls	Client Info		<b>141192</b>	139367	1647
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>25</b>	17	11
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>4</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	0
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**

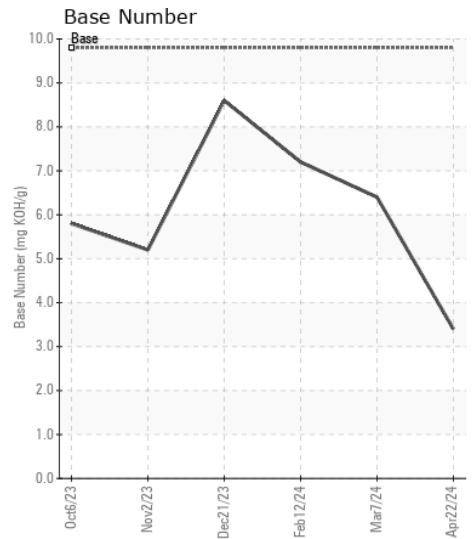
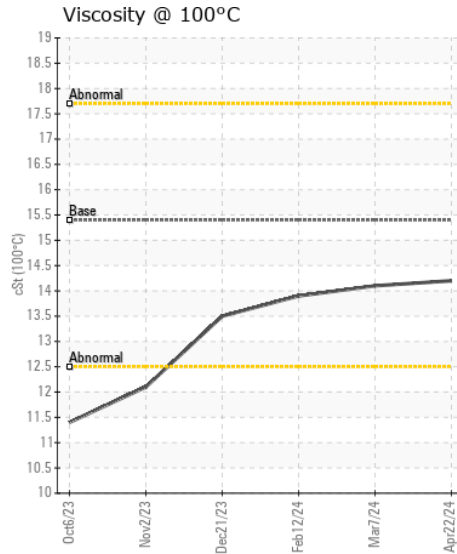
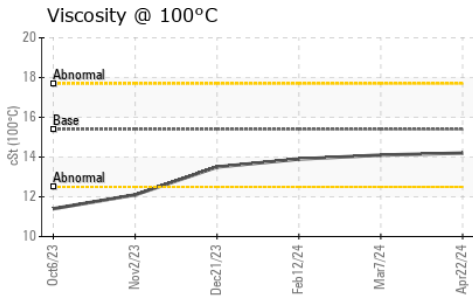
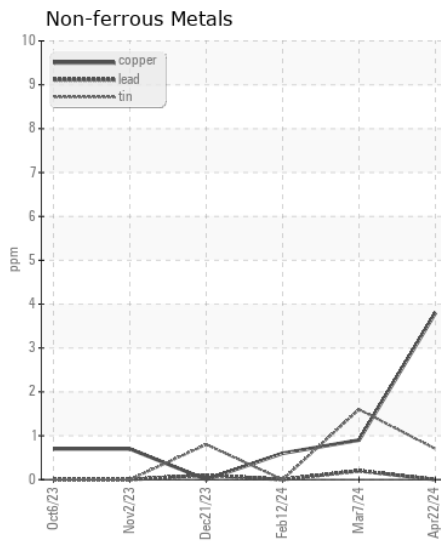
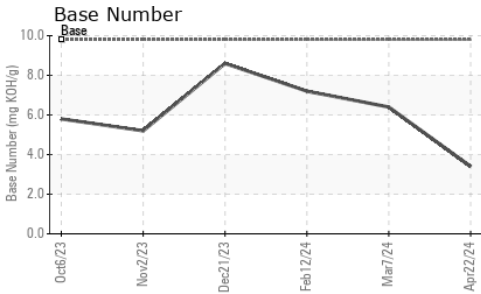
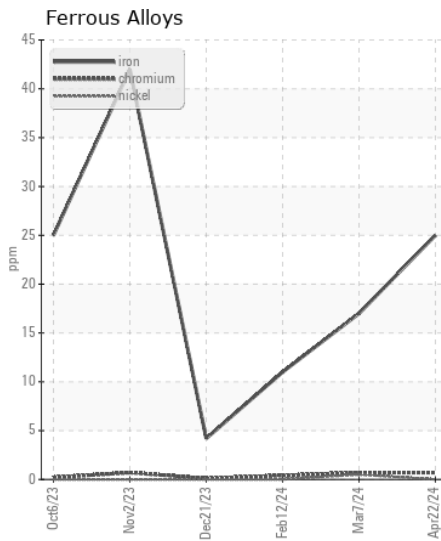
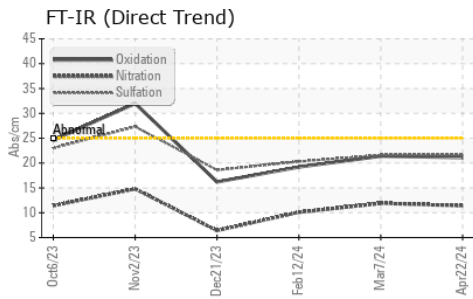
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
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>0.6</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.4</b>	11.9	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	21.6	20.3
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>9</b>	8	8
Boron	ppm	ASTM D5185m	0	<b>1</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	55	55
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>902</b>	903	870
Calcium	ppm	ASTM D5185m	1070	<b>1001</b>	1045	941
Phosphorus	ppm	ASTM D5185m	1150	<b>909</b>	874	946
Zinc	ppm	ASTM D5185m	1270	<b>1187</b>	1168	1101
Sulfur	ppm	ASTM D5185m	2060	<b>3177</b>	3323	2688
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.1</b>	21.4	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>3.4</b>	6.4	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	14.1	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104818 **Received** : 13 May 2024  
**Lab Number** : 06176730 **Tested** : 14 May 2024  
**Unique Number** : 11022783 **Diagnosed** : 14 May 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 820 - Joplin Hauling**  
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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)